

Magnetic Level Gauge PN10 to PN400

Magnetic operated Level Gauge and Interface Gauge for liquids
Temperatures from -200 °C up to +400 °C
Density rate from 0,29 up to 3,00 g/cm³

Product group **710**

Type **XXX.0**

Sheet: 1/1 Revision: 0

Date: 08/03

Connection

710.VAR

Variants
-side way
-top/bottom
-weld ends
-flange

Vent

710.VAR

-cap
-plug
-threaded end
-flange piece
-blind flange etc.

Indicating scale

see
710.AVG2
710.AVG3

red/silver

Accessories

Magnetic Level Switch

product group 740

-Reed/Triac
-SPDT
-Namur
-Ex

Insulation

see
710.ISOL

Remote control

Product group 745

-Reed chain
-Magnetostrictive
-ATEX

Float, datasheet

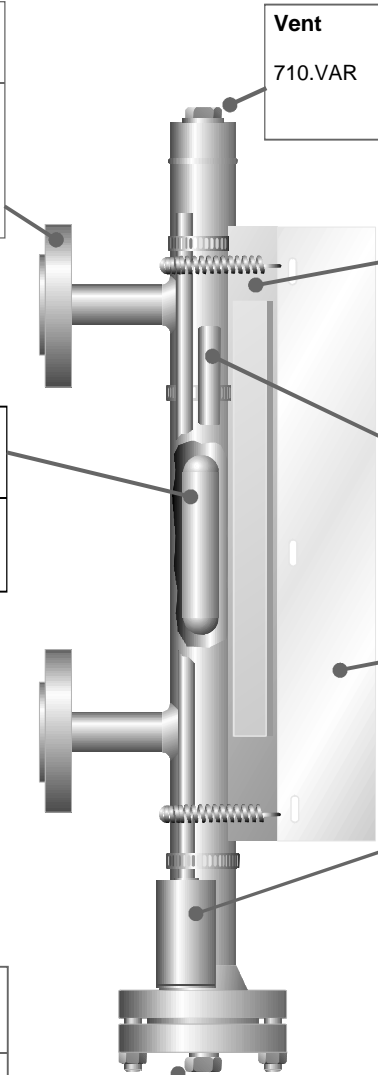
Magnetic Level Gauge

-closed
up to 400 bar

Drain

710.VAR

-cap
-plug
-threaded end
-flange piece
-blind flange etc.



Type overview

Type	Pressure DIN/ANSI	Standard-Density range [g/cm ³]
098	16/150	1,70-0,70
104	40/300	1,67-0,48
100	40/300	1,52-0,76
110	40/300	0,53-0,37
120	100/600	1,17-0,57
130	160/900	2,00-0,68
140	250/1500	2,00-0,68
150	320/2500	2,00-0,68
160	400/2500	2,00-0,68

General

Media: separated from indicator
Connection: variable
Sight length: from 5 m splitted version
from 3 m Hold latch
Automation: limit switches
remote controls

Material

Float: 1.4571/Ti
Body: 1.4571/1.0460
Flange: 1.4571/1.0460
further materials: on demand

Certifications, Examinations

Ex: ATEX, Zone 0 (incl. Titanium)
Ship building: Germanischer Lloyd
Examinations: all acc. to EN10204
Sour gas: NACE, BEB, MOAG, ...
Material: Ultra sonic, hardness test
Welding: X-ray, dye-penetrant test
Further examinations: on request

Surface finish

Oil and fat-free
Corrosive at SS
Shot blasting, Sand, steel gravel,
shines (Glass beads)
Touch, coloration

Ordering-no.

