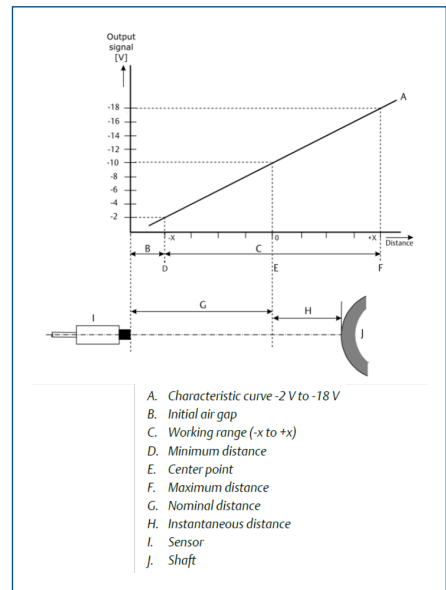
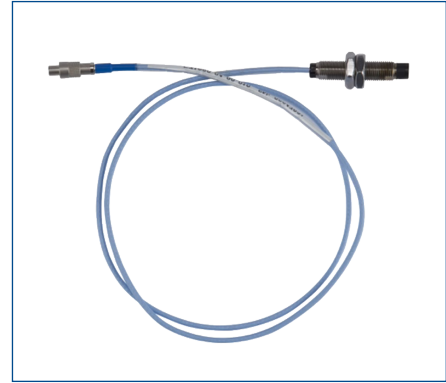


16mm Eddy Current Sensor

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/key.

Performance	
Linear Measurement Range	4 mm (160 mils)
Initial Air Gap	0.7 mm (28 mils)
Incremental Scale Factor (ISF)	ISO: 4 V/mm (101.6 mV/mil) ± 5%
Measuring Target	
Minimum Target Size	Minimum: 40 mm (1.57")
Minimum Shaft Diameter	Minimum: 80 mm (3.15")
Target Material (Ferromagnetic Steel)	42CrMo4 (AISI/SAE 4140) P235S C35 (AISI/SAE 1035) 34CrMo4 (AISI/SAE 4337, 4340) 26NiCrMoV14 ST 37, S235JR X35CrMo17 CK1500590 ASTM A276 Type 410 30CrNiMo8 18CrNiMo7-6 Other (On Request)



Environmental, General	
Protection Class	IP67, IEC 60529 IP68 (if DOC-TEST is assigned to delivered sensor)
Operating Temperature Range	Sensor incl. 1m Cable: -35 to +150°C (-31 to 302°F) Cable & Connector: -35 to +150°C (-31 to 302°F)
Material	Sensor Tip (Epoxy resin) Case (Stainless Steel) Cable (FEP Fluorinated Ethylene Propylene) Connector (Brass, nickel-plated)
Weight (Sensor with 1m Cable)	Approx. 200 grams (7.05 oz)

