AUTOMATIC FLOW CONTROL VALVES

MANUAL FLOW CONTROL VALVES

UNION VALVES, UNIONS & COMBO VALVES

COIL PAKS BYPASS KITS



HOSE PAKS

ACCESSORIES

Blowdown/Drain Valve, PT Test Plugs Condensate Drain Kits, Hose Adapters Flex Connectors, Meter Kits

O & M INFORMATION

Installation, Operation and Maintenance Information

ORDERING GUIDE

Order Information & Part Numbers

SAMPLE SPECIFICATIONS

Automatic Flow Control Valves Manual Flow Control Valves

MISCELLANEOUS

Comparison & Analysis Components vs. Paks Warranty Information

(Rev: 04/10/2019)

9982 E. 121st Street Fishers, IN 46037 Phone: (888) 900-0947 Fax: (800) 900-8654



AUTOMATIC FLOW CONTROL VALVES

UltraMatic for Actuator Model		UMA	(½"LO, 3/4"LO, 1"XLO)
UltraMatic for Actuator Model		UMA	Submittal Schedule
UltraMatic Model		UM	(½" thru 2½")
UltraMatic with Accessory Port Mode	el	UM	(½" thru 1½")
UltraMatic Model		UM	Submittal Schedule
UltraMatic Model		UMS	(½" thru 1")
UltraMatic Model (Lead free)		UMF	(1⁄2", 3/4", 1")
Ballorex Thermoelectric Actuators M	lodel	ND	(½" thru 1")
UltraMatic Model		UMT	(2" and 2½")
UltraMatic Model		UMTB	(2" and 21⁄2")
UltraMatic Model		UMG	(2½" thru 12")
UltraMatic Model		UMGB	(2½" thru 6")
UltraMatic Model		UMW	(2½" thru 12")
UltraMatic Model		UMW	(14" thru 48")
UltraMatic Model		UMWB	(2½" thru 6")
UltraMatic Models	UMT, UMTB, UMG, UMGB, UMW,	UMWB	Submittal Schedule

MANUAL FLOW CONTROL VALVES

UltraXB Orturi Model	ХВ	(1⁄2" thru 21⁄2")
UltraUB Orturi Model	UB	(1⁄2" thru 2")
UltraXB, UB Orturi Models	XB, UB	Submittal Schedule
UltraXB, UB - Orturi Models	XB, UB	Flow Chart
Vertex Model	VTX	(1⁄2" thru 2")
Vertex Model	VTX	Submittal Schedule
Vertex - Calculation Chart	VTX	(1⁄2" thru 1")
Vertex - Calculation Chart	VTX	(1¼" thru 2")
Vertex - Flow Chart	VTX	(1/2")
Vertex - Flow Chart	VTX	(3/4")
Vertex - Flow Chart	VTX	(1")
Vertex - Flow Chart	VTX	(1¼")
Vertex - Flow Chart	VTX	(11/2")
Vertex - Flow Chart	VTX	(2")
Venturi Model	NVF	(21⁄2" thru 12")
Venturi Model	NVFB	(21⁄2" thru 12")
Venturi Model	NVG	(21⁄2" thru 12")
Venturi Model	NVGB	(21/2" thru 12")
Venturi Model	NVT	(21/2")
Venturi Model	NVTB	(21/2")
Venturi Model	NV	Submittal Schedule
Venturi Model	NV	Flow Chart
UltraMB Model	MBA	(1/2", 3/4"LO, 1"LO)
UltraMB Model	MBA	Submittal Schedule
UltraMB Model	MB	(1⁄2" thru 21⁄2")
UltraMB with Accessory Port Model	MB	(1⁄2" thru 11⁄2")
UltraMB Model	MB	Submittal Schedule
UltraMB - Nomograph	MB	(1⁄2" thru 21⁄2")
UltraMB - Calculations	MB	(1⁄2" thru 21⁄2")



UltraMB - Flow Chart	Μ	В	(½", ¾"LO, 1"LO)
UltraMB - Flow Chart	Μ	В	(¾"STD, 1"STD, 1¼"LO)
UltraMB - Flow Chart	Μ	В	(1¼"STD, 1½"LO)
UltraMB - Flow Chart	Μ	В	(2", 21/2")
UltraMB Model	Μ	BNL	(1⁄2", 3/4", 1")
UltraMB Model	Μ	BNL	Submittal Schedule
UltraMB - Calculations	М	BNL	(1/2", 3/4", 1")
UltraMB - Flow Chart	М	BNL	(1/2")
UltraMB - Flow Chart	М	BNL	(3/4", 1")
UltraMB Model	М	BF	(2½" thru 6")
UltraMB Model	М	BFV	(2½" thru 6")
UltraMB Model	Μ	BG	(2½" thru 6")
UltraMB Model	М	BGV	(2½" thru 6")
UltraMB Model	Μ	BT	(21/2")
UltraMB Model	Μ	BTV	(21/2")
UltraMB Models	MBF, MBFV, MBG, MBGV, MB	T, MBTV	Submittal Schedule
UltraMB - Nomograph	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(2½" thru 6")
UltraMB - Calculations	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(2½" thru 6")
UltraMB - Flow Charts	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(21/2")
UltraMB - Flow Charts	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(3")
UltraMB - Flow Charts	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(4")
UltraMB - Flow Charts	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(5")
UltraMB - Flow Charts	MBF, MBFV, MBG, MBGV, MB	T, MBTV	(6")
Nextrol Model	N	XFB	(2½" thru 12")
Nextrol Model	N	XGB	(2½" thru 12")
Nextrol Model	N	ХТВ	(21/2")
TwinTube Pitot	TT	Г	(2½" thru 14")
Nextrol/TwinTube Pitot Models	NXFB, NXGB,	NXTB, TT	Submittal Schedule
Nextrol/TwinTube Pitot - Flow Cl	narts NXFB, NXGB,	NXTB, TT	(2½" thru 14")

PRESSURE INDEPENDENT CONTROL VALVES

Dynamic PIC Valve Model	ND	(1⁄2" thru 2")
Dynamic PIC Valve Model	ND	Submittal Schedule
Dynamic PIC Valve Model	ND	Pre-Set Data
Dynamic PIC Valve Model	ND	Flow Chart
Vivax Models	VIVF, VIVG, VIVT	(2½" thru 10")
Vivax Models	VIVF, VIVG, VIVT	Submittal Schedule



UNION VALVES, UNION & COMBO VALVES

UltraU Model	UU	(1⁄2" thru 2")
UltraC Model	UC	(1⁄2" thru 11⁄4")
UltraY Model	UY	(1⁄2" thru 21⁄2")
UltraY with Bypass Port Model	UY	(1⁄2" thru 11⁄2")
UltraYSS Model	YSS	(1⁄2" thru 1")
UltraY Model (Lead free)	YSF	(1⁄2" thru 1")
UltraX Model	UX	(1⁄2" thru 21⁄2")
UltraNXP Model	NXP	(1⁄2" thru 11⁄2")
UltraNX Model	NXU	(1⁄2" thru 1")
UltraNX Model	NXH	(1⁄2" thru 1")
UltraNX Model	NXS	(1/2" and 34")
UltraSBV Model	SBV	(1⁄2" thru 2")
Strainex Model	SXF	(21⁄2" thru 12")
Strainex Model	SXFV	(21⁄2" thru 12")
Strainex Model	SXG	(21⁄2" thru 12")
Strainex Model	SXGV	(21⁄2" thru 12")
Strainex Model	SXT	(21⁄2")
Strainex Model	SXTV	(21⁄2")
NexTube Model	NXF	(21⁄2" thru 12")
NexTube Model	NXFV	(21⁄2" thru 12")
NexTube Model	NXG	(21⁄2" thru 12")
NexTube Model	NXGV	(2½" thru 12")
NexTube Model	NXT	(21⁄2")
NexTube Model	NXTV	(21⁄2")
Butterfly Valve Model	BV	(2½" thru 12")
Butterfly Valve Model	BVG	(21⁄2" thru 12")
Butterfly Valve Model	BVT	(21⁄2")
UltraT Model	UTF1	(1⁄2" thru 1")
UltraT Models	UTF2, 3, 4	(1⁄2" thru 2")
UltraT Model	UTU1	(1⁄2" thru 1")
UltraT Models	UTU2, 3, 4	(1⁄2" thru 2")
		· ·

COIL PAKS

Coil Pal	k Models "A"	
	AYA, AXA, ANA	(½"LO, ¾"LO, 1"XLO)
	A2Y, A3Y, AY, A2X, A3X, AX,	(½" thru 2½")
	A2N, A3N, AN	(½" thru 1½")
Coil Pal	k Models "D"	
	D2Y, D2X, D2N	(½" thru 1½")
Coil Pal	k Models "M"	
	MYA, MXA, MNA	(½", ¾"LO, 1"LO)
	M2Y, M3Y, MY, M2X, M3X, MX,	(½" thru 2½")
	M2N, M3N, MN	(½" thru 1½")
Coil Pal	k Models "O"	
	O2Y, O3Y, OY, O2X, O3X, OX,	(½" thru 2½")
	O2N, O3N, ON	(½" thru 1½")
Coil Pal	k Models "X"	
	X2Y, X3Y, XY, X2X, X3X, XX,	(½" thru 2½")
	X2N, X3N, XN	(½" thru 1½")



Coil Pak Models "N" N2Y, N3Y, NY, N2X, N3X, NX, N2N, N3N, NN ByPass Kit Model BKF ByPass Kit Model BKU ByPass Kit Model BKFC ByPass Kit Model BKUC Coil Paks (Large) Automatic and Manual Models A2FY, A2FB, A2FN, A2GY, A2GB, A2GN, A2TY, A2TB, A2TN, V2FY, V2FB, V2FN, V2GY, V2GB, V2GN, V2TY, V2TB, V2TN, M2FY, M2FB, M2FN, M2GY, M2GB, M2GN, M2TY, M2TB, M2TN, N2FY, N2FB, N2FN, N2GY, N2GB, N2GN, B2FY, B2GY, N2TY, N2TB, N2TN, B2TY

(½" thru 1½") (½" thru 2") (2½" thru 6") (2½") (2½" thru 12") (2½") (2½" thru 6") (2½") (2½" thru 12") (2½")

(1/2" thru 11/2")

HOSE PAKS

Hose Pak Model	AYH	(½" thru 1"LO)
Hose Pak Model	AYH	(1"STD, 1¼"LO thru 2½")
Hose Pak Model	AYH-200H	(2" High Flow)
Hose Pak Model	AXH	(½" thru 1"LO)
Hose Pak Model	AXH	(1"STD, 1¼"LO thru 2½")
Hose Pak Model	AXH-200H	(2" High Flow)
Hose Pak Model	ANH	(½" thru 1"LO)
Hose Pak Model	ANH	(1"STD, 1¼"LO thru 1½":
Hose Pak Model	MYH	(½" thru 1"STD)
Hose Pak Model	MYH	(1¼"LO thru 2½")
Hose Pak Model	MXH	(½" thru 1"STD)
Hose Pak Model	MXH	(1¼"LO thru 2½")
Hose Pak Model	MNH	(½" thru 1"STD)
Hose Pak Model	MNH	(1¼"LO thru 1½")
Hose Pak Model	OYH	(½" thru 1"STD)
Hose Pak Model	OYH	(1¼"LO thru 2½")
Hose Pak Model	OXH	(½" thru 1"STD)
Hose Pak Model	OXH	(1¼"LO thru 2½")
Hose Pak Model	ONH	(½" thru 1"STD)
Hose Pak Model	ONH	(1¼"LO thru 1½")
Hose Pak Model	XYH	(1⁄2" thru 1"STD)
Hose Pak Model	XYH	(1¼"LO thru 2½")
Hose Pak Model	XXH	(½" thru 1"STD)
Hose Pak Model	XXH	(1¼" thru 2½")
Hose Pak Model	XNH	(½" thru 1"STD)
Hose Pak Model	XNX	(1¼"LO thru 1½")
Hose Pak Model	NYH	(½" thru 1"STD)
Hose Pak Model	NYH	(1¼"LO thru 1½")
Hose Pak Model	NXH	(½" thru 1"STD)
Hose Pak Model	NXH	(1¼"LO thru 1½")
Hose Pak Model	NNH	(½" thru 1"STD)
Hose Pak Model	NNH	(1¼"LO thru 1½")



ACCESSORIES

Adapters Grooved and Threaded Models FGA, FGR and FTA Adapter Hose Models HSA, HNA, HLA Air Vent Models AV-025, MV-025, MV-025L, Check Valve Models CV-1 & CV-2 Blowdown/Drain Valve Models BD-025, BD-050, BD-075 Condensate Drain Kits Models CK-1 & CK-2 Handle Extension Models ES-1, ES-2, ES-3 Hanging Tag Models HT-2, HT-4 Meter Kit for Automatic Flow Control Valve Model MKA Meter Kit for Manual Flow Control Valve Models MKM-050, MKM-100, MKM-300 NexPress Connection System - Data Sheet (1/2" thru 2") Models FE, TP, NPA NexLok Connection System - Data Sheet (1/2" thru 1") Models FE, TP, NLA NexLok Connection System - Data Sheet (11/4" thru 2") Model NLA NexLok Adapters, Couplings, Elbows, Tees (1/2" thru 1") Models NLA, NLC, NLE, NLT NexLok LD Adapters, Couplings, Elbows, Tees (11/4" thru 2") Models NLA, NLC, NLE, NLT Nexus Screen for UltraY Valves Model YS QuickVent Model QV Pressure/Temperature Test Plug Models PT-025, PT-025-G,R, Accessory Extension Models PTE, PTEB Shut-Off Valve (1/4") Model SV Thermometer Well Model TW-075 UltraFlex Connectors (1/2" thru 2") Models UFHM, UFHF, UFH UltraFlex Connectors (21/2") Model UFH Union Adapter Models UA-075-125 & UA-125-200 UltraWrap Model UW UltraWrap Model UWGF

INSTALLATION-OPERATION-MAINTENANCE

See "I-O-M" Chapter for Table of Contents

ORDERING GUIDE

Nexus Valve Union End Connection Size Guide	(1/2" thru 21/2")
Ordering Guide "A" for ActuatorsCoil Paks (AYA, AXA, ANA)	(1/2"LO, 3/4"LO, 1"XLO)
Ordering Guide "A" Coil Paks (A2Y, A3Y, A2X, A3X, A2N, A3N)	(1/2" thru 21/2")
Ordering Guide "A" Coil Paks (AY, AX, AN)	(1/2" thru 21/2")
Ordering Guide "A" Hose Paks (AYH, AXH, ANH)	(1/2" thru 21/2")
Ordering Guide "D" Coil Paks (D2Y, D2X, D2N)	(1/2" thru 2")
Ordering Guide "M" for ActuatorsCoil Paks (MYA, MXA, MNA)	(1/2", 3/4"LO, 1"LO)
Ordering Guide "M" Coil Paks (M2Y, M3Y, M2X, M3X, M2N, M3N)	(1/2" thru 21/2")
Ordering Guide "M" Coil Paks (MY, MX, MN)	(1/2" thru 21/2")
Ordering Guide "M" Hose Paks (MYH, MXH, MNH)	(1/2" thru 21/2")
Ordering Guide "O" Coil Paks (O2Y, O3Y, OY, O2X, O3X, OX, O2N, O3N, ON)	(1/2" thru 21/2")
Ordering Guide "O" Hose Paks (OYH, OXH, ONH)	(1/2" thru 21/2")
Ordering Guide "X" Coil Paks (X2Y, X3Y, XY, X2X, X3X, XX, X2N, X3N, XN)	(1/2" thru 21/2")
Ordering Guide "X" Hose Paks (XYH, XXH, XNH)	(1⁄2" thru 21⁄2")
Ordering Guide "N" Coil Paks (N2Y, N3Y, NY, N2X, N3X, NX, N2N, N3N, NN)	(1⁄2" thru 11⁄2")
Ordering Guide "N" Hose Paks (NYH, NXH, NNH)	(1⁄2" thru 11⁄2")
Ordering Guide "BKF, BKU" Bypass Kits	(1⁄2" thru 2")
Ordering Guide "BKFC, BKUC" Bypass Kits	(½" thru 2")
Ordering Guide "Packages A" Coil Paks	(21⁄2" thru 6")
Ordering Guide "Packages M" Coil Paks	(21⁄2" thru 6")
Ordering Guide "Packages V" Coil Paks	(21⁄2" thru 12")
Ordering Guide "Packages N" Coil Paks	(21/2" thru 12")



	(01/11/11 - 1011)
Ordering Guide "Packages B" Coil Paks	(2½" thru 12")
Ordering Guide for Ultramatic Model UMA	(½"LO, ¾"LO, 1"XLO)
Ordering Guide for Ultramatic Model UM with NO Option Port	(½" thru 2½")
Ordering Guide for Ultramatic Model UM with Option Port Ordering Guide for Ultramatic Model UMF	(½" thru 1½")
Ordering Guide for Dynamic Model ND	(1/2", 3/4", 1")
<u> </u>	(½" thru 2")
Ordering Guide for Ultramatic Models UMT, UMTB, UMG, UMGB, UMW, UMWB	(2" thru 48")
Ordering Guide for Orturi Model XB	(½" thru 2½")
Ordering Guide for Orturi Model UB	(½" thru 2")
Ordering Guide for UltraMB Model MBA	(½", ¾"LO, 1"LO)
Ordering Guide for Model MB with NO Option Port	(1⁄2" thru 21⁄2")
Ordering Guide for Model MB with Option Port	(1⁄2" thru 11⁄2")
Ordering Guide for UltraMB Model MBNL	(1/2", 3/4", 1")
Ordering Guide for Nextrol Models NXFB, NXGB, NXTB	(21⁄2" thru 12")
Ordering Guide for UltraMB Models MBF, MBFV, MBG, MBGV, MBT, MBTV	(2½" thru 6")
Ordering Guide for Venturi Model NVF, NVFB, NVG, NVGB, NVT, NVTB	(2½" thru 12")
Ordering Guide for Vivax Models VIVF, VIVG, VIVT	(21⁄2" thru 10")
Ordering Guide for Vertex Model VTX	(1⁄2" thru 2")
Ordering Guide for UltraU Model UU	(1⁄2" thru 2")
Ordering Guide for UltraC Model UC	(½" thru 1¼")
Ordering Guide for UltraX Model UX	(½" thru 2½")
Ordering Guide for UltraNXP Model NXP	(½" thru 1½")
Ordering Guide for UltraY Model UY with NO Bypass Port	(½" thru 2½")
Ordering Guide for UltraY Model UY with Bypass Port	(½" thru 1½")
Ordering Guide for UltraY Model YSF	(½" thru 1")
Ordering Guide for Strainex Models SXF, SXFV, SXG, SXGV, SXT, SXTV	(21⁄2" thru 12")
Ordering Guide for NexTube Models NXF, NXFV, NXG, NXGV, NXT, NXTV	(21⁄2" thru 12")
Ordering Guide for UltraT Models UTF, UTU	(1⁄2" thru 2")

SAMPLE SPECIFICATIONS & MISCELLANEOUS

Automatic Flow Control Valves Specifications Manual Flow Control Valves Specifications Cost Analysis Connection Comparison Maximum Allowable GPM Flow Rates Automatic Split Coil Detail (½" thru 2½") Automatic Split Coil Detail (½" thru 12") Manual Split Coil Detail with "O" Coil Paks Manual Split Coil Detail with "O" Coil Paks Manual Split Coil Detail with "Nextrol" Manual Split Coil Detail with "Nextrol" Manual Split Coil Detail with "UltraMB" Manual Split Coil Detail with "Nexus Venturi" NexFloChex - Automatic NexFloChex - Manual

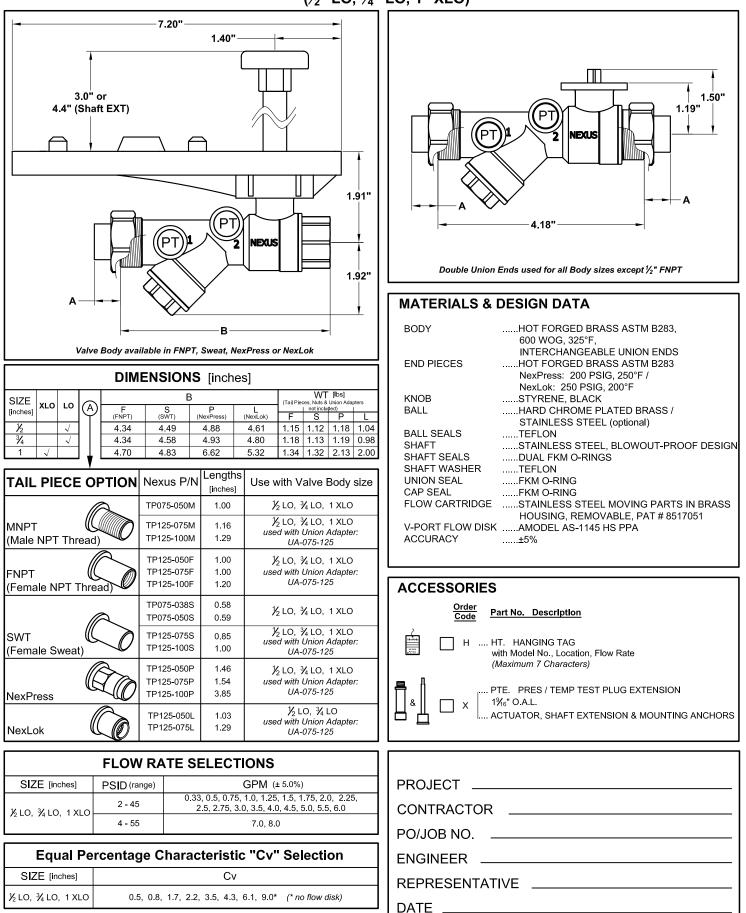


UltraMatic[™] Model UMA

Actuated Automatic Flow Control Valve

with V-Port Flow Characterizing Disk

(¹/₂" LO, ³/₄" LO, 1" XLO)



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraMatic[™] Model UMA

Submittal Schedule

(¹/₂" LO, ³/₄" LO, 1" XLO)

FLOW RATE SELECTIONS SIZE (Inches) PSID (range) GPM (± 5.0%) 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2 45 $\frac{1}{2}$

2 LO, ¾ LO, 1 XLO	2 - 45	2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0
$_{2}$ LO, 74 LO, 1 XLO	4 - 55	7.0, 8.0

ACCESSORIES

H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)

... PTE. PRES / TEMP TEST PLUG EXTENSION; $1\%_6$ " O.A.L.

Х ACTUATOR, SHAFT EXTENSION & MOUNTING ANCHORS

Equal Percentage Characteristic "Cv" Selection	
SIZE (Inches)	Cv
½ LO, ¾ LO, 1 XLO	0.5, 0.8, 1.7, 2.2, 3.5, 4.3, 6.1, 9.0* (* no flow disk)

Equal Percentage Characteristic "Cv" Selection		
SIZE (Inches)	Cv	
½ LO, ⅔ LO, 1 XLO	0.5, 0.8, 1.7, 2.2, 3.5, 4.3, 6.1, 9.0* (* no flow disk)	

ltem	Qty.	Cv	Model Designation	Tagging Information (Maximum 7 Characters)

ORDER DATA	
Sample Part #:	PROJECT
U M A - 0 7 5 L S - 0 5 0 S - 1 0 -	CONTRACTOR
UltraUMA Size	PO/JOB NO.
Fixed End	ENGINEER _
Flow Rate (GPM)	REPRESENTA
Please consult the Ordering Guide in the Nexus Valve	DATE
catalog for complete part number and ordering information.	

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



UltraMatic[™] Model UM

Automatic Flow Control Valve (1/2" thru 21/2")

PORT (#1 & #2): 1/4" NPT (Includes PT Test Plug)

	Valve Body ava	ailable in Fl	NPT, Sweat, NexPress					
DI	MENSIONS	[inche	es]					
SIZE [inches] XLO LO STD A F (NPT)	B S P (sweat) (NexPress) (Ne	L D	E F Cv (based on valve body only	(Tall Pieces & Nuts not Included)				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1.2 1.7 5.3 1.8	1.6 1.9 9 2.4 3.1 14	1.2 1.5				
		1.4 1.7 5.4 1.8	1.6 1.9 9 2.4 3.1 14	1.2 2.3	REMOVABLE FLOW CONTROL CARTRIDGE			
1 🗸 43	4.4 4.6 4	1.9 1.7	1.6 1.9 9	1.2				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5.3 5.6 5 6.6 6.8	5.9 1.8 - 2.5	2.4 3.1 14 3.5 4.3 32	2.3 3.9	Cartridge Cap			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3.0 1.8 9.3 2.5	2.4 3.1 14 3.5 4.3 32	2.5 4.4	FLOW RATE SELECTIONS			
1½ √ 6.3	6.7 8.9 9	9.5 2.5	3.5 4.3 32	4.5	SIZE [inches] PSID (range) GPM (± 5.0%)			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		2.0 3.4 2.2 3.4	5.1 5.5 77 5.1 5.5 77	7.8 8.0	2 - 45			
21/₂ ↓ 9.8	10.6 -	- 3.4	5.1 5.5 77	8.5	4 - 55 7.0, 8.0			
TAIL PIECE OPTION	Nexus P/N	_engths [inches]	Use with Valve Bo	ody size	½ STD, ¾ STD, 2 - 45 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.6, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5 1 LO, 1½ LO 5 oct 110, 120, 130, 140, 150, 110, 150, 110, 100, 10			
	TP075-050M TP125-050M	1.00	½ LO, ¾ LO, 1∑	XLO	2 45 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0			
	TP125-030M TP125-075M TP125-100M	1.16 1.29	½ STD, ⅔ STD, 1 LC	D, 1¼ LO	1 STD , 1¼ STD, 1½ LO 2 - 60 24.0, 25.0, 30.0, 35.0			
	TP200-050M	1.04			4 - 70 40.0, 45.0			
MNPT	TP200-075M TP200-100M TP200-125M	1.16 1.39 1.85	1 STD, 11⁄4 STD,	1½ LO	1½ STD, 2, 2½ 2 - 45 25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0			
(Male NPT Thread)	TP200-123M TP200-150M TP250-100M	1.89			5 - 50 80.0, 85.0, 90.0, 95.0, 100.0			
	TP250-125M TP250-150M	1.93 1.93 1.97	1½ STD, 2, 2	Y2	ACCESSORIES			
	TP250-200M TP125-050F	2.00			Order Code Part No. Description			
	TP125-075F TP125-100F	1.00 1.20	½ STD, ⅔ STD, 1 LC	D, 1¼ LO	C CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ½"LO, 1" XLO;			
	TP200-100F TP200-125F	1.61 1.57	1 STD, 11/2 STD, 11/2 LO		CV-2 for ½" STD, ¾"STD, 1"LO, 1¼"LO; Center Guided, Non-Slam Check			
FNPT	TP200-150F TP250-125F	1.16	1½ STD, 2, 2½		E ES-1, ES-2, ES-3. EXTENDED HANDLE			
(Female NPT Thread)	TP250-120F TP250-150F TP250-200F	1.97 1.36			Stationary housing for full-height vapor barrier			
	TP250-250F TP075-038S	1.74 0.58			H HT. HANGING TAG with Model No., Location, Flow Rate			
	TP075-050S TP125-050S	0.59	½ LO, ¾ LO, 1	XLO	(Maximum 7 Characters)			
A	TP125-050S TP125-075S TP125-100S	0.85	½ STD, ⅔ STD, 1 L0	0, 1¼ LO				
swt	TP200-075S TP200-100S	1.85 1.85	1 STD, 1¼ STD, 1½ LO		X PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.			
(Female Sweat)	TP200-125S TP200-150S	1.85 1.38						
	TP250-125S TP250-150S	1.69 1.97			MATERIALS & DESIGN DATA			
	TP250-200S TP125-050P	1.65 1.46			BODYHOT FORGED BRASS ASTM B283 (CAST BRASS: 1½" STD, 2", 2½"), 600 WOG, 325°F,			
	TP125-075P TPA125-100P	1.54 3.85	1 STD, 1/4 STD, 1 LO, 1/4 LO		INTERCHANGEABLE UNION ENDS END PIECESHOT FORGED BRASS ASTM B283			
NexPress	TP200-100P TPA200-125P	1.58 3.70			NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F			
INEXPICESS	11 A200-1301 3.03		1½ STD, 2, 2½		HANDLE & NUTZINC PLATED / PVC COATED BALLHARD CHROME PLATED BRASS / STAINLESS STEEL (optional)			
	TPA250-200P TP125-050L	4.07			BALL SEALSTEFLON SHAFTBRASS / STAINLESS STEEL (optional), BLOWOUT-PROOF			
	TP125-075L TP200-100L	1.29	½ STD, ⅔ STD, 1 LO, 1¼ LO		SHAFT SEALSDUAL FKM O-RINGS UNION SEALFKM O-RING			
NexLok	TPA200-100L TPA200-125L TPA200-150L	4.25	1 STD, 11/4 STD,	1½ LO	CAP SEALFKM O-RING FLOW CARTRIDGESTAINLESS STEEL MOVING PARTS IN BRASS HOUSING,			
INEXLOK	TPA200-150L TPA250-125L	4.05			REMOVABLE, PAT # 8517051 CARTRIDGE SEALEPDM			
	TPA250-150L TPA250-200L	4.85 4.40	1½ STD, 2, 2	V ₂	ACCURACY5%			
ORDER DATA								
Sample Part #:				PROJECT				
UM-075-S-	075M-	0 4 0	- N		CONTRACTOR			
Model Valve Trim		\square		T	PO/JOB NO			
UltraUM Size — Fixed End					ENGINEER			
Union End								
Accessory Cap Option — N = NO Optional 3rd Port — —					REPRESENTATIVE			
Option Order Codes (Accessorie	es) — — — —			DATE				

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraMatic[™] Model UM Automatic Flow Control Valve w/ Accessory Port

 $(\frac{1}{2})$ " thru $1\frac{1}{2}$ " LO)

PORT (#1): Valve Body available in FNPT, Sweat, NexPress or NexLok 2/2" NPT (Includes PT Test Plug) PORT (#2): OPTION **DIMENSIONS** [inches] for $\frac{1}{2}$ " LO thru 1 $\frac{1}{4}$ " LO valves: $\frac{1}{2}$ " NPT for 1" STD, 11/4" STD, 11/2" LO valves: 3/4" NPT SIZE Cv WT [lbs] XLO LO STD A Е F D S sweat) [inches] 1/2 3.9 4.1 4.5 4.2 1.7 1.6 1.9 9 1.2 D 5.3 1/2 5.0 4.9 5.5 1.8 2.4 3.1 14 1.5 3/4 3.9 4.2 4.6 1.6 1.9 9 1.2 4.4 1.7 (PT) ∛4 4.9 5.2 5.6 5.4 1.8 2.4 3.1 14 2.3 4.3 4.4 4.6 4.9 1.7 1.6 1.9 9 1.2 1 \checkmark 1 51 53 56 5.9 1.8 24 31 14 23 Ε PORT (#4): 1/4" NPT (Includes PT Test Plug) 1 6.8 6.9 7.1 2.5 3.5 4.3 32 3.9 11/4 (A) 8.0 1.8 2.4 2.5 J 5.4 5.3 7.6 3.1 14 REMOVABLE FLOW CONTROL CARTRIDGE 11/4 6.6 6.8 8.9 9.0 2.5 3.5 4.3 32 4.4 11/2 6.6 7.0 9.2 9.2 2.5 3.5 4.3 32 4.5 Cartridge Cap R Lengths TAIL PIECE OPTION Use with Valve Body size Nexus P/N **MATERIALS & DESIGN DATA** [inches TP075-050M 1/2 LO, 3/4 LO, 1 XLO 1.00 BODYHOT FORGED BRASS ASTM B283, 600 WOG, 325°F, TP125-050M 1.04 INTERCHANGEABLE UNION ENDS TP125-075M 1.16 % STD. % STD. 1 LO. 1% LO END PIECES .HOT FORGED BRASS ASTM B283 TP125-100M 1.29 NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / TP200-050M 1.04 NexLok LD: 200 PSIG, 200°F MNPT TP200-075M 1.16 HANDLE & NUT ZINC PLATED / PVC COATED 1 STD, 11/4 STD, 11/2 LO TP200-100M 1.39HARD CHROME PLATED BRASS / (Male NPT Thread) BALL TP200-125M 1.85 STAINLESS STEEL (optional) 1.89 TP200-150MTEFLON BALL SEALS TP125-050F 1.00BRASS / STAINLESS STEEL (optional), SHAFT 1/2 STD, 3/4 STD, 1 LO, 1/4 LO TP125-075F 1.00 BLOWOUT-PROOF TP125-100F 1.20 SHAFT SEALS DUAL FKM O-RINGS UNION SEALFKM O-RING TP200-100F 1.61 FNPT CAP SEALFKM O-RING 1 STD. 1% STD. 1% LO TP200-125F 1.57 (Female NPT Thread) FLOW CARTRIDGESTAINLESS STEEL MOVING PARTS IN BRASS HOUSING TP200-150F 1.16 **REMOVABLE, PAT # 8517051** TP075-038S 0.58 1/2 LO, 3/4 LO, 1 XLO CARTRIDGE SEALEPDM TP075-050S 0.59 ACCURACY5% TP125-050S 0.60 1/2 STD, 3/2 STD, 1 LO, 1/2 LO TP125-075S 0.85 TP125-100S 1.00 ACCESSORIES TP200-075S 1.85 SWT Order Code TP200-100S 1.85 (Female Sweat) 1 STD, 11/2 STD, 11/2 LO Part No. Description TP200-125S 1.85 TP200-150S 1.38 AV-025. AUTOMATIC AIR VENT А TP125-050P 1.46 250°F, 150 PSIG, positive shut-off, ¼" MNPT TP125-075P 1.54 1/2 STD, 3/2 STD, 1 LO, 1/2 LO (Not available for: ½"LO, ¾"LO, 1"XLO) TPA125-100P 3.85 CV-1, CV-2. CHECK VALVE TP200-100P 1.58 NexPress С TPA200-125P 3.70 1 STD, 11/4 STD, 11/6 LO CV-1 for ½"LO, ¾"LO, 1" XLO; TPA200-150P 3.63 CV-2 for ½" STD, ¾"STD, 1"LO, 1¼"LO, Center Guided, Non-Slam Check TP125-050L 1.03 1/2 STD. 3/2 STD. 1 LO. 1/2 LO TP125-075L 1.29 ES-1, ES-2. EXTENDED HANDLE Е TP200-100L 1.66 NexLok Stationary housing for full-height vapor barrier 1 STD, 11/4 STD, 11/2 LO TPA200-125L 4 25 TPA200-150L 4.05 HT. HANGING TAG Н with Model No., Location, Flow Rate FLOW RATE SELECTIONS (Maximum 7 Characters) SIZE [inches] PSID (range) GPM (± 5.0%) L SL. SHORT LEVER HANDLE 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2 - 45 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0 1/2 LO, 3/4 LO, 1 XLO MV-025. MANUAL AIR VENT V 4 - 55 7.0.8.0 325°F, 400 PSIG, ¼" MNPT, Side Discharge 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1. 5, 2.0, 2.25, 2 - 451/2 STD, 3/4 STD, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5 1 LO, 11/4 LO 5 **-** 65 110 120 130 140 150 .. MV-025L. MANUAL AIR VENT EXTENDED 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L 2 - 45 х 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0 1 STD , 11/4 STD, 11/2 LO . PTE. PRES / TEMP TEST PLUG EXTENSION 2 - 6024 0 25 0 30 0 35 0 1%₆" O.A.L. 4 - 70 40.0, 45.0 **ORDER DATA** Sample Part #: PROJECT U M - 0 7 5 - S - 0 7 5 M - 0 4 0 -V CONTRACTOR Model Valve Trim PO/JOB NO. UltraUM Size Fixed End ENGINEER _ Union End Flow Rate (GPM) REPRESENTATIVE _ Accessory Cap Option Optional 3rd Port Accessory Option Order Codes (Accessories) -DATE

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraMatic[™] Model UM

Submittal Schedule

(¹/₂" thru 2¹/₂")

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FLOW RATE SELECTIONS					
SIZE [inches]	PSID (range)	GPM (± 5.0%)			
⅓ LO, ¾ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0			
72 LO, 74 LO, 1 XLO	4 - 55	7.0, 8.0			
½ STD, ⅔ STD,	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5			
1 LO, 11⁄4 LO	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0			
	2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0			
1 STD,1¼ STD,1½ LO	2 - 60	24.0, 25.0, 30.0, 35.0			
	4 - 70	40.0, 45.0			
1½ STD. 2. 2½	2 - 45	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0			
1/2 310, 2, 2/2	5 - 50	80.0, 85.0, 90.0, 95.0, 100.0			

ACCESSORIES

- A AV-025. AUTOMATIC AIR VENT; 250°F, 150 PSIG, positive shut-off, $\not\!\!\! Z$ " MNPT
- $_{C}\ \ldots$ CV-1, CV-2. CHECK VALVE; Center Guided, Non-Slam Check
- E ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier
- H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- L SL. SHORT LEVER HANDLE
- V MV-025. MANUAL AIR VENT; 325°F, 400 PSIG, ¼" MNPT, Side Discharge Note: Not available for 1½"STD, 2", and 2½".
 - MV-025L. MANUAL AIR VENT EXTENDED; 2¼" O.A.L. Note: Not available for 1½"STD, 2", and 2½".
 - PTE. PRES / TEMP TEST PLUG EXTENSION; $1\%_6$ " O.A.L.

ltem	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)

ORDER DATA
Sample Part #:
UM - 075 - S - 075M - 04.0 - N
Model Valve Trim UltraUM Size Fixed End Union End Flow Rate (GPM) Accessory Cap Option Optional 3rd Port Accessoty or N = NO Optional 3rd Port Option Order Codes (Accessories)
Blasse sensult the "Ordering Cuide" section in Nerve Value Catalog

PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

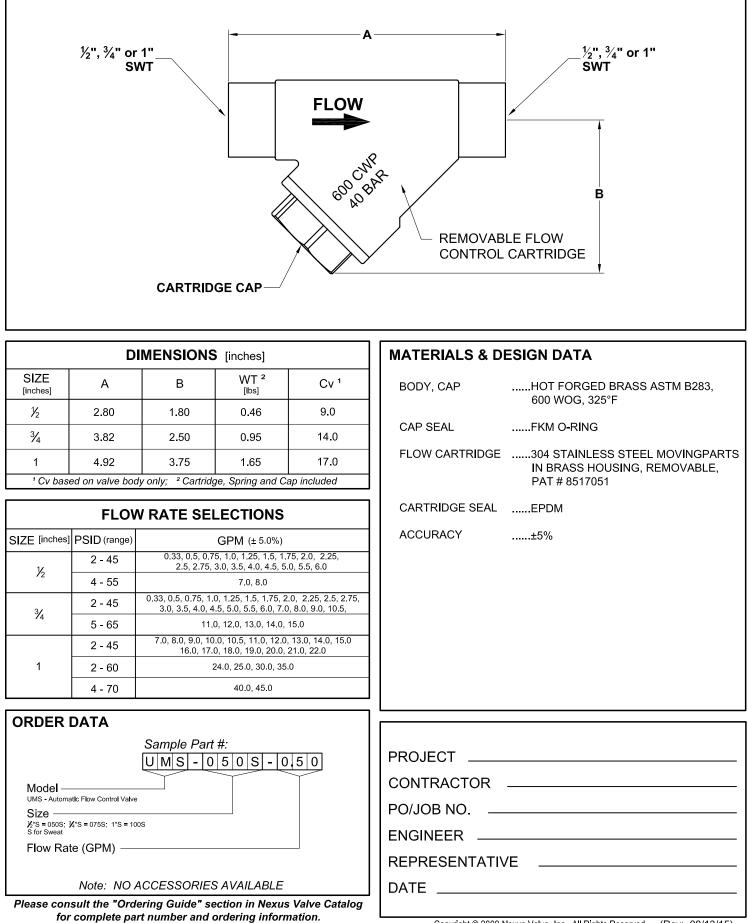
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UltraMatic[™] Model UMS

Automatic Flow Control Valve

(¹⁄₂", ³⁄₄", 1")

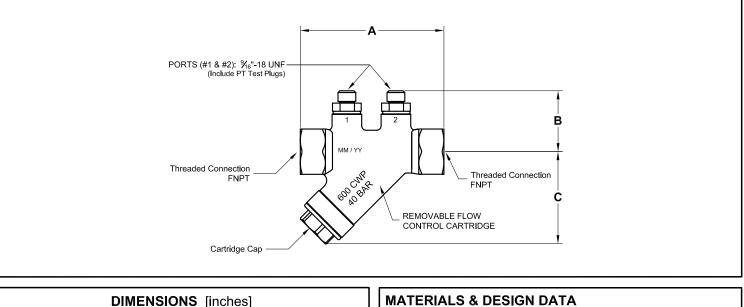




UltraMatic[™] Model UMF

Automatic Flow Control Valve

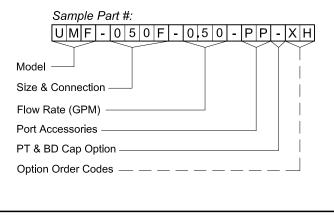
(1/2", 3/4", 1")



DIMENSIONS [inches]							
SIZE [inches]	Threaded Connections FNPT	А	В	С	WT² [lbs]	Cv ¹	
1/2	½" x ½"	3.48	1.55	1.50	1.06	9.0	
3⁄4	¾" x ¾"	4.00	1.69	2.46	1.60	14.0	
1	1" x 1"	4.63	1.69	2.46	1.83	14.0	
1 (¹ Cv based on valve body only; ² Cartridge, Spring, PT's, and Cap included						

	FLOW RATE SELECTIONS						
SIZE [inches]	PSID (range)	GPM (± 5.0%)					
1/2	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0					
12	4 - 55	7.0, 8.0					
3⁄4	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5					
74	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0					
1	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5					
	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0					

ORDER DATA



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

.....LEAD FREE BRASS C46500 BODY (or equivalent), 600 WOG, 325°FHOT FORGED BRASS ASTM B283, CAP 600 WOG, 325°F CAP SEALFKM O-RING FLOW CARTRIDGE304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, REMOVABLE, PAT # 8517051 CARTRIDGE SEALEPDM ACCURACY±5% NOT FOR POTABLE WATER THIS VALVE DOES NOT MEET LEAD FREE REQUIREMENTS

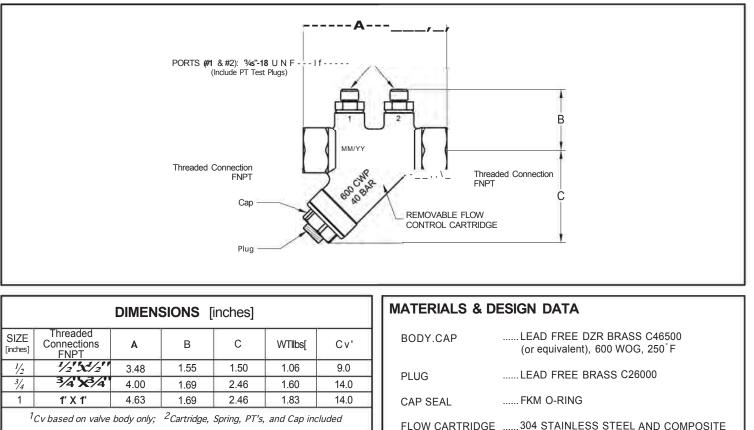
ACCESSORIES							
		<u>Order</u> Code					
Level for the		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)				
		x	PTE. PRES / TEMP TEST PLUG EXTENSION $1\%_6$ " O.A.L.				
PROJE	ЕСТ						
CONT							
CONT	RAU						
PO/JO	PO/JOB NO						
ENGINEER							
DATE							



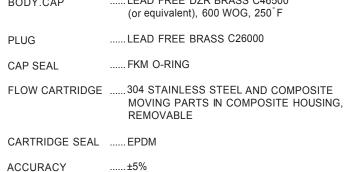
UltraMatic[™] Model UMNL

Lead Free Automatic Flow Control Valve

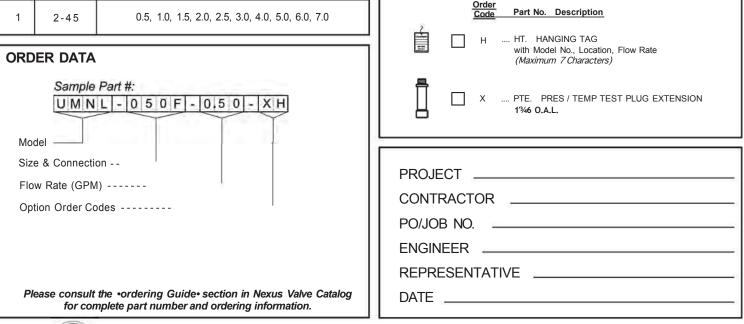
(¹/₂^{'''} ³/₄^{'''} 1'')



	FLOW RATE SELECTIONS								
SIZE [inches]	PSID (range)	GPM (±5.0%)							
1/2	2-45	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0							
3/4	2-45	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 7.0							
1	2-45	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 7.0							



ACCESSORIES





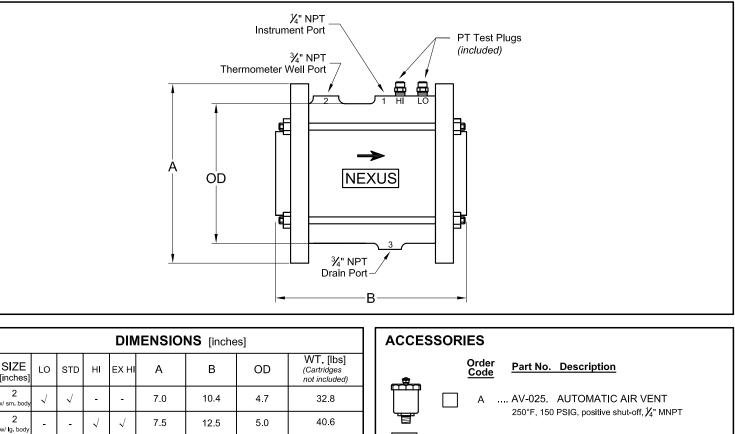


UltraMatic[™] Model UMT

Automatic Flow Control Valve

Threaded Ends

 $(2^{"} \text{ and } 2\frac{1}{2}^{"})$



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В	BD-075. BLOWDOWN / VENT / DRAIN
	325°F, 600 PSIG, $3\!\!\!/_4$ " hose bib & cap

.... HT. HANGING TAG н with Model No., Location, Flow Rate (Maximum 7 Characters)

- V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, 1/2" MNPT, Side Discharge
 - W TW-075 THERMOMETER WELL

Х

.. MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, $\frac{1}{4}$ " MNPT, Side Discharge, 2 $\frac{1}{4}$ " O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%₁₆" O.A.L.

PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	

DIMENSIONS [inches]									
LO STD HI EX HI A B OD (Cartridges not included)									
\checkmark	\checkmark	-	-	7.0	10.4	4.7	32.8		
-	-	\checkmark	\checkmark	7.5	12.5	5.0	40.6		
\checkmark	\checkmark	-	-	7.0	10.7	4.7	32.5		
\checkmark	\checkmark	\checkmark	\checkmark	7.5	12.8	5.0	40.3		
	~ - ~	J J - - J J		LO STD HI EX HI ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	LO STD HI EX HI A √ √ - - 7.0 - - √ √ 7.5 √ √ - - 7.0	LO STD HI EX HI A B \checkmark \checkmark - - 7.0 10.4 - - \checkmark \checkmark 7.5 12.5 \checkmark \checkmark - - 7.0 10.7	LO STD HI EX HI A B OD \checkmark \checkmark - - 7.0 10.4 4.7 - - \checkmark \checkmark 7.5 12.5 5.0 \checkmark \checkmark - - 7.0 10.7 4.7		

	FLOW RATES Control Range [PSID]										
SIZE		STD (5-50) for sm. body STD (2-45) for lg. body	HI (2-45)	EX HI (4-70)							
(± 5.0%, 5 GPM increments)											
2	25 - 70	75 - 100	105 - 165	140, 160, 180, 200, 220, 240							
21/2	25 - 70	75 - 100	105 - 165	140, 160, 180, 200, 220, 240							

MATERIALS & DESIGN DATA

ULTRAMATIC BODY	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS
FLOW CARTRIDGE	IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	EPDM
STUDS AND NUTS	ZINC PLATED STEEL
THRD. ADAPTERS	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
ACCURACY	±5%

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

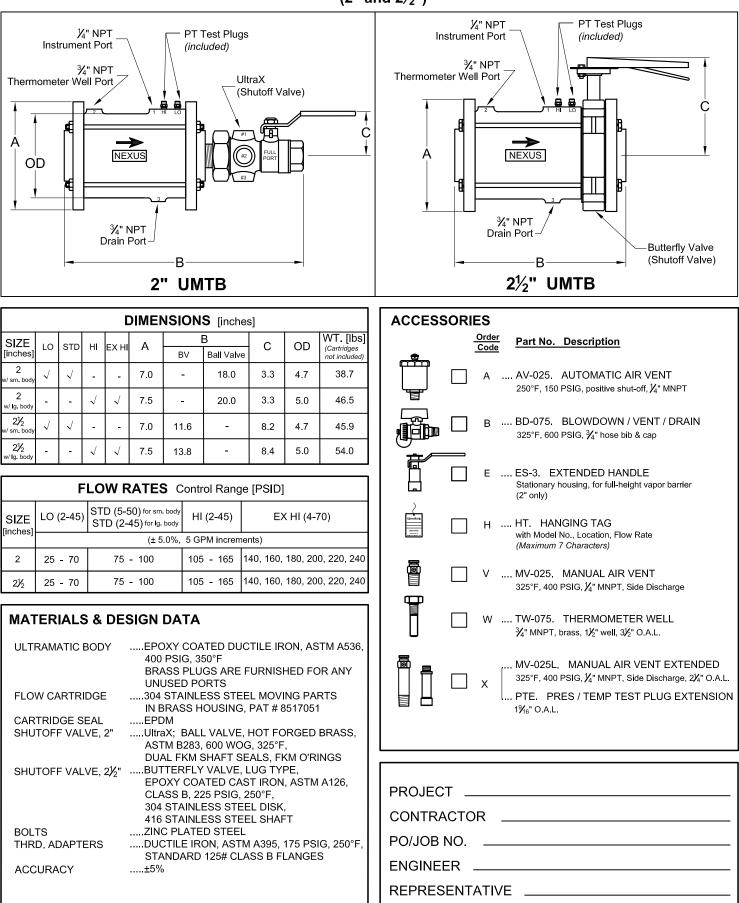


UltraMatic[™] Model UMTB

Automatic Flow Control Valve

Threaded Ends w/Shutoff Valve

(2" and 2¹/₂")



DATE

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

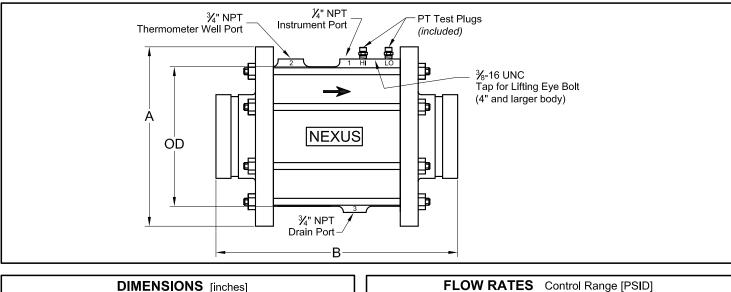


UltraMatic[™] Model UMG

Automatic Flow Control Valve

Grooved End

(2¹/₂" thru 12")



	DIMENSIONS [inches]									
SIZE [inches]	LO	STD	н	EX HI	А	В	OD	WT. [lbs] (Cartridges not included)		
21∕2 w/ sm. body	\checkmark	\checkmark	-	-	7.0	13.1	4.7	29.9		
21∕2 w/lg.body	-	-	\checkmark	\checkmark	7.5	15.2	5.0	42.3		
3	\checkmark	\checkmark	\checkmark	<	7.5	15.3	5.0	42.3		
4	\checkmark	\checkmark	\checkmark	<	9.0	15.3	6.8	56.7		
5	\checkmark	\checkmark	\checkmark	\checkmark	10.0	15.5	7.6	67.7		
6	\checkmark	\checkmark	\checkmark	\checkmark	11.0	16.1	8.6	92.0		
8	\checkmark	\checkmark	\checkmark	\checkmark	13.5	16.2	11.0	127.0		
10	\checkmark	\checkmark	\checkmark	\checkmark	16.0	16.7	13.4	180.5		
12	\checkmark	\checkmark	\checkmark	\checkmark	19.0	16.8	16.1	248.7		

ACCESSORIES

		rder ode	Part No. Description
		Α	. AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ½" MNPT
		в …	. BD-075. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, $\frac{3}{4}$ " hose bib & cap
		н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
đ		v	. MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
	<u> </u>	N	. TW-075. THERMOMETER WELL ⅔" MNPT, brass, 1½" well, 3½" O.A.L.
		× [. MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, $\frac{1}{4}$ " MNPT, Side Discharge, $\frac{2}{4}$ " O.A.L . PTE. PRES / TEMP TEST PLUG EXTENSION $1\frac{3}{6}$ " O.A.L.

STD (5-50) for 2½" w/ sm. body HI (2-45) for 21/2" & 3" EX HI (4-70) for 21/2" & 3" LO (2-45) STD (2-45) for 21/2" w/ Ig. body SIZE HI (4-45) for 4" thru 12"EX HI (5-45) for 4" thru 12 STD (2-45) for 3" thru 12" [inches] (± 5.0%, 5 GPM increments) 140, 160, 180, 200, 220, 240 21/2 25 - 70 75 - 100 105 - 165 140, 160, 180, 25 - 70 125 - 165 3 75 - 120 200, 220, 240 140, 160, 180, 75 - 120 245 - 480 4 125 - 240 200, 220, 240 265 - 680 5 75 - 190 140 - 380 165 - 310 6 75 - 240 245 - 480 125 - 400 485 - 960 8 125 - 480 485 - 840 130 - 800 490 - 1680 480 - 720 725 - 1320 730 - 1200 1450 - 2640 10 560 - 1030 1035 - 1940 1100 - 1830 2140 - 3800 12

MATERIALS & DESIGN DATA

ULTRAMATIC BODY	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	EPDM
STUDS & NUTS	ZINC PLATED STEEL
GROOVED ADAPTERS	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
ACCURACY	±5%

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

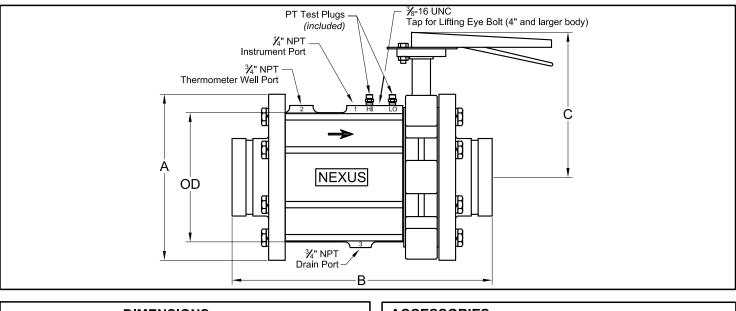


UltraMatic[™] Model UMGB

Automatic Flow Control Valve

Grooved Ends

(2½" thru 6")



	DIMENSIONS [inches]								
SIZE [inches]	LO	STD	н	EX HI	А	В	С	OD	WT. [lbs] (Cartridges not included)
21/2 w/ sm. body	\checkmark	\checkmark	-	-	7.0	14.8	8.2	4.7	46.5
21/2 w/ lg. body	-	-	\checkmark	\checkmark	7.5	16.9	8.2	5.0	54.5
3	\checkmark	\checkmark	\checkmark	\checkmark	7.5	17.1	8.4	5.0	60.5
4	\checkmark	\checkmark	\checkmark	\checkmark	9.0	17.3	9.1	6.8	76.5
5	\checkmark	\checkmark	\checkmark	\checkmark	10.0	17.7	9.5	7.6	86.5
6	\checkmark	\checkmark	\checkmark	\checkmark	11.0	18.3	10.2	8.6	120.0

	FLOW RATES Control Range [PSID]									
SIZE		STD (5-50) for 2½" w/ sm. body STD (2-45) for 2½" w/ lg. body STD (2-45) for 3" thru 6"	HI (2-45) for 2½" & 3" HI (4-45) for 4" thru 6"	EX HI (4-70) for 2½" & 3" EX HI (5-45) for 4" thru 6"						
[inches]		(± 5.0%,	5 GPM increments)							
21/2	25 - 70	75 - 100	105 - 165	140, 160, 180, 200, 220, 240						
3	25 - 70	75 - 120	125 - 165	140, 160, 180, 200, 220, 240						
4	75 - 120	125 - 240	140, 160, 180, 200, 220, 240	245 - 480						
5	75 - 190	140 - 380	165 - 310	265 - 680						
6	75 - 240	245 - 480	125 - 400	485 - 960						

MATERIALS & DESIGN DATA

ULTRAMATIC BODY	EPOXY COATED DUCTILE IRON, ASTM A536, 400 PSIG, 350°F
	BRASS PLUGS ARE FURNISHED FOR ANY
	UNUSED PORTS
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS
	IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	EPDM
BUTTERFLY VALVE	EPOXY COATED CAST IRON, ASTM A126,
	LUG TYPE BUTTERFLY VALVE,
	225 PSIG, 250°F, 316 STAINLESS STEEL DISK,
	416 STAINLESS STEEL SHAFT
BOLTS	ZINC PLATED STEEL
GROOVED ADAPTERS	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F,
	STANDARD 125# CLASS B FLANGES
ACCURACY	±5%

ACCESSORIES

DATE _

÷		Order Code	Part No. Description					
		Α	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, $\frac{1}{4}$ " MNPT					
		В	BD-075. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap					
		GB	BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)					
Uradiate uradiate		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)					
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge					
		W	TW-075. THERMOMETER WELL ¾" MNPT, brass, 1½" well, 3½" O.A.L.					
		x [MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1¾6" O.A.L.					
PROJECT								
PO/JOB NO								
	ENGINEER							
			=					
REPRESENTATIVE								

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

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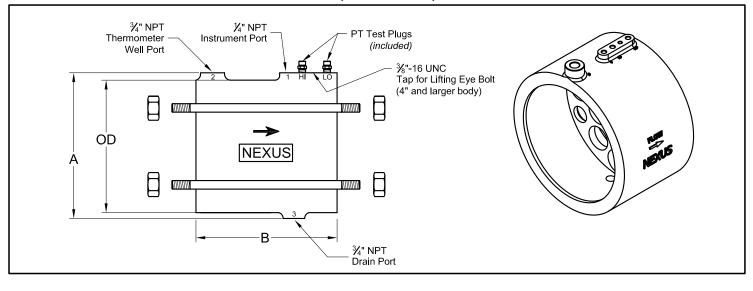


UltraMatic[™] Model UMW

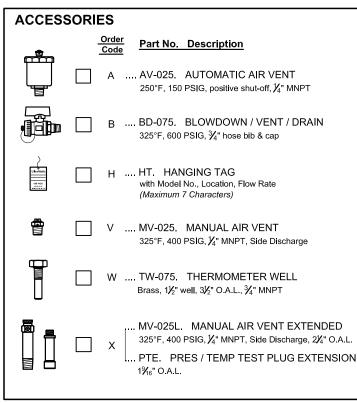
Automatic Flow Control Valve

Wafer Style

(2¹/₂" thru 12")



	DIMENSIONS [inches]											
SIZE [inches]	LO	STD	HI EX HI A B OD		EX HI A B OD		WT. [lbs] (Cartridges not included)					
21/2	\checkmark	\checkmark	-	-	- 5.1 8.4 4.7			16.2				
3	\checkmark	\checkmark	\checkmark	√ 5.6 10.5 5.0		10.5 5.0		25.8				
4	\checkmark	\checkmark	\checkmark	\checkmark	7.4	10.0	6.8	29.5				
5	\checkmark	\checkmark	\checkmark	\checkmark	9.3	10.0	7.6	34.7				
6	\checkmark	\checkmark	\checkmark	\checkmark	9.2	10.5	8.6	52.0				
8	8 🗸 🏹 🗸		\checkmark	\checkmark	11.6	10.0	11.0	62.7				
10	\checkmark	\checkmark	\checkmark	\checkmark	13.9	10.0	13.4	78.0				
12	\checkmark	\checkmark	\checkmark	\checkmark	16.7	10.0	16.1	83.5				



For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

	FLOW RATES Control Range [PSID]										
SIZE	LO (2 - 45)	LO (2-45) STD (5-50) for 2% HI (2-45) for 3" STD (2-45) for 3" thru 12" HI (4-45) for 4" thru		EX HI (4-70) for 3" EX HI (5-45) for 4" thru 12"							
linches		(± 5.0°	%, 5 GPM increments)								
21/2	25 - 70	75 - 100	-	-							
3	25 - 70	75 - 120	125 - 165	140, 160, 180, 200, 220, 240							
4	75 - 120	125 - 240	140, 160, 180, 200, 220, 240	245 - 480							
5	75 - 190	140 - 380	165 - 310	265 - 680							
6	75 - 240	245 - 480	125 - 400	485 - 960							
8	125 - 480	485 - 840	130 - 800	490 - 1680							
10	480 - 720	725 - 1320	730 - 1200	1450 - 2640							
12	560 - 1030	1035 - 1940	1100 - 1830	2140 - 3800							

MATERIALS & DESIGN DATA

ULTRAMATIC BODY	EPOXY COATED DUCTILE IRON, ASTM A536, 400 PSIG, 350°F BRASS PLUGS ARE FURNISHED FOR
	UNUSED PORTS
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL STUDS & NUTS	EPDM ZINC PLATED STEEL
ACCURACY	±5%

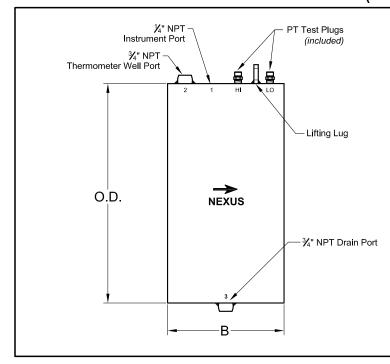
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

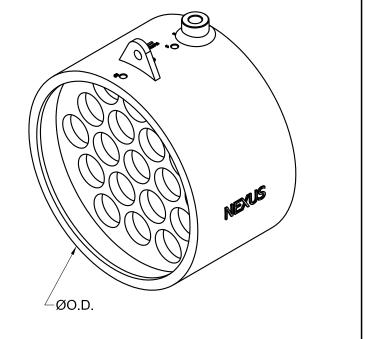


UltraMatic[™] Model UMW

Automatic Flow Control Valve

Fabricated Wafer Style (14" thru 48")





	DIM	IENSION		W RATES		ACCESSORIES		
SIZE [inches]	в	0.D.	Max	<. GPM 5.0%) "EX HI" PSID Range (5 - 45)	WT. [Lbs] (Cartridges not included)	A AV-025. AUTOMATIC AIR VENT		
14	10.0	17.5	2,200	4,560	92.0	250°F, 150 PSIG, positive shut-off, ¹ / ₄ " MNPT		
16	10.0	20.0	3,240	6,480	118.8			
18	10.0	21.4	3,720	7,440	130.7	B BD-075. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap		
20	10.0	23.6	4,440	8,880	152.7			
24	10.0	28.0	6,600	13,200	240.0			
30	12.0	34.5	10,200	20,400	339.0	with Model No., Location, Flow Rate (Maximum 7 Characters)		
36	12.0	41.0	14,520	29,040	TBD	_		
42	12.0	47.8	19,920	39,840	TBD			
48	12.0	54.3	25,920	51,840	TBD	325°F, 400 PSIG, ¼" MNPT, Side Discharge		
FLOW	ULTRAMATIC BODY:STEEL PIPE SA-53 GR. B or ROLLED STEEL PLATE SA-516 GR. 70, 400 PSIG, 350°F FLOW CARTRIDGE:304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051 CARTRIDGE SEAL:EPDM ACCURACY:±5%							
	R DATA							
	ple Part #					PROJECT		
						CONTRACTOR		
Mode	-					PO/JOB NO		
	Matic Size	 M)				ENGINEER		
						REPRESENTATIVE		
	Please co	onsult the O	rdering Guide	in the Nexus Valv		DATE		

Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

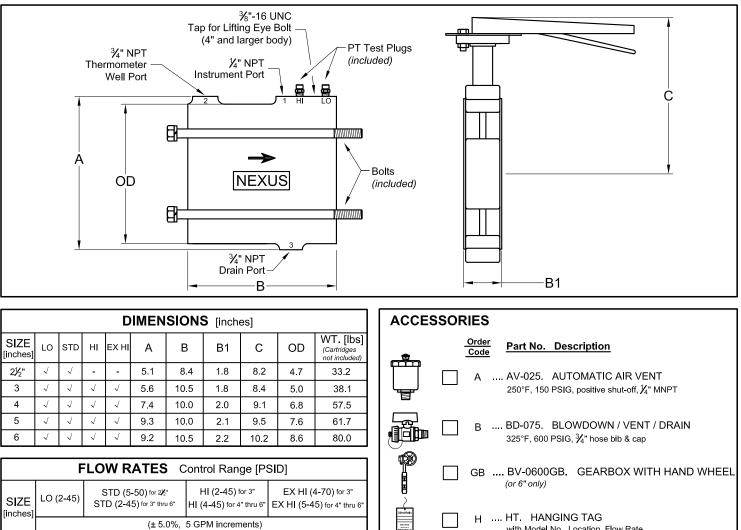


UltraMatic[™] Model UMWB

Automatic Flow Control Valve

Wafer Style w/Butterfly Valve

(2¹/₂" thru 6")



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	FLOW RATES Control Range [PSID]									
SIZE	LO (2-45)	STD (5-50) for 2½" STD (2-45) for 3" thru 6"	HI (2-45) for 3" HI (4-45) for 4" thru 6"	EX HI (4-70) for 3" EX HI (5-45) for 4" thru 6"						
	(± 5.0%, 5 GPM increments)									
21⁄2	25 - 70	75 - 100	-	-						
3	25 - 70	75 - 120	125 - 165	140, 160, 180, 200, 220, 240						
4	75 - 120	125 - 240	140, 160, 180, 200, 220, 240	245 - 480						
5	75 - 190	140 - 380	165 - 310	265 - 680						
6	75 - 240	245 - 480	125 - 400	485 - 960						

MATERIALS & DESIGN DATA

ULTRAMATIC BODY	EPOXY COATED DUCTILE IRON, ASTM A536, 400 PSIG, 350°F
	BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS
CARTRIDGE SEAL	IN BRASS HOUSING, PAT # 8517051 EPDM
BUTTERFLY VALVE	EPOXY COATED CAST IRON, ASTM A126, LUG TYPE BUTTERFLY VALVE,
	225 PSIG, 250°F, 316 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT,
BOLTS	BUTTERFLY VALVE SHIPPED LOOSE
ACCURACY	ZINC PLATED STEEL ±5%

•	Order Code	Part No. Description
	Α	. AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT
	в …	BD-075. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, λ_4''' hose bib & cap
3 0	GB	. BV-0600GB. GEARBOX WITH HAND WHEEL (or 6" only)
Viole voa	Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, λ " MNPT, Side Discharge
]	W	. TW-075. THERMOMETER WELL $rac{3}{4}$ " MNPT, brass, 1" extended neck, 1 $rac{1}{2}$ " well, 3 $rac{3}{2}$ " O.A.L.
	× [MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.

PROJECT ______ CONTRACTOR ______ PO/JOB NO. _____ ENGINEER _____ REPRESENTATIVE _____ DATE _____

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.



UltraMatic[™] Models UMT, UMW, UMG, UMTB, UMWB, UMGB Submittal Schedule

(2" thru 48")

	FLOW RATES Control Range [PSID]										
SIZE	LO (2 - 45)	STD (5-50) for 2½° w/ sm. body STD (2-45) for 2½° w/ lg. body STD (2-45) for 3° thru 12°	21/2" w/ lg. body		4-70) for 2", 2%", & 3" (5-45) for 4" thru 14"						
[Inches]		(± 5	5.0%, 5 GPM increments	5)							
2	25 - 70	75 - 100	105 - 165	105 - 165 140, 160, 180, 200, 220							
21/2	25 - 70	75 - 100	105 - 165	140, 160,	180, 200, 220, 240						
3	25 - 70	75 - 120	125 - 165	140, 160,	180, 200, 220, 240						
4	75 - 120	125 - 240	140, 160, 180, 2	00 2	245 - 480						
5	75 - 190	140 - 380	165 - 310	2	65 - 620						
6	75 - 240	245 - 480	125 - 400	4	85 - 960						
8	125 - 480	485 - 840	130 - 800	4	90 - 1680						
10	480 - 720	725 - 1320	730 - 1200		50 - 2640						
12	560 - 1030	1035 - 1940	1100 - 1830 2140 - 3740								
SIZE [Inches]	14	16	18	20	24						

SIZE [Inches]	14		16		18		20		24	
Control Range	HI (4-45)	EX H I (5 - 45)	HI (4-45)	EX HI (5-45)	H I (4-45)	EX HI (5-45)	H I (4-45)	EX H I (5-45)	H I (4 - 45)	EX H I (5 - 45)
Max.	2200	4560	3240	6480	3720	7440	4440	8880	6600	13200
SIZE [inches]	30		36		42		48			
Control Range	HI (4-45)	EX HI (5-45)	HI (4-45)	EX HI (5-45)	HI (4-45)	EX HI (5-45)	HI (4-45)	EX HI (5-45)		
Max.	10200	20400	14520	29040	· 19920	39840	25920	51840		

ACCESSORIES

- B BD-075. BLOWDOWN / VENT / DRAIN; 325°F, 600 PSIG, 3/4" hose bib & cap
- GB BV-0600G. GEARBOX WITH HAND WHEEL (for 6" only)
- H HT. HANGING TAG; with Model No., Location, Flow Rate (Maximum 7 Characters)
- V MV-025. MANUAL AIR VENT; 325°F, 400 PSIG, χ "MNPT, Side Discharge
- W TW-075. THERMOMETER WELL; $\frac{3}{4}$ " MNPT, brass, $\frac{1}{2}$ " well, $\frac{3}{2}$ " O.A.L.

ltem	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)

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	PROJECT
	CONTRACTOR
e consult	PO/JOB NO
alog.	ENGINEER
	REPRESENTATIVE
	DATE

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.



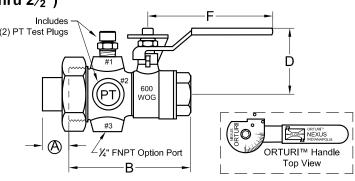


UltraXB Orturi[™] Model XB Calibrated Manual Balancing Valve

(½" thru 2½")

						·	Includes –	-	
	DIMENSI	ONS	[inches	5] 			(2) PT Test Plugs		
SIZE LO STD	F S (NPT) (Sweat)	B (NexPres	s) (NexLok)	D	F	(Tal Pleces & Nuts not included)	\ ₽		
Y ₂ √	2.9 3.1	3.5	3.2	1.7	1.9	0.8		┉┐┝ <u>┺</u> └	
	2.9 3.2 3.1 3.3	3.5	3.4	1.7 1.8	1.9 3.1	0.9		^{#2} 600	
$\frac{3}{4}$ $$	3.1 3.3 3.3 3.4	3.6 3.5	3.0	1.0	1.9	1.5 1.0	((F	РТ)) wog	
1 🗸	3.3 3.5	3.6	4.1	1.8	3.1	1.8			
	3.6 3.6	5.7	6.2	1.8 2.5	3.1 4.3	2.2		#3_]	
$1\frac{1}{4}$ $\sqrt{1}$	4.1 4.3 4.1 4.4	6.3 6.6	6.7	2.5	4.3	3.5 3.8	(A) / _v		
2 1	5.0 5.8	7.7	8.1	3.4	5.5	4.9		FNPT Option Pc	
21/2 🗸 🖌	5.2 6.0	-	-	3.4	5.5	5.2		—B——	
	ON Nexus		Lengths	lse wit	h Valve	Body size	Valve Body available in FNP7	, Sweat, NexPress	
			[Inches]			,	MATERIALS & D	DESIGN DA	
	TP075-0 TP125-0		1.00	1/2	, ¾ LO,	110	BODY	HOT FOR	
	TP125-0 TP125-1	75M	1.16 1.29	∛₄ ST	4 STD, 1 STD, 1¼ LO			600 WOG	
	TP200-0	50M	1.04					INTERCH 指" FNPT (
	TP200-0 TP200-1		1.16 1.39		1¼ STD	. 1%	END PIECES	HOT FOR	
	TP200-1:	25M	1.85 1.89			72		NexPress	
(Male NPT Thread)	TP200-1 TP250-1	оом	1.93					NexLok: 2	
	TP250-1 TP250-1	25M 50M	1.93 1.97		2, 2	2	HANDLE & NUT	NexLok LI	
	TP250-2 TP125-0	00M	2.00				MEMORY STOP	ZINC PLA	
	TP125-0	75F	1.00 1.00	¾ ST	D, 1 ST	D, 11⁄4 LO		MS-3: 30	
\bigwedge	TP125-1		1.20				BALL	HARD CH	
	TP200-1 TP200-1		1.61 1.57		11⁄4 STD,	11/2		STAINLES	
FNPT	TP200-1		1.16				BALL SEALS SHAFT	TEFLON BRASS / S	
(Female NPT Threa	d) TP250-1 TP250-1		1.77 1.97		2, 2)	,		BLOWOU	
		TP250-200F 1.3 TP250-250F 1.7		2, 2/2		2	SHAFT SEALS	DUAL FKN	
	TP075-0	38S	0.58	1/	3/10	11.0	UNION SEALS	FKM O-RI	
	TP075-050S TP125-050S		0.59	12	½, ¾ LO, 1 LO		ACCURACY	±3%	
A	TP125-0	75S	0.85	∛₄ ST	D, 1 ST	D, 1¼ LO			
((TP200-075S		1.85		ACCESSORIES				
SWT	C TP200-1 TP200-1		1.85 1.85	11⁄4 STD, 11⁄2		11/2	Ord Cod		
(Female Sweat)	TP200-150S TP250-125S		1.38			AV-025. AL			
	TP250-1	50S	1.69 1.97	2, 21/2		2		250°F, 150	
	TP125-050P		1.65					BD-025. BI	
	TP125-075 TPA125-100		1.54 3.85	¾ ST	¾ STD, 1 STD, 1¼ LO		325°F, 600 I		
	TP200-1	00P	1.58		11	.14			
NexPress	0 TPA200-1		3.70 3.63		11⁄4 STD,	1 % 2		ES-1M, ES-: Stationary h	
-	TPA250-7	150P	4.44		2, 2	<u>,</u>		2 cationary 11	
	TPA250-2 TP125-0		4.07	34 07					
	TP125-0	75L	1.29	% S⊺	ט, 1 ST	D, 1¼ LO		with Model I (Maximum 7 (
	TP200-1		1.66 4.25		1½ STC	. 1%		SL. SHOR	
NexLok	D TPA200-	150L	4.05		,,				
	TPA250-1 TPA250-1		4.43 4.85		2, 2,			MV-025. M	
	TPA250-2		4.40		2, 4	<u> </u>		325°F, 400 I	
								MV-025L. I	
	/ RATE SE	LEU	HON G				□ ×	325°F, 400	
FLOW SELECTOR	s	SIZE(s))		C	/			
1A		∕₄ LO,			0.0			17/8 O.A.L.	
1B		4 LO,			1.0				
1C 1D		½, ¾ LO, 1 LO ½, ¾ LO, 1 LO ¾ STD, 1 STD, 1¼ LO			3.9		PROJECT		
2B				+	1.3				
2.D 2.A	³ / ₄ STD, 1 STD, 1 ¹ / ₄ LO		1	2.4		CONTRACTOR			
3A		¾ STD, 1 STD, 1¼ LO ¾ STD, 1 STD, 1¼ LO ¾ STD, 1 STD, 1¼ LO			3.5		PO/JOB NO.		
3B					7.4	12			
3C	¾ STD,				16.		ENGINEER		
4A		STD, 1			16.		REPRESENTATIVE		
5A		$\frac{STD}{2}$	1/2		29.				
6A		2, 2½ 2, 2½			51. 29.		DATE		
6B									

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



s or NexLok

ΛTA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F,
END PIECES	INTERCHANGEABLE UNION ENDS, ¼" FNPT OPTION PORT (3 EACH) HOT FORGED BRASS ASTM B283 NexPress: 200 PSIG, 250°F / Next etc. 250 PSIC, 200°E /
	NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F
HANDLE & NUT	ZINC PLATED / PVC COATED
MEMORY STOP	MS-1: 1080 COLD ROLLED STEEL, COATED MS-3: 304 STAINLESS STEEL
BALL	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFT	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF
SHAFT SEALS UNION SEALS ACCURACY	DUAL FKM O-RINGS FKM O-RING ±3%

9	Order <u>Code</u>	Part No. Description
	A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT
	В	BD-025. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ∛" hose bib & cap
	Е	ES-1M, ES-2M, ES-3M. EXTENDED HANDLE Stationary housing, for full-height vapor barrier
	н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	L	SL. SHORT LEVER HANDLE
	V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
	х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L.
		I PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

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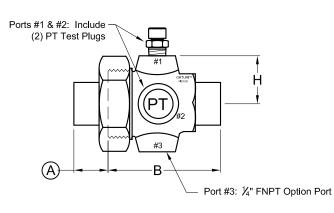


UltraUB Orturi™ Model UB

Bi-Directional Flow Meter, Modified Venturi

(¹/₂" thru 2")

M (MNPT) 2.2 2.6 2.6 2.9 3.0 3.1	B F (FNPT) - 2.1 2.2 2.4	S (Sweat) 1.7 2.2 2,4	H 0.8 0.8	WT [lbs] (Tail Pieces & Nuts not included) 0.5					
(MNPT) 2.2 2.6 2.6 2.9 3.0	(FNPT) - 2.1 2.2	(Sweat) 1.7 2.2	0.8						
2.6 2.6 2.9 3.0	2.1 2.2	2.2		0.5					
2.6 2.9 3.0	2.2		0.8						
2.9 3.0		24		0.9					
3.0	2.4	4.7	0.8	1.0					
		2.6	1.4	2.1					
2.1	2.5	2.7	1.4	2.3					
J. I	2.6	2.9	1.7	3.2					
PTION	Nexus P/N	[Inches]		Body size					
	TP075-050M	1.00		1/2					
	TP125-050M	1.04							
	TP125-075M	1.16	3	4, 1					
<u></u>	TP125-100M TP200-050M	1.29							
	TP200-075M	1.16							
	TP200-100M TP200-125M	1.39 1.85	11/2	$4, 1\frac{1}{2}$					
ad)	TP200-125M TP200-150M	1.85							
	TP250-100M	1.93							
	TP250-125M TP250-150M	1.93 1.97		2					
	TP250-200M	2.00							
	TP125-050F	1.00	3,	4, 1					
.	TP125-075F TP125-100F	1.00 1.20	7.	4, 1					
	TP200-100F	1.61							
	TP200-125F	1.57	11/4, 11/2						
		1.16							
read)				0					
	TP250-200F	1.36		2					
	TP250-250F	1.74							
				1/2					
-									
	TP125-075S	0.85	3/	4, 1					
	TP125-100S	1.00							
O				1.					
	TP200-125S	1.85	1)/	$1_{4}, 1_{2}$					
	TP200-150S	1.38							
	TP250-125S TP250-150S	1.69 1.97		2					
	TP250-200S	1.65							
		1.46	3	V 4. 1					
	TPA125-075P	3.85	7	4, 1					
∽_	TP200-100P	1.58							
$(n \mid$		3.70	1½	$4, 1\frac{1}{2}$					
	TPA250-150P TPA250-200P	4.44 4.07		2					
	TP125-050L	1.03							
	TP125-075L	1.29	3	7 ₄ , 1					
ŀ	TP200-100L	1.66							
ا د	TPA200-125L	4.25	1½	4, 1½					
		1 4.00 1							
	TPA200-150L								
Ò	TPA200-150L TPA250-125L	4.43		2					
Ò	TPA200-150L			2					
ð	TPA200-150L TPA250-125L TPA250-150L	4.43 4.85		2					
	TPA200-150L TPA250-125L TPA250-150L	4.43 4.85 4.40		2					
	read)	TP200-125F TP200-150F TP250-150F TP250-150F TP250-200F TP250-200F TP250-200F TP250-200F TP250-200F TP250-200F TP250-200F TP250-200F TP250-200F TP125-050S TP125-050S TP125-050S TP200-100S TP200-100S TP200-100S TP250-150S TP250-200S TP125-050P TP200-150P TP200-100P TP200-100P TP200-100P TP200-100P TP200-100L TP125-050L TP125-050L TP200-100L TP200-100L TP200-100L TP200-100L TP200-100L	TP200-125F TP200-150F 1.57 1.16 TP250-150F 1.77 TP250-150F TP250-200F 1.36 TP250-200F TP250-200F 1.36 TP250-200F TP075-050S 0.60 TP125-075S TP125-050S 0.60 TP125-075S TP200-175S 1.85 TP200-150S TP250-125S 1.85 TP200-150S TP250-125S 1.69 TP250-150S TP125-050P 1.46 TP125-050P TP125-050P 1.46 TP125-050P TP200-100P 1.58 TP200-125P TP200-100P 1.58 TP200-150P TP2250-200P 4.07 TP425-050P 4.44 TPA250-200P TP125-050L 1.03 TP125-050L TP125-050L 1.03 TP125-075L TP220-100L 1.66 TPA200-125L	TP200-125F 1.57 1½ TP200-150F 1.16 1/2 TP250-125F 1.77 1/2 TP250-200F 1.36 1.97 TP250-200F 1.36 1.74 TP125-050S 0.60 1.74 TP125-050S 0.60 1.74 TP125-050S 1.00 1.85 TP200-100S 1.85 1.97 TP200-100S 1.85 1.97 TP200-150S 1.69 1.74 TP200-150S 1.69 1.74 TP200-150S 1.65 1.97 TP250-200S 1.65 1.97 TP200-100P 1.58 1.97 TP200-100P 1.58 1.97 TP200-100P <					



FLOW RATE SELECTION GUIDE

FLOW SELECTOR	SIZE [inches]	Cv
1A	1/2	0.66
1B	1/2	1.32
1C	1/2	3.53
1D	1/2	0.30
2B	¾, 1	1.32
2A	¾, 1	2.46
3A	¾, 1	3.53
3B	3⁄4, 1	7.42
3C	¾, 1	16.60
4A	11/4, 11/2	16.60
5A	11/4, 11/2	29.70
6A	2	51.60
6B	2	29.70

ACCES	SSO		
.		Order Code	Part No. Description
		Α	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT
		в …	BD-025. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap
UtrailB Orisit Witter		Н …	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
		x [MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

600 WOG, 325°F,

.....FKM O-RING

.....±3%

END PIECES

UNION SEAL

ACCURACY

INTERCHANGEABLE UNION ENDS ¼" FNPT OPTION PORT (3 EACH)HOT FORGED BRASS ASTM B283

NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F



UltraXB, UB Orturi™ Model XB, UB

Submittal Schedule

(¹/₂" thru 2¹/₂")

FLOW RATE SELECTION GUIDE					
SIZE (inches)	FLOW SELECTOR				
½, ⅔ LO, 1 LO	1A, 1B, 1C, 1D				
¾ STD, 1 STD, 1¼ LO	2A, 2B, 3A, 3B, 3C				
1¼ STD, 1½	4A, 5A				
2, 21/2	6A, 6B				

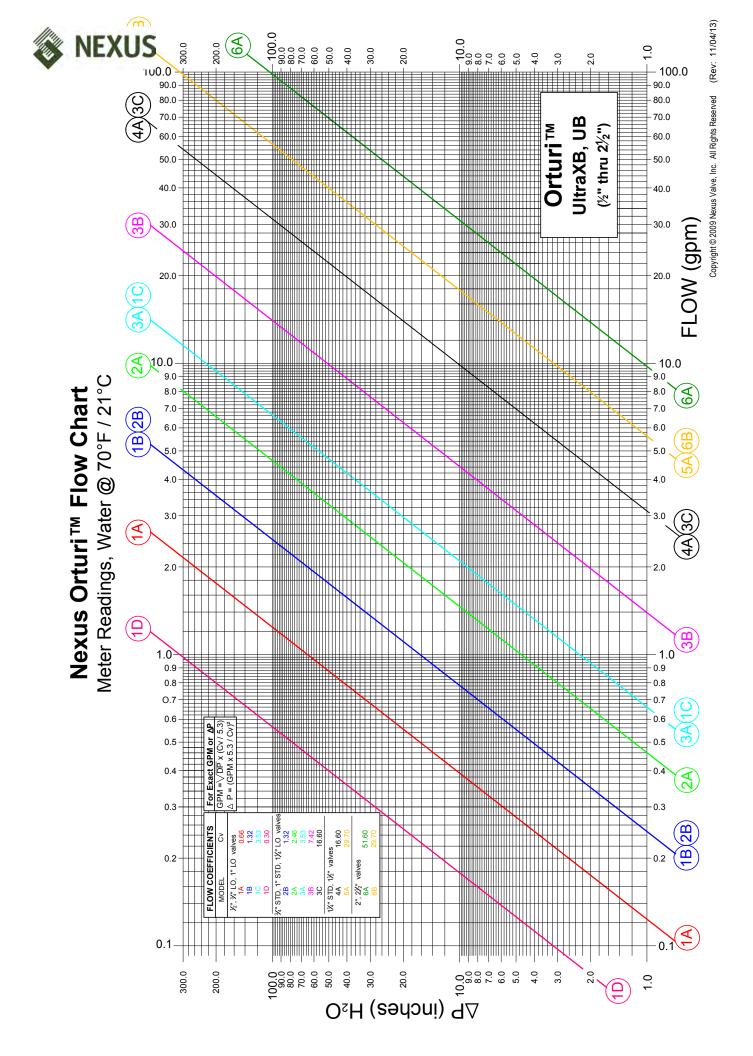
	CF	22	OR	RIES
AU		00		

- B BD-025. BLOWDOWN / VENT / DRAIN; 325°F, 600 PSIG, 3/4" hose bib & cap
- E ES-1, ES-2, ES-3. EXTENDED HANDLE
- Stationary housing for full-height vapor barrier H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- L SL. SHORT LEVER HANDLE; 2¼" O.A.L.
- L SL. SHORT LEVER HANDLE, 274 O.A.L.
- V MV-025. MANUAL AIR VENT; 325°F, 400 PSIG, X4" MNPT, Side Discharge
- , ... MV-025L. MANUAL AIR VENT EXTENDED; 2¼* 0.A.L. X [... PTE. PRES / TEMP TEST PLUG EXTENSION; 1%* 0.A.L.

ltem	Qty.	Selector	Model Designation	Tagging Information (Maximum 7 Characters)

ORDER DATA
Sample Part #:
X B - 0 7 5 L S - 0 5 0 S - 1 B -
Size
Fixed End
Union End
Flow Selector
Port Accessories $_$ — — — — — — — — — — $_$
Option Order Codes $_$ — — — — — — — — — — — — — — —
Please consult the Ordering Guide in the Nexus Valve
catalog for complete part number and ordering information.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

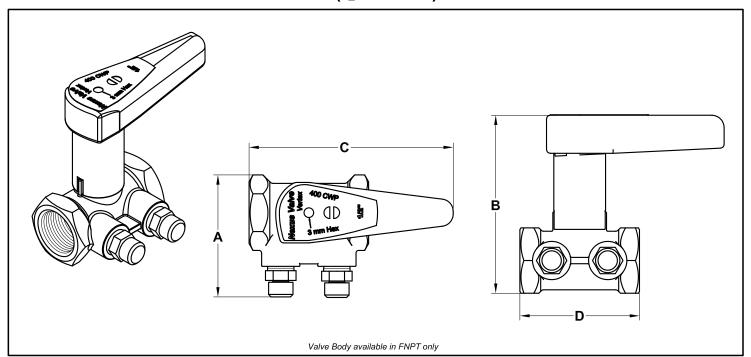




Vertex Model VTX Calibrated Balancing Valve

Multi-turn, Variable Orifice Adjustment

(¹/₂" thru 2")



DIMENSIONS [inches]						
SIZE [Inches]	CONNECTION	А	В	с	D	WT [Ibs]
1/2	FNPT	2.7	3.5	4.1	2.3	0.8
3⁄4	FNPT	2.9	3.7	4.2	2.5	1.0
1	FNPT	3.2	4.0	4.4	3.0	1.4
11/4	FNPT	3.5	5.4	6.5	3.5	2.5
11/2	FNPT	3.7	5.7	6.7	3.9	3.1
2	FNPT	4.2	6.3	7.0	4.7	4.4

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]			
	Min. (Setting 0)	Max. (Setting 9.9)		
У2	0.05	3.50		
3⁄4	0.08	9.05		
1	0.24	14.53		
11⁄/4	1.25	26.18		
11/2	1.80	44.94		
2	3.79	66.46		

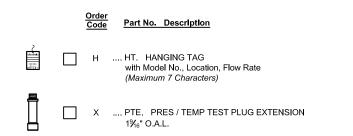
ORDER DATA

SIZE [inches]	Part #	Qty
1/2	VTX050T	
¾	VTX-075T	
1	VTX-100T	
11⁄4	VTX-125T	
11⁄2	VTX-150T	
2	VTX-200T	

MATERIALS & DESIGN DATA

BODY	DZR BRASS CW602N, MAX PRESSURE: 400 PSI (27.6 BAR) MAX TEMP: 248°F
BALL & NEEDLE	DZR BRASS CW602N, CHROME PLATED
HANDLE	GLASS FILLED POLYAMIDE
SEALING O'RING	EPDM
GASKET	PTFE
TEST PORT SEAL	EPDM

ACCESSORIES



PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Vertex[™] Model VTX Calibrated Balancing Valve

Submittal Schedule ($\frac{1}{2}$ " thru 2")

FLOW RATE RECOMANDATION GUIDE				
SIZE	IDEAL FLOW RANGES (GPM)			
(Inches)	Min. (Setting 0)	Max. (Setting 9.9)		
1/2	0.05	3.50		
3⁄4	0.08	9.05		
1	0.24	14.53		
11⁄4	1,25	26.18		
11/2	1.80	44.94		
2	3.79	66.46		

ACCESSORIES

- H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- $\chi ~~$ PTE. ~ PRES / TEMP TEST PLUG EXTENSION $1\%_6"$ O.A.L.

tem	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)

٢

ORDER DATA	
Samı V T	ole Part #: X - 0 7 5 T
Model	T T
Size ———	
Option Order Code (HT	Г)
Option Order Code (P1	Ē)

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

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Vertex - Calibrated Balancing Valve Calculation Chart

(¹/₂" thru 1")

1⁄2"			3⁄4"			1"		
SETTING	cv	C _V SIGNAL	SETTING	¢v	CV SIGNAL	SETTING	сv	C _V SIGNAL
0	0.081	0.081	0	0.139	0.139	0	0.393	0.405
0.1	0.081 0.069	0.081 0.069	0.1	0.150	0.150 0.162	0.1	0.393	0.393
0.2	0.069	0.069	0.2	0.182	0.182	0.2	0.393	0.393
0.4	0.081	0.081	0.4	0.197	0.208	0.4	0.405	0.405
0.5	0.081	0.081	0.5	0.220	0.231	0.5	0.428	0.416
0.6	0.092	0.092	0.6	0.243	0.254 0.277	0.6	0.439	0.439
0.8	0.092	0.092	0.8	0.277	0.217	0.7	0.486	0.402
0.9	0.116	0.116	0.9	0.335	0.335	0.9	0.520	0.520
1	0.127	0.127 0.139	1	0.358	0.370	1	0.555	0.555
1.1	0.159	0.159	1.1	0.393	0.405	1.1	0.590	0.601
1.3	0.173	0.173	1.3	0.462	0.474	1.3	0.682	0.694
1.4	0.185	0.185	1.4	0.509	0.509	1.4	0.728	0.740
1.5 1.6	0.197	0.197 0.220	1.5 1.6	0.543 0.578	0.543 0.578	1.5 1.6	0.775	0.798
1.7	0.231	0.231	1.7	0.613	0.613	1.7	0.890	0.913
1.8	0.254	0.254	1.8	0.659	0.647	1.8	0.948	0.971
1.9	0.266	0.266 0.289	1.9	0.694	0.694 0.728	1.9	1.006	1.029
2.1	0.301	0.301	2.1	0.775	0.763	2.1	1.133	1.156
2.2	0.324	0.324	2.2	0.809	0.809	2.2	1.202	1.226
2.3	0.335	0.335 0.358	2.3	0.856	0.844 0.879	2.3 2.4	1.272	1.295 1.364
2.5	0.370	0.370	2.5	0.937	0.913	2.5	1.422	1.434
2.6	0.393	0.393	2.6	0.971	0.960	2.6	1.492	1.503
2.7	0.405	0.405 0.428	2.7	1.017 1.052	0.994	2.7	1.561 1.642	1.572 1.642
2.9	0.439	0.439	2.9	1.098	1.075	2.9	1.711	1.723
3 3.1	0.462	0.451 0.474	3 3.1	1.133 1.179	1.110 1.145	3 3.1	1.792 1.873	1.792 1.862
3.1 3.2	0.474	0.474	3.1 3.2	1.179	1.145	3.1 3.2	1.873	1.862
3.3	0.509	0.509	3.3	1.260	1.226	3.3	2.023	2.000
3.4	0.532	0.520	3.4	1.295	1.260	3.4	2.093	2.081 2.151
3.5	0.543	0.543	3.5	1.341	1.295	3.5	2.174	2.151
3.7	0.578	0.578	3.7	1.422	1.376	3.7	2.324	2.289
3.8	0.601	0.590	3.8	1.457	1.411	3.8	2.405	2.359
3.9 4	0.613	0.613 0.624	3.9 4	1.503 1.538	1.457 1.492	3.9 4	2.474 2.555	2.428 2.509
4.1	0.659	0.647	4.1	1.584	1.526	4.1	2.625	2.578
4.2	0.671	0.659	4.2	1.619	1.572	4.2	2.706	2.648
4.3	0.694	0.682	4.3 4.4	1.665 1.711	1.607 1.653	4.3 4.4	2.775 2.856	2.717
4.5	0.728	0.717	4.5	1.746	1.688	4.5	2.925	2.856
4.6	0.752	0.740	4.6	1.792	1.734	4.6	2.995	2.925
4.7 4.8	0.775	0.752 0.775	4.7 4.8	1.838 1.885	1.769 1.815	4.7 4.8	3.076 3.145	2.995 3.064
4.9	0.809	0.798	4.9	1.919	1.850	4.9	3.214	3.133
5	0.832	0.809	5	1.966	1.896	5	3.295	3.214
5.1 5.2	0.856	0.832 0.856	5.1 5.2	2.012 2.058	1.931 1.977	5.1 5.2	3.365 3.434	3.284 3.353
5.3	0.890	0.879	5.3	2.104	2.023	5.3	3.515	3.434
5.4	0.913	0.890	5.4	2.162	2.070	5.4	3.584	3.503
5.5 5.6	0.937	0.913 0.937	5.5 5.6	2.208	2.116 2.151	5.5 5.6	3.665 3.735	3.584 3.665
5.7	0.983	0.960	5.7	2.301	2.197	5.7	3.816	3.746
5.8	1.006	0.983	5.8	2.359	2.243	5.8	3.896	3.827
5.9 6	1.029	1.006 1.017	5.9 6	2.405 2.463	2.289 2.347	5.9 6	3.977 4.058	3.908 3.989
6.1	1.075	1.041	6.1	2.521	2.393	6.1	4.139	4.081
6.2	1.110	1.064	6.2	2.567	2.440	6.2	4.220	4.174
6.3	1.133	1.087	6.3	2.625	2.486	6.3	4.313 4.394	4.266
6.5	1.179	1.133	6.5	2.740	2.590	6.5	4.486	4.451
6.6	1.202	1.156	6.6	2.798	2.636	6.6	4.579	4.544
6.7 6.8	1.226 1.260	1.191 1.214	6.7 6.8	2.856 2.914	2.694 2.740	6.7 6.8	4.671 4.775	4.648 4.752
6.9	1.283	1.237	6.9	2.971	2.798	6.9	4.879	4.856
7	1.307	1.260	7	3.041	2.844	7	4.983	4.960
7.1	1.330 1.364	1.283 1.307	7.1	3.099 3.168	2.902 2.960	7.1	5.087 5.203	5.076 5.180
7.3	1.387	1.330	7.3	3.226	3.018	7.3	5.307	5.295
7.4	1.411	1.353	7.4	3.295	3.076	7.4	5.423	5.411
7.5 7.6	1.434	1.376 1.399	7.5 7.6	3.365 3.422	3.133 3.191	7.5 7.6	5.550 5.665	5.538 5.654
7.7	1.492	1.422	7.7	3.492	3.249	7.7	5.793	5.770
7.8	1.515	1.445	7.8	3.561	3.307	7.8	5.920	5.897
7.9	1.538	1.468 1.492	7.9	3.631 3.700	3.365 3.422	7.9	6.059 6.186	6.024 6.140
8.1	1.584	1.515	8.1	3.769	3.492	8.1	6.325	6.267
8.2	1.619	1.538	8.2	3.839	3.550	8.2	6.463	6.382
8.3 8.4	1.642 1.665	1.561 1.584	8.3 8.4	3.908 3.977	3.619 3.677	8.3 8.4	6.602 6.741	6.510 6.625
8.5	1.688	1.607	8.5	4.047	3.746	8.5	6.891	6.752
8.6	1.711	1.630	8.6	4.128	3.804	8.6	7.030	6.868
8.7 8.8	1.734 1.757	1.653 1.665	8.7 8.8	4.197 4.266	3.873 3.943	8.7 8.8	7.169 7.319	6.972 7.088
8.9	1.781	1.688	8.9	4.347	4.012	8.9	7.458	7.192
9	1.792	1.711	9	4.417	4.081	9	7.596	7.284
9.1 9.2	1.815 1.838	1.723 1.746	9.1 9.2	4.486 4.567	4.162 4.232	9.1 9.2	7.735 7.874	7.377 7.458
9.3	1.862	1.769	9.3	4.636	4.301	9.3	8.001	7.527
9.4	1.885	1.781	9.4	4.717	4.382	9.4	8.128	7.596
9.5 9.6	1.896 1.919	1.804 1.815	9.5 9.6	4.787 4.868	4.463 4.544	9.5 9.6	8.244 8.359	7.643 7.677
9.7	1.942	1.827	9.7	4.937	4.625	9.7	8.464	7.700
9.8	1.954 1.977	1.850	9.8	5.018	4.706	9.8	8.556	7.700
9.9	1.9/7	1.862	9.9	5.087	4.798	9.9	8.625	7.700

How to calculate the Flow through Vertex using Cv Signal values:

- 1 Select column "Size" for the valve being used.
- 2 Read the handle setting on the valve.
- 3 Scan the "Size" column for your valve and regard the "Cv Signal" value for your Setting
- 4 Use the following equations to calculate flow.
 - a) If PSID is in pounds/square inch

$$GPM = C\nu \cdot \sqrt{\Delta P_{PSI}}$$

b) If PSID is in Inches of Water

$$GPM = \sqrt{\Delta P_{inH_20} \bullet C\nu/5.3}$$

How to determine Vertex Handle Settings using GPM and

<u>Pressure Differential (ΔP):</u>

1 If GPM and required pressure drop is known, calculate the required "Cv Signal" using the following equations:

a) If PSID is in pounds/square inch-

$$Cv = GPM / \sqrt{\Delta P_{PSI}}$$

b) If PSID is in Inches of Water

$$Cv = GPM \bullet 5.3 / \sqrt{\Delta P_{inH_2O}}$$

- 2 Locate Column for Valve being used
- 3 Scan down column until cloesest Cv to required is located
- 4 Read "Setting" number in the first column

"Cv Signal" for Flow Setting Use: "Cv" for Head Loss Calculations



Vertex - Calibrated Balancing Valve Calculation Chart (1¹/₄" thru 2")

1¼"			1½"			2"		
SETTING	Cv	CV SIGNAL	SETTING	۶۶	CV SIGNAL	SETTING	¢۷	CV SIGNAL
0.1	2.139 2.185	2.093	0.1	3.122 3.180	3.018	0.1	6.602 6.648	6.475
0.2	2.243	2.197	0.2	3.261	3.180	0.2	6.729	6.590
0.3	2.301	2.266	0.3	3.341	3.272	0.3	6.833	6.706
0.4 0.5	2.370 2.440	2.336 2.405	0.4	3.434 3.526	3.376 3.480	0.4	6.960 7.111	6.822 7.053
0.6	2.509	2.474	0.6	3.631	3.584	0.6	7.284	7.169
0.7	2.590	2.555	0.7	3.746	3.700	0.7	7.481	7.400
0.8	2.671	2.636	0.8	3.862 3.989	3.827 3.954	0.8	7.689	7.631
0.9	2.752	2.717 2.798	0.9	4.128	4.047	0.9	8.128	7.978
1.1	2.925	2.879	1.1	4.266	4.162	1.1	8.359	8.209
1.2	3.018 3.110	2.971	1.2	4.405	4.394	1.2	8.602	8.440
1.3 1.4	3.110	3.052 3.145	1.3 1.4	4.556 4.717	4.509 4.625	1.3 1.4	8.857 9.111	8.672 8.903
1.5	3.295	3.237	1.5	4.879	4.856	1.5	9.365	9.134
1.6	3.388	3.330	1.6	5.041	4.972	1.6	9.620	9.365
1.7 1.8	3.492 3.584	3.422 3.515	1.7 1.8	5.215 5.376	5.087 5.319	1.7 1.8	9.886 10.140	9.597 9.828
1.9	3.688	3.607	1.9	5.561	5.434	1.9	10.406	10.059
2	3.792	3.711	2	5.735	5.665	2	10.660	10.290
2.1 2.2	3.885 3.989	3.804 3.896	2.1	5.920 6.105	5.781 6.012	2.1	10.926 11.192	10.637 10.868
2.2	4.093	4.001	2.2	6.105	6.128	2.2	11.192	11.100
2.4	4.197	4.093	2.4	6.486	6.359	2.4	11.713	11.331
2.5	4.313	4.197	2.5	6.683	6.475	2.5	11.967	11.562
2.6 2.7	4.417 4.521	4.290 4.394	2.6 2.7	6.880 7.076	6.706 6.822	2.6 2.7	12.233 12.499	11.793 12.025
2.8	4.636	4.498	2.8	7.273	7.053	2.8	12.753	12.372
2.9	4.741	4.590	2.9	7.469	7.169	2.9	13.019	12.603
3 3.1	4.856 4.972	4.694 4.798	3	7.677	7.400	3.1	13.273 13.539	12.834 13.065
3.2	5.087	4.902	3.2	8.082	7.747	3.2	13.805	13.297
3.3	5.203	5.006	3.3	8.290	7.978	3.3	14.071	13.528
3.4	5.319 5.434	5.110	3.4	8.498 8.706	8.094	3.4	14.337	13.875
3.5 3.6	5.434	5.215 5.330	3.5 3.6	8.706	8.325 8.556	3.5 3.6	14.615 14.881	14.106 14.337
3.7	5.677	5.434	3.7	9.134	8.672	3.7	15.158	14.568
3.8	5.804	5.538	3.8	9.342	8.903	3.8	15.447	14.915
3.9 4	5.931 6.059	5.654 5.781	3.9	9.550 9.770	9.019 9.250	3.9	15.725 16.014	15.146 15.378
4.1	6.186	5.897	4.1	9.770	9.250	4.1	16.303	15.609
4.2	6.313	6.012	4.2	10.198	9.597	4.2	16.603	15.956
4.3	6.440	6.128	4.3	10.418	9.828	4.3	16.904	16.187
4.4 4.5	6.579 6.706	6.244 6.359	4.4	10.637 10.857	10.059 10.175	4.4	17.216 17.528	16.418 16.765
4.6	6.845	6.475	4.6	11.077	10.406	4.6	17.840	16.996
4.7	6.984	6.590	4.7	11.296	10.637	4.7	18.164	17.228
4.8 4.9	7.122	6.706 6.822	4.8 4.9	11.516 11.736	10.753 10.984	4.8 4.9	18.500 18.823	17.575 17.806
4.5 5	7.411	6.937	4.5	11.967	11.215	4.9	19.170	18.153
5.1	7.562	7.053	5.1	12.187	11.331	5.1	19.505	18.384
5.2	7.700	7.169	5.2	12.418	11.562	5.2	19.864	18.731
5.3 5.4	7.851 8.001	7.284	5.3 5.4	12.649 12.880	11.793 11.909	5.3 5.4	20.211 20.581	18.962 19.309
5.5	8.151	7.515	5.5	13.123	12.140	5.5	20.939	19.540
5.6	8.302	7.747	5.6	13.354	12.372	5.6	21.309	19.887
5.7 5.8	8.452 8.602	7.862 7.978	5.7 5.8	13.597 13.840	12.487 12.718	5.7 5.8	21.679 22.061	20.118 20.465
5.9	8.764	8.094	5.9	14.083	12.950	5.9	22.442	20.696
6	8.914	8.209	6	14.326	13.181	6	22.824	21.043
6.1 6.2	9.065	8.325 8.440	6.1 6.2	14.580 14.834	13.297 13.528	6.1 6.2	23.217 23.610	21.390 21.621
6.3	9.227	8.672	6.2	15.089	13.526	6.3	23.010	21.021
6.4	9.539	8.787	6.4	15.343	13.990	6.4	24.396	22.315
6.5	9.701	8.903	6.5	15.609	14.222	6.5	24.801	22.546
6.6 6.7	9.863 10.013	9.019 9.134	6.6 6.7	15.875 16.152	14.453 14.684	6.6 6.7	25.194 25.599	22.893 23.240
6.8	10.175	9.250	6.8	16.430	14.915	6.8	25.992	23.471
6.9	10.337	9.481	6.9	16.707	15.146	6.9	26.397	23.818
7 7.1	10.498 10.649	9.597 9.712	7	16.996 17.285	15.378 15.609	7	26.801 27.194	24.165 24.512
7.2	10.811	9.828	7.2	17.575	15.840	7.2	27.599	24.743
7.3	10.973	9.943	7.3	17.875	16.071	7.3	28.004	25.090
7.4	11.134 11.285	10.175	7.4	18.176	16.303	7.4	28.397	25.437
7.5 7.6	11.285	10.290 10.406	7.5	18.488 18.800	16.534 16.765	7.5 7.6	28.801 29.195	25.668 26.015
7.7	11.608	10.522	7.7	19.124	17.112	7.7	29.588	26.362
7.8	11.770	10.753	7.8	19.448	17.343	7.8	29.992	26.709
7.9 8	11.932 12.094	10.868 10.984	7.9	19.783 20.118	17.575 17.921	7.9	30.385 30.779	26.940 27.287
8.1	12.256	11.100	8.1	20.454	18.153	8.1	31.183	27.634
8.2	12.418	11.215	8.2	20.800	18.384	8.2	31.576	27.981
8.3 8.4	12.580 12.742	11.447 11.562	8.3 8.4	21.159 21.517	18.731 18.962	8.3 8.4	31.981 32.386	28.212 28.559
8.5	12.903	11.678	8.5	21.876	19.309	8.5	32.790	28.906
8.6	13.077	11.793	8.6	22.246	19.656	8.6	33.207	29.252
8.7	13.239	12.025	8.7	22.616	19.887	8.7	33.623	29.599
8.8 8.9	13.412 13.586	12.140 12.256	8.8 8.9	22.997	20.234 20.581	8.8 8.9	34.051 34.490	29.830 30.177
9	13.771	12.487	9	23.760	20.812	9	34.941	30.524
9.1	13.956	12.603	9.1	24.153	21.159	9.1	35.403	30.987
9.2 9.3	14.141	12.718 12.834	9.2 9.3	24.558 24.951	21.506 21.853	9.2 9.3	35.889 36.386	31.334 31.680
9.3	14.537	12.034	9.3	25.356	21.655	9.3	36.907	32.027
9.5	14.742	13.181	9.5	25.761	22.431	9.5	37.462	32.490
9.6 9.7	14.950 15.170	13.412 13.528	9.6 9.7	26.165 26.581	22.778 23.124	9.6 9.7	38.040 38.652	32.837 33.299

How to calculate the Flow through Vertex using Cv Signal values:

- 1 Select column "Size" for the valve being used.
- 2 Read the handle setting on the valve.
- 3 Scan the "Size" column for your valve and regard the "Cv Signal" value for your Setting.
- 4 Use the following equations to calculate flow.
 - a) If PSID is in pounds/square inch

$$GPM = Cv \bullet \sqrt{\Delta P_{PSI}}$$

b) If PSID is in Inches of Water

$$GPM = \sqrt{\Delta P_{inH_20} \bullet Cv/5.3}$$

How to determine Vertex Handle Settings using GPM and

Pressure Differential (AP):

- 1 If GPM and required pressure drop is known, calculate the required "Cv Signal" using the following equations:
 - a) If PSID is in pounds/square inch

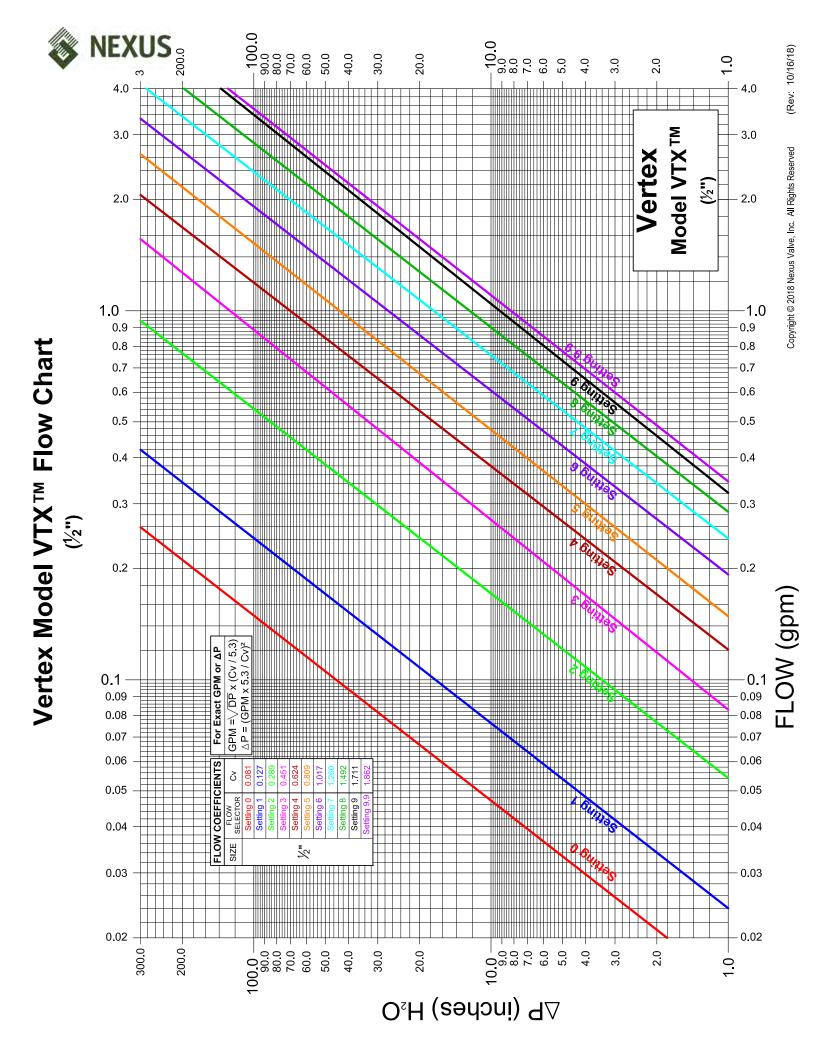
$$C\nu = GPM/\sqrt{\Delta P_{PSI}}$$

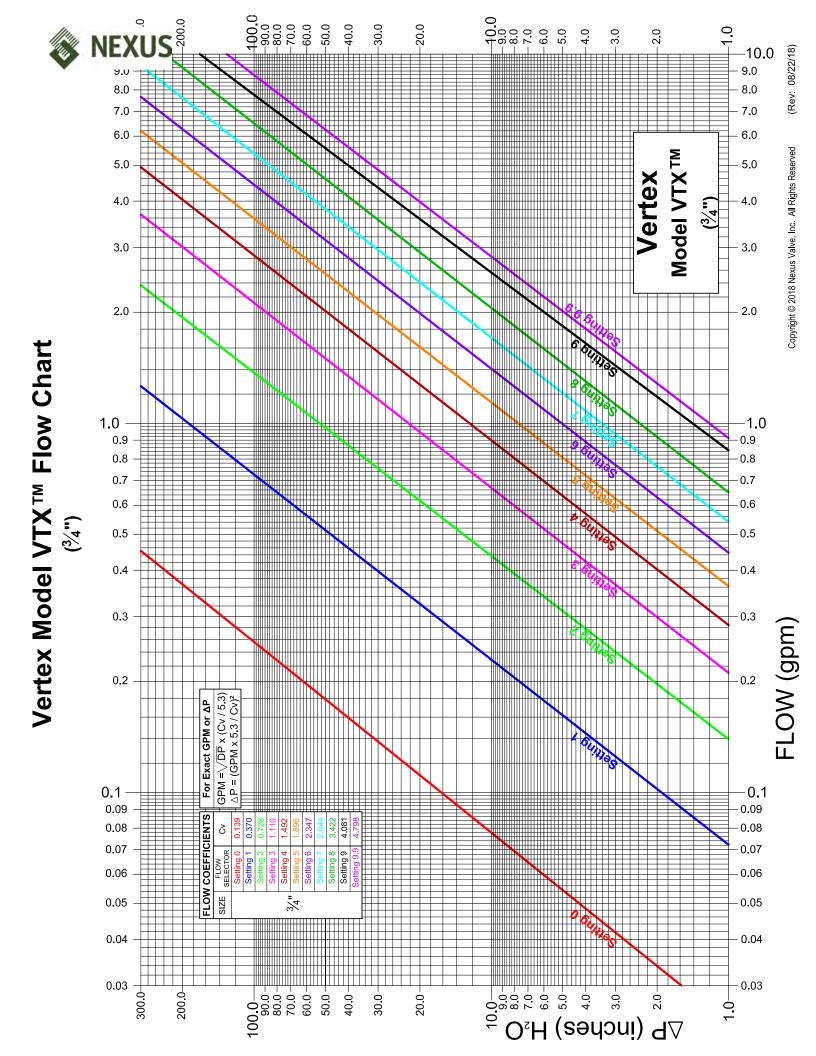
b) If PSID is in Inches of Water

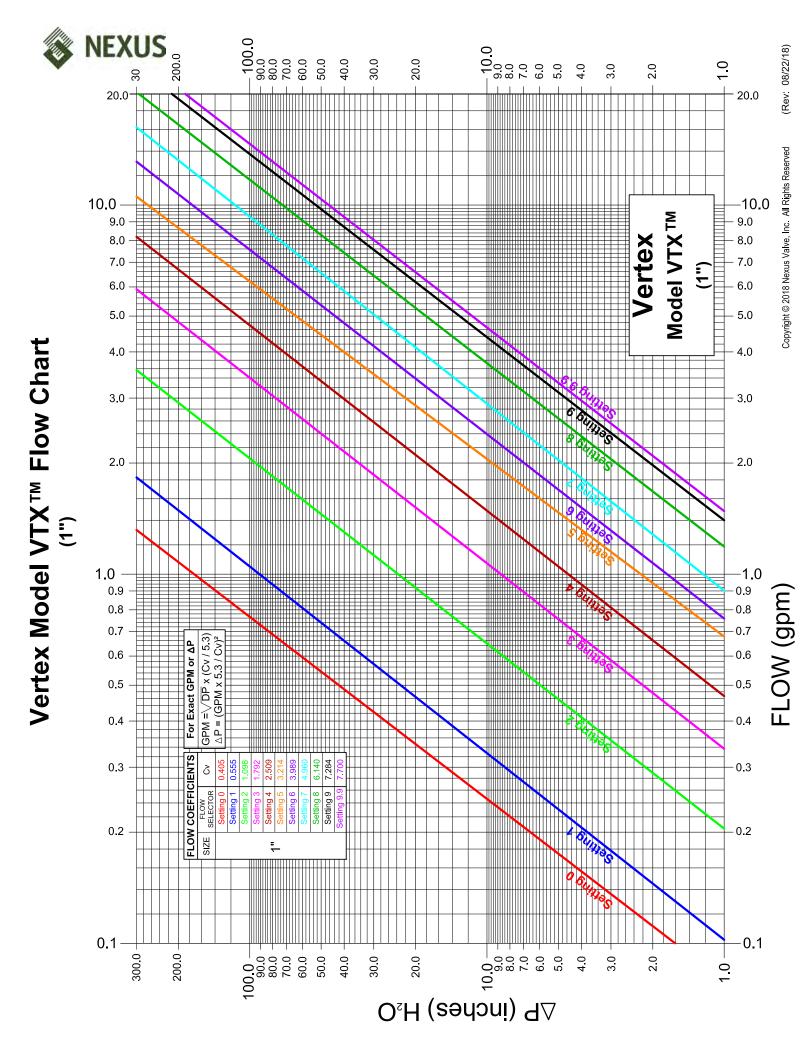
$$Cv = GPM \bullet 5.3 / \sqrt{\Delta P_{inH_2O}}$$

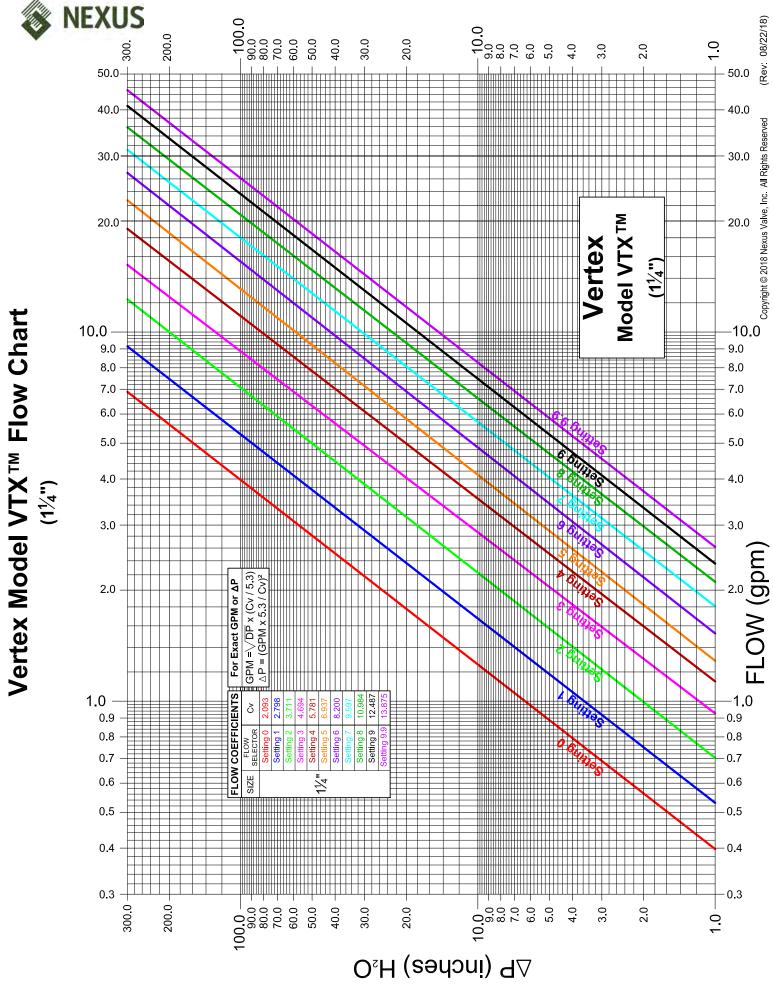
- 2 Locate Column for Valve being used
- 3 Scan down column until cloesest Cv to required is located
- 4 Read "Setting" number in the first column

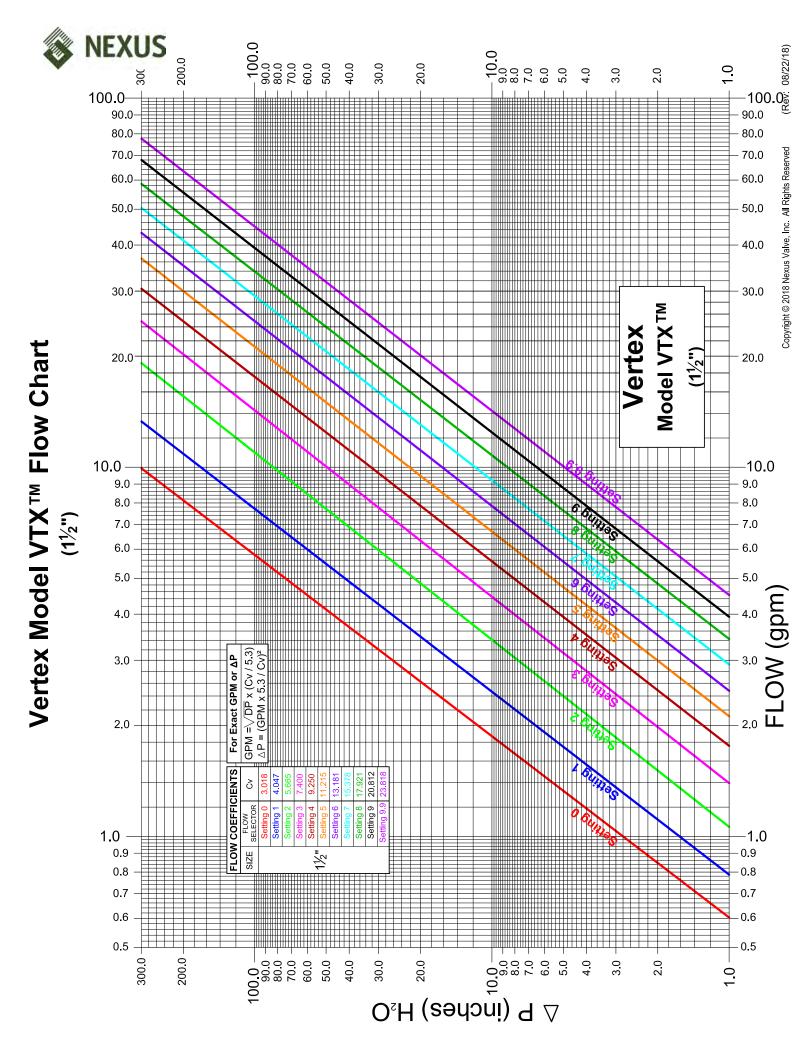
Use: "Cv Signal" for Flow Setting
"Cv" for Head Loss Calculations



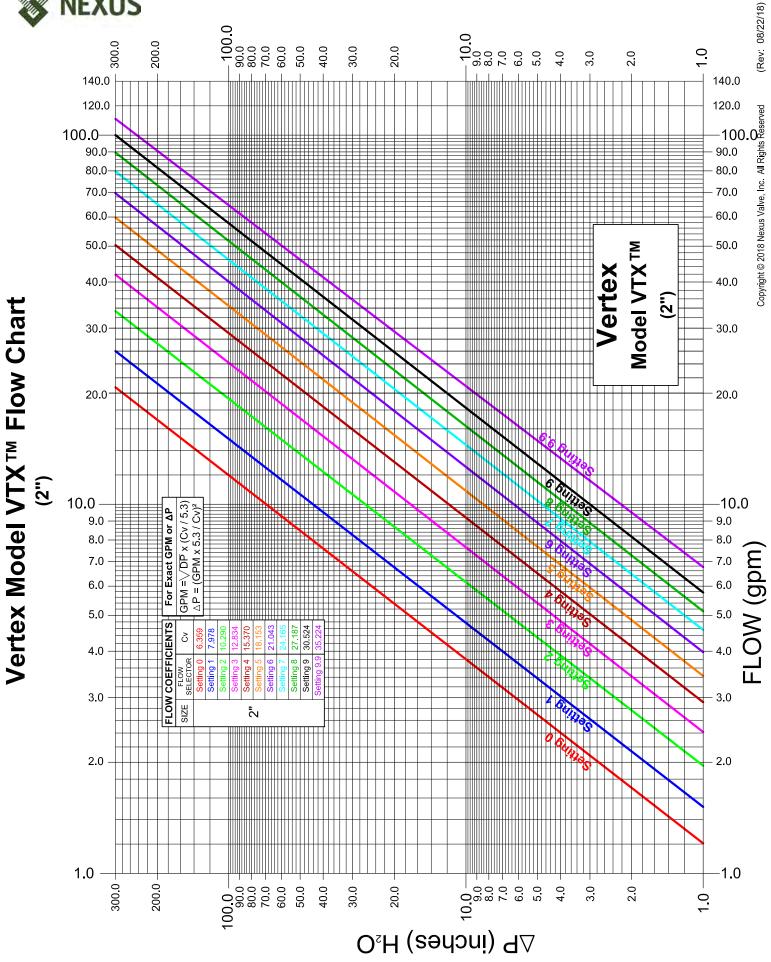










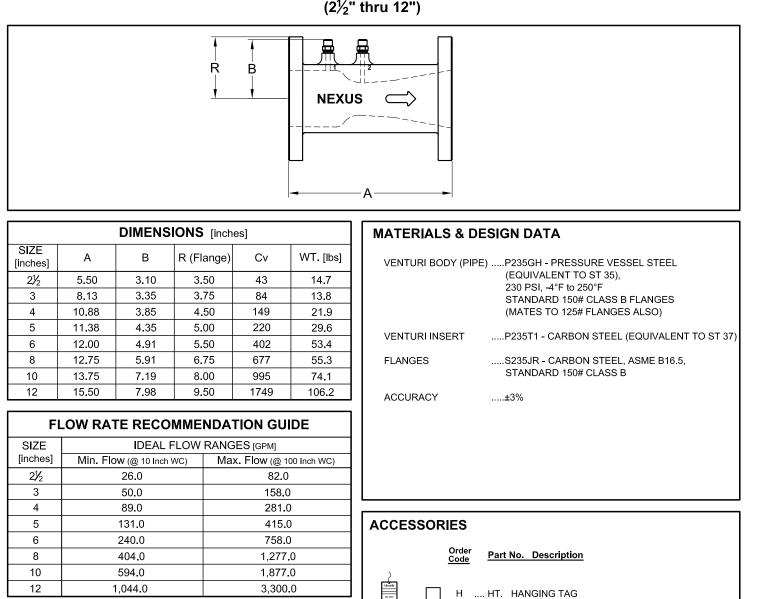




Nexus Venturi[™] Model NVF

Venturi Flow Meter

 $(2\frac{1}{2})$ " thru 12")

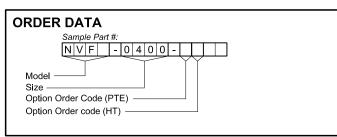


BASIC INSTALLATION NOTES

-MUST BE INSTALLED IN THE INDICATED FLOW DIRECTION -CAN BE ROTATED 360° AROUND PIPE AXIS FOR INSTALLATION -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM -NO STRAIGHT PIPE DIAMETERS ARE REQUIRED DOWNSTREAM

-ALLOW A MINIMUM OF 10 STRAIGHT PIPE DIAMETERS AFTER A PUMP DISCHARGE

-150# CLASS B FLANGES ALSO MATE TO 125# FLANGES



For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

Н with Model No., Location (Maximum 7 Characters)

X PTE. PRES / TEMP TEST PLUG EXTENSION 1%₁₆" O.A.L.

