

Flowserve FCD Corporation
 A Unit of Flowserve Corporation
 Flow Control Division

11444 Deerfield Road
 Cincinnati, OH 45242
 www.flowserve.com

Phone: 513 489 7800
 Facsimile: 513 489 5243
 E-mail: actuators@flowserve.com

Automated Ball Valve: Threaded-End

Introduction

Flowserve's Automated Ball Valve combines two well-known names in the quarter-turn valve industry: Durco and Automax. Durco 3-piece 1000 WOG valves feature 316 stainless steel bodies and balls for corrosion resistance. Glass-filled PTFE seats provide optimal pressure and temperature performance and true V-ring PTFE packing provides one of the best stem seals in the industry.

These valves have been carefully matched with Automax SuperNova rack-and-pinion actuators. The SuperNova is well known for durability and reliability because of its heavy-duty, hard anodized aluminum housing and precision die-cast pistons. This actuator utilizes unique travel stops to allow precise and easy adjustments of valve open and closed positions. Sized for a minimum of 70 psi air supply, these actuators will provide years of trouble-free service.



Our Automated Ball Valve is *factory* assembled with *factory* mounting hardware. Flowserve custom-designs all brackets and couplers to assure proper valve operation and maintainability. With Flowserve personnel building your automated valve, you will avoid common problems associated with valve/actuator misalignment or improper travel stop adjustment. Few companies have assembled more automated valves than Flowserve.

Features

- Whether it be the valve, actuator, or hardware, Flowserve gives careful consideration to **atmospheric and process fluid corrosion resistance**:
 - Actuator: Hard anodized body, polyurethane powder-coated endcaps, electroless nickel plated pinion
 - Valve: 316 Stainless steel body, ball and stem, PTFE packing, glass-filled PTFE seats
 - Hardware: Epoxy powder-coated steel bracket and coupler; stainless steel fasteners
- Three-piece valve construction allows for **easy seat maintenance**.
- Valve incorporates an ISO 5211 mounting flange to provide a **solid 4-point actuator mounting surface and optimal actuator alignment**.
- PTFE V-ring packing provides **excellent valve stem sealing**.
- **Field-reversible actuator pistons** allow easy conversion from fail closed to fail open.
- **NAMUR actuator interfaces** for bolt-on accessories such as limit switches, positioners, solenoids, etc.

How-to-Order

Valve Size	Double Acting Actuator	Spring-Return Actuator (Fail Closed)
1/2	ABVTDA.5	ABVTSR.5
3/4	ABVTDA.75	ABVTSR.75
1	ABVTDA1	ABVTSR1
1 1/2	ABVTDA1.5	ABVTSR1.5
2	ABVTDA2	ABVTSR2

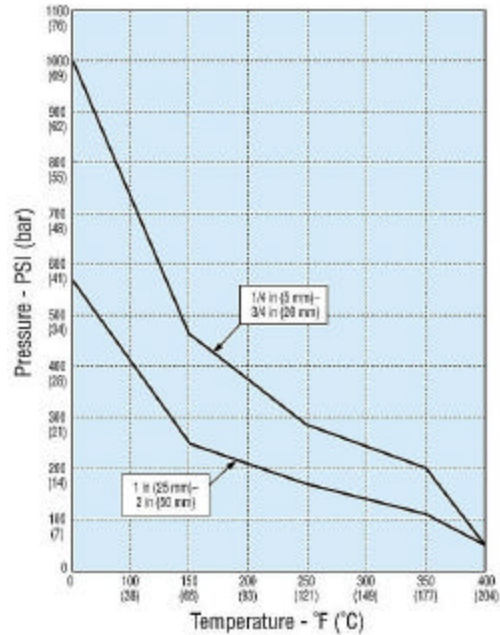
Valve Port Diameter and Flow Coefficient

Valve Size	Port Diameter In (mm)	C _v
1/2	0.63 (16)	23
3/4	0.81 (20)	45
1	1.00 (25)	90
1 1/2	1.50 (38)	230
2	2.00 (50)	450

Materials of Construction

Description	Material
Valve Body, Ball, Stem	316 Stainless Steel
Valve Seat	Glass-filled PTFE
Valve Packing	PTFE
Actuator Body	Hard-anodized Aluminum
Actuator End Caps	Powder Polyurethane coated Aluminum
Actuator Pinion	Electroless Nickel plated Steel
Actuator Pistons	Aluminum
Actuator Springs (Optional)	Painted Chrome Silicone Spring Steel
Actuator Seals	Buna N
Travel Stop Bolts & Nuts	Stainless Steel
Actuator End Cap Bolts	Stainless Steel
Bracket and Coupler	Powder Epoxy coated Steel
Hardware	Stainless Steel

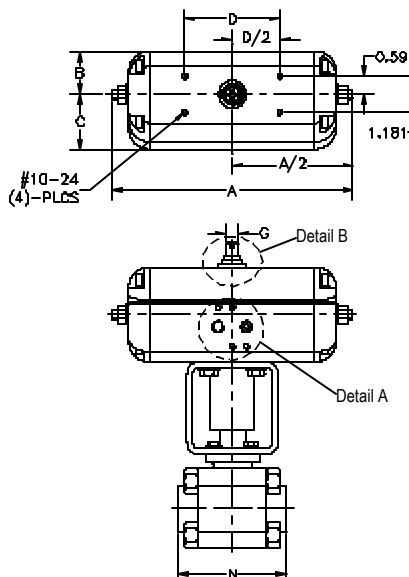
Pressure-Temperature Ratings



Other Specifications

Ambient Temperature Range:	-20 to 175 °F
Minimum Supply Pressure:	70 psi

Dimensions



VALVE SIZE	ACT. TYPE	A	B	C	D	E	F	G	H	J	K	L	M	N
1/2"	DA	6.69	1.14	1.58	3.150	6.88	.79	.394	.39	.75	1/8	3.150	.97	2.95
3/4"	DA	6.69	1.14	1.58	3.150	7.19	.79	.394	.39	.75	1/8	3.150	1.19	3.15
1"	DA	7.95	1.40	1.77	3.150	7.82	.79	.394	.47	.88	1/8	3.150	1.31	3.54
1-1/2"	DA	9.84	1.87	2.24	3.150	9.10	.79	.551	.77	1.00	1/8	3.150	1.77	4.72
2"	DA	9.84	1.87	2.24	3.150	9.56	.79	.551	.77	1.00	1/8	3.150	2.34	5.51
1/2"	SR	7.95	1.40	1.77	3.150	6.98	.79	.394	.47	.88	1/8	3.150	.97	2.95
3/4"	SR	9.84	1.87	2.24	3.150	7.19	.79	.551	.77	1.00	1/8	3.150	1.19	3.15
1"	SR	9.84	1.87	2.24	3.150	7.82	.79	.551	.77	1.00	1/8	3.150	1.31	3.54
1-1/2"	SR	11.65	2.17	2.48	3.150	9.10	.79	.551	.77	1.38	1/4	3.150	1.77	4.72
2"	SR	13.47	2.46	2.91	5.118	9.56	1.18	.787	1.10	1.38	1/4	5.118	2.34	5.51

