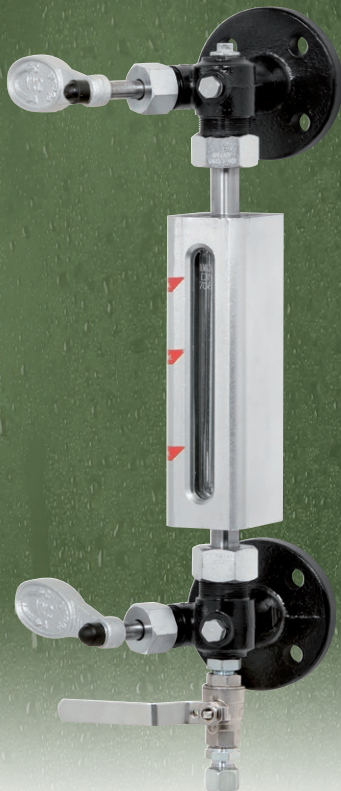


# Round-dowel level indicator



EN ASME/ANSI

Level gauges Model 666  
Level indicator box Model 166-ER



For use in boilers, receivers, cisterns, reservoirs, ...etc., to control the level of liquids, gases and steam. A multiple-slot polyprismatic viewer allows the level to be optically read, clearly differentiating liquid and gas phases from liquid ones.

## Specifications

- Level gauges with replaceable floating or mobile needle seal and safety ball. Should the viewer break a pressure imbalance is caused which moves the ball onto the seating preventing the fluid from flowing out.
- Gauge activation by means of a fast control lever.
- Indiscriminate gauge assembly with lever on the right or on the left.
- Seals are highly tightness, exceeding the requirements of the EN 12266-1.
- Gauges with draining plugs allowing crystals and sediments to be thoroughly cleaned out by inserting a  $\varnothing$  7 mm.rod.
- The round-dowel system, in certain applications, allows the level indicator box to be replaced with a  $\varnothing$  20 mm. glass tube
- Level box which can be positioned at any angle in the  $360^\circ$ .
- Maximum, medium and minimum level optical mobile indicators.
- Boron silicate viewer with the special feature that if accidentally broken it is not shed out in pieces.

## IMPORTANT

When assembling remove the washer (19) of the gauge operating as the upper one. We advise you to perfect the system with a cleaning valve, 3/8" Mod. 999 connected to the draining tube, in order to check the level indicator and its state of cleanliness periodically.

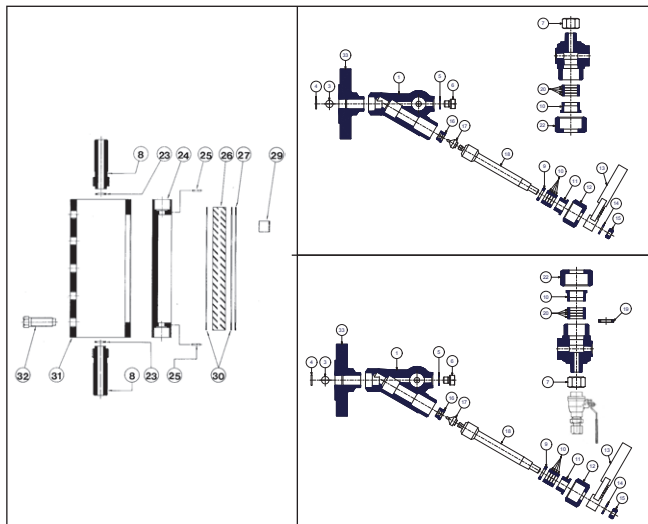
In steam boilers and other receivers with fluids that precipitate carry out at least one 2 ÷ 3 second cleaning session at 8 hour intervals.

Depending on demand:

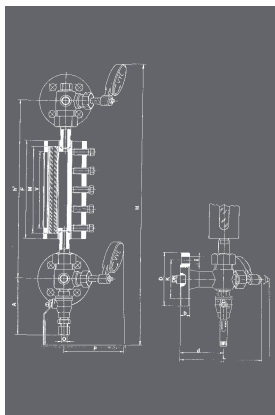
- Possibility of manufacture in other types of material, for use in special working conditions (high temperatures, fluids, etc.).
- Special gaskets.
- Transparent viewers with mica plates, recommendable for temperatures exceeding  $250^\circ$  C.
- Possibility to replace the level indicator box for  $\varnothing$  20 mm. glass tube and to fit it out with a protective pipe in case that it should be necessary.
- Boxes with special dowels for other distances between flange centres.
- Link boxes for viewing long levels.

