

T: +44 (0)1444 410040 E: sales@psmmarine.com www.psmmarine.com

### HCG Self Powered Hydrostatic Contents Gauge





# Part of the TankView product group

PSM Instrumentation Ltd, Unit 3 Burrell Road, Haywards Heath, West Sussex, RH16 1TW. UK

DAT 11D Sept. 2020

#### **KEY FEATURES**

- Self powered with no requirements for electrical or pneumatic power.
- Simple to install with factory calibration for each application.
- Stainless steel sensor construction ensures compatibility with common marine fluids such as fuel oil, seawater and bilge waste.
- Robust construction provides reliable operation with no requirements for routine calibration or service.
- A range of sensor mounting options, dial sizes & calibration markings and capillary lengths.
- Type approved for marine duty by the BV and DNV marine approval authorities and safe for installation in zone 0 flammable hazard areas.



PSM is a Scanjet Group Company



The HCG series self powered hydrostatic contents gauge requires no external power source for operation and gives a continuous readout of the contents within a tank without the aid of batteries or hand pumps.

HCG contents gauges are constructed with 316 stainless steel diaphragm, stainless steel or mild steel diaphragm sensor housing, a PVC sheathed copper micro bore pressure capillary and stainless steel indicator gauge.

Displacement of this diaphragm due to applied hydrostatic pressure is transferred via an inert gas filled capillary to the remotely positioned indicator. Each indicator is individually scaled and calibrated in customer requested units according to individual tank dimensions.

The capillary is heavy duty seamless copper mechanically protected by a fire retardant sheathing compound, and can be supplied to a maximum of 20 meters in length.

## Installation

Design simplicity is a key feature that reduces time and cost for installation. Each unit is supplied with the required calibration and scale markings and requires no commissioning on-site.

A full range of sensor connection options are available including flanged, threaded runningnut and submersible designs. These can be connect directly with standard / existing tank fittings and may even be fitted to full tanks by means of non-return or isolating valves.

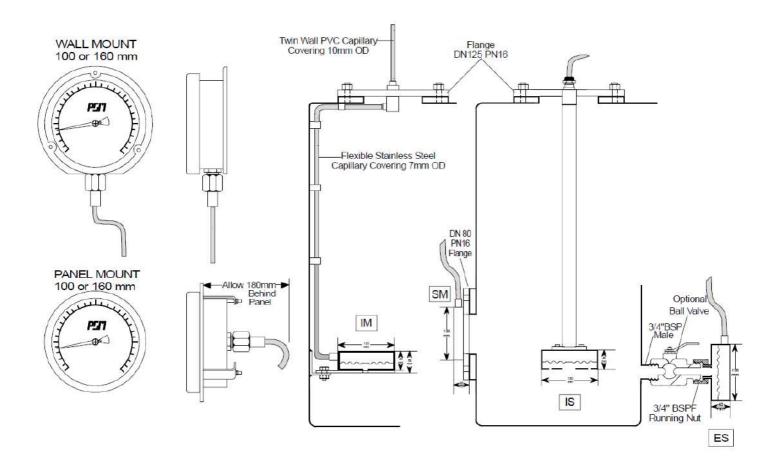
The indicator gauge can be positioned at any height above or below the sensor datum level point. The HCG series is maintenance free and requires no routine calibration.



## Specifications

Mounting type	Wall or Panel
Indicator gauge size	100, 160 and 250 mm diameters
Scale markings	According to customer application
Accuracy	+/- 1.5% of Full Scale
Environmental protection	Sensor IP68. Gauge dial IP65
Length of capillary tube	According to customer application (Max 20m)

### **Dimensions and sensor installation**





### **Model Coding**

## Model code 7 positions (ex: ES / X / 160 / W / S / 3 / P)

<ol> <li>Sensor mounting</li> <li>Sensor mounting</li> <li>Measurement range</li> </ol>	IM SM IS ES X	Internal tank mounting with fixing bracket External mounting DN80 PN16 flange Internal tank mounting with pole and DN125 flange External mounting 3/4" BSP running nut Specify according to application in metres water gauge
3. Indicator gauge diameter	100 160 250	100mm 160 mm 250 mm (wall mounting only)
4. Indicator gauge mounting	W P	Wall mount via integral back plate Panel mount via included clamp
5. Diaphragm sensor housing material (Note: diaphragm and in- dicator are always stainless steel)	S M	Stainless Steel Mild Steel
6. Capillary length	Х	Specify according to application (minimum 1m and maximum 20 m)
7. Capillary sheathing material	P S	PVC 10 mm o/d (sensor mounting external to tank) Stainless steel 8 mm o/d (sensor mounted internally in tank)

### Additional information required for manufacture:

- Tank dimensions or drawing
- Scale markings and units
- Tank name / product
- Product density / specific gravity
- Height of sensor above tank bottom