

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 \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		

Monitran Ltd | Monitor House | 33 Hazlemere Road | Penn | Bucks | UK | HP10 8AD

Telephone +44 (0)1494 816569 | E-mail info@monitran.com | Website www.monitran.com





MTN/1185IC Series

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

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
	1	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	5	1 -	-
MS003	Q/F Male	M10 Male	Part #	From	
MS004	Q/F Male	¼"-28 UNF Male M6 Male	MS034	¼"-28 UNF Male	¼"-28 UNF Female
MS006	Q/F Male		MS093	Q/F Male	M8 Male
Options			System conn	ection	

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

Monitoring circuit (mA)-→ +24V Ammeter 4-20mA Safety barrier system see drawing ATX009 •0V

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.



Monitran Ltd | Monitor House | 33 Hazlemere Road | Penn | Bucks | UK | HP10 8AD

Telephone +44 (0)1494 816569 | E-mail info@monitran.com | Website www.monitran.com