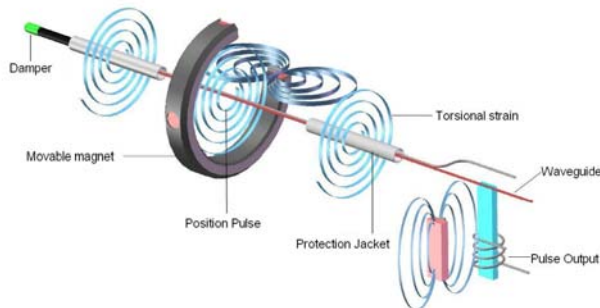
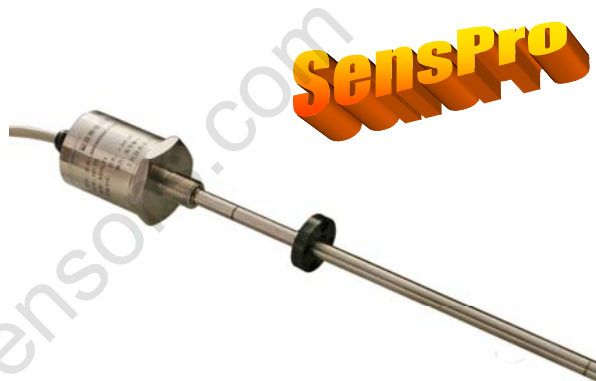


## SMC – Linear Position Sensor



SMC series linear position sensor is based on magnetostrictive principle and provides highly accurate absolute position measurement of displacement up to 120 inches (3 meters). Operation is based on accurately measuring the distance from a predetermined point to a magnetic field produced by a movable permanent magnet ring.

SMC is powered by 24VDC and integrated signal processing translates time-based position measurement directly into a market standard analog output signal. By providing an absolute output, no data is lost when power is interrupted. A user selectable 0-10VDC voltage (either low or high frequency response) or a 4-20mA current (3-wire) output is available in either forward or reverse slope signals. The contactless principle - an external movable magnet marks the position - eliminates the wear, noise and erroneous signal problems and guarantees the best durability without any recalibration.



The magnetostrictive linear displacement transducer operates in hostile industrial environments. The sensor probe is pressure-sealed to operate in hydraulic fluids up to 350Bar. Integral electronics are protected against contamination from dust.

### **Application**

- Hydraulic cylinder position
- Valve position sensing
- Printing and packing industry
- Plastic and rubber part manufacturing
- Tools and metalworking
- Port machinery

### **BENEFITS**

- Large stroke range
- High accuracy, resolution and stability
- Fast respond time,
- Linear measurement, absolute output
- EMI/RFI
- Up to 350Bar pressurize
- Frictionless operation

## Ordering Information

SM	C	G	2	-	0750M	C01	C41	3	1	P
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<p><b>Type</b> C = Ring Magnet F = Magnet Float X=Special</p> <p><b>Rod type</b> G=Hydraulic rod R=Profile soft rod</p> <p><b>Mounting</b> 0=M18x1.5 mm 2=M20x1.5 mm X=Special</p> <p><b>Stroke ---M</b> Millimeters (Encode in 5 mm increase)</p> <p><b>Electronic Connection</b> C--= meter cable (Encode in 1 meter increment) D--= Connector, number of pins, meter of cable XXX=Special</p>	<p><b>Package</b> P=General</p> <p><b>Operation Temp</b> 1=0 ~ 70 °C X=Special</p> <p><b>Rod Material</b> 3=304ss ø10mm X=Special</p> <p><b>Output</b> V01=0-10VDC C41=4-20mA (3-wire) V05=0-5VDC XXX=Special</p>
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## General Specification

<b>Stroke</b>	80mm~3000mm	<b>Input/output</b>	
<b>Mechanical zone</b>	Null: 50.8mm Dead: 63.5mm (consult for special)	<b>Input Power:</b>	15-30VDC
		<b>Consumption:</b>	<50mA
		<b>Output:</b>	0-10VDC, 0-5VDC, 4-20mA
<b>Accuracy:</b>		<b>Operating conditions:</b>	
Non-Linearity:	<±0.05% FS	Operating temperature:	-40°C... +75°C
Resolution:	<±0.002%FS	Mounting:	M18x1.5, M20X1.5 or custom
Repeatability:	<±0.002% FS		
<b>Material:</b>		<b>Electrical connection:</b>	
Sensor header:	304 ss	Connection type:	Cable or connector
Rod:	304 ss	Isolation:	500V (DC ground to machine ground)
Pressure rating:	350 bar		

## Dimension

