



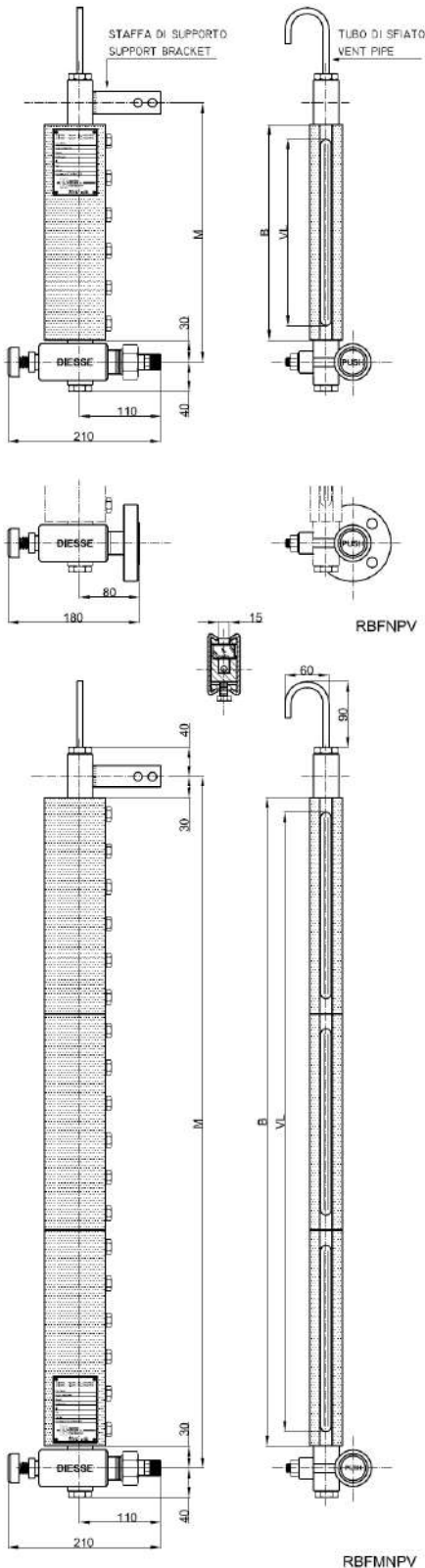
MARINE LEVEL GAUGES

On request the product is available also with
the approval certificate of Lloyd's Register



GLASS LEVEL GAUGE REFLEX TYPE PN16 DS LG - RBF NPV

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



Technical data

Service conditions

Pressione max: PN16
Temperatura max: 150°C

Application

Fluid storage tanks also aboard of ships

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 & valve body:	ASTM A105	AISI 316L
Stem and disc:	AISI 410	AISI 316
Non-wetted parts:	Carbon steel galvanized	Carbon steel galvanized

Gaskets

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

Self-closing Valve

DS NPV: self-closing, push button type

Handling: opening by push button (Standard: valve on the right side; On request on the left side)

Process connections:

Standard flange:	UNI PN16 DN15-20-25	ANSI #150/RF DN ½" - ¾" - 1"
Standard threaded unions:	BSP-M ½" - ¾"	NPT-M ½" - ¾"

Option: further connections types

Vent: Standard: threaded ½" with vent pipe

Option: on request (See details at page 1.52)

Drain: Standard: threaded ½" with plug

Option: on request (See details at 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 DS RBF: see below table

Valve DS NPV: Kg. 2,6 approx. (With flanges UNI DN20 PN16)

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

Housing DS RBF: see from page 1.69 (Drawing with components and parts list see page 1.61)

Valve DS NPV: see from page 1.74 (Drawing with components and parts list see page 1.67)

