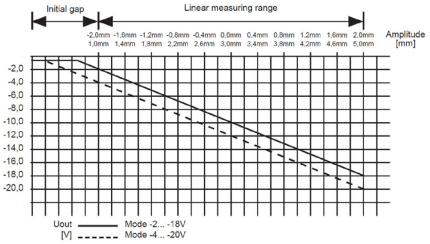
16mm Eddy Current Sensor



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/Linearity		4 V/mm (101.6 mV/mil) ≤ ±1.5%
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 1,000µm (0 to 0.039”)
Target		
Target/Surface Material		Ferromagnetic Steel (42 Cr Mo4 Standard)
Maximum Surface Speed		2,500 m/s (98,425 ips)
Shaft Diameter		≥80mm
Environmental		
Operating Temperature Range		-35 to 150°C (-31 to 302°F)
Temperature Error		<4%/100°K (API 670 Compliant)
Pressure Resistance to Sensor Head		10,000 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)		~200 grams (7.05 oz)



Compliance and Certifications	
CE	2014/30/EU (EN 61326-1) 2014/34/EU 2011/65/EU
ATEX	EN 60079-0 EN 60079-11
IEC-Ex	IEC 60079-0 IEC 60079-11 IEC 60079-26
CSA	CAN/CSA-C22.2 NO. 0-M91 CAN/CSA-C22.2 NO. 157-92 CAN/CSA-C22.2 NO. 213-M1987 CAN/CSA-E60079-15-02 (R2006) CAN/CSA-C22.2 NO. 25-1966 CAN/CSA-C22.2 NO. 61010-1-04 ANSI/UL Standard 913-2004 ANSI/UL Standard 1604-1995 UL 60079-15 2002 UL 61010-1

