

MATERIAL SCHEDULES

With this expression we intend to define by means of a tag the types of materials used for the main components that constitute a **BONETTI** magnetic level gauge

The most used Material Schedules are listed below.

Material Schedule	Vertical Chamber and Stub Ends	Float	Remaining Wetted Parts	NOT Wetted Parts
36/52	Tp 316L	Tp 316	A 105	A 105
36/63	Tp 316L	Tp 316	Tp 316	inox
36/64	Tp 316L	Tp 316	Tp 316	A 105
TIT/52	Tp 316L	Titanium	A 105	A 105
TIT/63	Tp 316L	Titanium	Tp 316	inox
TIT/64	Tp 316L	Titanium	Tp 316	A 105
PVC	PVC	PVC	PVC	PVC
PP	PP	PP	PP	PP
PVDF	PVDF	PVDF	PVDF	PVDF
PTFE	Tp 316 + PTFE	PTFE	PTFE	A 105

Slip-on flanges are manufactured in the most suitable material.

Flange connecting bolts are of the most suitable material.

CENTRE TO CENTRE DISTANCE VISIBLE LENGTH

Our magnetic level gauges are manufactured with the C to C and Visible Length requested by customers, up to approx 6,500 mm for level gauges having a stainless steel vertical chamber and up to approx 3,500 mm for level gauges having a vertical chamber in synthetic polymers.

Longer C to C distances are manufactured with an intermediate flanged connection.

Normally the visible length is equal to the Centre to Centre distance of the tank connections.

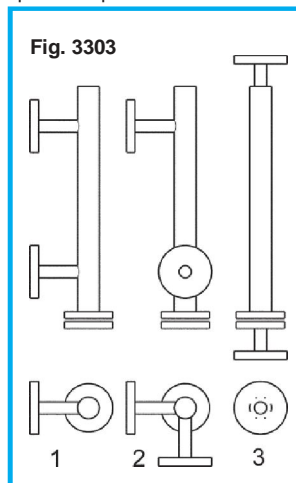
CONNECTIONS

We always recommend the fitting of shut-off cocks/valves between level gauge and vessel.

Connections arrangement

The standard and most requested arrangement (see Fig. 3303 - arrang. 1) consists of 2 horizontal vessel connecting stub ends fitted on same vertical.

Different arrangements (see arrang. 2, 3, etc.) can be made for special requirements.



Connections types.

The connections between the gauge body and the vessel (both with or without shut-off cocks or valves) are supplied according to Customer request.

The most common end connections are:

- welded flanges;
- slip-on flanges;
- male threaded;
- female threaded;
- threaded union nut for 3-piece connection;
- S.W.;
- B.W..

PN, DN and facing Standards to be indicated by Customer.

INDICATING SCALE

Each instrument is equipped with an indicating scale, fixed to the gauge chamber, fixed to the gauge chamber by means of brackets with spring or hose clamps.

The scale is made of rotating cylinders housed in a one piece case of austenitic stainless steel with glass in the front to allow the reading.

The scale allows continuous reading. The length of the scale is suitably sized for the gauge;

Axis to axis distance between cylinders is 10 mm.

The last bottom five cylinders of the indicating scale, positioned below the bottom nozzle connection to the vessel, provide visual alarm indication in case of float failure

Different versions of the indicating scale are available:

- Standard Scale

The standard scale is water proof. The sealing is obtained using silicone gaskets.

The cylinders are of plastic material of white/red colour, suitable for fluid operating temperature up to 200 °C.

- High Temperature Scale

In this scale the cylinders are of special plastic material of white/black colour, suitable for fluid operating temperature up to 400 °C. These white/black cylinders may be used also in standard scales for better reading in case of black/white television remote transmission. In case of higher temperatures special indicating scales are available.

- Scale with Non-frosting Extension

Perspex non-frosting block extension with a protrusion sized depending on the process fluid operating temperature is fitted and sealed on the standard indicating scale.

This solution allows the reading of the level also in case of frost on the gauge chamber and scale.

ACCESSORIES

Shut-off, drain and vent valves and cocks

We produce and can supply a wide and complete range of shut-off, drain and vent valves and cocks, specifically designed for level gauge application, as described in following pages.

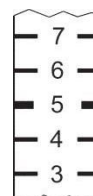
Calibrated Scale.

At the side of the indicating scale a stainless steel calibrated scale can be assembled (see Fig. 3304).

The standard calibration is in cm.

On request any different calibration or material can be supplied.

Fig. 3304



Magnetic Switches.

It is advisable, but not indispensable, that the fixing of the magnetic switches to the level gauge is made by the gauge manufacturer. Please state in your order if there are specific reading ranges within which the switch setting has to be made, or if the setting is to be considered continuous on all the length of the indicating scale. In both cases as the switch is fitted to the gauge chamber with a stainless steel amagnetic bracket, the position can be easily and precisely set without any special tool. The switches can be added also subsequently to delivery of the gauge.

Any switch can be located:

- with respect to the height of the gauge scale:
 - adjustable with continuity at the required level on the whole length of the indicating scale
 - adjustable within specific range to be stated in the order.
- with respect to the horizontal plane (Fig. 3305):
 - located at 180° in respect to the indicating scale, with an allowance range particularly wide, that is of $\pm 55^\circ$
 - at the side of the indicating scale, indifferently on the left or right side, and on both sides.

Therefore there is the possibility of having more than one magnetic switch at the same level (Fig. 3305), provided that it is not placed into the two blind areas indicated with A in Fig. 3305.

Please state in your order whether there are specific needs in the location of switches.