

## MTN/1100I & M1100I Series

Intrinsically Safe Industrial Accelerometer  
ATEX & IECEx Group I & II Approved

### Applications

- General industry
- Compressors, pumps, etc.
- Oil, petrochemical & mining

### Technical Specification

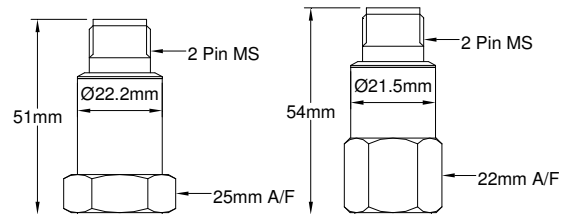
Standard Sensitivity  
Frequency Response  
Mounted Base Resonance  
Isolation  
Transverse Sensitivity  
Electrical Noise  
Current Range  
Bias Voltage  
Temperature Range For

Case Material  
Weight  
Sealing  
Mounting Torque  
Maximum Cable Length  
Certificate Details: Group I

Certificate Details: Group II

*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*

System Connection  
Terminal Parameters  
500V Isolation  
Barrier



100 mV/g  $\pm 10\%$  Nominal at 80 Hz  
2 Hz to 10 kHz  $\pm 5\%$  (-3 dB at 0.8 Hz)  
18 kHz (nominal)  
Base isolated  
Less than 5%  
0.1 mg max  
0.5 mA to 8 Ma  
12 Volts DC (nominal)  
T4 (-55°C  $\leq$  Ta  $\leq$  +115°C)  
T6 (-55°C  $\leq$  Ta  $\leq$  +65°C)  
Stainless steel  
100 gms (nominal)  
IP67  
8Nm  
See system drawing ATX027  
Baseefa02ATEX0245X and IECEx BAS 08.0013X  
Ex I M1 Ex ia I (-55°C  $\leq$  Ta  $\leq$  +115°C)  
BAS02ATEX1057X and IECEx BAS 08.0013X  
Ex II 1GD T135°C Ex ia IIC T4  
Ex iaD 20 T135°C (-55°C  $\leq$  Ta  $\leq$  +115°C)  
Ex II 1GD T85°C Ex ia IIC T6  
Ex iaD 20 T85°C (-55°C  $\leq$  Ta  $\leq$  +65°C)  
Drawing ATX027  
Ui = 28V, li = 93mA, Pi = 0.65W see certificate for  
Units will pass a 500V isolation test  
1 x MTL7728+ (BAS01ATEX7217) or (P&F Z728  
BAS01ATEX7005) or any other barrier that  
conforms to note 5 of ATX027

## Mounting and Sensitivity

| ORDER CODE<br>PART No             | MOUNTING                            | xx = OPTIONAL SENSITIVITY<br>RANGE AVAILABLE<br>(+/- 10%) |
|-----------------------------------|-------------------------------------|---|
| MTN/1100I-xx<br>MTN/1100IQ-xx     | 1/4" UNF FEMALE<br>QUICK FIT FEMALE | 10 mV/g<br>25 mV/g<br>30 mV/g<br>50 mV/g                  |
| FOR OTHER MOUNTINGS<br>SEE BELOW. |                                     |   |

|                  |  |
|------------------|--|
| <h3>Options</h3> | Mating connectors, MH002 (Standard), MH088 (Stainless steel), Dust option (Group II only), other sensitivities (see table) |
|------------------|--|

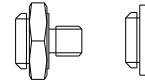
## Mounting Adapters and Studs

### Studs and Grub Screws



| Male Studs   |               |               |
|--------------|---------------|---------------|
| Product Code | From          | To            |
| MS036        | 1/4" - 28 UNF | M6            |
| MS039        | 1/4" - 28 UNF | 10 - 32 UNF   |
| MS067        | 1/4" - 28 UNF | M8            |
| MS068        | 1/4" - 28 UNF | 1/4" - 28 UNF |
| MS124        | 1/4" - 28 UNF | M10           |
| MS132        | 1/4" - 28 UNF | M12           |

### Quick Fit Adapters



| Quick Fit (Q/F) |          |                    |
|-----------------|----------|--------------------|
| Product Code    | From     | To                 |
| MS001           | Q/F Male | Glue Base          |
| MS002           | Q/F Male | M8 Male            |
| MS003           | Q/F Male | M10 Male           |
| MS004           | Q/F Male | 1/4" - 28 UNF Male |
| MS006           | Q/F Male | M6 Male            |

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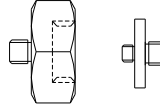
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We reserve the right to alter specifications without prior notice

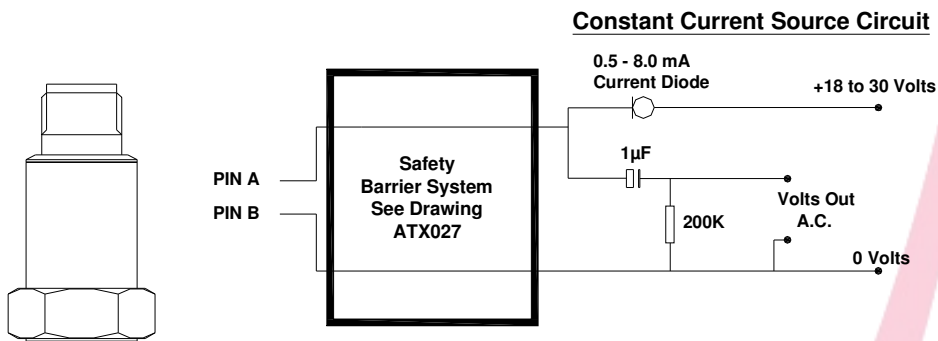
## Other Adapters



| Mounting Adapters |                    |                      |
|-------------------|--------------------|----------------------|
| Product Code      | From               | To                   |
| MS005             | Q/F Male           | 1/4" - 28 UNF Female |
| MS007             | Q/F Male           | 10 - 32 UNF Female   |
| MS008             | Q/F Male           | M8 Female            |
| MS011             | 1/4" - 28 UNF Male | Q/F Female           |
| MS013             | 1/4" - 28 UNF Male | Glue Base            |
| MS033             | 1/4" - 28 UNF Male | Q/F Female           |
| MS038             | Q/F Male           | M8 Conical Male      |
| MS061             | 1/4" - 28 UNF Male | 10 - 32 UNF Male     |
| MS079             | 1/4" - 28 UNF Male | Q/F Female           |
| MS106             | Q/F Male           | M10 Female           |

| Isolation    |                    |                      |
|--------------|--------------------|----------------------|
| Product Code | From               | To                   |
| MS034        | 1/4" - 28 UNF Male | 1/4" - 28 UNF Female |
| MS093        | Q/F Male           | M8 Male              |

## Measuring System Connection



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

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