

ING. ROLF HEUN

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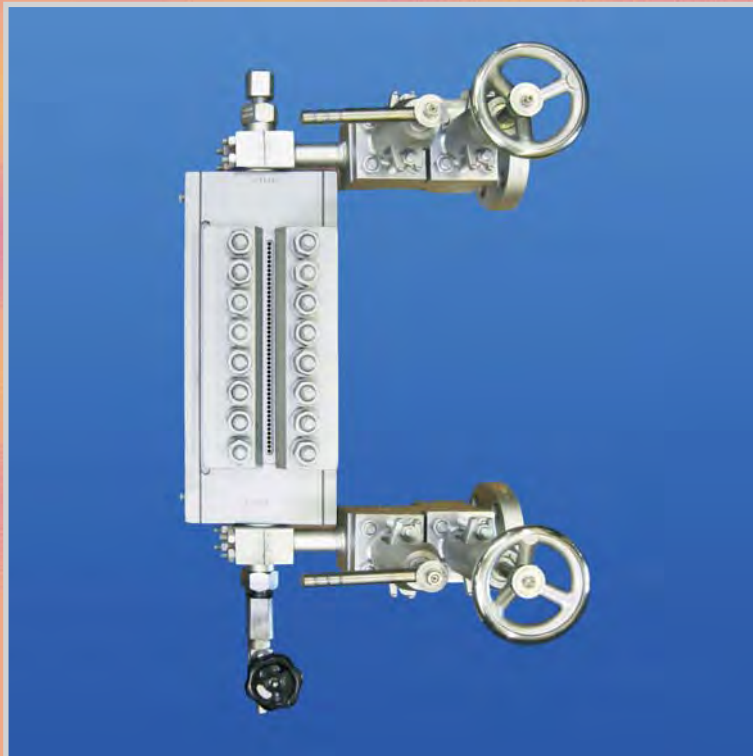
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Schauglasanzeiger für Sonderanwendungen
Sight Glass Level Gauges for special applications



700-703

Funktionsprinzip Schauglasanzeiger

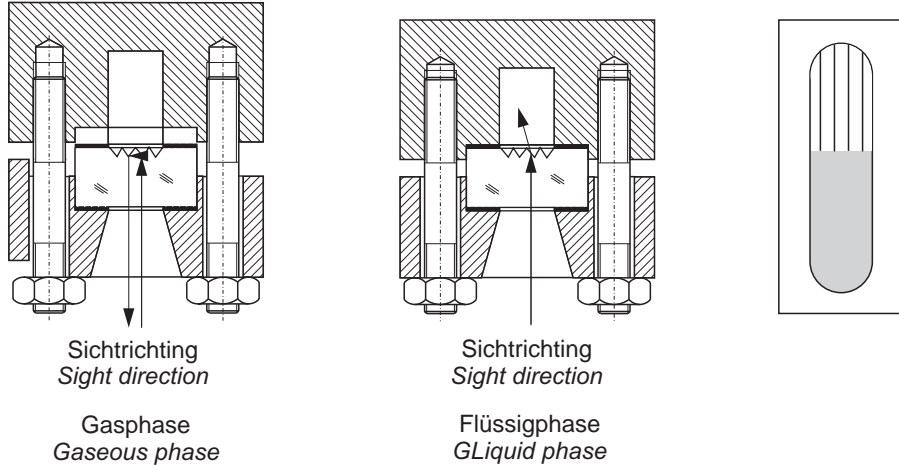
Reflexgläser nach DIN 7081

In Sichtrichtung einfallendes Licht trifft auf die Reflexrillen der Schauglasplatte und wird bei Flüssigkeit ins Medium weggebrochen und bei Gas reflektiert. Der Füllstand ist als dunkler Balken sichtbar, der Gasraum als silbriger Balken darüber.

Functional Description Sight Glass Level Gauges

Reflex glass type acc. to DIN 7081

Incident light is reflected at the reflex grooves of the sight glass plate covered by gas and is broken into the liquid in the part covered by medium. The liquid level is visible as a dark bar, the gaseous space as a silvery bar.



Transparentgläser nach DIN 7081

Entgegen der Sichtrichtung einfallendes Licht (Tageslicht oder das Licht einer Lampe) passiert beide Schauglasplatten mit dem dazwischen befindlichen Medium. Der Füllstand ist als Strich (Meniskus) bzw. anhand der Flüssigkeit selbst direkt sichtbar.

Transparent and reflex

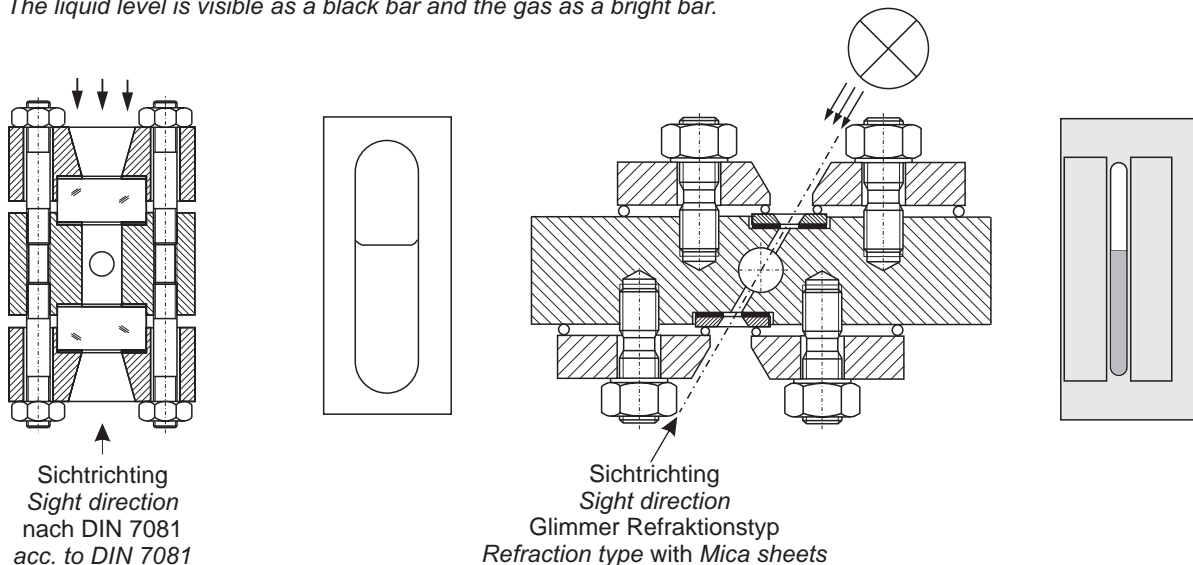
Incident light (daylight or the light of a lamp) passed sight glass contrary to the view direction the medium situated between this. The filling level is itself direct as a line (meniscus) or with the liquid visible.

Refraktionsprinzip mit Glimmerscheiben

Entgegen der Sichtrichtung einfallendes Licht einer Lampe passiert beide Glimmerplatten in einem Winkel mit dem dazwischen befindlichen Medium. In Gasphase wird das Licht im Spalt geführt und durchstrahlt beide Glimmerpakete, bei Flüssigkeit wird das Licht weggebrochen. Der Füllstand ist als schwarzer Balken und der Gasraum als heller Balken ablesbar.

Refraction type with mica sheets

The incident light of a lamp is guided through the two mica sheet packages in an angle and passes the medium between them. In gaseous phase the light is guided straight forward and passes both mica packets, in liquid the light is refracted away. The liquid level is visible as a black bar and the gas as a bright bar.



Sight Glass Level Gauge for special applications

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Data sheets boiler level gauges

Basic type	Pressure rating	Body type	Connection	Gauge valve type	internal connection	Actuation		
700.54	PN 25	Reflex	light top-bottom	pivoted	760.54	screwed	quick closing	7
700.40	PN 20 .. 100	Reflex, Transparent	heavy duty	side-side fixed	760.40	flanged	handwheel + q.c.	9
703.50	PN 100 .. 160	Transparent mica	"hot" high pressure	side-side fixed	760.40	flanged	handwheel + q.c.	11
703.60	PN 100 .. 160	Refraktion mica "hot"	high pressure	side-side fixed	760.40	flanged	handwheel + q.c.	13
703.80	PN 160 .. 250	Transparent mica	"hot" high pressure	side-side fixed	760.81	flanged	handwheel + q.c.	15
703.90	PN 160 .. 250	Refraktion mica "hot"	high pressure	side-side fixed	760.81	flanged	handwheel + q.c.	17

Data sheets tubular level gauges

Basic type	Pressure rating	Body type	Connection	Gauge valve type	internal connection	Actuation		
700.01	PN 25	Glass tube 16 mm	glass protection	top-bottom pivoted	760.01	screwed	handwheel offset	19
700.03	PN 25	Glass tube 16 mm	glass protection	top-bottom pivoted	760.03	screwed	quick closing offset	21

Data sheets special designs

Basic type	Pressure rating	Body type	Connection	Gauge valve type	internal connection	Actuation		
700.46	PN 25	Reflex, Transparent	large chamber	top-bottom	without/with			23
700.31	PN 16 .. 64	Reflex, Transparent	open back, bridge	weld-pad	without			25
700.32	PN 16 .. 64	Reflex, Transparent	full back, intake bore	weld-pad	without			25

Data sheets body

Body - overview								
BG001	40 x 40	light, DIN 7081						27
BG000	D80 x 20	large chamber, DIN 7081						29
BG00A	80 x 40	heavy duty, DIN 7081						29
BG00B	100 x 40	heavy duty, DIN 7081						31
BG00C	120 x 40	heavy duty, DIN 7081						31
BG00D	140 x 40	heavy duty, DIN 7081						31
BG00G	200 x 45	Transparent mica						33
BG00J	200 x 50	Refraktion mica						33
Material list body								35

Data sheets gauge valve

Gauge valves - overview								
Type	pressure rating	Actuation	connection body	thruway	pattern	stem thread		
760.01	PN 250	handwheel	screwed	angle	offset	inside		39
760.03	PN 100	quick closing	screwed	angle	offset	inside		41
760.54	PN 100	quick closing	screwed	straight	inline	inside		43
760.40	PN 160	handwheel + quick.cl.	flange	straight	inline	inside		45
760.81	PN 250	handwheel + quick.cl.	flange	straight	inline	OS&Y		47

Data sheets accessories

Mica sheets, seals for mica, set of mica, corrosion protection, low water level pointer	49
703.VAR process connection, drain, vent	51



Sight glass level gauges

Type selection

according to design pressure

Type PN	700 (DIN 7081)										703 (Mica)								
	01	03	31	32	46						Boiler level								
											54	40	50	60	80	90			
25	•				•						•								
64		•																	
100												•							
160													•	•					
250															•	•			

according to valve type

Type Valve 760	700 (DIN 7081)										703 (Mica)								
	01	03	31	32	46						Boiler level								
											54	40	50	60	80	90			
without			•		•														
01	•																		
03		•																	
54											•								
40												•	•	•					
81																•	•		

according to chamber

Type Chamber dimension	700 (DIN 7081)										703 (Mica)								
	01	03	31	32	46						Boiler level								
											54	40	50	60	80	90			
Glass pipe Ø16	•																		
Weld-pad, open back			•																
Weld-pad, full back				•															
Ø80 x 20, large ch.					•														
40 x 40, light											•								
80 x 40, heavy duty												•							
100 x 40, heavy duty												•							
120 x 40, heavy duty												•							
140 x 40, heavy duty												•							
200 x 50, Transp.mica													•			•			
200 x 50, Refrakt.mica														•			•		

according to connection gauge head - chamber

Type Connection	700 (DIN 7081)										703 (Mica)								
	01	03			46						Boiler level								
											54	40	50	60	80	90			
Flange					•														
Nippel																			
Thread		•	•								•								

according to valve actuation

SS = quick closing, HR = hand wheel, DA = hand wheel and quick closing

Type Operation	700										703 (Mica)								
	01	03									Boiler level								
											54	40	50	60	80	90			
SS																			
HR		•									•								
HR + SS														•	•	•	•	•	

according to ME / SL

ME = center to center, SL = visible length

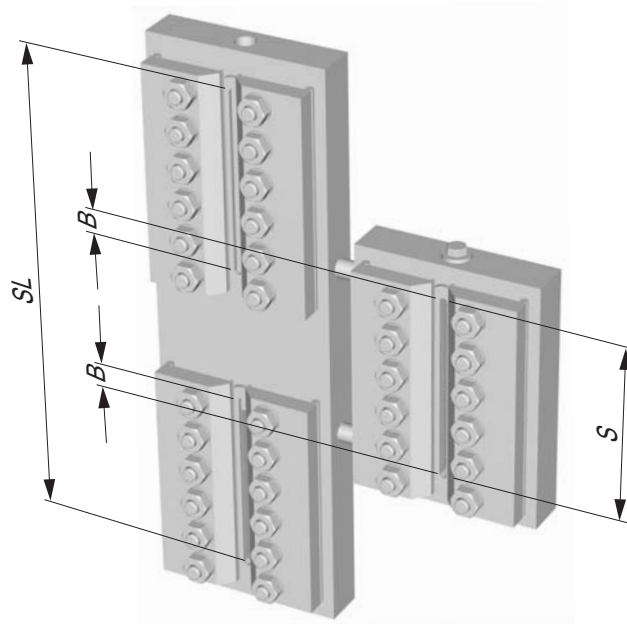
Type Conn.	700										703 (Mica)								
	01	03									Boiler level								
											54	40	50	60	80	90			
ME > SL		•	•								•								
ME ≥ SL												•	•	•	•	•			
ME = SL																			



