

# ASD Spring Diaphragm

## High Performance Spring Diaphragm Actuator



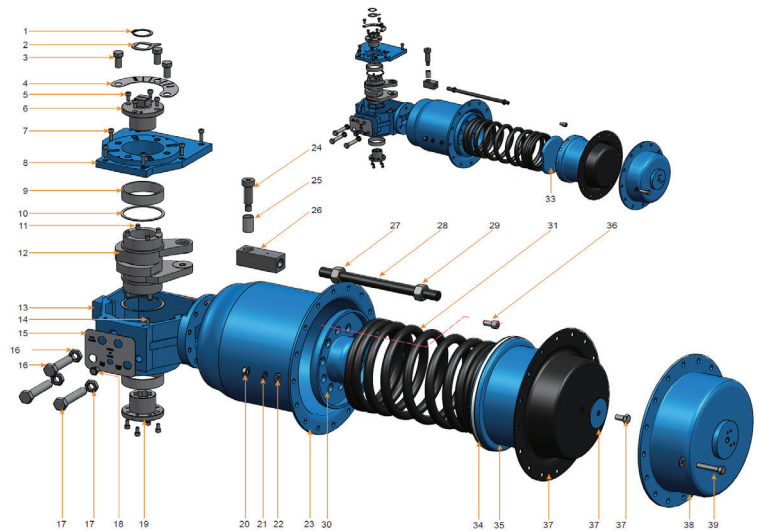
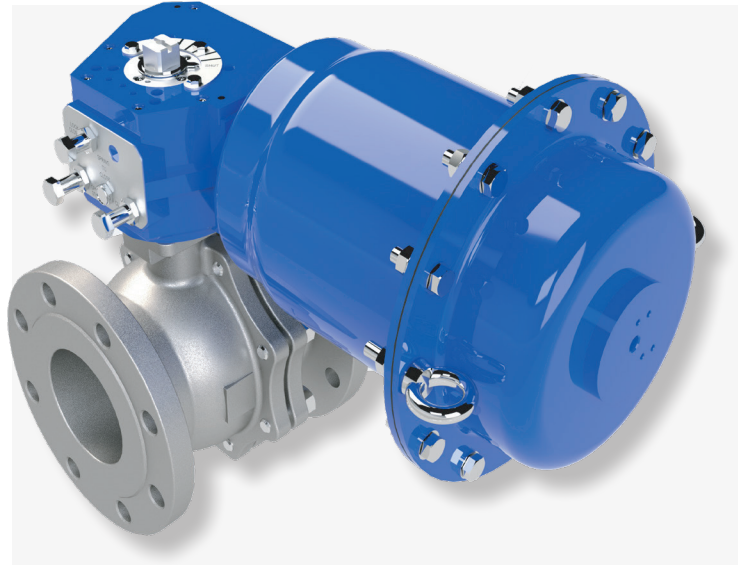
The ASD Spring Diaphragm Rotary Actuators are designed for quarter turn applications with minimal media supply pressure. The Spring Diaphragm separates the supply media from the springs allowing the actuator to be operated by unfiltered air, gas, water or mineral-based hydraulic fluid.

### ASD SPRING DIAPHRAGM FEATURES

- ✓ High Cycle Life & Low Friction Bearing Design
- ✓ Multiple Drive Bushings
- ✓ Field Reversible for Fail Open or Fail Closed Safety Operation
- ✓ ISO/NAMUR design for universal mounting and accessory attachment
- ✓ ASD Series Actuators can be operated with media supply as low as 15 psi
- ✓ UV resistant polyester powder coated housing

### MATERIALS OF CONSTRUCTION

ITEM	DESCRIPTION	MATERIALS SPECIFICATIONS
1	Snap Ring	304 Stainless Steel
2	Indicator	304 Stainless Steel
3	Hex Head Cap Screw	304 Stainless Steel
4	Indicator Plate	304 Stainless Steel
5	Socket Head Screw	304 Stainless Steel
6	Namur stem	Carbon Steel
7	Head Cap Screw	304 Stainless Steel
8	Cover	Carbon Steel
9	Driver Arm Bearing	304 Stainless Steel
10	Thrust Bearing	Nylon
11	Cylindrical Pin	Carbon Steel
12	Driver Arm	Ductile Iron
13	Driver Housing	Ductile Iron
14	Cylindrical Pin	304 Stainless Steel
15	Nameplate	304 Stainless Steel
16	Set Screw	304 Stainless Steel
17	Stop Screws	304 Stainless Steel
18	Breather	316 Stainless Steel
19	Drive Bushing	Carbon Steel
20	Lock Nut	Stainless Steel
21	Spring Washer	Stainless Steel
22	Gasket	Stainless Steel
23	Spring Housing	Carbon Steel
24	Shoulder Screw	Carbon Steel
25	Clevis Bearing	Stainless Steel
26	Clevis	Carbon Steel
27	Hex Jam Nut	Carbon Steel
28	Actuator Rod	Carbon Steel
29	Hex Jam Nut	Carbon Steel
30	Spring Retainer	Carbon Steel
31/32	Compression Springs	55Mn Spring Steel
33	Spring Retainer Plate	Carbon Steel
34	Retainer Bearing	UHMWPE
35	Diaphragm Retainer	Carbon Steel
36	Hex Head Cap Screw	Carbon Steel
37	Diaphragm	NBR
38	Diaphragm Cover	Carbon Steel
39	Hex Head Cap Screw	304 Stainless Steel



### SPRING DIAPHRAGM ACTUATOR ACCESSORIES

ASD Spring Diaphragm Actuators are designed with universal ISO 5211 and NAMUR mounts for easy valve-actuator or control accessory assembly (Limit Switches, Solenoid Valves, Positioners).

