

ACTUATORS & DAMPERS

FIRE AND SMOKE DAMPER ACTUATORS

MS4XXX, MS81XX SERIES



DESCRIPTION

Honeywell fire and smoke damper actuators are designed to meet both UL-555 and UL-555S 350°F safety requirements for combined fire and smoke applications. The fast-acting actuators close dampers in 15-20 seconds, and the integral spring return ensures the consistent, proper level of torque.

FEATURES

- Designed to meet UL-555 and UL-555S requirements
- Robust die-cast aluminum housing for protection and long service life
- Maximum spring return timing of 15-20 seconds
- Reliably built by the industry leader
- Energy-saving patented design
- No audible noise during holding

APPLICATION

Fire and Smoke actuator replacement must be installed correctly, per local codes, and approved by the Local Authority Having Jurisdiction (AHJ). Honeywell recommends following all local, state and national codes for periodic testing of the entire smoke control system. Refer to National Fire Protection Association (NFPA) National



MS4120F1006



MS4104F1210

Fire Codes NFPA90A, NFPA92A, and NFPA92B for the application. NFPA recommends periodic examination of each fire/smoke damper (annually or semi-annually) to ensure proper performance.



1

ACTUATORS & DAMPERS

COMMON SPECIFICATIONS

Motor	DC with brushes	Noise	
Wiring		Driving Open	80 dBA @ 3' (1.0 m)
MS4xxx	32" leads, 18 AWG and 7/8" knockout holes for conduit fittings	Holding	20 dBA @ 3' (1.0 m) no audible noise
MS8xxx	39" leads, 18 AWG and 7/8" knockout holes for conduit fittings	Life Expectancy	30,000 cycles
Action	CW/CCW mounting method	Operating Temperature	0° to 130°F (-18° to 55°C)
Rotation	95° ±3°, mechanically limited	Operating Humidity	5 to 95% RH, non-condensing
Auxiliary Switch		Approvals	CE, C-TICK, cULus, UL873, NEMA1
-F120X	2 SPST, 5A res., 3A ind. @ 250VAC	Warranty	5 years
-F10XX	None		

DIMENSIONS

Model	Torque	Dimensions	Maximum Shaft Diameter	Minimum Shaft Length	Weight	Enclosure Rating
MSxxxx	30 in-lb (3.4 Nm)	8.94"H x 5.125"W x 3.25"D (22.7 x 13.0 x 8.3 cm)	0.5" (1.3 cm)	2" (5.1 cm)	5.0 lb (2.3 Kg)	NEMA 1 (IP40)
MSxxxx	80 in-lb (9 Nm)					
MSxxxx	175 in-lb (20 Nm)	10.7"H x 2.9"W x 3.9"D (2.71 x 7.5 x 10.0 cm)	1.03" (2.6 cm)	1.0" (2.5 cm)	7.0 lb (3.2 Kg)	NEMA 2 (IP54)

WIRING

Typical 24 Vac wiring (MS Series).	Typical 24 Vac wiring (S20 Series).	Typical 120 Vac wiring.



