

## Magnetic Level Gauge PN 250/CL 1500

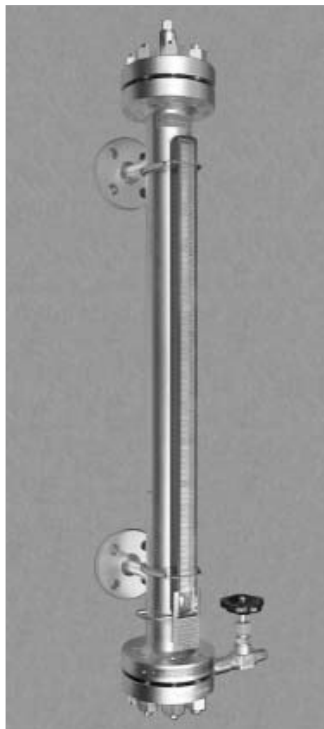
Magnetic indicating bar scale with fine resolution, indirect level indication  
 Indicating elements permanent magnetic with stop pin  
 Fully closed housing with gapless weldings  
 Float magnet field totally circular with strong far field  
 Float defect control with indication in lower display end

Product group **710**

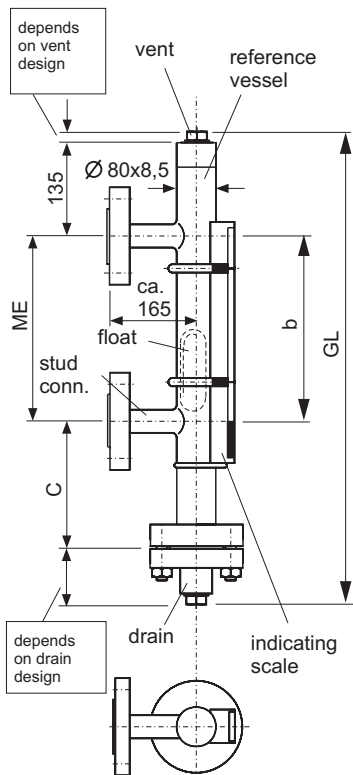
Type **140.0**

Sheet: 1/2 Revision: 10

Date: 04/07



Type 120.0 e. g. equipped with drain valve sideways, indicating scale type 710.AVG3 and top flange



### Field of Application

The magnetic level gauge is for indicating the level height or interface 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

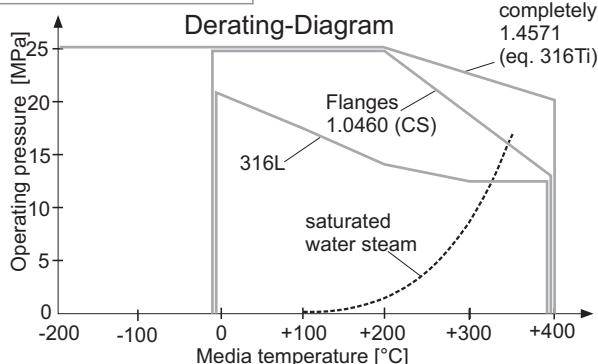
Density: form  $0,51 \text{ g/cm}^3$   
 Precision for Interface or density: from  $\pm 0,1 \text{ g/cm}^3$   
 Measuring range (=ME): to 5000 mm, above split construction, from 3000 mm holding bracket each 1500 mm  
 Measuring error:  $\pm 10 \text{ mm}$   
 Viscosity: max 5000 mPas  
 Display type: 710.AVG3  
 Connection: weld end or Flanges DIN and ANSI plug 1/2" NPT/cap  
 Drain/Vent: optional 3/4" NPT, G1/2A, G3/4A, Flange stud DIN and ANSI Valve ND8, optional ND6, and acc. to customer spec.  
 Material tube, stud, flanges, fixtures: SS 1.4571 (eq. 316Ti), optional, Hastelloy, Titanium etc., DIN + ANSI-materials  
 Float: Titanium  
 Weight: Basic 32,5 kg + 1,508 kg/100mm ME

### Design Data

Operating pressure: up to 25 MPa/1500 lbs (see Derating-Diagram)  
 Temperature Media  
 Reference vessel compl. 1.4571:  $-200 \dots +400 \text{ }^\circ\text{C}$   
 flanges 1.0460:  $-10 \dots +400 \text{ }^\circ\text{C}$  (see Derating-Diagram)  
 Below  $-10 \text{ }^\circ\text{C}$  Indicating scale 710.AVG2  
 below  $-20 \text{ }^\circ\text{C}$  add frost protection with 710.ISOL  
 In both cases preparation for insulation included