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## ASD SPRING DIAPHRAGM OUTPUT TORQUE (IN-LBS)

Model	Air Stroke at Supply Pressure (PSI)									Spring Stroke
	15	20	30	40	50	60	70	80	90	
ASD100A	92	254	632	-	-	-	-	-	-	150
ASD100B1	-	-	73	366	619	-	-	-	-	425
ASD100B2	-	-	-	-	314	607	890	-	-	575
ASD100C	-	-	-	-	-	473	774	1,074	-	779
ASD100D	-	-	-	-	-	-	579	906	1,196	885
ASD200A	201	460	1,062	-	-	-	-	-	-	363
ASD200B1	-	-	275	872	1,436	-	-	-	-	885
ASD200B2	-	-	-	-	987	1,599	2,199	-	-	1,186
ASD200C	-	-	-	-	-	965	1,558	2,202	-	1,434
ASD200D	-	-	-	-	-	-	1,041	1,687	2,304	1,797
ASD400B1	-	-	732	2,180	3,321	-	-	-	-	1,682
ASD400B2	-	-	-	-	1,625	2,939	4,228	-	-	2,319
ASD400C	-	-	-	-	-	2,251	3,632	4,936	-	2,814
ASD400D	-	-	-	-	-	-	1,994	3,365	4,501	3,646
ASD800B1	-	-	961	3,209	5,296	-	-	-	-	3,664
ASD800B2	-	-	-	-	3,141	5,627	8,278	-	-	4,921
ASD800C	-	-	-	-	-	5,448	8,055	10,653	-	6,151
ASD800D	-	-	-	-	-	-	4,673	7,280	9,657	7,133
ASD1500B1	-	-	1,730	5,772	9,541	-	-	-	-	6,593
ASD1500B2	-	-	-	-	4,919	9,075	13,209	-	-	8,496
ASD1500C	-	-	-	-	-	8,878	13,351	17,800	-	9,894
ASD1500D	-	-	-	-	-	-	8,278	12,420	16,869	12,682

### How To Order Guide

Series	Model	Springs	Seals
ASD = ASD Spring Diaphragm Actuator	100	A	B = Buna
	200	B1	(Standard -13 °F to 158°F / -25°C to 70°C)
	400	B2	V = Viton
	800	C	(High Temperature -5°F to 392°F / -15°C to 200°C)
	1500	D	L = LNBR (Low Temperature -40°F to 158°F / -40°C to 70°C)

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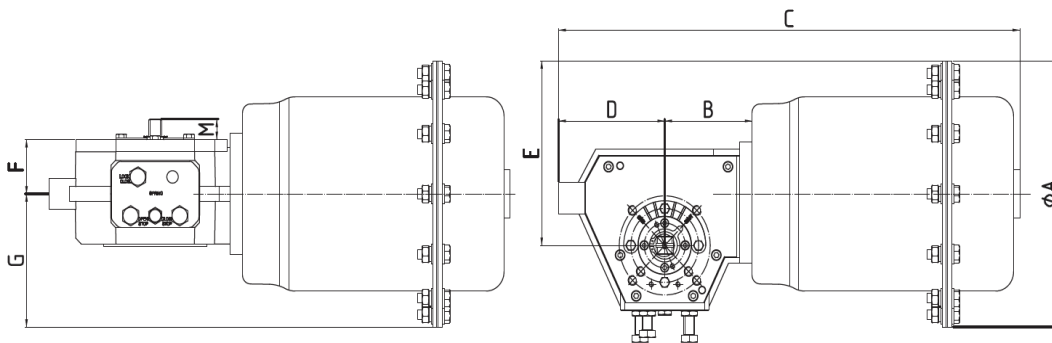
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## ASD SPRING DIAPHRAGM DIMENSIONS (INCHES)

Model	A	B	C	D	E	F	G	M	Square Drive	Operating Speed (s)		Weight (lbs)	ISO Mount
										Air Stroke	Spring Stroke		
100	8.94	2.95	17.32	3.58	5.83	2.05	4.49	0.79	0.55	1.6	1.0	46	F05-F07
200	10.79	3.86	20.47	4.69	7.48	2.20	5.40	0.79	0.87	3.4	1.6	73	F10-F12
400	12.60	4.25	23.30	5.51	8.50	2.95	6.30	0.79	1.06	6.0	3.3	134	F10-F14
800	15.04	5.11	28.39	6.30	10.87	3.54	7.52	0.79	1.42	8.0	6.3	236	F10-F14
1500	15.04	5.71	46.06	5.70	10.87	4.921	7.52	1.18	1.81	8.0	6.3	390	F16

### ASD100 - ASD800



### ASD1500

