

PNEUMATICS & FITTINGS



PNEUMATIC DAMPER ACTUATORS MP918A, MP918B, MP920B SERIES

Honeywell

DESCRIPTION

The **Honeywell MP918A** and **MP918B** pneumatic actuators position damper blades to control airflow in HVAC systems. The **MP918A** has a positive positioner, otherwise is the same as the **MP918B**. **MP920B** actuators have a long 6" stroke and are suitable for fan inlet vane control applications in a VAV system.



MP918B1014

FEATURES, MP918A AND B

- Rolling diaphragm for long life
- Low friction shaft bearing
- Close tolerance on operating range and stroke
- Versatile mounting and connecting hardware
- Nonoverlapping spring ranges for sequencing

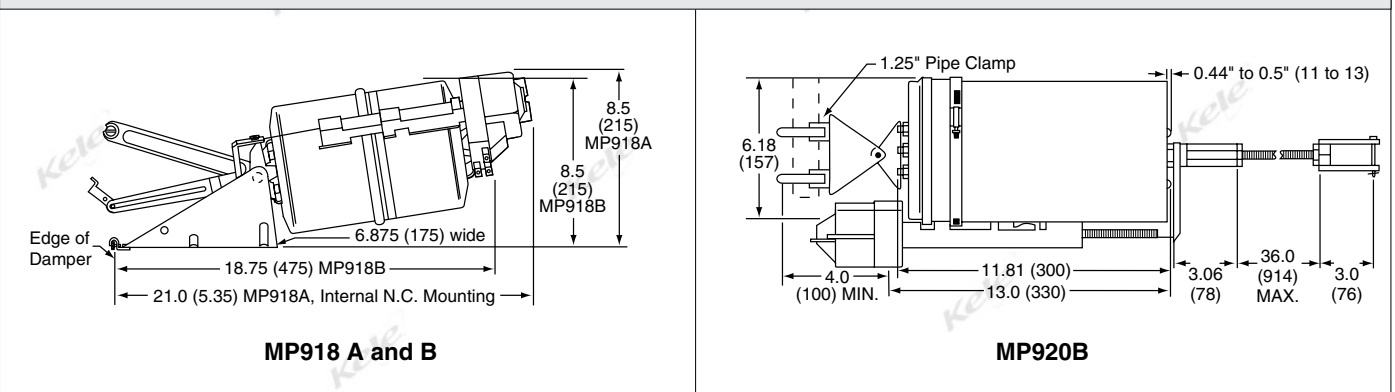
FEATURES, MP920B

- Rolling diaphragm operated for long life
- Fail-safe on over pressure
- Actuator can be swivel mounted from either end to pipe, floor, or wall surface
- Optional positive positioner provides accurate positioning under varying load conditions

SPECIFICATIONS

Connections		Operating Temperature	
MP918A, MP920	Barbs for 5/32" OD (4 mm) tubing for pilot; 1/4" OD (6 mm) tubing for main and branch	MP918A	-20° to 160°F (-29° to 70°C)
MP920	Barbs for 1/4" OD (6 mm) tubing	MP918B	-40° to 160°F (-40° to 70°C)
Diaphragm		MP920	-40° to 160°F (-40° to 70°C)
MP918	Neoprene, rolling type, 23.8 sq. in. (154 sq. cm) effective area	Maximum Pressure Rating	
MP920	Neoprene, rolling type, 24.8 sq. in. (160 sq. cm) effective area	MP918A	25 psi (172 kPa)
Air Consumption		MP918B, MP920	25 psi (172 kPa)
MP918A, MP920	0.021 scfm (9.9 mL/s) @ 18 psi (124 kPa)	Weight	
MP918B	None	MP918A	13.9 lb (6.3 Kg)
		MP918B	10.5 lb (4.8 Kg)
		MP920	13.1 lb (5.9 Kg)
		Warranty	
		1 year	

DIMENSIONS





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NET FORCE EXERTED AND STROKE

