

## The JK Position Sensor

### Linear Displacement Potentiometer

This range of resistive transmitters will measure linear movement of a valve, actuator, damper or any moving device and provide a current, voltage or resistive feedback signal proportional to position.



- **Compact Position Sensor**
- **Protection Class: IP55**
- **Measurement Range:  
0-35 mm to 0 –1250 mm**
- **Output: Current, Voltage or  
Resistive**

The transmitter uses a rotary potentiometer as the variable element. A coated steel wire is wound onto a pulley wheel with a constant force spring arrangement for wire retraction. The construction can provide a measure of damping if the anchor point of the wire is subject to vibration and can obviate mechanical wear if the motion is out of line with the potentiometer.

Standard versions are available ranging from 35mm up to 1250 mm (5000 mm special version), with either three wire resistive, two wire current (4-20mA) signal or 4 wire voltage (0-10 Volt, + supply voltage) output.

### Standard Features

Constant force return spring even up to the longest pull version.

Ceramic bush for the cord exit to reduce wear; miss-alignment of cord up to 30 degree.

Anti rotation swivel to avoid cord twisting.

Rolling bearings on main shaft to extend life and decrease stiction.

Nylon coated S/Steel pull cord.

Four core flexible screened cable, length 2 metres.

Customer calibration facility for current and voltage versions.

IP55 die cast alloy case, powder coated paint finish. Simple mounting by flanged feet front and back.

0.1% repeatability.

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## Options

Alternative pull cord materials, e.g. braided stainless steel, Kevlar.  
 Pull cord extensions for mounting at a distance from the subject.  
 Supply of various end fittings, eg. split ring, snap link, magnetic fitting.  
 Electrical plug and socket can be supplied, plastic or metal clad.  
 Armoured cable for harsh environments.  
 Custom brackets and pulleys to suit client's application.  
 Non-standard pull lengths.  
 Integral 4-20 mA 2-wire transmitter, or 0-10 V 4-wire transmitter.  
 The transmitter versions have span and zero calibration adjustments built in.  
 The transmitter electronics are also available as a stand-alone device to bring the span and zero adjustments to a convenient location away from the position sensor, e.g. in a safe area.  
 Battery operated, hand held read out instrument.

## Installation

JK Controls offer an application design and fitting service that ensures your installation is carried out efficiently and accurately. We can provide special design mounting hardware for your application and include installation and cabling services as necessary. We can also offer a complete design, supply, installation and commissioning service for your application.

## Ordering Information

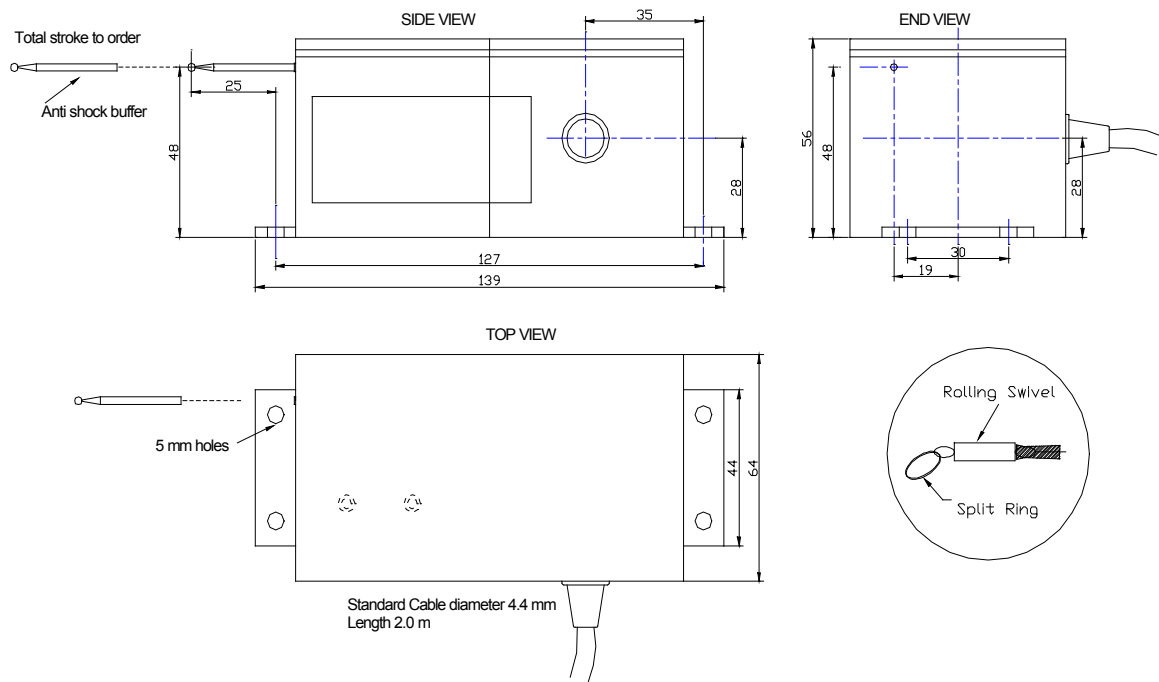
<b>Model Name</b>	<b>LDP</b>	<b>300</b>	<b>010V-122</b>	<b>AC5M</b>	<b>P8M,CE750,EF1</b>
<b>LDP</b>					
<b>Measurement Range (mm)</b>					
35, 75, 150, 300, 500, 1000, 1250					
<b>Outputs</b>					
420MA (4-20mA signal, 2 wire), -1 (Totally enclosed Span & Zero) -2 (Externally accessible Span & Zero)					
010V (0-10 Volt, 4 wire), -121 (9-15Vdc supply, totally enclosed Span & Zero) -241 (18-30Vdc supply, totally enclosed Span & Zero) -122 (9-15Vdc supply, Externally accessible Span & Zero) -242 (18-30Vdc supply, Externally accessible Span & Zero)					
R1K (Potentiometer 1KO, 3 wire). Other values on request.					
<b>Cable Length</b>					
SCnM - Standard Cable, n = length in metres ACnM - Armoured Cable, n = length in metres					
<b>Options (seperate codes by commas)</b>					
P4M - Plug and Socket, Metal (P8M for 0-10V version) P4P - Plug and Socket, Plastic (P8P for 0-10V version) CEn - Cord Extension (n = length in mm, minimum 50mm, maximum 2000mm) EFn - End Fixing (n = 1, Split ring - supplied as standard), (n = 2, Snap Link), (n = 3, Magnetic)					
<b>NOTE:</b> Above part number example for 300mm range with built in 0-10V transmitter with span and zero accessible without removing the lid, requiring voltage supply between 9 and 15 volts. Electrical connection via armoured cable 5m long with metal clad plug and socket. 750mm cord extension with split ring end fitting.					

