DS DIESSE FLUID CONTROL

Product origin
Design & Manufacturing
ITALY

weld-on level gauges

This type of level gauge is designed to be welded on to the tank and withstand the pressure inside it.

It is made from both carbon steel and stainless steel and can take reflex and transparent glasses.
Reflex glasses are recommended as they improve visibility.

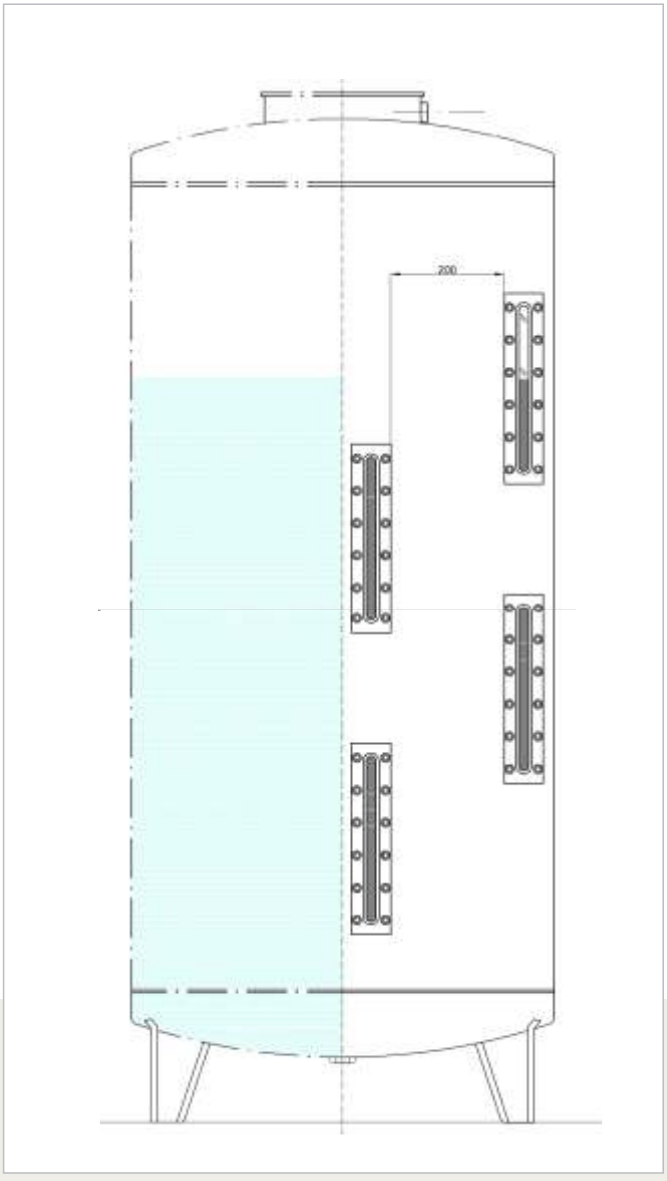
In order to prevent warping or distortions while the level gauge is in service, the technician tasked with installing the product must reinforce the wall of the tank where the gauge is to be welded on.

For visible lengths exceeding 320 mm, we recommend welding additional gauges on different axes to avoid weakening the tank structure.

During welding operations (which must only be carried out prior to gauge assembly), special care must be taken to avoid exposing the weld-on base to high temperatures for long periods of time as this may comprise the resistance of the gauge when in operation.

Operating limits / Conditions:

Process:	
Max. pressure:	rating class 300 (A105: 51 bar; AISI 316L : 49,6 bar) @ 38°C
Max. temperature:	300°C (max. temperature allowed by borosilicate glasses as per the DIN 7081 standard - see page 1.69)
On request:	rating class 600 (A105: 102 bar; AISI 316L : 99,3 bar) @ 38°C



Materials / Specifications

Weld-on base:
- standard: flat with a hole running along the whole visible length
- additional options: with radius (state the tank radius); with 2 holes (Ø: 15 mm) at the far ends of the visible length

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 316L stainless steel
- additional options: on request

Gaskets: (see page 1.71)
- standard: graphite
- additional options: PTFE; other extras on request

Glasses: (see page 1.69)
- reflex or transparent borosilicate glasses, thermally pre-stressed and extra hard as per the DIN 7081 standard

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:
Mica or PCTFE protective shield (for transparent glass only), calibrated scale, non-frosting extension, minimum level arrow (see page 1.55 for details)

Certifications (on request):
- NACE MR0175
- Others on request

This kind of level gauge can only be tested once it has been welded on to the tank in question.
All DIESSE components are individually checked and tested in accordance with company quality procedures and the industry regulations currently in effect.
Certificates can be issued on request.

