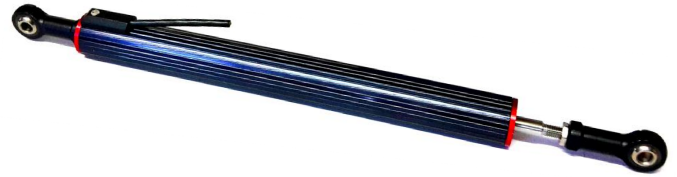


Linear Potentiometers MS19-M Series (Body Ø19) – Rod End Bearings

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-M is available with stroke lengths up to 450mm, a choice of potentiometer and regulated analogue outputs, sealing up to IP67.

Specifications :

Mechanical

Stroke lengths	25 / 50 / 75/ 100 / 150 / 200 / 250 / 300 / 350 / 400 / 450
Operational speed	10 m/s
Electrical & Mechanical life	> 25 millions de cycles (depending on installation and environmental conditions)
Material	Body – 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) ; IP67 (PTFE U spring, Viton O ring)

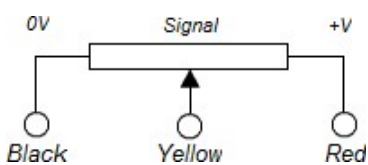
Electrical (Potentiometer Output)

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)	Signal
Connection	RED	BLACK	(Yellow wire = Not used)

Electrical Cable

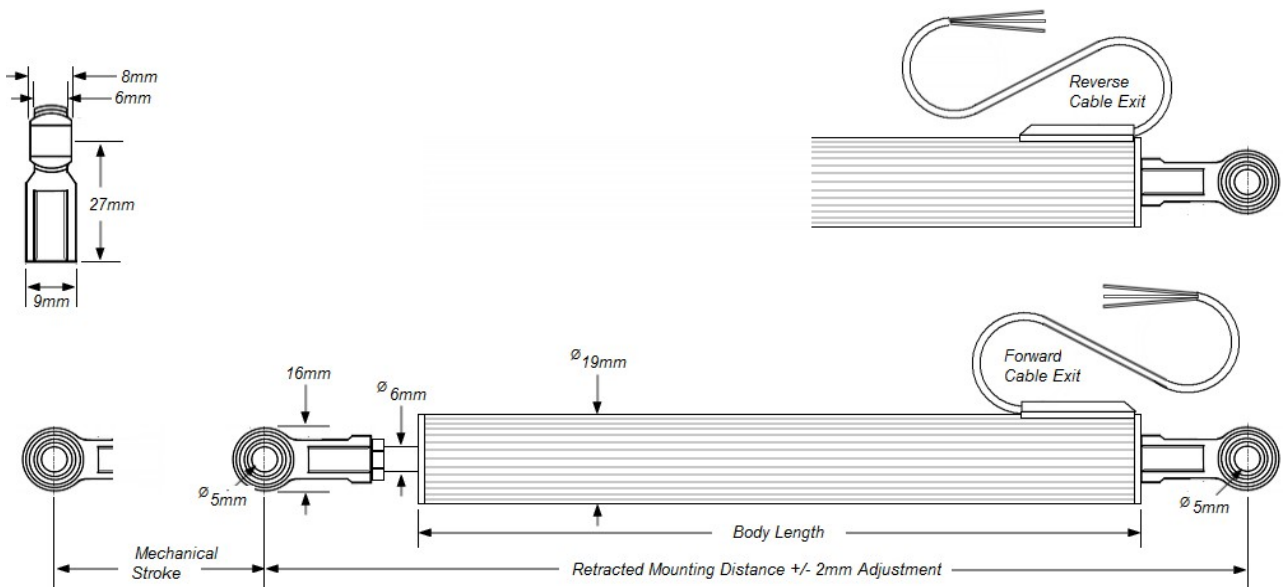
Cable Type	Raychem 55A, 24AWG, FDR 25 sleeve
Cable Length	Approximately 500 mm
Output Signal	Output signal may be reversed by swapping connections to the Red & Black and Brown & Blue wires. DO NOT connect +Ve supply to the Yellow or White wires, as this will cause damage to the sensor element



Dimensional drawing

Electrical Stroke (mm)	25	50	75	100	150	200	250	300	350	400	450
Retracted Mounting Distance (mm)	173	198	223	248	298	348	398	448	518	568	618
Min. Mechanical Stroke (mm)	27	52	77	102	152	202	252	302	352	402	452
Body Length (mm)	107	132	157	182	232	282	332	382	452	502	552
Approx. Weight Without Cable (g)	123	127	131	135	143	151	159	167	223	278	333
Resistance (K Ω +/-20%)	1.7	3.4	5	6.7	10	13.4	16.7	20	23.4	26.7	30

Mechanical Fixing Red End Bearings - \varnothing 5mm



Ordering Information :

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

Series

MS19-M

Stroke Length (mm)

025 / 050 / 075 / 100 / 150 / 200 / 250 / 300 / 350 / 400 / 450

Linearity

L50 = +/- 0.50% PE

Seal Rating

IP54

IP65

IP67

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



Tel : +33 (0)3 88 02 09 02 / Fax : +33 (0)3 88 02 09 03 / E-mail : info@ak-industries.com / Web : http://www.ak-industries.com