

Magnetic level gauge PN 40/CL 300

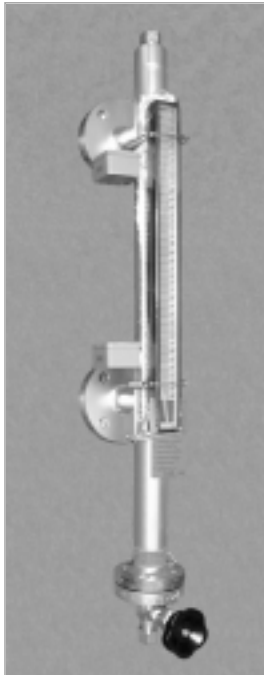
Magnetic indicating bar scale with fine resolution, indirect level indication
Fully closed housing with gapless weldings and butt-welded connections
Float magnet field totally circular with strong far field
Float defect control with indicating field in lower display end

Product group **710**

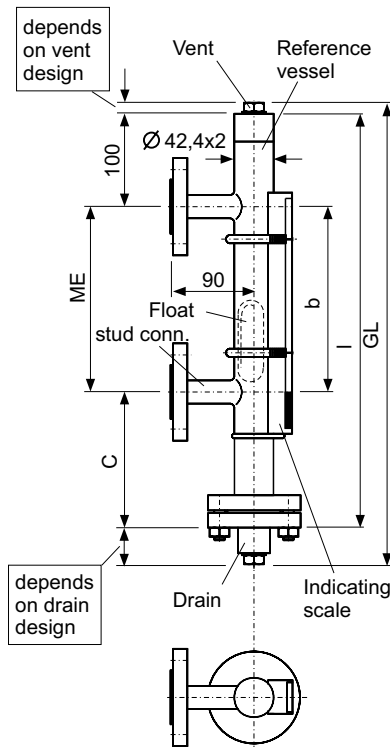
Type **104.0**

Sheet: 1/2 Revision: 2

Date: 08/03



Type .104.0 equipped with Magnetic switches MIN and MAX, vent plug, drain valve and indicating scale .AVG3 with high-T isolation.



Field of Application

The magnetic level gauge is for indicating the level height of liquids in any vessel via bypass. Simultaneously you can use level switches (s. 740.XXXX) or level sensors (s. 745.XXXX) mounted onto the reference vessel tube to signal level limits or measure the level height by remote means.

General Data

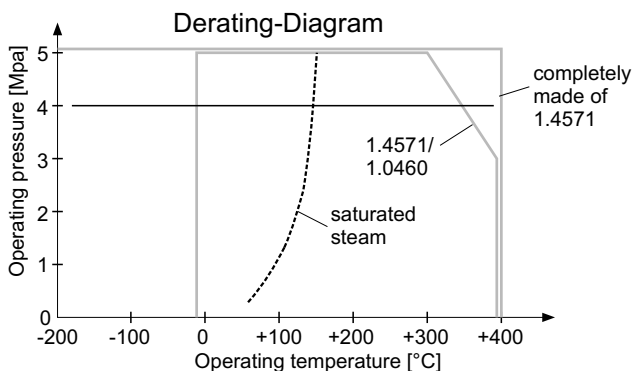
Density, float 1.4571: from 0,74 g/cm³
Titanium: from 0,48 g/cm³
Precision for Interface or density: from ±0,01 g/cm³
Measuring range (=ME): single piece up to 5000 mm, above split construction, from 3000 mm holding bracket each 1500 mm
Measuring error: ±10 mm
Viscosity: max 1000 mPas
Display type: 710.AVG3
Connection: weld end (Standard), Flanges DIN and ANSI
Drain/vent: Cap (Standard), plug 1/2" NPT, as option 3/4" NPT, G1/2A, G3/4A Valve DN6, optional DN8, Flange stud DIN and ANSI and acc. to customer spec.
Material tube, stud, 1.4571 (Standard), ANSI-coded flanges, fixtures: Titanium, Hastelloy, etc., float: 1.4571, Titanium etc.
Weight: Basic 7 kg + 0,33 kg/100mm ME

Design Data

Operating pressure: up to 5,2 MPa/300 lbs (see Derating-Diagram)
Temperature Media
Reference vessel cpl. 1.4571: -200 ... +400 °C
flanges 1.0460: -10 ... +400 °C (see Derating-Diagram)
Below -10 °C Indicating scale .AVG2 and below -20 °C add frost protection with 710.ISOL
In both cases preparation for insulation included.

Certificates

Pressure Vessel Directive (PED) 97/23/EG
EC-Type Examination Certificate: TÜV 03 ATEX 2190 Zone 0
Subject to alterations



Ordering no.

