

# MTN/M1185IC Series

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

ATEX and IECEx Group I 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.

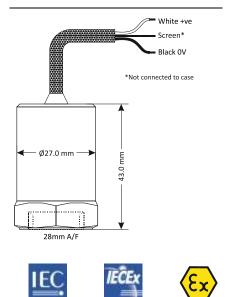
## Applications

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

#### **MTN/M1185IC**



## 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	$-55^{\circ}C \le Ta \le +115^{\circ}C$		
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 I	BAS02ATEX0245X and IECEx BAS 08.0013X Ex ia I Ma (-55°C $\leq$ Ta $\leq$ +115°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)		

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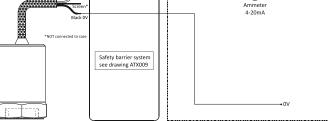
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Studs and grub screws		Mounting adapters			
Part #	From	То	Part #	From	То
MS036	¼"-28 UNF Male	M6 Male	MS005	Q/F Male	¼"-28 UNF Female
MS039	¼"-28 UNF Male	10-32 UNF Male	MS007	Q/F Male	10-32 UNF Female
MS067	¼"-28 UNF Male	M8 Male	MS008	Q/F Male	M8 Female
MS068	¼"-28 UNF Male	¼"-28 UNF Male	MS011	¼"-28 UNF Male	Q/F Female
MS124	¼"-28 UNF Male	M10 Male	MS013	¼"-28 UNF Male	Glue base
MS132	¼"-28 UNF Male	M12 Male	MS033	¼"-28 UNF Male	Q/F Female
	I	I	MS038	Q/F Male	M8 Conical Male
			MS061	¼"-28 UNF Male	10-32 UNF Male
Quick fit adapters		MS079	¼"-28 UNF Male	Q/F Female	
			MS106	Q/F Male	M10 Female
Part #	From	То			
MS001	Q/F Male	Glue base	Isolation		
MS002	Q/F Male	M8 Male	Dout #	- From	I <b>T</b> a
MS003	Q/F Male	M10 Male	Part # MS034	From %"-28 UNF Male	To ¼"-28 UNF Female
MS004	Q/F Male	¼"-28 UNF Male			
MS006	Q/F Male	M6 Male	MS093	Q/F Male	M8 Male
ptions			System conn	ection	

- 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 0-25	
MTN/1185ICQ-xx	Q/F Female	0-50 0-100	

# White +ve Monitoring circuit



Note: Care should be taken not to install this in a high velocity dust laden atmosphere.



-(mA)-

→ +24V

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