

# 8mm 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	8 V/mm (203.2 V/inch) ±1% max
Air Gap (Center)	approx. 1.5 mm (0.06") nominal
Long Term Drift	< 0.3%
Range:	Static ±1 mm (0.040")
	Dynamic 0 to 500µm (0 to 0.020")

## TARGET

Target/Surface Material	Ferromagnetic steel (42 Cr Mo 4 standard)
Maximum Surface Speed	2500 m/s (98425 ips)
Shaft Diameter	≥25mm
Linearity Error	≤ ±1%

## 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 (according to API 670):	<2%/100 K
Pressure resistance to sensor head	10000 hPa (145 psi)
Shock and Vibration	5g @ 60Hz @ 25°C (77°F)

## PHYSICAL

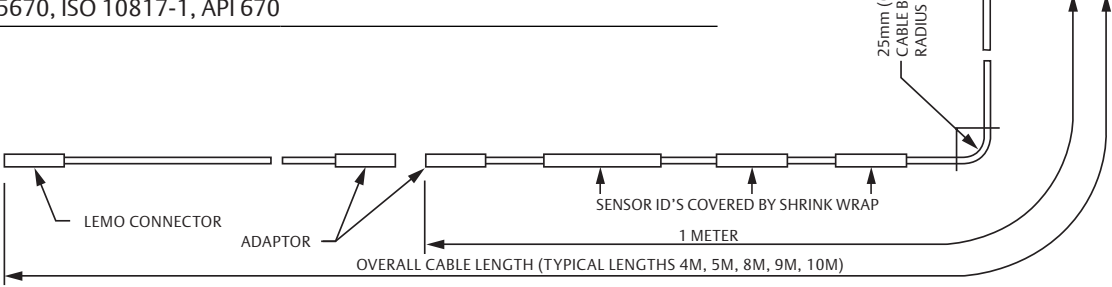
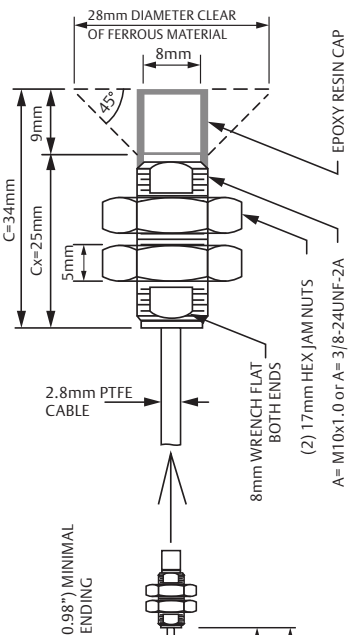
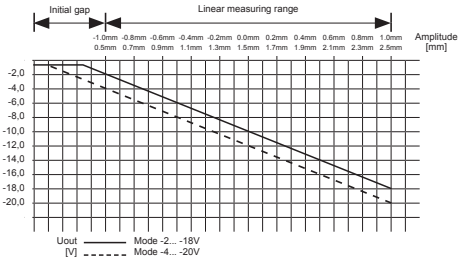
Material	Sleeve – Stainless Steel, Cable – PTFE
Weight (Sensor & 1M Cable, no Armor)	~100 grams (3.53 oz)

## 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



# Specifications Sheet

January 2014

PR 6423

ORDER MATRIX		PR6423 /	X	X	X	-	X	X	X
Sleeve Thread:	M10x1 3/8-24UNF-2A	0 1							
Armored Cable	WITHOUT WITH		0 1						
Total Sensor Length C=Cx +9mm	1(Cx=25mm), 2(45), 3(55),4(65),5(75), 6(85), 7(95), 8(105), 9(115mm)			X					
Cable Termination	WITH WITHOUT					0 1			
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), F(9m), 4(10m)						X		
Cable End	LEMO OPEN							0 1	

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