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## UHC Magnetic Level Indicator

The magnetic level gauge consists of Red/white or Yellow/Black magnetic rollers equipped with small magnets which are rotated one after another at an angle of 180° by the magnetic field of the permanent magnet put inside the float. The rollers change from white to red on rising level and red to white on falling level.

This level gauge can be side mounted or top mounted. Also when assemble with level transmitter outside the chamber, it can output 4-20mA, RS485, Hart. can assembled with several reed tube switches on needs for control purposes. When match with our secondary indicator, can realize remote indicating.



### Model Selection Table

UHC-	C	Side mounted;		
	D	Top mounted		
	O	Other		
	Signal	Y	Standard transmitter 4~20mA current signal (Resolution: 20mm/10mm/5mm);	
		H	Hart;	
		A	Switch and number;	
		L	transmitter with LCD	
			No signal output	
	Indicator type	O	Aluminium indicator holder	
		S	Sealed bargraph with stainless steel holder	
		L	Red/Green flaps with LED lamp	
	Structure	S	Steam tracing	
		E	Electric heating	
		F	Defrost	
			Ordinary type	
	Valve	D	Drain valve or drain plug	
		DV	Drain valve and Vent valve or plug	
		N	No valve	
	Working temperature	A	Ambient temperature ( 0~60℃ )	
		B	-20~90 C	
		M	-20~230℃	
		H	High temperature (<450℃)	
		L	If easy frozen	
	Material		SS304	0Cr18Ni9
		SS316L	022Cr17Ni12Mo2	
		SS321	0Cr18Ni10Ti	
		PP	PP (Polypropylene) , PVC , PVDF	
		PTFE	stainless steel lined with PTFE	
		FRP	Anticorrosive, <80C	
Explosion-proof	S	Safety environment		
	E	Explosion-proof ExdII BT4		
	I	intrinsic safety ExibII CT4		
Measure range			Unit: mm	
Fluid density			g/cm3	
working pressure			2.5, 4.0, 6.4, 10MPa	
Flange size, rate and standard			ANSI      DIN      JIS	

Example: UHC-C-YA-O-D-M-SS304-S-500-0.8-1-DIN DN25 PN16

**Remark: Manufactured customized is available for this product.**

Can make to Sections if gauge is longer than 3m to make suitable for delivery.



Model	UHC-C Side Mounted Magnetic Level Gauge
Measure ranges	100-15000mm
Measure accuracy	±5mm
Working pressure	1.0, 1.6, 2.5, 4.0, 6.4, 10.0, 16MPa
Fluid temperature	-40~450° C
Fluid viscosity	≤14m/s
Fluid density	≥0.45g/cm <sup>3</sup>
cage material	304SS, 316SS, PP, PVC or PTFE lining;
Flange	ANSI,JIS OR DIN form



Model	UHC-C-Y Level gauge with level transmitter
Description	Basis on UHC-C, added level transmitter
C-C	100-15000mm
Working pressure	1.0, 1.6, 2.5, 4.0, 6.4, 10.0, 16MPa
Fluid temperature	-40~450° C
Transmitter's resolution	5mm, 10mm, 20mm select able
transmitter	4-20mA, RS485, Hart, LCD is select-able
Power supply	24VDC, Battery power
cage material	304SS, 316SS, PP, PVC or PTFE lining;
Remarks	<i>Normally junction box at top. bottom side, inform us.</i>



Model	UHC-C-A Magnetic Float Level gauge with Switch
Measure ranges	100-15000mm
Measure accuracy	±5mm
Working pressure	1.0, 1.6, 2.5, 4.0, 6.4, 10.0, 16MPa
Fluid temperature	-40~450° C
Fluid density	≥0.45g/cm <sup>3</sup>
cage material	304SS, 316SS, 301SS, PP, PVC or PTFE lining;
switch types	Normally open (NO), normally close (NC), or SPDT type.

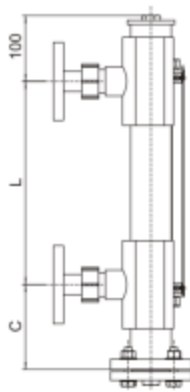


Model	UHC-C-YA Level gauge with Switch & transmitter
Measure ranges	100-15000mm
Measure accuracy	±5mm
Working pressure	1.0, 1.6, 2.5, 4.0, 6.4, 10.0, 16MPa
Fluid temperature	-40~450°C
Fluid density	≥0.45g/cm <sup>3</sup>
cage material	304SS, 316SS, 301SS, PP, PVC or PTFE lining;
Transmitter	resolution 3mm (0-10V), or 5mm, 10mm, 20mm
Output	LCD, LED, 4-20mA, Hart, RS485 24VDC
switch types	Normally open (NO), normally close (NC), or SPDT type.



Model	UHC-C-D Top mounted Level Gauge
Measure ranges	500-3000mm
Accuracy	±5mm
Working pressure	1.0, 1.6, 2.5MPa
Fluid temperature	-40~450°C
Fluid density	≥0.5g/cm <sup>3</sup>
cage material	304SS, 316SS, PP, PVC
can add level switch	Normally open (NO), normally close (NC), or SPDT.
Transmitter	Resolution: 3mm (0-10V), 5mm, 10mm, 20mm; 24VDC

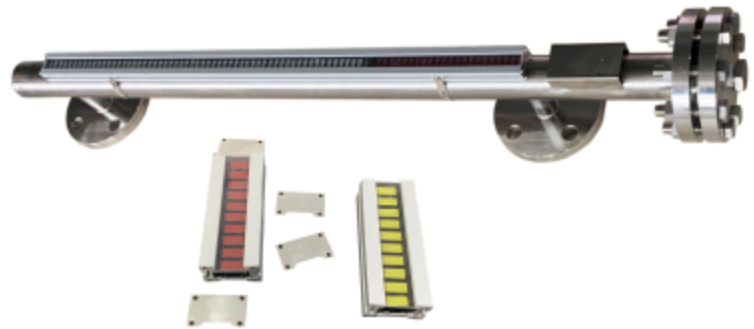
**Model: UHC-C-P plastic material float level gauge**



Material	PP	PVC	PVDF
Chamber size	63*3/5.2	63*3	63*3
Working pressure	-0.1MPa ~ 0.5MPa		
Fluid temperature:	-20~+80°C	-20~+60°C	-20~200°C
C-C distance	200-5000 mm		
Fluid viscosity	≲ 0.02 Pa.S		
Options	1. can add level switch 2. Transmitter		

**Magnetic level gauge without scale**

Indicator color: Red/white; Black/Yellow  
 Indicator shell material: PC  
 Roller material: Nylon  
 Suitable temperature: 130 °C



**UHC-C-ZHK Vacuum Sealed magnetic level Indicator**



Indicator type	Stainless Steel Sealed Type Indicator
Measure ranges	100-15000m
Working pressure	1.0, 1.6, 2.5, 4.0, 6.4, 10.0, 16MPa
Fluid temperature:	-20~+200°C, -20~+350°C
Fluid density	≥0.5g/cm <sup>3</sup>
cage material	304SS, 316SS, PP, PVC
Fluid viscosity	≤14m/s
Options	1. can add level switch 2. Transmitter 3. indicator color: a. Red/white, b. Yellow/Black

**UHC-F PTFE lining Float level gauge**



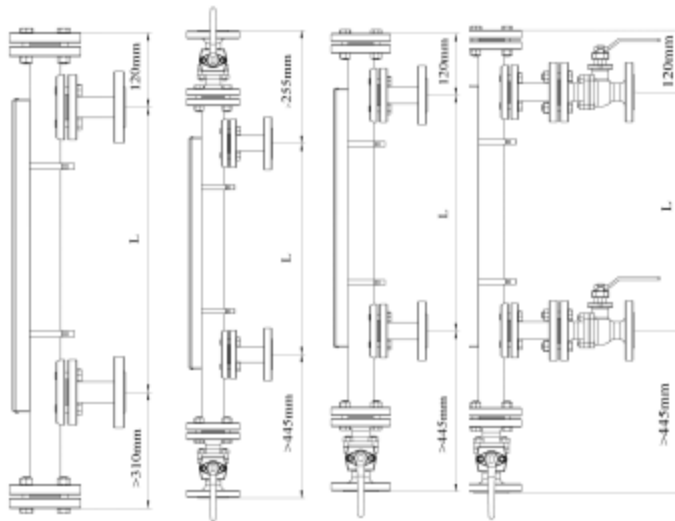
Material	Stainless steel lined with PTFE
Chamber size	Φ 55*(2mm+ PTFE 2.5mm)
Working pressure	-0.1MPa ~ 2.5MPa
Fluid temperature:	-20~+200°C
C-C distance	200-5000 mm
Fluid viscosity	≦ 0.02 Pa.S
Connection	Flange DN25, DN50
Options	1. can add level switch 2. Transmitter

**UHC-C-E Magnetic Level Gauge with LED indicator**

The LED indicator with light.  
 Suitable temperature: < 350°C,  
 power supply: 220 VAC

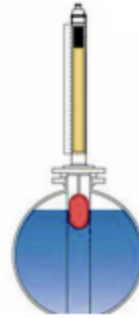


Can add PTFE lining ball valves as bellow types:

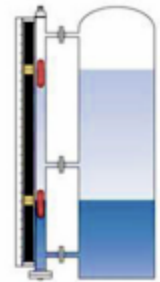


Type A      Type B      Type C      Type D

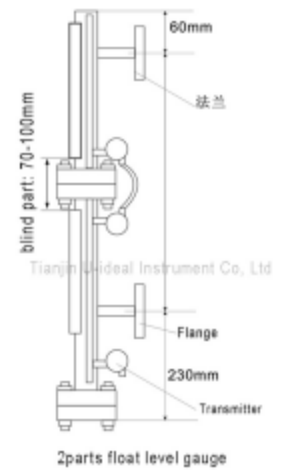
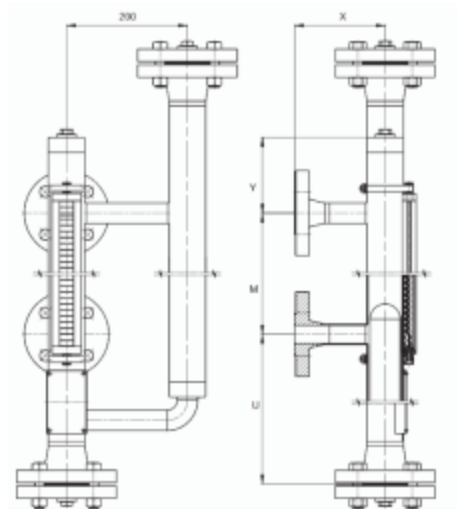
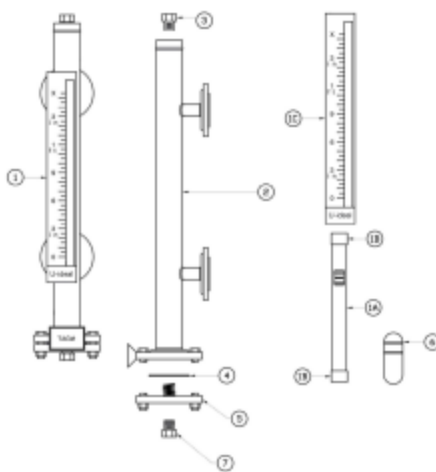
Typical structure



Style H Tank or Sump Level Indication

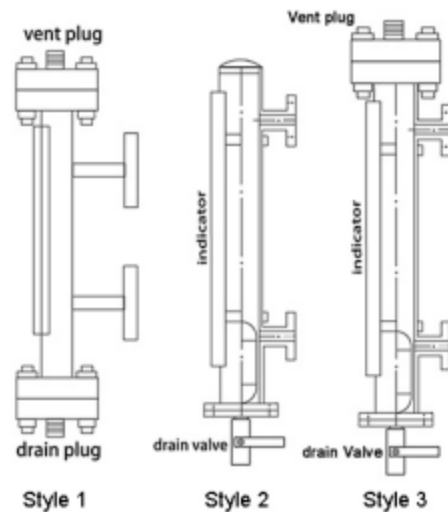


Style I Dual Indication for total interface level detection

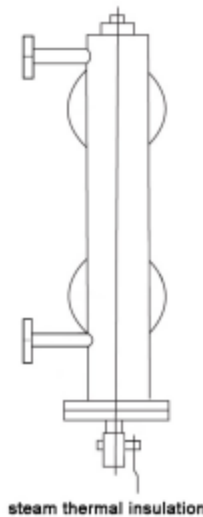


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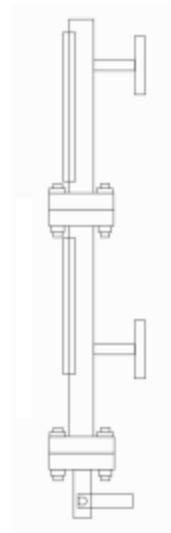
2parts float level gauge



Style 1      Style 2      Style 3      Style 4



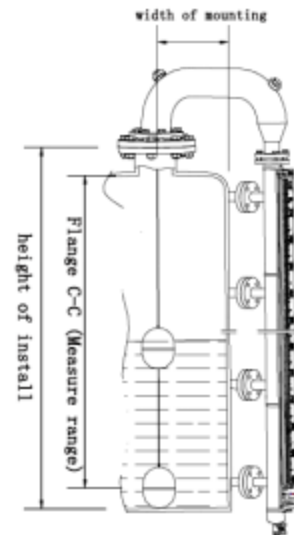
steam thermal insulation



**UHC – V Side-top mounted high viscous liquid Float & board level gauge for Pressure Vessel**

UHC-V side-top mounted high viscous liquid Float level gauge is suitable for heavy oil, crude oil, resin of high viscosity liquid level detection.

