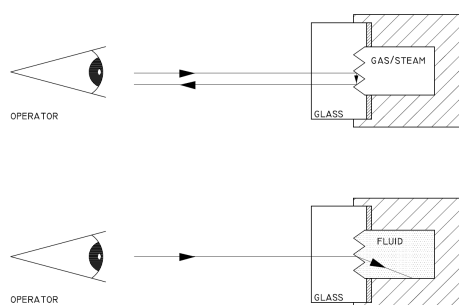


REFLEX level gauges

The level is ascertained using a glass which has a smooth side and a wetted prismatic side. The level of the fluid inside the level gauge is shown by using the optical principles of refraction: the wetted part fully absorbs light and so the fluid appears to be black. The part in contact with the gas, on the other hand, fully reflects light and so the gas appears to be of a very light colour.



The product line includes level gauges suitable for pressure ratings from PN10 to PN250 and a huge number of industrial process applications.

This type of gauge is recommended:

for taking clear and simple readings (see counter-indications below)
if you are looking for an inexpensive gauge which will also save you money on maintenance costs

Operating limits / Conditions:

Process:

Max. pressure: 255,5 bar @ 38°C (rating class 1500)

Max. temperature: 300°C (max. temperature allowed by borosilicate glasses as per the DIN 7081 standard - see page 1.69)

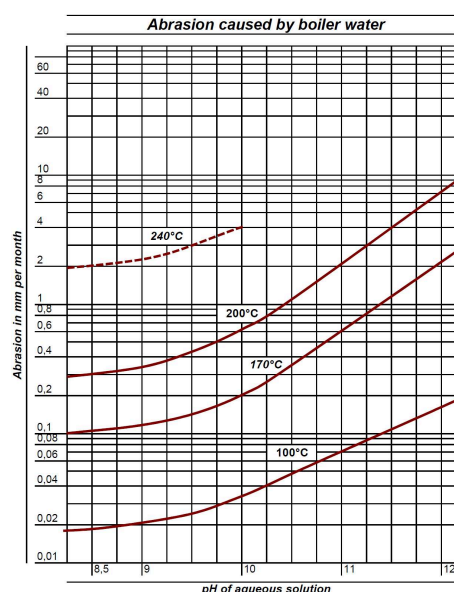
Steam: (see page 1.59)

Max. pressure: 22 bar

Max. temperature: 216°C (saturated steam @ 22 bar)

For saturated steam values > 20 bar, a low-maintenance transparent level gauge with mica shield protection should be used (see graph "Abrasion caused by boiler water" for the estimated glass life).

Not only does the glass life depend on the temperature, it depends on the pH of the water (the higher the value, the shorter the glass life).



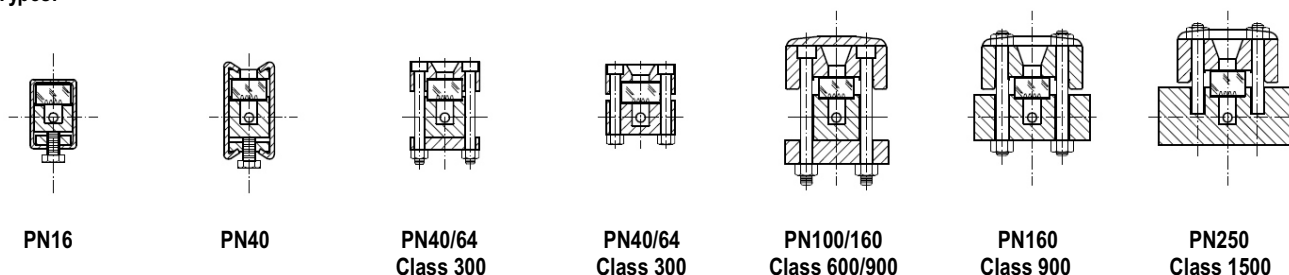
The product is NOT suitable for use in the following instances:

- ☐ if exposed to corrosive fluid (e.g. caustic soda, hydrofluoric acid, citric acid ...)
- ☐ if exposed to high pressure steam
- ☐ if subjected to repeated thermal shocks

In the scenarios listed above, the glass must be protected with MICA or PCTFE shields, so a transparent level gauge is necessary

- ☐ for checking the level of separation between two immiscible fluids (interface)
- ☐ for checking the colour of a fluid (all fluids look very dark)
- ☐ in cases where the fluid is particularly viscous (a film may form on the glass which prevents you from taking an accurate reading)
- ☐ in cases where the fluid is particularly dark (the reflex principle is rendered ineffective)

Types:



REFLEX level gauges

Materials / Specifications:

Connections between housing and cocks:

- with grinded pipes and stuffing box (view can be turned by the customer during installation)
- fixed centre-to-centre distance with metal seal (view can be turned during manufacture)

Wetted parts:

- standard: galvanized ASTM A105 or A105 LF2 carbon steel, ASTM A182 F316L stainless steel
- additional options: on request

Non-wetted parts:

- standard: galvanized carbon steel, AISI 316/316L stainless steel
- additional options: on request

Gaskets: (see page 1.71)

- standard: graphite/copper (ASTM A105), graphite/AISI 316 (A105 LF2 and ASTM A182 F316L)
- additional options: PTFE; other extras on request

Glasses: (see page 1.69)

- reflex borosilicate glasses, thermally pre-stressed and extra hard as per the DIN 7081 standard

Shut-off: (see page 1.49)

- standard: upper valve and lower valve (side/side)
- additional options: on request

Drain: (see page 1.50)

- standard: threaded valve
- additional options: on request

Vent: (see page 1.50)

- standard: blind (for grinded pipes version)
- threaded with plug (for fixed centre-to-centre version)
- additional options: on request

Tank connections:

Flanged:

- UNI standard: PN40 DN15 / DN20 / DN25
- ANSI standard: #150 / #300 / #600 DN 1/2" / 3/4" / 1"
- additional options: on request

Threaded:

- BSP (GAS) standard: 1/2"-M / 3/4"-M
- NPT standard: 1/2"-M / 3/4"-M

Weld-on: from 1/2" to 1" BW or SW

Option: further connections type or direct connections to the process without shut-off cocks (see page 1.49 for more details)

Shut-off cocks, drain cock and vent cock:

- Cylindrical plug cocks (type GR18 or MT18 - see page 1.47)
- Globe valves (type SHV - see page 1.48)
- Push-button valves (type NPV - see page 1.48)
- Ball valves (type SBB)

Spare parts:

Our spare parts are interchangeable with those of major international manufacturers.

For the full range of complete sets, turn to the spares section on page 1.69.

Accessories:

Lower and/or upper safety ball, pusher for safety ball, calibrated scale, non-frosting extension, minimum level arrow, continuous reading, cocks handles lock (see page 1.55 for details)

Certifications (On request):

- ATEX
- Tests and inspection by Notified Bodies
- NACE MR0175
- Others on request

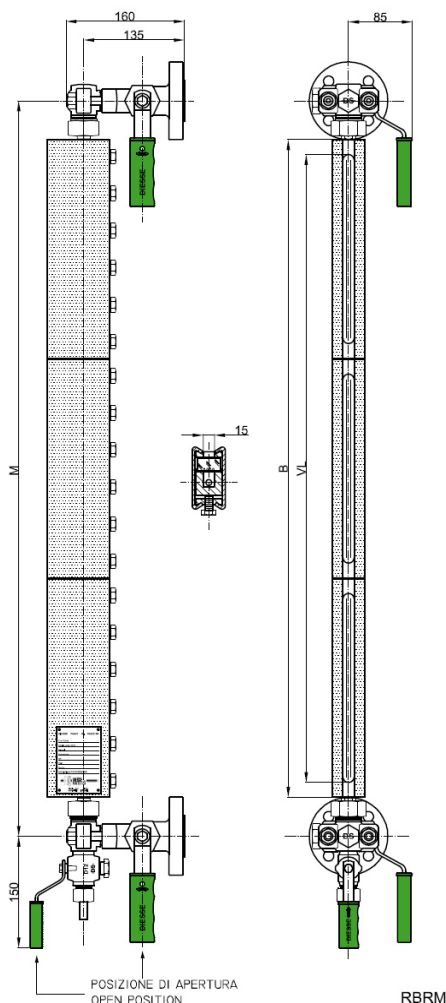
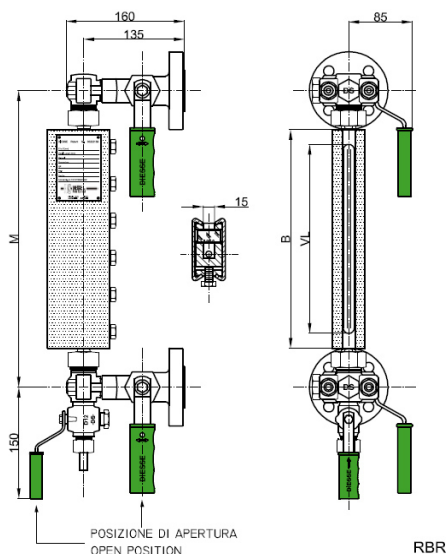
All DIESSE products are individually checked and tested in accordance with company quality procedures and the industry regulations currently in effect.

Certificates can be issued on request.

