

PERMANENT INSTRUMENT

ACTEON 2050-SS20-T / ACTEON 2050-SS50-T

New suspended solids and temperature field transmitter

- Sturdy, watertight, easy to install
- Widescreen graphic display: instant measurements, trend line, calibration state
- Quick and simple intuitive programming
- 4-20 mA outputs, programmable relays





Technical specifications	
Suspended solids measurement range	0.00 to 20.00g/L or 0.00 to 50.00g/L
Suspended solids measurement accuracy	±0.2g/l [0.00-20.00g/l] / ±0.2 g/l [0.00-20.00 and ±0.5 20.00-50.00g/l]
Temperature measurement range	-10.00 to +50.00°C
Temperature measurement accuracy (°C)	±0.1°C
Casing	ABS
Protection	IP 65
Operating temperature	-25°C to +55°C
Dimensions (L x W x D) /Weight	173 x 195 x 103mm / 1.5kg
Display	Widescreen back-lit graphic display: 240 x 128 pixels (108 x 58mm)
Power supply	230/115Vac 60Hz, Optional: 24Vdc
Max power consumption	10VA
4-20mA outputs	2 galvanic isolation outputs (max load 700ohms): - Adjustable from 0.00 to 20.00g/L or from 0.00 to 50.00g/L - Adjustable from -10.00°C to +50.00°C
Relay outputs	2 relays that can be configured in 3 different modes: - Adjustment in alarm mode (1 suspended solids and 1 temperature (°C) threshold) - Adjustment in adjustment mode (2 suspended solids thresholds) - Adjustment on 1 High threshold/Low threshold relay – forced Start-up/Shutdown

The standard ACTEON 2050 unit comes with a MES5 sensor with a 10-meter cable connection.

Simple, sturdy and reliable like its legendary predecessor, the APF series, with additional digital intelligence and leading-edge technology.

Fields of application:

Using the new ACTEON 2050 as a fixed unit optimizes the measurement and regulation processes of suspended solids in the following fields:

- Wastewater treatment, (input/output controls, aeration and anoxic tanks, sludge return, etc.)
- Industrial effluent treatment (input/output controls, biological treatment regulation, etc.)

Suspended solids sensor: PONCIR-MES5-10

Measurement principle: Optical absorption of infrared light, regulated and pulsed emission (10Hz frequency)

- **Dimensions:** Length: 195.5mm
- **Weight:** 1kg
- **Materials:** PVC and special glass, IP68
- **Temperature compensation (°C) :** automatic per CTN of +5 to +30°C
- **Emission wavelength:** 950nm (infrared)
- **Cable:** Multiple coated wires, polyurethane sheath. 10m standard length (up to 100m on request)

Installation options: Fixed sensor-holder perch, accessories for in-pipe installation.



The MES 5 optical sensor consists of three parts:

The head of the sensor

The sensor is cylindrical and has a diametral cavity with parallel walls (optical length 5mm). Two quartz disks mounted on ring-type joints let through the radiation and protect the different diodes. This assembly absorbs thermal shocks and allows the sensor to operate up to 100°C.

The body of the sensor

Equipped with a set of electronic boards, diode feeds and signal and amplification processors, the body of the sensor can be positioned up to 100m from the transmitter sensor.

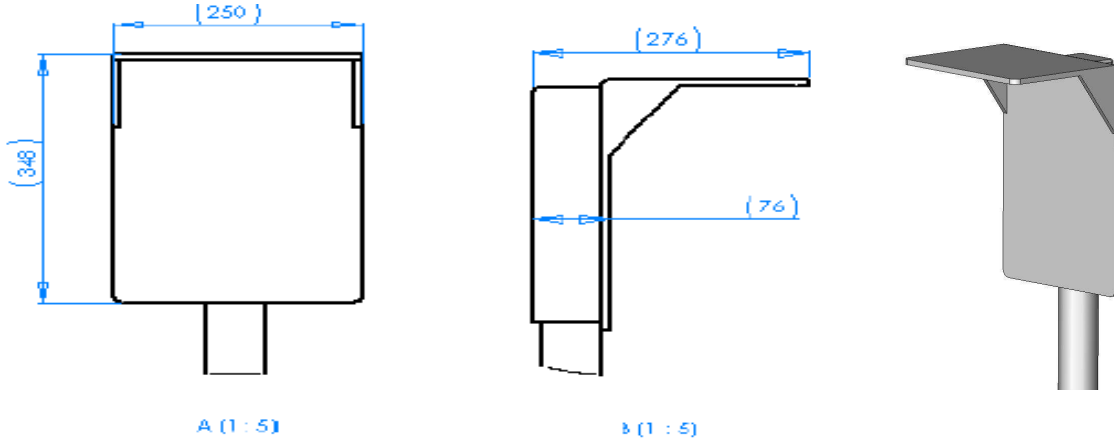
The sleeve

This is where the electronic boards are connected to the coated cable. A cable gland is used to keep it watertight.