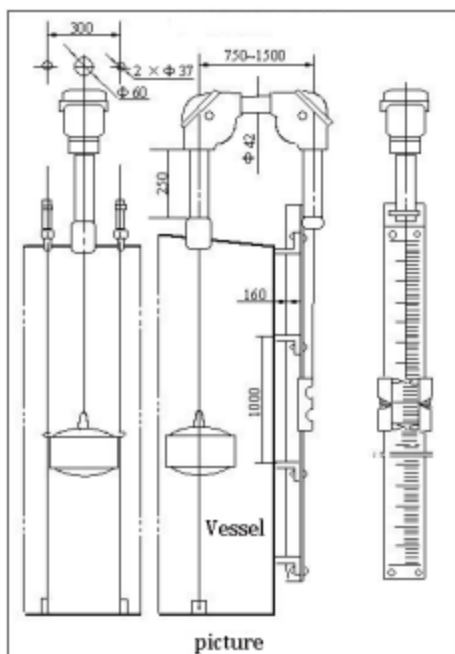
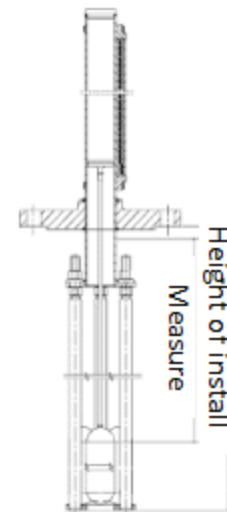
- C-C: 500 ~ 10000 mm, other length can be section made.
- Chamber tube material: 304SS; 316SS; 316L
- Working pressure: 0 ~ 1.6 MPa
- Medium density: 0.65 ~ 2.0 g/cm<sup>3</sup>
- Medium viscosity: 1.5 Pa s. or less
- Level Transmitter: output 4-20mA and switch option.



**Top mounted vaporizing fluid float level gauge**

UHC-T Top mounted vaporizing fluid special using magnetic float level gauge is suitable for easy vaporization liquid in pressure vessels, especially for buried tank of such as liquefied petroleum gas, methane. It contains **three pure titanium floats** and unique guide rail structure, is widely used in **LPG stations**.

- Measuring range: 300 ~ 3000 mm.
- Lead tube material: stainless steel 304SS; 316SS;
- Float material: Titanium
- Working pressure: -0.1 ~ 4 MPa
- Working temperature: - 80 ~ 80 °C
- Medium density: 0.4 ~1.2 g/cm<sup>3</sup>
- Medium viscosity: 0.4 Pa s.



**Float & Board Level Gauge**

It works by a float ball floating on the liquid, stainless steel rope and magnetic flappers moves with liquid level up and down.

**Technique Information:**

- Measure range: < 25m
- Indicator error: < 20mm
- Working pressure: ambient
- Fluid temperature: < 400 C
- Medium density: > 0.6g/cm<sup>3</sup>
- Connection method: flange or threaded

## 1. Top Mounted Magnetic Float Level Transmitter



### 1) UQK-B Liquid level transmitter.

UQK-B type liquid level transmitter is used for level test and remote control. There is chain of resistance, the transmitter convert the resistance signal to 4-20 mA, and add secondary can set the switch position freely. Type of field LED display + "4-20mA" indicator the true level continuously, and also connect with PLC/DCS or Recorders. The 4~20mA signal can transmit in the scope of 0~3Km

### 2) Customer order table

Item of UQK-B	Technical parameter	Your choice
Measure range	200-8000mm any length on order	
Indicator & Output	A. 0~4kΩ;      B.4~20mA 24VDC 2-wire; C. Hart, LCD    D. Battery power with field display	
Resolution	A. 20mm; B. 10mm; C. 7mm; D. 5mm	
Fluid Density	>=0.45g/cm <sup>3</sup> (tell us your density)	
Fluid temperature	< 150 C degree	
Process pressure	<2.5MPa or on order	
Process connection	Flange, Threaded, or assemble external of level gauge	
Material	SS304, SS316, PTFE	
Leading tube OD	Φ19mm, Φ8mm	
Floater ball OD size		

## 2. Glass plate Level Gauge

### The Reflex Liquid Level Gauge

The is used to see the level of the liquid in a vessel or tank. The gauge glass has three V-shaped grooves. The prism effect makes the gaseous phase look white, whereas in the liquid phase, the diffused reflection disappears making it look quite dark. This means that the liquid level can be seen clearly.

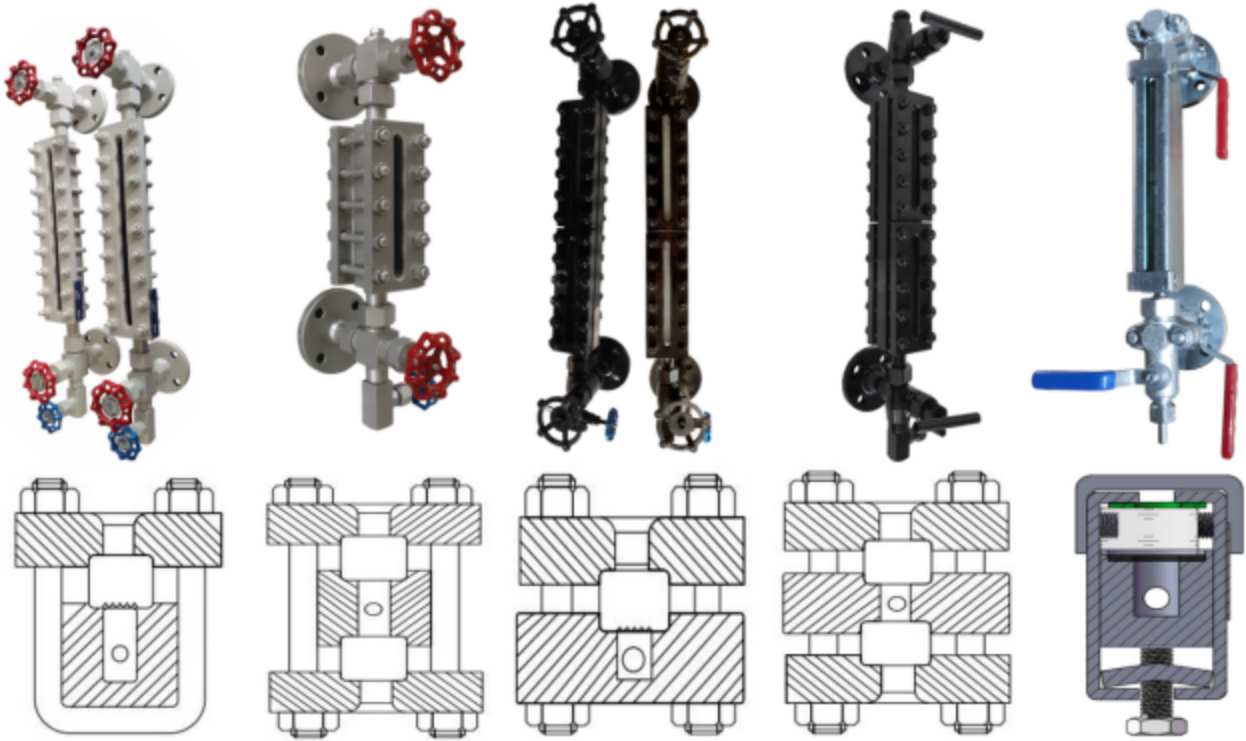
### See-Thru (Transparent) Liquid Level Gauge

This unit is used to see the level, color, or clarity of the liquid in a vessel or tank. This gauge uses two layers of gauge glass, and is constructed so that users can see through to the opposite side. The gauge can be protected with mica or fluorine resin which prevents the alkaline corrosion of the glass. The gauge also uses a lighting system to make it easier for users to measure the liquid level, and its



structure is more resistant to pressure than the reflex liquid level gauge.

**Pictures and description of different models**



TBS-F

TBS-A

UI-CV-F-HF

UI-CV-F-HT

RFL-40C

**Glass Size**



Unit: mm

No.	B1	A1	B2	A2	B3	A3	B4	A4	B5	A5	B6	A6	B7	A7	B8	A8	B9	A9
Length	115		140		165		190		220		250		280		320		340	
Width	34	30	34	30	34	30	34	30	34	30	34	30	34	30	34	30	34	30
Thickness	17		17		17		17		17		17		17		17		17	

**Main technical parameters**

Model	TBS-F	TBS-A	UI-CV-F-HF	UI-CV-F-HT	RFL-40C
Type	Reflex	Transparent	High pressure reflex	High pressure Transparent	90 degree Quick open/close
C-C (mm)	300-3600				285-2590
Visible Length (mm)	95-3360				141-2433
Gauge Material	CS、SS304、SS316L、Ti、etc				Cast steel
Glass Size	A1-A9, B1-B9				A1-A9
Glass Material	Borosilicate; Alumina-silicate				
Gasket Type	Graphite composite gasket; non-Asbestos gasket; Mica seal components				
suitable temperature	≤450℃				
Working pressure (Bar)	40 (Groove glass) 100 (Plate glass)	100 (Plate glass)	40 (Groove glass) 160 (Plate glass)	160 (Plate glass)	40 (Groove glass)

**Gauge Valve main technical parameters**

**UI-CV-F offset valve**
**UI-CV-S straight**
**RFL-40 Quick close**

 Suitable tube diameter:  $\phi$  18mm,  $\phi$  16mm

Model	UI-CV-F	UI-CV-S	RFL-40
Type	Offset Valve 360° turn	Straight Gauge Valve 360° turn	90° Quick Open / Close Gauge Valve
Valve body	Forging steel	CS, SS304, SS316L, Ti	Cast steel
Valve rod Material	2Cr13 / SS316L		
Sealing Material	Graphite		
Working temperature	$\leq 450^{\circ}\text{C}$		
Working pressure (Bar)	40 (Groove glass) 160 (Plate glass)	40 (Groove glass) 100 (Plate glass)	40 (Groove glass)
Connection mode	Flange; Thread; welding		Flange: DN15 DN20 DN25, 3/4" 1" 1-1/4"
Connection standard	ANSI, DIN, GB, JIS; NPT, BSPT, G, ZG;		ANSI, DIN, GB, JIS;
Apply to	TBS-F / TBS-A / TBS-HR / TBS-HT / RFL-40C		TBS-F / TBS-A / RFL-40C

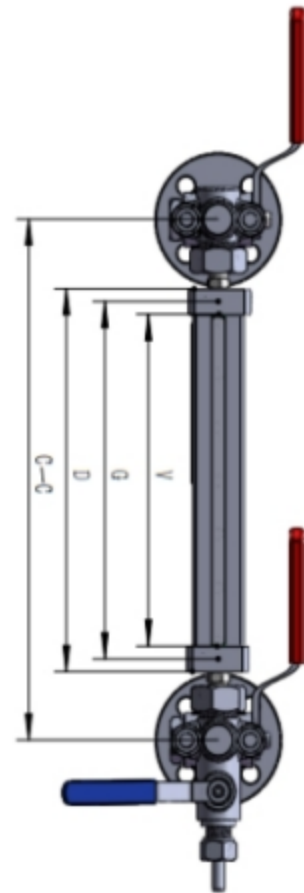
**Brass Gauge Valve for glass tube**

		
1/2" BSP suitable for glass tube OD15mm 3/4" BSP suitable for glass tube OD18mm Net weight: 2.1 kg	1/2" BSP suitable for glass tube OD15mm, weight: 520g/set Size: 3/4" BSP suitable for glass tube OD15mm, weight: 550g/set	G1/2" tube size: OD13mm 270g/set G3/4" tube size: OD18mm 285g/set

<b>Model: RFL-40C Reflex Level Gauge</b>			
Pressure	<4MPa	Temperature	<250 C, <450 C
Material	Carbon Steel	Flange	DN15 DN20 DN25, 3/4" 1" 1-1/4"



Model	Min C-C	Body D	visible length V(+2/0)	Glass length G	section	blind part
11	235	128	91	115	1	144
12	260	153	116	140	1	144
13	285	178	141	165	1	144
14	310	203	166	190	1	144
15	340	233	196	220	1	144
16	370	263	226	250	1	144
17	400	293	256	280	1	144
18	440	333	296	320	1	144
19	460	353	313	340	1	147
24	515	406	367	190	2	148
25	575	466	427	220	2	148
26	635	526	489	250	2	146
27	695	586	549	280	2	146
28	775	666	628	320	2	147
29	815	706	668	340	2	147
36	900	789	751	250	3	149
37	990	879	841	280	3	149
38	1110	999	961	320	3	149
39	1170	1059	1021	340	3	149
47	1285	1172	1134	280	4	151
48	1445	1332	1294	320	4	151
49	1525	1412	1374	340	4	151
57	1580	1465	1427	280	5	153
58	1780	1665	1627	320	5	153
59	1880	1765	1727	340	5	153
68	2115	1998	1960	320	6	155
69	2235	2118	2080	340	6	155
79	2590	2471	2433	340	7	157



<b>Model: RFL-40FC Reflex Level Gauge</b>			
Pressure	<4MPa	Temperature	<250 C, <450 C
Material	Carbon Steel	Flange	DN15 DN20 DN25, 3/4" 1" 1-1/4"



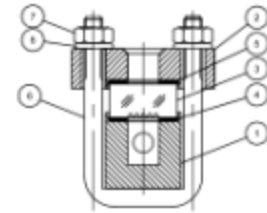
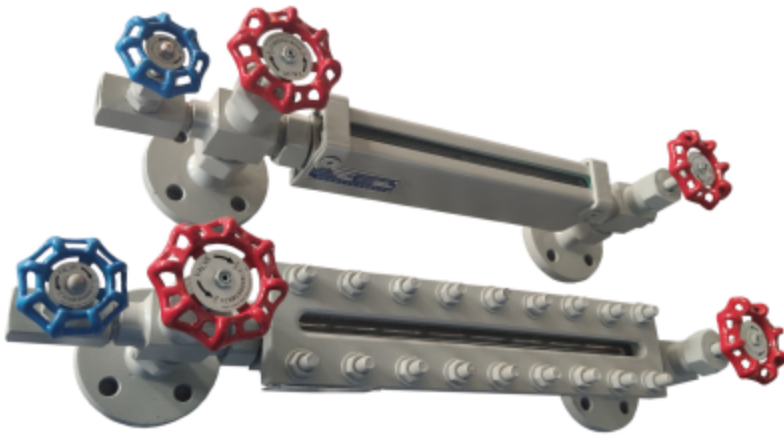
Model	Min C-C	Body D	Visible length V(+2/0)	Glass length G	section	Blind part
11	235	128	91	115	1	144
12	260	153	116	140	1	144
13	285	178	141	165	1	144
14	310	203	166	190	1	144
15	340	233	196	220	1	144
16	370	263	226	250	1	144
17	400	293	256	280	1	144
18	440	333	296	320	1	144
19	460	353	313	340	1	147
24	515	406	367	190	2	148
25	575	466	427	220	2	148
26	635	526	489	250	2	146
27	695	586	549	280	2	146
28	775	666	628	320	2	147
29	815	706	668	340	2	147
36	900	789	751	250	3	149
37	990	879	841	280	3	149
38	1110	999	961	320	3	149
39	1170	1059	1021	340	3	149
47	1285	1172	1134	280	4	151
48	1445	1332	1294	320	4	151
49	1525	1412	1374	340	4	151
57	1580	1465	1427	280	5	153
58	1780	1665	1627	320	5	153
59	1880	1765	1727	340	5	153
68	2115	1998	1960	320	6	155
69	2235	2118	2080	340	6	155
79	2590	2471	2433	340	7	157