GLASS LEVEL GAUGE REFLEX TYPE PN40

DS LG - RBR GR18

Code: DS LG-RBR...-... /40/RF-GR18/...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN40

Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: adjustable on 360° in the installation phase

Distance (Centre-to-centre)

Standard: see below table (Distance adjustable - 0 mm / + 10 mm)

Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:

Gauge body & cocks body:

Cocks trim:

Non-wetted parts:

CS/CS

ASTM A105

AISI 303

Carbon steel galvanized

SS/CS

AISI 316L

AISI 316

Carbon steel galvanized

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Type DS MT18: cylindrical plug type with monolithic body - Straight type - Quick 90° closing

(see page 1.47) Centre-to-centre distance $M = B + 115 \text{ mm or } 140 \text{ mm}$

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN40 DN15-20-25

ANSI#150-300-600/RF DN 1/2" - 3/4" - 1"

Standard threaded unions: BSP-M 1/2" - 3/4"

NPT-M 1/2" - 3/4"

Options: further connections types or direct connections to the process without shut-off cocks

(see page 1.49)

Vent: Standard: blind

Option: see page 1.50

Drain: Standard: cock type D12 threaded 1/2"

Option: see page 1.50

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Option: type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RBR: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

Housing type DS RBR: see from page 1.69 (drawing with components and parts list see page 1.61)

Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

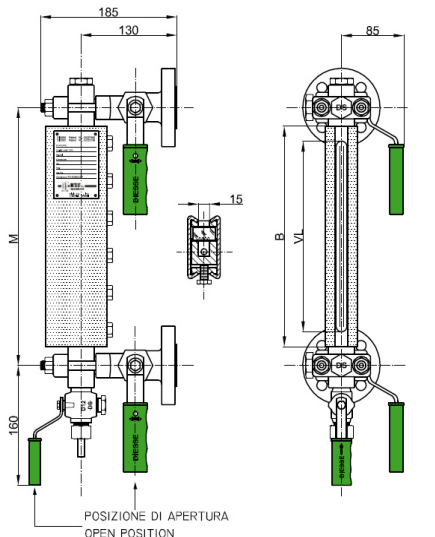
CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 -0/+10 mm	DISTANCE HL Pipes L = 70 -0/+10 mm	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+105	M = B+130	VL	x No. elements	
11	1x1	130	235	260	95	115x1	2,4
12	2x1	155	260	285	120	140x1	2,8
13	3x1	180	285	310	145	165x1	3,3
14	4x1	205	310	335	170	190x1	3,8
15	5x1	235	340	365	200	220x1	4,3
16	6x1	265	370	395	230	250x1	4,9
17	7x1	295	400	425	260	280x1	5,4
18	8x1	335	440	465	300	320x1	6,1
19	9x1	360	465	490	320	340x1	6,6
24	4x2	410	515	540	375	190x2	7,5
25	5x2	470	575	600	435	220x2	8,5
26	6x2	530	635	660	495	250x2	9,7
27	7x2	590	695	720	555	280x2	10,7
28	8x2	670	775	800	635	320x2	12,1
29	9x2	720	825	850	680	340x2	13,1
36	6x3	795	900	925	760	250x3	14,4
37	7x3	885	990	1015	850	280x3	15,9
38	8x3	1005	1110	1145	970	320x3	18,0
39	9x3	1080	1185	1210	1040	340x3	19,5
47	7x4	1180	1285	1310	1145	280x4	21,2
48	8x4	1340	1445	1470	1305	320x4	24,0
49	9x4	1440	1545	1570	1400	340x4	26,0
57	7x5	1475	1580	1605	1440	280x5	26,5
58	8x5	1675	1780	1805	1640	320x5	30,0
59	9x5	1800	1905	1930	1760	340x5	32,5
68	8x6	2010	2115	2140	1975	320x6	35,9
69	9x6	2160	2265	2290	2120	340x6	38,9
78	8x7	2345	2450	2475	2310	320x7	41,9
79	9x7	2520	2625	2650	2480	340x7	45,4
88	8x8	2680	2785	2810	2645	320x8	47,9
89	9x8	2880	2985	3010	2840	340x8	51,9

Tab. RBR

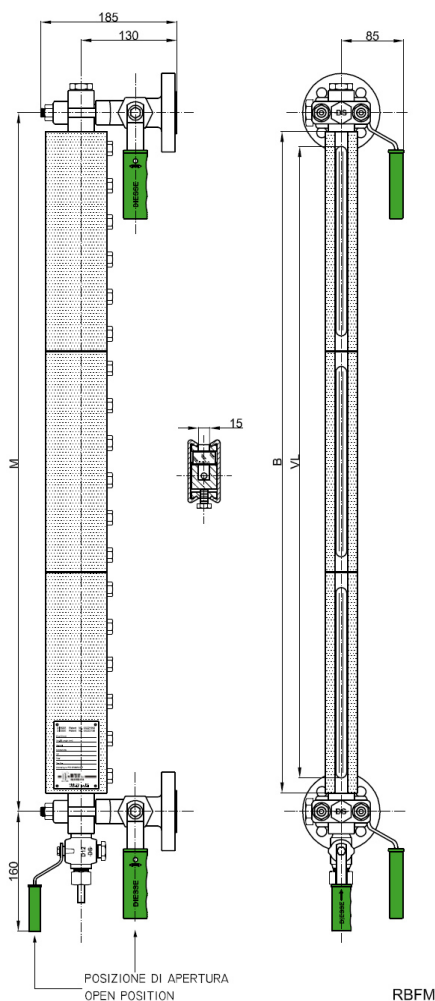
GLASS LEVEL GAUGE REFLEX TYPE PN40

DS LG - RBF GR18

Code: DS LG-RBF...-.../40/RF-GR18/...-...M...-CS/CS



RBF



RBFM

Technical data

Service conditions

Max Pressure: PN40

Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)

Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:

CS/CS

SS/CS

Gauge body & cocks body:

ASTM A105

AISI 316L

Cocks trim:

AISI 303

AISI 316

Non-wetted parts:

Carbon steel galvanized

Carbon steel galvanized

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN40 DN15-20-25

ANSI#150-300-600/RF DN 1/2" - 3/4" - 1"

Standard threaded unions: BSP-M 1/2" - 3/4"

NPT-M 1/2" - 3/4"

Options: further connections types or direct connections to the process without shut-off cocks

(see page 1.51)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.52

Drain: Standard: cock type D12 threaded 1/2"

Option: see page 1.52

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Option: type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RBF: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

Housing type DS RBR: see from page 1.69 (drawing with components and parts list see page 1.61)

Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

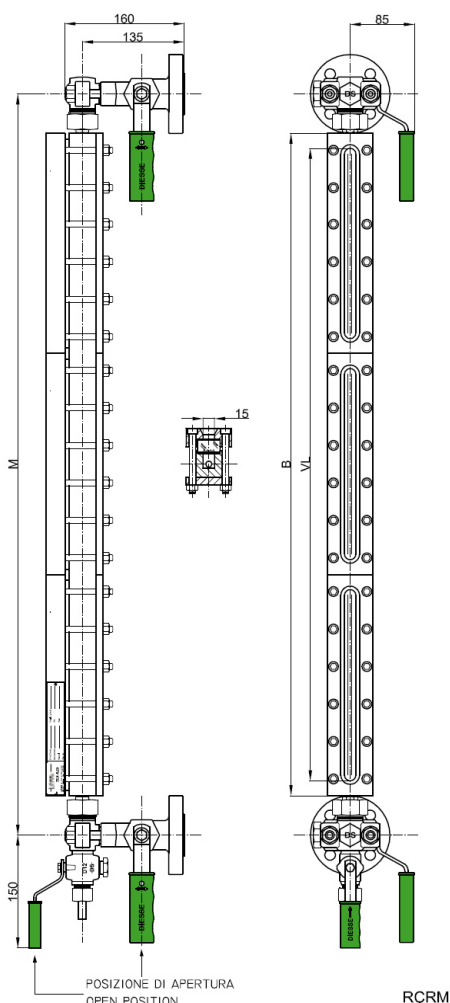
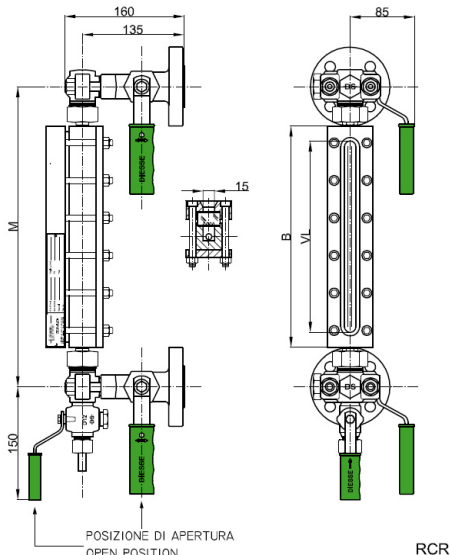
CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+40	VL	x No. elements	
11	1x1	130	170	95	115x1	3,7
12	2x1	155	195	120	140x1	4,1
13	3x1	180	220	145	165x1	4,6
14	4x1	205	245	170	190x1	5,1
15	5x1	235	275	200	220x1	5,6
16	6x1	265	305	230	250x1	6,2
17	7x1	295	335	260	280x1	6,7
18	8x1	335	375	300	320x1	7,4
19	9x1	360	400	320	340x1	7,9
24	4x2	410	450	375	190x2	8,8
25	5x2	470	510	435	220x2	9,8
26	6x2	530	570	495	250x2	11,0
27	7x2	590	630	555	280x2	12,0
28	8x2	670	710	635	320x2	13,4
29	9x2	720	760	680	340x2	14,4
36	6x3	795	835	760	250x3	15,7
37	7x3	885	925	850	280x3	17,2
38	8x3	1005	1045	970	320x3	19,3
39	9x3	1080	1120	1040	340x3	20,8
47	7x4	1180	1220	1145	280x4	22,5
48	8x4	1340	1380	1305	320x4	25,3
49	9x4	1440	1480	1400	340x4	27,3
57	7x5	1475	1515	1440	280x5	27,8
58	8x5	1675	1715	1640	320x5	31,3
59	9x5	1800	1840	1760	340x5	33,8
68	8x6	2010	2050	1975	320x6	37,2
69	9x6	2160	2200	2120	340x6	40,2
78	8x7	2345	2385	2310	320x7	43,2
79	9x7	2520	2560	2480	340x7	46,7
88	8x8	2680	2720	2645	320x8	49,3
89	9x8	2880	2920	2840	340x8	53,2