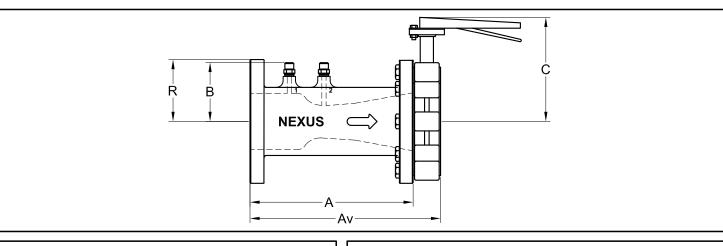
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Nexus Venturi[™] Model NVFB

Venturi Flow Meter with Butterfly Valve

(2¹/₂" thru 12")



DIMENSIONS [inches]								
SIZE	А	Av	в	R	С	Cv	WT.	[lbs]
[inches]		,	1	(Flange)	Ũ	0.	NVF	BV
21/2	5.50	7.30	3.10	3.50	8.3	43	14.7	12.9
3	8.13	9.93	3.35	3.75	8.4	84	13.8	13.1
4	10.88	12.98	3.85	4.50	9.2	149	21.9	19.0
5	11.38	13.58	4.35	5.00	9.5	220	29.6	23.0
6	12.00	14.20	4.91	5.50	10.2/11.6	402	53.4	29.0
8	12.75	15.15	5.91	6.75	13.2	677	55.3	65.0
10	13.75	16.35	7.19	8.00	14.5	995	74.1	101.0
12	15.50	18.60	7.98	9.50	16.3	1749	106.2	127.0

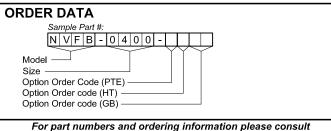
FLOW RATE RECOMMENDATION GUIDE					
SIZE	IDEAL FLOW RANGES [GPM]				
[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)			
21/2	26.0	82.0			
3	50.0	158.0			
4	89.0	281 <u>.</u> 0			
5	131.0	415.0			
6	240.0	758.0			
8	404.0	1,277.0			
10	594.0	1,877.0			
12	1,044.0	3,300.0			

BASIC INSTALLATION NOTES

-MUST BE INSTALLED IN THE INDICATED FLOW DIRECTION -CAN BE ROTATED 360° AROUND PIPE AXIS FOR INSTALLATION -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

-NO STRAIGHT PIPE DIAMETERS ARE REQUIRED DOWNSTEAM -ALLOW A MINIMUM OF 10 STRAIGHT PIPE DIAMETERS AFTER A PUMP DISCHARGE

-150# CLASS B FLANGES ALSO MATE TO 125# FLANGES -NVFB SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT

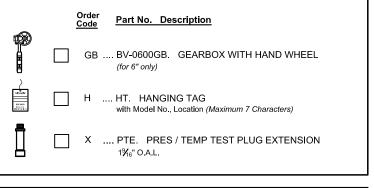


For part numbers and ordering information please consuthe "Ordering Guide" section in Nexus Catalog.

MATERIALS & DESIGN DATA

VENTURI BODY (PIPE	E)P235GH - PRESSURE VESSEL STEEL, (EQUIVALENT TO ST 35), 230 PSI, -4°F to 250°F STANDARD 150# CLASS B FLANGES (MATES TO 125# FLANGES ALSO)
VENTURI INSERT	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)
FLANGES	S235JR - CARBON STEEL, ASME B16.5, STANDARD 150# CLASS B
BUTTERFLY VALVE	EPOXY COATED CAST IRON, ASTM A126, CLASS B, LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS	ZINC PLATED STEEL
ACCURACY	<u>±</u> 3%

ACCESSORIES



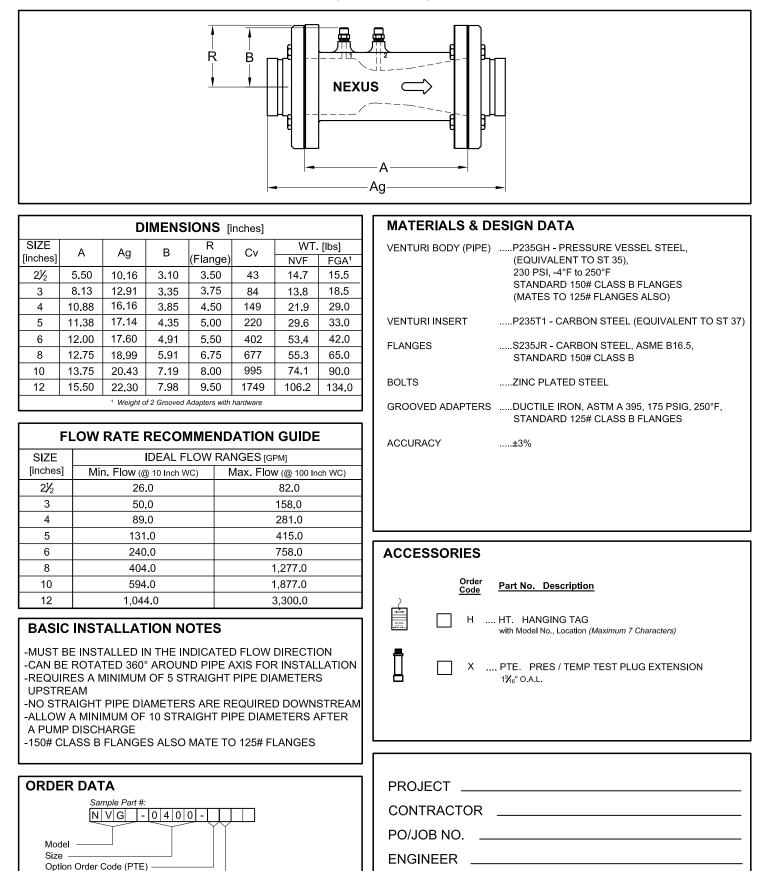
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Nexus Venturi™ Model NVG

Grooved End Venturi Flow Meter

 $(2\frac{1}{2}"$ thru 12")



For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

Option Order code (HT)

REPRESENTATIVE

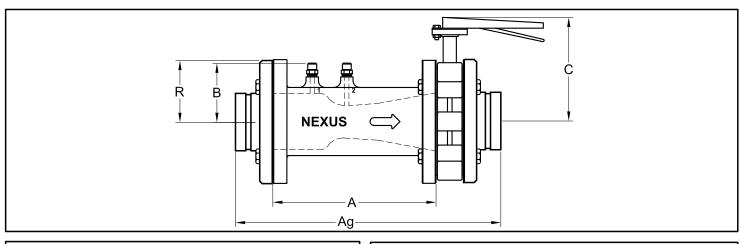
DATE



Nexus Venturi[™] Model NVGB

Grooved End Venturi Flow Meter with Butterfly Valve

(2¹/₂" thru 12")



DIMENSIONS [inches]

					•				
SIZE	Α	Ag	в	R	С	Cv		WT. [lt	os]
[inches]		7.9		(Flange)	Ũ	5	NVF	BV	FGA ¹
21/2	5.50	11.96	3.10	3.50	8.3	43	14.7	12.9	15.5
3	8.13	14.73	3.35	3.75	8.4	84	13.8	13.1	18.5
4	10.88	18.26	3.85	4.50	9.2	149	21.9	19.0	29.0
5	11.38	18.96	4.35	5.00	9.5	220	29.6	23.0	33.0
6	12.00	19.80	4.91	5.50	10.2/11.6	402	53.4	29.0	42.0
8	12.75	21.39	5.91	6.75	13.2	677	55.3	65.0	65.0
10	13.75	23.03	7.19	8.00	14.5	995	74.1	101.0	90.0
12	15.50	25.40	7.98	9.50	16.3	1749	106.2	127.0	134.0
	¹ Weight of 2 Grooved Adapters with hardware								

FLOW RATE RECOMMENDATION GUIDE

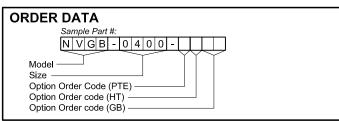
SIZE	IDEAL FLOW RANGES [GPM]				
[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)			
21/2	26.0	82.0			
3	50.0	158.0			
4	89.0	281 <u>.</u> 0			
5	131.0	415.0			
6	240.0	758.0			
8	404.0	1,277.0			
10	594.0	1,877.0			
12	1,044.0	3,300.0			

BASIC INSTALLATION NOTES

-MUST BE INSTALLED IN THE INDICATED FLOW DIRECTION -CAN BE ROTATED 360° AROUND PIPE AXIS FOR INSTALLATION -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

-NO STRAIGHT PIPE DIAMETERS ARE REQUIRED DOWNSTREAM -ALLOW A MINIMUM OF 10 STRAIGHT PIPE DIAMETERS AFTER A PUMP DISCHARGE

-150# CLASS B FLANGES ALSO MATE TO 125# FLANGES -NVGB SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT

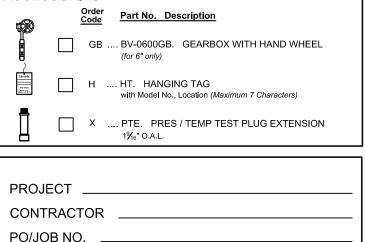


For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

MATERIALS & DESIGN DATA

VENTURI BODY (PIPE)	P235GH - PRESSURE VESSEL STEEL, (EQUIVALENT TO ST 35), 230 PSI, -4°F to 250°F STANDARD 150# CLASS B FLANGES (MATES TO 125# FLANGES ALSO)
VENTURI INSERT	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)
FLANGES	S235JR - CARBON STEEL, ASME B16.5, STANDARD 150# CLASS B
BUTTERFLY VALVE	EPOXY COATED CAST IRON, ASTM A126, CLASS B, LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS	ZINC PLATED STEEL
GROOVED ADAPTERS	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
ACCURACY	±3%

ACCESSORIES



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ENGINEER _____

REPRESENTATIVE _

DATE .

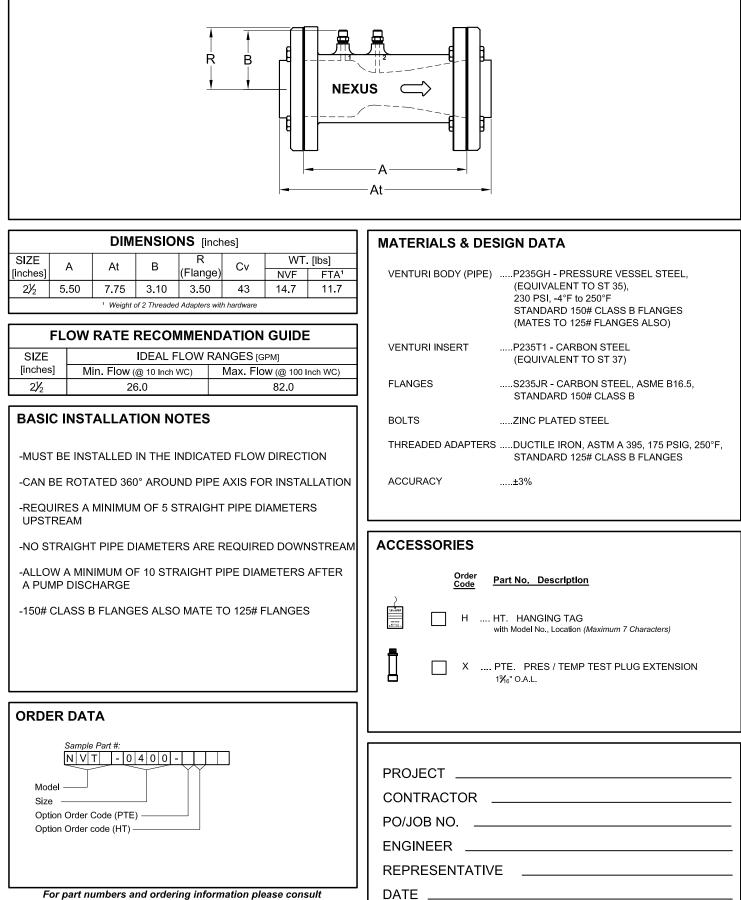
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Nexus Venturi[™] Model NVT

Threaded End Venturi Flow Meter

(2¹/₂")



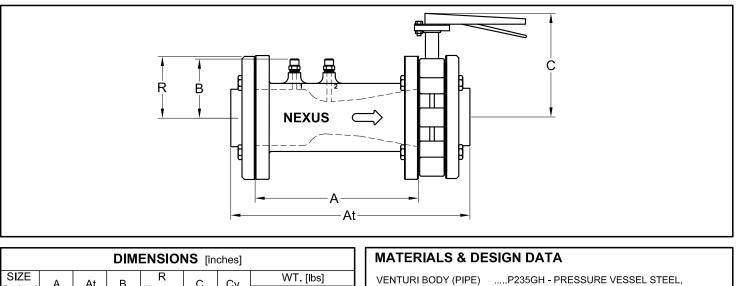
the "Ordering Guide" section in Nexus Catalog.



Nexus Venturi[™] Model NVTB

Threaded End Venturi Flow Meter with Butterfly Valve

(2¹/₂")



DIMENSIONS [inches]									
SIZE	А	At	в	R	С	Cv	١	NT. [lbs	5]
[inches]	~	7.0	U	(Flange)	<u> </u>	0,	NVF	BV	FTA ¹
21/2	5.50	9.55	3.10	3.50	8.3	43	14 <u>.</u> 7	12.9	11.7
¹ Weight of 2 Threaded Adapters with hardware									

FLOW RATE RECOMMENDATION GL	IDE
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SIZE	IDEAL FLOW RANGES [GPM]					
[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)				
21/2	26.0	82.0				

BASIC INSTALLATION NOTES

-MUST BE INSTALLED IN THE INDICATED FLOW DIRECTION

-CAN BE ROTATED 360° AROUND PIPE AXIS FOR INSTALLATION

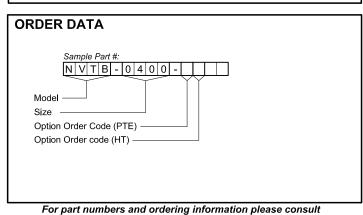
-REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

-NO STRAIGHT PIPE DIAMETERS ARE REQUIRED DOWNSTREAM

-ALLOW A MINIMUM OF 10 STRAIGHT PIPE DIAMETERS AFTER A PUMP DISCHARGE

-150# CLASS B FLANGES ALSO MATE TO 125# FLANGES

-NVTB SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT



the "Ordering Guide" section in Nexus Catalog.

	(EQUIVALENT TO ST 35), 230 PSI, -4°F to 250°F STANDARD 150# CLASS B FLANGES (MATES TO 125# FLANGES ALSO)
VENTURI INSERT	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)
FLANGES	S235JR - CARBON STEEL, ASME B16.5, STANDARD 150# CLASS B
BUTTERFLY VALVE	EPOXY COATED CAST IRON, ASTM A126, CLASS B, LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS	ZINC PLATED STEEL
THREADED ADAPTERS	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
ACCURACY	±3%
ACCESSORIES	
Order <u>Code</u>	Part No. Description
	HT. HANGING TAG with Model No., Location (Maximum 7 Characters)
□ ×	. PTE. PRES / TEMP TEST PLUG EXTENSION $1 \ensuremath{\mathscr{H}_6}\xspace^{-1}$ o.a.l.
L	
PROJECT	
CONTRACTOR	

CONTRACTOR

PO/JOB NO.

ENGINEER _____

REPRESENTATIVE

DATE



Nexus Venturi Model NV™

Submittal Schedule

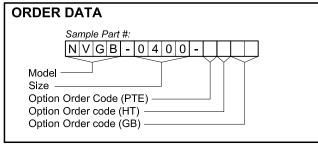
(2¹/₂" thru 12")

FLOW RATE RECOMMENDATION GUIDE				
SIZE	SIZE IDEAL FLOW RANGES [GPM]			
[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)		
21/2	26.0	82.0		
3	50.0	158.0		
4	89.0	281.0		
5	131.0	415.0		
6	240.0	758.0		
8	404.0	1,277.0		
10	594.0	1,877.0		
12	1,044.0	3,300.0		

ACCESSORIES

- GB BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)
- H HT. HANGING TAG with Model No., Location (Maximum 7 Characters)
- X PTE. PRES / TEMP TEST PLUG EXTENSION $1\%_6"$ O.A.L.

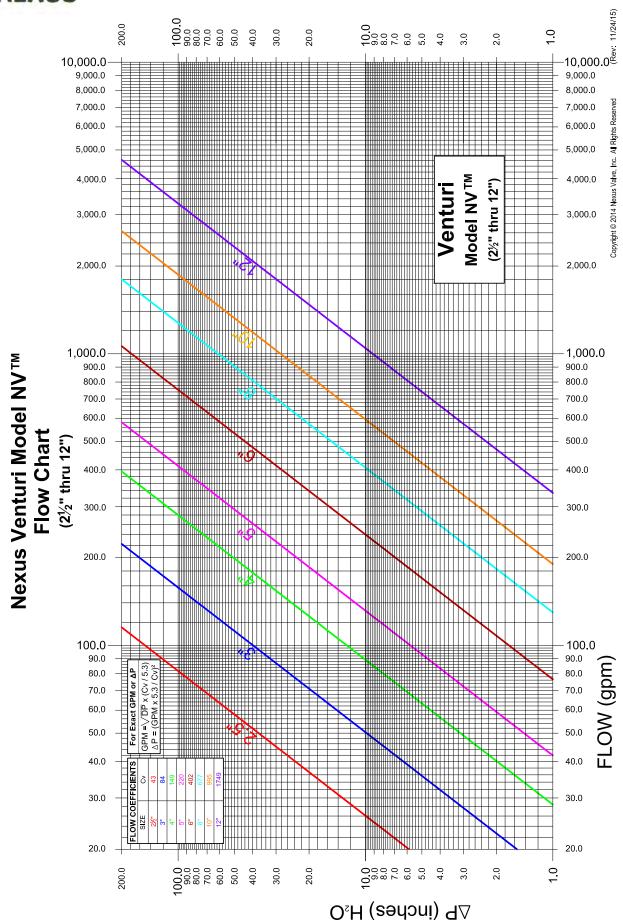
ltem	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)



For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



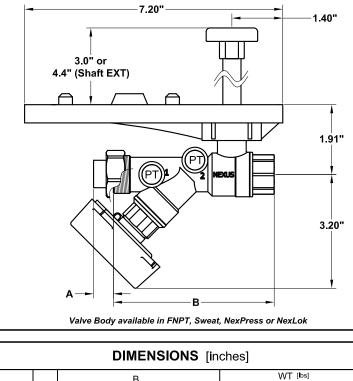




UltraMB[™] Model MBA

Actuated Adjustable Flow Control Valve

(¹/₂", ³/₄" LO, 1" LO)



SIZE			I	3		(Tall Plece	WT s, Nuts & Unio	[lbs] on Adapters not	Included)
[Inches]	(A)	F (FNPT)	S (SWT)	P (NexPress)	L (NexLok)	F (FNPT)	S (SWT)	P (NexPress)	L (NexLok)
1/2		4.34	4.49	4.88	4.61	1.55	1.52	1.58	1.04
∛₄ LO		4.34	4.58	4.93	4.80	1.58	1.53	1.59	0.98
1 L O		4.70	4.83	6.62	5.32	1.74	1.72	2.53	2.00
TAU				Navu		engths		Use with	1

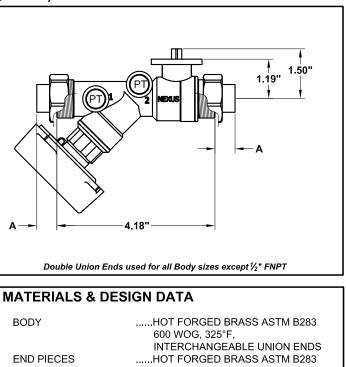
TAIL PIECE OPTION	Nexus P/N	[inches]	Valve Body size
	TP075-050M	1.00	½, ¾ LO, 1 LO
MNPT (Male NPT Thread)	TP125-075M TP125-100M	1.16 1.29	½, ¾ LO, 1 LO used with Union Adapter: UA-075-125
FNPT (Female NPT Thread)	TP125-050F TP125-075F TP125-100F	1.00 1.00 1.20	½, ⅔ LO, 1 LO used with Union Adapter: UA-075-125
	TP075-038S TP075-050S	0.58 0.59	½, ¾ LO, 1 LO
SWT (Female Sweat)	TP125-075S TP125-100S	0.85 1.00	⅓, ¾ LO, 1 LO used with Union Adapter: UA-075-125
NexPress	TP125-050P TP125-075P TPA125-100P	1.46 1.54 3.85	1⁄2, 3⁄4 LO, 1 LO used with Union Adapter: UA-075-125
NexLok	TP125-050L TP125-075L	1.03 1.29	𝔥 ₂ , 𝔥 LO, 1 LO used with Union Adapter: UA-075-125

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOV [gpi	HANDWHEEL TURNS	
	Min.	Max.	Max.
½, ¾ LO, 1 LO	0.25	8.00	10

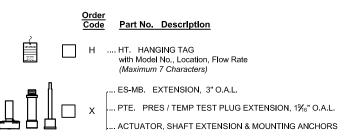
Equal Percentage Characteristic "Cv" Selection				
SIZE [inches]	Cv			
½ , ¾ LO, 1 LO	0.5, 0.8, 1.7, 2.2, 3.5, 4.3, 6.1, 9.0* (* no flow disk)			

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



END PIECES	HOT FORGED BRASS ASTM B283
	NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F
KNOB	STYRENE, BLACK
BALL	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFT	STAINLESS STEEL
	BLOW OUT PROOF DESIGN
SHAFT SEALS	DUAL FKM O-RINGS
SHAFT WASHER	TEFLON
UNION SEAL	FKM O-RING
CAP SEAL	FKM O-RING
V-PORT FLOW DISK	AMODEL AS-1145 HS PPA
MB BALANCING GLOBE	BRASS
MB HANDLE	NYLON, GLASS-FILLED
ACCURACY	±5%

ACCESSORIES



PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE
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UltraMB[™] Model MBA

Submittal Schedule

(¹/₂", ³/₄" LO, 1" LO)

FLOW RATE RECOMANDATION GUIDE

SIZE	IDEAL FLOW RANGES (GPM)		
(Inches)	Min.	Max.	
½, ⅔ LO, 1 LO	0.25	8.00	

Equal Percentage Characteristic "Cv" Selection SIZE (Inches) Cv ½, ¾ LO, 1 LO 0.5, 0.8, 1.7, 2.2, 3.5, 4.3, 6.1, 9.0* (* no flow disk)

ACCESSORIES

H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)

.... ES-MB. EXTENSION; 3" O.A.L.

X PTE. PRES / TEMP TEST PLUG EXTENSION; 1%" O.A.L.

.... ACTUATOR, SHAFT EXTENSION & MOUNTING ANCHORS

ltem	Qty.	Cv	Model Designation	(Maximum 7 Characters)

ORDER DATA	
Sample Part #:	PROJECT
MBA - 075LS - 050S - 1B -	CONTRACTOR
UltraMBA Size	PO/JOB NO.
Fixed End	
	ENGINEER
Flow Selector	REPRESENTATIVE
Please consult the Ordering Guide in the Nexus Valve	DATE
catalog for complete part number and ordering information.	



UltraMB[™] Model MB

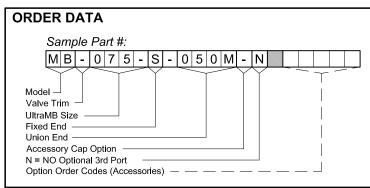
Manual Flow Control Valve

PORT (#1 & #2): 1/4" NPT (Includes PT Test Plug)

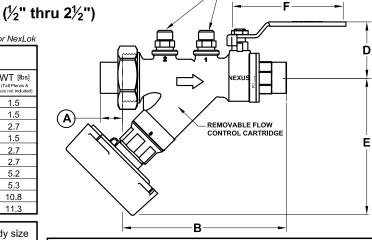
Valve Body available in FNPT, Sweat, NexPress or NexLok

	DIMENSIONS [inches]										
SIZE [inches]	LO	STD	Ø	F (NPT)	S (sweat)	B (NexPress)	L (NexLok)	D	Е	F	(Tall Pleces & Nuts not included)
1/2		\checkmark		3.9	4.1	4.5	4.2	1.7	3.2	1.9	1.5
3∕4	\checkmark			3.9	4.2	4.6	4.4	1.7	3.2	1.9	1.5
3∕4		\checkmark		4.9	5.2	5.6	5.4	1.8	3.9	3.1	2.7
1	\checkmark			4.3	4.4	4.6	4.9	1.7	3.2	1.9	1.5
1		\checkmark		5.1	5.3	5.6	5.9	1.8	3.9	3.1	2.7
11/4	\checkmark			5.4	5.3	7.6	8.0	1.8	3.9	3.1	2.7
11/4		\checkmark		6.6	6.8	8.6	9.3	2.5	5.1	4.3	5.2
11/2		\checkmark		6.6	7.0	8.9	9.5	2.5	5.1	4.3	5.3
2		\checkmark	11	9.1	9.9	11.9	12.2	3.4	6.1	5.5	10.8
21/2		\checkmark]	9.8	10.6	-	-	3.4	6.1	5.5	11.3
			- 1								

TAIL PIECE OPTION	Nexus P/N	Lengths [inches]	Use with Valve Body size
	TP075-050M	1.00	½, ¾ LO, 1 LO
	TP125-050M TP125-075M TP125-100M	1.04 1.16 1.29	¾ STD, 1 STD, 1¼ LO
MNPT (Male NPT Thread)	TP200-050M TP200-075M TP200-100M TP200-125M TP200-150M	1.04 1.16 1.39 1.85 1.89	1¼ STD, 1½
	TP250-100M TP250-125M TP250-150M TP250-200M	1.93 1.93 1.97 2.00	2, 21/2
	TP125-050F TP125-075F TP125-100F	1.00 1.00 1.20	¾ STD, 1 STD, 1¼ LO
FNPT	TP200-100F TP200-125F TP200-150F	1.61 1.57 1.16	11/4 STD, 11/2
(Female NPT Thread)	TP250-125F TP250-150F TP250-200F TP250-250F	1.77 1.97 1.36 1.74	2, 2½
	TP075-038S TP075-050S	0.58 0.59	½, ¾ LO, 1 LO
	TP125-050S TP125-075S TP125-100S	0.60 0.85 1.00	¾ STD, 1 STD, 1¼ LO
SWT (Female Sweat)	TP200-075S TP200-100S TP200-125S TP200-150S	1.85 1.85 1.85 1.38	1¼ STD, 1½
	TP250-125S TP250-150S TP250-200S	1.69 1.97 1.65	2, 2½
	TP125-050P TP125-075P TPA125-100P	1.46 1.54 3.85	¾ STD, 1 STD, 1¼ LO
NexPress	TP200-100P TPA200-125P TPA200-150P	1.58 3.70 3.63	11⁄4 STD, 11⁄2
	TPA250-150P TPA250-200P	4.44 4.07	2, 2¥ ₂
	TP125-050L TP125-075L	1.03 1.29	¾ STD, 1 STD, 1¼ LO
	TP200-100L TPA200-125L TPA200-150L	1.66 4.25 4.05	11⁄4 STD, 11⁄2
	TPA250-125L TPA250-150L TPA250-200L	4.43 4.85 4.40	2, 2½



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



FLOW RATE RECOMMENDATION GUIDE						
SIZE [inches]	IDEAL FLOW	Handwheel Turns				
	Min.	Max.				
½, ¾ LO, 1 LO	0.25	8.00	10			
¾ STD, 1 STD, 1¼ LO	0.45	18.00	10			
11⁄4 STD, 11⁄2	1.00	40.00	10			
2, 2½	1.50	95.00	10			
· · · · · · · · · · · · · · · · · · ·						
MATERIALS & I	DESIGN DA	ТА				
5051	HOT FORGED BRASS ASTM B283 (CAST BRASS: 1½" STD, 2", 2½"), 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS HOT FORGED BRASS ASTM B283 NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F /					
BALL BALL SEALS SHAFT SHAFT SEALS UNION SEAL CAP SEAL BALANCING GLOBE HANDLE	TEFLON	VC COATED PLATED BRASS / ST, ESS STEEL (optional) IGS	AINLESS STEEL (optional) ; BLOWOUT-PROOF			

ACCESSORIES Order Part No. Description Code CV-1, CV-2. CHECK VALVE С CV-1 for 1/2", 3/4"LO, 1"LO CV-2 for ¾"STD, 1"STD, 1¼"LO Center Guided, Non-Slam Check ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier Е ES-MB. EXTENSION 3" O.A.L. HT. HANGING TAG н with Model No., Location, Flow Rate (Maximum 7 Characters) SL. SHORT LEVER HANDLE L PTE. PRES / TEMP TEST PLUG EXTENSION Х 1%₆" O.A.L.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



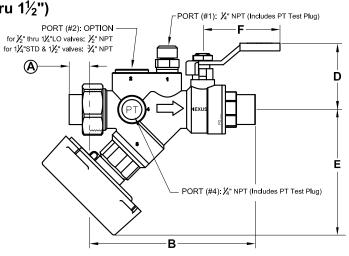
UltraMBTM Model MB Manual Flow Control Valve w/ Accessory Port

(1/2" thru 11/2")

Valve Body available in FNPT, Sweat, NexPress or NexLok

				al, Ne	XF1835	OF NEXLOR	for 11/4"STD & 11/2" valves:
D	MENSION	IS [Inche	esj				(A)
SIZE [inches] LO STD A F) S (sweat) (Nex	PL Press) (NexLok)	D	Е	F	(Tall Pleces & Nuts not included)	
		Press) (NexLok)	1.7	3.2	1.9		
$\frac{\gamma_2}{3\gamma_4}$ $$ 3.9		.5 4.2	1.7	3.2	1.9	1.5	
$\frac{74}{34}$ $\sqrt{4.9}$.6 5.4	1.8	3.9	3.1	2.7	
$1 \sqrt{4}$.6 4.9	1.7	3.2	1.9	1.5	
1 1 5.		.6 5.9	1.8	3.9	3.1	2.7	
1¼ √ 5.4	5.3 7	.6 8.0	1.8	3.9	3.1	2.7	
11⁄4 √ 6.6	6.8 8	.9 9.0	2.5	5.1	4.3	5.2	
1½ √ ♥ 6.0	6 7.0 9	.2 9.2	2.5	5.1	4.3	5.3	
TAIL PIECE OPTIO	Nexus P/	N Length		with \	/alve E	Body size	
	TP075-050	M 1.00		1/2, ¥4	LO, 1	LO	
	TP125-050		24			111.0	
	TP125-075		¥4	STD,	1 STD,	1¼ LO	MATERIALS
	TP125-100 TP200-050						
MNPT	TP200-075						BODY
(Male NPT Thread)	TP200-100			11/4	STD, 1	1/2	END PIECES
	TP200-125						END PIECES
	TP200-150						
\land	TP125-050 TP125-075		3/.	STD		1¼ LO	HANDLE & NU
	TP125-075		/4	5, 5,	. 510,	174 LO	BALL
	TP200-100						BALL SEALS
FNPT	TP200-125			11/4	STD, 1	1/2	SHAFT
(Female NPT Thread)	TP200-150						SUNET SEAL O
	TP075-038			1/2 3.	4 LO, '	110	SHAFT SEALS UNION SEAL
	TP075-050	S 0.59		12, Y	4 LU, '	1 LU	CAP SEAL
~	TP125-050		-				BALANCING G
\mathbb{A}	TP125-075		3/4	STD,	1 STD,	11⁄4 LO	HANDLE ACCURACY
	TP125-100		_				
SWT	TP200-075						
(Female Sweat)	TP200-100 TP200-125			11/4	STD, 1	1/2	
	TP200-150						
	TP125-050						🛱 _
	TP125-075		3∕⊿	STD,	1 STD.	1¼ LO	
R	TPA125-10			,	,	, -	
	TP200-100	P 1.58					
NexPress	TPA200-12	5P 3.70		11/4	STD, 1	11/2	
	TPA200-15	OP 3.63					
	TP125-050		3/	STD.	1 STD	1½ LO	
	TP125-075		/4	····,	,	.,, 20	🛱 🗍 –
NexLok	TP200-100			.14	070	12	╽╽┟┤┍┺┑└╴
	TPA200-125 TPA200-150			1/4	STD, 1	1/2	
	117200100						
FLOW RAT	E RECOM	MENDA	TION	GUI	DE		
SIZE [inches]	IDEAL FLO	WRANGE	S [gpm]	Ha	ndwhe	el Turns	┏┛□□
	Min.	M	ax.		N	lax.	
½, ¾ LO, 1 LO	0.25	8	.00			10	◙ └
¾ STD, 1 STD, 1¼ LO	0.45		.00	+		10	
1½ STD, 1½				+			
174 STD, 172	1.00	40	0.00		,	10	╹┃ ┌
ORDER DATA							
Sample Part #:							
	- S - 0	50M	- IVI				
	<u>- S - 0</u>						PROJECT
ΙΙΤ	Ĭ	T	ļ		T		
Model					i i		CONTRAC
Valve Trim							
UltraMB Size							PO/JOB N
Fixed End							
Union End ———					1		ENGINEE
Accessory Cap Option -			1				
Optional 3rd Port Accesso	ory						REPRESE
Option Order Codes (Acc	essories) — —						
		_					I DATE

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
END PIECES	HOT FORGED BRASS ASTM B283
	NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F
HANDLE & NUT	ZINC PLATED / PVC COATED
BALL	HARD CHROME PLATED BRASS /
BALL SEALS	STAINLESS STEEL (optional) TEFLON
SHAFT	BRASS / STAINLESS STEEL (optional),
SHAFT SEALS	BLOWOUT-PROOF DUAL FKM O-RINGS
UNION SEAL	FKM O-RING
CAP SEAL	FKM O-RING
BALANCING GLOBE	BRASS NYLON. BRASS-FILLED
= ===	±5%

ACCESS	UN	L3	
		Order Code	Part No. Description
		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT (Not available for: ½", ¾"LO, 1"LO)
		С	CV-1, CV-2. CHECK VALVE CV-1 for ½", ½"LO, 1"LO CV-2 for ½"STD, 1"STD, 1¼"LO Center Guided, Non-Slam Check
Î.		E	ES-1, ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION 3" O.A.L.
and and a second s		н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		L	SL. SHORT LEVER HANDLE
Ē		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
		x	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ½" MNPT, Side Discharge, 2½" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



UltraMB[™] Model MB

Submittal Schedule

(¹/₂" thru 2¹/₂")

FLOW RATE RECOMANDATION GUIDE						
SIZE	IDEAL FLOW RANGES (GPM)					
(Inches)	Min.	Max.				
½, ¾ LO, 1 LO	0.25	8.00				
¾ STD, 1 STD, 1¼ LO	0.45	18.00				
1¼ STD, 1½	1.00	40.00				
2, 21/2	1.50	95.00				

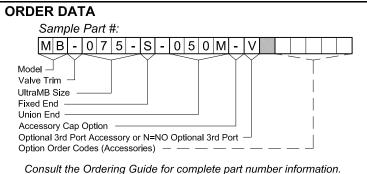
ACCESSORIES

А	AV-025. A	AUTOMATIC AIR VENT; 250°F, 150 PSIG, positive shut-off, ¼" MNPT	
С	CV-1, CV-2	2. CHECK VALVE, Center Guided, Non-Slam Check	

- ES-1, ES-2, ES-3. EXTENDED HANDLE; Stationary housing for full-height vapor barrier E [... ES-MB. EXTENSION; 3" O.A.L.
- H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- L SL. SHORT LEVER HANDLE; 21/4" O.A.L.

.... PTE. PRES / TEMP TEST PLUG EXTENSION; 1%6" O.A.L.

ltem	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)

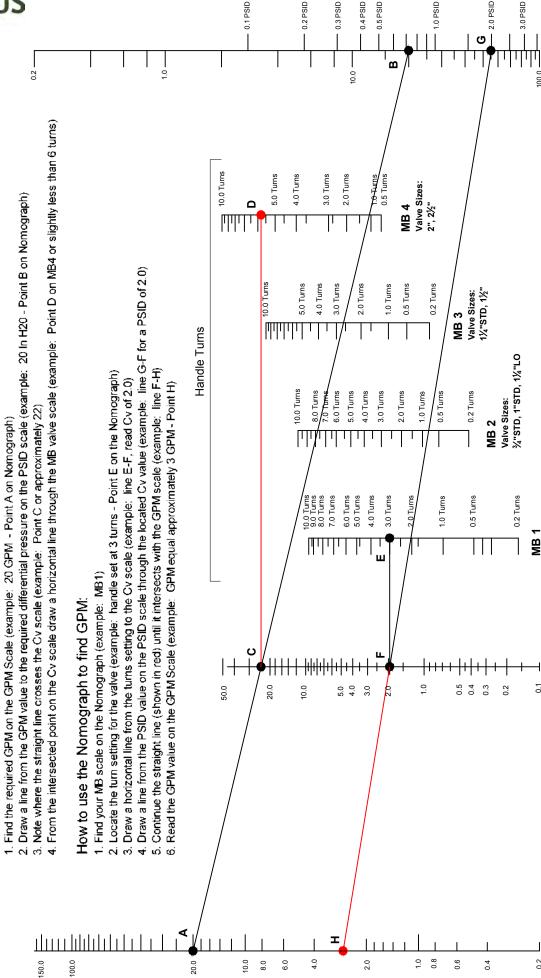


PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



(%" thru 2%")

How to use the Nomograph to find the correct handle setting for your application:



NEXUS

PSID

½", ¾"LO, 1"LO

ວີ

GPM 0.2

0.1

Valve Sizes:

100.0 In H2O

UltraMB™ - Multiturn Balancing Valve Calculations

(½" thru 2½")



MB4		"C/1 C'.C	N/A	N/A	N/A	2.3	2.4	2.6	2.6	2.8	2.8	3.5	4.5	5.9	6.4	9.9	12.0	15.2	18.1	21.7	25.3	29.0	32.9	36.5	39.4	42.1	45.0	48.4	50.8
MB3	zes:	1 1/4' STD, 1 1/2'	0.9	1.0	1.3	1.4	1.5	1.6	1.7	2.0	2.0	2.8	3.4	4.6	5.5	6.6	7.8	9.1	10.7	11.9	12.9	14.0	15.2	16.3	17.4	18.5	19.7	20.6	21.6
MB2	Valve Sizes	3/4'STD, 1"STD, 1-1/4"LO	0.4	0.7	0.6	0.8	0.8	0.9	0.9	0.9	1.0	1.3	1.5	ل وز	2.3	2.7	3.2	3.6	4.2	4.7	5.5	6.0	6.8	7.6	8.3	<u>9</u> .0	9.7	10.7	11.6
MB1		1/2", 3/4"10, 1"10	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	1.1	1.3	1.6	2.0	2.4	2.8	3.5	3.7	4.1	4.6	5.3	5.8	6.5	7.2	7.8	8.6	8.8	9.4
	Turns		0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	2.5	8.0	8.5	9.0	9.5	10.0

How to calculate the Flow through UltraMB u Cv values

- 1. Select column MB1,MB2, MB3, MB4 for the valve being used
 - 2. Read the Handle Turns counter on the valve
- 3. Scan the MB column for your valve and regard the Cv value for your turns
 - 4. Use the following equations to calculate flow

If PSID is in pounds/square inch

$$GPM = Cv \bullet \sqrt{\Delta P_{PSI}}$$

If PSID is in Inches of Water

$$GPM = \sqrt{\Delta P_{inH_{2}0}} \bullet Cv/5.3$$

How to determine UltraMB Handle Turns using: GPM and Pressure Differential (ΔP)

 If GPM and required pressure drop is known, calculate the required CV using the following equations:

If PSID is in pounds/square inch

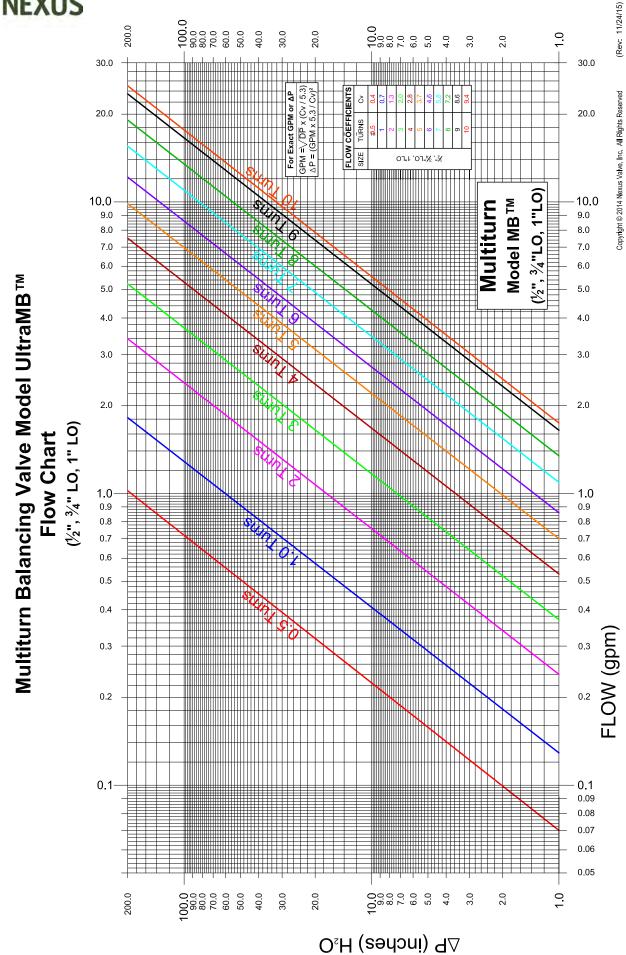
$$\mathcal{C} m{v} = GPM \, / \sqrt{\Delta P_{_{PW}}}$$

If PSID is in Inches of Water

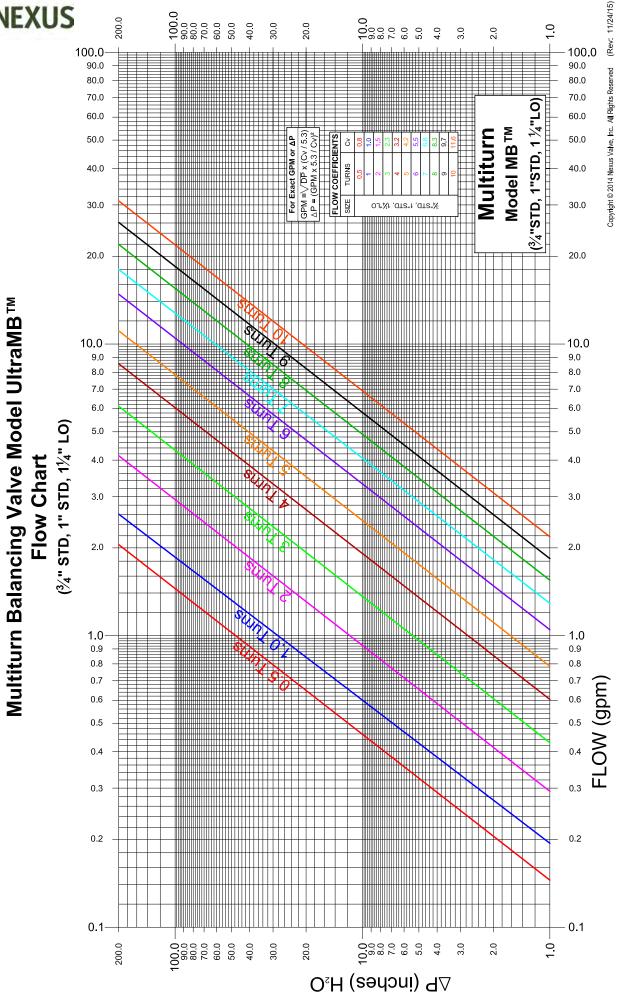
$$CV = GPM \bullet 5.3 / \sqrt{\Delta P_{mun}}$$

- Locate Column for Valve being used
- 3. Scar down column until cloesest Cv to required is located
 - Read Turn number in first column

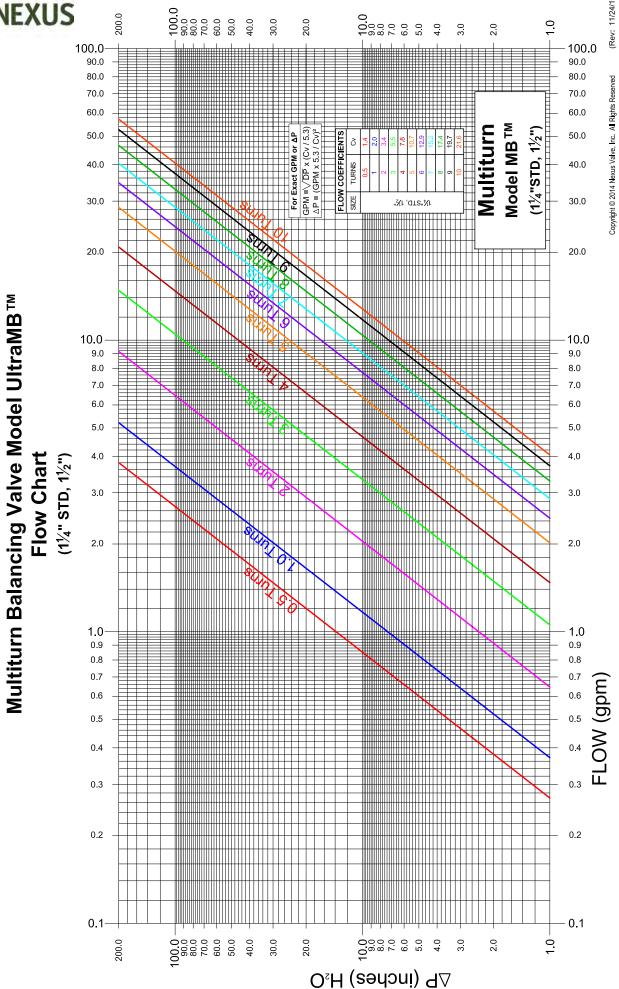




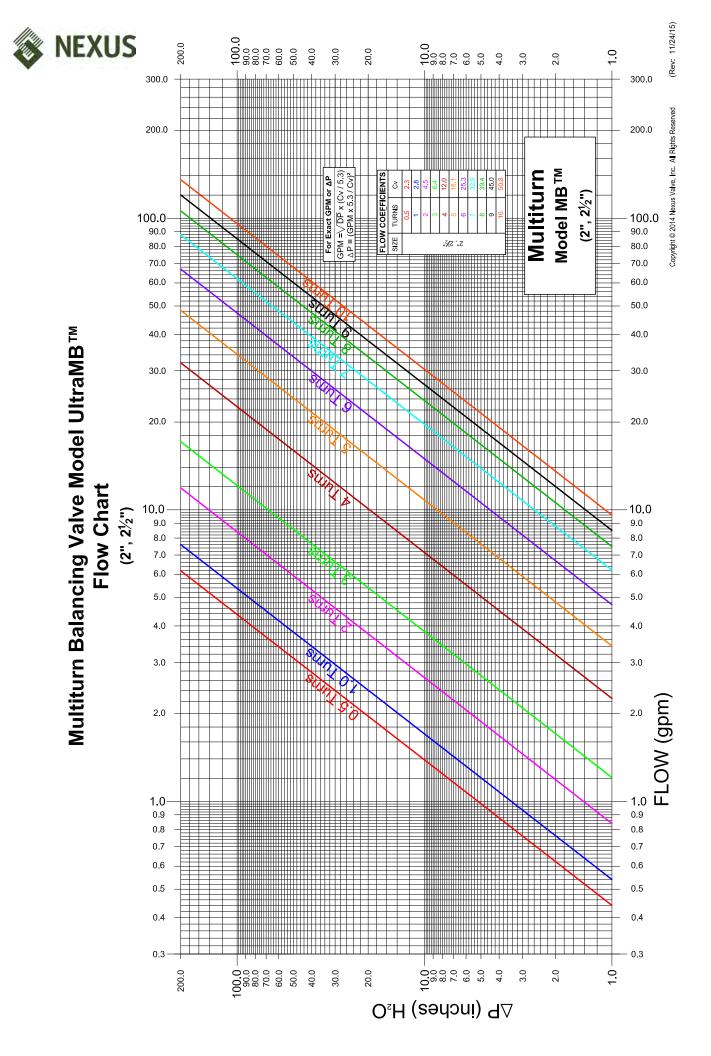








(Rev: 11/24/15)

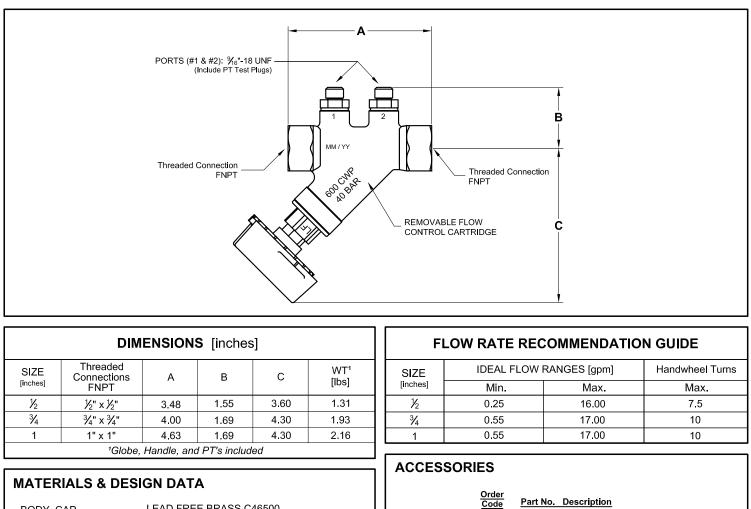




UltraMB[™] Model MBNL

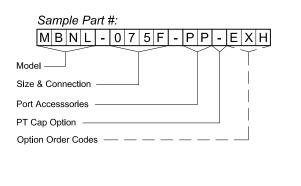
Lead Free Globe Style Balancing Valve

(¹/₂", ³/₄", 1")



ACC	URACY	±5%
HAN	DLE	NYLON, GLASS-FILLED
BALA	ANCING GLOBE	LEAD FREE BRASS C46500
CAP	SEAL	FKM O-RING
BOD	Y, CAP	LEAD FREE BRASS C46500, 600 WOG, 325°F

ORDER DATA



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraMB[™] Model MBNL is tested and certified to NSF/ANSI 61 & NSF/ANSI 372 for Lead Free compliance.

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.... ES-MTV. EXTENSION

.... HT. HANGING TAG

with Model No., Location, Flow Rate (Maximum 7 Characters)

X PTE. PRES / TEMP TEST PLUG EXTENSION

3" O.A.L.

1%₁₆" O.A.L.

PROJECT _____

REPRESENTATIVE _____

CONTRACTOR _____

PO/JOB NO. _

ENGINEER _

DATE ____

Е

П н

(Rev: 03/03/17)



UltraMB[™] Model MBNL

Submittal Schedule

(¹/₂", ³/₄", 1")

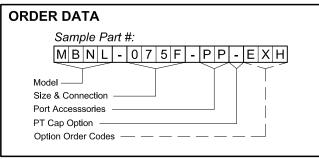
FLOW RATE RECOMMENDATION GUIDE

SIZE	IDEAL FLOW	/ RANGES [gpm]	Handwheel Turns
[inches]	Min.	Max.	Max.
1/2	0.25	16.00	7.5
3⁄4	0.55	17.00	10
1	0.55	17.00	10

ACCESSORIES

- E ES-MTV. EXTENSION, 3" O.A.L.
- H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- X PTE. PRES / TEMP TEST PLUG EXTENSION; $1\%_{16}"$ O.A.L. MV-025L. MANUAL AIR VENT EXTENDED

ltem	Qty.	Cv	Model Designation	Tagging Information (Maximum 7 Characters)



Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

UltraMBNL™ - Multiturn Balancing Valve Calculations

(1/2", 3/4", 1")

Cv Values for UltraMBNL Handle Turns

	MBNL1	MBNL2
Turns	Valve	Sizes
	1/2"	3/4", 1"
0.2	0.42	0.35
0.3	0.46	0.60
0.4	0.54	0.82
0.5	0.59	0.90
0.6	0.63	0.97
0.7	0.73	1.05
0.8	0.79	1.12
0.9	0.85	1.20
1.0	0.85	1.27
1.5	0.95	1.58
2.0	1.21	1.73
2.5	1.55	2.01
3.0	1.87	2.28
3.5	2.33	2.59
4.0	2.83	2.95
4.5	3.34	3.34
5.0	3.98	3.81
5.5	4.59	4.30
6.0	5.34	4.82
6.5	6.26	5.30
7.0	7.17	5.87
7.5	8.35	6.27
8.0	I	6.80
8.5	•	7.26
9.0	I	7.74
9.5	I	8.31
10.0	I	8.74

How to calculate the Flow through UltraMBNL using:

Cv values

- 1. Select column MBNL1 or MBNL2 for the valve being used
 - Read the Handle Turns counter on the valve
- 3. Scan the MBNL column for your valve and regard the CV value for your turns
 - 4. Use the following equations to calculate flow

If PSID is in pounds/square inch

$$GPM = Cv \bullet \sqrt{\Delta P_{PSI}}$$

If PSID is in Inches of Water

$$GPM = \sqrt{\Delta P_{inH_{2}0}} \bullet Cv / 5.3$$

How to determine UltraMBNL Handle Turns using: GPM and Pressure Differential (∆P)

1. If GPM and required pressure drop is known, calculate the required Cv_using the following equations:

If PSID is in pounds/square inch

$$Cv = GPM / \sqrt{\Delta P_{_{NN}}}$$

Γ

If PSID is in Inches of Water

$$Cv = GPM \bullet 5.3/\sqrt{\Delta H}$$

1111

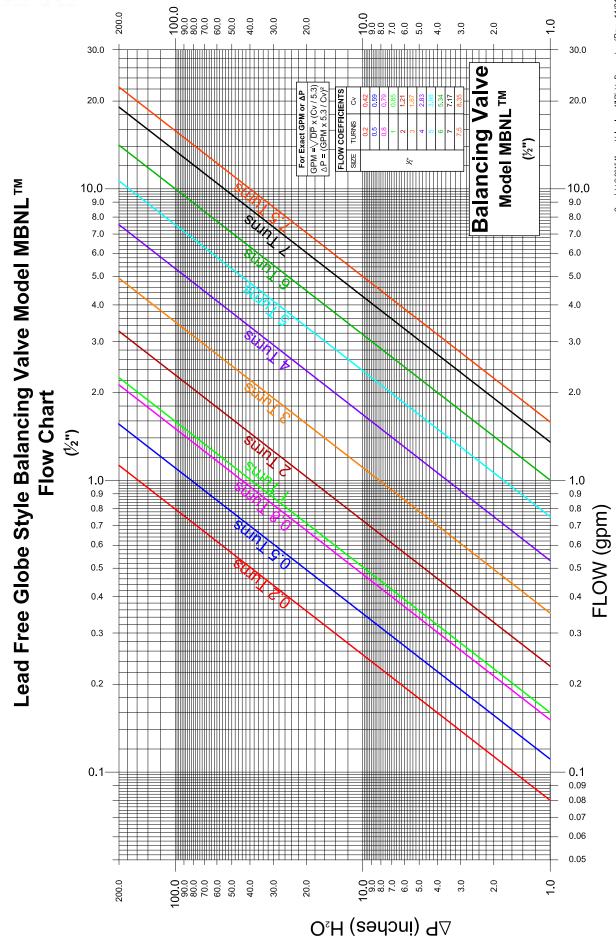
2. Locate Column for Valve being used

- Scan down column until cloesest Cv is located

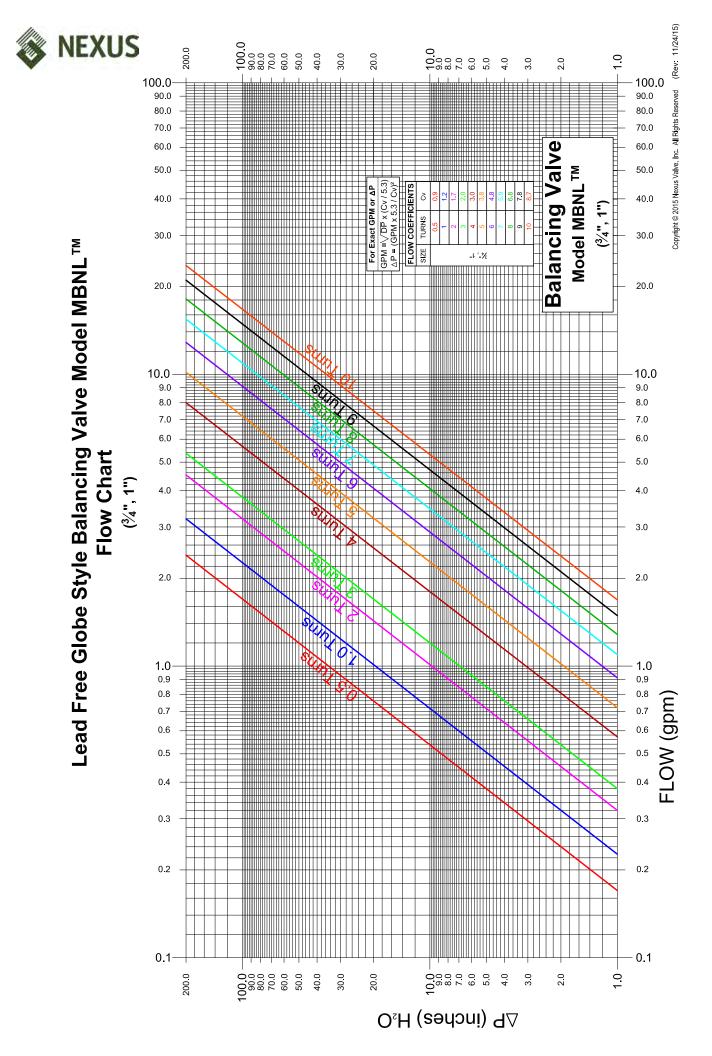
- Read Turn number in first column 4 ര്
- (Rev: 11/06/15) Copyright @ 2015 Nexus Valve, Inc. All Rights Reserved







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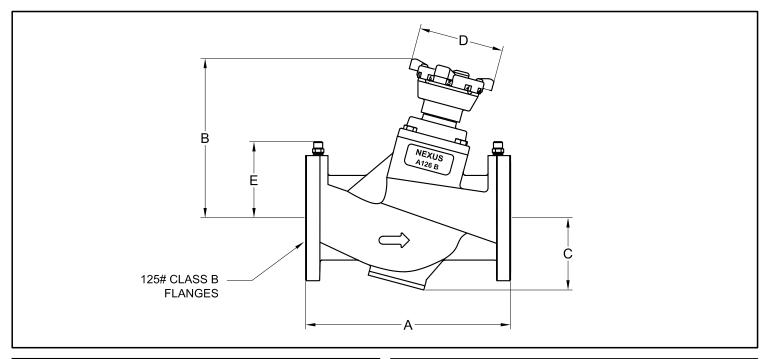




UltraMB[™] Model MBF

Manual Flow Control Valve

(2½" thru 6")



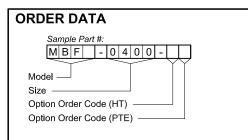
	DIMENSIONS [inches]											
SIZE [inches]	А	В	С	D	E	WT. [lbs]						
21/2	11.38	9.06	3.90	5.12	4.65	38.9						
3	12.25	9.53	4.25	5.12	5.00	43.3						
4	14.00	11.02	4.88	5.12	5.25	63.4						
5	15.50	15.35	5.83	7.87	6.58	83.2						
6	19.00	16.34	6.77	7.87	7.52	146.7						

FLOW RATE RECOMMENDATION GUIDE											
SIZE [inches]	IDEAL FLOW	RANGES [GPM]	Handwheel Turns								
	Min.	Max.	Max. (functional)								
21/2	4	150	4								
3	4	200	6								
4	8	300	6								
5	5	500	12								
6	20	1000	15								

BASIC INSTALLATION NOTES

-CAN BE ROTATED ±90° IN-LINE (HANDWHEEL ON TOP POSITION) -CAN BE MOUNTED HORIZONTALLY OR VERTICALLY

- -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM
- -REQUIRES A MINIMUM OF 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM
- -125# CLASS B FLANGES ALSO MATE TO 150# FLANGES



For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

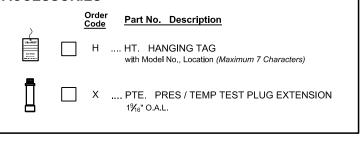
MATERIALS & DESIGN DATA

BODY	-
LIMITING SCREW STEM STOPPER RETAINING RING SPRING O-RINGS	
HANDWHEEL	-
POSITION INDICATOR SEAL SCREWS	-
GLOBE	-

.....CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGESBRASS, ASTM B16 C36000BRASS, ASTM B16 C36000BRASS, ASTM B16 C36000STAINLESS STEEL 302EPDMPOLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")POLYAMIDEEPDMSTAINLESS STEEL A2RYTON (PPS, Polyphenylene Sulfide)±5%

ACCESSORIES

ACCURACY



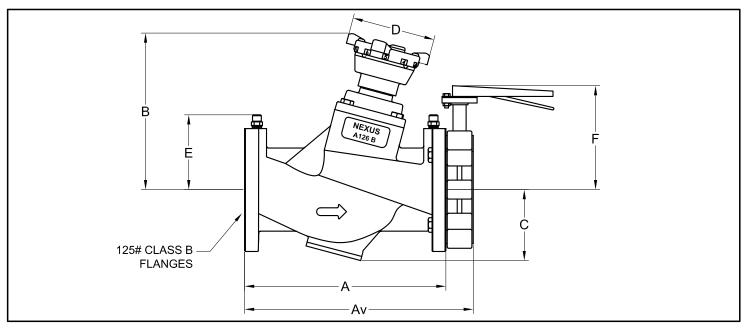
PROJECT								
CONTRACTOR								
PO/JOB NO								
ENGINEER								
REPRESENTATIVE								
DATE								



UltraMB[™] Model MBFV

Manual Flow Control Valve

(2½" thru 6")



	DIMENSIONS [inches]											
SIZE [inches]	А	Av	В	С	D	Е	F		T. [lbs] Butterfly Valve			
21/2	11.38	13.18	9.06	3.90	5.12	4.65	8.3	38.9	12.9			
3	12.25	14.05	9.53	4.25	5.12	5.00	8.4	43.3	13.1			
4	14.00	16.10	11.02	4.88	5.12	5.25	9.2	63.4	19.0			
5	15.50	17.07	15.35	5.83	7.87	6.58	9.5	83.2	23.0			
6	19.00	21.20	16.34	6.77	7.87	7.52	^{10.2} /11.6	146.7	29.0			

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW	Handwheel Turns	
	Min.	Max.	Max. (functional)
21/2	4	150	4
3	4	200	6
4	8	300	6
5	5	500	12
6	20	1000	15

BASIC INSTALLATION NOTES

-CAN BE ROTATED ±90° IN-LINE (HANDWHEEL ON TOP POSITION) -CAN BE MOUNTED HORIZONTALLY OR VERTICALLY

-REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

-REQUIRES A MINIMUM OF 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM

-125# CLASS B FLANGES ALSO MATE TO 150# FLANGES

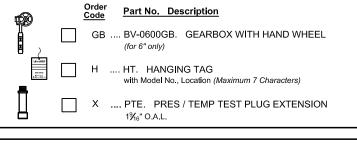
-MBFV SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT -BUTTERFLY VALVE MAY BE ROTATED 90° FOR PT PORT ACCESS

Sample Part #: MBFV-0400- Model Size Option Order Code (HT) Option Order code (GB)	ORDER DATA
Size Option Order Code (HT)	Sample Part #:
Size Option Order Code (HT)	M B F V -0 4 0 0 -
Option Order code (PTÉ)	Size Option Order Code (HT) Option Order code (GB)

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

MATERIALS & DESIGN DATACAST IRON, ASTM A126, CLASS B BODY 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES LIMITING SCREWBRASS, ASTM B16 C36000BRASS, ASTM B16 C36000 STEM STOPPER **RETAINING RING**BRASS, ASTM B16 C36000STAINLESS STEEL 302 SPRING **O-RINGS**EPDM HANDWHEELPOLYAMIDE (21/2", 3", 4") STEEL, EPOXY COATED (5", 6") POSITION INDICATORPOLYAMIDEEPDM SEAL SCREWSSTAINLESS STEEL A2 GLOBE:RYTON (PPS, Polyphenylene Sulfide) BUTTERFLY VALVEEPOXY COATED CAST IRON, ASTM A126. CLASS B, LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, **416 STAINLESS STEEL SHAFT** BOLTSZINC PLATED STEEL ACCURACY±5%

ACCESSORIES



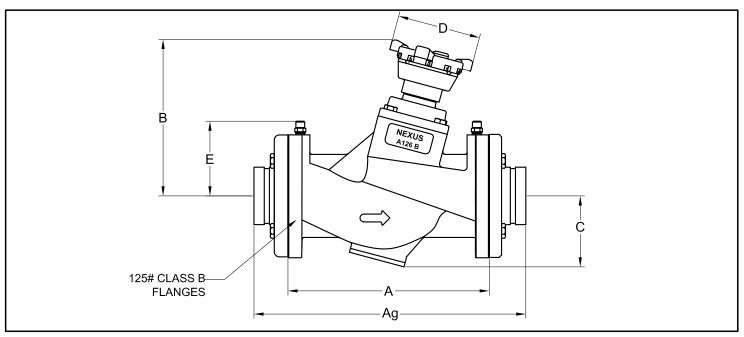
PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	



UltraMB[™] Model MBG

Manual Flow Control Valve

(2½" thru 6")



	DIMENSIONS [inches]								
SIZE		Ag	В	С	D	Е	WT. [lbs]		
[inches]							MBF	FGA ¹	
21/2	11.38	16.04	9.06	3.90	5.12	4.65	38.9	15.5	
3	12.25	17.03	9.53	4.25	5.12	5.00	43.3	18.5	
4	14.00	19.28	11.02	4.88	5.12	5.25	63.4	29.0	
5	15.50	21.26	15.35	5.83	7.87	6.58	83.2	33.0	
6	19.00	24.60	16.34	6.77	7.87	7.52	146.7	42.0	
¹ Weight of 2 Grooved Adapters with hardware									

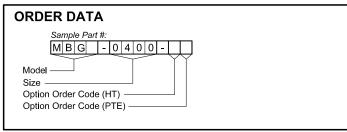
FLOW RATE RECOMMENDATION GUIDE

SIZE[inches]	IDEAL FLOW	Handwheel Turns	
GIZE[inoneo]	Min.	Max.	Max. (functional)
21/2	4	150	4
3	4	200	6
4	8	300	6
5	5	500	12
6	20	1000	15

BASIC INSTALLATION NOTES

-CAN BE ROTATED ±90° IN-LINE (HANDWHEEL ON TOP POSITION) -CAN BE MOUNTED HORIZONTALLY OR VERTICALLY -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

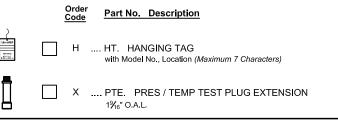
- -REQUIRES A MINIMUM OF 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM
- -125# CLASS B FLANGES ALSO MATE TO 150# FLANGES



MATERIALS & DESIGN DATA

BODY	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
LIMITING SCREW	BRASS, ASTM B16 C36000
STEM STOPPER	BRASS, ASTM B10 C30000
••••••••	,
RETAINING RING	BRASS, ASTM B16 C36000
SPRING	STAINLESS STEEL 302
O-RINGS	EPDM
HANDWHEEL	POLYAMIDE (2½", 3", 4")
	STEEL, EPOXY COATED (5", 6")
POSITION INDICATOR	POLYAMIDE
SEAL	EPDM
SCREWS	STAINLESS STEEL A2
GLOBE:	RYTON (PPS, Polyphenylene Sulfide)
GROOVED ADAPTERS	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F,
	STANDARD 125# CLASS B FLANGES
BOLTS	ZINC PLATED STEEL
ACCURACY	±5%

ACCESSORIES



PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

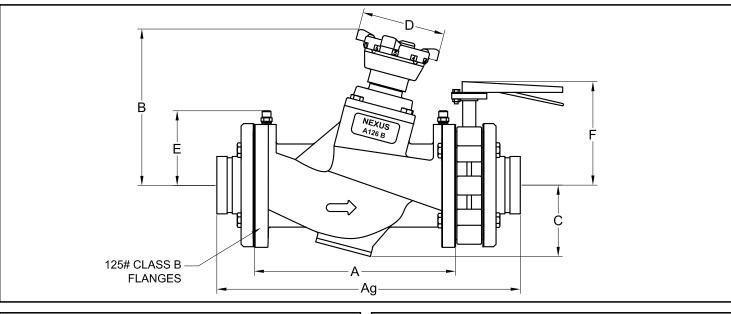
For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.



UltraMB[™] Model MBGV

Manual Flow Control Valve

(2½" thru 6")



	DIMENSIONS [inches]									
SIZE [inches]	А	Ag	В	С	D	Е	F	MBF	WT. [lbs] Butterfly Valve	FGA ¹
21/2	11.38	17.84	9.06	3.90	5.12	4.65	8.3	38.9	12.9	15.5
3	12.25	18.83	9.53	4.25	5.12	5.00	8.4	43.3	13.1	18.5
4	14.00	21.38	11.02	4.88	5.12	5.25	9.2	63.4	19.0	29.0
5	15.50	23.46	15.35	5.83	7.87	6.58	9.5	83.2	23.0	33.0
6	19.00	26.80	16.34	6.77	7.87	7.52	^{10.2} /11.6	146.7	29.0	42.0
	¹ Weight of 2 Grooved Adapters with hardware									

FLOW RATE RECOMMENDATION GUIDE

IDEAL FLOW	Handwheel Turns	
Min. Max.		Max. (functional)
4	150	4
4	200	6
8	300	6
5	500	12
20	1000	15
	Min. 4 4 8 5	4 150 4 200 8 300 5 500

BASIC INSTALLATION NOTES

-CAN BE ROTATED ±90° IN-LINE (HANDWHEEL ON TOP POSITION) -CAN BE MOUNTED HORIZONTALLY OR VERTICALLY -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM

-REQUIRES A MINIMUM OF 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM

-125# CLASS B FLANGES ALSO MATE TO 150# FLANGES

-MBGV SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT -BUTTERFLY VALVE MAY BE ROTATED 90° FOR PT PORT ACCESS

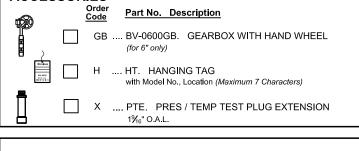
ORDER DATA	
Sample Part #: [M B G V - 0 4 0 0	
Model Size Option Order Code (HT) Option Order code (GB) Option Order code (PTE)	

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

MATERIALS & DESIGN DATA

BODY	CAST IRON, ASTM A126, CLASS B, 175 PSIG, 250°F,
LIMITING SCREW STEM STOPPER RETAINING RING SPRING O-RINGS HANDWHEEL	STANDARD 125# CLASS B FLANGES BRASS, ASTM B16 C36000 BRASS, ASTM B16 C36000 BRASS, ASTM B16 C36000 STAINLESS STEEL 302 EPDM POLYAMIDE (2½", 3", 4")
POSITION INDICATOF SEAL SCREWS GLOBE BUTTERFLY VALVE	EPDM STAINLESS STEEL A2 RYTON (PPS, Polyphenylene Sulfide)
BOLTS GROOVED ADAPTER: ACCURACY	416 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT ZINC PLATED STEEL SDUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES ±5%

ACCESSORIES



PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

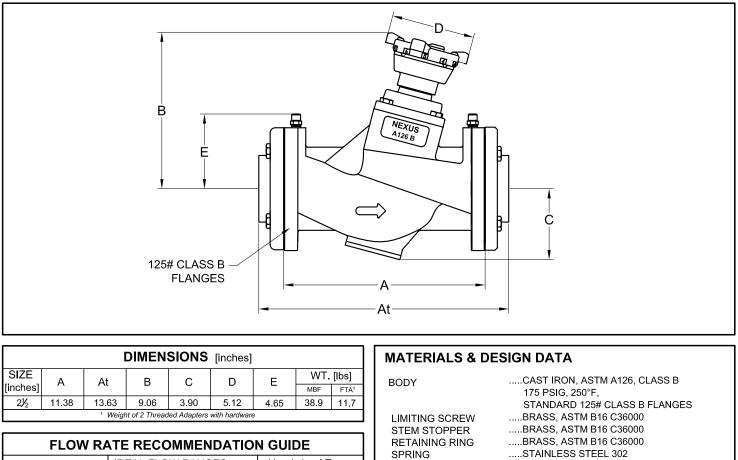
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UltraMB[™] Model MBT

Manual Flow Control Valve

 $(2\frac{1}{2}'')$



SIZE [inches]	IDEAL FLOW	RANGES [GPM]	Handwheel Turns					
	Min.	Max.	Max. (functional)					
21⁄2	4	150	4					

BASIC INSTALLATION NOTES

ORDER DATA

Model Size

Option Order Code (HT) Option Order code (PTE)

-CAN BE ROTATED ±90° IN-LINE (HANDWHEEL ON TOP POSITION)

-CAN BE MOUNTED HORIZONTALLY OR VERTICALLY

- -REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM
- -REQUIRES A MINIMUM OF 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM
- -123# CLASS B FLANGES ALSO MATE TO 150# FLANGES

.....EPDM **O-RINGS**POLYAMIDE HANDWHEEL POSITION INDICATORPOLYAMIDEEPDM SEAL SCREWSSTAINLESS STEEL A2RYTON (PPS, Polyphenylene Sulfide) GLOBE THREADED ADAPTERSDUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGESZINC PLATED STEEL BOLTS ACCURACY±5% ACCESSORIES Order Part No. Description Code



 		 · ·	_
1%."	O.A.L		

R DATA	
Sample Part #: M B T - 0 4 0 0 - n Order Code (HT) n Order code (PTE)	PROJECT
For part numbers and ordering information please consult	DATE

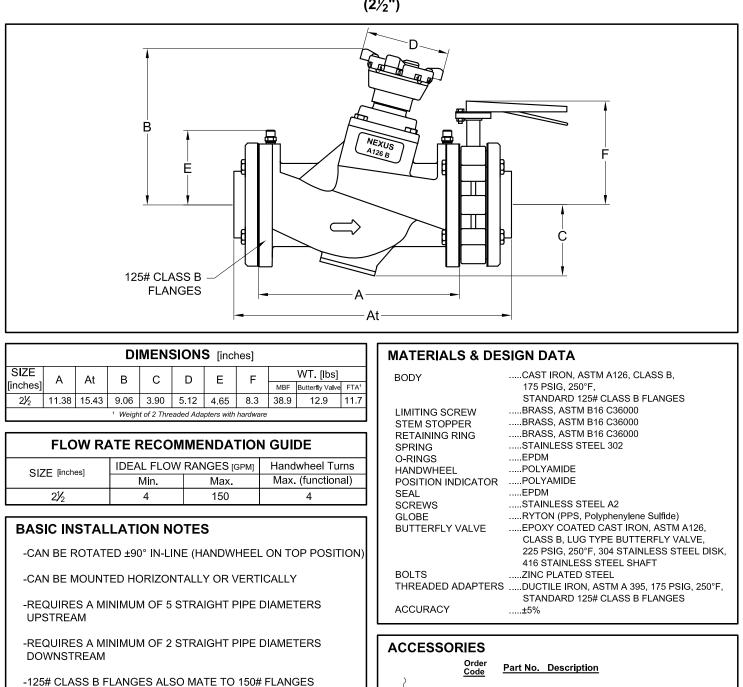
For part numbers the "Ordering Guide" section in Nexus Catalog.



UltraMB[™] Model MBTV

Manual Flow Control Valve

 $(2\frac{1}{2}")$



- MBTV SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT

-BUTTERFLY VALVE MAY BE ROTATED 90° FOR PT PORT ACCESS	X PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.
ORDER DATA Sample Part #: MBTV-0400- Model Size Option Order Code (HT) Option Order code (PTE)	PROJECT
For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.	DATE

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.... HT. HANGING TAG

with Model No., Location (Maximum 7 Characters)

н



UltraMB™ Models MBF, MBFV, MBG, MBGV, MBT, MBTV Submittal Schedule (2¹/₂" thru 6")

FLOW RATE RECOMANDATION GUIDE

SIZE	IDEAL FLOW	RANGES (GPM)
(Inches)	Min.	Max.
21/ ₂	4	150
3	4	200
4	8	300
5	5	500
6	20	1000

ACCESSORIES

- GB BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)
- H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
- X PTE. PRES / TEMP TEST PLUG EXTENSION 1%₁₆" O.A.L.

ltem	Qty.	GPM	Model Designation	(Maximum 7 Characters)

ſ

ORDER DATA	
Sample Part #:	
MBF - 0 4 0 0 -	
Model (MBF, MBFV, MBG, MBGV, MBT, MBTV) Size (2%; 3°, 4°, 5°, 6°) Option Order Code (HT) Option Order Code (GB) Option Order Code (PTE)	

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

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UltraMBTM - Multiturn Balancing Valve

Flow Chart

 $(2\frac{1}{2}$, thru 6")

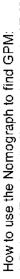
How to use the Nomograph to find the correct handle setting for your application: Find the required GPM on the GPM Scale (example: 200 GPM - Point A on Nomograph)

2. Draw a line from the GPM value to the required differential pressure on the In H2O scale (example: 70 In H2O - Point B on Nomograph)

Note where the straight line crosses the Cv scale (example: Point C or approximately 150)

4. From the intersected point on the Cv scale draw a horizontal line through the MB valve scale (example: Point D on MB-0500 or slightly less than 4 turns)

1.0 –



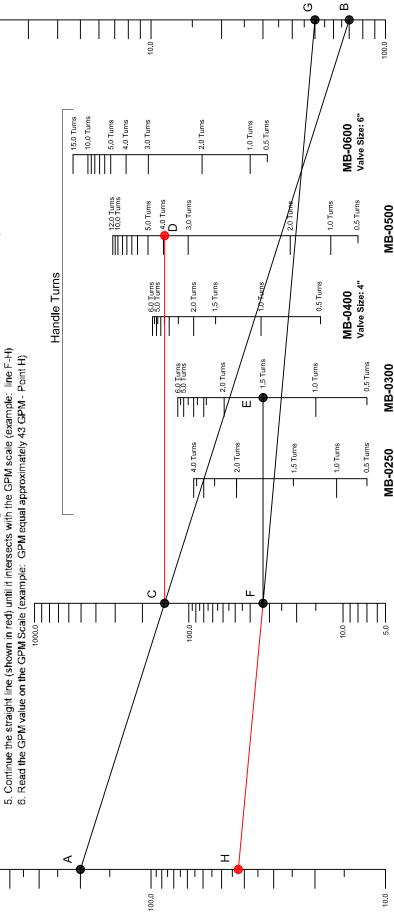
1000.0



Locate the turn setting for the valve (example: handle set at 1.5 turns - Point E on the Nomograph)

3. Draw a horizontal line from the turns setting to the Cv scale (example: line E-F, read Cv of 34)

4. Draw a line from the In H2O value on the In H2O scale through the located Cv value (example: line G-F for a In H2O of 50)





In H2O

Valve Size: 5"

Valve Size: 3"

Valve Size: 2½"

2

GPM



UltraMB™ - Multiturn Balancing Valve Calculations (2½" thru 6")



Cv Values for UltraMB Handle Turns

	MB-0250	MB-0300	MB-0400	MB-0500	MB-0600
Turns			Valve Sizes:		
	2-1/2"	ŝ	4"	2,	ē.
0.5	7.4	7.0	13.7	7.5	30.9
1.0	۰ ۴ ⁻ ۴	14.9	34.1	12.0	39.7
1.5	20.7	33.4	66.5	N/A	N/A
2.0	49.2	58.7	93.0	22.5	81.7
2.5	68.4	77.2	117.2	N/A	N/A
3.0	79.9	80.3	133.5	100.6	183.1
3.5	88.6	87.7	144.D	N/A	N/A
4.0	92.7	92.8	152.3	146.0	254.9
4.5	96.0	101.0	159.0	N/A	N/A
5.0	1.00	107.6	162.3	183.9	320.6
5.5	104.0	113.0	167.0	A/N	N/A
6.0	110.0	118.1	17'.5	215.3	350.8
6.5	A/A	123.0	C.771	N/A	N/A
7.0	N/A	129.6	179.6	234.0	379.2
8.0	V/N	N/A	N/A	252.3	422.0
9.0	N/A	A/A	N/A	268.7	429.4
10.0	V/N	N/A	N/A	287.6	450.6
11.0	N/A	N/A	N/A	300.1	482.0
12.0	V/N	N/A	N/A	311.0	500.0
13.0	V/N	N/A	N/A	A/N	529.0
14.0	NA	N/A	N/A	N/A	546.0
15.0	N/A	N/A	N/A	N/A	563.1

How to calculate the Flow through UltraMB using: Cv values

- 1. Select column MB-0250,MB-0300, MB-0400, MB-0500,MB-0600 for the valve being used
 - Read the Handle Turns counter on the valve
- 3. Scan the MB column for your valve and regard the Cv value for your turns 4. Use the following equations to calculate flow:

If PSID is in pounds/square inch

$$GPM = Cv \bullet \sqrt{\Delta P_{PSI}}$$

If PSID is in Inches of Water

$$GPM = \sqrt{\Delta P_{inlt_20}} \bullet CV/5.3$$

How to determine UltraMB Handle Turns using: GPM and Pressure Differential (∆P)

1 If GPM and required pressure drop is known, calculate the required CV using the following equations:

If PSID is in pounds/square inch

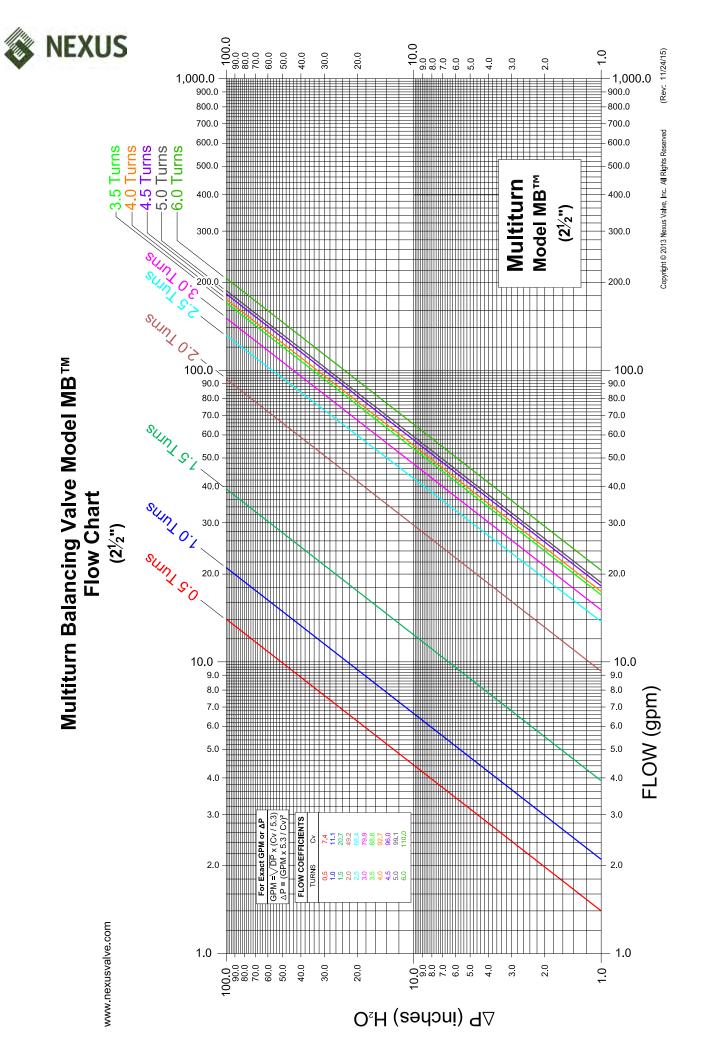
$$Cv = GPM / \sqrt[\gamma]{\Delta P_{_{
m Fil}}}$$

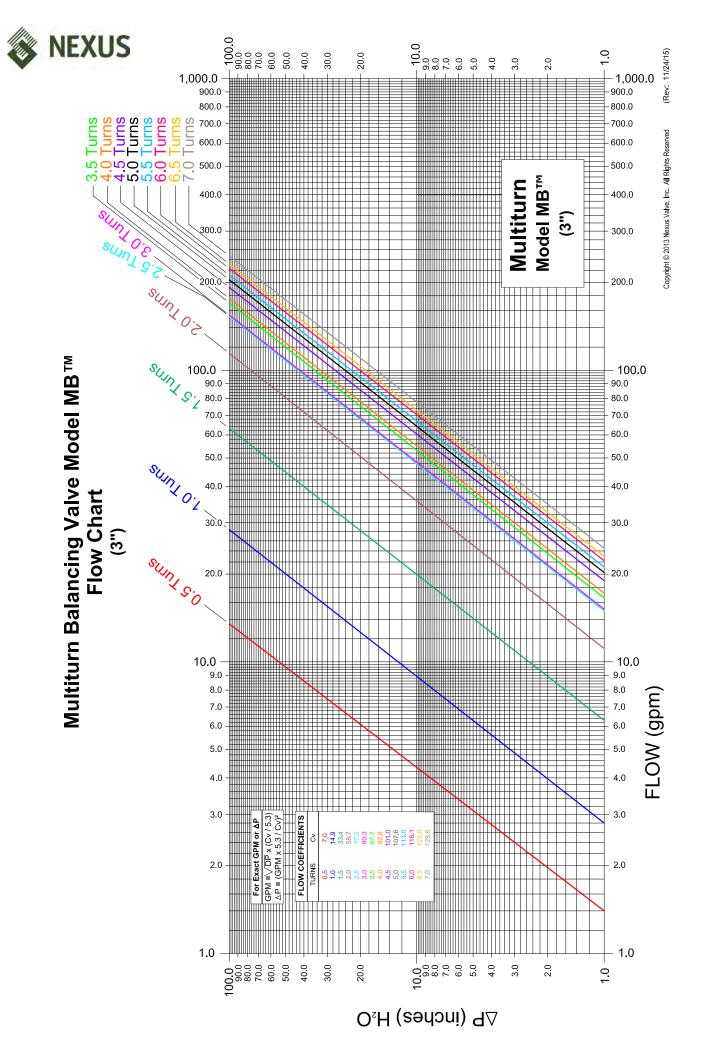
If PS D is in Inches of Water

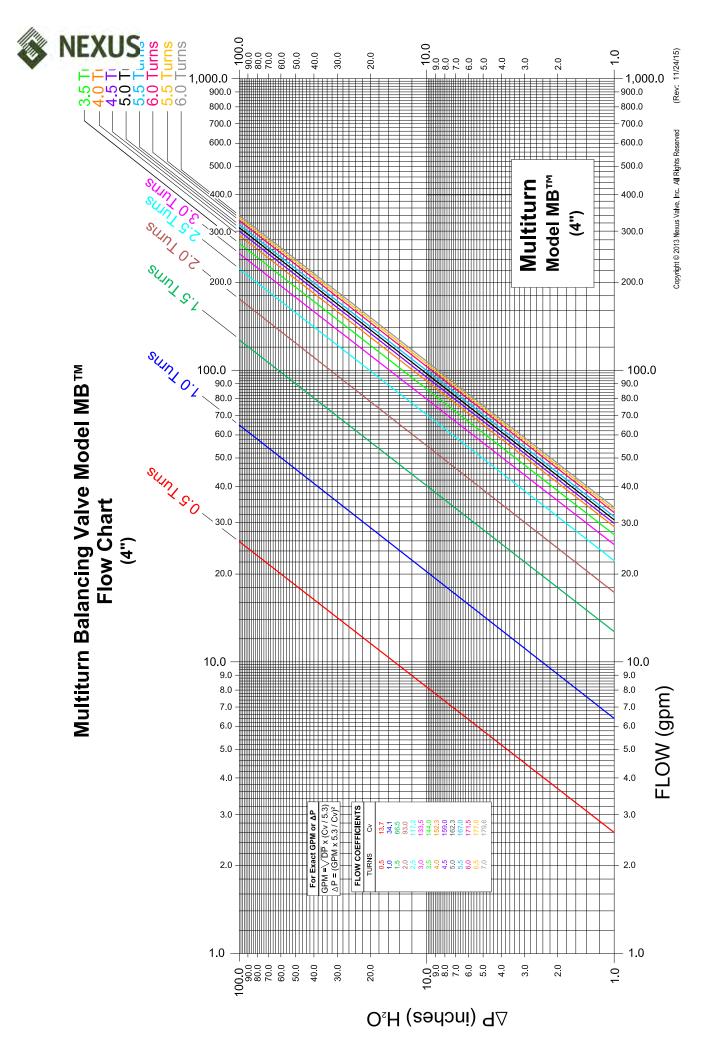
$$Cv = GPM \bullet 5.3 / \sqrt{\Delta P_{_{DN_o}}}$$

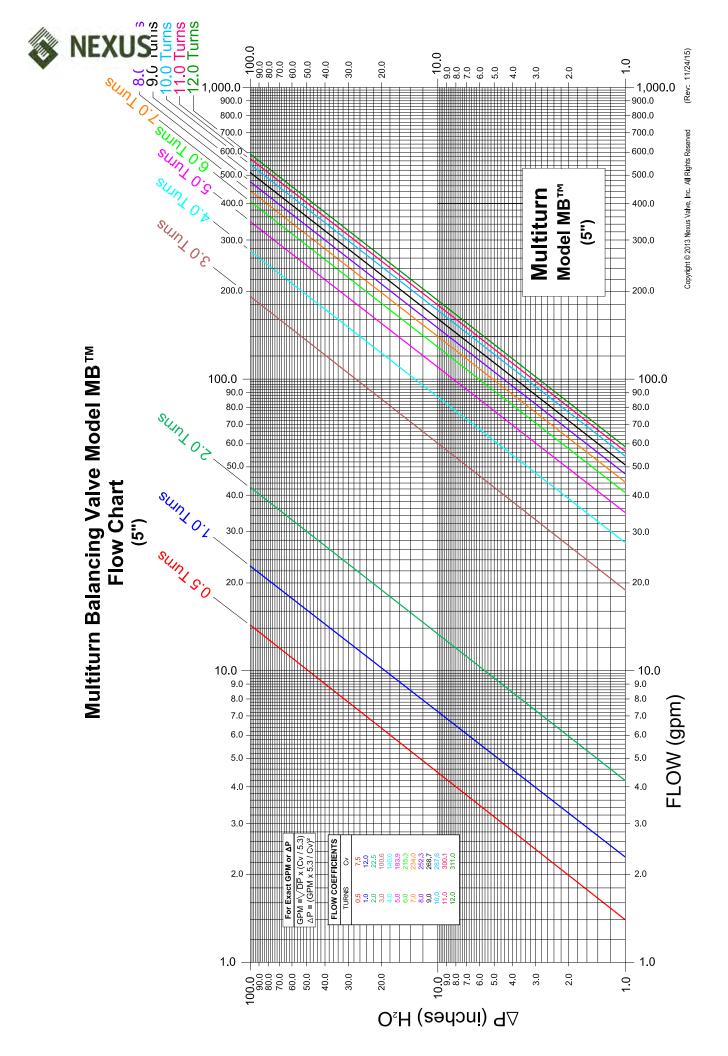
- 2 Locate Column for Valve being used
- Scan down column until cloesest Cv to required is located m

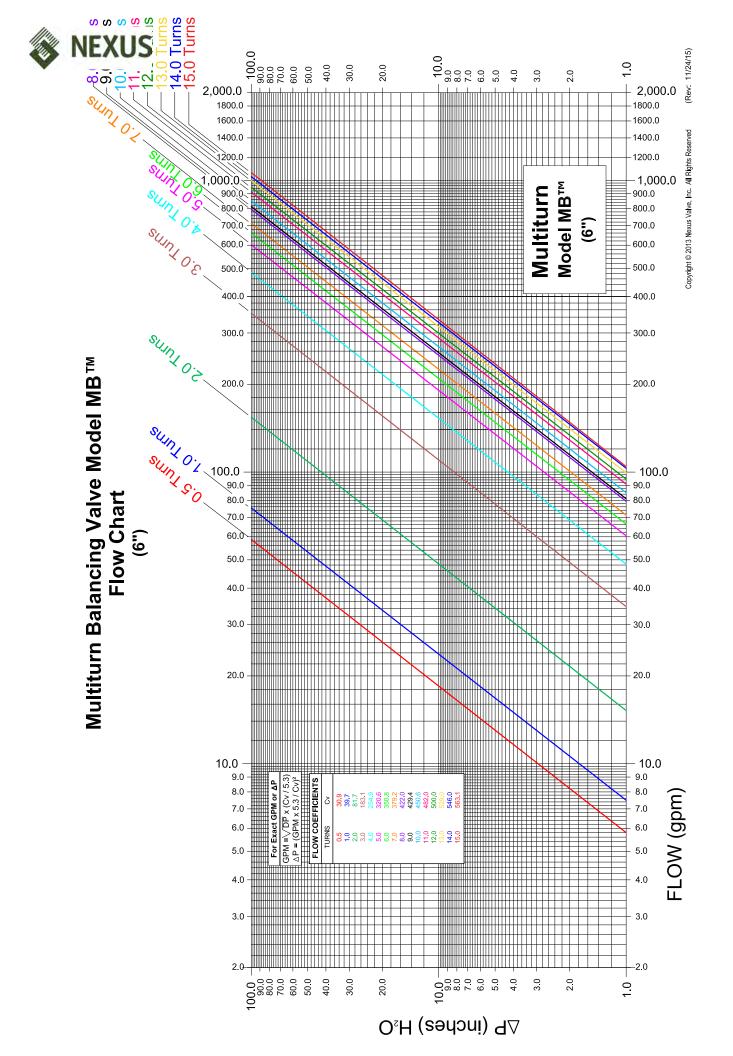
 - 4 Read Turn number in first colum-









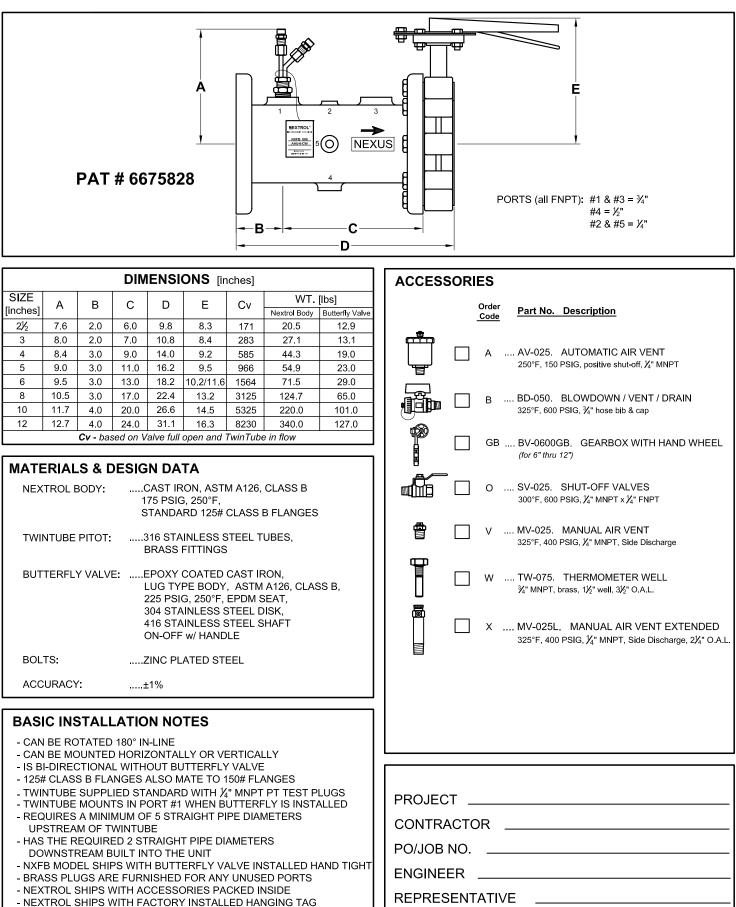




Nextrol[™] Model NXFB

Calibrated Balancing Valve, Pitot Tube™

(2¹/₂" thru 12")



DATE

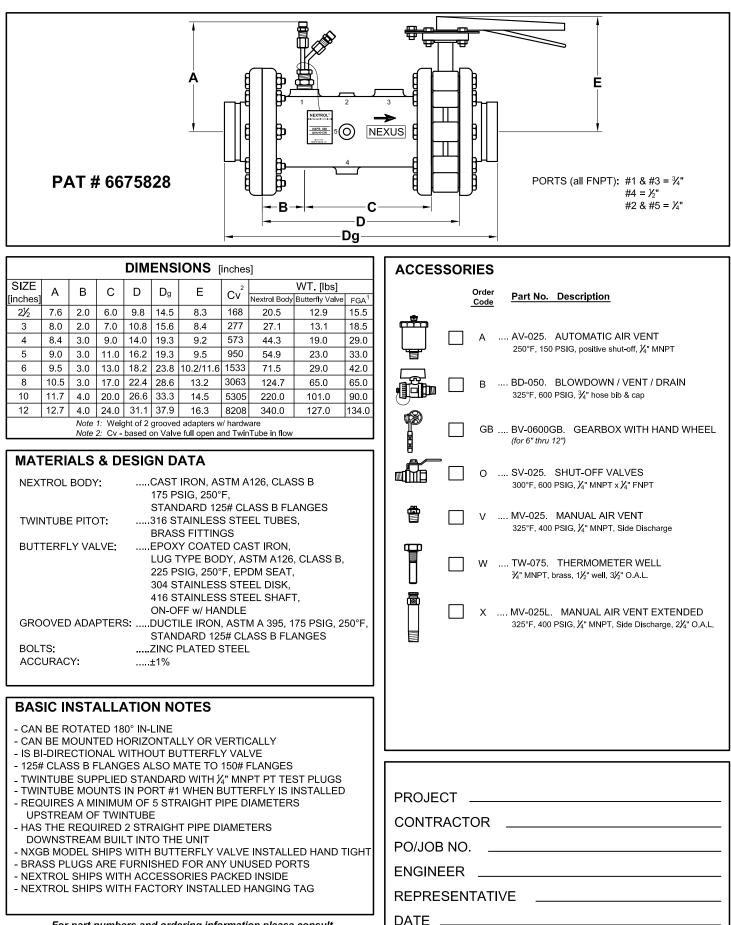
For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.



Nextrol[™] Model NXGB

Grooved End Calibrated Balancing Valve, Pitot Tube™

(2¹/₂" thru 12")



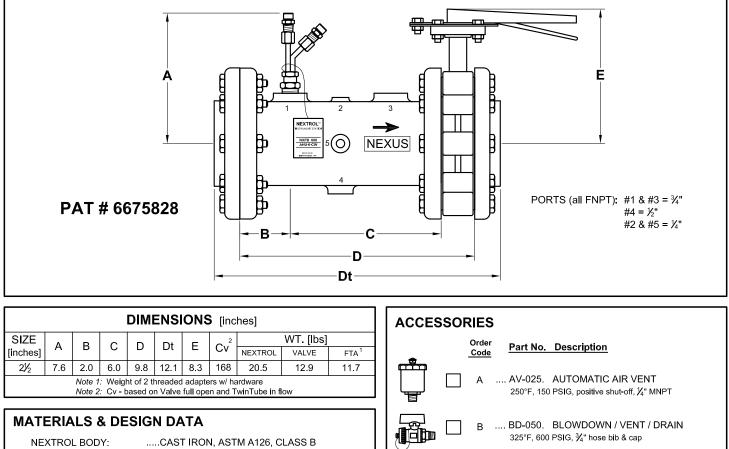
For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.



Nextrol[™] Model NXTB

Threaded End Calibrated Balancing Valve, Pitot Tube™

(2¹/₂")



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NEXTROL BODY:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F,
	STANDARD 125# CLASS B FLANGES
TWINTUBE PITOT:	316 STAINLESS STEEL TUBES, BRASS FITTINGS
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT ON-OFF w/ HANDLE
THREADED ADAPTERS:	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
BOLTS:	ZINC PLATED STEEL
ACCURACY:	±1%

BASIC INSTALLATION NOTES

- CAN BE ROTATED 180° IN-LINE
- CAN BE MOUNTED HORIZONTALLY OR VERTICALLY
- IS BI-DIRECTIONAL WITHOUT BUTTERFLY VALVE
- 125# CLASS B FLANGES ALSO MATE TO 150# FLANGES
- TWINTUBE SUPPLIED STANDARD WITH $\ensuremath{\sc k}$ " MNPT PT TEST PLUGS
- TWINTUBE MOUNTS IN PORT #1 WHEN BUTTERFLY IS INSTALLED
- REQUIRES A MINIMUM OF 5 STRAIGHT PIPE DIAMETERS UPSTREAM OF TWINTUBE
- HAS THE REQUIRED 2 STRAIGHT PIPE DIAMETERS DOWNSTREAM BUILT INTO THE UNIT
- NXTB MODEL SHIPS WITH BUTTERFLY VALVE INSTALLED HAND TIGHT
- BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS
- NEXTROL SHIPS WITH ACCESSORIES PACKED INSIDE
- NEXTROL SHIPS WITH FACTORY INSTALLED HANGING TAG

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

X MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X/" MNPT, Side Discharge, 2X" O.A.L.
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

O SV-025. SHUT-OFF VALVES

.... MV-025. MANUAL AIR VENT

.... TW-075. THERMOMETER WELL

¾" MNPT, brass, 1½" well, 3½" O.A.L.

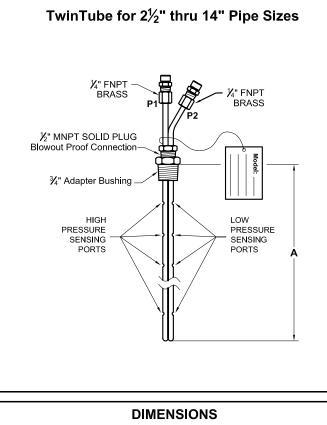
300°F, 600 PSIG, χ " MNPT x χ " FNPT

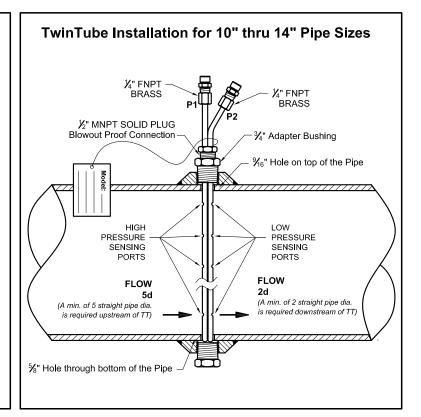
325°F, 400 PSIG, 1/4" MNPT, Side Discharge



TwinTube[™] Pitot

(2¹/₂" thru 14")





DESIGN DATA

- TWINTUBE SUPPLIED STANDARD WITH $\chi_4^{\prime\prime}$ MNPT PRES / TEMP TEST PLUGS.
- BLOWOUT-PROOF PIPE CONNECTION.
- TWINTUBE IS BI-DIRECTIONAL WHEN INSTALLED WITH A MINIMUM OF (5) STRAIGHT PIPE DIAMETERS UPSTREAM AND (2) STRAIGHT PIPE DIAMETERS DOWNSTREAM.
- 600 PSIG W.P., 300°F MAX. TEMPERATURE.

- ACCURACY: ±1%

0.64	
0.61	ACCESSORIES
	Order Code Part No. Description Image: O marked state 0 marked state Image: O marked state SV-025. Image: O marked state
s	
	PROJECT
	CONTRACTOR
	PO/JOB NO
	ENGINEER
	REPRESENTATIVE

DIMENSIONS										
PIPE SIZE [inches]	MODEL NO.	SENSING HOLES (ea. side)	A [inches/mm]	WT [Lbs]						
21/2	TT-0250-K	4	3.80 / 96.5	0.46						
3	TT-0300-K	4	4.30 / 109.2	0.47						
4	TT-0400-K	4	5.30 / 134.6	0.49						
5	TT-0500-K	4	6.30 / 160.0	0.50						
6	TT-0600-K	5	7.30 / 185.4	0.52						
8	TT-0800-K	6	9.30 / 236.2	0.55						
10	TT-1000-K	4	12.85 / 326.4	0.61						
12	TT-1200-K	4	14.85 / 377.2	0.64						
14	TT-1400-K	4	16.10 / 408.9	0.61						

MATERIALS

TUBES

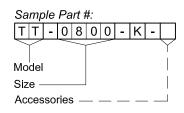
MOUNTING PLUG

......½" MNPT, BRASS

.....316 STAINLESS STEEL

ADAPTER BUSHING½" FNPT x ¾" MNPT, BRAS

ORDER DATA





Nextrol[™]/TwinTube[™] Pitot

Submittal Schedule

(2¹/₂" thru 12")

ACCESSORIES

FLOW RATE SELECTION GUIDE								
SIZE (Inches)	FLOW COEFFICIENTS (Cv)							
21/2	119							
3	181							
4	326							
5	505							
6	732							
8	1273							
10	2005							
12	2800							

- A AV-025. AUTOMATIC AIR VENT; 250°F, 150 PSIG, positive shut-off, ¼" MNPT
- B BD-050. BLOWDOWN / VENT / DRAIN; 325°F, 600 PSIG, 3/4" hose bib & cap, 1/2" MNPT
- GB BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" Nextrol only)
- O SV-025. SHUT-OFF VALVE; 300°F, 600 PSIG, 1/4" MNPT x 1/4" FNPT
- V MV-025. MANUAL AIR VENT; 325°F, 400 PSIG, Side Discharge, 1/4" MNPT
- W TW-075. THERMOMETER WELL; brass, 11/2" well, 31/2" O.A.L., 3/4" MNPT
- X MV-025L. MANUAL AIR VENT EXTENDED; 325°F, 400 PSIG, Side Discharge, 2¹/₄" O.A.L., ¹/₄" MNPT

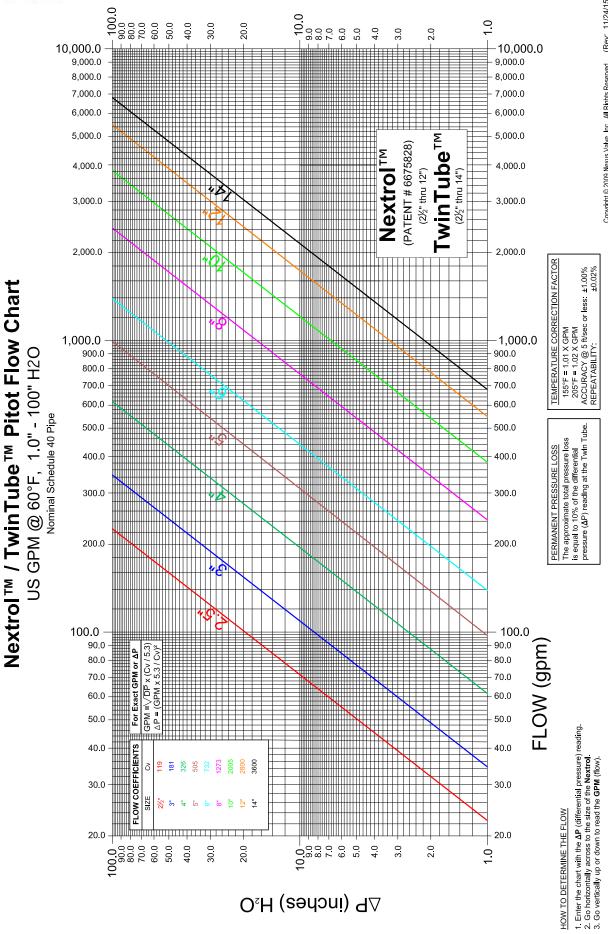
Item	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)

ORDE	R D)AT	Α												
Sample Part #:															
	N)	XG	В	0 4	0	0		V	G	В	Ρ				
Mode	\sim	<u> </u>			Γ										
Next	rol Si	ze –													
Port	Acce	ssori	es												
Optic	on Or	der (Cod	es –											
Gearbox Option (for 6" Nextrol only)															
	_									-					

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.





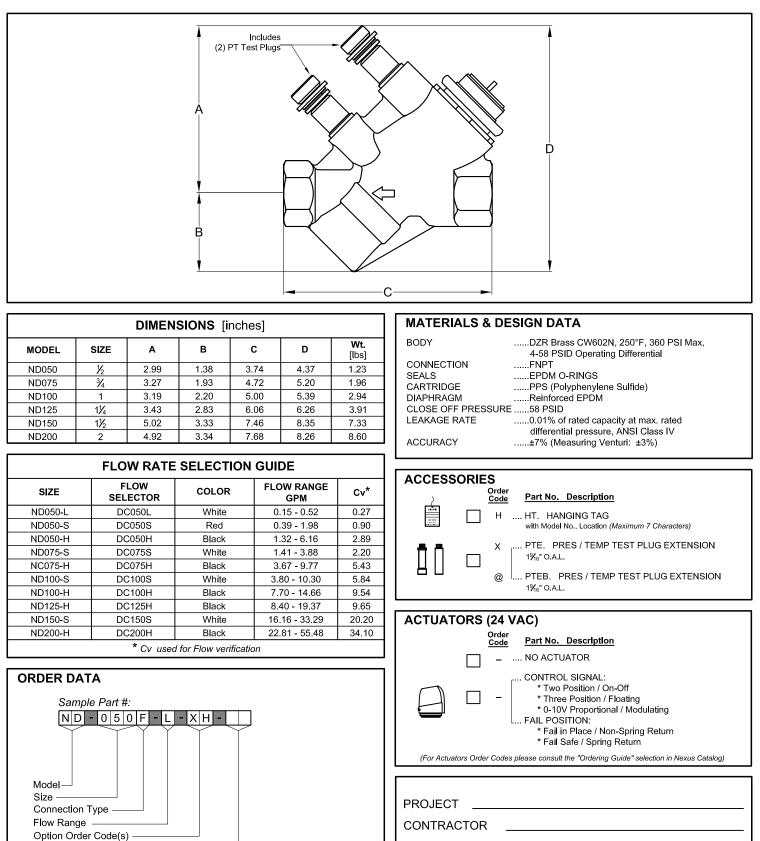
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Dynamic[™] Model ND

Pressure Independent Control Valve

(¹/₂" thru 2")



PO/JOB NO.

ENGINEER

DATE

REPRESENTATIVE

For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

Actuator Options -



Dynamic[™] Model ND

Submittal Schedule

(¹/₂" thru 2")

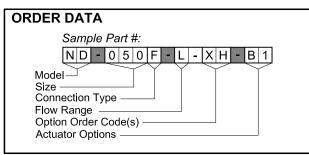
FLOW RATE SELECTION GUIDE										
SIZE	FLOW SELECTOR	COLOR	FLOW RANGE GPM	Cv*						
ND050-L	DC050L	White	0 15 - 0 52	0.27						
ND050-S	DC050S	Red	0.39 - 1.98	0.90						
ND050-H	DC050H	Black	1.32 - 6.16	2.89						
ND075-S	DC075S	White	1.41 - 3.88	2.20						
NC075-H	DC075H	Black	3.67 - 9.77	5.43						
ND100-S	DC100S	White	3.80 - 10.30	5.84						
ND100-H	DC100H	Black	7.70 - 14.66	9.54						
ND125-H	DC125H	Black	8.40 - 19.37	9.65						
ND150-S	DC150S	White	16.16 - 33.29	20.20						
ND200-H	DC200H	Black	22.81 - 55.48	34.10						
	* Cv us	sed for Flow verifica	tion							

ACCESSORIES

Х

- H HT. HANGING TAG with Model No., Location (Maximum 7 Characters)
- MODULATING ACTUATOR 24 V (0-10 V Control Voltage)
- TWO POSITION ACTUATOR 24 V (0-10 V Control Voltage)
- PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.
- @ |.... PTEB. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.