<b>Model: RFL-40HFC Reflex Level Gauge</b>			
Pressure	<4MPa	Temperature	<250 C, <450 C
Material	Carbon Steel	Flange	DN15 DN20 DN25, 3/4" 1" 1-1/4"

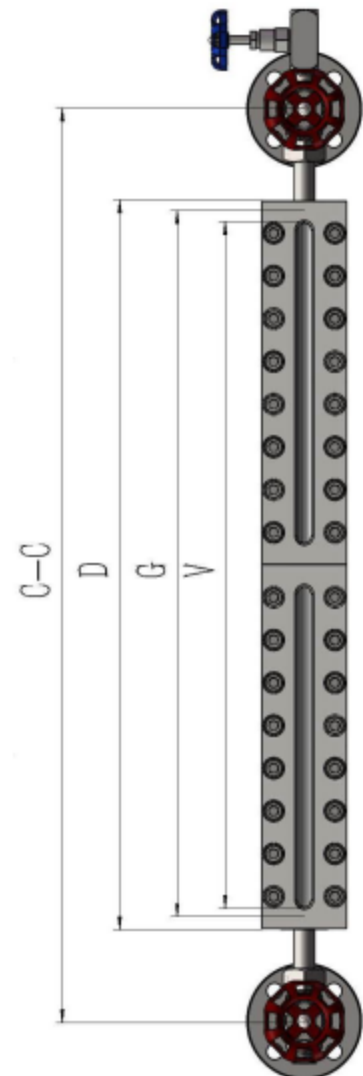


Model	Min C-C	Body D	Visible length V(+2/0)	Glass length G	section	Blind part
11	235	128	91	115	1	144
12	260	153	116	140	1	144
13	285	178	141	165	1	144
14	310	203	166	190	1	144
15	340	233	196	220	1	144
16	370	263	226	250	1	144
17	400	293	256	280	1	144
18	440	333	296	320	1	144
19	460	353	313	340	1	147
24	515	406	367	190	2	148
25	575	466	427	220	2	148
26	635	526	489	250	2	146
27	695	586	549	280	2	146
28	775	666	628	320	2	147
29	815	706	668	340	2	147
36	900	789	751	250	3	149
37	990	879	841	280	3	149
38	1110	999	961	320	3	149
39	1170	1059	1021	340	3	149
47	1285	1172	1134	280	4	151
48	1445	1332	1294	320	4	151
49	1525	1412	1374	340	4	151
57	1580	1465	1427	280	5	153
58	1780	1665	1627	320	5	153
59	1880	1765	1727	340	5	153
68	2115	1998	1960	320	6	155
69	2235	2118	2080	340	6	155
79	2590	2471	2433	340	7	157

<b>Model: TBS-F Reflex Level Gauge</b>			
Pressure	<4MPa	Temperature	<250 C, <450 C
Material	Carbon Steel, stainless steel	Flange	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"

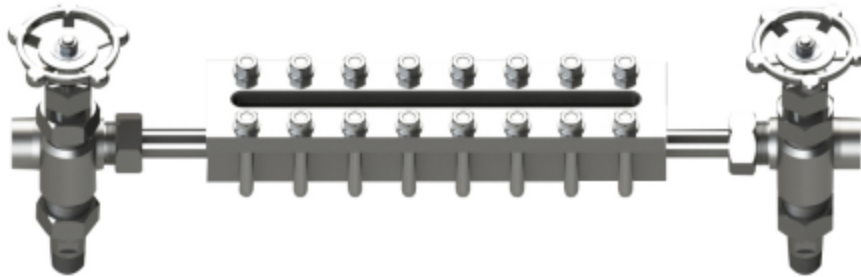


Model	Min C-C	Body D	visible length V(+2/0)	Glass length G	section	blind part
L-1	239	135	95	115	1	144
L-2	264	160	120	140	1	144
L-3	289	185	145	165	1	144
L-4	314	210	170	190	1	144
L-5	344	240	200	220	1	144
L-6	374	270	230	250	1	144
L-7	404	300	260	280	1	144
L-8	444	340	300	320	1	144
L-9	464	360	320	340	1	144
L-10	524	420	380	190	2	144
L-11	584	480	440	220	2	144
L-12	644	540	500	250	2	144
L-13	704	600	560	280	2	144
L-14	784	680	640	320	2	144
L-15	824	720	680	340	2	144
L-16	914	810	770	250	3	144
L-17	1004	900	860	280	3	144
L-18	1124	1020	980	320	3	144
L-19	1184	1080	1040	340	3	144
L-20	1304	1200	1160	280	4	144
L-21	1464	1360	1320	320	4	144
L-22	1544	1440	1400	340	4	144
L-23	1604	1500	1460	280	5	144
L-24	1804	1700	1660	320	5	144
L-25	1904	1800	1760	340	5	144
L-26	2144	2040	2000	320	6	144
L-27	2264	2160	2120	340	6	144
L-28	2624	2520	2480	340	7	144

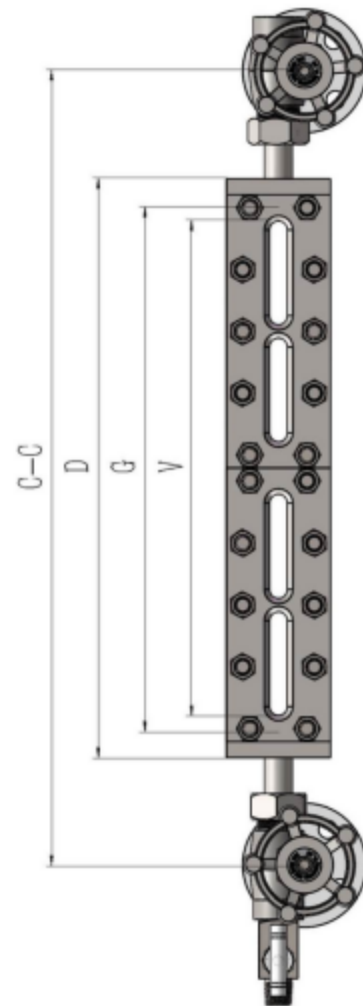




<b>Model: UI-CV-F-LF Reflex Level Gauge</b>			
Pressure	4MPa, 7MPa, <16MPa	Temperature	<250 C, <450 C
Material	Carbon steel, Stainless steel	Connection	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"
glass	Borosilicate or Al-Si glass	Connection type	Flange, Screw or other



Model	Min C-C	Body D	visible Length V(+2/0)	Glass length G	section	Blind part
H-1	286	135	90	115	1	196
H-2	311	160	115	140	1	196
H-3	336	185	140	165	1	196
H-4	361	210	165	190	1	196
H-5	391	240	195	220	1	196
H-6	421	270	225	250	1	196
H-7	451	300	255	280	1	196
H-8	521	370	325	165	2	196
H-9	571	420	375	190	2	196
H-10	631	480	435	220	2	196
H-11	691	540	495	250	2	196
H-12	751	600	555	280	2	196
H-13	781	630	585	190	3	196
H-14	871	720	675	220	3	196
H-15	961	810	765	250	3	196
H-16	1051	900	855	280	3	196
H-17	1111	960	915	220	4	196
H-18	1231	1080	1035	250	4	196
H-19	1351	1200	1155	280	4	196
H-20	1351	1200	1155	220	5	196
H-21	1501	1350	1305	250	5	196
H-22	1591	1440	1395	220	6	196
H-23	1651	1500	1455	280	5	196
H-24	1771	1620	1575	250	6	196
H-25	1951	1800	1755	280	6	196
H-26	2041	1890	1845	250	7	196
H-25	2251	2100	2055	280	7	196

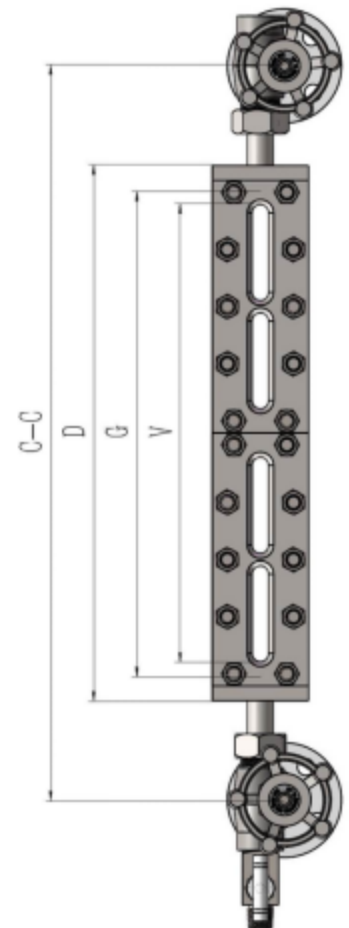




<b>Model: UI-CV-F-HF Reflex Level Gauge</b>			
Pressure	4MPa, 7MPa, <16MPa	Temperature	<250 C, <450 C
Material	Carbon steel, Stainless steel	Connection	DN15 DN20 DN25, DN40, DN50
glass	Borosilicate or Al-Si glass	Connection type	Flange, Screw or other



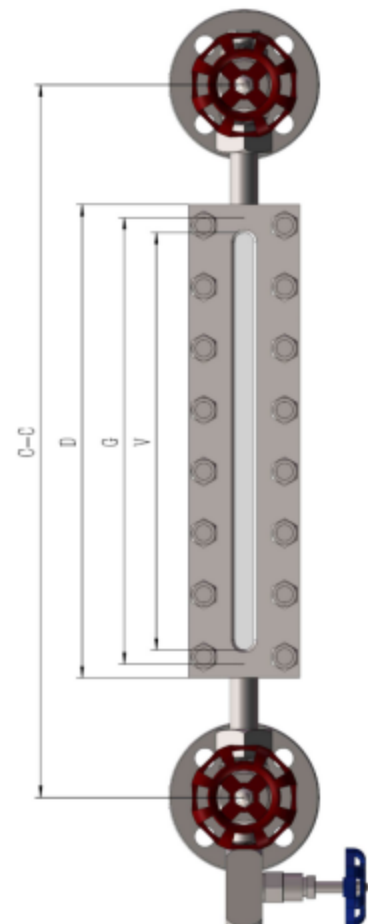
Model	Min C-C	Body D	Visible Length V(+2/0)	Glass Length G	section	Blind part
H-1	286	135	90	115	1	196
H-2	311	160	115	140	1	196
H-3	336	185	140	165	1	196
H-4	361	210	165	190	1	196
H-5	391	240	195	220	1	196
H-6	421	270	225	250	1	196
H-7	451	300	255	280	1	196
H-8	521	370	325	165	2	196
H-9	571	420	375	190	2	196
H-10	631	480	435	220	2	196
H-11	691	540	495	250	2	196
H-12	751	600	555	280	2	196
H-13	781	630	585	190	3	196
H-14	871	720	675	220	3	196
H-15	961	810	765	250	3	196
H-16	1051	900	855	280	3	196
H-17	1111	960	915	220	4	196
H-18	1231	1080	1035	250	4	196
H-19	1351	1200	1155	280	4	196
H-20	1351	1200	1155	220	5	196
H-21	1501	1350	1305	250	5	196
H-22	1591	1440	1395	220	6	196
H-23	1651	1500	1455	280	5	196
H-24	1771	1620	1575	250	6	196
H-25	1951	1800	1755	280	6	196
H-26	2041	1890	1845	250	7	196
H-25	2251	2100	2055	280	7	196



<b>Model: TBS-A Transparent Level Gauge</b>			
Pressure	<7MPa, <16MPa	Temperature	<250 C, <450 C
Material	Carbon steel, Stainless steel	Flange	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"



Model	Min C-C	Body D	visible length V(+2/0)	Glass length G	section	blind part
M-1	273	135	95	115	1	178
M-2	298	160	120	140	1	178
M-3	323	185	145	165	1	178
M-4	348	210	170	190	1	178
M-5	378	240	200	220	1	178
M-6	408	270	230	250	1	178
M-7	438	300	260	280	1	178
M-8	478	340	300	320	1	178
M-9	498	360	320	340	1	178
M-10	558	420	380	190	2	178
M-11	618	480	440	220	2	178
M-12	678	540	500	250	2	178
M-13	738	600	560	280	2	178
M-14	818	680	640	320	2	178
M-15	858	720	680	340	2	178
M-16	948	810	770	250	3	178
M-17	1038	900	860	280	3	178
M-18	1158	1020	980	320	3	178
M-19	1218	1080	1040	340	3	178
M-20	1338	1200	1160	280	4	178
M-21	1498	1360	1320	320	4	178
M-22	1578	1440	1400	340	4	178
M-23	1638	1500	1460	280	5	178
M-24	1838	1700	1660	320	5	178
M-25	1938	1800	1760	340	5	178
M-26	2178	2040	2000	320	6	178
M-27	2298	2160	2120	340	6	178
M-28	2658	2520	2480	340	7	178



Welcome to contact us for Other size.

