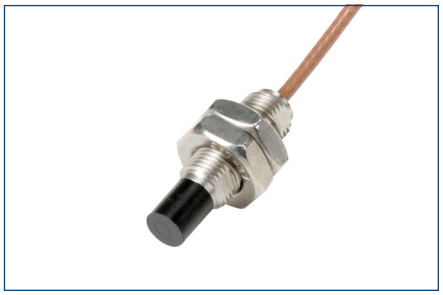
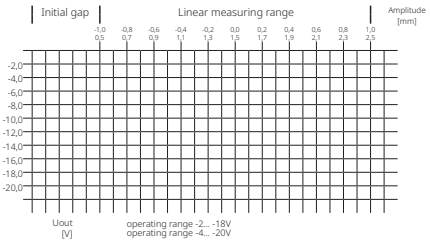
8mm Eddy Current Sensor



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



Performance	
Linear Measurement Range	2 mm (80 mils)
Initial Air Gap	0.5 mm (20 mils)
Incremental Scale Factor (ISF)	ISO: 8 V/mm (203.2 mV/mil) ± 5% @ temperature range 0 to 45°C (+32 to +113°F)
Deviation from best fit straight line (DSL)	± 0.025 mm (± 1 mil) @ temperature range 0 to 45°C (+32 to +113°F)
Measuring Target	
Minimum Shaft Diameter	25 mm (0.79”)
Target Material (Ferromagnetic Steel)	42CrMo4 (AISI/SAE 4140) Standard Other (On Request)
Environmental, General	
Protection Class	IP66, IEC 60529
Operating Temperature Range	Sensor incl. 1m Cable: -35 to +180°C (-31 to 356°F) Cable & Connector: -35 to +150°C (-31 to 302°F)
Material	Sensor Tip (PEEK Polyether Ether Ketone), Case (Stainless Steel) Cable (PTFE Polytetrafluoroethylene), Connector (Brass, nickel-plated)
Weight (Sensor with 1m Cable)	Approx. 100 grams (3.53 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 / 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)	
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

Ordering Information

Tip Diameter	Case Threads	Armored Cable	Model No.
8mm	M10x1	No	PR6423/00
		Yes	PR6423/01
			PR6423/03*
	3/8"-24 UNF	No	PR6423/10
		Yes	PR6423/11
			PR6423/13*

**Armored cable option for Reverse Mount, if Adapter Plug is chosen.*

Model No.	Case Thread X	Adapter Plug X	Cable Length X	Cable End X
PR6423/00 PR6423/01 PR6423/10 PR6423/11	**0** 25mm **1** 35mm **2** 45mm **3** 55mm **4** 65mm **5** 75mm **6** 85mm **7** 95mm **8** 105mm **9** 115mm **E** 155mm **H** 195mm **R** Reverse Mount	**0** With **1** Without	**0** 4.0m **1** 5.0m **3** 8.0m **F** 9.0m **4** 10.0m	**0** Lemo* **1** Open

**Not available, if Reverse Mount without Adapter Plug is chosen.*

Example: PR6423/000-000

ECS 8mm, M10X1, NO ARMOR, 25MM SLEEVE, 1+3M CABLE, LEMO

Special Version PR6423/xxx-xxx-RAD

Technical Data differing from Standard	
Material	Sensor Tip (Epoxy Resin) Case (Stainless Steel with EPDM O-Ring Sealing) Cable (Polyolefine)
Operating Temperature Range	-35 to +80°C (-31 to 176°F)
Radiation Resistance	Sensor & 1m Cable: up to 80Mrad Extension Cable & Converter: up to 0.1Mrad
Calculated Lifetime @ radiation of 0.5Sv/h:	With neutron radiation: 18.26 years With beta or gamma radiation: 183 years
Certifications	No hazardous area certification available!

Product Accessories

Model Number	Product Description
EZ 1600	Probe Holder
MPT 064	Metal Protection Tube

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