7	1	0	.	X	X	X	.	X	.	X	X	X	-	X	X	X	X	-	X	X	X	X	X	X	X	X
Type	X	X	X											Selection key see 710.VAR												
Heating	without		0											X				ME in mm								
	with		3											X				Density upper value, see datasheets								

PHÖNIX

Messtechnik GmbH
Salzschlirfer Straße 13
D-60386 Frankfurt/M.
Tel. +49/69/41 67 42 - 20
Fax +49/69/41 67 42 - 29
sales@phoenix-mt.com
www.phoenix-mt.com



Magnetically operated Liquid Level Gauges

Type data overview

Required data:

- P (Design- and process pressure)
- T (Design- and process temperature)
- sg (specific gravity, lower, upper)
- Connection to containment, tank
- Vent/drain type
- Material
- Measuring length
- Level, interface

Type	Material	Design Pressure P[bar]	at T [°C]	Tmax [°C]	standard Indication tube / bypass tube	Float for sg [g/cm ³]	
						1.4571	Titanium
710.102.0	PVC	10	+20...+60	+60	63,0 x 3,0	0,70...2,00	
710.102.0	PE	25	+20...+40	+40	63,0 x 3,0	0,70...2,00	
710.102.0	PP	6	+20...+50	+90	63,0 x 3,0	0,70...2,00	
710.102.0	PVDF	16	-10...+140	+140	63,0 x 3,0	0,70...2,00	
710.103.0	SS/PTFE	10	-10...+140	+140	60,3,0 x 2,9	0,70...2,00	
710.098.0/.098.3	SS	19	-200...+400	+400	42,4 x 2,0 / 57,0 x 2,9	0,70...1,67	
710.104.0/.104.3	SS	52	-200...+400	+400	42,4 x 2,0 / 57,0 x 2,9	0,74...1,6	0,54...0,78
710.100.0/.101.3	SS	52	-200...+400	+400	57,0 x 2,9 / 76,9 x 2,9	0,75...1,527	0,48...1,43
710.106.0	SS/Gummi	25	-10...+80	+80	60,3,0 x 2,9	0,64...2,00	0,64...2,00
710.110.0/.110.3	SS	52	-200...+400	+400	76,1 x 2,9 / 88,9 x 3,2		0,29...0,72
710.120.0/.120.3	SS	103	-200...+400	+400	76,1 x 4,0 / 88,9 x 3,2		0,57...1,17
710.130.0	SS	160	-200...+400	+400	76,1 x 5,0		0,57...1,17
710.140.0	SS	250	-200...+400	+400	80,0 x 8,5		0,51...1,27
710.150.0	SS	320	-200...+400	+400	88,9 x 11,0		0,51...1,03
710.160.0	SS	400	-200...+400	+400	88,0 x 15,0		0,51...1,03
710.200/.300.0	SS	52/103	-200...+400	+400	76,1 x 2,9		0,51...1,17
710.220/.320.0	SS	400	-200...+400	+400	57,0 x 2,9	Custom design	
710.221/.321.0	SS	400	-200...+400	+400	57,0 x 2,9	Custom design	
710.222/.322.0	SS	400	-200...+400	+400	57,0 x 2,9	Custom design	
710.222.5	SS	400	-200...+400	+400	57,0 x 2,9	Custom design	
710.223/.323.0	SS	400	-200...+400	+400	57,0 x 2,9	Custom design	

Float design

- Closed floats
- up to 400 bar max P_{proc}
- e. g. 362 °C T_{op} at 198 bar P_{op} saturated steam (sg=0,51 g/cm³).

Other densities and materials on request
710.102.0: float material=material of tube

Note

- 710...0
no heating jacket
- 710...3
with heating jacket

Subject to alterations.