Item	Qty.	GPM	Model Designation	Tagging Information (Maximum 7 Characters)
				(Maximum + Oneracions)



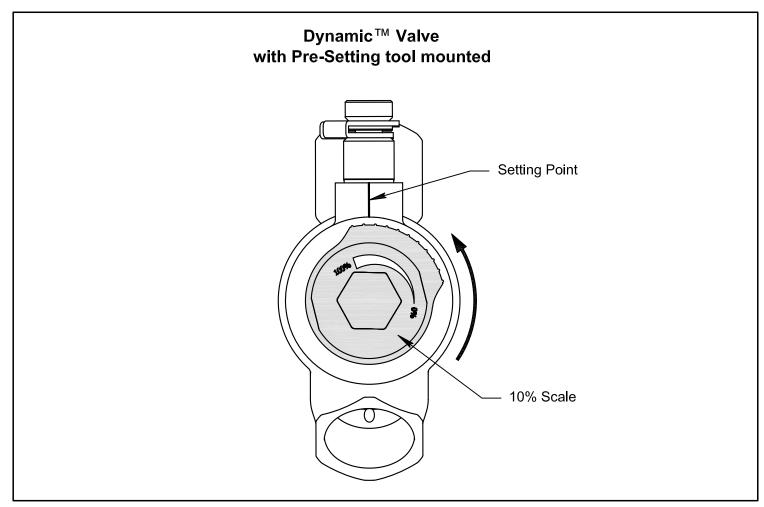
For part numbers and ordering information please consult the "Ordering Guide" section in Nexus Catalog.

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

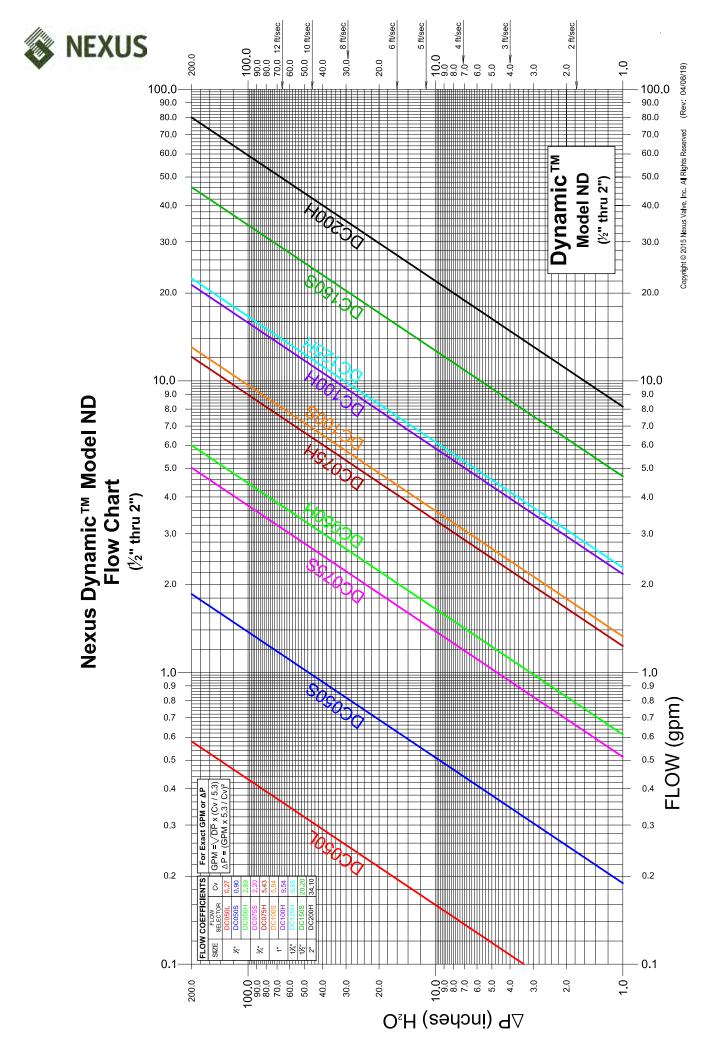


Dynamic[™] Pre-Set Data Pressure Independent Control Valve

(¹/₂" thru 2")

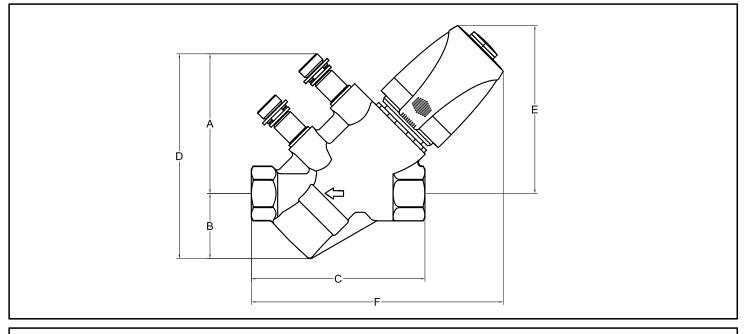


		GPM										
		DC050L	DC050S	DC050H	DC075S	DC075H	DC100S	DC100H	DC125H	DC150S	DC200H	
	100%	0.52	1.98	-	3.88	9.78	10.30	14.66	19.57	33.68	-	
	95%	0.52	1.97	-	3.81	9.64	10.14	14.46	19.51	33.41	-	
	90%	0.51	1.95	-	3.74	9.51	9.99	14.27	19.02	33.13	-	
	85%	0.50	1.93	-	3.61	9.19	9.59	13.87	18.70	32.73	51.52	
	80%	0.49	1.92	6.18	3.49	8.88	9.19	13.47	18.39	32.34	51.52	
5	75%	0.48	1.90	5.98	3.31	8.56	8.76	13.08	18.07	32.12	49.34	
Setting	70%	0.48	1.89	5.79	3.14	8.24	8.32	12.68	17.75	31.90	47.16	
et	65%	0.47	1.85	5.55	3.01	7.89	8.04	12.34	17.34	30.45	45.37	
	60%	0.46	1.82	5.31	2.88	7.53	7.77	12 .01	16.93	29.01	43.59	
Knob	55%	0.44	1.79	5.07	2.74	7.17	7.45	11.69	16.39	27.98	41.71	
l S l	50%	0.43	1.76	4.83	2.60	6.82	7.13	11.38	15.85	26.95	39.83	
	45%	0.40	1.71	4.58	2.44	6.53	6.84	11.00	15.22	26.15	38.20	
S S	40%	0.37	1.66	4.32	2.28	6.25	6.54	10.62	14.58	25.36	36.58	
re-Set	35%	0.34	1.59	4.04	2.16	5.96	6.22	10.18	13.79	24.47	33.35	
<u> </u>	30%	0.30	1.51	3.76	2.03	5.67	5.90	9.75	13.00	23.58	30.12	
	25%	0.26	1.39	3.47	1.92	5.37	5.61	9.39	12.21	22.59	28.73	
	20%	0.21	1.27	3.17	1.81	5.07	5.31	9.03	11.41	21.60	27.34	
	15%	0.21	1.07	2.71	1.71	4.76	4.95	8.72	10.66	20.51	26.15	
	10%	-	0.87	2.26	1.62	4.44	4.60	8.40	9.91	19.42	24.97	
	5%	-	0.56	1.82	1.52	3.96	4.32	8.00	9.19	18.23	24.17	





Ballorex Thermoelectric Actuators



Dimensions	Specif	Specifications			
ss here the second seco	Operating voltage Base position Operating power Average actuation delay Control voltage Actuator travel Actuating force Ambient temperature Protection class	24 V AC, 50-60 Hz Normally closed 2 W 30 s/mm 0-10 V DC 4 mm 22.5 lbs 0 to +140°F IP54			

						ON	I/OFF a	ctuator 24 V			
	D	imensi	ons			Specifications					
4 mm 54 px 47 44								Operating voltage Base position Operating power Closing and opening times Actuating force Ambient temperature Protection class UL conformity Connecting cable	24 V AC/DC, 0-60 Hz Normally closed 1.8 W approx. 3 min. 22.5 lbs 0 to +140°F IP54 UL 60730 Grey/1 m		
		DIME	SION	S [inch	esj						
MODEL	SIZE	A	В	С	D	Е	F	PROJECT			
ND050	1⁄2"	2.99	1.38	3.74	4.37	3.62	5.43	CONTRACTOR			
ND075	3⁄4"	3.27	1.93	4.72	5.20	4.36	6.76				
ND100	1"	3.19	2.20	5.00	5.39	5.09	5.77	PO/JOB NO			
ORDER DATA											
								REPRESENTATIVE			
								DATE			

Please consult the "Ordering Guide" in the Nexus Valve Catalog for complete part number and ordering information.



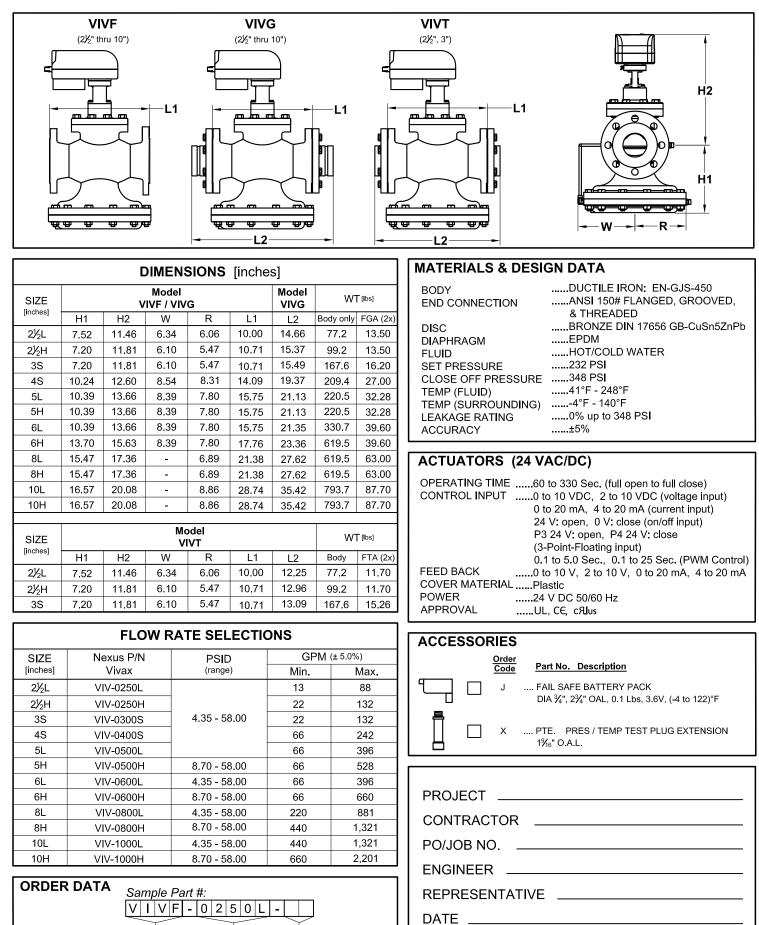
Model

Size & Connection

Vivax[™] Model VIVF, VIVG, VIVT

Pressure Independent Control Valve

(2¹/₂" thru 10")



Accessories



Vivax[™] Models VIVF, VIVG, VIVT

Pressure Independent Control Valve

Submittal Schedule (2¹/₂" thru 10")

FLOW RATE SELECTIONS												
SIZE												
[inches]	(range)	Min.	Max.									
21⁄2L		13	88									
2½H		22	132									
3S	4.35 - 58.00	22	132									
4S		66	242									
5L		66	396									
5H	8.70 - 58.00	66	528									
6L	4.35 - 58.00	66	396									
6H	8.70 - 58.00	66	660									
8L	4.35 - 58.00	220	881									
8H	8.70 - 58.00	440	1,321									
10L	4.35 - 58.00	440	1,321									
10H	8.70 - 58.00	660	2,201									

ACCESSORIES

 $X \quad \mbox{ PTE. PRES / TEMP TEST PLUG EXTENSION } 1\% _{6} " O.A.L. \label{eq:constraint}$

Item Qty. GPM		GPM	Model Designation	Tagging Information (Maximum 7 Characters)				

ORDER DATA	
Sample Part #: V V F - 0 2 5 0 L -	
Model ———	
Size & Connection	
Accessories	

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

J FAIL SAFE BATTERY PACK DIA ¾", 2¾" OAL, 0.1 Lbs, 3.6V, (-4 to 122)°F





SIZE

[inches]

½ LO

1/2 STD

⅔

1

11/4

11/2

2

A

M (MNPT)

2.2

2.7

2.6

2.6

2.9

3.0

3 1

UltraU[™] Model UU

Union

(¹/₂" thru 2")

WT [lbs]

(Tail Pieces & Nuts not Included)

0.4

0.7

0.6

0.7

1.6

1.8

26

Valve Body available in FNPT, MNPT or Sweat (l_2'' LO available in MNPT or Sweat only & l_2''' STD available in MNPT only)

DIMENSIONS [inches]

S

(Sweat

1.7

-

2.2

2.4

2.6

2.7

20

н

0.8

0.9

0.9

0.8

1.4

1.4

17

I.D.

0.6

0.6

0.8

1.0

1.3

1.6

20

В

(FNPT)

-

-

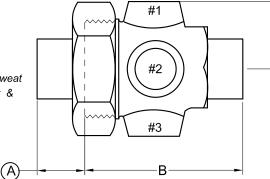
2.1

2.2

2.4

2.5

26



MATERIALS & DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
END PIECES	½" FNPT OPTION PORT (3 EACH) HOT FORGED BRASS ASTM B283 NexPress: 200 PSIG, 250°F /
UNION SEAL	NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F FKM O-RING

Н

2 3.1	2.6	2.9	1.7	2.0	2.6
TAIL PIECE OPTION	Nex	us P/N	Lengths [inches]		e with 3ody size
	TP12 TP12	75-050M 25-050M 25-075M 25-100M	1.00 1.04 1.16 1.29		<u>2</u> LO D, ¾, 1
MNPT (Male NPT Thread)	TP200-050M TP200-075M TP200-100M TP200-125M TP200-150M		1.04 1.16 1.39 1.85 1.89	1½	ά, 1½
(TP250-100M TP250-125M TP250-150M TP250-200M		1.93 1.93 1.97 2.00		2
	TP12	25-050F 25-075F 25-100F	1.00 1.00 1.20	½ STI	D, ¾, 1
ENPT	TP200-100F TP200-125F TP200-150F		1.61 1.57 1.18	11/2	i, 1½
(Female NPT Thread)	TP250-125F TP250-150F TP250-200F TP250-250F		1.77 1.97 1.36 1.74		2
		75-038S 75-050S	0.58 0.59	1/2	LO
	TP12	25-050S 25-075S 25-100S	0.60 0.85 1.00	½ STI	D, ¾, 1
SWT (Female Sweat)	TP20 TP20 TP20	00-075S 00-100S 00-125S 00-150S	1.85 1.85 1.85 1.38	1½	4, 1½
	TP2: TP2:	50-125S 50-150S 50-200S	1.69 1.97 1.65		2
	TP12 TPA1	25-050P 25-075P 25-100P	1.46 1.54 3.85	½ STI	D, ¾, 1
NexPress	TPA2	00-100P 00-125P 00-150P	1.58 3.70 3.63	1½	4, 1½
		25-050L 25-075L	1.03 1.29	½ STE), ³ ⁄ ₄ , 1
NexLok	TPA2	00-100L 200-125L 200-150L	1.66 4.25 4.05	1½	i, 1½
	TPA250-125L TPA250-150L TPA250-200L		4.43 4.85 4.40		2

Please consult the "Ordering Guide" section in Nexus Valve Catalog

ACCESSORIES <u>Order</u> Part No. Description Code A AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT B BD-025. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap C CV-1, CV-2. CHECK VALVE CV-1 for ½"LO; CV-2 for ½"STD, ¾" & 1"; Center Guided, Non-Slam Check P PT-025. PRES / TEMP TEST PLUG 皆 325°F, 1000 PSIG, ¼" MNPT V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, 1/4" MNPT, Side Discharge MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, 1/4" MNPT, Side Discharge, 21/4" O.A.L. Х .. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L. PROJECT _____ CONTRACTOR ___ PO/JOB NO. ENGINEER _ REPRESENTATIVE _____ DATE .

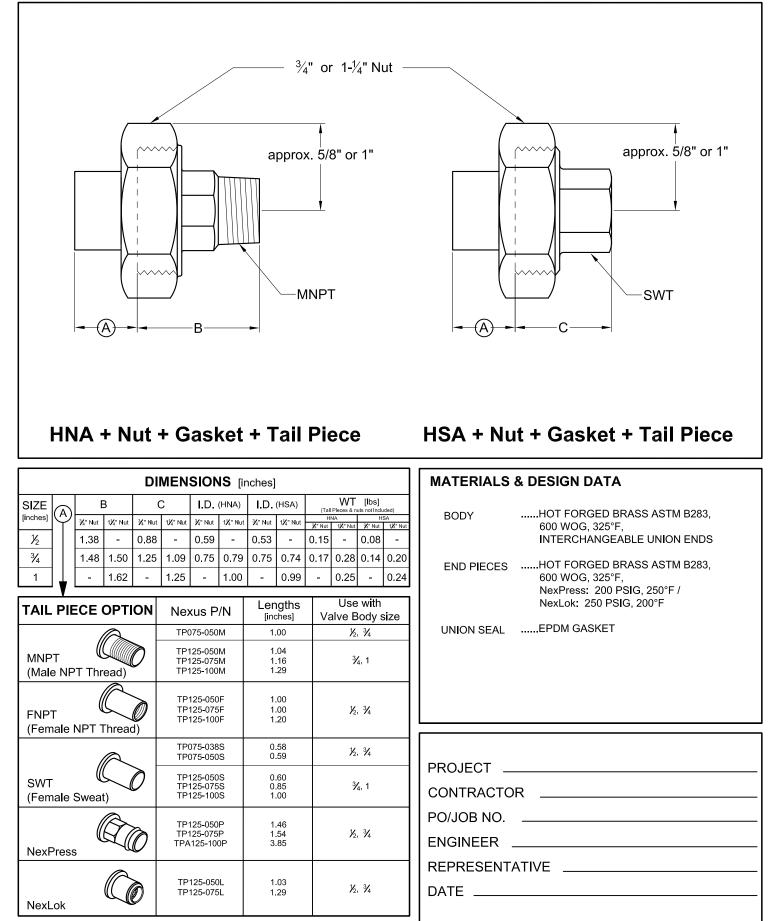
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UltraC[™] Model UC

Union

(½" thru 1")



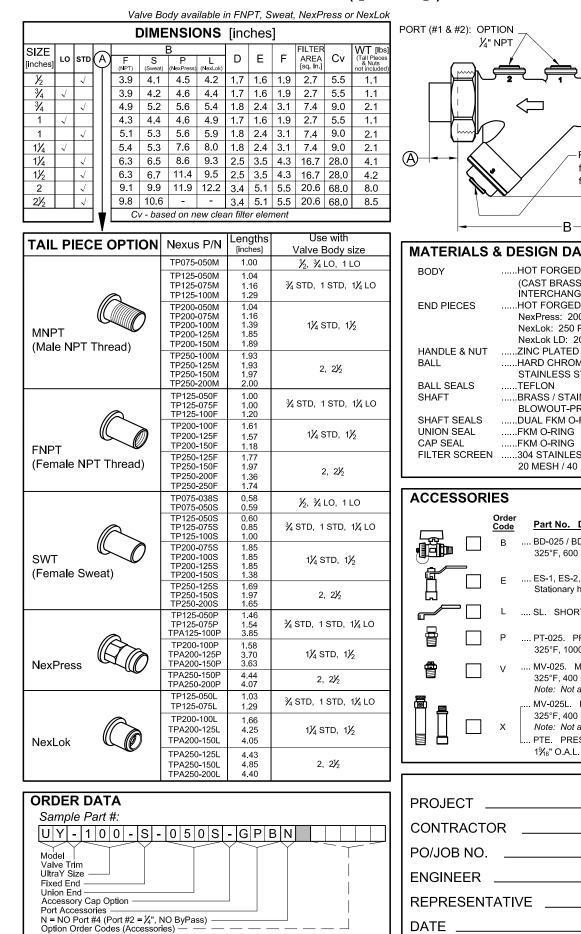
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

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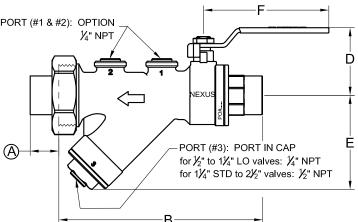


UltraY[™] Model UY **Y-Strainer**

(1/2" thru 21/2")



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



MATERIALS & DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, (CAST BRASS: 2", 2½"), 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
END PIECES	HOT FORGED BRASS ASTM B283, NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F
HANDLE & NUT	ZINC PLATED
BALL	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFT	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEAL	FKM O-RING
CAP SEAL	FKM O-RING
FILTER SCREEN	304 STAINLESS STEEL, REMOVABLE,
	20 MESH / 40 MESH (optional)

		Order <u>Code</u> B	Part No. Description BD-025 / BD-050. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap
		E	ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier
	'	L	SL. SHORT LEVER HANDLE
		Ρ	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, ¼" NPT
Ē		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge Note: Not available for 1½"STD, 2", and 2½".
		х	 MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. Note: Not available for 1½"STD, 2", and 2½". PTE. PRES / TEMP TEST PLUG EXTENSION 1%₀" O.A.L.

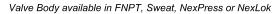
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



UltraY[™] Model UY Y-Strainer w/ Bypass Port

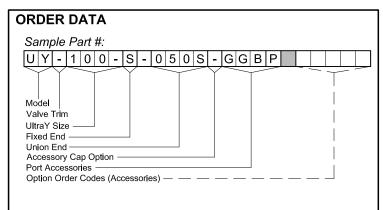
 $(\frac{1}{2}"$ thru $1\frac{1}{2}")$

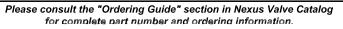
PORT (#2): OPTION / BYPASS for $\frac{1}{2}$ " thru 1 $\frac{1}{2}$ " LO valves: $\frac{1}{2}$ " NPT option or bypass for 1 $\frac{1}{4}$ " STD & 1 $\frac{1}{2}$ " valves: $\frac{3}{4}$ " NPT option or bypass

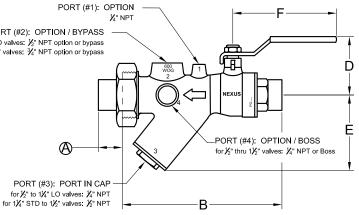


DIMENSIONS [inches]													
SIZE [inches]	LO	STD	A	F (NPT)	S (Sweat)	B (NexPress)	L (NexLok)	D	Е	F	FILTER AREA [sq. in.]	Cv	(Tail Pieces & Nuts not Included)
1/2		\checkmark		3.9	4.1	4.5	4.2	1.7	1.6	1.9	2.7	5.5	1.1
3⁄4	\checkmark			3.9	4.2	4.6	4.4	1.7	1.6	1.9	2.7	5.5	1.1
3⁄4		\checkmark		4.9	5.2	5.6	5.4	1.8	2.4	3.1	7.4	9.0	2.1
1	\checkmark			4.3	4.4	4.6	4.9	1.7	1.6	1.9	2.7	5.5	1.1
1		\checkmark		5.1	5.3	5.6	5.9	1.8	2.4	3.1	7.4	9.0	2.1
11/4	\checkmark			5.4	5.3	7.6	8.0	1.8	2.4	3.1	7.4	9.0	2.1
11/4		\checkmark		6.6	6.8	8.9	9.0	2.5	3.5	4.3	16.7	28.0	4.1
11/2		\checkmark		6.6	7.0	11.7	9.2	2.5	3.5	4.3	16.7	28.0	4.2
	Cv - based on new clean filter element												

TAIL PIECE OPTION	Nexus P/N	Lengths [inches]	Use with Valve Body size		
	TP075-050M	1.00	½, ¾ LO, 1 LO		
	TP125-050M	1.04			
	TP125-075M	1.16	¾ STD, 1 STD, 1¼ LO		
	TP125-100M	1.29			
MNPT	TP200-050M	1.04			
	TP200-075M	1.16	11 0 0 11		
(Male NPT Thread)	TP200-100M	1.39	11⁄4 STD, 11⁄2		
	TP200-125M TP200-150M	1.85 1.89			
	TP125-050F	1.00			
	TP125-050F	1.00	¾ STD, 1 STD, 1¼ LO		
	TP125-100F	1.20	74010, 1010, 17420		
	TP200-100F	1.61			
FNPT 🖤	TP200-125F	1.57	1½ STD, 1½		
(Female NPT Thread)	TP200-150F	1.16	174 51 D, 172		
	TP075-038S	0.58			
	TP075-050S	0.58	½, ¾ LO, 1 LO		
	TP125-050S	0.60			
	TP125-075S	0.85	¾ STD, 1 STD, 1¼ LO		
	TP125-100S	1.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
I SWT	TP200-075S	1.85			
(Female Sweat)	TP200-100S	1.85	11 075 11		
(i emale owear)	TP200-125S	1.85	11⁄4 STD, 11⁄2		
	TP200-150S	1.38			
	TP125-050P	1.46			
	TP125-075P	1.54	¾ STD, 1 STD, 1¼ LO		
	TPA125-100P	3.85			
	TP200-100P	1.58			
NexPress	TPA200-125P	3.70	1½ STD, 1½		
	TPA200-150P	3.63			
	TP125-050L	1.03			
	TP125-075L	1.29	¾ STD, 1 STD, 1¼ LO		
	TP200-100L	1.66			
NexLok	TPA200-125L	4.25	11⁄4 STD, 11⁄2		
l v	TPA200-150L	4.05			







MATERIALS & DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
END PIECES	HOT FORGED BRASS ASTM B283, NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F
HANDLE & NUT	ZINC PLATED
BALL	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFT	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEAL	FKM O-RING
CAP SEAL	FKM O-RING
FILTER SCREEN	304 STAINLESS STEEL, REMOVABLE, 20 MESH / 40 MESH (optional)

ACCESSORIES

.		Order <u>Code</u>	Part No. Description
		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT (Not available for: ½", ¾"LO, 1"LO)
		В	BD-025 / BD-050. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, $3\!$
		Е	ES-1, ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier
		L	SL. SHORT LEVER HANDLE
		Ρ	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, ¼" NPT
Ë		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
		х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L.
			PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.
PROJEC	ст ₋		
	л о т/		

CONTRACTOR

PO/JOB NO.

ENGINEER _

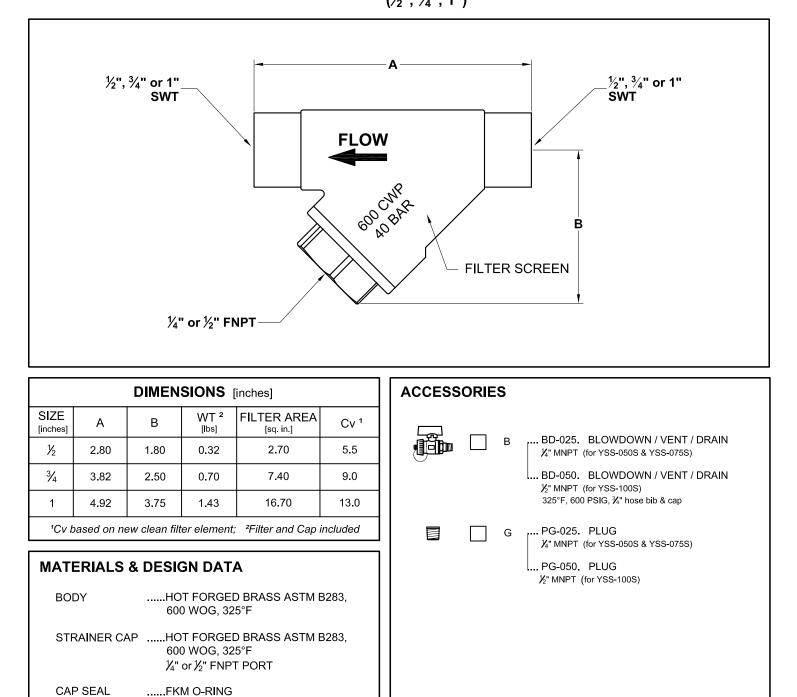
REPRESENTATIVE __

DATE



UltraYSS™ Model YSS

Y Strainer (1/2", 3/4", 1")



FILTER SCREEN304 STAINLESS STEEL, REMOVABLE, 20 MESH / 40 MESH (optional)

ORDER DATA Sample Part #: YSS-050S-B Model YSS-Strainer Size X"S = 050S; X"S = 075S; 1" = 100S S for Sweat Option Order Codes (Accessories)

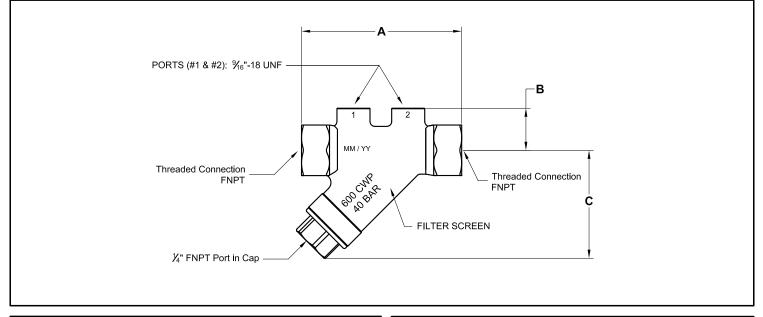
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraY[™] Model YSF Y Strainer

$(\frac{1}{2}^{"}, \frac{3}{4}^{"}, 1^{"})$

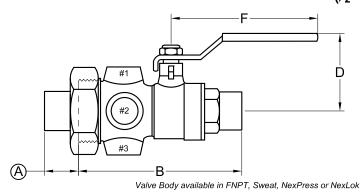


DIMENSIONS [inches]								ACCESSORIES					
SIZE Threade Connection FNPT		В	С	WT ² [lbs]	Cv 1	FILTER AREA [sq. in.]		<u>(</u>	<u>Order</u> Code	Part No. Description			
$\frac{1}{2} \qquad \frac{1}{2} \times \frac{1}{2} \\ \frac{3}{4} \qquad \frac{3}{4} \times \frac{3}{4} \\ \frac{3}$	" 4.00	0.92	1.50 2.46	0.88	5.5 9.0	2.70 7.40			в	BD-025. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap			
1 1" x 1" 4.63 1.05 2.46 1.60 9.0 7.40 ¹ Cv based on new clean filter element; ² Filter, Cap, and PT's included MATERIALS & DESIGN DATA									G ··	PG-9/16. PLUG %6"-18 UNF			
BODY CAP SEAL	L (EAD FRE or equival	E BRASS ent), 600		5°F				Н·	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)			
STRAINER C	6	IOT FOR 500 WOG 4" FNPT I	, 325°F	ASS AST	VI B283,				Ρ	PT-NL-9/16. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, %6"-18 UNF			
FILTER SCRI		304 STAINLESS STEEL, REMOVABLE, 20 MESH / 40 MESH (optional)							х	PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.			
NOT FOR PC THIS VALVE			AD FREE	REQUIRI	EMENTS								
ORDER DATA Sample Part #: Y S F - 0 5 0 F - G G B - X H Model Size & Connection PT & BD Cap Option Port Accessories Option Order Codes						CON ⁻ PO/JO ENGI REPF	TRAC DB N NEEI RESE	тоғ 0 २ — NTA	R				
	ult the "Order complete part					atalog				Navus Valva Inc. All Pichte Pasaniad (Rev: 03/03/4)			



UltraX[™] Model UX **Ball Valve**

(¹/₂" thru 2¹/₂")



DIMENSIONS [inches] (Tail Pieces & Nuts not include B SIZE BALL LO STD F (A)D Cv F (NPT) S (sweat) P L (NexLok) [inches] I.D. (NexPress γ_2 2.9 3.1 3.5 3.2 1.7 1.9 0.6 21 0.6 \checkmark ¾ 2.9 0.8 3.2 3.5 1.7 1.9 0.6 21 3.4 ¾ 3.1 \checkmark 3.3 3.6 3.6 1.8 3.1 0.8 42 1.0 3.4 1.7 21 1 \checkmark 3.3 3.5 3.9 1.9 0.6 1.5 42 1 3.3 3.5 3.6 4.1 1.8 3.1 0.8 1.9 11/4 3.6 3.6 5.7 6.2 1.8 3.1 0.8 42 2.5 6.7 11/4 4.1 2.5 132 \checkmark 4.3 6.3 4.3 1.3 3.2 11/2 \checkmark 4.1 4.4 6.6 6.9 2.5 4.3 1.3 132 3.3 5.0 8.1 2 5.8 7.7 3.4 5.5 1.9 345 \checkmark 4.2

$\begin{array}{c c} 2 & \\ \hline 2 \frac{1}{2} & \\ \hline \end{array}$.0 5.		-	3.4	5.5	1.9	345	4.2		
	ΓΙΟΝ	Nexus	s P/N	Length [inches]		Use with Valve Body size				
		TP075-	050M	1.00		1/2, 3/4 LO, 1 LO				
		TP125- TP125- TP125-	075M	1.04 1.16 1.29		V₄ STD,	1 STD,	1¼ LO		
MNPT (Male NPT Thread		TP200- TP200- TP200- TP200- TP200- TP200-	075M 100M 125M	1.04 1.16 1.39 1.85 1.89		1½ STD, 1½				
	-)	TP250- TP250- TP250- TP250- TP250-	125M 150M 200M	1.93 1.93 1.97 2.00		2, 2¥2				
		TP125 TP125 TP125	-075F	1.00 1.00 1.20		∕₄ STD,	1 STD,	1¼ LO		
	D	TP200 TP200 TP200	125F	1.61 1.57 1.18		11/4	STD, 1	V ₂		
(Female NPT Three	ead)	TP250 TP250 TP250 TP250 TP250	150F 200F	1.77 1.97 1.36 1.74		2, 2½				
		TP075 TP075	-050S	0.58 0.59		½, ¾ LO, 1 LO				
		TP125 TP125 TP125	-075S	0.60 0.85 1.00	5 34 STD, 1 S		1 STD,	1¼ LO		
SWT (Female Sweat)	0	TP200 TP200 TP200 TP200 TP200	100S 125S	1.85 1.85 1.85 1.38		1½ STD,		V ₂		
,		TP250 TP250 TP250	-150S	1.69 1.97 1.65		2, 2½				
		TP125 TP125 TPA125	-075P	1.46 1.54 3.85	3	∕₄ STD,	1 STD,	1¼ LO		
NexPress	TP200-100P TPA200-125P TPA200-150P			1.58 3.70 3.63		11⁄4 STD, 11⁄2				
		TPA250 TPA250	-200P	4.44 4.07		:	2, 2 1⁄ 2			
		TP125 TP125	-075L	1.03 1.29	3	∕₄ STD,	1 STD,	1¼ LO		
NexLok	TP200-100L TPA200-125L TPA200-150L			1.66 4.25 4.05		11⁄4 STD, 11⁄2				
	-	TPA250 TPA250 TPA250)-150L	4.43 4.85 4.40			2, 2 <mark>1⁄</mark> 2			

MATERIALS & DESIGN DATA									
BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS,								
END PIECES	 ¼" FNPT OPTION PORT (3 EACH) HOT FORGED BRASS ASTM B283 NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F 								
HANDLE & NUT BALL	ZINC PLATED / PVC COATED HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)								
BALL SEALS SHAFT	TEFLON BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF								
SHAFT SEALS UNION SEAL	DUAL FKM O-RINGS FKM O-RING								

ACCESSORIES

ACCES	SOR	IES	
-		<u>Order</u> Code	Part No. Description
Ē		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, X" MNPT
		В	BD-025. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap
Ħ		С	CV-1, CV-2. CHECK VALVE CV-1 for ½", ¾"LO & 1"LO, CV-2 for ¾"STD, 1"STD & 1¼"LO; Center Guided, non-slam check
		Е	ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing, for full-height vapor barrier
	, 🗌	L	SL. SHORT LEVER HANDLE
ORTURA		М	MS-1, MS-3. MEMORY STOP 304 stainless steel
		Ρ	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, ¼" MNPT
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
		Х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.
PROJE		OR	
CONTR		OR	

PO/JOB NO. _____ ENGINEER ____

REPRESENTATIVE

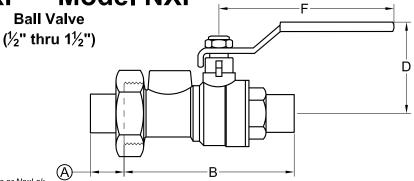
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Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraNXP[™] Model NXP

Ball Valve



600 WOG, 325°F,

½" FNPT OPTION PORTHOT FORGED BRASS ASTM B283

NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°FZINC PLATED / PVC COATED

.....HARD CHROME PLATED BRASS /

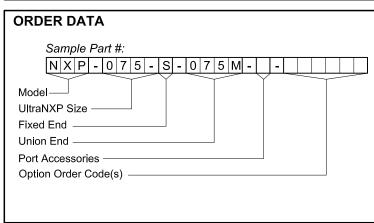
.....HOT FORGED BRASS ASTM B283,

INTERCHANGEABLE UNION ENDS,

Valve Body available in FNPT, Sweat, NexPress or NexLok

	DIMENSIONS [inches]												
SIZE [Inches]	LO	STD	Ą	F (NPT)	S (sweat)	B (NexPress)	D	F	BALL I.D.	Cv	(Tail Pieces & Nuts not included)		
1/2		\checkmark		2.9	3.1	3.5	3.2	1.7	1.9	0.6	21	0.5	
3∕4	\checkmark			2.9	3.2	3.5	3.4	1.7	1.9	0.6	21	0.7	
3⁄4		\checkmark		3.1	3.3	3.6	3.6	1.8	3.1	0.8	42	0.9	
1	\checkmark			3.3	3.4	3.5	3.9	1.7	1.9	0.6	21	1.4	
1		\checkmark		3.3	3.5	3.6	4.1	1.8	3.1	0.8	42	1.8	
11/4	\checkmark			3.6	3.6	5.7	6.2	1.8	3.1	0.8	42	2.4	
11/4		\checkmark		3.9	4.1	6.1	6.7	2.5	4.3	1.3	132	3.0	
11/2		\checkmark		3.9	4.2	6.4	6.9	2.5	4.3	1.3	132	3.1	

TAIL PIECE OPTION	Nexus P/N	Lengths [inches]	Use with Valve Body size
	TP075-050M	1.00	½, ¾ LO, 1 LO
	TP125-050M TP125-075M TP125-100M	1.04 1.16 1.29	¾ STD, 1 STD, 1¼ LO
MNPT (Male NPT Thread)	TP200-050M TP200-075M TP200-100M TP200-125M TP200-150M	1.04 1.16 1.39 1.85 1.89	1¼ STD, 1½
	TP125-050F TP125-075F TP125-100F	1.00 1.00 1.20	⅔ STD, 1 STD, 1¼ LO
FNPT (Female NPT Thread)	TP200-100F TP200-125F TP200-150F	1.61 1.57 1.16	1¼ STD, 1½
	TP075-038S TP075-050S	0.58 0.59	½, ¾ LO, 1 LO
	TP125-050S TP125-075S TP125-100S	0.60 0.85 1.00	¾ STD, 1 STD, 1¼ LO
SWT (Female Sweat)	TP200-075S TP200-100S TP200-125S TP200-150S	1.85 1.85 1.85 1.38	11⁄4 STD, 11⁄2
	TP125-050P TP125-075P TPA125-100P	1.46 1.54 3.85	¾ STD, 1 STD, 1¼ LO
NexPress	TP200-100P TPA200-125P TPA200-150P	1.58 3.70 3.63	1½ STD, 1½
\bigcirc	TP125-050L TP125-075L	1.03 1.29	¾ STD, 1 STD, 1¼ LO
NexLok	TP200-100L TPA200-125L TPA200-150L	1.66 4.25 4.05	1½ STD, 1½



STAINLESS STEEL (optional) BALL SEALSTEFLON SHAFTBRASS / STAINLESS STEEL (optional) **BLOWOUT-PROOF** SHAFT SEALSDUAL FKM O-RINGSFKM O-RING UNION SEAL

BALL

BODY

END PIECES

HANDLE & NUT

ACCESSORIES

MATERIALS & DESIGN DATA

		Order Code	Part No. Description					
		С	CV-1, CV-2. CHECK VALVE CV-1 for ½", ¼"LO & 1"LO, CV-2 for ¾"STD, 1"STD & 1¼"LO; Center Guided, non-slam check					
		E	ES-1, ES-2. EXTENDED HANDLE Stationary housing, for full-height vapor barrier					
		L	SL. SHORT LEVER HANDLE					
ORTURA		Μ	MS-1. MEMORY STOP 304 stainless steel					
		Ρ	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, X" MNPT					
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X" MNPT, Side Discharge					
		х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%" O.A.L.					
PROJEC	;т_							
CONTRA	٩СТС	DR						
PO/JOB NO								
REPRES	SENT		/E					

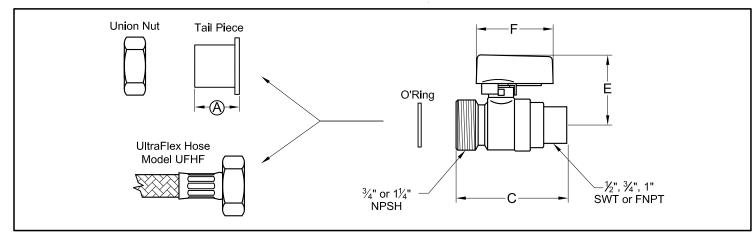
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



UltraNX[™] Model NXU

Ball Valve

(1⁄2" thru 1")



DIMENSIONS [inches]											
SIZE	A	С		Е	F	BALL	Cv	(TP & Nuts not Included)			
[inches]	$ \Psi $	SWT	FNPT			I.D.		SWT	FNPT		
1/2		2.3	2.3	1.5	1.6	0.5	17	0.3	0.6		
3⁄4		2.5	2.3	1.7	1.6	0.8	40	0.6	0.7		
1		2.6	2.3	1.7	1.6	0.8	40	0.7	0.7		

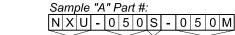
TAIL PIECE OPTION	Nexus P/N	Lengths [Inches]	Use with Valve Body size
	TP075-050M	1.00	Y ₂
MNPT (Male NPT Thread)	TP125-050M TP125-075M TP125-100M	1.04 1.16 1.29	⅔, 1
FNPT (Female NPT Thread)	TP125-050F TP125-075F TP125-100F	1.00 1.00 1.20	⅔, 1
	TP075-038S TP075-050S	0.58 0.59	γ_2
SWT (Female Sweat)	TP125-050S TP125-075S TP125-100S	0.60 0.85 1.00	∛₄, 1
NexPress	TP125-050P TP125-075P TPA125-100P	1.46 1.54 3.85	⅔, 1
NexLok	TP125-050L TP125-075L	1.03 1.29	¾, 1

MATERIALS & DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
END PIECES	HOT FORGED BRASS ASTM B283, NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F
HANDLE	ALUMINUM
BALL	HARD CHROME PLATED BRASS
BALL SEALS	TEFLON
SHAFT	BRASS, BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEAL	FKM O-RING
MEMORY STOP	STAINLESS STEEL
HOSE SPECS	400 PSI, 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

ORDER DATA

Model NXU Assembly:

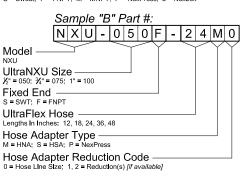


wodel ———		
NXU		
UltraNXU Size		
<mark>½</mark> "=050; ¾"=075; 1"=100		

	-ixed End —	
5	S = SWT; F = FNPT	

Union End –

%"=038; ½"=050; ¾"=075; 1"=100; 1¼"=125 S=Sweat; F=FNPT; M=MNPT; P=NexPress; L=NexLok



Model NXU Valve Body only:

<u>Nexus P/N</u>

- NX-038S-075MH-MS NX-050S-075MH-MS NX-050F-075MH-MS NX-075S-125MH-MS NX-075F-125MH-MS NX-100S-125MH-MS NX-100F-125MH-MS
- ¾" SWT x ¾" NPSH ½" SWT x ¾" NPSH ¼" ENPT x ¾" NPSH

Valve Size:

72" SWT X 74" NPSH 72" FNPT X 34" NPSH 34" SWT X 114" NPSH 34" FNPT X 114" NPSH 1" SWT X 114" NPSH 1" FNPT X 114" NPSH

PROJECT	

CONTRACTOR _____

PO/JOB NO.

ENGINEER _

REPRESENTATIVE _____

_

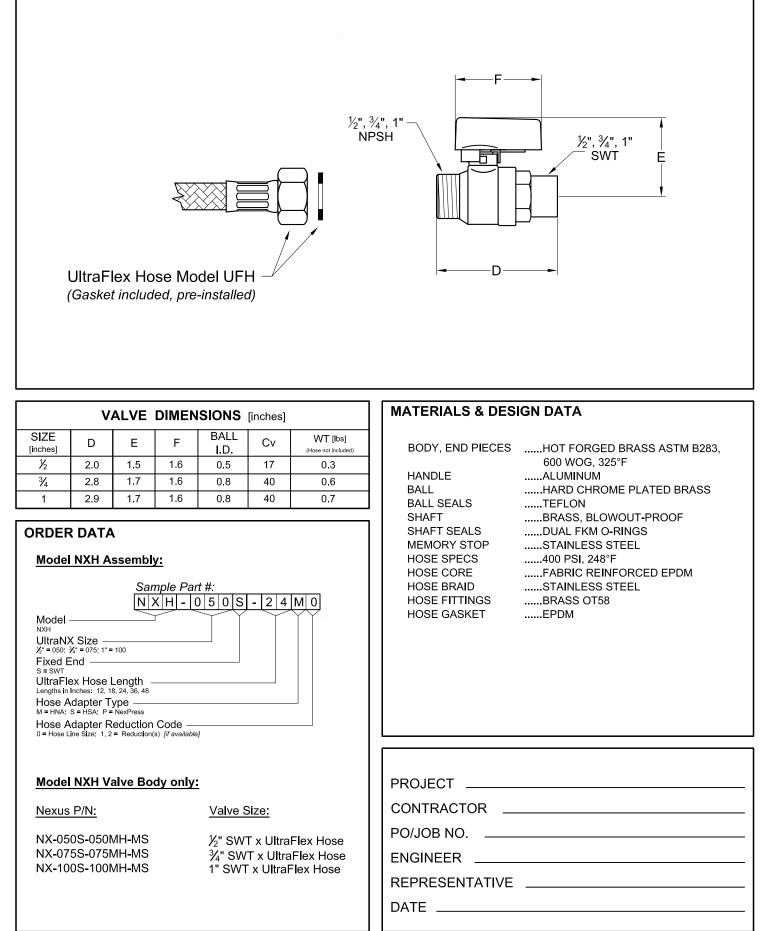
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UltraNX[™] Model NXH

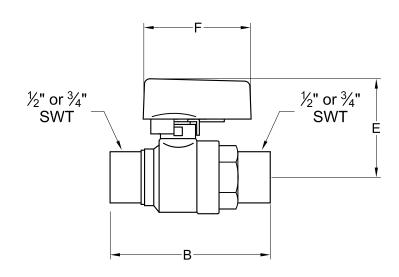
Ball Valve, SWT End

(½" thru 1")





Ball Valve $(\frac{1}{2}" \& \frac{3}{4}")$



		DIME	INSIO	NS [inche	es]	
SIZE [inches]	В	E	F	BALL I.D.	Cv	WT [lbs]
1/2	2.3	1.5	1.6	0.5	17	0.3
3∕₄	3.0	1.7	1.6	0.8	40	0.6

ORDER DATA

Nexus P/N:

Valve Size:

NX-050S-050S-MS NX-075S-075S-MS ½" SWT x ½" SWT ¾" SWT x ¾" SWT

MATERIALS & DESIGN DATA

BODY, END PIEC
HANDLE
BALL
BALL SEALS
SHAFT
SHAFT SEAL
MEMORY STOP

CESHOT FORGED BRASS ASTM B283, 600 WOG, 325°FALUMINUMHARD CHROME PLATED BRASSTEFLONBRASS, BLOWOUT-FROOFDUAL FKM O-RINGSSTAINLESS STEEL

PROJECT _____

CONTRACTOR _____

PO/JOB NO. _____

ENGINEER ____

REPRESENTATIVE _____

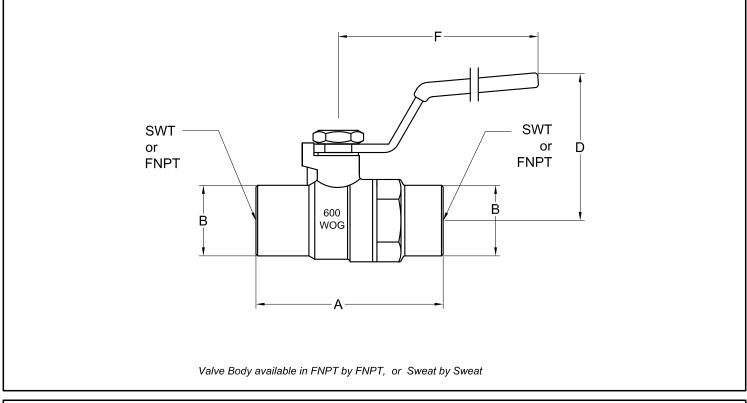
DATE _



Standard Ball Valve Model SBV

Ball Valve

(¹/₂" thru 2")



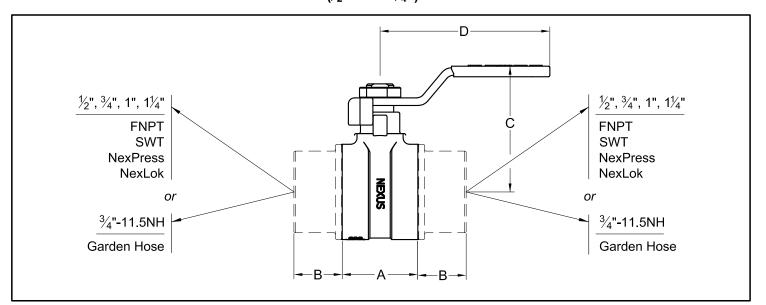
				DIM	ENSIONS [inches / mm]				
SIZE	A		В		D		F	WT [lbs / Kg]		0.4
[inches / mm]	S (sweat)	F (FNPT)	S (sweat)	F (FNPT)	S (sweat)	F (FNPT)		S (sweat)	F (FNPT)	Cv
1⁄2 / 15	2.0 / 50.0	2.0 / 50.5	0.63 / 16.0	1/2"	1.85 / 47.0	1.85 / 47.0	3.35 / 85.0	0.30 / 0.14	0.35 / 0.16	8
3⁄4 / 20	2.6 / 66.0	2.2 / 54.6	0.88 / 22.3	3⁄4"	1.97 / 50.0	2.05 / 52.0	3.54 / 90.0	0.40 / 0.18	0.50 / 0.23	14
1 / 25	3.2 / 82.0	2.6 / 66.6	1.13 / 28.7	1"	2.14 / 54.5	2.15 / 54.6	3.74 / 95.0	0.76 / 0.35	0.72 / 0.33	32
11⁄4 / 32	3.5 / 88.4	3.0 / 77.2	1.38 / 35.0	11⁄4"	2.47 / 62.7	2.39 / 60.6	4.53 / 115.0	1.25 / 0.57	1.00 / 0.45	59
11⁄2 / 40	4.1 / 104.0	3.5 / 88.5	1.63 / 41.4	11⁄2"	2.89 / 73.5	2.89 / 73.5	5.55 / 141.0	1.81 / 0.82	1.92 / 0.87	118
2 / 50	4.8 / 122.0	3.8 / 96.0	2.13 / 54.1	2"	2.95 / 75.0	3.15 / 80.0	5.55 / 141.0	2.00 / 0.91	2.50 / 1.14	155

MATERIALS & DESIGN DATA BODYHOT FORGED BRASS ASTM B283, 600 WOG, 325° SHAFTBRASS, BLOWOUT PROOF HANDLE & NUTZINC PLATED / PVC COATED BALLHARD CHROME PLATED BRASSTEFLON BALL SEALS SHAFT SEALSDUAL FKM O-RINGS **ORDER DATA** PROJECT _____ Sample Part #: S B V - 0 5 0 S CONTRACTOR PO/JOB NO. _____ Model -SBV - Standard Ball Valve ENGINEER ____ Size - $\chi_{*}^{*} = 050; \ \chi_{*}^{*} = 075; \ 1^{*} = 100; \ 1\chi_{*}^{*} = 125; \ 1\chi_{*}^{*} = 150; \ 2^{*} = 200$ S for Sweat, F for FNPT REPRESENTATIVE DATE .



Configur-A-Ball[™] Model CB

Configurable Ball Valve $(\frac{1}{2}"$ thru $1\frac{1}{4}")$



	DIMENSIONS [inches]												
SIZE			_			B (per Fixed E	nd)			_	BALL	Cv	WT[lbs]
[Inches]	LO	STD	A	F (NPT)	S (SWT)	P (NexPress)	L (NexLok)	GH-075 (Garden Hose)	С	D	I.D.	(Valve t	oody only)
1/2	√		0.97	0.62	0.83	1.22	0.95	0.65	1.62	1.90	0.6	21	0.11
1/2		\checkmark	1.10	0.81	0.73	1.23	1.02	0.66	1.67	3.10	0.8	42	0.18
3⁄4	\checkmark		0.97	0.69	0.93	1.28	1.14	0.65	1.62	1.90	0.6	21	0.11
3⁄4		\checkmark	1.10	0.71	0.98	1.34	1.14	0.66	1.67	3.10	0.8	42	0.18
1	\checkmark		0.97	1.03	1.17	1.38	1.65	0.65	1.62	1.90	0.6	21	0.11
1		\checkmark	1.10	0.87	1.08	1.33	1.71	0.66	1.67	3.10	0.8	42	0.18
11⁄4	\checkmark		1.10	1.15	1.18	N/A	N/A	0.66	1.67	3.10	0.8	42	0.18

MATERIALS & DESIGN DATA

BODY	DZR BRASS: CW602N, 600 WOG. 325°F
END PIECES	HOT FORGED BRASS ASTM B283 NexLok: 250 PSIG, 200°F /
	NexPress: 200 PSIG, 250°F CARBON STEEL, PVC COATED /
HANDLE / NUT	ZINC PLATED
BALL	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFT	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEAL	FKM O-RING

	<u>Order</u> Code	Part No. Description
	Е	ES-1. EXTENDED HANDLE Stationary housing, for full-height vapor barrier (Note: Not compatible with the Butterfly Handle)
	Н	HT. HANGING TAG with Model No., Location (Maximum 7 Characters)
	L	SL. SHORT LEVER HANDLE (Note: Available for CB2)
	Μ	MS-1. MEMORY STOP 304 Stainless Steel (Note: Not compatible with the Butterfly Handle)
	Т	T-HDL. BUTTERFLY HANDLE Die-cast aluminum, Epoxy painted, Red 1.85" O.A.L.
PROJECT		
CONTRACTO	R _	
PO/JOB NO.		

ORDER DATA
Sample Part #:
C B 1 - 0 5 0 F - 0 7 5 M G H - 1 - 1
Model Valve Trim Size 1st FE Fixed End Type Size 2nd FE Fixed End Type Option Order Codes

DATE

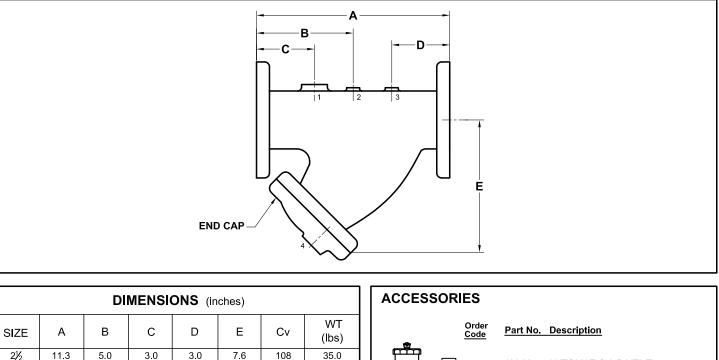
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Strainex[™] Model SXF

"Y" Strainer

(2¹/₂" thru 12")



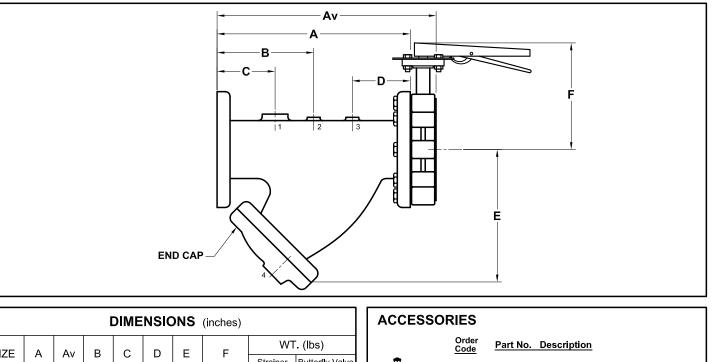
OILL		_	-	-	_	•••	(lbs)			0000	<u>-</u>	
21/2	11.3	5.0	3.0	3.0	7.6	108	35.0					
3	12.5	6.0	3.0	3.0	8.3	205	49.0			А	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT	
4	14.9	7.0	3.0	3.0	10.1	251	71.0	T			250 F, 150 F316, positive shut-on, 24 WiNF1	
5	17.9	9.0	3.5	3.6	11.6	400	113.0					
6	20.4	10.0	4.0	4.0	14.3	540	147.0			в	BD-075. BLOWDOWN / VENT / DRAIN	
8	24.0	12.0	4.0	4.0	17.2	980	246.0				325°F, 600 PSIG, ¾" hose bib & cap	
10	29.5	13.0	6.0	6.0	20.7	1,500	429.0	>				
12	33.8	13.0	4.3	6.0	17.2	2,100	638.0	Studeux		н	HT. HANGING TAG	
Cv - based on new clean filter element							400 MrG			with Model No., Location (Maximum 7 Characters)		
MATERIALS & DESIGN DATA STRAINEX BODY: GRAY CAST IRON BODY and END CAP ASTM A48, CLASS 30, 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES										Ρ	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, ¼" MNPT	
			(MATE TO 150# FLANGES ALSO) PORTS (all FNPT): $\#1 = \frac{3}{4}$ "; $\#2 = \frac{1}{4}$ "; $\#3 = \frac{1}{4}$ ";							V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X" MNPT, Side Discharge	
SCREEN:			#4 = ¾", 2" (for 10" & 12") 304 S.S., ASTM A167							W	TW-075. THERMOMETER WELL ⅔" MNPT, brass, 1½" well, 3½" O.A.L.	
		2,	I <u>ZES</u> ½" and 3" " thru 12"	' C	PENING 0.045 perf 0.125 perf	:				х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION	
PLUGS:			BRASS, ARE FURNISHED FOR ANY UNUSED PORTS								1%6" O.A.L.	
ACCESSORIES: SHIPPED LOOSE												
ORDER DATA												
		Sample	Part #·					PROJECT				
Sample Part #:								CONTRACTOR				
S X F 0 6 0 0 - W P V B -												
								PO/JOB NO				
Strainex Size												
Port Accessories								ENGINEER				
Option Order Codes (Accessories)								REPRESENTATIVE				
		ng Guide mber and		xus Valve informati		DATE						

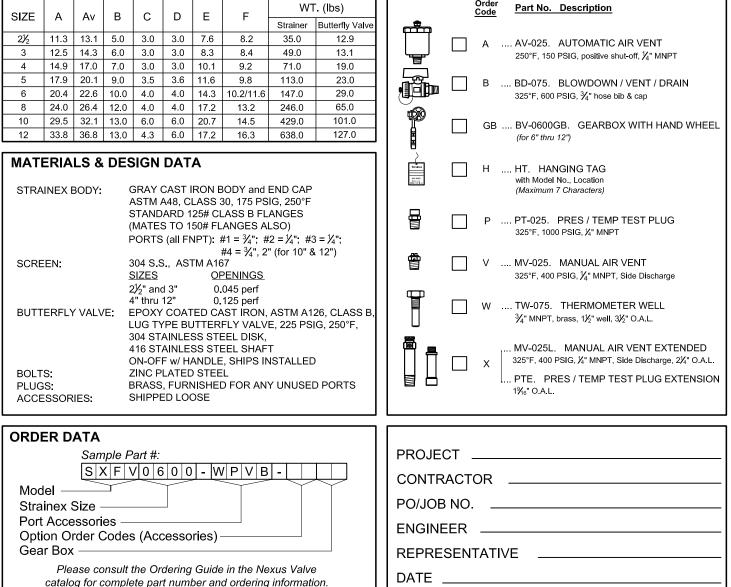


Strainex[™] Model SXFV

"Y" Strainer with Butterfly Valve

 $(2\frac{1}{2}"$ thru 12")





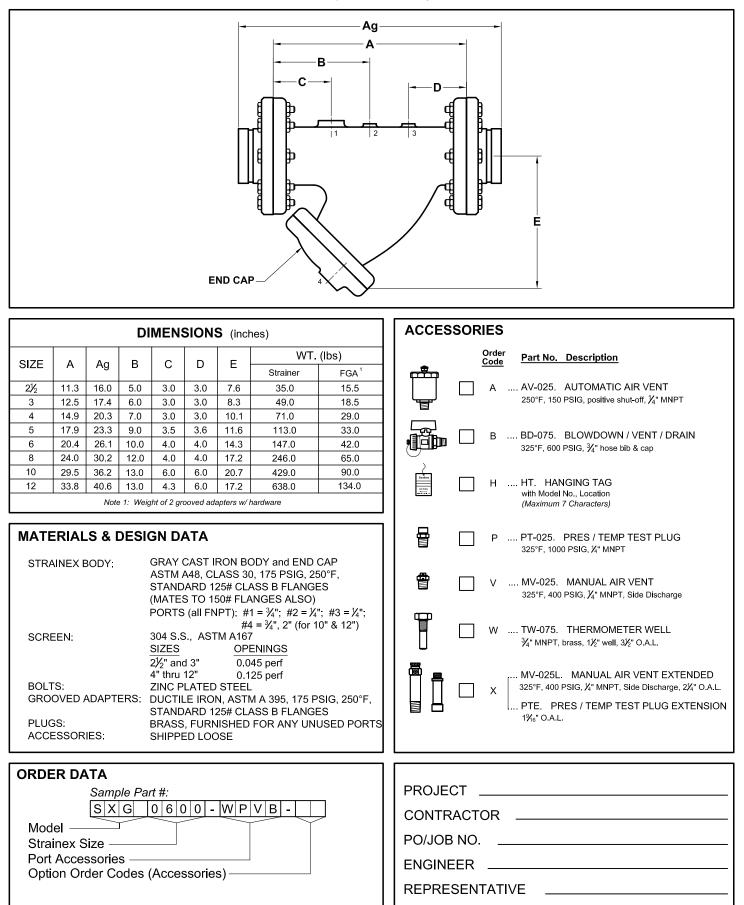
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Strainex[™] Model SXG

Grooved End "Y" Strainer

(2¹/₂" thru 12")



Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.

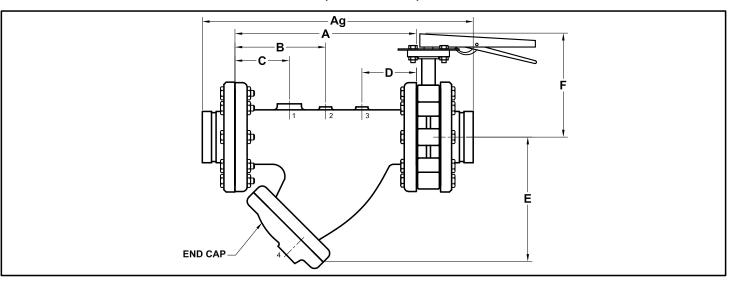
DATE .



Strainex[™] Model SXGV

Grooved End "Y" Strainer with Butterfly Valve

(2¹/₂" thru 12")



<u>otion</u>				
IATIC AIR VENT sitive shut-off,				
OOWN / VENT / DRAIN hose bib & cap				
ARBOX WITH HAND WHEEL				
AG ion ers)				
TEMP TEST PLUG ' MNPT				
AL AIR VENT MNPT, Side Discharge				
IOMETER WELL ' well, 3½" O.A.L.				
UAL AIR VENT EXTENDED MNPT, Side Discharge, 2¼" O.A.L. MP TEST PLUG EXTENSION				
PROJECT				
PO/JOB NO				
ENGINEER				
REPRESENTATIVE				
DATE				

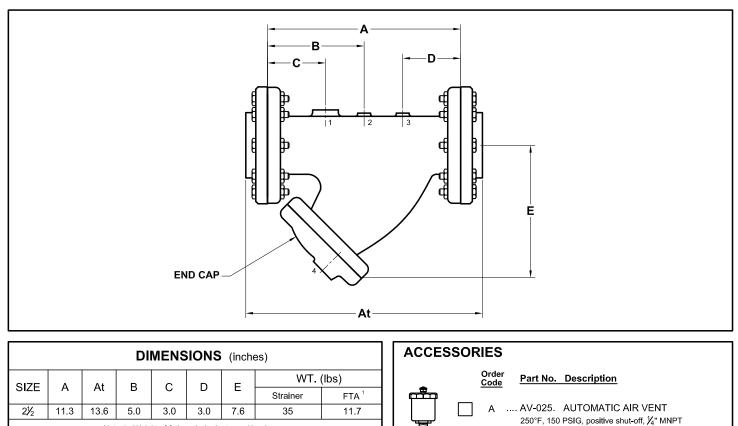
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Strainex[™] Model SXT

Threaded End "Y" Strainer

(2¹/₂")



Note 1: Weight of 2 threaded adapters w/ hardware

B BD-075. BLOWDOWN / VENT / DRAIN **MATERIALS & DESIGN DATA** 325°F, 600 PSIG, $\frac{3}{4}$ " hose bib & cap GRAY CAST IRON BODY and END CAP STRAINEX BODY: H HT. HANGING TAG ASTM A48, CLASS 30, 175 PSIG, 250°F, with Model No. Location STANDARD 125# CLASS B FLANGES (Maximum 7 Characters) (MATES TO 150# FLANGES ALSO) PORTS (all FNPT): $#1 = \frac{3}{4}$ "; $#2 = \frac{1}{4}$ "; $#3 = \frac{1}{4}$ "; P PT-025. PRES / TEMP TEST PLUG #4 = 3/4" 325°F, 1000 PSIG, ¼" MNPT SCREEN: 304 S.S., ASTM A167 ē MV-025. MANUAL AIR VENT SIZES OPENINGS V 325°F, 400 PSIG, 1/4" MNPT, Side Discharge 0.045 perf 21/2" BOLTS: ZINC PLATED STEEL W TW-075. THERMOMETER WELL 3/4" MNPT, brass, 1/2" well, 3//2" O.A.L. THREADED ADAPTERS; DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F. STANDARD 125# CLASS B FLANGES . MV-025L. MANUAL AIR VENT EXTENDED PLUGS: BRASS, FURNISHED FOR ANY UNUSED PORTS 325°F, 400 PSIG, 1/4" MNPT, Side Discharge, 21/4" O.A.L. Х .. PTE. PRES / TEMP TEST PLUG EXTENSION ACCESSORIES: SHIPPED LOOSE 1%₁₆" O.A.L. **ORDER DATA** PROJECT Sample Part #: S X T 0 2 5 0 - W P V B -CONTRACTOR Model -PO/JOB NO. Strainex Size Port Accessories -ENGINEER _ **Option Order Codes (Accessories)** REPRESENTATIVE

DATE .

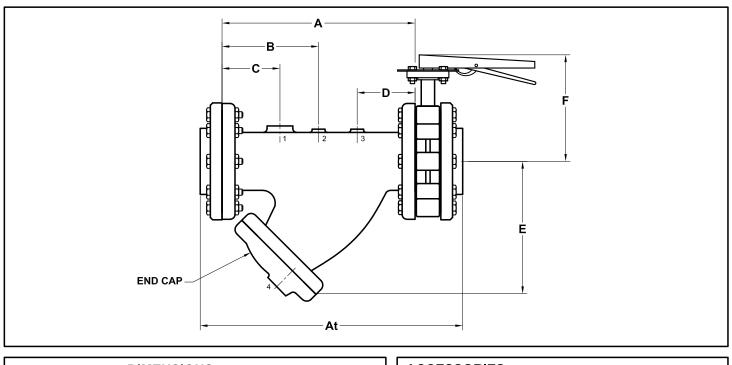
Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.



Strainex[™] Model SXTV

Threaded End "Y" Strainer with Butterfly Valve

(2½")



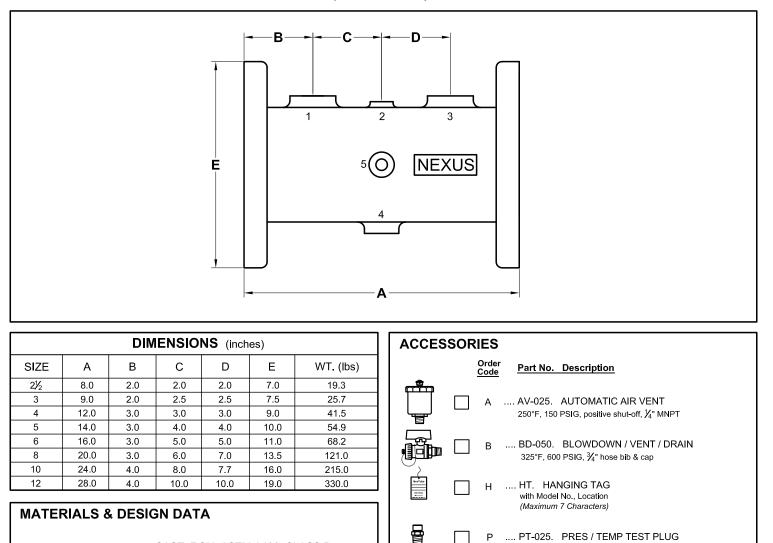
DIMENSIONS (inches)									ACCESSORIES									
SIZE	A 11.3	At 13.6	B 5.0 Note 1:	C 3.0 Weight	D 3.0 of 2 thre	E 7.6 aded ada	F 8.2 apters w	Strainer 35.0 ⁽ hardware	But	VT. (Ibs tterfly Val 12.9	ve F	TA ¹ I.7]		Orc <u>Co</u> A	<u>de</u>	Part No. Description AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ¼" MNPT
МАТ	ERIA	LS &	& DE	SIGN	I DA	ΤΑ) 1 1		E	3.	BD-075. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap
STRAINEX BODY: GRAY CAST IRON BODY and END CAP ASTM A48, CLASS 30, 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO) PORTS (all FNPT): $\#1 = \frac{3}{4}$ "; $\#2 = \frac{7}{4}$ "; $\#3 = \frac{7}{4}$ ";								F	1.	HT. HANGING TAG with Model No., Location (Maximum 7 Characters)								
SCRE	EEN:			304 : SIZE	S.S., /	ASTM .	#4 = 4167 <u>OPEN</u>	= ¾" IINGS	74	, #3 –	/4 ,					F	.	PT-025. PRES / TEMP TEST PLUG 325°F, 1000 PSIG, ኢ" MNPT
BUTTERFLY VALVE:			2½" 0.045 perf EPOXY COATED CAST IRON, ASTM A126, CLASS B LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 204 STAINI ESS STEEL DISK				SB,				V	/	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge					
	304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT ON-OFF w/ HANDLE, SHIPS INSTALLED BOLTS: ZINC PLATED STEEL							V	V.	TW-075. THERMOMETER WELL ⅔" MNPT, brass, 1½" well, 3½" O.A.L.								
PLUG	THREADED ADAPTERS:DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGESPLUGS:BRASS, FURNISHED FOR ANY UNUSED PORTS ACCESSORIES:SHIPPED LOOSE						;	× [MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.									
ORD	ER D	ΑΤΑ	\												 ד			
				Part # V 0		0 - 1	WP	VB-					PROJECT					
S X T V 0 2 5 0 - W P V B - Model Strainex Size						PO/JOB NO												
Por	t Acc	essoi	ries -										ENGINEER					
Opt	ion C	Order	Code	es (Ac	cess	ories				J			REP	RE	SEN	ΤA	TI	VE
								ne Nexu Iering in					DATE					



NexTube[™] Model NXF

Instrument Station

(2¹/₂" thru 12")



曾

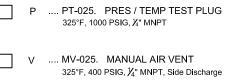
Х

NEXTUBE BODY:CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

BASIC INSTALLATION NOTES

- CAN BE ROTATED 180° IN-LINE
- CAN BE MOUNTED HORIZONTALLY OR VERTICALLY
- IS BI-DIRECTIONAL WITHOUT BUTTERFLY VALVE
- 125# CLASS B FLANGES ALSO MATE TO 150# FLANGES
- PORTS (all FNPT) #1 & #3 = $\frac{3}{4}$ "; #4 = $\frac{1}{2}$ "; #2 & #5 = $\frac{1}{4}$ "
- BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS
- NEXTUBE SHIPS WITH ACCESSORIES PACKED INSIDE

ORDER DATA	
Sample Part #: N X F _0 6 0 0 - W V G B P -	
Model	
NexTube Size	
Port Accessories	
Option Order Codes (Accessories)	
Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information	





MV-025L. MANUAL AIR VENT EXTENDED	
325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L.	
PTE. PRES / TEMP TEST PLUG EXTENSION	I

PTE.	PRES / TEMP TEST PLUG EXTENSION
1% ₁₆ " O.	λ.L.

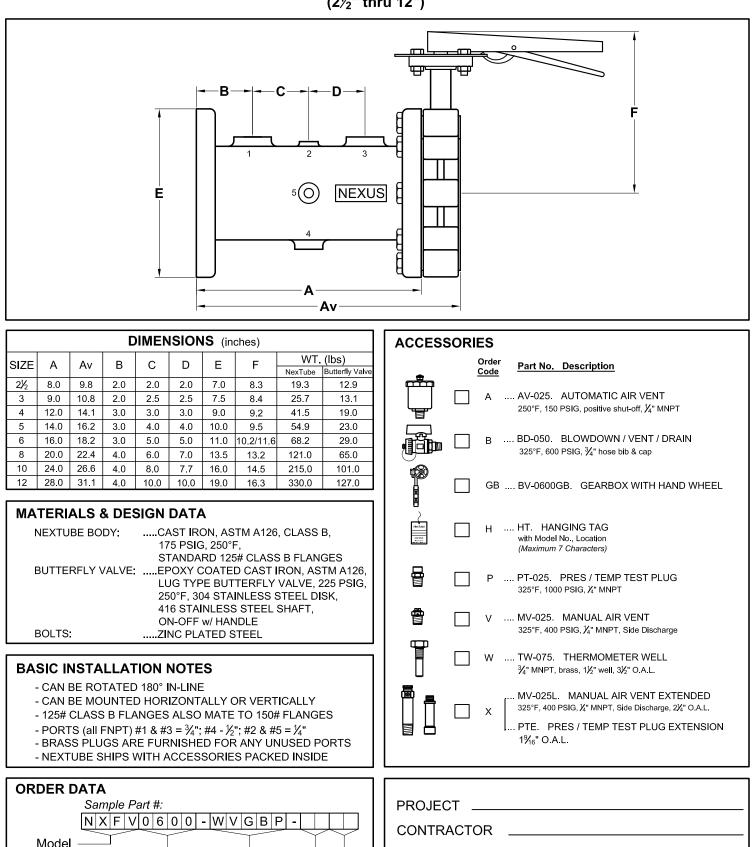
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



NexTube[™] Model NXFV

Instrument Station with Butterfly Valve

 $(2\frac{1}{2}"$ thru 12")



PO/JOB NO.

ENGINEER .

DATE

REPRESENTATIVE _

NexTube Size

Port Accessories -

Option Order Codes (Accessories) Gear Box

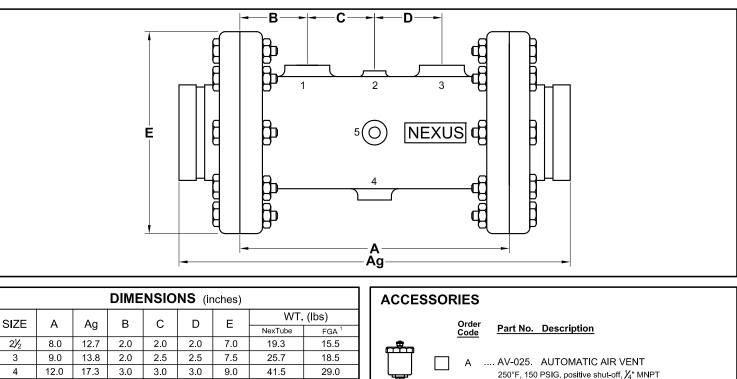
Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.



NexTube[™] Model NXG

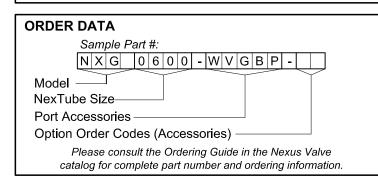
Grooved End Instrument Station

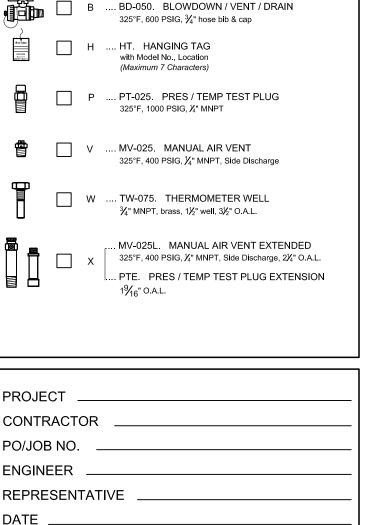
(2¹/₂" thru 12")



4 3.0 3.0 3.0 19.4 5 14.0 3.0 4.0 4.0 10.0 54.9 33.0 6 16.0 21.6 3.0 5.0 5.0 11.0 68.2 42.0 20.0 8 26.3 121.0 65.0 3.0 6.0 7.0 13.5 10 24.0 16.0 30.7 215.0 90.0 4.0 8.0 7.7 12 28.0 330.0 134.0 34.8 10.0 19.0 4.0 10.0 Note 1: Weight of 2 grooved adapters w/ hardware **MATERIALS & DESIGN DATA** ð Ρ NEXTUBE BODY:CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES 曾 V GROOVED ADAPTERS:DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES BOLTS:ZINC PLATED STEEL **BASIC INSTALLATION NOTES** Х - CAN BE ROTATED 180° IN-LINE - CAN BE MOUNTED HORIZONTALLY OR VERTICALLY - PORTS (all FNPT) #1 & #3 = ¾"; #4 = ½"; #2 & #5 = ¼" - IS BI-DIRECTIONAL WITHOUT BUTTERFLY VALVE - 125# CLASS B FLANGES ALSO MATE TO 150# FLANGES - BRASS PLUGS ARE FURNISHED FOR ANY UNUSED PORTS

- NEXTUBE SHIPS WITH ACCESSORIES PACKED INSIDE



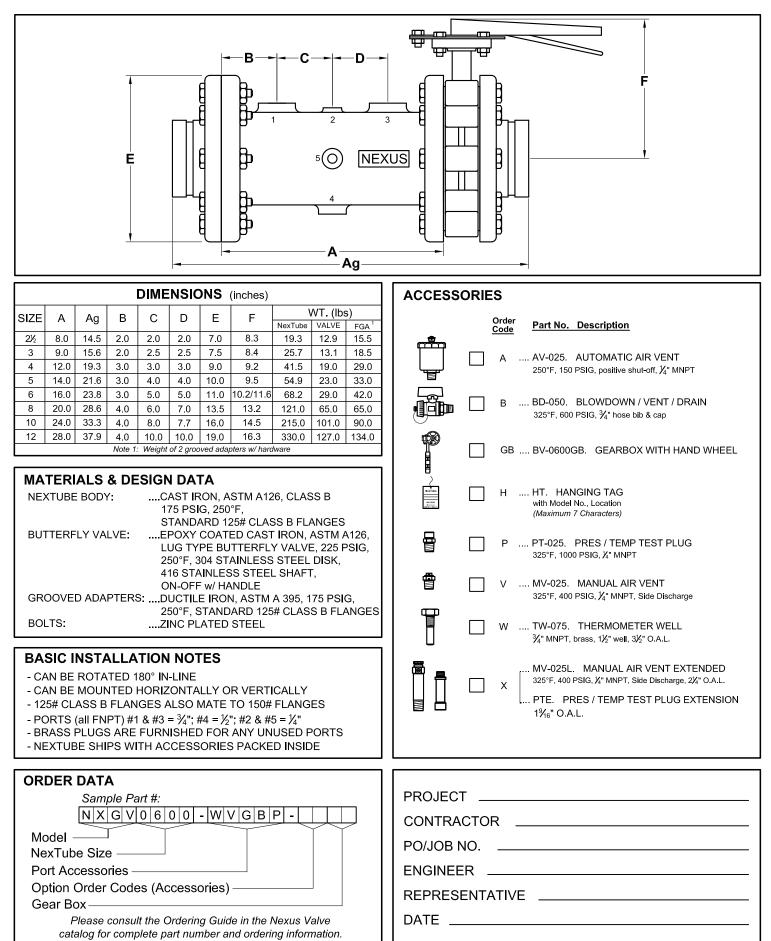




NexTube[™] Model NXGV

Grooved End Instrument Station with Butterfly Valve

(2¹/₂" thru 12")

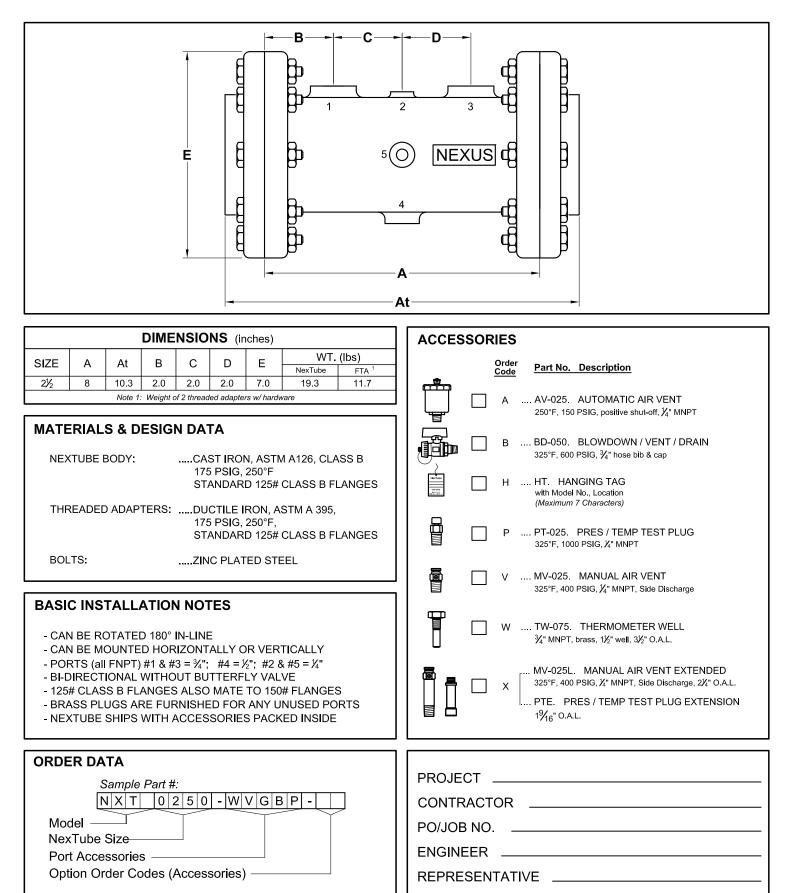




NexTube[™] Model NXT

Threaded End Instrument Station

(2¹/₂")



DATE _

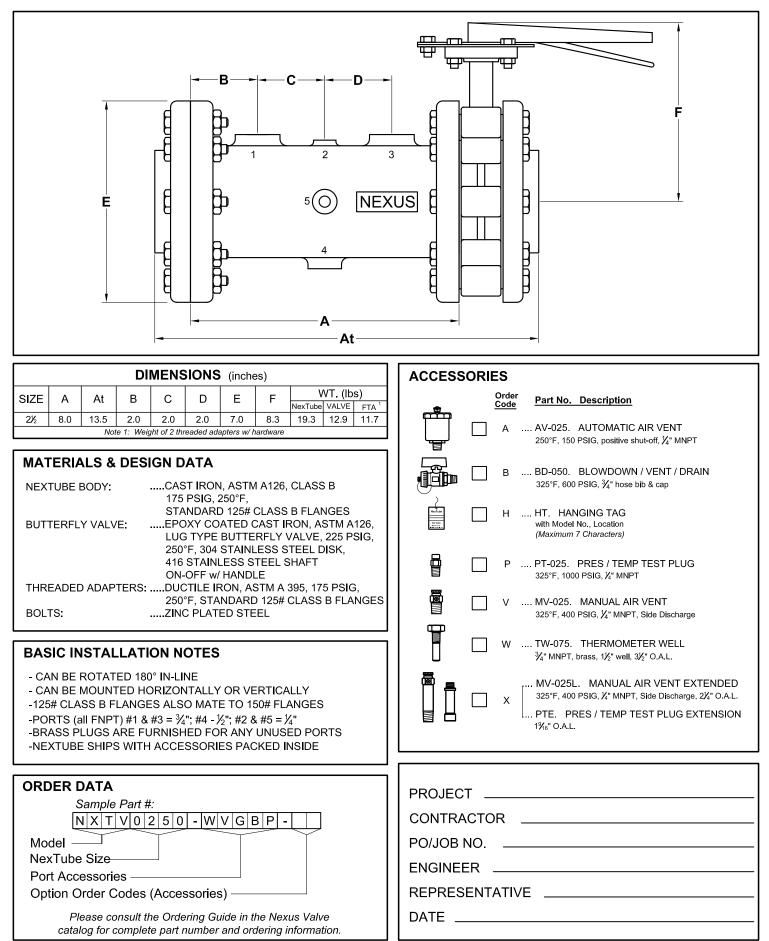
Please consult the Ordering Guide in the Nexus Valve catalog for complete part number and ordering information.



NexTube[™] Model NXTV

Threaded End Instrument Station with Butterfly Valve

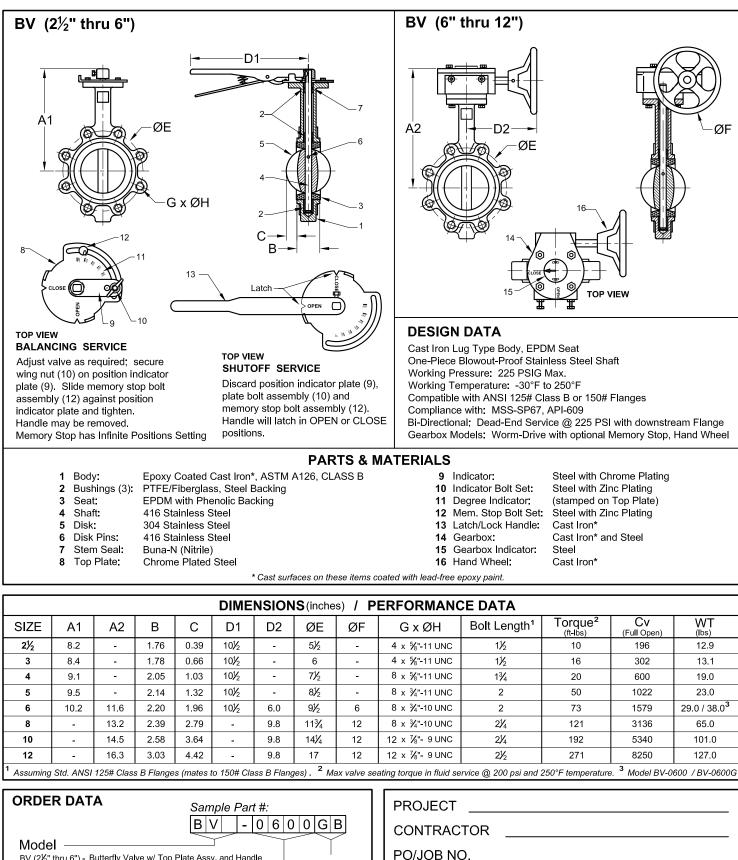
(2½")





Butterfly Valve Model BV

(2¹/₂" thru 12")



BV (2½" thru 6") - Butterfly Valve w/ Top Plate Assy. and Handle BV (6" thru 12") - Butterfly Valve w/ Gearbox Assy. and Hand Wheel

Butterfly Valve Size -----

GB - Gearbox option for 6" BV only

ENGINEER

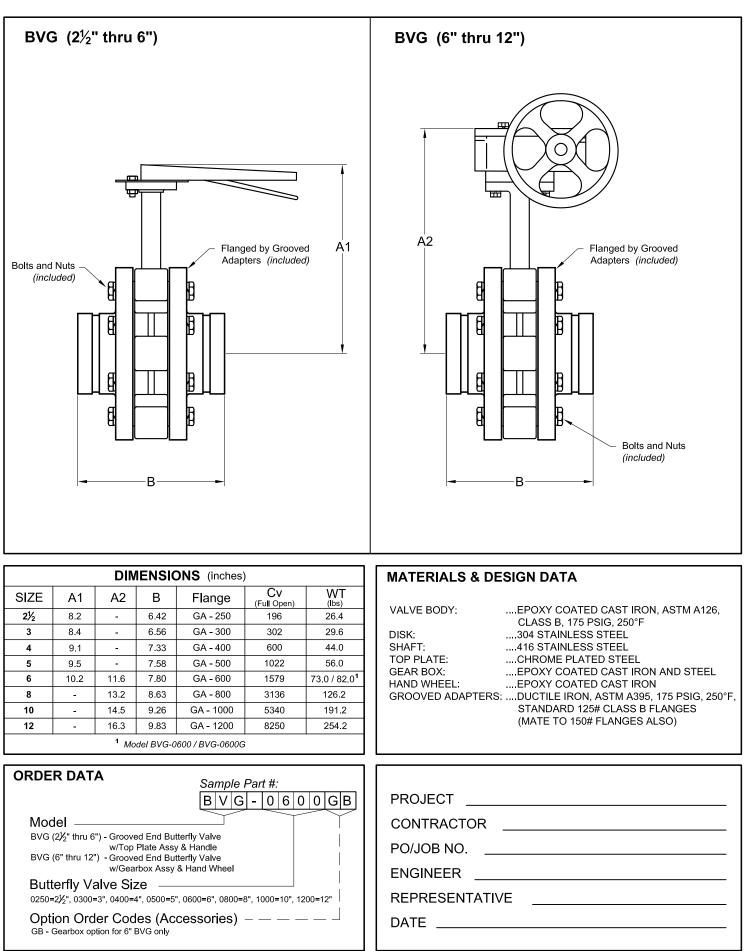
DATE

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Butterfly Valve Model BVG

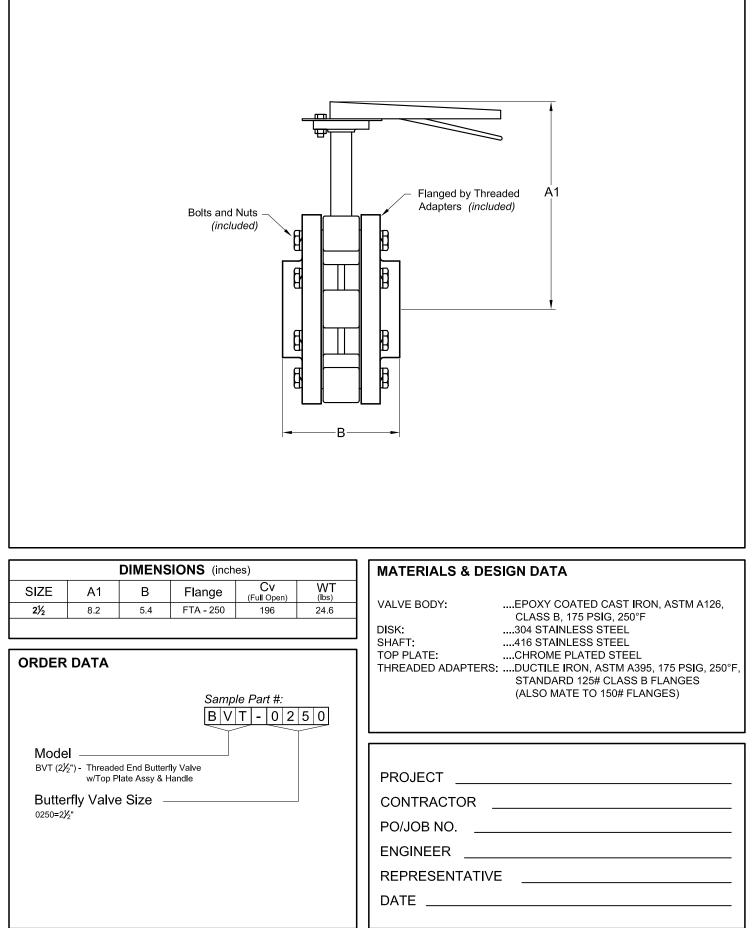
(2¹/₂" thru 12")





Butterfly Valve Model BVT

(2½")

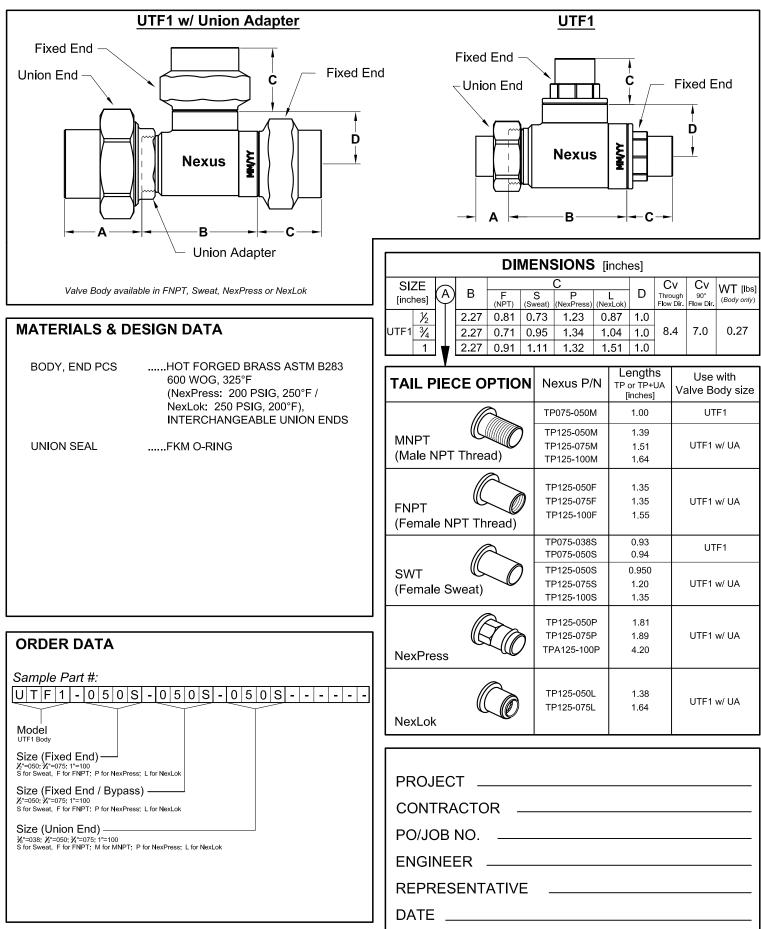




UltraT[™] Model UTF1

Union Tee w/ Fixed Bypass

(¹/₂" thru 1")



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

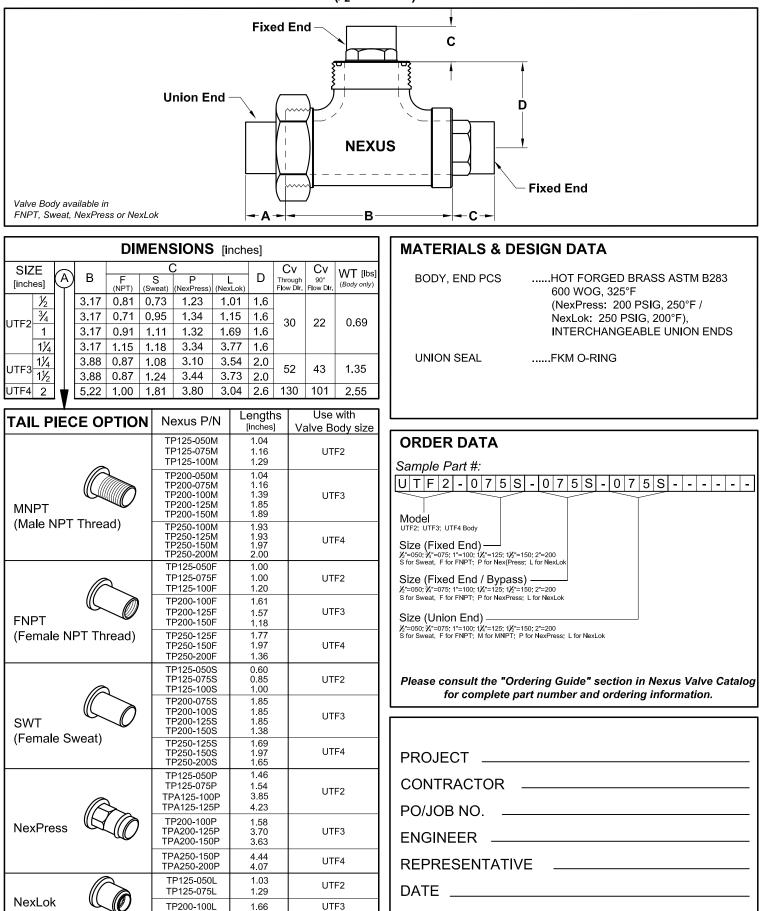
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UltraT™ Models UTF2, UTF3, UTF4

Union Tee w/ Fixed Bypass

(¹/₂" thru 2")

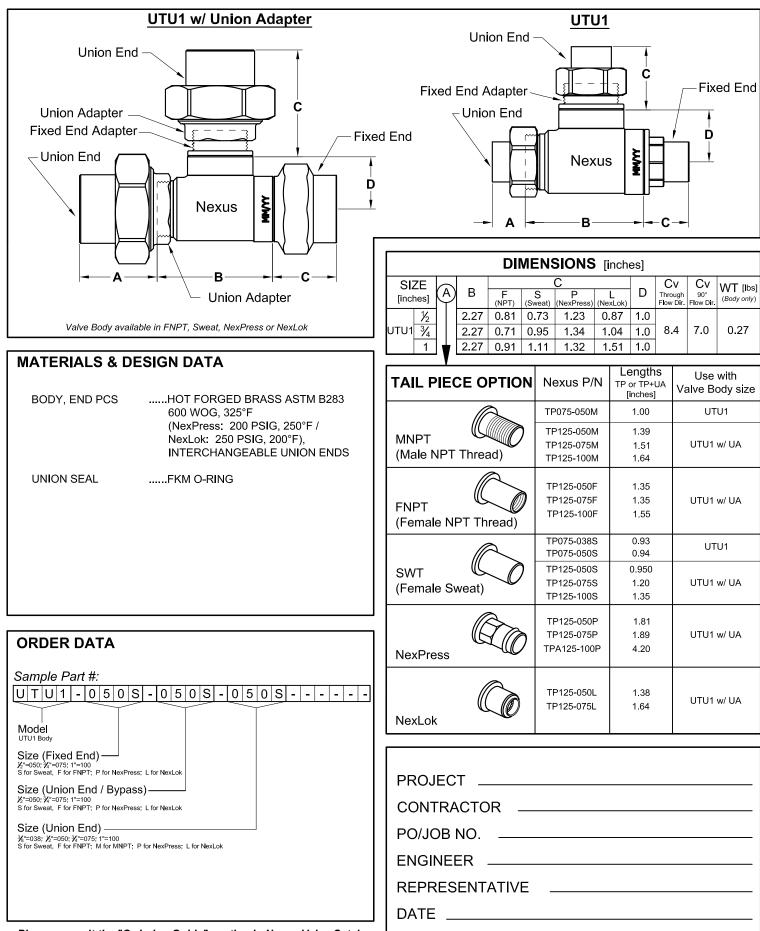




UltraT[™] Model UTU1

Union Tee w/ Union Bypass

(½" thru 1")



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

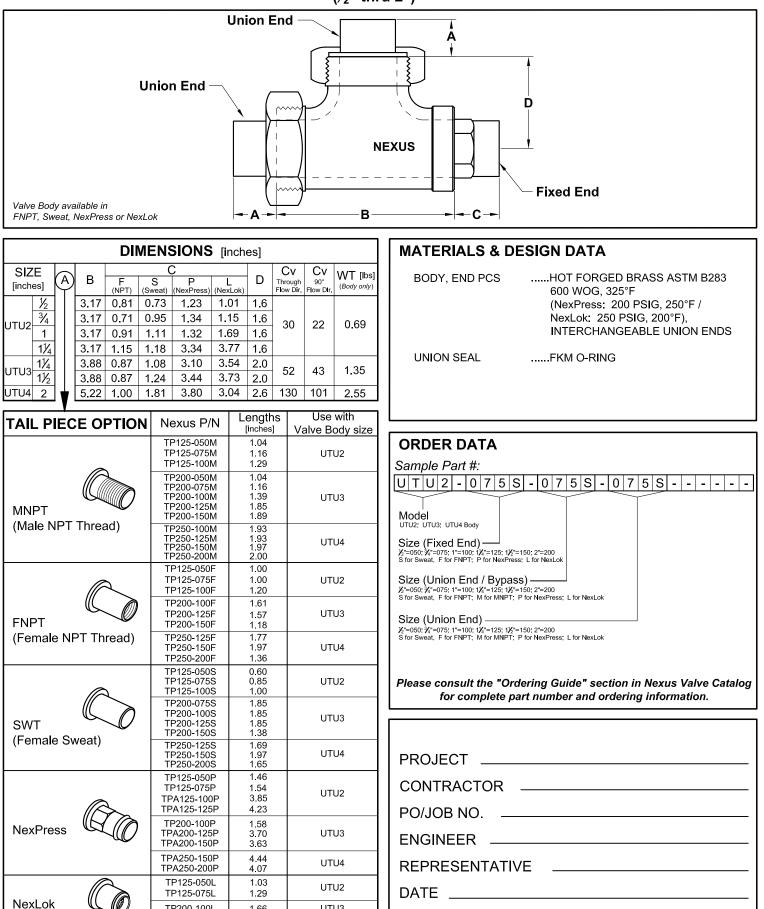
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UltraT™ Models UTU2, UTU3, UTU4

Union Tee w/ Union Bypass

(¹/₂" thru 2")



TP200-100L

1.66

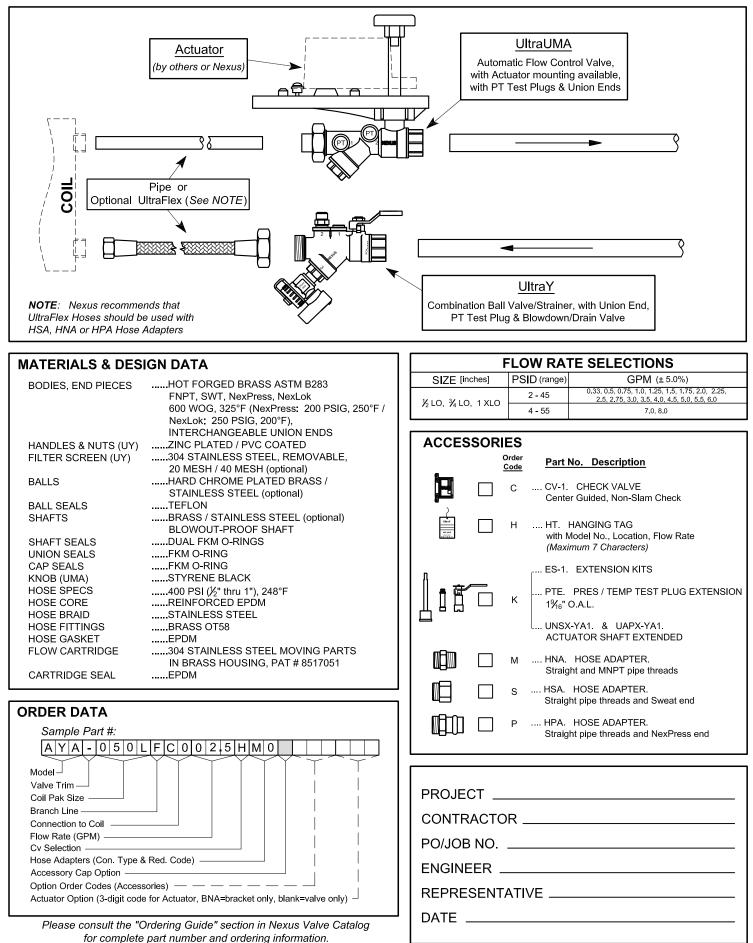
UTU3





Coil Pak[™] AYA

(¹/₂" LO, ³/₄" LO, 1" XLO)

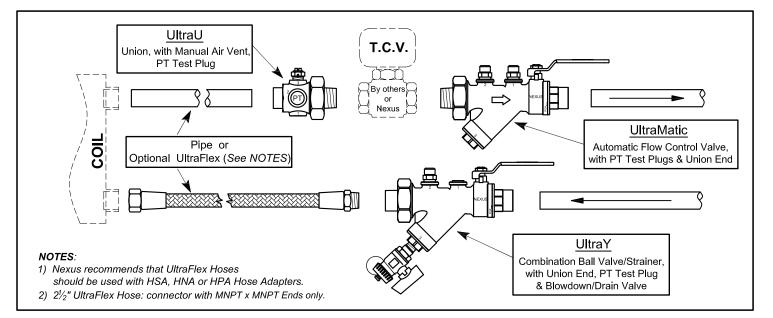


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Coil Pak™ A2Y

(1/2" thru 21/2")



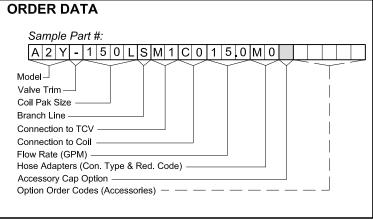
MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283
	(CAST BRASS: UY/UM (1½"STD, 2", 2½"))
	FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress; 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
FILTER SCREEN (UY)	
TIETER SCREEN (01)	20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS /
DALLS	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
3HAI 13	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	
CAP SEALS	FKM O-RING
FLOW CARTRIDGE	
	IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	EPDM
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F
	400 PSI (1/4 und 2), 248 F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

SIZE [inches]	PSID (range)					
⅓ LO, ¾ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0				
$\gamma_2 = 0, \gamma_4 = 0, T = 0$	4 - 55	7.0, 8.0				
½ STD, ⅔ STD,	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5				
1 LO, 1¼ LO	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0				
	2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0				
1 STD,1¼ STD,1½ LO	2 - 60	24.0, 25.0, 30.0, 35.0				
	4 - 70	40.0, 45.0				
1½ STD, 2, 2½	2 - 45	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0				
1/2 310, 2, 2/2	5 - 50	80.0, 85.0, 90.0, 95.0, 100.0				

FLOW RATE SELECTIONS

ACCESSORIES								
		Order Code	Part No. Description					
Ħ		С	CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ¾"LO, 1"XLO; CV-2 for ½"STD, ¾"STD, 1"LO, 1¼"LO; Cv-tor Cv:dod № STor, theoretic					
		н	Center Guided, Non-Slam Check HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)					
		к	ES. EXTENSION KITS					
		L	SL. SHORT LEVER HANDLE					
		М	HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads					
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end					
		Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end					
		Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)					



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

PO/JOB	NO.	_

Deale and

ENGINEER _____

REPRESENTATIVE _____

PROJECT _____

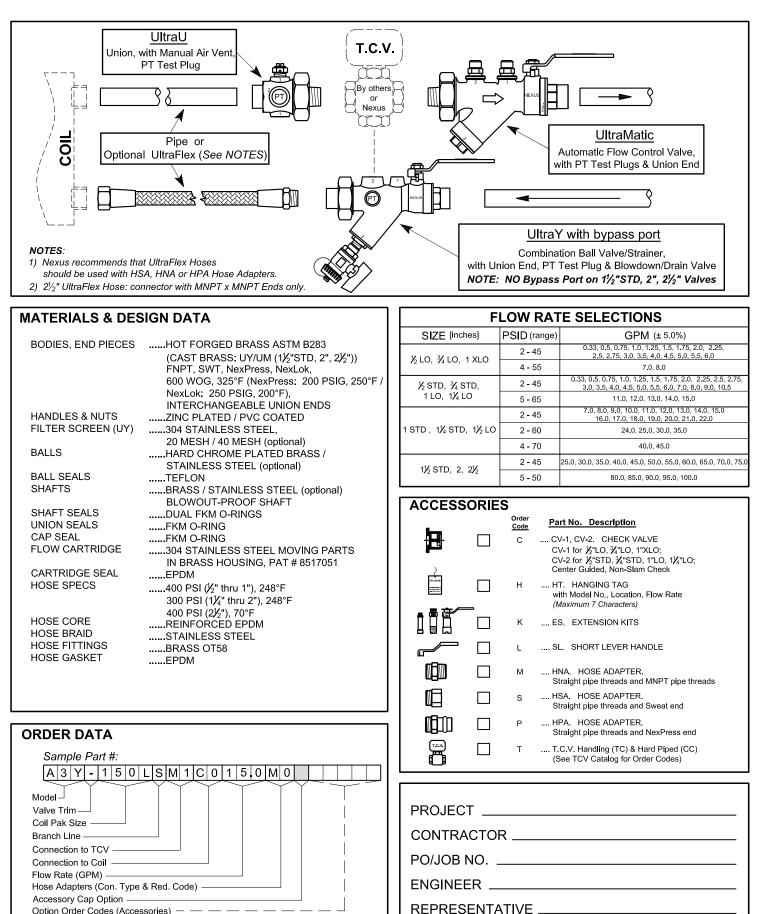
CONTRACTOR _____

DATE .



