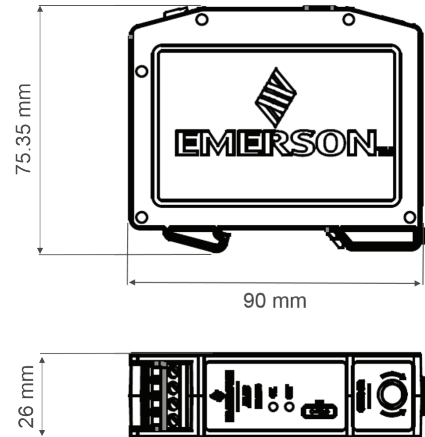


# Eddy Current Converter

Sensor Signal Converter 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.

## Compatible Sensors (Configurable)

Sensor Type	Measuring Range
AMS EZ105x (5mm Sensor)	1.0mm (Standard Range) 1.5mm & 2.0mm (Extended Range)
AMS EZ108x (8mm Sensor)	2.0mm (Standard Range) 3.0mm & 4.0mm (Extended Range)
Emerson PR6424 (w/ adaptation)	4.0mm (Standard Range) 8.0mm & 12.0mm (Extended Range)
Emerson PR6425 (w/ adaptation)	4.0mm (Standard Range) 8.0mm & 12.0mm (Extended Range)
Emerson PR6426 (w/ adaptation)	8.0mm (Standard Range) 16.0mm & 24.0mm (Extended Range)
Third Party Sensors (w/ adaptation)	Range depending on Sensor, currently only BN 3300 XL supported
Performance	
Frequency Range	0 to 20 kHz
Sensor Target Material (Configurable)	42CrMo4 (AISI/SAE 4140) P235S C35 (AISI/SAE 1035) 34CrMo4 (AISI/SAE 4337, 4340) 26NiCrMoV14 ST 37, S235JR X35CrMo17 Other (On Request)
Sensor Excitation Frequency	Three (Configurable)



Environmental, General	
Protection Class	IP20, IEC 60529
Supply Voltage Range	-21V to -32V (Output Range -2V to -18V)
Operating Temperature Range	-35 to +85°C (-31 to 185°F)
Relative Humidity	5 to 95%, non-condensing
Shock and Vibration	5g @ 60Hz @ 25°C (77°F)
EMR Resistance	EN 61326-1
Material	Housing Material: Polycarbonate (PC)
Weight	Approx. 100 grams (3.53 oz)
Mounting	DIN Rail
Connections	Sensor: Lemo-Plug Supply/Output: Screw Type (max. 1.5mm <sup>2</sup> ) Configuration: Micro-USB

## Compliance and Certifications

Model Number	Product Description
CE	EMC – EN61326-1 2014/30/EU 2014/34/EU 2011/65/EU
ATEX	EN 60079-0:2018 EN 60079-11:2012 EN 60079-15:2010
IEC-Ex	IEC 60079-0:2017 IEC 60079-11:2011 IEC 60079-15:2010
CCOE PESO India	IEC 60079-0:2011 IEC 60079-11:2011 IEC 60079-15:2010
CSA	CAN/CSA-C22.2 NO. 0-10 CAN/CSA-C22.2 NO. 61010-1-12 CAN/CSA-C22.2 NO. 60079-0:15 CAN/CSA-C22.2 NO. 60079-11:14 CAN/CSA-C22.2 NO. 60079-15:16 UL 61010-1:12 UL 60079-0:13 UL 60079-11:13 UL 60079-15:13

EAC	TP TC 012/2011 ГОСТ 31610.0-2014 ГОСТ 31610.11-2014 ГОСТ 31610.15-2014
CCC	GB 3836.1-2010 GB 3836.4-2010 GB 3836.8-2014
Marine	DNV GL rules for classification – Ships and offshore units
Safety (SIL): SC2 (SIL 2 Capable) [EZ1000-SIS only]	IEC 61508:2010 Parts 1-7

## Hazardous Area Approvals

Intrinsic Safety (ia)		
ATEX	II 1G – Ex ia IIC T6,T4,T2 Ga	Tamb: T6 (-35°C ≤ Tamb ≤ 50°C) T4 (-35°C ≤ Tamb ≤ 80°C) T2 (-35°C ≤ Tamb ≤ 80°C)
IEC-Ex	Ex ia IIC T6,T4,T2 Ga	
CSA	Ex ia IIC T2/T4/T6 Ga Class I, Zone 0, AEx ia IIC T2/T4/T6 Ga	
EAC-Ex	0Ex ia IIC T6/T4/T2 Ga X	
CCC-Ex	Ex ia IIC T6 Ga Ex ia IIC T4/T2 Ga	
CCOE PESO India	Ex ia IIC T6,T4,T2 Ga	
KTL Korea	Ex ia IIC T6,T4,T2	
CML Japan	Ex ia IIC T6,T4,T2 Ga	

Non-sparking (nA)		
ATEX	II 3G – Ex nA [ic] IIC T6,T4,T2 Gc	Tamb: T6 (-35°C ≤ Tamb ≤ 50°C) T4 (-35°C ≤ Tamb ≤ 80°C) T2 (-35°C ≤ Tamb ≤ 80°C)
IEC-Ex	Ex nA [ic] IIC T6,T4,T2 Gc	
CSA	Ex nA [ic] IIC T2/T4/T6 Gc Class I, Zone 2, wAEx nA IIC T2/T4/T6 Gc	
EAC-Ex	2Ex nA [ic] IIC T6/T4/T2 Gc X	
CCC-Ex	Ex nA [ic] IIC T6 Gc Ex nA [ic] IIC T4/T2 Gc	
CCOE PESO India	Ex nA [ic] IIC T6,T4,T2 Gc	
KTL Korea	Ex nA [ic] IIC T6,T4,T2	
CML Japan	Ex nA [ic] IIC T6,T4,T2 Gc	

## Ordering Information

Model Number	Product Description
EZ1000	EZ 1000 – Eddy Current Converter
EZ1000-FCAL	EZ 1000 CONVERTER, FACTORY CALIBRATED
EZ1000-SIS	EZ1000 CONVERTER, SAFETY RATED

## Product Accessories

Model Number	Product Description
MHM-9500-00187	DIN-RAIL TO PANEL MOUNT ADAPTER 98X70MM
EZ1900-003-ADAP-1	ECS CABLE ADAPTER PR642X/XXX-XX0, NO ARMOR, 0.35M CAB
EZ1900-003-ADAP-2	ECS CABLE ADAPTER BN, NO ARMOR, 0.35M CAB

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