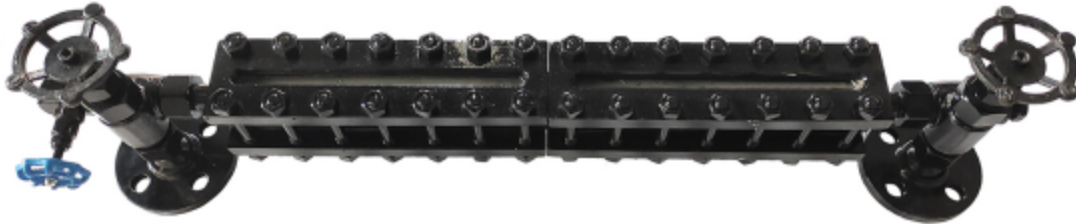
<b>Model: RFL-40AC Transparent Level Gauge</b>			
Pressure	<4MPa	Temperature	<250 C, <450 C
Material	Carbon Steel	Flange	DN15 DN20 DN25, 3/4" 1" 1-1/4"



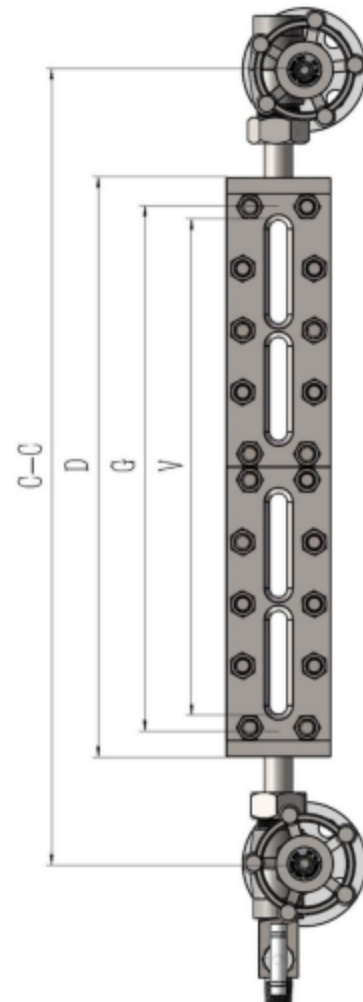
Model	Min C-C	Body D	Visible length V(+2/0)	Glass length G	section	Blind part
11	235	128	91	115	1	144
12	260	153	116	140	1	144
13	285	178	141	165	1	144
14	310	203	166	190	1	144
15	340	233	196	220	1	144
16	370	263	226	250	1	144
17	400	293	256	280	1	144
18	440	333	296	320	1	144
19	460	353	313	340	1	147
24	515	406	367	190	2	148
25	575	466	427	220	2	148
26	635	526	489	250	2	146
27	695	586	549	280	2	146
28	775	666	628	320	2	147
29	815	706	668	340	2	147
36	900	789	751	250	3	149
37	990	879	841	280	3	149
38	1110	999	961	320	3	149
39	1170	1059	1021	340	3	149
47	1285	1172	1134	280	4	151
48	1445	1332	1294	320	4	151
49	1525	1412	1374	340	4	151
57	1580	1465	1427	280	5	153
58	1780	1665	1627	320	5	153
59	1880	1765	1727	340	5	153
68	2115	1998	1960	320	6	155
69	2235	2118	2080	340	6	155
79	2590	2471	2433	340	7	157

Other size can be design.

<b>Model: UI-CV-F-A Transparent Level Gauge</b>			
Pressure	<16MPa	Temperature	<250 C, <450 C
Material	Forged steel	Flange	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"

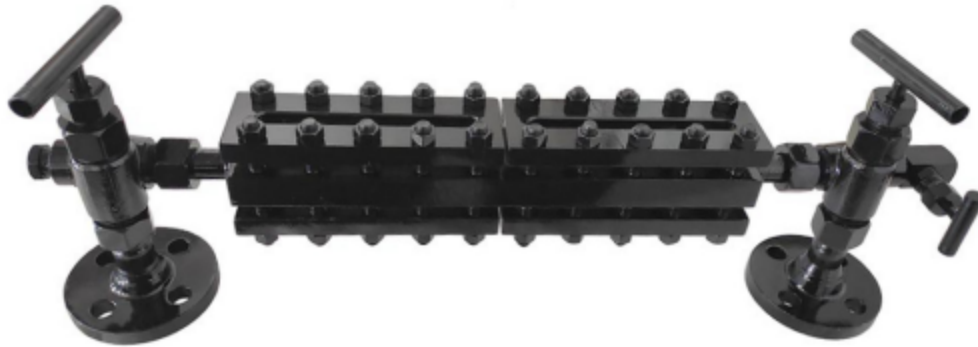


Model	Min C-C	Body D	visible Length V(+2/0)	Glass length G	section	Blind part
H-1	286	135	90	115	1	196
H-2	311	160	115	140	1	196
H-3	336	185	140	165	1	196
H-4	361	210	165	190	1	196
H-5	391	240	195	220	1	196
H-6	421	270	225	250	1	196
H-7	451	300	255	280	1	196
H-8	521	370	325	165	2	196
H-9	571	420	375	190	2	196
H-10	631	480	435	220	2	196
H-11	691	540	495	250	2	196
H-12	751	600	555	280	2	196
H-13	781	630	585	190	3	196
H-14	871	720	675	220	3	196
H-15	961	810	765	250	3	196
H-16	1051	900	855	280	3	196
H-17	1111	960	915	220	4	196
H-18	1231	1080	1035	250	4	196
H-19	1351	1200	1155	280	4	196
H-20	1501	1350	1305	250	5	196
H-21	1651	1500	1455	280	5	196
H-22	1771	1620	1575	250	6	196
H-23	1951	1800	1755	280	6	196
H-24	2041	1890	1845	250	7	196
H-25	2251	2100	2055	280	7	196

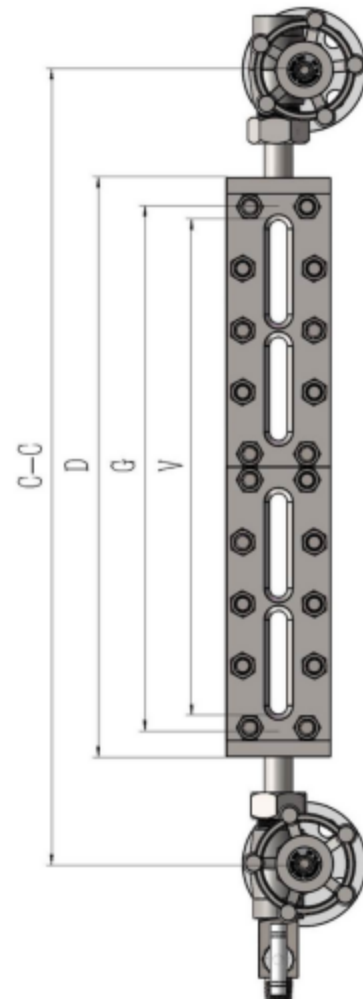


Other size can be design, too.

<b>Model: UI-CV-F-HT Transparent Level Gauge</b>			
Pressure	<16MPa	Temperature	<250 C, <450 C
Material	Forged steel	Flange	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"



Model	Min C-C	Body D	visible Length V(+2/0)	Glass length G	section	Blind part
H-1	286	135	90	115	1	196
H-2	311	160	115	140	1	196
H-3	336	185	140	165	1	196
H-4	361	210	165	190	1	196
H-5	391	240	195	220	1	196
H-6	421	270	225	250	1	196
H-7	451	300	255	280	1	196
H-8	521	370	325	165	2	196
H-9	571	420	375	190	2	196
H-10	631	480	435	220	2	196
H-11	691	540	495	250	2	196
H-12	751	600	555	280	2	196
H-13	781	630	585	190	3	196
H-14	871	720	675	220	3	196
H-15	961	810	765	250	3	196
H-16	1051	900	855	280	3	196
H-17	1111	960	915	220	4	196
H-18	1231	1080	1035	250	4	196
H-19	1351	1200	1155	280	4	196
H-20	1351	1200	1155	220	5	196
H-21	1501	1350	1305	250	5	196
H-22	1591	1440	1395	220	6	196
H-23	1651	1500	1455	280	5	196
H-24	1771	1620	1575	250	6	196
H-25	1951	1800	1755	280	6	196
H-26	2041	1890	1845	250	7	196
H-25	2251	2100	2055	280	7	196



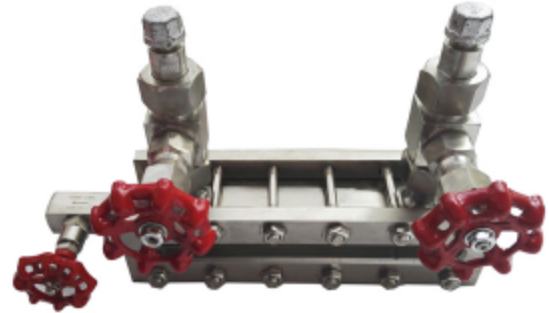
Other size can be produced on order.

**Non-blind type glass plate level gauge**

<b>Pressure</b>	<16MPa	<b>Temperature</b>	<250 C, <450 C
<b>Material</b>	Forged steel	<b>Flange</b>	DN15 DN20 DN25, DN40, DN50, 3/4", 1", 1-1/4", 1.5", 2"



TBS-FW blindless Reflex Level Gauge



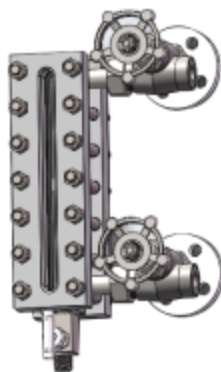
TBS-AW Transparent Level Gauge



TBS-FWH high pressure Reflex Level Gauge



CVF-TWH high pressure wide chamber transparent level gauge



CVF-TW Transparent level gauge



CVF-TW transparent level gauge

**Non-blind type glass plate level gauge dimensions refer to bellow table:**

Table of long visible type glass level gauge

Model	C-C Longer	C-C Shorter	Chamber length D	visible Length V(+2/0)	Glass length G	section
H-1	135	55	135	90	115	1
H-2	160	80	160	115	140	1
H-3	185	105	185	140	165	1
H-4	210	130	210	165	190	1
H-5	240	160	240	195	220	1
H-6	270	190	270	225	250	1
H-7	300	220	300	255	280	1
H-8	320	240	320	275	300	1
H-9	340	260	340	295	320	1
H-10	360	280	360	315	340	1
H-11	370	290	370	325	165	2
H-12	420	340	420	375	190	2
H-13	480	400	480	435	220	2
H-14	540	460	540	495	250	2
H-15	600	520	600	555	280	2
H-16	630	550	630	585	190	3
H-17	640	560	640	595	300	2
H-18	680	600	680	635	320	2
H-19	720	640	720	675	340	2
H-20	720	640	720	675	220	3
H-21	810	730	810	765	250	3
H-22	900	820	900	855	280	3
H-23	960	880	960	915	220	4
H-24	1020	940	1020	975	320	3
H-25	1080	1000	1080	1035	250	4
H-26	1200	1120	1200	1155	280	4
H-27	1280	1200	1280	1235	300	4
H-28	1350	1270	1350	1305	250	5
H-29	1360	1280	1360	1315	320	4
H-30	1440	1360	1440	1395	340	4
H-31	1500	1420	1500	1455	280	5
H-32	1620	1540	1620	1575	250	6
H-33	1800	1720	1800	1755	280	6
H-34	1890	1810	1890	1845	250	7
H-35	2100	2020	2100	2055	280	7



**B69H-16 mica sheet Two Color high pressure Level Gauge**

For monitoring the water level of power plant boiler drum of thermal power generating set.

- Center to center distance: on order
- Nominal pressure: 16-32MP
- working temperature: saturated steam
- Connection size: OD28x4mm welding or made on needs
- **Red for air, and green for water**
- Lamp type: LED with power: 220VAC
- A with two line glass window, no interrupt zone for level view.  
B With one line glass window, have interrupt zone.


**B49H-1.6 Economy type two color glass Level Gauge**

Model	B49H-25		
Name	Bi-color Flat glass level gauge		
PN	1.6~4.0(MPa)		
DN	25(mm)		
C-C	300~440(mm)		
Temp.	≤250℃		
Material	Carbon steel		
Lamp	power AC 36V+/-4V		
Nominal diameter	1.60MPa	2.50MPa	4.00MPa
Test Pressure	2.45	3.80MPa	6MPa
Visible length	165~195mm		
Center to Center	300, 330, 350, 400 (mm)		
Indicator color	Red for Liquid, green for air		
View angle	20°		
View distance	< 60m		





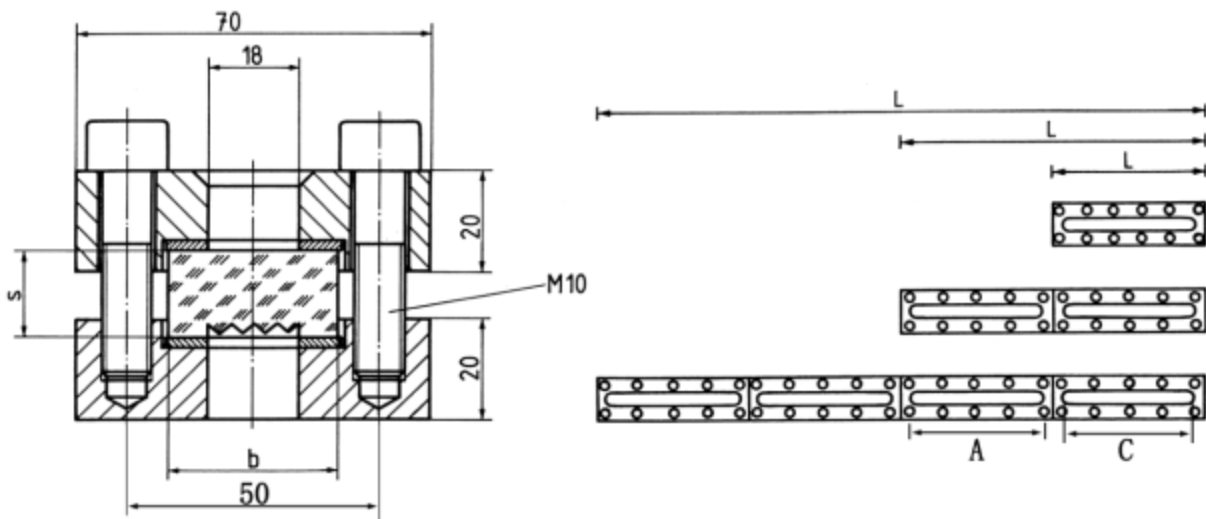
**HG5-1370-80 Lumiglas Sight Glass Fitting Rectangular**

The base flange of the sight glass unit is welded into or onto the vessel wall; the glass plate with gasket either side is firmly held in place by bolted on cover flange.

