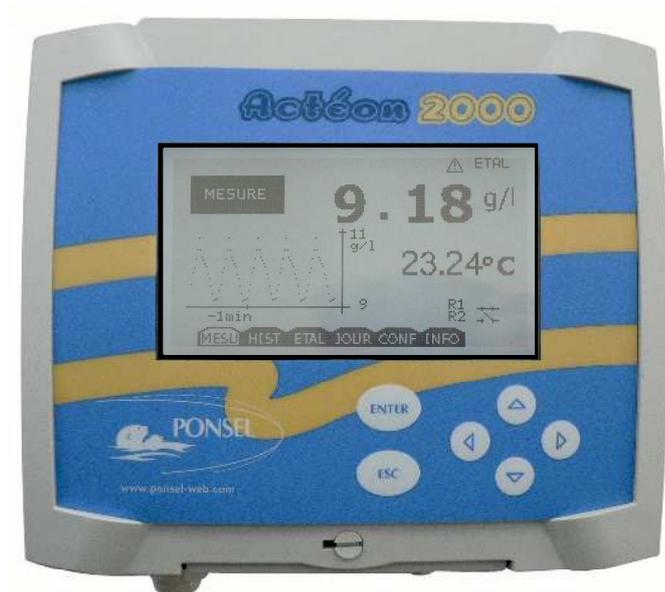


## PERMANENT INSTRUMENT

# 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	
<b>Suspended solids measurement range</b>	0.00 to 20.00g/L or 0.00 to 50.00g/L
<b>Suspended solids measurement accuracy</b>	±0.2g/l [0.00-20.00g/l] / ±0.2 g/l [0.00-20.00 and ±0.5 20.00-50.00g/l]
<b>Temperature measurement range</b>	-10.00 to +50.00°C
<b>Temperature measurement accuracy (°C)</b>	±0.1°C
<b>Casing</b>	ABS
<b>Protection</b>	IP 65
<b>Operating temperature</b>	-25°C to +55°C
<b>Dimensions (L x W x D) /Weight</b>	173 x 195 x 103mm / 1.5kg
<b>Display</b>	Widescreen back-lit graphic display: 240 x 128 pixels (108 x 58mm)
<b>Power supply</b>	230/115Vac 60Hz, Optional: 24Vdc
<b>Max power consumption</b>	10VA
<b>4-20mA outputs</b>	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
<b>Relay outputs</b>	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.