Coil Pak™ A3Y

 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$



DATE _

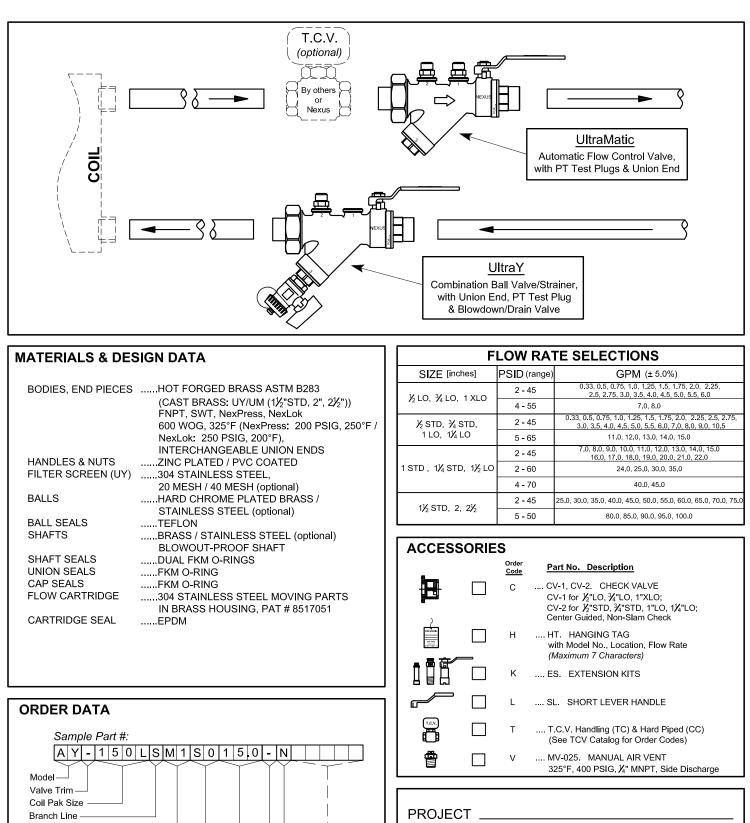
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

Option Order Codes (Accessories) -



Coil Pak™ AY

(1/2" thru 21/2")



PO/JOB NO. _____

ENGINEER ____

DATE _

REPRESENTATIVE _____

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

Connection to TCV Connection to Coil -Flow Rate (GPM) -

Accessory Cap Option

Option Order Codes (Accessories)

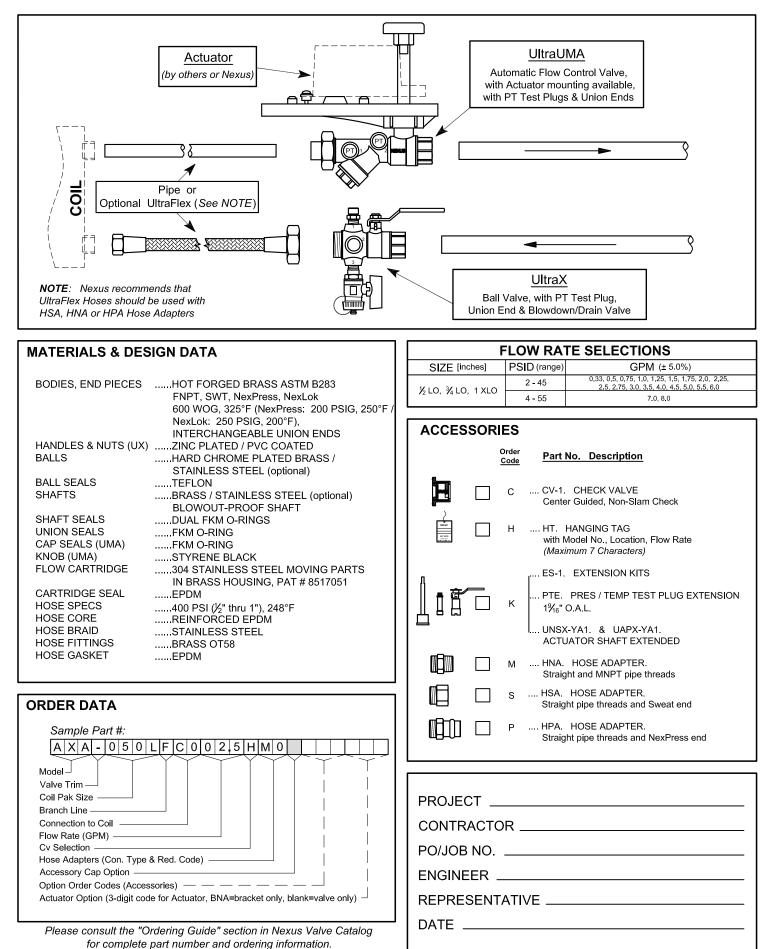
Optional (UM) 3rd Port & Accessory (N=NO 3rd Port)

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Coil Pak™ AXA

(¹/₂" LO, ³/₄" LO, 1" XLO)

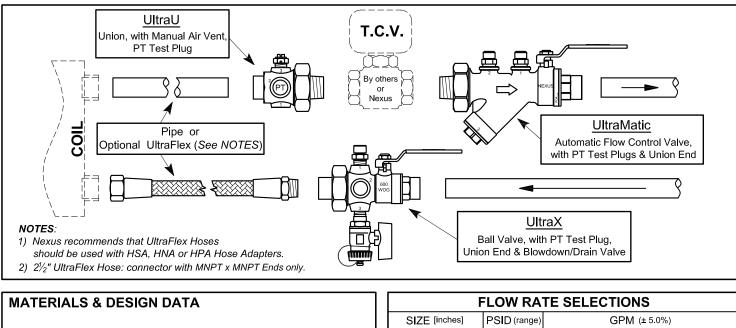


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Coil Pak[™] A2X

(¹/₂" thru 2¹/₂")



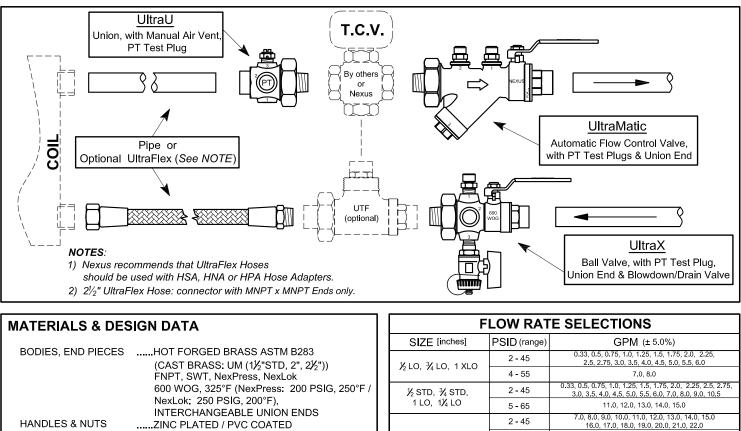
		SIZE [inches]	PSID (range)	GPM (± 5.0%)		
BODIES, END PIECES	HOT FORGED BRASS ASTM B283		2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0		
	(CAST BRASS: UM (1½"STD, 2", 2½"))	½ LO, ¾ LO, 1 XLO	4 - 55	7.0, 8.0		
	FNPT, SWT, NexPress, NexLok, 600 WOG, 325°F (NexPress: 200 PSIG, 250°F /	⅓ STD, ¾ STD,	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5		
	NexLok: 250 PSIG, 200°F),	1 LO, 11/4 LO	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0		
	INTERCHANGEABLE UNION ENDS		2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0		
HANDLES & NUTS BALLS	ZINC PLATED / PVC COATED HARD CHROME PLATED BRASS /	1 STD , 11/4 STD, 11/2 LO	2 - 60	24.0, 25.0, 30.0, 35.0		
	STAINLESS STEEL (optional)		4 - 70	40.0, 45.0		
BALL SEALS SHAFTS			2 - 45	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0		
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT	1½ STD, 2, 2½	5 - 50	80.0, 85.0, 90.0, 95.0, 100.0		
SHAFT SEALS	DUAL FKM O-RINGS		•			
UNION SEALS	FKM O-RING		ES			
CAP SEAL (UM)	FKM O-RING		Order Code P	art No. Description		
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS					
CARTRIDGE SEAL	IN BRASS HOUSING, PAT# 8517051			V-1, CV-2. CHECK VALVE V-1 for 兆"LO, 犯"LO, 1"XLO;		
HOSE SPECS	400 PSI (½" thru 1"), 248°F		C	V-2 for K"STD 3/"STD 1"10 11/"10		
	300 PSI (1¼" thru 2"), 248°F	~	С	enter Guided, Non-Slam Check		
	400 PSI (2½"), 70°F	Utyphinto	Н Н	T. HANGING TAG		
HOSE CORE	REINFORCED EPDM			th Model No., Location, Flow Rate		
HOSE BRAID	STAINLESS STEEL		(٨	laximum 7 Characters)		
HOSE FITTINGS	BRASS OT58		K ES	S. EXTENSION KITS		
HOSE GASKET	EPDM					
			L SI	SHORT LEVER HANDLE		
				NA. HOSE ADAPTER. traight pipe threads and MNPT pipe threads		
				SA. HOSE ADAPTER.		
ORDER DATA				traight pipe threads and Sweat end		
Comple Dout #1				PA. HOSE ADAPTER.		
Sample Part #:				traight pipe threads and NexPress end		
A 2 X - 1 5 0				C.V. Handling (TC) & Hard Piped (CC) See TCV Catalog for Order Codes)		
Model			(0			
Valve Trim —						
Coil Pak Size ———						
Branch Line ———		PROJECT _				
Connection to TCV ———			סו			
Connection to Coil ———			JI			
Flow Rate (GPM)		PO/JOB NO ENGINEER REPRESENTATIVE				
Hose Adapters (Con. Type	& Red. Code)					
Option Order Codes (Acces	ssories) — — — — — — — —					
	,					
		REFRESENT				
Please consult the "Or	rdering Guide" section in Nexus Valve Catalog	DATE				
for complete i	part number and ordering information					

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak™ A3X

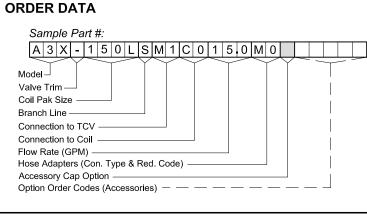
 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$



BALLSHARD CHROME PLATED BRASS / STAINLESS STEEL (optional) BALL SEALSTEFLON SHAFTSBRASS / STAINLESS STEEL (optional) **BLOWOUT-PROOF SHAFT** SHAFT SEALSDUAL FKM O-RINGSFKM O-RING UNION SEALS CAP SEAL (UM)FKM O-RING FLOW CARTRIDGE304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051 CARTRIDGE SEALEPDM HOSE SPECS400 PSI (1/2" thru 1"), 248°F 300 PSI (11/4" thru 2"), 248°F 400 PSI (21/2"), 70°F HOSE COREREINFORCED EPDMSTAINLESS STEEL HOSE BRAID HOSE FITTINGSBRASS OT58 HOSE GASKETEPDM

FLOW RATE SELECTIONS					
SIZE [inches]	PSID (range)	GPM (± 5.0%)			
½ LO, ⅔ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0			
$y_2 LO, y_4 LO, T ALO$	4 - 55	7.0, 8.0			
½ STD, ⅔ STD,	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5			
1 LO, 1¼ LO	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0			
1 STD,1½ STD,1½ LO	2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0			
	2 - 60	24.0, 25.0, 30.0, 35.0			
	4 - 70	40.0, 45.0			
1½ STD, 2, 2½	2 - 45	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0			
	5 - 50	80.0, 85.0, 90.0, 95.0, 100.0			

ACCESS		
_	Order Code	Part No. Description
	С	CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ½"LO, 1"XLO; CV-2 for ½"STD, ¼"STD, 1"LO, 1½"LO; Center Guided, Non-Slam Check
	н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	к	ES. EXTENSION KITS
	L	SL. SHORT LEVER HANDLE
	М	HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads
	S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
	Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
	Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

DATE

PROJECT _____

CONTRACTOR _____

REPRESENTATIVE _____

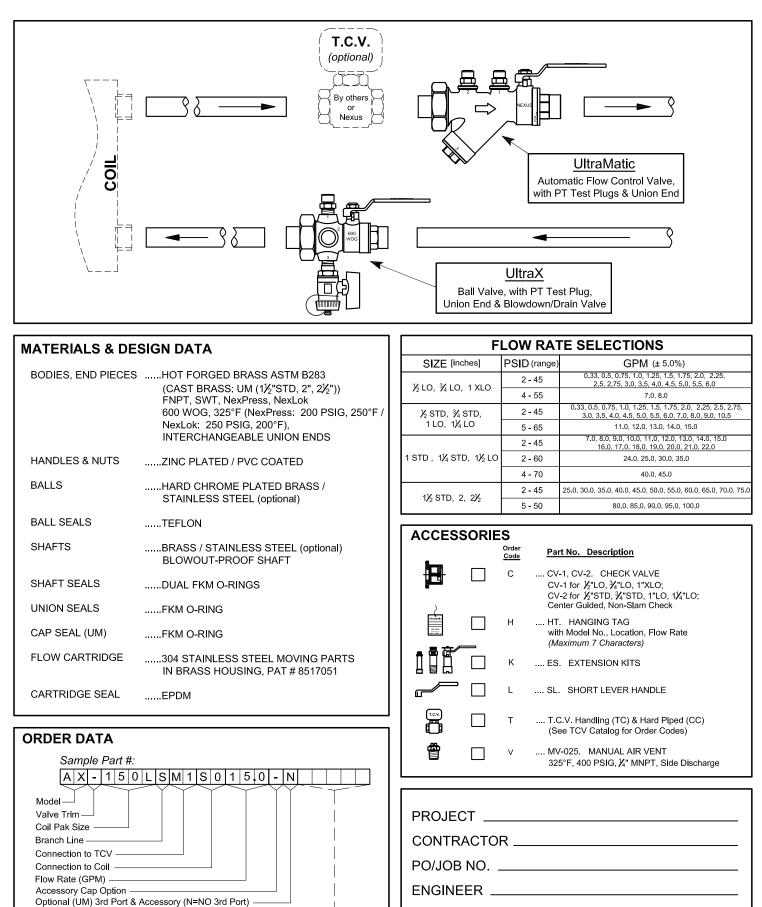
PO/JOB NO. _____

ENGINEER _____



Coil Pak[™] AX

(1/2" thru 21/2")



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

Option Order Codes (Accessories)

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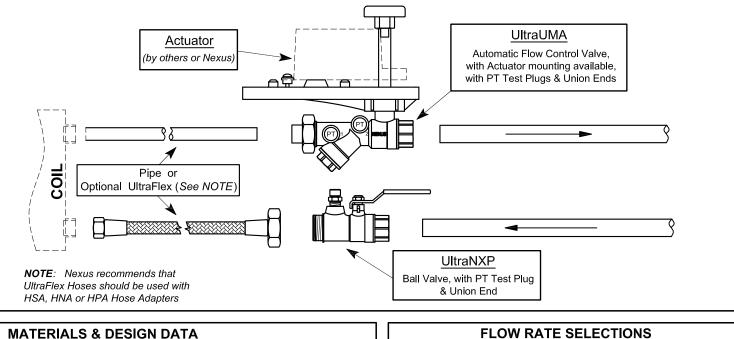
REPRESENTATIVE _____

DATE



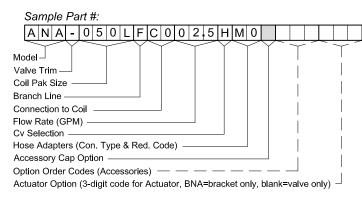
Coil Pak[™] ANA

(¹/₂" LO, ³/₄" LO, 1" XLO)



BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS (NXP	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS /
DALLO	
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEALS (UMA)	FKM O-RING
KNOB (UMA)	STYRENE BLACK
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS
	IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	FPDM
HOSE SPECS	400 PSI (½" thru 1"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	
HUSE GASKET	EPDM

ORDER DATA



FLOW RATE SELECTIONS				
SIZE [inches] PSID (range) GPM (± 5.0%)				
½ LO, ⅔ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0		
	4 - 55	7.0, 8.0		
ACCESSORIES				

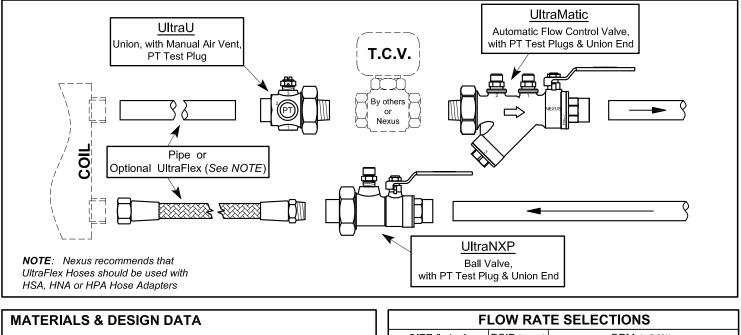
Order Part No. Description Code CV-1. CHECK VALVE С Center Guided, Non-Slam Check HT. HANGING TAG н with Model No., Location, Flow Rate (Maximum 7 Characters) ... ES-1. EXTENSION KITS PTE. PRES / TEMP TEST PLUG EXTENSION Κ 1%₁₆" O.A.L. UNSX-YA1. & UAPX-YA1. ACTUATOR SHAFT EXTENDED M HNA. HOSE ADAPTER. Straight and MNPT pipe threads HSA. HOSE ADAPTER. S Straight pipe threads and Sweat end HPA. HOSE ADAPTER. MALL Р Straight pipe threads and NexPress end PROJECT _ CONTRACTOR _____ PO/JOB NO. ENGINEER _ REPRESENTATIVE _____

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information. DATE



Coil Pak[™] A2N

(1/2" thru 11/2")



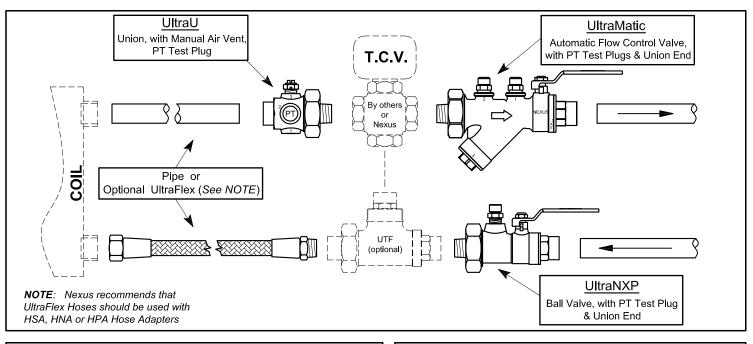
	SIZE [inches]	PSID (range)	GPM (± 5.0%)
BODIES, END PIECESHOT FORGED BRASS ASTM B283		2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0
FNPT, SWT, NexPress, NexLok	½ LO, ¾ LO, 1 XLO	4 - 55	7.0, 8.0
600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok; 250 PSIG, 200°F).		2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75
INTERCHANGEABLE UNION ENDS	½ STD, ⅔ STD, 1 LO, 1¼ LO		3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5
HANDLES & NUTSZINC PLATED / PVC COATED	1 0, 174 0	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0
BALLSHARD CHROME PLATED BRASS /		2 - 45	16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0
STAINLESS STEEL (optional)	1 STD , 11/4 STD, 11/2 LC	2 - 60	24.0, 25.0, 30.0, 35.0
BALL SEALSTEFLON		4 - 70	40.0, 45.0
SHAFTSBRASS / STAINLESS STEEL (optional)		•	
BLOWOUT-PROOF SHAFT	ACCESSORIE	-s	
SHAFT SEALSDUAL FKM O-RINGS UNION SEALSFKM O-RING		Orden	
CAP SEAL (UM)FKM O-RING	•	Code Par	t No. Description
FLOW CARTRIDGE			1, CV-2. CHECK VALVE
IN BRASS HOUSING, PAT # 8517051			1 for ½"LO, ¾"LO, 1"XLO;
CARTRIDGE SEALEPDM	>		-2 for ½"STD, ¾"STD, 1"LO, 1¼"LO; hter Guided. Non-Slam Check
HOSE SPECS400 PSI (½" thru 1"), 248°F	Upsällete		HANGING TAG
300 PSI (1 ¹ / ₄ " thru 1 ¹ / ₂ "), 248°F			Model No., Location, Flow Rate
HOSE COREREINFORCED EPDM	- ● 産	(Ma	ximum 7 Characters)
HOSE BRAIDSTAINLESS STEEL HOSE FITTINGS BRASS 0758		K ES.	EXTENSION KITS
HOSE FITTINGSBRASS OT58 HOSE GASKETEPDM		L SL.	
		L 5L.	SHORT LEVER HANDLE
		м ни	A. HOSE ADAPTER.
		Stra	aight pipe threads and MNPT pipe threads
		- 110	A. HOSE ADAPTER.
			aight pipe threads and Sweat end
ORDER DATA			A. HOSE ADAPTER.
Courselo Doct the			aight pipe threads and NexPress end
Sample Part #:	(T.C.V.)		
A 2 N - 1 5 0 L S M 1 C 0 1 5 0 M 0			.V. Handling (TC) & Hard Piped (CC) e TCV Catalog for Order Codes)
		(
Valve Trim			
Coil Pak Size			
Branch Line	PROJECT _		
Connection to TCV		P	
Connection to Coil		/IX	
Flow Rate (GPM)	PO/JOB NO.		
Hose Adapters (Con. Type & Red. Code)			
Accessory Cap Option	ENGINEER _		
Option Order Codes (Accessories) — — — — — — — — —			
	REPRESENT	AIIVE	
Please consult the "Ordering Guide" section in Nexus Valve Catalog			
for complete part number and ordering information.			

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Coil Pak[™] A3N

(1/2" thru 11/2")

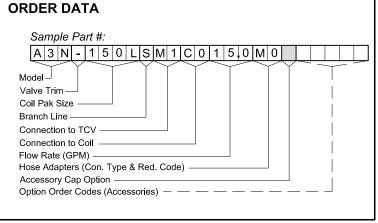


MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS BALLS	ZINC PLATED / PVC COATED HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (UM)	FKM O-RING
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL	EPDM
HOSE SPECS	400 PSI (½" thru 1"), 248°F
HOSE CORE	300 PSI (1¼" thru 1½"), 248°F REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	

FLOW RATE SELECTIONS						
SIZE [inches]	PSID (range)	GPM (± 5.0%)				
⅓ LO, ¾ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0				
72 LO, 74 LO, 1 ALO	4 - 55	7.0, 8.0				
½ STD, ⅔ STD,	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5				
1 LO, 1¼ LO	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0				
	2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0				
1 STD,1¼ STD,1½ LO	2 - 60	24.0, 25.0, 30.0, 35.0				
	4 - 70	40.0, 45.0				

ORI	ES	
	Order Code	Part No. Description
	С	CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ¼"LO, 1"XLO; CV-2 for ½"STD, ¾"STD, 1"LO, 1¼"LO; Center Guided, Non-Slam Check
	н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	к	ES. EXTENSION KITS
	L	SL. SHORT LEVER HANDLE
	М	HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads
	S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
	Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
	Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

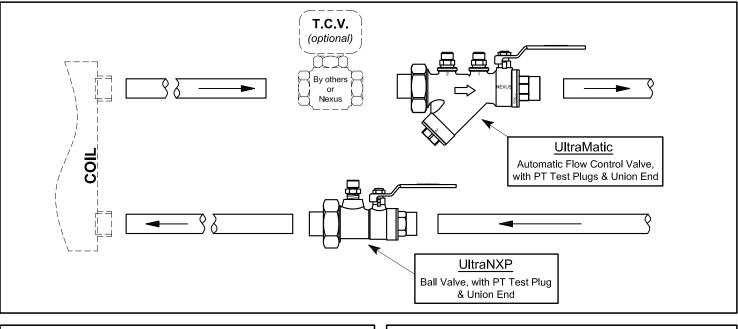
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

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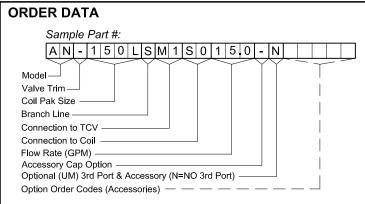


Coil Pak™ AN

(1/2" thru 11/2")



MATERIALS & DESIGN DATA		
BODIES, END PIECES	SHOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS	
HANDLES & NUTS	ZINC PLATED / PVC COATED	
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)	
BALL SEALS	TEFLON	
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT	
SHAFT SEALS	DUAL FKM O-RINGS	
UNION SEALS	FKM O-RING	
CAP SEAL (UM)	FKM O-RING	
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051	
CARTRIDGE SEAL	EPDM	



Please consult the "Ordering Guide" section in Nexus Valve Catalog
for complete part number and ordering information.

FLOW RATE SELECTIONS					
SIZE [inches]	PSID (range)	GPM (± 5.0%)			
⅓ LO, ⅔ LO, 1 XLO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0			
7_2 LO, 7_4 LO, T XLO	4 - 55	7.0, 8.0			
½ STD, ⅔ STD, 1 LO, 1¼ LO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5			
	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0			
	2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0			
1 STD , $1\frac{1}{4}$ STD, $1\frac{1}{2}$ LO	2 - 60	24.0, 25.0, 30.0, 35.0			
	4 - 70	40.0, 45.0			

ACCES	ACCESSORIES		
_		Order <u>Code</u>	Part No. Description
		С	CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ¾"LO, 1"XLO; CV-2 for ½"STD, ¾"STD, 1"LO, 1¼"LO; Center Guided, Non-Slam Check
Utvalkate		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		к	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
T.C.V.		т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, χ " MNPT, Side Discharge
PROJE	ст_		

CONTRACTOR _____

PO/JOB NO. _____

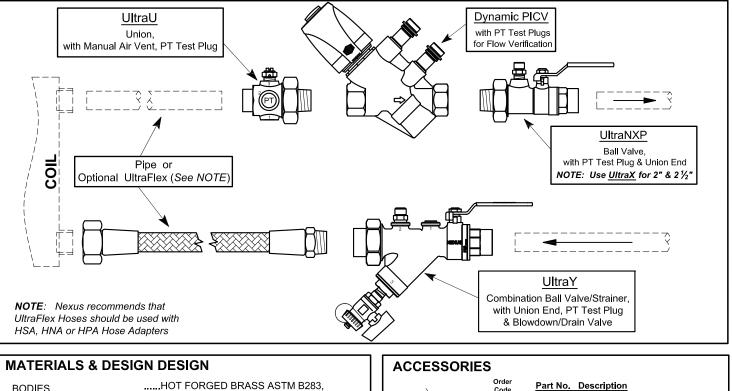
ENGINEER _____

REPRESENTATIVE _____



Coil Pak™ D2Y

 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$



.....HOT FORGED BRASS ASTM B283, BODIES 600 WOG, 325°F, INTERCHANGEABLE UNION ENDSDZR BRASS CW602N, ND VALVE BODY 360 PSI MAX, 250°F, 4-58 PSID OPERATING DIFFERENTIAL, FNPT CONNECTIONSHOT FORGED BRASS ASTM B283, END PIECES NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°FEPDM O-RINGS ND VALVE SEALSPPS (Polyphenylene Sulfide) ND VALVE CARTRIDGEREINFORCED EPDM ND VALVE DIAPHRAGMZINC PLATED / PVC COATED HANDLES & NUTS304 STAINLESS STEEL, REMOVABLE, FILTER SCREEN (UY) 20 MESH / 40 MESH (optional)HARD CHROME PLATED BRASS / BALLS STAINLESS STEEL (optional)TEFLON BALL SEALSBRASS / STAINLESS STEEL (optional) SHAFTS **BLOWOUT-PROOF SHAFT**DUAL FKM O-RINGS SHAFT SEALSFKM O-RING UNION SEALSFKM O-RING CAP SEAL (UY) HOSE SPECS400 PSI (1/2" thru 1"), 248°F 300 PSI (11/4" thru 2"), 248°F 400 PSI (21/2"), 70°FREINFORCED EPDM HOSE CORESTAINLESS STEEL HOSE BRAID

MUM HNA. HOSE ADAPTER. Μ Straight and MNPT pipe threads HSA. HOSE ADAPTER. s Straight pipe threads and Sweat end **n**êm HPA. HOSE ADAPTER. Р Straight pipe threads and NexPress end **ACTUATORS (24 VAC)** Orde Part No. Description Code NO ACTUATOR CONTROL SIGNAL: * Two Position / On-Off * Three Position / Floating * 0-10V Proportional / Modulating FAIL POSITION: * Fail in Place / Non-Spring Return * Fail Safe / Spring Return (For Actuators Order Codes please consult the "Ordering Guide" selection in Nexus Catalog)

Code

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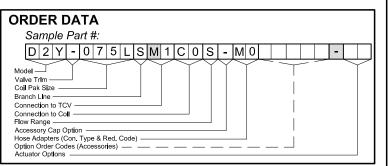
.... HT. HANGING TAG

(Maximum 7 Characters)

.... SL. SHORT LEVER HANDLE

.... ES. EXTENSION KITS

with Model No., Location, Flow Rate



.....BRASS OT58

.....EPDM

HOSE FITTINGS

HOSE GASKET

Please consult the "Ordering Guide" in the Nexus Valve Cataloa for complete part number and ordering information.

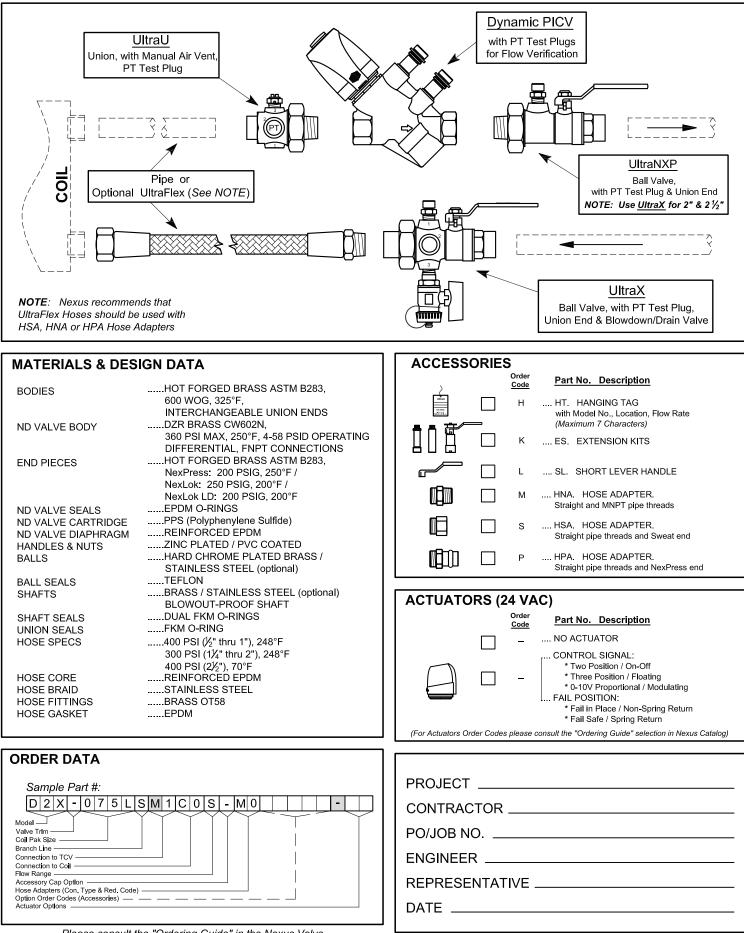
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

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Coil Pak™ D2X

(¹/₂" thru 2¹/₂")

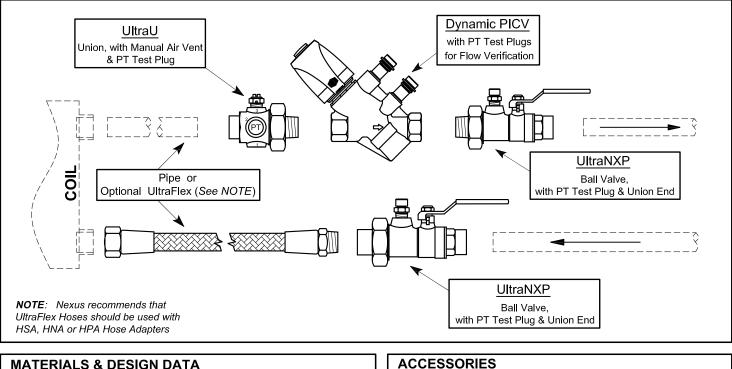


Please consult the "Ordering Guide" in the Nexus Valve Catalog for complete part number and ordering information



Coil Pak[™] D2N

(¹/₂" thru 1¹/₂")



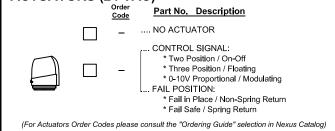
MATERIALS & DESIGN DATA

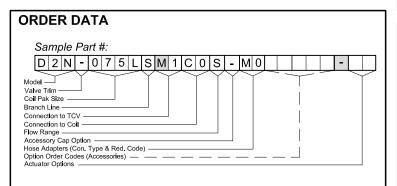
BODIES	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F, INTERCHANGEABLE UNION ENDS
ND VALVE BODY	DZR BRASS CW602N, 360 PSI MAX, 250°F, 4-58 PSID OPERATING DIFFERENTIAL, FNPT CONNECTIONS
END PIECES	HOT FORGED BRASS ASTM B283, NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F / NexLok LD: 200 PSIG, 200°F
ND VALVE SEALS	EPDM O-RINGS
ND VALVE CARTRIDGE	PPS (Polyphenylene Sulfide)
ND VALVE DIAPHRAGM	
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFTS	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM



>	Code	Part No. Description
	Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	к	ES. EXTENSION KITS
	L	SL. SHORT LEVER HANDLE
	М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
	S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
	Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end

ACTUATORS (24 VAC)





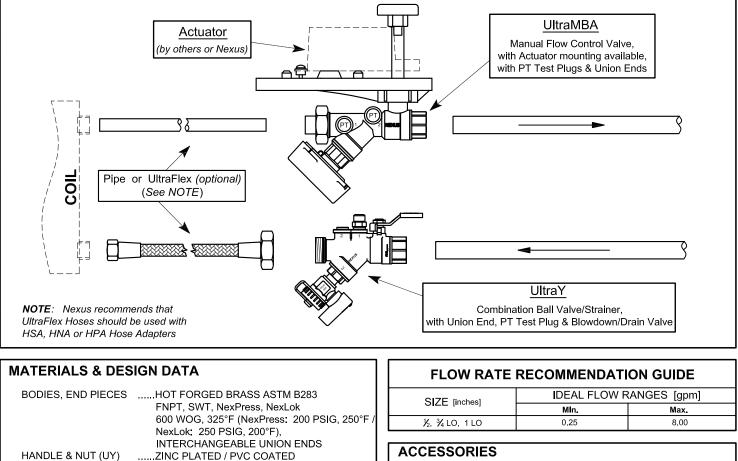
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

Please consult the "Ordering Guide" in the Nexus Valve Catalog for complete part number and ordering information.

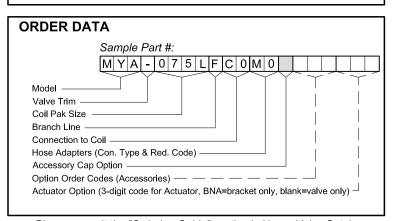


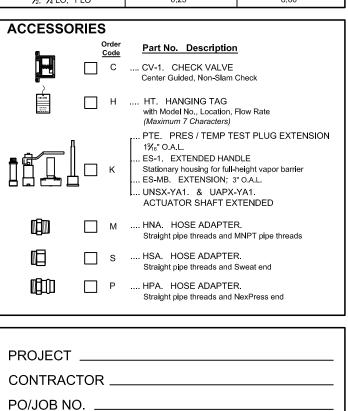
Coil Pak™ MYA

(¹/₂", ³/₄" LO, 1" LO)



HANDLE & NUT (UY)	ZINC PLATED / PVC COATED
FILTER SCREEN (UY)	304 STAINLESS STEEL,
	20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM





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REPRESENTATIVE _____

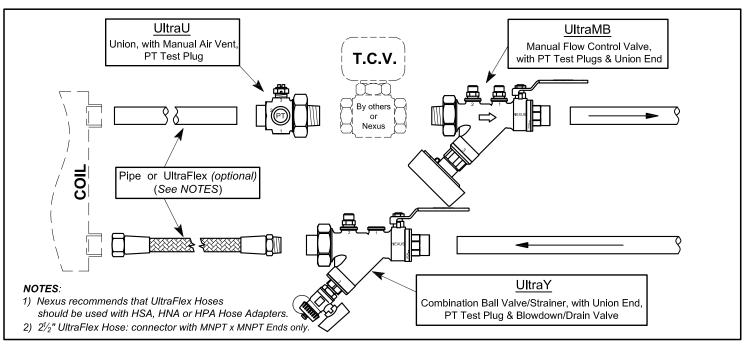
DATE

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak[™] M2Y

(¹/₂" thru 2¹/₂")



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PROJECT _

PO/JOB NO. __

ENGINEER ____

DATE

CONTRACTOR _____

REPRESENTATIVE _____

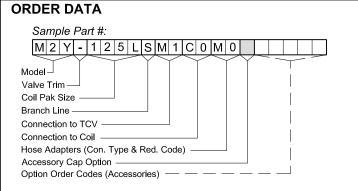
MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 CAST BRASS: UY/MB (2", 2½") FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F),
HANDLES & NUTS	INTERCHANGEABLE UNION ENDS
FILTER SCREEN (UY)	304 STAINLESS STEEL, 20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRÁSS /
BALL SEALS	STAINLESS STEEL (optional)
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEALS (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F
HOSE CORE HOSE BRAID HOSE FITTINGS HOSE GASKET	400 PSI (2½"), 70°F REINFORCED EPDM STAINLESS STEEL BRASS OT58 EPDM

FLOW RATE RECOMMENDATION GUIDE

TEOW RATE RECOMMENDATION GOIDE			
SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
½, ¾ LO, 1 LO	0.25	8.00	
¾ STD, 1 STD, 1¼ LO	0.45	18.00	
11/4 STD, 11/2	1.00	40.00	
2, 21/2	1.50	95.00	

ACCESS	ACCESSORIES		
_		Order Code	Part No. Description
		с	CV-1, CV-2. CHECK VALVE CV-1 for ½", ½"LO, 1"LO; CV-2 for ½"STD, 1"STD, 1½"LO; Center Guided, Non-Slam Check
the data		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		К	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X ^a MMPT, Side Discharge, 2X ^a O.A.L. <i>Note: Not available for 2^a and 2X^a</i> . PTE. PRES / TEMP TEST PLUG EXTENSION; 1% ^a O.A.L. ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3 ^a O.A.L.
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)

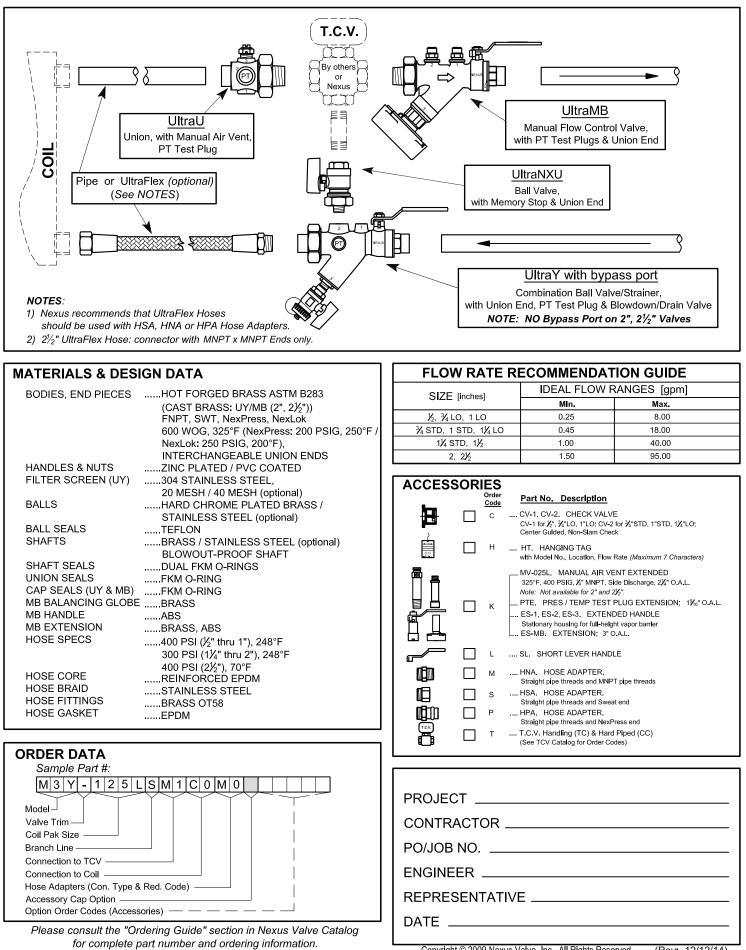


Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak™ M3Y

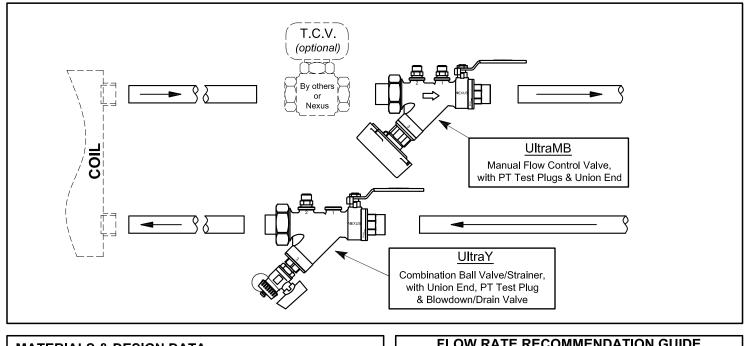
 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$





Coil Pak[™] MY

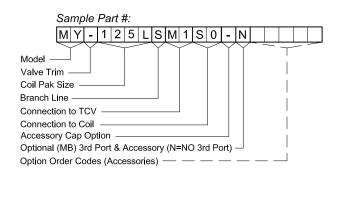
(¹/₂" thru 2¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283
	(CAST BRASS: UY/MB (2", 2½"))
	FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
FILTER SCREEN (UY)	304 STAINLESS STEEL,
	20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEALS	FKM O-RING
MB BALANCING GLOBE	EBRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS

ORDER DATA



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

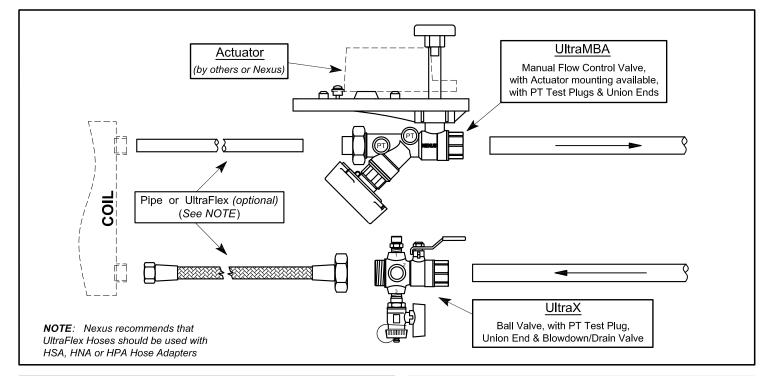
SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
½, ¾ LO, 1 LO	0.25	8.00	
¾ STD, 1 STD, 1¼ LO	0.45	18.00	
11⁄4 STD, 11⁄2	1.00	40.00	
2, 21/2	1 <u>.</u> 50	95.00	

ACCESSORIES		
Order <u>Part No. Description</u>		
C CV-1, CV-2. CHECK VALVE CV-1 for ½", ¼"LO, 1"LO; CV-2 for ½"STD, 1"STD, 1¼"LO; Center Guided, Non-Slam Check H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)		
 MV-025L. MANUAL AIR VENT EXTENDED 325°F, A'00 PSIG, X' MNPT, Side Discharge, 2X' O.A.L. Note: Not available for 2" and 2X'." ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3" O.A.L. 		
L SL. SHORT LEVER HANDLE		
T T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)		
V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X" MNPT, Side Discharge		
PROJECT		
CONTRACTOR		
PO/JOB NO		
ENGINEER		
REPRESENTATIVE		
DATE		



Coil Pak™ MXA

(¹/₂", ³/₄" LO, 1" LO)



FLOW RATE RECOMMENDATION GUIDE

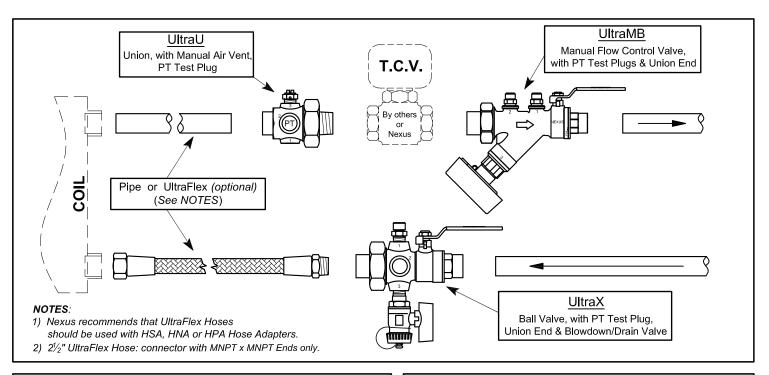
MATERIALS & DESIGN DATA

	OIZE (inches)	IDEAL FLOW RANGES [gpm]	
BODIES, END PIECESHOT FORGED BRASS ASTM B283	SIZE [inches]	Min.	Max.
FNPT, SWT, NexPress, NexLok	1/2, 3/4 LO, 1 LO	0.25	8.00
600 WOG, 325°F (NexPress: 200 PSIG, 250°F /			
NexLok: 250 PSIG, 200°F),	ACCESSORIES		
INTERCHANGEABLE UNION ENDS	ACCESSORIES		
HANDLE & NUT (UX)ZINC PLATED / PVC COATED	Orde		n
BALLSHARD CHROME PLATED BRASS /			<u></u>
STAINLESS STEEL (optional)			
BALL SEALSTEFLON		Center Guided, Non-Slar	n Check
SHAFTSBRASS / STAINLESS STEEL (optional)		HT. HANGING TAG	
BLOWOUT-PROOF SHAFT		with Model No., Location	n, Flow Rate
SHAFT SEALSDUAL FKM O-RINGS		(Maximum 7 Characters,)
UNION SEALSFKM O-RING		PTE. PRES / TEMP	TEST PLUG EXTENSION
MB BALANCING GLOBEBRASS MB HANDLE ABS		1%₁₀" O.A.L.	
		ES-1 EXTENDED HA	
	┃║ <u>┃</u> <u>↓</u> – – – – – – – – – – – – – – – – – – –	Stationary housing for fu ES-MB EXTENSION;	
HOSE SPECS400 PSI (½" thru 1"), 248°F HOSE COREREINFORCED EPDM		UNSX-YA1. & UAP	
HOSE BRAIDSTAINLESS STEEL		ACTUATOR SHAFT E	
HOSE FITTINGSBRASS OT58	_		
HOSE GASKETEPDM		HNA. HOSE ADAPT	
		Straight pipe threads and	d MNPT pipe threads
		HSA. HOSE ADAPTI	ER.
		Straight pipe threads and	
DRDER DATA		HPA. HOSE ADAPTI	ED
		Straight pipe threads and	
Sample Part #:			
M X A - 0 7 5 L F C 0 M 0			
Model			
Valve Trim	PROJECT		
Coil Pak Size			
Branch Line	CONTRACTOR _		
Connection to Coil			
Hose Adapters (Con. Type & Red. Code)	PO/JOB NO		
Accessory Cap Option			
Option Order Codes (Accessories) — — — — — — — — —	ENGINEER		
Actuator Option (3-digit code for Actuator, BNA=bracket only, blank=valve only) $ ightarrow$	REPRESENTATIVE		
Please consult the "Ordering Guide" section in Nexus Valve Catalog			
for complete part number and ordering information.			
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Coil Pak™ M2X

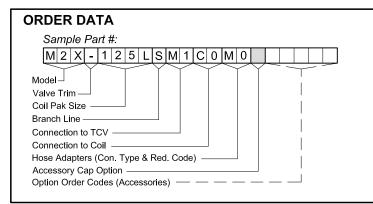
(1/2" thru 21/2")



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MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 CAST BRASS: MB (2", 2½") FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F
HOSE CORE HOSE BRAID HOSE FITTINGS HOSE GASKET	400 PSI (2½"), 70°F REINFORCED EPDM STAINLESS STEEL BRASS OT58 EPDM



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
½, ¾ LO, 1 LO	0.25	8.00	
¾ STD, 1 STD, 1¼ LO	0.45	18.00	
11/4 STD, 11/2	1.00	40.00	
2, 21/ ₂	1.50	95.00	

ACCESSORIES				
		Order <u>Code</u>	Part No. Description	
		C	CV-1, CV-2. CHECK VALVE CV-1 for X", X"LO, 1"LO; CV-2 for X"STD, 1"STD, 1X"LO; Center Guided, Non-Slam Check	
Headings		H.	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)	
		к	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L. Note: Not available for 2" and 2X". PTE. PRES / TEMP TEST PLUG EXTENSION; 1%" O.A.L. ES-1, ES-2, ES-3. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3" O.A.L.	
		L.	SL. SHORT LEVER HANDLE	
		М	HNA. HOSE ADAPTER. Straight plipe threads and MNPT plipe threads	
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end	
		Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end	
		Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)	
PROJECT				
CONTRA	сто	OR		

PO/JOB NO.

ENGINEER __

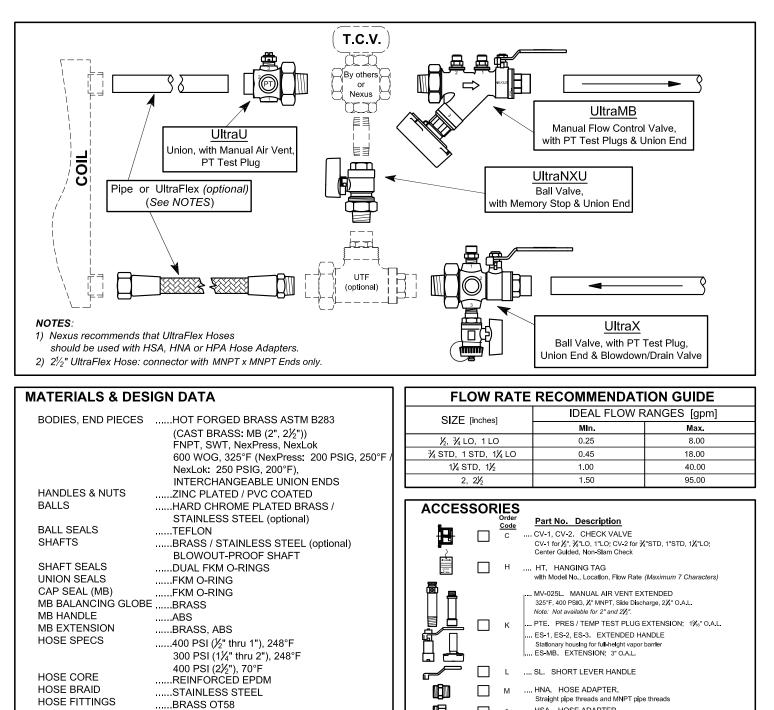
REPRESENTATIVE _____

DATE



Coil Pak™ M3X

 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$



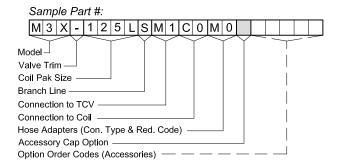
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ORDER DATA

HOSE GASKET



.....EPDM

Please consult the "Ordering Guide" section in Nexus Valve Catal for complete part number and ordering information.

	Image: Straight pipe threads and NexPress end Image: Straight pipe threads an
	PROJECT CONTRACTOR PO/JOB NO ENGINEER REPRESENTATIVE DATE
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HSA HOSE ADAPTER

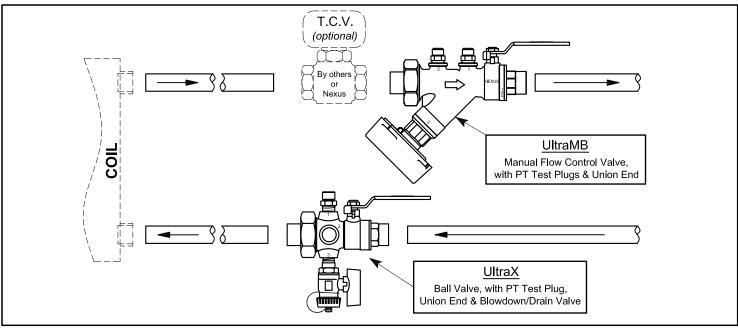
.... HPA. HOSE ADAPTER.

Straight pipe threads and Sweat end



Coil Pak[™] MX

(¹/₂" thru 2¹/₂")



MATERIALS & DESIGN DATA

		SIZE [inches]	100,000	Cator [gpin]
BODIES, END PIECESHOT FORGED BRASS ASTM B283			Min.	Max.
CAST BRASS: MB (2", 2½")		½, ¾ LO, 1 LO	0.25	8.00
FNPT, SWT, NexPress, NexLok		4 STD, 1 STD, 11/4 LO	0.45	18.00
600 WOG, 325°F (NexPress: 200 PS	IG, 250°F /	11⁄4 STD, 11⁄2	1.00	40.00
NexLok: 250 PSIG, 200°F),		2, 2 1 / ₂	1.50	95.00
INTERCHANGEABLE UNION ENDS				
HANDLES & NUTSZINC PLATED / PVC COATED		CESSORIES		
BALLSHARD CHROME PLATED BRASS /		.		
STAINLESS STEEL (optional) BALL SEALS TEFLON		Order <u>Code</u>	Part No. Description	
SHAFTSBRASS / STAINLESS STEEL (optional	n l		V-1, CV-2. CHECK VALVE	
BLOWOUT-PROOF SHAFT	')		℃-1 for ½", ¾"LO, 1"LO, CV-2 for ¾	4"STD, 1"STD, 11/4"LO;
SHAFT SEALSDUAL FKM O-RINGS		>	Center Guided, Non-Slam Check	
UNION SEALSFKM O-RING		🖬 🗋 н і	HT. HANGING TAG	
CAP SEAL (MB)FKM O-RING		v v	ith Model No., Location, Flow Rate	(Maximum 7 Characters)
MB BALANCING GLOBEBRASS		ι	/V-025L. MANUAL AIR VENT	
MB HANDLEABS		Ĩ 🖣 🛛 🗥	325°F, 400 PSIG, ¼" MNPT, Side D	
MB EXTENSIONBRASS, ABS			lote: Not available for 2" and $2\frac{1}{2}$ ".	<u>.</u>
			PTE. PRES / TEMP TEST PLU	
	媾		ES-1, ES-2, ES-3 EXTENDED	
			Stationary housing for full-height van ES-MB. EXTENSION; 3" O.A.L.	
			LO-IND. EXTENSION, 3 O.A.L.	
			L. SHORT LEVER HANDLE	
ORDER DATA			C.V. Handling (TC) & Hard Pipe	ed (CC)
ORDER DATA			See TCV Catalog for Order Codes)	
		A		
Sample Part #:			1V-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side D	ischarge
M X - 1 2 5 L S M 1 S 0 - N				
Coil Pak Size Branch Line	11''			
Connection to TCV		DNTRACTOR		
Connection to TCV				
Accessory Cap Option	PC	PO/JOB NO		
Optional (MB) 3rd Port & Accessory (N=NO 3rd Port)				
Option Order Codes (Accessories) — — — — — — — —		ENGINEER		
			/ -	
		PRESENTATI	Έ	
Please consult the "Ordering Guide" section in Nexus Valve C				
Flease consult the Ordening Guide section in Nexus Valve C				

for complete part number and ordering information.

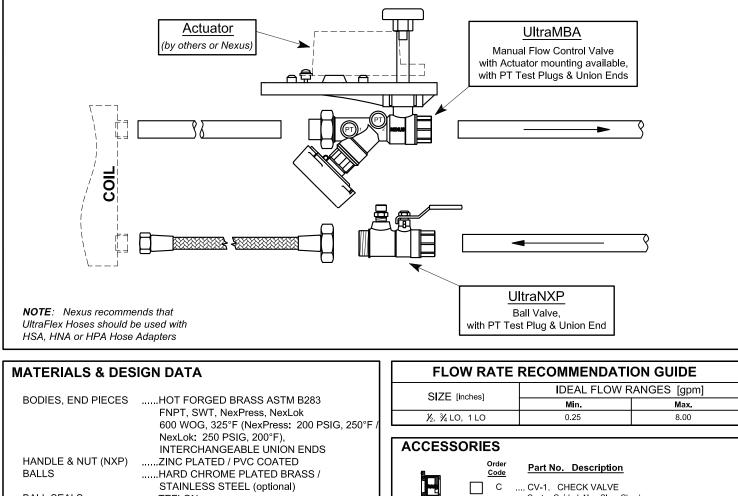
FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]			
	Min.	Max.		
½, ¾ LO, 1 LO	0.25	8.00		
¾ STD, 1 STD, 1¼ LO	0.45	18.00		
11/4 STD, 11/2	1.00	40.00		
2, 21/2	1.50	95.00		

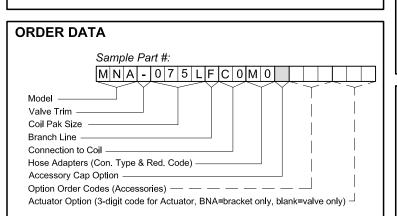


Coil Pak[™] MNA

(¹/₂", ³/₄" LO, 1" LO)



BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM



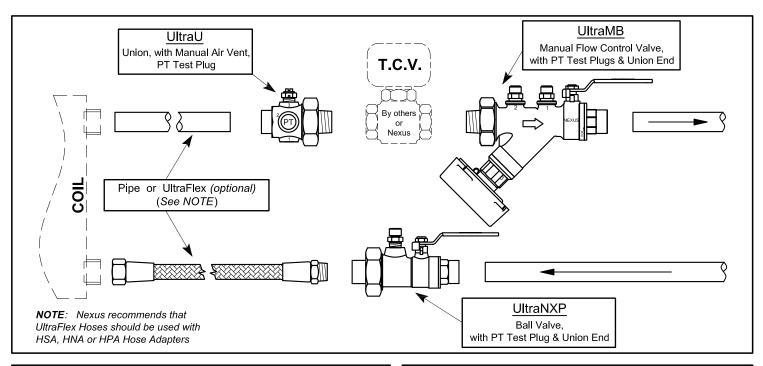
½, ¾ LO, 1 L	_0	0.25	8.00	
ACCESSOR	IES			
	Order <u>Code</u> C	Part No. Description CV-1. CHECK VALVE Center Guided. Non-Slam Chu	eck	
]н	HT. HANGING TAG with Model No., Location, Flo (Maximum 7 Characters)	w Rate	
] к	PTE. PRES / TEMP TES 1%" O.A.L. ES-1. EXTENDED HANDL Stationary housing for full-hei ES-MB. EXTENSION; 3" C UNSX-YA1. & UAPX-YA ACTUATOR SHAFT EXTER	E ght vapor barrier).A.L. \1.	
	М	HNA. HOSE ADAPTER. Straight pipe threads and MN	IPT pipe threads	
	s	HSA. HOSE ADAPTER. Straight pipe threads and Sw	eat end	
] P	HPA. HOSE ADAPTER. Straight pipe threads and Nex	xPress end	
PROJECT				
CONTRACT	OR _			
PO/JOB NO				
ENGINEER				
REPRESENTATIVE				
DATE				

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak[™] M2N

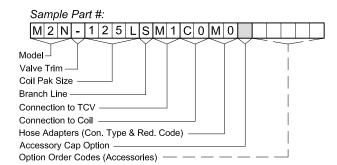
(¹/₂" thru 1¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
HOSE CORE	300 PSI (1¼" thru 1½"), 248°F REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

ORDER DATA



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
½, ¾ LO, 1 LO	0.25	8.00	
¾ STD, 1 STD, 1¼ LO	0.45	18.00	
11⁄4 STD, 11⁄2	1.00	40.00	

ACCESSORIES Part No. Description Order Code C CV-1, CV-2. CHECK VALVE CV-1 for $\frac{1}{2}$ ", $\frac{3}{4}$ "LO, 1"LO, CV-2 for $\frac{3}{4}$ "STD, 1"STD, 1 $\frac{1}{4}$ "LO; Center Guided, Non-Slam Check H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters) MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. .. PTE. PRES / TEMP TEST PLUG EXTENSION; 1% O.A.L. Пκ W ES-1, ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3" O.A.L. L SL. SHORT LEVER HANDLE M HNA. HOSE ADAPTER. ٩D Straight pipe threads and MNPT pipe threads S HSA. HOSE ADAPTER. Straight pipe threads and Sweat end P HPA. HOSE ADAPTER. Straight pipe threads and NexPress end T T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes) PROJECT _ CONTRACTOR _____ PO/JOB NO. _____

ENGINEER _

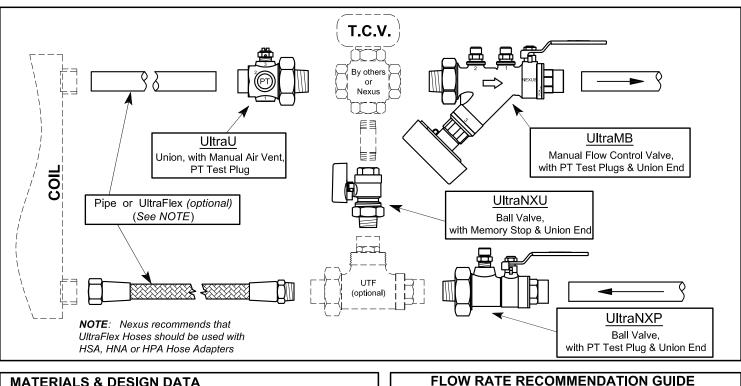
REPRESENTATIVE _____

DATE



Coil Pak™ M3N

 $(\frac{1}{2}"$ thru $1\frac{1}{2}")$



SIZE [inches]

½, ¾ LO, 1 LO

¾ STD, 1 STD, 1¼ LO

11/4 STD, 11/2

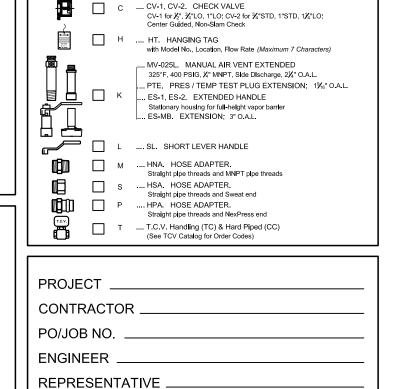
ACCESSORIES Order

DATE

Code

MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 1½"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM



IDEAL FLOW RANGES [gpm]

Max.

8.00

18.00

40.00

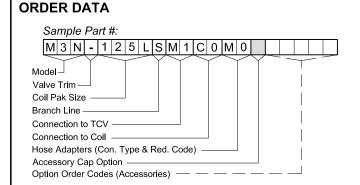
Min.

0.25

0.45

1.00

Part No. Description

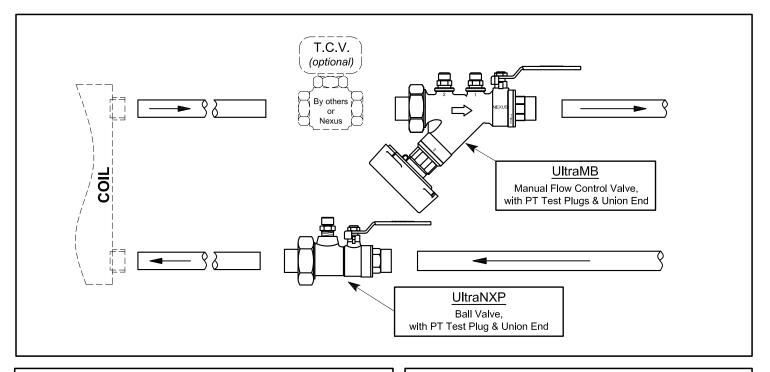


Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak™ MN

(¹/₂" thru 1¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS

Sample Part #: MN - 1 2 5 L S M 1 S 0 - N Model Valve Trim Coil Pak Size Branch Line Connection to TCV Connection to TCV Optional (MB) 3rd Port & Accessory (N=NO 3rd Port) Option Order Codes (Accessories)

for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

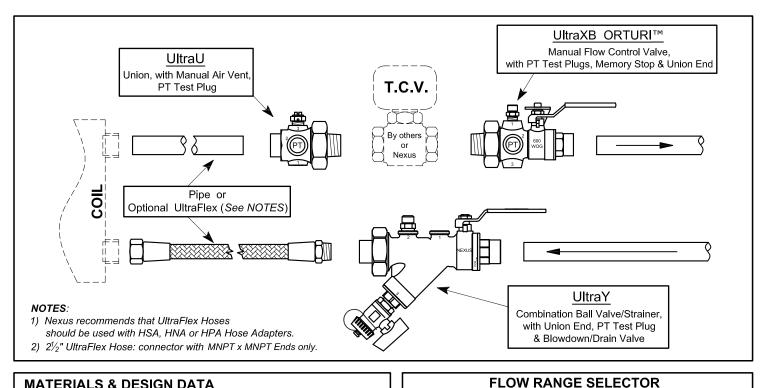
SIZE [inches]	IDEAL FLOW RANGES [gpm]	
	Min.	Max.
½, ¾ LO, 1 LO	0.25	8.00
¾ STD, 1 STD, 1¼ LO	0.45	18.00
1¼ STD, 1½	1.00	40.00

ACCESSORIES				
_		Order <u>Code</u>	Part No. Description	
		С	CV-1, CV-2. CHECK VALVE CV-1 for ½", ½"LO, 1"LO; CV-2 for ½"STD, 1"STD, 1½"LO; Center Guided, Non-Slam Check	
		н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)	
		к	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X," MNPT, Side Discharge, 2X," O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION; 1%6° O.A.L. ES-1, ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3° O.A.L.	
		L	SL. SHORT LEVER HANDLE	
T.C.M.		т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)	
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X MNPT, Side Discharge	
PROJE	ст.			
CONTRACTOR				
PO/JOB NO				
ENGINEER				
REPRESENTATIVE				
DATE .				



Coil Pak[™] O2Y

(¹/₂" thru 2¹/₂")



1

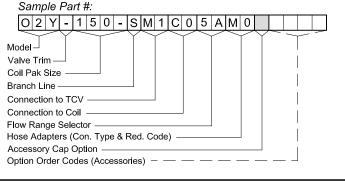
MATERIALS & DESIGN DATA

ORDER DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 (CAST BRASS: UY (2", 2½")) FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
FILTER SCREEN (UY)	304 STAINLESS STEEL,
	20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (UY)	FKM O-RING
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F
HOSE CORE	400 PSI (2½"), 70°F
HOSE BRAID	
HOSE FITTINGS	STAINLESS STEEL
HOSE GASKET	BRASS OT58
HUSE GASKET	EPDM

SIZE [inches] SELECTOR ½, ¾ LO, 1 LO 1A, 1B, 1C, 1D 3/4 STD, 1 STD, 1/4 LO 2A, 2B, 3A, 3B, 3C 1¼ STD, 1½ 4A, 5A 2, 21/2 6A, 6B

ACCESS	ORIE	-	
>		Order <u>Code</u>	Part No. Description
UPro-XSS		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		к	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)
PROJEC ⁻	Г		
CONTRA	сто	R	



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



REPRESENTATIVE _____

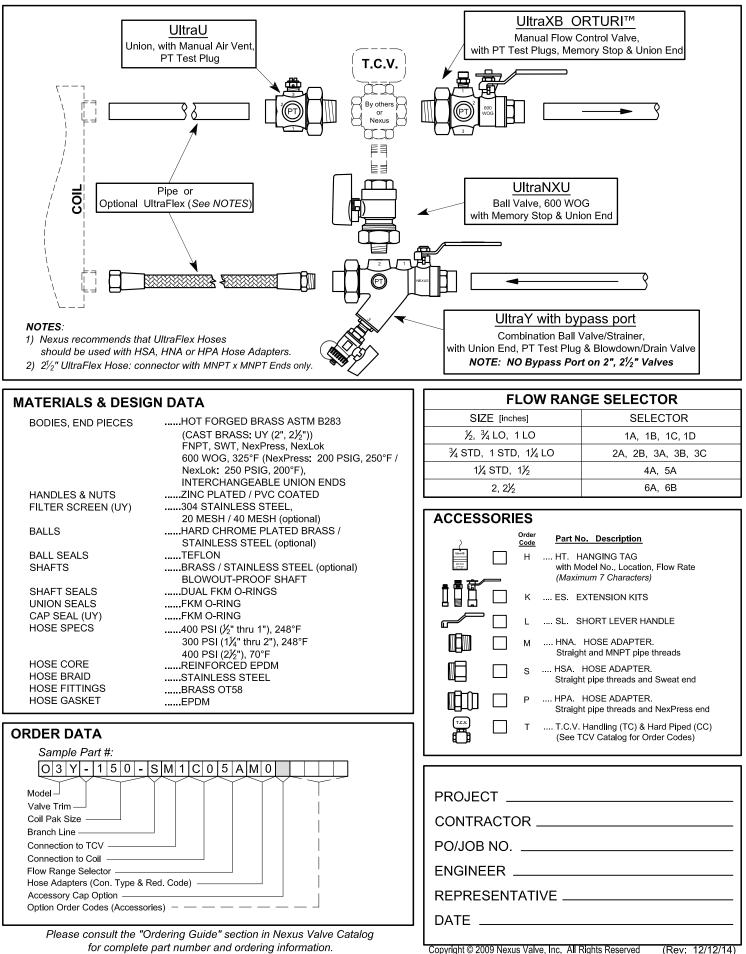
DATE

PO/JOB NO. _____



Coil Pak™ O3Y

 $(\frac{1}{2}"$ thru $2\frac{1}{2}")$

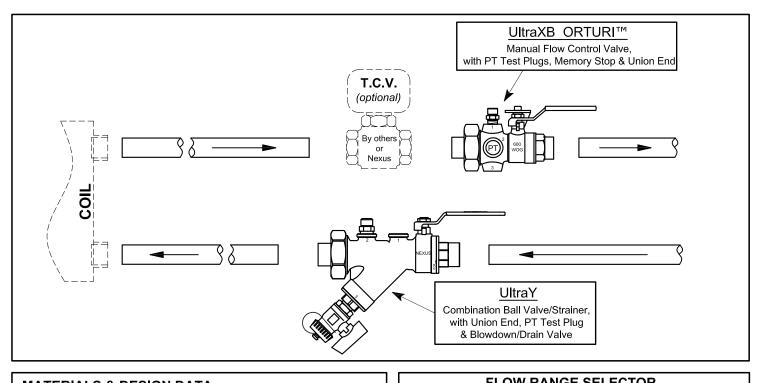


for complete part number and ordering information.



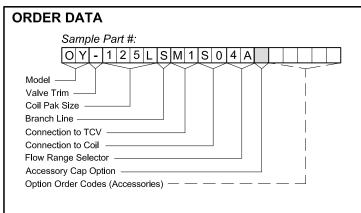
Coil Pak[™] OY

(¹/₂" thru 2¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 CAST BRASS: UY (2", 2½") FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
FILTER SCREEN (UY)	304 STAINLESS STEEL, 20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (UY)	FKM O-RING



FLOW RANGE SELECTOR					
SIZE [inches]	SELECTOR				
½, ¾ LO, 1 LO	1A, 1B, 1C, 1D				
³ ⁄4 STD, 1 STD, 1½ LO	2A, 2B, 3A, 3B, 3C				
1¼ STD, 1½	4A, 5A				
2, 21/2	6A, 6B				

ACCESSORIES					
		Order <u>Code</u>	Part No. Description		
		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)		
		к	ES. EXTENSION KITS		
	'□	L	SL. SHORT LEVER HANDLE		
т.с.v.		т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)		
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge		
PROJECT					

CONTRACTOR _____

PO/JOB NO. _____

ENGINEER _____

DATE _

REPRESENTATIVE _____

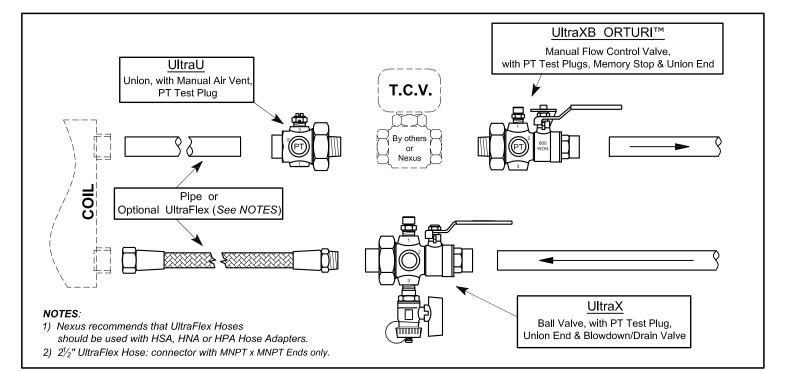
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

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Coil Pak™ O2X

(¹/₂" thru 2¹/₂")

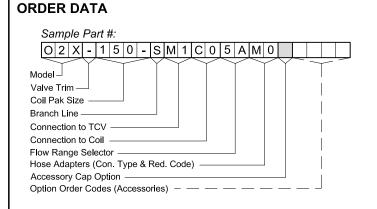


MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS BALLS	ZINC PLATED / PVC COATED HARD CHROME PLATED BRASS /
BALL SEALS	STAINLESS STEEL (optional) TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 2"), 248°F 400 PSI (2½"), 70°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RANGE SELECTOR SIZE [inches] SELECTOR ½, ¾ LO, 1 LO 1A, 1B, 1C, 1D ¾ STD, 1 STD, 1¼ LO 2A, 2B, 3A, 3B, 3C 1¼ STD, 1½ 4A, 5A 2, 2½ 6A, 6B

ACCESSO	ORIES	
, ·	Order <u>Code</u>	Part No. Description
(1919-32) 	_ н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	_ к	ES. EXTENSION KITS
	L	SL. SHORT LEVER HANDLE
	M	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
	s	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
	Р	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
	Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)
PROJECT		
CONTRAC	TOR _	
PO/JOB NO	0	
ENGINEEF	२	
REPRESE	ΝΤΑΤΙΛ	/E

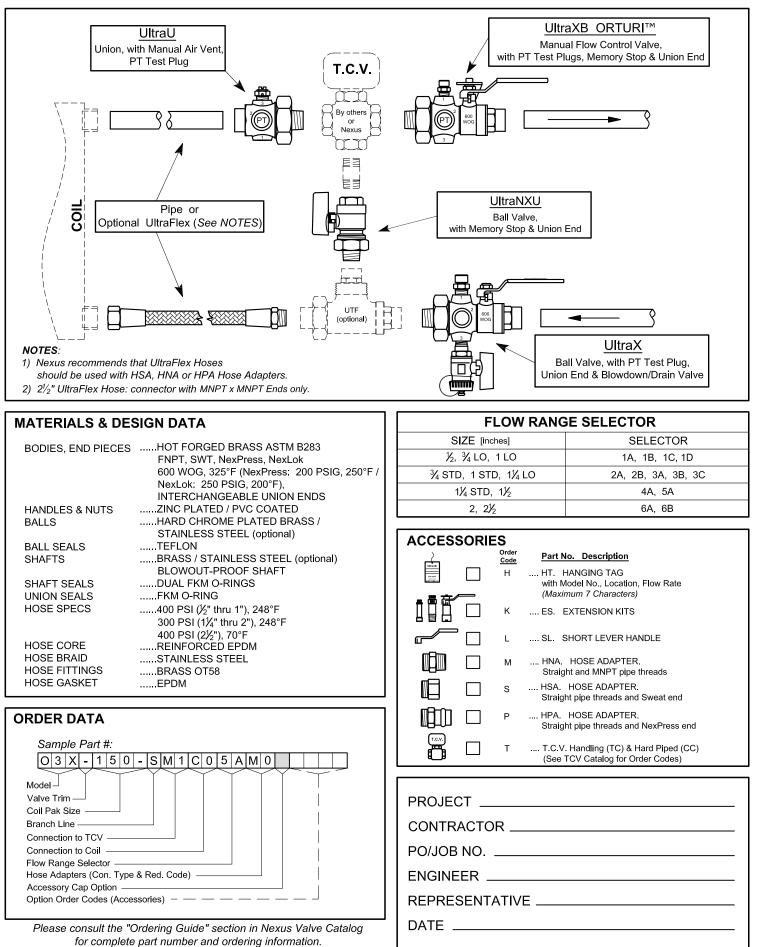


Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information. DATE



Coil Pak[™] O3X

(1/2" thru 21/2")



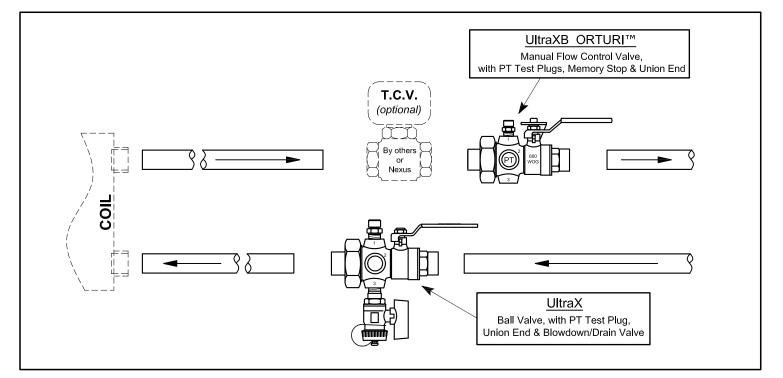
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(Rev: 12/12/14)



Coil Pak™ OX

(¹/₂" thru 2¹/₂")



MATERIALS & DESIGN DATA

ORDER DATA

Model _____ Valve Trim _____ Coil Pak Size _____ Branch Line _____ Connection to TCV _____ Connection to Coil _____ Flow Range Selector _____ Accessory Cap Option _____ Option Order Codes (Accessories)

Sample Part #:

O X - 1 2 5 L S M 1 S 0 4 A

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING

SIZE [inches] SELECTOR ½, ¾ LO, 1 LO 1A, 1B, 1C, 1D ¾ STD, 1 STD, 1¼ LO 2A, 2B, 3A, 3B, 3C 1¼ STD, 1½ 4A, 5A 2, 2½ 6A, 6B

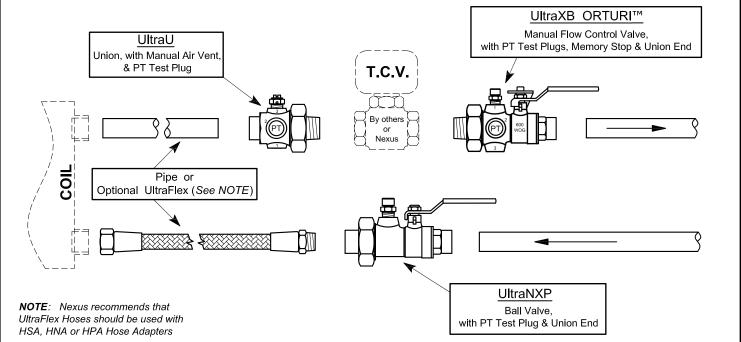
	ACCESSORIES					
			Order <u>Code</u>	Part No. Description		
			н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)		
			К	ES. EXTENSION KITS		
			L	SL. SHORT LEVER HANDLE		
]	T.C.V.		т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)		
			V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge		
	PROJECT					
	CONTRA	стс	R _			
	PO/JOB N	Ю.				
	ENGINEER					
	REPRESENTATIVE					
	DATE					

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



Coil Pak[™] O2N

(1/2" thru 11/2")



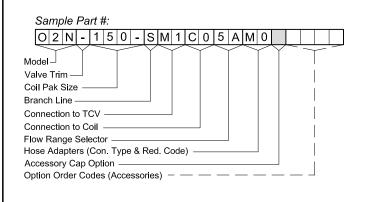
MATERIALS & DESIGN DATA

ORDER DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F, NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED / PVC COATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
HOSE SPECS	400 PSI (½" thru 1"), 248°F
	300 PSI (1¼" thru 1½"), 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RANGE SELECTOR			
SIZE [inches]	SELECTOR		
½, ¾ LO, 1 LO	1A, 1B, 1C, 1D		
¾ STD, 1 STD, 1¼ LO	2A, 2B, 3A, 3B, 3C		
11/4 STD, 11/2	4A, 5A		

ACCESSORIES			
,		Order <u>Code</u>	Part No. Description
		н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		К	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		Ρ	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		Т	T.C.V. Handling (TC) & Hard Piped (CC) (See TCV Catalog for Order Codes)
PROJECT			
CONTRACTOR			



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

ENGINEER _

REPRESENTATIVE _____

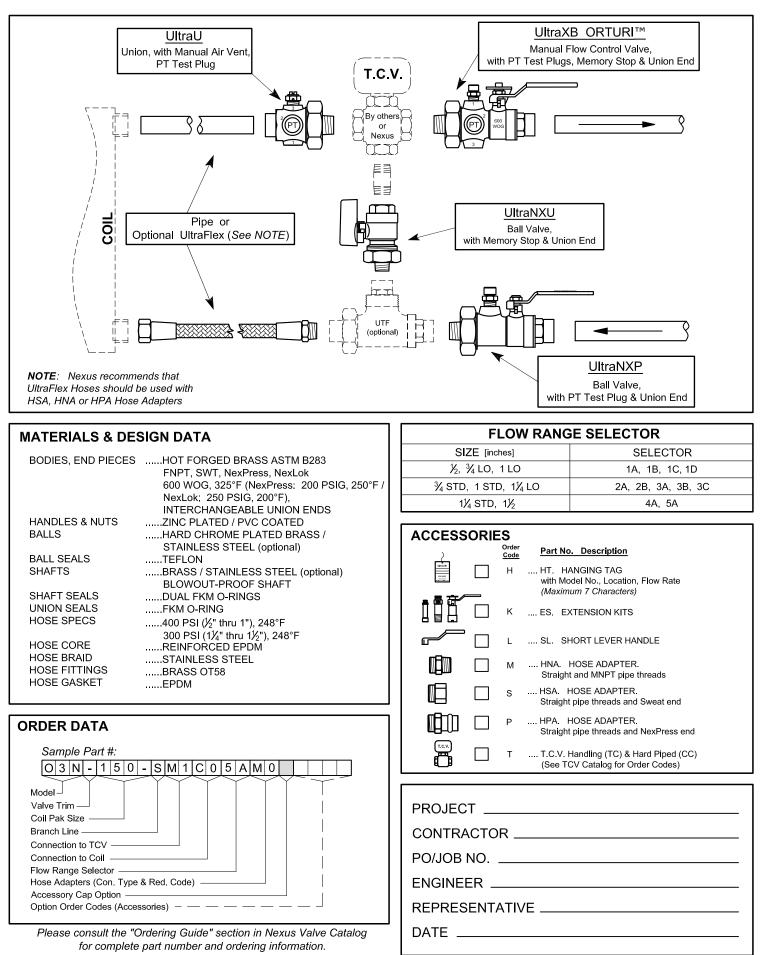
PO/JOB NO. _____

DATE



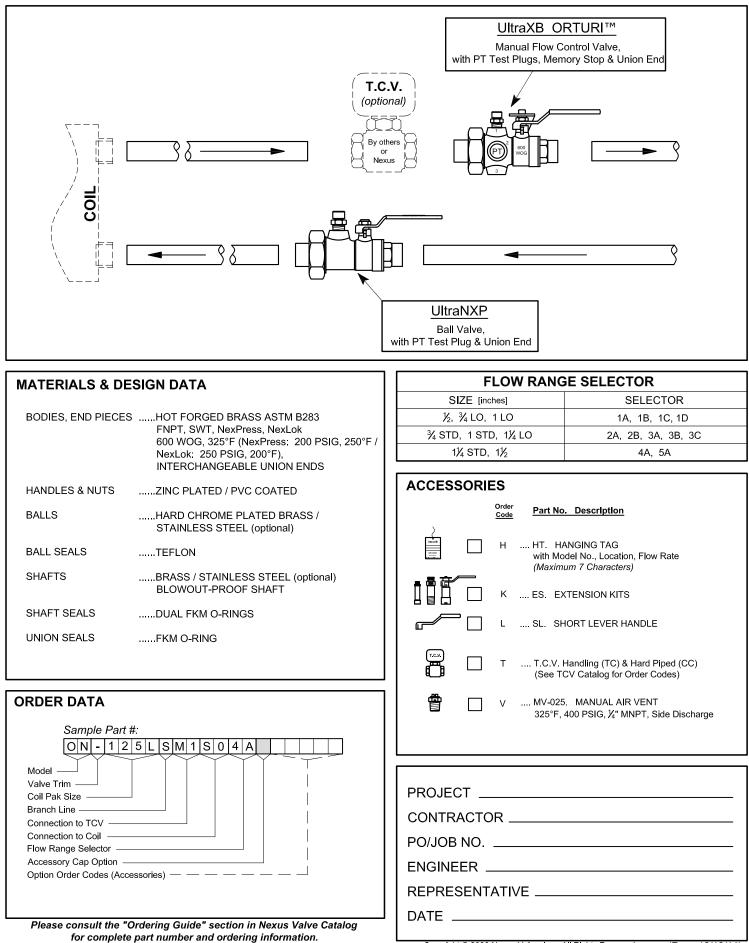
Coil Pak™ O3N

(1/2" thru 11/2")



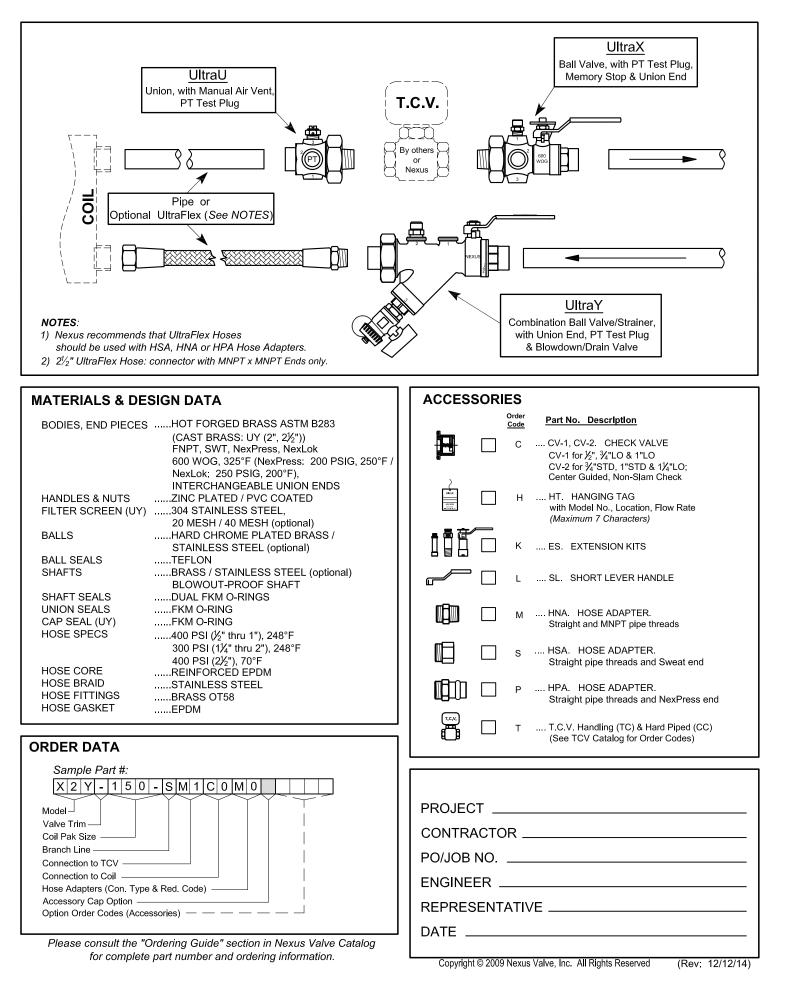


Coil Pak[™] ON





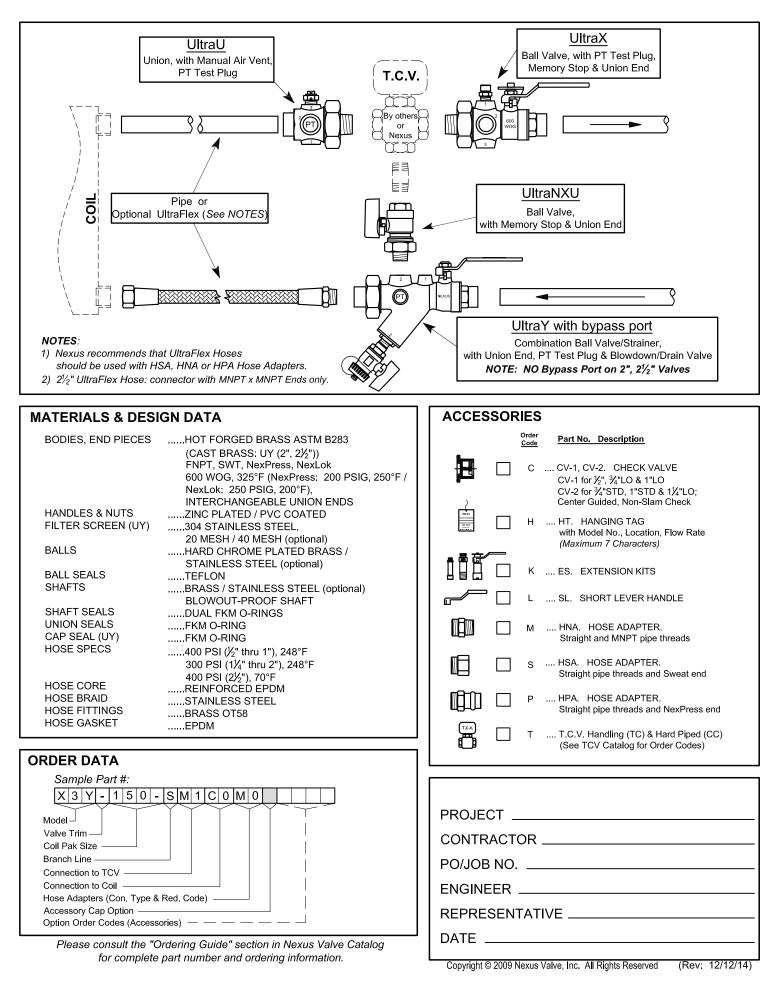
Coil Pak™ X2Y





Coil Pak[™] X3Y

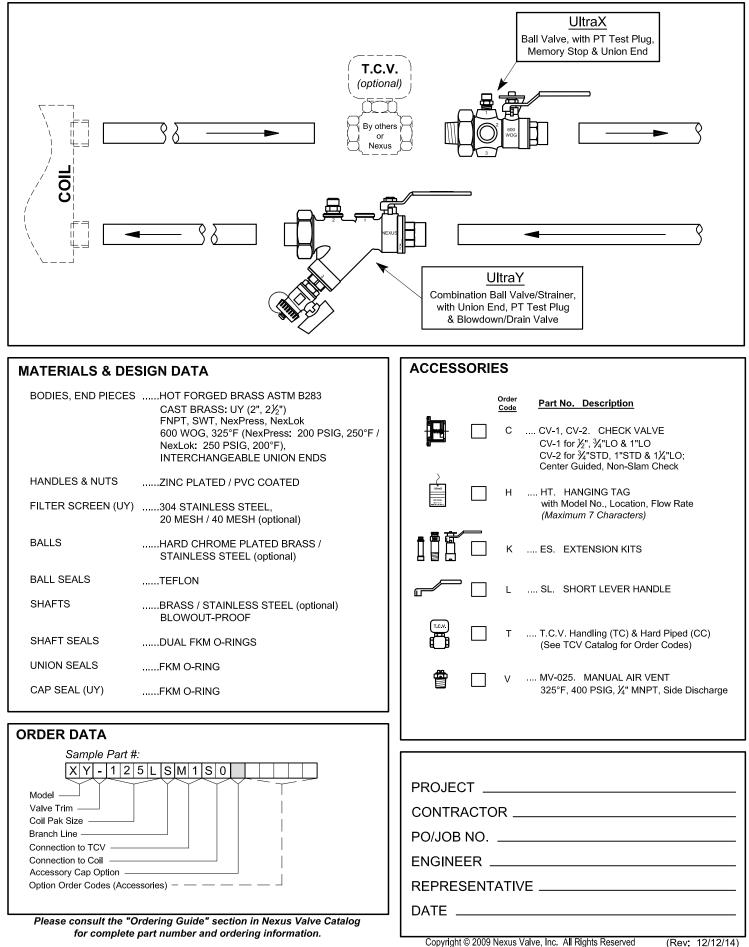
(1/2" thru 21/2")





Coil Pak™ XY

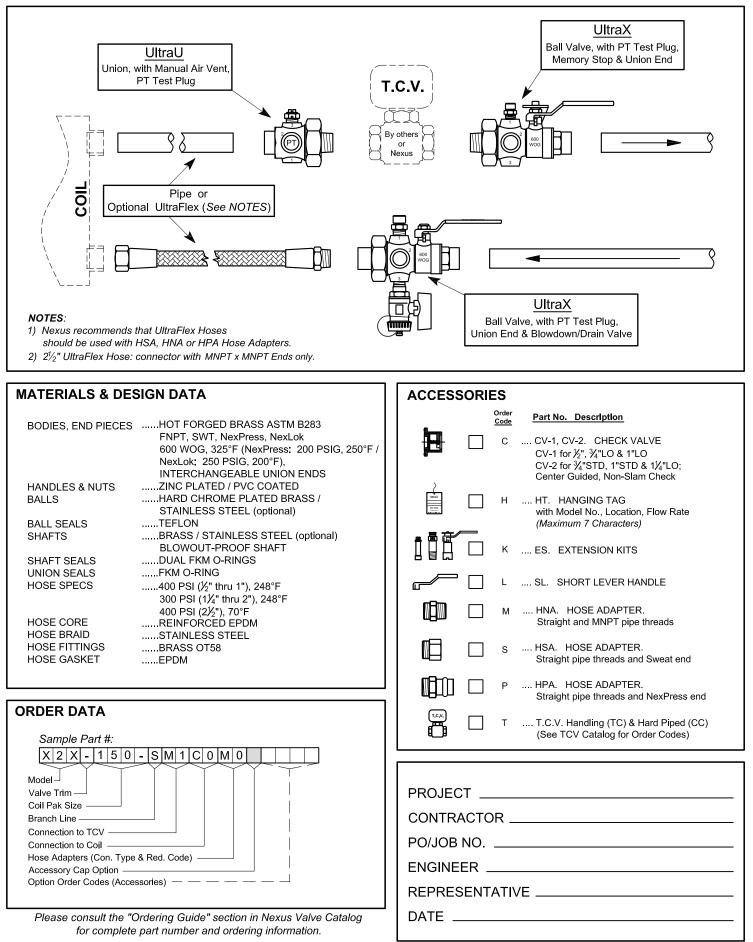
$(\frac{1}{2}"$ thru $2\frac{1}{2}")$



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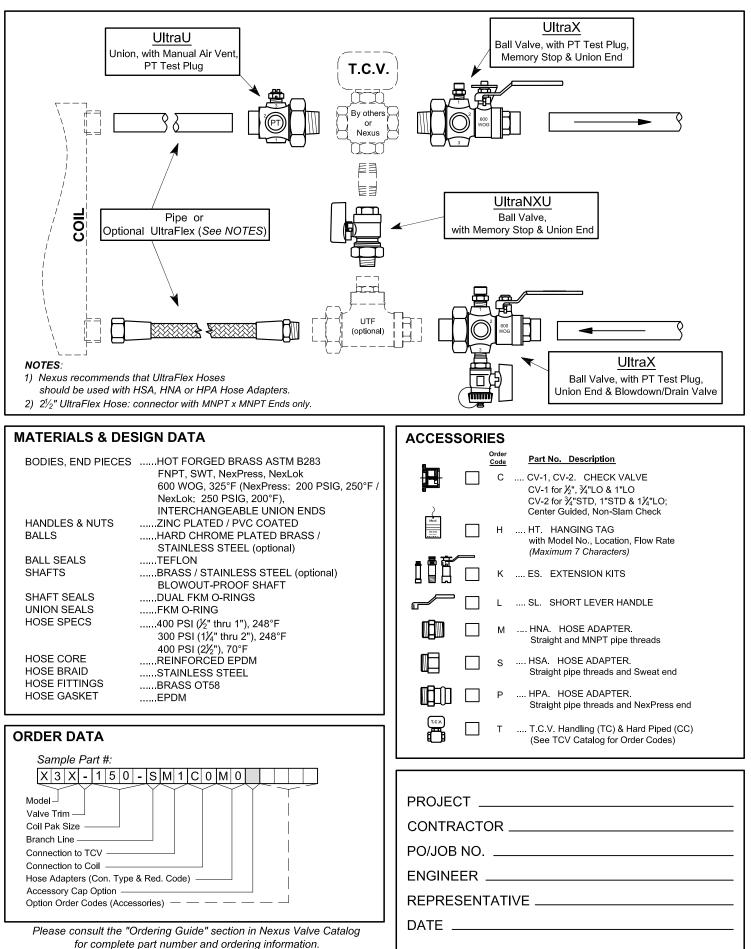


Coil Pak™ X2X





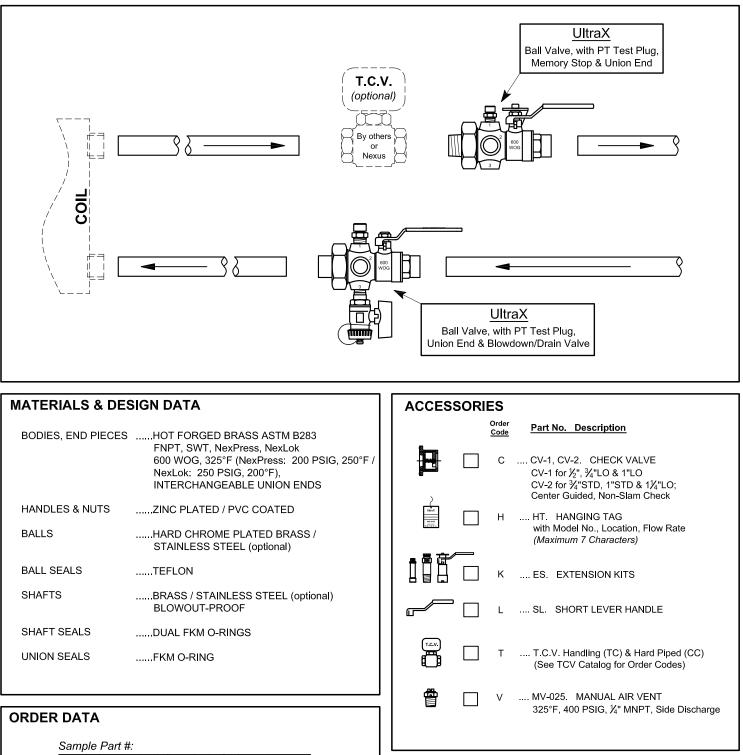
Coil Pak[™] X3X

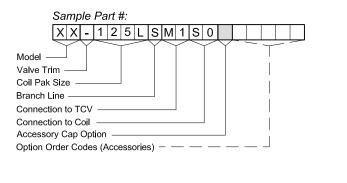




Coil Pak™ XX

(1/2" thru 21/2")





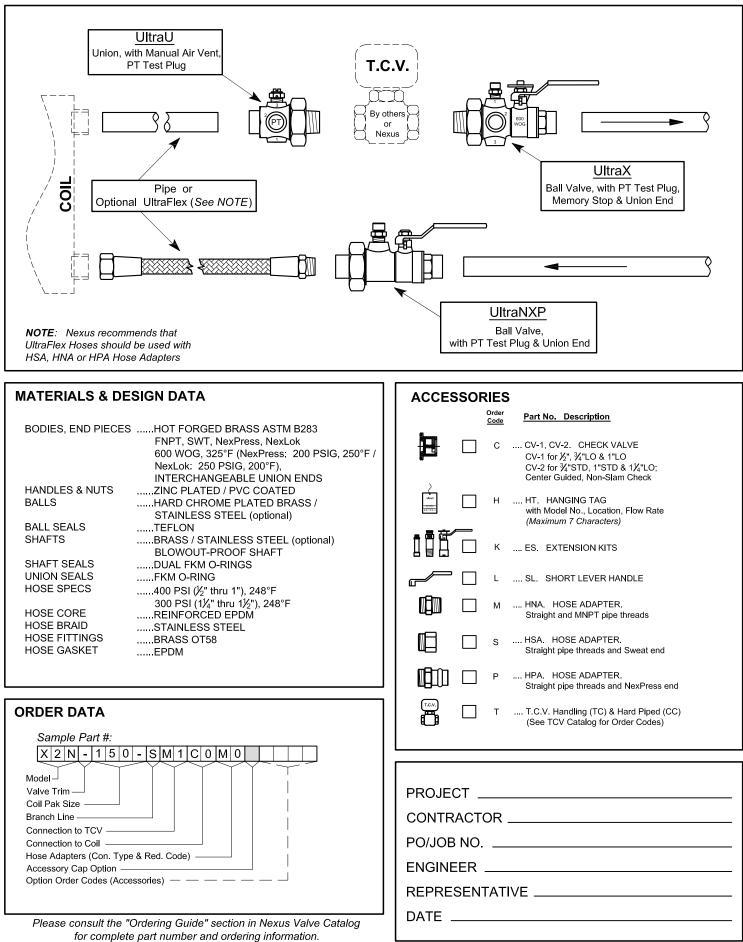
PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



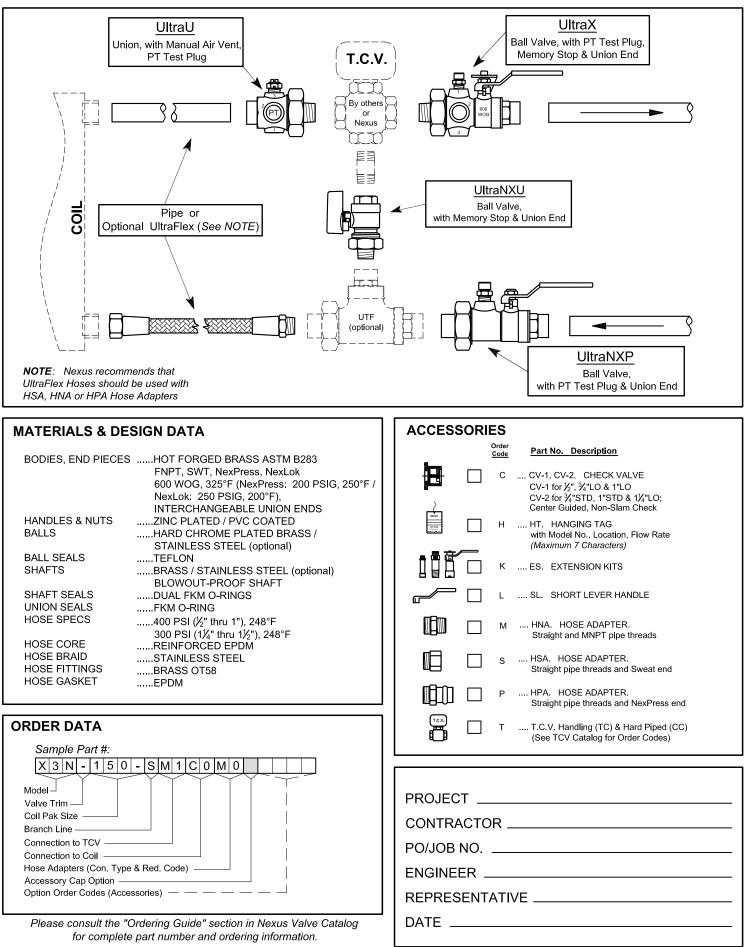
Coil Pak™ X2N

(1/2" thru 1/2")



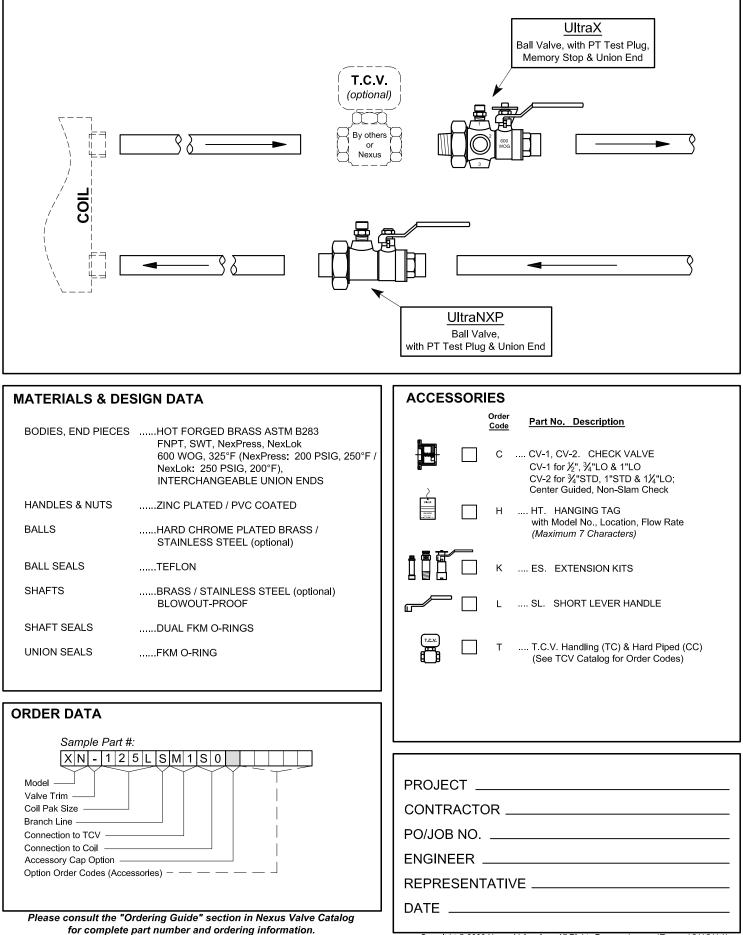


Coil Pak[™] X3N



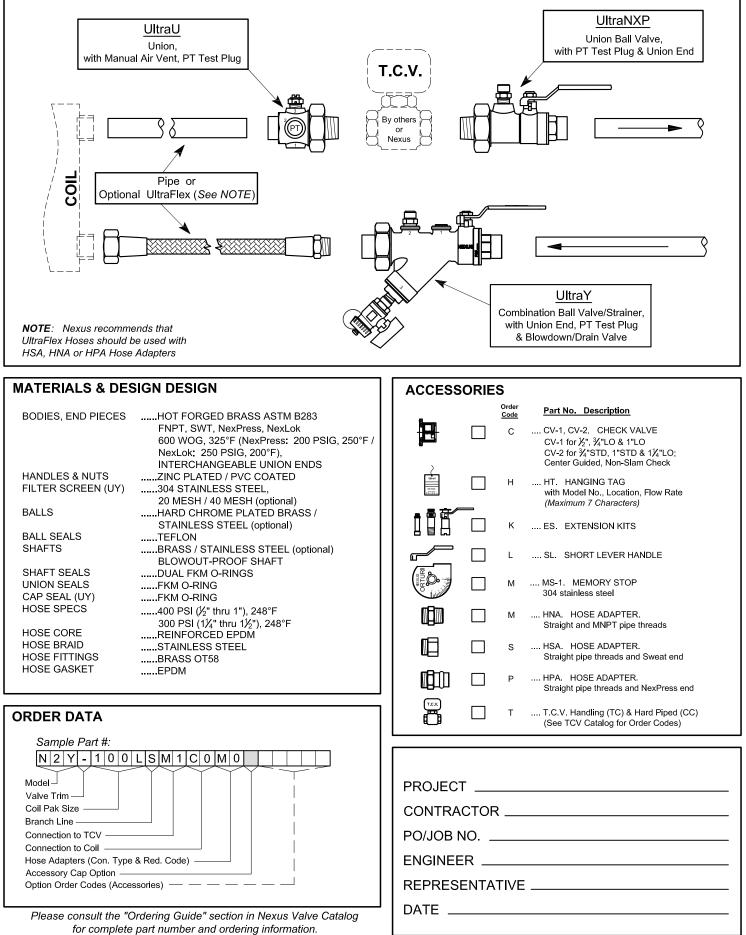


Coil Pak™ XN



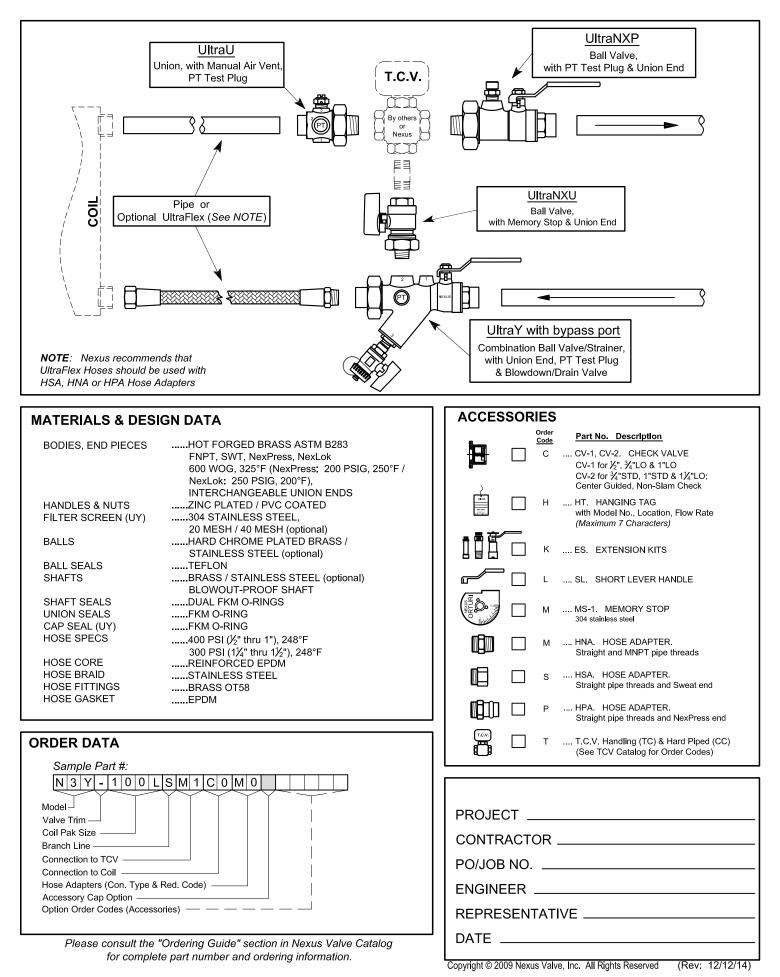


Coil Pak[™] N2Y



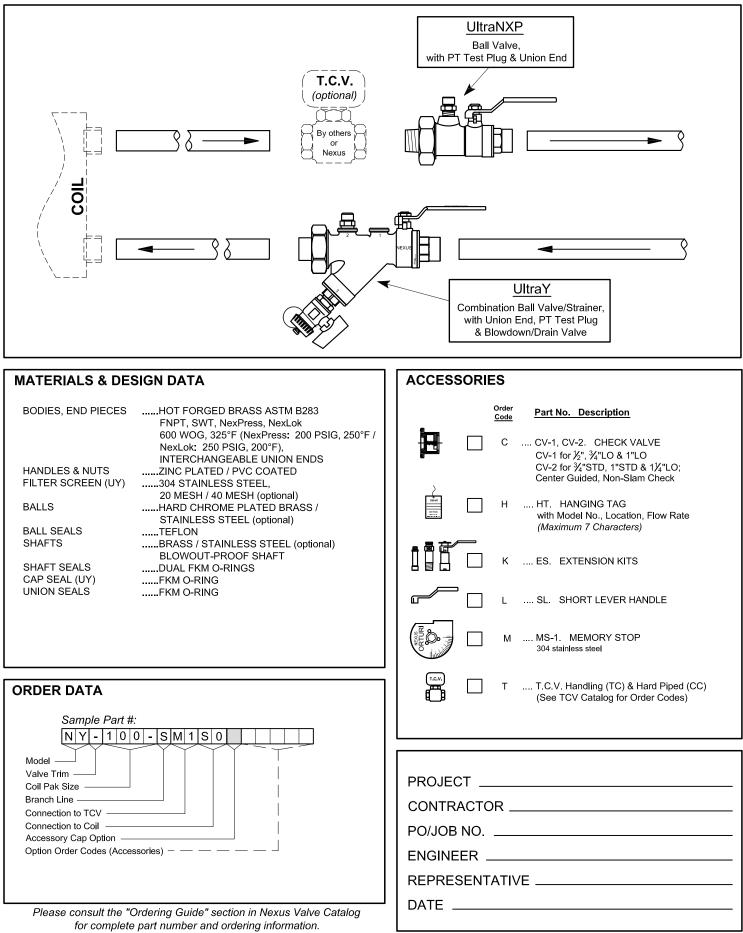


Coil Pak™ N3Y



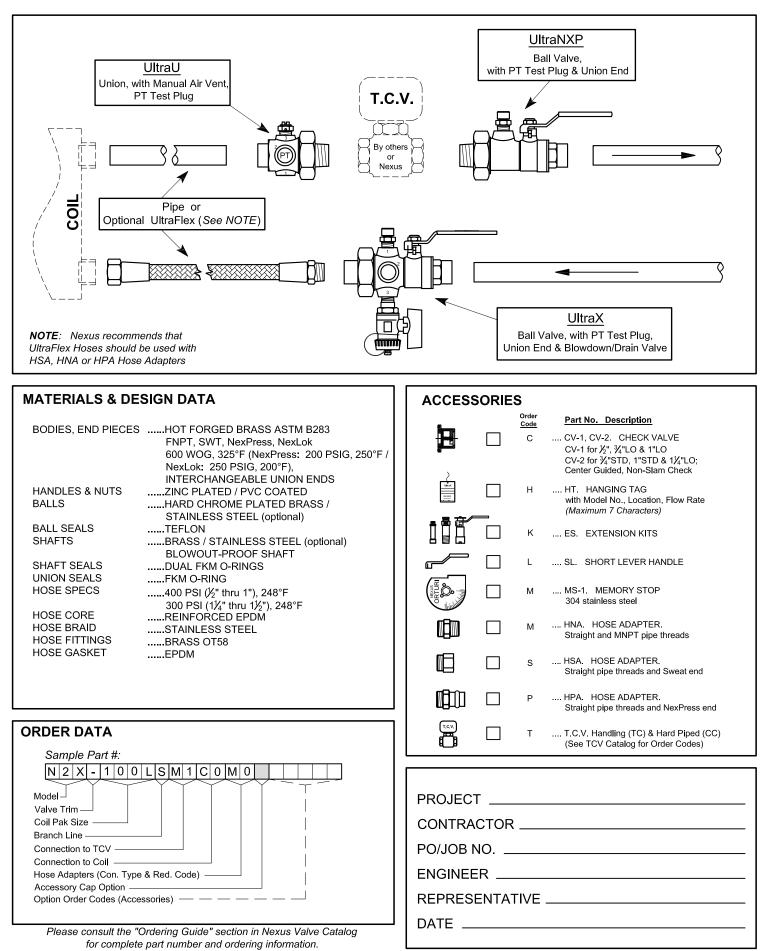


Coil Pak[™] NY



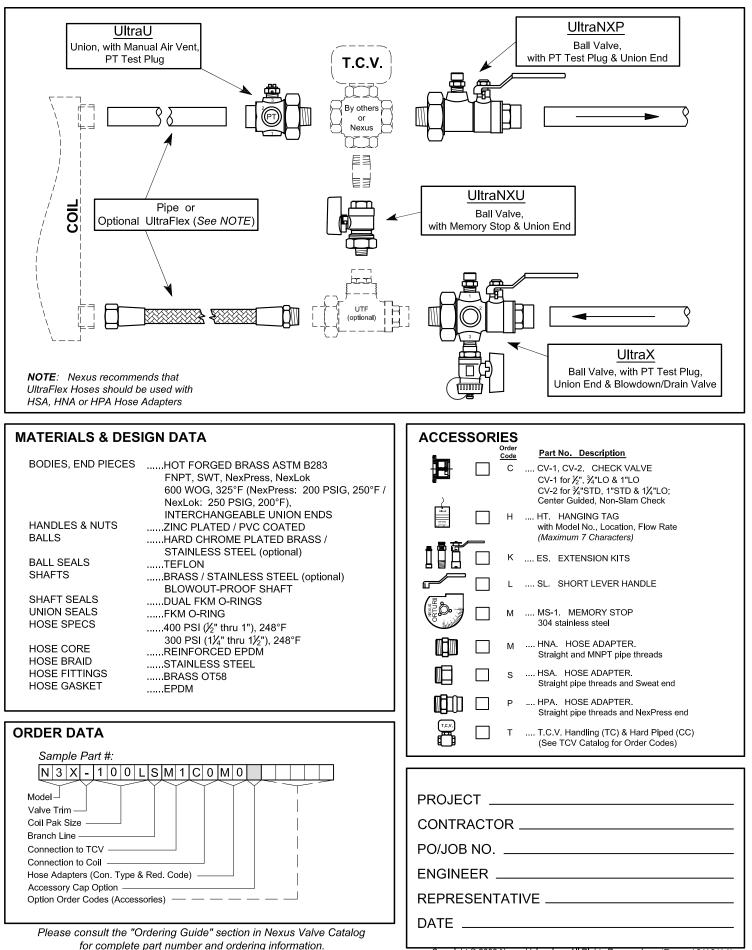


Coil Pak[™] N2X





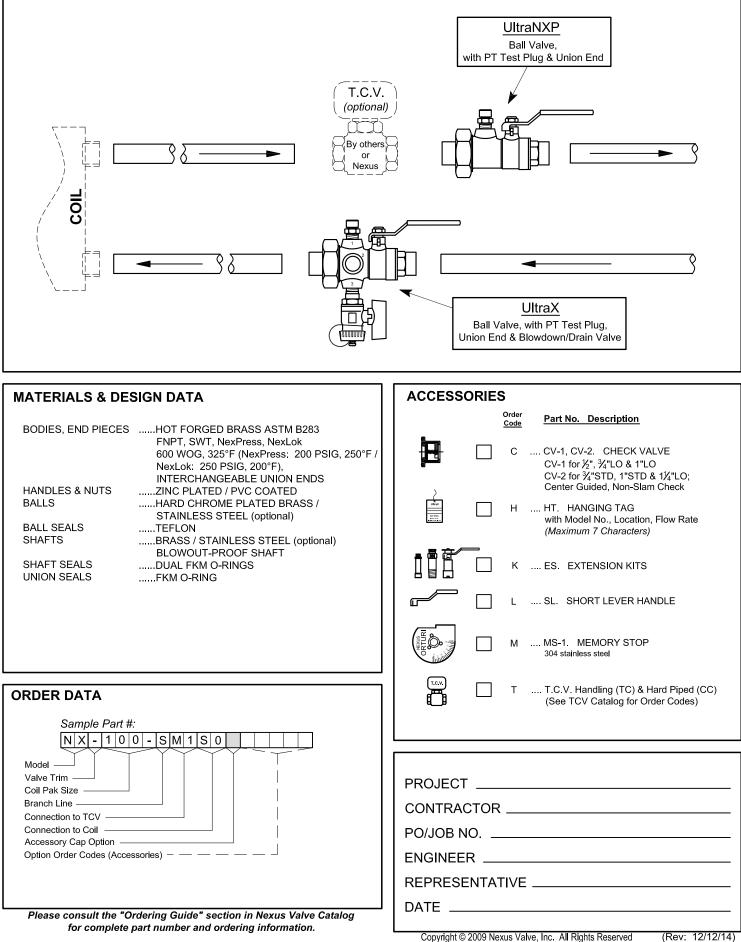
Coil Pak[™] N3X





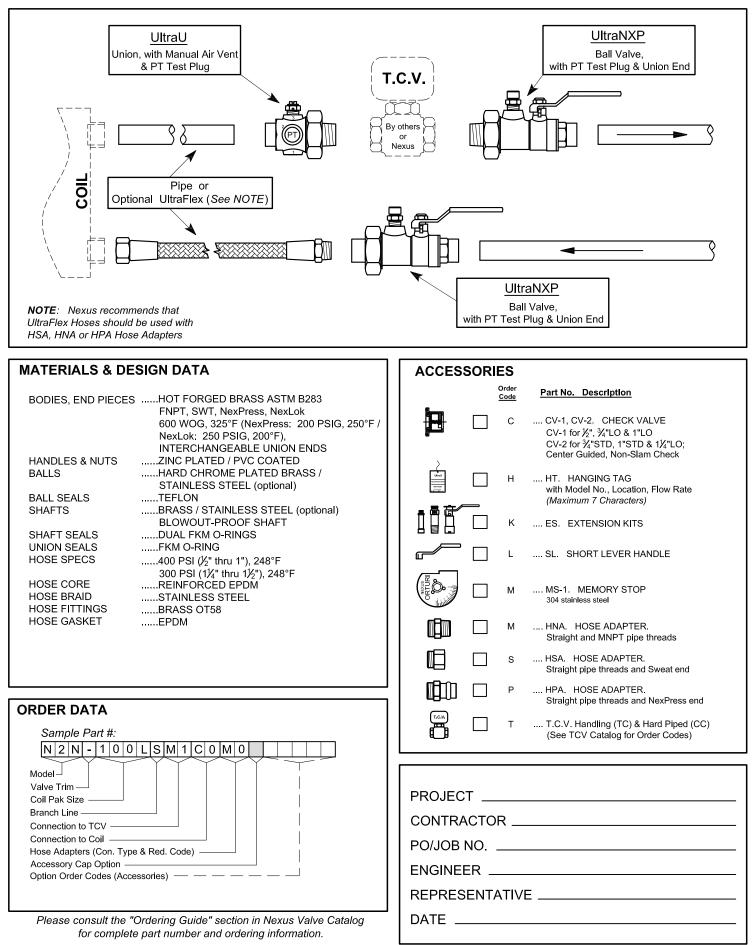
Coil Pak™ NX

$(\frac{1}{2}"$ thru $1\frac{1}{2}")$



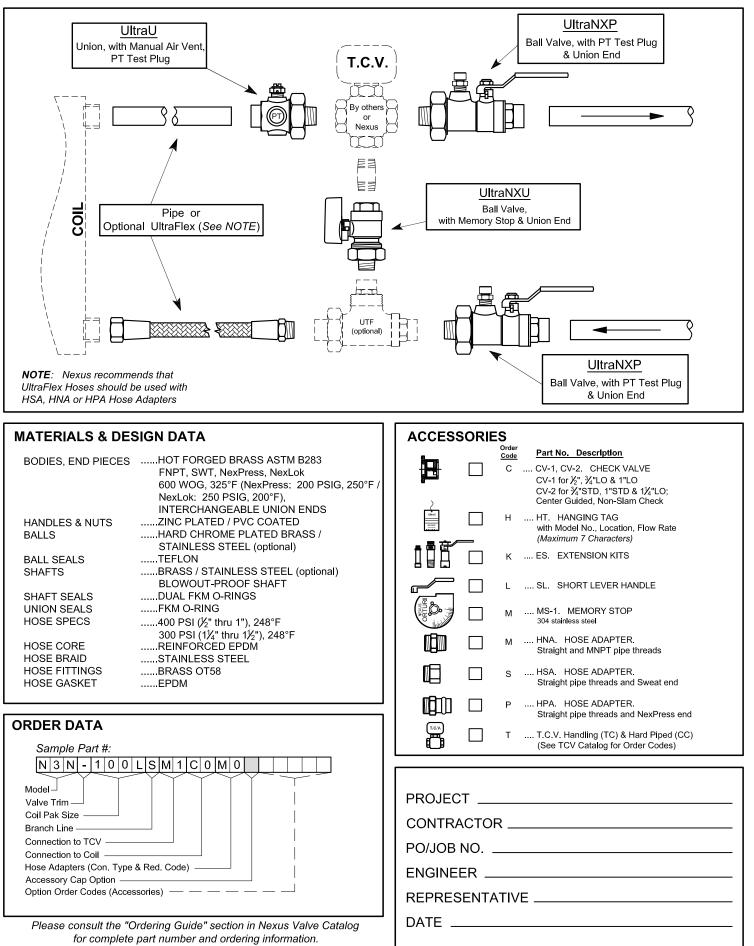


Coil Pak™ N2N





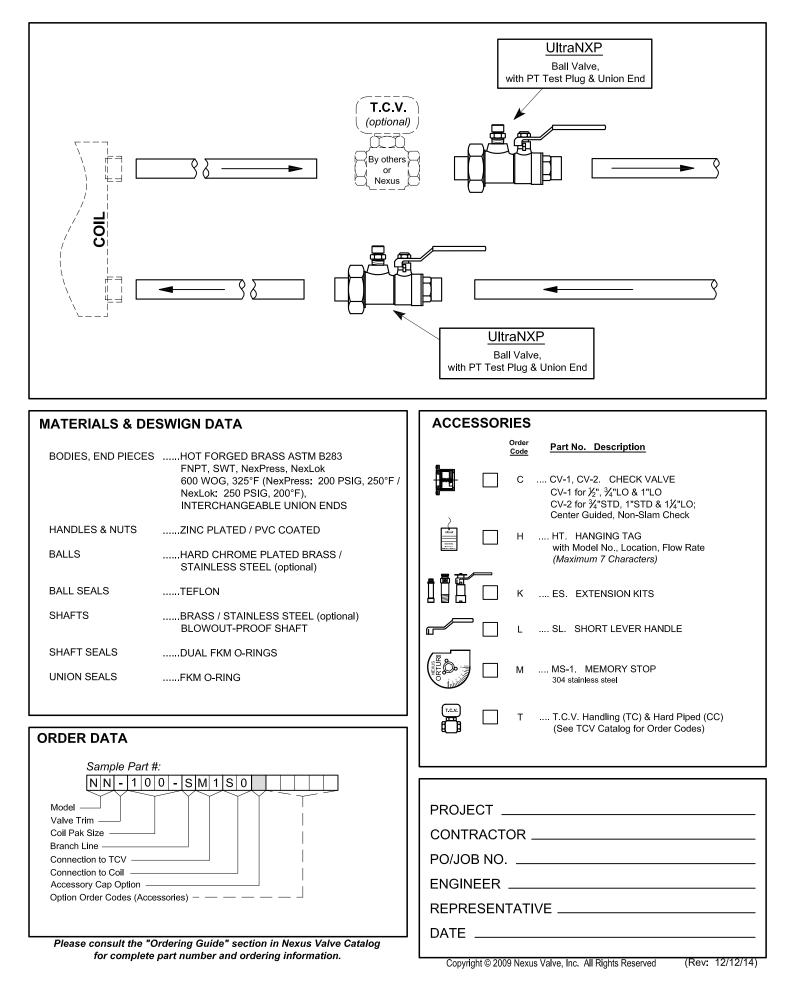
Coil Pak[™] N3N





Coil Pak[™] NN

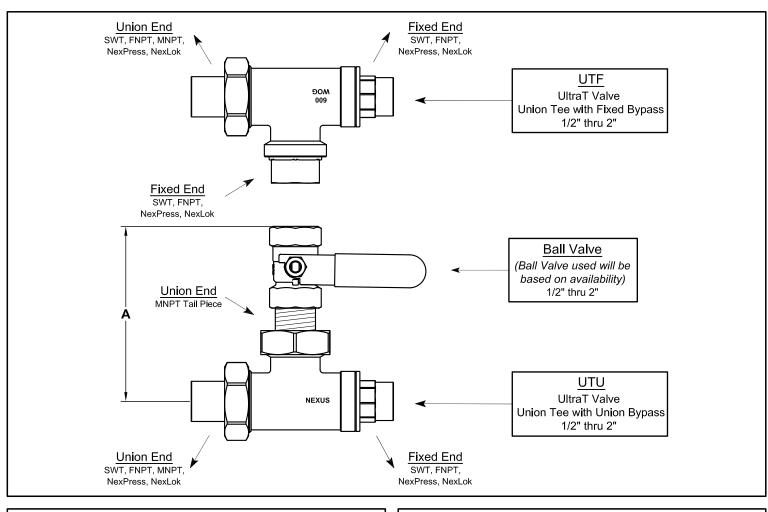
(1/2" thru 11/2")



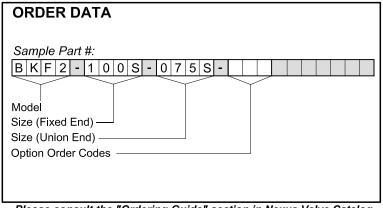


ByPass Kit[™] Model BKF

(¹/₂" thru 2")



DIMENSION "A" [inches] (for reference only)				
SIZE [inches]	with MNPT Tail Pieces			
	UTF-2	UTF-3	UTF-4	
1/2	4.24	4.64	-	
3⁄4	4.37	4.86	-	
1	4.94	5.58	6.92	
11⁄4	6.53	6.43	7.19	
11/2	_	6.96	7.66	
2	-	_	8.00	



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

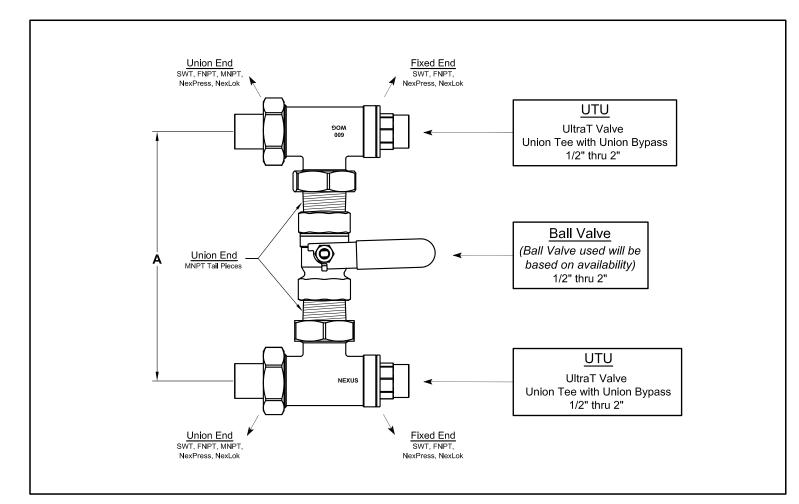
MATERIALS & DESIGN DATA

BODIES	HOT FORGED BRASS ASTM B283,
	600 WOG, 325°F
	INTERCHANGEABLE UNION ENDS
END PIECES	HOT FORGED BRASS ASTM B283,
	NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F) /
	NexLok LD: 200 PSIG, 200°F
HANDLE & NUT	ZINC PLATED / PVC COATED
BALL	HARD CHROME PLATED BRASS
BALL SEALS	TEFLON
SHAFT	BRASS, BLOWOUT-PROOF
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEAL	FKM O-RING

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



ByPass KitTM Model BKU (¹/₂" thru 2")



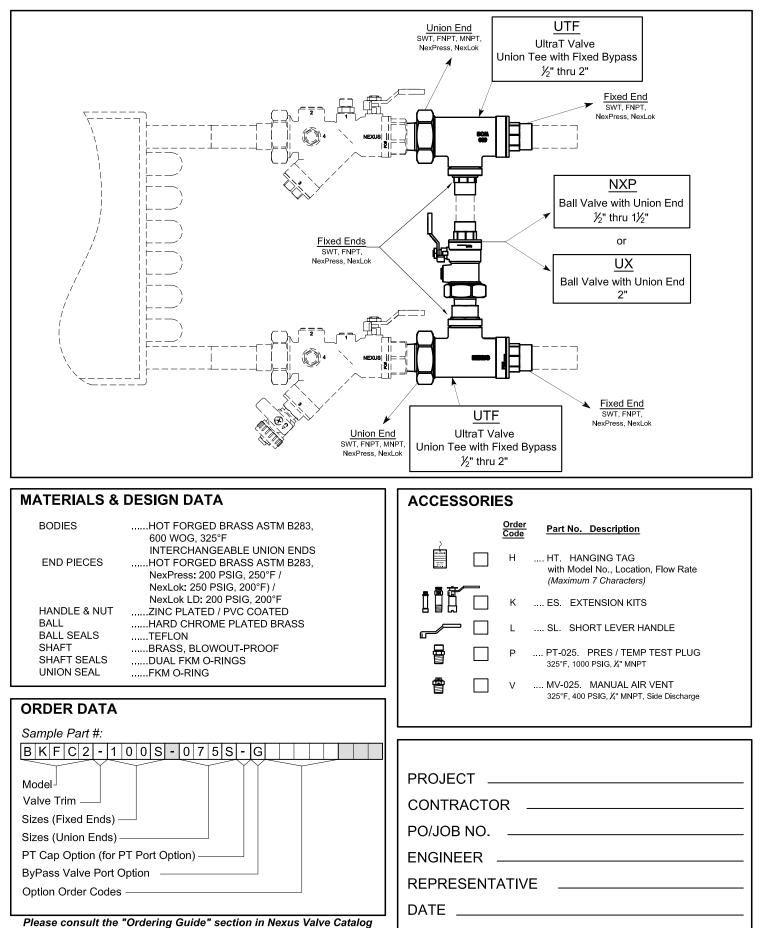
DIMENSION "A" [inches] (for reference only)				MATERIALS & DESIGN DATA	
SIZE		ith MNPT Tail Piec	es	BODIES	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F INTERCHANGEABLE UNION ENDS
[inches]	UTU-2	UTU-3 UTU-4		END PIECES	HOT FORGED BRASS ASTM B283, NexPress: 200 PSIG, 250°F /
1/2	6.6	7.5	-		NexLok: 250 PSIG, 200°F) / NexLok LD: 200 PSIG, 200°F
3∕₄	7.1	7.8	-	HANDLE & NUT BALL	ZINC PLATED / PVC COATED
1	7.6	8.6	10.9	BALL SEALS	TEFLON
11⁄4	9.6	9.9	11.2	SHAFT SHAFT SEALS	BRASS, BLOWOUT-PROOF DUAL FKM O-RINGS
11/2	-	10.5	11.8	UNION SEAL	FKM O-RING
2	-	-	12.1		
ORDER DA	TA				
Sample Part #				PROJECT	
BKU2-100S-075S-					
Vodel				PO/JOB NO.	
Size (Fixed End)				ENGINEER	
Size (Union End)					
Option Order Co	odes —			REPRESENTA	TIVE

for complete part number and ordering information.



