

# 16mm Eddy Current Sensor

Non-contact sensor designed for critical turbomachinery applications such as steam, gas and hydro turbines, compressors, pumps and fans to measure radial and axial shaft dynamic displacement; position, eccentricity and speed/key.

## DYNAMIC PERFORMANCE

Sensitivity	4 V/mm (101.6 V/inch) ±1.5% max
Air Gap (Center)	approx. 2.7 mm (0.11") nominal
Long Term Drift	< 0.3%
Range: Static:	±2.0 mm (0.079")
Dynamic:	0 to 1000µm (0 to 0.039")

## TARGET

Target/Surface Material	Ferromagnetic steel (42 Cr Mo 4 standard)
Maximum Surface Speed	2500 m/s (98425 ips)
Shaft Diameter	≥80mm
Linearity Error	≤ ±1.5%

## ENVIRONMENTAL

Operating Temperature Range	-35 to 180°C (-31 to 356°F)
Temperature Excursions <4 Hours	200°C (392°F)
Maximum Cable Temperature	200°C (392°F)
Temperature Error (ac-cording to API 670):	<4%/100 K
Pressure resistance to sensor head	10000 hPa (145 psi)
Shock and Vibration	5g @ 60Hz @ 25°C (77°F)

## POWER & ELECTRICAL

See Converter spec sheet (CON011, CON021, CON031, CON041)

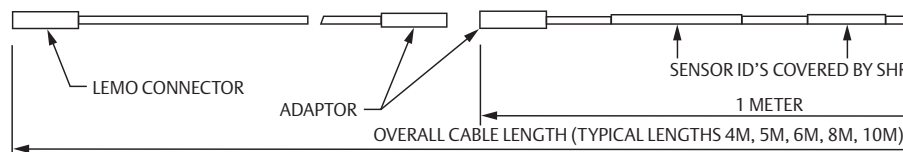
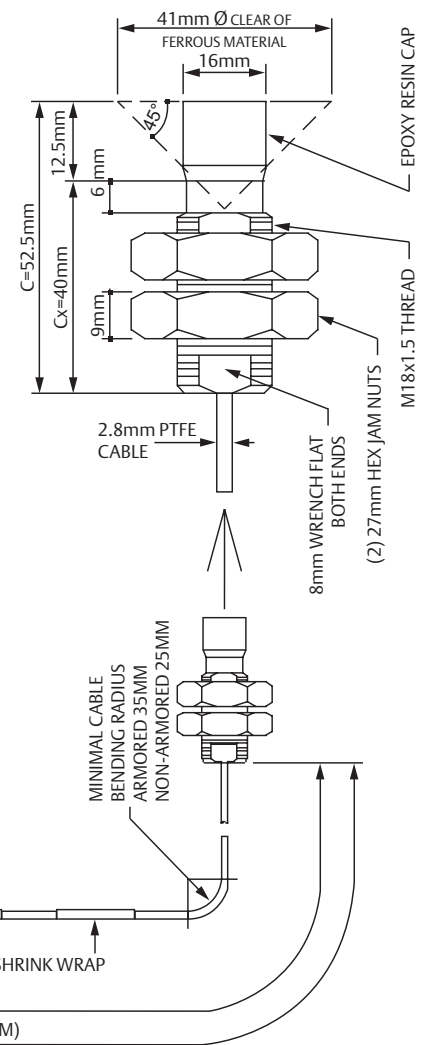
## PHYSICAL

Material	Sleeve – Stainless Steel, Cable – PTFE
Weight (Sensor & 1M Cable, no Armor)	~200 grams (7.05 oz)

## ACCESSORIES

Required – Converter (Lemo Connector: CON 011, CON 021)  
(Screw Terminal: CON 041)

Optional – Mounting Bracket, Metal Protection Tube, Cable Seals

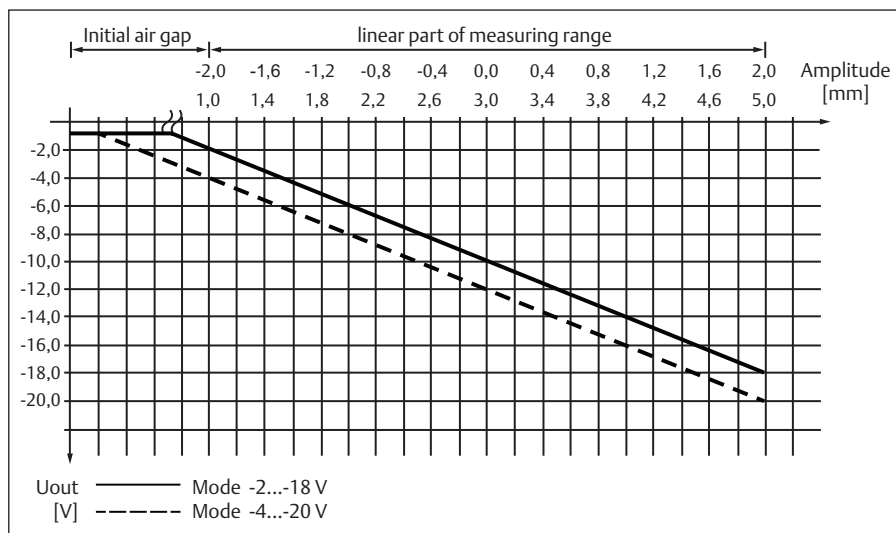


**AGENCY APPROVALS**

Dependent on Converter, mounting and safety Barriers; various CSA and ATEX agency approvals are standard, see Converter spec sheet for details.

Standards: DIN 45670, ISO 10817-1, API 670

ORDER MATRIX	PR 6424 /	X	X	X	-	X	X	X
Sleeve Thread:	M18x1.5	0						
Armored Cable	WITHOUT		0					
	WITH		1					
Total Sensor Length C=Cx +12.5mm	0(Cx=40mm), 1(50), 2(60), 3(70), 4(80), 5(90), 6(100), 7(110), 8(120), 9(130), A(140), B(150), C(160), D(170), E(180), F(190), G(200), H(210), J(220), K(230), L(240), M(250), N(260), P(270), Q(280), R(290)			X				
Adaptor Plug	WITH					0		
	WITHOUT					1		
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), 4(10m)						X	
Cable End	LEMO							0
	OPEN							1



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