- 1) Suitable pressure: 0.6MPa, 1.6Mpa or other
- 2) Working temperature: ≤250°C
- 3) Material: Carbon steel, Stainless steel, Titanium or other



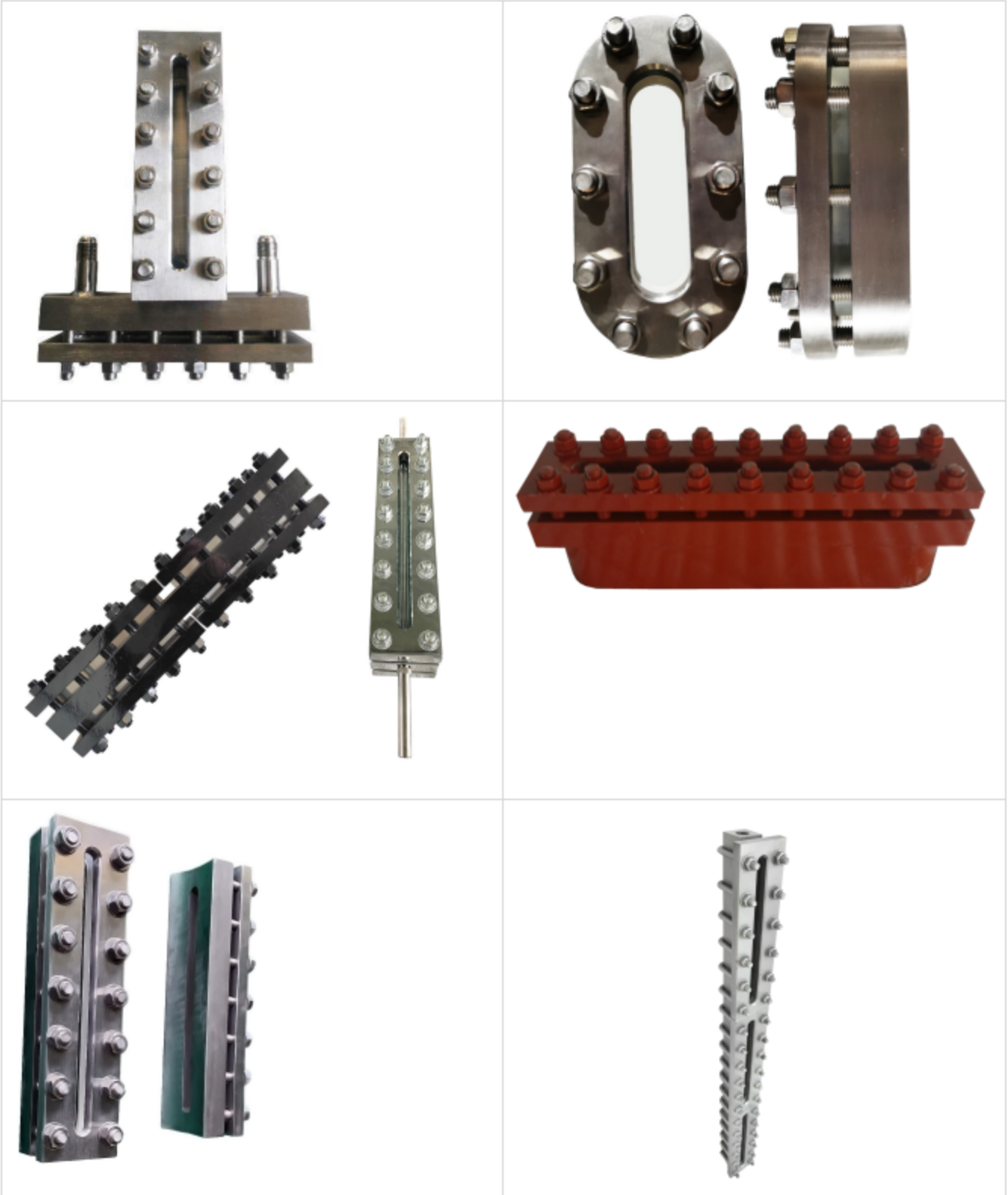
• Dimensions of Lumiglas sight glass fitting rectangular:



size		1	2	3	4	5	6	7	8	9	10	11	12	13
fitting	L	170	195	210	250	300	350	400	440	500	600	700	800	1000
sight glass plate *	section	1	1	1	1	1	1	1	2	2	2	2	2	4
	Glass	140	165	190	220	280	320	370	190	220	280	320	370	220
Width*thick =34*17	C	124	149	174	204	264	304	354	174*2	204*2	264*2	304*2	354*2	204*4
	Bolt qty	8	10	10	12	14	16	18	20	24	28	32	36	40

Standard is reflex glass. Transparent type glass is optional when needs.

**Other Sight glasses**



**RF-B Boat Fuel Reflex Glass Level Gauge**

**structural features**

The level gauge is fitted with a steel ball in each of the upper and lower valves. When the glass plate suddenly broke in an accident. Under the action of the inside pressure, the steel ball in the container will automatic seal, this will prevent the injection or continued outward flow of the liquid. And ensured the safety of the person and equipment. A sampling plug is installed at the lower end of the level gauge, which can be open for sampling or maintenance.



**Technique Information:**

A, reading error: plus or minus 0.5cm

B, measure the height range of liquid level

This level gauge is based on the installation center distance H (the distance between the center line of the upper and lower valves of the level gauge). The scale range on the glass plate is H1. The corresponding relation between H and H1 is shown in bellow table.

H (mm)	500	600	800	1000	1200	1400	1600	1800	2000
H1 (mm)	340	440	640	840	1040	1240	1440	1640	1840

**3. Glass sizes**

Items	TYPE A flat/groove			TYPE B flat/groove			TYPE H Flat			TYPE TA 28 flat		
	L	W	H	L	W	H	L	W	H	L	W	H
000				85	34	17						
00				90	34	17						
0				95	34	17						
1	115	30	17	115	34	17	-	-	-	113	27,6	16,8
2	140	30	17	140	34	17	140	34	22	-	-	-
3	165	30	17	165	34	17	165	34	22	163	27,6	16,8
4	190	30	17	190	34	17	190	34	22	188	27,6	16,8
5	220	30	17	220	34	17	220	34	22	218	27,6	16,8
6	250	30	17	250	34	17	250	34	22	248	27,6	16,8
7	280	30	17	280	34	17	280	34	22	278	27,6	16,8
8	320	30	17	320	34	17	320	34	22	318	27,6	16,8
9	340	30	17	340	34	17	340	34	22	338	27,6	16,8
10	370	30	17	370	34	17	-	-	-	-	-	-
11	400	30	17	400	34	17	-	-	-	-	-	-
12	450	30	17	450	34	17	-	-	-	-	-	-
13	500	30	17	500	34	17	-	-	-	-	-	-

Model	Sizes				
Single groove	140*40*33	165*40*33	190*40*33	218*40*33	218*43*34
double grooved glass	165*34*20	190*34*20	218*34*20		
double color center grooved sight glass	165*34*22	190*34*22	218*34*22	250*34*22	280*34*22
	320*34*22	340*34*22			
Regular triangular glass	165*44*22	190*44*22	216*44*22		
Partial prism glass	120*50*22	165*50*22	186*50*22	190*50*22	216*50*22
double color center grooved sight glass	165*34*22	190*34*22	218*34*22	250*34*22	280*34*22
	320*34*22	340*34*22			

## 4. Pressure vessel sight glass Fitting

### Application:

Weld-on low pressure sightglass fittings for observing the internals of tanks, pressure vessels, silos, gear-trains, separators and pipelines etc.

### General:

low pressure sightglasses are similar to the DIN28-120 series and are suitable for welding into or onto vessel walls.

### Operating Conditions:

Rated for pressures up to 5 bar depending on size.

Temperature rating up to 900°C depending on seal and glass selection.



### Item Part

1 Base Flange: (welding flange) Stainless steel 316L or 304L, carbon steel.

2 Gaskets: NAF, PTFE, Viton, food quality Silicone rubber or micaceous material for high temperature applications.

3 Sight glass disc: Toughened Soda Lime (up to 150 ° C) to DIN8902 or BS3463, toughened Borosilicate (up to 280 ° C) to DIN7080 or Quartz (up to 900 ° C).

4 Cover flange: Stainless steel 316L or 304L carbon steel.

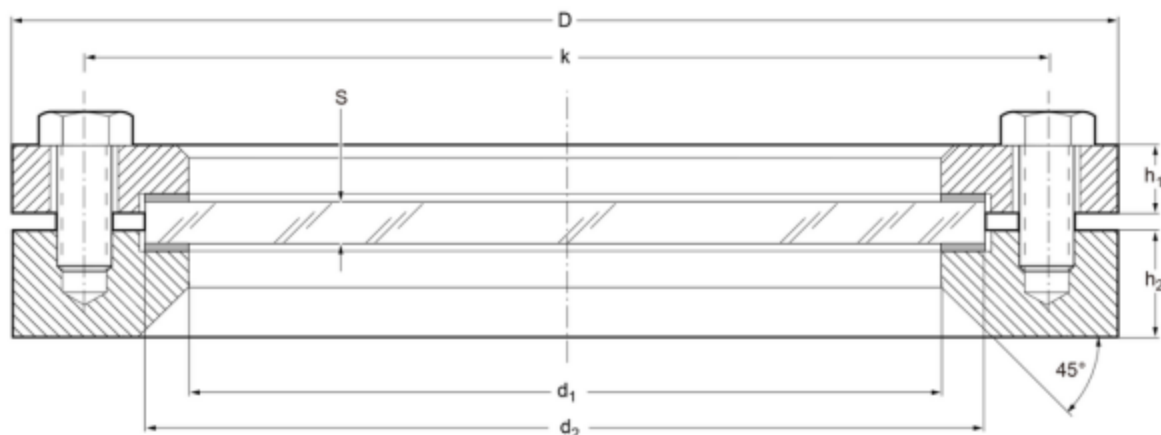
5 Securing bolts: Stainless steel A2 grade or carbon steel.

**Other materials are available upon request.**

**The Sight glass can add with wipper, lamp , can be with welding neck.**

**Other types see to our sight glass catalog.**

**Installation:** welding the base flange (1) into the vessel wall, Place gaskets (2), sight glass disc (3) and cover flange carefully. Then the bolts (5) are progressively tightened, cross tight the bolt several times.



Size		1	2	3	4	5	6	7	8	9	10
Pressure rating	bar	5	5	5	5	5	5	4	4	3	3
Viewing diameter	d1	<b>50</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>	<b>300</b>
Sight glass disc	d2	60	89	114	150	175	200	225	250	275	325
	S (TSL)	10	12	12	15	15	15	15	19	19	19
	S (TBS)	10	12	12	20	20	25	25	20	20	30
Flanges	D	100	150	177	202	228	254	280	304	345	405
	h1	16	16	16	16	16	16	16	19	19	19
	h2	25	25	25	25	25	25	25	30	30	30
Bolts	K	78	127	152	178	204	229	256	280	304	366
	No.	4	4	4	8	8	8	8	8	8	8
	Size	M12	M12	M12	M12	M12	M12	M12	M12	M12	M12
	Length	30	30	30	35	35/45	35/45	35/45	40/45	40/45	45/55

#### Dimensions for Visilume Standard Sightglass Fitting with Wiper Assembly

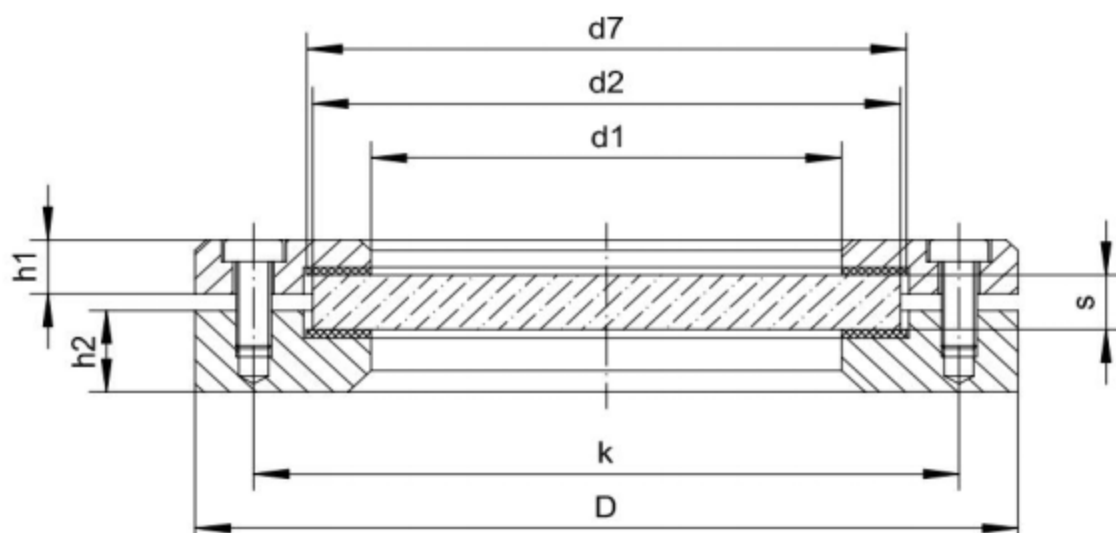
Size		1	2	3	4	5	6	7	8	9	10
Pressure rating	bar	<b>N/A</b>	5	5	5	5	5	3	3	2	2
Viewing Diameter	d1	<b>50</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>175</b>	<b>200</b>	<b>225</b>	<b>250</b>	<b>300</b>
Sight glass disc	d2	<b>N/A</b>	89	114	150	175	200	225	250	275	325
	S (TSL)	<b>N/A</b>	12	12	15	15	15	15	15	15	15
	S (TBS)	<b>N/A</b>	12	12	15	20	20	15	15	20	15

#### Ordering Information

Please specify the selected items as follows:

Fittings: Viewing diameter

Material: Base (welding) flange, bolts, cover flange, glass disc, gaskets.