Tab. RBF

GLASS LEVEL GAUGE REFLEX TYPE PN40

DS LG - RCR GR18

Code: DS LG-RCR...-... /40/RF-GR18/...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN40

Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: adjustable on 360° in the installation phase

Distance (Centre-to-centre)

Standard: see below table (**Distance adjustable - 0 mm / + 10 mm**)

Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body & cocks body:	ASTM A105	AISI 316L	AISI 316L
Cocks trim:	AISI 303	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN40 DN15-20-25

ANSI#150-300-600/RF DN 1/2" - 3/4" - 1"

Standard threaded unions: BSP-M 1/2" - 3/4"

NPT-M 1/2" - 3/4"

Options: further connections types or direct connections to the process without shut-off cocks

(see page 1.49)

Vent:

Standard: blind

Option: see page 1.50

Drain:

Standard: cock type D12 threaded 1/2"

Option: see page 1.50

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RCR: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 35 Nm

Spare parts

Housing type DS RCR: see from page 1.69 (drawing with components and parts list see page 1.62)

Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

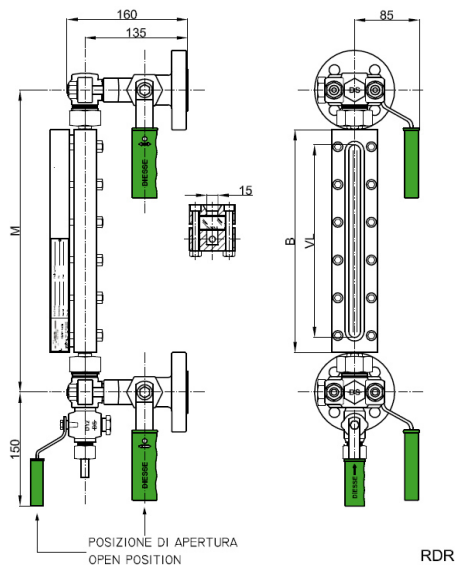
CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 -0/+10 mm	DISTANCE HL Pipes L = 70 -0/+10 mm	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+105	M = B+130	VL	x No. elements	
11	1x1	130	235	260	95	115x1	3,0
12	2x1	155	260	285	120	140x1	3,5
13	3x1	180	285	310	145	165x1	4,0
14	4x1	205	310	335	170	190x1	4,4
15	5x1	235	340	365	200	220x1	5,2
16	6x1	265	370	395	230	250x1	5,6
17	7x1	295	400	425	260	280x1	6,3
18	8x1	335	440	465	300	320x1	7,0
19	9x1	360	465	490	320	340x1	7,6
24	4x2	410	515	540	375	190x2	8,6
25	5x2	470	575	600	435	220x2	10,2
26	6x2	530	635	660	495	250x2	11,0
27	7x2	590	695	720	555	280x2	12,5
28	8x2	670	775	800	635	320x2	13,8
29	9x2	720	825	850	680	340x2	15,0
36	6x3	795	900	925	760	250x3	16,5
37	7x3	885	990	1015	850	280x3	18,6
38	8x3	1005	1110	1145	970	320x3	20,7
39	9x3	1080	1185	1210	1040	340x3	22,5
47	7x4	1180	1285	1310	1145	280x4	24,7
48	8x4	1340	1445	1470	1305	320x4	27,5
49	9x4	1440	1545	1570	1400	340x4	29,9
57	7x5	1475	1580	1605	1440	280x5	30,8
58	8x5	1675	1780	1805	1640	320x5	34,3
59	9x5	1800	1905	1930	1760	340x5	37,3
68	8x6	2010	2115	2140	1975	320x6	41,3
69	9x6	2160	2265	2290	2120	340x6	44,8
78	8x7	2345	2450	2475	2310	320x7	48,0
79	9x7	2520	2625	2650	2480	340x7	52,2
88	8x8	2680	2785	2810	2645	320x8	54,8
89	9x8	2880	2985	3010	2840	340x8	59,6

Tab. RCR

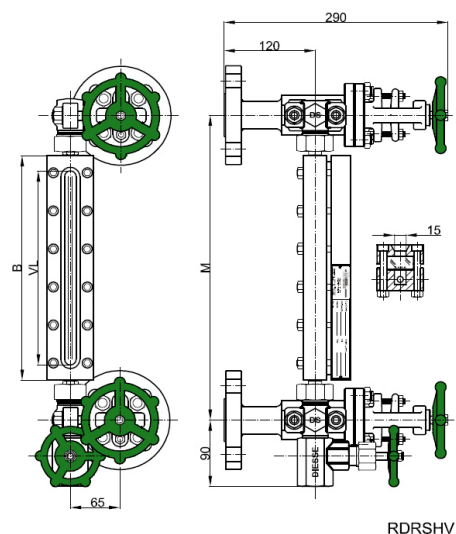
GLASS LEVEL GAUGE REFLEX TYPE PN40

DS LG - RDR GR18 / SHV

Code: DS LG-RDR...-... /40/RF-GR18/...-M...-CS/CS



Code: DS LG-RDR...-... /40/RF-SHV/...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN40

Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: adjustable on 360° in the installation phase

Distance (Centre-to-centre)

Standard: see below table (Distance adjustable - 0 mm / + 10 mm)

Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body:	ASTM A105	AISI 316L	AISI 316L
Cocks body type DS GR18:	ASTM A105	AISI 316L	AISI 316L
Cocks trim:	AISI 303	AISI 316	AISI 316
Valves body type DS SHV:	A105 LF2	AISI 316L	AISI 316L
Stem, disc / seat valves:	AISI 410 / AISI 316	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Valves type DS SHV: globe type - Opening/Closing by handwheel

Process connections:

Standard flanges: UNI PN40 DN15-20-25 ANSI#150-300-600/RF DN 1/2" - 3/4" - 1"

Standard threaded unions: BSP-M 1/2" - 3/4" NPT-M 1/2" - 3/4"

Options: further connections types or direct connections to the process without shut-off cocks

(see page 1.49)

Vent: Standard: blind

Option: see page 1.50

Drain: Standard: cock type D12 threaded 1/2"

Option: see page 1.50

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type B (see page 1.69)

Option: type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RDR: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Valves type DS SHV: Kg. 11,8 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 35 Nm

Spare parts

Housing type DS RDR: see from page 1.69 (drawing with components and parts list see page 1.62)

Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

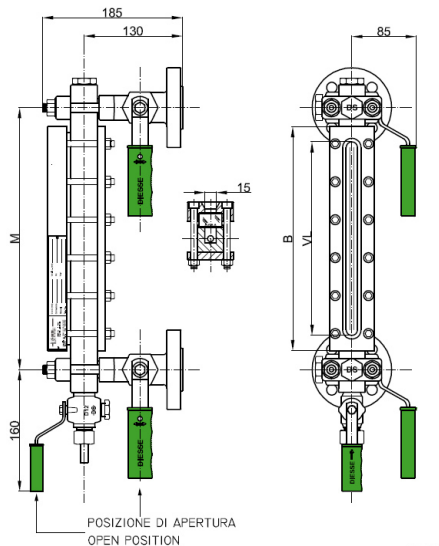
Valves type DS SHV: see from page 1.74 (drawing with components and parts list see page 1.68)

CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 -0/+10 mm	DISTANCE HL Pipes L = 70 -0/+10 mm	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
		B	M = B+105	M = B+130	VL		
11	1	130	235	260	95	115	2,9
12	2	155	260	285	120	140	3,4
13	3	180	285	310	145	165	3,8
14	4	205	310	335	170	190	4,4
15	5	235	340	365	200	220	5,2
16	6	265	370	395	230	250	5,6
17	7	295	400	425	260	280	6,0
18	8	335	440	465	300	320	6,5
19	9	360	465	490	320	340	7,5

