



# LEVEL GAUGE 541 542

## GENERAL DESCRIPTION

### REFLEX TYPE (541)

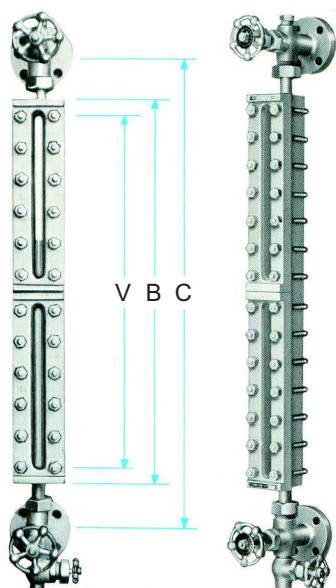
The reflex liquid level gauges work base on the light reflection. This kind of level gauge use several glasses which face fitted to the chamber to bring prismatic grooves when operating. The light rays are reflected into the chamber when the liquid in the chamber existed. This result causes the gauge glass to appear black. And when the air-glass interface exists causes gases to appear white. For part in contact with the liquid can be applied with carbon steel, stainless steel or other materials to protect glass surface from corrosive action.

### TRANSPARENT TYPE (542)

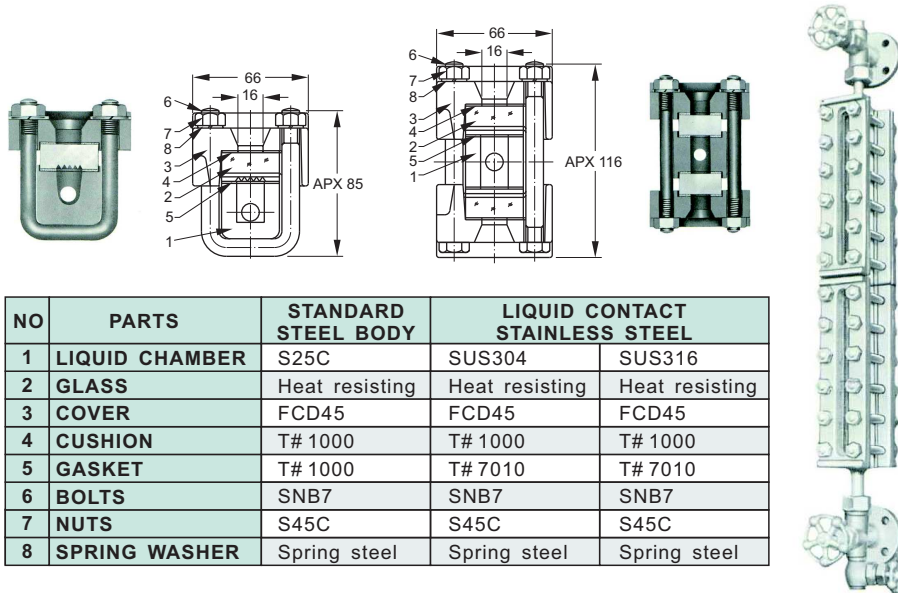
The transparent liquid level gauges are suitable for almost every type of installations. The transparency of surface glass, with surface of light, located on the back of the gauge, the ray of which are totally reflected, allows the level of liquid and liquid color can be clearly observed. The glass sheet and cover plate are held tightly by stud bolts and nuts. In order to protect glass surface from corrosive of the fluid process, high-pressure, high-temperature and alkaline surfaces, high grade mica shield can be applied to the inner surface of glass sheet.

## DIMENSIONS

### 541



### 542



NO	PARTS	LIQUID CONTACT	
		STANDARD STEEL BODY	STAINLESS STEEL
1	LIQUID CHAMBER	S25C	SUS304 SUS316
2	GLASS	Heat resisting	Heat resisting Heat resisting
3	COVER	FCD45	FCD45 FCD45
4	CUSHION	T# 1000	T# 1000 T# 1000
5	GASKET	T# 1000	T# 7010 T# 7010
6	BOLTS	SNB7	SNB7 SNB7
7	NUTS	S45C	S45C S45C
8	SPRING WASHER	Spring steel	Spring steel Spring steel

## ASSEMBLY UNIT AND DIMENSIONS (mm)

TABLE 1

UNIT & CODE DIMENSIONS GLASS CODE	1			2			3			4			5			6			7			8			
	V	B	C	V	B	C	V	B	C	V	B	C	V	B	C	V	B	C	V	B	C	V	B	C	
0	90	130	310																						
1	115	155	335																						
2	140	180	360																						
3	165	205	385	370	410	590	575	615	795	780	820	1000													
4	195	235	415	430	470	650	665	705	885	900	920	1120													
5	225	265	445	490	530	710	755	795	975	1020	1060	1240	1285	1325	1505	1550	1590	1770	1815	1855	2035				
6	255	295	475	550	590	770	845	885	1065	1140	1180	1360	1435	1475	1655	1730	1770	1950	2025	2065	2245	2320	2360	2540	
7	295	335	515	630	670	850	965	1005	1185	1300	1340	1520	1635	1675	1855	1970	2010	2190	2305	2345	2525	2640	2680	2860	
8	315	355	535	670	710	890	1025	1065	1245	1380	1420	1600	1735	1775	1955	2090	2130	2310	2445	2485	2665	2800	2840	3020	
9	375	415	595	790	830	1010	1205	1245	1425	1620	1660	1840	2035	2075	2255	2450	2490	2670	2865	2905	3085				

