

The MTN/1700I series wideband acoustic emission sensors are designed to provide signals to appropriately approved data-collector and used for monitoring the performance of large industrial control valves situated in hazardous areas. The sensor provides a high frequency acoustic emission signal, a dc voltage output proportional to temperature and a serial ident signal. The sensor has a robust cylinder stainless-steel body designed to fit control valves being monitored.

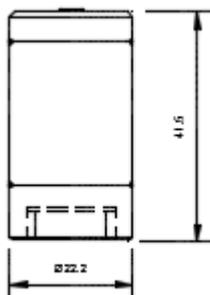
## Applications

- Structures, Cranes, Bucket trucks
- Pressure vessels, Metals
- Fans, compressors, pumps etc

## MTN/1700I



## Dimensions



## Technical

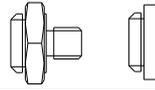
Peak Sensitivity	mV(m/s)dB Available Gain Settings x1, x10, x100
Supply voltage	5V DC
Frequency response	50kHz to 200 kHz $\pm 10\%$
Mounted base resonance	180 kHz
Isolation	Base isolated
Operating Temp Range	-25 to 90°C
Temperature sensitivity	0.08%/°C
Transverse sensitivity	Less than 5%
Temperature output	mV/°C
Serial Ident	One wire
Mating Connector	7 Pin Fischer Plug (MC350)
Maximum cable length	See system drawing ATX009
Mounting torque	8Nm
Weight	65g (nominal)
Sealing	IP54
Case material	Stainless steel

## Certificate Details

Group I	Ex ia I BAS02ATEX0245 and IECEx BAS 08.0013X
Group II	Ex ia IIC T6 BAS02ATEX1057 and IECEx BAS 08.0013X
Barrier	MTL7787+, BAS01ATEX7202 or P&FZ787, BAS01ATEX7005 or any other barrier that conforms to note 4 of ATX009 (Available on request)



## Mounting Adapters and studs



Quick Fit (Q/F)		
Product Code	From	To
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

Isolation		
Product Code	From	To
MS093	Q/F Male	M8 Male

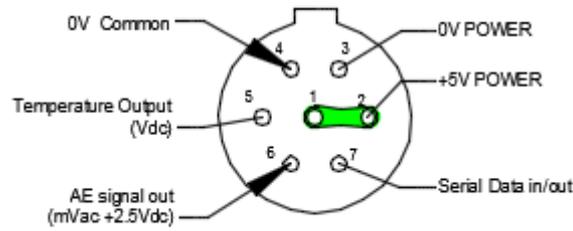
## Connecting cable Options

MTN/CA432

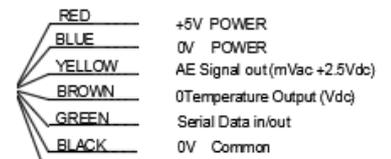
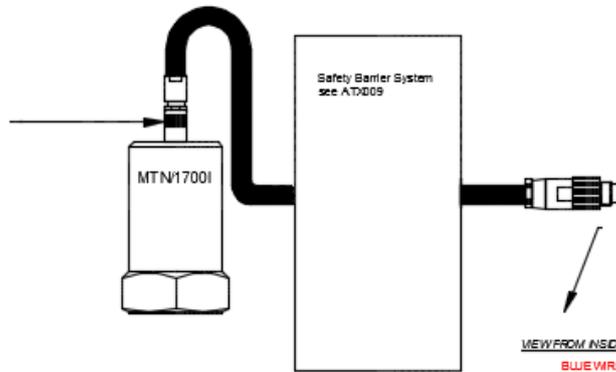
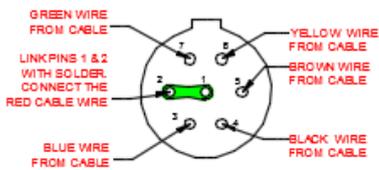
6 Core ETFE cable 7 pin Fischer Plug to 7 pin sub miniature connector (Triad 01)

## System Connection

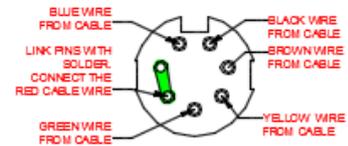
### CONNECTOR PIN CONNECTIONS (Top View)



#### VIEW FROM INSIDE OF CONNECTOR (SOLDER SIDE)



#### VIEW FROM INSIDE OF THE CONNECTOR (SOLDER SIDE)



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