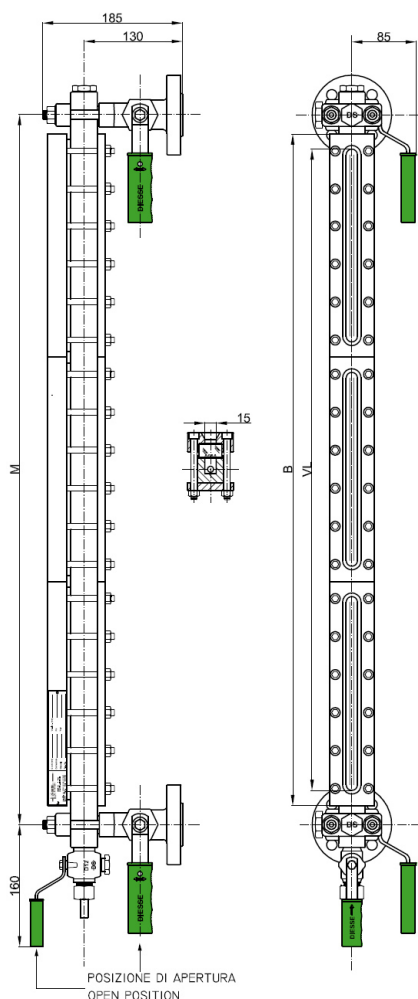
Tab. RDR

GLASS LEVEL GAUGE REFLEX TYPE PN40 and PN64 / Class 300 DS LG - RCF GR18

Code: DS LG-RCF...-.../40/RF-GR18/...-...-M...-CS/CS



RCF



RCFM

Technical data

Service conditions

Max Pressure: PN40 and PN64; Class 300 (A105: 51 bar @ 38°C; AISI 316L: 49,6 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body & cocks body:	ASTM A105	AISI 316L	AISI 316L
Cocks trim:	AISI 303	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN40-64 DN15-20-25 ANSI#150-300-600/RF DN 1/2" - 3/4" - 1"

Standard threaded unions: BSP-M 1/2" - 3/4" NPT-M 1/2" - 3/4"

Options: further connections types or direct connections to the process without shut-off cocks
(see page 1.51)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.52

Drain: Standard: cock type D12 threaded 1/2"

Option: see page 1.52

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RCF: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 35 Nm

Spare parts

Housing type DS RCF: see from page 1.69 (drawing with components and parts list see page 1.62)

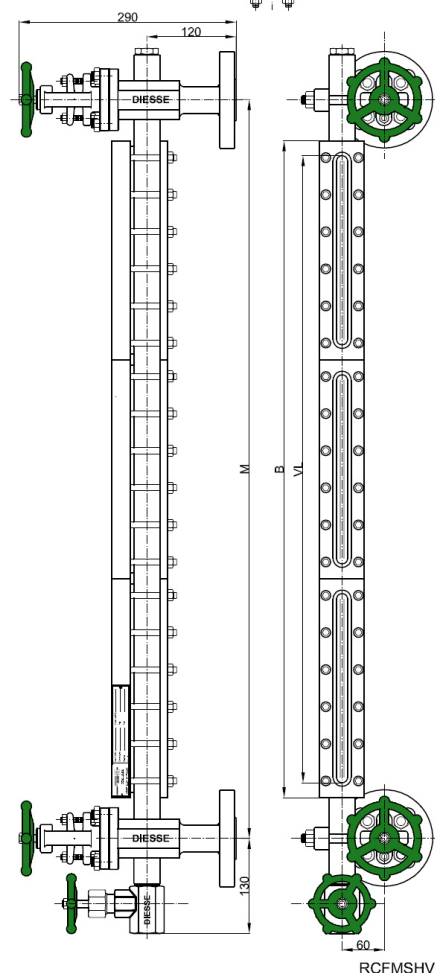
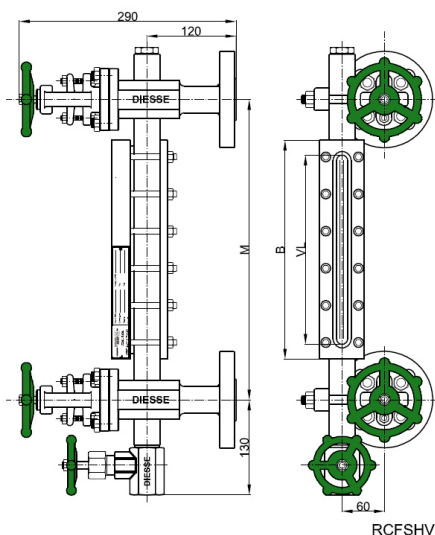
Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+40	VL	x No. elements	
11	1x1	130	170	95	115x1	4,3
12	2x1	155	195	120	140x1	4,8
13	3x1	180	220	145	165x1	5,3
14	4x1	205	245	170	190x1	5,7
15	5x1	235	275	200	220x1	6,5
16	6x1	265	305	230	250x1	6,9
17	7x1	295	335	260	280x1	7,6
18	8x1	335	375	300	320x1	8,3
19	9x1	360	400	320	340x1	8,9
24	4x2	410	450	375	190x2	9,9
25	5x2	470	510	435	220x2	11,5
26	6x2	530	570	495	250x2	12,3
27	7x2	590	630	555	280x2	13,8
28	8x2	670	710	635	320x2	15,1
29	9x2	720	760	680	340x2	16,3
36	6x3	795	835	760	250x3	17,8
37	7x3	885	925	850	280x3	19,9
38	8x3	1005	1045	970	320x3	22,0
39	9x3	1080	1120	1040	340x3	23,8
47	7x4	1180	1220	1145	280x4	26,0
48	8x4	1340	1380	1305	320x4	28,8
49	9x4	1440	1480	1400	340x4	31,2
57	7x5	1475	1515	1440	280x5	32,1
58	8x5	1675	1715	1640	320x5	35,6
59	9x5	1800	1840	1760	340x5	38,6
68	8x6	2010	2050	1975	320x6	42,6
69	9x6	2160	2200	2120	340x6	46,1
78	8x7	2345	2385	2310	320x7	49,3
79	9x7	2520	2560	2480	340x7	53,5
88	8x8	2680	2720	2645	320x8	56,1
89	9x8	2880	2920	2840	340x8	60,9

Tab. RCF

GLASS LEVEL GAUGE REFLEX TYPE PN40 and PN64 / Class 300 DS LG - RCF SHV

Code: DS LG-RCF...-... /40/RF-SHV...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN40 and PN64; Class 300 (A105: 51 bar @ 38°C; AISI 316L: 49,6 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 3.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body:	ASTM A105 / A105 LF2	AISI 316L	AISI 316L
Valves body:	A105 LF2	AISI 316L	AISI 316L
Stem, disc / seat valves:	AISI 410 / AISI 316	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off valves

Type DS SHV: globe type

Handling: by handwheel

Process connections:

Standard flanges: UNI PN40-64 DN15-20-25 ANSI#150-300-600/RF DN ½" - ¾" - 1"
Standard threaded unions: BSP-M ½" - ¾" NPT-M ½" - ¾"

Options: further connections types or direct connections to the process without shut-off valves (see page 1.53)

Vent: Standard: threaded ½" with plug

Option: see page 1.54

Drain: Standard: valve type DHV threaded ¾"

Option: see page 1.54

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RCF: see below table

Valves type DS SHV: Kg. 11,8 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 35 Nm

Spare parts

Housing type DS RCF: see from page 1.69 (drawing with components and parts list see page 1.62)

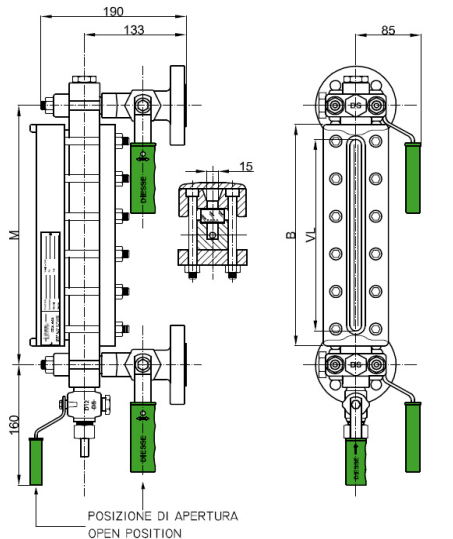
Valves type DS SHV: see from page 1.74 (drawing with components and parts list see page 1.68)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+80	VL	x No. elements	
11	1x1	130	210	95	115x1	4,3
12	2x1	155	235	120	140x1	4,8
13	3x1	180	260	145	165x1	5,3
14	4x1	205	285	170	190x1	5,7
15	5x1	235	315	200	220x1	6,5
16	6x1	265	345	230	250x1	6,9
17	7x1	295	375	260	280x1	7,6
18	8x1	335	415	300	320x1	8,3
19	9x1	360	440	320	340x1	8,9
24	4x2	410	490	375	190x2	9,9
25	5x2	470	550	435	220x2	11,5
26	6x2	530	610	495	250x2	12,3
27	7x2	590	670	555	280x2	13,8
28	8x2	670	750	635	320x2	15,1
29	9x2	720	800	680	340x2	16,3
36	6x3	795	875	760	250x3	17,8
37	7x3	885	965	850	280x3	19,9
38	8x3	1005	1085	970	320x3	22,0
39	9x3	1080	1160	1040	340x3	23,8
47	7x4	1180	1260	1145	280x4	26,0
48	8x4	1340	1420	1305	320x4	28,8
49	9x4	1440	1520	1400	340x4	31,2
57	7x5	1475	1555	1440	280x5	32,1
58	8x5	1675	1755	1640	320x5	35,6
59	9x5	1800	1880	1760	340x5	38,6
68	8x6	2010	2090	1975	320x6	42,6
69	9x6	2160	2240	2120	340x6	46,1
78	8x7	2345	2425	2310	320x7	49,3
79	9x7	2520	2600	2480	340x7	53,5
88	8x8	2680	2760	2645	320x8	56,1
89	9x8	2880	2960	2840	340x8	60,9

