# MTN/M1100IC Series

Intrinsically safe industrial accelerometer ATEX & IECEx Group I approved

ATEX and IECEx Group I certified. General purpose top-entry constant current accelerometer with isolated AC output. Made from robust stainless steel throughout for long term vibration analysis in harsh, hazardous gas and dust environments. Sealed to IP67 and includes integral stainless overbraided ETFE cable. Available with a wide range of mountings.

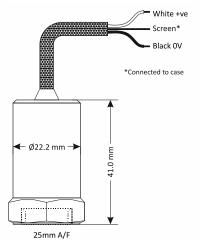
## **Applications**

- General industry
- Compressors, pumps etc
- Oil and petrochemical
- Mining

### **MTN/M1100IC**



#### **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
Dynamic range	±80g
Transverse sensitivity	Less than 5%
Electrical noise	0.1mg max
Current range	0.5 to 8mA
Temperature range	-55°C ≤ Ta ≤ +115°C
Bias voltage	12V DC (nominal)
Case material	Stainless steel
Cable	Integral stainless steel overbraided ETFE
Standard cable length	5m
Maximum cable length	See system drawing ATX027
Mounting torque	8Nm
Weight	110g (nominal)
Sealing	IP67
Insulation	Units will pass a 500V insulation test

#### **Certificate details**

Group I	BAS02ATEX0245X and IECEx BAS 08.0013X Ex ia I Ma (-55°C $\leq$ Ta $\leq$ +115°C)	
Terminal parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W For Ci & Li see certificate	
Barrier	1 x MTL7728+ (BAS01ATEX7217) or (P&F Z728BAS01ATEX7005) or any other barrier that conforms to note 5 of ATX027 (Available on request)	



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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

# **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

## Isolation

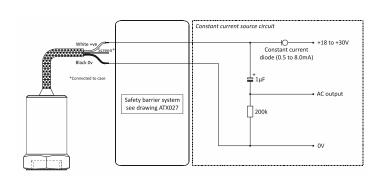
Part #	From	То
MS034	1/4"-28 UNF Male	1/4"-28 UNF Female
MS093	Q/F Male	M8 Male

## **Options**

- Cable length
- Various mounts
- Connector
- Dust option (Group II only)
- Other sensitivities (see below)

Part #	Mounting	xx = Optional Sensitivity (mV/g)
MTN/1100IC-xx  MTN/1100ICQ-xx	¼" UNF Female Q/F Female	10
		20
		25
		30
		50
		500
		1000

## **System connection**



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

