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.

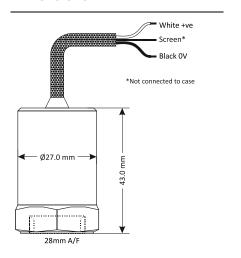
## **Applications**

- 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 <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	MTL787S, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX009	





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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	1/4"-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**

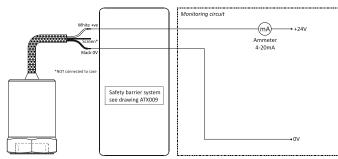


Part #	From	То
MS005	Q/F Male	1/4"-28 UNF Female
MS007	Q/F Male	10-32 UNF Female
MS008	Q/F Male	M8 Female
MS011	¼"-28 UNF Male	Q/F Female
MS013	¼"-28 UNF Male	Glue base
MS033	¼"-28 UNF Male	Q/F Female
MS038	Q/F Male	M8 Conical Male
MS061	¼"-28 UNF Male	10-32 UNF Male
MS079	¼"-28 UNF Male	Q/F Female
MS106	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.



<sup>&</sup>lt;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.