N° PIECE	PIECE	MATERIAL																	
		CAST STEEL						CAST STEEL						STAINLESS STEEL					
1,2	Body	Cast steel (EN-1.0619)						Cast steel (EN-1.0619)						Stainless steel (EN-1.4408)					
3	Safety ball	Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)					
4	Safety ring	Stainless steel (EN-1.4310)						Stainless steel (EN-1.4310)						Stainless steel (EN-1.4310)					
5,23	Coupling	Aluminium/Copper						Aluminium/Copper						PTFE (Teflón)					
6	Screw	Carbon steel (EN-1.1151)						Carbon steel (EN-1.1151)						Stainless steel (EN-1.4401)					
7	Cover/Cap*	Carbon steel (EN-1.1191)*						Carbon steel (EN-1.1191)*						Stainless steel (EN-1.4401)*					
8	Dowel	Stainless steel (EN-1.4305)						Stainless steel (EN-1.4305)						Stainless steel (EN-1.4401)					
9	Ring	Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)					
10,20	Seal	Graphite						Graphite						PTFE (Teflón)					
11,21	Gland	Carbon steel (EN-1.1191)						Carbon steel (EN-1.1191)						Stainless steel (EN-1.4401)					
12,22	Gland nut	Carbon steel (EN-1.1191)						Carbon steel (EN-1.1191)						Stainless steel (EN-1.4401)					
13	Lever	Carbon steel (EN-1.0037)						Carbon steel (EN-1.0037)						Carbon steel (EN-1.0037)					
14	Washer	Carbon steel (EN-1.1141)						Carbon steel (EN-1.1141)						Carbon steel (EN-1.4401)					
15	Nut	Carbon steel (EN-1.1141)						Carbon steel (EN-1.1141)						Stainless steel (EN-1.4401)					
16	Seating	Stainless steel (EN-1.4028)						Stainless steel (EN-1.4028)						Stainless steel (EN-1.4401)					
17	Seal	Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)					
18	Shaft	Stainless steel (EN-1.4028)						Stainless steel (EN-1.4028)						Stainless steel (EN-1.4401)					
19	Washer	Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)					
24	Box	Carbon steel (EN-1.1191)						Carbon steel (EN-1.1191)						Stainless steel (EN-1.4401)					
25	Gudgeon	Carbon steel (EN-1.1231)						Carbon steel (EN-1.1231)						Stainless steel (EN-1.4310)					
26	Viewer	Boron-Silicate						Boron-Silicate						Boron-Silicate					
27	Reglet	Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)						Stainless steel (EN-1.4401)					
29	Indicator arrow	Aluminium						Aluminium						Aluminium					
30	Coupling	Klingerit cardboard / Graphite						Klingerit cardboard / Graphite						Klingerit cardboard / Graphite					
31	Body	Carbon steel (EN-1.0570)						Carbon steel (EN-1.0570)						Stainless steel (EN-1.4408)					
32	Screw	Carbon steel (EN-1.1191)						Carbon steel (EN-1.1191)						Stainless steel (EN-1.4401)					
33	Flange	Carbon steel (EN-1.0460)						Carbon steel (EN-1.0460)						Stainless steel (EN-1.4401)					
DN		20 and 25																	
PN		16						40						40					
OPERATING CONDITIONS	MAX. PRESSURE IN bar	16	14,8	13,3	12,1	10,2	9,5	40	37,1	33,3	30,4	25,7	23,8	40	40	33,7	31,8	28,5	27,4
	MAX. TEMP. IN °C	*RT	100	200	250	350	400	*RT	100	200	250	350	400	*RT	100	200	250	350	400

\*Room Temperature (-10 °C a 50 °C)



LEVEL GAUGE	UPPER								LOWER									
	DN	20				25				DN	20				25			
NPS	3/4"									3/4"								
A	-									110								
L	183									183								
L1	198									198								
P	155									155								
d	105									105								
O	-									12								
CONNECTION	EN 1092-1 PN-16/40	105	75	14	18	115	85	14	18	105	75	14	18	115	85	14	18	
	ASME B16.5 150 lbs	100	69,90	15,90	13,20	110	79,40	15,90	14,70	100	69,90	15,90	13,20	110	79,40	15,90	14,70	
	ASME B16.5 300 lbs	115	82,60	19,10	16,30	125	88,90	19,10	17,90	115	82,60	19,10	16,30	125	88,90	19,10	17,90	
REDUCED PITCH Ø	15				15				15				15					
DRILLS N°	4				4				4				4					
WEIGHT	CAST. STEEL	2,55				2,80				2,50				2,75				
	IN kgs. STAINL. STEEL	2,55				2,80				2,50				2,75				
CODE 2101-666	CAST STEEL PN-16	53441				51041				53442				51042				
	CAST STEEL PN-40	83441				81041				83442				81042				
	ST STEEL PN-40	83421				81021				83422				81022				
	CAST STEEL 150#	534411				510411				534421				510421				
	CAST STEEL 300#	834412				810412				834422				810422				
	ST STEEL 150#	834211				810211				834221				810221				
ST STEEL 300	834212				810212				834222				810222					



N°. LEVEL INDICATOR BOX	0	I	II	III	IV	V	VI	VII	VIII	IX	X	
h1	285	305	330	355	380	410	445	470	510	530	560	
V	75	95	120	145	170	200	230	260	300	320	350	
M	95	115	140	165	190	220	250	280	320	340	370	
F	115	135	160	185	210	240	275	300	340	360	390	
H	518	538	563	588	613	643	678	703	743	763	793	
WEIGHT IN kgs.	CARBON STEEL. PN-16	2,84	3,30	3,89	4,40	4,97	5,59	6,20	6,79	7,40	7,80	8,40
	CARBON STEEL. PN-40	2,84	3,30	3,89	4,40	4,97	5,59	6,20	6,79	7,40	7,80	8,40
	STAINLESS STEEL. PN-40	2,98	3,39	4,05	4,46	5,11	5,80	6,60	7,00	7,80	8,40	9,00
CODE 2101-166.	CARBON STEEL. PN-16	53440	53441	53442	53443	53444	53445	53446	53447	53448	53449	5344
	CARBON STEEL. PN-40	83440	83441	83442	83443	83444	83445	83446	83447	83448	83449	8344
	STAINLESS STEEL. PN-40	83420	83421	83422	83423	83424	83425	83426	83427	83428	83429	8342