# MTN/2287I-2P Series

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

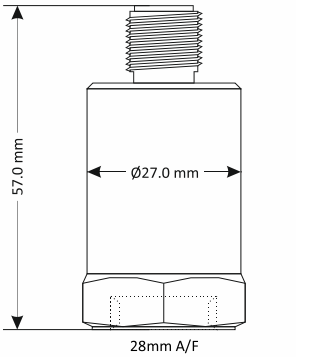
ATEX and IECEx Group II certified. General purpose, top-entry accelerometer with DC output proportional to acceleration. Made from robust stainless steel throughout for continuous vibration monitoring in harsh industrial environments. Internal electronics are enclosed in a Faraday cage and isolated to 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.

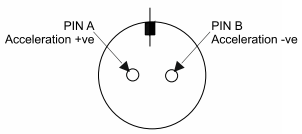
## Applications

- Intrinsically safe data collector
- Oil and mining
- Pumps, fans and compressors

## MTN/2287I-2P


## Dimensions




## Technical

| | |
|---|---|
| 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°C ≤ Ta ≤ +65°C |
| Case material | Stainless steel |
| Maximum cable length | See system drawing ATX038 |
| Mounting torque | 8Nm |
| Weight | 150g (nominal) |
| Sealing | IP67 |

## Certificate Details

| | |
|---|---|
| Group II[1] | BAS02ATEX1057X and IECEx BAS 08.0013X<br>Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +65°C)<br>Ex ia IIIC T85˚C DA (-55°C ≤ Ta ≤ +65°C) |
| Terminal parameters | Ui = 28V, Ii = 93mA, Pi = 0.65W<br>For Ci and Li see certificate |
| Barrier | MTL7787+, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX038 (Available on request) |

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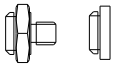
## Studs and grub screws

| Part # | From | To |
|---|---|---|
| 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



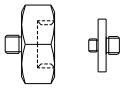
| Part # | From | To |
|---|---|---|
| MS001 | Q/F Male | Glue base |
| MS002 | Q/F Male | M8 Male |
| MS003 | Q/F Male | M10 Male |
| MS004 | Q/F Male | ¼"-28 UNF Male |
| MS006 | Q/F Male | M6 Male |

## Options

- 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<br>0-2<br>0-5<br>0-10<br>0-20 |
| MTN/2287IQ-2P-xx | Q/F Female | |

## Mounting adapters

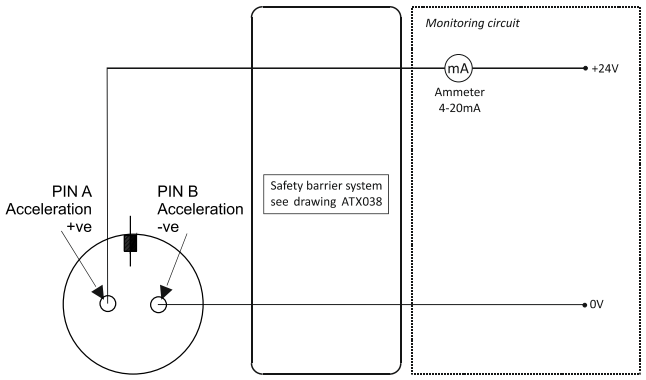


| Part # | From | To |
|---|---|---|
| MS005 | Q/F Male | ¼"-28 UNF Female |
| MS007 | Q/F Male | 10-32 UNF Female |
| MS008 | Q/F Male | M8 Female |
| MS011 | ¼"-28 UNF Male | Q/F Female |
| MS013 | ¼"-28 UNF Male | Glue base |
| MS033 | ¼"-28 UNF Male | Q/F Female |
| MS038 | Q/F Male | M8 Conical 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 | To |
|---|---|---|
| MS034 | ¼"-28 UNF Male | ¼"-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.*

[1]*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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