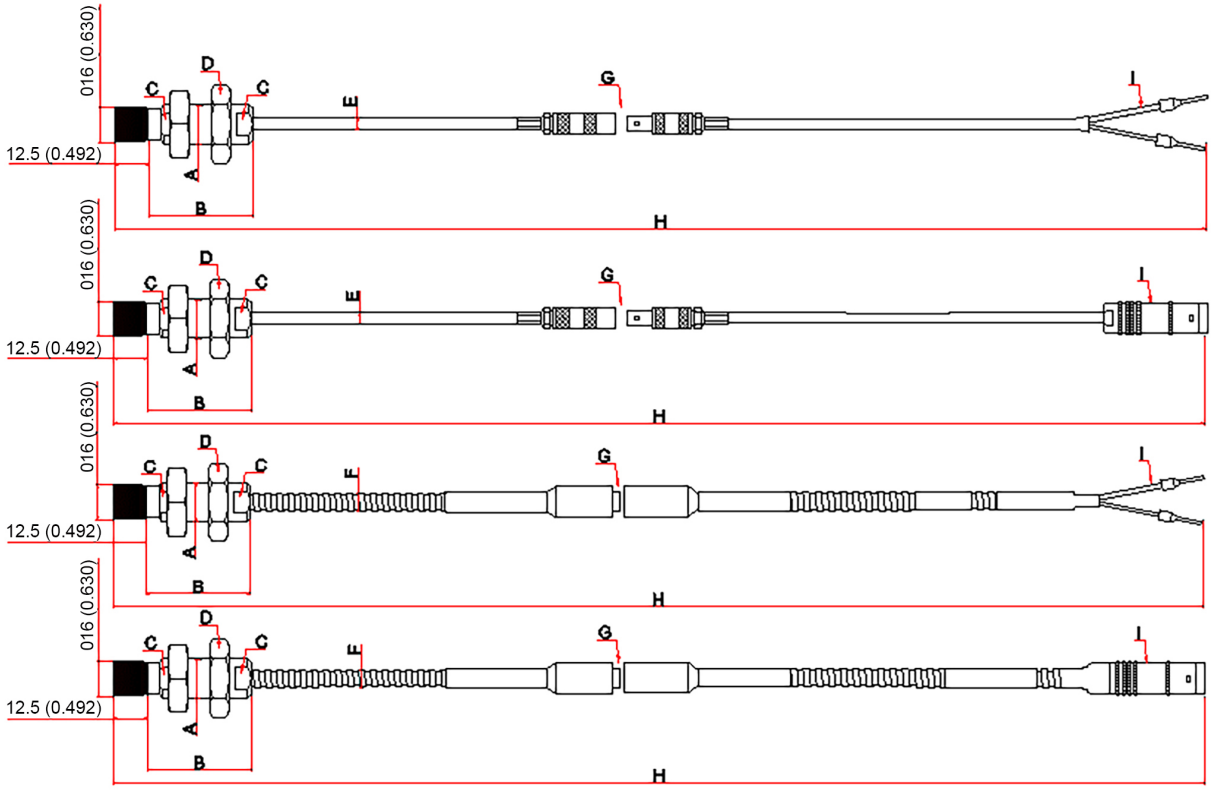
Hazardous Area Approvals

Compliance and Certifications	
ATEX / IEC-Ex	Area classification depends on converter, see converter documentation for details, sensor temperature classification: T6: Ta ≤ 84°C T4: Ta ≤ 114°C T3: Ta ≤ 160°C
CSA	Area classification depends on converter, see converter documentation for details, sensor temperature classification: T6: Ta ≤ 64°C T4: Ta ≤ 114°C T3: Ta ≤ 160°C
Non-sparking (nA)	
CSA	Area classification depends on converter, see converter documentation for details, sensor temperature classification: T6: Ta ≤ 64°C T4: Ta ≤ 114°C T3: Ta ≤ 160°C

Dimensions

PR6424/xxx-xxx

Note: All dimensions shown in millimetres (inches)



A. Case thread, M18x1.5 or 3/4-16UNF
B. Case Length
C. Wrench flats. SW 16 mm
D. SW 27 mm
E. Standard cable diameter 2.8 mm (0.11 in), minimum bending radius 25 mm (0.984 in)
F. Armored cable diameter 6 mm (0.236 in), minimum bending radius 35 mm (1.378 in)
G. Optional Adapter Plug after 1m cable fron Sensor
H. Cable Length (Tolerances 0...+10%)
I. Lemo connector (male), 11.0 mm (0433.in) diameter or open cable end

Ordering Information

Order Matrix	PR6424 /	X	X	X	-	X	X	X
Sleeve Thread	M18x1.5 3/4”-16 UNF	0 1						
Armored Cable	WITH WITHOUT		1 0					
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 WITHOUT					0 1		
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), 4(10m)						X	
Cable End	LEMO OPEN							0 1

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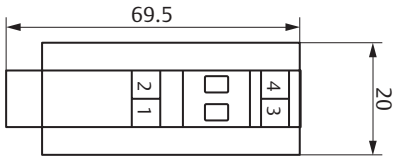
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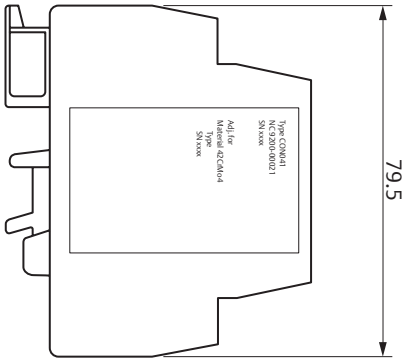
Eddy Current Signal Converter

Sensor Signal Converter designed for critical turbo machinery applications such as steam, gas and hydro turbines, compressors, pumps and fans to measure radial and axial shaft displacement, position, eccentricity and speed/key.

Dynamic Performance	
Frequency Range (-3 dB)	0 to 20,000 Hz
Rise Time	<15µs
NOTE: Designed for PR6422, PR6423, PR6424, PR6425, PR6426 For Extended Range Use: CON041/91x-xxx PR6425 Requires Extended Range Converter	
Environmental	
Operating Temperature Range	-30 to 100°C (-22 to 212°F)
Shock and Vibration	5g @ 60Hz @ 25°C (77°F)
Protection Class	IP20
Power & Electrical	
Supply Voltage Range	-23V to -32V (Output Range -4V to -20V)
	-21V to -32V (Output Range -2V to -18V)
Physical	
Housing Material / Weight	PA 6.6 / ~60 grams (2.12 oz)
Mounting	Din Rail
Connections	Screw Terminal (Max. 1.5mm2, Wire-end Sleeves)







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