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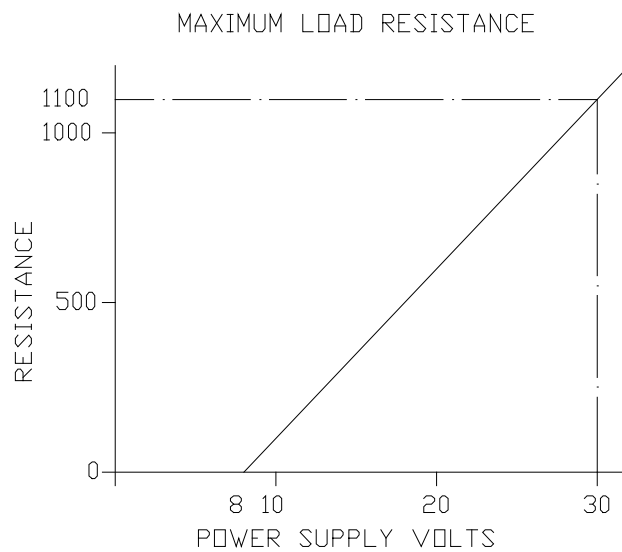
**Email. [engineering@jkcontrols.co.uk](mailto:engineering@jkcontrols.co.uk) Web. [www.jkcontrols.co.uk](http://www.jkcontrols.co.uk)**

### Dimensions

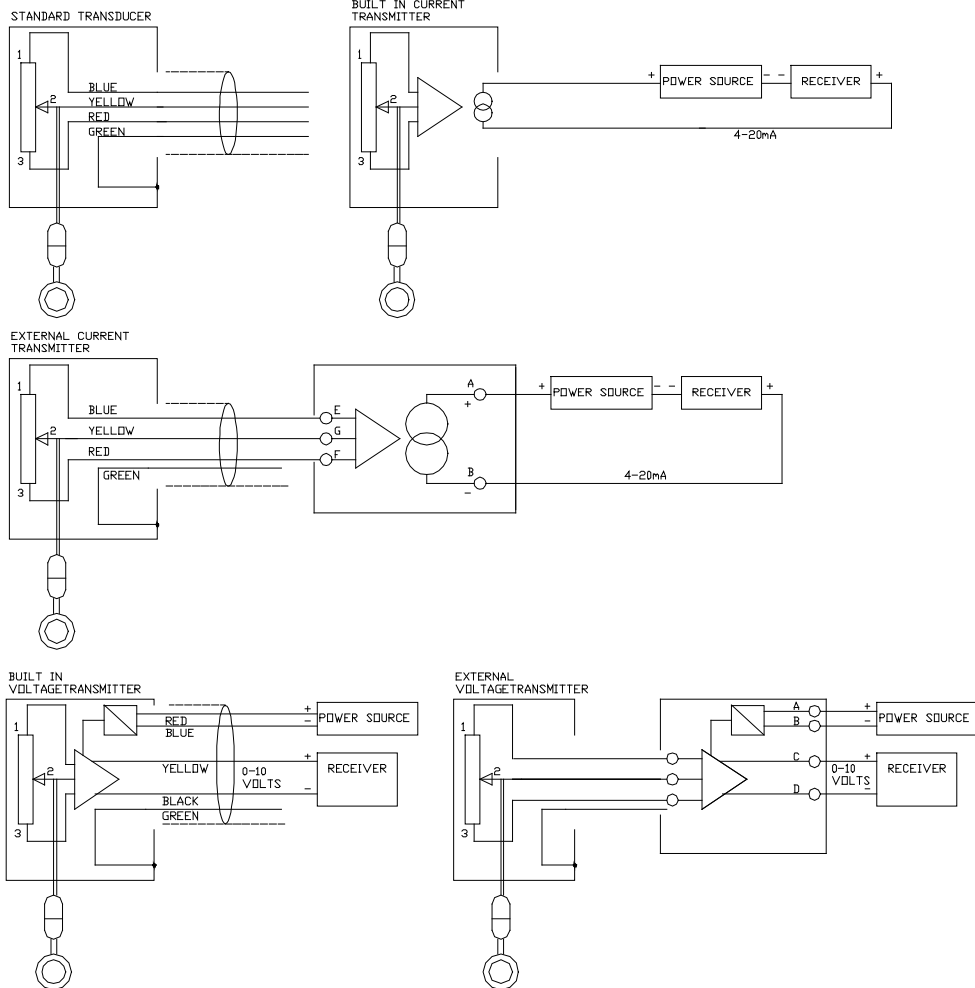
All dimensions are in mm.



### Current Load Compliance



### Connection Diagrams



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