# MTN/2200ITC Series

Intrinsically safe industrial accelerometer ATEX & IECEx Group II approved

ATEX and IECEx Group II certified. General purpose top-entry constant current accelerometer with isolated AC and temperature outputs. Made from robust stainless steel throughout for long term vibration analysis in harsh, hazardous gas and dust environments. Internal electronics are isolated to minimise noise with increased bias voltage stability. Sealed to IP67 and includes integral stainless steel overbraided ETFE cable. Available with a wide range of mountings.

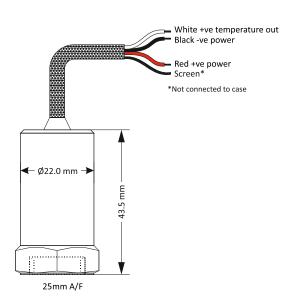
## **Applications**

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

## MTN/2200ITC



### **Dimensions**









#### **Technical**

Standard sensitivity	100mV/g ±10% nominal @ 80Hz	
Temperature output	10mV/°C	
Frequency response	2Hz to 10kHz ±5% (-3dB @ 0.8Hz)	
Mounted base resonance	18kHz (nominal)	
Isolation	Electronics in Faraday cage, isolated from body	
Dynamic range	±80g	
Transverse sensitivity	Less than 5%	
Electrical noise	0.1mg max	
Current range	0.5 to 8mA	
Operating temperature	-55 to 95°C	
Temperature range	T4 (-55°C ≤ Ta ≤ +95°C)	
	T6 (-55°C ≤ Ta ≤ +45°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 ATX037	
Mounting torque	8Nm	
Weight	110g (nominal)	
Sealing	IP67	
Insulation	Units will pass a 500V insulation test	

#### **Certificate details**

Group II <sup>1</sup>	BAS02ATEX1057X and IECEx BAS 08.0013X Ex II 1GD T85°C Ex ia IIC T4 Ga Ex ia IIIC T135°C Da (-55°C $\leq$ Ta $\leq$ 95°C) Ex II 1GD T85°C Ex ia IIC T6 Ga Ex ia IIIC T85°C Da (-55°C $\leq$ Ta $\leq$ 45°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 ATX037 (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

## **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**

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

Part #	Mounting	xx = Optional Sensitivity (mV/g)
		10
MTN/2200ITC-xx	¼" UNF Female	20
		25
		30
MTN/2200ITCQ-xx	Q/F Female	50
		500

# **Mounting adapters**

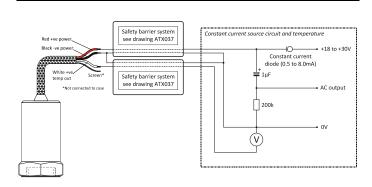


Part #	From	То
MS005	Q/F Male	1/4"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106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

#### **Isolation**

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

## **System connection**



<sup>&</sup>lt;sup>1</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.

