MTN/1185IC Series



Intrinsically safe 4-20mA velocity transducer ATEX & IECEx Group I & II approved

ATEX and IECEx Group II certified. General purpose, top-entry velocity transducer with DC output. 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 overbraided ETFE cable and is available with a wide range of mountings.

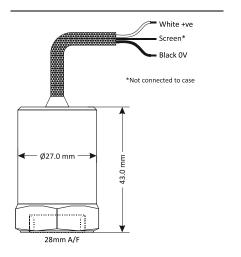
Applications

- Intrinsically safe data collector
- Oil and mining
- Fans, compressors, pumps etc

MTN/1185IC



Dimensions









Technical

Output current	4-20mA DC proportional to rms velocity (mm/s)	
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	
Standard cable length	5m	
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 $^{\circ}$ C DA (-55 $^{\circ}$ C \leq Ta \leq +65 $^{\circ}$ C)
Terminal parameters	Ui = 28V, Ii = 93mA, Pi = 0.65W For Ci and Li see certificate
	MTL7787+, BAS01ATEX7202 or P&FZ787,
Barrier	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	То
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
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Quick fit adapters



Part #	From	То
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

- Dust option (Group II only)
- **Filters**
- Mounting threads
- Other cable lengths
- Other velocities (see below)

Part #	Mounting	xx = Optional Velocity (mm/s rms)
MTN/1185IC-xx	¼" UNF Female	0-10 0-20
MTN/1185ICQ-xx	Q/F Female	0-25 0-50 0-100

Mounting adapters

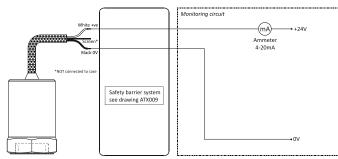


Part #	From	То
MS005	Q/F Male	¼"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106	Q/F Male	M10 Female

Isolation

_	Part #	From	То
	MS034	¼"-28 UNF Male	1/4"-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.



¹Warning 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.