Boiler level gauges

Bridging

Mica

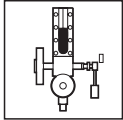


Example for bridging, uninterrupted indication with bypass

Visible length and window type

	window length S		190			250			290			310	
	bridging B		30	70	10	50	90	10	50	90	30	70	
		visible length SL											
nos of windows	2	350	310	490	450	410	570	530	490	590	550		
	3	510	430	730	650	570	850	770	690	870	790		
	4	670	550	970	850	730	1130	1010	890	1150	1030		
	5	830	670	1210	1050	890	1410	1250	1090	1430	1270		
	6	990	790	1450	1250	1050	1690	1490	1290	1710	1510		
	7	1150	910	1690	1450	1210	1970	1730	1490	1990	1750		
	8	1310	1030	1930	1650	1370	2250	1970	1690	2270	1990		
	9	1470	1150	2170	1850	1530	2530	2210	1890	2550	2230		
	10	1630	1270	2410	2050	1690	2810	2450	2090	2830	2470		





Sight glass level gauge CL150

Light execution
 Reflex, Transparent
 Connection top-bottom pivoted
 Connection gauge valve to gauge chamber: thread
 Quick closing

Product group **700**

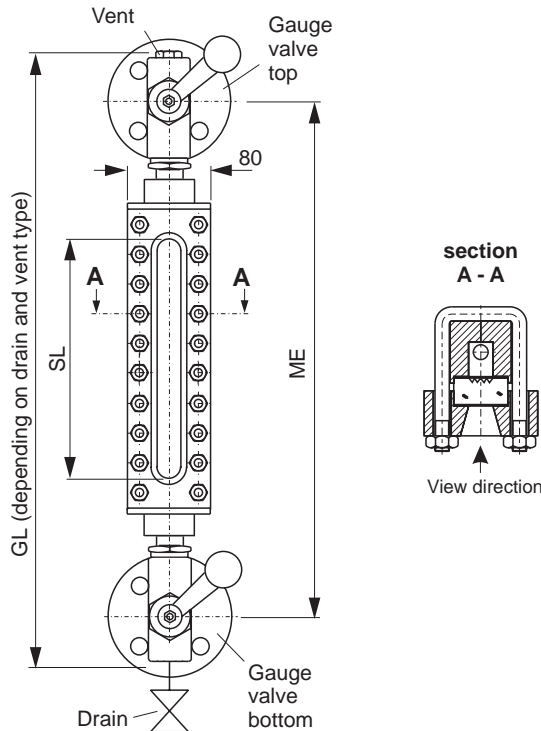
Type **54**

Sheet: 7

Revision: 0

Date:

08/05



Field of Application

Direct reading liquid level indicator for general applications up to CL150 (depends on glass type) e. g. as boiler level gauges. Increased safety with ball check valves.

General Data

Visible length SL: <ME
 Body: 40 x 40
 Connection gauge valve - body: screwed
 Gauge valve types: see data sheet 760.54
 Actuation: quick closing
 Material glass plates acc. to DIN 7081: Borosilicate
 Material media wetted parts: CS
 Depending on delivery situation material can vary.
 Weight
 - basic weight (glass type 4-9): 10.5-14.0 kg
 Depending on execution weight can vary.

Design Data

Design pressure-temperature see derating
 - 40 x 40, reflex: data sheet BG00R1

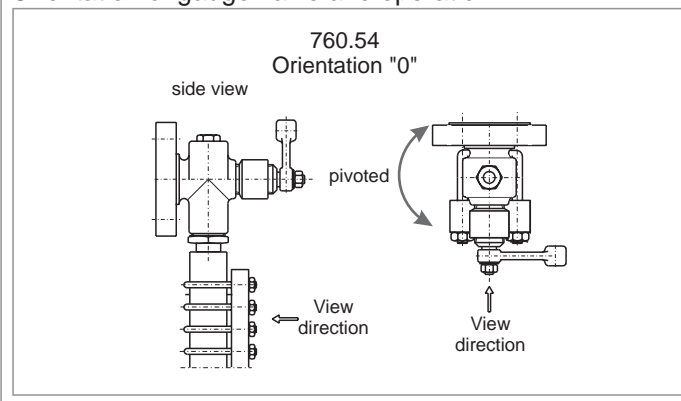
Further Data

Connection gauge valve - body: see 703.VAR
 Process connection: see 703.VAR
 Vent: see 703.VAR
 Drain: valve

Accessories

Pointer low water: see accessories catalogue 703

Orientation of gauge valve and operation



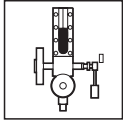
CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations

Ordering no.

7 0 0 5 4 0 X 5 4 0 X X - 0 0 - 0 0 X X X X X X X - X X X X										see 703.VAR	ME [mm]			
glass window	Reflex (DIN 7081)	1									X	results from ME	glass type	
												X	spec. glass types	
													DIN-bolts, -nuts	DIN/ASME
													A ANSI-bolts, -nuts	
													40 x 40 (DIN 7081)	gauge body
gauge valve	760.54		5	4	0								see data sheet 760.54	orientation gauge valve





Sight glass level gauge CL150 to 600

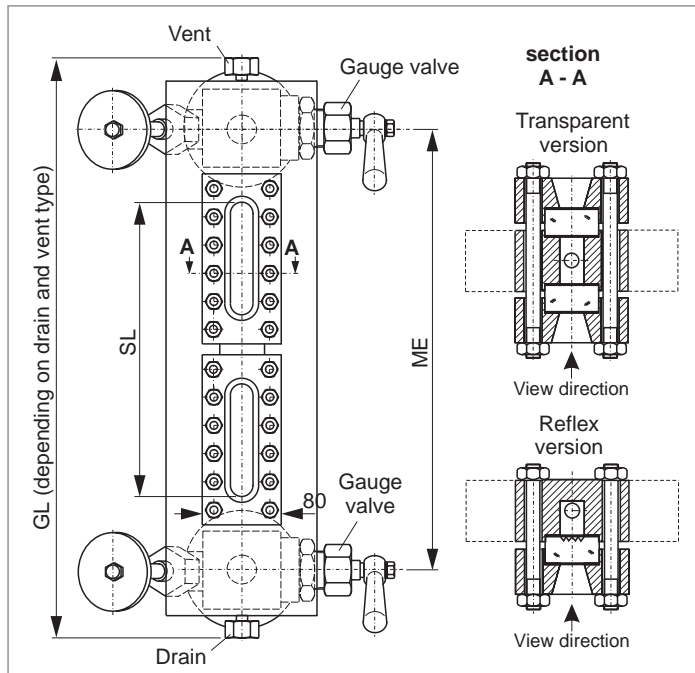
Heavy duty execution
 Reflex, Transparent
 Connection side-side fixed
 Connection gauge valve to gauge chamber: flange
 Double shut-off, hand wheel and quick closing

Product group **703**

Type **40**

Sheet: 9 Revision: 0

Date: 08/05



Field of Application

Direct reading liquid level indicator for boiler level up to CL600 (depends on glass type). Increased safety with ball check valves.

General Data

Visible length SL: \leq ME-130 mm
 Body: 80x40, 100x40, 120x40, 140x40
 Connection gauge valve - body: flange
 Gauge valve types: s. Datenblatt 760.40
 Actuation: hand wheel and quick closing lever
 Material glass plates acc. to DIN 7081: Borosilicate, mica protection
 Material media wetted parts: CS, SS
 Depending on delivery situation material can vary.
 Types with special materials are available.

Weight

- basic weight (glass type 4-11)
 reflex / transparent: 21.0-27.0/24.0-32.0 kg
 - per segment (glass type 4-11)
 reflex / transparent: 7.9-15.6/10.4-19.8 kg
 Depending on execution weight can vary.

Design Data

Design pressure/-temperature see derating
 80x40, 100x40,
 120x40, 140x40: data sheet BG00RA-00RD

Further Data

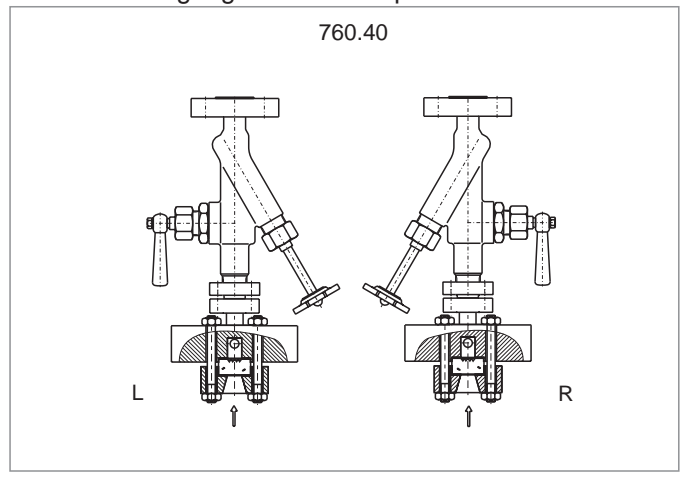
Connection gauge valve - body: see 703.VAR
 Process connection: see 703.VAR
 Vent: see 703.VAR
 Drain: see 703.VAR

Accessories

Glass protection etc.: see accessories catalogue 700
 Frosts protection: see accessories catalogue 700
 Illumination: see accessories catalogue 700
 Scale: see accessories catalogue 700
 Pointer low water: see accessories catalogue 703
 Heating: see accessories catalogue 700

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Orientation of gauge valve and operation



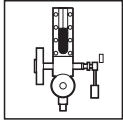
Subject to alterations

Ordering no.

7 0 3 4 0 X X X X X X X X - X X - X X X X X X X X X X - X X X X X		see 703.VAR	ME [mm]
bridging	without	0	results from ME
	with	1	
glass window	Reflex (DIN 7081)	1	nos of segments
	Transparent (DIN 7081)	2	
gauge valve	760.40	4 0	DIN-bolts. -nuts
			A ANSI-bolts. -nuts
			DIN/ASME
			gauge body
			orientation
			gauge valve

X 17, A - D, depends on design pressure
 X see data sheet 760.14/15/16/17





Boiler level gauge CL600 to CL900

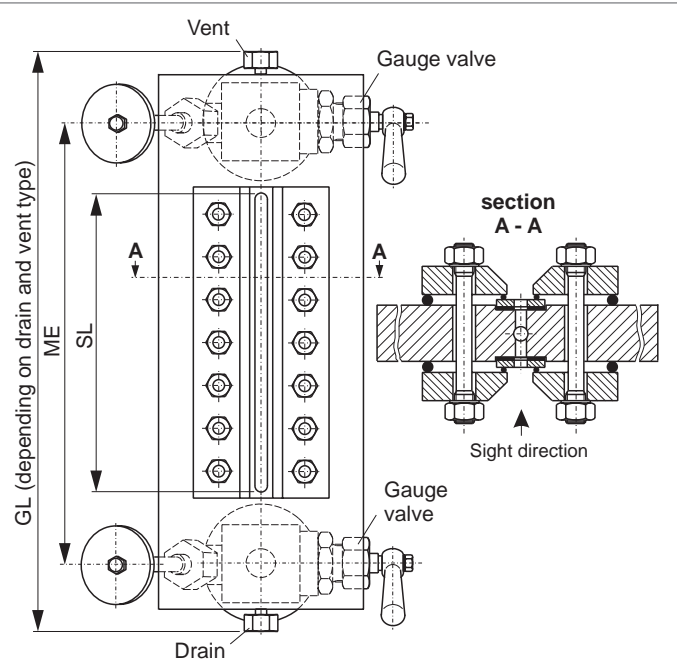
"Hot" high pressure
Transparent type
Connection side-side fixed
Connection gauge valve to gauge chamber: flange
Double shut-off, hand wheel and quick closing

Product group **703**

Type **50**

Sheet: 11 Revision: 0

Date: 08/05



Field of Application

Direct reading liquid level indicator for boiler level up to CL900. Increased safety with ball check valves.