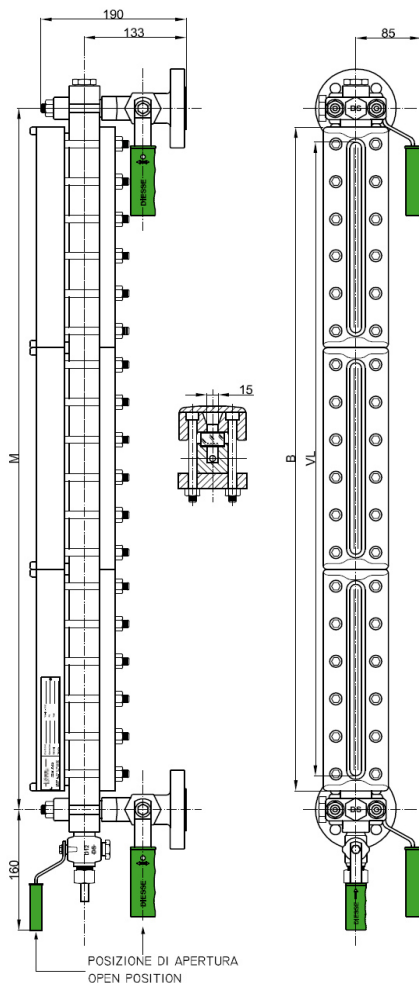
Tab. RCF

GLASS LEVEL GAUGE REFLEX TYPE PN100 and PN160 / Class 600 and 900 DS LG - RPF GR18

Code: DS LG-RPF...-... /100/RF-GR18/...-...-M...-CS/CS



RPF



RPFM

Technical data

Service conditions

Max Pressure: PN100; Class 600 (A105: 102 bar @ 38°C; AISI 316L: 99,3 bar @ 38°C) and PN160; Class 900 (A105: 153,1 bar @ 38°C; AISI 316L: 148,9 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 2.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body & cocks body:	ASTM A105	AISI 316L	AISI 316L
Cocks trim:	AISI 303	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges:	UNI PN100-160 DN20 - DN25	ANSI#600-900/RF DN ¾" - 1"
Standard threaded unions:	BSP-M ¾" - 1"	NPT-M ¾" - 1"

Options: further connections types or direct connections to the process without shut-off cocks (see page 1.51)

Vent: Standard: threaded ½" with plug

Option: see page 1.52

Drain: Standard: cock type D12 threaded ½"

Option: see page 1.52

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RPF: see below table

Cocks type DS GR18: Kg. 9,2 approx. (with flanges UNI DN20 PN100)

Tightening torque of housing screws

Standard: 75 Nm

Spare parts

Housing type DS RPF: see from page 1.69 (drawing with components and parts list see page 1.63)

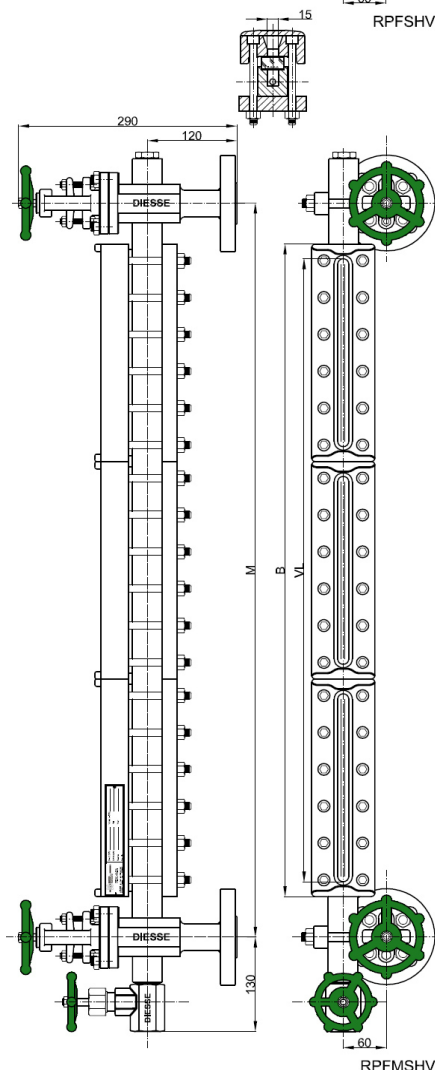
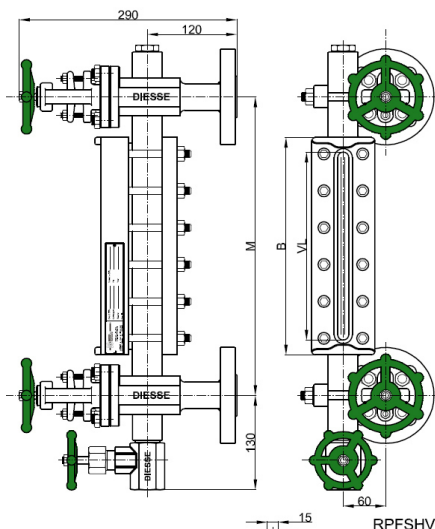
Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+50	VL	x No. elements	
11	1x1	130	180	95	115x1	7,7
12	2x1	155	205	120	140x1	8,6
13	3x1	180	230	145	165x1	9,9
14	4x1	205	255	170	190x1	11,0
15	5x1	235	285	200	220x1	12,3
16	6x1	265	315	230	250x1	13,1
17	7x1	295	345	260	280x1	14,8
18	8x1	335	385	300	320x1	16,0
19	9x1	360	410	320	340x1	17,7
24	4x2	410	460	375	190x2	20,5
25	5x2	470	520	435	220x2	23,1
26	6x2	530	580	495	250x2	24,7
27	7x2	590	640	555	280x2	28,1
28	8x2	670	720	635	320x2	30,5
29	9x2	720	770	680	340x2	33,9
36	6x3	795	845	760	250x3	36,3
37	7x3	885	935	850	280x3	41,4
38	8x3	1005	1055	970	320x3	45,0
39	9x3	1080	1130	1040	340x3	50,1
47	7x4	1180	1230	1145	280x4	54,7
48	8x4	1340	1390	1305	320x4	59,5
49	9x4	1440	1490	1400	340x4	66,3
57	7x5	1475	1525	1440	280x5	68,0
58	8x5	1675	1725	1640	320x5	74,0
59	9x5	1800	1850	1760	340x5	82,5

Tab. RPF

GLASS LEVEL GAUGE REFLEX TYPE PN100 and PN160 / Class 600 and 900 DS LG - RPF SHV

Code: DS LG-RPF...-... /100/RF-SHV/...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN100; Class 600 (A105: 102 bar @ 38°C; AISI 316L: 99,3 bar @ 38°C) and PN160; Class 900 (A105: 153,1 bar @ 38°C; AISI 316L: 148,9 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 2.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body:	ASTM A105 / A105 LF2	AISI 316L	AISI 316L
Valves body:	A105 LF2	AISI 316L	AISI 316L
Stem, disc / seat valves:	AISI 410 / AISI 316	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off valves

Type DS SHV: globe type

Handling: by handwheel

Process connections:

Standard flanges: UNI PN100-160 DN20-25 ANSI#600-900/RF DN 3/4" - 1"
Standard threaded unions: BSP-M 3/4" - 1" NPT-M 3/4" - 1"
Options: further connections types or direct connections to the process without shut-off valves (see page 1.53)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.54

Drain: Standard: valve type DHV threaded 3/4"

Option: see page 1.54

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RPF: see below table

Valves type DS SHV: Kg. 13,5 approx. (with flanges UNI DN20 PN100)