**Vessel Sight Glass fitting for open tank**

**Dimensions**

Size		1	2	3	4	5	6	7
Nominal bore	DN	50	80	100	125	150	200	300
Viewing diameter	d1	80	100	125	150	175	225	300
Sight glass disc	d2	100	125	150	175	200	250	325
	s	10	10	10	10	10	10	15
Flanges	D	140	165	190	215	240	290	370
	k	120	145	170	195	220	270	345
	h1	10	10	10	10	10	10	15
	h2	15	15	15	15	15	15	20
Fastening bolts	no.	4	8	8	8	8	8	12
	Size	M 6	M 6	M 6	M 6	M 6	M 6	M 8
Gaskets (side with product contact and atmospheric side)	d1	80	100	125	150	175	225	300
	d7	102	127	152	177	202	252	327

**Order data:**

- Xukang sight glass fitting (DIN) and construction
- Nominal diameter (DN) / nominal pressure (PN)
- Material: bolts glass disc gaskets

**7. Glass Tubular Level Gauge**

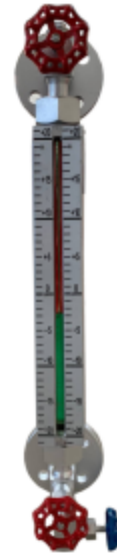
<b>Model selection of Glass Tubular Level Gauge</b>					
Model No.	Pressure	temperature	chamber material	Glass material	C-C distance
Pressure	P1	1.0MPa			
	P2	2.0MPa			
	P4	4.0MPa			
	P6	6.4MPa			
	P10	10.0MPa			
Temperature	T1	<60 ° C			
	T2	<100 ° C			
	T3	<180 ° C			
	T4	<450 ° C			
	T5	<600 ° C			
Body material	CS	Carbon Steel			
	304	Stainless steel 304			
	316	Stainless steel 316			
	PVC	PVC anticorrosive plastic			
	PP	valve, flange PP anticorrosive plastic			
	PTFE	Stainless steel lining PTFE			
Working condition of different Glass tube	B	Borosilicate Glass Tube <100° C, <1MPa			
	P	Transparent PVC, PP anticorrosive tube <60° C			
	F	Transparent Soft PTFE anticorrosive tube <180° C			
	Q	Quartz glass tube a. <450 ° C; b.<600 ° C, <10MPa			
Flange size	DN15	DN20	DN25	DN40	DN50
Center to Center Distance				(mm)	



**UGS-A (GZS-A) Bi-color Quartz Glass Tube Liquid Level Gauge**

This gauge is consist of gauge valve, red/green glass sheet, V shape glass tube, chamber and scale plate.

- 1) Measure ranges: 300~3200mm
- 2) Glass tube size: OD29\*thick 10mm    OD26\*thick 8mm
- 3) Working temperature: -20~600°C
- 4) Nominal pressure: PN0~10MPa
- 5) Quartz tube test pressure: ≤13MPa
- 6) Meter material: carbon steel, SS304
- 7) Green for liquid, red for air (can add electric light on order)



**GZS-C series Economic Glass tube Water Level Gauge**

- 1) Measure ranges: 300~5000mm
- 2) Working temperature: ≤180°C
- 3) Nominal pressure: PN0~16Bar
- 4) Meter material: carbon steel or SS304, SS316  
Transparent tube protector: U shape Aluminium housing
- 5) Visible length = center to center distance -100mm
- 6) Connection method: thread or flange any type on order.

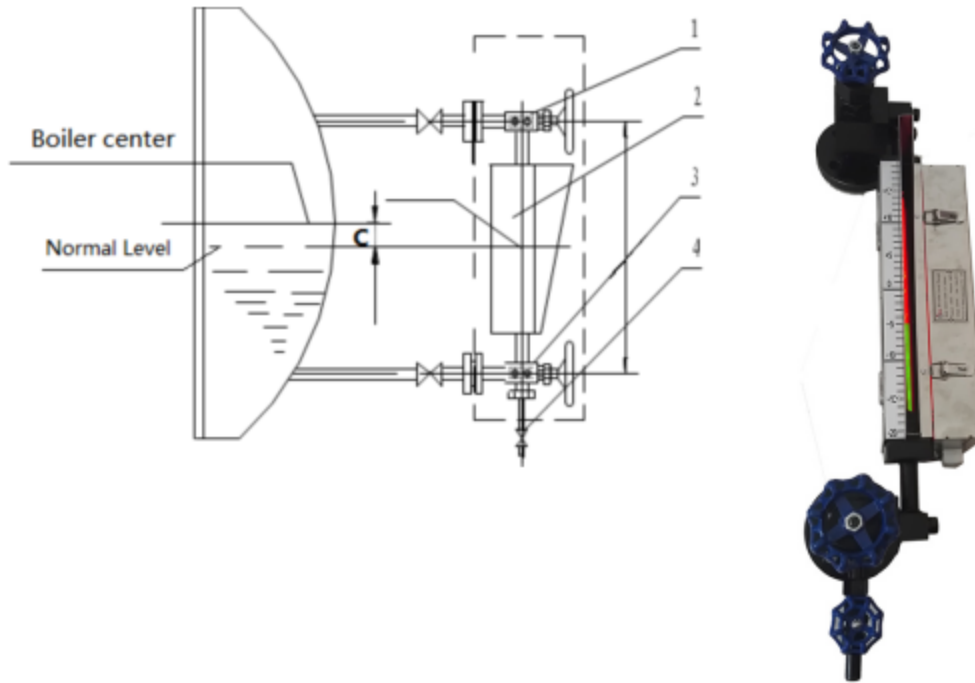
*Water Gauge valve: needle valve with safety ball check inside the valve.*

**Type choice of glass tube:**

- A) Borosilicate Glass tube OD 20mm x thick 2.5mm  
Borosilicate glass tube: C-C length ≤1840mm or longer;
- B) Acrylic glass tube: OD20 x thick 3mm  
Suitable for center to center length <5040mm
- C) PTFE transparent tube OD 20 x thick 2mm  
Suitable for any length.



**B49HT-2.5G, 4.0G, 6.4G, 10G Double Color Quartz Glass Tube Water Level Indicator**



Bi-color water gauge consists of upper valve, lower valve, and gauge chamber, drain valve, and lamp house. Inside the valve body. There is a safety steel ball and safety valve seat. When the quartz glass tube is broken suddenly, the steel ball will remove to the safety valve seat in high speed pushed by high pressure steam to shut off the channel of the gauge automatically until the upper and lower valves is closed by hand. The ball will be reset by the pressure from the balancing tube and by its gravity.

- 1) Measure ranges: 300-600mm
- 2) Working temperature: -20~450°C, 600° C
- 3) Glass Tube Size: Quartz tube OD29\*thickness 10mm
- 4) Meter material: A105, SS304, SS316
- 5) Process connection: flange DN25 or other. PN2.5, PN4.0, PN6.4, PN10MPa
- 6) Bi-color display: red for air, green for water level display. (Very clear display)
- 7) Two LED light assemble to the level gauge: Adapter input: 100-240VAC, output: 3-24VDC adjustable, LED power: 3-24VDC.

**Components:**

- |                |                      |                   |                    |
|----------------|----------------------|-------------------|--------------------|
| 1. RED GLASS   | 2. GAUGE housing     | 3. WINDOWS COVER  | 4. QUARTZ TUBE     |
| 5. GREEN GLASS | 6. GLASS COVER PLATE | 7. LIGHT COVER    | 8. REFLECTOR PLATE |
| 9. END COVER   | 10. PRESS COVER      | 11. GRAPHITE RING | 12. BRACKET        |
13. power adapter

**5. Steel Ruler type Well Depth and Water Level Meter**

## 1. Overview

This water level Indicator is designed for Water Well Depth Measurement with probe and buzz. The steel ruler water level gauge provides the most accurate way to measure well depth or levels of water in wells boreholes and water pipes.



Specification	30m	50m	100m	150m	200m	300m	500m
Measurement dept. ( m )	0~30	0~50	0~100	0~150	0~200	0~300	0~500
Minimum reading ( mm )	1.0						
Repetitive reading ( mm )	±2.0						
Operating voltage ( V )	DC=9						

## 2. Principle structure

There are two major components:

Ground receiving equipment-steel ruler water level gauge, including the probe, steel ruler cable, receiving system and winding plate, battery and other components.

Probe part: stainless steel material. For water level detect: when the probe touches the water, it alarm, once left the water, and it will stop.

Steel ruler part of the cable: Made of steel ruler and wire by plastic technology, which prevents the steel ruler corrosion,

Receiving system part: Consist of the sounder, indicator and peak indicator. The sounder gives a continuous beep, then the indicator light is on, and the peak indicates the voltmeter.



## 6. Ultrasonic Level Meter

### UL-A general Ultrasonic Level Meter

- DC12-24V wide work voltage
- Backup and recovery parameter set
- Free adjustment of the range of analog output



- Set a filter value to remove
- Custom serial port data format
- Optional increment/difference distance measurement to measure air space or liquid level
- 1-15 transmitted pulse intensity depending on working conditions
- Explosion-proof (optional)

**Specifications**

Range: 5, 8, 10, 12, 15m Blind zone: <math>< 0.4-0.5\text{m}</math> (different for range) Measure error: 0.3%F.S Display: OLED Display resolution: 1mm Frequency: 20~350KHz Power consumption: <math>< 1.5\text{W}</math> Output (optional): 4~20mA $R_L > 600\Omega$ (standard) 1~5V\1~10V RS485 3 NPN 2 relays (AC: 5A 250V DC: 10A 24V)	Material: ABS or PTFE probe Dimension: $\Phi 92\text{mm} \times 198\text{mm} \times \text{M60}$ Electrical interface: M20X1.5 Installation: M60X2 or $\varnothing 61\text{MM}$ Operating surroundings: normal temperature, normal pressure Protection degree: IP65(others optional)
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**UL-F5 Split type ultrasonic level meter , Open channel Ultrasonic Flowmeter**

- (1) Flux range : 0~9999999 (Full eight cleared and the cumulative number plus 1)
- (2) Instant flux: 10L/s~10m<sup>3</sup>/s(based on wire type and size)
- (3) Accuracy: 5%
- (4) Sensor range: 2m, 5m, 8m, 10m
- (5) blind area: 0.3~0.5m (different from range)
- (6) sensor precision :  $\pm 0.5\%F.S$
- (7) display: LCD
- (8) liquid level resolution: 1mm
- (9) keyboard: 16
- (10) signal input: transducer
- (11) output(optional): 4-20mA/  
RS485/232(Modbus)/ 4 relays  
(AC:5A 250V DC:10A 120V)
- (12) work voltage: AC220V or DC12~24V
- (13) consumption: <math>< 3\text{W}</math>
- (14) material: ABS for instrument, ABS for sensor
- (15) main instrument size: 180mm\*160mm\*76mm/168mm\*130
- (16) sensor size:  $\Phi 65\text{mm} \times 119\text{mm} \times \text{G1 } 1/2(3\text{m})$ 、 $\Phi 74\text{mm} \times 137\text{mm} \times \text{M60}(5-15\text{m})$ 、 $\Phi 109\text{mm} \times 194\text{mm} \times \text{M30}(20-30\text{m})$
- (17) sensor installation size: G1 1/2(3m), M60x2 (5-15m) , M30X1.5 (20-30m)
- (18) sensor cable: 10m shield cable



- (19) work surrounding: normal
- (20) protection degree: IP53 for main instrument  
IP65 for sensor(higher degree optional)
- (21) data scan: check hour, day, week, year flux record.
- (22) optional item when order: Mini SD data collect、GPRS/GPS、micro-printer.

**ULT Small blind area ultrasonic level meter**

**Brief introduction**

ULT small blind area ultrasonic level meter is a kind of product exploited for needing of high precise in some situation. And it's the first ultrasonic level sensor which small blind area achieves to 0.06m and 1mm measure resolution. The cover is ABS, sensor is PP; they are both rigid and small. The cover of main processor is crystal, bring the convenience of observing measure value. The main board was made of SMT electronic components 。 Those made our production more stable and reliable.



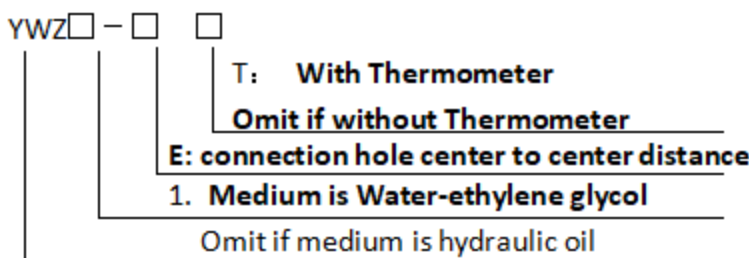
**Features:**

- High precise
- Strong anti-interference
- Automatic temperature compensation
- Firm and stable transducer suit for bad industry condition
- General Specification:
  - Max sensing range: 1m
  - Unusable area: : <0.06 m
  - Emission angle : 9°
  - Max measure error: ±1.5mm
  - Transducer frequency: 40KHz~430.0KHz
  - Display resolution: 1mm
  - Display: 4 figures 8 segments LED (LCD available)
- Power: DC 12~30V Power consumption: <1.5W
- Output signal: 4~20mA (other output signal is available)
- Max load impedance: 300Ω
- Fix model: M30 or M48 screw ring
- Protection degree: IP65
- Dimension :Φ75mm×117mm×M48 (ABS)
- Keyboard: 3 sensitive metal piece key
- The shell material: PP, ABS
- Ambient temperature:-20℃~60℃
- Ambient pressure: normal condition
- Humidity: 0 to 95%
- Weight: 332g

## 7. YWZ Series OIL LEVEL INDICATORS WITH THERMOMETER

The oil level gauges which supplied from our company are essential accessories of oil tank, oil cellar, cooling case and gear box. They can indicate both liquid level and liquid temperature.

These type oil level gauges are an attractive, new and unique type, and can indicate liquid level and temperature clearly. Good assembly performances; fixed installation, crack control, shockproof and leakage proof and their advantages. These type oil level gauges are designed to 25 different kinds' specifications according the oil tank volume. We assure the products quality for one year, and welcome all new and old customer to try these type products.