General Data

Visible length SL: <ME
Body: 200 x 45
Connection gauge valve - body: flange
Gauge valve types: see data sheet 760.40
Actuation: hand wheel and quick closing
Material sight window: mica
Material media wetted parts: CS, SS
Depending on delivery situation material can vary.
Types with special materials are available.
Weight
- ME 340/400/450/500 mm: 55,0/60,0/65,0/70,0 kg
Depending on execution weight can vary.

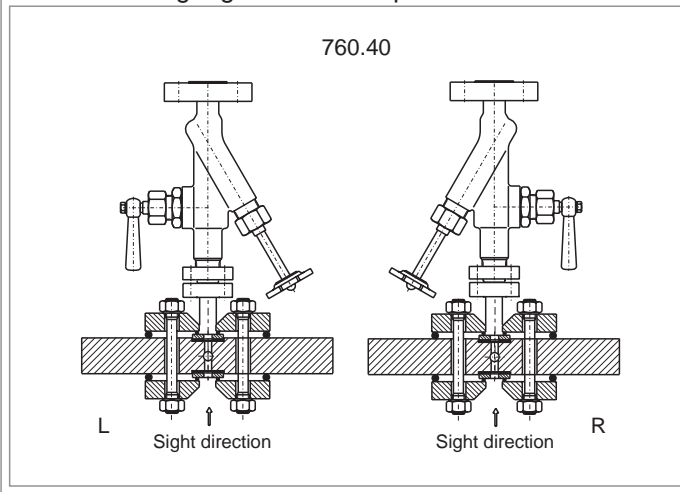
Design Data

Design pressure/-temperature: see derating data sheet BG00RG

Further Data

Process connection: see 703.VAR
Vent: see 703.VAR
Drain: see 703.VAR

Orientation of gauge valve and operation



Accessories

Illumination: see accessories catalogue 700
Scale: see accessories catalogue 700
Pointer low water: see accessories catalogue 703

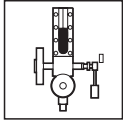
CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations

Ordering no.

7 0 3 5 X X X 4 0 X X X - 0 0 - 0 0 X X X X X X - X X X X		see 703.VAR	ME [mm]
Connection gauge head	fixed 0 pivoted 4	results from ME X	field type
bridging	without 0		
	with 1		
window	mica transparent 2	DIN-bolts, -nuts A ANSI-bolts, -nuts	DIN/ASME
gauge valve	760.40 4 0 X	G 200x45 (transparent) see data sheet 760.40	gauge body orientation gauge valve





Boiler level gauge CL600 to CL900

Black and white indication
 Refraction type
 Connection side-side fixed
 Connection gauge valve to gauge chamber: flange
 Double shut-off, hand wheel and quick closing

Product group **703**

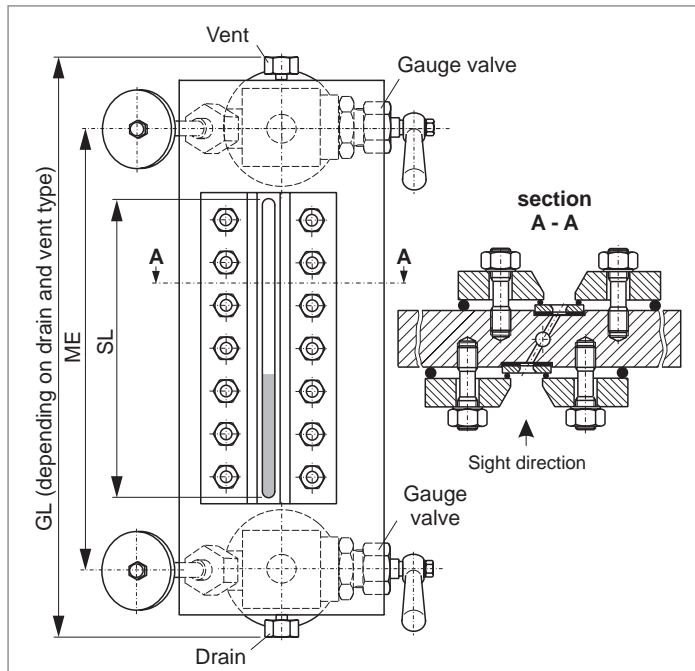
Type **60**

Sheet: 13

Revision: 0

Date:

08/05



Field of Application

Direct reading liquid level indicator for boiler level up to CL900. Suitable for camera monitoring. Increased safety with ball check valves.

General Data

Visible length SL: <ME
 Body: 200 x 45
 Connection gauge valve - body: flange
 Gauge valve types: see data sheet 760.40
 Actuation: hand wheel and quick closing lever
 Material sight window: mica
 Material media wetted parts: CS, SS
 Depending on delivery situation material can vary.
 Types with special materials are available.
 Weight
 - ME 340/400/450/500 mm: 55,0/60,0/65,0/70,0 kg
 Depending on execution weight can vary.

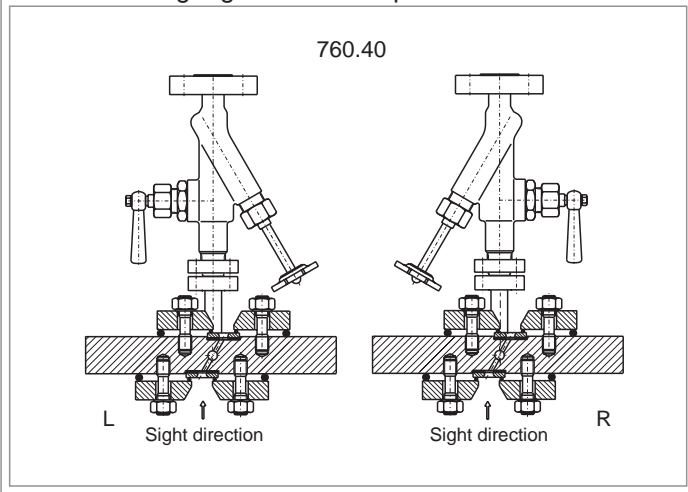
Design Data

Design pressure/-temperature: see derating data sheet BG00RJ

Further Data

Process connection: see 703.VAR
 Vent: see 703.VAR
 Drain: see 703.VAR

Orientation of gauge valve and operation



Accessories

Illumination: see accessories catalogue 700
 Scale: see accessories catalogue 700
 Pointer low water: see accessories catalogue 703

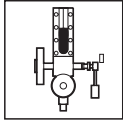
CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations

Ordering no.

7 0 3 6 X X X 4 0 X X X - 0 0 - 0 0 X X X X X X - X X X X		see 703.VAR	ME [mm]
Connection gauge head	fixed 0 pivoted 4	results from ME X	field type
bridging	without 0 with 1	DIN-bolts, -nuts A ANSI-bolts, -nuts	DIN/ASME
window	mica transparent 2	G 200x45 (transparent)	gauge body
gauge valve	760.40 4 0 X	see data sheet 760.40	orientation gauge valve





Boiler level gauge CL1500 to CL2500

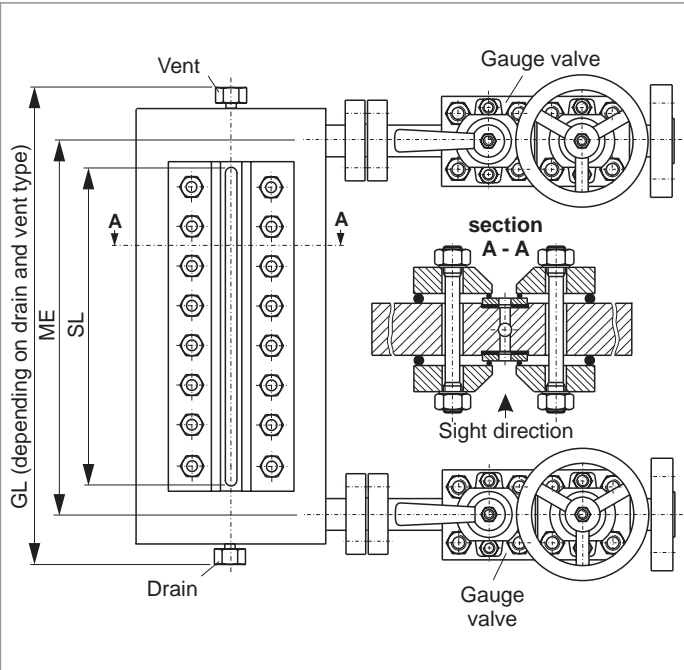
"Hot" high pressure
 Transparent type
 Connection side-side fixed
 Connection gauge valve to gauge chamber: flange
 Double shut-off, hand wheel and quick closing, OS&Y

Product group **703**

Type **80**

Sheet: 15 Revision: 1

Date: 07/06



Field of Application

Direct reading liquid level indicator for boiler level up to CL2500. Increased safety with ball check valves.

General Data

Visible length SL: <ME
 Body: 200 x 45
 Connection gauge valve - body: flange
 Gauge valve types: see data sheet 760.81
 Actuation: hand wheel and quick closing lever
 Material sight window: mica
 Material media wetted parts: CS, SS
 Depending on delivery situation material can vary.
 Types with special materials are available.
 Weight
 - ME 340/400/450/500 mm: 55,0/60,0/65,0/70,0 kg
 Depending on execution weight can vary.

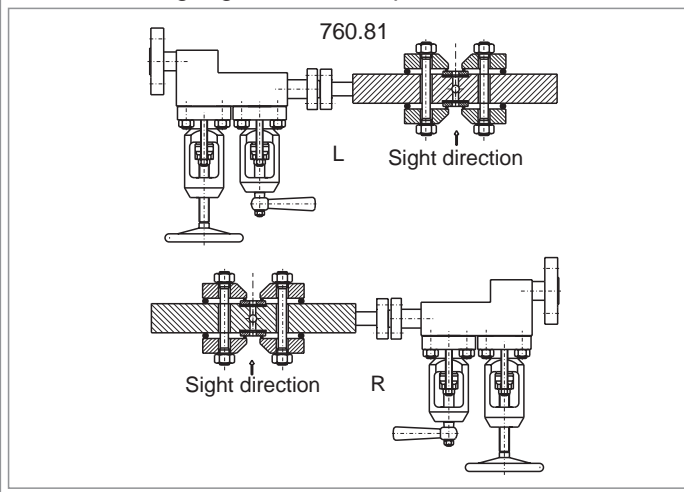
Design Data

Design pressure/-temperature: see derating data sheet BG00RG

Further Data

Process connection: see 703.VAR
 Vent: see 703.VAR
 Drain: see 703.VAR

Orientation of gauge valve and operation



Accessories

Illumination: see accessories catalogue 700
 Scale: see accessories catalogue 700
 Pointer low water: see accessories catalogue 703

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

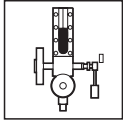
Subject to alterations

Ordering no.

7 0 3 8 X X X 8 1 X X X - 0 0 - 0 0 X X X X X X X - X X X X X
 see 703.VAR ME [mm]

Connection gauge head	fixed	0	results from ME	field type
	pivoted	4	X spec. field types	
bridging	without	0		
	with	1		
window	mica transparent	2	DIN-bolts, -nuts	DIN/ASME
gauge valve	760.81	8 1 X	A ANSI-bolts, -nuts	gauge body
			G 200x45 (transparent)	orientation gauge valve
			see data sheet 760.81	





Boiler level gauge CL1500 to CL2500

Black and white indication
 Refraction type
 Connection side-side fixed
 Connection gauge valve to gauge chamber: flange
 Double shut-off, hand wheel and quick closing, OS&Y

Product group **703**

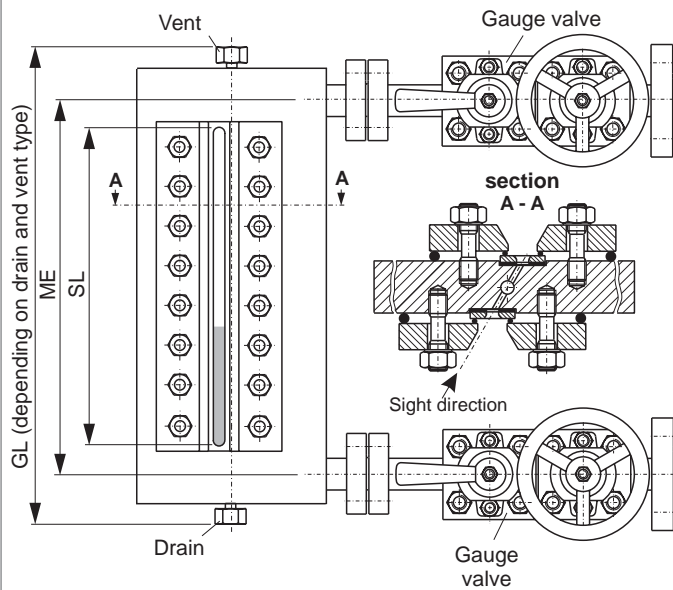
Type **90**

Sheet: 17

Revision: 0

Date:

08/05



Field of Application

Direct reading liquid level indicator for boiler level up to CL2500. Increased safety with ball check valves.

