

NEW PRODUCT PREVIEW

Glass Filled Polypropylene Pneumatic Actuators

FOR BALL VALVES AND BUTTERFLY VALVES UP TO 4"

KEY FEATURES AND BENEFITS

- Ideal for Corrosive Atmosphere and Environments
- Available in Double Acting and Spring Return Designs (Butterfly Valves up to 3")
- Corrosion-Resistant GFPP Housing
- Anodized Aluminum Two-Piston Rack and Pinion
- Manual Override (Double Acting Standard Only)
- Position Indicator
- Permanent Lubrication
- Lightweight - Easy for Installation
- Namur-Style Solenoid Mounting
- ISO 5211 Mounting Base
- Stainless Steel Fasteners
- Alternative Operating Media for 40psi to 120psi
- All Units are Marked for Traceability
- 100% Factory Tested

OPTIONS

- Double Acting Air-to-Open and Close
- Solenoid Valves with Optional Voltages
- Auxiliary Limit Switch
- Cycle Speed Controls

SPECIFICATIONS

- HOUSING: GFPP (Glass Filled Polypropylene) per ASTM D4101 Cell Class 85580
- OUTPUT SHAFT: 303 Stainless Steel per ASTM A314
- SEALS: BUNA-N
- MINIMUM AIR PRESSURE: 40psi (* Consult Factory)
- MAXIMUM AIR PRESSURE: 120psi
- CYCLE TIME: Half Second, Typical
- AIR PORT CONNECTIONS: 1/4" NPT
- NAMUR MOUNTING: VDI/VDE 3845
- OPERATING TEMPERATURE RANGE: -4°F to 176°F



GFPP PMD4 Series Double Acting Pneumatic Actuators

FOR 1/2" TO 4" BALL VALVES / UP TO 4" BUTTERFLY VALVES



DESCRIPTION

1. End Cap Screws
2. End Cap
3. End Cap O-Ring
4. Spring Cartridge*
5. Piston O-Ring
6. Piston Skate
7. Piston (Rack)
8. Indicator
9. Snap Ring
10. Body
11. Upper Pinion Washer
12. Upper Pinion O-Ring
13. Pinion
14. Lower Pinion O-Ring
15. Lower Pinion Washer
16. Flange Nuts
17. Flange
18. Flange Bolts

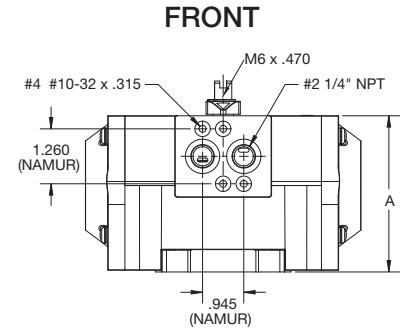
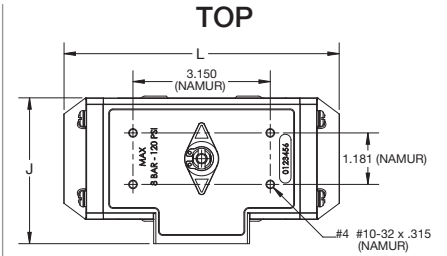
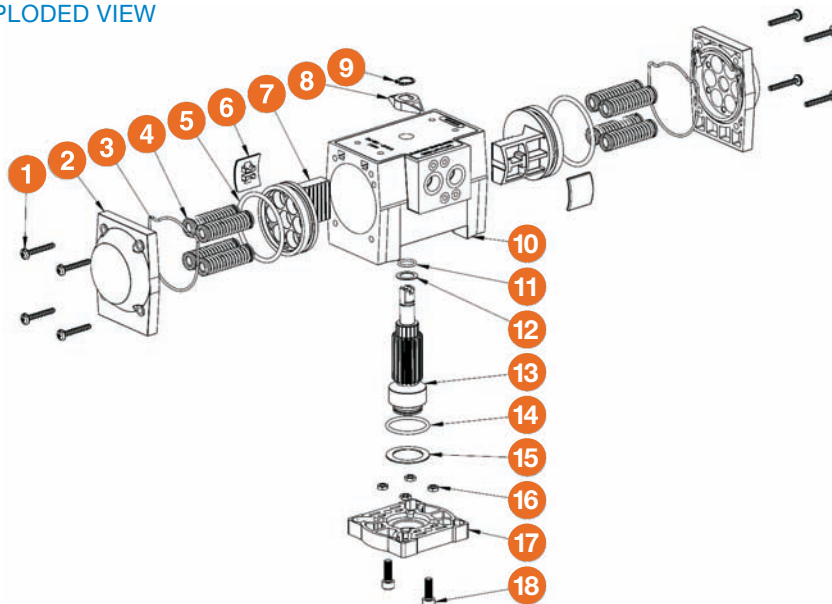
MATERIALS

- 304 Stainless Steel
- Glass Filled Polypropylene
- BUNA-N
- Steel Epoxy Coated
- BUNA-N
- Cast Aluminum
- Anodized Aluminum
- Technopolymer
- 304 Stainless Steel
- Glass Filled Polypropylene
- 304 Stainless Steel
- BUNA-N
- 303 Stainless Steel
- BUNA-N
- Tempered Steel
- 304 Stainless Steel
- Glass Filled Polypropylene
- 304 Stainless Steel