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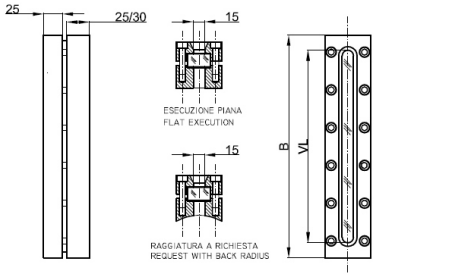
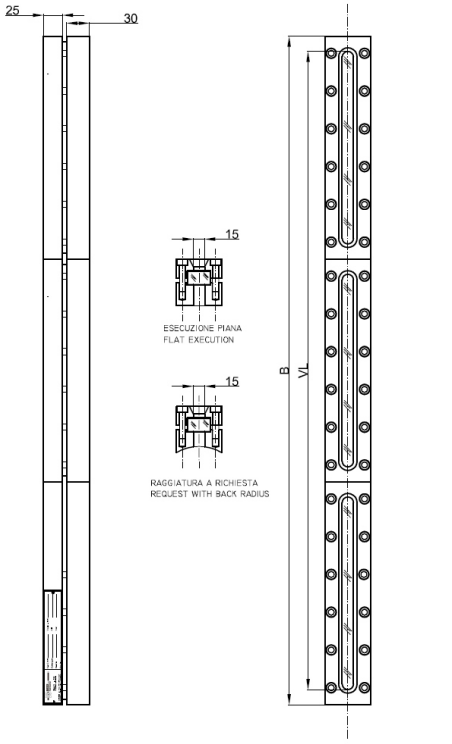
WELD-ON GLASS LEVEL GAUGE REFLEX and TRANSPARENT PN40 / Class 300

DS LG - RCW / TCW

Code: DS LG-RCW…-CS/CS **REFLEX**
Code: DS LG-TCW…-CS/CS **TRANSPARENT**

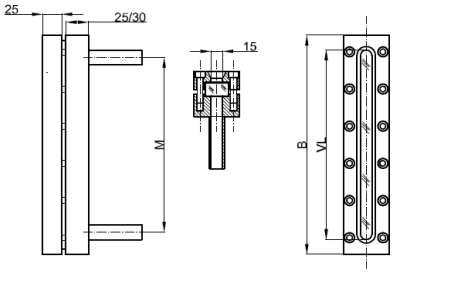


RCW/TCW



RCWM/TCWM

Code: DS LG-RCWSP…-CS/CS **REFLEX**
Code: DS LG-TCWSP…-CS/CS **TRANSPARENT**



RCWSP/TCWSP

Technical data

Service conditions
Max Pressure: PN40; Class 300 (A105: 51 bar @ 38°C; AISI 316L: 49,6 bar @ 38°C)
Option: PN100; Class 600 (A105: 102 bar @ 38°C; AISI 316L: 99,3 bar @ 38°C)
Max Temperature: 300°C (According to DIN 7081 for glasses, see page 1.69)

Total length
Standard: see below table
Option: On request intermediate lengths and over 1.080 mm

Process connections
Standard: Drilling on the whole visible length
Option: Two holes Ø 15 mm at the opposite ends of the visible length or two pipes welded at the centre-to-centre distance requested (See below drawing)

Execution of housing to be weld
Standard: flat
Option: On request with back radius

Materials (Standard)

Execution:	CS/CS	SS/CS	SS/SS
Housing body:	ASTM A105	AISI 316L	AISI 316L
Cover:	ASTM A105	ASTM A105	AISI 316L
Bolts and nuts:	Carbon steel galvanized	Carbon steel galvanized	AISI 316

Gaskets
Standard: graphite Option: PTFE

Glasses
Reflex and Transparent - 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
See below table

Tightening torque of screws
Standard: 25-30 Nm

Spare parts
See from page 1.69

Recommendation
For requested visible lengths over 320 mm, to avoid the tank structure weakness, it is recommended to weld on the tank more level gauges positioned on different axes

CODE	TYPE	BODY Length [mm]	VISIBLE Length [mm]	GLASS Length [mm]	WEIGHT Housing [Kg]
	x No. el.	B	VL	x No. elements	
11	1x1	130	**95**	115	2,5
12	2x1	155	**120**	140	3,0
13	3x1	180	**145**	165	3,4
14	4x1	205	**170**	190	3,9
15	5x1	235	**200**	220	4,7
16	6x1	265	**230**	250	5,1
17	7x1	295	**260**	280	5,6
18	8x1	335	**300**	320	6,0
19	9x1	360	**320**	340	6,9
24	4x2	410	**375**	190x2	7,8
25	5x2	470	**435**	220x2	9,4
26	6x2	530	**495**	250x2	10,2
27	7x2	590	**555**	280x2	11,2
28	8x2	670	**635**	320x2	12,0
29	9x2	720	**680**	340x2	13,8
36	6x3	795	**760**	250x3	15,3
37	7x3	885	**850**	280x3	16,8
38	8x3	1005	**970**	320x3	18,0
39	9x3	1080	**1040**	340x3	20,7

Tab. RCW/TCW