

ATEX and IECEx Group I 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

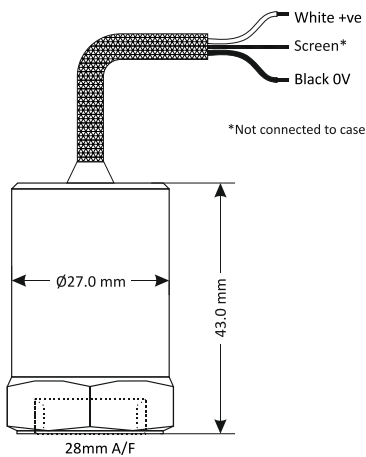
MTN/M1187IC



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	$-55^{\circ}\text{C} \leq T_a \leq +115^{\circ}\text{C}$
Temperature sensitivity	0.08%/ $^{\circ}\text{C}$
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

Dimensions



Certificate details

Group I	BAS02ATEX0245X and IECEx BAS 08.0013X Ex ia I Ma ($-55^{\circ}\text{C} \leq T_a \leq +115^{\circ}\text{C}$)
Terminal parameters	$U_i = 28\text{V}$, $I_i = 93\text{mA}$, $P_i = 0.65\text{W}$ For Ci and Li see certificate
Barrier	MTL787S, BAS01ATEX7217 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX009

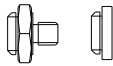


Studs and grub screws



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



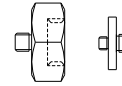
Part #	From	To
MS001	Q/F Male	Glue base
MS002	Q/F Male	M8 Male
MS003	Q/F Male	M10 Male
MS004	Q/F Male	¼"-28 UNF Male
MS006	Q/F Male	M6 Male

Options

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

Part #	Mounting	xx = Optional acceleration (g rms)
MTN/M1187IC-xx	¼" UNF Female	0-1 0-2 0-5
MTN/M1187ICQ-xx	Q/F Female	0-10 0-20

Mounting adapters

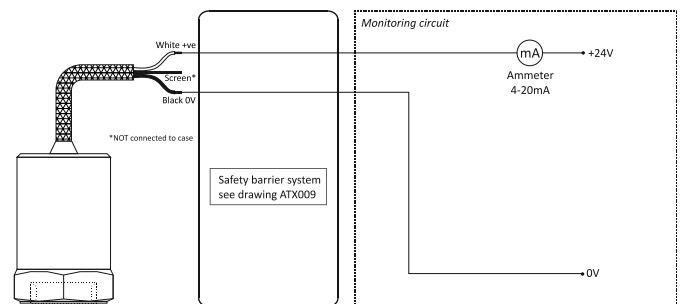


Part #	From	To
MS005	Q/F Male	¼"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106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

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.

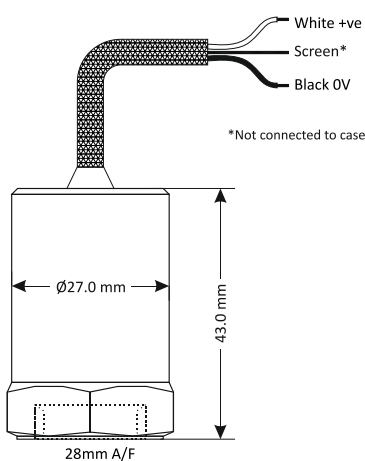
Applications

- 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)
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Supply voltage	12-32V DC (4-20mA)
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Frequency response	2Hz to 1kHz $\pm 10\%$
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Mounted base resonance	5kHz (nominal)
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Isolation	Base isolated
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Dynamic range	50g peak
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Transverse sensitivity	Less than 5%
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Temperature range for	T6 (-55°C \leq Ta \leq +65°C)
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Temperature sensitivity	0.08%/°C
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Case material	Stainless steel
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Cable	Integral stainless steel overbraided ETFE
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Maximum cable length	See system drawing ATX009
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Mounting torque	8Nm
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Weight	150g (nominal)
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Sealing	IP67
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Certificate details

Group II ¹	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)
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Terminal parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W For Ci and Li see certificate
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Barrier	MTL7787+, BAS01ATEX7217 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX009 (Available on request)
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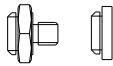


Studs and grub screws



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



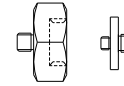
Part #	From	To
MS001	Q/F Male	Glue base
MS002	Q/F Male	M8 Male
MS003	Q/F Male	M10 Male
MS004	Q/F Male	¼"-28 UNF Male
MS006	Q/F Male	M6 Male

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
MTN/1187ICQ-xx	Q/F Female	0-10
		0-20

Mounting adapters

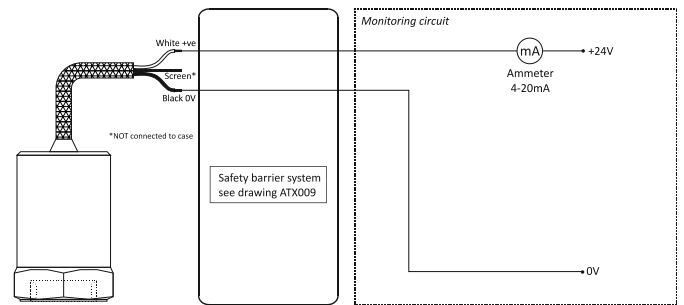


Part #	From	To
MS005	Q/F Male	¼"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106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

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.