ByPass Kit[™] Model BKFC

(1⁄2" thru 2")

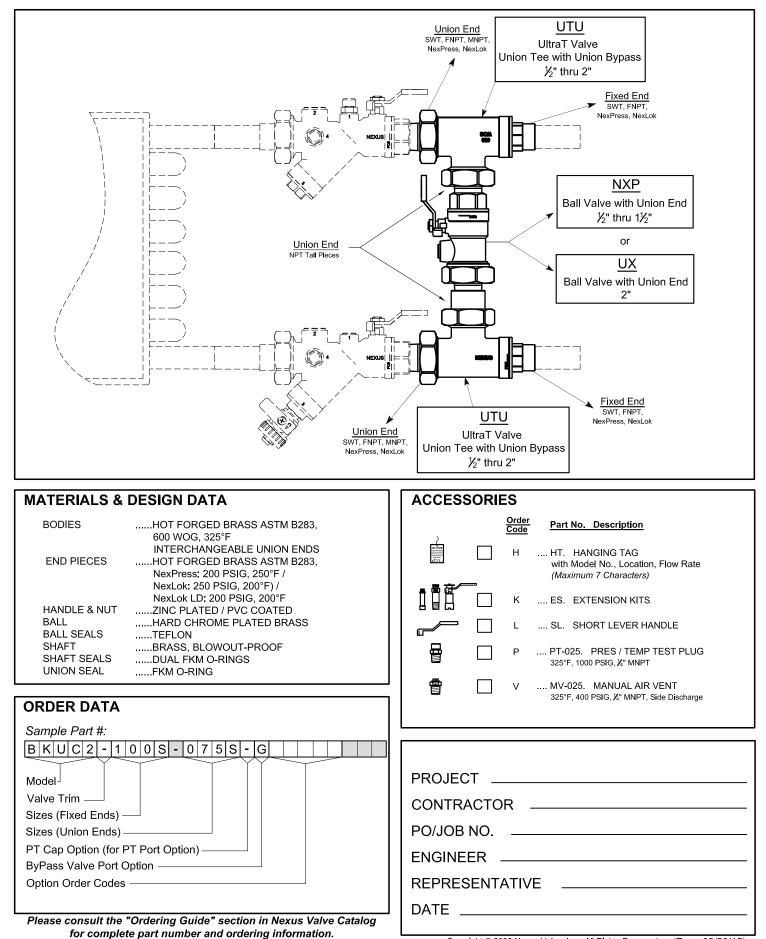


for complete part number and ordering information.



ByPass Kit[™] Model BKUC

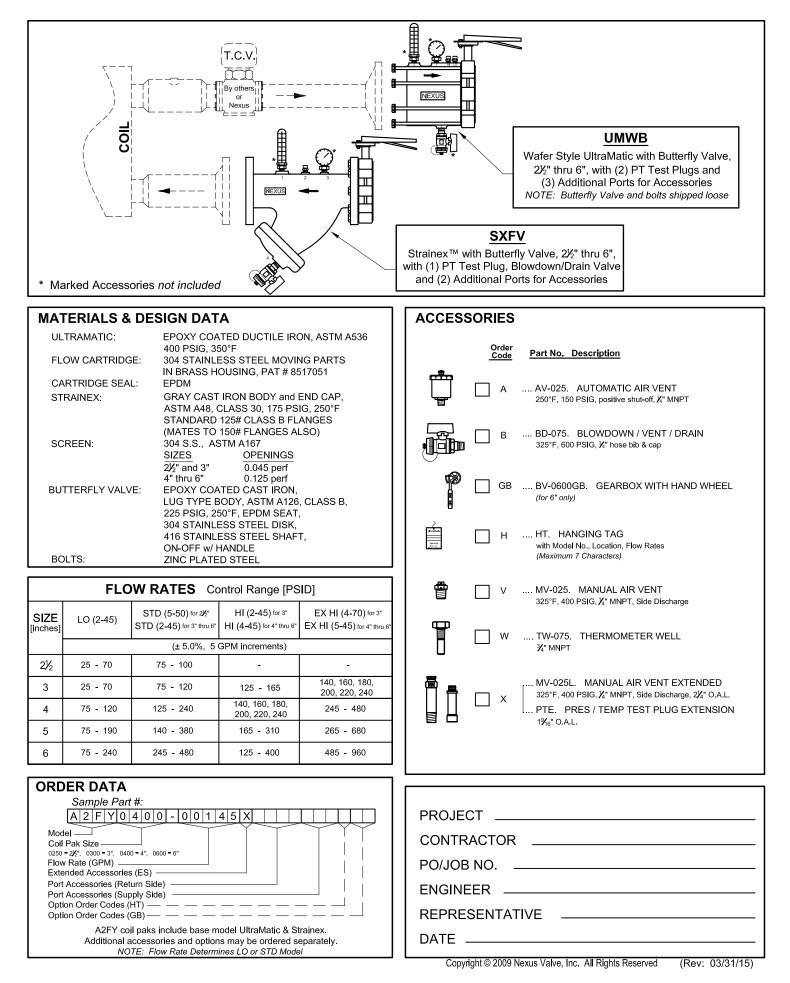
(1/2" thru 2")





Coil Pak[™] A2FY

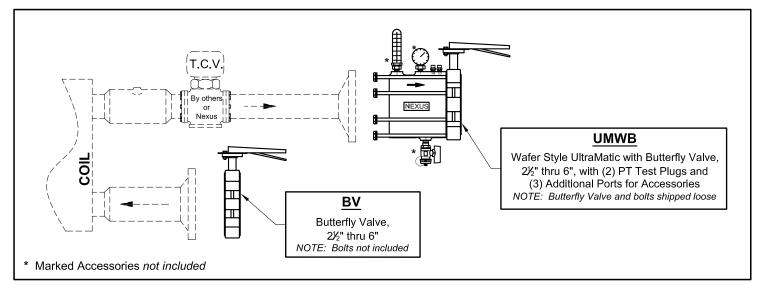
(2½" thru 6")





Coil Pak™ A2FB

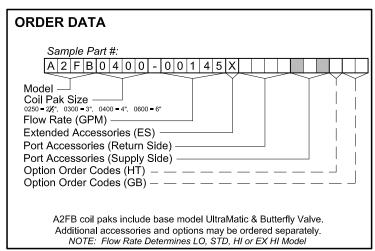
(2¹/₂" thru 6")

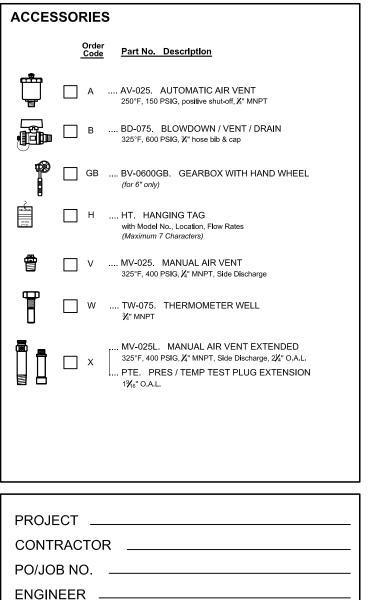


MATERIALS & DESIGN DATA

ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
BUTTERFLY VALVE:	EPOXY COATED CAST IRON,
	LUG TYPE BODY, ASTM A126, CLASS B,
	225 PSIG, 250°F, EPDM SEAT,
	304 STAINLESS STEEL DISK,
	416 STAINLESS STEEL SHAFT,
	ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL

	FLOW RATES Control Range [PSID]			
SIZE [inches]	LO (2-45)	STD (5-50) for 2½" STD (2-45) for 3" thru 6"	HI (2-45) for 3" HI (4-45) for 4" thru 6"	EX HI (4-70) for 3" EX HI (5-45) for 4" thru 6"
	(± 5.0%, 5 GPM increments)			
21/2	25 - 70	75 - 100	-	-
3	25 - 70	75 - 120	125 - 165	140, 160, 180, 200, 220, 240
4	75 - 120	125 - 240	140, 160, 180, 200, 220, 240	245 - 480
5	75 - 190	140 - 380	165 - 310	265 - 680
6	75 - 240	245 - 480	125 - 400	485 - 960





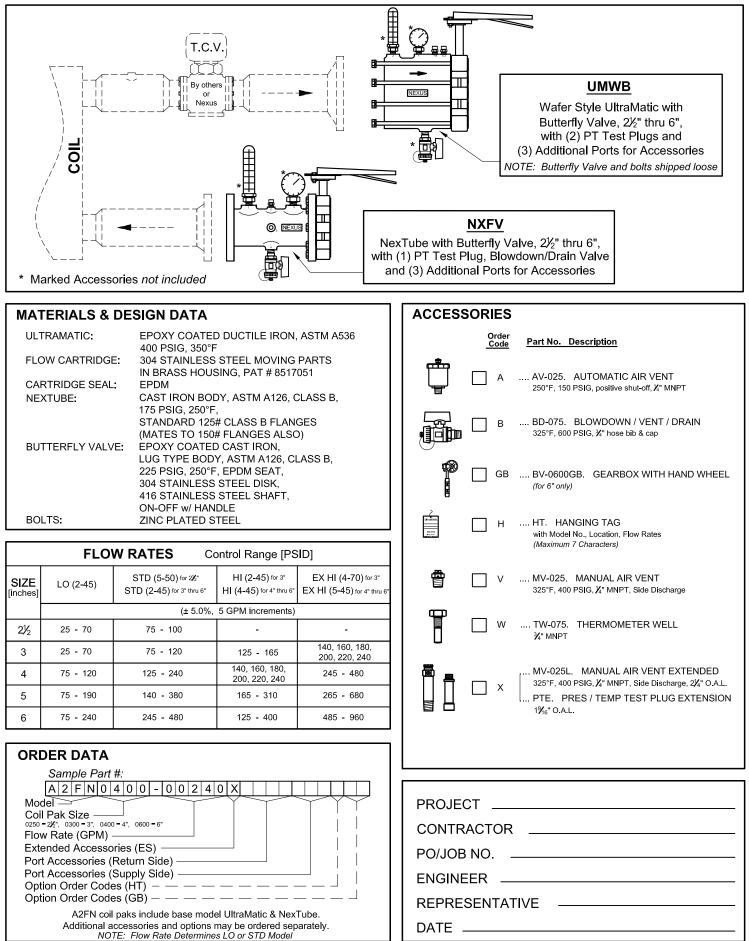
REPRESENTATIVE

DATE .



Coil Pak[™] A2FN

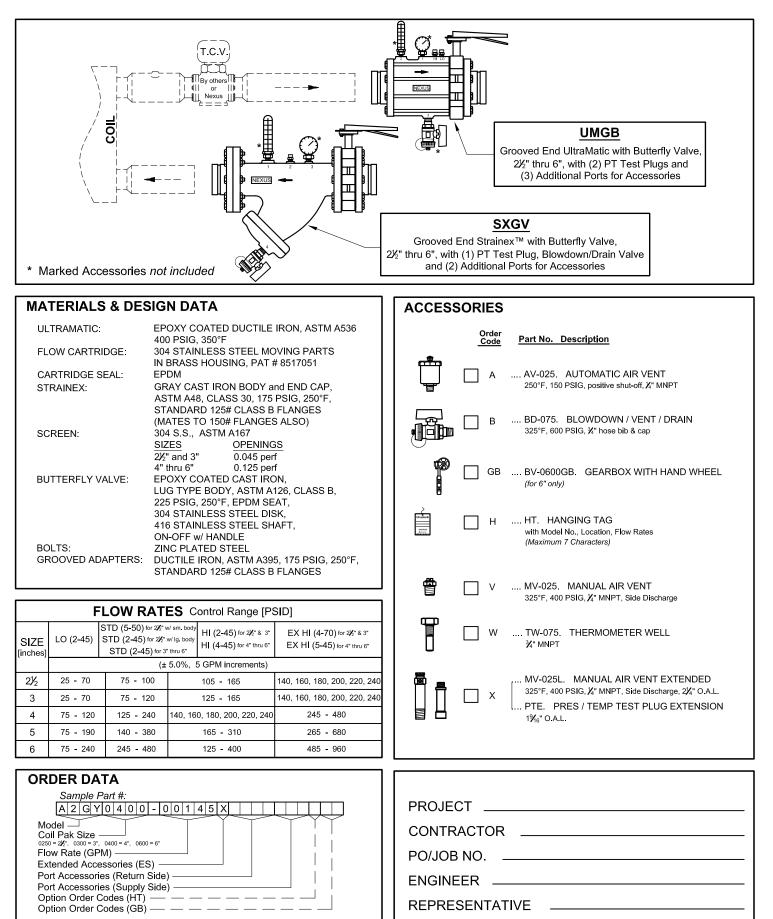
(2½" thru 6")





Coil Pak[™] A2GY

(2½" thru 6")



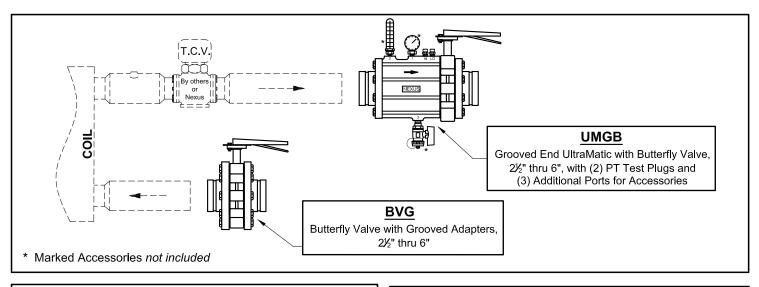
DATE

A2GY coil paks include base model UltraMatic & Strainex. Additional accessories and options may be ordered separately. NOTE: Flow Rate Determines LO or STD Model



Coil Pak[™] A2GB

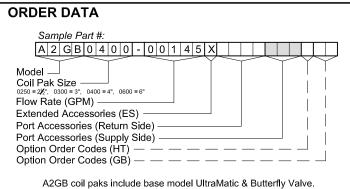
(2½" thru 6")



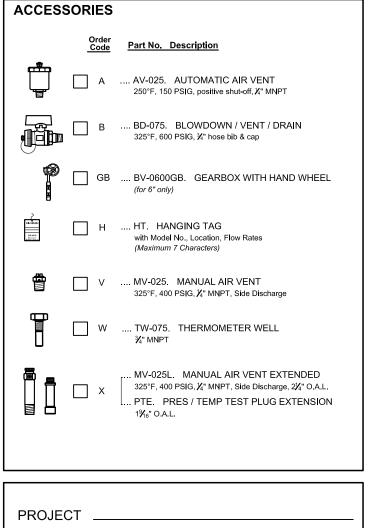
MATERIALS & DESIGN DATA

ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

	FLOW RATES Control Range [PSID]				
SIZE [inches]	LO (2-45)	STD (5-50) for 2½" v STD (2-45) for 2½" STD (2-45) for 3'	w/ lg. body	HI (2-45) for 2½" & 3" HI (4-45) for 4" thru 6"	EX HI (4-70) for 2½" & 3" EX HI (5-45) for 4" thru 6"
	(± 5.0%, 5 GPM increments)				
21/2	25 - 70	75 - 100		105 - 165	140, 160, 180, 200, 220, 240
3	25 - 70	75 - 120		125 - 165	140, 160, 180, 200, 220, 240
4	75 - 120	125 - 240	140, 16	0, 180, 200, 220, 240	245 - 480
5	75 - 190	140 - 380		165 - 310	265 - 680
6	75 - 240	245 - 480		125 - 400	485 - 960



A2GB coil paks include base model UltraMatic & Butterfly Valve. Additional accessories and options may be ordered separately. NOTE: Flow Rate Determines LO, STD, HI or EX HI Model



CONTRACTOR

PO/JOB NO.

ENGINEER __

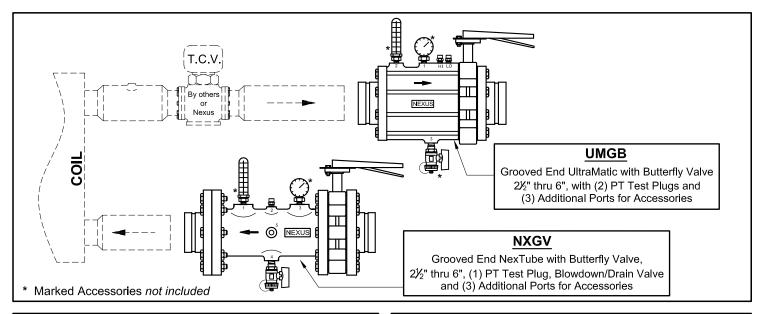
REPRESENTATIVE

DATE



Coil Pak[™] A2GN

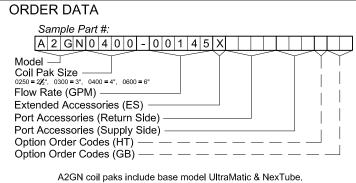
(2¹/₂" thru 6")



MATERIALS & DESIGN DATA

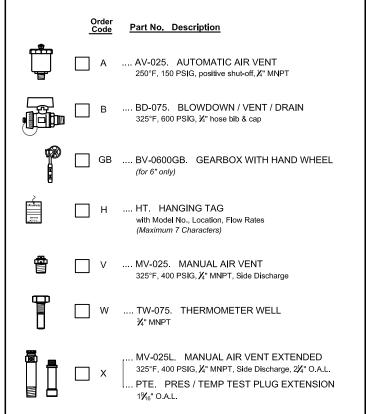
ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F
	STANDARD 125# CLASS B FLANGES
	(MATES TO 150# FLANGES ALSO)
BUTTERFLY VALVE:	EPOXY COATED CAST IRON,
	LUG TYPE BODY, ASTM A126, CLASS B,
	225 PSIG, 250°F, EPDM SEAT,
	304 STAINLESS STEEL DISK,
	416 STAINLESS STEEL SHAFT,
	ON-OFF w/ HANDLE
BOLTS: GROOVED ADAPTERS:	ZINC PLATED STEEL DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

FLOW RATES Control Range [PSID]					
SIZE [inches]	LO (2-45)	STD (5-50) for 2½" w STD (2-45) for 2½" v STD (2-45) for 3"	w/ lg. body	HI (2-45) for 2½" & 3" HI (4-45) for 4" thru 6"	EX HI (4-70) for 2½" & 3" EX HI (5-45) for 4" thru 6"
		(±	5.0%,	5 GPM increments)	
21/2	25 - 70	75 - 100		105 - 165	140, 160, 180, 200, 220, 240
3	25 - 70	75 - 120		125 - 165	140, 160, 180, 200, 220, 240
4	75 - 120	125 - 240	140, 16	0, 180, 200, 220, 240	245 - 480
5	75 - 190	140 - 380		165 - 310	265 - 680
6	75 - 240	245 - 480		125 - 400	485 - 960



A2GN coll paks include base model UltraMatic & NexTube. Additional accessories and options may be ordered separately. NOTE: Flow Rate Determines LO or STD Model

ACCESSORIES

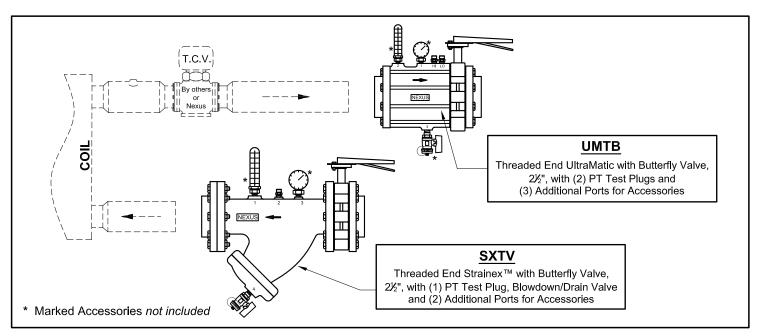


PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	



Coil Pak[™] A2TY

(2½")



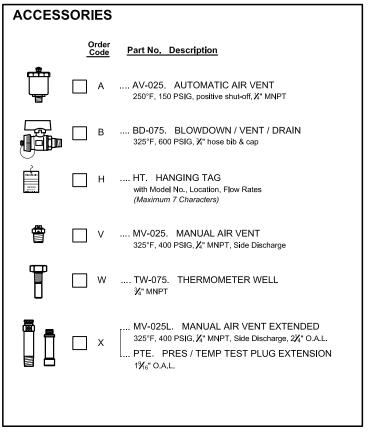
MATERIALS & DESIGN DATA

ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG. 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS
	IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
STRAINEX:	GRAY CAST IRON BODY and END CAP,
	ASTM A48, CLASS 30, 175 PSIG, 250°F,
	STANDARD 125# CLASS B FLANGES
	(MATES TO 150# FLANGES ALSO)
SCREEN:	304 S.S., ASTM A167
	SIZES OPENINGS
	2½" 0.045 perf
BUTTERFLY VALVE:	EPOXY COATED CAST IRON,
	LUG TYPE BODY, ASTM A126, CLASS B,
	225 PSIG, 250°F, EPDM SEAT,
	304 STAINLESS STEEL DISK.
	416 STAINLESS STEEL SHAFT,
	ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F,
	STANDARD 125# CLASS B FLANGES

	FLOW RATES Control Range [PSID]				
SIZE [inches]	LO (2-45)	STD (5-50) for $2\mathbb{Z}^n$ w/ sm. body STD (2-45) for $2\mathbb{Z}^n$ w/ lg. body	HI (2-45)	EX HI (4-70)	
		(± 5.0%,	5 GPM increments)		
21/2	25 - 70	75 - 100	105 - 165	140, 160, 180, 200, 220, 240	

ORDER DATA
Sample Part #:
A 2 T Y 0 2 5 0 - 0 0 1 1 0 X
Model Coll Pak Size
Flow Rate (GPM)
Extended Accessories (ES)
Port Accessories (Return Side) —————
Port Accessories (Supply Side)
Option Order Codes (HT) — — — — — — — — — — —
A OTD/ and a standard and a standard till the Market O. Oter stand

A2TY coil paks include base model UltraMatic & Strainex. Additional accessories and options may be ordered separately. NOTE: Flow Rate Determines LO or STD Model

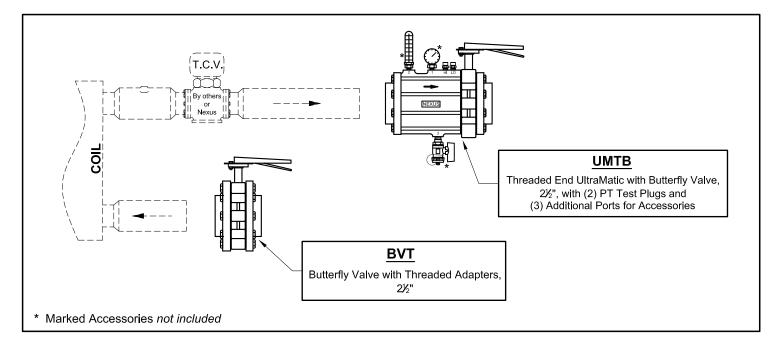


PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak[™] A2TB

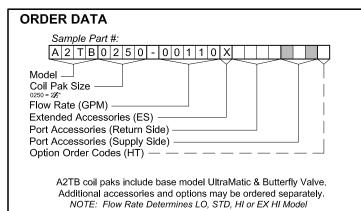
(**2**½")

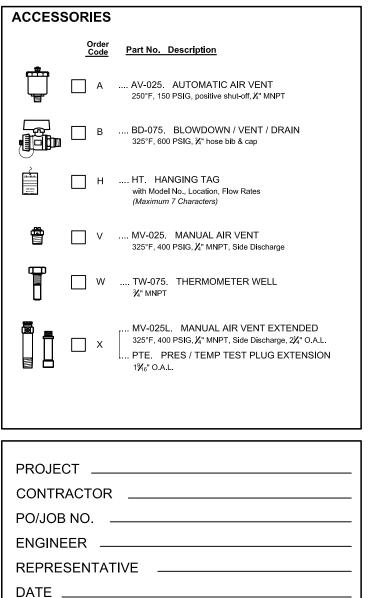


MATERIALS & DESIGN DATA

ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

FLOW RATES Control Range [PSID]						
SIZE [inches]	LO (2-45)	STD (5-50) for 2½" w/ sm. body STD (2-45) for 2½" w/ lg. body	HI (2-45)	EX HI (4-70)		
	(± 5.0%, 5 GPM increments)					
21/2	25 - 70 75 - 100		105 - 165	140, 160, 180, 200, 220, 240		

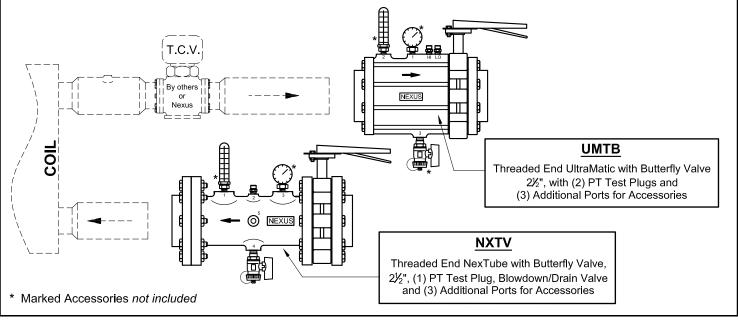






Coil Pak[™] A2TN

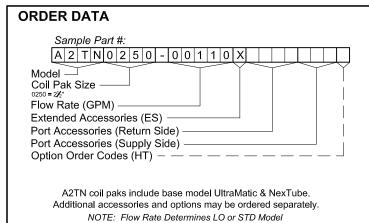
(**2**½")

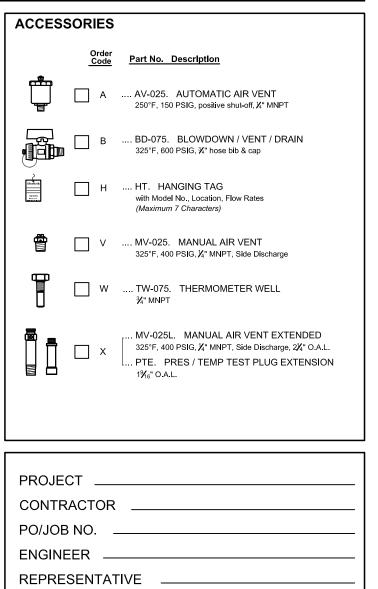


MATERIALS & DESIGN DATA

ULTRAMATIC:	EPOXY COATED DUCTILE IRON, ASTM A536 400 PSIG, 350°F
FLOW CARTRIDGE:	304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051
CARTRIDGE SEAL:	EPDM
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F
	STANDARD 125# CLASS B FLANGES
	(MATES TO 150# FLANGES ALSO)
BUTTERFLY VALVE:	EPOXY COATED CAST IRON,
	LUG TYPE BODY, ASTM A126, CLASS B,
	225 PSIG, 250°F, EPDM SEAT,
	304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT,
	ON-OFF W/ HANDLE
BOLTS:	ZINC PLATED STEEL
	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

FLOW RATES Control Range [PSID]					
2½" w/ sm. body 2½" w/ lg. body HI (2-45)	EX HI (4-70)				
(± 5.0%, 5 GPM increments)					
100 105 - 165	140, 160, 180, 200, 220, 240				
	2½* w/ sm. body r 2½* w/ g. body (± 5.0%, 5 GPM increments)				



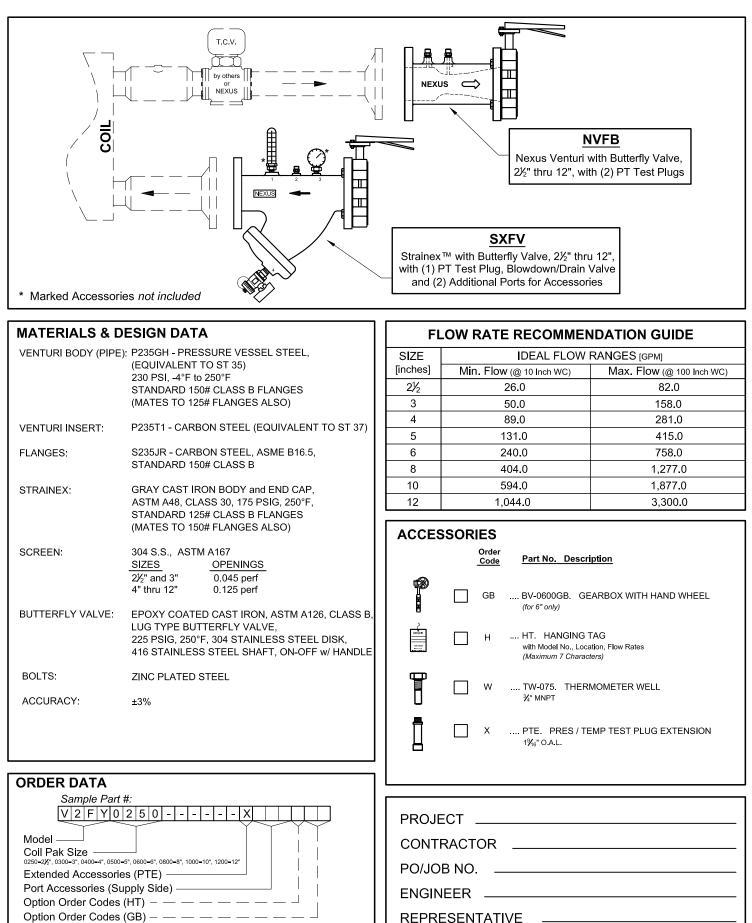


DATE



Coil Pak[™] V2FY

(2¹/₂" thru 12")



DATE .

V2FY coil paks include base model UltraNV & Strainex. Additional accessories and options may be ordered separately.



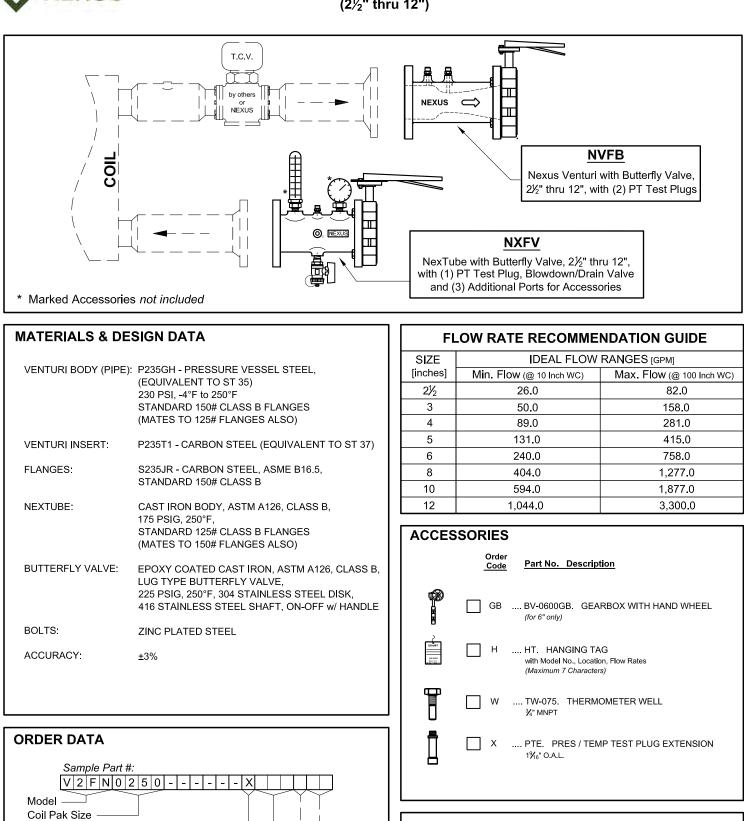
0250=21/2", 0300=3", 0400=4", 0500=5", 0600=6", 0800=8", 1000=10", 1200=12"

V2FN coil paks include base model UltraNV & NexTube. Additional accessories and options may be ordered separately.

Extended Accessories (PTE) Port Accessories (Supply Side) Option Order Codes (HT) Option Order Codes (GB) -

Coil Pak™ V2FN

 $(2\frac{1}{2}"$ thru 12")

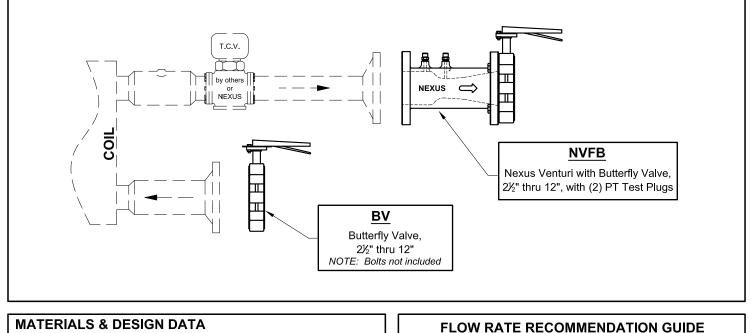


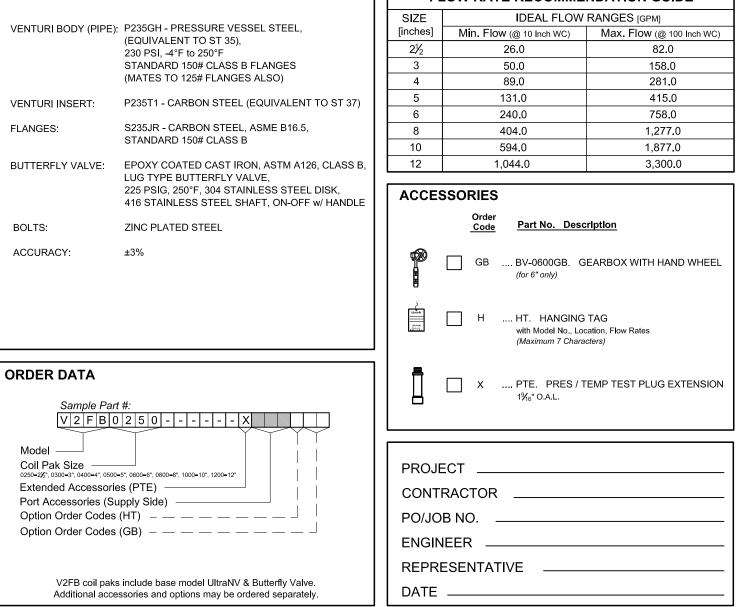
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak™ V2FB

(2¹/₂" thru 12")

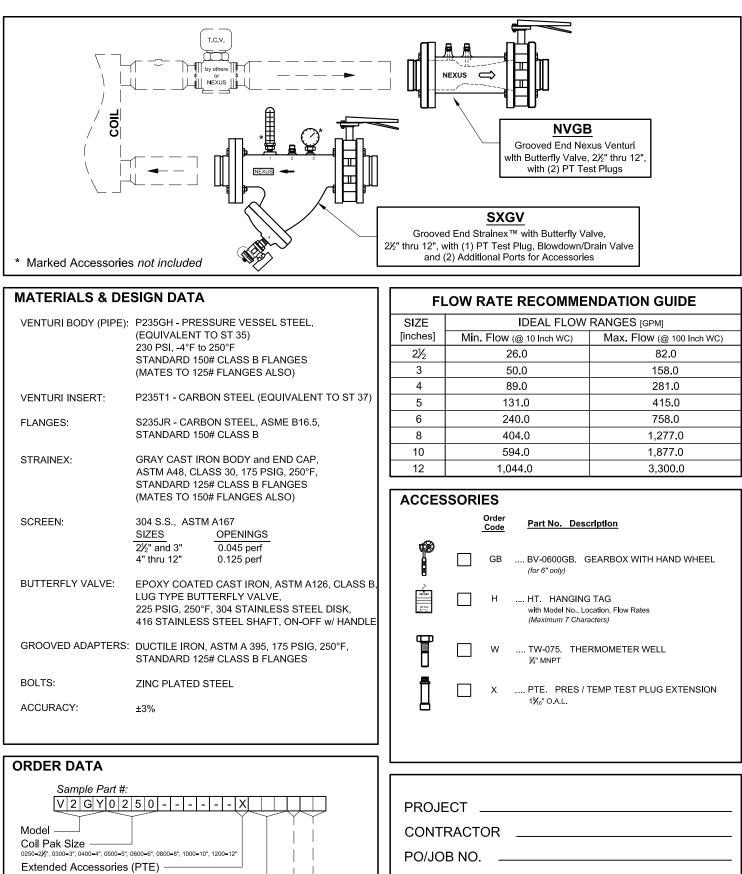






Coil Pak™ V2GY

(2¹/₂" thru 12")



ENGINEER ___

DATE

REPRESENTATIVE _

V2GY coil paks include base model UltraNV & Strainex. Additional accessories and options may be ordered separately.

Port Accessories (Supply Side)

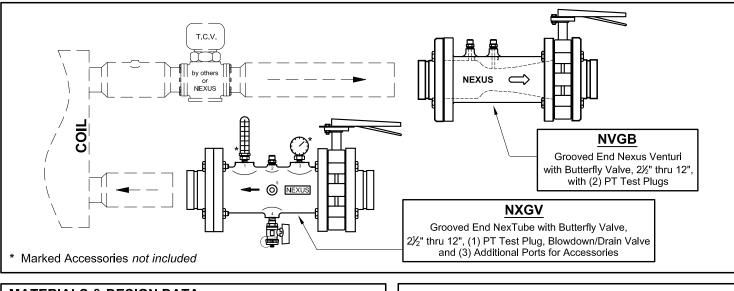
Option Order Codes (HT) ----

Option Order Codes (GB) -



Coil Pak[™] V2GN

(2¹⁄₂" thru 12")



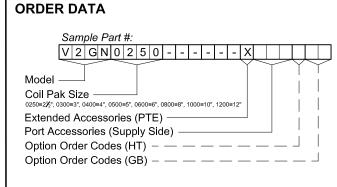
MATERIALS & DESIGN DATA

VENTURI BODY (PIPE):	P235GH - PRESSURE VESSEL STEEL, (EQUIVALENT TO ST 35) 230 PSI, -4°F to 250°F STANDARD 150# CLASS B FLANGES (MATES TO 125# FLANGES ALSO)
VENTURI INSERT:	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)
FLANGES:	S235JR - CARBON STEEL, ASME B16.5, STANDARD 150# CLASS B
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, ASTM A126, CLASS B, LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
BOLTS:	ZINC PLATED STEEL
ACCURACY:	±3%

FLOW RATE RECOMMENDATION GUIDE

IDEAL FLOW RANGES [GPM]				
Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)			
26.0	82.0			
50.0	158.0			
89.0	281.0			
131.0	415.0			
240.0	758.0			
404.0	1,277.0			
594.0	1,877.0			
1,044.0	3,300.0			
	Min. Flow (@ 10 Inch WC) 26.0 50.0 89.0 131.0 240.0 404.0 594.0			

ACCESSORIES			
	Order Code	Part No. Description	
	GB	. BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)	
	н	. HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)	
	W	TW-075. THERMOMETER WELL ¾" мNPT	
	х	PTE. PRES / TEMP TEST PLUG EXTENSION $1\%_{e}^{"}$ O.A.L.	



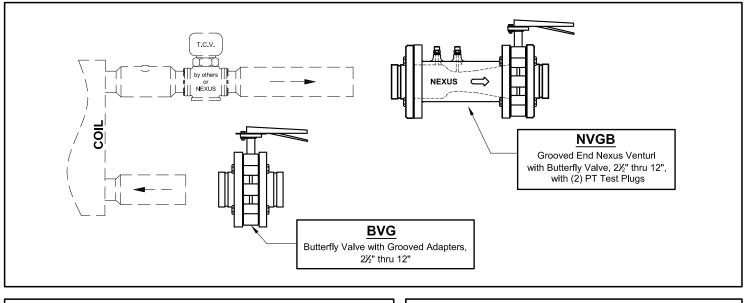
PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	

V2GN coil paks include base model UltraNV & NexTube. Additional accessories and options may be ordered separately.



Coil Pak[™] V2GB

(2¹⁄₂" thru 12")



MATERIALS & DESIGN DATA

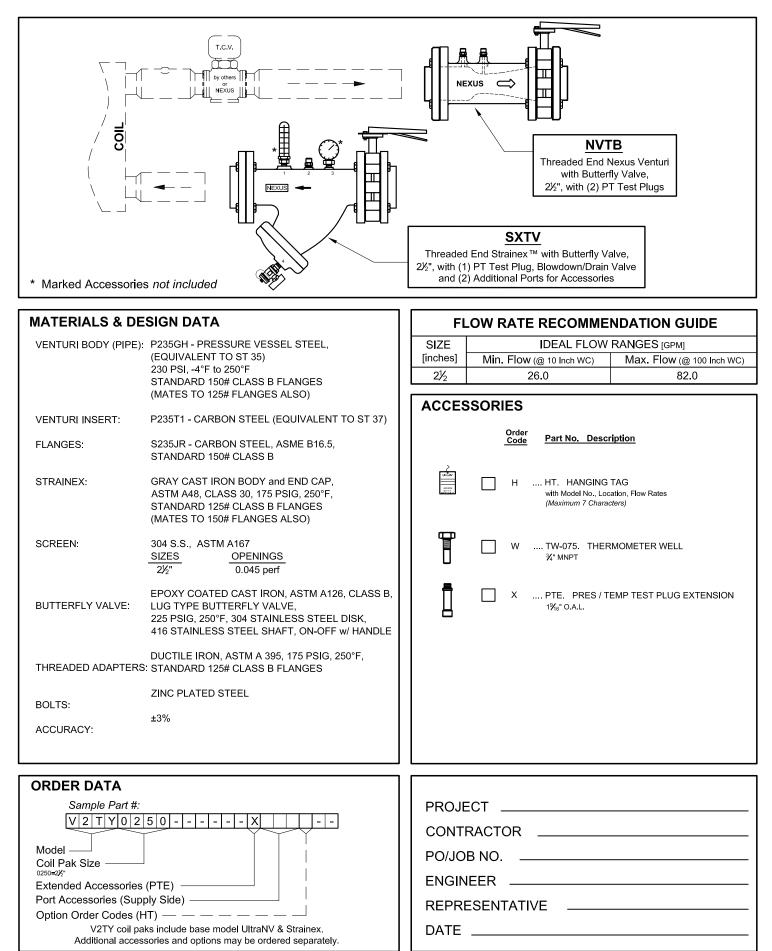
		SIZE	IDEAL FLOW	RANGES [GPM]	
VENTURI BODY (PIPE):	P235GH - PRESSURE VESSEL STEEL, (EQUIVALENT TO ST 35)	[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)	
	230 PSI, -4°F to 250°F	21/2	26.0	82.0	
	STANDARD 150# CLASS B FLANGES	3	50.0	158.0	
	(MATES TO 125# FLANGES ALSO)	4	89.0	281.0	
VENTURI INSERT:	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)	5	131.0	415.0	
		6	240.0	758.0	
FLANGES:	S235JR - CARBON STEEL, ASME B16.5,	8	404.0	1,277.0	
	STANDARD 150# CLASS B	10	594.0	1,877.0	
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, ASTM A126, CLASS B,	12	1,044.0	3,300.0	
	LUG TYPE BUTTERFLY VALVE, 225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE	ACCES	SORIES		
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES		Order <u>Code</u> Part No. Desc	<u>eription</u>	
BOLTS:	ZINC PLATED STEEL	GB BV-0600GB. GEARBOX WITH HAND WHEEL			
ACCURACY: ±3%					
			H HT. HANGING with Model No., Lo (Maximum 7 Chara	cation, Flow Rates	
ORDER DATA Sample Part #.			X PTE. PRES / 1 1%₅" O.A.L.	TEMP TEST PLUG EXTENSION	
V2GB02	2 5 0 X				
Model		PROJE	-CT		
Coil Pak Size					
Extended Accessories	(PTE)	CONT	CONTRACTOR		
Port Accessories (Sup	olv Side)		PO/JOB NO		
Option Order Codes (H					
Option Order Codes (GB) $-$ — — — — — — — — $-$		ENGINEER			
		REPRI	ESENTATIVE		
	clude base model UltraNV & Butterfly Valve. rries and options may be ordered separately.	DATE			

FLOW RATE RECOMMENDATION GUIDE



Coil Pak™ V2TY

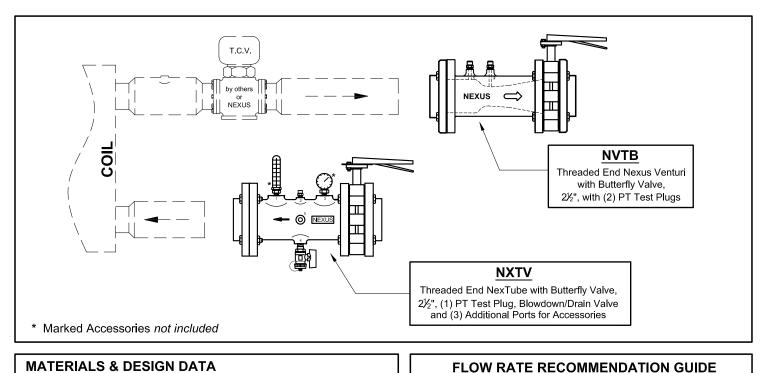
$(2\frac{1}{2}'')$





Coil Pak[™] V2TN

(21/2")



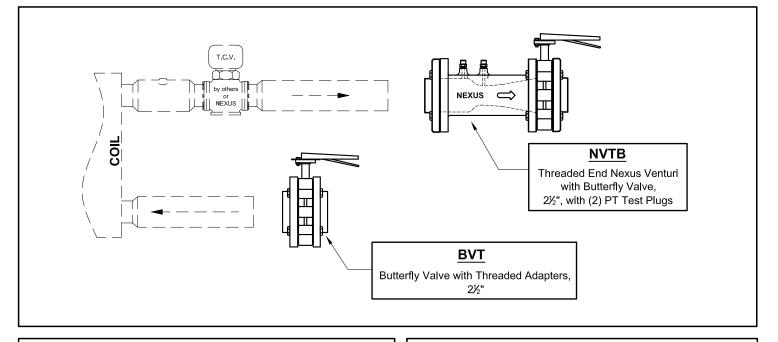
MATERIALS & DESIGN DATA

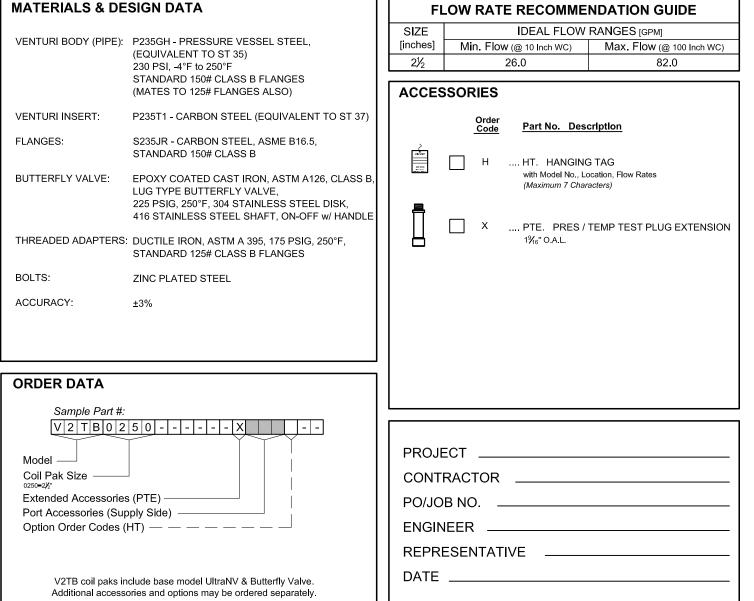
WATERIALS & DI			OW RATE RECOMME	INDATION GUIDE
VENTURI BODY (PIPE)	: P235GH - PRESSURE VESSEL STEEL,	SIZE	IDEAL FLOW	RANGES [GPM]
	(EQUIVALENT TO ST 35)	[inches]	Min. Flow (@ 10 Inch WC)	Max. Flow (@ 100 Inch WC)
	230 PSI, -4°F to 250°F STANDARD 150# CLASS B FLANGES	21/2	26.0	82.0
	(MATES TO 125# FLANGES ALSO)			
VENTURI INSERT:	P235T1 - CARBON STEEL (EQUIVALENT TO ST 37)		SORIES	
FLANGES:	S235JR - CARBON STEEL, ASME B16.5, STANDARD 150# CLASS B	, ,	Order <u>Code</u> Part No. Desc	ription_
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F,	Utradiv enno	H HT. HANGING with Model No., Lo (Maximum 7 Chara	cation, Flow Rates
	STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)			
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, ASTM A126, CLASS B, LUG TYPE BUTTERFLY VALVE,		W TW-075. THEI ¾" MNPT	RMOMETER WELL
	225 PSIG, 250°F, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE		X PTE. PRES/1	FEMP TEST PLUG EXTENSION
THREADED ADAPTERS	S: DUCTILE IRON, ASTM A 395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES		1% ₆ " O.A.L.	
BOLTS:	ZINC PLATED STEEL			
ACCURACY:	±3%			
ORDER DATA		j <u> </u>		
Sample Part	#:			
V 2 T N 0	2 5 0 X	PROJE	ECT	
	\uparrow \uparrow \uparrow \uparrow \uparrow	CONTI	RACTOR	
Model				
Coil Pak Size ———		P0/J0	B NO	
	s (PTE)	ENGIN	IEER	
	pply Side)		ESENTATIVE	
	aks include base model UltraNV & NexTube. essories and options may be ordered separately.	DATE		



Coil Pak[™] V2TB

(2½")

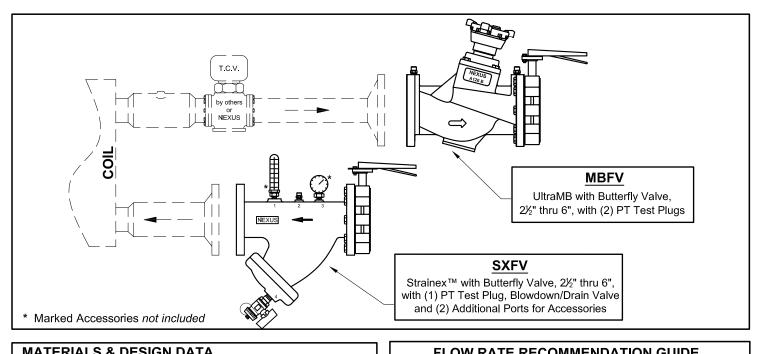






Coil Pak[™] M2FY

(2¹⁄₂" thru 6")



MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
O-RINGS:	EPDM
HANDWHEEL:	POLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")
POSITION INDICATOR:	POLYAMIDE
SEAL:	EPDM
STRAINEX:	GRAY CAST IRON BODY and END CAP, ASTM A48, CLASS 30, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
SCREEN:	304 S.S., ASTM A167 <u>SIZES OPENINGS</u> 2½" and 3" 0.045 perf 4" thru 6" 0.125 perf
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL

ORDER DATA
Sample Part #:
M 2 F Y 0 4 0 0 - 0 0 1 4 5 X
Model —
Coil Pak Size
Flow Rate (GPM)
Extended Accessories (ES)
Port Accessories (Return Side) ———————
Port Accessories (Supply Side)
Option Order Codes (HT) $-$ — — — — — — — — — — \square
Option Order Codes (GB) — — — — — — — — — — — \square

M2FY coil paks include base model UltraMB & Strainex. Additional accessories and options may be ordered separately.

FLOW RATE RECOMMENDATION GUIDE						
SIZE [inches]	IDEAL FLOW RANGES [GPM]		Handwheel Turns			
	Min.	Max.	Max. (functional)			
21/2	4 150		4			
3	4 200		6			
4	8	300	6			
5	5	500	12			
6	20	1000	15			

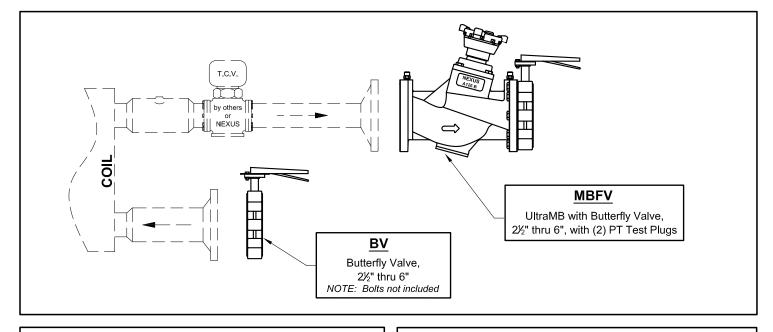
ACCE	ACCESSORIES				
•		Order Code	Part No. Description		
Ţ		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, Z" MNPT		
		GB	BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)		
UP2MMB UP2MMB Instruct		Н	HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)		
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, Z * MNPT, Side Discharge		
		W	TW-075. THERMOMETER WELL ¾" MNPT		
		х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.		

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak[™] M2FB

(2¹/₂" thru 6")



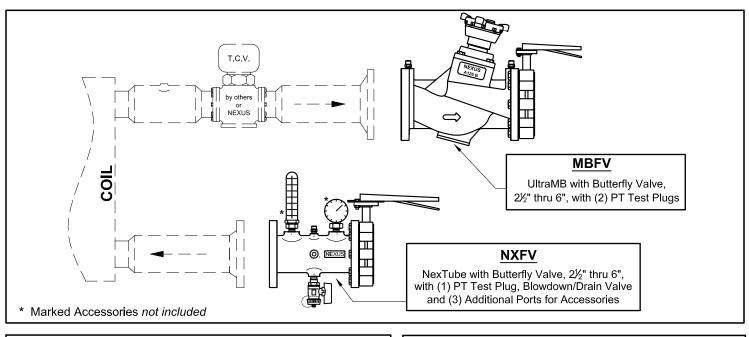
MATERIALS & DESIGN DATA FLOW RATE RECOMMENDATION GUIDE IDEAL FLOW RANGES [GPM] Handwheel Turns SIZE [inches] ULTRA MB: CAST IRON, ASTM A126, CLASS B Min. Max. (functional) Max. 175 PSIG, 250°F, $2\frac{1}{2}$ 4 150 4 STANDARD 125# CLASS B FLANGES 3 4 200 6 4 8 300 6 O-RINGS: EPDM 5 5 500 12 HANDWHEEL: POLYAMIDE (21/2", 3", 4") 6 20 1000 15 STEEL, EPOXY COATED (5", 6") POSITION INDICATOR: ACCESSORIES POLYAMIDE Order SEAL: EPDM Part No. Description Code BUTTERFLY VALVE: EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, GB BV-0600GB. GEARBOX WITH HAND WHEEL 225 PSIG, 250°F, EPDM SEAT, (for 6" only) 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE н HT. HANGING TAG with Model No., Location, Flow Rates BOLTS: ZINC PLATED STEEL (Maximum 7 Characters) PTE. PRES / TEMP TEST PLUG EXTENSION Х 1%₁₆" O.A.L. **ORDER DATA** Sample Part #: M 2 F B 0 4 0 0 - 0 0 1 4 5 X Model -Coil Pak Size PROJECT ____ Flow Rate (GPM) Extended Accessories (ES) CONTRACTOR _____ Port Accessories (Return Side) -Port Accessories (Supply Side) -PO/JOB NO. Option Order Codes (HT) -Option Order Codes (GB) -ENGINEER __ REPRESENTATIVE DATE M2FB coil paks include base model UltraMB & Butterfly Valve.

Additional accessories and options may be ordered separately.



Coil Pak[™] M2FN

(2¹/₂" thru 6")



SIZE [inches]

21/2

3

4

5

6

DATE

ACCESSORIES

MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES			
O-RINGS:	EPDM			
HANDWHEEL:	POLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")			
POSITION INDICATOR:	POLYAMIDE			
SEAL:	EPDM			
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)			
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE			
BOLTS:	ZINC PLATED STEEL			
ORDER DATA				

.... AV-025. AUTOMATIC AIR VENT А 250°F, 150 PSIG, positive shut-off, ¼" MNPT GB BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only) HT. HANGING TAG Н with Model No., Location, Flow Rates (Maximum 7 Characters) T TW-075. THERMOMETER WELL W ¾" MNPT MV-025L MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, $\chi_{\!\!\!4}^{\!\!\!\prime}$ MNPT, Side Discharge, 2 $\chi_{\!\!\!4}^{\!\!\prime}$ O.A.L. ПΧ ... PTE. PRES / TEMP TEST PLUG EXTENSION 1%₆" O.A.L. PROJECT _____ CONTRACTOR _ PO/JOB NO. ENGINEER _ REPRESENTATIVE

FLOW RATE RECOMMENDATION GUIDE IDEAL FLOW RANGES [GPM]

Part No. Description

Max.

150

200

300

500

1000

Min.

4

4

8

5

20

Order Code

Handwheel Turns

Max. (functional)

4

6

6

12

15

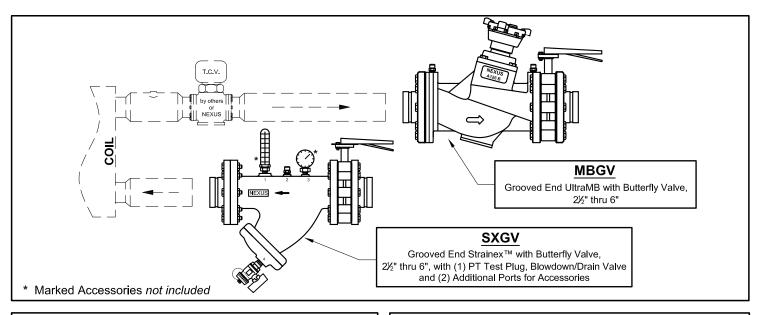
Sample Part #:
M 2 F N 0 4 0 0 - 0 0 2 4 0 X
Model
Coil Pak Size ——
$0250 = 2\frac{1}{2}$ ", $0300 = 3$ ", $0400 = 4$ ", $0600 = 6$ "
Flow Rate (GPM) —
Extended Accessories (ES)
Port Accessories (Return Side)
Port Accessories (Supply Side)
Option Order Codes (HT) — — — — — — — — — — — — —
Option Order Codes (GB) — — — — — — — — — — — — — — —

M2FN coil paks include base model UltraMB & NexTube. Additional accessories and options may be ordered separately.



Coil Pak™ M2GY

(2¹/₂" thru 6")



MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
O-RINGS:	EPDM
HANDWHEEL:	POLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")
POSITION INDICATOR:	POLYAMIDE
SEAL:	EPDM
STRAINEX:	GRAY CAST IRON BODY and END CAP, ASTM A48, CLASS 30, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
SCREEN:	304 S.S., ASTM A167 SIZES OPENINGS 2½" and 3" 0.045 perf 4" thru 6" 0.125 perf
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

ORDER DATA
Sample Part #:
M2GY0400-00145X
Coil Pak Size
Flow Rate (GPM)
Extended Accessories (ES)
Port Accessories (Return Side)
Port Accessories (Supply Side)
Option Order Codes (HT) — — — — — — — — — — — —
Option Order Codes (GB) — — — — — — — — — — — — —

M2GY coil paks include base model UltraMB & Strainex. Additional accessories and options may be ordered separately.

FLOW RATE RECOMMENDATION GUIDE

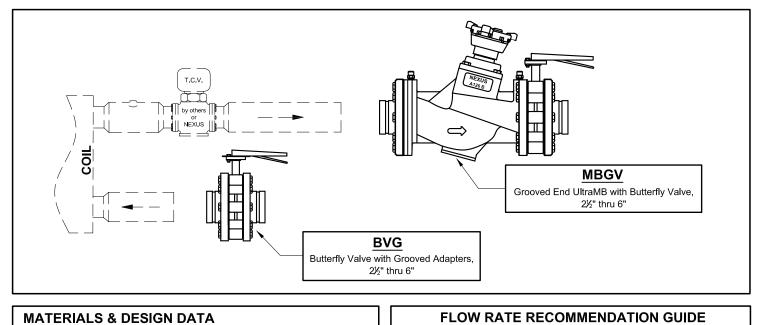
SIZE [inches]	IDEAL FLOW	Handwheel Turns	
	Min.	Max.	Max. (functional)
21/2	4	150	4
3	4	200	6
4	8	300	6
5	5	500	12
6	20	1000	15

ACCESS	ACCESSORIES					
		Order Code	Part No. Description			
Ţ		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, Z" MNPT			
		GB	BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)			
UtysHB un root 		н	HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)			
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, //," MNPT, Side Discharge			
		W	TW-075. THERMOMETER WELL ⅔" MNPT			
		х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ½" MNPT, Side Discharge, 2½" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.			



Coil Pak[™] M2GB

(2½" thru 6")



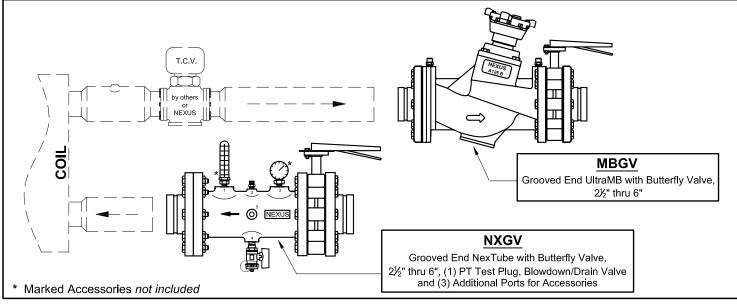
MATERIALS & DESIGN DATA

		SIZE [inches]	IDEAL FLOW	RANGES [GPM]	Handwheel Turns
ULTRA MB:	IB: CAST IRON, ASTM A126, CLASS B, 175 PSIG, 250°F,		Min.	Max.	Max. (functional)
	STANDARD 125# CLASS B FLANGES	21/2	4	150	4
	(MATES TO 150# FLANGES ALSO)	3	4	200	6
O-RINGS:	EPDM	4	8	300	6
		5	5	500	12
HANDWHEEL:	POLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")	6	20	1000	15
POSITION INDICATOR:	POLYAMIDE	ACCESSOR	IES		
SEAL:	EPDM		Order <u>Code</u> Part No	o. Description	
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE		GB BV-0600 (for 6" onl		VITH HAND WHEEL
BOLTS:	ZINC PLATED STEEL		with Mode	NGING TAG el No., Location, Flow R	ates
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES				PLUG EXTENSION
ORDER DATA					
Option Order Codes (HT)		PO/JOB NC ENGINEER REPRESEN	OR		
	de base model UltraMB & Butterfly Valve. s and options may be ordered separately.				red (Rev: 02/23/18)
		Copyligi			(



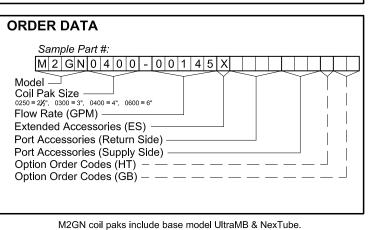
Coil Pak[™] M2GN

(2½" thru 6")



MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
O-RINGS:	EPDM
HANDWHEEL:	POLYAMIDE (2½", 3", 4") STEEL, EPOXY COATED (5", 6")
POSITION INDICATOR:	POLYAMIDE
SEAL:	EPDM
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES



Additional accessories and options may be ordered separately.

FLOW RATE RECOMMENDATION GUIDE					
SIZE [inches]	IDEAL FLOW RANGES [GPM] Handwheel Turn				
	Min.	Max.	Max. (functional)		
21/2	4	150	4		
3	4	200	6		
4	8	300	6		
5	5	500	12		
6	20	1000	15		

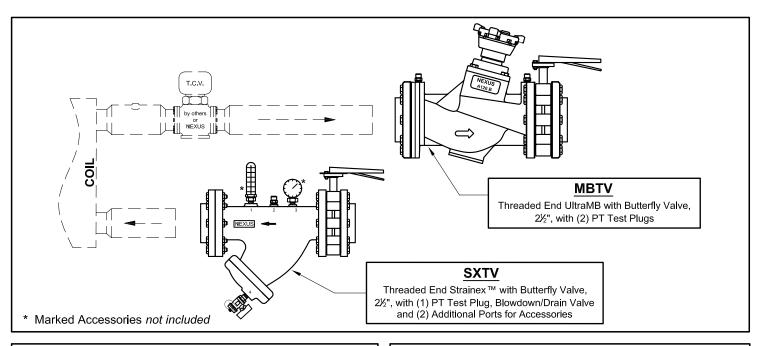
ACCESSORIES				
		Order Code	Part No. Description	
		A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, X" MNPT	
		GB	BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" only)	
		Н	HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)	
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge	
		W	TW-075. THERMOMETER WELL ¾" MNPT	
		х	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1¾6" O.A.L.	

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak[™] M2TY

(2½")



MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES		
O-RINGS:	EPDM		
HANDWHEEL:	POLYAMIDE		
POSITION INDICATOR:	POLYAMIDE		
SEAL:	EPDM		
STRAINEX:	GRAY CAST IRON BODY and END CAP, ASTM A48, CLASS 30, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)		
SCREEN:	304 S.S., ASTM A167 SIZES OPENINGS 2½" 0.045 perf		
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE		
BOLTS:	ZINC PLATED STEEL		
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES		

ORDER DATA
Sample Part #:
M 2 T Y 0 2 5 0 - 0 0 1 1 0 X
Coil Pak Size ——
0250 = 2½"
Flow Rate (GPM)
Extended Accessories (ES)
Port Accessories (Return Side)
Port Accessories (Supply Side)
Option Order Codes (HT) — — — — — — — — — — —
M2TY coil paks include base model UltraMB & Strainex.
Additional accessories and options may be ordered separately.

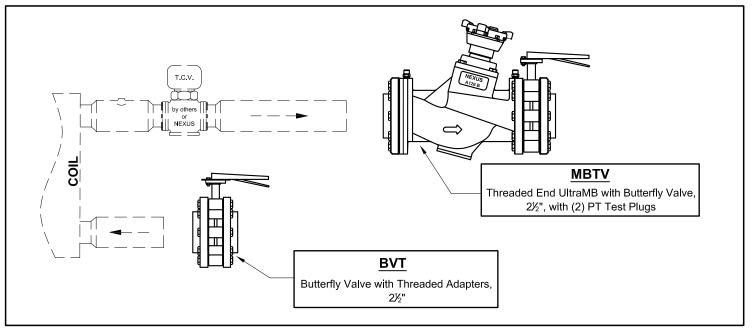
FL	FLOW RATE RECOMMENDATION GUIDE			
SIZE [inches]		IDEAL FLOW RANGES [GPM]		Handwheel Turns
	licitesj	Min.	Max.	Max. (functional)
21/	2	4	150	4
ACCES	SORIES	6		
	Orde Code		Description	
	□ A		UTOMATIC AIR V SIG, positive shut-off, J	
Litrate Litrate Litrate Litrate Litrate	Н	HT. HANG with Model No (Maximum 7 0	, Location, Flow Rate	95
Ē	V		IANUAL AIR VEN SIG, ¼" MNPT, Side D	
	w	TW-075. T ⅔" м№т	HERMOMETER V	VELL
	□ x	325°F, 400 PS	MANUAL AIR VEI SIG, ¼" MNPT, Side D S / TEMP TEST P	

L	
	PROJECT
	CONTRACTOR
	PO/JOB NO
	ENGINEER
	REPRESENTATIVE
	DATE
	1



Coil Pak[™] M2TB

(**2½**")



MATERIALS & DESIGN DATA

Model -

Coil Pak Size -

Flow Rate (GPM) — Extended Accessories (ES)

Port Accessories (Return Side) Port Accessories (Supply Side)

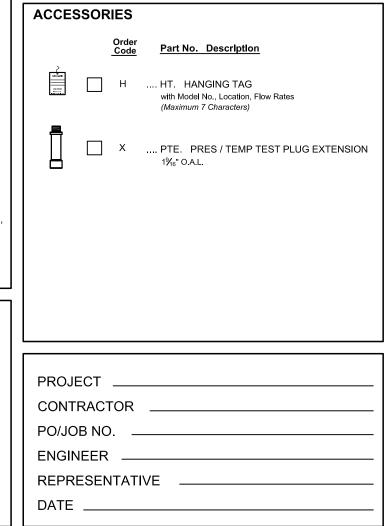
Option Order Codes (HT)

ULTRA MB:	CAST IRON, ASTM A126, CLASS B, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)			
O-RINGS:	EPDM			
HANDWHEEL:	POLYAMIDE			
POSITION INDICATOR:	POLYAMIDE			
SEAL:	EPDM			
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE			
BOLTS:	ZINC PLATED STEEL			
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES			
ORDER DATA				
Sample Part #: M 2 T B 0 2 5 0 - 0 0 1 1 0 X				

M2TB coil paks include base model UltraMB & Butterfly Valve.

Additional accessories and options may be ordered separately.

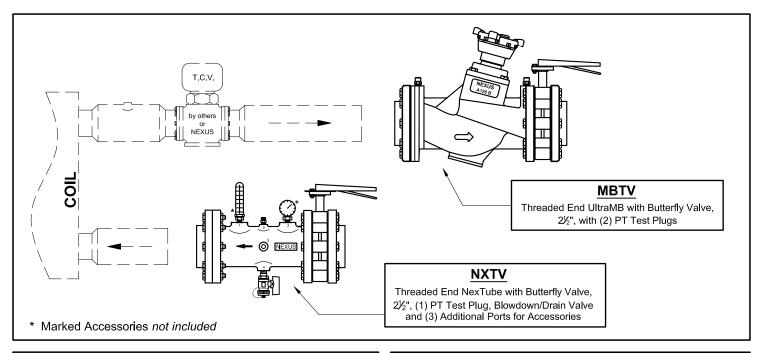
FLOW RATE RECOMMENDATION GUIDE IDEAL FLOW RANGES [GPM] Handwheel Turns Min. Max. Max. (functional) 2½ 4 150 4





Coil Pak[™] M2TN

(2½")



MATERIALS & DESIGN DATA

ULTRA MB:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES
O-RINGS:	EPDM
HANDWHEEL:	POLYAMIDE
POSITION INDICATOR:	POLYAMIDE
SEAL:	EPDM
NEXTUBE:	CAST IRON BODY, ASTM A126, CLASS B, 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES

ORDER DATA Sample Part #: M2 T N 0 2 5 0 - 0 0 1 1 0 X Model Coil Pak Size 0250 - 2½* Flow Rate (GPM) Extended Accessories (ES) Port Accessories (Return Side) Port Accessories (Supply Side) Option Order Codes (HT) M2TN coil paks include base model UltraMB & NexTube.

Additional accessories and options may be ordered separately.

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW	Handwheel Turns	
	Min.	Max.	Max. (functional)
21/2	4	150	4

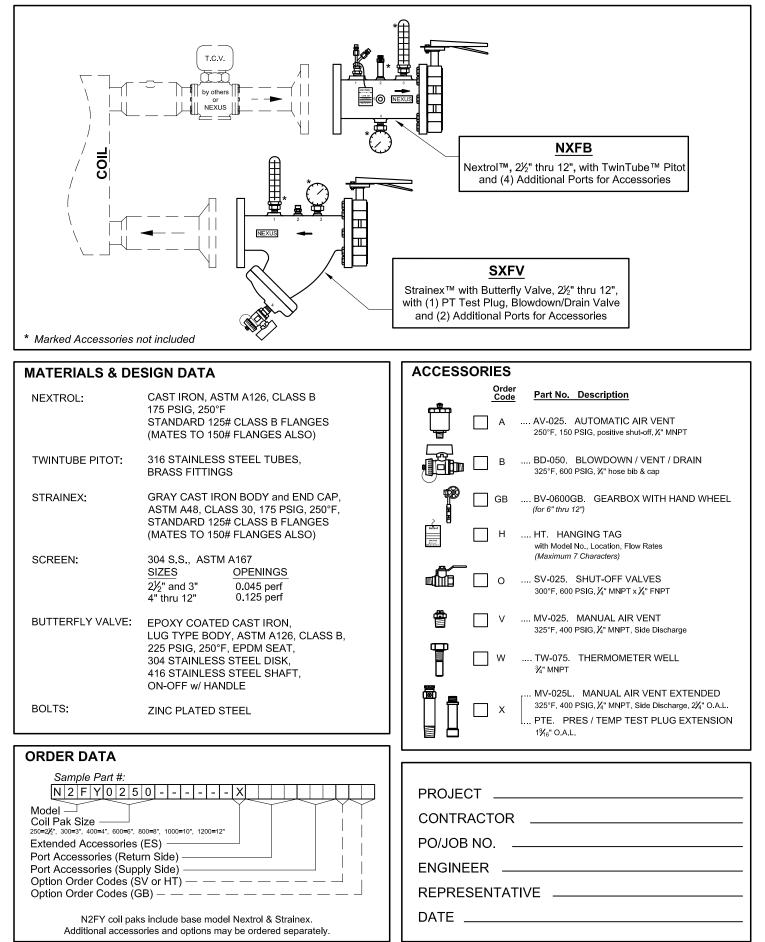
ACCESSORIES			
•	Order Code	Part No. Description	
	☐ A	AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, ½" MNPT	
	Н	HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)	
	V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge	
	w []	TW-075. THERMOMETER WELL ¾" MNPT	
	□ x	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.	

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak[™] N2FY

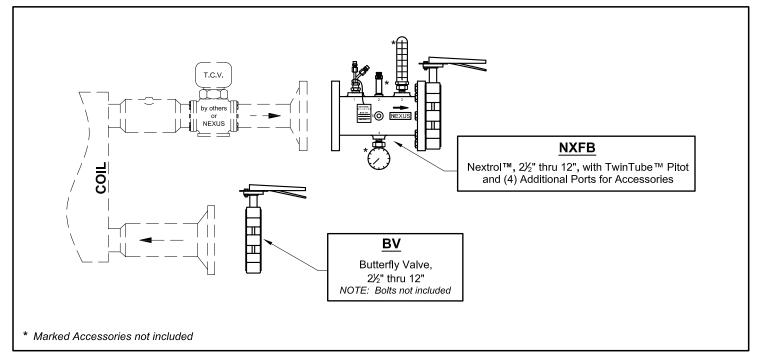
(2¹/₂" thru 12")

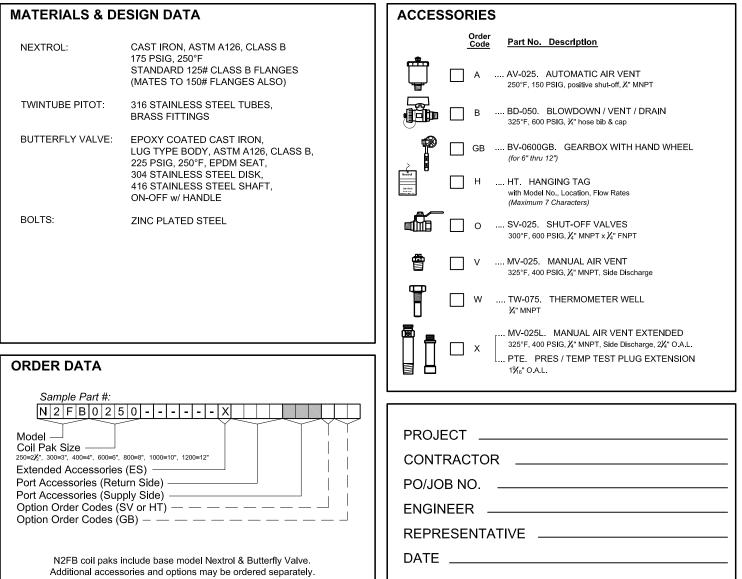




Coil Pak[™] N2FB

(2¹/₂" thru 12")

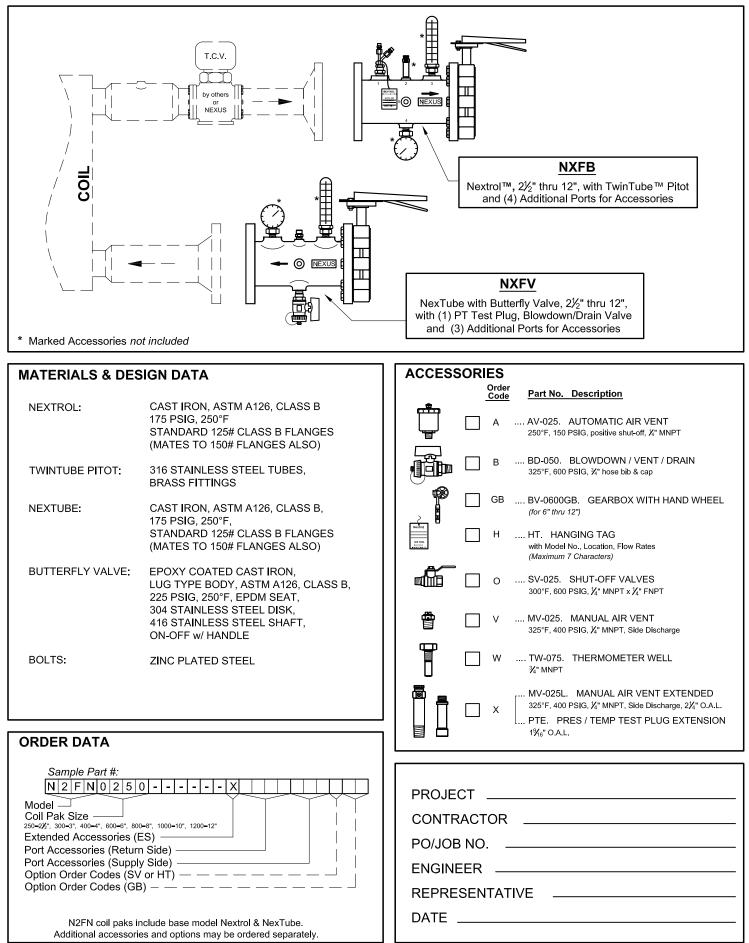






Coil Pak™ N2FN

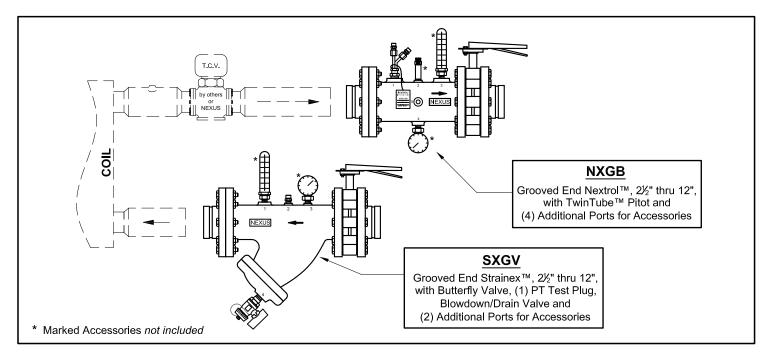
(2¹/₂" thru 12")





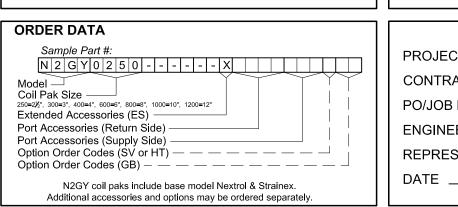
Coil Pak[™] N2GY

(2¹/₂" thru 12")

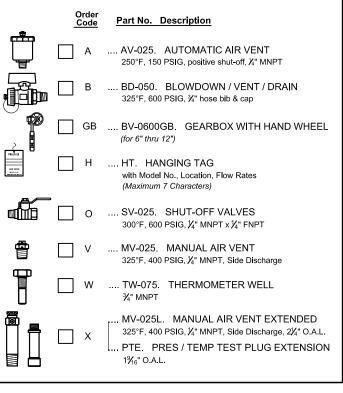


MATERIALS & DESIGN DATA

NEXTROL:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
TWINTUBE PITOT:	316 STAINLESS STEEL TUBES, BRASS FITTINGS
STRAINEX:	GRAY CAST IRON BODY and END CAP, ASTM A48, CLASS 30, 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)
SCREEN:	304 S.S., ASTM A167 SIZES OPENINGS 2½" and 3" 0.045 perf 4" thru 12" 0.125 perf
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE
BOLTS:	ZINC PLATED STEEL
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES



ACCESSORIES

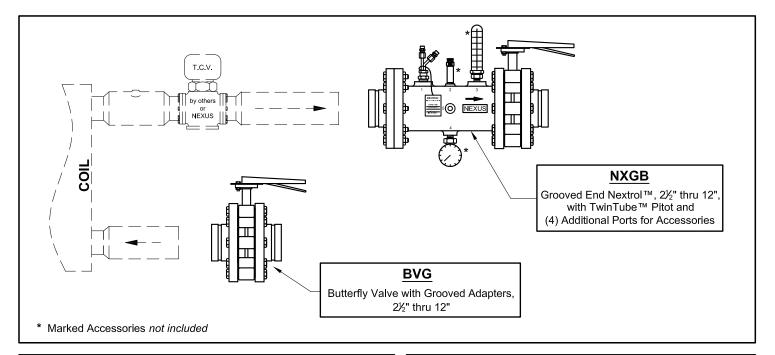


PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Coil Pak[™] N2GB

(2¹/₂" thru 12")



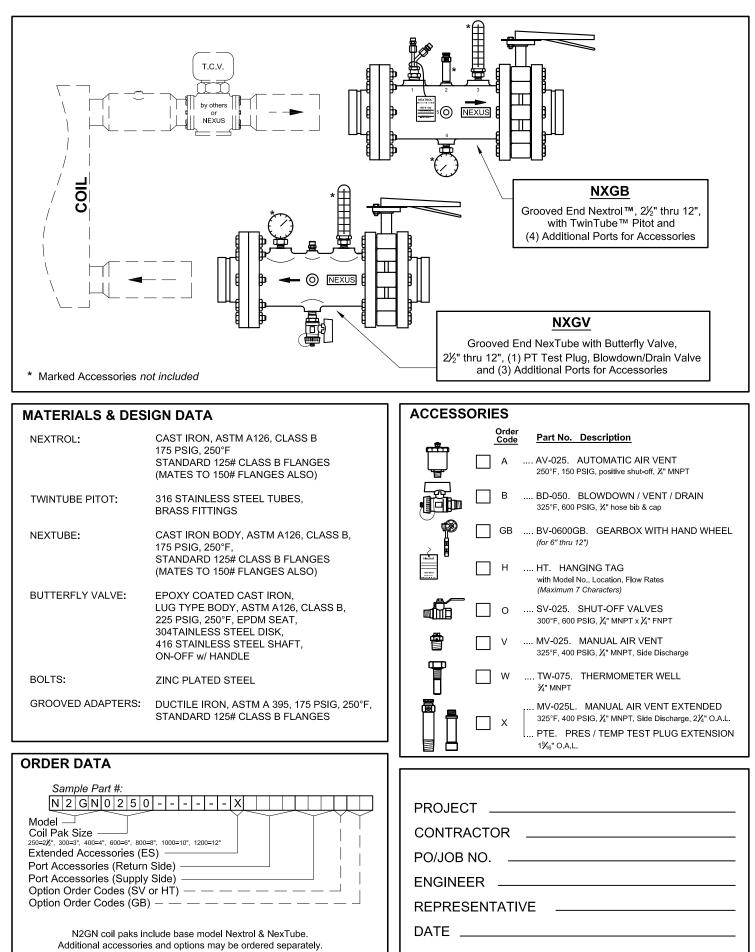
MATERIALS & DESIGN DATA

MATERIALS & DESIGN DATA] [ACCESSORIES
NEXTROL:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)		Order <u>Code</u> Part No. Description A AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, //" MNPT
TWINTUBE PITOT:	316 STAINLESS STEEL TUBES, BRASS FITTINGS		B BD-050. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK 416 STAINLESS STEEL SHAFT,		GB BV-0600GB. GEARBOX WITH HAND WHEEL (for 6" thru 12")
BOLTS:	ON-OFF w/ HANDLE ZINC PLATED STEEL		(Maximum 7 Characters)
GROOVED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES		300°F, 600 PSIG, ¼" MNPT × ¼" FNPT Image: Solution of the state of th
		, 	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
ORDER DATA			
Sample Part #: N 2 G B 0 2 5 0 X Model Coil Pak Size 250=2%; 300=3', 400=4'', 600=6'', 800=8'', 1000=10'', 1200=12'' Extended Accessories (ES) Port Accessories (Return Side) Port Accessories (Supply Side) Option Order Codes (SV or HT) Option Order Codes (GB)			PROJECT CONTRACTOR PO/JOB NO ENGINEER REPRESENTATIVE
N2GB coil paks include base model Nextrol & Butterfly Valve. Additional accessories and options may be ordered separately.			DATE



Coil Pak[™] N2GN

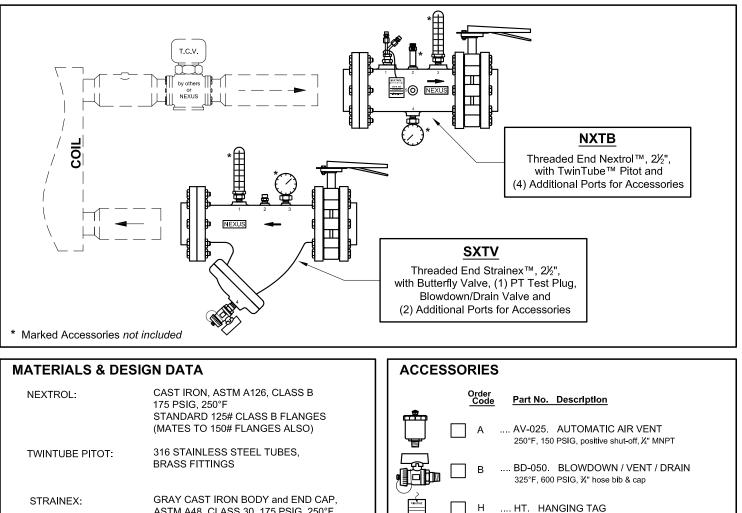
(2¹/₂" thru 12")





Coil Pak[™] N2TY

$(2\frac{1}{2}")$



▥װֿם

ASTM A48, CLASS 30, 175 PSIG, 250°F STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)

304 S.S., ASTM A167 SCREEN: SIZES OPENINGS 0.045 per 21/2" BUTTERFLY VALVE: EPOXY COATED CAST LUG TYPE BODY, ASTN 225 PSIG, 250°F, EPDM **304 STAINLESS STEEL**

ON-OFF w/ HANDLE ZINC PLATED STEEL BOLTS: THREADED ADAPTERS: DUCTILE IRON. ASTM STANDARD 125# CLAS

EPOXY COATED CAST IRON,	ل V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT, ON-OFF w/ HANDLE ZINC PLATED STEEL DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES	W TW-075. THERMOMETER WELL ³ / ₄ " MNPT W MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ½" MNPT, Side Discharge, 2½" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6" O.A.L.
	[
X	PROJECT CONTRACTOR PO/JOB NO

ENGINEER _

REPRESENTATIVE

0

Model — Coil Pak Size 250=21/5" Extended Accessories (ES) Port Accessories (Return Side) Port Accessories (Supply Side) Option Order Codes (SV or HT)

ORDER DATA

Sample Part #:

N 2 T Y 0 2 5 0 - -

N2TY coil paks include base model Nextrol & Strainex. Additional accessories and options may be ordered separately. DATE

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with Model No., Location, Flow Rates

300°F, 600 PSIG, 1/4" MNPT x 1/4" FNPT

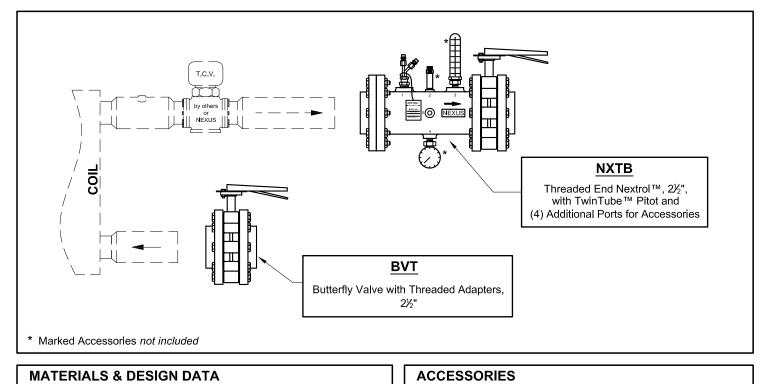
(Maximum 7 Characters)

..... SV-025. SHUT-OFF VALVES



Coil Pak[™] N2TB

(21/2")



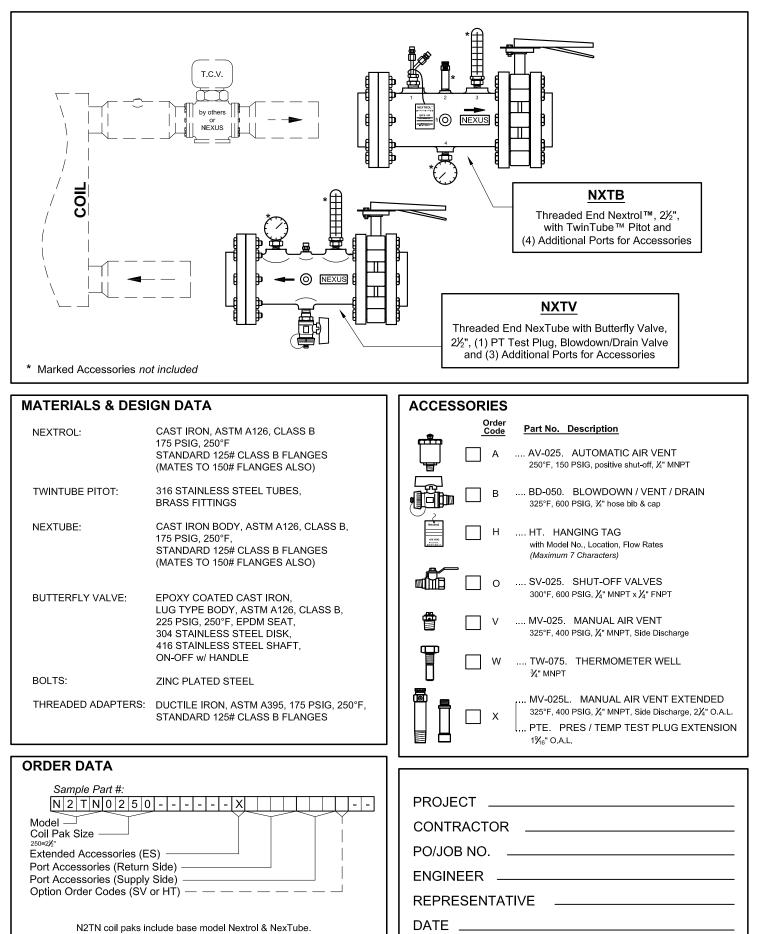
MATERIALS & DESIGN DATA

NEXTROL:	CAST IRON, ASTM A126, CLASS B 175 PSIG, 250°F	Order <u>Code</u> Part No. Description		
	STANDARD 125# CLASS B FLANGES (MATES TO 150# FLANGES ALSO)	A AV-025. AUTOMATIC AIR VENT 250°F, 150 PSIG, positive shut-off, X" MNPT		
TWINTUBE PITOT:	316 STAINLESS STEEL TUBES, BRASS FITTINGS	B BD-050. BLOWDOWN / VENT / DRAIN 325°F, 600 PSIG, ¾" hose bib & cap		
BUTTERFLY VALVE:	EPOXY COATED CAST IRON, LUG TYPE BODY, ASTM A126, CLASS B, 225 PSIG, 250°F, EPDM SEAT, 304 STAINLESS STEEL DISK, 416 STAINLESS STEEL SHAFT,	H HT. HANGING TAG with Model No., Location, Flow Rates (Maximum 7 Characters)		
	ON-OFF w/ HANDLE	O SV-025. SHUT-OFF VALVES 300°F, 600 PSIG, ¼" MNPT × ¼" FNPT		
BOLTS:	ZINC PLATED STEEL			
THREADED ADAPTERS:	DUCTILE IRON, ASTM A395, 175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES	325°F, 400 PSIG, ¼" MNPT, Side Discharge		
		X MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION 1%6° O.A.L.		
ORDER DATA				
Sample Part #:				
N 2 T B 0 2 5 0	X	PROJECT		
Model — Coil Pak Size ———		CONTRACTOR		
Extended Accessories (ES Port Accessories (Return S		PO/JOB NO.		
Port Accessories (Supply S	Side)	ENGINEER		
Option Order Codes (SV o	ur HT) — — — — — — — — — —	REPRESENTATIVE		
	ide base model Nextrol & Butterfly Valve. es and options may be ordered separately.	DATE		



Coil Pak[™] N2TN

(2½")

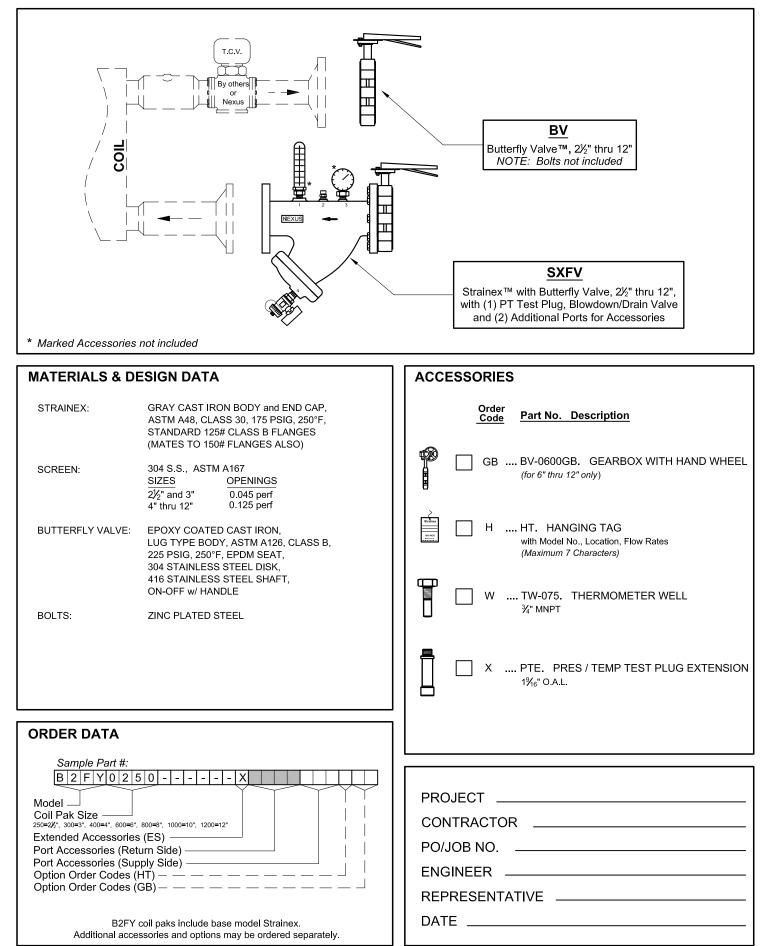


Additional accessories and options may be ordered separately.



Coil Pak™ B2FY

(2¹/₂" thru 12")

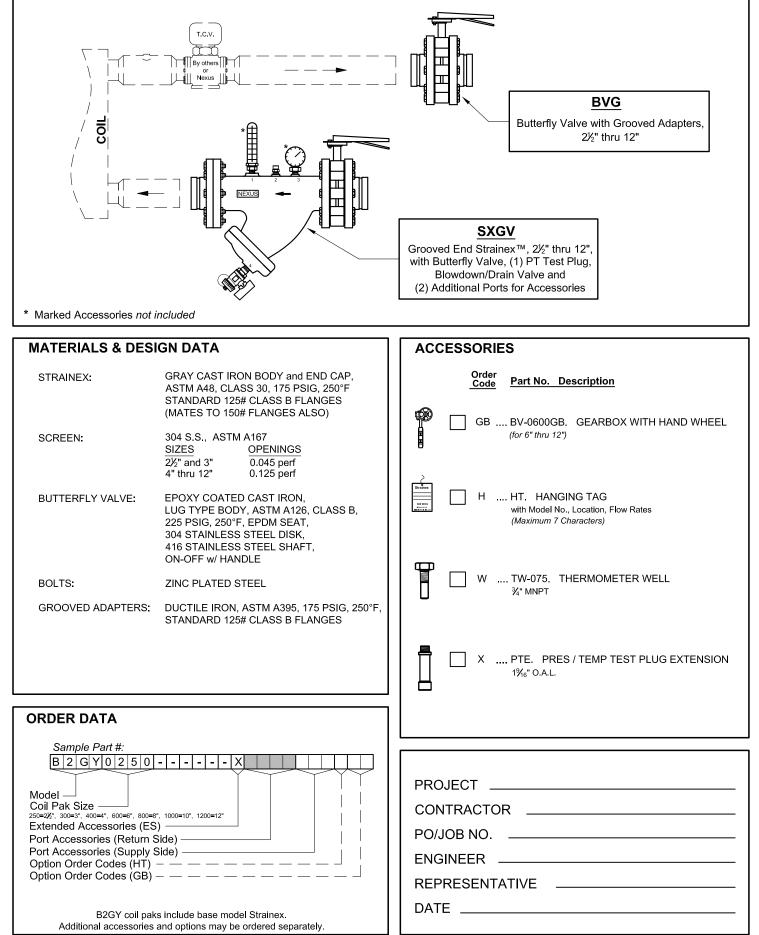


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Coil Pak™ B2GY

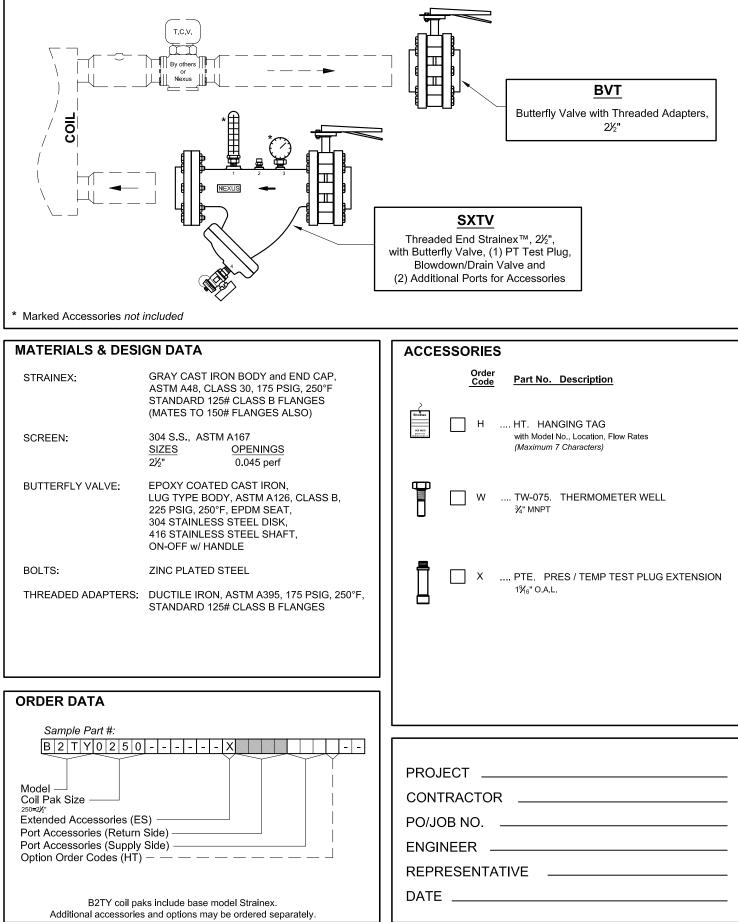
(2¹/₂" thru 12")





Coil Pak[™] B2TY

$(2\frac{1}{2}")$

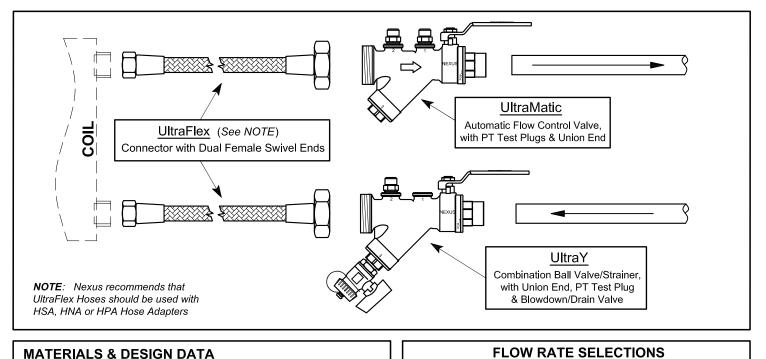






Hose Pak[™] AYH

(1/2" thru 1"LO)



MATERIALS & DESIGN DATA

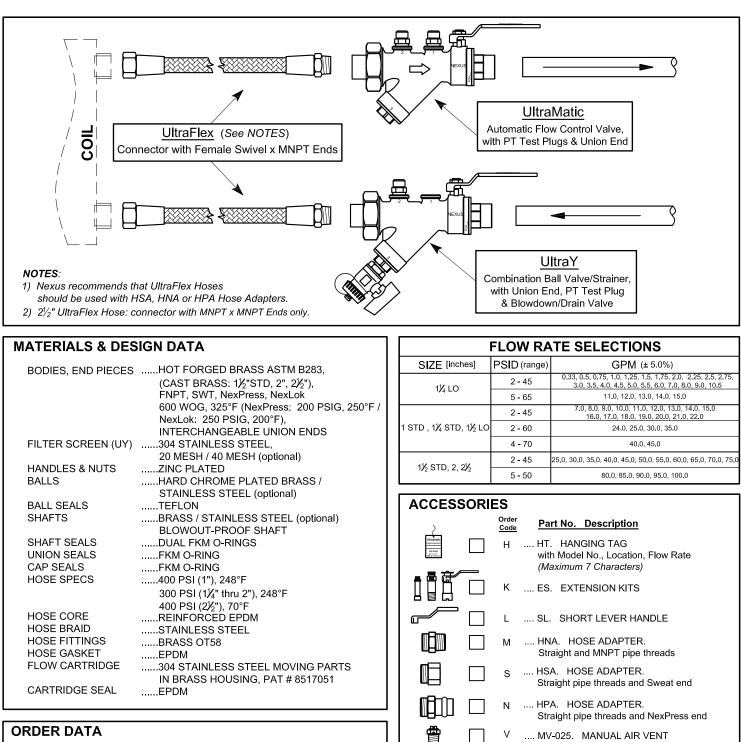
BODIES, END PIECESHOT FORGED BRASS ASTM B283,	SIZE [inches] PSID (range) GPM (± 5.0%)
FNPT, SWT, NexPress, NexLok	½ LO, ½ LO, 1 XLO 2 - 45 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0
600 WOG, 325°F (NexPress: 200 PSIG, 250°F /	<i>y</i> ₂ LO, <i>y</i> ₄ LO, 1 XLO 4 - 55 7.0, 8.0
NexLok: 250 PSIG, 200°F),	2 - 45 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5
INTERCHANGEABLE UNION ENDS	1/2 STD, 3/4 STD, 1 LO 5 - 65 11.0, 12.0, 13.0, 14.0, 15.0
HANDLES & NUTSZINC PLATED	
FILTER SCREEN (UY)304 STAINLESS STEEL,	ACCESSORIES
20 MESH / 40 MESH (optional) BALLSHARD CHROME PLATED BRASS /	
STAINLESS STEEL (optional)	Order Code Part No. Description
BALL SEALSTEFLON	
SHAFTSBRASS / STAINLESS STEEL (optional)	
BLOWOUT-PROOF SHAFT	CV-1 for ½"LO, ¼"LO, 1"XLO, CV-2 for ½"STD, ¼"STD, 1"LO, 1¼"LO;
SHAFT SEALSDUAL FKM O-RINGS	Center Guided, Non-Slam Check
UNION SEALSFKM O-RING CAP SEALSFKM O-RING	
HOSE SPECS400 PSI. 248°F	with Model No., Location, Flow Rate (Maximum 7 Characters)
HOSE CORE	
HOSE BRAIDSTAINLESS STEEL	
HOSE FITTINGSBRASS OT58	
HOSE GASKETEPDM	
FLOW CARTRIDGE304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051	
CARTRIDGE SEALEPDM	
	s HSA. HOSE ADAPTER.
ORDER DATA	Straight pipe threads and NexPress end
Sample Part #:	V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ½" MNPT, Side Discharge
A Y H -0 7 5 - S -0 1 5 -2 4 M 0 - N	323 F, 400 FSIG, 74 IMINET, Side Discillarge
Model	
Valve Trim —	
Hose Pak Size	PROJECT
Branch Line	CONTRACTOR
Flow Rate (GPM)	
UltraFlex Hose Length Hose Adapters (Con. Type & Red. Code)	PO/JOB NO
Accessory Cap Option	
Optional UM 3rd Port & Accessory (N=NO 3rd Port)	ENGINEER
Option Order Codes (Accessories) — — — — — — — — — — — —	
	DATE
Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.	
for complete part number and ordering information.	Convright © 2009 Nexus Valve Inc. All Rights Reserved (Rev. 08/17/15)

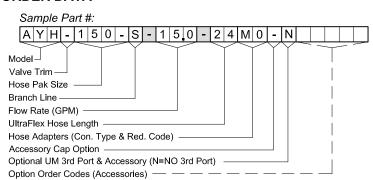
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Hose Pak[™] AYH

(1"STD, $1\frac{1}{4}$ "LO thru $2\frac{1}{2}$ ")





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PROJECT _____

PO/JOB NO. _____

REPRESENTATIVE _____

ENGINEER ____

DATE

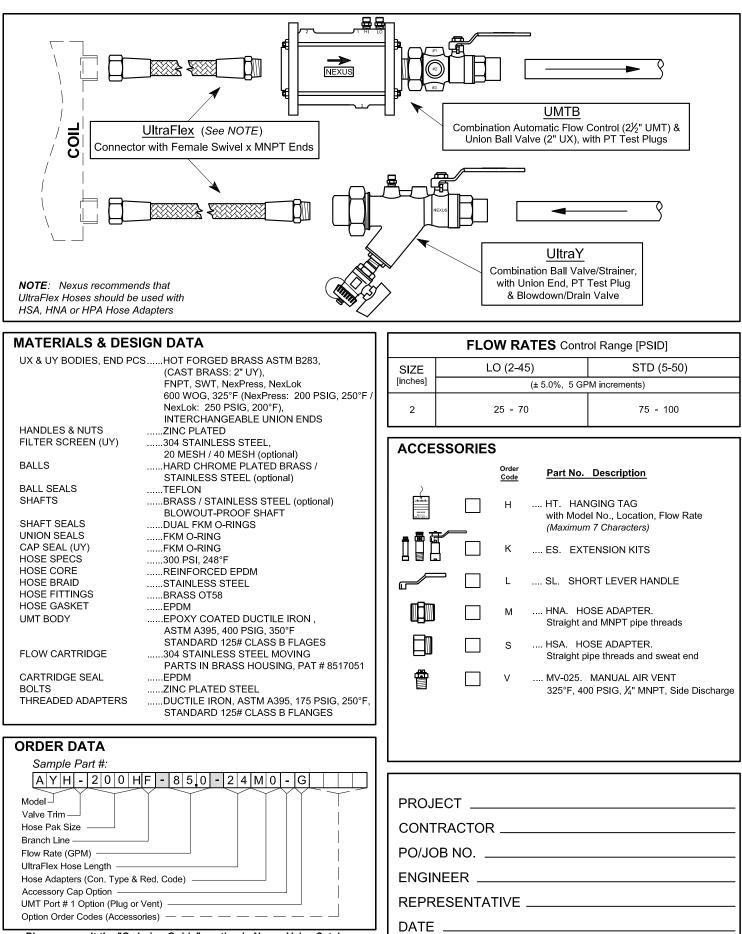
CONTRACTOR _____

325°F, 400 PSIG, 1/4" MNPT, Side Discharge



Hose Pak[™] AYH-200H

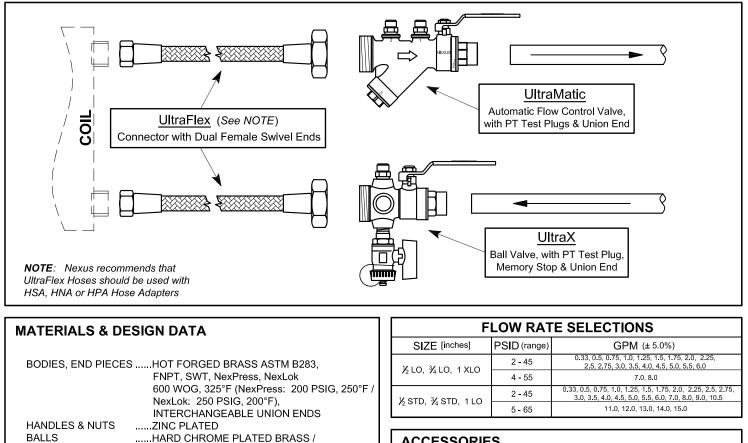
(2" High Flow)





Hose Pak[™] AXH

(1/2" thru 1"LO)

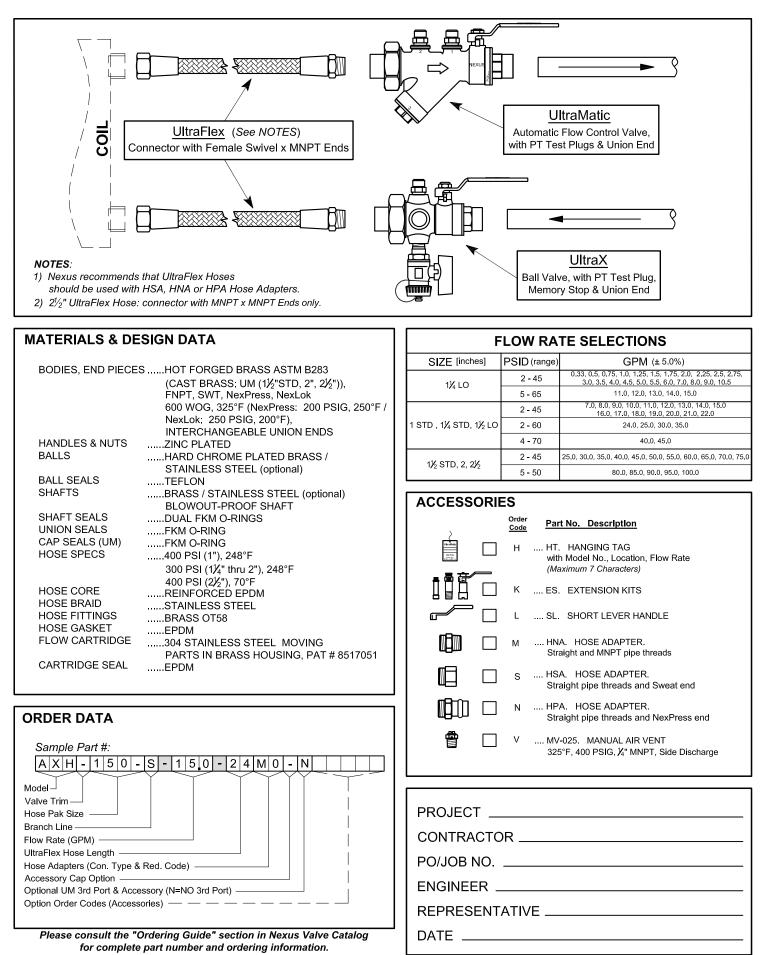


BALLSHARD CHROME PLATED BRASS / STAINLESS STEEL (optional)	ACCESSORIES
BALL SEALSTEFLON	Order Code Part No. Description
SHAFTSBRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT SHAFT SEALSDUAL FKM O-RINGS UNION SEALSFKM O-RING CAP SEALS (UM)FKM O-RING	CV-1, CV-2. CHECK VALVE CV-1 for ½"LO, ¼"LO, 1"XLO; CV-2 for ½"STD, ¾"STD, 1"LO, 1½"LO; CV-2 for ½"STD, ¾"STD, 1"LO, 1½"LO; Center Guided, Non-Slam Check
HOSE SPECS400 PSI, 248°F HOSE COREREINFORCED EPDM HOSE BRAIDSTAINLESS STEEL	H HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
HOSE FITTINGSBRASS OT58 HOSE GASKETEPDM	K ES. EXTENSION KITS
FLOW CARTRIDGE304 STAINLESS STEEL MOVING PARTS IN BRASS HOUSING, PAT # 8517051	L SL. SHORT LEVER HANDLE
CARTRIDGE SEALEPDM	M HNA. HOSE ADAPTER. Straight and MNPT pipe threads
	S HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
ORDER DATA	N HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
Sample Part #:	ل ع25°F, 400 PSIG, ℤ" MNPT, Side Discharge
AXH-075-S-015-24M0-N	
Model →	
Hose Pak Size	PROJECT
Flow Rate (GPM)	
Hose Adapters (Con. Type & Red. Code)	PO/JOB NO
Accessory Cap Option Optional UM 3rd Port & Accessory (N=NO 3rd Port)	ENGINEER
Option Order Codes (Accessories) — — — — — — — — — — — —	REPRESENTATIVE
Please consult the "Ordering Guide" section in Nexus Valve Catalog	



Hose Pak[™] AXH

(1"STD, $1\frac{1}{4}$ "LO thru $2\frac{1}{2}$ ")

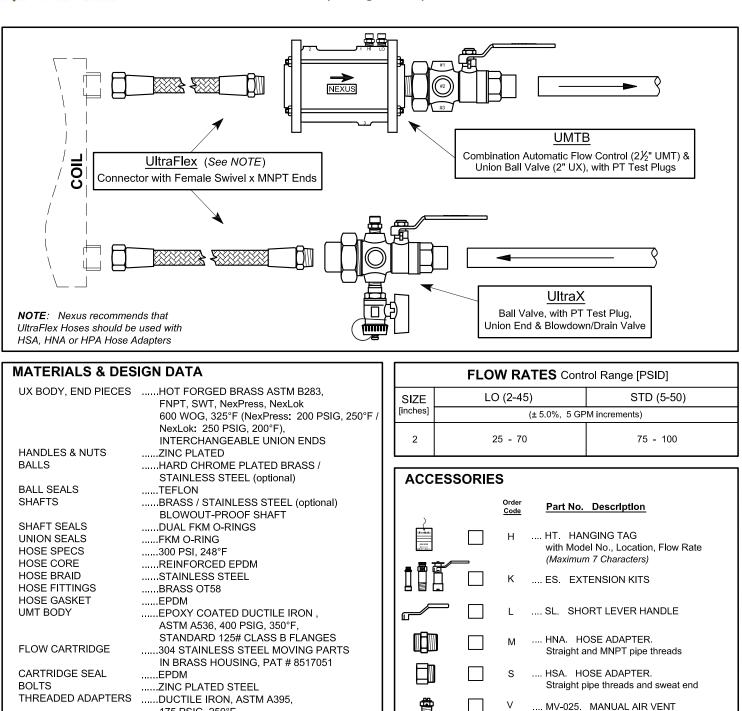


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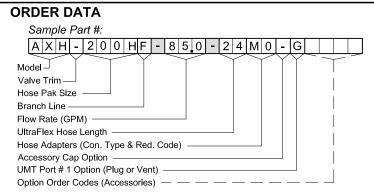


Hose Pak[™] AXH-200H

(2" High Flow)



175 PSIG, 250°F, STANDARD 125# CLASS B FLANGES



lease consult the "Ordering Guide" section in Nexus Valve Catalog	
for complete part number and ordering information.	