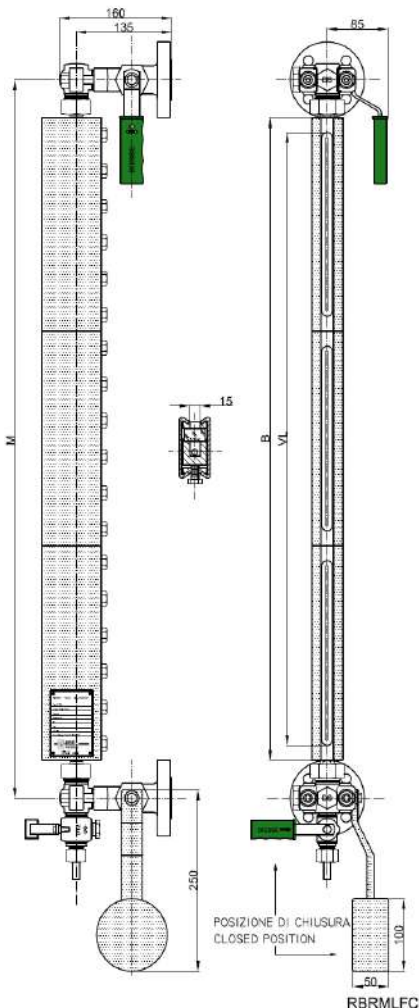
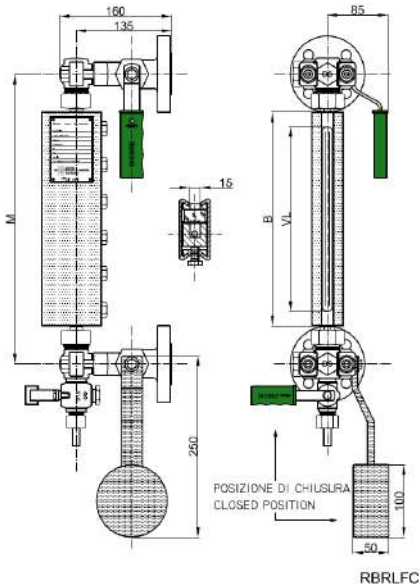
CODE	TYPE	BODY Length [mm]	DISTANCE MINIMUM SL [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+60	VL	x No. elements	
11	1x1	130	190	95	115x1	3,7
12	2x1	155	215	120	140x1	4,1
13	3x1	180	240	145	165x1	4,6
14	4x1	205	265	170	190x1	5,1
15	5x1	235	295	200	220x1	5,6
16	6x1	265	325	230	250x1	6,2
17	7x1	295	355	260	280x1	6,7
18	8x1	335	395	300	320x1	7,4
19	9x1	360	420	320	340x1	7,9
24	4x2	410	470	375	190x2	8,8
25	5x2	470	530	435	220x2	9,8
26	6x2	530	590	495	250x2	11,0
27	7x2	590	650	555	280x2	12,0
28	8x2	670	730	635	320x2	13,4
29	9x2	720	780	680	340x2	14,4
36	6x3	795	855	760	250x3	15,7
37	7x3	885	945	850	280x3	17,2
38	8x3	1005	1065	970	320x3	19,3
39	9x3	1080	1140	1040	340x3	20,8
47	7x4	1180	1240	1145	280x4	22,5
48	8x4	1340	1400	1305	320x4	25,3
49	9x4	1440	1500	1400	340x4	27,3
57	7x5	1475	1535	1440	280x5	27,8
58	8x5	1675	1735	1640	320x5	31,3
59	9x5	1800	1860	1760	340x5	33,8
68	8x6	2010	2070	1975	320x6	37,2
69	9x6	2160	2220	2120	340x6	40,2
78	8x7	2345	2405	2310	320x7	43,2
79	9x7	2520	2580	2480	340x7	46,7
88	8x8	2680	2740	2645	320x8	49,3
89	9x8	2880	2940	2840	340x8	53,2

Tab. RBF

GLASS LEVEL GAUGE REFLEX TYPE PN25 and PN40 / Class 150

DS LG - RBR GR18 - LFC

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



Technical data

Service conditions

Max Pressure: PN25 and PN40

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

Application

Fluid storage tanks also aboard of ships

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
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

