

High resolution intrinsically safe gauge for tank level measurement Master Level series AT05410



The AT05410 high resolution level sensor is ideal for applications that demand maximum precision and it is also suitable for detecting tank leaks.

The AT05410 sensor operates in accordance with the magnetostrictive measuring principle.

The sensor tube contains a wire made of magnetostrictive material. Magnets integrated in the floats magnetise the wire at the float position. The sensor electronics transmit current pulses through the wire, which generate a circular magnetic field. A torsional wave develops at the point where the two magnetic fields overlap and it propagates towards the sensor head. In the sensor head, these waves are converted into an electrical signal. The float positions are calculated from the different propagation times.

For precision temperature measurements, the sensor tube of the AT05410 high resolution contains temperature sensors.

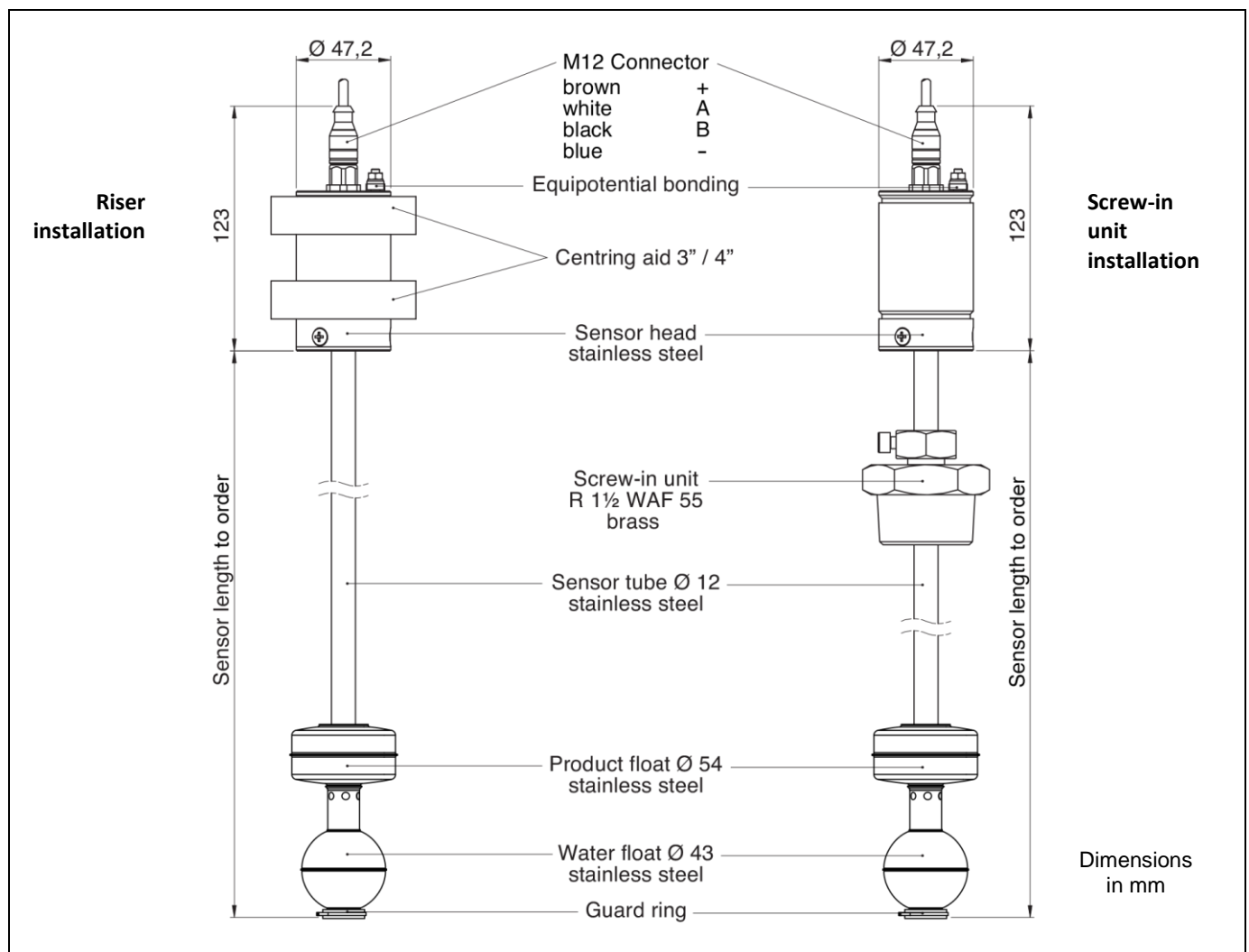
Technical data

• Product accuracy	± 0,25 mm (product) ± 2 mm (water)
• Repeatability	± 0,05 mm (product) ± 0,5 mm (water)
• Resolution	0,001 mm
• Floater	Ø 54x33 mm (product) Ø 43x62 mm (water)
• Water detection	Continuously from 30 mm
• Temperature Measuring range	-40 ÷ +85°C
• Temperature Measuring accuracy	< ± 0,3°C (20°C), ± 0,2°C (25°C)
• Electrical connection	M12 connector for cable terminal
• Protection class	IP68
• Sensor material	1.4301/304 (dipstick) 1.4305/303 (head)

- Marking



II 1 G Ex ia IIB T6...T5 Ga
 II 1/2G Ex ia IIB T6...T4 Ga/Gb
 II 2 G Ex ia IIB T6...T4 Gb
 II 1D Ex ia IIIC T135 °C Da



Code

AT05410	/PRODUCT	/HEIGHT
	/C: fuels	/XXXX: height in cm

Specification subject to change without notice