Magnetgesteuerte Niveauanzeiger

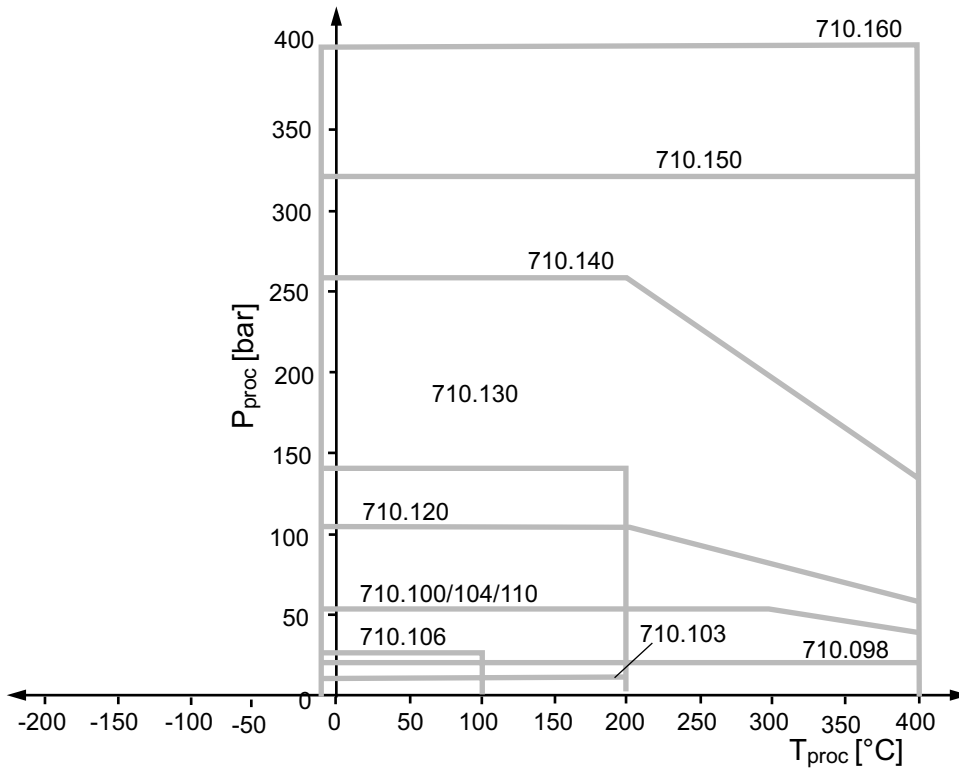
Magnetically operated Liquid Level Gauges

P - T - Diagramm

Werkstoff: 1.0460

P - T - Diagram

Material: 1.0460

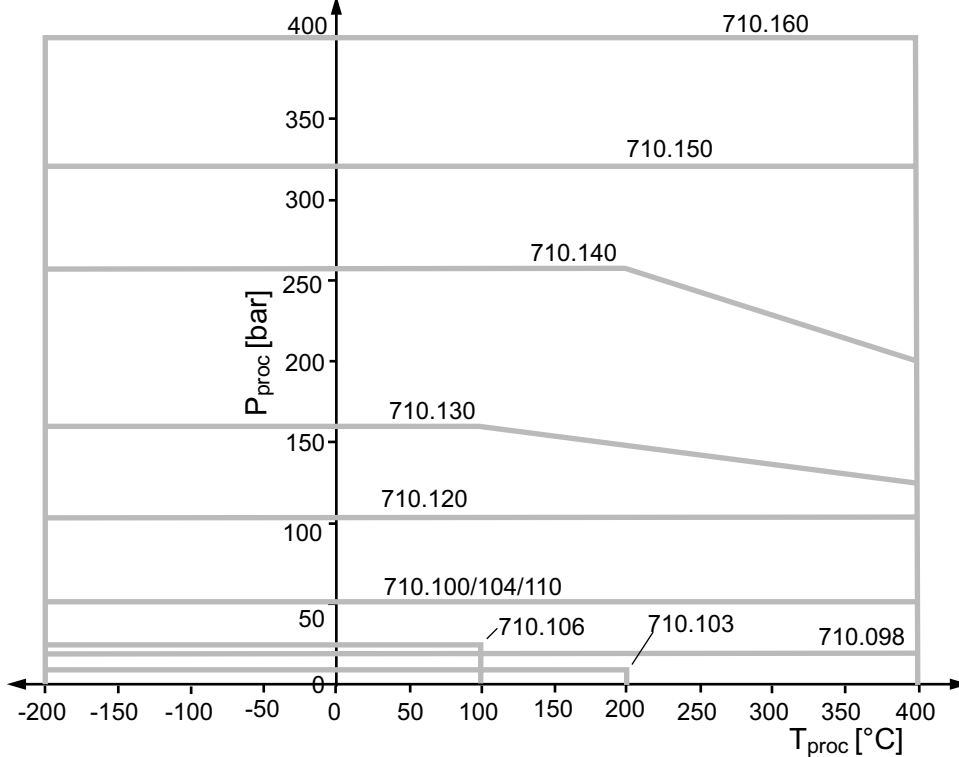


P - T - Diagramm

Werkstoff: 1.4571

P - T - Diagram

Material: 1.4571



Änderungen vorbehalten.