P

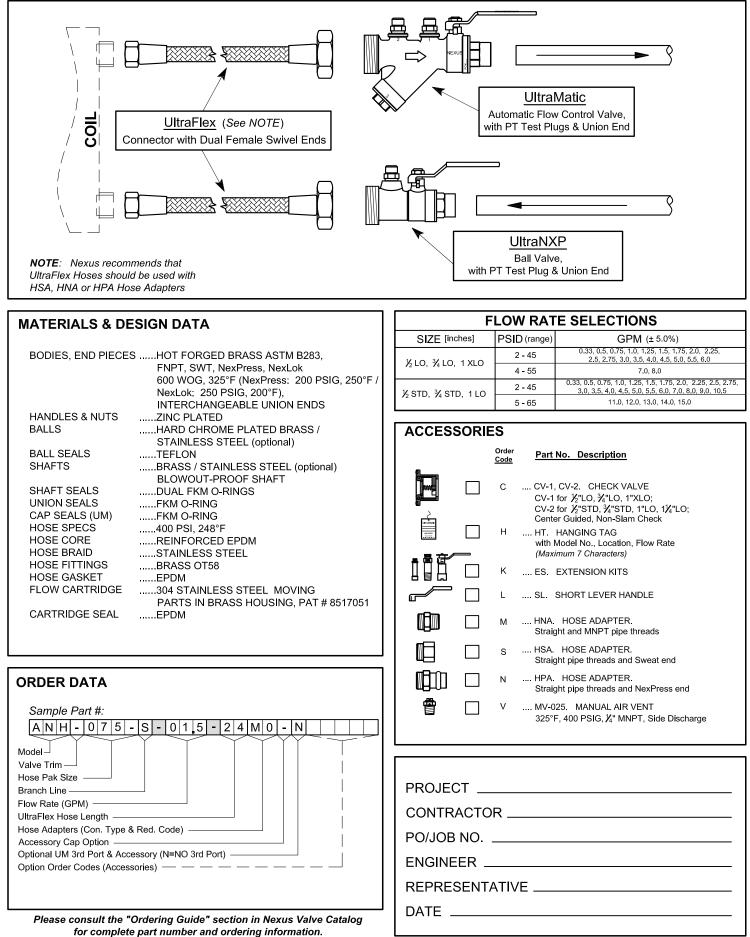
PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

325°F, 400 PSIG, 1/4" MNPT, Side Discharge



Hose Pak[™] ANH

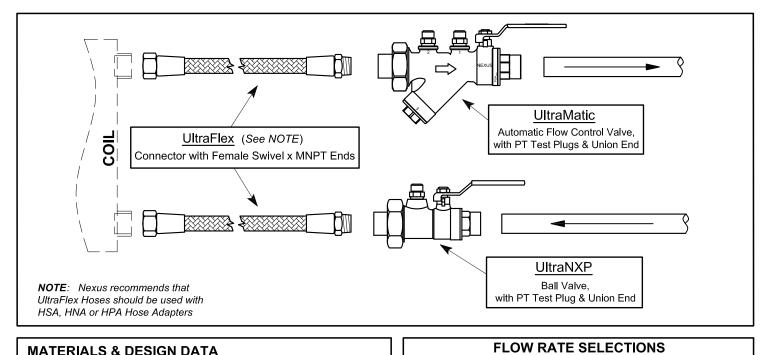
(¹/₂" thru 1"LO)





Hose Pak[™] ANH

(1"STD, 1¹/₄"LO thru 1¹/₂"STD)

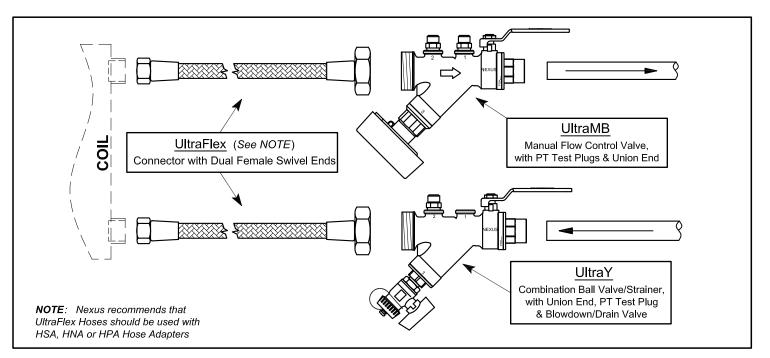


		SIZE [inches]	PSID (range)	GPM (± 5.0%)
BODIES, END PIECES	SHOT FORGED BRASS ASTM B283,	1½ LO	2 - 45	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5
	FNPT, SWT, NexPress, NexLok	174 20	5 - 65	11.0, 12.0, 13.0, 14.0, 15.0
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F),		2 - 45	7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0
	INTERCHANGEABLE UNION ENDS	1 STD , 11/4 STD, 11/2 LC	2 - 60	24.0, 25.0, 30.0, 35.0
HANDLES & NUTS	ZINC PLATED		4 - 70	40.0, 45.0
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)	1½ STD	2 - 45	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 70.0, 75.0
BALL SEALS	TEFLON	1/2 510	5 - 50	80.0, 85.0, 90.0, 95.0, 100.0
SHAFTS	BRASS / STAINLESS STEEL (optional)			
	BLOWOUT-PROOF SHAFT	ACCESSORIE	S	
SHAFT SEALS UNION SEALS	DUAL FKM O-RINGS FKM O-RING		Order Pa	rt No. Description
CAP SEAL (UM)	FKM O-RING	<u> </u>	Code Fa	
HOSE SPECS	400 PSI (1"), 248°F	Ulivaliant:		. HANGING TAG
	300 PSI (1¼" thru 1½"), 248°F	and and Exception		h Model No., Location, Flow Rate aximum 7 Characters)
HOSE CORE HOSE BRAID	REINFORCED EPDM STAINLESS STEEL			,
HOSE FITTINGS	BRASS OT58		K ES	EXTENSION KITS
HOSE GASKET	EPDM		I SI	. SHORT LEVER HANDLE
FLOW CARTRIDGE	304 STAINLESS STEEL MOVING		2 02	
CARTRIDGE SEAL	PARTS IN BRASS HOUSING, PAT # 8517051 EPDM			IA. HOSE ADAPTER.
CARTRIDGE SEAL	EPDM			aight and MNPT pipe threads
				SA HOSE ADAPTER.
[51	raight pipe threads and Sweat end
ORDER DATA				PA. HOSE ADAPTER. raight pipe threads and NexPress end
Sample Part #:			V MV	/-025. MANUAL AIR VENT
	S - 1 5 0 - 2 4 M 0 - N	_	32	5°F, 400 PSIG, <mark>¼</mark> " MNPT, Side Discharge
Model –				
Valve Trim — Hose Pak Size ———		PROJECT		
Branch Line —				
Flow Rate (GPM)			R	
UltraFlex Hose Length ——				
Hose Adapters (Con. Type 8	Red. Code)	10,000 110.		
Accessory Cap Option	essory (N=NO 3rd Port)	ENGINEER _		
Option Order Codes (Access	sories) — — — — — — — — — —			
,	<i>'</i>	KEPKESENI		
Please consult the "C	Drdering Guide" section in Nexus Valve Catalog	DATE		
	part number and ordering information.			
•	-			



Hose Pak[™] MYH

(¹/₂" thru 1"STD)



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283
	FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
FILTER SCREEN (UY)	304 STAINLESS STEEL
	20 MESH / 40 MESH (optional)
HANDLES & NUTS	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEALS	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI, 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

ORDER DATA Sample Part #: MYH-075-S-24M0-N Model Valve Trim Hose Pak Size Branch Line UltraFlex Hose Length Hose Adapters (Con. Type & Red. Code) Accessory Cap Option Optional MB 3rd Port & Accessory (N=NO 3rd Port) Option Order Codes (Accessories)

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
½, ¾ LO, 1 LO	0.25	8.00	
¾ STD, 1 STD	0.45	18.00	

ACCES	ACCESSORIES				
_		Order Code	Part No. Description		
		с …	. CV-1, CV-2. CHECK VALVE CV-1 for ½", ¼"LO, 1"LO; CV-2 for ¾"STD, 1"STD; Center Guided, Non-Slam Check		
Uperature Telecology Telecology		н	. HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)		
		к	. MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2¼" O.A.L. <i>Note: Not available for 2" and 2½".</i> . PTE. PRES / TEMP TEST PLUG EXTENSION; 1%° O.A.L. . ES-1. EXTENDED HANDLE Stationary housing for full-height vapor barrier . ES-MB. EXTENSION; 3" O.A.L.		
		L	. SL. SHORT LEVER HANDLE		
		м …	. HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads		
		s	HSA HOSE ADAPTER. Straight pipe threads and Sweat end		
		N	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end		
		v	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge		

PROJECT _____

PO/JOB NO. _____

ENGINEER ___

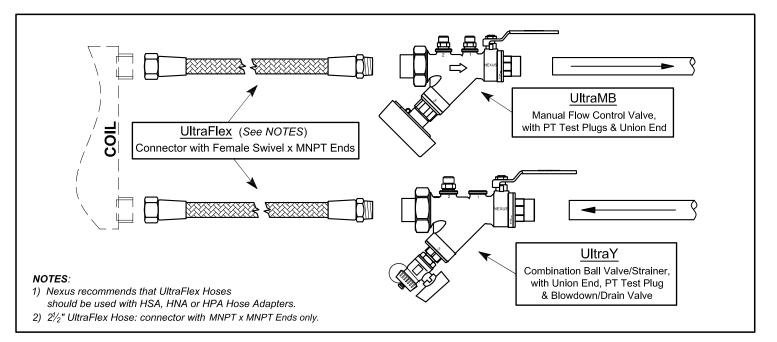
REPRESENTATIVE _____

DATE .



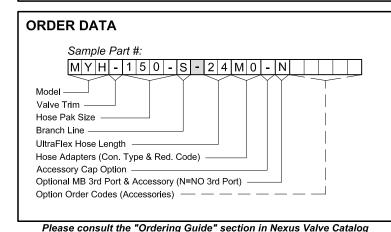
Hose Pak™ MYH

(1¹/₄"LO thru 2¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283
	(CAST BRASS: 2", 2½"),
	FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F /
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED
FILTER SCREEN (UY)	
	20 MESH / 40 MESH (optional)
BALLS	HARD CHROME PLATED BRASS /
2,1220	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFT SEALS	DUAL FKM Q-RINGS
UNION SEALS	FKM O-RING
CAP SEALS	FKM O-RING
MB BALANCING GLOBE	
MB HANDLE	
MB EXTENSION	ABS
HOSE SPECS	BRASS, ABS
HUSE SPECS	300 PSI / 248°F (1¼" thru 2"),
	400 PSI / 70°F (2½")
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM



for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
11⁄4 LO	0.45	18.00	
1¼ STD, 1½	1.00	40.00	
2, 2 ½	1.50	95.00	

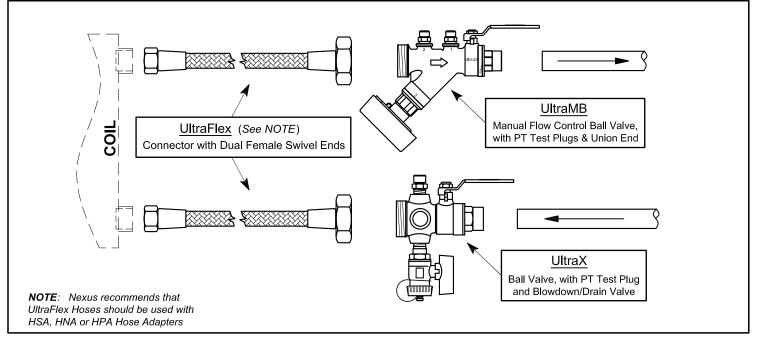
ACCESSORIES Order Part No. Description Code С ... CV-2. CHECK VALVE CV-2 for 1¼"LO; Center Guided, Non-Slam Check HT. HANGING TAG Н with Model No., Location, Flow Rate (Maximum 7 Characters) ... MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, ¼" MNPT, Side Discharge, 2¼" O.A.L. Note: Not available for 2" and 21/2". ... PTE. PRES / TEMP TEST PLUG EXTENSION; 1%6" O.A.L. ES-1. ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier ... ES-MB. EXTENSION; 3" O.A.L. SL. SHORT LEVER HANDLE L HNA. HOSE ADAPTER. М Straight pipe threads and MNPT pipe threads HSA. HOSE ADAPTER. S Straight pipe threads and Sweat end HPA. HOSE ADAPTER. Ν Straight pipe threads and NexPress end 曾 MV-025. MANUAL AIR VENT V 325°F, 400 PSIG, ¼" MNPT, SIde Discharge

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Hose Pak[™] MXH

(¹/₂" thru 1"STD)



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MATERIALS & DESIGN DATA

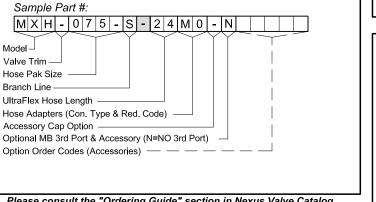
ORDER DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	400 PSI, 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW F	ANGES [gpm]
GIZE [inclica]	Min.	Max.
½, ¾ LO, 1 LO	0.25	8.00
¾ STD, 1 STD	0.45	18.00

ACCESSORIES					
_		Order <u>Code</u>	Part No. Description		
		С	CV-1, CV-2. CHECK VALVE CV-1 for ½", ½"LO, 1"LO; CV-2 for ½"STD, 1"STD; Center Guided, Non-Slam Check		
U Passada		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)		
		к	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, Side Discharge, 2X" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION; 1%6" O.A.L. ES-1. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3" O.A.L.		
		L	SL. SHORT LEVER HANDLE		
		М	HNA. HOSE ADAPTER. Stralght plpe threads and MNPT plpe threads		
		S	HSA. HOSE ADAPTER. Stralght plpe threads and Sweat end		
		Ν	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end		
đ		v	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X," MNPT, Side Discharge		

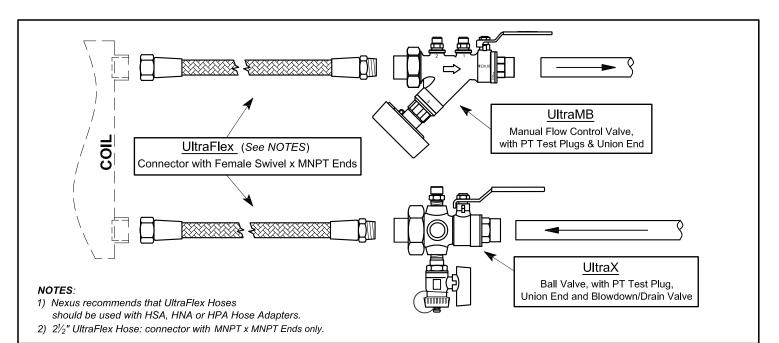


PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Hose Pak[™] MXH

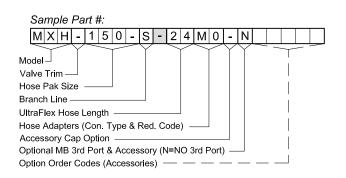
(1¹/₄"LO thru 2¹/₂")



MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 (CAST BRASS: MB (2", 2½")), FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	300 PSI / 248°F (1¼" thru 2"),
	400 PSI / 70°F (2½")
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

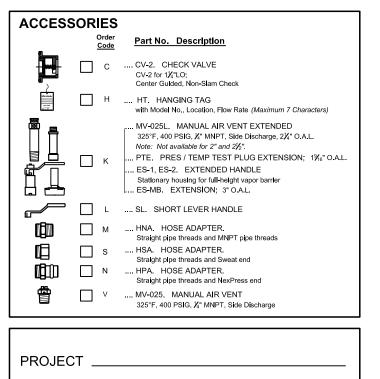
ORDER DATA



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

FLOW RATE RECOMMENDATION GUIDE SIZE [inshed] IDEAL FLOW RANGES [gpm]

SIZE [inches]		ANGES [gpm]
	Min.	Max.
1¼ LO	0.45	18.00
1¼ STD, 1½	1.00	40.00
2, 21⁄2"	1.50	95.00



CONTRACTOR _____

PO/JOB NO. _____

ENGINEER __

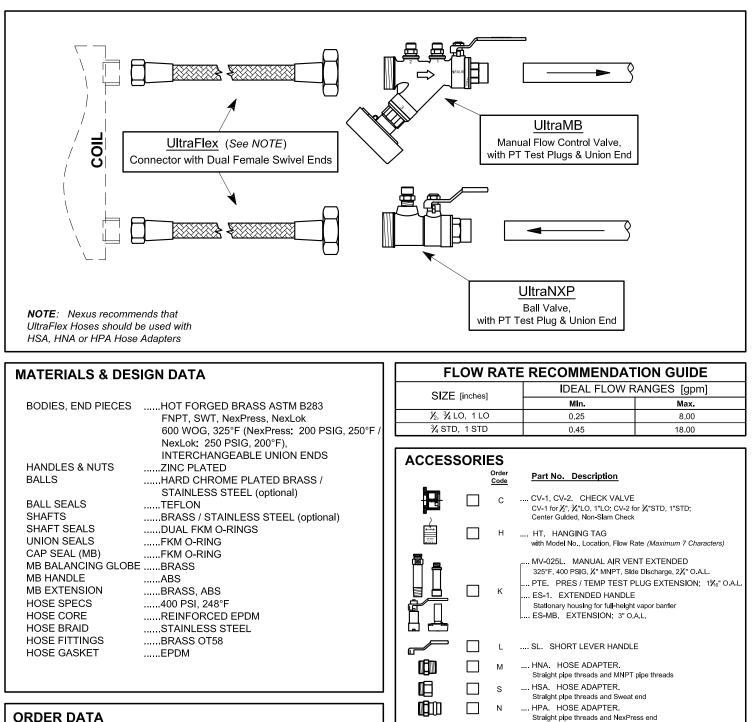
REPRESENTATIVE _____

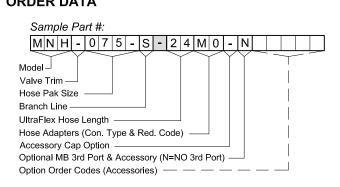
DATE



Hose Pak[™] MNH

(¹/₂" thru 1"STD)



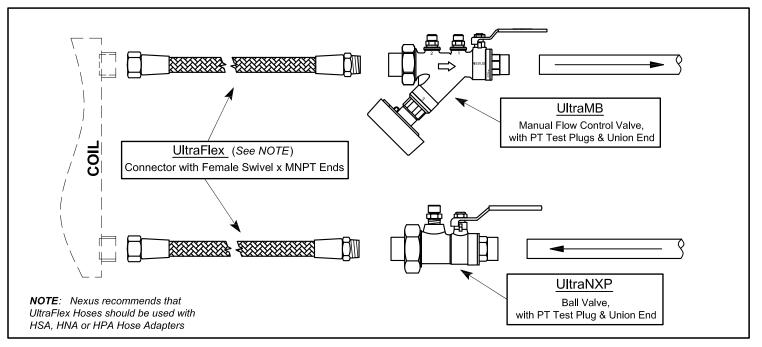


Straight pipe threads and NexPress end W MV-025. MANUAL AIR VENT 325°F, 400 PSIG, X* MNPT, Side Discharge					
PROJECT					
CONTRACTOR					
PO/JOB NO					
ENGINEER					
REPRESENTATIVE					
DATE					



Hose Pak[™] MNH

(1¹/₄"LO thru 1¹/₂")



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MATERIALS & DESIGN DATA

ORDER DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F / NexLok: 250 PSIG, 200°F), INTERGANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
CAP SEAL (MB)	FKM O-RING
MB BALANCING GLOBE	BRASS
MB HANDLE	ABS
MB EXTENSION	BRASS, ABS
HOSE SPECS	300 PSI, 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RATE RECOMMENDATION GUIDE

SIZE [inches]	IDEAL FLOW RANGES [gpm]		
	Min.	Max.	
11⁄4 LO	0.45	18.00	
11⁄4 STD, 11⁄2	1.00	40.00	

ACCESSORIES

	Order <u>Code</u>	Part No. Description
Ħ	с …	CV-2. CHECK VALVE CV-2 for 1%"L0; Center Gulded, Non-Slam Check
CProliner 	н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
	к	MV-025L. MANUAL AIR VENT EXTENDED 325°F, 400 PSIG, X" MNPT, SIde Discharge, 2X" O.A.L. PTE. PRES / TEMP TEST PLUG EXTENSION; 1%° O.A.L. ES-I, ES-2. EXTENDED HANDLE Stationary housing for full-height vapor barrier ES-MB. EXTENSION; 3" O.A.L.
	L	SL. SHORT LEVER HANDLE
	м	HNA. HOSE ADAPTER. Straight pipe threads and MNPT pipe threads
	s .	HSA. HOSE ADAPTER. Stralght plpe threads and Sweat end
	Ν	HPA. HOSE ADAPTER. Stralght pipe threads and NexPress end
	v	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, Z" MNPT, Side Discharge

Sample Part #: MNH-150-S-24M0-N Model Valve Trim Hose Pak Size Branch Line UltraFlex Hose Length Hose Adapters (Con. Type & Red. Code) Accessory Cap Option Optional UM 3rd Port & Accessory (N=NO 3rd Port) Option Order Codes (Accessories)

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

PROJECT ______ CONTRACTOR _____

PO/JOB NO. _____

ENGINEER __

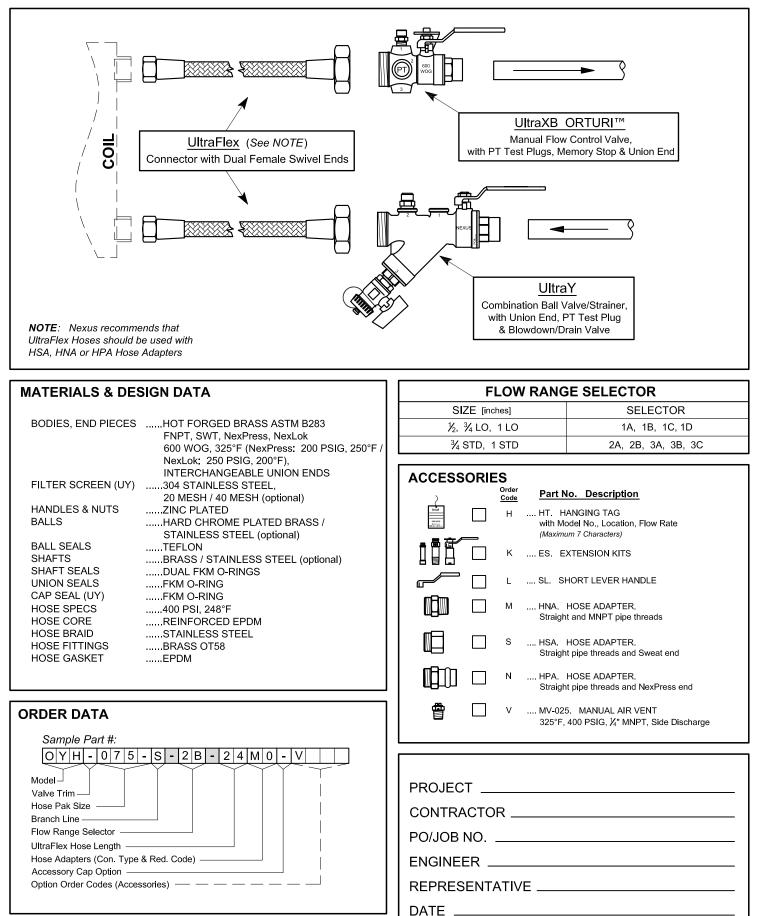
REPRESENTATIVE _____

DATE



Hose Pak[™] OYH

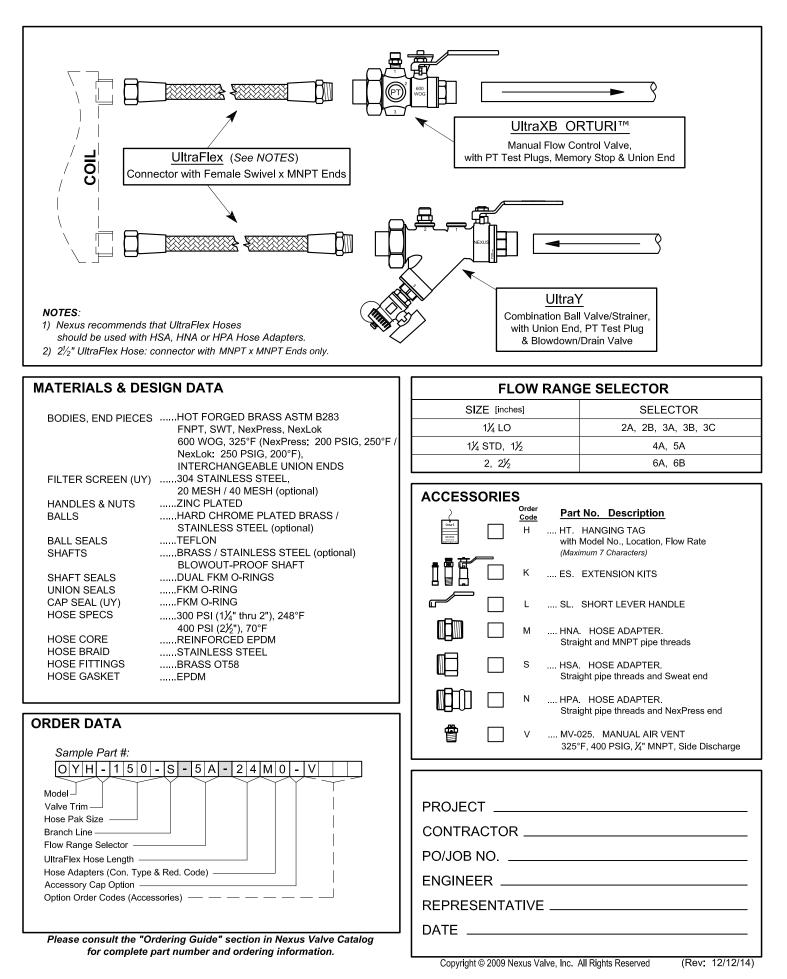
(¹/₂" thru 1"STD)





Hose Pak[™] OYH

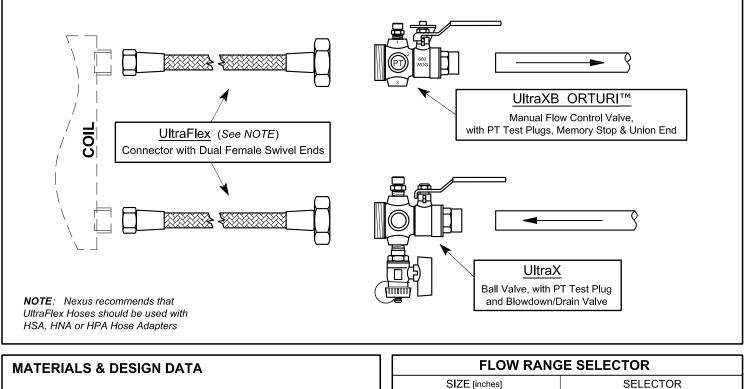
(1¹/₄"LO thru 2¹/₂")



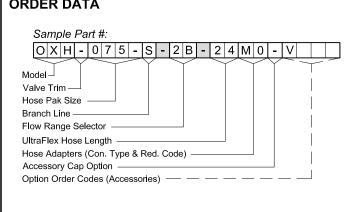


Hose Pak[™] OXH

(¹/₂" thru 1"STD)



		S	ZE [inche	əs]
BODIES, END PIECES	HOT FORGED BRASS ASTM B283,		⅓, 1 LO	
	FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress; 200 PSIG, 250°F /	3⁄4	STD, 1 S	STD
HANDLES & NUTS BALLS	NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS ZINC PLATED HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)		SORIE	Ord <u>Coo</u>
BALL SEALS	TEFLON			Н
SHAFTS SHAFT SEALS UNION SEALS HOSE SPECS HOSE CORE HOSE BRAID HOSE FITTINGS HOSE GASKET	BRASS / STAINLESS STEEL (optional) BLOWOUT-PROOF SHAFT DUAL FKM O-RINGS FKM O-RING 400 PSI, 248°F REINFORCED EPDM STAINLESS STEEL BRASS OT58 EPDM			K L M S
ORDER DATA				N



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

½, 1 LO			1A, 1B, 1C, 1D
¾ STD, 1 STD			2A, 2B, 3A, 3B, 3C
			<u>_</u>
ACCESSORIES			
>		Order <u>Code</u>	Part No. Description
Ovtari escues		н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		к	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		N	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
PROJECT			

CONTRACTOR _____

PO/JOB NO. _____

ENGINEER ____

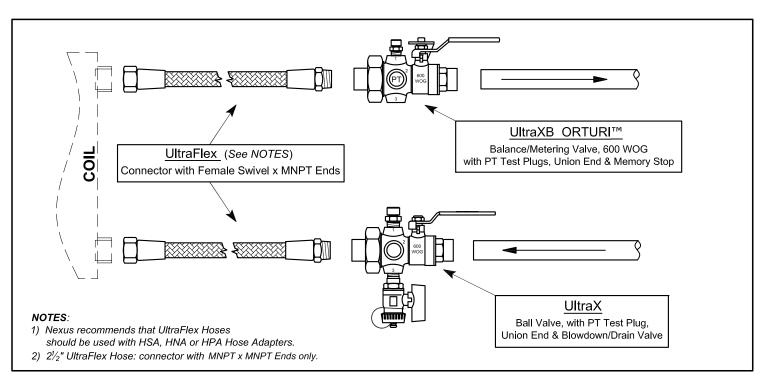
REPRESENTATIVE _____

DATE .



Hose Pak[™] OXH

(1¹/₄"LO thru 2¹/₂")

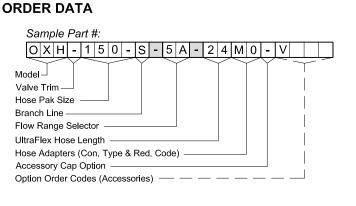


MATERIALS & DESIGN DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283 FNPT, SWT, NexPress, NexLok 600 WOG, 325°F (NexPress: 200 PSIG, 250°F NexLok: 250 PSIG, 200°F), INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS / STAINLESS STEEL (optional)
BALL SEALS	TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
HOSE SPECS	300 PSI / 248°F (1¼" thru 2"),
	400 PSI / 70°F (21/2")
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RANG	SE SELECTOR
SIZE [inches]	SELECTOR
1¼ LO	2A, 2B, 3A, 3B, 3C
11/4 STD, 11/2	4A, 5A
2, $2\frac{1}{2}$	6A, 6B

		Order <u>Code</u> H	Part No. Description HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		к	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		Ν	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge
PROJEC	ст_		
CONTR)R	



Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.

REPRESENTATIVE _____

ENGINEER ____

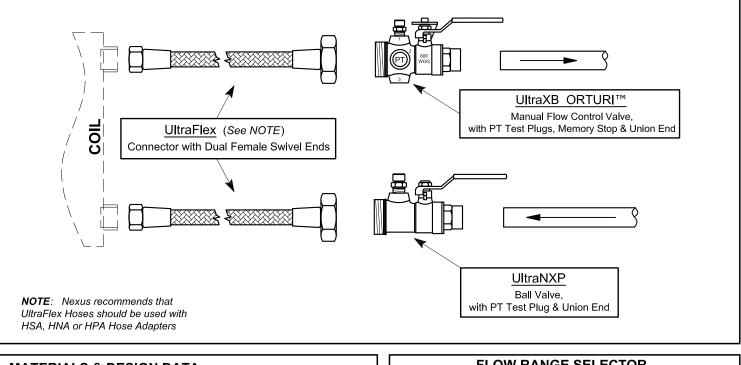
DATE

PO/JOB NO. _____



Hose Pak[™] ONH

(¹/₂" thru 1"STD)



MATERIALS & DESIGN DATA

ORDER DATA

BODIES, END PIECES	HOT FORGED BRASS ASTM B283,
	FNPT, SWT, NexPress, NexLok
	600 WOG, 325°F (NexPress: 200 PSIG, 250°F
	NexLok: 250 PSIG, 200°F),
	INTERCHANGEABLE UNION ENDS
HANDLES & NUTS	ZINC PLATED
BALLS	HARD CHROME PLATED BRASS /
	STAINLESS STEEL (optional)
BALL SEALS	,TEFLON
SHAFTS	BRASS / STAINLESS STEEL (optional)
	BLOWOUT-PROOF SHAFT
SHAFT SEALS	DUAL FKM O-RINGS
UNION SEALS	FKM O-RING
HOSE SPECS	400 PSI, 248°F
HOSE CORE	REINFORCED EPDM
HOSE BRAID	STAINLESS STEEL
HOSE FITTINGS	BRASS OT58
HOSE GASKET	EPDM

FLOW RANG	SE SELECTOR
SIZE [inches]	SELECTOR
½, 1 LO	1A, 1B, 1C, 1D
¾ STD, 1 STD	2A, 2B, 3A, 3B, 3C

ACCESSORIES			
,		Order <u>Code</u>	Part No. Description
		Н	HT. HANGING TAG with Model No., Location, Flow Rate (Maximum 7 Characters)
		К	ES. EXTENSION KITS
		L	SL. SHORT LEVER HANDLE
		М	HNA. HOSE ADAPTER. Straight and MNPT pipe threads
		S	HSA. HOSE ADAPTER. Straight pipe threads and Sweat end
		Ν	HPA. HOSE ADAPTER. Straight pipe threads and NexPress end
		V	MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge

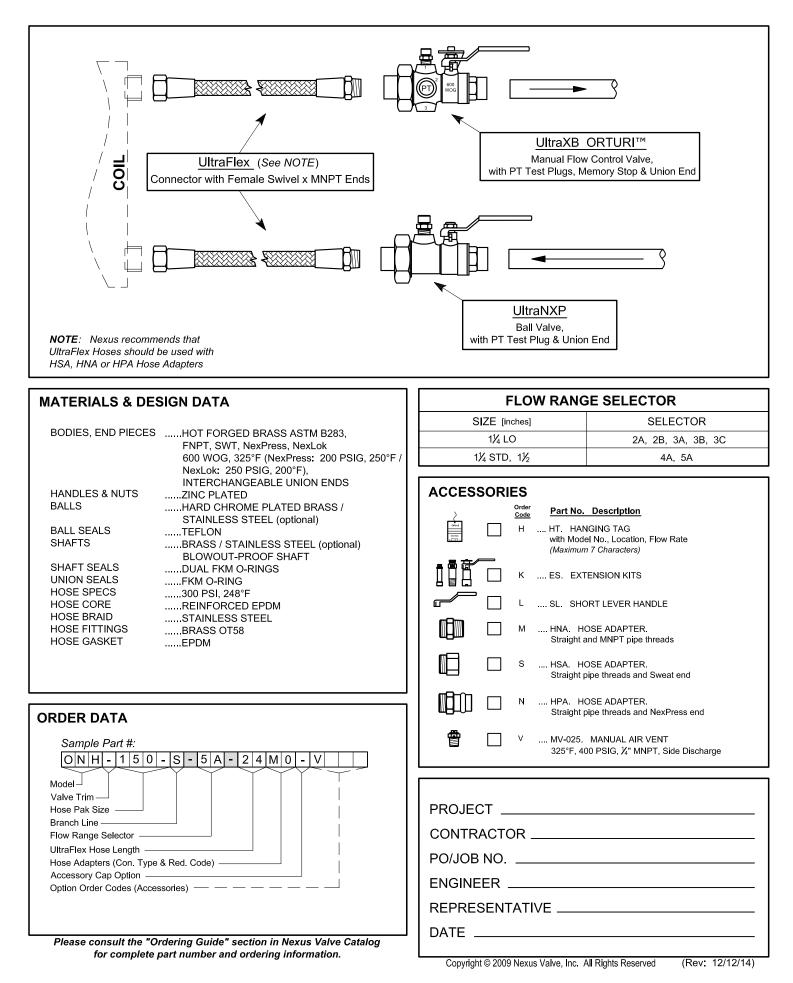
Sample Part #: ONH-075-S-2B-24M0-V Model-Valve Trim Hose Pak Size Branch Line Flow Range Selector UltraFlex Hose Length Hose Adapters (Con. Type & Red. Code) Accessory Cap Option Option Order Codes (Accessories)

PROJECT
CONTRACTOR
PO/JOB NO.
ENGINEER
REPRESENTATIVE
DATE



Hose Pak[™] ONH

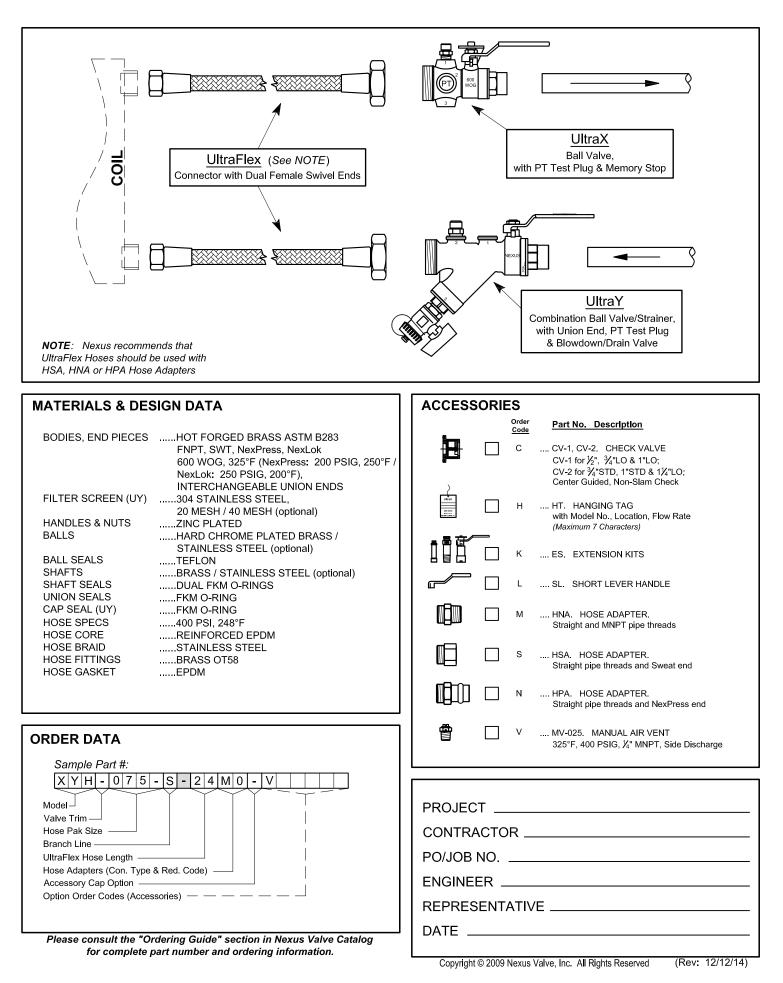
(1¹/₄"LO thru 1¹/₂")





Hose Pak[™] XYH

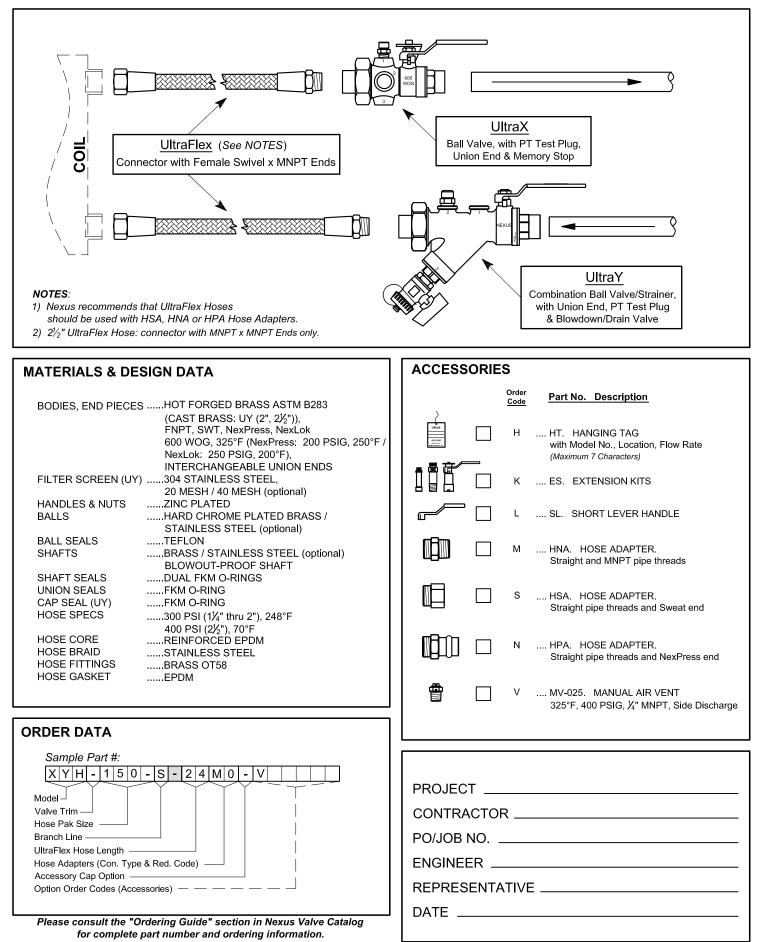
(¹/₂" thru 1"STD)





Hose Pak[™] XYH

(1¹/₄"LO thru 2¹/₂")

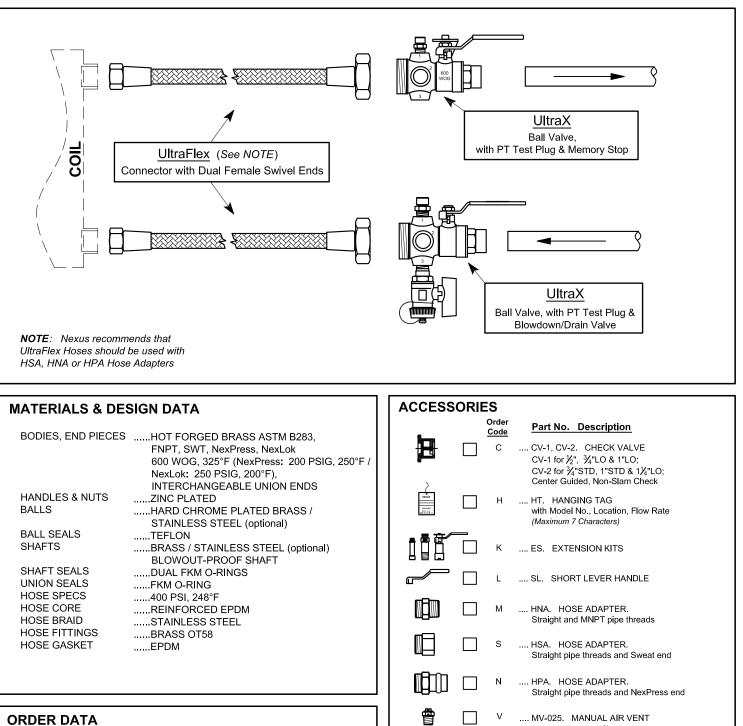


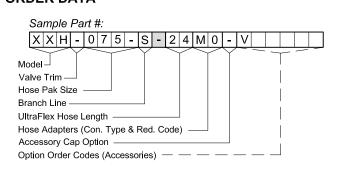
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Hose Pak™ XXH

(¹/₂" thru 1"STD)



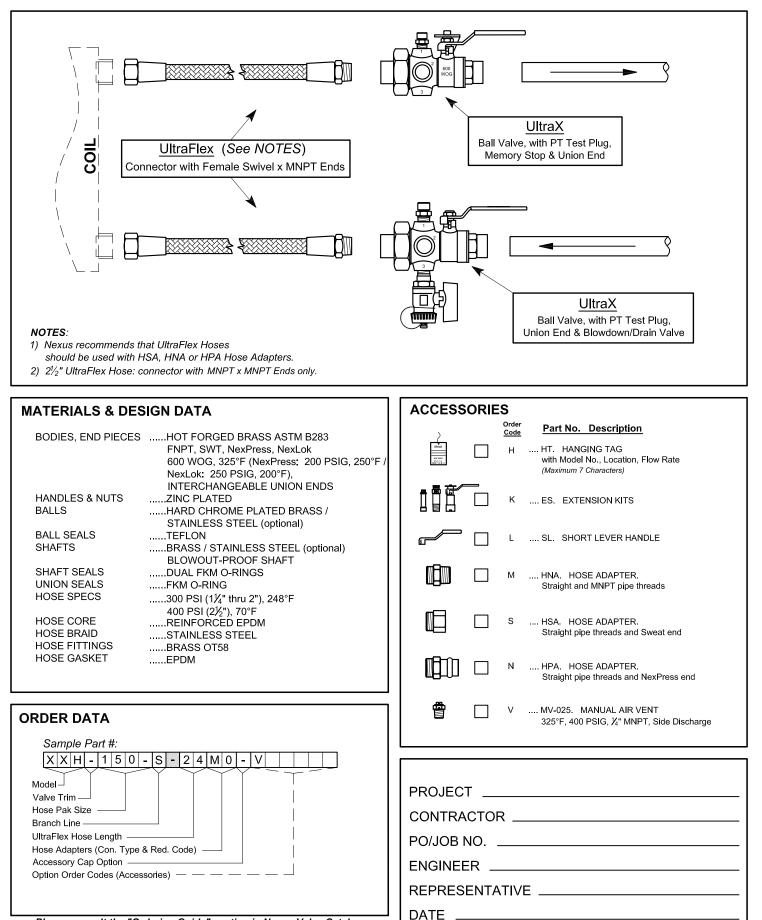


V MV-025. MANUAL AIR VENT 325°F, 400 PSIG, ¼" MNPT, Side Discharge			
PROJECT			
CONTRACTOR			
PO/JOB NO			
ENGINEER			
REPRESENTATIVE			
DATE			



Hose Pak[™] XXH

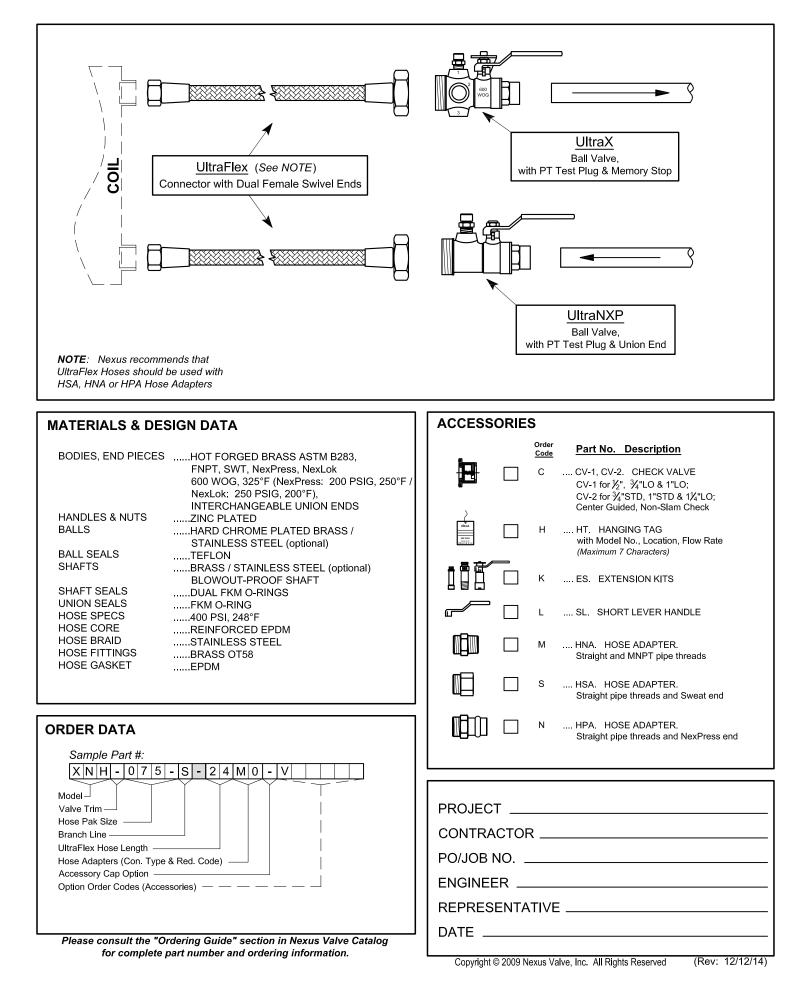
(1¹/₄"LO thru 2¹/₂")





Hose Pak™ XNH

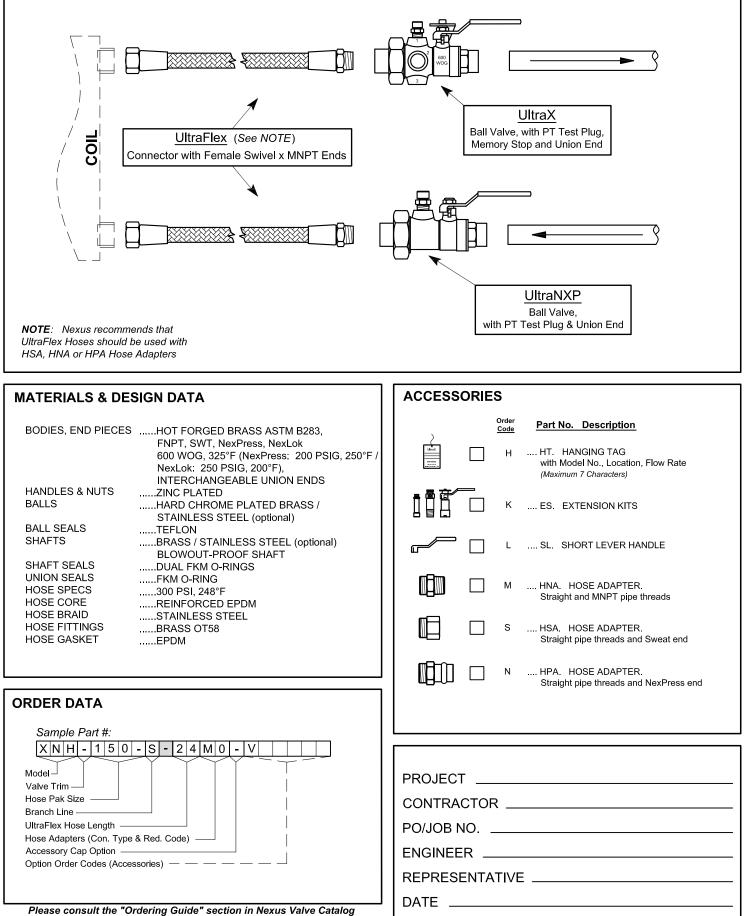
(¹/₂" thru 1"STD)





Hose Pak[™] XNH

(1¹/₄"LO thru 1¹/₂")



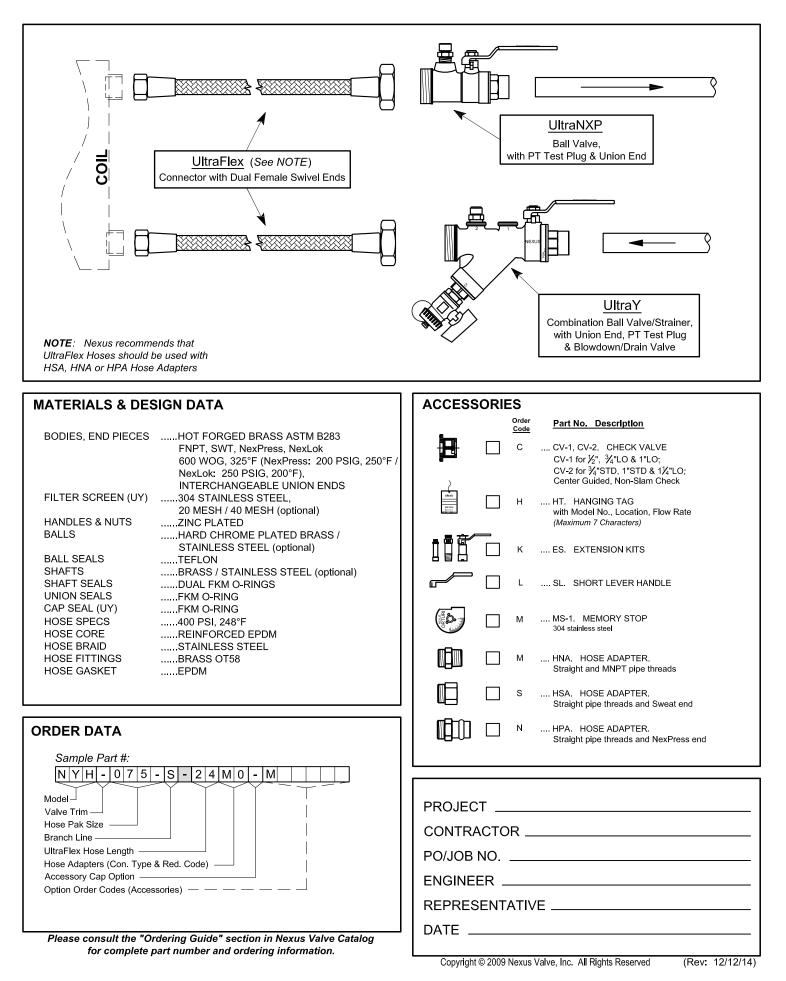
for complete part number and ordering information.

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Hose Pak[™] NYH

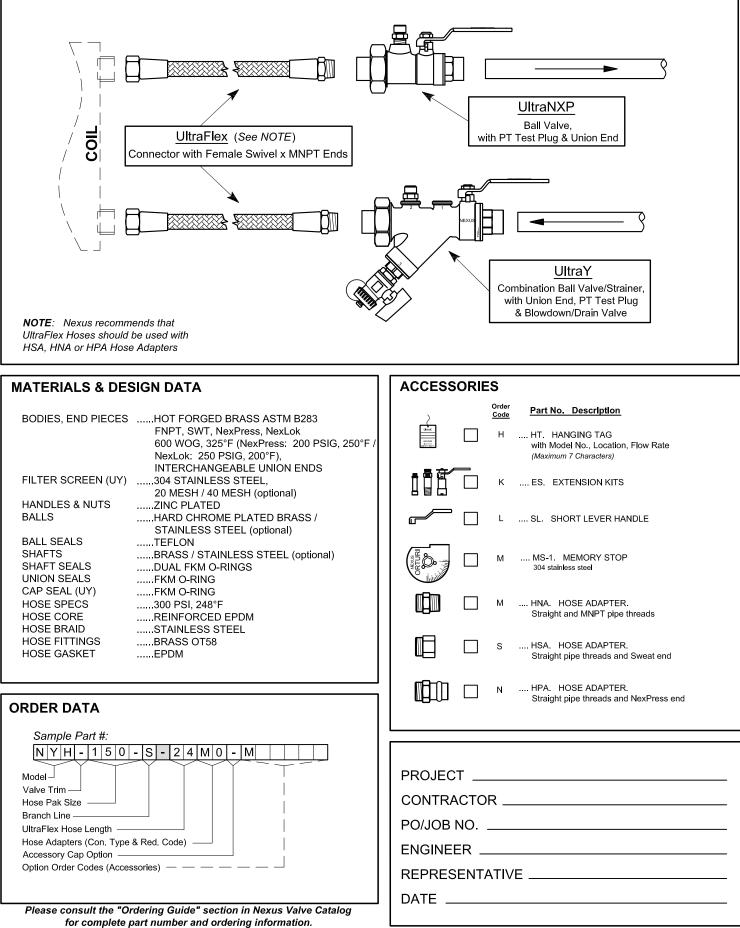
(¹/₂" thru 1"STD)





Hose Pak[™] NYH

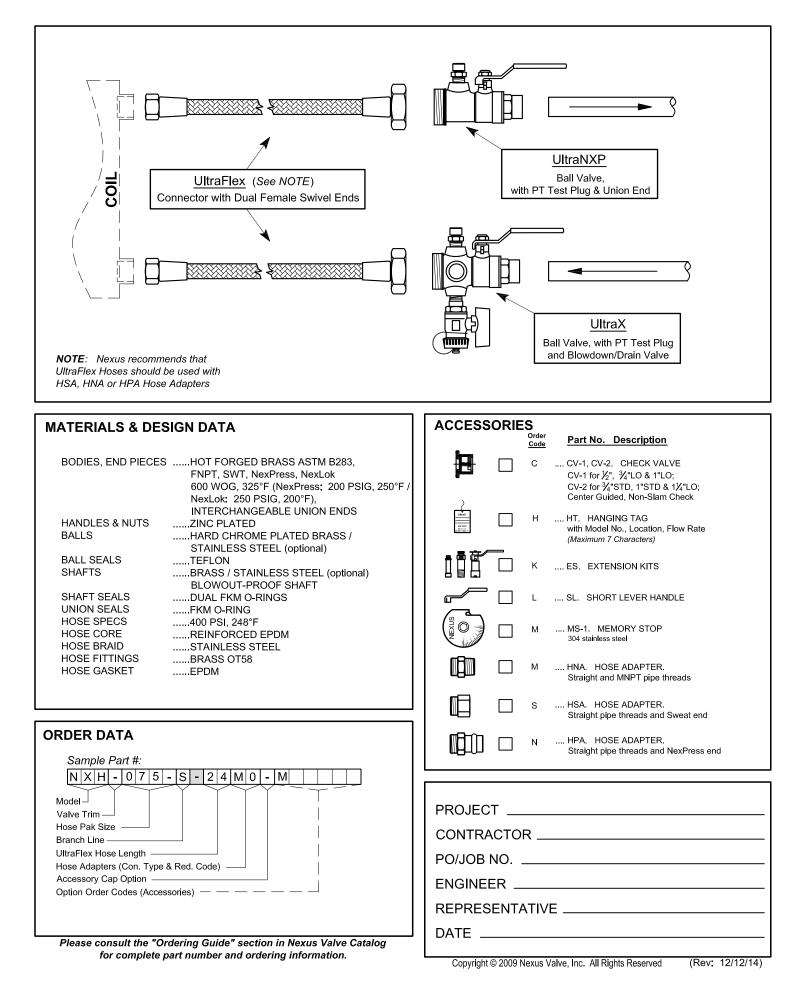
(1¹/₄"LO thru 1¹/₂")





Hose Pak[™] NXH

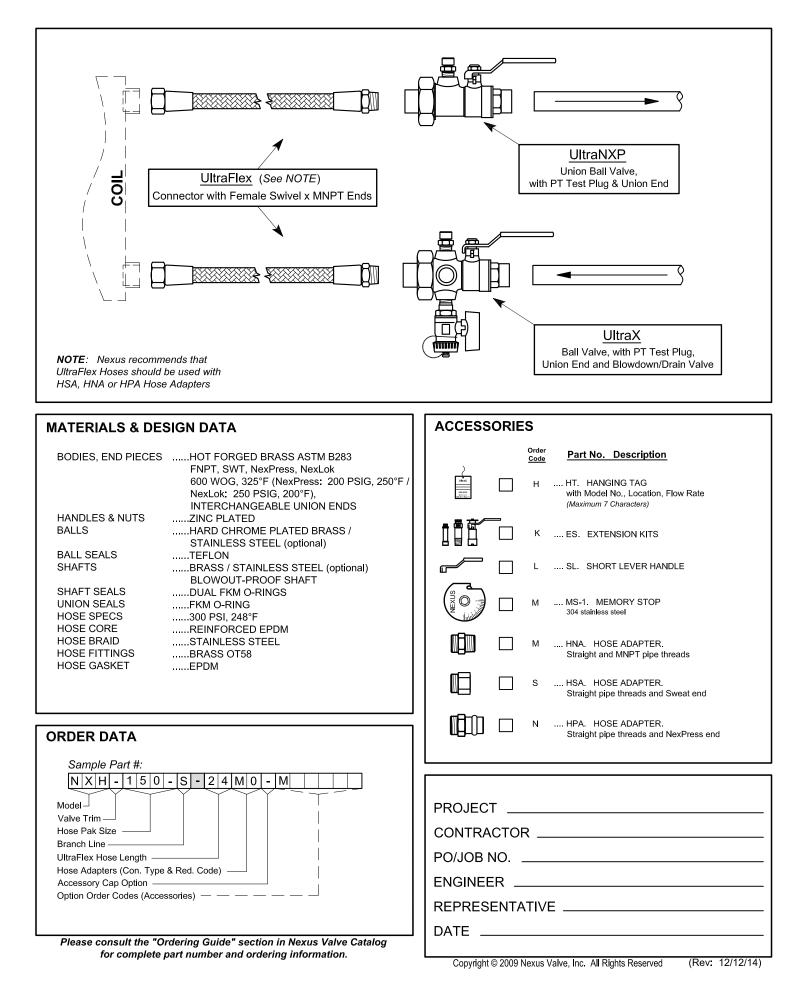
(¹/₂" thru 1"STD)





Hose Pak[™] NXH

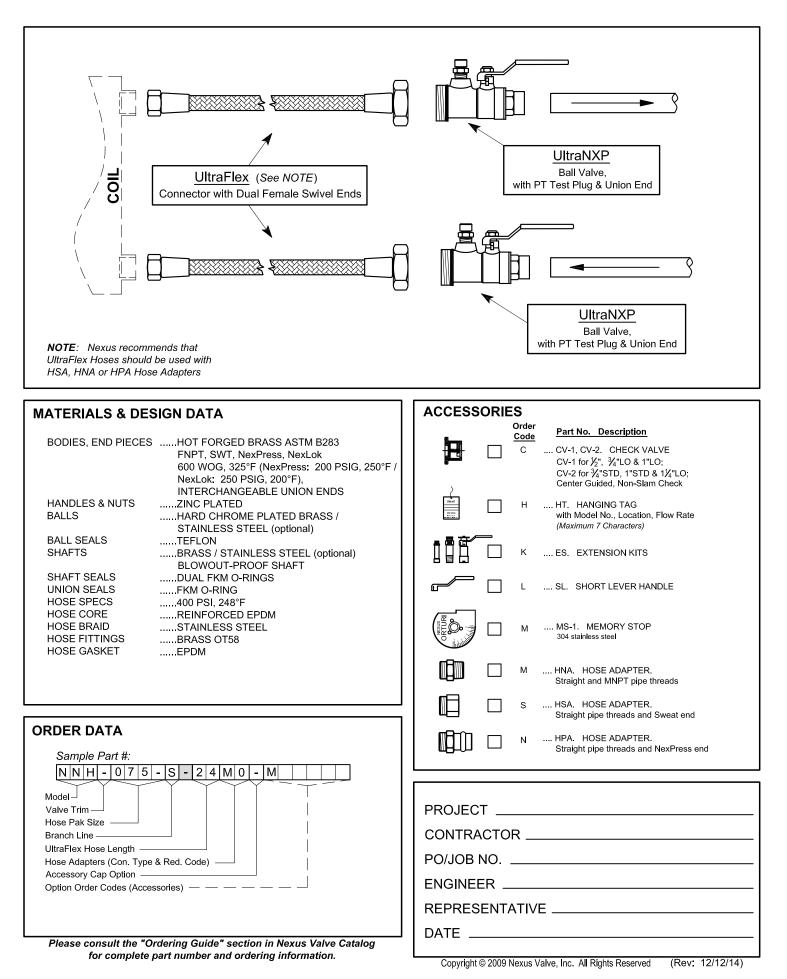
(1¹/₄"LO thru 1¹/₂")





Hose Pak[™] NNH

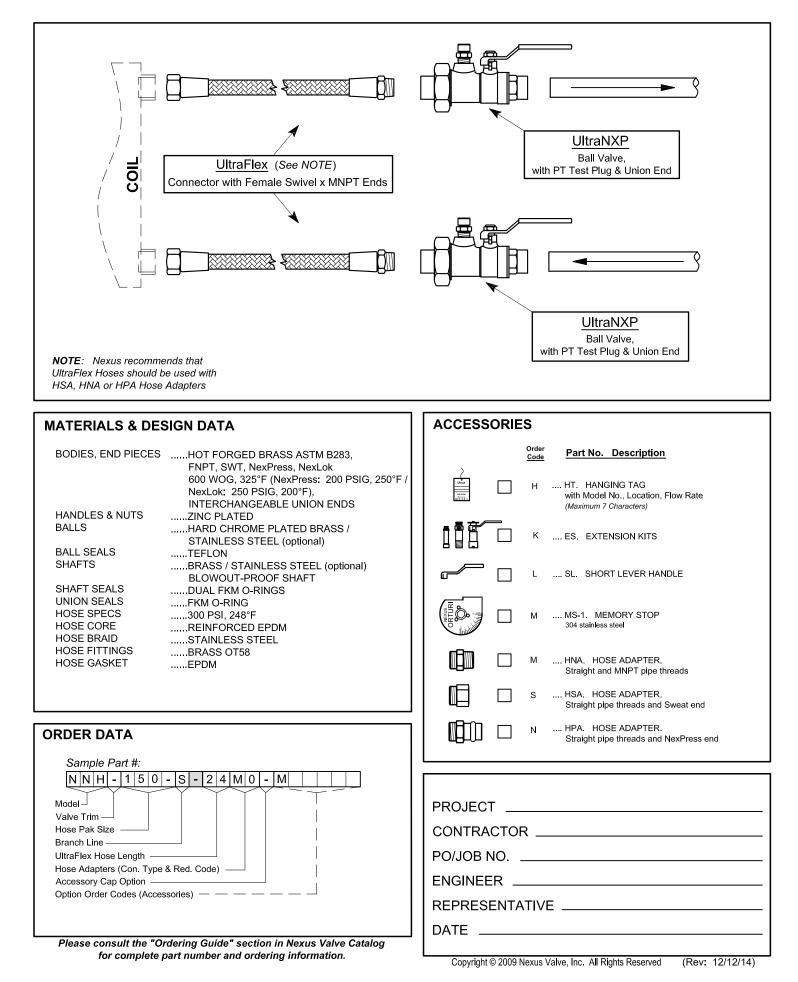
(¹/₂" thru 1"STD)





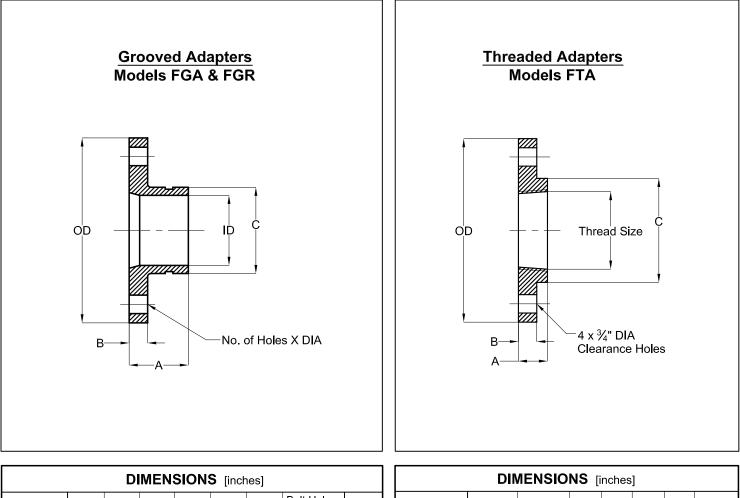
Hose Pak[™] NNH

(1¹/₄"LO thru 1¹/₂")





Adapters - Grooved Models FGA & FGR and Threaded Model FTA



Nexus							Bolt Holes	Wat	
Part No.	SIZE	ID	OD	А	В	С	No. of Holes x DIA	Wgt. [Lbs]	
FGA-250	21⁄2"	2.21	7.00	2.33	¹ 1/ ₁₆ "	21/8"	4 x ⅔"	6.83	
FGA-300	3"	2.83	7.50	2.40	3⁄4"	31⁄2"	4 x ⅔″	8.24	
FGA-400	4"	3.78	9.00	2.64	¹⁵ / ₁₆ "	4½"	8 x ¾"	13.50	
FGA-500	5"	4.75	10.00	2.69	¹⁵ / ₁₆ "	5% ₁₆ "	8 x ⅔"	16.14	
FGA-600	6"	5.75	11.00	2.80	1"	6%"	8 x ⅔"	19.80	
FGA-800	8"	7.65	13.50	3.12	1½"	85⁄8"	8 x 7⁄8"	31.50	
FGA-1000	10"	9.57	16.00	3.34	1 ³ ⁄16"	10¾"	12 x 1"	43.85	
FGA-1200	12"	11.42	19.00	3.40	11/4"	12¾"	12 x 1"	66.00	
FGR-300-250	3" x 2½"	2.21	7.50	2.40	3⁄4"	21/8"	4 x ¾"	8.27	

	DIMENSIONS [inches]								
Nexus Part No.	SIZE	Thread SIZE	OD	A	В	С	Wgt. [Lbs]		
FTA-250	21⁄2" x 21⁄2"	21⁄2" NPT	7.0	11/8	¹ 1⁄ ₁₆	3%16	5.85		
FTA-250-200	2½" x 2"	2" NPT	7.0	1	¹ 1⁄ ₁₆	31⁄16	5.80		
FTA-300	3" x 3"	3" NPT	7.5	1¾ ₁₆	3∕4	41⁄4	7.63		
FTA-300-200	3" x 2"	2" NPT	7.5	1	3⁄4	31⁄16	7.40		
FTA-300-250	3" x 2½"	2½" NPT	7.5	11/8	3∕4	3 ⁹ ⁄16	8.00		

MATERIAL & DESIGN DATA

F	PS	ТЕМР	. RATII VE DIN	NG: /IENSIONS	 175 per /	CTILE PSIG ANSI NDAF	/ 250 / AW)°F			
					STA	NDA	RD				
					(Rev	v. of A	NSI /	AW۱/	NA (C606-	-06)
					 per / STA	ANSI NDAI	/ AW RD	WA-C			

ORDER DATA

<u>QTY</u>	Part#	QTY	<u>Part#</u>
	FGA-250 FGA-300 FGA-400 FGA-500 FGA-600 FGA-800 FGA-1000 FGA-1200		FGR-300-250 FTA-250 FTA-250-200 FTA-300 FTA-300-200 FTA-300-250

PROJECT _____

CONTRACTOR _____

PO/JOB NO. _____

ENGINEER ____

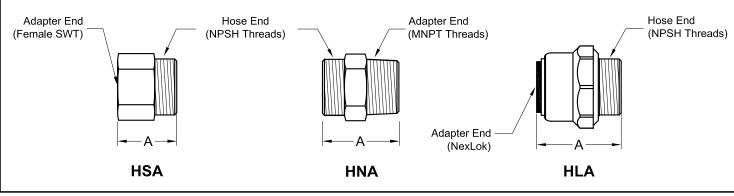
REPRESENTATIVE _____

DATE _



Hose Adapters Models HSA, HNA, HLA

(1/2" thru 2")



Part #	Hose End NPSH	Adpt. End Fem. SWT, MNPT, NexLok	А	HEX/ OCT	WT [lbs]
HSA-050	1/2"	1⁄2"	1.00"	7⁄8"	0.09
HSA-050-038	1/2"	3∕8"	0.75"	5⁄8"	0.05
HSA-075	3⁄4"	³ ⁄4"	1.25"	11⁄1 ₆ "	0.14
HSA-075-050	3⁄4"	1/2"	0.88"	3⁄4"	0.08
HSA-100	1"	1"	1.50"	1%"	0.28
HSA-100-050	1"	1⁄2"	0.87"	3⁄4"	0.13
HSA-100-075	1"	3⁄4"	1.31"	1¾"	0.29
HSA-125	11⁄4"	11⁄4"	1.47"	1¾"	0.20
HSA-125-075	11/4"	3⁄4"	1.09"	1¼ ₁₆ "	0.20
HSA-125-100	11/4"	1"	1.25"	1 ¾ "	0.24
HSA-150	11/2"	11⁄2"	1.69"	2"	0.35
HSA-200	2"	2"	2.11"	21⁄2"	0.57
HNA-050	1/2"	1/2"	1.33"	7⁄8"	0.10
HNA-075	3⁄4"	3⁄4"	1.65"	11/ ₁₆ "	0.27
HNA-075-050	3⁄4"	1/2"	1.38"	11/16"	0.15
HNA-100	1"	1"	1.80"	1¾"	0.38
HNA-100-050	1"	1⁄2"	1.44"	13⁄8"	0.11
HNA-100-075	1"	3⁄4"	1.61"	13/8"	0.33
HNA-125	11⁄4"	11⁄4"	1.88"	1¾"	0.37
HNA-125-075	11⁄4"	3⁄4"	1.61"	11⁄4"	0.38
HNA-125-100	11⁄4"	1"	1.80"	13⁄8"	0.45
HNA-150	11/2"	11⁄2"	2.03"	2"	0.50
HNA-200	2"	2"	2.21"	21⁄2"	0.76
HLA-050	1/2"	1/2"	1.20"	1.10"	0.12
HLA-075	3⁄4"	3⁄4"	1.29"	1.40"	0.29
HLA-100	1"	1"	1.66"	1.69"	0.40

MATERIALS & DESIGN DATA

Machined from solid brass, these adapters provide superior connectivity between Nexus UltraFlex female swivel hose ends and NPT pipe fittings or copper tubing. The UltraFlex hose end, where the Hose Adapters can be threaded in, has swivel fitting with NPSH (straight pipe) threads, and gasket.

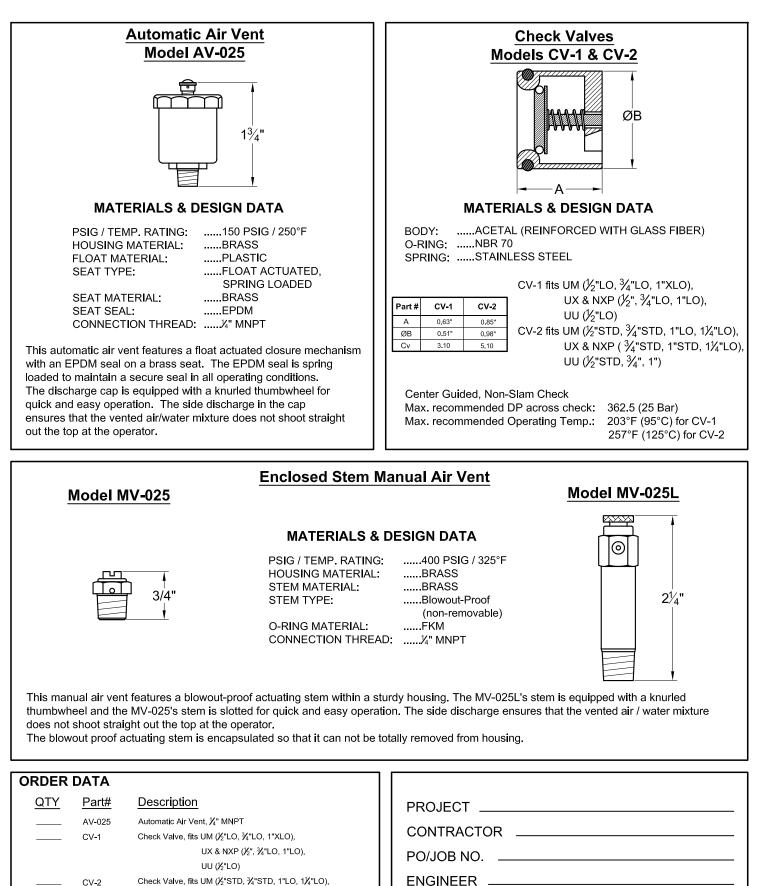
All threaded ends (including NPT) have faces that are machined true and flat for maximum sealing performance against gaskets.

ORDER DATA							
QTY	Part #	QTY	Part #	QTY	Part #		
	HSA-050		HSA-125-100		HNA-125		
	HSA-050-038		HSA-150		HNA-125-075		
	HSA-075		HSA-200		HNA-125-100		
	HSA-075-050		HNA-050		HNA-150		
	HSA-100		HNA-075		HNA-200		
	HSA-100-050		HNA-075-050		HLA-050		
	HSA-100-075		HNA-100		HLA-075		
	HSA-125		HNA-100-050		HLA-100		
	HSA-125-075		HNA-100-075				

PROJECT
CONTRACTOR
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Air Vents Models AV-025, MV-025 & MV-025L, Check Valves Models CV-1 & CV-2



UX & NXP (¾"STD, 1"STD, 1¼"LO),

UU (½"STD, ¾", 1")

Manual Air Vent, ¼" MNPT

Manual Air Vent Extended, 1/2" MNPT

MV-025

MV-025L

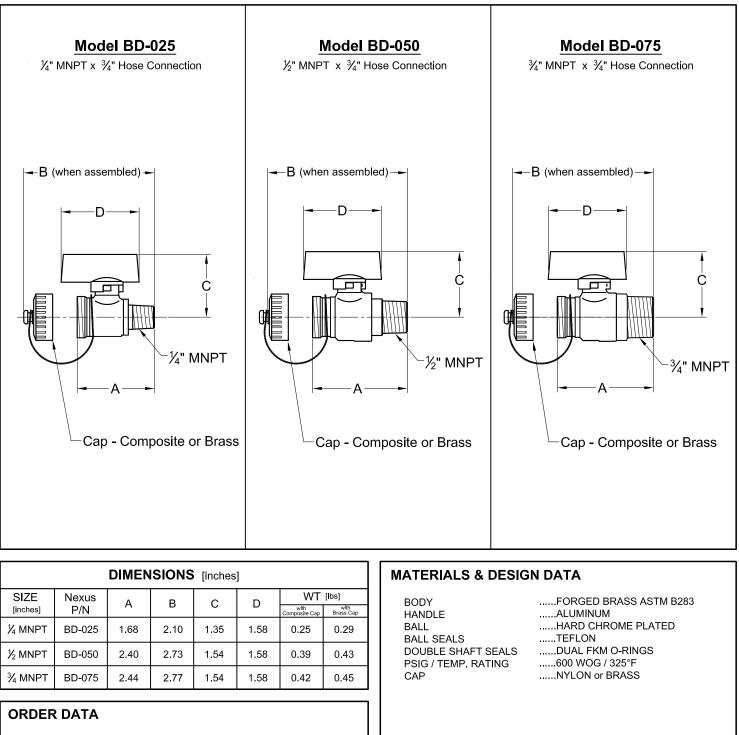
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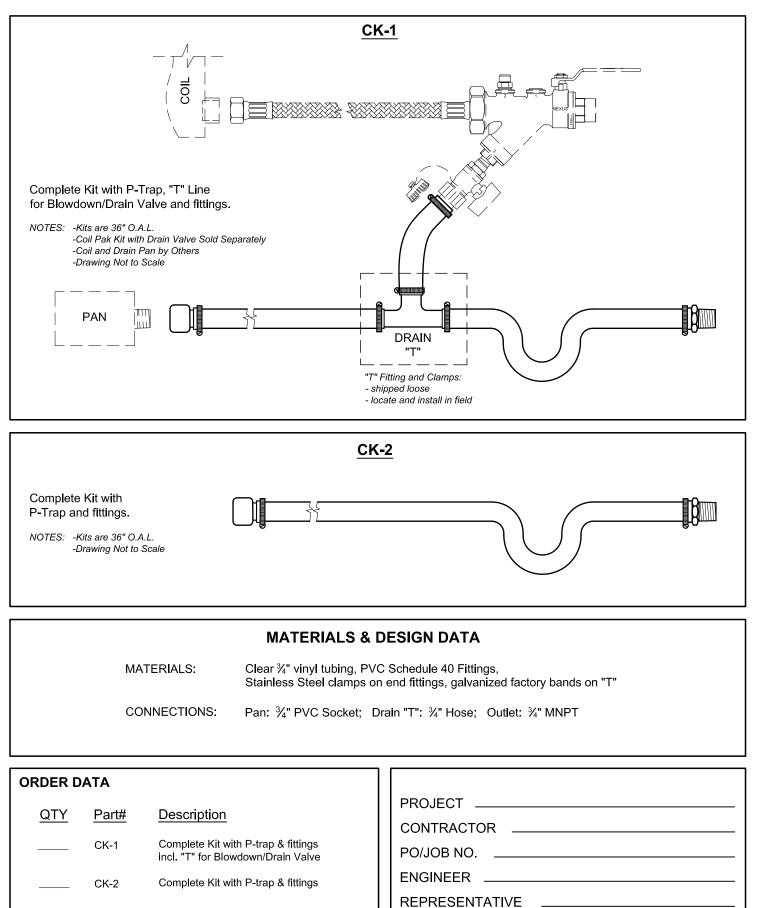
Blowdown/Drain Valves Models BD-025, BD-050, BD-075



<u>QTY</u>	Part#	Description	L	
	BD-025	Blowdown-Drain-Vent Valve, $\not\!$	Γ	
	BD-050	Blowdown-Drain-Vent Valve, $ ot\!\!/_2$ " MNPT Inlet, with Composite Cap		PROJECT
	BD-075	Blowdown-Drain-Vent Valve, $cepsilon$ "MNPT Inlet, with Composite Cap		CONTRACTOR
	BD-025-BC	Blowdown-Drain-Vent Valve, χ " MNPT Inlet, with Brass Cap		PO/JOB NO
	BD-050-BC	Blowdown-Drain-Vent Valve, $ ot\!\!\!/_2$ " MNPT Inlet, with Brass Cap		ENGINEER REPRESENTATIVE
	BD-075-BC	Blowdown-Drain-Vent Valve, $ ac{3}{4}$ " MNPT Inlet, with Brass Cap		DATE



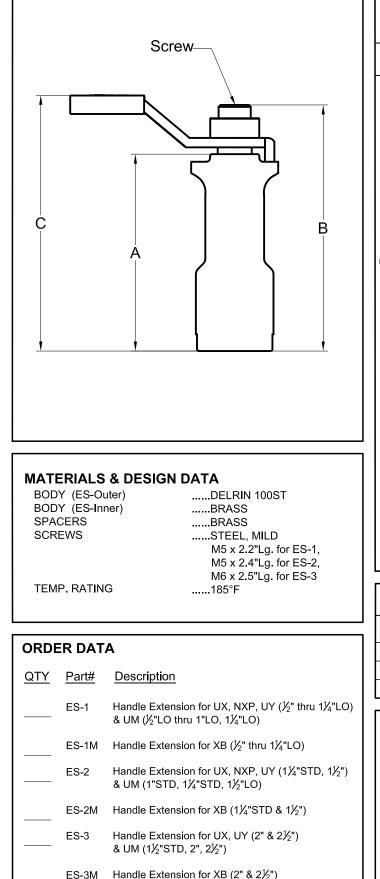
Condensate Drain Kits Models CK-1 & CK-2

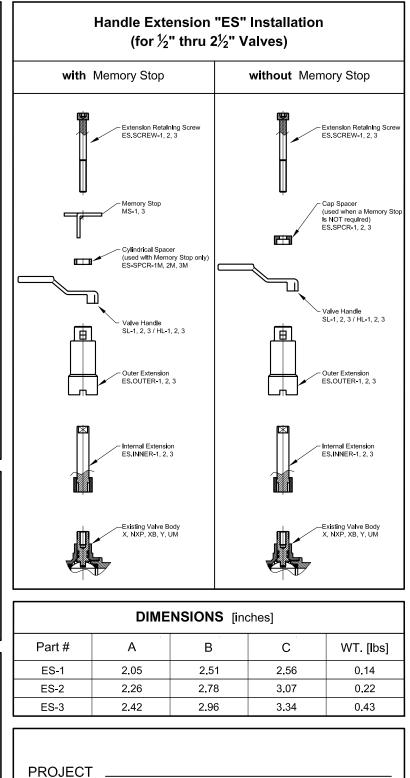


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Handle Extension Model ES-1, ES-2, ES-3





CONTRACTOR _____

PO/JOB NO.

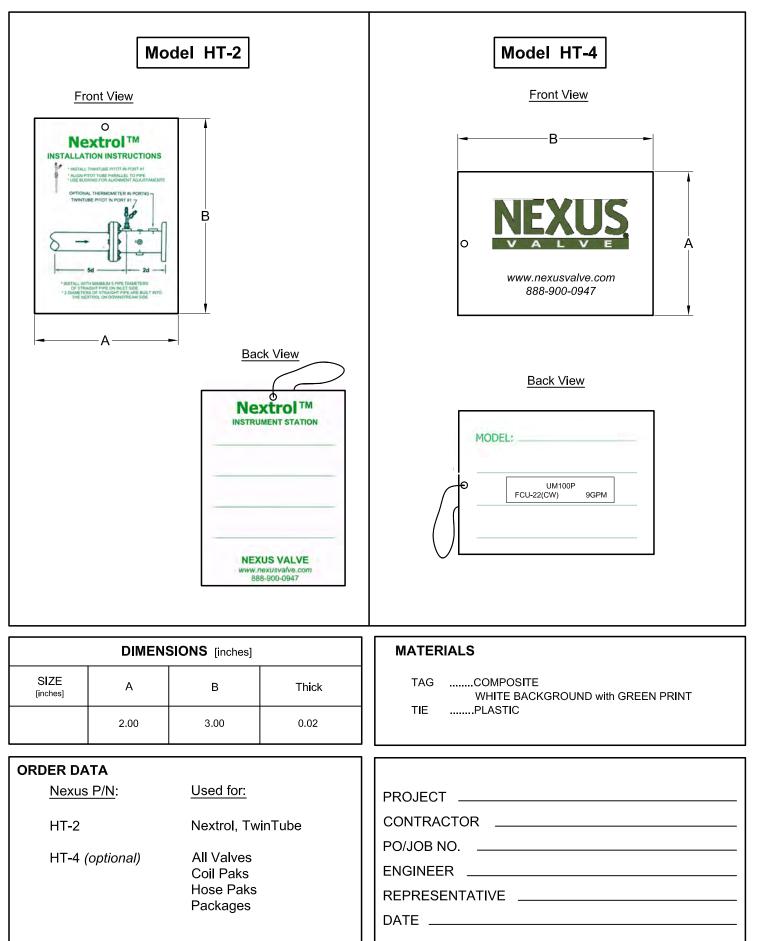
ENGINEER _

REPRESENTATIVE

DATE

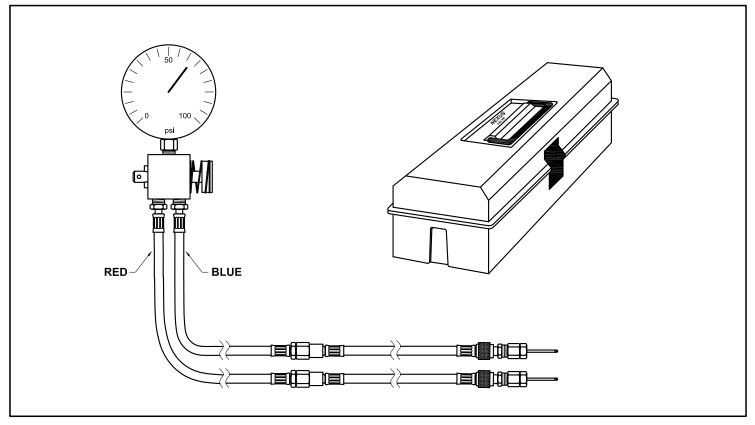


Hanging Tag Models HT-2, HT-4





Meter Kit Model MKA (for Automatic Flow Control Valves)



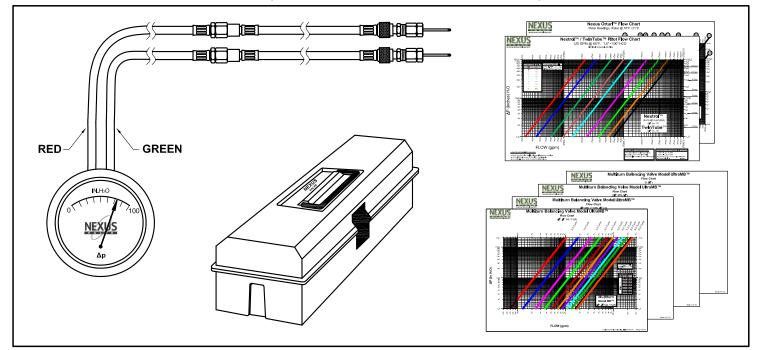
STANDARD MATERIAL SPECIFICATIONS					
GAUGE	CASE, RING: LENS: DIAL: CONNECTION: ACCURACY: RANGE: MAX. OPERATING PRESSURE: OPERATING TEMPERATURE RANGE:	STAINLESS STEEL ACRYLIC 4" FACE, ALUMINUM, GLYCERINE FILLED ¼" NPT 3-2-3% - ANSI B40.1, GRADE B 0 - 100 psi/bar 500 PSIG (34.7 bar) 32°F Min. to 200°F Max.			
CARRYING CASE	MOLDED PLASTIC, RED				
HOSES	5 Ft. LONG (RED & BLUE), NITRILE JACKET AND LINER				
END FITTINGS	SCHRADER ¼" BRASS COUPLERS AND PT PROBE ADAPTERS				
FILTERS	TEST KIT IS PROTECTED WITH 90 MICRON FILTERS TO MINIMIZE PLUGGING WITH SCALE, SAND, ETC. ELEMENTS CAN BE CLEANED OR REPLACED.				

ORDER DATA Part #: MKA	PROJECT CONTRACTOR PO/JOB NO ENGINEER
	REPRESENTATIVE



Meter Kit Models MKM-050, MKM-100, MKM-300

(for Manual Flow Control Valves)



STANDARD MATERIAL SPECIFICATIONS					
GAUGE	BODY, TYPE: LENS: DIAL, WETTED INTERNALS: CONNECTION: ACCURACY: RANGES:	ANODIZED ALUMINUM, DIAPHRAGM DIFFERENTIAL PRESSURE ACRYLIC 4½" FACE, BUNA-N ELASTOMERS, BRASS & 316 S.S. PARTS ¼" NPT 5% FULL SCALE (ASCENDING) 0-50 IN.H ² O (MKM-050) 0-100 IN.H ² O (MKM-100) 0-300 IN.H ² O (MKM-300)			
	MAX. OPERATING PRESSURE: OPERATING TEMPERATURE RANGE:	500 PSIG (34.7 bar) 32°F Min. to 180°F Max.			
CARRYING CASE	MOLDED PLASTIC, GRAY				
HOSES	5 Ft. LONG (GREEN & RED), NITRILE JACKET AND LINER				
END FITTINGS	SCHRADER ¼" BRASS COUPLERS AND	PT PROBE ADAPTERS			
FILTERS	TEST KIT IS PROTECTED WITH 90 MIC ELEMENTS CAN BE CLEANED OR REP	RON FILTERS TO MINIMIZE PLUGGING WITH SCALE, SAND, ETC. LACED.			
CHARTS	CHARTS LAMINATED SHEETS WITH: NEXTROL/TWINTUBE, ORTURI, MB, MBNL, ND, NV, VERTEX FLOW CHARTS & MKM OPERATING INSTRUCTIONS				
ORDER DATA					
		PROJECT			

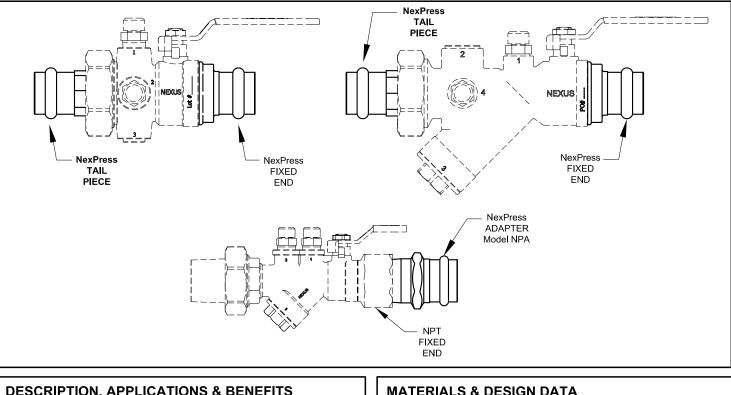
Part #: MKM-050 MKM-100 MKM-300

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



NexPress[™] **Connection System**

(¹/₂" thru 2")



DATE

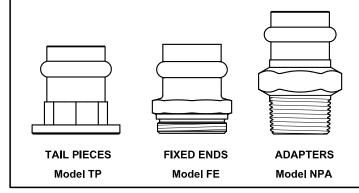
DESCRIPTION, APPLICATIONS & BENEFITS

- Description: NexPress[™] is a safe, reliable and economical connection system for connecting copper pipes, valves, and hoses using cold-press connection technology.
- Applications: K, L, and M hard and soft copper tubing. - All copper tubing to comply with ASTM B88 standards.
 - NexPress[™] fittings are approved for ABOVE ground applications only.
- Approved Applications: Hydronic Heating - Chilled Water (w/ Glycol)
- Benefits: - Fast and easy to use - Flameless
 - Environmentally Friendly

MATERIALS & DESIGN DATA

DZR C35330 Brass FKM seals Operating Pressure: 200 PSI max Test Pressure: 600 PSI Temperature: 34°F to 250°F water systems Temperature: 0°F to 250°F water/glycol systems

NexPress[™] has been tested to IAPMO PS 117-2006



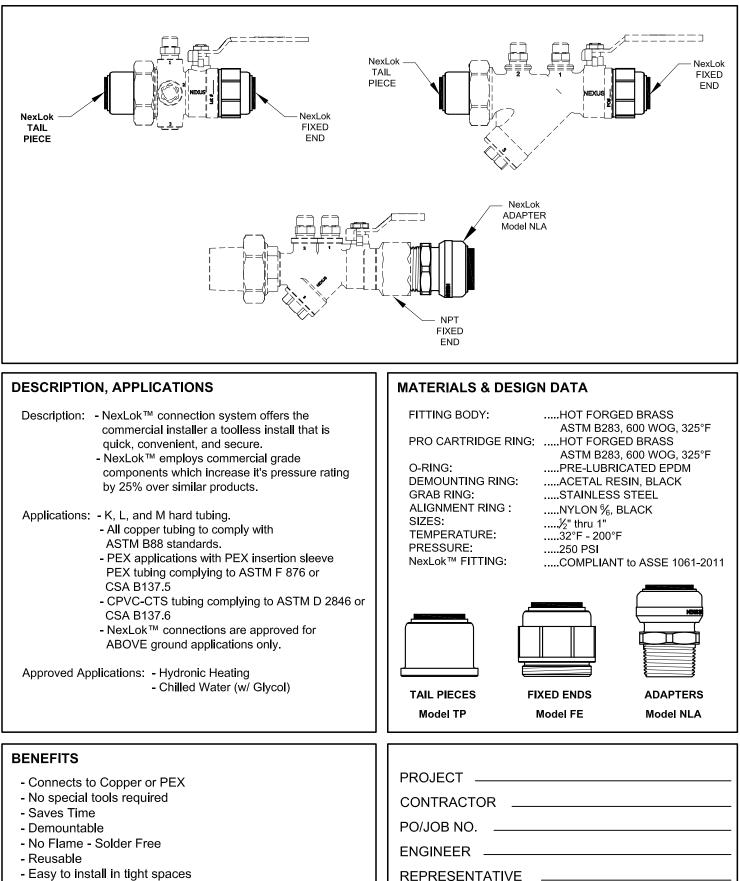
COMPATIBLE CRIMP TOOL MANUFACTURERS

- Ridgid ProPress
- Stanley Virax
- REMS Power-Press
- Rothenberger Romax Pressliner



NexLok[™] Connection System

(½" thru 1")



- Environmentally Friendly NOTE: PEX Tubing requires included support ring

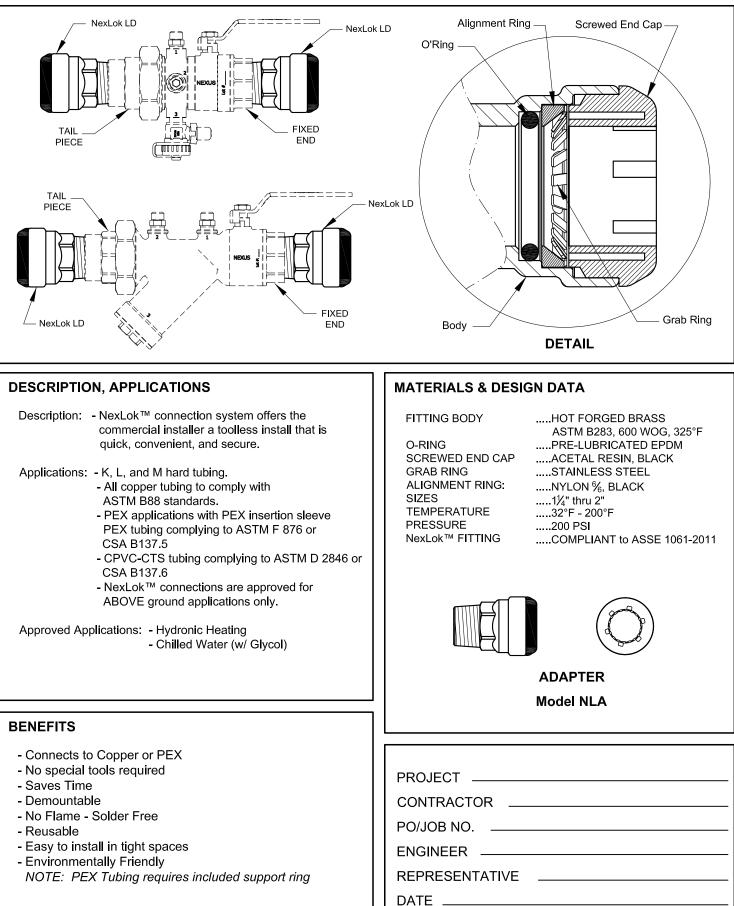
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(Rev: 11/20/17)



NexLok[™] LD Connection System

(1¹⁄₄" thru 2")



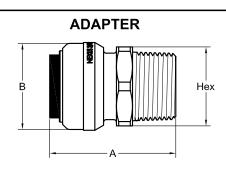
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(Rev: 11/22/17)

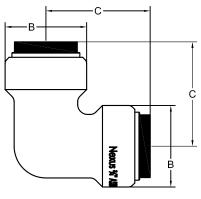


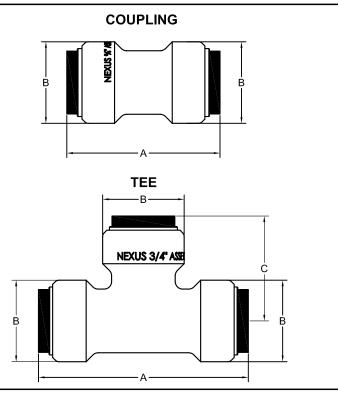
NexLok[™] Adapters, Couplings, Elbows, Tees

(¹⁄₂" thru 1")









DIMENSIONS [inches]										
	Nexus Part No.	SIZE	ID	А	В	С	Hex	Wt. [Lbs]		
ers	NLA-050	1/2"	0.55	1.84	1.06	-	1.00	0.17		
Adapters	NLA-075	3⁄4"	0.76	1.92	1.36	-	1.22	0.24		
Ad	NLA-100	1"	1.02	2.42	1.66	-	1.48	0.39		
sĝr	NLC-050	1⁄2"	0.63	1.91	0.96	-	-	0.12		
Couplings	NLC-075	3∕4"	0.88	2.40	1.28	-	-	0.20		
о С	NLC-100	1"	1.15	2.62	1.65	-	-	0.36		
S	NLE-050	1/2"	0.55	-	1.06	1.32	-	0.15		
Elbows	NLE-075	3⁄4"	0.83	-	1.28	1.63	-	0.26		
	NLE-100	1"	1.10	-	1.65	1.93	-	0.52		
						1				
s l	NLT-050	1⁄2"	0.59	2.63	0.96	1.32	-	0.22		
Tees	NLT-075	3⁄4"	0.83	3.28	1.28	1.64	-	0.36		
	NLT-100	1"	1.10	3.86	1.65	1.93	-	0.68		

ORDER DATA

Adapters		Couplings		E	bows	Tees		
QTY	Part #	QTY	Part #	QTY	Part #	QTY	Part #	
	NLA-050		NLC-050		NLE-050		NLT-050	
	NLA-075		NLC-075		NLE-075		NLT-075	
	NLA-100		NLC-100		NLE-100		NLT - 100	

MATERIALS & DESIGN DATA

FITTING BODY:	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F
PRO CARTRIDGE RING:	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F
O-RING:	PRE-LUBRICATED EPDM
DEMOUNTING RING:	ACETAL RESIN, BLACK
GRAB RING:	STAINLESS STEEL
ALIGNMENT RING :	NYLON %, BLACK
SIZES:	½" thru 1"
TEMPERATURE:	32°F - 200°F
PRESSURE:	250 PSI
NexLok™ FITTING:	COMPLIANT to ASSE 1061-2011

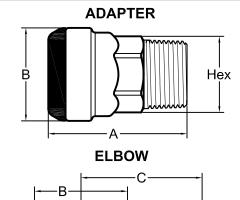
PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
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DATE	
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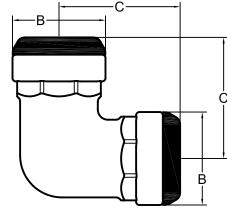
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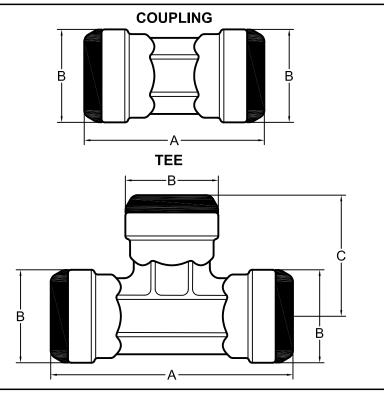


NexLok™LD Adapters, Couplings, Elbows, Tees

(1¼" thru 2")







DIMENSIONS [inches]										
	Nexus Part No.	SIZE	ID	А	В	С	Wt. [Lbs]			
ers	NLA-125	11⁄4"	1.30	3.27	2.33	-	0.95			
Adapters	NLA-150	1½"	1.47	3.47	2.76	-	1.16			
Ad	NLA-200	2"	1.95	3.70	3.22	-	1.43			
Couplings	NLC-125	11⁄4"	1.39	4.52	2.33	-	1.41			
	NLC-150	11⁄2"	1.64	4.95	2.76	-	1.72			
Col	NLC-200	2"	2.14	5.48	3.22	-	2.16			
NS	NLE-125	11⁄4"	1.39	-	2 <u>.</u> 33	3.04	1.93			
Elbows	NLE-150	1½"	1.47	-	2.76	3.37	2.94			
Ξ	NLE-200	2"	1.95	-	3.22	3.90	3.68			
s	NLT-125	11⁄4"	1.39	6.08	2.33	3.04	2.59			
Tees	NLT-150	1½"	1.47	6.72	2.76	3.37	3.46			
Г	NLT-200	2"	1.95	7.80	3.22	3.90	4.64			

ORDER	DATA
-------	------

Adapters		Couplings		Elbows			Tees		
QTY	Part #	QTY	Part #	QTY	Part #		QTY	Part #	
	NLA-125		NLC-125		NLE-125			NLT-125	
	NLA-150		NLC-150		NLE - 150			NLT-150	
	NLA-200		NLC-200		NLE-200			NLT-200	

MATERIALS & DESIGN DATA

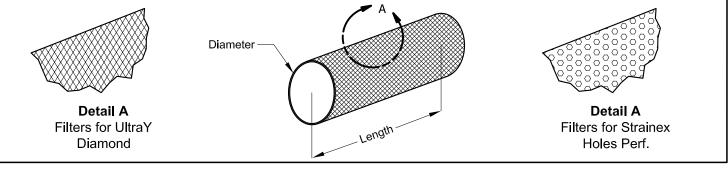
FITTING BODY:	HOT FORGED BRASS ASTM B283, 600 WOG, 325°F
O-RING:	PRE-LUBRICATED EPDM
SCREWED END CAP:	ACETAL RESIN, BLACK
GRAB RING:	STAINLESS STEEL
ALIGNMENT RING :	NYLON %, BLACK
SIZES:	1¼" thru 2"
TEMPERATURE:	32°F - 200°F
PRESSURE:	200 PSI
NexLok™ FITTING:	COMPLIANT to ASSE 1061-2011

PROJECT	
CONTRACTOR	
PO/JOB NO	
ENGINEER	
REPRESENTATIVE	
DATE	
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Nexus Filter Screen for UltraY[™] & Strainex Valves



Nexus P/N	Mesh/Inch	Aperture (Diamond)	Perf/Sq Inch	Open Area		MENSIONS s / mm]	Used in Nexus Valves
		[inches]		%	Diameter	Length	
YS-Y1	20 x 20	0.033 x 0.080	250	50%	0.75" / 19.00	1.12" / 28.50	UY-050-, UY-075L, UY-100L, YSS-050S, YSF-050F
YS-Y1-40	40 x 40	0.017 x 0.040	500	42%	0.75" / 19.00	1.12" / 28.50	UY-050-, UY-075L, UY-100L
YS-Y2	20 x 20	0.033 x 0.080	250	50%	0.98" / 25.00	2.35" / 59.80	UY-075-, UY-100-, UY-125L, YSS-075S, YSF-075F, YSF-100F
YS-Y2-40	40 x 40	0.017 x 0.040	500	42%	0.98" / 25.00	2.35" / 59.80	UY-075-, UY-100-, UY-125L
YS-Y3	20 x 20	0.033 x 0.080	250	50%	1.50" / 38.00	3.54" / 90.00	UY-125-, UY-150-; YSS-100S
YS-Y3-40	40 x 40	0.017 x 0.040	500	42%	1.50" / 38.00	3.54" / 90.00	UY-125-, UY-150-
YS-Y4	20 x 20	0.033 x 0.080	250	50%	2.33" / 59.20	5.00" / 127.00	UY-200-, UY-250-
YS-Y4-40	40 x 40	0.017 x 0.040	500	42%	2.33" / 59.20	5.00" / 127.00	UY-200-, UY-250-

		Aperture (Round)			Open Area		MENSIONS	
Nexus P/N	Mesh/Inch	Hole Dia.	Dist bet	Perf/Sq Inch	•	linches	s / mm]	Used in Nexus Valves
		[inches]	holes [inches]		%	Diameter	Length	
SXF-0250	14 x 14	Ø0.043	0.069	238	35%	2.50" / 63.50	6.50" / 165.00	SXF-0250, SXFV-0250, SXG-0250, SXGV-0250, SXT-0250, SXTV-0250
SXF-0300	14 x 14	Ø0.043	0.069	238	35%	3.13" / 79.38	7.06" / 179.4	SXF-0300, SXFV-0300, SXG-0300, SXGV-0300, SXT-0300, SXTV-0300
SXF-0400	5 x 5	Ø0.126	0.189	30	37%	4.00" / 101.60	9.03" / 229.40	SXF-0400, SXFV-0400, SXG-0400, SXGV-0400, SXT-0400, SXTV-0400
SXF-0500	5 x 5	Ø0.126	0.189	30	37%	5.06" / 128.59	11.75" / 298.45	SXF-0500, SXFV-0500, SXG-0500, SXGV-0500, SXT-0500, SXTV-0500
SXF-0600	5 x 5	Ø0.126	0.189	30	37%	5.75" / 146.05	13.62" / 346.00	SXF-0600, SXFV-0600, SXG-0600, SXGV-0600, SXT-0600, SXTV-0600
SXF-0800	5 x 5	Ø0.126	0.189	30	37%	7.50" / 190.50	18.00" / 457.20	SXF-0800, SXFV-0800, SXG-0800, SXGV-0800, SXT-0800, SXTV-0800
SXF-1000	5 x 5	Ø0.126	0.189	30	37%	10.63" / 269.88	20.19" / 512.80	SXF-1000, SXFV-1000, SXG-1000, SXGV-1000, SXT-1000,SXTV-1000
SXF-1200	5 x 5	Ø0.126	0.189	30	37%	12.63" / 320.68	22.87" / 581.00	SXF-1200, SXFV-1200, SXG-1200, SXGV-1200, SXT-1200, SXTV-1200

DESCRIPTION & APPLICATIONS

- Metal filters are used in commercial and industrial/OEM applications, where the filters will be continuously exposed to liquid.
- The application's goal is to protect downstream components from particulate matter.
- Usable with water/glycol mixtures to 50%.

MATERIALS & DESIGN DATA

- Material: 304 Stainless Steel, ASTM A167
- Construction Method:
 Filters for UY: Welded Expanded Metal
 (2 Ply Welded Expanded Metal for YS-Y4-40).
 Filters for Stainex: Perforated Metal
- Max allowable working Pressure:
 600 hydrostatic pressure
- Service Temperature to 30°F (water/glycol)

BENEFITS

- Cleanable and reuseable
- Withstands significant fluid flow over wire mesh or paper filters.

PROJECT ______ CONTRACTOR _____

PO/JOB NO. _____

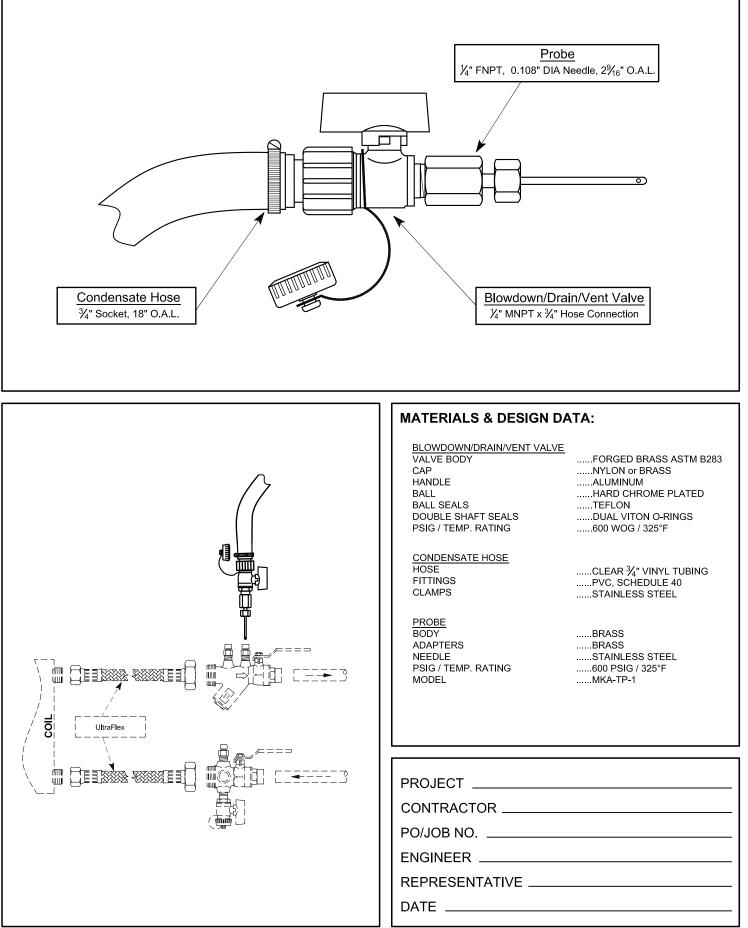
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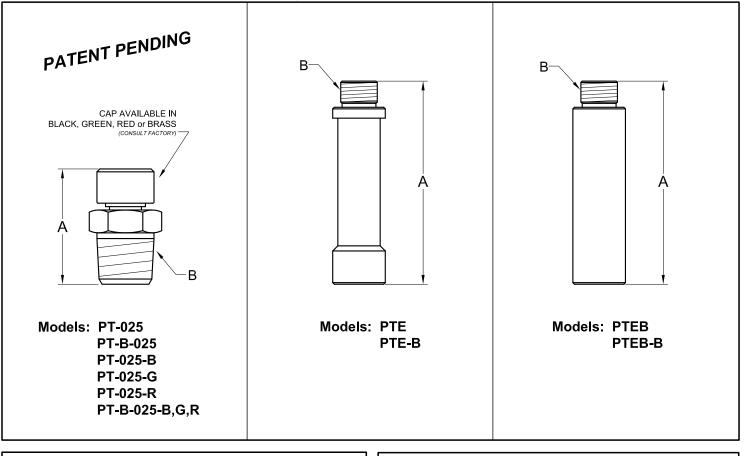


QuickVent Model QV





Pressure/Temperature Test Plug Models PT-025, PT-025-B,G,R Accessory Extension Models PTE, PTEB



DIMENSIONS [inches]					
Part # A		В	WT. [lbs]		
PT-025	1.0	½" MNPT	0.10		
PT-B-025	1.0	¼" MNPT	30.0		
PT-025-B	1.0	½" MNPT	0.06		
PT-025-G	1.0	¼" MNPT	0.06		
PT-025-R	1.0	¼" MNPT	0.06		
PT-B-025-B,G,R	1.0	¼" MNPT	18.0		
PTE	1.6	¾ "-24 UNF	0.08		
PTEB	1.6	¾"-24 UNF	0.08		

ORD	ER DATA	
<u>QTY</u>	<u>Part#</u>	Description
	PT-025	Pressure/Temperature Test Plug with Brass Cap, λ " MNPT
	PT-B-025	Pressure/Temperature Test Plug with Brass Cap, $\ensuremath{\mathcal{X}}$ " MNPT,
		Bulk (300 pcs)
	PT-025-B	Pressure/Temperature Test Plug with Black Cap, $ ot\!$
	PT-025-G	Pressure/Temperature Test Plug with Green Cap, $ ature$ MNPT
	PT-025-R	Pressure/Temperature Test Plug with Red Cap, $\ensuremath{\mathcal{X}}$ " MNPT
	PT-B-025-B,G,R	Pressure/Temperature Test Plug with Black, Green, Red Cap,
		¼" MNPT, Bulk (300 pcs)
	PTE	Pressure/Temp Test Plug Extension, Delrin
	PTE-B	Pressure/Temp Test Plug Extension, Bulk (1000 pcs)
	PTEB	Pressure/Temp Test Plug Extension, Brass
	PTEB-B	Pressure/Temp Test Plug Extension, Bulk (500 pcs)

MATERIALS & DESIGN DATA BODY (PT-025,

PT-025-B, PT-025-G, PT-025-R)	
BODY (PTE)	DELRIN
BODY (PTEB)	BRASS
CAP (PT-025-B, PT-025-G, PT-025-R)	NYLON 6 / 6
CAP (PT-025)	BRASS
PLUG SEAL	NORDEL
THREAD SEALANT	LOCTITE 516 / 517
PSIG / TEMP. RATING	1000 PSIG / 325°F

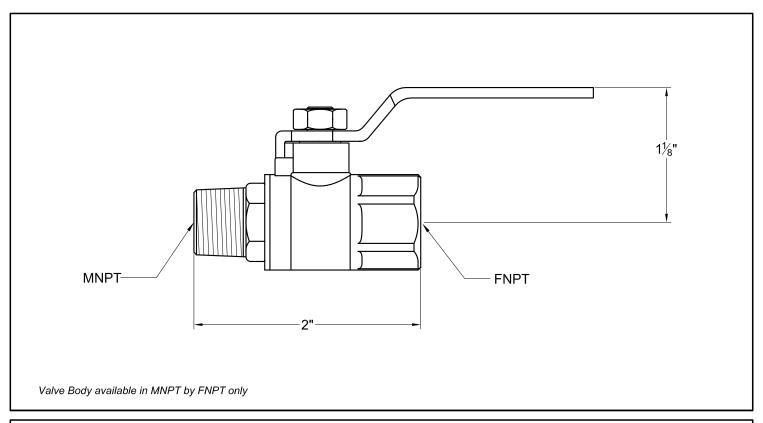
.....BRASS

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE



Shut-Off Valve Model SV

(1⁄4")



MATERIALS & DESIGN DATA

BODY	HOT FORGED BRASS ASTM B283, 600 WOG, 325°
SHAFT	BRASS, BLOWOUT PROOF

HANDLE & NUTZINC PLATED / PVC COATED

BALLHARD CHROME PLATED BRASS

BALL SEALSTEFLON

SHAFT SEALSDUAL FKM O-RINGS

ORDER DATA	
Sample Dart #1	PROJECT
Sample Part #: S V - 0 2 5	CONTRACTOR
Model	PO/JOB NO
SBV - Standard Ball Valve Size	ENGINEER
X" = 025	
Please consult the "Ordering Guide" section in Nexus Valve Catalog	

Please consult the "Ordering Guide" section in Nexus Valve Catalog for complete part number and ordering information.



