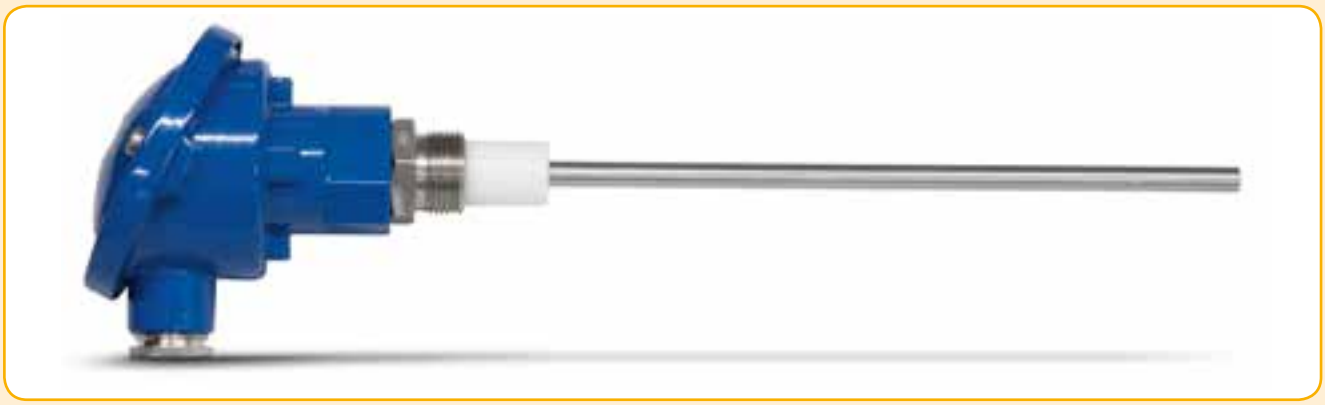
E9TRB TRIBO SENSOR WITH CHARGE DISPLACEMENT

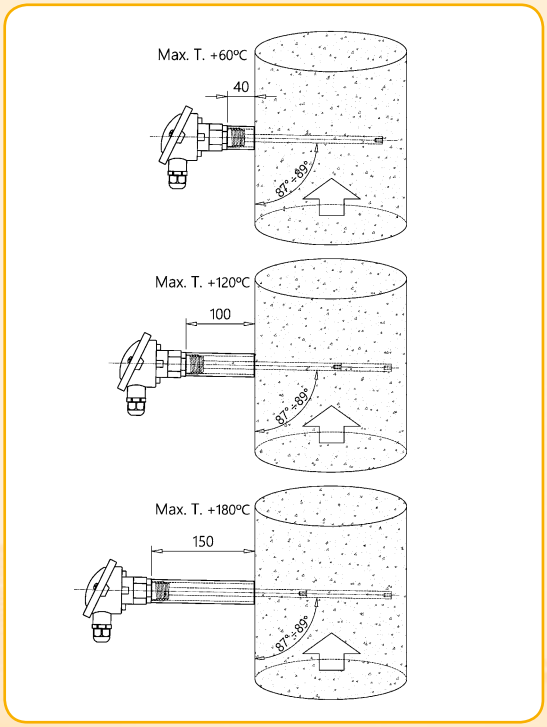


DESCRIPTION

The charge displacement probe is a measuring instrument with microprocessor, is pre-calibrated, with two open-collector type optically-isolated digital outputs, an Rs485 serial line to configure and/or download data, a PWM 4/20 mA output and brief LED indications for the operating modes. The probe is designed to detect and measure the dust emissions caused by breakage of sleeve filters.

The probe detects the dust in a gaseous fluid, with displacement of the electric charge in the electrode, induced by the electric charges. The quantity of electric charge induced on the electrode is proportional to the amount of dust present in the gaseous fluid. An increase in the concentration of the dusts determines a proportional increase of the signal that reaches the micro-processor.

3201058 Threaded Bush F. 3/4"G L040 Max. T. +60°C
3201060 Threaded Bush F. 3/4"G L100 Max. T. +120°C
3201062 Threaded Bush F. 3/4"G L150 Max. T. +180°C



TECHNICAL SPECIFICATIONS

Power supply	20 / 30 Vdc
Maximum input power	1W
Resolution	0.1 mg/m3, 0.01 mg/m3 See versions
Range settings	Automatic/Manual
Dimensions of the dust particles	> 0.3 µm
Type of products that can be measured	Particles of dust in gaseous fluid
Flow speed	> 4 m/s
Measuring principle	Charge displacement
Alarm threshold 3 (Fault)	Activated automatically by the test function
Alarms outputs	n. 3 optoisolated outputs with solid state relay, protected by self-resetting fuses
Outputs maximum current	100 mA
Maximum voltage applicable on the outputs	48 V
Output functions	Can be set normally closed or normally open
Probe operating temperature	< 180°C
Probe operating pressure	< 2 bar
Electrode material	Aisi 304 stainless steel
Container material	Aluminium
Humidity	< 95% non condensing
Environment temperature for the electronics	-20 / +60 °C For higher temperatures mount with spacer
Measurable elements	All non-aggressive gases
Electric connection	1 terminal board with 3 poles + 1 terminal board with 6 poles
Mechanical connection to the structure	3/4" G
Protection rating	IP 65
Display	n°. 4 LEDs
Output PWM 4/20 mA	Active output, optoisolated. Max load 500 Ohm
Serial output	RS485 with two wires

OPTIONS UPON REQUEST

- Zone 22 ATEX Certification.
- Surface treatment in Teflon PTFE for heavy duty use, direct exposure to weather conditions, acid exhaust fumes.

REFERENCE STANDARDS

- Directive 2014/30/EC Electromagnetic Compatibility meeting European harmonised standards EN61000-6-2:2005 class B in standard EN61000-6-4:2001
- Directive 2014/35/EU Low Voltage meeting European harmonised standards EN 60947-1:2004