General Data

Visible length SL: <ME
 Body: 200 x 45
 Connection gauge valve - body: flange
 Gauge valve types: see data sheet 760.81
 Actuation: hand wheel and quick closing lever
 Material sight window: mica
 Material media wetted parts: CS, SS
 Depending on delivery situation material can vary.
 Types with special materials are available.
 Weight
 - ME 340/400/450/500 mm: 55,0/60,0/65,0/70,0 kg
 Depending on execution weight can vary.

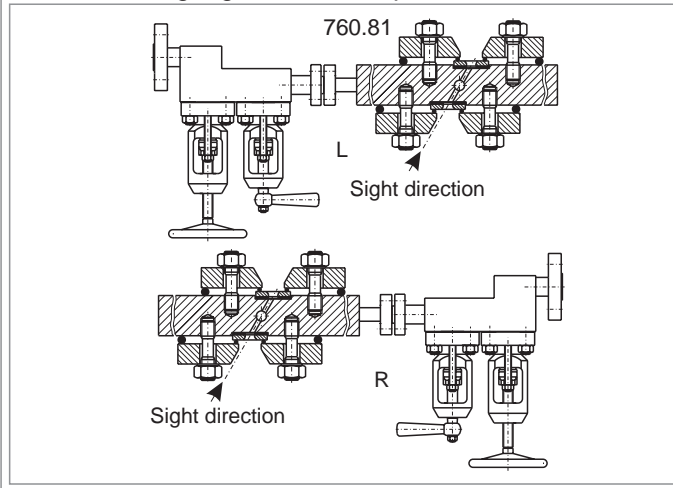
Design Data

Design pressure/-temperature: see derating data sheet BG00RJ

Further Data

Process connection: see 703.VAR
 Vent: see 703.VAR
 Drain: see 703.VAR

Orientation of gauge valve and operation



Accessories

Illumination: see accessories catalogue 700
 Scale: see accessories catalogue 700
 Pointer low water: see accessories catalogue 703

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

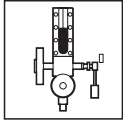
Subject to alterations

Ordering no.

7 0 3 9 X X X 8 1 X X X - 0 0 - 0 0 X X X X X X X - X X X X
 see 703.VAR ME [mm]

Connection gauge head	fixed	0	results from ME	field type
	pivoted	4	X spec. field types	
bridging	without	0	DIN-bolts, -nuts	DIN/ASME
	with	1	A ANSI-bolts, -nuts	
window	mica transparent	2	G 200x45 (transparent)	gauge body
gauge valve	760.81	8 1 X	see data sheet 760.81	orientation gauge valve





Sight Glass Level Gauge Glass tube D16

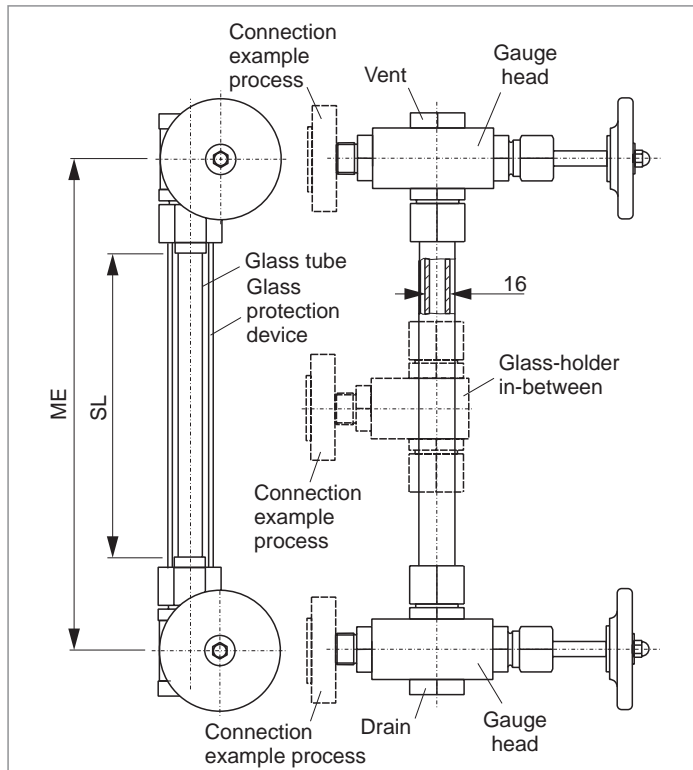
Connection top-bottom pivoted
Offset, handwheel
Glass protection

Product group **700**

Type **01**

Sheet: 19 Revision: 0

Date: 08/05



Field of Application

Direct reading liquid level indicator with glass tube for general applications up to CL150. Increased safety with ball check valves and glass protection.

General Data

Visible length SL: ME-140 mm
from 1500 mm and up every 1000 mm glass-holder in-between union, flange
Process connection: s. datasheet 760.01
Gauge valve types: hand wheel
Actuation: Borosilicate
Material glass tube: CS, SS
Material media wetted parts: SS
Material glass protection device: Viton
Material sealing glass tube: Depending on delivery situation material can vary.
Types with special materials e. g. Hastelloy, Monel etc. are available.

Weight

- basic weight for ME ≤1500 mm: 3,6 kg
- basic weight for ME >1500 mm: 4,9 kg
- + weight/m: 0,2 kg
- weight glass protection device/m: 0,2 kg

Design Data

Design pressure/-temperature: -20...+200 °C/
0...2,5 MPa

Further Data

Process connection: see 703.VAR
Vent: see 703.VAR
Drain: see 703.VAR

Accessories

Scale: see accessories 700

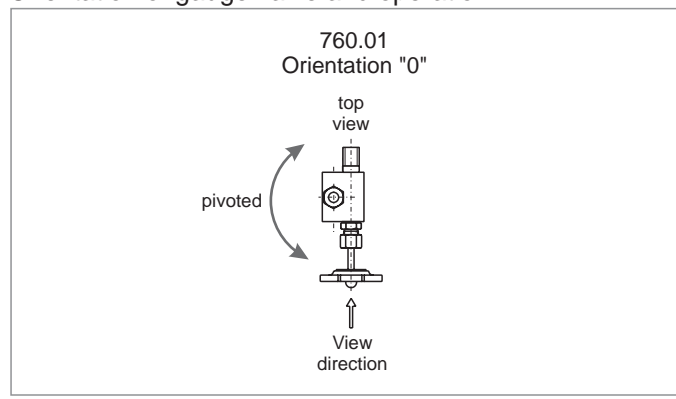
Spare parts

Glass tube: length = ME -40
Gasket: 0160022015VI

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations

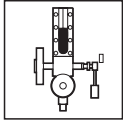
Orientation of gauge valve and operation



Ordering no.

7 0 0 0 1 0 0 0 1 0 Q 0										see 703.VAR										ME [mm]							
										- 0 0 -										- X X X X X X X X X X -				- X X X X			
Glass-holder in-between	without (ME ≤1500)	0																		orientation gauge valve							
	with (ME >1500 mm)	1																									
Gauge valve	760.01	0	1	0	see Datasheet 760.01																						





Sight Glass Level Gauge Glass tube D16

Connection top-bottom pivoted
Offset, quick closing
Glass protection

Product group **700**

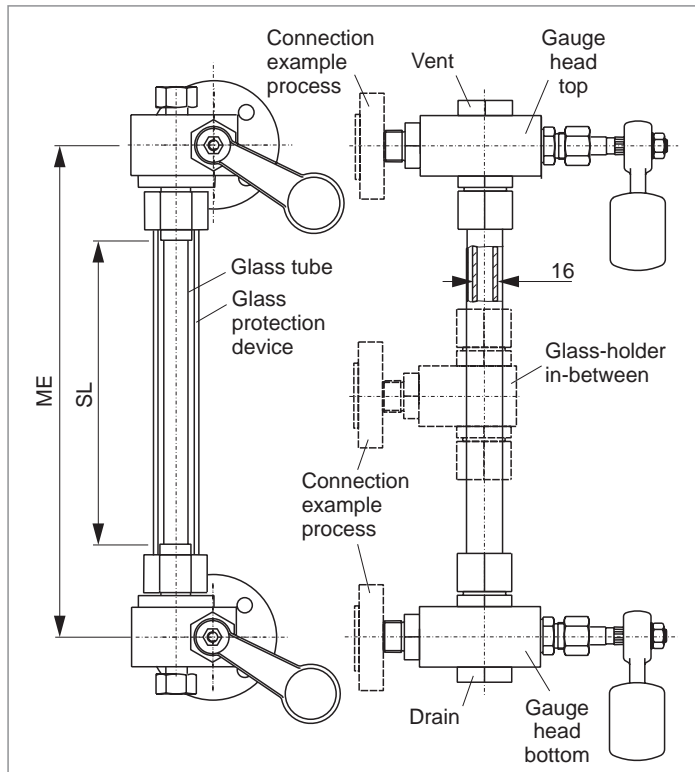
Type **03**

Sheet: 21

Revision: 0

Date:

08/05



Field of Application

Direct reading liquid level indicator with glass tube for general applications up to CL150. Increased safety with ball check valves and glass protection.

General Data

Visible length SL: ME-140 mm
from 1500 mm and up every 1000 mm glass-holder in-between

Process connection: union, flange
Gauge valve types: s. datasheet 760.03
Actuation: quick closing
Material glass tube: Borosilicate
Material media wetted parts: CS, SS
Material glass protection device: SS
Material sealing glass tube: Viton
Depending on delivery situation material can vary.
Types with special materials e. g. Hastelloy, Monel etc. are available.

Weight
- basic weight for ME ≤1500 mm: 3,6 kg
- basic weight for ME >1500 mm: 4,9 kg
- + weight/m: 0,2 kg
- weight glass protection device/m: 0,2 kg

Design Data

Design pressure/-temperature: -20...+200 °C/
0...2,5 MPa

Further Data

Process connection: see 703.VAR
Vent: see 703.VAR
Drain: see 703.VAR

Accessories

Scale: see accessories 700

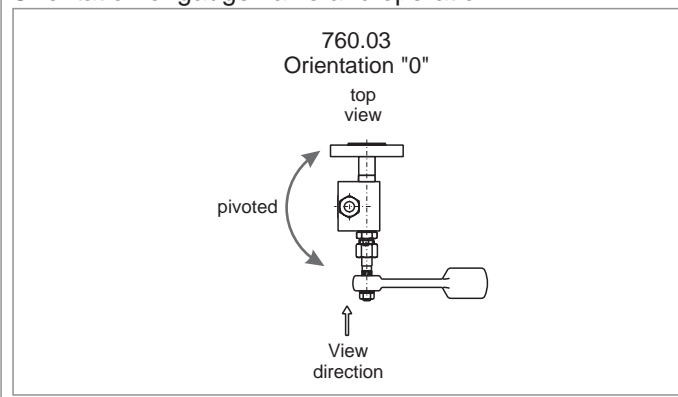
Spare parts

Glass tube: length = ME -40
Gasket: 0160022015VI

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations

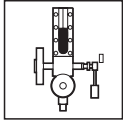
Orientation of gauge valve and operation



Ordering no.

7 0 0 0 3 0 0 0 3 0 Q 0 - 0 0 -										see 703.VAR										ME [mm]							
X X X X X X X X X X										X X X X																	
Glass-holder in-between	without (ME ≤1500)		0		with (ME >1500 mm)		1																				
Gauge valve	760.03		0 3 0		see Datasheet 760.03										orientation gauge valve												





Sight Glass Level Gauge CL150

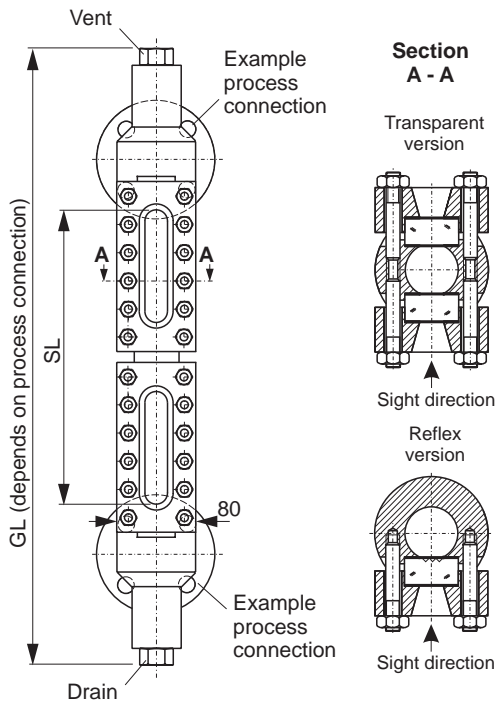
Connection top-bottom pivoted
 Reflex, transparent
 Gauge heads 760.50/51/52/53 optional

Product group **700**

Type **46**

Sheet: 23 Revision: 0

Date: 08/05



Field of Application

Direct reading liquid level indicator with glass tube for easily out-gassing media up to CL150 (depends on glass type).