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Thermometer Well Model TW-075

$1-1/4"-18 \text{ UNEF} \ Thread$ $1-1/2" \text{ Hex} \ 3/4" \text{ MNPT} \ Thread$ $3/4" \text{ MNPT} \ Thread$ $Stem \text{ Length } = 3\frac{1}{2}"$ $\emptyset \frac{5}{8}"$	1.06" $U'' = 2\frac{1}{2}$ "
DESCRIPTION & APPLICATIONS	MATERIALS & DESIGN DATA
A THERMOMETER WELL IS A PRESSURE TIGHT RECEPTACLE, DESIGNED TO ACCEPT A TEMPERATURE SENSING ELEMENT, AND PROVIDE A MEANS TO INSERT THAT ELEMENT INTO A VESSEL OR PIPE.	BODYBRASS PRESSURE / TEMP RATING300 PSI / 150°F 250 PSI / 350°F LENGTH "U" = 2½" INDICATES THE INSERTION DEPTH INTO A PROCESS VESSEL OR PIPING SYSTEM "U" MUST BE EQUAL OR EXCEED THE LENGTH OF THE SENSITIVE PORTION OF THE TEMPERATURE INSTRUMENT'S STEM OR BULB.
PRINCIPLES OF OPERATION	
 A THERMOWELL ACTS AS A BARRIER BETWEEN A PROCESS MEDIUM AND THE SENSING ELEMENT OF A TEMPERATURE MEASURING DEVICE. IT PROTECTS AGAINST CORROSIVE MEDIA, MEDIA CONTAINED UNDER PRESSURE, OR MEDIA FLOWING AT A HIGH VELOCITY. A THERMOWELL ALSO ALLOWS THE SENSING ELEMENT TO BE REMOVED FROM THE APPLICATION WHILE MAINTAINING A CLOSED SYSTEM. 	PROJECT CONTRACTOR PO/JOB NO ENGINEER REPRESENTATIVE DATE



Flexible Connector

NEXUS

 $050 = \frac{1}{2}$, $075 = \frac{3}{4}$, 100 = 1, $125 = \frac{1}{4}$, $150 = \frac{1}{2}$, 200 = 2

2"F x 1⁄2"F Hose_Sample Part #:

U F H - 0 5 0 F - 0 5 0 F - 1 8

Connector Length

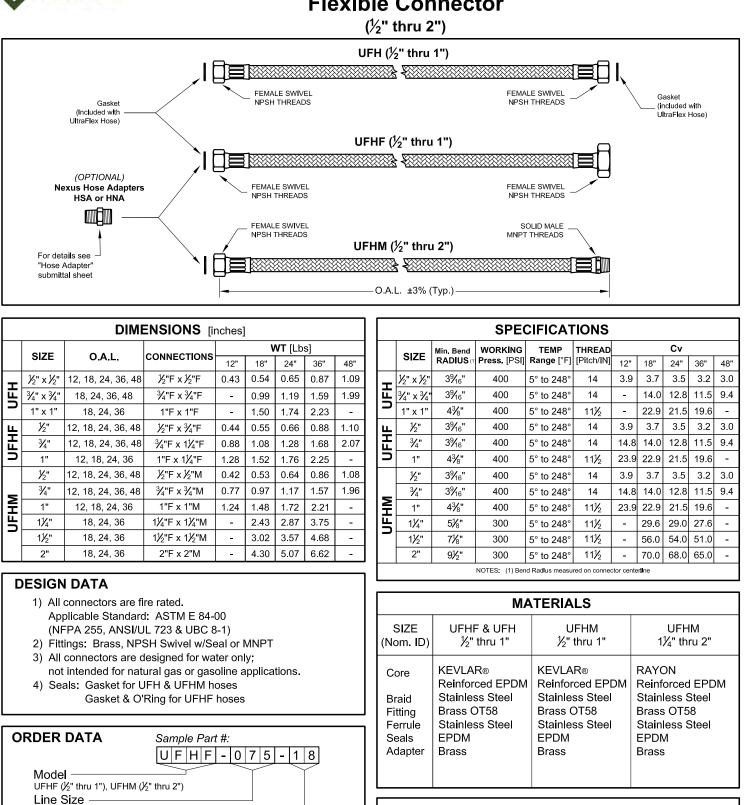
050 = ½", 075 = ¾", 100 = 1" **Connector Length**

12", 18", 24", 36", 48

Model

UFH (1/2" thru 1") Line Size

12", 18", 24", 36", 48



PROJECT

CONTRACTOR

PO/JOB NO.

ENGINEER

REPRESENTATIVE

DATE

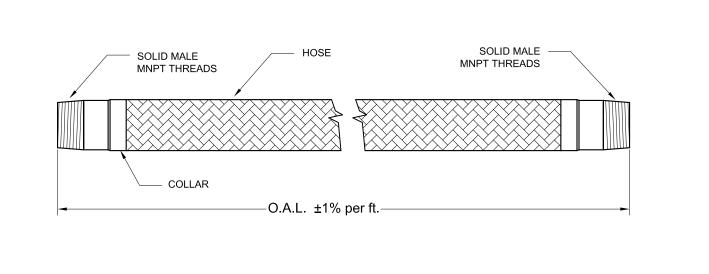


UltraFlex[™] Model UFH

Flexible Connector

(2½")





	DIMENSIONS [inches]					
	SIZE	0.A.L.	CONNECTIONS	WT [Lbs]		
	OILL	0.7.12.		24	36	
м	21⁄2"	24, 36	2½"M x 2½"M	5.9	8.0	

	SPECIFICATIONS						
	SIZE	Min. Bend	WORKING	ТЕМР	THREAD	c	v
	SIZE	RADIUS (1)	Press. [PSI]	[°F]	[Pitch/IN]	24"	36"
м	21⁄2"	91⁄2"	400	70°	8	68.0	65.0
	NOTES: (1) Bend Radius measured on connector centerline						

TEMPERATURE DERATING FACTORS Multiply X Working PSIG							
200°F	250°F	300°F	350°F	400°F	500°F	600°F	700°F
0.94	0.92	0.88	0.86	0.83	0.78	0.74	0.70

ORDER DATA	
ORDER DATA	
	Sample Part #: [U F H 2 5 0 - 2 4]
Model UFH (2½")	
Line Size 250 = 2½"	
Connector Length – 24" or 36"	

MATERIALS

Hose: Stainless Steel Collar: T-304 Stainless Steel Braid: Stainless Steel Fitting: Sch. 40 Carbon Steel

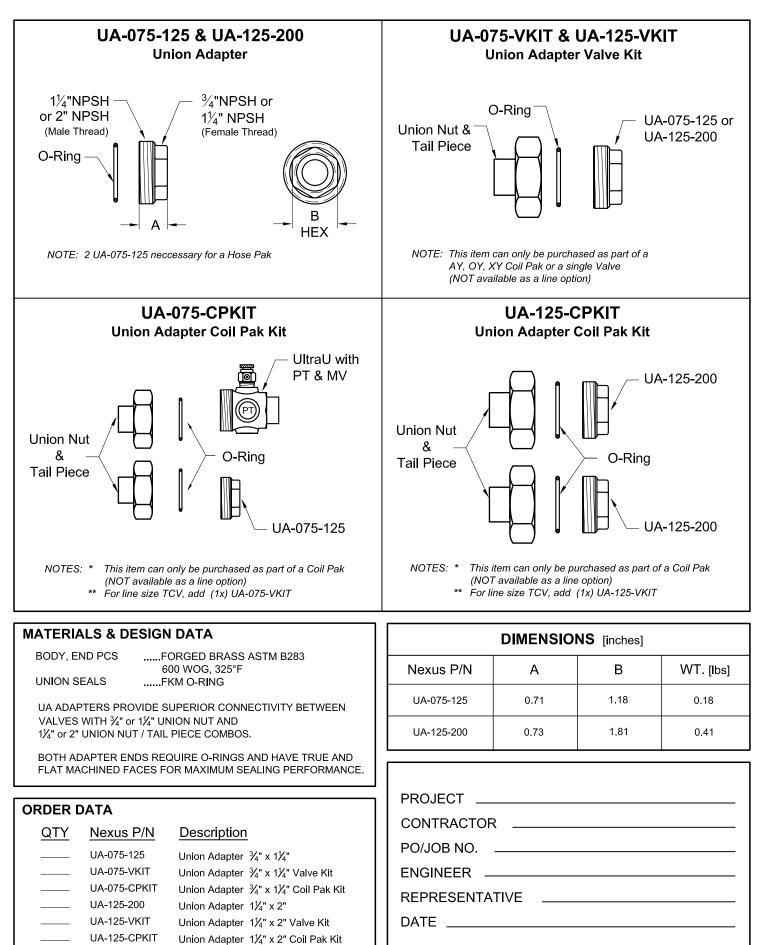
DESIGN DATA

- 1) These connectors are fire rated. Applicable Standard: ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- 2) These connectors are designed for water only; Not intended for natural gas or gasoline applications.
- 3) Lateral Offset: max. χ_{16} ".

(Rev: 07/23/14)



Union Adapter Models UA-075-125 & UA-125-200





UltraWrap[™] Model UW Reusable Valve Insulation Wraps

By NOSWEAT[™]

NO SWEAT[™] Reusable Valve Wraps

are a patented flexible insulation system designed for use with pipe insulation. The NO SWEAT[™] removable and reusable wraps are used over an insulated valve with a reusable design to provide an ongoing protective covering to the insulated valve.

The NO SWEAT[™] valve wrap comes packaged with a 1" thick fiberglass blanket insert that is used to completely cover the insulated valve . The outer cover of the NO SWEAT[™] wrap is made of DuPont Tychem® QC that easily stretches around the insulated valve and is secured with a Velcro closure. Tychem® QC consists of a durable Tyvek® substrate quality coated with polyethylene. Rugged and durable, Tychem® QC is a tough barrier fabric that resists punctures and tears. Tychem® QC remains flexible even in cold conditions compared to other fabrics based on measurements over a wide range of temperatures. Tychem® QC is impermeable to water.

MATERIALS and DESIGN DATA

MATERIALS and D	ESIGN DATA		
Tychem® QCTy	berglass Blanket /vek® coated with Polyethyle ith Velcro Closure	ne	
Sealing TapeP\	/C or equal, White		
Operating Temperature	Limits:		
Tychem® QC:	Up to 200°F [-	
Insert:	0°F to 450°F		
Flame Spread:	•	o to 30 mil [0.8 mml]	
Smoke Developed		o to 30 mil [0.8 mml]	
Flammability test results		nability - fabrics are considered and generally he trade as having no unusual burning s.	
Grade:	Weatherable		
Color:	White / Gloss	finish	
Mullen Burst (STNM D3 Breaking Strength Grab (™ D3776-90) 7-75) on (WVT) (ASTM E 96)	2.5 oz/yd ² 10 mils 0.01 Perms at 37.8C / 100F - RH / 100% 65 psi 43 / 49 lbs)7 / 5 lbs	
General Properties			
Temperature Limits:	0°F to 450°F [-18°C to		
Sanitary/Odorless:	Does not promote mole	Resistant to fungi and bacteria.	
UV Resistant:	Use indoors and outdoo	0	
Excellent Appearance:		coloring adds a distinct quality	┢
	appearance to the syste	, , , , , , , , , , , , , , , , , , ,	
Long lasting:	Can be used and re-use		F
Vibration Resistant	Will not settle or separa	te.	
Fire Safety:	DuPont Tychem® QC f		
	Normal Flammability. Th	5	┢
		UL25/50 rating and are	
	non-combustible per AS		F
		al, institutional, industrial, and	L
	residential projects in al	parts of North America.	

QUALIFICATIONS FOR USE

HOT SYSTEMS

- Tychem® QC should be limited and kept below 200°F [93°C] by use of proper insulation thickness
- Tychem® QC should be kept away from contact with, or exposed to, sources of direct or radiated heat
- For fittings where operating temperatures exceed 250°F [121°C], or where pipe insulation is greater than 1½" [38.0 mm], two or more layers of the insulation inserts are required beneath the NO SWEAT [™] cover surface

COLD SYSTEMS

 For fittings where operating temperature is below 45°F [7°C], or where the pipe insulation is greater than 1½" [38.0 mm], two or more layers of the insulation inserts are required beneath the NO SWEAT™ cover surface

BENEFITS

- Installs 10 times faster than traditional methods.
- Can be removed and reused after installation.
- Flexible and compressible can be used where oversizing of insulation is possible.
- Covers a multitude of valves including: automatic flow, ball valves, strainers, circuit setters, etc.
- Matches ASJ and PVC jacket.
- Efficiently sized in eight diameters to fit $\frac{1}{2}$ " through 6" pipe sizes.
- Noncombustible and impermeable to water.
- Prevents condensation and combats mildew and mold.

Thermal Efficiency of Insert (ASTM C 177)				
Mean Temperatures k (Thermoconductivit				
100°F [38°C]	0.28 [0.040]			
200°F [93°C]	0.38 [0.055]			
300°F [149°C]	0.52 [0.075]			
400°F [204°C]	0.70 [0.101]			
500°F [260°C]	0.90 [0.130]			

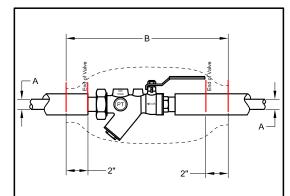
INSTALLATION

NO SWEAT[™] Reusable Valve Wraps are quick and easy to install, ideal for indoor or outdoor use on domestic water, chilled water, dual temperature, hot water and steam, along with other piping systems in commercial, institutional and industrial applications. Use on all outdoor vertical pipe applications of the NO SWEAT[™] product should be sealed on all North Ends by using a white matching PVC tape or equal.



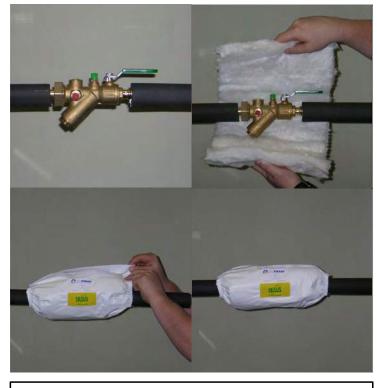
UltraWrap[™] Model UW **Reusable Valve Insulation Wraps**

By NOSWEAT™



Pipe Diameters	Pipe Insulation Thickness				
[inches]	½" Thk.	1" Thk.	1½" Thk.	2" Thk.	
5%: 1/2	1	2	3	3	
7/8: 3/4	1	2	3	3	
11/8: 1	1	2	3	4	
1¾: 1¼	2	3	3	4	
1%: 1½	2	3	3	4	
21/ ₈ : 2	2	3	4	5	
25%; 2½	3	3	4	5	
31/8: 3	3	4	5	6	
4½: 4	4	5	6	6	
5	5	6	7	8	
6	6	7	8	8	

QUICK SELECTION GUIDE for NEXUS VALVES					
Nevue Velve	Valve Size	Pipe Insulation Thickness & Valve Wrap Lengths			
Nexus Valve	[inches]	½" Thk. Insul.	1" Thk. Insul.	1½" Thk. Insul	2" Thk. Insul.
	½ LO, ¾ LO, 1 XLO	#2c - 12"	#2c - 12"	#3b - 12"	#4a - 12"
	½ STD, ⅔ STD, 1 LO, 1¼ LO	#2d - 14"	#3c - 14"	#3c - 14"	#4d - 14"
	1 STD, 1¼ STD, 1½ LO	#4d - 18"	#4d - 18"	#4d - 18"	#5b - 18"
↔ UltraUM / UltraY	1½ STD, 2 STD	#5c - 20"	#5c - 20"	#5c - 20"	#5c - 20"
	½, ⅔ LO, 1 LO	#1d - 10"	#2b - 10"	#3a - 10"	#4a - 12"
	¾ STD, 1 STD, 1¼ LO	#2d - 14"	#3c - 14"	#3c - 14"	#4b - 14"
	1¼ STD, 1½	#3d - 16"	#3d - 16"	#4c - 16"	#5a - 16"
/ UltraXB / UltraX / UltraNXP	2	#3d - 16"	#3d - 16"	#4c - 16"	#5a - 16"
	Y2	#1d - 10"	#2b - 10"	#3a - 10"	#4a - 12"
	3∕₄	#1d - 10"	#2b - 10"	#3a - 10"	#4a - 12"
	½ lo	#1c - 8"	#2a - 8"	#3a - 10"	#3a - 10"
	½ STD, ⅔, 1	#1d - 10"	#2b - 10"	#3a - 10"	#4a - 12"
	1½, 1½	#2b - 10"	#3a - 10"	#3a - 10"	#4a - 12"
UltraU	2	#2b - 10"	#3a - 10"	#4a - 12"	#5a - 16"



VALVE WRAP LENGTHS							
γ_2 " Thk. Insul.	1/2" Thk. Insul. 1" Thk. Insul. 1/2" Thk. Insul. 2" Thk. Insul.						
#1a - 4"	#1b - 6"	#1c - 8"	#1d - 10"				
#2a - 8"	#2b - 10"	#2c - 12"	#2d - 14"				
#3a - 10"	#3b - 12"	#3c - 14"	#3d - 16"				
#4a - 12"	#4b - 14"	#4c - 16"	#4d - 18"				
#5a - 16"	#5b - 18"	#5c- 20"	#5d - 22"				
#6a - 16"	#6b - 22"	#6c - 32"	#6d - 42"				
#7a - 22"	#7b - 32"	#7c - 42"					
#8a - 22"	#8b - 32"	#8c- 42"					

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

NO SWEAT[™] is the registered trademark of NO SWEAT™ Reusable Valve Insulation Wraps



UltraWrap[™] Model UWGF Mechanical Grooved Fitting Covers

By NOSWEAT[™]

U.S. PATENT #6907907

NO SWEAT™ Mechanical Grooved Fitting Covers

Are a patented, flexible insulation system designed for use with mechanical pipe insulation systems. The NO SWEAT[™] mechanicl grooved fitting cover is designed to be used with routine piping systems. The outer wrap is made of durable, flexible and impermeable DuPont Tychem® QC. It completely covers and easily stretches around the insulated fitting and is secured with a Velcro closure.

The fitting is protected by a 2" thick insulation blanket included in the NO SWEAT [™] Mechanical Grooved Fitting Cover kit.

The end result is a durable, flexible and continuous insulation barrier that resists punctures and tears on the outside and prevents condensation, mold and mildew on the inside - in a wide range of temperature environments.

MATERIALS & DESIGN DATA

Materials:

Insulation Insert	Fiberglass Blanket
Tychem® QC	Tyvek® coated with Polyethylene with Velcro Closure
Sealing Tape	PVC or equal, White

Operating Temperature Limits:

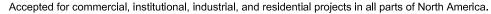
Tychem® QC:	Up to 200°F [93°C]
Insert	0°F to 450°F [-18°C to +232°C]
Flame Spread:	25 or less - up to 30 mil [0.8 mml]
Smoke Developed:	50 or less - up to 30 mil [0.8 mml]
Flammability test results - Class 1:	Normal Flammability - fabrics are considered and generally accepted by the trade as having no unusual burning characteristics.
Grade:	Weatherable
Color:	White / Gloss finish

Physical Properties of Tychem® QC:

Total Basis Weight (ASTM D3776-90).....2.5 oz/yd²Thickness (ASTM D1777-75).....10 milsWater Vapor Transmission (WVT) (ASTM E 96).....001 Perms at 37.8C/100F - RH/100%Mullen Burst (STNM D3786-87).....65 psiBreaking Strength Grab (md/cd) (ASTM D5034-90).....43/49 lbsTearing Strength Trapezoid (md/cd) (ASTM D1117-80).....7/5 lbs

General Properties:

Temperature Limits: Sanitary/Odorless: UV Resistant: Excellent Appearance: Long lasting: Vibration Resistant: Fire Safety:	0°F to 450°F [-18°C to +232°C] Will not absorb odors. Resistant to fungi and bacteria. Does not promote mold growth. Use indoors and outdoors. Bright high gloss white coloring adds a distinct quality appearance to the system. Can be used and re-used, once applied Will not settle or separate. DuPont Tychem® QC fabric is rated as Class 1: Normal Flammability. The fiberglass insulation inserts have a UL25/50 rating
	and are non-combustible per ASTM E 136.







UltraWrap[™] Model UWGF Mechanical Grooved Fitting Covers

By NOSWEAT™

QUALIFICATIONS FOR USE

HOT SYSTEMS

- Tychem® QC should be limited and kept below 200°F [93°C] by use of proper insulation thickness
- Tychem® QC should be kept away from contact with, or exposed to, sources of direct or radiated heat
- For fittings where operating temperatures exceed 250°F [121°C], or where pipe insulation is greater than 2" [50.8 mm], two or more layers of the insulation inserts are required beneath the NO SWEAT[™] cover surface

COLD SYSTEMS

 For fittings where operating temperature is below 45°F [7°C], or where the pipe insulation is greater than 2" [50.8 mm], two or more layers of the insulation inserts are required beneath the NO SWEAT™ cover surface

BENEFITS

- Installs 10 times faster than traditional fitting covers.
- No "stepped" snipping or cutting needed - matches any profile, anytime.
- Flexible tofit, unlike rigid PVC product.Overlaps existing pipe insulation for
- an air tight seal.
- One size fits 1", $1\frac{1}{2}$ ", 2" thick insulation.
- Matches ASJ and PVC jacket.
- Efficiently sized in ten diameters to fit 2" through 14" pipe sizes.
- Noncombustible and impermeable to water.
- Prevents condensation and combats mildew and mold.

INSTALLATION

NO SWEAT[™] Mechanical Grooved Fitting Covers are quick and easy to install, ideal for indoor or outdoor use on domestic water, chilled water, dual temperature, hot water and steam, along with other piping systems in commercial, institutional and industrial applications.

Use on all outdoor vertical pipe applications of the NO SWEAT ™ product should be sealed on all North Ends by using a white matching PVC tape or equal.

NO SWEAT [™] is the registered trademark	
of NO SWEAT™ Mechanical Grooved Fitting Covers	

THERMAL EFFICIENCY of INSERT (ASTM C 177)

Mean Temperatures	k (Thermoconductivity)
100°F [38°C]	0.28 [0.040]
200°F [93°C]	0.38 [0.055]
300°F [149°C]	0.52 [0.075]
400°F [204°C]	0.70 [0.101]
500°F [260°C]	0.90 [0.130]

SIZING CHART

(5 wraps/inserts to each box)

All Pieces include 2" thick insulation insert

Pipe Diameters [inches]	90°	45°	Tee	Coupling
2	2-90°	2 - 45°	2-Tee	2-C
2½	2½-90°	2½-45°	2½-Tee	2½-C
3	3-90°	3-45°	3-Tee	3-C
4	4-90°	4-45°	4-Tee	4-C
5	5-90°	5-45°	5-Tee	5-C
6	6-90°	6-45°	6-Tee	6-C
8	8-90°	8-45°	8-Tee	8-C
10	10-90°	10-45°	10-Tee	10-C
12	12-90°	12-45°	12-Tee	12-C
14	14 - 90°	14 - 45°	14-Tee	14-C

PROJECT
CONTRACTOR
PO/JOB NO
ENGINEER
REPRESENTATIVE
DATE

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INSTALLATION-OPERATION-MAINTENANCE

Effective Date: February 13, 2019

Please read and follow instructions within. Disregarding these instructions may result in poor performance and / or product failure and void your warranty.

Nexus Valve, Inc.

Tel 888.900.0947 Fax 800.900.8654 9982 E. 121st Street Fishers, IN 46037

www.nexusvalve.com info@nexusvalve.com



Limited Warranty1 General Information
Dynamic™
UltraXB™ Orturi
UltraMB™26
Nextrol™
UltraMBF™
Nexus Venturi – Model NV™
Strainex [™]
UltraY™
UltraX™
UltraNXP™
UltraU™
Valves for Actuators (UMA / MBA)
Ultra BK™ Bypass Kits
UltraT™61
Standard Ball Valve
NXU / NXS / NXH
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Meter Kits – MKA
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Manual Air Vents71
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Extension PTE / PTEB73
Union Adapter
Tool Requirements
Replacement O-Rings
Replacement Gaskets
Notes



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LIMITED WARRANTY

All goods sold hereunder are warranted to be free from defects in material and factory workmanship for the applicable Warranty Period. Various other products supplied through Nexus from an other manufacturer, such as temperature control valves, shall be subject to that manufacturers' warranty. Any misapplication, tampering, adjusting, abuse or other changes in the field to Nexus products will result in the automatic voiding of the Nexus limited warranty.

Replacement Parts

Nexus will replace or repair any of its valves, unions, or accessories which is determined to be defective in workmanship or material, free of charge, provided such products are installed in accordance with the best practices accepted in the trade and recommended in the Nexus Valve I.O.M.

Liability

THE LIABILITY OF NEXUS IS LIMITED TO REPLACEMENT OR REPAIR OF THE DEFECTIVE PART WHICH MUST BE RETURNED TO NEXUS WITH WRITTEN NOTICE BEFORE SUCH REPLACEMENT OR REPAIR IS MADE. NEXUS IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFIT, EXPENSES OF DELAYS, AND LOST SERVICE TIME.

Exclusions

This warranty applies only to defects in workmanship or material. The warranty does not include threaded connections, union connections, press or push connections, O-rings, gaskets, field connections, or products subject to conditions beyond those specified for the products. This warranty is in lieu of all other warranties, whether expressed or implied.

WARRANTY PERIOD

BRAND	PRODUCT GROUP	WARRANTY PERIOD
Nexus	Nexus Valve	5 Years from Date of Purchase
	Efficiency & Safety	5 Years from Date of Purchase
	Pressurization & Storage	5 Years from Date of Purchase
	Vacuum Deaeration	2 Years from Date of Purchase
Various	Various	Subject to OEM Warranty. Contact Nexus for details.





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GENERAL INFORMATION

General Information

Symbology



Important Information Please Review

×

Unacceptable Installation Do Not Violate This Information



Reference To Alternate Page



Acceptable Installation

Threaded Connections

Threaded connections in the field should be made according to specified or industry-accepted standards. All tapered pipe thread connections of Nexus Valve products conform to the ANSI/ASME B1.20.1-1983 American National Standard for Taper Pipe Threads (NPT threads).

When installing valve bodies with a threaded connection, it is imperative to use the flats provided on the threaded connection to resist the torque required for tightening the mating pipe threads.

DO NOT PLACE WRENCH / TOOL ON VALVE BODY!

The threads provided on Nexus Valve union connections are straight threads with no taper, conform to the ANSI/ASME B1.20.7-1991 American National Standard for Hose Coupling Threads (NPSH threads), and require an o-ring or gasket per design to seal.

Piping connections to a union tail piece must only be made while the tail piece is disconnected from the union. The union connection can be reassembled after the tail piece piping connection is completed.

Factory installed accessories (PT test plugs, MV air vents, PG plugs, BD drain valves, etc). are sealed at the factory and should not be disturbed after delivery.

Sweat Connections

Nexus Valve products with sweat connections are intended for "soft" solders with low melting temperatures. They are not designed for "silver" solders or other high temperature soldering methods. Use a standard approved soldering procedure including proper preparation of the copper pipe and cleaning of the pipe, valve connection, and/or union tail piece fitting.

AVOID OVERHEATING THE VALVE OR OTHER COMPONENTS WHEN MAKING SWEAT CONNECTIONS! A HEAT SINK - SUCH AS A WET RAG - MUST BE USED WHEN MAKING SWEAT CONNECTIONS!



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For valve bodies with integral sweat fittings, special care must be taken to avoid overheating the seals, orings, and sealant used in the valve body assembly. Position the valve lever or handle in the open position to eliminate pressure buildup and dissipate heat and use a heat sinking method.

FAILURE TO PROTECT THE VALVE BODY AND SEALS CONTAINED WITHIN THE VALVE BODY FROM OVERHEATING WILL CAUSE THE SEALS TO FAIL, THE VALVE TO LEAK, AND WILL VOID THE NEXUS VALVE WARRANTY.

For valve and/or union bodies with a sweat type union end tail piece, the tail piece must be removed from the valve or union body before heat is applied to avoid damaging the union o-ring.

NexPress[™] Connections

The NexPress[™] connection is for use with Types K, L, and M hard copper tubing. The maximum working pressure on the NexPress[™] fitting is 200 psi and is manufactured for water and water/glycol systems. For the connection to work "leak free" it is mandatory that the end of the copper tube be properly "dressed." Failure to "dress" the tube properly will result in a torn or damaged o-ring and result in a weak or leaking seal. To properly use NexPress[™] fittings:

- We recommend not using pipe fittings that do not have the required length of straight pipe. If using pipe fittings, be sure to properly dress them.
- Cut the end of the tube square.
- Remove all dirt, debris & burrs inside and outside.
- Chamfer the leading edge of the tube 5mm by 30 degrees.
- Ensure that the o-ring is present in the fitting, check that the o-ring is positioned evenly in the fitting's groove and is free of dirt, oil or other foreign materials.
- Insert tubing into the fitting, ensure that the tubing inserts fully into the fitting.
- If the tubing is difficult to insert, a little water or a food grade silicone spray may be applied to the tubing.
- Once the tubing is fully inserted, the fitting must be crimped using crimping tools, Ridgid ProPress, Stanley, NIBCO, etc.
- A minimum distance between press fittings must be 1/2 the tubing diameter.
- Consider clearance requirements between wall/ceiling & piping for the press tool.
- When transistioning to threaded connections, the threaded connection is made first.
- A minimum distance, when pressing a connection near an existing brazed fitting, of 2x the tubing diameters is required.
- A minimum distance, when pressing a connection near an existing solder fitting, of ½ the tubing diameters is required.
- When soldering near a NexPress™ connection a minimum distance of 3x tube diameters is required.
- When brazing near a NexPress™ connection a minimum distance of 9x tube diameters is required.
- A minimum distance of 4" must be maintained when welding a pipe adjacent to a pipe with a NexPress™ connection.



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GENERAL INFORMATION

- A minimum distance of 3' must be maintained when welding on the same pipe as a NexPress™ connection.
- A minimum distance of 4" must be maintained when attaching a sliding pipe hanger to a pipe with a NexPress™ connection.
- Pressure surges that result in water hammer effects can cause damage to the press fittings.
- Pressing causes pipe deflection. To minimize this, alternate the position of the press tool on each fitting connection in a piping line.
- After crimping, inspect and mark that the fitting has been crimped. Check for leaks.

Tube Size (Inch)	Required Insertion Depth (Inches)
1/2''	13/16"
3/4"	1"
1"	1"
11⁄4″	1"
11⁄2″	1 ⁷ / ₁₆ "
2"	1 ⁵ / ₈ "

NexLok[™] Connections

NexLok[™] and NexLok[™] LD connections are for use with ASTM B88 hard drawn and annealed Type K,L, and M copper tubing ½" through 2" and with ½" through 2" PEX tubing with a Nexus Tube Liner. The NexLok[™] fitting is designed for 1/2 " to 1" tubing and is rated for temperatures of 0°F to 200°F with a maximum working pressure of 250 PSI. The NexLok[™] LD is designed for 1-1/4" through 2" tubing and is rated for temperatures of 0°F to 200°F with a maximum NexLok[™] LD is designed for 1-1/4" through 2" tubing and is rated for temperatures of 0°F to 200°F with a maximum working pressure of 200 PSI. Both the NexLok[™] and The NexLok[™] LD are manufactured for water and water/glycol systems.

For the connection to work properly it is mandatory that the following instructions be followed:

- We recommend not using pipe fittings that do not have the required length of straight pipe. If using pipe fittings, be sure to properly dress them.
- The NexLok[™] fittings must not come in contact with household or industrial cleaning products, paints, greases, fluxes, mineral oils, adhesives, nitrates or other solvents during installation or after installation.
- The exterior surface of the NexLok™ fitting should not be painted.
- All proprietary flushing chemical should be reviewed with Nexus engineering prior to use.
- Soldering or brazing should not be done within 12" of the NexLok™ fitting.
- All soldered or brazed piping systems must be cool to touch before insertion into the NexLok[™] fitting.
- When transitioning to threaded connections, the threaded connection should be made first.



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• All TCV's should be atleast 5 tubing diameters from each NexLok™ fitting.

Installation of 1/2" through 2" tube:

- Cut the tube square (perpendicular to centerline of tube) with a tube cutter
- Remove burrs by chamfering the inside and outside diameters of the tube
- Mark the required insertion depth of the tube (See table below following page).

•

Tube Size	Required Insertion
(Inch)	Depth (Inches)
1/2"	¹⁵ / ₁₆ "
3/4"	11⁄8″
1"	1 5⁄16″
1¼″	21/4"
11⁄2″	2 ⁷ / ₁₆ "
2"	23/4"

- A Nexus Tube liner / PEX insertion sleeve must be inserted into the PEX tubing before inserting into the NexLok[™] connection.
- Holding the fitting firmly, insert the tube straight into the fitting with a twisting motion until the depth mark on the tube is aligned with the end of the fitting.
- Check that the depth mark is at the end of the fitting, if not, continue to push the tube to the full insertion depth.
- A minimum distance between press connections, after full insertion depth, should be 1".
- Once the tube is correctly installed to the proper depth, limit rotation of the tube.



Inserting a properly prepared tube straight into the NexLok[™] fitting will produce a leak free joint, will reduce insertion force, will prevent o-ring damage, and will insure the tube may easily be inserted to the proper depth. Failure to properly prepare the tube, inserting at angle and pulling the tube into proper alignment with the fitting is poor assembly practice and may result is a leaking joint.



DO NOT insert anything into the NexLok[™] grab ring fitting other than water tubing; it may not release. This warning includes human body parts and is critical to your health and safety. Seek emergency medical services if you become entangled in the grab ring mechanism inside the NexLok[™] fitting.



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GENERAL INFORMATION

Removal of the tube from the NexLok[™] fitting:

- Select the correct size removal tool for the job;
- Place the removal tool around the tube next to the fitting assembly. The flat side of the tool should be placed in contact with the fitting.
- Push the removal tool toward the fitting firmly until the grab ring is compressed.
- With the removal tool firmly held in place, use a twisting, and pulling motion to remove the tube from the fitting.
- Release the removal tool after the tube is removed.
- If the tube is to be re-used, check the tube for score marks, and any other defects such as dirt, or chips.
- If any defects exist, the tube must be repaired as needed to meet the installation requirements detailed previously in this installation manual.
- Check the internal parts of the fitting. The grab ring, pipe guide, and o-ring must be in the housing and aligned with the fitting opening.
- If all of the parts are in good condition, and aligned, then the fitting is ready to be assembled with a properly prepared pipe or tube.

Removal of the tube from the NexLok™ LD fitting:

- Ensure water pressure is removed from piping and the piping section isolated.
- Using a the adjustable spanner wrench from Nexus, place the wrench tangs in the opposing slots in the end cap and loose the end cap by turning wrench counter clock-wise (Fig 1).
- Pull the end cap away from the fitting.
- Remove the pipe and the grip ring from the fitting.
- Use an acceptable tool and cut the grip ring from the pipe. Care should be taken with the grip ring to avoid injury.
- Ensure the o-ring and protection ring are seated into the fitting if not well seated ensure reassembly in the same sequence as removed from the fitting.
- Place a NEW grip ring, available from NEXUS into the fitting. Ensure seating againse the protection ring. Ensure the grip ring seats with the taper facing inward toward the o-ring.
- Re-inert end cap and tighten into the fitting until snug the fitting is ready for tube inserting. Be sure to follow instruction above for preparing the tube for insertion.





Figure 2



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GENERAL INFORMATION

Removal of tube from the NexLok™ using demount rings

- Using a the adjustable spanner wrench from Nexus, place the wrench tangs in the opposing slots in the end cap and loose the end cap by turning wrench counter clock-wise (Fig 1).
- Slide the cap away from the fixed end on the pipe.
- Take the appropriate sized demount ring provided by Nexus, and snap it over the pipe between the cap and grip ring (Fig 2).
- Ensure the tapered end of the demount ring is facing the grip ring.
- Guide the cap back onto the fixed end and hand tighten.
- Twist and pull the pipe from the fixed end.
- Unscrew the cap and remove the demount ring.

Union Tail Piece Installation

Nexus Valve manufactures a series of interchangeable union end tail pieces for 1/2" through 2-1/2" connections.

Preparing for Installation of Union Tail Pieces

For both threaded and sweat types of tail pieces, the union tail piece must be disassembled from the valve or union body for the installation procedure. Separate the union tail piece from the valve body by removing the union nut, taking care not to lose or damage the union o-ring. Care must also be taken not to damage the o-ring sealing surface of the tail piece during handling and the installation procedure. This surface must not be scratched, deformed, or otherwise damaged in any way if the union o-ring seal is to perform properly.

Installation of Threaded Union Tail Pieces

Refer to instructions on <u>Preparing for Installation of Union Tail Pieces</u> before proceeding.

Position the union nut on the pipe side of the tail piece connection prior to installing the tail piece on the pipe, so that the union nut is available to reassemble the union connection.

Threaded tail pieces should be held properly during the thread tightening process. It is critical that the internal hex keyway or external tool flats provided on the tail piece be used to resist the torque required for tightening.

Nexus Valve threaded tail pieces for 1/2" through 1" NPT connections have an internal (female) hex keyway to facilitate installation. For these tail pieces, the proper hex key size for each NPT connection size is given on page 75. Nexus Valve offers a tool kit that includes the appropriate hex keys.

For valves equipped with 1-1/4" through 2" NPT threaded tail pieces, use the provided flats around the circumference of the fitting to hold and tighten the tail piece.



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GENERAL INFORMATION

If necessary, apply pipe sealant to pipe threads per industry standard practice. Note that Nexus Valve supplies some male thread components with pre-applied Loctite® sealant; while found to be an effective timesaver, this provision is a convenience feature only and the performance of this sealant is not warranted.

Tighten the tail piece per industry standard practice and proceed to <u>Completing the Installation of Union End</u> <u>Tail Pieces</u>.

Installation of Sweat Union Tail Pieces

Refer to instructions on <u>Preparing for Installation of Union Tail Pieces</u> before proceeding. Union tail pieces with a sweat type connection must be disassembled from the valve or union body before making the soldered connection. Separating the union tail piece from the valve or union body allows the soldering procedure to be done without overheating and damaging the o-ring seal of the union connection.

Position the union nut on the pipe side of the tail piece connection prior to installing the tail piece on the pipe, so that the union nut is available to reassemble the union connection.

Perform the soldering procedure in accordance with industry standard practice while adhering to the guidelines in Section II, Sweat Connections on page 2.



Allow the soldered connection to cool to ambient temperature before proceeding! Attempting to reassemble the union connection before allowing the soldered piece to cool will damage the union o-ring.

Proceed to Completing the Installation of Union End Tail Pieces.

Completing the Installation of Union Tail Pieces

After following the proper installation procedures for installation of the union end tail piece and the associated valve or union body, the union connection with o-ring may be reassembled. Follow the installation and assembly instructions on page 8 named, Union O-Ring Installation & Union Assembly.

Union O-Ring Installation & Union Assembly

An o-ring seal is a dynamic seal in that it is intended to move within the o-ring groove or gland. The o-ring groove is purposely designed wider than the o-ring width - per design standards for o-ring sealing applications so that the o-ring may move to seal the leak path when pressure is applied.

PIPE DOPE OR SEALANT SHOULD NEVER BE APPLIED TO THE O-RING, O-RING GROOVE, OR MATING SURFACE.

Inspect the o-ring groove for damage or debris (including pipe sealant). Inspect the mating surface of the tail piece flange to insure that it is not scratched, deformed or otherwise damaged. Any damaged components must be replaced.



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GENERAL INFORMATION

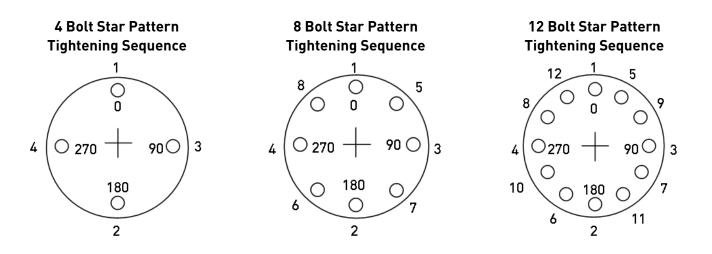
Carefully place the o-ring in the groove. Use of a quality non-petroleum based o-ring lubricant at the time of installation will help protect the O-ring from damage by abrasion, pinching, rolling or cutting and facilitate installation. Confirm that the o-ring is properly placed in the groove and reassemble the union connection. Secure the union nut hand-tight, **and then tighten no more then an additional** ¹/₄ **turn**.

Flanged Product Bolting Specifications

Field supplied studs, nuts and bolts should meet the following specifications:

- Carbon Steel
- ASME A307 Grade B material requirements
- ASME B18.2.1 Square Head Bolt or Heavy
- Hex Head Bolt requirements
 ASME B18.2.2 Heavy Hex Nut requirements

	centing opeentieu center							
	Recommended torque for	Bolt Size	Torque ft-lb					
5	tightening nut and bolt.	5/8"	84					
		3/4"	105					
	7/8" 160							
	1st Round - 30% of final torque							
	2nd Round - 60% of final torque							
	3rd Round - 100% of final torque							
	One final time clockwise around flange							



NPT Accessory Installation Procedure

Most products come assembled to factory specifications. Accessories on valves larger than 2-1/2" do not come assembled. Nexus Valve recommends tightening accessories to the following torque specifications:

• Accessories used in the 1/4" NPT to 13 - 15ft-lb.

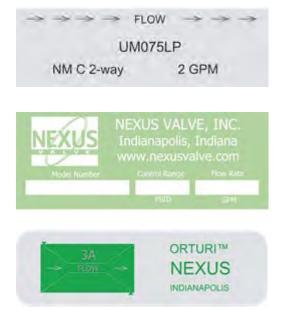


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- Accessories used in the 1/2" NPT to 20 25 ft-lb.
- Accessories used in the 3/4" NPT to 23 30 ft-lb.
- Thread sealant is pre-applied on most Nexus Valve supplied accessory MNPT connections.

Valve Identification



UM and UMS valves are shipped with a standard body identification tag located on the top of the handle or body. This tag includes the following information: flow rate (GPM), valve size, direction of flow, and location information (if provided). An optional hanging tag is also available.

Wafer style UltraMatic[™] valves are shipped with a standard body identification tag located on the valve body. This tag includes the following information: model number, control range (PSID) & flow rate (GPM).

UltraXB[™] Orturi valves are shipped with a tag on the handle as well as a body marking. This tag will indicate which modified venturi tube has been installed in the valve.

Standard Hanging Tag



For all valve products, an optional hanging body tag is available. This tag includes the part number and upon customer request, a tagging location.

Nextrol[™] Hanging Tag



Nextrol[™] products are shipped with a hanging tag. This tag includes model number, valve size, and tag location



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ULTRAMATICTM

UltraMatic™

UltraMatic[™] is a pressure independent automatic flow limiting valve. The UltraMatic[™] is available in several sizes and configurations.

General Information

- UltraMatic[™] can be installed in horizontal and vertical planes.
- When installing UltraMatic[™], space around the valve must be provided for port access and rotation of the handle.
- Each UltraMatic[™] has an internal cartridge that is factory-set to a specific flow rate (GPM). This flow rate cannot be adjusted in the field. Contact your local Nexus Valve representative if a different GPM is required. See page 17 for instructions to replace the cartridge if this becomes necessary.
- It is imperative that the valve be installed with correct direction of flow.
- Installation of a y-strainer is recommended upstream for any control valve or balancing device.



To achieve maximum performance, the elimination of air in the fluid is required.



Do not back flush with the cartridge in the body. Nexus Valve recommends using an UltraBK[™] Series bypass and flushing kit for flushing the hydronic system prior to start up and after periodic maintenance.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification

UltraMatic[™] Model UM

The UltraMatic[™] Model UM is a pressure independent automatic flow control valve (AFCV) which has both an isolation ball valve and union integrated into one body. In various configurations, the Model UM can accommodate several types of accessories, but comes standard with two pressure and temperature test plugs.

Straight Run Requirements

UltraMatic[™] does not typically require any straight pipe runs up or downstream. Changes in pipe diameter size at the valve inlet may cause turbulence impacting pressure drop readings.

Accessory Port Locations

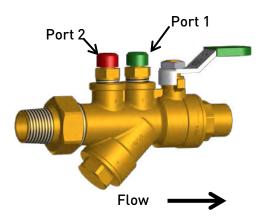
UltraMatic[™] comes equipped with two (2) PT test plugs. Standard configuration will have the port # 2 designated for high-pressure and port # 1 for low-pressure. Other configurations are available, contact your representative for assistance. (See images on next page for additional reference).



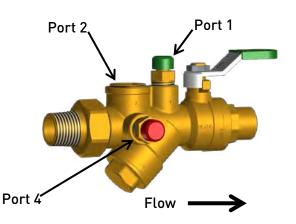
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ULTRAMATICTM





Alternate Configuration



UltraMatic[™] Model UMS

The UltraMatic[™] Model UMS is a simple SWT x SWT pressure independent automatic flow control valve (AFCV).



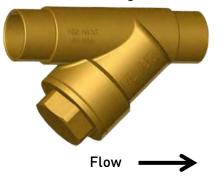
Refer to page 2 for installation procedure. Refer to page 10 for valve identification.

Straight Run Requirements

UltraMatic[™] UMS does not typically require any straight pipe runs up or downstream. Changes in pipe diameter size at the valve inlet may cause turbulence impacting pressure drop readings.

Accessory Port Locations

UltraMatic[™] UMS does not have pressure and temperature test plugs. (See image below for reference). Standard Configuration





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ULTRAMATICTM

UltraMatic[™] Model UMF

The UltraMatic[™] Model UMF is a simple FNPT x FNPT pressure independent automatic flow control valve (AFCV). THIS VALVE DOES NOT MEET LEAD FREE / LOW LEAD REQUIREMENTS.



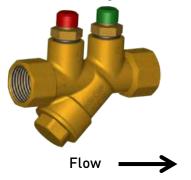
Refer to page 2 for installation procedure. Refer to page 10 for valve identification.

Straight Run Requirements

UltraMatic[™] UMF does not typically require any straight pipe runs up or downstream. Changes in pipe diameter size at the valve inlet may cause turbulence impacting pressure drop readings.

Accessory Port Locations

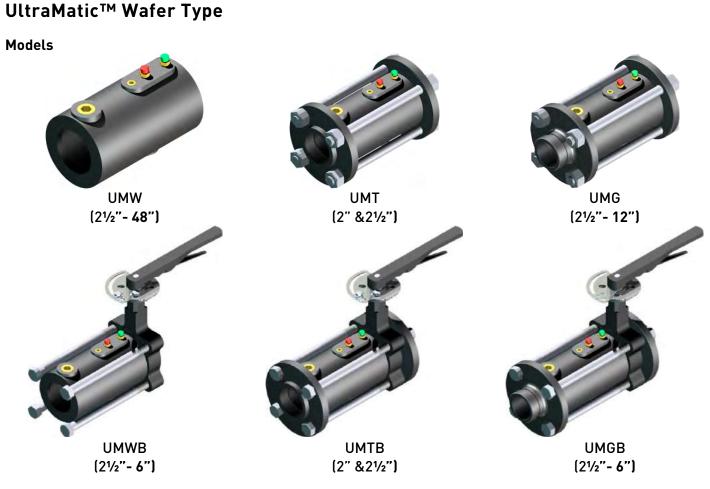
UltraMatic[™] UMF has two (2) pressure and temperature test plugs. (See image below on for reference). Standard Configuration





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ULTRAMATIC™



Installation

UltraMatic[™] wafer type valves can be installed in horizontal and vertical planes. All hardware is provided through 12".

Straight Run Requirements

Nexus Valve recommends following ASHRAE plumbing standards for control valves (ASHRAE Handbook– HVAC Systems and Equipment—Hydronic Heating and Cooling Systems Design—Balance Fittings).

Avoid placing UMW type valves at pump discharge, immediately after 90's or directly coupled to eccentric reducers. Follow ASHRAE recommendations for straight run requirements.



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ULTRAMATIC™

Accessory Port Locations

The UltraMatic[™] has a 1/4" NPT port (marked HI) designated for high-pressure, and a 1/4" NPT port (marked LO) designated for low-pressure, a 1/4" NPT port (#1) for instrument (accessory), and a 3/4" NPT port (#2) for thermometer well. On the opposite side a 3/4" NPT port (#3) is designated for a drain valve.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.

Accuracy

The UltraMatic[™] has an accuracy of ±5% and is ordered for a specific flow rate. The flow limiting cartridge has an operating range 2-45 PSID for example. The first number, 2, of this operating range is the minimum DP required to maintain constant flow and the second number, 45, is the maximum DP of the range for the specified GPM.

Flow Verification

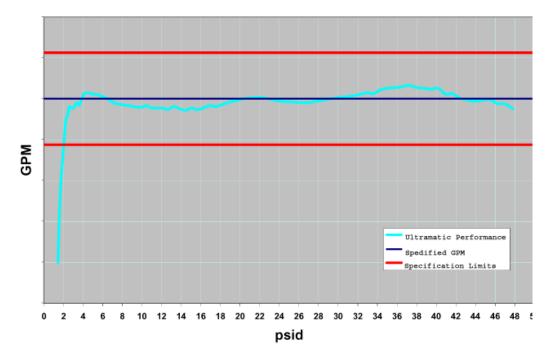
Since the GPM cannot be adjusted in the field, the pressure/temperature ports are supplied for flow verification purposes only. A meter kit, such as Nexus Valve's # MKA, may be used to assure that the valve is operating in its specified spring range. If the pressure drop across the valve falls within the operating range 2-45 PSID or 5-50 PSID, then the GPM will be in the specified flow range. Dirt or debris may cause a false reading. See typical control chart for Nexus UltraMatic™ on following page.



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ULTRAMATIC™

Sample Performance of Nexus UltraMatic



Refer to page 69 for meter kit operating instructions.

Maintenance

- UltraMatic[™] UM does not require any maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



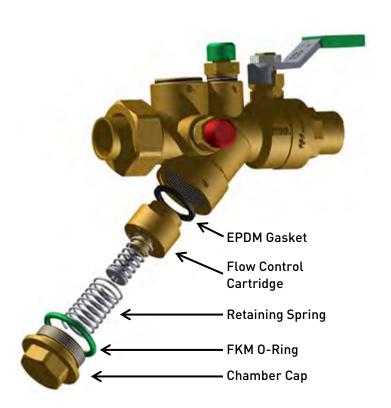
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ULTRAMATIC™

Cartridge Replacement

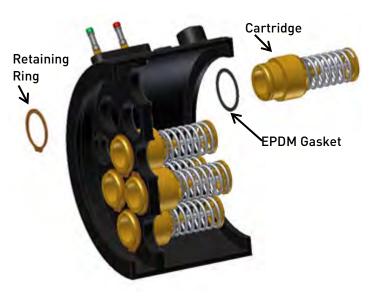
- For UM valves (1/2"-2-1/2") shut inlet and outlet isolation valves. Drain coil. Remove chamber cap on the bottom of the UltraMatic[™].
- The cartridge may be removed without disrupting the piping. Remove cartridge by hand, no tools are necessary.
- Check for debris and remove it, if necessary.
- Replace EPDM gasket. Replace cartridge. Replace FKM o-ring on chamber cap.
- Screw chamber cap into valve body using the following hex sockets or wrenches:
- For Y1 & Y2 use hex socket #13/16"
 - For Y3 use hex socket #1 1/16"
 - For Y4 use wrench #32 mm
- Slowly open isolation valve. Purge air and check for leaks.



i

Some valves may come with a cartridge adapter.

- Nexus Valve Tool Kit Part # TK is required for replacing the cartridges.
- Isolate the flow to the UltraMatic[™], remove the studs or bolts, and remove the UltraMatic[™] body from the line.
- Remove the retaining ring using the removal/installation pliers from Nexus Valve Tool Kit, and remove the cartridges by hand.
- Replace EPDM cartridge gaskets.
- Reinstall the replacement cartridge and fasten using the retaining ring with the removal/installation pliers from Nexus Valve Tool Kit.





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DYNAMICTM

Dynamic™

The Nexus Dynamic[™] is a pressure independent control valve (PICV) which maintains constant flow independent of changes in pressure of the heating or cooling system.

Installed with an actuator, the Dynamic[™] combines an automatic flow limiter with a two way control valve; having full control authority the valve reacts and adjusts the flow according the the building management system or room thermostat signal.

Without an actuator, the Dynamic[™] works as an automatic flow limiter.

General information

- Dynamic[™] can be installed in horizontal and vertical planes.
- When installing Dynamic[™], space around the valve must be provided for port access and cartridge removal.
- Each Dynamic[™] has an internal cartridge that can be set to a specific flow rate (GPM).
- It is imperative that the valve be installed with correct direction of flow. There is an arrow on the side of the device indicating proper installation.
- Installation of a y-strainer is recommended upstream for any control valve or balancing device.
- A flushing / pre-setting cap is provided for system flushing. Maximum pressure during flushing is 230 PSI, maximum water temperature for flushing is 77°F when using the flushing cap. A BK Series bypass and flushing kit is recommended.
- The flow cartridge can be removed and installed using a 37 mm wrench. DO NOT USE ANY TOOL ON THE SMALL NUT ON THE TOP OF THE CARTRIDGE.
- For precise flow measuring, the Dynamic[™] includes a built in venturi.
- Maximum differential pressure should not exceed 58 PSI. Note, this is across the valve, not just the venturi metering section.



To achieve maximum performance, the elimination of air in the fluid is required.



Do not back flush with the cartridge in the body. Nexus Valve recommends using an UltraBK[™] Series bypass and flushing kit for flushing the hydronic system prior to start up and after periodic maintenance.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification



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DYNAMICTM

Straight Run Requirements

Dynamic[™] does not typically require any straight pipe runs up or downstream. Changes in pipe diameter size at the valve inlet may cause turbulence impacting pressure drop readings.

Setting the Flow

Before setting the design flow on the Dynamic[™], the pump must be set at maximum capacity and all service valves in the system must be in the fully open position. The differential pressure across the Dynamic[™] must at all times not exceed 58 PSI.

The design flow is easily adjusted with the included pre-setting tool. After connecting a differential pressure gauge to the Dynamic[™], the flow reading is provided for precise flow tuning.

The pre-setting tool is mounted on top of the valve covering the valve stem. The scale on the pre-setting tool is read against the marking on the brass housing of the valve.

The flow is set by turning the pre-setting tool from 0-90°. Each marking on the scale indicates a step of 10%. When the required flow is set and the starting differential pressure is provided, the flow is kept constant.

Dynamic[™] with pre-setting tool mounted.



Dynamic™ with 100% Pre-set flow

Dynamic[™] with 50% Pre-set flow





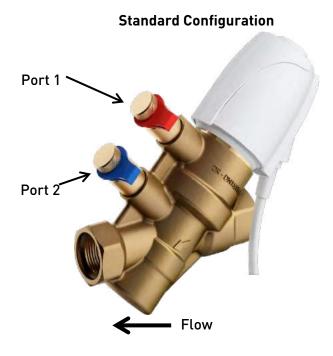


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DYNAMIC^{тм}

Accessory Port Locations

Dynamic[™] comes equipped with two (2) PT test plugs. Standard configuration will have the port # 1 designated for high-pressure and port # 2 for low-pressure.



Cartridge Installation / Removal





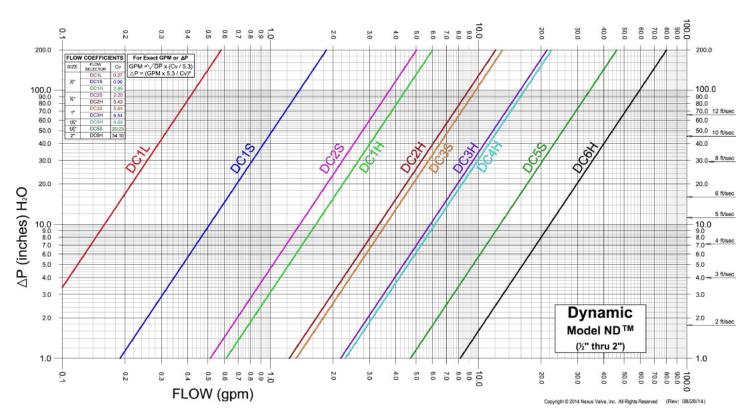




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DYNAMICTM

Dynamic[™] Flow Chart





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DYNAMICTM

Pre-setting Data

			GPM								
		DC050L	DC050S	DC050H	DC075S	DC075H	DC100S	DC100H	DC125H	DC150S	DC200H
	100%	0.52	1.98	-	3.88	9.78	10.30	14.66	0.00	33.68	-
	95%	0.52	1.97	-	3.81	9.64	10.14	14.46	9.51	33.41	-
	90%	0.51	1.95	-	3.74	9.51	9.99	14.27	19.02	33.13	-
	85%	0.50	1.93	-	3.61	9.19	9.59	13.87	18.70	32.73	51.52
	80%	0.49	1.92	6.18	3.49	8.88	9.19	13.47	18.39	32.34	51.52
	75%	0.48	1.90	5.98	3.31	8.56	8.76	13.08	18.07	32.12	49.34
	70%	0.48	1.89	5.79	3.14	8.24	8.32	12.68	17.75	31.90	47.16
ing	65%	0.47	1.85	5.55	3.01	7.89	8.04	12.34	17.34	30.45	45.37
Sett	60%	0.46	1.82	5.31	2.88	7.53	7.77	12.01	16.93	29.01	43.59
Pre-Set Knob Setting	55%	0.44	1.79	5.07	2.74	7.17	7.45	11.69	16.39	27.98	41.71
t Kn	50%	0.43	1.76	4.83	2.60	6.82	7.13	11.38	15.85	26.95	39.83
-Se	45%	0.40	1.71	4.58	2.44	6.53	6.84	11.00	15.22	26.15	38.20
Pre	40%	0.37	1.66	4.32	2.28	6.25	6.54	10.62	14.58	25.36	36.58
	35%	0.34	1.59	4.04	2.16	5.96	6.22	10.18	13.79	24.47	33.35
	30%	0.30	1.51	3.76	2.03	5.67	5.90	9.75	13.00	23.58	30.12
	25%	0.26	1.39	3.47	1.92	5.37	5.61	9.39	12.21	22.59	28.73
	20%	0.21	1.27	3.17	1.81	5.07	5.31	9.03	11.41	21.60	27.34
	15%	0.21	1.07	2.71	1.71	4.76	4.95	8.72	10.66	20.51	26.15
	10%	-	0.87	2.26	1.62	4.44	4.60	8.40	9.91	19.42	24.97
	5%	-	0.56	1.82	1.52	3.96	4.32	8.00	9.19	18.23	24.17



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ULTRAXB™ ORTURI

UltraXB™ Orturi

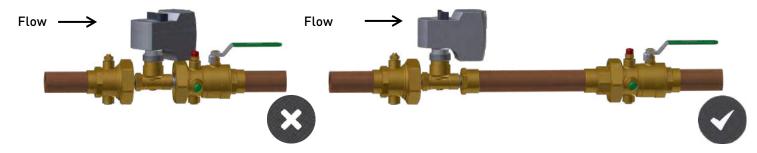
The UltraXB™ Orturi is a manually adjustable modified venturi circuit balancing valve.

General Information

- UltraXB[™] may be installed in horizontal or vertical planes.
- When installing UltraXB[™], space around the valve must be provided for port access and rotation of the handle.
- Installation of a y-strainer is recommended upstream of any control valve or balancing device.
- To achieve maximum performance the elimination of air in the fluid is required.
- Straight run requirements for the UltraXB[™] are generally not necessary. Some unique applications may require straight pipe for accurate pressure drop readings.



If reductions of more than one pipe size is made, 5 pipe diameters upstream and 2 pipe diameters downstream may be required to ensure a stable pressure drop reading when the pipe size leading to the UltraXB[™] is smaller than the pipe size of the UltraXB[™] due to placement of a TCV, elbow or other obstruction. See image below.



Accessory Locations

UltraXB[™] will have the port #1 or port #3 designated for high pressure and port #2 for low-pressure. Optional accessories will determine the high pressure port configuration. (See image page 24)



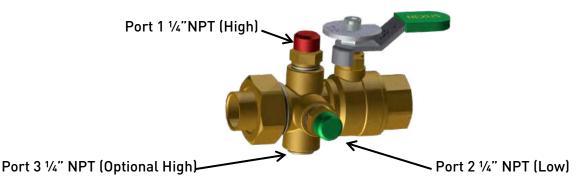
Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



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ULTRAXB™ ORTURI



Adjusting & Balancing

- The UltraXB[™] should be set in the field by a qualified balancing contractor. The desired flow rate, is set by slowly adjusting the supplied ball valve until the differential pressure reading across the selected modified venturi reaches the desired pressure drop.
- Once the desired flow rate is achieved (refer to graph on page 25 or available for download at the Nexus Valve website: www.nexusvalve.com), rotate the memory stop, which is located on the top of the ball valve handle, until it hits the valve stop. Then lock it with an allen wrench. A 4 mm wrench is required for 1/2" - 11/4" and 5 mm for 11/2" - 21/2" respectively.



Meter Kits

A differential pressure meter kit, such as Nexus #MKM models, must be used to measure the differential pressure in inches of water column across the modified venturi. If using a Nexus Valve meter kit, connect the red hose to the upstream, high-pressure port (usually in port #1). The green hose should be connected to the low pressure port (always in port #2).



Refer to page 70 for meter kit operating instructions.



Effective

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ULTRAXB™ ORTURI

Accuracy

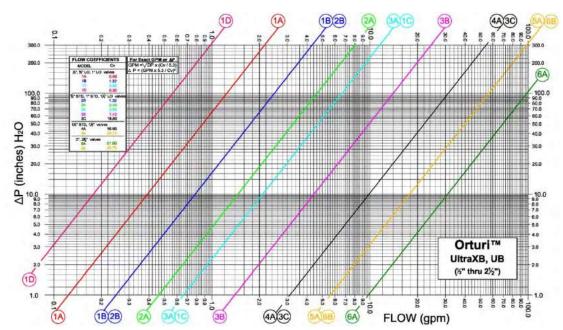
UltraXB[™] accuracy is +/- 3%.

Maintenance

- UltraXB[™] does not require any maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.

Flow Charts

Full scale flow charts can be obtained in the Nexus Valve Products Catalog as well as on-line at www.nexusvalve.com.





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ULTRAMB™

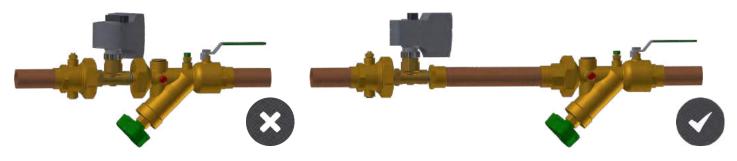
UltraMB™

General Information

The UltraMB[™] is a multi-turn manually adjustable balancing valve with an integrated isolation valve and union end.

- UltraMB[™] may be installed in horizontal or vertical planes.
- When installing UltraMB[™], space around the valve must be provided for port access and rotation of the handle.
- Installation of a y-strainer is recommended upstream of any control valve or balancing device.
- To achieve maximum performance, the elimination of air in the fluid is required.
- Straight run requirements for the UltraMB[™] are generally not necessary. Some unique applications may require straight pipe for accurate pressure drop readings.

If reductions of more than one pipe size is made, 5 pipe diameters upstream and 2 pipe diameters downstream may be required to ensure a stable pressure drop reading when the pipe size leading to the UltraMB[™] is smaller than the pipe size of the UltraMB[™] due to placement of a TCV, elbow or other obstruction. See image below.





7

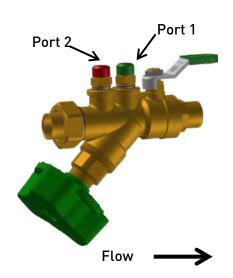
Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



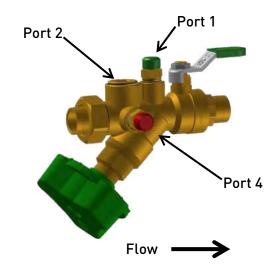
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ULTRAMB™

Accessory Locations Standard Configuration



Alternate Configuration



UltraMB™ Model MBLF

The UltraMB[™] Model MBLF is a FNPT x FNPT Lead Free globe style balancing valve.



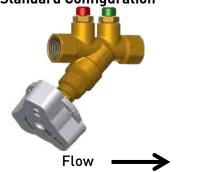
Refer to page 2 for installation procedure. Refer to page 10 for valve identification.

Straight Run Requirements

When installing the UltraMB[™] Model MBLF, Five (5) pipe diameters upstream and two (2) pipe diameters downstream may be required to ensure a stable pressure drop readings.

Accessory Port Locations

UltraMB[™] MBLF has two (2) pressure and temperature test plugs. (See image below on for reference). Standard Configuration





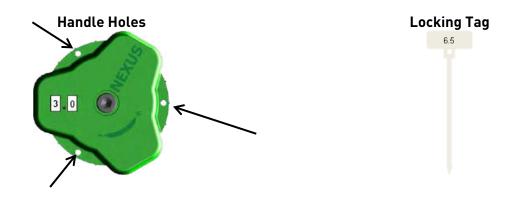
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ULTRAMB™

Adjusting & Balancing

- The UltraMB[™] should be set in the field by a qualified balancing contractor. The desired flow rate and pressure drop is set by slowly adjusting the green handle until the prescribed flow rate is achieved at a specified pressure drop.
- The specified flow rate is determined by noting the two digit number on the adjusting handle (note this number changes from 0.0 to 9.9 as the handle is rotated counterclockwise) and the recorded pressure drop across the red and green test ports on the valve.
- Once the desired flow rate is obtained the UltraMB[™] may be locked in position with the supplied tie wrap by sliding it through the handle holes and tightening the tie wrap against the handle.
- For reference the tie wrap may be marked with the handle number with a pen or pencil.
- See handle & tie image on page 28.



Meter Kits

A differential pressure meter kit, such as Nexus #MKM models, must be used to measure the differential pressure in inches of water column across the modified venturi. If using a Nexus Valve meter kit, connect the red hose to the upstream, high-pressure port (usually in port #2 or 4). The green hose should be connected to the low pressure port (always in port #1).



Refer to page 70 for meter kit operating instructions.

Accuracy

UltraMB[™] accuracy is +/- 5%.

Maintenance

- UltraMB[™] does not require any maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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ULTRAMBTM

Flow Charts & Flow Calculators

When balancing, refer to the following flow charts or use the hand calculators



Full scale flow charts can be obtained in the Nexus Valve Products Catalog as well as on-line at www.nexusvalve.com.

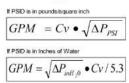
Basic Calculator

	MB1	MB2	MB3	MB4			
Turns	Valve Sizes:						
	1/2", 3/4"LO, 1"LO	3/4"STD, 1"STD, 1-1/4"LO	1-1/4"STD, 1-1/2"	2*, 2-1/2			
0.2	0.2	0.4	0.9	N/A			
0.3	0.3	0.7	1.0	N/A			
0.4	0.3	0.6	1.3	N/A			
0.5	0.4	0.8	1.4	2.3			
0.6	0.5	0.8	1.5	2.4			
0.7	0.5	0.9	1.6	2.6			
0.8	0.6	0.9	1.7	2.6			
0.9	0.7	0.9	2.0	2.8			
1.0	0.7	1.0	2.0	2.8			
1.5	1.1	1.3	2.8	3.5			
2.0	1.3	1.5	3.4	4.5			
2.5	1.6	1.9	4.6	5.9			
3.0	2.0	2.3	5.5	6.4			
3.5	2.4	2.7	6.6	9.9			
4.0	2.8	3.2	7.8	12.0			
4.5	3.5	3.6	9.1	15.2			
5.0	3.7	4.2	10.7	18.1			
5.5	4.1	4.7	11.9	21.7			
6.0	4.6	5.5	12.9	25.3			
6.5	5.3	6.0	14.0	29.0			
7.0	5.8	6.8	15.2	32.9			
7.5	6.5	7.6	16.3	36.5			
8.0	7.2	8.3	17.4	39.4			
8.5	7.8	9.0	18.5	42.1			
9.0	8.6	9.7	19.7	45.0			
9.5	8.8	10.7	20.6	48.4			
10.0	9.4	11.6	21.6	50.8			

Nomograph Calculator

How to calculate the Flow through UltraMB using: Cv values 1. Select column MB1,MB2, MB3, MB4 for the valve being used

2. Read the Handle Turns counter on the value same bang back
3. Scan the MB column for your valve and regard the Cv value for your turns
4. Use the following equations to calculate flow



How to determine UltraMB Handle Turns using: GPM and Pressure Differential (ΔP)

1. If GPM and required pressure drop is known, calculate the required Cv using the following equations

If PSID is in pounds/square inch



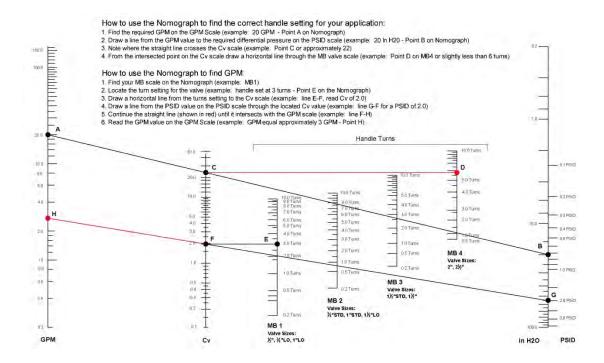
2. Locate Column for Valve being used 3. Scan down column until closesest Cv to required is located 4. Read Turn number in first column



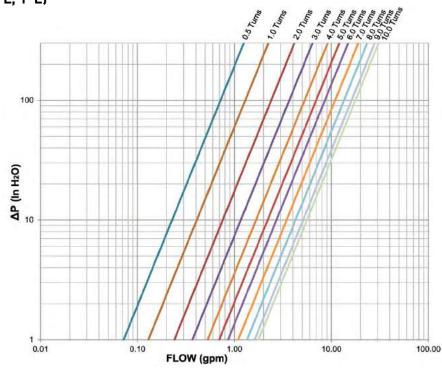
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ULTRAMB™



Flow Chart (1/2", 3/4"L, 1"L)

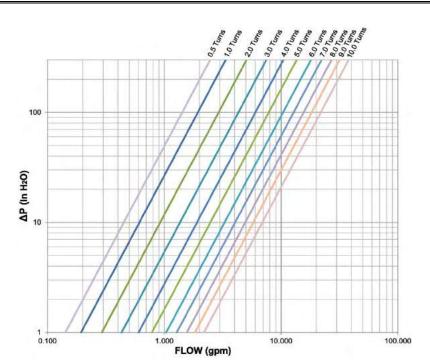


Flow Chart (¾", 1", 1¼"L)

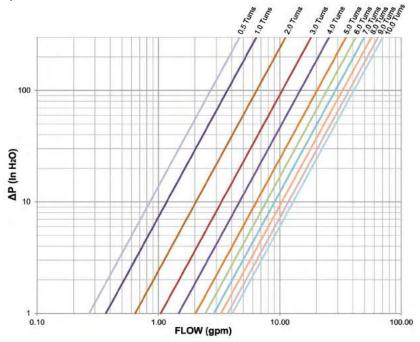


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ULTRAMB™



Flow Chart (11/4", 11/2")

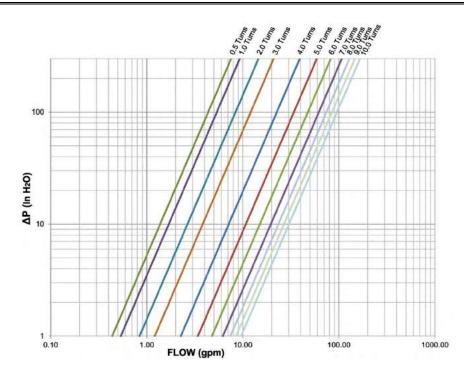


Flow Chart (2", 21/2")



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ULTRAMB™





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NEXTROL™

Nextrol™

Nextrol[™] is a manually adjustable balancing valve and metering station which uses the TwinTube[™] pitot tube for accurately measuring differential pressure.



Please note that the Nextrol[™] accessories are packaged separately to avoid damage during shipping. Accessory packages include all plugs necessary to install in any unused ports as well as TwinTube[™]. Valve bodies are packaged separately and identified appropriately.

Models





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NEXTROL™

General Installation Notes

- Installation of a y-strainer is recommended upstream of any control valve or balancing device.
- To achieve maximum performance, the elimination of air in the fluid is required.
- Valves should be installed with the disc in the closed position to prevent possible damage to disc edge. Flanged models use standard ANSI 125# class flanges (also mates to 150# class flanges). Assembly may be accomplished with standard gaskets and hardware. Butterfly valves should be checked for free unobstructed disc movement.





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NEXTROL™

Straight Run Requirements

The Nextrol[™] requires a minimum of five (5) straight upstream pipe diameters and two (2) downstream. The Nextrol[™] already has the required downstream pipe diameters built into the unit when TwinTube[™] is installed in port #1.

Adjusting & Balancing

- The Nextrol[™] should be adjusted in the field by an experienced balance contractor.
- The desired flow rate is set by slowly adjusting the supplied butterfly valve until the differential pressure reading across the TwinTube™ reaches the desired pressure drop.
- Multiple passes are usually required to properly balance the system.
- Once this is achieved, lock the memory stop, which is located on the top works of the butterfly valve handle.



The readout instrument should be located below the TwinTube[™]. This prevents air entrapment in the instrument lines. Instrument lines should be properly sloped down ½" per foot with no high points that may cause air entrapment. If this is not possible, air vents must be placed at any high points in the piping. To ensure the quality of the reading, the best orientation of the TwinTube[™] may be vertically down.

Meter Kits

A DP meter kit, such as Nexus #MKM models, must be used to measure the differential pressure. If using a Nexus Valve meter kit, connect the red hose to the high-pressure port, typically indicated by the red cap, of the TwinTube[™], and the green hose to the low-pressure port of the TwinTube[™], typically indicated by a green cap.

-

Refer to page 70 for meter kit operating instructions. Refer to page 9 for bolting & tightening specifications. Refer to page 10 for valve identification.

Maintenance

- The Nextrol[™]/TwinTube[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.

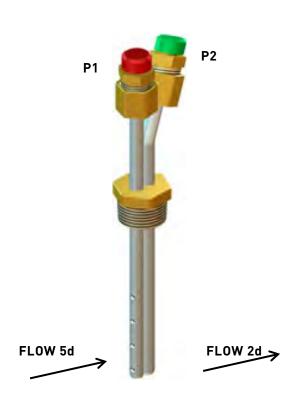


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NEXTROL™

TwinTube[™] Function

The TwinTube[™] pitot produces a differential pressure (DP) signal proportional to the square of the flow rate. The signal has two parts: the high pressure "P1" which is produced by the velocity of the liquid at the upstream tube and the low pressure "P2" which is static pressure downstream of the second tube. The differential reading taken at the TwinTube[™] is: DP=P1-P2



Align tubes parallel to pipe.

"P1" is upstream - high pressure (velocity pressure) "P2" is downstream - low pressure (static pressure).

The TwinTube[™] is bi-directional when installed with proper straight pipe diameters.

Adjust 3/4" bushing as necessary to align TwinTube™ parallel to pipe. It is not necessary to anchor the TwinTube™ to the pipe, as it is blowout proof.

A minimum of five (5) straight pipe diameters is required upstream of the TwinTube™ to ensure accuracy.

A minimum of two (2) straight pipe diameters is required downstream.

A Nextrol[™] flow or balancing station has the minimum two (2) straight pipe diameters built in.



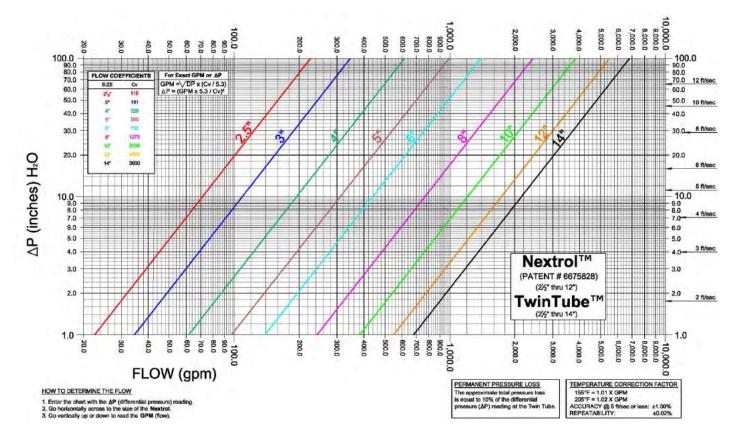
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NEXTROL™

Nextrol[™] / TwinTube[™] Flow Chart



Full scale flow charts can be obtained in the Nexus Valve Products Catalog as well as online at www.nexusvalve.com.





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ULTRAMBFTM

UltraMBF™

The UltraMBF[™] is a manually adjustable balancing valve where adjustment is required at strategic points to improve the efficiency of the system.



Please note that the UltraMBF[™] accessories are packaged separately to avoid damage during shipping. Accessory packages include all P/T test plugs and anoy other plugs necessary to install in any unused ports. Valve bodies are packaged separately and identified appropriately.

Models:



General Installation Notes

- Installation of a y-strainer is recommended upstream of any control valve or balancing device.
- To achieve maximum performance, the elimination of air in the fluid is required.
- Valves should be installed with the disc in the closed position to prevent possible damage to disc edge. Flanged models use standard ANSI 125# class flanges (also mates to 150# class flanges). Assembly may be accomplished with standard gaskets and hardware. Butterfly valves should be checked for free unobstructed disc movement.
- Do not lift the UltraMBF[™] by the handle.
- The UltraMBFTM is unidirectional. Please observe the flow direction arrow on the valve body.
- Do not weld the flanges to the pipe or to flange adapters.



Refer to page 9 for Bolting & Tightening Specifications.

Position indicator my be repositioned in 4 positions to allow ease in viewing. See instructions on page 39.



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ULTRAMBFTM

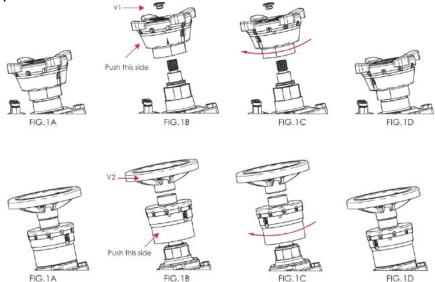
Straight Run Requirements

The UltraMBF™ requires a minimum of five (5) straight upstream pipe diameters and two (2) downstream.

Setting the Hand Wheel

The hand wheel mounting (Fig. 1A) can be set for easier viewing by:

- 1. Remove the upper center screw in the handle (Fig. 1B)
- Remove the indicator assembly by pulling the handle and the lower parts away from the valve. Ensure that the two pieces remain in constant contact – DO NOT ALLOW THEM TO SEPARATE. FAILURE TO KEEP THE TWO PARTS TIGHTLY TOGETHER MAY NECESSITATE RECALIBRATION OF THE SETTING WHEELS. (Fig. 1B)
- 3. Rotate the handle assembly by 90° 180° 270° (Fig. 1C)
- 4. Place the assembly back over the valve bonnet (Fig. 1D)
- 5. Replace the upper screw.



Adjusting & Balancing

• Setting the handle – a fully closed valve will indicate a 0-0 reading with the basic 0 being on the lower scale and the fine setting being on the upper scale.



As the handle is rotated, the upper number will increase from 0 – 9 and then increment the basic lower setting number by 1. To read the valve setting, the basic number is the units number and the handle number is the digit number. (Basic).(Digit)

• Using the correct flow chart for the selected valve, close the valve ensuring the setting reads approximately 0.0.



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ULTRAMBFTM

- From the flow chart, check the selected pressure and GPM required and note the closest handle • setting.
- Open the valve to the proper setting. •
- Check the pressure drop across the pressure testports and verify the GPM on the flow chart adjust as needed to obtain the required flow.
- Set the memory stop at the new setting •
 - 1. Remove the center screw in the handle.
 - With a flat blade screwdriver, turn the inner stem travel stopper screw clockwise until it stops.
 - Replace the center screw.
 - 4. The valve may now be closed as an isolation valve and opened back to the preset setting and not beyond.
 - 5. Reverse the memory stop setting instructions should additional commissioning changes be required.

Maintenance

- The UltraMBF[™] does not require maintenance under normal operating conditions. •
- It is recommended to visually inspect products on regular intervals.

Flow Charts & Calculators



Full scale flow charts can be obtained in the Nexus Valve Products Catalog as well as on-line at www.nexusvalve.com.

Basic Flow Calculator

Cv Values for UltraMB Handle Turns

	MB-0250	MB-0300	MB-0400	MB-0500	MB-0600		
Turns	Valve Sizes:						
0420000	2-1/2"	3*	4"	5"	6*		
0.5	7.4	7.0	13.7	7.5	30.9		
1.0	11.1	14.9	34.1	12.0	39.7		
1.5	20.7	33.4	66.5	N/A	N/A		
2.0	49.2	58.7	93.0	22.5	81.7		
2.5	68.4	77.2	117.2	N/A	N/A		
3.0	79.9	8.3	133.5	100.6	183.1		
3.5	88.6	87.7	N/A	N/A	N/A		
4.0	92.7	92.8	152.3	146.0	254.9		
4.5	96.0	N/A	N/A	N/A	N/A		
5.0	99.1	107.6	162.3	183.9	320.6		
6.0	110.0	118.1	171.5	215.3	350.8		
7.0	N/A	129.6	179.6	234.0	379.2		
8.0	N/A	N/A	N/A.	252.3	422		
9.0	N/A	N/A	N/A	268.7	429.4		
10.0	N/A	N/A	N/A	287.6	450.6		
11.0	N/A	N/A	N/A	300.1	N/A		
12.0	N/A	N/A	N/A	311.0	N/A		
15.0	N/A	N/A	N/A	N/A	563.1		

How to calculate the Flow through UltraMB using: Cv values

- 1. Select column MB-0250 MB-0300, MB-0400, MB-0500 MB-0600 for the valve being used
- Read the Handle Turns counter on the value
 Scan the MB column for your value and regard the Cv value for your turns
 Use the following equations to calculate flow:

If PSID is in pounds/square inch
$$GPM = Cv \bullet \sqrt{\Delta P_{PSI}}$$

If PSID is in Inches of Water

$$\overline{GPM} = \sqrt{\Delta P_{inH,0}} \bullet Cv / 5.3$$

How to determine UltraMB Handle Turns using: GPM and Pressure Differential (ΔP)

1. If GPM and required pressure drop is known, calculate the required Cv using the following equations:

$$\label{eq:started} \begin{array}{l} \text{FPSD is in pounds/Aquare inch} \\ \hline Cv = GPM / \sqrt{\Delta P_{\scriptscriptstyle roc}} \\ \text{FPSD is in inches of Water} \\ \hline Cv = GPM \bullet 5.3 / \sqrt{\Delta P_{\scriptscriptstyle acc, \sigma}} \\ 2 \text{ Locals Control for Value Pairs used} \end{array}$$

Locate Column for Valve being used
 Scan down column until closeset Cv to required is located
 Read Turn number in first column

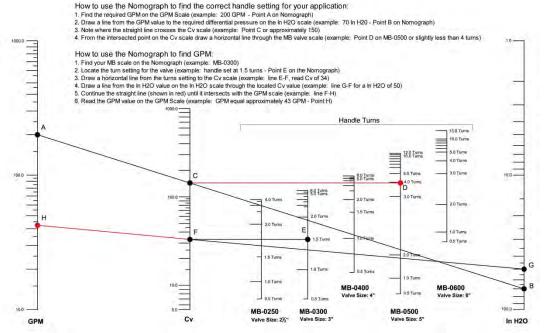


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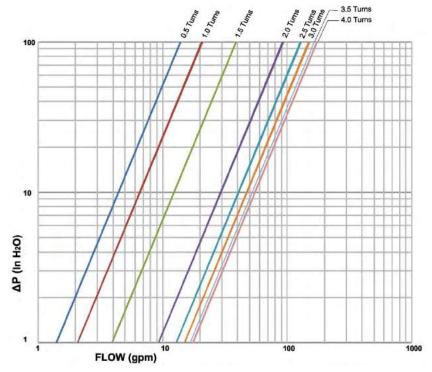
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ULTRAMBF™

Nomograph Calculator



MBF Flow Chart 21/2"





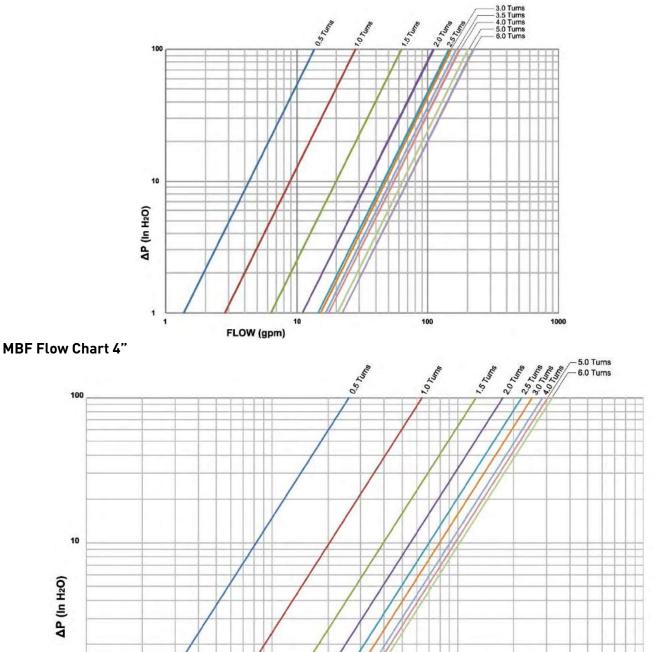
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ULTRAMBF™

1000

MBF Flow Chart 3"

1 -



100

10

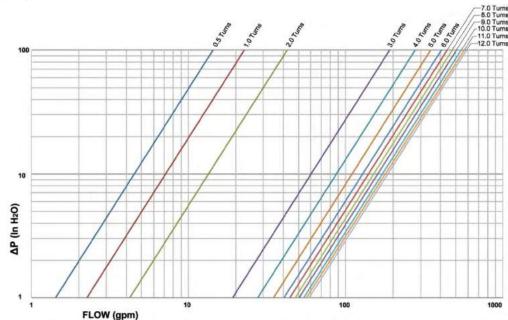
FLOW (gpm)



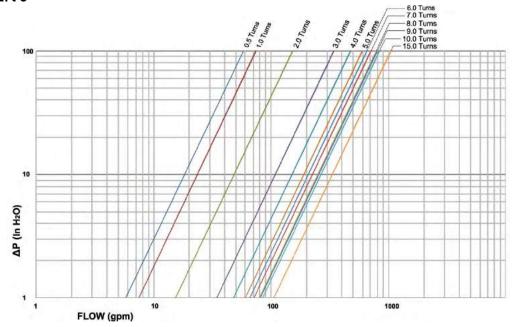
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ULTRAMBF™

MBF Flow Chart 5"



MBF Flow Chart 6"





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NEXUS VENTURI – MODEL NV™

Nexus Venturi – Model NV™

The Nexus Venturi is a manually adjustable balancing valve and metering station which uses a precision venturi tube for accurately measuring differential pressure.



Please note that the Nexus Venturi accessories may be packaged separately to avoid damage during shipping. Accessory packages include all plugs necessary to install in any unused ports. Valve bodies are packaged separately and identified appropriately.

Models



General Installation Notes

- An arrow on the label indicates the flow direction of the valve the NV[™] will not work properly if installed backwards.
- Installation of a y-strainer is recommended upstream of any control valve or balancing device.
- To achieve maximum performance, the elimination of air in the fluid is required.
- The NV[™] may be shipped with a butterfly valve the butterfly valve must be installed downstream from the NV[™] and may be attached directly to the flange of the NV[™].
- Valves should be installed with the disc in the closed position to prevent possible damage to disc edge. Flanged models use standard ANSI 125# class flanges (also mates to 150# class flanges). Assembly may be accomplished with standard gaskets and hardware. Butterfly valves should be checked for free unobstructed disc movement.



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NEXUS VENTURI – MODEL NVTM



Straight Run Requirements

The NV[™] requires a minimum of five (5) straight upstream pipe diameters and zero (0) downstream. If a pump is installed immediately in front of the NV[™], there is a requirement of ten (10) straight upstream pipe diameters.

Adjusting & Balancing

- The NV[™] should be adjusted in the field by an experienced balance contractor.
- The desired flow rate is set by slowly adjusting the supplied butterfly valve until the differential pressure reading across the pressure and temperature test plugs reaches the desired pressure drop.
- Multiple passes are usually required to properly balance the system.
- Once this is achieved, lock the memory stop, which is located on the top works of the butterfly valve handle.



The readout instrument should be located below the NV[™]. This prevents air entrapment in the instrument lines. Instrument lines should be properly sloped down ½" per foot with no high points that may cause air entrapment. If this is not possible, air vents must be placed at any high points in the piping. To ensure the quality of the reading, the best orientation of the TwinTube[™] may be vertically down.

Meter Kits

A DP meter kit, such as Nexus #MKM models, must be used to measure the differential pressure. If using a Nexus Valve meter kit, connect the red hose to the high-pressure port, typically indicated by a red cap, and the blue hose to the low-pressure port, typically indicated by a green cap.



Refer to page 70 for meter kit operating instructions. Refer to page 9 for bolting & tightening specifications.

Refer to page 10 for valve identification.



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NEXUS VENTURI – MODEL NV™

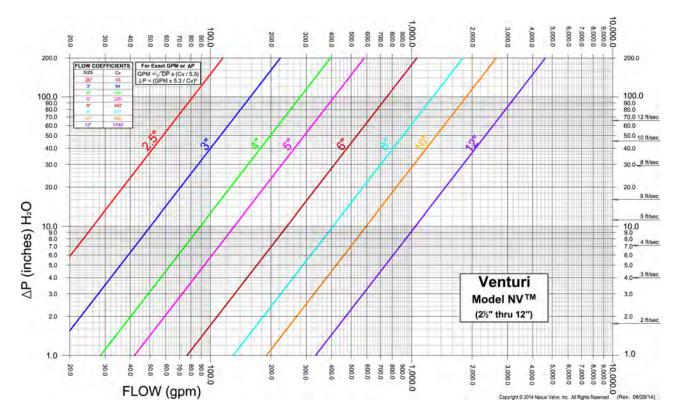
Maintenance

- The NV[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.

Nexus Venturi Flow Chart



Full scale flow charts can be obtained in the Nexus Valve Products Catalog as well as on-line at www.nexusvalve.com.





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STRAINEXTM

Strainex™

General

Strainex[™] is a cast iron, flanged pipeline y-strainer and metering station. Accessories for the Strainex[™] are packaged separately to avoid damage during shipping.

Models



Installation Notes

- Strainex[™] should be installed on the supply side of a coil or wherever a pipeline strainer is required, and can be in horizontal and vertical planes.
- Each Strainex[™] is identified with a flow direction arrow. It is imperative that the flow arrow points in the direction of flow.



Refer to page 9 for bolting and tightening specifications. Refer to page 10 for valve identification.



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STRAINEXTM

As allowed by the flange pattern, the Strainex[™] body and/or butterfly valve may be rotated to any orientation in the pipeline. However, it is recommended that the drain valve be installed as in the picture below to allow accumulated dirt to be removed. Valves should be installed with the disc in the closed position to prevent possible damage to disc edge. Flanged models use standard ANSI 125# class B flanges (also mates to 150# class flanges). Assembly may be accomplished with standard gaskets and hardware. Butterfly valves should be checked for free unobstructed disc movement.



Preferred Blow Down Positions

Preferred Filter Positions

Maintenance

- If Strainex's[™] pressure drop becomes excessive, accumulated dirt should be blown down through the blowdown/drain valve to a drain.
- The Strainex[™] may require annual or periodic maintenance.
- It is recommended to visually inspect products on regular intervals.

Strainer Screen Maintenance / Replacement

- Shut inlet and outlet isolation valves. Drain coil. Remove access plate on the bottom of the Strainex[™].
- The screen may be removed without disrupting the piping. Remove screen by hand, no tools are necessary.
- Install new or clean screen, replace access plate and gasket. Bolt plate onto valve body. Slowly open isolation valve. Purge air and check for leaks. Use of a replacement gasket is recommended.



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ULTRAYTM

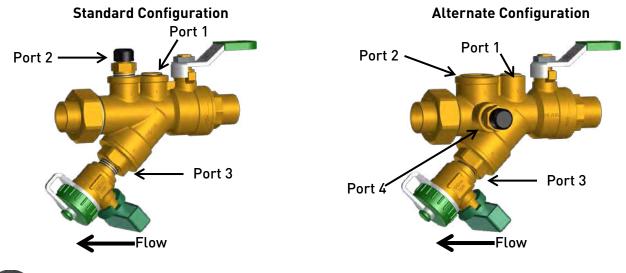
UltraY™

General

The UltraY[™] is a combination y-strainer, ball valve, and union. In addition to being used as a strainer, it can be used to isolate hydronic equipment for repairs and/or to drain the system.

Installation Notes

- UltraY[™] can be installed on the supply side of the coil or wherever a y-strainer is required, and can be installed horizontally or vertically.
- When installing the UltraY[™], space around the valve must be provided for port access, rotation of the handle, and possible cleaning of the strainer element.
- A blowdown/drain is recommended on the UltraY[™] to allow accumulated dirt to be removed.
- After use, **CLOSE** the blowdown / drain valve by turning the handle perpendicular to flow. The cap **IS NOT** designed to contain flow.
- UltraY[™] does not need any straight-run requirements for either inlet or outlet.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



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ULTRAYTM

Models YSS and YSF

Models YSS and YSF are part of the UltraY[™] family but do not include all of the same features as the UltraY[™]. THESE VALVES DO NOT MEET LEAD FREE / LOW LEAD REQUIREMENTS.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



Maintenance

• It is recommended to visually inspect products on regular intervals.

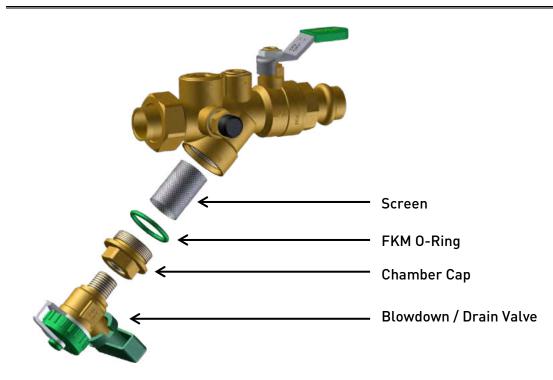
Strainer Screen Maintenance / Replacement

- Close inlet and outlet isolation valves. Drain the coil. Remove chamber cap on the bottom of the UltraY[™].
- The screen may be removed without disrupting the piping. Remove screen by hand, no tools are necessary.
- Replace screen. Replace FKM O-Ring on the chamber cap.
- Replace chamber cap onto valve body, tighten firmly using Wrenches # 13/16", # 1 1/16", or # 32 mm, depending on the valve size.
- Slowly open isolation valve.
- Purge air and check for leaks.
- Periodic maintenance is required for filters. Failure to properly maintain filter element may cause permanent damage to the valve.
- A 20 mesh screen is standard. A 40 mesh screen is optional.



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ULTRAYTM





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ULTRAXTM

UltraX™

General

UltraX[™] is a combination ball valve and union with three (3) 1/4" accessory ports.

Installation Notes

- When installing the UltraX[™], space around the valve must be provided for port access and rotation of the handle.
- UltraX[™] can be used to isolate hydronic equipment for repairs and/or to drain the system.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



- UltraX[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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ULTRANXPTM

UltraNXP™

General

The UltraNXP[™] is a combination ball valve and union with one (1) 1/4" accessory port.

Installation Notes

- When installing the UltraNXP[™], space around the valve must be provided for port access, rotation of the handle.
- UltraNXPTM can be used to isolate hydronic equipment for repairs and/or instrumentation.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



- UltraNXPTM does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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ULTRAUTM

UltraU™

General

UltraU™ Unions can be used for easy removal of hydronic equipment for repairs and/or to drain the system.

Installation Notes

- UltraU[™] Union may be installed anywhere a union is required.
- When installing the UltraU[™], space around the valve must be provided for port access.
- When a Manual/Automatic or other accessories to vent air is included, it must face upward, and the blowdown/drain valve downward.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



- UltraU[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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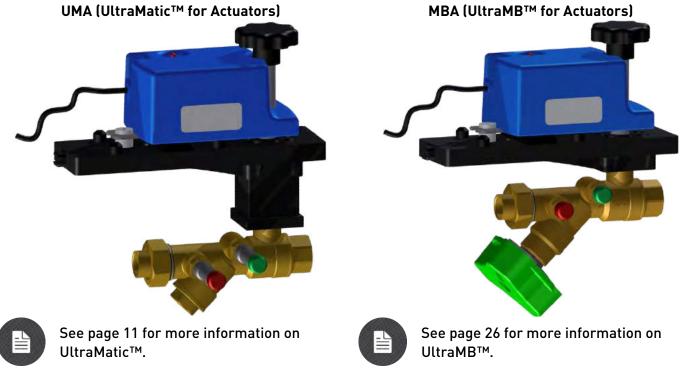
VALVES FOR ACTUATORS (UMA / MBA)

Valves for Actuators (UMA / MBA)

General Information

The UltraMatic[™] UMA Actuated Control Valve is a pressure independent automatic flow limiting valve with a equal percentage ball valve and an electrically controled actuator. The UltraMB[™] MBA Actuated Control Valve is a pressure dependent manually adjusted flow limiting valve with an equal percentage ball valve and an electrically controlled actuator.

Models



Installation Notes

- The actuated valve may be mounted horizontally or vertically
- When mounting horizontally the actuator should be on top of the pipe within 45° of pure vertical
- Direction of flow:
- On supply side applications the ball valve is the first element the water should pass through.
- On return side applications the ball valve is the last element the water should pass through.
- Straight run requirements are not typically required for the Ultramatic UMA, however changes in pipe diameters before and after the valve may impact stability of pressure drop readings in both UMA and MBA.



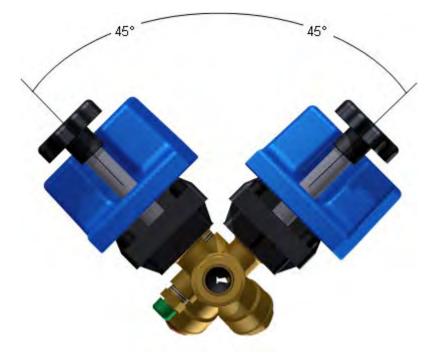
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VALVES FOR ACTUATORS (UMA / MBA)

 Installation of a y-strainer upstream from the control valve is recommended for life and performance of the Model UMA and MBA.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification



Accessories

- The Ultramatic Models UMA and MBA comes equipped with two standard PT test plugs; port 1 is the high pressure port and port 2 is the low pressure port.
- The Ultramatic Model UMA may be outfitted with various pressure independent flow limiting cartridges.
- The Models UMA and MBA comes standard with a full port ball valve, but may be configured with an equal percentage ball valve. The hang tag on the valve body will be marked with the appropriate Cv for the equal percentage ball valve.
- Actuator mounting brackets standard or extended.
- ISO F03 Mounting pad with square 9 mm valve stem.



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VALVES FOR ACTUATORS (UMA / MBA)

Connecting an Actuator to UMA

- Important considerations when selecting an Actuator for the Nexus Valve UMA / MBA
- Check the Actuator Matrix in the Nexus Valve TCV Catalog for actuators selected for mounting on our valve. If the matrix does not meet your criteria ensure the following when selecting an alternate actuator:
- Output of actuator must be greater than 18 inch lbs
- Actuator must accept a ½ shaft
- Actuator must mount to the Nexus Valve universal mounting bracket
- Actuator must have flat bottom for mounting to the universal mounting bracket
- Actuator must have a "T" slot in the bottom to accept a mounting "T" anchor to secure actuator the universal mounting bracket.
- ACTUATOR MUST BE SET FOR CLOCKWISE FROM NORMALLY CLOSED POSISITION TO FULLY OPEN
- There are two bracket styles normal and extended for use with insulation. An Allen wrench for a 10-32 socket head cap screw is required to attach the bracket to the valve. The normal bracket assembly requires the universal bracket and four 3/8" long 10-32 socket head cap screws.
- The extended assembly requires the universal bracket the extension kit and four 1-3/4" long 10-32 socket head cap screws.
- After selecting the proper shaft (see "Suggestions for shaft selection" below) for the installation, insert shaft through the ½" diameter bracket hole, align the flats with the diagonal cut on the valve stem and press the bracket over the valve mounting pad. The universal mounting bracket may be aligned in four 90° positions around the valve stem. Tighten the socket head cap screws to 25 inch lbs.
- Select correct shaft for application from four Nexus Valve options, shaft must be long enough to pass through bracket and completely through actuator coupling.
- Suggestions for shaft selection key dimension is actuator thickness (bottom of actuator to top of shaft coupling).

For normal bracket installation.

- Actuator thickness less than 1.8"- use shaft UNS-YA1.
- Actuator greater than 1.8" and less than 3.2" use shaft UNSXS-YA1.

For extended bracket installation

- Actuator thickness less than 1.8" use shaft UNSX-YA1.
- Actuator greater than 1.8" and less than 3.2" use shaft UNSXL-YA1.
- Actuator Anchors Nexus Va;ve has five alternative anchors. These anchors are used to secure the "rear end" of the actuator from moving when actuator is activated.
- These anchors are designed for the pre-selected actuators supplied by Nexus Valve, but may work with other actuators.
- Anchors should be assembled through the bottom of the bracket with a washer, a locking washer and a 3/8" long 10-32 socket head cap screw. Socket head cap screw should be tightened to 25 in lbs once the anchor is slide into the T slot on the bottom of the actuator.



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VALVES FOR ACTUATORS (UMA / MBA)

- If the Nexus Valve anchors do not fit your actuator, then an alternative anchoring device will need to be fabricated. You may be able to use "off the shelf" screws and nuts. It is important that the anchor secure the actuator squarely on the bracket, does not "bend" the actuator over the bosses on the bracket, and prevents the actuator from moving when actuator is activated. In using non-standard anchors, it is imperative that the anchor does not bind the actuator and prevent free rotation of the ball valve. Failure to ensure free rotation of the ball valve will induce pre-mature failure of the valve stem seals.
- Wiring the actuator follow actuator manufactures data sheet for proper rotation of ball valve.
 NOTE: Ensure actuator is set for normally closed with counter-clock-wise rotation to open valve. If rotation is incorrect, user will not receive benefits of the characterized v port.

Operation

When both the mechanical and electrical connections are made to the manufacture's requirements cycle the actuator to ensure:

- proper rotation
- complete cycling of the actuator and ball valve
- free rotation
- no binding of the shaft and actuator
- no motion of the actuator on the universal bracket
- if actuator is spring loaded, ensure actuator cycles correctly to stop position when power is removed

Maintenance

Valve Maintenance

Valve should be examined periodically to ensure no leaks or indications of valve damage

Actuator Maintenance

- Periodic review that connections to the valve are tight, ensure the actuator is not moving on the bracket and the shaft is tightly connected to the actuator coupling.
- Follow actuator manufacturer's maintenance procedures.



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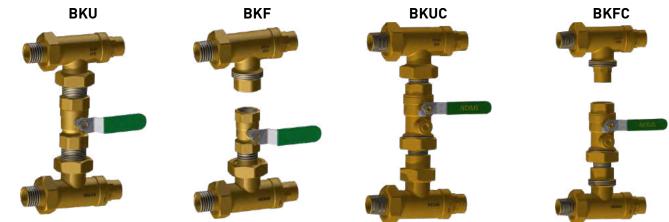
ULTRA BKTM BYPASS KITS

Ultra BK[™] Bypass Kits

General

The UltraBK[™] bypass and flush kit is a universal product that can be used to provide the best terminal component protection during system flushing.

Models



Installation Notes

- UltraBK[™] does not typically require any straight pipe runs up or downstream.
- When installing UltraBK[™], space around the valve must be provided for rotation of the handle
- UltraBK[™] can be installed in horizontal and vertical planes.



Refer to page 2 for installation procedure.

Refer to page 10 for valve identification.

Refer to page 62 for information about the SBV standard ball valve. Refer to page 53 for information about the NXP ball valve.

- UltraBK[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.

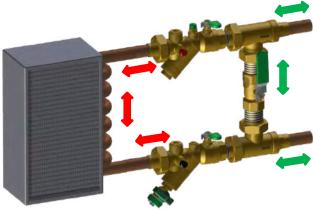


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ULTRA BKTM BYPASS KITS

Operation

Flushing



- 1. Close the supply side valve .
- 2. Close the return side valve.
- 3. Open the bypass valve.
- 4. Repeat on all terminal units.
- 5. System is now ready for flushing.

Standard Operation

- 1. Close the bypass valve.
- 2. Open the supply side valve.
- 3. Open air vent to purge any free air from system. Close vent when air is purged.
- 4. Open the return side valve.
- 5. Repeat on all terminal units.
- 6. System is now ready for operation.



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ULTRATTM

UltraT™

General

The UltraT[™] is a universal tee fitting that can be used for a multitude of applications. It is available with either 1 fixed end and 2 union ends or 2 fixed ends and 1 union end. See models below.

Models



Installation Notes

- UltraT[™] does not require any straight pipe runs up or downstream.
- UltraT[™] can be installed in horizontal and vertical planes.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.

- UltraT[™] does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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STANDARD BALL VALVE

Standard Ball Valve

General

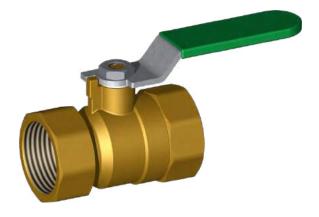
SBV ball valve may be installed anywhere a general isolation valve is required.

Installation Notes

- SBV does not typically require any straight pipe runs up or downstream.
- When installing SBV, space around the valve must be provided for rotation of the handle
- SBV can be installed in horizontal and vertical planes.



Refer to page 2 for installation procedure. Refer to page 10 for valve identification.



- SBV does not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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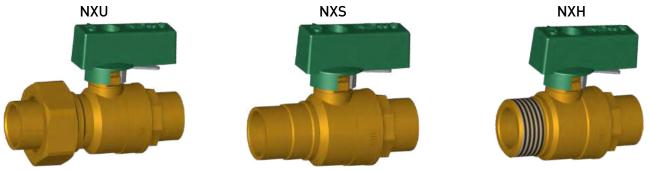
NXU / NXS / NXH

NXU / NXS / NXH

General

The UltraNX[™] is a family of unique ball valves with a variety of connection types. A memory stop is also provided on all NX series valves. The NXU can be used anywhere a general isolation valve is required.

Models



Installation Notes

- A memory stop is provided and can be adjusted using a Phillips screwdriver on the top of the handle.
- The UltraNXH[™] is a combination ball valve with stainless steel braided hose connected at one end. This can be used for isolation of mechanical equipment where allowed.





Refer to page 2 for installation procedure. Refer to page 10 for valve identification. Refer to page 64 for hose installation procedures.

- NXU and the NXH do not require maintenance under normal operating conditions.
- It is recommended to visually inspect products on regular intervals.



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ULTRAFLEXTM

UltraFlex™

General

Nexus UltraFlex[™] hoses are specifically designed for trouble free long term use when properly installed in hydronic applications. UltraFlex[™] hoses and associated pipe fittings are fabricated to meet demands of most normal temperatures, pressures, and fluids associated with most hydronic applications. Maximum pressure and temperature limits are stamped on one ferrule of each hose for easy identification.

Installation Instructions

• When installing flexible hoses, do not impart a twist or torque load upon the hose. Be careful when tightening the threaded connections. When tightening the female threaded nut of a hose, hold the ferrule stationary by hand while tightening the screw connections. Male threaded connections do not swivel, hold the male fittings at the hexagonal shoulder provided at the base of the male connector when tightening.



Be careful when tightening the threaded connections.



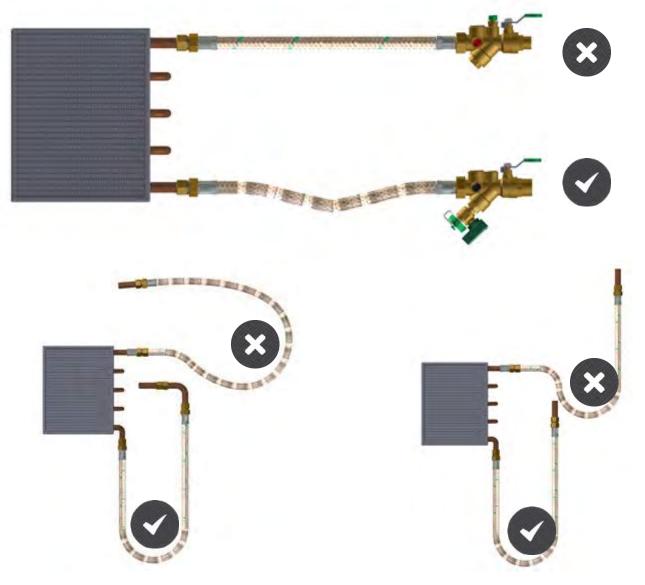


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- Never install the hose in tension. The hose is made to hold internal pressure, not to act as a means of support. Always allow an extra 5% in actual hose length to allow for shrinkage when the hose is subjected to internal pressure.
- The rigid piping attached to flexible hose should be anchored immediately to the hose connection to avoid imposing piping support and vibration loads on the flexible hose.
- Avoid tight bends in the flexible hose. Tight bends can reduce the flow capacity of the hose, induce high pressure drops, and may lead to failure.

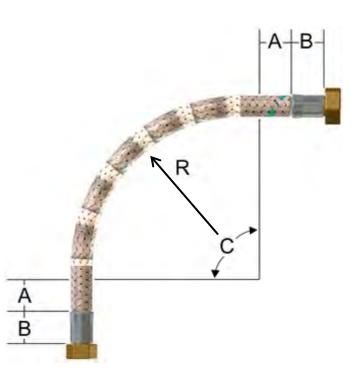




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UltraFlex Allowing A Bend					
Size	Length (in)	A (in)	B (in)	R Min. Bend Radius (in)	C (max) Based on R
	12	1.6	0.9	3.5	114º
1 /ว"	18	1.6	0.9	3.5	180º
1/2"	24	1.6	0.9	3.5	180º
	36	1.6	0.9	3.5	180º
	12	2.2	1.4	3.5	79 º
o//"	18	2.2	1.4	3.5	176º
3/4"	24	2.2	1.4	3.5	180º
	36	2.2	1.4	3.5	180º
	12	2.7	1.4	4.3	50º
1"	18	2.7	1.4	4.3	130º
1	24	2.7	1.4	4.3	180º
	36	2.7	1.4	4.3	180º
	18	3.5	1.8	5.1	82º
1-1/4"	24	3.5	1.8	5.1	149º
	36	3.5	1.8	5.1	180º
1-1/2"	18	4.2	2.0	7.1	45 ⁰
	24	4.2	2.0	7.1	93º
	36	4.2	2.0	7.1	180º
	18	5.1	2.2	9.4	20º
2"	24	5.1	2.2	9.4	56º
	36	5.1	2.2	9.4	129º



- The bend in a flexible hose should all be in one plane. Example; A hose may be bent downwards or upwards to handle an offset in piping, but should not bend downward and then to the right or left. Bends create a torsional load on the hose. (See image page 67)
- Verify that the proper gasket or o-ring type seal is present and properly positioned before completing any screwed connection that has a straight mechanical thread, rather than tapered self sealing threads.
- Do not over pressure the hose or expose the hose to temperatures above or below the specified allowable limits. Maximum pressure and temperature limits are stamped on one ferrule of each hose for easy identification.



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ULTRAFLEX™

- The gaskets provided with Nexus UltraFlex[™] hoses are made of EPDM material. This gasket is softer than traditional fiber gaskets to allow ease of installation and does not require extreme tightening to obtain a seal. Care must be taken not to over tighten this connection. Over tightening can cause damage to the gasket and or sealing surfaces.
- When installing an UltraFlex[™] gasket connection, care should be taken to verify that the gasket has been properly installed into the end of the hose. The metallic sealing surfaces on each side of this gasket should be visually examined to verify that they are flat and smooth with no sharp edges or deep scratches which could cut the gasket or provide a leak path beyond the gasket. The female nuts on each end of the hose have internal NPSH threads. This is a non-tapered thread identical to a standard tapered pipe thread, NPT, but without the taper.
- This threaded connection with gasket installed should be hand tightened and then further tightened no more than 1/4 revolution. No pipe dope or thread sealant should be applied to either sealing surface or pipe threads.





UFH All Stainless Hoses

The UltraFlex[™] 2 ½ UFH hose connector is designed specifically to compensate for pipe misalignment, absorb vibration and harmonics, and minimize stress on the piping system



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ULTRAFLEXTM

Fig. C

Installation Notes

- Do not compress the flexible connector to fit.
- Do not stretch the flexible connector to fit a gap larger than its factory furnished length.
- Do not force rotate ends of connector during assembly.
- Do not torque the end connectors.
- Anchor hose an unsecured hose will transmit vibrations to the piping system.
- Do no bend hose sharply near fittings fitting ends must always remain perpendicular to the axis of the hose.
- Do not let the hose support any weight except its own.
- Do not force hose into too much lateral offset.
- Do not bend hose less than 15" radius intermittent or 3" static.

Gaskets on Hoses

- UFH (1/2" thru 1") have captured gaskets on both sides (Fig. A).
- UFHF (1/2" thru 1") have captured gasket on one side, and nothing provided on the opposite side, as the 3/4" & 1-1/4"Fem fittings connect to a valve with o-ring (Fig. B).
- UFHM (1/2" thru 1") have captured gasket on one side (Fig. C).
- UFHM (1-1/4" thru 2") have suppled gasket on one side (i.e. not captured), (Fig. D).
 Fig. A
 Fig. B

Image: state of the state of



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METER KITS – MKA

Meter Kits – MKA

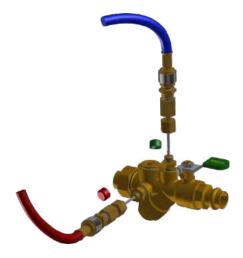
The Meter Kit model MKA is a manually operated differential pressure metering kit for use with most automatic flow limiting valves.

Instructions

- Connect hoses to the testports—red high pressure hose upstream, blue low pressure hose downstream.
- Ensure the valves are open on the device being tested.
- Press the spring loaded "thumb" switch on clear valve, read, and record whether the pressure reading is high or low pressure from gauge.
- Release spring loaded "thumb" switch on clear valve, read, and record pressure reading from gauge.
- Subtract the low pressure reading from the high pressure reading to calculate differential pressure across the tested device.
- Drain the kit after use.
- The Model MKA test kit is equipped with filters near the end of the hoses. If the gauge responds slowly to changes in differential pressure, the filter elements may need to be cleaned. To remedy this, unscrew the two halves of the filter housing and remove the brass filter element. It may be cleaned by flushing with a mild detergent and water. After reassembly, if this has not satisfactorily improved the gauge performance, replace the filter element.
- Replace the caps on the test ports when you have completed using the metering kits.



Severe damage may occur if this test kit is subjected to freezing temperatures. Proper eye protection should always be worn when working with pressure containing parts. Some meter kits may have green colored hoses for low pressure in lieu of blue colored hoses.







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METER KITS – MKM

Meter Kits – MKM

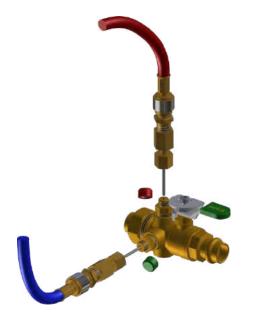
The Meter Kit model(s) MKM are differntial pressure meter kits designed for use with most types of balancing valves.

Instructions

- Connect hoses to the testports—red high pressure hose upstream, blue low pressure hose downstream.
- Ensure the valves are open on the device being tested and read differential pressure.
- Upon completion of test, disconnect hoses and store them in testkit case.
- Drain the kit after use.
- The Model MKM test kit is equipped with filters near the end of the hoses. If the gauge responds slowly to changes in differential pressure, the filter elements may be partially plugged and need to be cleaned. To remedy this, unscrew the two halves of the filter housing and remove the brass filter element. It may be cleaned by flushing with a mild detergent and water. After reassembly, if this has not satisfactorily improved the gauge performance, replace the filter element.
- Replace the caps on the test ports when you have completed using the metering kits.



Severe damage may occur if this test kit is subjected to freezing temperatures. Proper eye protection should always be worn when working with pressure containing parts. Some meter kits may have green colored hoses for low pressure in lieu of blue colored hoses.







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MANUAL AIR VENTS

Manual Air Vents

MV-025 & MV-025L

- MV's feature a blowout-proof actuating stem within a sturdy housing.
- MV-025 is slotted for quick and easy operation. To open, turn counter clockwise.
- MV-025L is equipped with a knurled thumbwheel. To open, turn counter clockwise.
- Ensure no debris is in seating area.
- Close vent when water begins to stream.



Do not over tighten when closing. Over tightening can damage the o-ring which may cause a leak.

Hot liquid may be released when operating air vent.



Proper eye protection should always be worn when working with pressure containing parts.



MV-025L





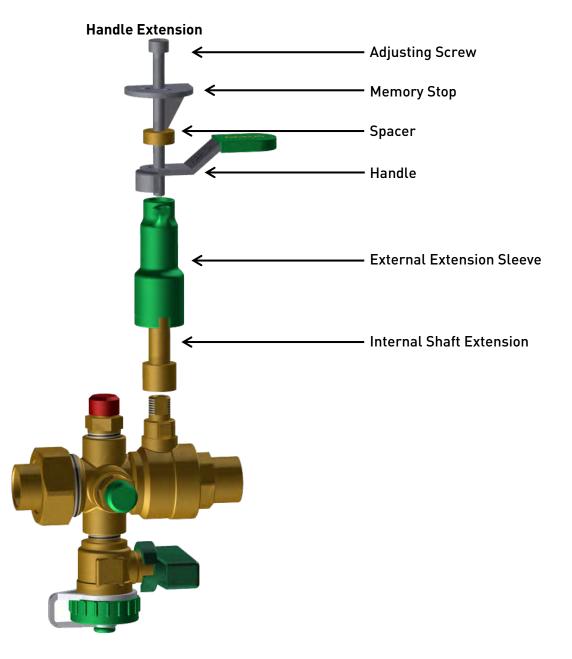


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HANDLE EXTENSION KITS

Handle Extension Kits

Nexus Valve offers extension kits to extend handles above insulation. Extension kits are normally assembled to the valve at the factory. If field assembly is required, assemble as seen in image below. Not all valve handles include the memory stop feature.





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EXTENSION PTE / PTEB

Extension PTE / PTEB

Pre-Installation Inspection

- Visually verify that o-ring has been installed in PTE at the female threaded end and that the extension is not plugged with debris.
- Visually verify that male threads on the PTE have not been damaged and the end of the male threaded portion is satisfactory to act as a gasket surface.
- Carefully remove cap from pre-installed PT. Verify that no leakage is observed from the existing PT.
 Caution: If seal in existing PT has been damaged the PT's cap may be under pressure and release hot liquid when the cap is removed.

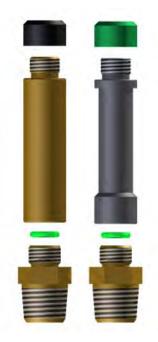
Proper eye protection should always be worn when working with pressure containing parts.

Installation of PTE

- Screw the PTE onto the exposed male threads of the existing PT. Hand tightening is sufficient. (Over tightening may cause damage to the o-ring). Do not use a wrench to tighten the PTE.
- Hand tighten the cap removed from the PT on to the PTE extension to prevent dust and debris from accumulating on top of the internal seal of the PT. Note: The PTE is not intended to contain pressure.



It is not necessary to remove the PTE to take pressure or temperature readings through the PT as Nexus Valve offers extended probe needles for this purpose.





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UNION ADAPTER

Union Adapter

General

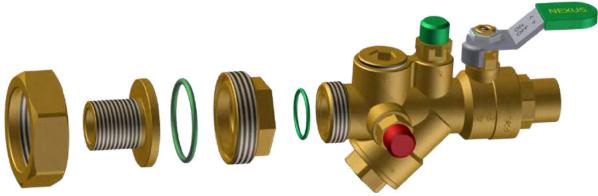
Union adapters may be installed on a Nexus Valve brand valve or union with a ¾" or 1¼" union size to adapt to the next union size to allow use of a larger union end connection. Refer to the chart below for applications. These adapters require the appropriate o-rings on each side of the adapter.

Model UA Installation Procedure

• Follow standard o-ring, tail piece, and union nut installation guidelines found on page 4.

- The Union Adapters do not require any annual or periodic maintenance.
- It is recommended to visually inspect products on regular intervals.

