KR Series

Linear Position Sensor

Feature:

- High resolution and excellent performance
- Ejector rod automatic reset, spring external
- Two bracket installation, generous appearance
- Strong temperature stability, built-in conversion module
- Output signal can be: potentiometer, 0-10/5VDC, 4-20mA, RS485

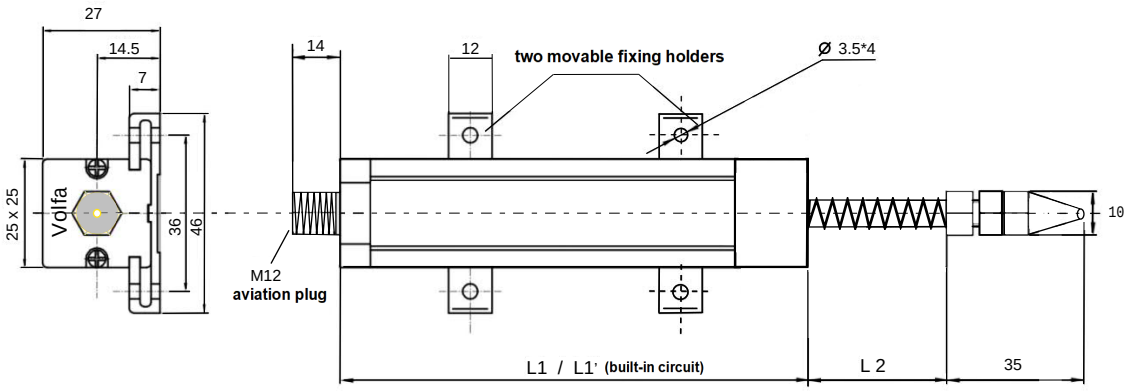
Details:

- Outer shell aluminum alloy, surface oxidation treatment
- Top rod stainless steel, copper steel ball probe hexagon nut fixed
- Bearing flexible wide copper bushing
- High precision conductive plastics for resistance components
- Sliding brush assembly multi-pin six-element alloy sliding brush, anti-radial offset design of the ejector rod • Electrical connection 4-pin M12 round aviation plug

Usage:

- Injection molding machine, extraction machine
- Experimental equipment, platform, building surface deformation monitoring
- Sluice control, woodworking machinery, hydraulic machinery, etc

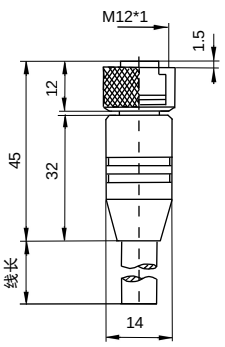
Dimensions:



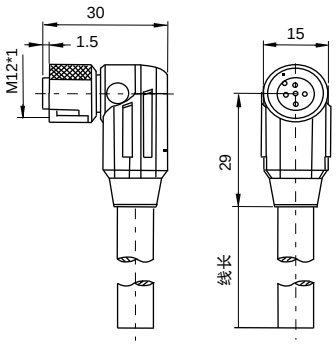
accessary size:

Aviation round plug

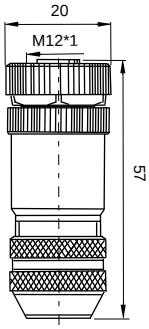
K4P*M-S-M12



K4P*M-SW-M12



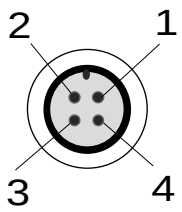
EEM33 - 88 - N



Parameters：

Parameter	unit	Details
Range （A）	mm	10 15 25 50 75 100 150 200
Mechanical range （+/-2.0）	mm	18 23 33 58 83 108 158 208
Electrical range	mm	A + 1.5
housing length（potentiometer L1）	mm	78 83 93 118 143 168 217 267
test rod length （L2）	mm	35 50 61 85 111 136 210 261
Built-in circuit integration （L1'）	mm	L1 + 50
Standard resistance	KΩ	default 5 1, 2, 3, 10 optional
Resistance tolarence	±%	15
Linearity	±%	0.1 / 0.05
Repeatability	mm	0.01
wiper working current	uA	<1
Drive force（horizontal direction）	N	＜ 2
Output signal type		potentiometer、（0-5)V DC、（0-10)V DC、（4-20)mA、RS485 (Modbus RTU)
Working temperature	℃	resistance output：-45 - 125， analog：-10 - 80
anti-viberation frequency	Hz	5...2000
amplitude	mm	Max= 1.5
acceleration	g	aMax= 15
anti-shock time	ms	11
force	g	50
Working life	time	> 20 x 10^6
Protection Class		IP 54 (DIN EN 60529)
Permissable working voltage Max	V	resistance signal：42， analog signal：18 - 30
Output & input voltage temperature coefficient	ppm/k	30 in general
insulation resistance	MΩ	>100 (500VDC)
insulation strength	uA	<100 (500VAC , 50Hz)

wirings：



PIN no.	K4P series connector (orange) no shielding	EEM33-88 -N + Grey shielding cable	Output 4-20mA	Output 0-10V	Serial Output RS485	Resistance Output
1	brown	brown	Signal+	24V	5V	5V/10V
2	white	green	24V	Signal+	Power ground	Signal+
3	blue	white		Signal-&GND	485+	Signal-&GND
4	black	yellow			485-	

instructions：

KR - XXX - XX

series

range

10 = 10 mm
15 = 15 mm
25 = 25 mm
50 = 50 mm
75 = 75 mm
. . .
200 = 200 mm

output signal

no: potentiometer output
A1: 4 - 20 mA two-wire system
V1: 0 - 10 V three-wire system
V2: 0 - 5 V three-wire system
R5: RS485 Modbus RTU

Matching cable：
4x0.14mm² PVC cable with 4 hole M12x1 straight connector

2m cable, type： K4P2M-S-M12
5m cable, type： K4P5M-S-M12
10m cable, type： K4P10M-S-M12

4x0.14mm² PVC cable with 4hole M12x1 angle connector

2m cable, type： K4P2M-SW-M12
5m cable, type： K4P5M-SW-M12
10m cable, type： K4P10M-SW-M12

4 hole straight Aviation plug
type：EEM33-88-N