

Intrinsically safe submersible velocity transducer 4-20mA output for PLC interface ATEX & IECEx Group II approved

ATEX and IECEx Group II certified. Submersible, general purpose, top-entry velocity transducer with DC output. Made from robust stainless steel throughout for long term vibration analysis in harsh underwater environments and areas with constant moisture or condensation. Sealed to IP68 and includes integral heavy duty polyurethane cable. Available with a wide range of mountings.

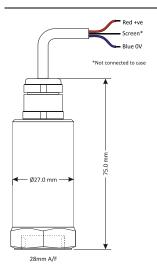
## **Applications**

- Intrinsically safe data collector
- Oil and mining
- Submersible pumps, fans and compressors

MTN/1185IW



Dimensions





Technical		
Output current	4-20mA DC proportional to rms velocity (mm/s)	
Supply voltage	12-32V DC (4-20mA)	
Frequency response	2Hz to 1kHz ±10 %	
Mounted base resonance	5kHz (nominal)	
Isolation	Base isolated	
Dynamic range	50g peak	
Transverse sensitivity	Less than 5%	
Temperature range	$-55^{\circ}C \le Ta \le +65^{\circ}C$	
Temperature sensitivity	0.08%/°C	
Case material	Stainless steel	
Cable <sup>1</sup>	Integral polyurethane - length to be specified at point of order	
Maximum cable length	See system drawing ATX031	
Mounting torque	8Nm	
Weight	150g (nominal)	
Sealing	IP68	
Submersible depth	5m max (0.5 bar)	
Certificate details		
Group II <sup>2</sup>	BAS02ATEX1057X and IECEx BAS 08.0013X Ex ia IIC T6 Ga (-55°C $\le$ Ta $\le$ +65°C) Ex ia IIIC T85°C Da (-55°C $\le$ Ta $\le$ +65°C)	
Terminal parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W For Ci and Li see certificate	
Barrier	MTL7787+, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 5 of ATX031 (Available on request)	

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ISO 90

<u>sira</u>



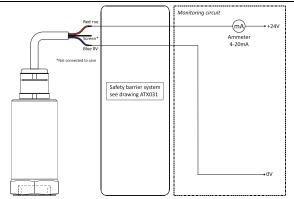
## MTN/1185IW Series

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Studs and grub screws **Mounting adapters** Part # То Part # То From From 1/4"-28 UNF Male M6 Male 1/4"-28 UNF Female MS036 MS005 Q/F Male 10-32 UNF Female MS039 1/4"-28 UNF Male 10-32 UNF Male MS007 Q/F Male MS067 1/4"-28 UNF Male MS008 Q/F Male M8 Male M8 Female MS068 1/4"-28 UNF Male 1/4"-28 UNF Male MS011 1/4"-28 UNF Male Q/F Female 1/4"-28 UNF Male MS013 ¼"-28 UNF Male MS124 M10 Male Glue base MS132 1/4"-28 UNF Male M12 Male MS033 1/4"-28 UNF Male Q/F Female Q/F Male M8 Conical Male MS038 MS061 1/4"-28 UNF Male 10-32 UNF Male **Quick fit adapters** 1/4"-28 UNF Male Q/F Female MS079 (Hp MS106 Q/F Male M10 Female Part # From То Isolation MS001 Q/F Male Glue base MS002 Q/F Male M8 Male Part # From То MS003 Q/F Male M10 Male 1/4"-28 UNF Male 1/4"-28 UNF Female MS034 ¼"-28 UNF Male MS004 Q/F Male MS093 Q/F Male M8 Male MS006 Q/F Male M6 Male Options System connection Monitoring circuit Various cable lengths (mA) +24V **Optional mountings** Ammeter 4-20mA Filters

• Other sensitivities (see below)

Part #	Mounting	xx = Optional Velocity (mm/s rms)
MTN/1185IW-xx	¼"UNF Female	0-10 0-20 0-25 0-50 0-100
MTN/1185IWQ-xx	Q/F Female	



## Note: Care should be taken not to install this in a high velocity dust laden atmosphere.

<sup>1</sup> This cable has additional hosing around it manufactured from PTFE plastic, which has a surface resistivity of greater than 1 G $\Omega$ m and therefore poses a risk from electrostatic ignition.

<sup>2</sup> Warning ref Group II: The Ci and Li were previously lower. The installer must take account of the increase in internal capacitance and inductance present on this apparatus.

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