Subject to alterations.

Magnetically operated Liquid Level Gauges

710.VAR

Selection key

XXXXXX

DIN		ANSI		DIN		ANSI		
A	without facing	ST		F	tongue	RJ		Connection flange
B	female facing	LT		G	groove	LG		
C	DL-C			H	male	SG		
D	DL-D	RF		K	lens			
E	DL-E	RF sf						
A	DN10	1/4"		F	DN40	1 1/2"		Diameter
B	DN15	1/2"		G	DN50	2"		
C	DN20	3/4"		H	DN65	2 1/2"		
D	DN25	1"		I	DN80	3"		
E	DN32	1 1/4"		J	DN100	4"		
0	Piece, welding end	F	PN160	R	PN6 (EN)			Process connection
1	PN100	G	PN250	S	PN10 (EN)			
2	PN160	H	PN320	T	External thread G			
3	PN250	I	PN400	U	External thread NPT			
4	PN320	J	150 lbs	V	PN16 (EN)			
5	PN400	K	300 lbs	W	PN25 (EN)			
9	Custom design	L	600 lbs	X	Piece, welding end			
A	PN6	M	900 lbs	Y	PN40 (EN)			
B	PN16	N	1500 lbs	Z	PN64 (EN)			
C	PN40	O	2500 lbs	b	PN10			
D	PN64	P	Internal thread G	c	PN25			
E	PN100	Q	External thread NPT					
G	1.4571/PTFE							Sealing material
H	Graphite							
K	1.4391							
P	PTFE							
S	SIL C4400							
6	Vent 1/2" NPT, DN8 PN250, side ways			E	Vent 1/2" NPT DN8 PN250 socket			Drain
9	Flange-piece			F	Vent 1/2" NPT DN8 PN250			
A	Blind flange			G	Vent 1/2" NPT DN6 PN100			
B	Plug G1/2"			I	Vent 3/4" NPT DN8 PN250			
C	Plug 1/2 NPT			c	Plug 3/4" NPT			
D	Vent G1/2A DN8 PN250							
1	Cap + plug 1/2" NPT			B	Flange + plug G1/2A			Vent
2	Cap + plug G1/2A			C	Flange + plug 1/2" NPT			
3	Cap + plug 3/4" NPT			D	Flange + vent G1/2A DN8 PN250			
4	Cap + vent 1/2" NPT DN6 PN100			F	Flange + vent 1/2" NPT DN8 PN250			
5	Cap + vent 1/2" NPT DN8 PN250			G	Flange + vent 1/2" NPT DN6 PN100			
6	Cap + vent G1/2A DN8 PN250			H	Flange + vent G3/4A DN8 PN250			
7	Cap + vent 3/4" NPT DN8 PN250			I	Flange + vent 3/4" NPT DN8 PN250			
8	Cap + vent G3/4A DN8 PN250			O	Cap			
A	Blind flange			c	Flange + plug 3/4" NPT			
A	-60...-20 °C, AVG2, 60 mm frost protection							Temperature range
B	-19...-10 °C, AVG2							
C	-9...+100 °C, AVG3							
D	+101...+300 °C, AVG3							
E	+301...+450 °C, AVG3							
F	-100...-61 °C, AVG2, 100 mm frost protection							
G	-150...-101 °C, AVG2, 150 mm frost protection							
H	-273...-151 °C, AVG2, 200 mm frost protection							
4	1.4571 / A2-70 (T<400 °C)							Flange/screw material
A	A105 / 193 B7							
L	316L / 193 B8 C12							
S	1.0460 / 8.8 (T<300 °C)							
T	316 Ti / 193 B8T C12							
W	1.0460 / 1.7709 (T<400 °C), high-temperature resistant screws							

Subject to alterations

Rev. 0 09/03

PHÖNIX MESSTECHNIK GmbH
Salzschlirfer Straße 13, D-60386 Frankfurt
Tel. +49/69/41 67 42 -20
Fax +49/69/41 67 42 -29

MAGNETANZEIGER
MAGNETIC LEVEL GAUGES
PN 10 - PN 400

PHÖNIX