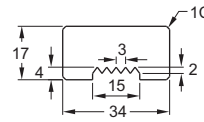
C=Center-to-center of mountings / B= Body length ( 180 mm less than C )  
V= Visible length of liquid ( 40mm less than B ; 220mm less than C )

## MODEL SELECTIONS FOR LEVEL GAUGE

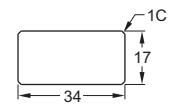
ITEMS	CODE	SPECIFICATIONS
① MODEL	541	REFLEX TYPE LEVEL GAUGE
	542	TRANSPARENT TYPE LEVEL GAUGE
② GAUGE TYPE	A	Standard version
	B	With mica sheet (Only for 542 model)
	C	Bi-color windows (Only for 541 model)
	D	Tracing jacket structure
	E	To be special specified
③ ASSEMBLY UNIT	- 1	Code 1 of unit ( see table 1 )
	}	}
	- 8	Code 8 of units
	- X	To be specified
④ GLASS SELECTION	0	Code 0 of glass ( see table 2 )
	}	}
	9	Code 9 of glass
	X	To be specified
⑤ PRESSURE RATING ( Design pressure )	1	≤ 1 MPa ( Standard )
	2	≤ 2 MPa
	3	≤ 3 Mpa
	4	≤ 4 MPa
	5	To be specified
⑥ CHAMBER MATERIAL	- A	S25C
	- B	304SS
	- C	316SS
	- D	To be specified
⑦ COVER MATERIAL	A	S25C
	B	304SS
	C	316SS
	D	To be specified
⑧ BOLT / NUT MATERIAL	A	SNB7 / S45C
	B	304SS
	C	To be specified
⑨ GASKET	A	Non-asbeston
	B	PTFE
	C	To be specified
⑩ C-C LENGTH	- 310	310 mm ( see table 1 )
	}	}
	- 3085	3085 mm
	- XXXX	To be specified
⑪ VALVE ASSEMBLY	/ A	Not required
	/ B	Required , with gauge valves
	/ C	Required , with gauge valves & drain valve
	/ D	To be specified

## DIMENSIONS OF GAUGE GLASSES

### REFLEX TYPE



### TRANSPARENT TYPE



### BICOLOR TYPE

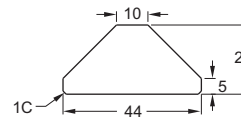


TABLE 2

CODE	LENGTH (mm)
0	115
1	140
2	165
3	190
4	220
5	250
6	280
7	320
8	340
9	400

Width is 34 mm  
Thickness is 17 mm

## MODEL SELECTIONS FOR GAUGE VALVE

ITEMS	CODE	SPECIFICATIONS
① MODEL	941A	CROSS BODY
	941B	OFFSET BODY
	941C	OEM VERSIONS
② BONNET STYLE	- 1	Female threaded
	- 2	Flange
	- 3	Gauge union provides
	- 4	To be specified
③ OPERATING TEMPERATURE	1	≤ 100°C
	2	≤ 200°C
	3	≤ 300°C
	4	To be specified
④ OPERATING PRESSURE	1	≥ 1 Mpa
	2	≥ 2 Mpa
	3	≥ 3 Mpa
	4	≥ 4 MPa
	5	To be specified
⑤ BALL CHECK	- A	Not required
	- B	Required
⑥ MATERIAL OF WETTED PARTS	A	S25C
	B	304SS
	C	316SS
	D	To be specified
⑦ PROCESS CONNECTION	A	NPT Thread
	B	ANSI Flange
	C	JIS Flange
	D	To be specified
⑧ CONNECTION SIZE	- 15	15A (1/2")
	- 20	20A (3/4")
	- 25	25A (1")
	- XX	To be specified

## DOERS TECHNOLOGY CORPORATION

4F, NO. 1, LANE 11, TZU-CHIANG STREET, TU-CHENG INDUSTRIAL PARK, TAIPEI COUNTY, TAIWAN 23678

website : [www.doers.com.tw](http://www.doers.com.tw)

E-mail : [doers.tech@msa.hinet.net](mailto:doers.tech@msa.hinet.net)

TEL : 886-2-22682689

FAX : 886-2-22681248