### Certificates

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



### Ordering no.

7 1 0 . 1 4 0 . 0 - XXX - XXXX - XXXXXXXX

Density, e.g.  $057=0,57 \text{ g/cm}^3$

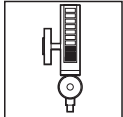
Center to center ME in mm

Connections etc. see data sheet 710.VAR

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## Details

Float, Vent, Drain and Connection

Product group **710**

Type **140.0**

Sheet: 2/2

Revision: 10

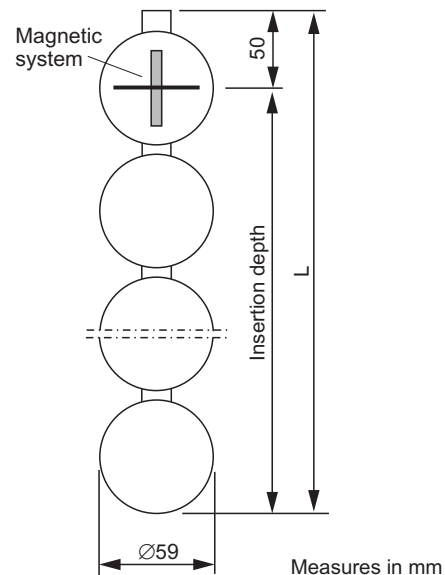
Date:

04/07

### Float material Titanium, Ø59, PN250

| Density [g/cm³] | Measure C [mm] | Total length L [mm] | Weight [g] | Part no.    |
|-----------------|----------------|---------------------|------------|-------------|
| 0,75 ... 1,03   | 213            | 213                 | 231        | BG101409103 |
| 0,65 ... 0,74   | 335            | 335                 | 324        | BG101409074 |
| 0,58 ... 0,64   | 457            | 457                 | 417        | BG101409064 |
| 0,54 ... 0,57   | 579            | 579                 | 510        | BG101409057 |
| 0,51 ... 0,53   | 823            | 823                 | 696        | BG101409053 |

Density range corresponds to measuring error ±10 mm

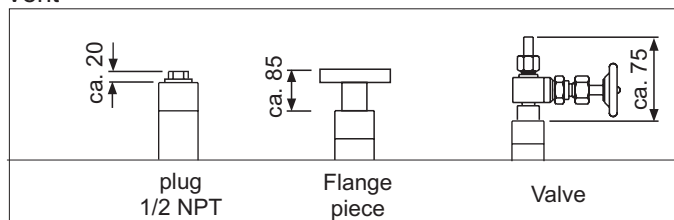


### Design data Float

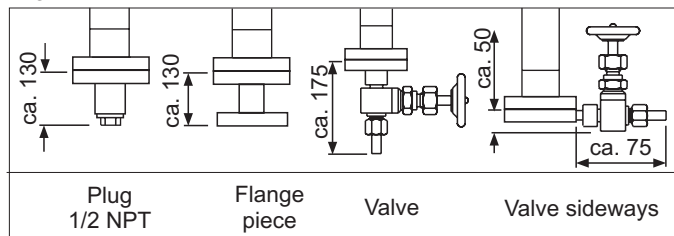
Operating pressure: up to 25,0 MPa/1500 lbs  
(see Derating Diagram)  
Test pressure (cold): 32,5 MPa  
Operating temperature: -200 ... +400 °C  
(see Derating Diagram)  
Total length: see Float table

Subject to alterations

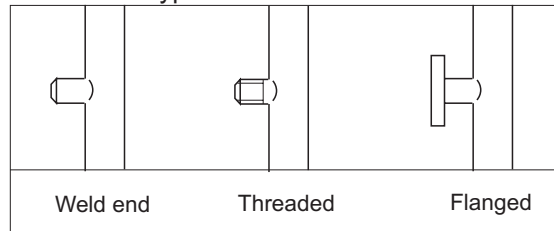
### Vent



### Drain



### Connection types



### Ordering no.

#### Accessories:

| Device           | Produktgruppe |
|------------------|---------------|
| 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 | 710.AVGX             |
| Sealing          | 1010079010NS         |
| Fixing springs   | 3813000972           |
| Align magnet     | BG10XXXXMAKU         |

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

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