

Linear Potentiometers MS19-SRA Series (Body Ø19) – Return Spring

The MS-19 series of linear potentiometers are designed to withstand the harsh environments of testing and industrial applications. Using proven 'Conductive Plastic' technology, the sensors offer high performance and reliability at operational temperatures up to +150°C

The heavy duty 19mm diameter MS19-SRA is available with stroke lengths up to 150mm a choice of potentiometer and regulated analogue outputs, sealing up to IP67.



Specifications :

Mechanical

Stroke lengths (mm)	50 / 100 / 150
Operational speed	10 m/s
Electrical & Mechanical life	> 25 millions de cycles (depending on installation and environmental conditions)
Material	Housing – Aluminium Shaft – Stainless steel
Operating Temperature	-40°C - +150°C (Potentiometer output) ; -30°C - +125°C (4-20mA, 0-5V, 0-10V output)
Sealing	IP54 (felt) ; IP65 (2 x Viton O ring)

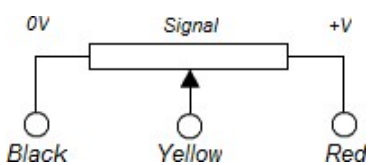
Electrical (Potentiometer Output)

Technology	Conductive plastic
Max. Supply Voltage	40 VDC
Resolution	Essentially infinite
Output signal	Potentiometer (voltage divider)
Recommended Wiper Current	< 10 µA
Independent Linearity	≤ +/- 0,5 %
Repeatability	≤ 0,01mm

Electrical (Regulated Outputs)

Technology	Conductive plastic with "on board" signal conditioning
Supply Voltage	6-30VDC (4-20mA ; 0-5V output) ; 11-30VDC (0-10V output)
Resolution	Essentially infinite
Reverse Polarity Protection	Yes
Output Signal	4-20mA ; 0-5V ; 0-10V
Independent Linearity	≤ +/- 0,5 %
Repeatability	≤ 0,01mm

Electrical Connection (Potentiometer output)



Wiring	+Ve Supply	0V Supply (GND)	Signal
Connection	RED	BLACK	YELLOW

Electrical connection (0-5V ; 0-10V Output) :

Wiring	+Ve Supply	0V Supply (GND)	Signal
Connection	RED	BLACK	YELLOW

Electrical connection (4-20mA Output) 2 wire :

Wiring	+Ve Supply	0V Supply (GND)	
Connection	RED	BLACK	(Yellow wire = Not used)

Electrical Cable

Cable Type	Raychem 55A, 24AWG, FDR 25 sleeve
Cable Length	Approximately 500 mm
Output Signal	Output signal may be reversed by swapping connections to the Red & Black and Brown & Blue wires. DO NOT connect +Ve supply to the Yellow or White wires, as this will cause damage to the sensor element



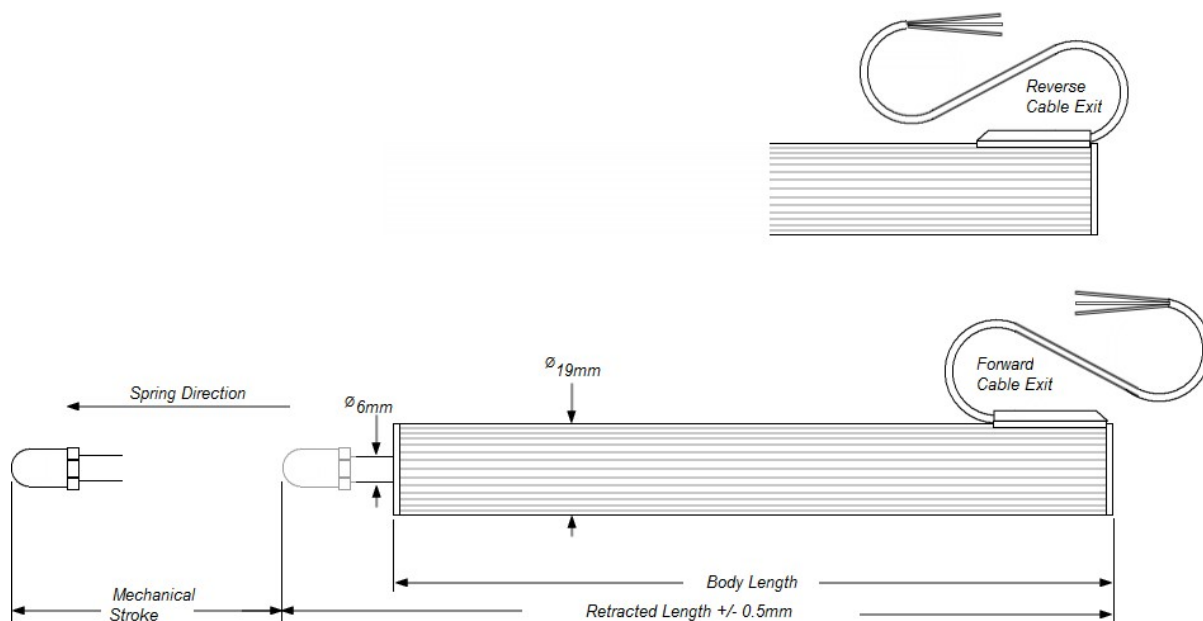
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Dimensional drawing

Electrical Stroke (mm)	50	100	150
Retracted Mounting Distance (mm)	208	258	358
Min. Mechanical Stroke (mm)	52	102	152
Body Length (mm)	182	232	332
Approx. Weight Without Cable (g)	127	135	151
Resistance (K Ω +/-20%)	3.4	6.7	10

End Shaft

M5 Dome Nut



Ordering Information :

MS19-SRA - **050** - **L50** - **IP65** - **F010** - **I420**

Series

MS19-SRA

Stroke Length (mm)

050 / 100 / 150

Linearity

L50 = +/- 0.50% PE

Seal Rating

IP54

IP65

Cable exit Direction

F = Forward facing cable exit

R = Reverse facing cable exit

Cable Length

005 = 0,5 m (standard)

020 = 2 m

Or any other length

Options

I420 = 4-20mA regulated output

U005 = 0-5V regulated output

U010 = 0-10V regulated output



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