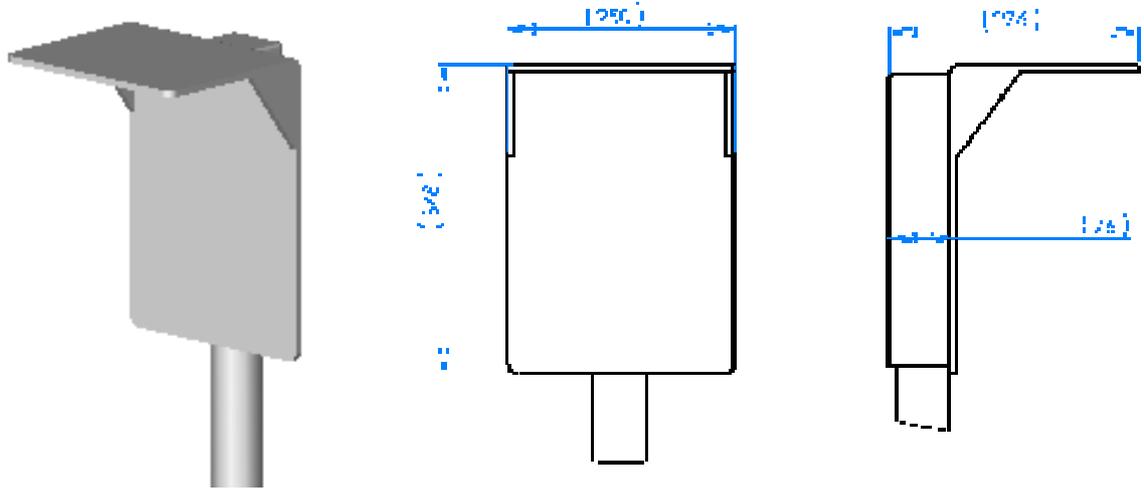
### The sleeve

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

## Temperature Sensor:

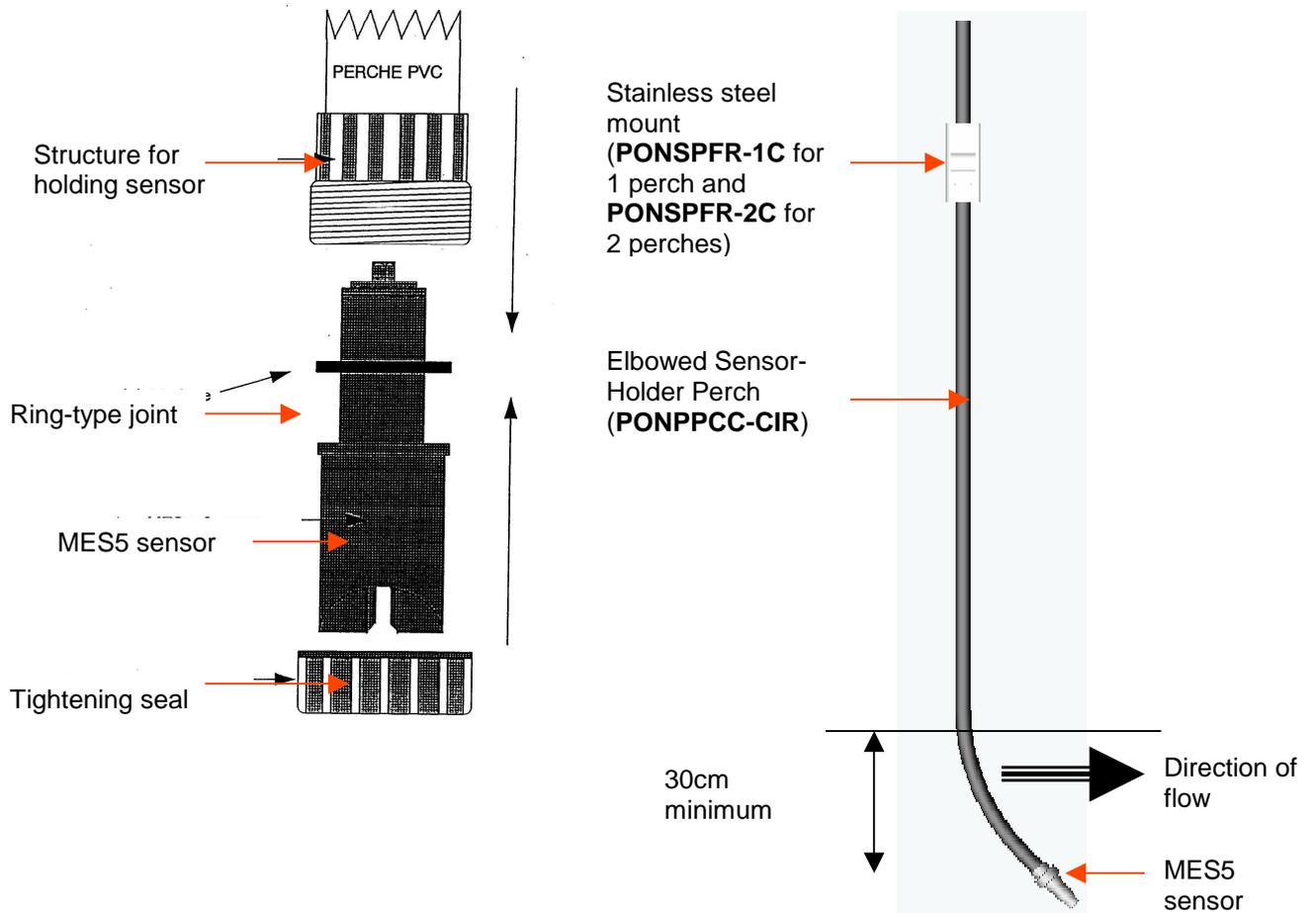
- Delrin, Stainless steel, Silicone - IP68
- Dimensions: Diameter 3mm (sensor), Length 115mm
- Weight: 40g
- Cable: 10m standard length

### Accessories for electronic unit installation:

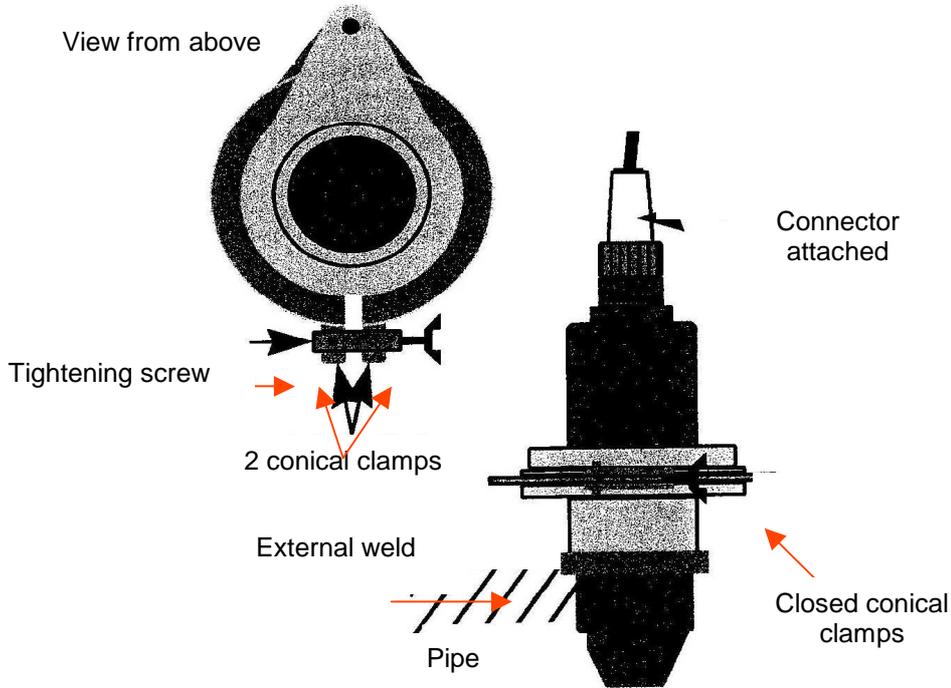


Hood mount for the ACTEON 2050 transmitter (**PON-PDPCV-1** for 1 transmitter and **PON-PDPCV-2** for 2 transmitters).

### 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