

Three-Way Ball Valves for Actuation

1/2" to 6" - PVC & Corzan® CPVC



Mounting Kits
Sold Separately

ACTUATOR-READY
VALVES

Three Flow Patterns

Hayward Three-Way Ball Valves for Actuator Mounting come standard with an NT ball that permits the flow to be diverted from the bottom port to either the left or right ports: there is no Off position. An optional TW ball, used with the the proper electric actuator, adds an Off position to the NT flow pattern of left or right. An optional TP ball allows flow through all ports at the same time, or flow shutoff.

Solid Actuator Mounting Design

For rock-solid actuator mounting, the valve incorporates a unique design whereby the mounting bracket mounts directly to the valve body without the need for glued or clamped-on mounting pads. This assures proper alignment of the actuator to the valve without creating any damaging side loads to cause premature stem seal failure.

One-Piece Body

The one-piece molded body features an integrally molded bottom port. There are no fabricated connections to fail or leak.

No Metal, No Corrosion

Hayward all-plastic Three-Way Valves contain no metal parts. The valves will never fail because of corrosion and they do not require painting or epoxy coating to stand up to aggressive environments.

Features

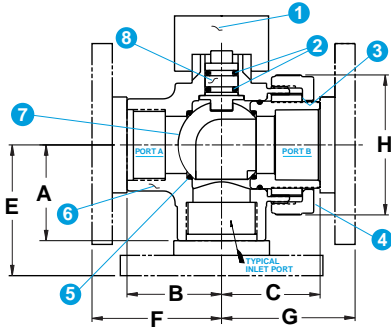
- Double Stem Seals
- Viton® or EPDM Seals
- Three Flow Patterns
- One Piece Body
- Integral Mounting Pad

Options

- Electric Actuators
- Pneumatic Actuators
- Stem Extensions for 3", 4" & 6" Sizes
- TP and TW Balls for Optional Flow Pattern
- Mounting Kits

Corzan® is a trademark of Noveon, Inc.
Viton® is a trademark of DuPont Dow Elastomers

Technical Information



Parts List - Three-Way Valves for Actuation

1. Mounting Kit (Optional)
2. O-Ring Seals
3. End Connector
4. Assembly Nut
5. Teflon Seats
6. Body
7. Ball
8. Stem

Dimensions - Inches / Millimeters

Size	A	B	C	D	E	F	G	H	Weight - lb / kg	
									Skt/Thd	Flanged
1/2"	1.75 / 44	1.56 / 40	1.72 / 44	2.53 / 64	2.78 / 70	2.69 / 68	2.78 / 70	2.25 / 57	0.50 / .23	1.00 / .45
3/4"	1.80 / 46	1.85 / 47	1.89 / 48	2.82 / 72	2.95 / 75	3.01 / 77	3.03 / 77	2.56 / 65	0.75 / .34	1.38 / .63
1"	2.25 / 57	2.13 / 54	2.25 / 57	3.08 / 78	3.57 / 91	3.45 / 88	3.57 / 91	3.00 / 76	1.13 / .51	2.00 / .91
1-1/2"	2.81 / 71	2.67 / 68	2.71 / 69	3.50 / 89	4.41 / 112	4.63 / 118	4.30 / 109	4.00 / 102	2.00 / .91	3.25 / 1.48
2"	3.25 / 83	3.22 / 82	3.22 / 82	3.95 / 100	5.00 / 127	4.94 / 125	4.94 / 125	4.75 / 121	3.50 / 1.59	5.50 / 2.50
3"	4.56 / 116	4.38 / 111	4.38 / 111	5.88 / 149	6.60 / 168	6.41 / 163	6.41 / 163	6.63 / 168	9.00 / 4.09	15.0 / 6.81
4"	5.56 / 141	5.25 / 133	5.25 / 133	8.88 / 226	8.03 / 204	7.73 / 196	7.73 / 196	8.63 / 219	14.50 / 6.59	25.0 / 11.36
6"	n/a	n/a	n/a	8.88 / 226	8.81 / 224	8.50 / 216	8.50 / 216	8.63 / 219	n/a	34.5 / 16.68

Selection Chart

Size	Material	End Conn.	Seals	Pressure Rating
1/2"-4"	PVC/CPVC	Socket, Threaded or Flanged	Viton® or EPDM	150 PSI @ 70F
6"*	PVC/CPVC	Flanged	Viton® or EPDM	Non-Shock

* 4" Valve venturied to 6"

Cv Factors

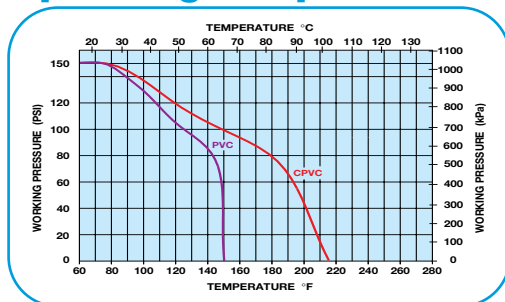
Size	Value	Size	Value
1/2"	3.0	2"	58
3/4"	7.0	3"	190
1"	10	4"	450
1-1/2"	30	6"	340

Pressure Loss Calculation Formula

$$\Delta P = \left[\frac{Q}{Cv} \right]^2$$

ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

Operating Temp/Pressure



Flow Schematics

Top View		
Flow At	NT Ball - Standard	
0°	Port A	Port B
45°	Port A	Port B
No Deadhead		
90°	Port A	Port B
Flow At	TW Ball	
0°	Port A	Port B
90°	Port A	Port B
Center-Off		
180°	Port A	Port B
Flow At	TP Ball	
0°	Port A	Port B
90°	Port A	Port B



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