General Data

Visible length SL: <GL
 Body: 80x20
 Process connection: flange, nipple
 Material glass plates: Borosilicate
 Material media wetted parts: CS, SS
 Depending on delivery situation material can vary.
 Types with special materials e. g. Hastelloy, Monel etc. are available.
 Weight
 - basic weight (glass type 4-9): 20,0-24,0 kg
 - per segment (glass type 4-9): 8,2-12,8 kg
 Depending on execution weight can vary.

Design Data

Design pressure/temperature: see derating data sheet BG00RO

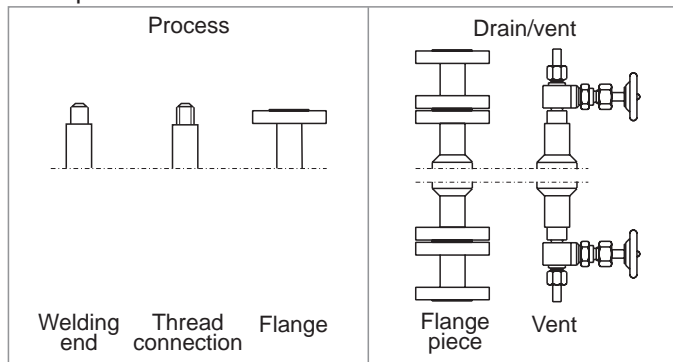
Further Data

Process connection: see 703.VAR

Accessories

Glass protection etc.: see accessories catalogue 700
 Frosts protection: see accessories catalogue 700
 Illumination: see accessories catalogue 700
 Scale: see accessories catalogue 700
 Heating: see accessories catalogue 700

Examples connection



CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

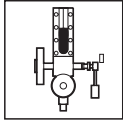
Subject to alterations

Ordering no.

7 0 0 4 6 X 2 0 0 0 0 X - X X - X X X X X X X X X X - X X X X X
see 703.VAR ME [mm]

bridging	without	0	X X nos of segments	results from SL	glass type
	with	1		X spec. glass types	
			DIN-bolts, -nuts	DIN/ASME	
			A ANSI-bolts, -nuts		





Sight Glass Level Gauge weld-in CL600

Reflex, transparent
Open back
bridge
full back, intake bore

Product group **700**

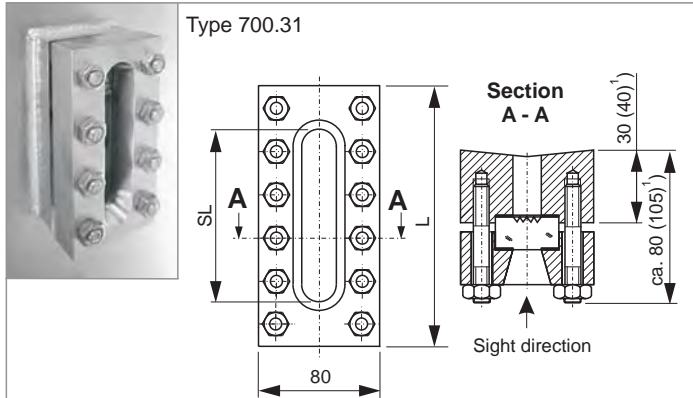
Type **31/32**

Sheet: 25

Revision: 1

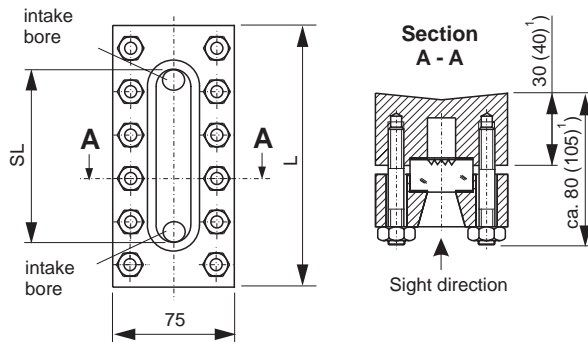
Date:

02/07



¹⁾ with larger pressures, tank volumes or lengths

Type 700.32



¹⁾ with larger pressures, tank volumes or lengths

Measures in mm

Dimension table

Glass type	length L	sight length SL	Glass type	length L	sight length SL
size 0	118	75	size 11	423	380
size 1	138	95	size 12	453	410
size 2	163	120	size 13	483	440
size 3	188	145	size 14	523	480
size 4	213	170	size 15	553	510
size 5	243	200	size 16	583	540
size 6	273	230	size 17	623	580
size 7	303	260	size 18	653	610
size 8	343	300	size 19	683	640
size 9	363	320	size 20	723	680
size 10	393	350			

Field of Application

Direct reading liquid level indicator for welding in a container wall, up to CL600.

General Data

Body: weld-in
optionally corners rounded
welded

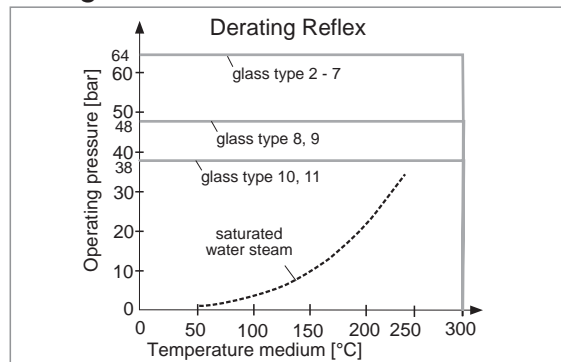
Process connection: 700.32 optional with
welding end or flange piece

Material glass plates DIN 7081: Borosilicate
Material media wetted parts: CS, SS
Depending on delivery situation material can vary.

Types with special materials e. g.
Hastelloy, Monel etc. are available.

Weight
- basic weight (glass type 0-9): 3,5-10,5 kg
Depending on execution weight can vary.

Design Data



Further Data

Process connection: see 700.VAR

Accessories

Glass protection etc.: see accessories catalogue 703

CS (= carbon steel) and SS (= stainless steel type 316SS) are materials suitable for Pressure Vessels according to EN or ASME.

Subject to alterations







Ordering no.

7 0 0 X X X X 0 0			see 703.VAR			ME [mm]			
X - X X - X X X X X X X X X X			X - X X - X X X X X X X X X X			X X X X X			
Basic type	open	3 1	X X	nos of segments	X X	results from SL	X	spec. glass types	glass type
	closed	3 2							
	Stud	3 3							
Body	with intake bore	0	X X	nos of segments	X X	results from SL	X	spec. glass types	glass type
	open back	1							
Window	Reflex (DIN 7081)	1	X X	nos of segments	X X	results from SL	X	spec. glass types	glass type
	Transparent (DIN 7081)	2							
			DIN-bolts, -nuts			DIN/ASME			
			ANSI-bolts, -nuts			DIN/ASME			

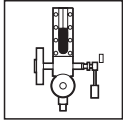


Sight glass level gauge

Overview chamber

	Part No.	Rating [bar]			Glass type (a.DIN 7081)		Field type (Mica,Transp)	siutable for sight glass level gauge type	Dim.
		Reflex	Transp.	Refrakt.	Reflex	Transparent			
	BG00R1	64 48 38	25 20 12,5		2 - 6 7 - 9 10, 11	2 - 6 7 - 9 10, 11		700.54	40x40
	BG00RA	80 (100)	64		see data-sheet	see data-sheet		703.40	80x40
	BG00RB BG00RC BG00RD	80 (100)	80 (100)		see data-sheet	see data-sheet		700.40	100x40 120x40 140x40
	BG00RO		25 20 12,5			2 - 6 7 - 9 10 - 11		700.46	Ø80x20
	BG00RG		160 250				see data-sheet	703.50 703.80	200x45
	BG00RJ			160 250			see data-sheet	703.60 703.90	200x50





Sight glass level gauge, chamber

Square bar 40 x 40
Round bar D80 x 20

Product group **700**

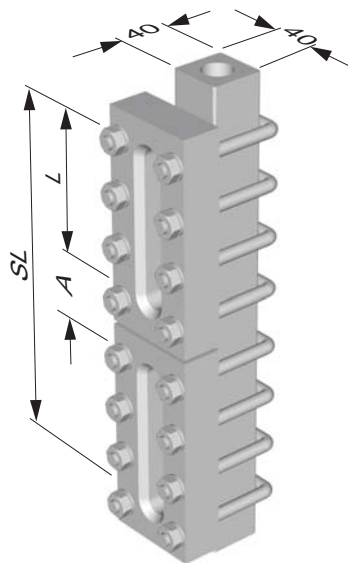
Type **BG00R1/O**

Sheet: 29

Revision: 0

Date:

08/05



BG00R1

Dimensions in mm

Field of application

Sight glass level gauge type:

Type of indication:

Suitable f. glass type (acc.to DIN 7081):

Rating CS:

Material:

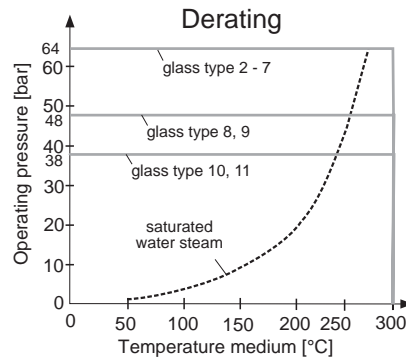
700.54

Reflex

2-7, 8, 9, 10, 11

-10...+300 °C/64 bar

see sheet material list body



Subject to alterations

Glass type	2	5	6	7	8	9	10	11
Glass-SL L	120	200	230	260	300	320	350	380

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)

Field of application

Sight glass level gauge type:

Type of indication:

Suitable for glass type (acc. to DIN 7081)

Transparent:

Rating:

Material:

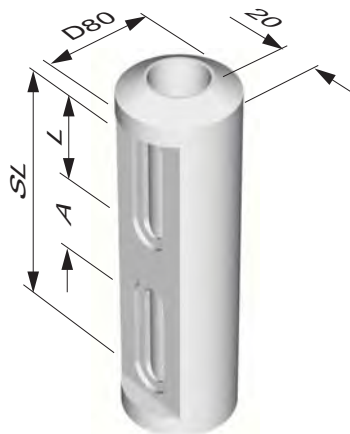
700.46, large chamber

Transparent

2-7, 8, 9, 10, 11 / 2-6, 7-9, 10, 11

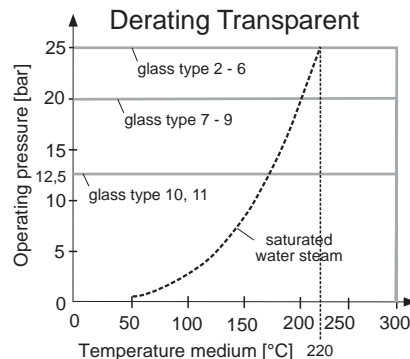
25 bar

see sheet material list chamber



BG00RO

Masse in mm



Subject to alterations

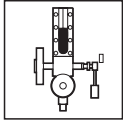
Glass type	2	5	6	7	8	9	10	11
Glass-SL L	120	200	230	260	300	320	350	380

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)



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Sight glass level gauge, chamber

Bar 80 x 40
 Bar 100 x 40
 Bar 120 x 40
 Bar 140 x 40

Product group **703**

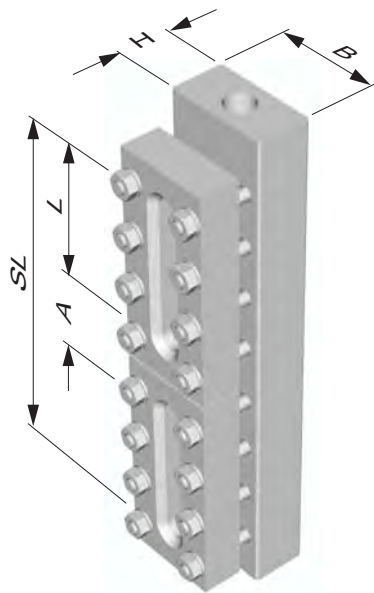
Type **BG00RA-D**

Sheet: 31

Revision: 0

Date:

08/05



	H	B
BG00RA	40	80

Dimensions in mm

Field of application

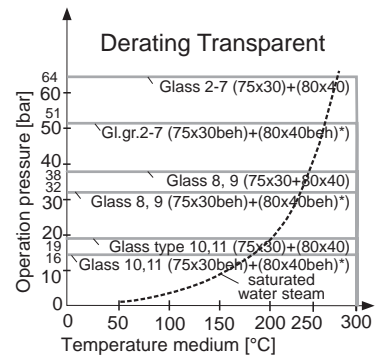
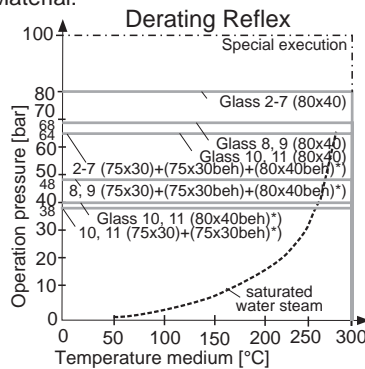
Sight glass level gauge type:
 Type of indication:
 Suitable f. glass type (acc.to DIN 7081):
 Reflex / Transparent:
 Rating Reflex / Transparent:
 Material:

703.40

Reflex, Transparent

2-7, 8, 9, 10, 11

CS to -10 °C, SS to -200 °C/100/64 bar
 see sheet material list chamber

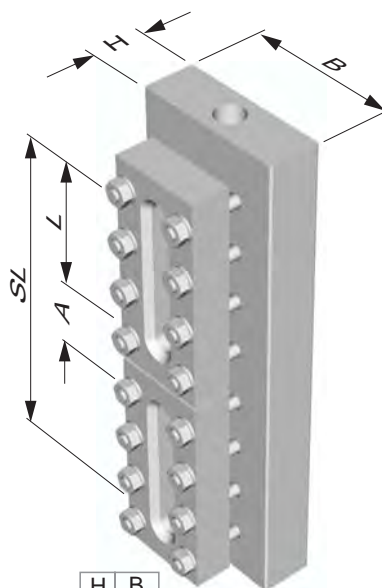


*) beh = heated

Subject to alterations

Glass type	2	5	6	7	8	9	10	11
Glass-SL L	120	200	230	260	300	320	350	380

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)



	H	B
BG00B	40	100
BG00C	40	120
BG00D	40	140

Dimensions in mm

Field of application

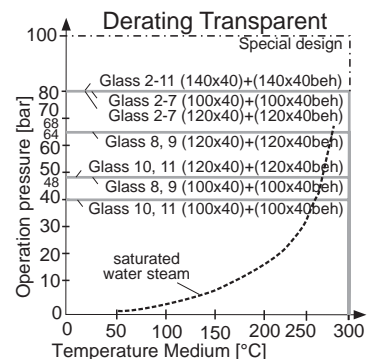
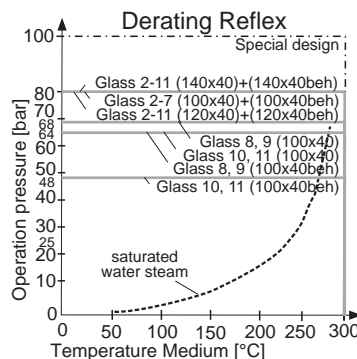
Sight glass level gauge type:
 Type of indication:
 Suitable f. glass type (acc.to DIN 7081):
 Reflex / Transparent:
 Rating Reflex / Transparent:
 Material:

703.40

Reflex, Transparent

2-7, 8, 9, 10, 11

CS to -10 °C, SS to -200 °C/100 bar
 see sheet material list chamber



*) beh = heated

Subject to alterations

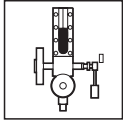
Glass type	2	5	6	7	8	9	10	11
Glass-SL L	120	200	230	260	300	320	350	380

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)



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 Tel. 04105-57230 Fax. 04105-572366





Boiler level gauge, chamber

Bar 200 x 45, transparent mica
Bar 200 x 50, refraction mica

Product group **703**

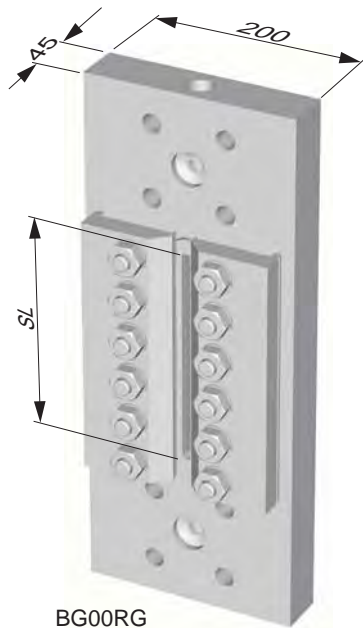
Type **BG00RG/J**

Sheet: 33

Revision: 0

Date:

08/05



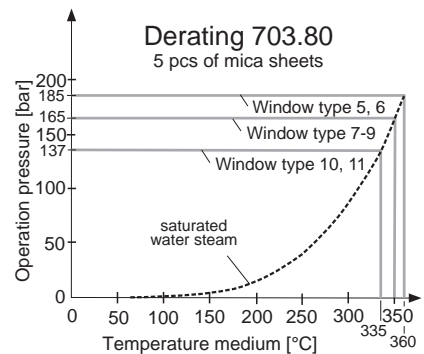
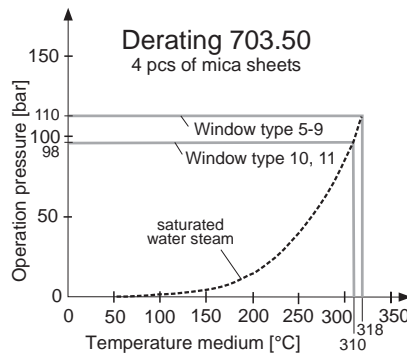
BG00RG

Dimensions in mm

Field of application

Boiler level gauge type:
Type of indication:
Sight window type:
Rating:
Material:

703.50/80
Transparent
5, 7-9
160/250 bar
see sheet material list chamber

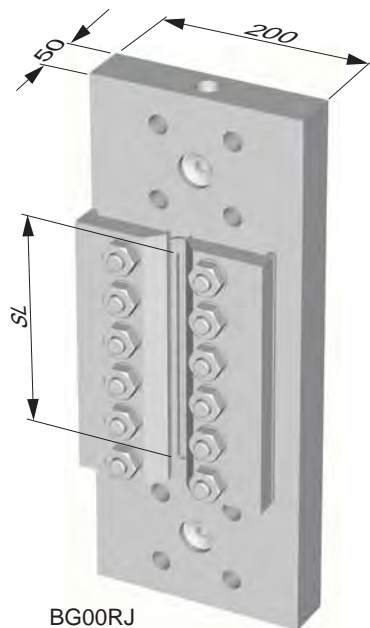


L see accessories mica

Subject to alterations

Window type					5	7	8	9		
SL					190	250	290	310		

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)



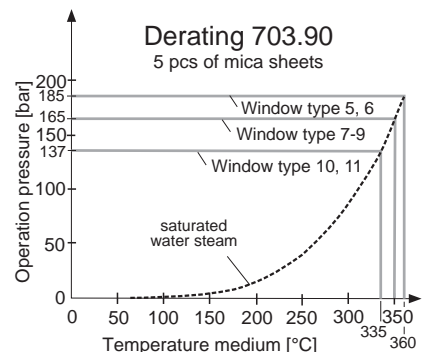
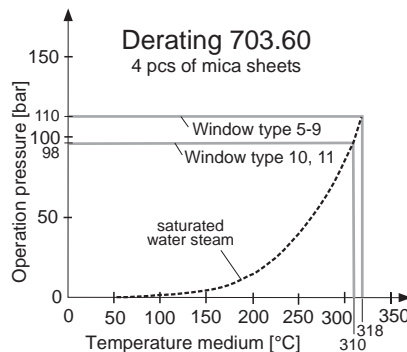
BG00RJ

Dimensions in mm

Field of application

Boiler level gauge type:
Type of indication:
Sight window type:
Rating:
Material:

703.60/90
black and white
5, 7-9
160/250 bar
see sheet material list chamber



L see accessories mica

Subject to alterations

Window type					5	7	8	9		
SL					190	250	290	310		

Visible length $SL = N * L + (N - 1) * A$ $A = 45$ (may vary acc. to spec. SL)



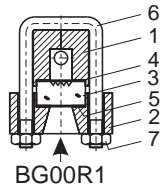
ING. ROLF HEUN
Mess-Prüf- Regetechnik GmbH
Hufeisen 16, 21218 Seevetal
Tel. 04105-57230 Fax. 04105-572366



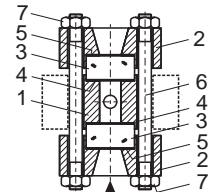
Sight glass level gauge

Material list chamber

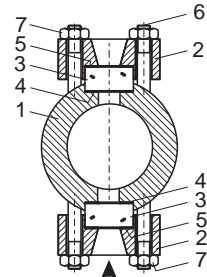
	Pos	Denomination	Material	
			complete CS	complete SS
BG00R1 40 x 40 bis light	1	Body	CS	SS
BG00RD 140 x 40 und heavy duty	2	Cover	CS	SS
BG00RO D80x20 large chamber	3	Glass	Borosilicate	Borosilicate
	4	Gasket	Graphite	Graphite
	5	Cushion	Nefalit	Nefalit
	6	Bolt	CS, tempered	SS
	7	Nut	CS, tempered	SS



BG00R1

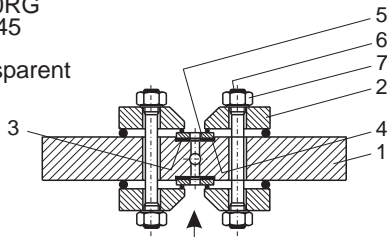


BG00RA - BG00RD

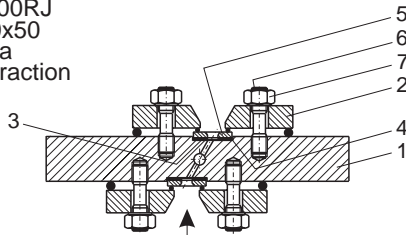


BG00RO

	Pos	Denomination	Material
BG00RG 200x45 Mica Transparent	1	Body	CS
	2	Cover	CS
	3	Gasket	Graphite
	4	Mica	Mica
	5	Holder frame	CS
	6	Bolt	CS, tempered
	7	Nut	CS, tempered



	Pos	Denomination	Material
BG00RJ 200x50 Mica Refraction	1	Body	CS
	2	Cover	CS
	3	Gasket	Graphite
	4	Mica	Mica
	5	Holder frame	CS
	6	Bolt	CS, tempered
	7	Nut	CS, tempered



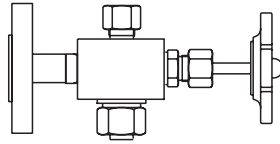
Sight glass level gauge

Overview gauge valves

Connection chamber: flange or nipple, Actuation: handwheel, PN 250

spindle thread inside

760.01

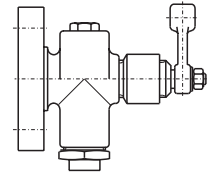
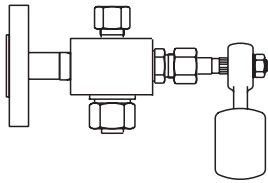


Connection chamber: flange or nipple, Actuation: quick closing lever, PN 100

spindle thread inside

760.03

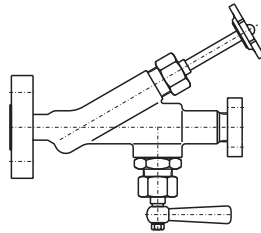
760.54



Connection chamber: flange, Actuation: handwheel / quick closing lever, PN 160

spindle thread inside

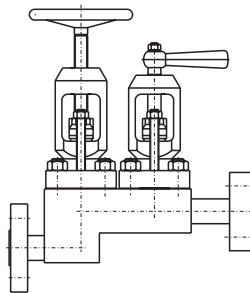
760.40

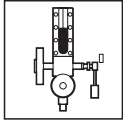


Connection chamber: flange, Actuation: handwheel / quick closing lever, PN 250

spindle thread OS&Y

760.81





Gauge valve CL 1500

Handwheel
 Angle seat, offset
 Spindle screw inside
 Seat renewable

Product group **760**

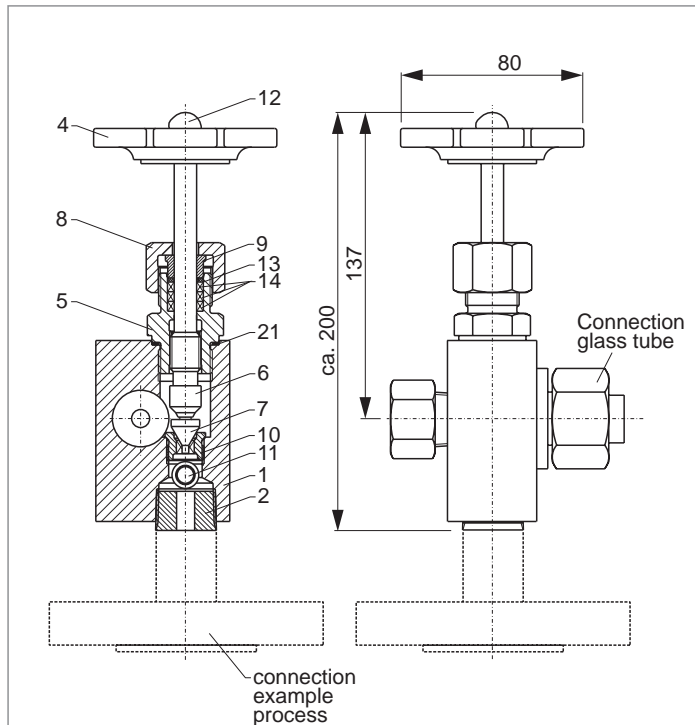
Type **01**

Sheet: 39

Revision: 0

Date:

08/05



Field of Application

The gauge valve is to close the tank against the level gauge. It is actuated by a handwheel. As a standard an automatic ball check is integrated. The process connection is manufactured acc. to customer's specification.

