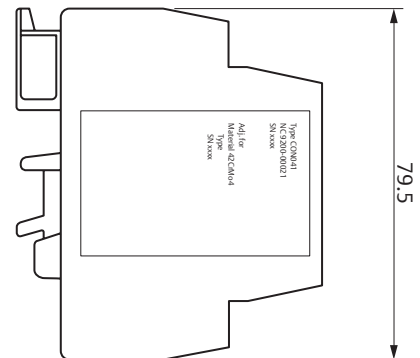
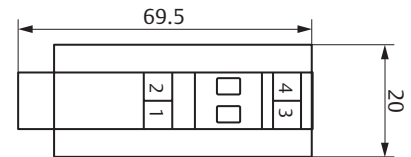


# Eddy Current Signal Converter

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. 1.5mm <sup>2</sup> , Wire-end Sleeves)



Compliance and Certifications	
CE	2014/30/EU 2014/34/EU 2011/65/EU EN61326-1 DIN EN 50581
ATEX	EN 60079-0:2009 EN 60079-11:2012
IEC-Ex	IEC 60079-0:2007-10; Edition 5 IEC 60079-11:2011; Edition: 6.0 IEC 60079-26:2006; Edition: 2
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

Intrinsic Safety (iA)	
ATEX	II 2 G Ex ia IIC T4 Gb, -20°C ≤ Ta ≤ 80°C (Use with current limiting, e.g.: safety barrier)
IEC-Ex	Ex ia IIC T4 Gb, -20°C ≤ Ta ≤ 80°C (Use with current limiting, e.g.: safety barrier)
CSA	Class I Division 1, Groups A, B, C, D, T4 T4: -25°C ≤ Ta ≤ 80°C (Use with current limiting, e.g.: safety barrier)
Non-sparking (nA)	
CSA	Class I Division 2, Groups A, B, C, D Ex nA II T3..T4 AEx nA II T3..T4 T4: -25°C ≤ Ta ≤ 80°C

## Ordering Information

Model Number	Sensor Type	Measuring Range	Linearity Error
CON041	PR6422 PR6423 PR6424 PR6426	1.0mm (Standard Range) 2.0mm (Standard Range) 4.0mm (Standard Range) 8.0mm (Standard Range)	≤ 1.5% ≤ 1.0% ≤ 1.5% ≤ 1.5%
CON041/912-015	PR6422	1.5mm (Extended Range)	≤ 2.0%
CON041/913-030	PR6423	3.0mm (Extended Range)	≤ 1.5%
CON041/913-040	PR6423	4.0mm (Extended Range)	≤ 2.0%
CON041/914-060	PR6424	6.0mm (Extended Range)	≤ 1.0%
CON041/914-080	PR6424	8.0mm (Extended Range)	≤ 1.5%
CON041/914-100	PR6424	10.0mm (Extended Range)	≤ 2.0%
CON041/915-040	PR6425	4.0mm (Standard Range)	≤ 1.5%
CON041/915-060	PR6425	6.0mm (Extended Range)	≤ 2.0%
CON041/915-080	PR6425	8.0mm (Extended Range)	≤ 3.0%
CON041/915-100	PR6425	10.0mm (Extended Range)	≤ 4.0%
CON041/916-120	PR6426	12.0mm (Extended Range)	≤ 1.5%
CON041/916-160	PR6426	16.0mm (Extended Range)	≤ 2.0%
CON041/916-200	PR6426	20.0mm (Extended Range)	≤ 2.5%
CON041/916-240	PR6426	24.0mm (Extended Range)	≤ 3.5%

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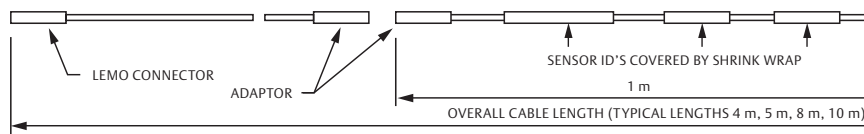
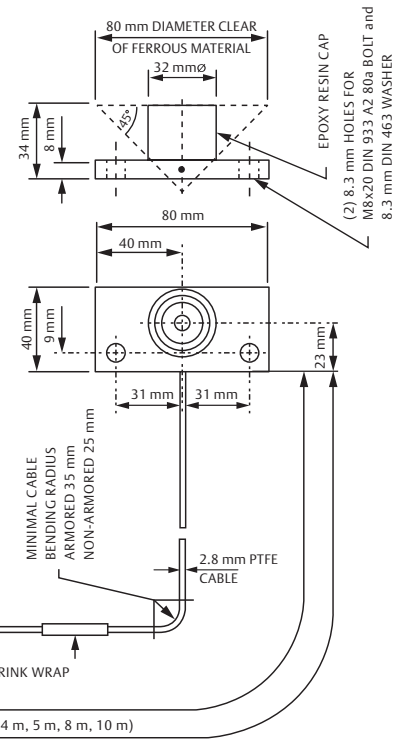
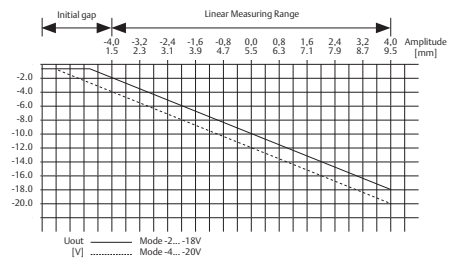
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# 32mm Eddy Current Sensor

Non-contact sensor 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 motion.



Dynamic Performance	
Sensitivity	2 V/mm (50.8 mV/mil) $\leq \pm 1.5\%$ max
Air Gap (Center)	Approx. 5.5 mm (0.22") Nominal
Long Term Drift	< 0.3%
Range	Static $\pm 4.0$ mm (0.157")
Target	
Target/Surface Material	Ferromagnetic Steel (42 Cr Mo 4 Standard)
Maximum Surface Speed	2,500 m/s (98,425 ips)
Shaft Diameter	$\geq 200$ mm (7.87")
Environmental	
Operating Temperature Range	-35 to 175°C (-31 to 347°F)
Temperature Excursions <4 Hours	200°C (392°F)
Maximum Cable Temperature	200°C (392°F)
Temperature Error (at +23 to 100°C)	-0.3%/100°K Zero Point
	<0.15%/10°K Sensitivity
Pressure Resistance To Sensor Head	6,500 hpa (94 psi)
Shock and Vibration	5g (49.05 m/s <sup>2</sup> ) @ 60Hz @ 25°C (77°F)
Physical	
Material	Sleeve - Stainless Steel, Cable - PTFE
Weight (Sensor & 1M Cable, no Armor)	~800 grams (28.22 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

Intrinsic Safety (iA)	
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

Order Matrix		PR6426 /	X	X	X	-	X	X	X
Sleeve Thread	NO THREAD	0							
Armored Cable	WITH WITHOUT		1 0						
Total Sensor Length	Mounting Plate 80 mm x 40 mm			0					
Adaptor Plug	WITH WITHOUT					0 1			
Total Cable Length	0(4 m), 1(5 m), 2(6 m), 3(8 m), 4(10 m)						X		
Cable End	LEMO OPEN							0 1	

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