

The **XCT600 series** is a robust inductive in-cylinder linear sensor design with a Ø10mm aluminium sleeve, specifically developed for positional feedback in actuator applications, where temperature, pressure and fluid are a consideration.

Available with a measurement range from 50mm to 500mm (2" to 20"), the sensor provides the customer with the option of either an M10 thread or Ø10mm internal flange mounting.

Manufactured with high quality materials, they are typically specified in industrial and automotive control measurement systems. They operate from a 6 to 30VDC supply and provide a low noise analogue output of 0.5 to 4.5VDC.

The fully welded pressure area permits both models to operate up to 300 bar, the XCT0601 is supplied with a nitrile O ring to seal the front face. They are designed to operate to a maximum temperature of 125°C (257°F). The rear of the sensor and cable exit are environmentally protected against the ingress of dust and water to a maximum rating of IP68.

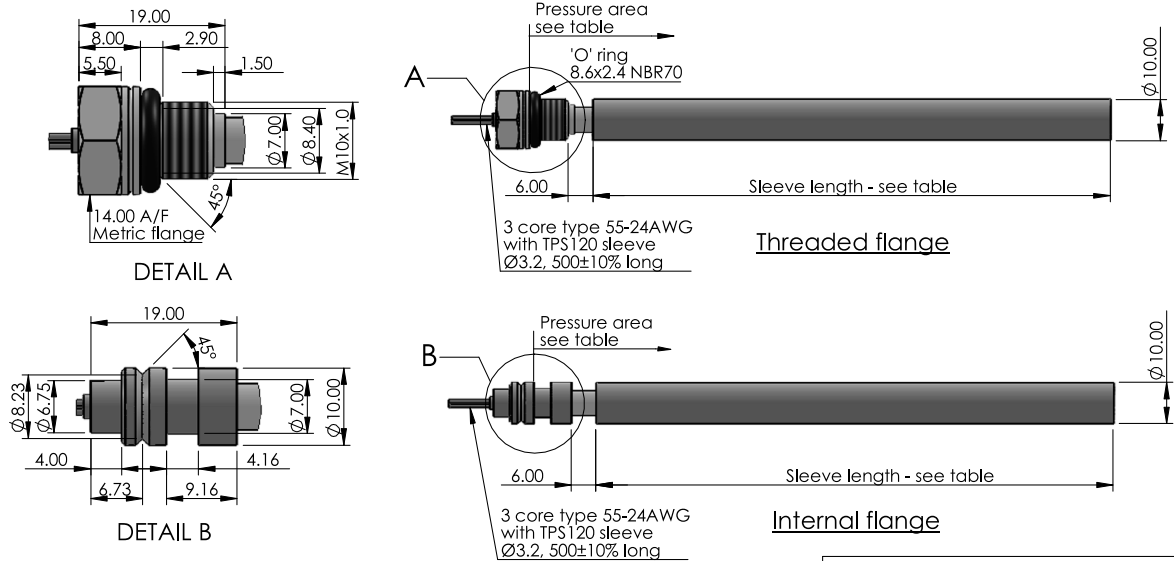
For total system integrity, they are fitted with fire and chemical resistant, high temperature, TPS125XL sleeved type 55-24AWG signal cabling.

Key features and benefits

- Measurement ranges 50mm to 500mm (2" to 20")
- Contactless technology
- Choice of threaded or internal flange mounting
- Maximum operating temperature of 125°C (257°F)
- Operate to a working pressure of 300 bar
- Sealed to IP68
- 3 core 24AWG XL-ETFE TPS125XL cabling
- Custom designs available on request



XCT In-cylinder with threaded or internal flange



Ordering Information: **XCT060X-XXX**

Flange option:
1 = Threaded flange
2 = Internal flange
Electrical Stroke in mm

Specification									
Input conditions (+Vs)	+6 to +30								VDC
Electrical stroke	50	100	150	200	250	300	400	500	mm
Mechanical stroke (max)	Electrical stroke length +2.0								mm
Sleeve length	96	146	196	246	296	346	446	546	mm
Non-linearity (note 2)	< ±1			< ±0.5					%FS
Sensitivity <±2% (see note 2)	80.0	40.0	27.0	20.0	16.0	13.0	10.0	8.0	mV/mm
Resolution	0.06								
Output voltage range (nominal)	0.5 to 4.5								VDC
Thermal drift (note 3)	< ±1								%FS
Operating temperature	-40 to +125								°C
Update rate	>500								Hz
Supply current	<10								mA
Torque setting	18								Nm
Pressure rating (note 5)	300								bar
Weight (approx)	60	98	136	174	212	288	364	440	grams
Environmental	IP68								
Material	Case - Stainless steel 316 Sleeve - Anodised aluminium alloy								

Notes:

1. Incorrect wiring may cause internal damage
2. Non-linearity error is calculated from least squares best fit method.
3. Maximum error over 0° to 80°C.
4. Dependent on medium within core guide tube bore.
5. See pressure resistance area. (As shown on drawing)
6. General dimension tolerance is ±0.25mm.

Electrical Connections - (see note 1)