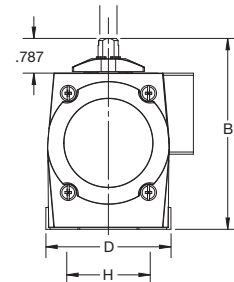
DIMENSIONS

MODEL	A in / mm	B in / mm	D in / mm	H in / mm	J in / mm	K in / mm	L in / mm	FLANGE STANDARD (dim M)	WEIGHT (lbs)
PMD410	2.76 / 70	3.58 / 91	2.087 / 53	0.87 / 22	2.64 / 67	0.43 / 11	6.89 / 175	F04	1.15
PMD415	3.54 / 90	4.37 / 111	2.756 / 70	1.30 / 33	3.39 / 86	0.55 / 14	6.30 / 160	F05	2.26
PMD419	4.39 / 112	5.22 / 133	2.756 / 70	1.30 / 33	3.98 / 101	0.67 / 17	4.68 / 119	F07	3.59

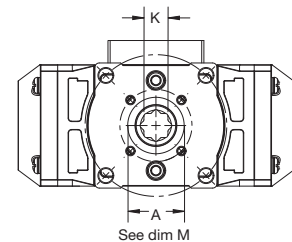
EXPLODED VIEW



SIDE



BOTTOM



TORQUES (in-lbs)

MODEL	80 PSIG
PMD410	125
PMD415	275
PMD419	500

*Consult Factory for applications with less than 80 PSIG air supply

*Springs not included in PMD4 Series. For reference only.

GFPP PMS4 Series Spring Return Pneumatic Actuators

FOR 1/2" TO 4" BALL VALVES / UP TO 3" BUTTERFLY VALVES



DESCRIPTION

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14. Lower Pinion O-Ring
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16. Flange Nuts
17. Flange
18. Flange Bolts

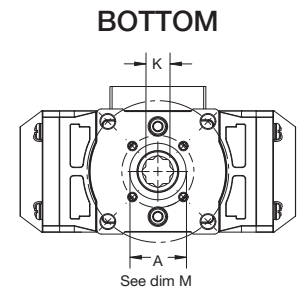
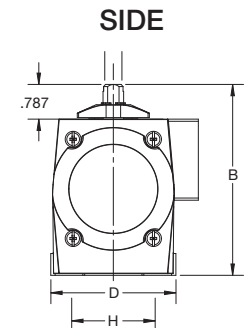
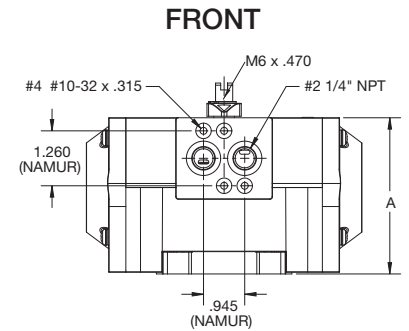
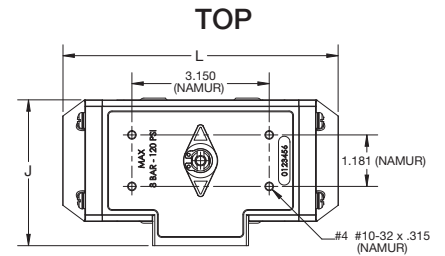
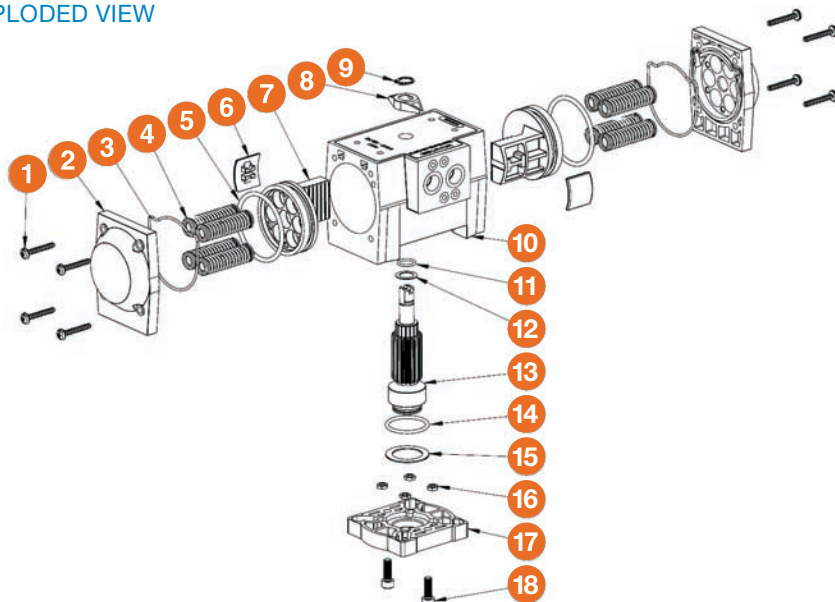
MATERIALS