Tightening torque of housing screws

Standard: 75 Nm

Spare parts

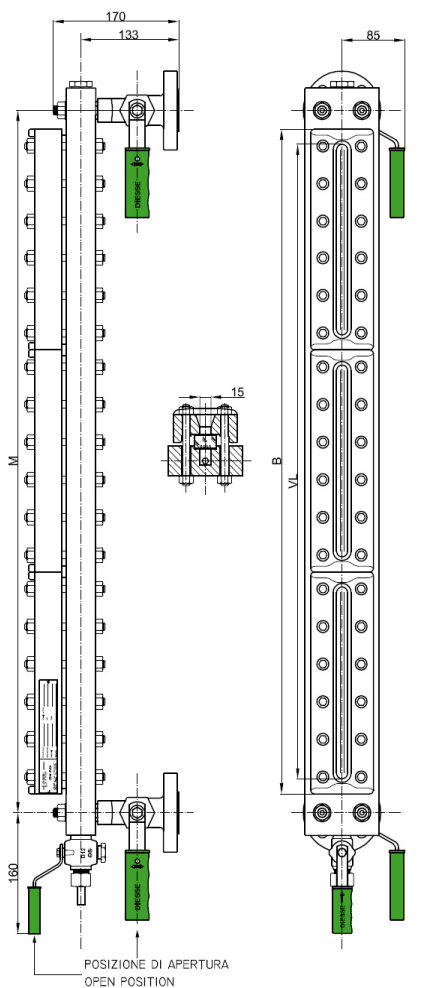
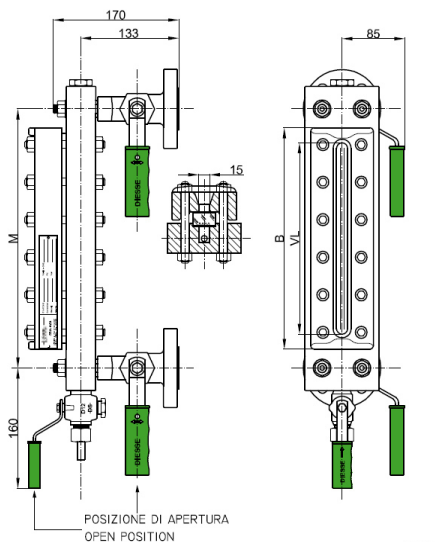
Housing type DS RPF: see from page 1.69 (drawing with components and parts list see page 1.63)
Valves type DS SHV: see from page 1.74 (drawing with components and parts list see page 1.68)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+80	VL	x No. elements	
11	1x1	130	210	95	115x1	7,7
12	2x1	155	235	120	140x1	8,6
13	3x1	180	260	145	165x1	9,9
14	4x1	205	285	170	190x1	11,0
15	5x1	235	315	200	220x1	12,3
16	6x1	265	345	230	250x1	13,1
17	7x1	295	375	260	280x1	14,8
18	8x1	335	415	300	320x1	16,0
19	9x1	360	440	320	340x1	17,7
24	4x2	410	490	375	190x2	20,5
25	5x2	470	550	435	220x2	23,1
26	6x2	530	610	495	250x2	24,7
27	7x2	590	670	555	280x2	28,1
28	8x2	670	750	635	320x2	30,5
29	9x2	720	800	680	340x2	33,9
36	6x3	795	875	760	250x3	36,3
37	7x3	885	965	850	280x3	41,4
38	8x3	1005	1085	970	320x3	45,0
39	9x3	1080	1160	1040	340x3	50,1
47	7x4	1180	1260	1145	280x4	54,7
48	8x4	1340	1420	1305	320x4	59,5
49	9x4	1440	1520	1400	340x4	66,3
57	7x5	1475	1555	1440	280x5	68,0
58	8x5	1675	1755	1640	320x5	74,0
59	9x5	1800	1880	1760	340x5	82,5

Tab. RPF

GLASS LEVEL GAUGE REFLEX TYPE PN160 / Class 900 DS LG - RXF GR18

Code: DS LG-RXF...-.../160/RF-GR18/.../...M...-CS/CS



RXFM

Technical data

Service conditions

Max Pressure: PN160; Class 900 (A105: 153,1 bar @ 38°C; AISI 316L: 148,9 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 2.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body & cocks body:	ASTM A105	AISI 316L	AISI 316L
Cocks trim:	AISI 303	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN160 DN20 - DN25 ANSI#900/RF DN ¾" - 1"
Standard threaded unions: BSP-M ¾" - 1" NPT-M ¾" - 1"
Options: further connections types or direct connections to the process without shut-off cocks (see page 1.51)

Vent: Standard: threaded ½" with plug

Option: see page 1.52

Drain: Standard: cock type D12 threaded ½"

Option: see page 1.52

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RXF: see below table

Cocks type DS GR18: Kg. 9,2 approx. (with flanges UNI DN20 PN100)

Tightening torque of housing screws

Standard: 75 Nm

Spare parts

Housing type DS RXF: see from page 1.69 (drawing with components and parts list see page 1.63)

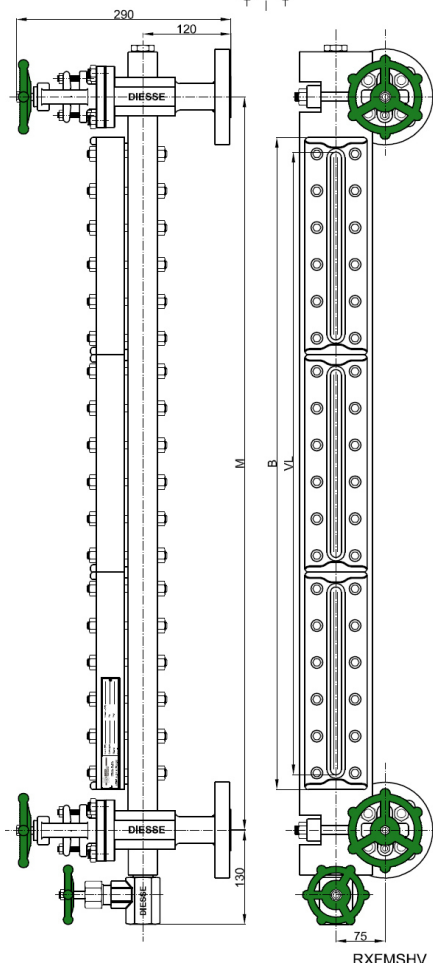
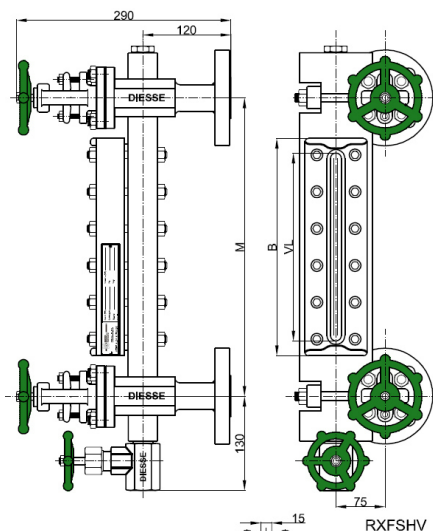
Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+50	VL	x No. elements	
11	1x1	130	180	95	115x1	11,3
12	2x1	155	205	120	140x1	12,7
13	3x1	180	230	145	165x1	14,4
14	4x1	205	255	170	190x1	15,5
15	5x1	235	285	200	220x1	17,7
16	6x1	265	315	230	250x1	19,0
17	7x1	295	345	260	280x1	21,3
18	8x1	335	385	300	320x1	23,1
19	9x1	360	410	320	340x1	25,2
24	4x2	410	460	375	190x2	28,0
25	5x2	470	520	435	220x2	32,4
26	6x2	530	580	495	250x2	35,0
27	7x2	590	640	555	280x2	39,6
28	8x2	670	720	635	320x2	43,2
29	9x2	720	770	680	340x2	47,4
36	6x3	795	845	760	250x3	51,0
37	7x3	885	935	850	280x3	57,9
38	8x3	1005	1055	970	320x3	63,3
39	9x3	1080	1130	1040	340x3	69,6
47	7x4	1180	1230	1145	280x4	76,2
48	8x4	1340	1390	1305	320x4	83,4
49	9x4	1440	1490	1400	340x4	91,8
57	7x5	1475	1525	1440	280x5	94,5
58	8x5	1675	1725	1640	320x5	103,5
59	9x5	1800	1850	1760	340x5	114,0

Tab. RXF

GLASS LEVEL GAUGE REFLEX TYPE PN160 / Class 900 DS LG - RXF SHV

Code: DS LG-RXF...-.../160/RF-SHV...-...M...-CS/CS



Technical data

Service conditions

Max Pressure: PN160; Class 900 (A105: 153,1 bar @ 38°C; AISI 316L: 148,9 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 2.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body:	ASTM A105 / A105 LF2	AISI 316L	AISI 316L
Valves body:	A105 LF2	AISI 316L	AISI 316L
Stem, disc / seat valves:	AISI 410 / AISI 316	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off valves

Type DS SHV: globe type

Handling: by handwheel

Process connections:

Standard flanges: UNI PN160 DN20-25 ANSI#900/RF DN 3/4" - 1"
Standard threaded unions: BSP-M 3/4" - 1" NPT-M 3/4" - 1"
Options: further connections types or direct connections to the process without shut-off valves (see page 1.53)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.54

Drain: Standard: valve type DHV threaded 3/4"

Option: see page 1.54

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RXF: see below table

Valves type DS SHV: Kg. 13,5 approx. (with flanges UNI DN20 PN160)

Tightening torque of housing screws

Standard: 75 Nm

Spare parts

Housing type DS RXF: see from page 1.69 (drawing with components and parts list see page 1.63)

