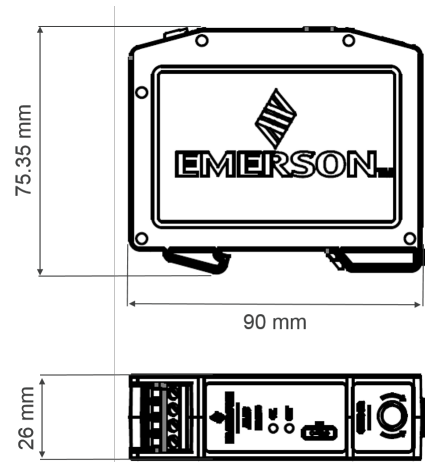


# Eddy Current Converter

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)
AMS EZ116x (16mm Sensor) 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 CK1500590 ASTM A276 Type 410 30CrNiMo8 18CrNiMo7-6 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	2014/30/EU (EN 61326-1) 2014/34/EU 2014/65/EU (EN IEC 63000)
ATEX	EN 60079-0:2018 EN IEC 60079-7:2015 + A1:2018 EN IEC 60079-11:2012
IEC-Ex KTL Korea	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
CCC	GB 3836.1-2010 GB 3836.4-2010 GB 3836.8-2014
CCOE PESO India	IEC 60079-0:2011 IEC 60079-11:2011 IEC 60079-11:2011
CML Japan	JNIO SH-TR-46-1:2020 JNIO SH-TR-46-6:2015 JNIO SH-TR-46-8:2015

Marine	DNV GL rules for classification – Ships and offshore units
Safety (SIL): SC2 (SIL 2 Capable) [EZ1000-SIS only]	IEC 61508:2010

## 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	
CCC-Ex	Ex ia IIC T6/T4/T2 Ga	
CCOE PESO India	Ex ia IIC T6,T4,T2 Ga	
KTL Korea	Ex ia IIC T6,T4,T2 Ga	
CML Japan	Ex ia IIC T6,T4,T2 Ga	

Increased Safety (ec)		
ATEX	II 3G Ex ec [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 ec [ic] IIC T6,T4,T2 Gc	
CSA	Ex ec [ic] IIC T2/T4/T6 Gc Class I, Zone 2, AEx ec [ic] IIC T2/T4/T6 Gc	
CCC-Ex	Ex nA [ic] IIC T6/T4/T2 Gc	
CCOE PESO India	Ex nA [ic] IIC T6,T4,T2 Gc	
KTL Korea	Ex nA [ic] IIC T6,T4,T2 Gc	
CML Japan	Ex nA [ic] IIC T6,T4,T2 Gc	

## Ordering Information

Model Number	Product Description
EZ1000	EZ1000 – Eddy Current Converter
EZ1000-FCAL	EZ1000 Converter, Factory Calibrated
EZ1000-SIS	EZ1000 Converter, Safety Rated
EZ1000-SIS-FCAL	EZ1000 Converter, Safety Rated, Factory Calibrated

## Product Accessories

Model Number	Product Description
MHM-9500-00187	DIN Rail to Panel Mount Adapter 98x70mm
MHM-9199-00142	EZ 1000 Mounting Adapter DIN Rail for Horizontal Mount
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
EZ1900-ADAP-90	ECS Cable Adapter, 90 Degree for EZ1000
EZ1000-JB	EZ1000 Junction Box for up to six EZ1000 Converters, Stainless Steel
EZ1000-JB2	EZ1000 Junction Box for up to six EZ1000 Converters, Plastic

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