

### MTN/2287I-2P Series

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

ATEX and IECEx Group II certified. General purpose, top-entry accelerometer with DC output proportional to acceleration. Made from robust stainless steel throughout for continuous vibration monitoring in harsh industrial environments. Internal electronics are enclosed in a Faraday cage and isolated to minimise noise. Sealed to IP67 with industry standard two wire 4-20mA output proportional to sensor range that can connect directly to PLC, DCS and other industrial controllers. Includes 2-pin MS connector and is available with a wide range of mountings.

#### **Applications**

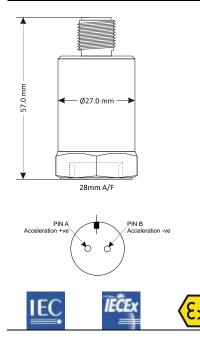
- Intrinsically safe data collector
- Oil and mining

• Pumps, fans and compressors

#### MTN/2287I-2P



Dimensions



#### **Technical**

Technical		
Output current	4-20mA DC proportional to rms acceleration (g rms)	
Supply voltage	12-32V DC (4-20mA)	
Frequency response	2Hz to 1kHz ±10%	
Mounted base resonance	5kHz (nominal)	
Isolation	Electronics in Faraday cage, isolated from body	
Dynamic range	50g peak	
Temperature sensitivity	0.08%/°C	
Transverse sensitivity	Less than 5%	
Temperature range	$-55^{\circ}C \le Ta \le +65^{\circ}C$	
Case material	Stainless steel	
Maximum cable length	See system drawing ATX038	
Mounting torque	8Nm	
Weight	150g (nominal)	
Sealing	IP67	

#### **Certificate Details**

Group II <sup>1</sup>	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, Ii = 93mA, Pi = 0.65W For Ci and Li see certificate
Barrier	MTL787S, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX038 (Available on request)

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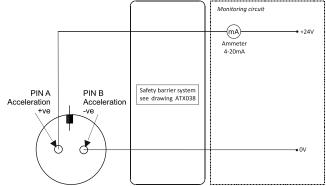
Studs and grub screws **Mounting adapters** ₀ Part # То Part # То From From M6 Male 1/4"-28 UNF Female MS036 1/4"-28 UNF Male MS005 Q/F Male ¼"-28 UNF Male MS039 10-32 UNF Male MS007 Q/F Male 10-32 UNF Female MS067 1/4"-28 UNF Male MS008 M8 Male Q/F Male M8 Female MS068 1/4"-28 UNF Male 1/4"-28 UNF Male 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 MS106 Q/F Male M10 Female (Hp Part # From То Isolation MS001 Glue base Q/F Male MS002 Q/F Male M8 Male Part # From То MS003 Q/F Male M10 Male ¼"-28 UNF Male 1/4"-28 UNF Female MS034 MS004 Q/F Male ¼"-28 UNF Male MS093 Q/F Male M8 Male MS006 Q/F Male M6 Male

#### Options

- Filters
- Mounting threads
- High temperatures
- Other ranges (see below)

Part #	Mounting	xx = Optional acceleration (g rms)
MTN/2287I-2P-xx	¼" UNF Female	0-1 0-2 0-5 0-10 0-20
MTN/2287IQ-2P-xx	Q/F Female	

## System connection



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

<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.

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