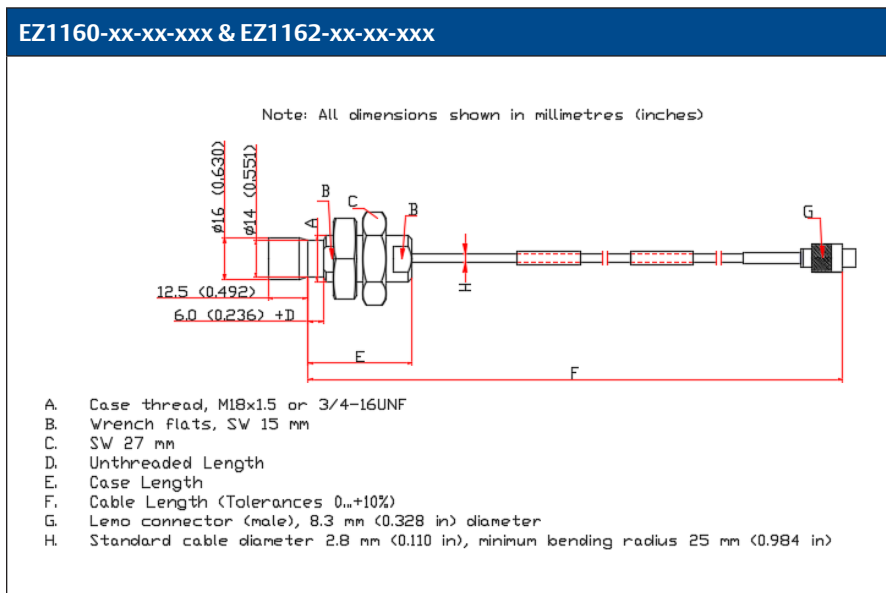
Compliance and Certifications

Model Number	Product Description
CE	2014/30/EU (EN 61326-1) 2014/34/EU 2014/65/EU (EN IEC 63000)
ATEX	EN IEC 60079-0:2018 EN IEC 60079-7:2015 + A1:2018 EN IEC 60079-11:2012
IEC-Ex	IEC 60079-0:2017 IEC 60079-7:2017 IEC 60079-11:2011
CSA	CAN/CSA-C22.2 NO. 0-10 CAN/CSA-C22.2 NO. 61010-1-12 CAN/CSA-C22.2 NO. 60079-0:19 CAN/CSA-C22.2 NO. 60079-11:14 CAN/CSA-C22.2 NO. 60079-7:16 UPD1:2015; UPD2:2016; AMD1:2018 UL 61010-1 UL 60079-0:19 UL 60079-11:13 UL 60079-7:2017

Hazardous Area Approvals

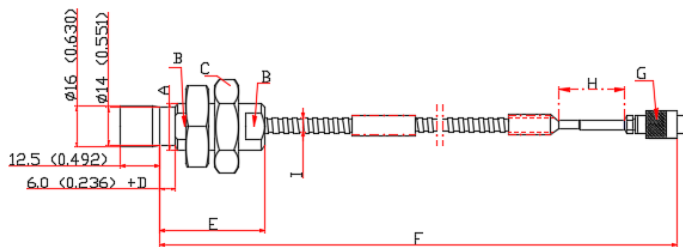
Intrinsic Safety (ia)	
ATEX / IEC-Ex / CSA	Area classification depends on converter, see converter documentation for details. Sensor temperature classification: T6: $-35^{\circ}\text{C} \leq T_a \leq 65^{\circ}\text{C}$ T4: $-35^{\circ}\text{C} \leq T_a \leq 130^{\circ}\text{C}$ T2: $-35^{\circ}\text{C} \leq T_a \leq 150^{\circ}\text{C}$
Increased Safety (ec)	
ATEX / IEC-Ex / CSA	Area classification depends on converter, see converter documentation for details. Sensor temperature classification: T6: $-35^{\circ}\text{C} \leq T_a \leq 65^{\circ}\text{C}$ T4: $-35^{\circ}\text{C} \leq T_a \leq 130^{\circ}\text{C}$ T2: $-35^{\circ}\text{C} \leq T_a \leq 150^{\circ}\text{C}$

Dimensions



EZ1161-xx-xx-xxx & EZ1163-xx-xx-xxx

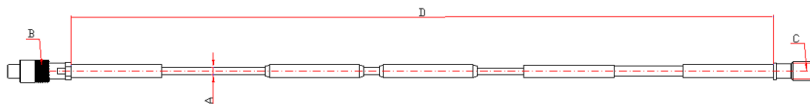
Note: All dimensions shown in millimetres (Inches)