液位液温计 **liquid Level and temperature Gauge**

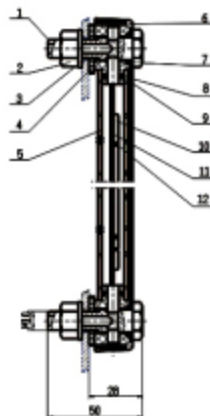
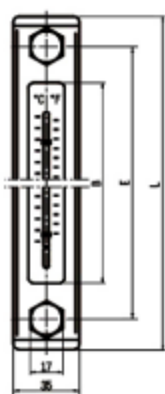
**Example:**

**YWZ-80: Oil gauge without thermometer for hydraulic oil.**

**YWZBH-80T: Oil gauge with thermometer for water-ethylene glycol.**



Product Structure Diagram:



- 1. Bolts
- 2. Nuts
- 3. Gasket ring
- 4. Seal gasket
- 5. Meter body
- 6. Meter head
- 7(8). O ring
- 9. Shell
- 10. Thermometer
- 11. Rating plate
- 12. Tie wire

**MODEL CODE**

MODEL	Size ( mm )		
	L (Gauge)	E (C-C)	B (Indicator)
YWZ-76	106	76	37
YWZ-76T			
YWZ-80	110	80	42
YWZ-80T			
YWZ-100	130	100	62
YWZ-100T			
YWZ-125	155	125	87
YWZ-125T			
YWZ-127	157	127	89
YWZ-127T			
YWZ-150	180	150	112
YWZ-150T			
YWZ-160	190	160	122
YWZ-160T			
YWZ-200	230	200	162
YWZ-200T			
YWZ-250	280	250	212
YWZ-250T			
YWZ-254	284	254	215
YWZ-254T			
YWZ-300T	330	300	262
YWZ-350T	380	350	312
YWZ-400T	430	400	362
YWZ-450T	480	450	412
YWZ-500T	530	500	462

**TEMPERATURE RANGE AND SUSTAINED PRESSURE**

**Temperature range:**  $-20^{\circ}\text{C} \sim +100^{\circ}\text{C}$

**Pressure class:** 0.10~0.15MPa

**INSTRUCTION OF INSTALLATION AND ACCESSORIES**

Open two holes on the container according to the level gauge center to center distance. For example if oil tank wall thickness  $\leq 10\text{mm}$ , the two holes diameter where fix screws are  $\varnothing 11\text{mm}$ ; And if oil tank wall thickness  $> 10\text{mm}$ , the two holes diameters are M10. Please treat the surface of the two holes to avoid oil leaking. Liquid level gauge accessories: nut, gasket, and packing plate each two sets. And our factory supplies all the above accessories.

## 8. Radar Level Meter

### 80GHz High frequency Radar Level Transmitter


Is Suitable for high dust, agitating tank, strong foam, steam and strong corrosion and high temperature environment (+200°C) liquid level or solid level measurement.

- Working frequency 76-81GHz
- Accuracy: +/-1mm
- 2-wire , 4-wire with measure range: 0.1-10m, 0.3-120m.
- Have field LCD display
- Communication: UI782x: MODBUS / UI783x: HART
- Signal output     UI782x : 4~20mA or RS-485  
                          UI783x: 4~20mA  
                          Bluetooth optional
- Beam Angle: 3° , 8°
- Process pressure: -0.1~2MPa, 3MPa
- Process Temperature: -40~85°C, 200°C, 500°C , 1000°C
- Power: 15~28VDC
- Field operation/programming: 128 × 64dot matrix display / 4buttons, PC software, Bluetooth
- Product Size Ø100\*270mm
- Cable entry M20\*1.5
- Protection class IP67
- Explosion-proof grade ExdIICT6
- Installation method Thread or flange
- Weight 2.480Kg/2.995Kg
- Packing box size 370\*270\*180mm




### 26GHz Radar Level Gauge

#### RD901 26GHz Radar Level Gauge

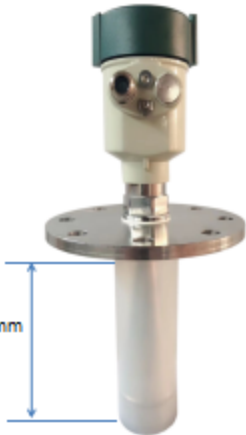
	Application:	various high corrosive fluid
	Measure range	10m
	Medium Temperature	-40~120° C
	Process pressure:	-0.1~0.3MPa
	Accuracy:	±5mm
	Frequency:	26GHz
	Explosion-proof class:	Exib II C T6 Gb
	Protection class:	IP67
	signal output:	4...20mA/HART(2-wire / 4-wire) RS485/Modbus



**RD902 26GHz Radar Level Gauge**


	Application:	high temperature, high pressure medium
	Measure range	30m
	Medium Temperature	-40~250° C
	Process pressure:	-0.1~4.0MPa
	Accuracy:	±3mm
	Frequency:	26GHz
	Explosion-proof class:	Exib II CT6 Gb
	Protection class:	IP67
	signal output:	4...20mA/HART(2-wire / 4-wire) RS485/Modbus

**RD908 26GHz Radar Level Gauge**

	Application: Various corrosive liquid
	Measure range: 15meter
	Process connection: Threaded or Flange
	Medium temperature: -40~200°C
	Process pressure: -0.1~2Mpa
	Accuracy: ± 5mm
	Frequency: 26GHz
	Explosion-proof: Exia II C T6 Ga
	Protection class: IP67
	Output signal: 4~20mA/HART, RS485/Modbus
	Power: 24VDC 2-wire, or 220VAC 4-wire
	Beam: 8° Material: SS304 lining with PFA size: OD76 x H 57mm

**6GHz Radar Level Meter**

**RD801 6G Radar Level Meter**

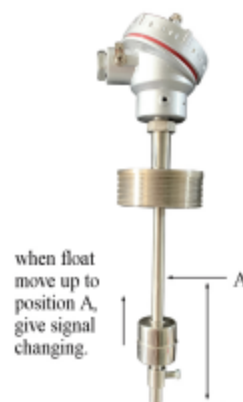
	Applicable medium: liquid, light corrosive liquid, small Volatile soda acid liquid level measurement, Slurry level measuring
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## 9. Float level control switches

Float level control switches is suitable for liquid level control in industrial process such as water treatment, petrochemicals, boiler and vessels. The float level switches worked on fluid buoyancy principle, when float up and down due to buoyancy effect to high or low level limit, the magnetic reed switch (or micro switch) in the junction box affected by arm end magnet, and the contact "NC" and "NO" interchanged accordingly.

### UQK-A top mount Float Level Switch

- Contact rate: 0.5A/250VAC
- **Float size = OD\*H\*ID and density:**
- Operate temp.: -30~120°C
- Contact Way: NO, NC, SPDT or holding signal
- Wet Material: SUS304, SS316, PP, PTFE
- Sp.Gr.: on order
- Connection: flange or thread, size on order
- Insertion rod length: on order
- Explosion-proof: on choice
- Switch position and switch number: on choice

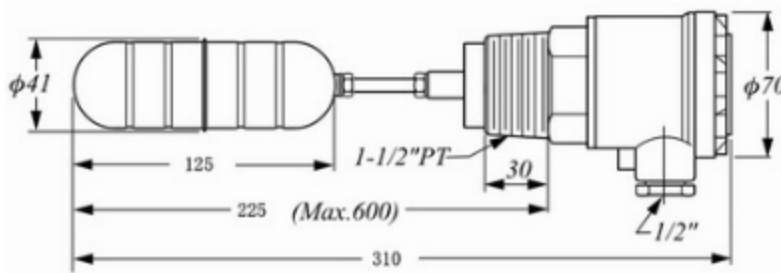


### Plastic anti-corrosive Float Level Switch

- Model UQK-PHK
- Power supply 0.5A/250VAC
- Working pressure -0.1~+0.5MPa
- Fluid temperature -20~80°C, -20~200°C
- switch type Normal open, Normal Close, SPDT

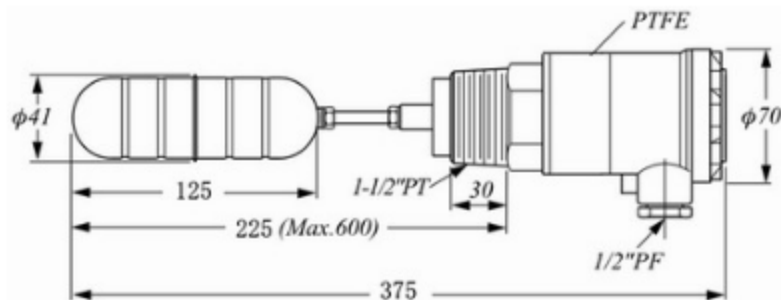


## Side Mounted Float Level Switch



### Thread UQK-10 side mount

- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65
- Connection: special size accepted



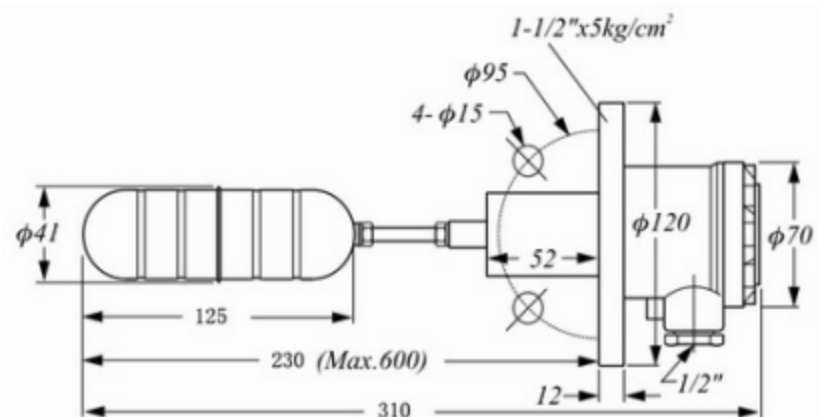
### High temp. UQK-10T side mount

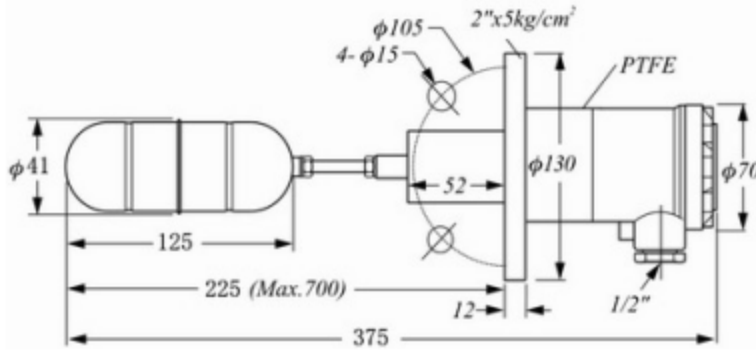
- Contact rate: 5A/250VAC
- Operate temp.: -30~250℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65
- Connection: flange or threaded, on needs



### Flanged UQK-20 side mount

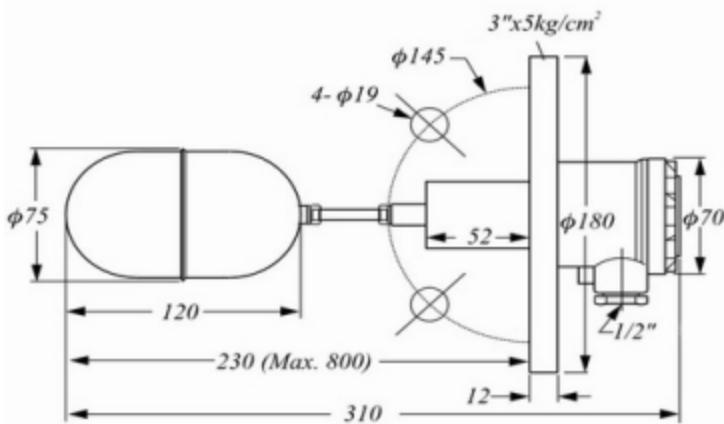
- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65





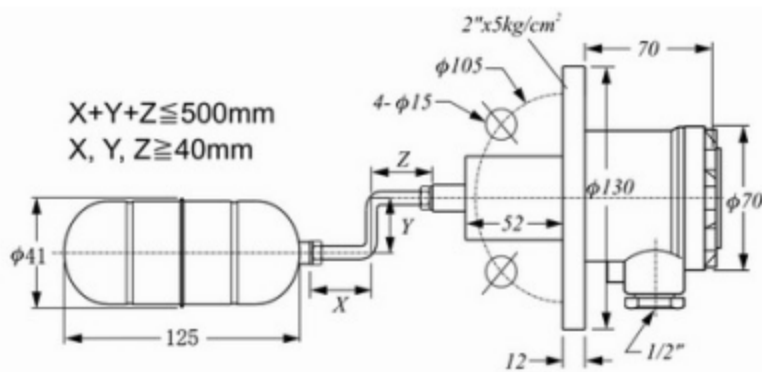
**Flange High temp. UQK-20T**

- Contact rate: 5A/250VAC
- Operate temp.: -30~200℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65



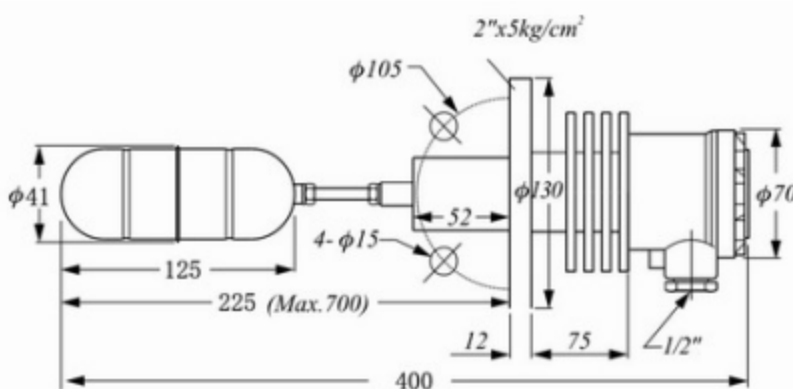
**Flanged UQK-21 side mount**

- Contact rate: 5A/250VAC
- Oper temp: -30~200℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65



