

Three-way Threaded Equal Percentage Ball Valves with Non-fail-safe Actuators

NEMA 4



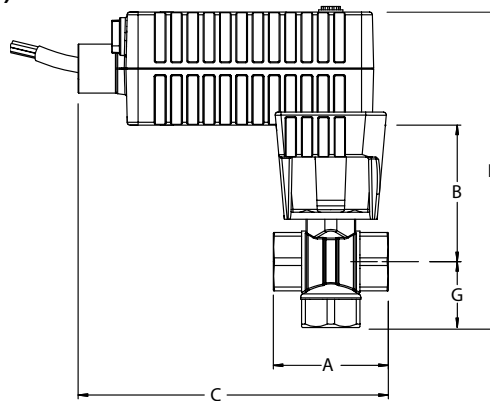
Valve Specifications	
Static Pressure/Temp:	360 PSI / 250°F (600 WOG)
Service:	Chilled water, hot water, up to 50% Glycol
Flow Characterizing Disc:	Glass Filled Polymer
Body Material:	Forged Brass ASTM B283
End Connections:	Brass NPT
Stem:	Brass
Stem Seals:	EPDM O-Rings
Ball:	Nickel-plated brass
Ball Seals:	Teflon Seals with EPDM O-Rings
Angle of Rotation:	0–90°



Three-way valve coil and bypass streams flow simultaneously through the ball. Bypass Cv is always 80% of coil Cv so there is always enough pressure drop in bypass mode. Three-way over-flow problems are eliminated.

Dimensions (nominal)

(measured in inches unless noted)

