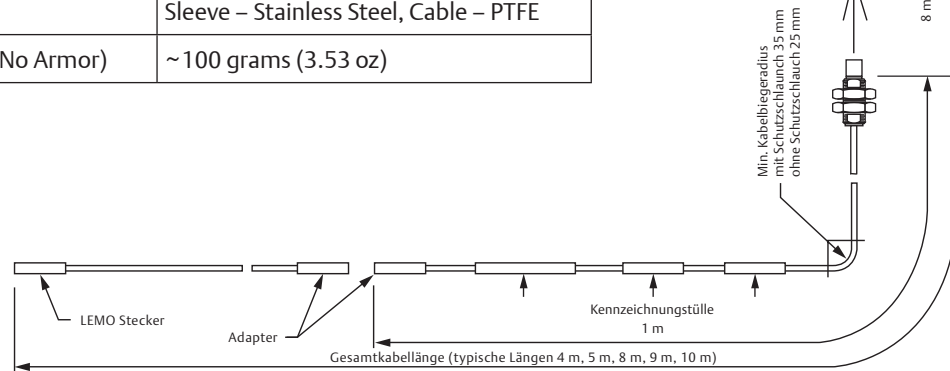
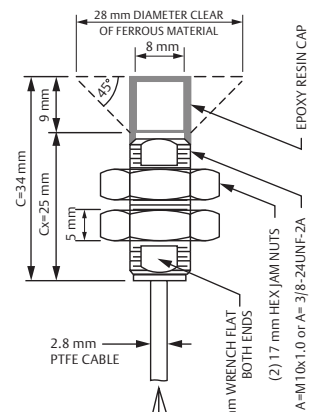
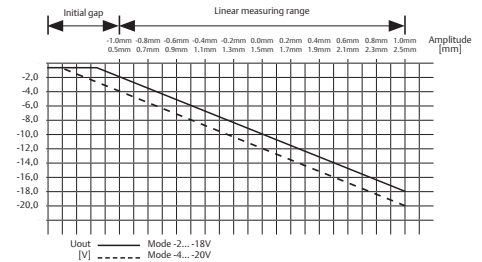


# 8 mm Eddy Current Sensor

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	8 V/mm (203.2 mV/mil) $\leq \pm 1\%$
Air Gap (Center)	Approx. 1.5 mm (0.06") Nominal
Long Term Drift	< 0.3%
Range:	Static $\pm 1$ mm (0.040")
	Dynamic 0 to 500 $\mu$ m (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	$\geq 25$ mm
Environmental	
Operating Temperature Range	Sensor and Cable: -35 to 200°C (-31 to 392°F)  Connector: -35 to 150°C (-31 to 302°F)
Temperature Error	<2%/100°K (API Compliant)
Pressure Resistance to Sensor Head	10000 hpa (145 psi)
Shock and Vibration	5g @ 60 Hz @ 25°C (77°F)
Physical	
Material	Sleeve – Stainless Steel, Cable – PTFE
Weight (Sensor & 1M Cable, No Armor)	~100 grams (3.53 oz)



Compliance and Certifications	
CE	2014/30/EU 2014/34/EU 2011/65/EU EN61326-1 DIN EN 50581
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 / 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		PR6423 / X X X - X X X						
Sleeve Thread	M10x1 3/8-24UNF-2A	0 1						
Armored Cable	WITH WITHOUT		1 0					
Total Sensor Length C=Cx+9mm	0(Cx=25 mm), 1(35 mm), 2(45 mm), 3(55 mm), 4(65 mm), 5(75 mm), 6(85 mm), 7(95 mm), 8(105 mm), 9(115 mm), C(125 mm), I(135 mm), K(145 mm), E(155 mm), M(165 mm), J(175 mm), L(185 mm), H(195 mm)			X				
Adaptor Plug	WITH WITHOUT					0 1		
Total Cable Length	0(4 m), 1(5 m), 2(6 m), 3(8 m), F(9 m), 4(10 m)						X	
Cable End	LEMO OPEN							0 1

**Product Accessories**

Model Number	Product Description
PR 6480	Probe Holder
MPT 064	Metal Protection Tube

**Emerson**  
**Reliability Solutions**  
 835 Innovation Drive  
 Knoxville, TN 37932 USA  
 ☎ +1 865 675 2400  
 🌐 [www.emerson.com/ams](http://www.emerson.com/ams)

©2017, Emerson. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.