		UA 075 125	UA 125 200
UltraMatic™	UМ	1/2"L0, 3/4"L0, 1"XL0	1/2"STD, 3/4"STD, 1"LO, 1-1/4"LO
UltraMB™	МВ	1/2", 3/4L0, 1"L0	3/4"STD, 1"STD, 1-1/4"LO
UltraY™	UY	1/2", 3/4"L0, 1"L0	3/4"STD, 1"STD, 1-1/4"L0
UltraX™	UX	1/2", 3/4L0, 1"L0	3/4"STD, 1"STD, 1-1/4"LO
UltraXB™ Orturi	ХВ	1/2", 3/4L0, 1"L0	3/4"STD, 1"STD, 1-1/4"L0
UltraU™	UU	1/2"LO	1/2"STD, 3/4", 1"
UltraNXP™		1/2", 3/4"L0, 1"L0	3/4", 1", 1-1/4" LO
NXU		1/2"	3/4"
0-rings		OR-075, OR-125	OR-125, OR-200





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TOOL REQUIREMENTS

Tool Requirements

ltem	Tooling Required For Installation
PG-025	1/4" Hex Key (Allen Wrench)
PG-050	3/8" Hex Key (Allen Wrench)
PT-025	9/16" or 14mm Deep Socket
PT-050	7/8" Deep Socket
BD-025	7/8" Open End Wrench
BD-050	22 mm Open End Wrench
BD-075	Adjustable Wrench
MS-1	4 mm Hex Key (Allen Wrench)
MS-3	5 mm Hex Key (Allen Wrench)
MV-025	9/16" or 14mm Deep Socket
TP075-050M	9/16" Hex Key (Allen Wrench)
TP125-050M	9/16" Hex Key (Allen Wrench)
TP125-075M	3/4" Hex Key (Allen Wrench)
TP125-100M	7/8" Hex Key (Allen Wrench)
UN-075	(30 mm Hex nut) tighten by hand + 1/4 Turn with adjustable wrench
UN-125	(46 mm Hex nut) tighten by hand + 1/4 Turn with adjustable wrench
UN-200	(66 mm Hex nut) tighten by hand + 1/4 Turn with adjustable wrench
UN-250	(83 mm Hex nut) tighten by hand + 1/4 Turn with adjustable wrench

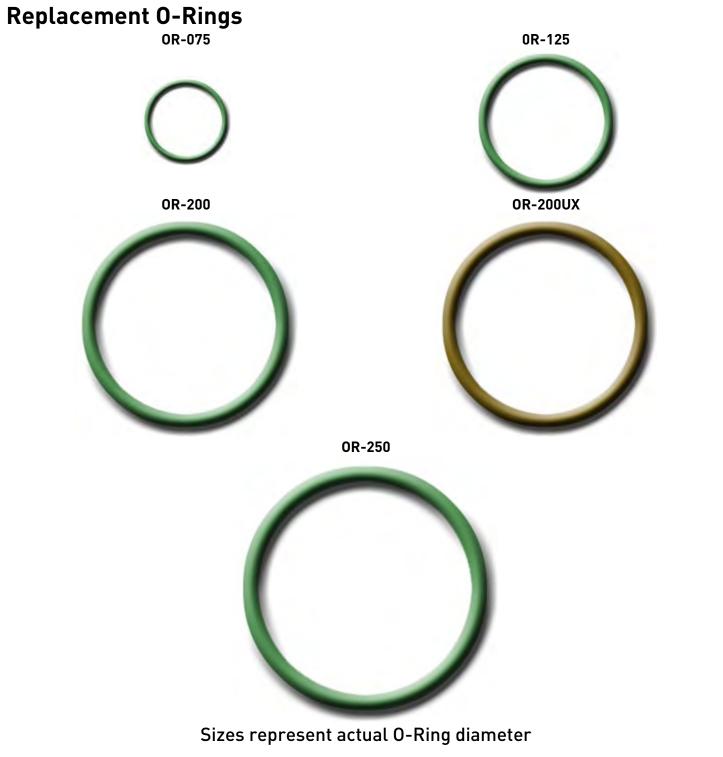


See pages 2 - 10 for recommend torque and tightening instructions.



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REPLACEMENT O-RINGS





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REPLACEMENT GASKETS

Replacement Gaskets

- 150# Flange Ring Gasket (EPDM) P/N's & Dimensions					
Nexus P/N	Flange Size	ID (in)	OD (in)	Thick (in)	
FG-250	2.50"	2-7/8	4-7/8	1/16	
FG-300	3.00"	3-1/2	5-3/8	1/16	
FG-400	4.00"	4-1/2	6-7/8	1/16	
FG-500	5.00"	5-9/16	7-3/4	1/16	
FG-600	6.00"	6-5/8	8-3/4	1/16	
FG-800	8.00"	8-5/8	11	1/16	
FG-1000	10.00"	10-3/4	13-3/8	1/16	
FG-1200	12.00"	12-3/4	16-1/8	1/16	

Filter Cap Gasket (EPDM), Model SXF: P/Ns and Dimensions					
Nexus P/N	Strainer Size	ID (in)	OD (in)	Thick (in)	
SXFCGE-0250	2.50"	2.99	4.06	0.06	
SXFCGE-0300	3.00"	3.62	4.69	0.06	
SXFCGE-0400	4.00"	4.49	5.67	0.06	
SXFCGE-0500	5.00"	5.71	6.69	0.06	
SXFCGE-0600	6.00"	6.46	7.64	0.06	



Ultra-Flex Hose Gaskets					
Nexus P/N	Hose Size	ID (in)	OD (in)	Thick (in)	
UFHW-050*	0.50"	0.47	0.71	0.08	
UFHW-075*	0.75"	0.67	0.91	0.08	
UFHW-100*	1.00"	0.83	1.18	0.1	
UFHW-125	1.25"	1	1.5	0.13	
UFHW-150	1.50"	1.25	1.75	0.13	
UFHW-200	2.00"	1.75	2.25	0.13	
*These gaskets intended only for use in ½", ¾" or 1" female swivel ends of					

Nexus UltraFlex[™] hoses which feature captive washer design.

GASKETS for NAC/SAC INSTALLTIONS					
Nexus P/N	Cartridge Size	ID (in)	OD (in)	Thick (in)	
SAC-050-GASKET	0.50"	0.65	0.84	0.06	
SAC-075-GASKET	0.75"	0.89	1.08	0.06	
SAC-125-GASKET	1.25"	1.09	1.58	0.06	
SAC-200-GASKET	2.00"	1.8	2.54	0.11	
SAC-300-GASKET	3.00"	2.67	3.13	0.11	



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NOTES

Notes



UNION END CONNECTION SIZE GUIDE for Unions & Union End Valves

(1/2" thru 2-1/2")

SIZE COMPATIBILITY CHART - Fixed Ends vs. Available Union Ends

This chart provides a quick reference for determining available union end connections for a given valve or union size. Find the valve or union series and size on the left, and follow across the row to see which union ends are available.

Model(s)	Fixed End Size	Available Union Ends
UMA	050L, 075L, 100X	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
UM	050L, 075L, 100X	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
	050-, 075-, 100L, 125L	050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P, 125P
	100-, 125-, 150L	050M, 075M, 075S, 100F, 100M, 100S, 100P, 100L, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P
	150-, 200-, 250-	100M, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P, 200F, 200M, 200S, 200P, 250F
	050-	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
UB	075-, 100-	050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P, 100L, 125P
	125-, 150-	050M, 075M, 075S, 100F, 100M, 100S, 100P, 100L, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P
	200-	100M, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P, 200F, 200M, 200S, 200P, 250F
UC	050M, 050S, 075M, 075S	038S, 050M, 050S
	075M, 075S, 100M, 100S, 125M, 125S	050F, 050M, 050S, 050L, 050P, 075F, 075M, 075S, 075L, 075P, 100F, 100M, 100S, 100P
	050L	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
UU	050-, 075-, 100-	050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P, 125P
	125-, 150-	050M, 075M, 075S, 100F, 100M, 100S, 100P, 100L, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P
	200-	100M, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P, 200F, 200M, 200S, 200P, 250F
MBA	050-, 075L, 100L	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
XB, MB, UX, NXP, UY NXU	050-, 075L,100L	038S, 050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P
	075-, 100-, 125L	050F, 050M, 050S, 050P, 050L, 075F, 075M, 075S, 075P, 075L, 100F, 100M, 100S, 100P, 125P
	125-, 150-	050M, 075M, 075S, 100F, 100M, 100S, 100P, 100L, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P
	200-, 250-	100M, 125F, 125M, 125S, 125P, 150F, 150M, 150S, 150P, 200F, 200M, 200S, 200P, 250F

TCV/COIL CHART - Size vs. Available Union Ends and Reduction Codes

This chart provides a quick reference for determining available union end connections and reduction codes for a given coil pak size. Find the coil pak size on the left, and follow across the row to see which union ends and reduction codes are available for the TCV or Coil connection.

Size	TCV Options	Coil Options
050L	M0, S0	M0, S0, P0
050-	M0, S0	M0, S0, P0
075L	M1, S1	M1, S1, P0, P1
075-	F0, F1, M0, M1, S0, S1	F0, FA, M0, M1, MA, S0, S1, SA, P0, P1
100XL	M1, S1	M1, S1, P1, P2
100L, 100-	F0, F1, F2, M0, M1, M2, S0, S1, S2	F0, F1, M0, M1, M2, S0, S1, S2, P0, P1, P2
125L	F1, F2, F3, M1, M2, M3, S1, S2, S3	F1, F2, F3, M1, M2, M3, S1, S2, S3, P0, P1, P2, P3
125-	F0, F1, M0, M1, M2, M3, S0, S1, S2	F0, F1, FA, M0, M1, M2, M3, MA, S0, S1, S2, SA, P0, P1
150L, 150-	F0, F1, F2, M0, M1, M2, M3, M4, S0, S1, S2, S3	F0, F1, F2, M0, M1, M2, M3, M4, S0, S1, S2 ,S3, P0, P1, P2
200-	F0, F1, F2, M0, M1, M2, M3, S0, S1, S2	F0, F1, F2, M0, M1, M2, M3, S0, S1, S2, P0, P1, P2
250-	F1, F2, F3, M1, M2, M3, M4, S1, S2, S3	F0, F1, F2, F3, M1, M2, M3, M4, S1, S2, S3, P1, P2, P3

NOTES General: 1) All size codes are in 100ths.

For example: 050 = 0.50" = 1/2", 125 = 1.25" = 1 1/4", etc.

2) Union End Style Code: F = Female, M = Male, S = Sweat, P = NexPress, L = NexLok

NOTES SIZE COMPATIBILITY: 1) "050S" = 1/2" Sweat

2) See literature for available fixed end styles.

NOTES TCV/COIL: 1) Numbers in reduction codes represent a step down and "A" represents a step up in size

For example: For a 125- kit 0 = 1 1/4" Connection

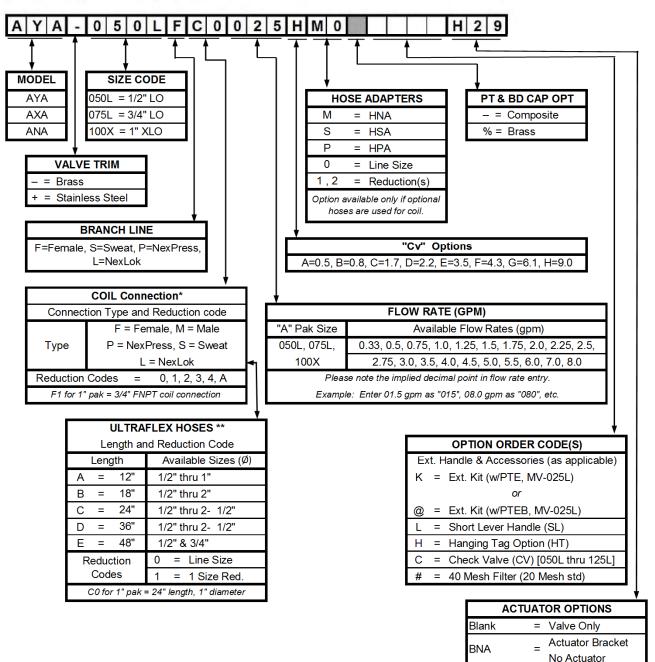
For a 125- kit 1 = 1" Connection

For a 075- kit A = 1" Connection



Ordering Guide for "A" - Actuator Coil Paks™ Models AYA, AXA, ANA (1/2"LO, 3/4"LO, 1"XLO)

Part # Template w/Sample Part #:

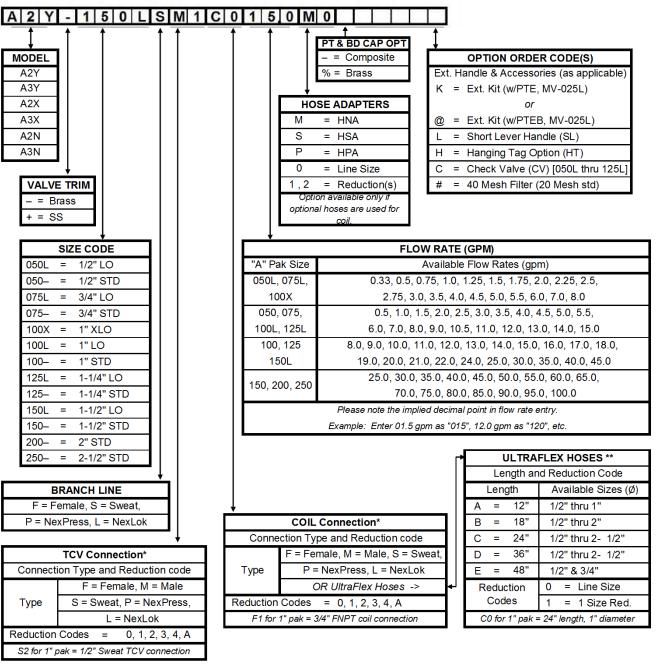


** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "A" Coil Paks™ Models A2Y, A3Y, A2X, A3X (1/2" thru 2-1/2") Models A2N, A3N (1/2" thru 1-1/2")

Part # Template w/Sample Part #:

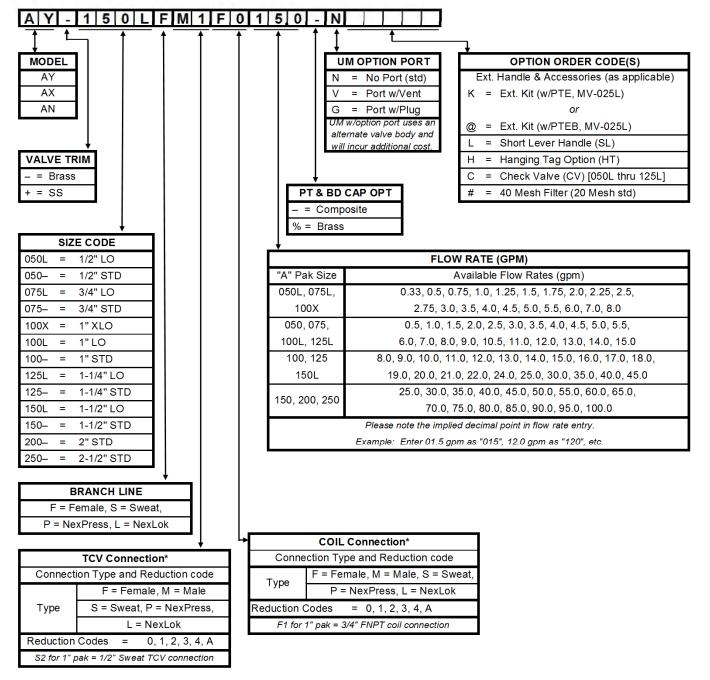


* Please consult the **Union End Connection Size Guide** to determine if desired reduction size and connection type is available. ** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "A" Coil Paks™ Models AY, AX (1/2" thru 2-1/2") Model AN (1/2" thru 1-1/2")

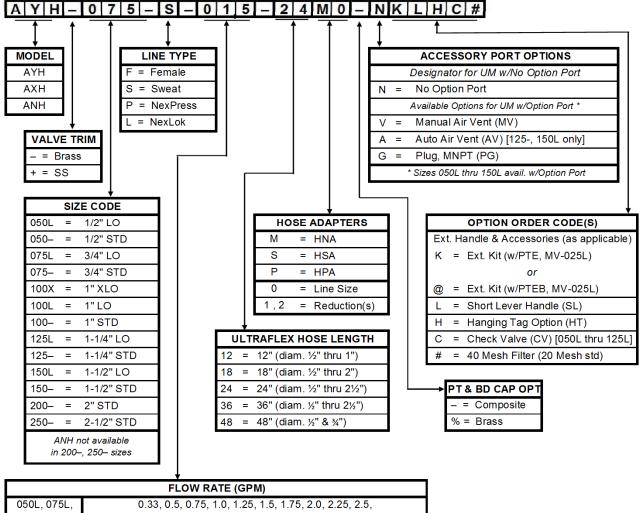
Part # Template w/Sample Part #:



* Please consult the **Union End Connection Size Guide** to determine if desired reduction size and connection type is available. ** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



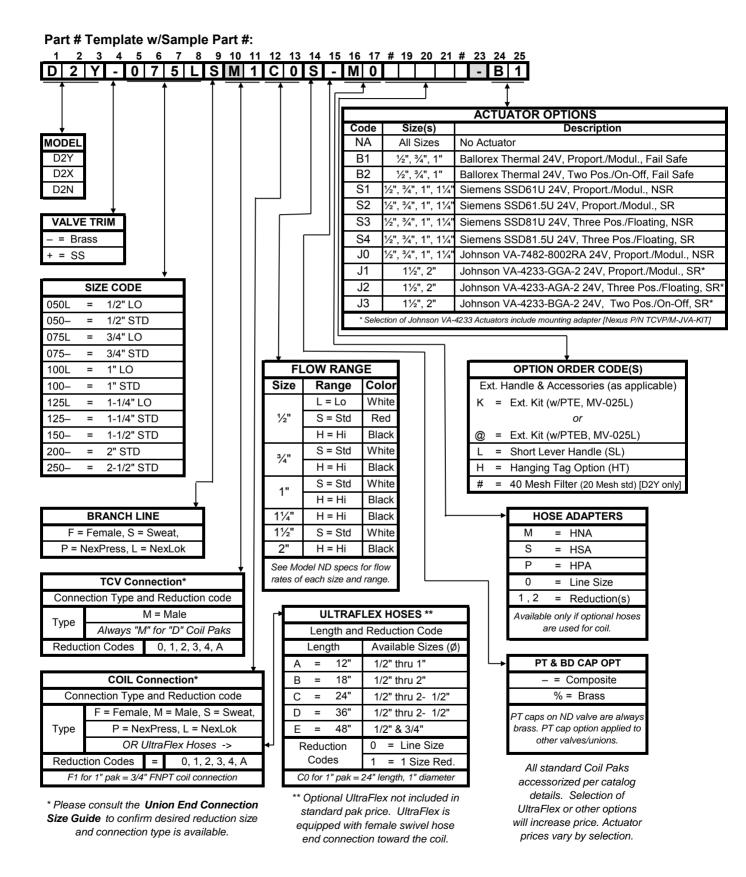
Ordering Guide for "A" Hose Paks™ Models AYH, AXH (1/2" thru 2-1/2") Model ANH (1/2" thru 1-1/2")



FLOW RATE (GPM)			
050L, 075L,	0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5,		
100X	2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0		
050, 075,	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5,		
100L, 125L	6.0, 7.0, 8.0, 9.0, 10.5, 11.0, 12.0, 13.0, 14.0, 15.0		
100, 125	8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0,		
150L	19.0, 20.0, 21.0, 22.0, 24.0, 25.0, 30.0, 35.0, 40.0, 45.0		
150, 200, 250	25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0,		
150, 200, 250	70.0, 75.0, 80.0, 85.0, 90.0, 95.0, 100.0		
Please note the implied decimal point in flow rate entry.			
Example: Enter 01.5 gpm as "015", 12.0 gpm as "120", etc.			



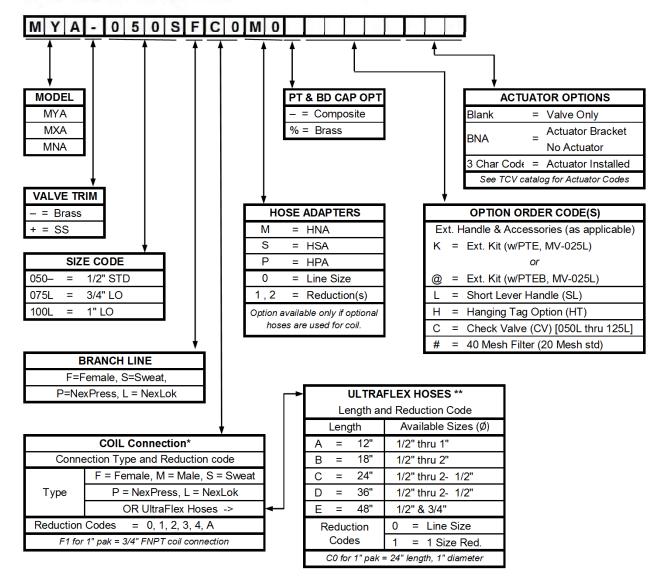
Ordering Guide for "D" Coil Paks™ Models D2Y, D2X (1/2" thru 2-1/2") Model D2N (1/2" thru 1-1/2") w/Nexus Model "ND" Dynamic Balancing Control Valve





Ordering Guide for "M" - Actuator Coil Paks™ Models MYA, MXA, MNA (1/2", 3/4"LO, 1"LO)

Part # Template w/Sample Part #:



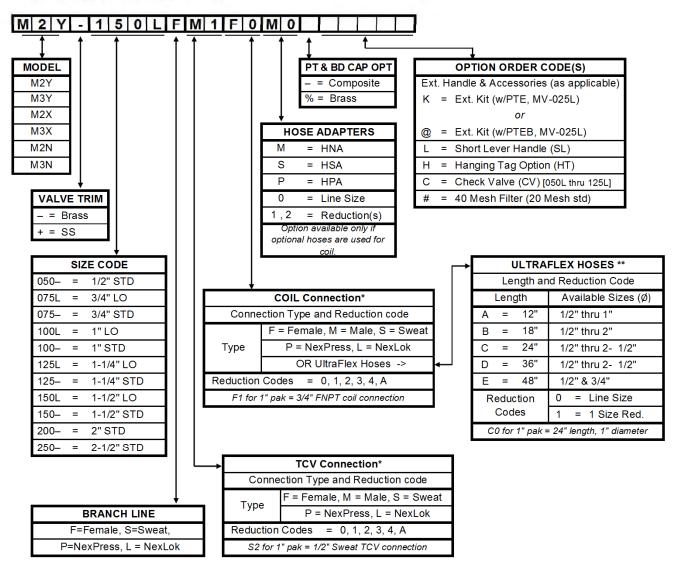
* Please consult the **Union End Connection Size Guide** to determine if desired reduction size and connection type is available. ** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil.

All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "M" Coil Paks™ Models M2Y, M3Y, M2X, M3X (1/2" thru 2-1/2") Models M2N, M3N (1/2" thru 1-1/2")

Part # Template w/Sample Part #:

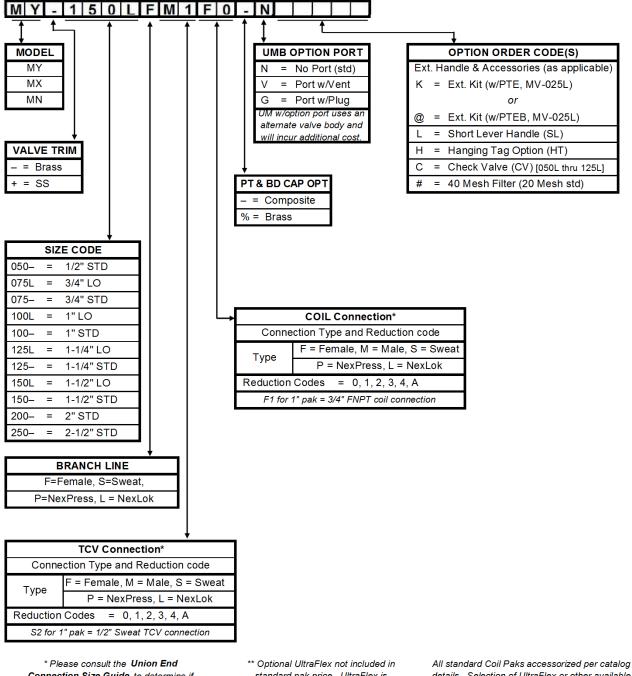


* Please consult the **Union End Connection Size Guide** to determine if desired reduction size and connection type is available. ** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "M" Coil Paks™ Models MY, MX (1/2" thru 2-1/2") Model MN (1/2" thru 1-1/2")

Part # Template w/Sample Part #:

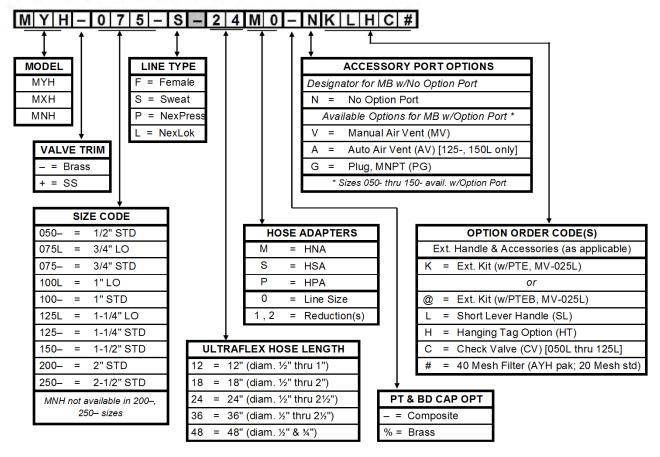


Connection Size Guide to determine if desired reduction size and connection type is available.

** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog details. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



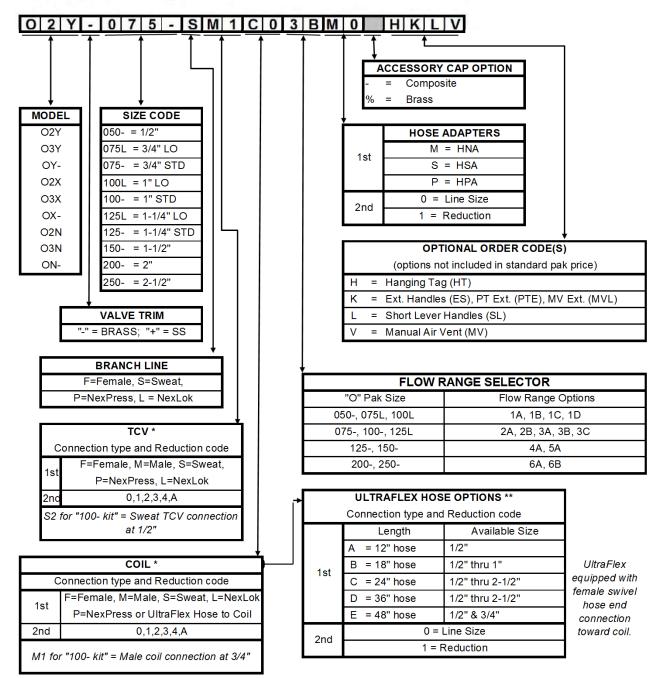
Ordering Guide for "M" Hose Paks™ Models MYH, MXH (1/2" thru 2-1/2") Model MNH (1/2" thru 1-1/2")





Ordering Guide for "O" Coil Paks™ Models O2Y, O3Y, OY, O2X, O3X, OX, O2N, O3N, ON (1/2" thru 2-1/2")

Part # Template w/Sample Part #:



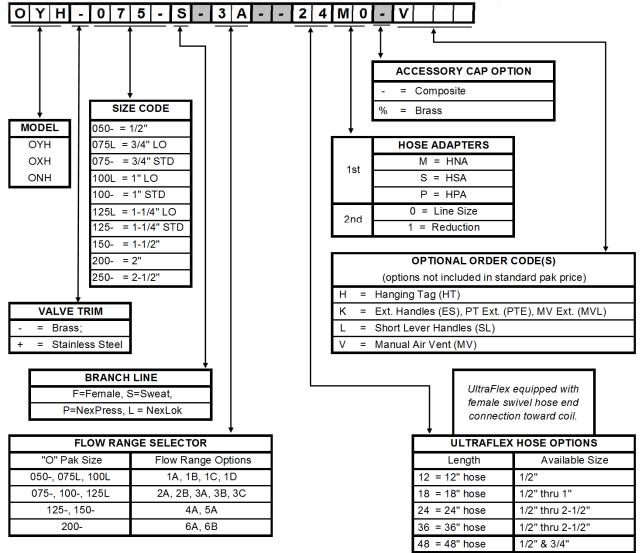
* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.

** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog detail sheets. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "O" Hose Paks™ Models OYH, OXH, ONH (1/2" thru 2-1/2")

Part # Template w/Sample Part #:

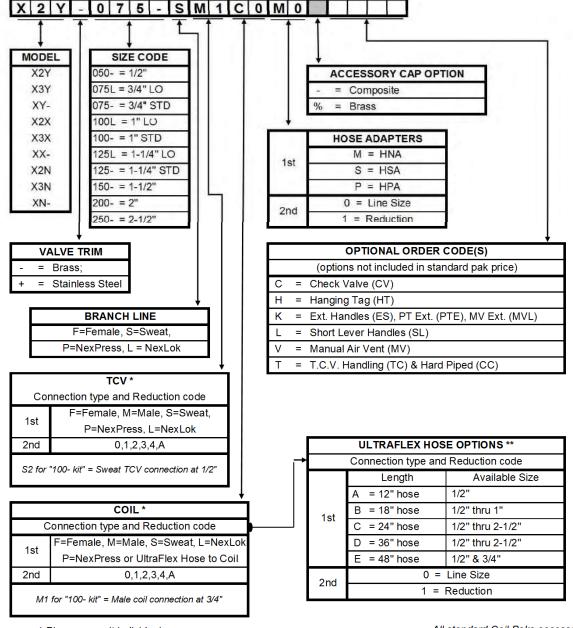


All standard hose paks accessorized per catalog detail sheets. Selection of available options will increase price.



Ordering Guide for "X" Coil Paks™ Models X2Y, X3Y, XY, X2X, X3X, XX, X2N, X3N, XN (1/2" thru 2-1/2")

Part # Template w/Sample Part #:



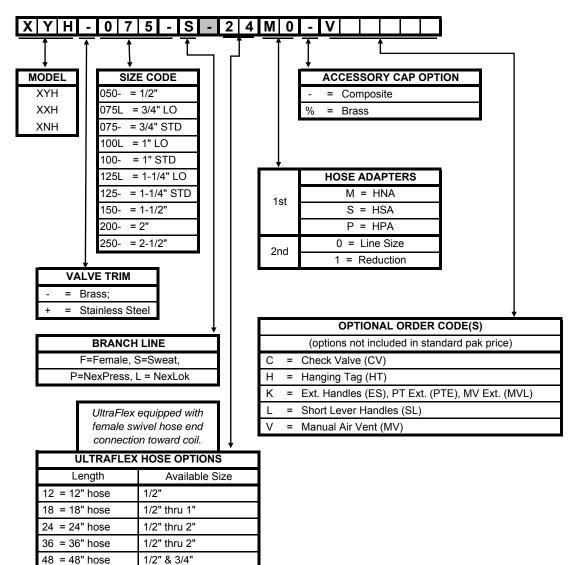
* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.

** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog detail sheets. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



Ordering Guide for "X" Hose Paks™ Models XYH, XXH, XNH (1/2" thru 2-1/2")

Part # Template w/Sample Part #:

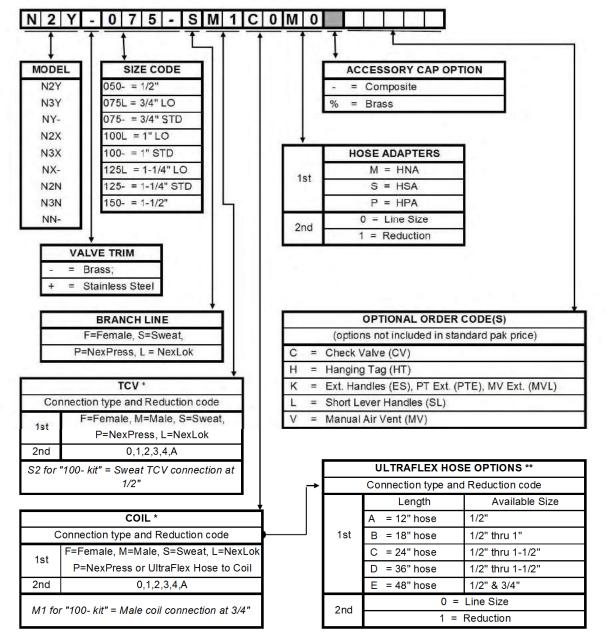


All standard hose paks accessorized per catalog detail sheets. Selection of available options will increase price.



Ordering Guide for "N" Coil Paks™ Models N2Y, N3Y, NY, N2X, N3X, NX, N2N, N3N, NN (1/2" thru 1-1/2")

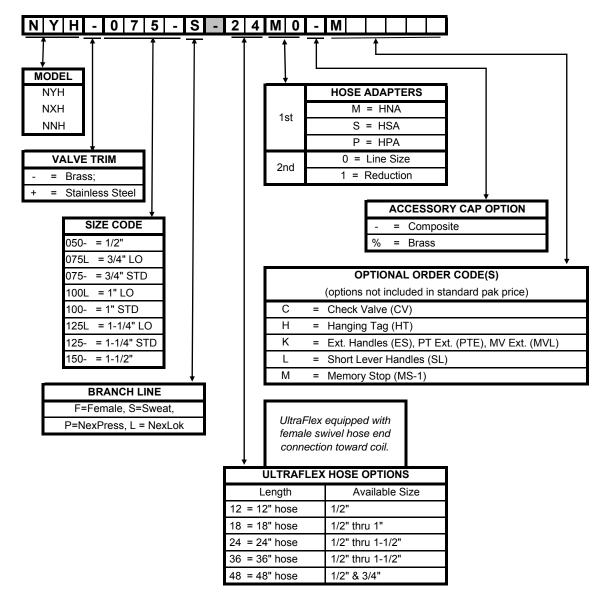
Part # Template w/Sample Part #:



* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available. ** Optional UltraFlex not included in standard pak price. UltraFlex is equipped with female swivel hose end connection toward the coil. All standard Coil Paks accessorized per catalog detail sheets. Selection of UltraFlex or other available options will increase price. Coil Paks do not include TCV.



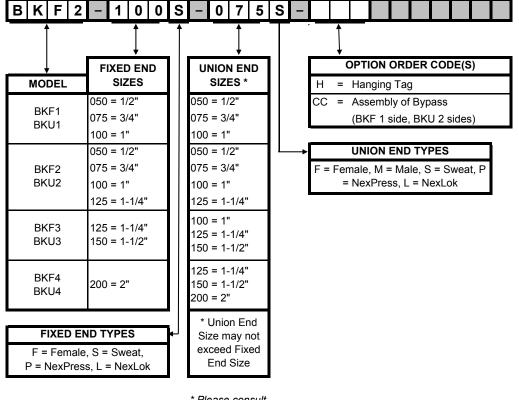
Ordering Guide for "N" Hose Paks™ Models NYH, NXH, NNH (1/2" thru 1-1/2")





Ordering Guide for Bypass Kit Models BKF & BKU (1/2" thru 2")

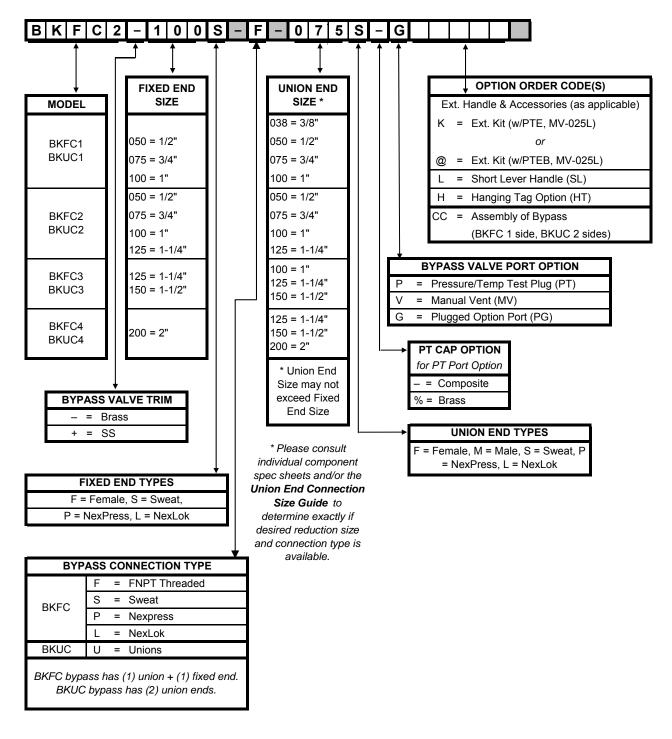
Part # Template w/Sample Part #:



* Please consult individual component spec sheets and/or the Union End Connection Size Guide to determine exactly if desired reduction size and connection type is available.

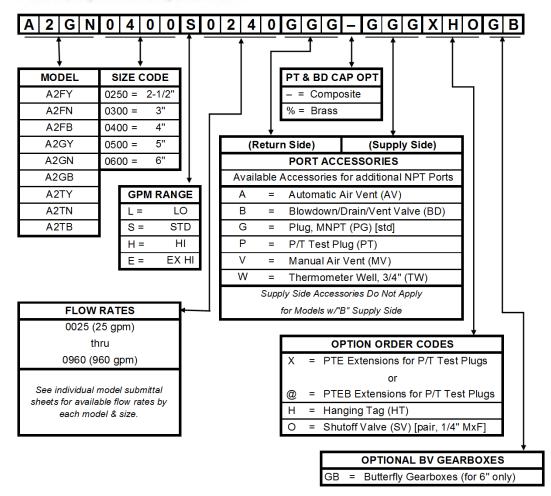


Ordering Guide for Bypass Kit™ Models BKFC & BKUC (1/2" thru 2")



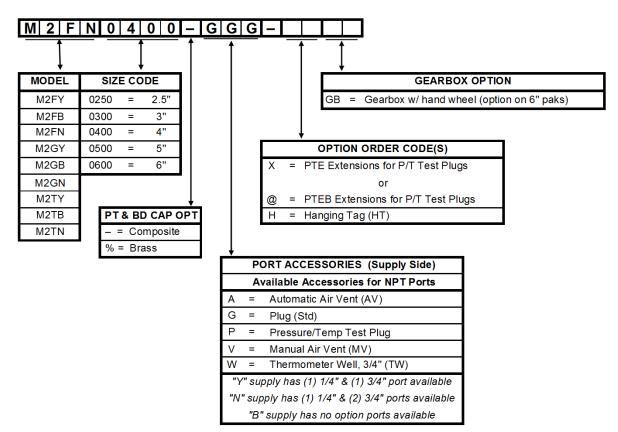


Ordering Guide for Coil Paks™ Models A2FY, A2FB, A2FN (2-1/2" thru 6") Models A2GY, A2GB, A2GN (2-1/2" thru 6") Models A2TY, A2TB, A2TN (2-1/2")



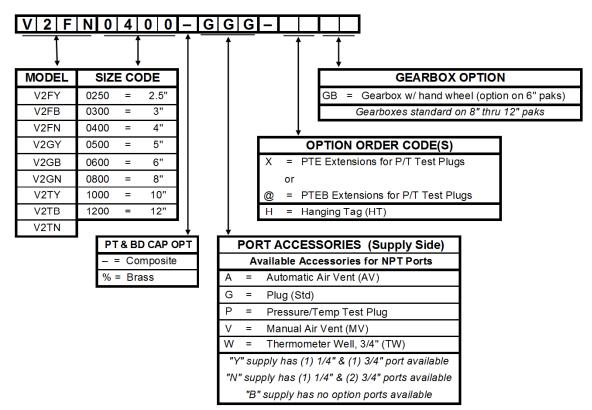


Ordering Guide for Coil Paks™ Models M2FY, M2FB, M2FN, M2GY, M2GB, M2GN (2 1/2" thru 6") M2TY, M2TB, M2TN (2 1/2")



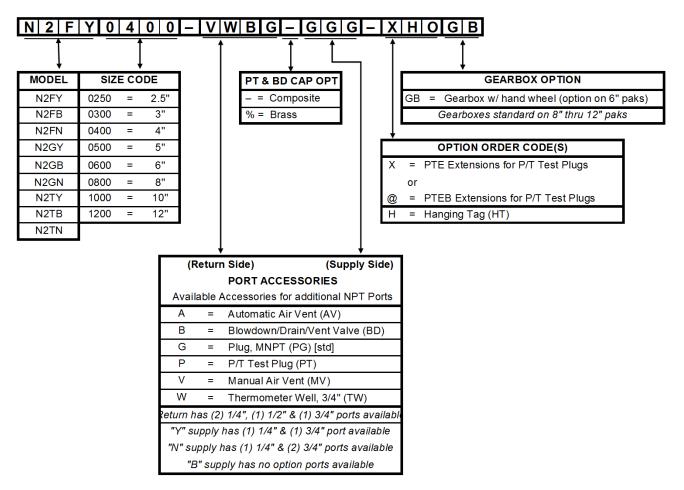


Ordering Guide for Coil Paks™ Models V2FY, V2FB, V2FN, V2GY, V2GB, V2GN (2 1/2" thru 12") V2TY, V2TB, V2TN (2 1/2" only)



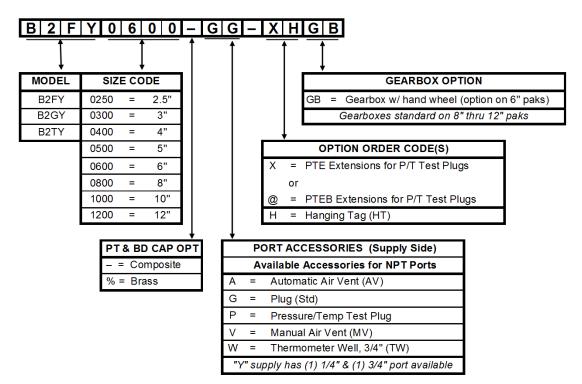


Ordering Guide for Coil Paks™ Models N2FY, N2FB, N2FN, N2GY, N2GB, N2GN (2 1/2" thru 12") N2TY, N2TB, N2TN (2 1/2" only)



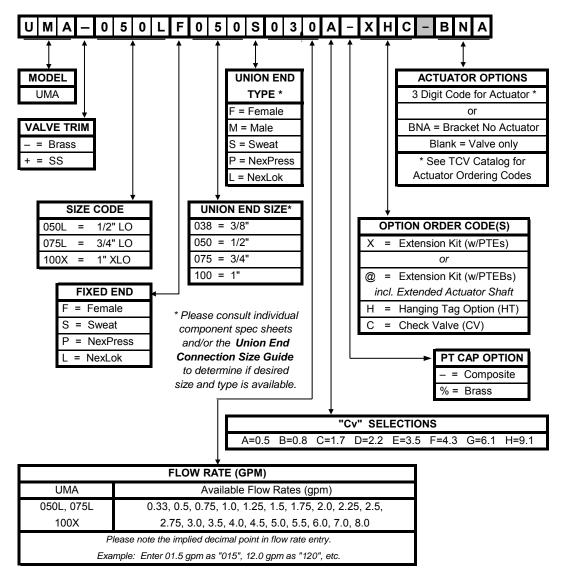


Ordering Guide for Coil Paks™ Models B2FY, B2GY (2 1/2" thru 12") Model B2TY (2 1/2" only)





Ordering Guide for UltraUMA[™] Model UMA (1/2" LO, 3/4" LO, 1" XLO)



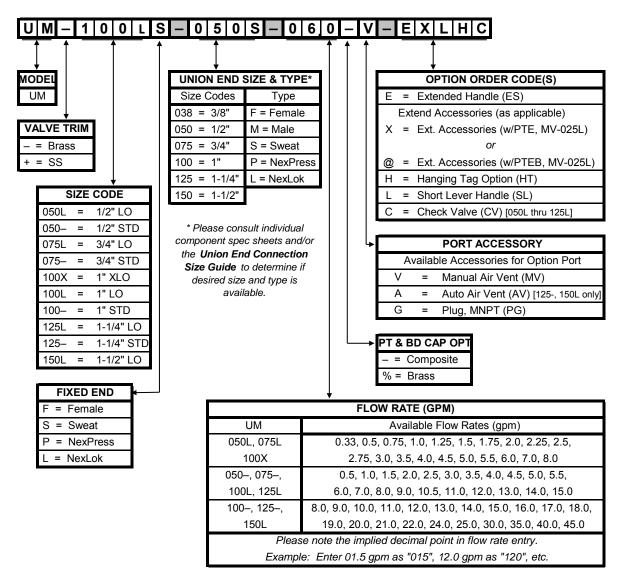


Ordering Guide for UltraMatic[™] Model UM with NO Option Port (1/2" LO thru 2-1/2")

UM - 075 - 5 - 050 M -0 5 0 – N EXLHC **OPTION ORDER CODE(S)** MODEL **UNION END SIZE & TYPE*** UΜ Size Codes = Extended Handle (ES) Type Е 038 = 3/8"F = Female Extend Accessories (as applicable) VALVE TRIM M = Male 050 = 1/2"X = Ext. Accessories (w/PTE, MV-025L) S = Sweat - = Brass 075 = 3/4"or P = NexPress + = SS 100 = 1"@ = Ext. Accessories (w/PTEB, MV-025L) 125 = 1-1/4" L = NexLok = Hanging Tag Option (HT) Н SIZE CODE 150 = 1 - 1/2"= Short Lever Handle (SL) Т 050L 1/2" LO 200 = 2" = Check Valve (CV) [050L thru 125L] = С 1/2" STD 250 = 2 - 1/2"050-= 075L 3/4" LO N = UM with NO Option Port = 075-3/4" STD * Please consult individual = component spec sheets and/or PT & BD CAP OPT 1" XLO 100X = the Union End Connection 100L = 1" LO - = Composite Size Guide to determine if 100-= 1" STD % = Brass desired size and type is 1-1/4" LO available 125L = 125-1-1/4" STD = 150L 1-1/2" LO = FLOW RATE (GPM) 150-1-1/2" STD = 2" STD UM Available Flow Rates (gpm) 200-= 250-= 2-1/2" STD 050L, 075L 0.33, 0.5, 0.75, 1.0, 1.25, 1.5, 1.75, 2.0, 2.25, 2.5, 100X 2.75, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0 FIXED END 050-, 075-, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, F = Female 100L, 125L 6.0, 7.0, 8.0, 9.0, 10.5, 11.0, 12.0, 13.0, 14.0, 15.0 S = Sweat 100-, 125-, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0, 24.0, 25.0, 30.0, 35.0, 40.0, 45.0 P = NexPress150L = NexLok 25.0, 30.0, 35.0, 40.0, 45.0, 50.0, 55.0, 60.0, 65.0, 150-, 200-, 250-70.0, 75.0, 80.0, 85.0, 90.0, 95.0, 100.0 Please note the implied decimal point in flow rate entry. Example: Enter 01.5 gpm as "015", 12.0 gpm as "120", etc.



Ordering Guide for UltraMatic[™] Model UM with Option Port (1/2" LO thru 1-1/2" LO)

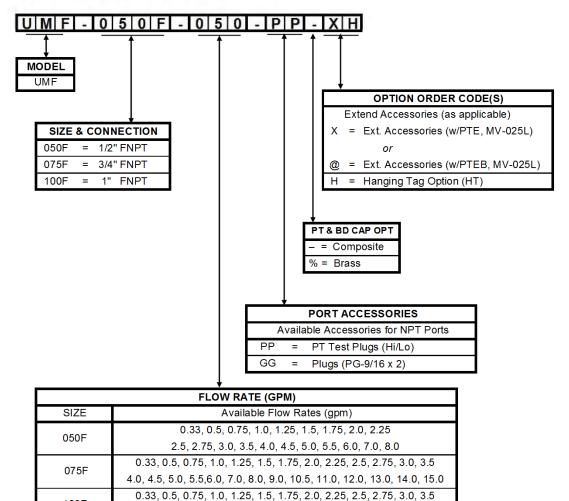




Ordering Guide for UltraMatic™ Model UMF Automatic Flow Control (1/2", 3/4" & 1" FNPT)

Part # Template w/Sample Part #:

100F

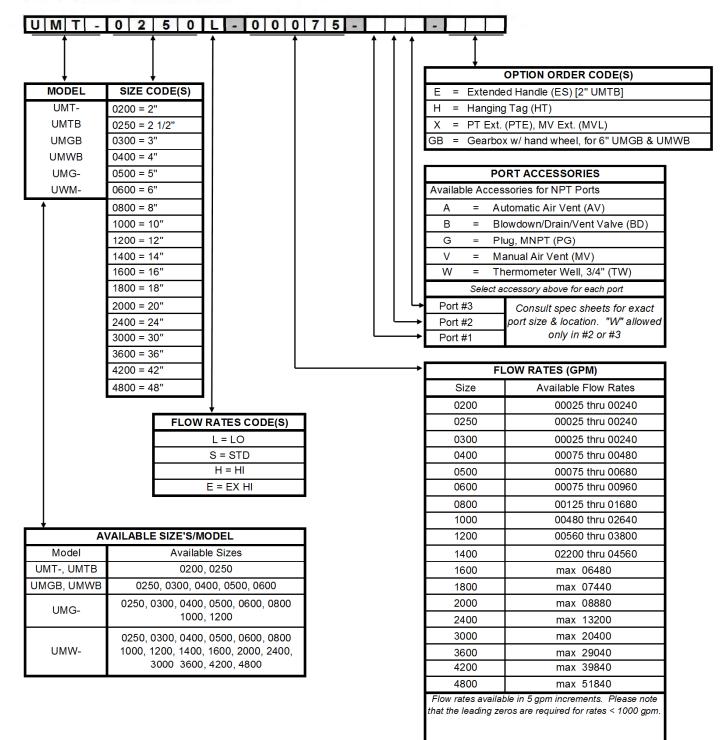


4.0, 4.5, 5.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.5, 11.0, 12.0, 13.0, 14.0, 15.0

Please note the implied decimal point in flow rate entry. Example: Enter 01.5 gpm as "015", 12.0 gpm as "120", etc.

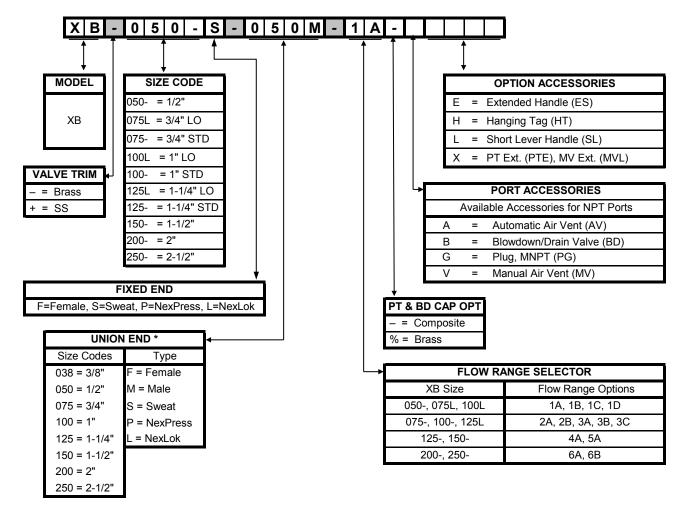


Ordering Guide for UltraMatic[™] Models UMT, UMTB, UMG, UMGB, UMW, UMWB (2" thru 48")





Ordering Guide for Orturi™ Model XB (1/2" thru 2-1/2")



Part # Template w/Sample Part #s:

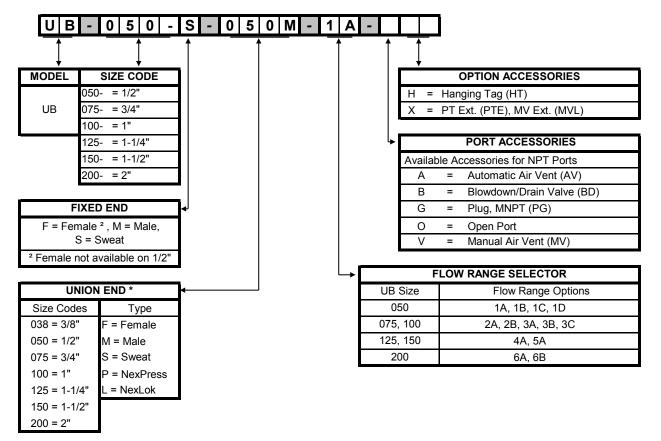
* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.



Ordering Guide for Orturi™ Model UB

(1/2" thru 2")

Part # Template w/Sample Part #s:

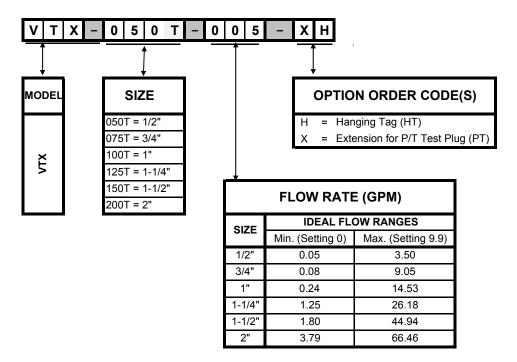


* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.



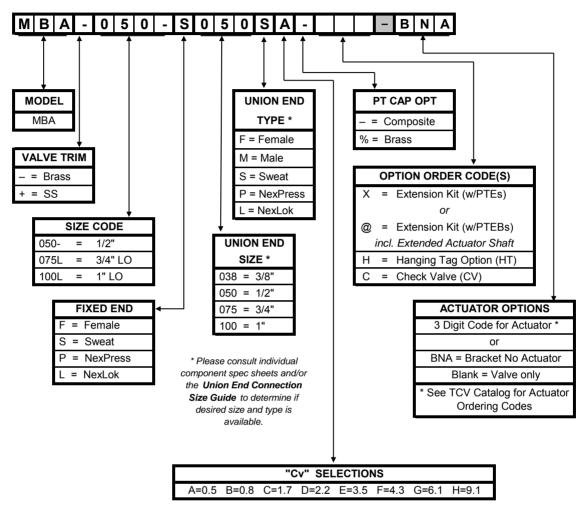
Ordering Guide for Vertex™ Model VTX Pressure Independent Control Valve

(1/2" thru 2")



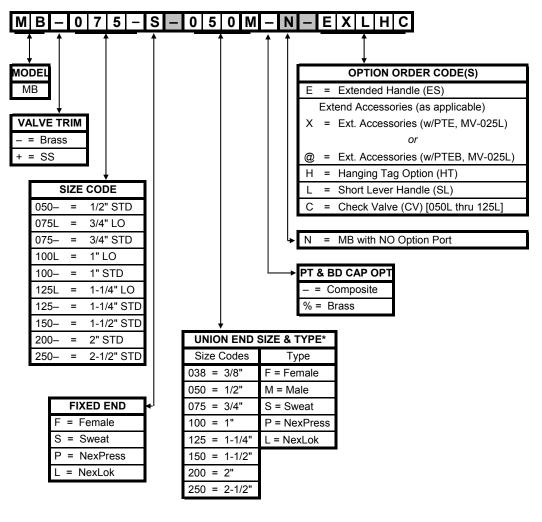


Ordering Guide for Orturi™ Model MBA (1/2", 3/4"LO, 1"LO)





Ordering Guide for UltraMB™ Model MB with NO Option Port (1/2" thru 2-1/2")



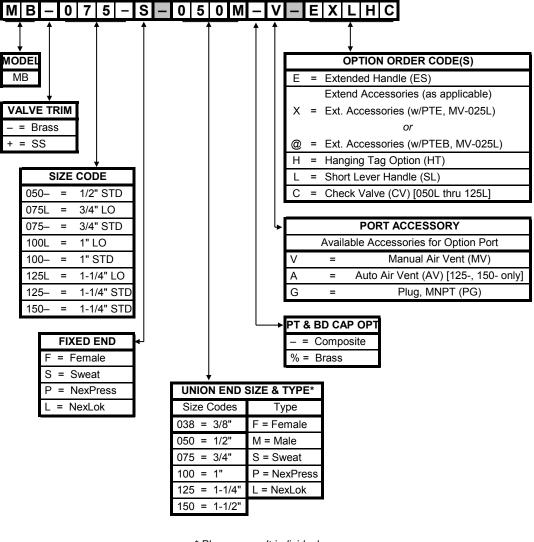
Part # Template w/Sample Part #s:

* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine if desired size and type is available.



Ordering Guide for UltraMB[™] Model MB with Option Port (1/2" thru 1-1/2")

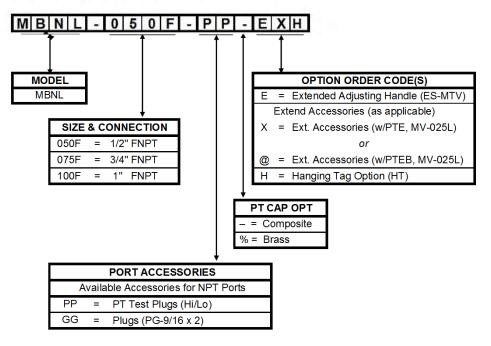
Part # Template w/Sample Part #s:



* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine if desired size and type is available.



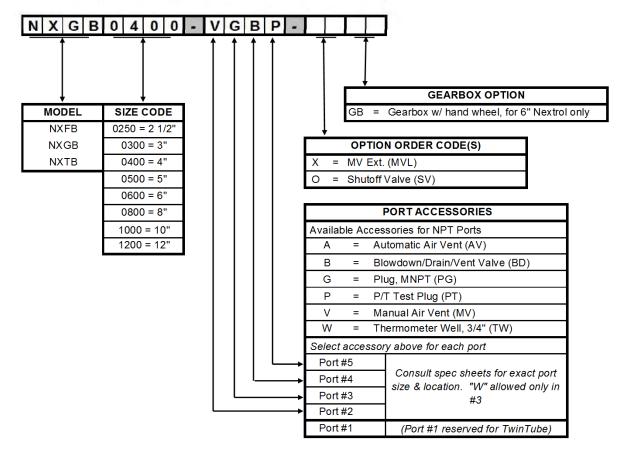
Ordering Guide for UltraMB™ Model MBNL Lead Free Balancing Valve (1/2", 3/4" & 1" FNPT)





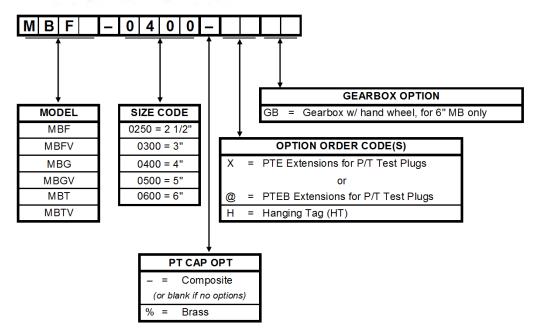
Ordering Guide for Nextrol™ Balancing Valve Models NXFB, NXGB, NXTB

(2 1/2" thru 12")



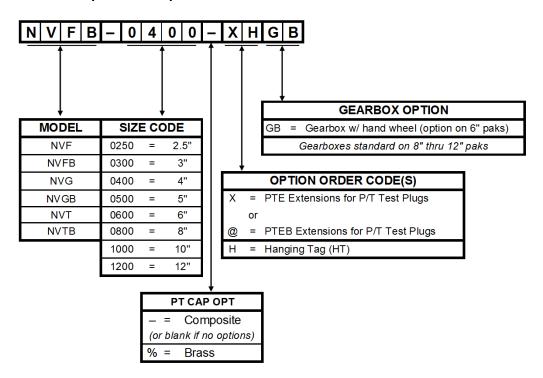


Ordering Guide for UltraMB™ Manual Flow Control Valve Models MBF, MBFV, MBG, MBGV, MBT, MBTV (2-1/2" thru 6")



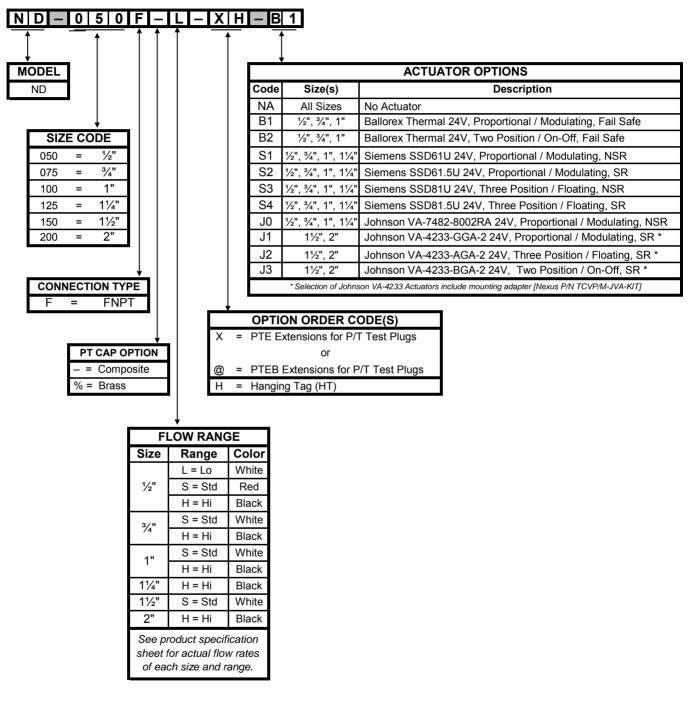


Ordering Guide for Nexus Venturi Models NVF, NVFB, NVG, NVGB (2-1/2" thru 12") Models NVT, NVTB (2-1/2" only)





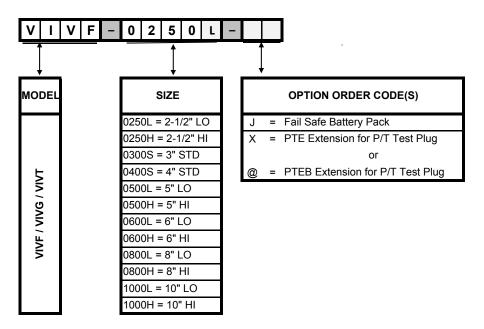
Ordering Guide for Nexus Dynamic Model ND Balancing Valve (1/2" thru 2")





Ordering Guide for Vivax™ Model VIVF, VIVG, VIVT Pressure Independent Control Valve

(2-1/2" thru 10")

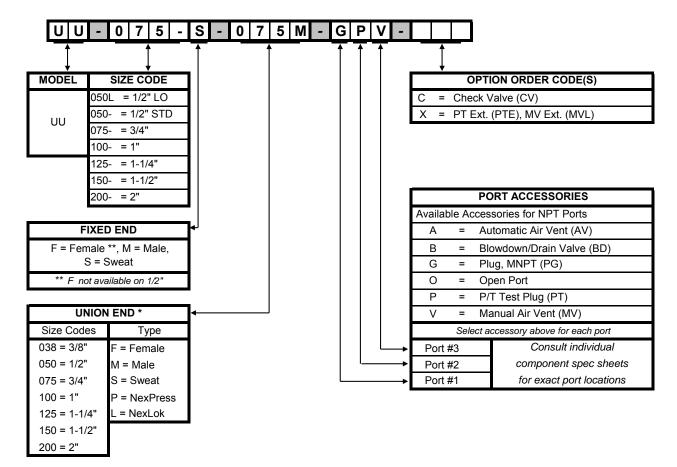




Ordering Guide for UltraU™ Model UU

(1/2" thru 2")

Part # Template w/Sample Part #:



* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.



Ordering Guide for UltraC[™] Model UC (1/2" thru 1")

Part # Template w/Sample Part #s:

UC	- 0	5	0 _	М -	0	5	0	М	
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ļ									
MODEL	SIZE	E COL	DE				UN	IION	END *
	050- =	1/2"			S	Size (Code	es	Туре
UC	075- =	3/4"			(038 =	= 3/8		F = Female
	100- =	1"			(050 =	= 1/2		M = Male
					(075 =	= 3/4	."	S = Sweat
						100	= 1"		P = NexPress
									L = NexLok

M = Male

S = Sweat

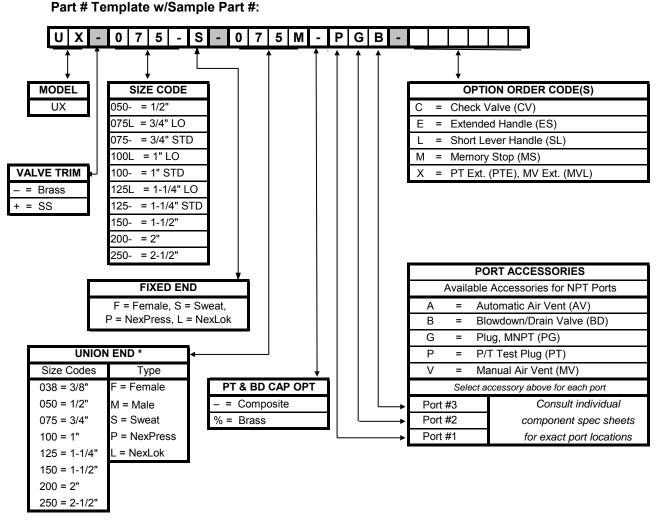
* Please consult individual component spec sheets and/or the **Union End Connection Size Guide** to determine exactly if desired reduction size and connection type is available.

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	(Rev: 04/04/18)



Ordering Guide for UltraX[™] Model UX

(1/2" thru 2-1/2")



* Please consult individual component spec sheets and/or the Union End Connection Size Guide to determine exactly if desired reduction size and connection type is available.

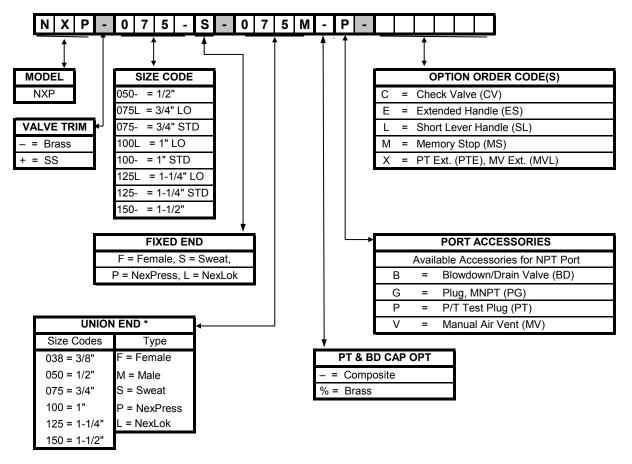
> Copyright ©2009 Nexus Valve, Inc. All Rights Reserved (Rev: 09/20/16)



Ordering Guide for UltraNXP™ Model NXP

(1/2" thru 1-1/2")

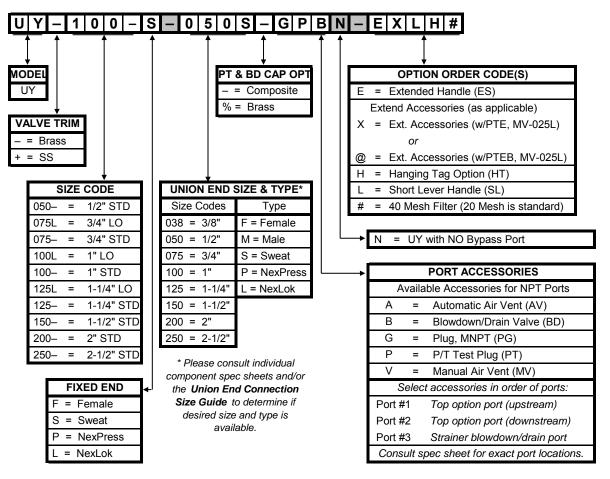
Part # Template w/Sample Part #:



* Please consult individual component spec sheets and/or the Union End Connection Size Guide to determine exactly if desired reduction size and connection type is available.

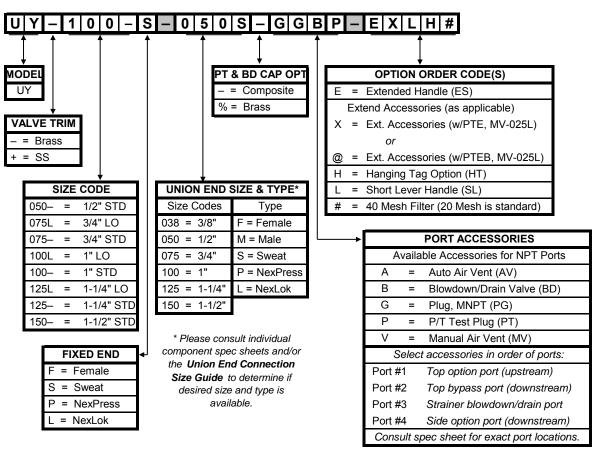


Ordering Guide for UltraY™ Model UY with No Bypass Port (1/2" thru 2-1/2")



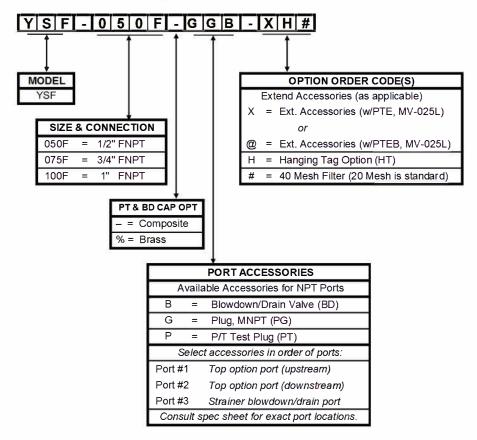


Ordering Guide for UltraY™ Model UY with Bypass Port (1/2" thru 1-1/2")





Ordering Guide for UltraY™ Model YSF Strainer (1/2", 3/4" & 1" FNPT)





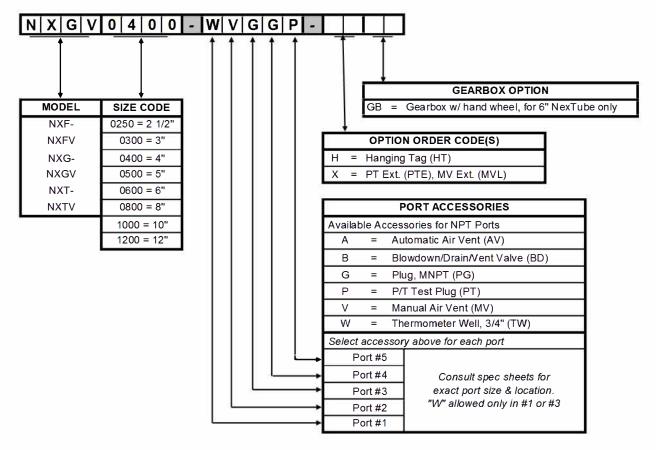
Ordering Guide for Strainex™ Models SXF, SXFV, SXG, SXGV, SXT, SXTV (2 1/2" thru 12")

S X G V 0 4 0 0 - W P V G -GEARBOX OPTION MODEL SIZE CODE GB = Gearbox w/ hand wheel, for 6" Strainex only 0250 = 2 1/2" SXF-0300 = 3" **OPTION ORDER CODE(S)** SXFV 0400 = 4" = Hanging Tag (HT) Н 0500 = 5" = PT Ext. (PTE), MV Ext. (MVL) SXG-Х 0600 = 6" SXGV SXT-0800 = 8" PORT ACCESSORIES 1000 = 10" SXTV Available Accessories for NPT Ports 1200 = 12" Α Automatic Air Vent (AV) = Blowdown/Drain/Vent Valve (BD) В = Plug, MNPT (PG) G = Ρ P/T Test Plug (PT) = Manual Air Vent (MV) V = W = Thermometer Well, 3/4" (TW) Select accessory above for each port Port #4 Consult spec sheets for exact port Port #3 size & location. "W" allowed only in Port #2 #1. Port #1

Strainex Part # Template w/Sample Part #:



Ordering Guide for NexTube™ Models NXF, NXFV, NXG, NXGV, NXT, NXTV (2 1/2" thru 12")

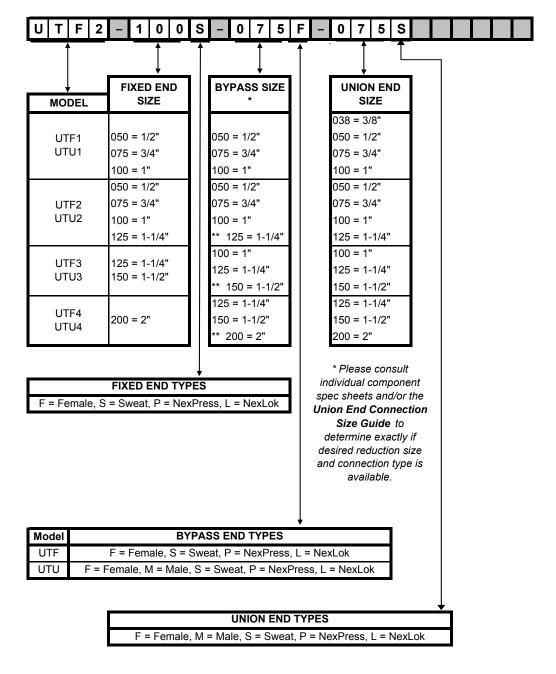


NexTube Part # Template w/Sample Part #:



Ordering Guide for UltraT™ Models UTF & UTU (1/2" thru 2")

Part # Template w/Sample Part #:



* Bypass Size may not exceed Fixed End Size

** Individually marked bypass sizes available only on UTU



I. <u>Requirements</u>

- A. Minimum Component Requirements
- B. Materials of Construction
- C. Installation Methods

II. Components

- A. Shutoff Valves (21/2" and smaller)
- B. Shutoff Valves (21/2" and larger)
- C. Automatic Flow Control Valves
- D. Temperature Control Valves, ref. Section 15___
- E. Combination Strainer/Ball Valves
- F. Combination Strainer/Butterfly Valves
- G. Y-Strainers (2¹/₂" and smaller)
- H. Y-Strainers $(2\frac{1}{2})^{*}$ and larger)
- I. Blowdown/Drain Valves
- J. Unions
- K. Accessories

III. Procedures

- A. Water System Balancing with AFCVs
- B. Basic Piping Methods, ref. Section 15____

IV. Acceptable Manufactures



(Continued)

I. <u>Requirements</u>

A. Minimum Requirements Per Coil Installation

- 1. Automatic Flow Control Valve (AFCV).
- 2. Y-strainer.
- 3. Temperature Control Valve (TCV).
- 4. Union connections at coil and TCV.
- 5. Air vent on return side.
- 6. Blowdown/drain valve on supply side.
- 7. Pressure/temperature test plugs across coil and TCV.
- 8. Full port, union end ball valves or butterfly valve for shutoff.

B. Materials Of Construction (2½" and smaller, except as noted)

- 1. Brass or stainless steel metals.
- 2. Teflon, EPDM or FKM seals.

C. Installation

- 1. Installation shall conform to basic piping methods specifications.
- 2. All components shall be isolated by shutoff valves.
- 3. Flexible hoses shall be installed at coil connections as shown in the plans or at the option of the mechanical contractor.
- 4. Union tailpieces may be used to reduce pipe sizes to match coil and TCV valve size(s).
- 5. Pressure/Temperature test plugs shall be installed across coil.
- 6. A Y-strainer or combination strainer and valve shall be installed on the supply side.
- 7. Unions shall be used to isolate the coil, AFCV and TCV.

II. <u>Components</u>

A. Shutoff Valves (2¹/₂" and smaller) shall be forged brass ball valves with:

- 1. A one-piece body rated at 600 psi WP, 325° F.
- 2. Interchangeable union ends with FKM o-ring seal (ground joint is not acceptable).
- 3. Multiple ¹/₄" tapped ports for test plugs, vent, and/or drain.
- 4. Blowout-proof stem with dual KFM o-ring seals.
- 5. Hard chrome plated brass / stainless steel (optional) ball with Teflon seats; like Nexus UX.

B. Shutoff Valves (2¹/₂" and larger) shall be lug pattern butterfly valves with:

- 1. A minimum of 225 psi WP, 250° F.
- 2. 125# / 150# Class lug pattern cast or ductile iron body.
- 3. EPDM cartridge seat, 416 stainless steel one-piece shaft, and 304 stainless steel disc.
- 4. Top and bottom shaft bushings.
- 5. (6" and smaller) to have lever operator; (6" and larger) to have worm gear operator.
- 6. (6" and smaller) to have an infinite position chrome plated steel top plate for balancing purposes.
- 7. Epoxy coated body; like Nexus BV.



(Continued)

C. Automatic Flow Control Valves shall be non-clogging design with:

- 1. The flow cartridge's non-clogging service design shall include no metal-to-metal contact, no segmented ports, and incorporate a flow nozzle and a metering disc controlled by a pressure compensating spring.
- 2. The flow cartridge shall be a single assembly, constructed with stainless steel moving parts and be accessible without removing the valve from the piping ($\frac{1}{2}$ " thru 2 $\frac{1}{2}$ " brass valves).
- 3. The flow cartridge shall be100% factory flow tested and calibrated to maintain an accuracy of $\pm 5\%$; the accuracy shall be 100% maintained over an operating range of (2 45), (4 55) or (5 50) PSID.
- 4. The flow cartridge shall carry a limited lifetime material warranty.
- Valves (2½" and smaller) shall be a forged brass Y-pattern body with ball valve,
 (2) pressure/temperature ports, a tag indicating the model, flow rate and PSID range, blowout proof stem with dual FKM o-ring seals, interchangeable union end with FKM o-ring seal, hard chrome plated brass ball with Teflon seats, and rated at 600 psi WP, 325° F; like Nexus UM.
- 6. Valves (2½" and larger) shall be a wafer style or 125# / 150# Class flanged cast iron body with (2) pressure/temperature ports, a tag indicating the model, flow rate and PSID range; able to incorporate a drain and/or vent as required; and rated at 175 psi WP, 250° F; like Nexus UM.

D. Temperature Control Valves, ref. Section 15____

E. Combination Strainer/Ball Valves (2¹/₂" and smaller) used for supply side shutoff and strainer requirements shall be forged brass construction with:

- 1. A minimum rating of 600 WOG, 325° F.
- 2. Interchangeable union end with FKM o-ring seal.
- 3. Multiple $\frac{1}{4}$ tapped ports for test plugs, vent, or other accessories.
- 4. Blowout proof stem with dual FKM o-ring seals.
- 5. Hard chrome plated brass / stainless steel (optional) ball with Teflon seats.
- 6. A 20 mesh / 40 mesh (optional) 304 stainless steel filter screen, accessible without affecting the valve piping.
 - 7. A port in the filter cap for a blowdown/drain valve; like Nexus UY.

F. Combination Strainer/Butterfly Valves (2¹/₂" and larger) used for supply side shutoff and strainer requirements shall be cast or gray iron construction with:

- 1. A minimum rating of 175 psi WP, 250° F.
- 2. 125# Class flanges (mates to 150# Class flanges) and lug pattern butterfly valve.
- 3. Multiple 1/4" tapped accessory ports across the filter screen.
- 4. A flanged end cap with a ³/₄" port for a blowdown/drain valve standard thru 8" size.
- 5. A ³/₄" port for thermometer well.
- 6. A 304 stainless steel screen, with perforations 0.045" thru 3", and 0.125" thru 8"; like Nexus SXFV.

G. Y-Strainers (2¹/₂" and smaller) shall be forged brass body with:

- 1. ¹/₄" tapped accessory port(s).
- 2. A rating of 600 WOG, 325° F.
- 3. A 20 mesh / 40 mesh (optional) 304 stainless steel filter screen, removable without affecting the strainer piping.
 - 4. A port in the filter cap for a blowdown/drain valve; like Nexus UY.



(Continued)

H. Y-Strainers (2¹/₂" and larger) shall be 125# Class flanged cast or ductile iron body with:

- 1. Multiple $\frac{1}{4}$ " tapped accessory ports across the filter screen.
- 2. A flanged end cap with a ³/₄" port for a blowdown valve standard thru 8" size.
- 3. A ³/₄" port for thermometer well.
- 4. A 304 stainless steel screen, with perforations 0.045" thru 3", and 0.125" thru 8"; like Nexus SXF.

I. Blowdown/Drain Valves shall be forged brass ball valve construction with:

- 1. A minimum rating of 600 WOG, 325° F.
- 2. Blowout proof stem with dual FKM o-ring seals.
- 3. Hard chrome plated brass ball with Teflon seats.
- 4. A ³/₄" hose end and nylon / brass (optional) cap with retainer to protect threads; like Nexus BD.

J. Unions (2" and smaller) shall be forged brass with:

- 1. A minimum of 600 psi WP, 325° F.
- 2. Multiple ¼" tapped ports for test plugs, vent and/or drain valves.
- 3. FKM o-ring seal; like Nexus UU.

K. Accessories to coil piping components shall conform to the following:

- 1. Pressure/Temperature test plugs shall be rated for 1000 psi, 325° F, with brass body, Nordel check plugs, and sealed cap; like Nexus PT.
- 2. Flexible hoses shall be designed for water, and fire retarding conform to ASTM codes E84-00, with stainless steel outer braid. Hoses (½" thru 1") shall have a Kevlar reinforced EPDM tube core, brass end fittings, and designed for a working pressure of 400 psi, 248° F. Hoses (1¼" thru 2") shall have Rayon reinforced EPDM tube core, brass end fittings, and designed for a working pressure of 300 psi, 248° F. The (2½") hose shall have stainless steel outer braid and carbon steel Sch. 40 fittings, and designed for a working pressure of 400 psi, 70° F. All hoses (1¼" thru 2") shall have at least one union or swivel end fitting; like Nexus UFHM, and all hoses (1" and smaller) shall have dual union or swivel end fittings, like Nexus UFHF.
- 3. Manual air vents shall be of brass construction and rated at 400 psi, 325° F; like Nexus MV or approved equal.
- 4. Shaft extensions (2" and smaller) for insulated pipe shall be at least 2¼" tall and constructed of brass with a stationary external shaft housing to ensure vapor barrier seal; like Nexus ES.



(Continued)

III. Procedures

A. Water System Balancing with AFCVs (also ref. Balancing, Section 15____)

The following minimum tests shall be performed (do **not** throttle pump):

- 1. Check tagging on AFCVs to ensure they match coil data.
- 2. Check supply and return water temperatures at:
 - a) Boilers, chillers and heat exchangers.
 - b) The terminal coils of piping circuits with the three highest pressure drops.
- 3. Check pressure differentials at:
 - a) Boilers, chillers and heat exchangers.
 - b) The AFCVs of the piping circuits with the three lowest pressure drops.
 - c) The AFCVs of the piping circuits with the three highest pressure drops.
- 4. If pressure differential at the AFCVs checked in 3(c) (circuits with highest-pressure drops) exceed the minimum design by more than 3 psi, the owner has the option to trim the impeller(s).
- 5. If a problem occurs at a coil other than those addressed above, determine the specific problem and solution.

B. Basic Piping Methods, ref. Section 15____

IV. Acceptable Manufacturers

Ball Valves

- 1. Nexus UX
- 2. Apollo
- 3. Nibco

Butterfly Valves

- 1. Nexus BV
- 2. Metraflex
- 3. Centerline

Flexible Hoses

- 1. Nexus UFHF
- 2. Metraflex
- 3. Microflex

Blowdown Drain Valves

- 1. Nexus BD
- 2. Apollo
- 3. Nibco

Unions

- 1. Nexus UU
- 2. Nibco
- 3. Apollo

Automatic Flow Control Valves

- 1. Nexus UM
 - 2. Or approved equal.

Combination Strainer, Union Ball Valves

- 1. Nexus UY
- 2. Mueller
- 3. Metraflex

Combination Strainer, Butterfly Valves

- 1. Nexus SXFV
- 2. Metraflex

Y-Strainers

- 1. Nexus UY
- 2. Metraflex
- 3. Mueller





I. <u>Requirements</u>

- A. Minimum Component Requirements
- B. Materials of Construction
- C. Installation Methods

II. Components

- A. Shutoff (Isolation) Valves (2¹/₂" and smaller)
- B. Shutoff (Isolation) Valves (2¹/₂" and larger)
- C. Manual Flow Control Valves (2¹/₂" and smaller)
- D. Manual Flow Control Valves (2¹/₂" and larger)
- E. Temperature Control Valves, ref. Section 15_
- F. Combination Strainer/Ball Valves (2¹/₂" and smaller)
- G. Combination Strainer/Ball Valves (2¹/₂" and larger)
- H. Y-Strainers (2¹/₂" and smaller)
- I. Y-Strainers (2¹/₂" and larger)
- J. Blowdown/Drain Valves
- K. Unions
- L. Accessories

III. Procedures

- A. Balancing, ref. Section 15_
- B. Basic Piping Methods, ref. Section 15____

IV. Acceptable Manufacturers



(Continued)

I. <u>Requirements</u>

A. Minimum Component Requirements per Coil Installation

- 1. Manual Flow Control Valve (MFCV).
- 2. Y-strainer.
- 3. Temperature Control Valve (TCV).
- 4. Union connections at coil and TCV.
- 5. Air vent on return side.
- 6. Blowdown/drain valve on supply side.
- 7. Pressure/temperature test plugs across coil and TCV.
- 8. Union end ball valves or butterfly valve for shutoff.

B. Materials Of Construction (1/2 " - 12")

- 1. Brass or stainless steel metals (2¹/₂" and smaller).
- 2. Cast or ductile iron, steel (21/2" and larger).
- 3. Teflon seats, FKM seals (2¹/₂" and smaller).
- 4. EPDM seats and seals $(2\frac{1}{2})^{2}$ and larger).

C. Installation

- 1. Installation shall conform to basic piping methods specifications.
- 2. All components shall be isolated by-shutoff valves.
- 3. Flexible hoses shall be installed at coil connections as shown in the plans or at the option of the mechanical contractor.
- 4. Union tailpieces maybe used to reduce pipe sizes to match coil and TCV valve size(s).
- 5. Pressure/Temperature test plugs shall be installed across coil.
- 6. A Y-strainer shall be installed on the supply side.
- 7. Unions shall be used to isolate the coil, MFCV, and TCV.

II. Components

A. Shutoff Valves (2¹/₂" and smaller) shall be forged brass ball valves with:

- 1. A one-piece body rated at 600 psi WP, 325° F.
- 2. Interchangeable union ends with FKM o-ring seal (ground joint is not acceptable).
- 3. Multiple 1/4" tapped ports for test plugs, vent, and/or drain.
- 4. Blowout-proof stem with dual FKM o-ring seals.
- 5. Hard chrome plated brass / stainless steel (optional) ball with Teflon seats; like Nexus UX.



(Continued)

B. Shutoff Valves (2¹/₂" and larger) shall be lug pattern butterfly valves with:

- 1. A minimum of 225 psi WP, 250° F.
- 2. 125# / 150# Class lug pattern cast or ductile iron body.
- 3. EPDM cartridge seat, 416 stainless steel one-piece shaft, and 304 stainless steel disc.
- 4. Top and bottom shaft bushings.
- 5. (6" and smaller) to have lever operator; (6" and larger) to have worm gear operator.
- 6. (6" and smaller) to have an infinite position chrome plated steel top plate for balancing purposes.
- 7. Epoxy coated body; like Nexus BV

C. Manual Flow Control Valves (2¹/₂" and smaller) shall be a combination of metering/balance type of forged brass construction with:

- 1. A modified venturi equipped with (2) pressure/temperature ports and an ID tag.
- 2. A combination shutoff and memory stop device-indicating degree of opening.
- 3. A rating of 600 WOG, 325° F.
- 4. An interchangeable union ends with FKM o-ring type seal.
- 5. Blowout proof stem with dual FKM o-ring seals.
- 6. Hard chrome plated brass /stainless steel (optional) ball with Teflon seats; like Nexus XB.

D. Manual Flow Control Valves (2¹/₂" and larger) shall be an instrument and metering station with integral Pitot Tube, multiple ports for instruments, accessories and drains, a butterfly throttling valve and:

- 1. The pitot tube shall be twin tube design, of 316 stainless steel with blowout proof attachment to station body.
- 2. Ports shall include ³/₄" port for thermometer well, ¹/₄" ports for pressure gauge, air vent, transmitter or other accessories, and a ¹/₂" drain port.
- 3. The instrument station shall be 125# Class flanged (mates to 150# Class flanges) construction.
- 4. The butterfly valve shall be lug pattern with a rating 225 PSIG, 250° F.
- 5. The butterfly valve shall have an infinite position operator with memory stop (6" and smaller), worm gear with memory stop (6" and larger); like Nexus NXFB.

E. Temperature control valves, ref. Section 15____

F. Combination Strainer/Ball valves (2¹/₂" and smaller) used for supply side shutoff and strainer requirements shall be forged brass construction with:

- 1. A minimum rating of 600 WOG, 325° F.
- 2. Interchangeable union end with FKM o-ring seal.
- 3. Multiple $\frac{1}{4}$ " tapped ports for test plugs, vent, or other accessories.
- 4. Blowout proof stem with dual FKM o-ring seals.
- 5. Hard chrome plated brass / stainless steel (optional) ball with Teflon seats.
- 6. A 20 mesh / 40 mesh (optional) 304 stainless steel filter screen, accessible without affecting the valve

piping.

7. A port in the filter cap for a blowdown/drain valve; like Nexus UY.



(Continued)

- G. Combination Strainer/Butterfly valves (2½" and larger) used for supply sides shutoff and strainer requirements shall be cast or gray iron construction with:
 - 1. A minimum rating of 175 psi WP, 250° F.
 - 2. 125# Class flanges (mates to 150# Class flanges) and lug pattern butterfly valve.
 - 3. Multiple ¹/₄" tapped accessory ports across the filter screen.
 - 4. A flanged end cap with a $\frac{3}{4}$ " port for a blowdown valve standard thru 8" size.
 - 5. A ³/₄" port for thermometer well.
 - 6. A 304 stainless steel screen, with perforations 0.045" thru 3", and 0.125" thru 8"; like Nexus SXFV.

H. Y-Strainers ($2\frac{1}{2}$ " and smaller) shall be forged brass body with:

- 1. ¼" tapped accessory port(s).
- 2. A rating of 600 WOG, 325° F.

3. A 20 mesh / 40 mesh (optional) 304 stainless steel filter screen, removable without affecting the strainer piping.

4. A port in the filter cap for a blowdown/drain valve; like Nexus UY.

I. Y-Strainers (2¹/₂" and larger) shall be 125# Class flanged cast or ductile iron body with:

- 1. Multiple ¼" tapped accessory ports across the filter screen.
- 2. A flanged end cap with a ³/₄" port for a blowdown/drain valve standard thru 8" size.
- 3. A ³⁄₄" port for thermometer well.
- 4. A 304 stainless steel screen, with perforations 0.045" thru 3" and 0.125" thru 8"; like Nexus SXF.

J. Blowdown/Drain Valves shall be forged brass ball valve construction with:

- 1. A minimum rating of 600 WOG, 325° F.
- 2. Blowout proof stem with dual FKM o-ring seals.
- 3. Hard chrome plated brass ball with Teflon seats.
- 4. A ¾" hose end and nylon / brass (optional) cap with retainer to protect threads; like Nexus BD.

K. Unions (2" and smaller) shall be forged brass with:

- 1. A minimum of 600 psi WP, 325° F.
- 2. Multiple ¹/₄" tapped ports for test plugs, vent and/or drain valves.
- 3. FKM o-ring seal; like Nexus UU.



(Continued)

L. Accessories to coil piping components shall conform to the following:

- 1. Pressure/Temperature test plugs shall be rated for 1000 psi, 325° F, with brass body, Nordel check plugs, and sealed cap; like Nexus PT.
- 2. Flexible hoses shall be designed for water, and fire retarding conform to ASTM codes E84-00, with stainless steel outer braid. Hoses (½" thru 1") shall have a Kevlar reinforced EPDM tube core, brass end fittings, and designed for a working pressure of 400 psi, 248° F. Hoses (1¼" thru 2") shall have Rayon reinforced EPDM tube core, brass end fittings, and designed for a working pressure of 300 psi, 248° F. The (2½") hose shall have stainless steel outer braid and carbon steel Sch. 40 fittings, and designed for a working pressure of 400 psi, 70° F. All hoses (1¼" thru 2") shall have at least one union or swivel end fitting; like Nexus UFHM, and all hoses (1" and smaller) shall have dual union or swivel end fittings, like Nexus UFHF.
- 3. Manual air vents shall be of brass construction and rated at 400 psi, 325° F; like Nexus MV or approved equal.
- 4. Shaft extensions (2" and smaller) for insulated pipe shall be at least 21/4" tall and constructed of brass with a stationary external shaft housing to ensure vapor barrier seal; like Nexus ES.

III. Procedures

- A. Balancing, ref. Section 15____
- B. Basic Piping Methods, ref. Section 15____

IV. Acceptable Manufacturers

Ball Valves

- 1. Nexus UX
- 2. Apollo
- 3. Nibco

Butterfly valves

- 1. Nexus BV
- 2. Metraflex
- 3. Centerline

Flexible Hoses

- 1. Nexus UFHF
- 2. Metraflex
- 3. Microflex

Blowdown Drain Valves

- 1. Nexus BD
- 2. Apollo
- 3. Nibco

Unions

- 1. Nexus UU
- 2. Nibco
- 3. Apollo

Manual Flow Control Valves

- 1. Nexus XB
- 2. Armstrong
- 3. Tour & Anderson

Combination Strainer, Union Ball Valves

- 1. Nexus UV
- 2. Mueller
- 3. Metraflex

Combination Strainer, Butterfly valves

- 1. Nexus SXBV
- 2. Metraflex

Strainers

- 1. Nexus UY
- 2. Mueller





COST ANALYSIS FOR TYPICAL 3-WAY COIL HOOKUP USING ³/₄" COPPER PIPE

A. MATERIALS

Supply Side

Qty.	Item	Price/ea.	Price/Total
1	¾" Ball Valve	6.75	6.75
1	3⁄4" Y-Strainer	15.00	15.00
1	1⁄2" Boiler Drain w/Cap	6.25	6.25
2	³ ⁄ ₄ " x ¹ ⁄ ₂ " Tee	1.25	2.50
1	1⁄2" x 1⁄4" Bushing	0.75	0.75
1	PT Press/Temp Port	6.00	6.00
1	¾" Union	5.50	5.50
1	³ ⁄ ₄ " x ¹ ⁄ ₂ " Reducer	1.00	1.00
Total Ma	terial Cost for Supply Side		43.75
Return \$	Side		
1	3⁄4" Circuit Setter	38.00	38.00
2	¾" x 1⁄₂" Tee	6.25	12.50
2	¾" Union	5.50	11.00
2	1⁄2" x 1⁄4" Bushing	0.75	1.50
1	PT Press/Temp Port	6.00	6.00
1	Manual Vent	6.00	6.00
1	³ ⁄ ₄ " x ¹ ⁄ ₂ " Reducer (Swt)	1.00	1.00
2	³ / ₄ " x ¹ / ₂ " Reducer (MIP)	2.25	4.50
Total Ma	terial Cost for Return Side		80.50
<u>Bypass</u>			

1	1/2" Ball Valve w/ Mem Stop	6.00	6.00
1	1/2" Union	3.50	3.50
1	1/2" Swt-MIP Adapter	3.00	3.00
Total Ma	aterial Cost for Bypass		12.50

Total Material Cost 136.75

Note: Material costs do not include the cost of the ³/₄" copper pipe.

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COST ANALYSIS (Continued)

B. LABOR REQUIRED (see comparison drawing)	
Supply Side Connections (Nos. 1-13)	13
Return Side Connections (Nos. 14-29)	16
TCV Connections (Nos. 30-32)	3
Bypass Connections (Nos. 33-38)	6

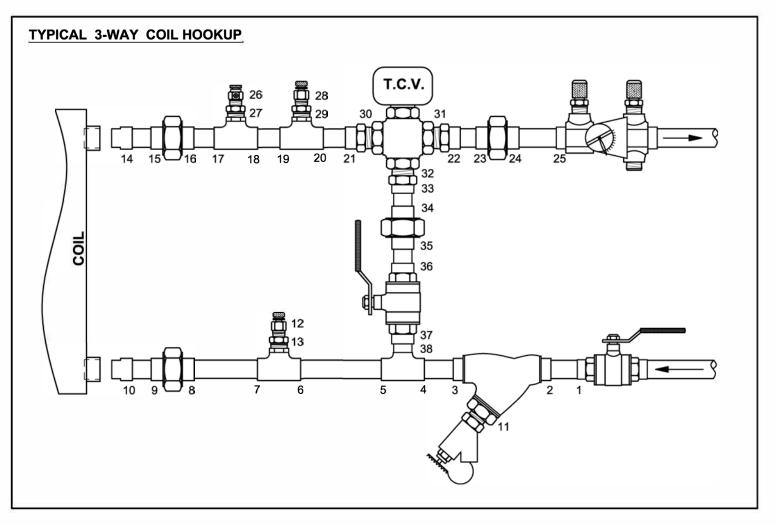
Total Connections Required 38

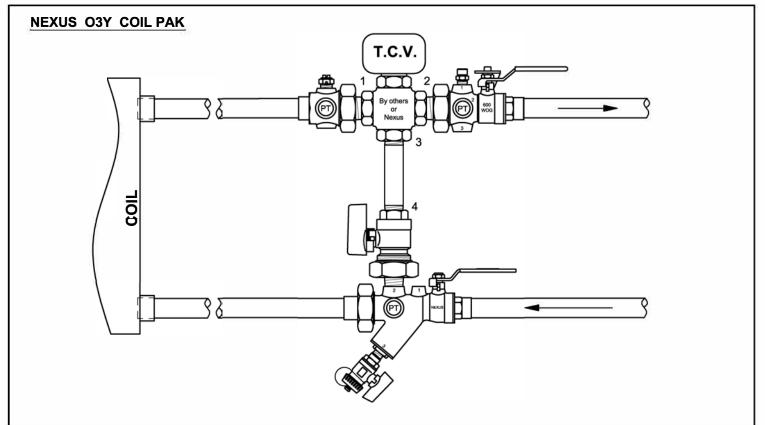
Note: Labor figures are for connections only; excludes cutting the ³/₄" copper pipe.

38 CONNECTIONS FOR THE TYPICAL HOOKUP, VS. 4 CONNECTIONS FOR THE NEXUS COIL PAK!



Connection Comparison for 3-Way Coil Hookups







Maximum Allowable GPM Flow Rates @ 4 ft/sec for Common Pipe Sizes (Automatic or Manual)

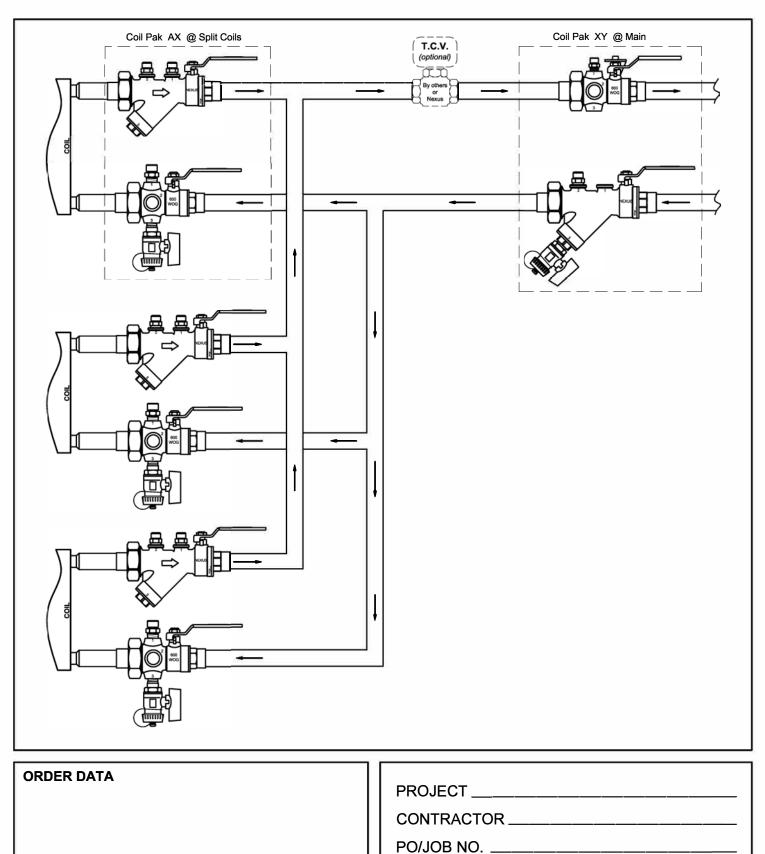
Size	Туре	Max GPM@ 4 ft/sec
	Copper Tube, Type L	2.9
1/2"	Steel Pipe, Sch. 40	3.8
-	PVC Plastic Pipe, Sch. 40	3.8
	Copper Tube, Type L	6.0
3/4"	Steel Pipe, Sch. 40	6.7
	PVC Plastic Pipe, Sch. 40	6.6
	Copper Tube, Type L	10.3
1"	Steel Pipe, Sch. 40	11.0
	PVC Plastic Pipe, Sch. 40	10.8
1 1/4"	Copper Tube, Type L	15.6
	Steel Pipe, Sch. 40	18.7
	PVC Plastic Pipe, Sch. 40	18.6
	Copper Tube, Type L	22.3
1 1/2"	Steel Pipe, Sch. 40	25.4
	PVC Plastic Pipe, Sch. 40	25.4
	Copper Tube, Type L	38.6
2"	Steel Pipe, Sch. 40	41.8
	PVC Plastic Pipe, Sch. 40	41.8
	Copper Tube, Type L	70.0
2 1/2"	Steel Pipe, Sch. 40	50.0
	PVC Plastic Pipe, Sch. 40	70.0

ASHRAE recommends a maximum velocity of 4 ft/sec to limit noise, erosion, and water hammer pressures generated from water flowing within piping (See ASHRAE 2009 Handbook, "Fundamentals" Chapter 22 page b)



Automatic Split Coil Detail

(1/2" thru 21/2")



ENGINEER ____

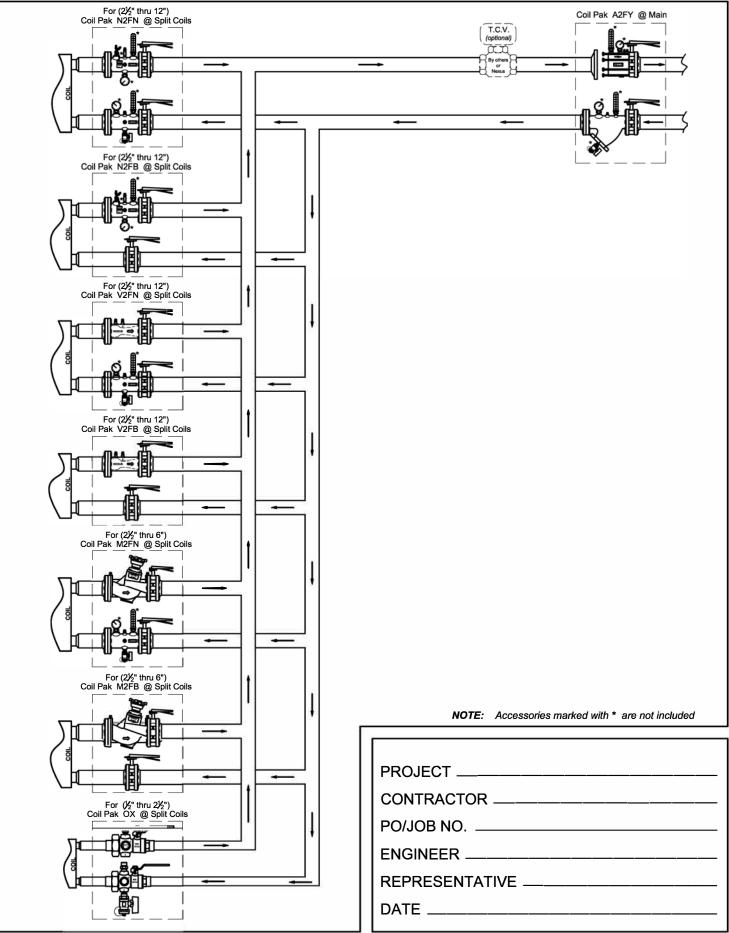
REPRESENTATIVE __

DATE



Automatic Split Coil Detail

(2¹/₂" thru 12")

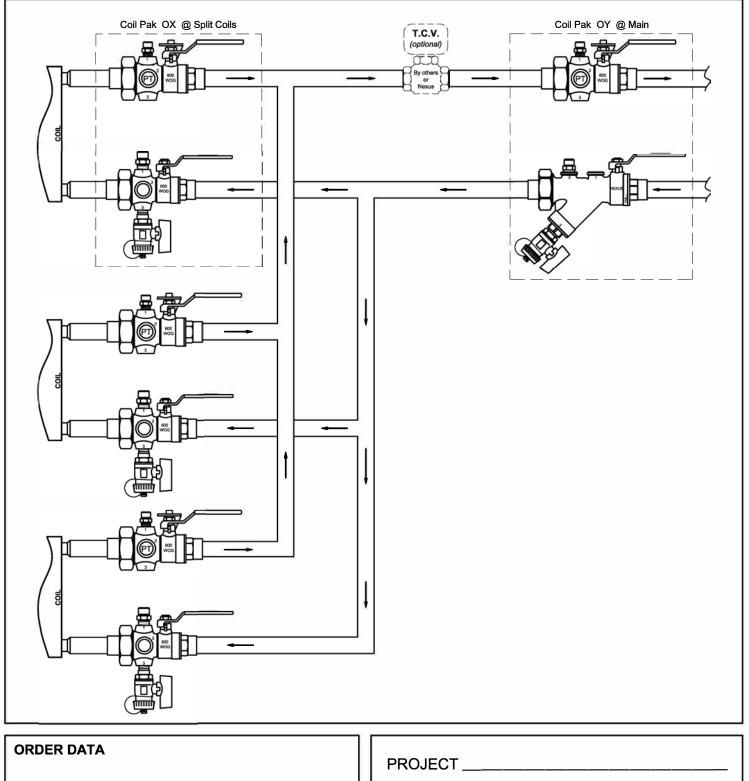


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"O" Coil Paks

(1/2" thru 21/2")



PO/JOB NO. _____

ENGINEER ____

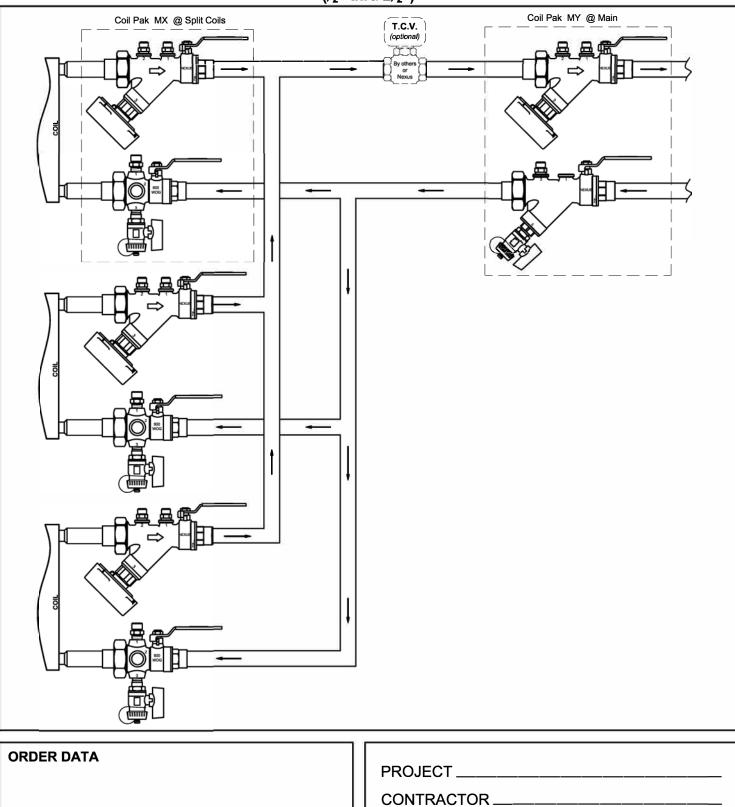
REPRESENTATIVE _

DATE



Manual Split Coil Detail "M" Coil Paks

(¹/₂" thru 2¹/₂")



PO/JOB NO. _____

ENGINEER ____

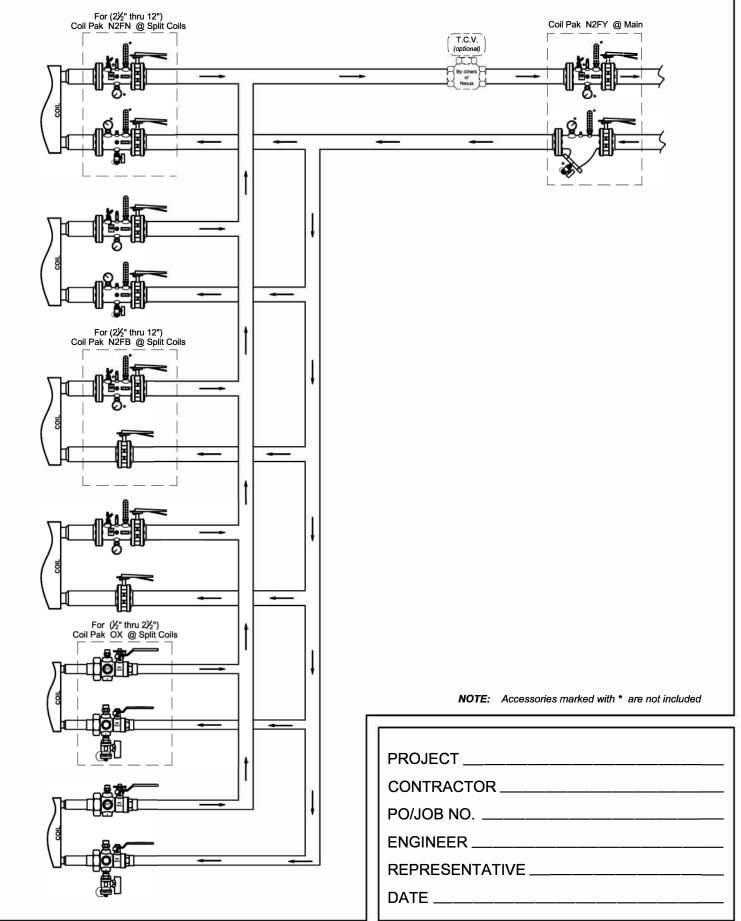
REPRESENTATIVE ____

DATE



with Nextrol[™]

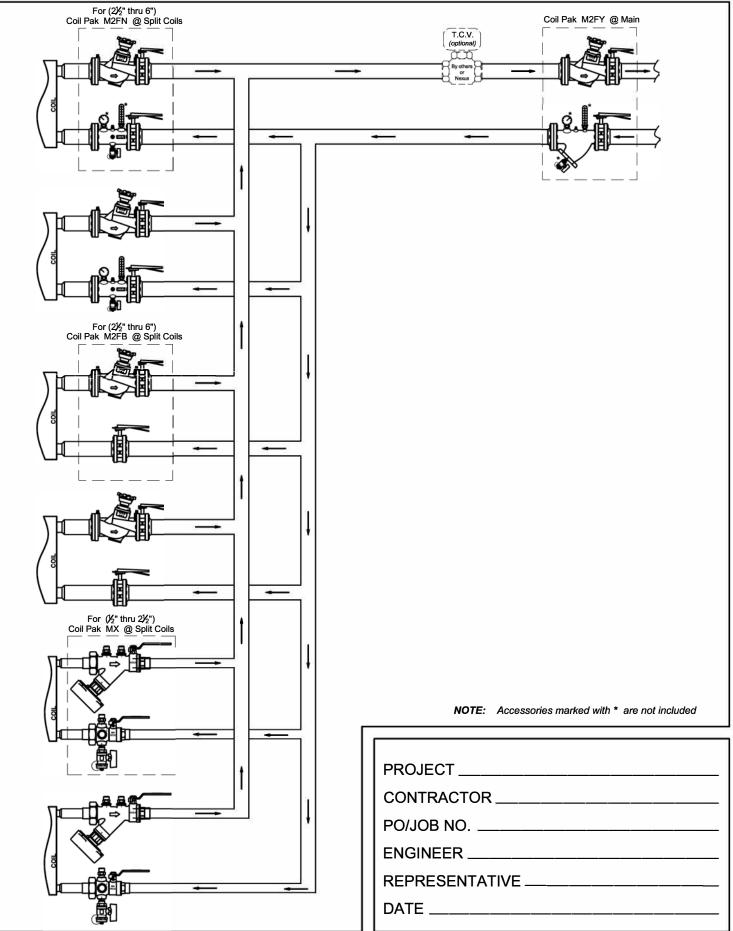
(2¹/₂" thru 12")





with UltraMB™

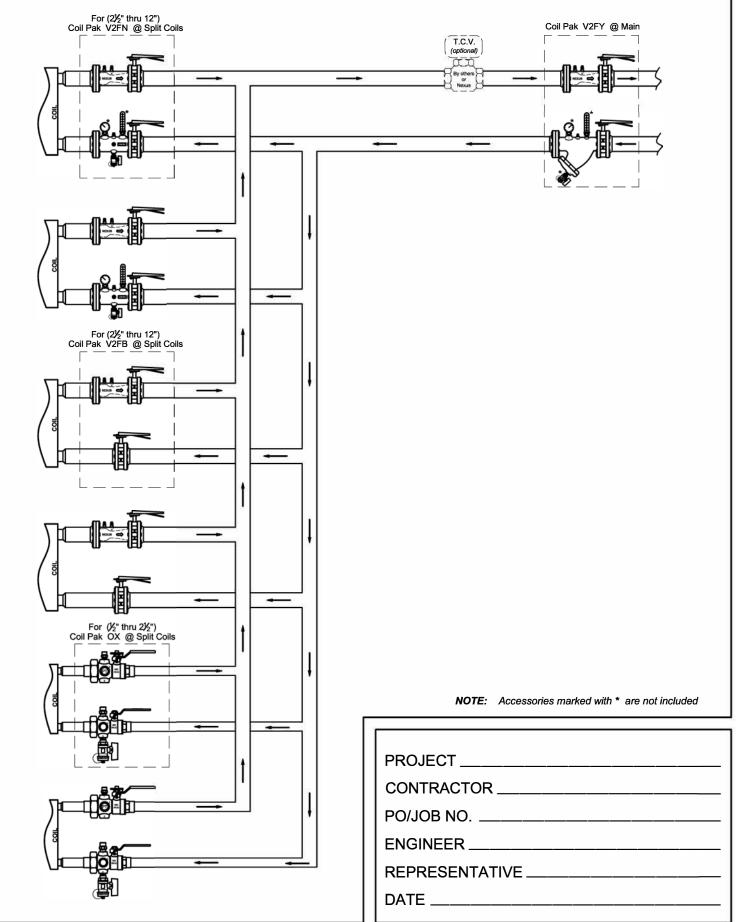
(2¹/₂" thru 6")





with Nexus Venturi™

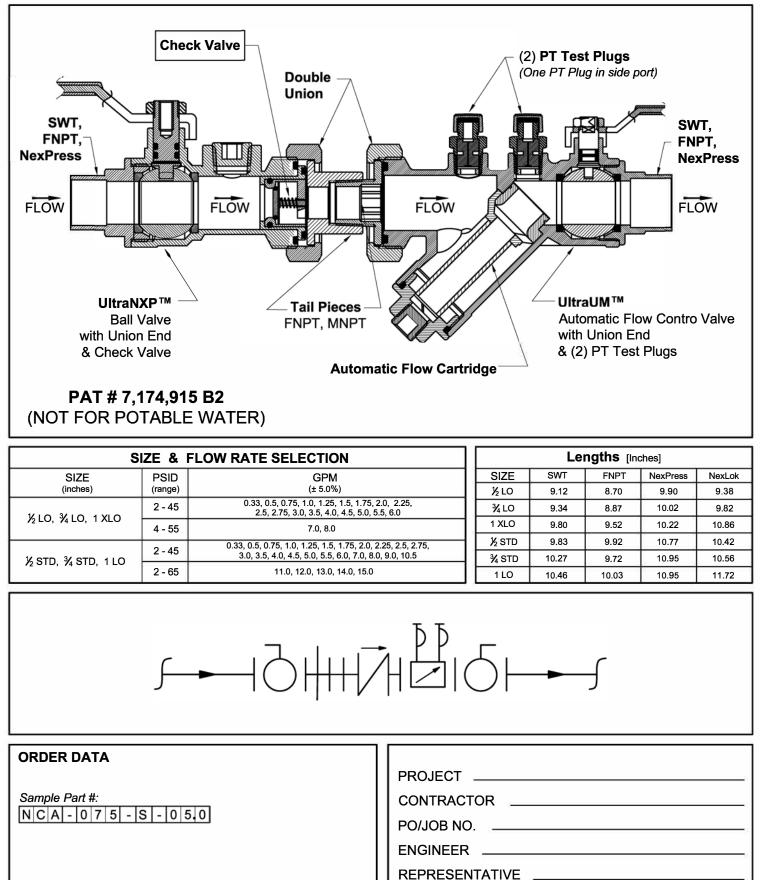
(2¹/₂" thru 12")





NexFloChex[™] Automatic Balance & Check Valve

(¹/₂"LO thru 1"LO)

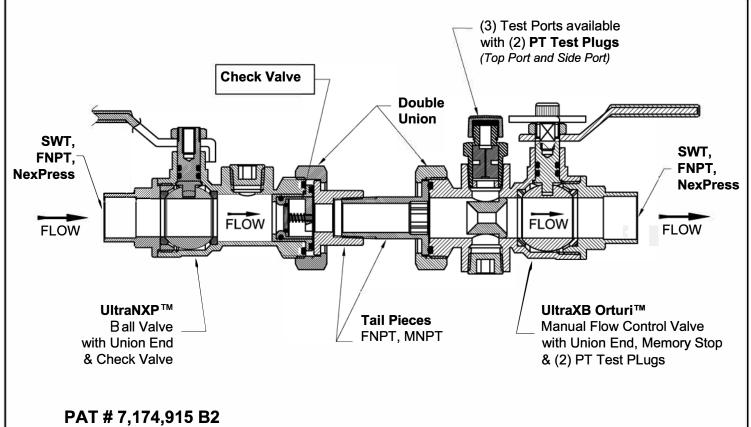


DATE



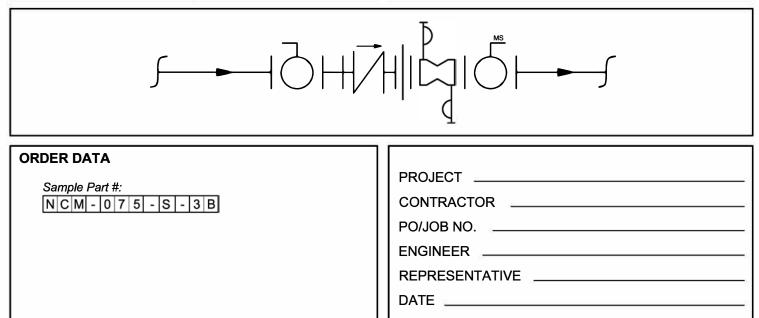
NexFloChex[™] Manual Balance & Check Valve

(½" Thru 1"STD)



(NOT FOR POTABLE WATER)

FLOW RATE SELECTION GUIDE			Lengths [Inches]					
FLOW SELECTOR	VALVE SIZE	SIZE	SWT	FNPT	NexPress	NexLok		
		1/2	7.64	7.63	8.84	7.86		
1A, 1B, 1C, 1D	½, ¾ LO, 1 LO	¾ LO	8.12	7.63	8.80	8.60		
		¾ STD	8.47	7.95	9.16	8.80		
2A, 2B, 3A, 3B, 3C	¾ STD, 1 STD	1 LO	8.59	8.32	9.00	9.53		
		1 STD	8.68	8.27	9.18	9.93		





company mission

Nexus Valve's mission is to provide single-point sourcing of quality hydronic products and to provide additional value-added services for resellers and users of those products. Nexus Valve's pledge is to continue its effort to fulfill the mission as effectively and efficiently as possible, while maintaining the high levels of innovation, production and service to which our customers and users are accustomed.