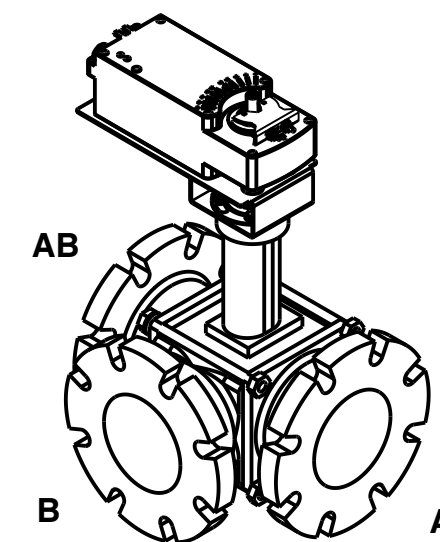
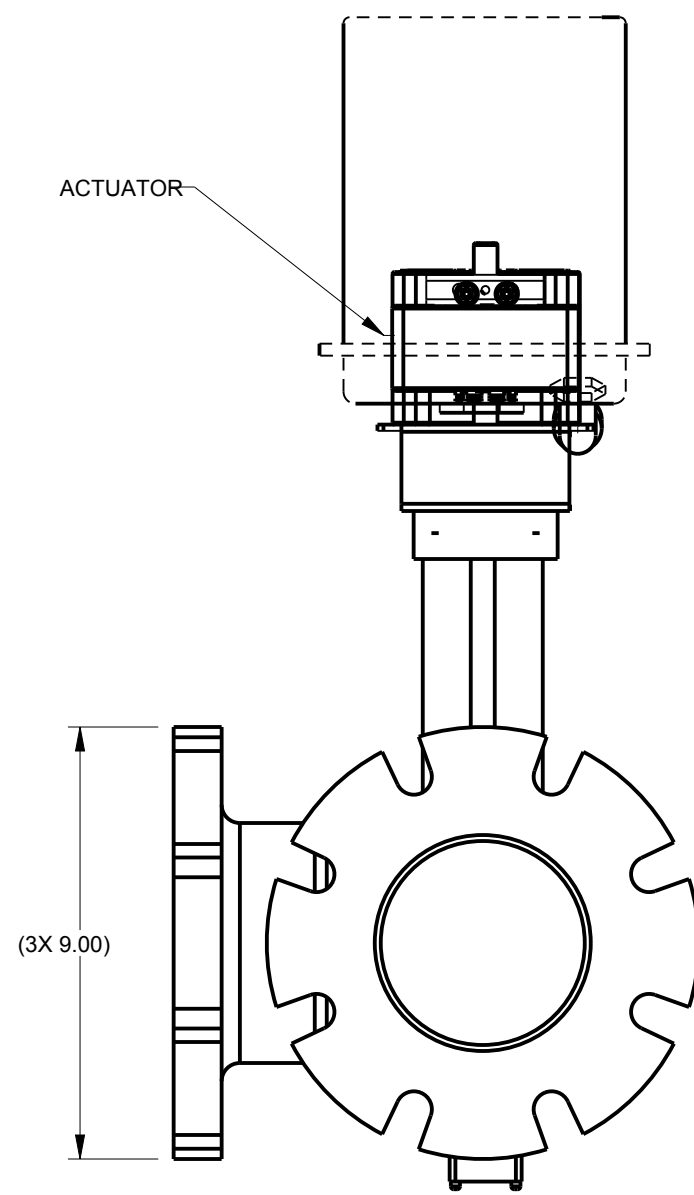
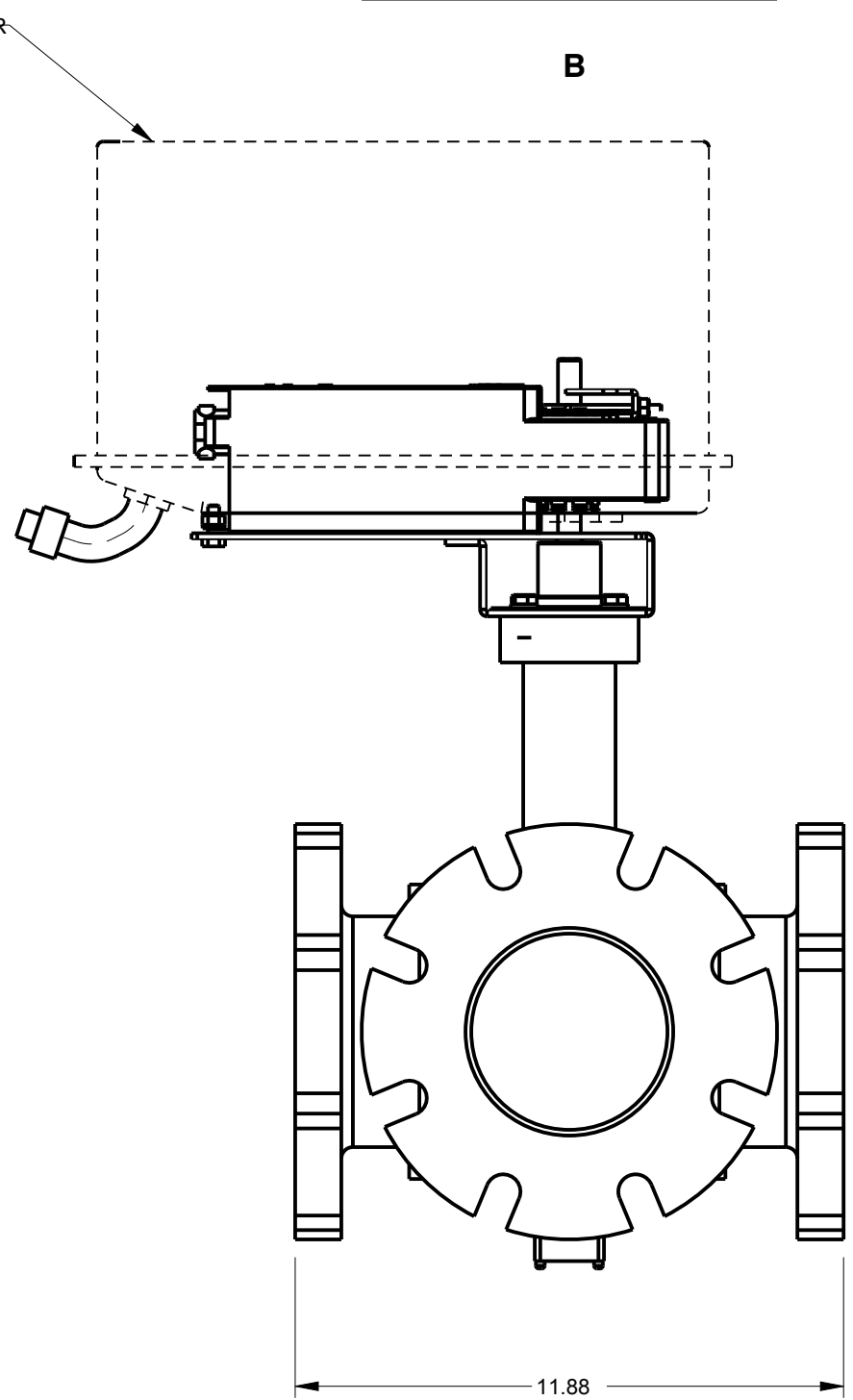
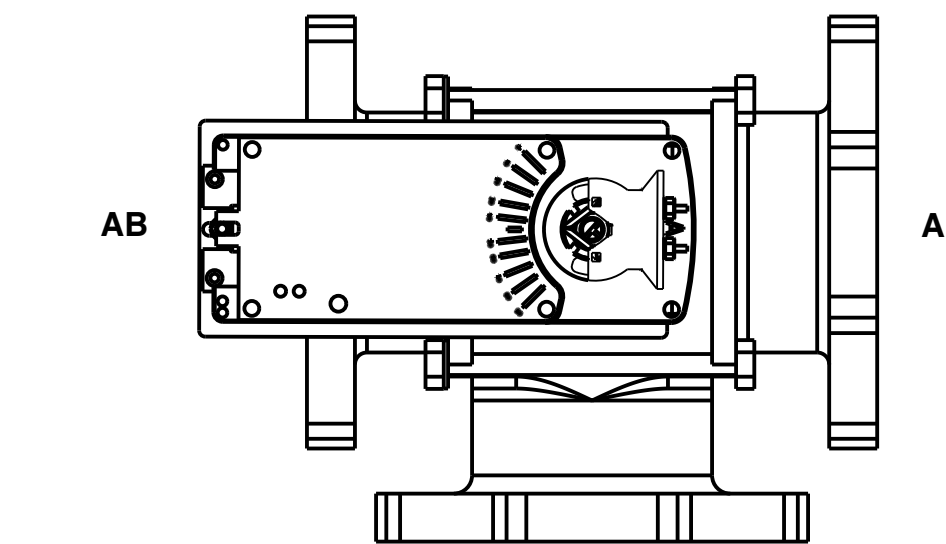


