



MTN/1187IW & M1187IW Series



Intrinsically safe industrial 4-20mA accelerometer

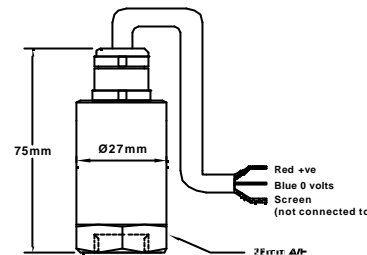
ATEX I & II Approved

Not to be mounted in a high velocity dust laden atmosphere

Applications

- Intrinsically safe data-collector
- Oil & mining
- Submersible Pumps, fans, compressors, etc.

Technical Specification



| | |
|-------------------------|--|
| Output Current | 4-20mA DC proportional to RMS acceleration (g) |
| Velocity Range | See table below |
| Frequency Response | 2 Hz to 1 kHz $\pm 10\%$ |
| Dynamic Range | See table on page 2 |
| Mounted Resonance | 5 kHz min |
| Isolation | Base isolated |
| Operating Temp Range | -25 to 90 °C |
| Temperature Sensitivity | 0.08 %/°C |
| Transverse Sensitivity | Less than 5% |
| Supply Voltage | 12-32 Volts DC (4-20 mA) |
| Standard Cable | 5 metres Integral Polyurethane Cable |
| Maximum Cable Length | See system drawing ATX031 |
| Case Material | Stainless steel |
| Weight | 150 gms (nominal) |
| Submersible Depth | 100 metres maximum (10 bar) |
| Sealing | IP68 |
| Mounting Torque | 8 Nm |
| Certificate Details: | Group I EEx ia I Baseefa02ATEX0245 |
| | Group II EEx ia IIC T6 BAS02ATEX1057 |
| System Connection | Drawing ATX031 |
| Barrier | MTL 787S, BAS01ATEX7202 or P&F Z787, BAS01ATEX7005 or any other barrier that conforms to Note 4 of ATX009. |
| Options | Ranges, filters, mounting threads, other cable lengths |

Mounting and Sensitivity

| ORDER CODE PART No | MOUNTING | xx =VELOCITY RANGE AVAILABLE (+/- 10%) |
|---------------------------------------|-----------------------------------|---|
| MTN/1187IW-xx MTN/1187IWQ-xx | ¼" UNF FEMALE QUICK FIT FEMALE | 0-20 mm/sec RMS 0-25 mm/sec RMS 0-50 mm/sec RMS 0-100 mm/sec RMS |
| FOR OTHER MOUNTINGS SEE OVER PAGE. | | |

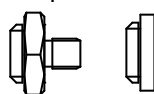
| | |
|------------------|--|
| <h2>Options</h2> | Ranges, filters, mounting threads, other cable lengths |
|------------------|--|

Mounting Adapters and Studs

Studs and Grub Screws



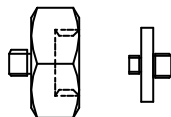
Quick Fit Adapters



| 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 (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 |

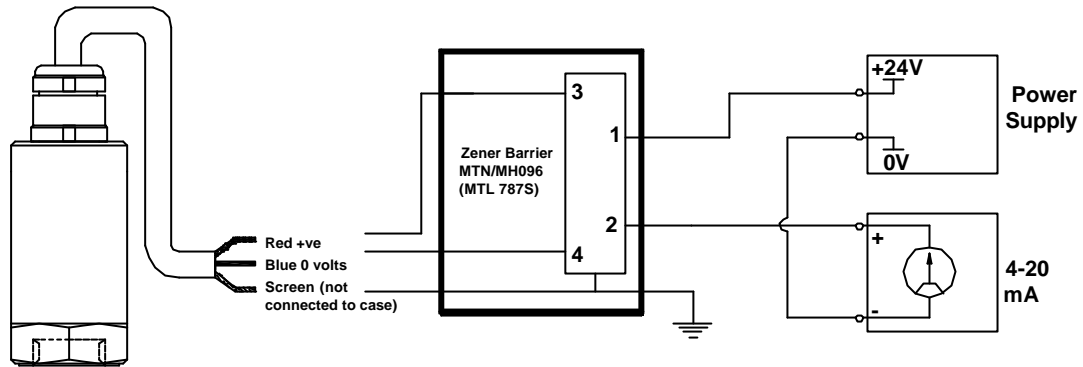
Other Adapters



| 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 MS093 | 1/4" - 28 UNF Male Q/F Male | 1/4" - 28 UNF Female M8 Male |

Barrier System Connection



| Barrier Enclosures | | |
|--------------------|------|---------------------|
| Product Code | Type | Capacity |
| MTN/MH073 | MT2 | 2 Barrier Capacity |
| MTN/MH062 | MT5 | 2 Barrier Capacity |
| MTN/MH045 | MT12 | 12 Barrier Capacity |
| MTN/MH024 | MT24 | 24 Barrier Capacity |
| MTN/MH032 | MT32 | 32 Barrier Capacity |