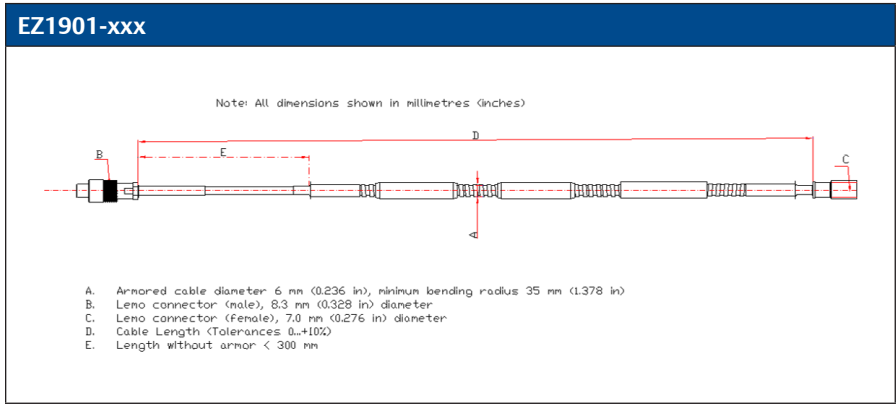
- A. Case thread, M18x1.5 or 3/4-16UNF
- B. Wrench flats, SW 15 mm
- C. SW 27 mm
- D. Unthreaded Length
- E. Case Length
- F. Cable Length (Tolerances 0...+10%)
- G. Lemo connector (male), 8,3 mm (0.328 in) diameter
- H. Length without armor < 30 mm at 1m, < 300 mm at 5m and 10m cable length
- I. Armored cable diameter 6 mm (0.236 in), minimum bending radius 35 mm (1.378 in)

EZ1900-xxx

Note: All dimensions shown in millimetres (Inches)



- A. Standard cable diameter 2.8 mm (0.110 in), minimum bending radius 25 mm (0.984 in)
- B. Lemo connector (male), 8,3 mm (0.328 in) diameter
- C. Lemo connector (female), 7,0 mm (0.276 in) diameter
- D. Cable Length (Tolerances 0...+10%)



Ordering Information Sensor

Case Threads	Armored Cable	Model No.
M18x1.5	No	EZ1160
	Yes	EZ1161
3/4"-16 UNF	No	EZ1162
	Yes	EZ1163

Model Number	-	Case Length XX	-	Unthreaded Length XX	-	Cable Length XXX
EZ1160		04 40mm (Minimum)		00 0mm (No UTL)		010 1.0m
EZ1161		05 50mm 06 60mm 07 70mm 08 80mm 09 90mm 10 100mm 15 150mm 20 200mm 25 250mm 29 290mm (Maximum) XX Xmm (On Request) Order in increments of 10mm.		XX Xmm (On Request) Note: Remaining threaded Length must be either 50mm or 100mm		050 5.0m 100 10.0m
EZ1162		15 1.5in (Minimum)		00 0mm (No UTL)		
EZ1163		20 2.0in 25 2.5in 30 3.0in 35 3.5in 40 4.0in 60 6.0in 80 8.0in 95 9.5in (Maximum) XX X.Xin (On Request) Order in increments of 0.5in		XX X.Xin (On Request) Note: Remaining threaded Length must be either 2.0in or 4.0in.		

Example:
 EZ1160-04-00-050
 ECS 16mm, M18X1.5, NO ARMOR, 40MM SLEEVE, 0MM UNTHREADED, 5M CABLE

Special Versions

Part Number	Description
EZ1xxx-xx-xx-xxx-001	Sensor option with special short armor.
EZ1xxx-xx-xx-xxx-002	Sensor option with FEP covered stainless steel armor.
EZ1xxx-xx-xx-xxx-003	Sensor option with special sealing.
EZ1xxx-xx-xx-xxx-004	Sensor option with special big Lemo connector.

Ordering Information Extension Cable

Model Number	-	Armored Cable X	-	Cable Length XXX
EZ1900		0 No		030 3.0m
EZ1901		1 Yes		040 4.0m 050 5.0m 060 6.0m 070 7.0m 080 8.0m 090 9.0m

Example:

EZ1900-040

ECS EXTENSION CABLE, NO ARMOR, 4M CABLE

Product Accessories

Model Number	Product Description
MPT 064	Metal Protection Tube

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