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- Cast Aluminum
- Anodized Aluminum
- Technopolymer
- 304 Stainless Steel
- Glass Filled Polypropylene
- 304 Stainless Steel
- BUNA-N
- 303 Stainless Steel
- BUNA-N
- Tempered Steel
- 304 Stainless Steel
- Glass Filled Polypropylene
- 304 Stainless Steel

DIMENSIONS

MODEL	A in / mm	B in / mm	E in / mm	H in / mm	J in / mm	K in / mm	L in / mm	FLANGE STANDARD (dim M)	WEIGHT (lbs)
PMS410	2.76 / 70	3.58 / 91	0.47 / 12	0.87 / 22	2.64 / 67	0.43 / 11	6.89 / 175	F04	1.33
PMS415	3.54 / 90	4.37 / 111	0.47 / 12	1.30 / 33	3.39 / 86	0.55 / 14	6.30 / 160	F05	2.7
PMS419	4.39 / 112	5.22 / 133	0.47 / 12	1.30 / 33	3.98 / 101	0.67 / 17	4.68 / 119	F07	4.4
PMS420	4.39 / 112	5.22 / 133	0.47 / 12	1.30 / 33	3.98 / 101	0.67 / 17	4.68 / 119	F07	4.4

EXPLODED VIEW



TORQUES (in-lbs)

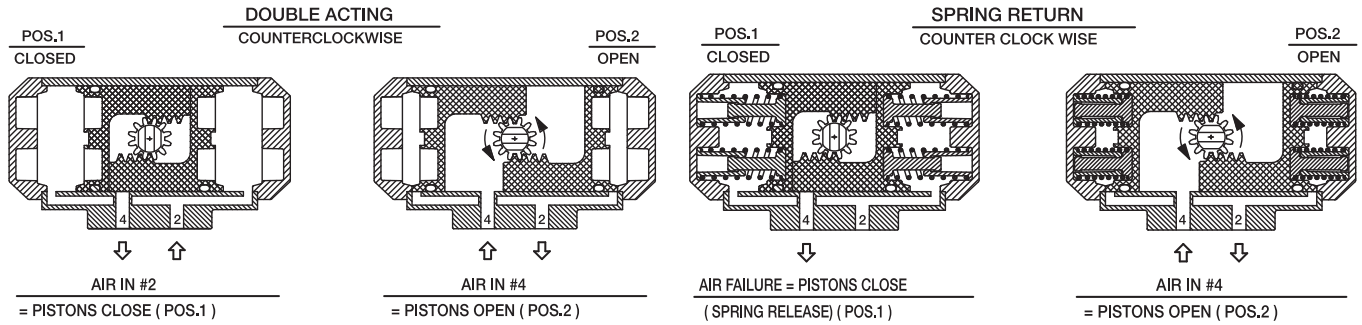
MODEL	SPRINGS #	CLOSING TORQUE (SPRING)		80 PSIG	
		start	end	start	end
PMS410	2+2	66	44	81	59
PMS415	4+4	150	107	168	125
PMS419	4+4	245	184	316	255
PMS420	5+5	307	230	270	193

*Consult Factory for applications with less than 80 PSIG air supply

GFPP PMD4 / PMS4 Series Pneumatic Actuators

TECHNICAL INFORMATION

ACTUATOR OPERATING SYSTEMS



ACTUATOR SPECIFICATIONS

	PMD410	PMD415	PMD419	PMS410	PMS415	PMS419	PMS420
Torque Output (in. / lb.) @ 80psi	125	275	500	81	316	316	270
Spring Stroke (Start / End)	NA	NA	NA	66 / 44	150 / 107	245 / 184	307 / 230
Enclosure Material	Glass Filled Polypropylene						
Output Shaft	303 Stainless Steel						
Air Port Connections	1/4" NPT						
Air Consumption (cu. in.)	13.5	22	40.6	8	10.8	17.5	17.5
Air Transfer	Internal						
Stroke Time (seconds)	0.5						
Cycle Time	1/2 second						
Minimum Air Pressure	80psi						
Maximum Air Pressure	120psi						
Operation	Rack and Pinion						
Weight (lb / kg)	1.15 / .52	2.25 / 1.02	3.55 / 1.61	1.33 / .64	2.7 / 1.22	4.40 / 2.0	4.40 / 2.0

VALVE SELECTION CHART

Valve Type	Size	PMD410	PMD415	PMD419	PMS410	PMS415	PMS419	PMS420
TB Series Ball Valves	1/2"	•			•	•		
	3/4"	•			•	•		
	1"	•			•	•		
	1-1/4"		•			•		
	1-1/2"		•			•		
	2"		•			•		
	2-1/2" - 3"			•			•	
TW / LA Series Three Way Valves	4" - 6"			•			•	
	1/2"	•				•		
	3/4"	•				•		
	1"	•				•		
	1-1/4"		•				•	
	1-1/2"		•				•	
	2"		•				•	
BY Series Butterfly Valves	3"			•				•
	4"			•				•
	2"			•				•
	3"			•				•



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