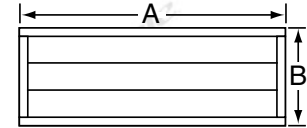
Model	Operating Range psi (kPa)	Stroke in (cm)	Net Force in Pounds (N) Exerted at Various Pressures	
			0 psi (0 kPa)	18 psi (124 kPa)
MP918B	3 to 7 (21 to 48)	3.5 (9.0)	52 (231)	244 (1086)
	3 to 13 (21 to 90)	3.5 (9.0)	50 (222)	89 (396)
	5 to 10 (34 to 69)	3.5 (9.0)	96 (427)	162 (721)
	8 to 13 (55 to 90)	3.5 (9.0)	160 (712)	83 (370)
MP918A	8 to 13 (55 to 90) ¹	3.5 (9.0)	160 (712)	83 (370)
Model	Operating Range	Stroke	0 psi (0 kPa)	20 psi (138 kPa)
MP920B	7.25 to 13 (50 to 90)	6 (15.0)	173 (770)	298 (1326)

Note: 1. Also see MP918A Operating Range and Startpoint Pressure.

DAMPER "A" AND "B" DIMENSIONS



Vertical Blade



Horizontal Blade

MAXIMUM DAMPER RATING FOR "B" DIMENSIONS - in (cm)

MP918A				
Damper Model	Operating Range psi (kPa)	Modulating Service		2-Pos. Service
		13 psi (90 kPa)	18 psi (124 kPa)	18 psi (124 kPa)
D640, D641	3 to 7 (21 to 48)	123" (84.8)	123" (84.8)	123" (84.8)
	3 to 13 (21 to 90)	N/A	123" (84.8)	123" (84.8)
	5 to 10 (34 to 69)	123" (84.8)	123" (84.8)	205" (141.3)
	8 to 13 (55 to 90)	N/A	123" (84.8)	205" (141.3)
D642, D643, D644, D645	3 to 7 (21 to 48)	101" (69.6)	101" (69.6)	101" (69.6)
	3 to 13 (21 to 90)	N/A	101" (69.6)	101" (69.6)
	5 to 10 (34 to 69)	101" (69.6)	101" (69.6)	169" (116.5)
	8 to 13 (55 to 90)	N/A	101" (69.6)	169" (116.5)

N/A = Not applicable

MP918B					
Damper Model	Operating Range psi (kPa)	Modulating Service		2-Position Service	
		18 psi (124 kPa)	20 psi (138 kPa)	18 psi (124 kPa)	20 psi (138 kPa)
D640, D641	8 to 13 (55 to 90) ¹	205" (141.5)	287" (197.9)	205" (141.5)	287" (197.9)
		169" (116.5)	236" (162.7)	169" (116.5)	236" (116.5)
D642, D643 D644, D645					

Note: 1. With positive positioner (3, 5, or 10 psi span). Also applies to MP918B 8-13 psi (55 to 90 kPa) slaves used with MP918A.

ORDERING INFORMATION

MODEL	DESCRIPTION
MP918A1024	Damper actuator with 10 psi span positioner, includes mounting bracket and crank arm
MP918A1057	Damper actuator with 10 psi span positioner, includes internal NC mounting bracket
MP918A1081	Damper actuator with 10 psi span positioner, includes internal NO mounting bracket
MP918B1006	Damper actuator 3-13 psi spring range, includes external mounting bracket and crank arm
MP918B1014	Damper actuator 3-13 psi spring range, includes internal NC mounting bracket
MP918B1022	Damper actuator 3-13 psi spring range, includes internal NO mounting bracket
MP918B1030	Damper actuator 3-13 psi spring range, does not include mounting bracket
MP918B1048	Damper actuator 5-10 psi spring range, includes external mounting bracket and crank arm
MP918B1063	Damper actuator 3-7 psi spring range, includes external mounting bracket
MP918B1071	Damper actuator 3-7 psi spring range, includes internal NC mounting bracket
MP918B1089	Damper actuator 8-13 psi spring range, includes external mounting bracket and crank arm
MP918B1097	Damper actuator 8-13 psi spring range, includes internal NC mounting bracket
MP918B1105	Damper actuator 8-13 psi spring range, includes internal NO mounting bracket
MP918B1113	Damper actuator 8-13 psi spring range, does not include bracket
MP918B1196	Damper actuator 8-13 psi spring range, includes external trunnion mounting bracket
MP920B1002	Damper actuator 7-13 psi spring range, 6" stroke

ACCESSORIES

14004345-001	Positive positioner kit for MP920 damper actuator
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