

Miniaturized



- 8mm, 11mm, 12mm & 15mm Stroke Lengths
- ±2% Standard Linearity
- 40 Million Cycles Life Span
- Stainless Steel Shaft
- Shaft Spring Return (MMR Type)

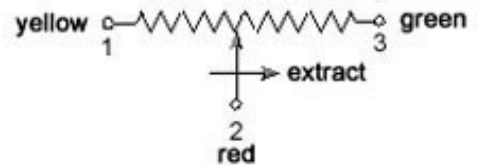
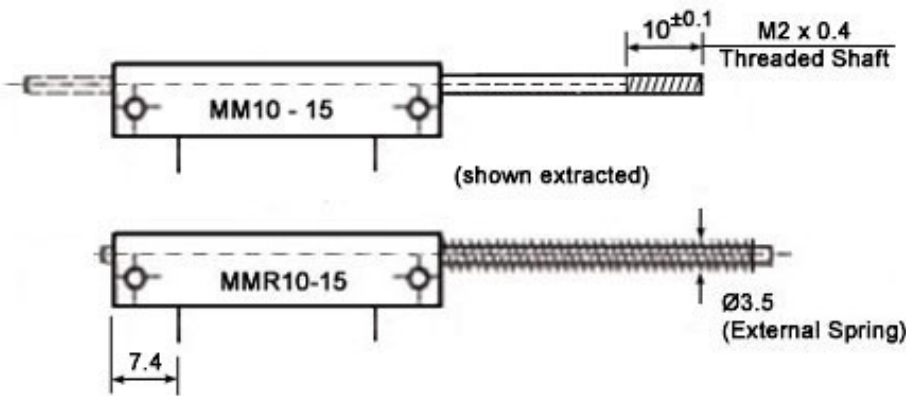
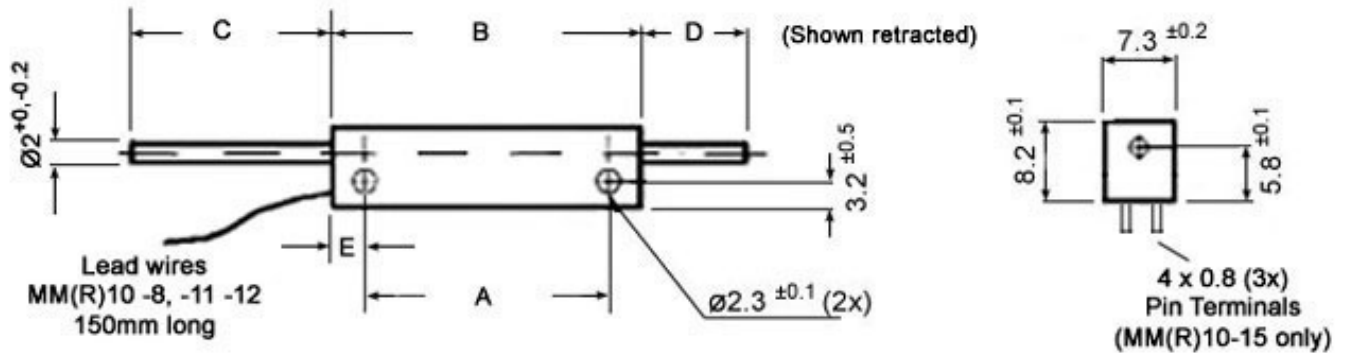
Compact linear motion potentiometer features long life, high resolution conductive plastic element. MM10 version without a shaft spring. MMR10 version is with shaft spring which acts to maintain the shaft fully extracted.

Electrical Specifications	MM(R)10-8	MM(R)10-11	MM(R)10-12	MM(R)10-15
Electrical stroke (±0.5mm)	8mm	11mm	12.7mm	15mm
Resistance Values	1, 2, 5, 10 20, 50 (K ohms)			
Resistance Tolerance (standard)	± 15% (10% optional)			
Linearity Tolerance (standard)	± 2% (1% optional)			
Resolution	Essentially infinite (<0.01mm)			
Output Smoothness	<0.1% against input voltage			
Power @ 40°	0.2 W			
Temperature Coefficient of Element	400 ppm/K			
Contact Resistance Variation	<2%			
Insulation Resistance	>1,000 Mohm @ 500 VDC			
Dielectric Strength	1 minute @ 500 VAC			
Maximum Wiper Current	1mA			
Recommended Wiper Current	<1µA			
Mechanical Specifications	MM(R)10-8	MM(R)10-11	MM(R)10-12	MM(R)10-15
Mechanical Stroke (mm)	8±1	12±1	13±1	15+3,-0
Operating Friction (MM10, no spring)	< 0.3N (30gf)			< 0.5N (50gf)
Operating Friction (MMR10, spring)	3N (300gf)			5N (500gf)
Stopper Strength	10 (N)			
Weight	5 grams			
Life Expectancy - Shaft Cycles	Version MM10 (no spring) 40 million / Version MMR10 (w/spring) 20 million			
Displacement Speed	2 m/s			
Vibration	15 g/10Hz to 2,000 Hz			
Shock	50 g/11ms			
Environmental Specifications				
Operating Temperature	-25°C to +105°C			
Storage Temperature	-40°C to +125°C			
IP Protection Grade	IP40 (IP54 optional)			
Standards	MIL-R-12934			
Materials				
Housing	Duroplast			
Shaft	Stainless steel			
Wire Leads	0.5mm x 150mm long (MM(R)10-15: pin terminals, gold plated brass)			

Dimensions (mm)

MM(R)10 -8, -11, -12, -15

(MMR10 -8, -11, -12: shaft spring is internal)



Dimensions Table (mm)

	MM(R)10 - 8	MM(R)10 - 11	MM(R)10 - 12	MM10 - 15	MMR10 - 15
A (±0.2)	25.4	25.4	25.4	32	32
B (±0.5)	32	32	32	37	37
C max. (±1)	18	22	23	28	18
C min. (±1)	10	10	10	10	0
D max. (±1)	18	22	23	28	37
D min. (±1)	10	10	10	10	19
E	3.3	3.3	3.3	2.5	2.5

Options

- Shaft modifications
- Longer or shorter shaft lengths
- Longer lead wires
- Fractional resistance values
- Non standard resistance values
- IP54 sealing

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