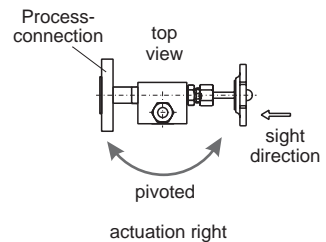
General Data

Material
 - Housing, nipple, flange: CS or SS
 - Trim: SS
 other materials on request
 Orientation: horizontally, see Fig. orientation
 Ball check diff. pressure: >0,5 bar
 Process connection: DIN/ANSI acc. to cust. spec.
 Weight: ca. 2,0 kg

Design Data

Operating pressure: up to 25 MPa/1500 lbs
 Temperature media:
 Housing, nipple, flange SS: -200 ... +400 °C
 Housing, nipple, flange CS: -10 ... +400 °C

Orientation



Measures in mm

Pos.	Denomination	Dimension	Material	
			Exec. CS	Exec. SS
1	Housing	80 x 60 x 40	1.0460/A105	SS316
2	Nipple	3/4"NPT	1.0460/A105	SS316
3				
4	Handwheel	D00388K80M08		Duroplastic/Steel
5	Bonnet	572012415AB		SS
6	Spindle	5650320759		SS
7	Cone	5610255459		SS
8	Nut	592102405AB		SS
9	Stuffing box	5706010059		SS
10	Seat	5604120459		SS
11	Ball	D054011120		SS
12	Nut M8	D15879060		SS
13	Base ring	0100016020SI		SIL4400
14	Packing	0016001040GR		Graphite
15				
16				
17				
18				
19				
20				
21	Sealing	D07603130024		SS

CS (= carbon steel) rsp. SS (= stainless steel type 316SS) are materials suitable for pressure vessels according to EN oder ASME.

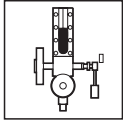
subject to alterations

Ordering no.

7 6 0 . 0 1 X X - X - - - X X X

X	X	X	see 700.VAR	Connection process
S	CS			Material
4	SS			
-	-	Stuffing box		spindle sealing
0	F	Bellows		





Gauge valve CL 600

Quick closing lever
 Angle seat, offset
 Spindle screw inside
 Seat renewable

Product group **760**

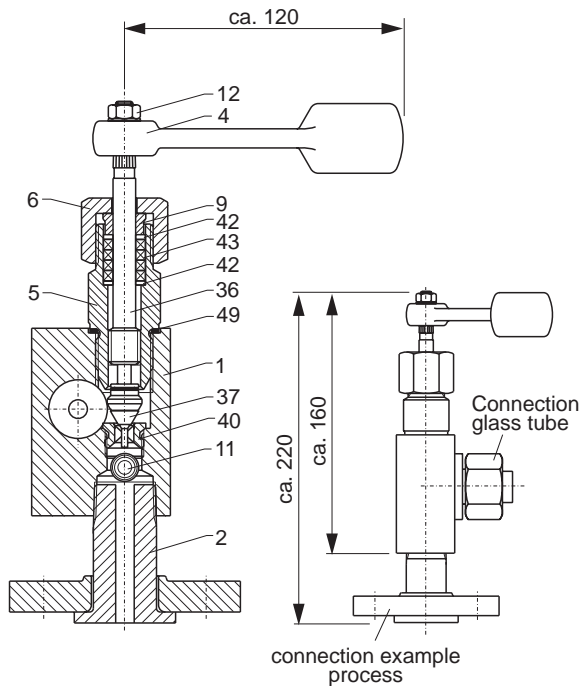
Type **03**

Sheet: 41

Revision: 0

Date:

08/05



Masse in mm

Pos.	Denominat.	Dimension	Material	
			Exec. CS	Exec. SS
1	Housing	80 x 60 x 40	1.0460/A105	SS316
2	Nipple	3/4"NPT	1.0460/A105	SS316
4	Lever	69355506		Steel
5	Bonnet	5720200159B		SS
6	Nut 1"	5923033859B		SS
9	Stuffing box	5706013559		SS
11	Ball	D054011120		SS
12	Nut M10	D009342100		SS
16				
17				
18				
19				
36	Spindle	5650151159B		SS
37	Cone	5610259659		SS
38	screw conn.	5632007559		SS
39	Lock plate	3116000159		SS
40	Seat	5604121659		SS
42	Sealing	0130024020SI		SIL4400
43	Packing	0024001360GR		Graphite
46				
49	Sealing	D07603933039		SS

Field of Application

The gauge valve is to close the tank against the level gauge. It is actuated by a quick closing lever. As a standard an automatic ball check is integrated. The process connection is manufactured acc. to customer's specification.

General Data

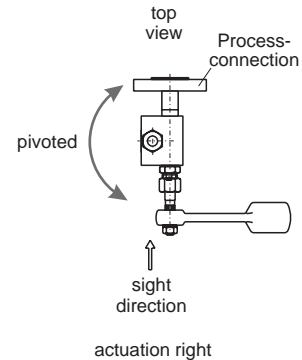
Material
 - Housing, nipple, flange: CS or SS
 - Trim: SS
 other materials on request
 Orientation: horizontally, see Fig. orientation
 Ball check diff. pressure: >0,5 bar
 Process connection: DIN/ANSI acc. to cust. spec.
 Weight: ca. 1,5 kg

Design Data

Operating pressure: up to 10 MPa/600 lbs
 Temperature media:
 Housing, nipple, flange SS: -200 ... +400 °C
 Housing, nipple, flange CS: -10 ... +400 °C

Orientation

Examples



CS (= carbon steel) rsp. SS (= stainless steel type 316SS) are materials suitable for pressure vessels according to EN oder ASME.

subject to alterations

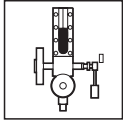
Ordering no.

7 6 0 . 0 3 - X _ _ _ _ X X X

		X	X	X	see 700.VAR	Connection process
S	CS					Material
4	SS					



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Gauge valve, CL 600

Quick closing
 Angle seat
 Spindle thread inside
 Seat and cone renewable
 Thread connection to chamber

Product group **760**

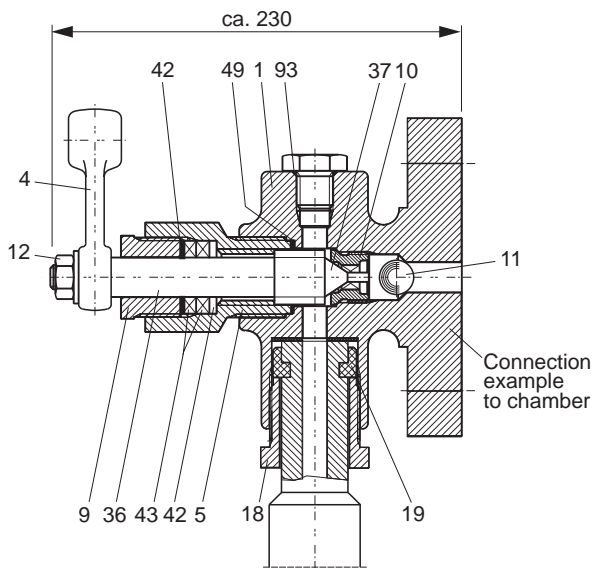
Type **54**

Sheet: 43

Revision: 0

Date:

08/05



Measures in mm

Pos.	Denominat.	Dimension	Material
1	Housing	5501401634B	1.0460/A105
2			
4	Lever	1180018618	GG
5	Bonnet	5720200035	CS
6			
9	Screw conn.	5632160135	CS
10	Seat	5604120459	SS
11	Ball	D054011120	SS
12	Nut M10	D009342100	SS
17			CS
18	Screw conn.	5632150131B	CS
19	Sealing		
36	Spindle	5650151059	SS
37	Cone		
38			
39			SS
42	Sealing	0130024020SI	SIL4400
43	Packing	0024001360GR	Graphite
46			
49	Sealing	0220010010PS	Novaphit
93	Sealing	D07603921026	SS

Field of Application

The gauge valve is to close the vessel against the level gauge. It is actuated by a quick closing lever. As a standard an automatic ball check is integrated. The process connection is manufactured acc. to customer's specification.

General Data

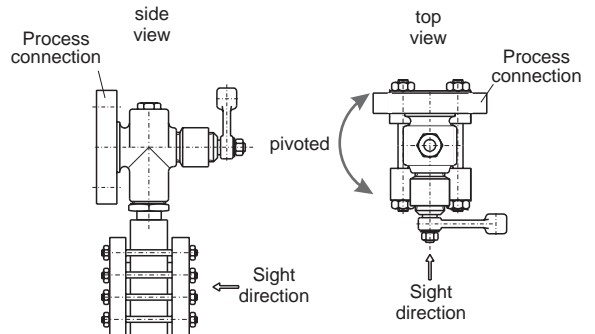
Material
 - Housing, nippel, flange: CS
 - Trim: SS
 other materials on request
 Orientation: horizontally, see Fig. orientation
 Ball check diff. pressure: >0,5 bar
 Process connection: DIN/ANSI acc. to cust. spec.
 Weight: ca. 3,0 kg

Design Data

Operating pressure: up to 10 MPa/600 lbs
 Temperature media
 Housing, flange SS: -200 ... +400 °C
 Housing, flange CS: -10 ... +400 °C

Orientation

Examples



CS (= carbon steel) rsp. SS (= stainless steel type 316SS) are materials suitable for pressure vessels according to EN or ASME.

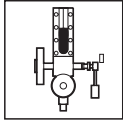
subject to alterations

Ordering no.

7 6 0 . 5 4 - X _ _ _ _ X X X

X	X	X	see 700.VAR	Process connection
S	CS			Material





Gauge valve, CL 900

Double shut-off with hand wheel and quick closing
 Straight seat
 Spindle thread inside
 Seats and cone are renewable
 Flange connection to chamber

Product group **760**

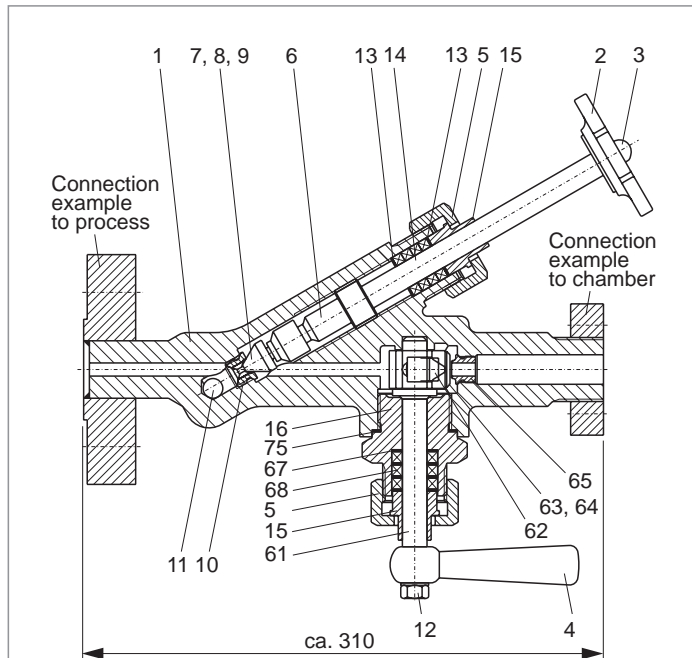
Type **40**

Sheet: 45

Revision: 2

Date:

11/07



Measures in mm

Pos.	Denominat.	Actuation		Material
		left	right	
1	Housing	5503900041B		1.7335
2	Hand wheel	D03319G14C13		GG
3	Nut M8	D15879060		SS
4	Lever	69355505		GG
5	Nut	5923038335B		CS
6	Spindle (regul.)	5673241250		SS
7	Cone	5610359959		SS
8	Screw connect.	5632011059		SS
9	Lock plate	3116008259		SS
10	Seat	5604120459		SS
11	Ball	D054011120		SS
12	Nut M10	D00934S100		SS
13	Sealing	0270015020SI		SIL4400
14	Packing	0270015060GR		Graphite
15	Stuffing box	57060156MS		SS
16	Bonnet	5720234635		CS
61	Spindle (piv.lev.)	5673240750	5673240850	SS
62	Tilting yoke	5599000156B		SS
63	Screw conn.	5632091950		SS
64	Sealing	3529050058		SS
65	Seat	5604121759		SS
67	Sealing	0270015020SI		SIL4400
68	Packing	0270015060GR		Graphite
75	Sealing	D07603952M45		

Field of Application

The gauge valve is to close the vessel against the level gauge. It is actuated by a hand wheel or a quick closing lever. As a standard an automatic ball check is integrated. The process connection is manufactured acc. to customer's specification.