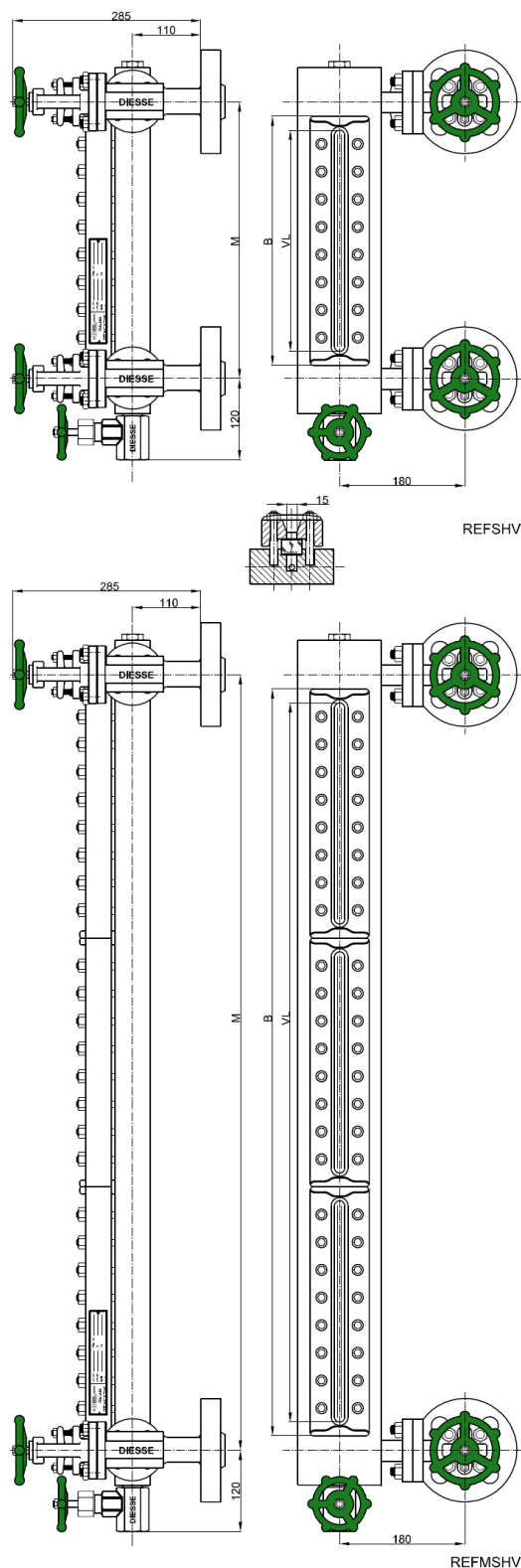
Valves type DS SHV: see from page 1.74 (drawing with components and parts list see page 1.68)

CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+80	VL	x No. elements	
11	1x1	130	210	95	115x1	11,3
12	2x1	155	235	120	140x1	12,7
13	3x1	180	260	145	165x1	14,4
14	4x1	205	285	170	190x1	15,5
15	5x1	235	315	200	220x1	17,7
16	6x1	265	345	230	250x1	19,0
17	7x1	295	375	260	280x1	21,3
18	8x1	335	415	300	320x1	23,1
19	9x1	360	440	320	340x1	25,2
24	4x2	410	490	375	190x2	28,0
25	5x2	470	550	435	220x2	32,4
26	6x2	530	610	495	250x2	35,0
27	7x2	590	670	555	280x2	39,6
28	8x2	670	750	635	320x2	43,2
29	9x2	720	800	680	340x2	47,4
36	6x3	795	875	760	250x3	51,0
37	7x3	885	965	850	280x3	57,9
38	8x3	1005	1085	970	320x3	63,3
39	9x3	1080	1160	1040	340x3	69,6
47	7x4	1180	1260	1145	280x4	76,2
48	8x4	1340	1420	1305	320x4	83,4
49	9x4	1440	1520	1400	340x4	91,8
57	7x5	1475	1555	1440	280x5	94,5
58	8x5	1675	1755	1640	320x5	103,5
59	9x5	1800	1880	1760	340x5	114,0

Tab. RXF

GLASS LEVEL GAUGE REFLEX TYPE PN250 / Class 1500 DS LG - REF SHV

Code: DS LG-REF...-.../1500/...-SHV/...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN250; Class 1500 (A105: 255,5 bar @ 38°C; AISI 316L: 239,2 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

Standard: see below table for minimum distance (Fixed distance, not adjustable)
Option: On request intermediate distances and over 2.000 mm

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Gauge body:	ASTM A105 / A105 LF2	AISI 316L	AISI 316L
Valves body:	A105 LF2	AISI 316L	AISI 316L
Stem, disc / seat valves:	AISI 410 / AISI 316	AISI 316	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets

Standard: graphite/AISI 316

Option: PTFE/AISI316

Shut-off valves

Type DS SHV: globe type

Handling: by handwheel

Process connections:

Standard flanges: UNI PN250 DN On request ANSI#1500 DN On request
Options: further connections types or direct connections to the process without shut-off valves (see page 1.53)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.54

Drain: Standard: valve type DHV threaded 3/4"

Option: see page 1.54

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081
Standard: fitted with type B, thickness 21 mm (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS REF: see below table

Valves type DS SHV: Kg. 16,5 approx. (with flanges 1" ANSI 1500#RF)

Tightening torque of housing screws

Standard: 90 Nm

Spare parts

Housing type DS REF: see from page 1.69 (drawing with components and parts list see page 1.63)

Valves type DS SHV: see from page 1.74 (drawing with components and parts list see page 1.68)

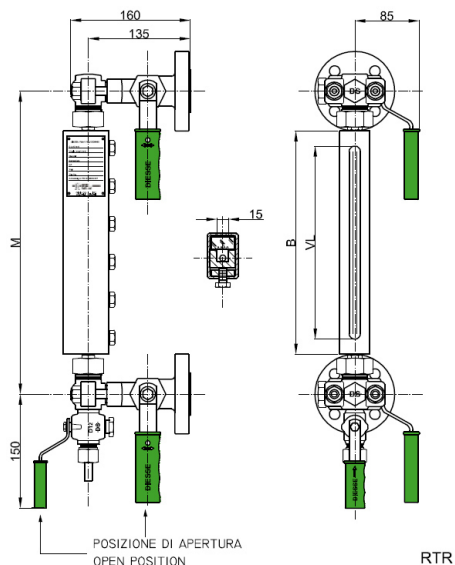
CODE	TYPE	BODY Length [mm]	DISTANCE SL MINIMUM [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+80	VL	x No. elements	
11	1x1	130	210	95	115x1	13,4
12	2x1	155	235	120	140x1	15,2
13	3x1	180	260	145	165x1	17,3
14	4x1	205	285	170	190x1	18,8
15	5x1	235	315	200	220x1	21,5
16	6x1	265	345	230	250x1	23,3
17	7x1	295	375	260	280x1	26,0
18	8x1	335	415	300	320x1	28,5
19	9x1	360	440	320	340x1	31,0
24	4x2	410	490	375	190x2	34,6
25	5x2	470	550	435	220x2	40,0
26	6x2	530	610	495	250x2	43,5
27	7x2	590	670	555	280x2	49,1
28	8x2	670	750	635	320x2	53,9
29	9x2	720	800	680	340x2	59,0
36	6x3	795	875	760	250x3	63,7
37	7x3	885	965	850	280x3	72,1
38	8x3	1005	1085	970	320x3	79,4
39	9x3	1080	1160	1040	340x3	86,9
47	7x4	1180	1260	1145	280x4	95,1
48	8x4	1340	1420	1305	320x4	104,9
49	9x4	1440	1520	1400	340x4	114,9
57	7x5	1475	1555	1440	280x5	118,1
58	8x5	1675	1755	1640	320x5	130,3
59	9x5	1800	1880	1760	340x5	142,8

Tab. REF

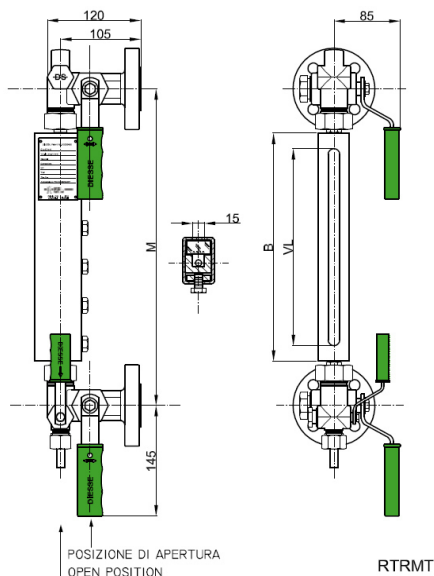
GLASS LEVEL GAUGE REFLEX TYPE PN16

DS LG - RTR GR18 / MT18

Code: DS LG-RTR...-... /16/RF-GR18/...-...-M...-CS/CS



Code: DS LG-RTR...-... /16/RF-MT18/...-...-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN16

Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

View

Standard: adjustable on 360° in the installation phase

Distance (Centre-to-centre)

Standard: see below table (Distance adjustable - 0 mm / + 10 mm)

Materials (Standard)

Execution:

CS/CS

Gauge body & cocks body:

ASTM A105

Cocks trim:

AISI 303

Non-wetted parts:

Carbon steel galvanized

Gaskets

Standard: graphite/copper

Option: graphite/AISI 316 or PTFE/AISI316

Shut-off cocks

Type DS GR18: cylindrical plug type - Straight type - Quick 90° closing

Type DS MT18: cylindrical plug type with monolithic body - Straight type - Quick 90° closing

(see page 1.47)

Centre-to-centre distance $M = B + 115 \text{ mm or } 140 \text{ mm}$

Handling: lever operated with PP handle (Standard: right; Option: left)

Process connections:

Standard flanges: UNI PN16/40 DN15-20-25

ANSI#150/RF DN ½" - ¾" - 1"

Standard threaded unions: BSP-M ½" - ¾"

NPT-M ½" - ¾"

Options: further connections types or direct connections to the process without shut-off cocks

(see page 1.49)

Vent: Standard: blind

Option: see page 1.50

Drain: Standard: cock type D12 threaded ½"

Option: see page 1.50

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RTR: see below table

Cocks type DS GR18: Kg. 7,4 approx. (with flanges UNI DN20 PN40)