Temperature Sensor:

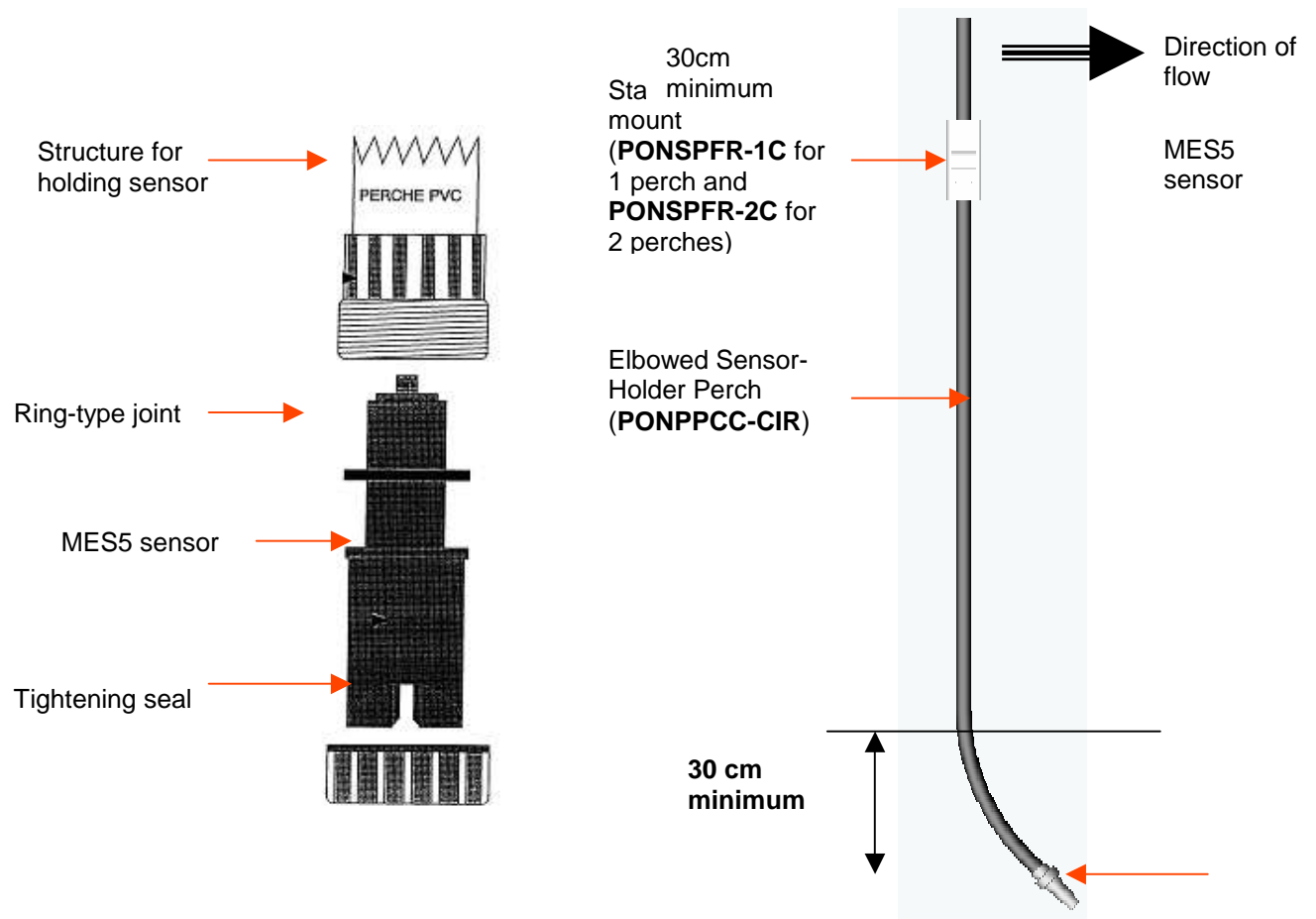
- Delrin, Stainless steel, Silicone - IP68
- Dimensions: Diameter 3mm (sensor), Length 115mm
- Weight: 40g
- Cable: 10m standard length

Accessories for electronic unit installation:

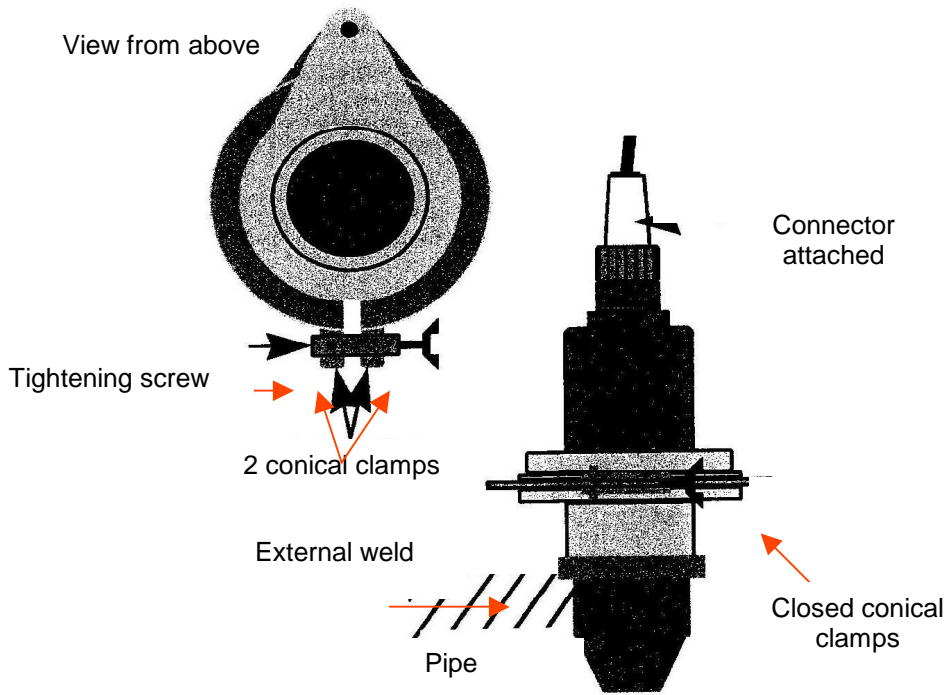


Hood mount for the ACTEON 2050 transmitter (**PON-PDPCV-1** for 1 transmitter and **PON-PDPCV-2** for 2 transmitters).

Accessories for sensor installation in tanks and open canals:



Accessories for in-pipe installation:



MES5 sensor for in- pipe installation with a quick mounting/dismounting system using conical coupling clamps