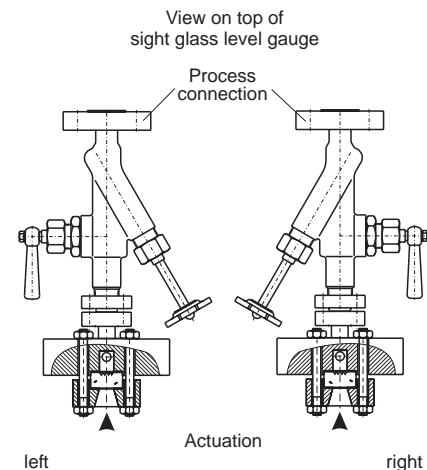
General Data

Material
 - Housing, nippel, flange: CS
 - Trim: SS
 other materials on request
 Orientation: horizontally, see Fig. orientation
 Ball check diff. pressure: >0,5 bar
 Process connection: DIN/ANSI acc. to cust. spec.
 Weight: ca. 10,0 kg

Design Data

Operating pressure: up to 16 MPa/900 lbs
 Temperature media
 Housing, flange SS: -200 ... +400 °C
 Housing, flange CS: -10 ... +400 °C

Orientation



CS (= carbon steel) rsp. SS (= stainless steel type 316SS) are materials suitable for pressure vessels according to EN or ASME.

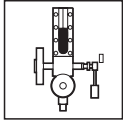
subject to alterations

Ordering no.

7 6 0 . 4 0 X - X - - - X X X

X	X	X	see 700.VAR	Process connection
S	CS			Material
4	SS			Material
L	quick closing lever lefthand			Orientation
R	quick closing lever righthand			Orientation





Gauge valve, CL 2500

Double shut-off with hand wheel and quick closing
 Straight seat
 Spindle thread outside
 Seats and cone are renewable
 Flange connection to chamber

Product group **760**

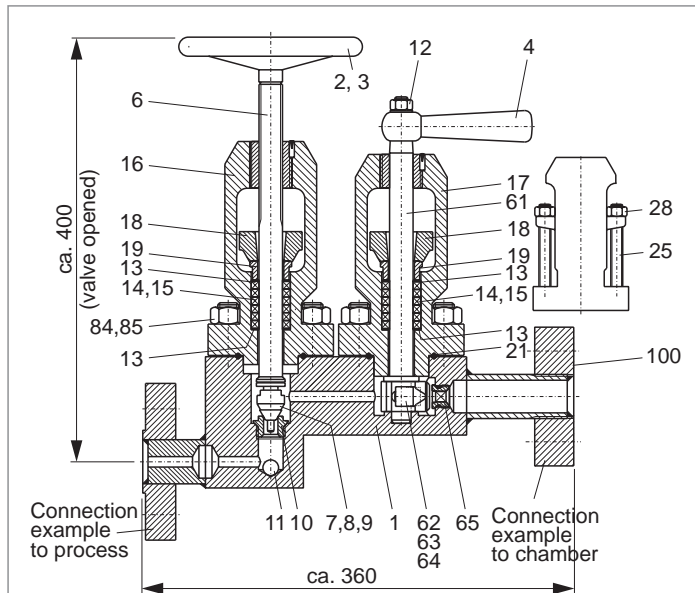
Type **81**

Sheet: 47

Revision: 0

Date:

08/05



Measures in mm

Pos.	Denomination	Actuation		Material
		left	right	
1	Housing	5501179941B		1.7335/A105
2	Hand wheel	D03319G14C13		GG
3	Nut M8	D15879080		SS
4	Lever	69355505		GG
5				
6	Spindle (regul.)	5673290950		SS
7	Cone	5610359959		SS
8	Screw connect.	5632011059		SS
9	Lock plate	3116008259		SS
10	Seat	5604121659		SS
11	Ball	D054011120		SS
12	Nut M10	D00934S100		SS
13	Sealing	0300018020SI		SIL4400
14	Packing	0300018060GR		Reingraphit
15	Packing ring	0300018060GF		form pressed
16	Bow cover	5330104941B		1.7335
17	Bow cover	5330104841B		1.7335
18	Gland	5711118541		1.7335
19	Stuffing box	5706018476		2.0402
21	Sealing ring D50	0500000050VA		1.4541
25	Bolt M12	D00976W12100		1.7709
28	Nut M12	D00934S120		8.
61	Spindle (piv.lev.)	5673290850	5673290750	SS
62	Tilting yoke	5599000156B		SS
63	Screw connect.	5632091950		SS
64	Sealing	3529050058		SIL4400
65	Seat	5604121759		SS
84	Bolt M16	D00976W16065		1.7709
85	Nut M16	D009348160		1.7285
100	Sealing (lens)	3529050142		1.7362

Field of Application

The gauge valve is to close the vessel against the level gauge. It is actuated by a hand wheel or a quick closing lever. As a standard an automatic ball check is integrated. The process connection is manufactured acc. to customer's specification.

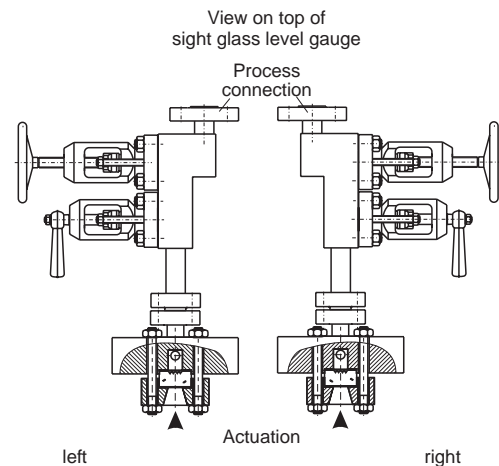
General Data

Material
 - Housing, nippel, flange: CS
 - Trim: SS
 other materials on request
 Orientation: horizontally, see Fig. orientation
 Ball check diff. pressure: >0,5 bar
 Process connection: DIN/ANSI acc. to cust. spec.
 Weight: ca. 24.0 kg

Design Data

Operating pressure: up to 25 MPa/2500 lbs
 Temperature media
 Housing, flange SS: -200 ... +400 °C
 Housing, flange CS: -10 ... +400 °C

Orientation



CS (= carbon steel) rsp. SS (= stainless steel type 316SS) are materials suitable for pressure vessels according to EN or ASME.

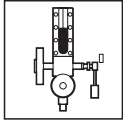
subject to alterations

Ordering no.

7 6 0 . 8 1 X - X _ _ _ _ X X X

		X X X see 700.VAR	Process connection
S	CS		Material
4	SS		Material
L	quick closing lever lefthand		Orientation
R	quick closing lever righthand		Orientation





Sight glass level gauge

Mica sheets
Gaskets
Mica packages
Corrosion protection
Pointer low water

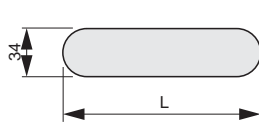
Product group **703**

Type **-**

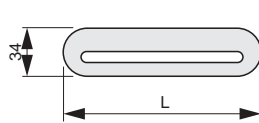
Sheet: 49 Revision: 0

Date: 08/05

Mica and gaskets



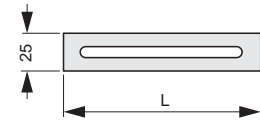
mica rounded



gasket for mica rounded
graphite with SS-inlay



mica rectangular



gasket for mica rectangular
graphite with SS-inlay

Type	L	mica rounded 0,2 - 0,3 mm	gasket for mica rounded	mica rectangular 0,2 - 0,3 mm	gasket for mica rectangular
0	95	39890800GL			
1	115	39890801GL			
2	140	39890802GL			
3	165	39890803GL			
4	190	39890804GL	35292034VG	39891709GL	335290230VG
5	220	39890805GL	35292035VG	39891710GL	335290231VG
6	250	39890806GL	35292036VG	39891712GL	
7	280	39890807GL	35292037VG	39891713GL	335290233VG
8	320	39890808GL	35292038VG	39891714GL	335290234VG
9	340	39890809GL	35292039VG	39891715GL	335290235VG
10	370	39890810GL			
11	400	39890811GL		39891717GL	
	420			39891719GL	335290239VG
12	430	39890812GL			
13	460	39890813GL			
14	500	39890814GL			
15	530	39890815GL			

Mica packages

thickness per sheet	total thickness	P _{design} [bar]		
		80	up to 140 bar	above 140 bar
0,2...0,3 round or rectangular	0,8...1,2 1,2...1,5 1,4...1,5	4	6	7
0,3 rectangular	0,9 1,2 1,5	3	4	5
nos of sheets need for total thickness				

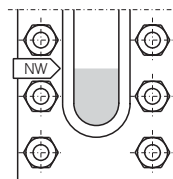
For each mica window for the types 703.50, 703.60, 703.80 and 703.90 a package up to 1,5 mm of total thickness is needed. Each package needs nos of single sheets depending on pressure range as listed in the table.

Measures in mm

Corrosion protection

For corrosion protection 1 mica sheet 0,2-0,3 mm thick is to be laid onto the glass acc. to DIN 7081.

Pointer low water



Form, size and inscription vary depending upon execution of the boiler level gauge

Subject to alterations



ING. ROLF HEUN
Mess-Prüf- Regetechnik GmbH
Hufeisen 16, 21218 Seevetal
Tel. 04105-57230 Fax. 04105-572366



Sight Glass Level Gauges

703.VAR

Model code

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	stud, welding end	F	PN160	R	PN6 (EN)			Nominal pressure, Process connection
1	PN100	G	PN250	S	PN10 (EN)			
2	PN160	H	PN320	T	male thread G			
3	PN250	I	PN400	U	male 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	stud, 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	female thread G	c	PN25			
E	PN100	Q	female thread NPT					
X	same as vent							Drain
Y	connection acc. to customer's specification							Vent
9	flange piece							
B	plug G1/2A							
C	plug 1/2" NPT							
D	vent G1/2A DN8 PN250							
E	vent 1/2" NPT DN8 PN250, socket							
F	vent 1/2" NPT DN8 PN250							
G	vent 1/2" NPT DN6 PN400							
I	vent 3/4" NPT DN8 PN250							
S	gate valve 1/2" NPT							
c	plug 3/4" NPT							
	number of glasses will be given separately							Glass type/ SL
0	glass type 0..9, A..J (10..19) DIN 7081; glass tube=0							
K	glass type 20 DIN 7081							
a	mica 190 mm							
b	mica 250 mm							
c	mica 290 mm							Glass protection/ temperature
d	mica 310 mm							
6	frost protection 60 mm (-60<=T<0 °C)							
8	frost protection 160 mm (-180<=T<-60 °C)							
9	frost protection custom design							
A	mica outside and inside (244<T<280 °C, only for H2O and transparent)							
I	mica outside (230<T<350 °C, not for H2O)							
Q	FEP-foil (0<T<200 °C, only for transparent)							
1	CS							Material chamber/ cover/ bolts
2	SS							
2	PN160							
4	1.4571/1.4571/A2-70 (T <400 °C)							
9	Special material							
A	1.4571/1.0460/A2-70							
L	316L/316L/193B8							
M	316L/A105/193B8							
R	A105/A105/193B7							
S	1.0460/1.0460/8.8 (T <300 °C)							
T	316Ti/316Ti/193B8							
U	A387Gr12/A387Gr12/193B7							
W	1.7335/1.7335/1.7709 (T <400 °C)							

