

Intrinsically safe fully submersible industrial accelerometer ATEX & IECEx Group II approved

ATEX and IECEx Group II certified. Submersible, general purpose, top-entry, constant current accelerometer with isolated AC output. Made from robust stainless steel throughout for long term vibration analysis in harsh underwater environments and areas with constant moisture or condensation. Internal electronics are isolated to minimise noise with increased bias voltage stability. Sealed to IP68 and includes integral heavy duty polyurethane cable. Available with a wide range of mountings.

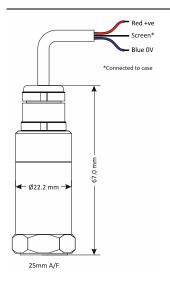
Applications

- Submersible pumps
- Roll monitors
- Paper machinery

MTN/2200IW



Dimensions









Technical

Standard sensitivity	100mV/g ±10% nominal @ 80Hz	
Frequency response	2Hz to 10kHz ±5% (-3dB @ 0.8Hz)	
Mounted base resonance	18kHz (nominal)	
Isolation	Base isolated	
Transverse sensitivity	Less than 5%	
Electrical noise	0.1mg max	
Current range	0.5 to 8mA	
Bias voltage	12V DC (nominal)	
Temperature range	-55°C ≤ Ta ≤ +65°C	
Case material	Stainless steel	
Cable type ¹	Integral polyurethane - length to be specified at point of order	
Maximum cable length	See system drawing ATX037	
Mounting torque	8Nm	
Weight	150g (nominal)	
Sealing	IP68	
Submersible depth	5m max (0.5 bar)	
 Insulation	Units will pass a 500V insulation test	

Certificate details

Group II²	BAS02ATEX1057X and IECEx BAS 08.0013X Ex ia IIC T6 Ga (-55°C \leq Ta \leq +65°C) Ex ia IIIC T85°C Da (-55°C \leq Ta \leq +65°C)	
Terminal parameters	Ui = 28V, li = 93mA, Pi = 0.65W For Ci and Li see certificate	
Barrier	1 x MTL7728+ (BAS01ATEX7217) or P&F Z728 (BAS01ATEX7005) or any other barrier that conforms to note 5 of ATX037	



MTN/2200IW Series

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Studs and grub screws



Part #	From	То
MS036	¼"-28 UNF Male	M6 Male
MS039	¼"-28 UNF Male	10-32 UNF Male
MS067	¼"-28 UNF Male	M8 Male
MS068	¼"-28 UNF Male	¼"-28 UNF Male
MS124	¼"-28 UNF Male	M10 Male
MS132	¼"-28 UNF Male	M12 Male
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Quick fit adapters



Part #	From	То
MS001	Q/F Male	Glue base
MS002	Q/F Male	M8 Male
MS003	Q/F Male	M10 Male
MS004	Q/F Male	¼"-28 UNF Male
MS006	Q/F Male	M6 Male

Options

- Mating connectors
- Various cable lengths
- Optional mountings
- Other sensitivities (see below)

Part #	Mounting	xx = Optional Sensitivity (mV/g)
MTN/2200IW-xx	¼" UNF Female	10 25
		30
MTN/2200IWQ-xx	Q/F Female	500

Mounting adapters

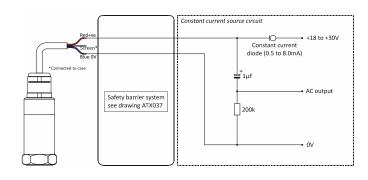


Part #	From	То
MS005	Q/F Male	1/4"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106	Q/F Male	M10 Female
	1	1

Isolation

_	Part #	From	То
	MS034	¼"-28 UNF Male	1/4"-28 UNF Female
	MS093	Q/F Male	M8 Male

System connection



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

² 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.



 $^{^1}$ This cable has additional hosing around it manufactured from PTFE plastic, which has a surface resistivity of greater than 1 G Ω and therefore presents a risk of electrostatic ignition.