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

Lower cock with weight closing accessory for self closing

Process connections:

Standard flanges: UNI PN40 DN15-20-25

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

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

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

Options: further connections types to the process (See page 1.49)

Vent: Standard: blind

Option: see page 1.50

Drain: Standard: cock DS 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 DS RBR: see below table

Cocks DS GR18 with weight closing for lower handle: Kg. 10,8 approx. (With flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

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

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

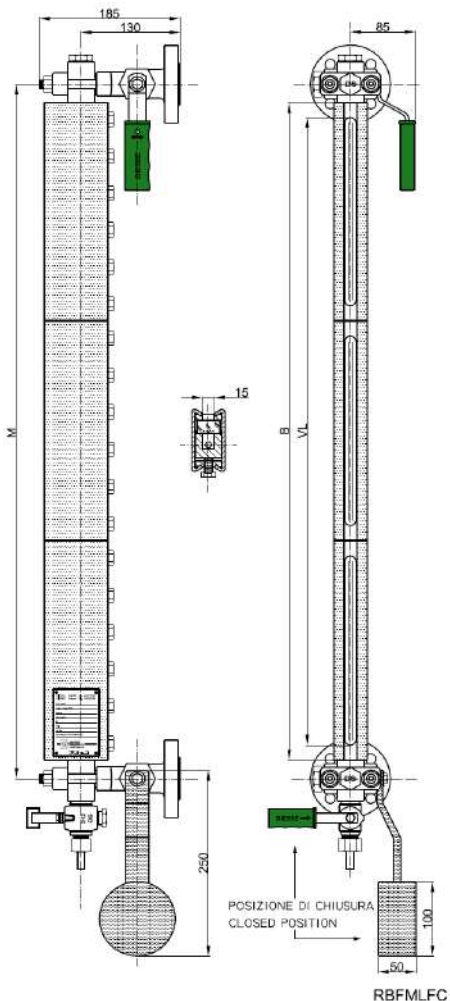
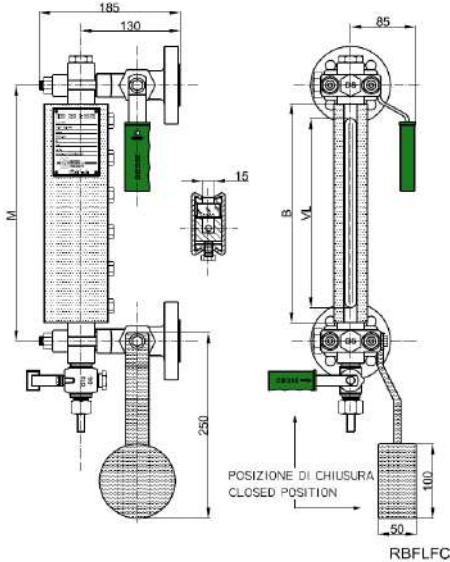
CODE	TYPE	BODY Length [mm]	DISTANCE SL Pipes L = 57 M [-0/+10 mm]	DISTANCE HL Pipes L = 70 M [-0/+10 mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	M = B+105	M = B+130	VL	x No. elements	
11	1x1	130	235	260	95	115x1	2,4
12	2x1	155	260	285	120	140x1	2,8
13	3x1	180	285	310	145	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 PN25 and PN40 / Class 150

DS LG - RBF GR18 - LFC

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



Technical data

Service conditions

Max Pressure: PN25 and PN40

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

Application

Fluid storage tanks also aboard of ships

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:

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

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

Lower cock with weight closing accessory for self closing

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 to the process (see page 1.51)

Vent: Standard: threaded 1/2" with plug

Option: see page 1.52

Drain: Standard: cock DS 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 DS RBF: see below table

Cocks DS GR18 with weight closing for lower handle: Kg. 10,8 approx. (With flanges UNI DN20 PN40)

Tightening torque of housing screws

Standard: 40 Nm

Spare parts

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

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

CODE	TYPE	BODY Length [mm]	DISTANCE MINIMUM SL [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