710.104.0 - XXX - XXXX - XXXXXXXX

Density, e.g.
054=0,54 g/cm³

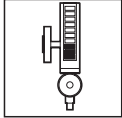
Center to center ME
in mm

Connections etc.
see sheet
710.VAR

PHÖNIX

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Details

Float, Vent, Drain and Connection

Product group **710**

Type **104.0**

Sheet: 2/2

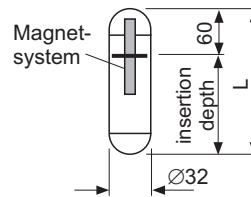
Revision: 4

Date:

09/05

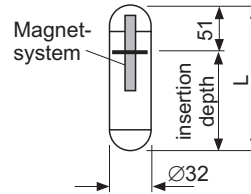
Float material 1.4571, Ø32, PN40/CL300

Density range [g/cm ³]	Measure C [mm]	Total length L [mm]	Weight [g]	Part no.
1,32 ... 1,67	160	150	101	BG1001044167
1,10 ... 1,31	190	180	111	BG1001044131
0,97 ... 1,09	230	220	128	BG1001044109
0,87 ... 0,96	270	260	144	BG1001044096
0,80 ... 0,86	330	320	171	BG1001044086
0,74 ... 0,79	410	400	208	BG1001044079
Interface float (individually designed ±0.01 g/cm ³)				BG1001044TRX



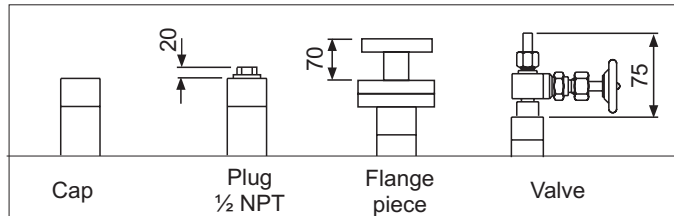
Float material Titanium, Ø32, PN40/CL300

Density range [g/cm ³]	Measure C [mm]	Total length L [mm]	Weight [g]	Part no.
1,09 ... 1,43	140	130	73	BG1001049143
0,89 ... 1,08	170	160	82	BG1001049108
0,75 ... 0,88	210	200	93	BG1001049188
0,66 ... 0,74	250	240	104	BG1001049074
0,60 ... 0,65	300	290	117	BG1001049065
0,55 ... 0,59	360	350	133	BG1001049059
0,51 ... 0,54	430	420	153	BG1001049054
0,48 ... 0,50	510	500	175	BG1001049050
Interface float (individually designed ±0.01 g/cm ³)				BG1001049TRX

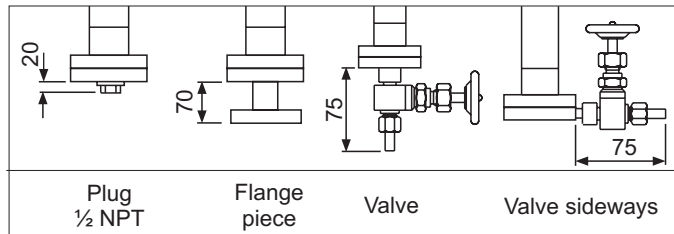


Density range corresponds to measuring error ±10 mm

Vent



Drain

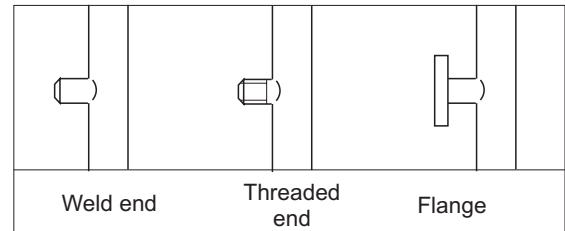


Design Data

Operating pressure: up to 5,2 MPa/300 lbs
(see Derating-Diagram for 1.4571)
Test pressure: Operating pressure x 1,3
Operating temperature: -200 ... +400 °C
(see Derating-Diagram for 1.4571)

Subject to alterations

Connections



Ordering no.

Accessories:

Device	Product group
Magnetic switch	740.XXXX
Level sensor	745.XXXX
Indicating scale	710.AVGX
Frost protection	710.PLEXI
Heating	710.HEAT

Spare parts:

Designation	Part no.
Float	s. Float table above
Indicating scale	BG10.AVGX
Sealing	04750395XXX
Fixing springs	3813000672
Align magnet	BG10XXXXMAKU

There may be any other customer specified connections, materials and special floats.

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