Cocks type DS MT18: Kg. 6,1 approx. (with flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 25 Nm

Spare parts

Housing type DS RTR: see from page 1.69 (drawing with components and parts list see page 1.61)

Cocks type DS GR18: see from page 1.72 (drawing with components and parts list see page 1.66)

Cocks type DS MT18: see from page 1.64 (drawing with components and parts list see page 1.67)

With cocks type DS GR18:

CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 -0/+10 mm	DISTANCE HL Pipes L = 70 -0/+10 mm	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+105	M = B+130	VL	x No. elements	
11	1x1	130	235	260	95	115x1	1,8
12	2x1	155	260	285	120	140x1	2,0
13	3x1	180	285	310	145	165x1	2,2
14	4x1	205	310	335	170	190x1	2,5
15	5x1	235	340	365	200	220x1	2,9
16	6x1	265	370	395	230	250x1	3,2
17	7x1	295	400	425	260	280x1	3,6
18	8x1	335	440	465	300	320x1	4,0
19	9x1	360	465	490	320	340x1	4,3

Tab. RTR

With cocks type DS MT18 (Monolithic body):

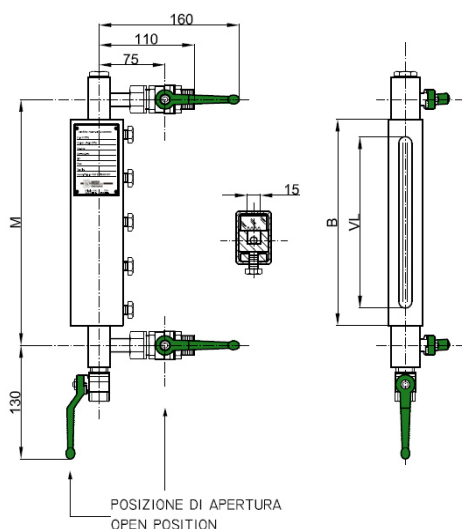
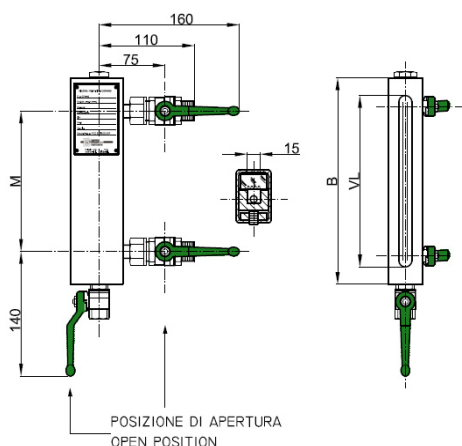
CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 -0/+10 mm	DISTANCE HL Pipes L = 70 -0/+10 mm	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+115	M = B+140	VL	x No. elements	
11	1x1	130	245	270	95	115x1	1,8
12	2x1	155	270	295	120	140x1	2,0
13	3x1	180	295	320	145	165x1	2,2
14	4x1	205	320	345	170	190x1	2,5
15	5x1	235	350	375	200	220x1	2,9
16	6x1	265	380	405	230	250x1	3,2
17	7x1	295	410	435	260	280x1	3,6
18	8x1	335	450	475	300	320x1	4,0
19	9x1	360	475	500	320	340x1	4,3

Tab. RTRMT

GLASS LEVEL GAUGE REFLEX TYPE PN16

DS LG - RTF SBB / D12

Code: DS LG-RTF...-1/2"GASM-SBB/DBB/PB-M...-CS/CS



Technical data

Service conditions

Max Pressure: PN16

Max Temperature:

- With PTFE gaskets and ball valves type DS SBB: 120°C

- With graphite gaskets and cylindrical plug cocks type DS D12: 170°C

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

On request, Fixed distance, not adjustable

Materials (Standard)

Execution:

Gauge body:

Body, ball and sealing of ball valves type DS SBB:

Body, trim and sealing of cocks type DS D12:

Non-wetted parts:

CS/CS

ASTM A105

Brass (CW617N) / Brass (CW617N) / PTFE

ASTM A105 / AISI 303 / Graphite

Carbon steel galvanized

Gaskets

Standard: PTFE/copper

Option: graphite/copper

Valves

Standard: ball valves type SBB threaded 1/2" BSP-F - Quick 90° closing

Handling: lever operated

Option: on request cylindrical plug cocks type DS D12 threaded 1/2" BSP-F - Quick 90° closing (see page 3.3)

Handling: lever operated with PP handle

Process connections:

Standard: threaded 1/2" BSP-M (with ball valves type DS SBB)

threaded 1/2" BSP-F (with revolving female connections - without valves)

Vent:

Standard: threaded 3/8" BSP-F with plug

Drain:

Standard: ball valve type DS DBB threaded 3/8" BSP-F - Quick 90° closing

Handling: lever operated

Option:

on request with cylindrical plug cocks type DS D12 threaded 3/8" BSP-F or BSP-M with drain tube

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RTF: see below table

Ball valve type DS SBB: Kg. 0,2 unit approx.

Cock type DS D12: Kg. 0,5 unit approx.

Tightening torque of housing screws

Standard: 20 Nm

Spare parts

Housing type DS RTF: see from page 1.69 (drawing with components and parts list see page 1.61)

Cocks type DS D12: see from page 1.72

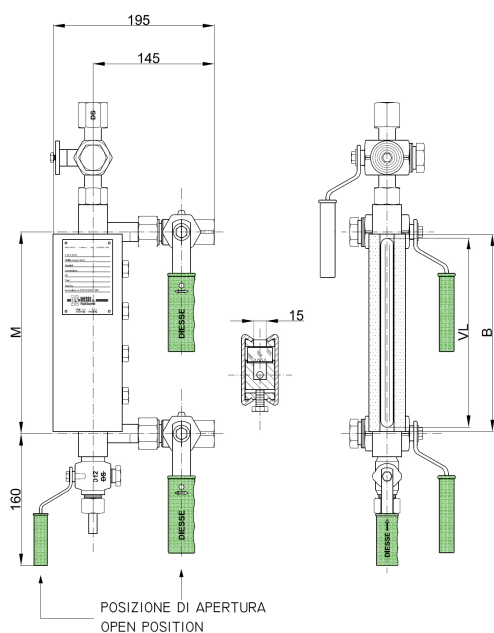
CODE	TYPE	BODY Length [mm]	DISTANCE [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
		B	M	VL		
11	1	130	On request	95	115	1,8
12	2	155	On request	120	140	2,0
13	3	180	On request	145	165	2,2
14	4	205	On request	170	190	2,5
15	5	235	On request	200	220	2,9
16	6	265	On request	230	250	3,2
17	7	295	On request	260	280	3,6
18	8	335	On request	300	320	4,0
19	9	360	On request	320	340	4,3

Tab. RTF

GLASS LEVEL GAUGE REFLEX TYPE PN25

DS LG - RBFPM D18

Code: DS LG-RBFPM...-1/2"GASF-D18/D12/PM18-M....-CS/CS



RBFP

Technical data

Service conditions

Max Pressure: PN25
Max Temperature: 170°C

View

Standard: front, on request lateral (right or left) adjustable in the production phase

Distance (Centre-to-centre)

On request, Fixed distance, not adjustable

Materials (Standard)

Execution: CS/CS
Gauge body & cocks body: ASTM A105
Cocks trim: AISI 303
Non-wetted parts: Carbon steel galvanized

Gaskets

Standard: graphite/copper

Shut-off cocks

Standard: cylindrical plug cocks type DS D18 threaded 1/2" BSP-F - Quick 90° closing (see page 3.4)

Handling: lever operated with PP handle

Process connections:

Standard: threaded 1/2" BSP-F (with cylindrical plug cocks type DS D18)
threaded M28x2-F (with revolving female connections - without valves)

Vent:

Standard: three way cylindrical plug manometer setting valve with control flange type DS PM18 threaded 1/2" BSP-F (see page 3.5)

Handling: lever operated with PP handle

Option: on request threaded 1/2" BSP-F with plug (without cock)

Drain:

Standard: with cylindrical plug cock type DS D12 threaded 1/2" BSP-M with drain tube - Quick 90° closing (see page 3.3)

Handling: lever operated with PP handle

Glasses

Reflex - Borosilicate glass, "extra hard" and thermally pre-stressed - According to DIN 7081

Standard: fitted with type A (see page 1.69)

Option: type B (see page 1.69)

Accessories

See from page 1.55

Weights

Housing type DS RBFPM: see below table

Cocks type DS D18: Kg. 0,9 unit approx.

Cock type DS PM18: Kg. 1,2 unit approx.

Cock type DS D12: Kg. 0,5 unit approx.

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

Housing type DS RBFPM: see from page 1.69 (drawing with components and parts list see page 1.61)

Cocks type DS D18: see from page 1.72

Cock type DS PM18: see from page 1.72

Cock type DS D12: see from page 1.72

CODE	TYPE	BODY Length [mm]	DISTANCE [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
		B	M	VL		
11	1	130	On request	95	115	2,4
12	2	155	On request	120	140	2,8
13	3	180	On request	145	165	3,3
14	4	205	On request	170	190	3,8
15	5	235	On request	200	220	4,3
16	6	265	On request	230	250	4,9
17	7	295	On request	260	280	5,4
18	8	335	On request	300	320	6,1
19	9	360	On request	320	340	6,6

Tab. RBFP