

# M SERIES

400, 675, 1000 & 1500 IN-LBS, NEMA 4

The M series rotary electric actuator was designed for small and medium size valve and damper applications. This industrial grade reversing actuator has been manufactured for over thirty years and has achieved an impeccable reputation for reliability in applications requiring repeated superior performance year after year.



## SPECIFICATIONS:

TORQUE	MS	400 In-Lb (45.2 Nm)
	MR	675 In-Lb (76.3 Nm)
	ML	1000 In-Lb (113Nm)
	MH	1500 In-Lb (169.5Nm)

CYCLE TIME	MS	10 Sec./90	12Vdc, 24Vdc, 24Vac, 115Vac & 230Vac
	MS	20 Sec./90	115Vac extended duty motor (75%) & 24Vdc (alternative)
	MR & ML	15 Sec./90	12Vdc, 24Vdc, 24Vac, 115Vac & 230Vac
	MR & ML	30 Sec./90	115Vac extended duty motor (75%) & 24Vdc (alternative)
	MH	30 Sec./90	12Vdc, 24Vdc, 24Vac, 115Vac & 230Vac
	MH	60 Sec./90	115Vac extended duty motor (75%) & 24Vdc (alternative)

DUTY CYCLE            25% standard on 115Vac and 230Vac  
 75% optional on 115Vac extended duty motor  
 100% standard on 12Vdc, 24Vdc and 24Vac

MOTOR                    Permanent split capacitor (for AC) with thermal overload protection

CURRENT RATINGS    FL= Full Load, LR= Lock Rotor

	115VAC (Std.)		24VAC & 24VDC		12VDC		208VAC/1PH/60HZ		230VAC/1PH/60HZ	
	FL	LR	FL	LR	FL	LR	FL	LR	FL	LR
MS & MR	0.38	0.75	0.90	3.20	1.70	4.20	0.21	0.42	0.18	0.38
ML & MH	0.38	0.75	1.10	3.20	2.20	4.20	0.21	0.42	0.18	0.38

The motor's LR amps must be taken into account when sizing the input power supply and fuses. Slow blow fuses are recommended

CERTIFICATION        CSA                    Master Contract 178618  
 CLASSIFICATION    3221 02 – Valves – Actuators; 3221 82 – Valves – Actuators Certified to US Standards  
 CANADIAN            C22.2 No. 139-1982 (Reaffirmed 2000) – Electrically Operated Valves  
                               C22.2 No. 94-M91 (Reaffirmed 2001) – Special Purpose Enclosures  
 UNITED STATES      UL 429, 5th Edition (8 Oct 2004) – Electrically Operated Valves  
                               UL 50, 11th Edition (12 Sep 2003) – Enclosures for Electrical Equipment

CERTIFIED VOLTAGES    115Vac  
 CERTIFIED ENCLOSURE    Type 4  
 CERTIFIED TEMP.        -4F (-20C) to 104F (40C)  
 CERTIFIED OPTIONS      One or Two Auxiliary Switches, Dec clutching Manual Override with Hand Wheel, Friction Brake, Power On Brake and Power Off Brake for 115Vac (For complete list of options, see option grid in catalog page 40)

COATING                Thermally bonded polyester powder



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POSITION INDICATOR	Visual Electric	Dome Indicator Feedback from limit switches, same as operating voltage
SWITCHES	Snap action	SPDT, 15A @ 250Vac
LUBRICATION	Grease	Permanent, little or no maintenance required
WEIGHT	MS, MR & ML – 16 lb (7.26 kg)	MH – 22 lb (10 kg)
MOUNTING	Universal	
MOUNTING PAD	ISO 5211 F05 & F07 with 17mm star drive	
TEMPERATURE	-40F (-40C) to 150F (65.6C), heater & thermostat required 0F and below Optional double heater for application down to -76F (-60C)	
OVERRIDE	Manual, Declutching Hand Wheel	

## TECHNICAL DRAWING:

