

HONEYWELL DIRECT COUPLED ACTUATORS SPRING RETURN S SERIES

DESCRIPTION

S Series Actuators high-performance spring return, medium and high torque, direct coupled actuators from Honeywell are designed and tested to provide reliable spring return control for dampers and valves that require up to 175 in-lb (20 Nm) of torque. The **S Series** has an excellent feature set that combines flexibility and simplicity.

FEATURES

- *Self-centering shaft adapter*
- *Auto adapt on modulating models*
- *Internal or field-installable auxiliary switches*
- *Selector switch for modulating or floating*
- *Adjustable zero and span*
- *Mechanical override crank*
- *Detachable wiring cover*
- *Five-year standard Honeywell warranty*

Honeywell



MS7510



ACTUATORS & DAMPERS

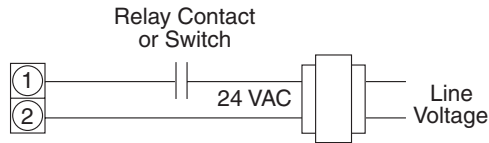
SPECIFICATIONS			
Power	24 VAC ±20%, 50/60 Hz, 120 VAC (two-position only)	Spring return direction	cw or ccw (flippable)
Control signal	Two-position 24 VAC, Two-position 120 VAC, floating/proportional	Ambient temp	-40° to 140°F (-40° to 60°C)
Electrical ratings		Ambient humidity	5% to 95% noncondensing
MS7505	13 VA	Sound	<35 dB(A) at 3' (1m)
MS7510	14 VA	Life expectancy	60,000 full cycles, 1.5 million repositions nominal
MS7520	16 VA	Resolution	200 (±10) positions in 95 degrees rotation
MS8105	25 VA	Housing	NEMA 2 (IP54) horizontal
MS8110	30 VA	Conduit connection	1/2" NPS
MS8120	40 VA	Wiring connection	Enclosed terminal strip
MS4105	45 VA	Shaft diameter	0.38" to 1.06" (0.95 to 2.7 cm) self-centering
MS4110	45 VA	Min shaft length	1" (2.5 cm) (3"/7.6 cm recommended)
MS4120	60 VA	Feedback	2-10 VDC (proportional models only)
Torque		Operation timing	90 sec
MSXX05	44 in-lb (5 Nm)	Spring-return timing	20 sec nominal
MSXX10	88 in-lb (10 Nm)	Agency approvals	UL, ULC, CE, C-TICK, plenum rated
MSXX20	175 in-lb (20 Nm)	Dimensions	2.9"H x 3.9"W x 9.8"L (25 x 10 x 7.5 cm)
Stall torque		Weight	7 lb (3.2 kg)
MSXX05	88 in-lb (10 Nm)		
MSXX10	175 in-lb (20 Nm)		
MSXX20	350 in-lb (40 Nm)		
Rotation	95 ±3 degrees		



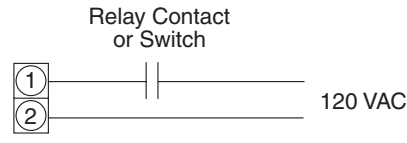
ACTUATORS & DAMPERS

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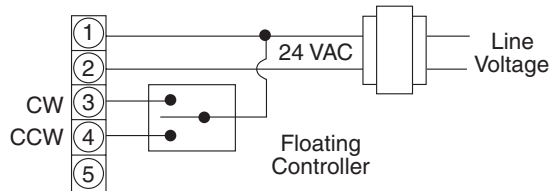
WIRING



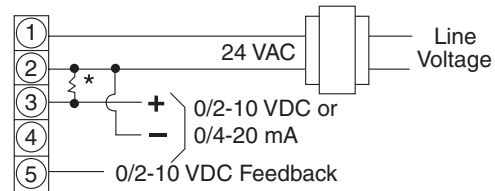
MS81xx
Two-position Control



MS41xx
Two-position Control

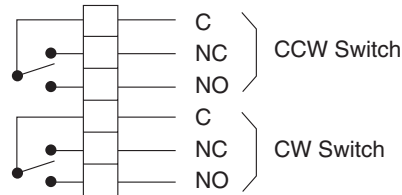


MS75xx
Floating Control



* 500Ω, 1/2W or greater resistor required when control signal is 0/4-20 mA

MS75xx
Proportional Control



SW2
Auxiliary Switch Kit

Note: **SW2** auxiliary switches are adjustable and field installed on the actuator. Order **SW2** auxiliary switch kit. Some actuator models are available with factory installed integral auxiliary switches (see below).

Ratings: 230V max, 5A resistive, 3A inductive

ORDERING INFORMATION

MODEL	DESCRIPTION
MS8105A1008	Spring return 44 in-lb, two-position, 24 VAC (catalog number S0524-2POS)
MS4105A1002	Spring return 44 in-lb, two-position, 120 VAC (catalog number S05120-2POS)
MS7505A2008	Spring return 44 in-lb, proportional/floating (catalog number S05010)
MS8110A1008	Spring return 88 in-lb, two-position, 24 VAC (catalog number S1024-2POS)
MS8110A1206	Spring return 88 in-lb, two-position, 24 VAC, int. aux. switch (catalog number S1024-2POS-SW2)
MS4110A1002	Spring return 88 in-lb, two-position, 120 VAC (catalog number S10120-2POS)
MS4110A1200	Spring return 88 in-lb, two-position, 120 VAC, int. aux. switch (catalog number S10120-2POS-SW2)
MS7510A2008	Spring return 88 in-lb, proportional/floating (catalog number S10010)
MS7510A2206	Spring return 88 in-lb, proportional/floating, int. aux. switch (catalog number S10010-SW2)
MS8120A1007	Spring return 175 in-lb, two-position, 24 VAC (catalog number S2024-2POS)
MS8120A1205	Spring return 175 in-lb, two-position, int. aux. switch (catalog number S2024-2POS-SW2)
MS4120A1001	Spring return 175 in-lb, two-position, 120 VAC (catalog number S20120-2POS)
MS4120A1209	Spring return 175 in-lb, two-position, int. aux. switch (catalog number S20120-2POS-SW2)
MS7520A2007	Spring return 175 in-lb, proportional/floating (catalog number S20010)
MS7520A2205	Spring return 175 in-lb, proportional/floating, int. aux. switch (catalog number S20010-SW2)

RELATED PRODUCTS

SW2	Auxiliary switch kit
32004254-002	Self-centering shaft coupler for S Series (replacement)
ZGR01	500Ω, 1/2W resistor
50001194-001	Universal surface mount bracket/crank arm
50000407-001	Tandem mount bracket