MTN/1187IC Series

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

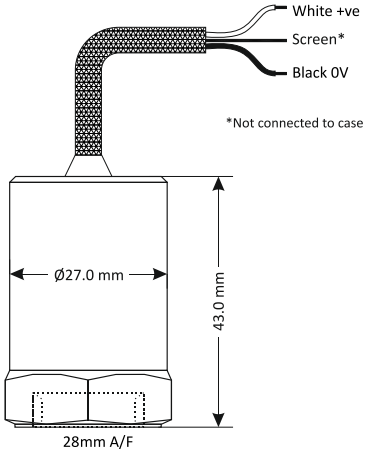
ATEX and IECEx Group II certified. General purpose, top-entry accelerometer with DC output proportional to acceleration. Made from robust stainless steel throughout for continuous vibration monitoring in harsh industrial environments. Sealed to IP67 with industry standard two wire 4-20mA output proportional 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 ±10 %
Mounted base resonance	5kHz (nominal)
Isolation	Base isolated
Dynamic range	50g peak
Transverse sensitivity	Less than 5%
Temperature range for	T6 (-55°C ≤ Ta ≤ +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[1]	BAS02ATEX1057X and IECEx BAS 08.0013X Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +65°C) Ex ia IIIC T85˚C DA (-55°C ≤ Ta ≤ +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 ATX009 (Available on request)

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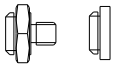
Studs and grub screws

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



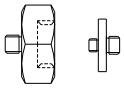
Part #	From	To
MS001	Q/F Male	Glue base
MS002	Q/F Male	M8 Male
MS003	Q/F Male	M10 Male
MS004	Q/F Male	¼"-28 UNF Male
MS006	Q/F Male	M6 Male

Options

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

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

Mounting adapters

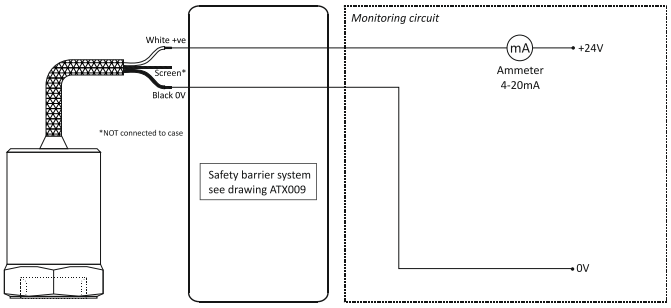


Part #	From	To
MS005	Q/F Male	¼"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106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