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1

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INDIVIDUAL SPECIFICATIONS

Model	Torque	Supply Voltage	Supply VA	Control Signal	Drive Time	Spring Return Time	Weight
MS4104F1010	30 in-lb (3.4 Nm)	24 VAC +20%, -10%, 50/60 Hz	16 VA running, 8 VA holding	Two-position	25 seconds	15 seconds	5.0 lb (2.3 Kg)
MS4104F1210	30 in-lb (3.4 Nm)	24 VAC +20%, -10%, 50/60 Hz	16 VA running, 8 VA holding	Two-position	25 seconds	15 seconds	5.0 lb (2.3 Kg)
MS4604F1010	30 in-lb (3.4 Nm)	120 VAC +10%, 60 Hz	0.18A running, 0.11A holding	Two-position	25 seconds	15 seconds	5.0 lb (2.3 Kg)
MS4604F1210	30 in-lb (3.4 Nm)	120 VAC +10%, 60 Hz	0.18A running, 0.11A holding	Two-position	25 seconds	15 seconds	5.0 lb (2.3 Kg)
MS8104F1010	80 in-lb (9 Nm)	24 VAC +20%, -10%, 50/60 Hz	23 VA running, 7 VA holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS8104F1210	80 in-lb (9 Nm)	24 VAC +20%, -10%, 50/60 Hz	23 VA running, 7 VA holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS4109F1010	80 in-lb (9 Nm)	120 VAC +10%, -15%, 60 Hz	0.25A running, 0.13A holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS4109F1210	80 in-lb (9 Nm)	120 VAC +10%, -15%, 60 Hz	0.25A running, 0.13A holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS4609F1010	80 in-lb (9 Nm)	230 VAC ± 10%, 50/60 Hz	0.13A running, 0.09A holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS4609F1210	80 in-lb (9 Nm)	230 VAC ± 10%, 50/60 Hz	0.13A running, 0.09A holding	Two-position	25 seconds	20 seconds	5.0 lb (2.3 Kg)
MS8109F1010	175 in-lb (20 Nm)	24 VAC +20%, -10%, 50/60 Hz	45 VA running, 10 VA holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS8109F1210	175 in-lb (20 Nm)	24 VAC +20%, -10%, 50/60 Hz	45 VA running, 10 VA holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4120F1006	175 in-lb (20 Nm)	120 VAC +10%, 60 Hz	0.35A running, 0.15A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4120F1204	175 in-lb (20 Nm)	120 VAC +10%, 60 Hz	0.35A running, 0.15A holding 0.20A running, 0.14A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4620F1005	175 in-lb (20 Nm)	230 VAC +10%, 50/60 Hz	0.20A running, 0.14A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4620F1203	175 in-lb (20 Nm)	230 VAC +10%, 50/60 Hz	0.20A running, 0.14A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4620F1203	175 in-lb (20 Nm)	230 VAC +10%, 50/60Hz	0.20A running, 0.14A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)
MS4620F1005	175 in-lb (20 Nm)	230 VAC +10%, 50/60Hz	0.20A running, 0.14A holding	Two-position	15 seconds	15 seconds	7.0 lb (3.2 Kg)

ORDERING INFORMATION

MODEL

MS4104F1010

MS4104F1210

MS4604F1010

MS4604F1210

MS8104F1010

MS8104F1210

MS4109F1010

MS4109F1210

MS4609F1010

MS4609F1210

MS8109F1010

MS8109F1210

MS8120F1002

MS8120F1200

MS4120F1006

MS4120F1204

MS4620F1005

MS4620F1203

DESCRIPTION

Fire/smoke actuator, 30 in-lb, 120 VAC

Fire/smoke actuator, 30 in-lb, 120 VAC, w/ 2 aux. switches

Fire/smoke actuator, 30 in-lb, 230 VAC

Fire/smoke actuator, 30 in-lb, 230 VAC, w/ 2 aux. switches

Fire/smoke actuator, 30 in-lb, 24 VAC

Fire/smoke actuator, 30 in-lb, 24 VAC, w/ 2 aux. switches

Fire/smoke actuator, 80 in-lb, 120 VAC

Fire/smoke actuator, 80 in-lb, 120 VAC, w/ 2 aux. switches

Fire/smoke actuator, 80 in-lb, 230 VAC

Fire/smoke actuator, 80 in-lb, 230 VAC, w/ 2 aux. switches

Fire/smoke actuator, 80 in-lb, 24 VAC

Fire/smoke actuator, 80 in-lb, 24 VAC, w/ 2 aux. switches

Fire/smoke actuator, 175 in-lb, 24 VAC

Fire/smoke actuator, 175 in-lb, 24 VAC, w/ 2 aux. switches

Fire/smoke actuator, 175 in-lb, 120 VAC

Fire/smoke actuator, 175 in-lb, 120 VAC, w/ 2 aux. switches

Fire/smoke actuator, 175 in-lb, 230 VAC

Fire/smoke actuator, 175 in-lb, 230 VAC, w/ 2 aux. switches

ACCESSORIES

201391

205649

32003532-005

Shaft adapter for 3/8" shafts

Surface mounting bracket (not supplied with actuator) for MLxx15, MSxx09

Auxiliary switch, dual SPDT, for MLxx15, MSxx09 fire/smoke actuators