

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. 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 integral stainless steel overbraided ETFE cable and is available with a wide range of mountings.

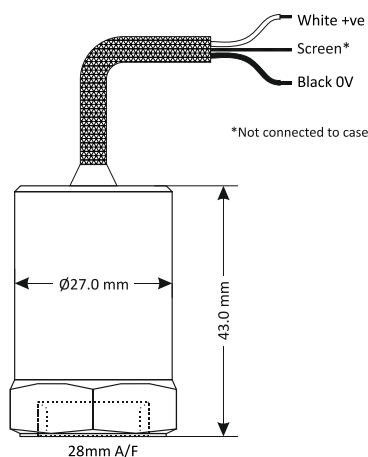
## Applications

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

## MTN/1187IC



## 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 $\pm 10\%$
Mounted base resonance	5kHz (nominal)
Isolation	Base isolated
Dynamic range	50g peak
Transverse sensitivity	Less than 5%
Temperature range for	T6 (-55°C $\leq$ Ta $\leq$ +65°C)
Temperature sensitivity	0.08%/°C
Case material	Stainless steel
Cable	Integral stainless steel overbraided ETFE
Maximum cable length	See system drawing ATX009
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	MTL7787+, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX009 (Available on request)



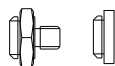
For pricing or any further information, please contact Omni Instruments Ltd.

## 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



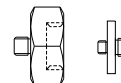
Part #	From	To
MS001	Q/F Male	Glue base
MS002	Q/F Male	M8 Male
MS003	Q/F Male	M10 Male
MS004	Q/F Male	¼"-28 UNF Male
MS006	Q/F Male	M6 Male

## Options

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

Part #	Mounting	xx = Optional acceleration (g rms)
MTN/1187IC-xx	¼" UNF Female	0-1 0-2 0-5
MTN/1187ICQ-xx	Q/F Female	0-10 0-20

## Mounting adapters

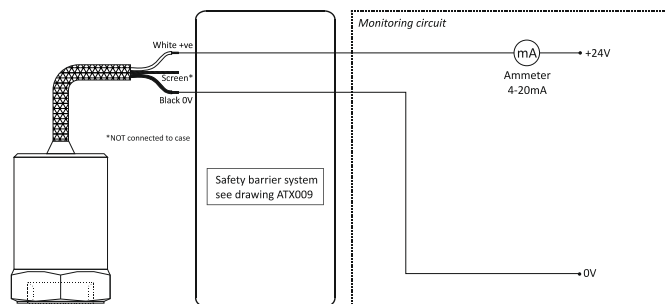


Part #	From	To
MS005	Q/F Male	¼"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106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

<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.

Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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