SIZE	A: Length	B: HEIGHT	C: LENGTH	D: DEPTH (NOT SHOWN)	F: HEIGHT	G: HEIGHT
	FNPT	FNPT	FNPT		FNPT	FNPT
0.5	2.6	2.9	6.5	3.0	7.5	2.4
0.75	2.8	2.9	6.6	3.0	7.5	2.0
1	2.8	3.3	6.6	3.0	7.5	2.0
1	3.0	3.4	6.7	3.0	8.0	2.6
1	4.2	3.6	7.3	3.0	9.0	3.3
1.25	3.0	3.4	6.7	3.0	8.0	2.5
1.25	3.6	3.6	7.0	3.0	8.6	2.8
1.5	3.5	3.6	7.0	3.0	8.8	2.8
1.5	4.0	4.1	7.2	3.0	9.6	3.3
2	4.0	4.1	7.2	3.0	9.7	3.3
2	5.0	4.5	7.7	3.0	10.8	3.8
2.5	5.3	4.8	7.8	3.0	11.0	4.0

Flow characterizing disc:

- Equal percentage flow mirrors equal percentage coil characteristic.
- Molded from GE NORYL, a blend of a polyimide with reinforced modified polymer PPE for retention of mechanical properties, chemical resistance, and dimensional stability.
- Because the disc is press fit into the ball where flow exits, the valve is able to modulate where differential pressure is over 160 psi without affecting the disc.
- Tapered shape means the back of the disc is too large to be forced through the ball's port.
- Good chemical resistance to: alcohol, alkalis (base), cooling and heating system liquids (ethylene and propylene glycol), chlorinated water, detergents/ cleaners. Poor chemical resistance to acids (high concentration), hydrocarbons, ketones, phenol.

REVISIONS						
REV	ZONE	DESCRIPTION	E.O.	BY	DATE	CHECK
[REDACTED]						



SCALE 0.125



601843T 3

SPECIFICATIONS:

- LOW TORQUE
- STAINLESS STEEL BALL & STEM
- CAST IRON VALVE BODY
- STANDARD ANSI 125 FLANGE CONNECTIONS
- EXTERNAL LIMIT STOP
- FLOW INDICATION ARROWS
- POWER - 24 VAC ±20%, 50/60Hz
- MAX POWER CONSUMPTION 15.5 VA
- AMBIENT TEMPERATURE -40° F TO 131° F
- 3 POSITION MODULATING 0(2)-10 VDC
- SPRING RETURN
- NEMA 4 WEATHER PROOF ENCLOSURE
- UL & CSA RATED

APPROVED VENDORS

TABULATION			
PART NO.	P/N REV	DESCRIPTION	
601843	3	VALVE ASSY-WATER 3 WAY 152 CV	
601837	3	VALVE ASSY-WATER 3 WAY 254 CV	
601844	3	VALVE ASSY-WATER 3 WAY 327 CV	

UNLESS OTHERWISE SPECIFIED: ALL UNITS ARE IN INCHES FRACTIONS ±1/32 ANGLES ±1° X.X = ±.12 X.XX = ±.06 X.XX = ±.03 X.XXX = ±.010 DRAFT ___ WALL ___ RADII ___ CONCENTRICITIES .020 DIA. SQUARENESS .015 IN./IN. BREAK EDGES .015 MAX. SURFACE FINISH PER ASME Y14.36M-1996	APPROVED	DATE	 OXNARD, CALIFORNIA
	CHECKED	DATE	
DRAWN J. PARSONS	DATE 03/26/07	E.O. 3890	SCALE 0.250
		THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP AS IT EMBODIES PROPRIETARY INFORMATION WITH ALL RIGHTS RESERVED BY RAYPAK, INC.	
TITLE VALVE ASSY-3 WAY 152 CV 4"			PRO/E
MAT'L.	SERIES/MODEL	DWG. NO. 601843T	REV 3