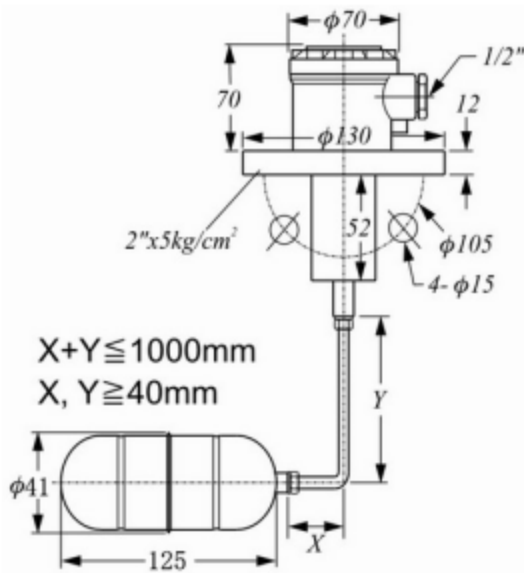
**Z type UQK-30 side mount**

- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65



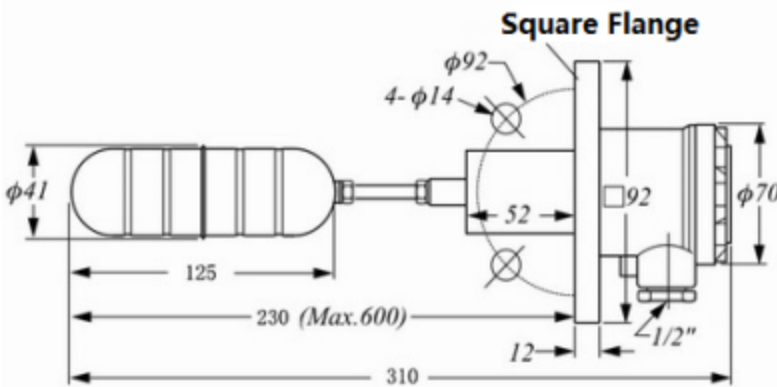
**High temp. UQK-41 side mount**

- Contact rate: 5A/250VAC
- Operate temp.: -30~350℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65



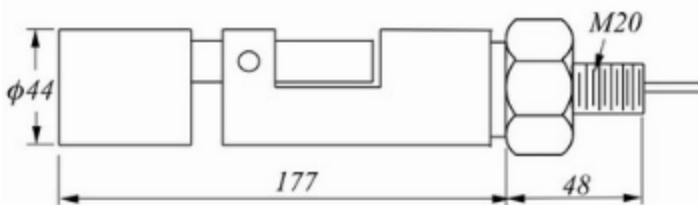
**Flanged UQK-50 Top mount**

- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65g/cm3



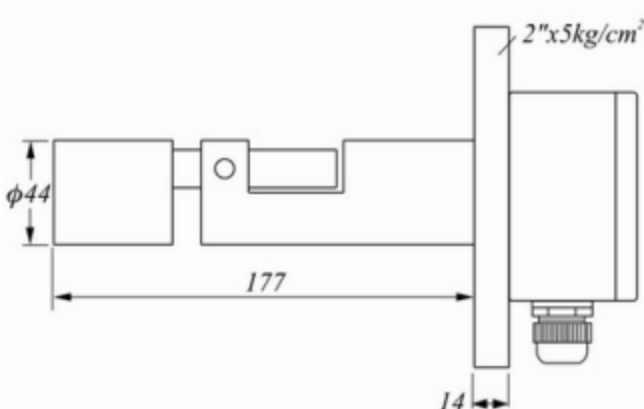
**Flange type UQK-60 side mount**

- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: SUS304
- Sp.Gr.: 0.65
- High temp. type on order



**PP thread UQK-80 side mount**

- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: PP
- Sp.Gr.: 0.7
- Screw size: special order accepted.

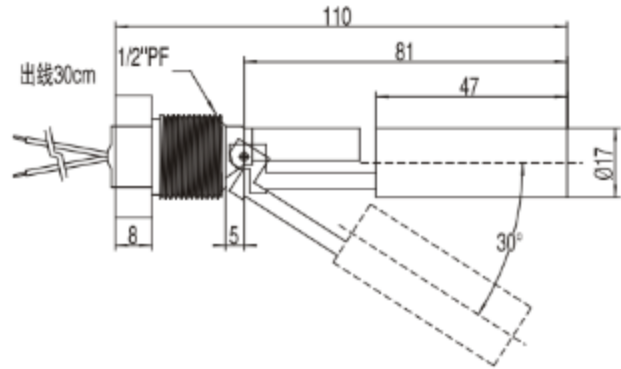


**PP Flanged UQK-81 side mount**

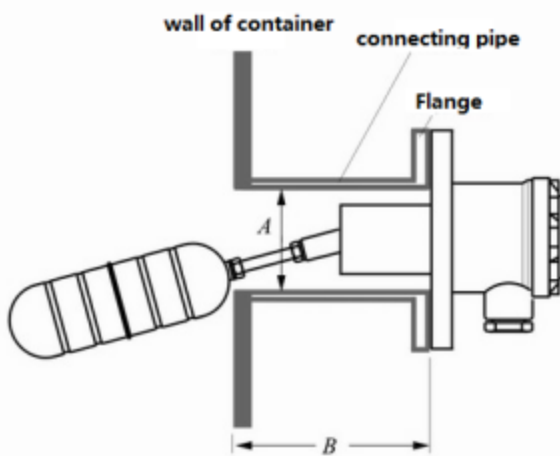
- Contact rate: 5A/250VAC
- Operate temp.: -30~100℃
- Contact Way: SPDT
- Wet Material: PP
- Sp.Gr.: 0.7
- Flange

**UQK-90 Stainless steel Float level switch**

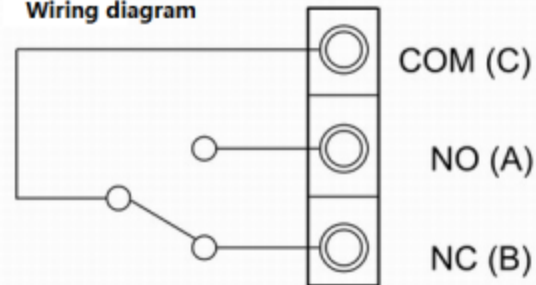
- Model UQK-90
- Contact rate 50W/250VAC SPST
- Wet parts SS304/SS316L
- Measure length 100mm
- Pressure rate 5bar
- Temperature -20~150 C (max. 200 C)
- Process connection 1/2" PF
- Suitable density : 0.9
- Cable PTFE cable length 30cm



**Installation schematic diagram:**



**Wiring diagram**



## 10. Rotating Paddle Level Switch

Rotary paddle level switch is used for solid materials(including powder, massive, granular, gel, etc.)

### 1. Technical parameters

1. Power supply: 220VAC/110VAC/24VAC/24VDC
2. Contact capacity: 250VAC/10A SPDT
3. Power: 4W
4. blade rotation speed: 1RPM
5. Torque : 1.0kg×cm
6. Material Specific Gravity:  $\geq 0.5\text{g/cm}^3$
7. Working temperature:  $-10^{\circ}\text{C}$   $-80^{\circ}\text{C}$ ; Maximum temperature  $400^{\circ}\text{C}$
8. Insulation resistance:  $\geq 100\text{M}\Omega$
9. Dielectric strength: 1500V\*1min
10. IP Grade: IP65
11. Blade Material: SS304
12. Process Pressure:  $< 0.1\text{MPa}$  ( ordinary model ),  $< 0.6\text{MPa}$  for high pressure model is on order.

### Model Selection

Model 1	XK10-□ (for Specific Gravity $< 0.8\text{g/cm}^3$ ), also named small switch	
Connecting Shaft	C	Standard thread type installation
	F	Standard Flange type installation
	Z	Shaft protection tube type
	G	High temperature thread type
	GF	High temperature Flange type
	GZ	High temperature Shaft protection tube type
Blade shape	A	30*100
	B	65*80 decomposable Blades
	X	Double 80*35 Cross Blades
Blade shape:	1	220VAC
	2	24VDC
	3	24VAC

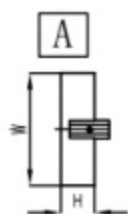
Model 2	XK-3□ (Specific Gravity $> 0.8\text{g/cm}^3$ ), also called big switch	
Connecting Shaft type	0	Standard thread type installation
	1	Standard Flange type installation
	2	Shaft protection tube type
	3	High temperature thread type
	4	High temperature Flange type
	5	High temperature protection tube type
	6	Shaft length adjustable type



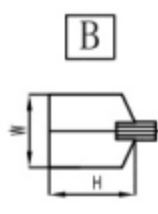
	8	Steel cable type
<b>Blade shape</b>	A	XK30 series: 100*30(W x H); XK10 series 80*35
	B	65*80(W x H)
	C	50*30(W x H)
	D	Sickle type
	E	Folded type
<b>Power Supply</b>	1	220VAC
	2	110VAC
	3	24VAC
	4	24VDC

Remarks: **Blade shape**

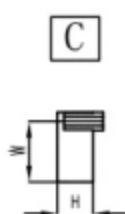
## 2. Pictures and description of different models



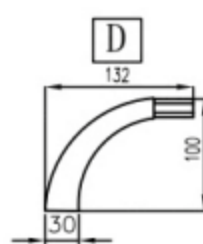
A. 100\*30 (W×H)



B. 65\*80 (W×H)



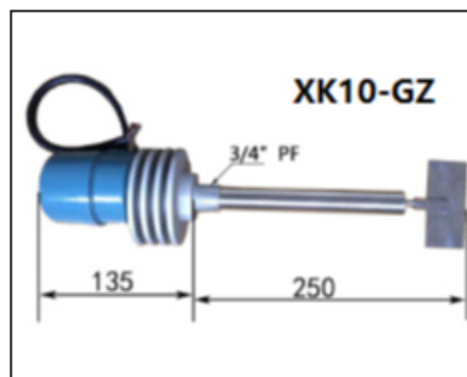
C. 50×30 (W×H)



D. 镰刀型 sickle-shaped

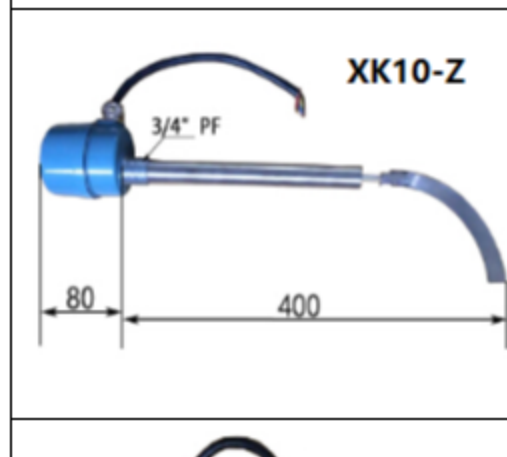


E. 折叠型 folded-type



### XK10-GZ high temperature with protection tube

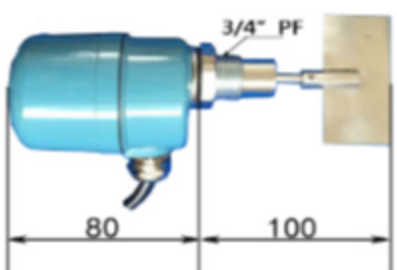

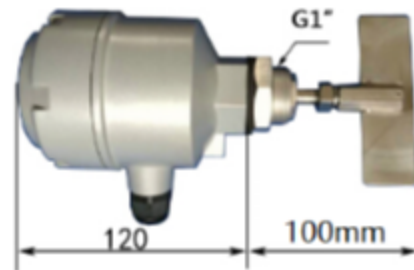
Terminal block	Aluminum Alloy IP65
Power Consumption	4W
Output nodes	5A/250VAC SPDT
Rotation rate	1RPM
Operating temperature	-10~200℃
Specific Gravity	0.5g/cm <sup>3</sup>
Connection	3/4"PF

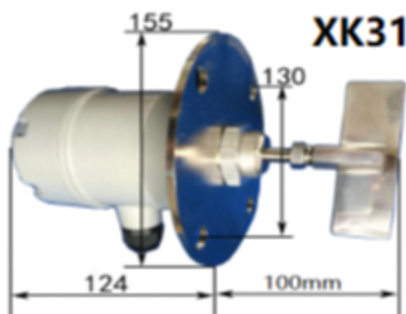
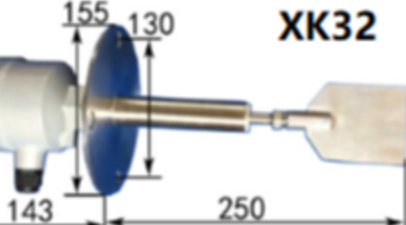
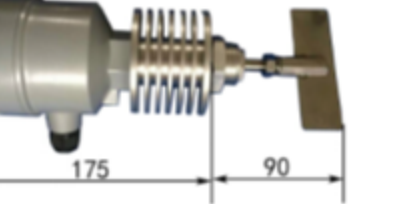
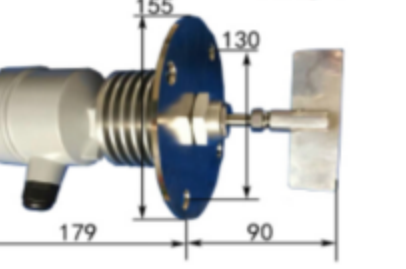
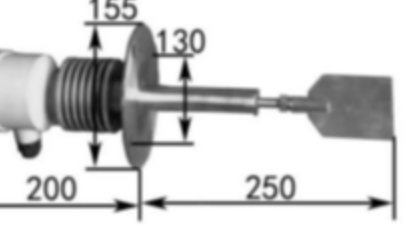


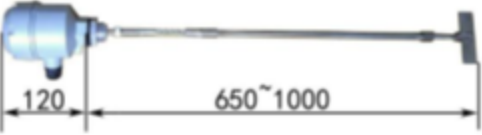
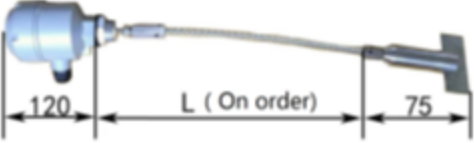
### XK10-Z with shaft's protection tube

Terminal block	Aluminum Alloy IP65
Power Consumption	4W
Output nodes	5A/250VAC SPDT
Rotation rate	1RPM
Operating temperature	-10~80℃
Specific Gravity	0.5g/cm <sup>3</sup>
Connection	3/4"PF

### XK10-G high temperature threaded

	Terminal block Voltage Power Consumption Output nodes Rotation rate Operating temperature Specific Gravity Connection	Aluminum Alloy IP65 AC220V/1A; 24VAC 4W 5A/250VAC SPDT 1RPM -10~200℃ 0.5g/cm <sup>3</sup> 3/4"PF
 <p><b>XK10-C</b></p>	<p align="center"><b>XK10-CA (ordinary threaded type)</b></p> Terminal block Power Consumption Output nodes Rotation rate Operating temperature Specific Gravity Connection	
	<p align="center"><b>XK10-CX (Micro-switch ambient temperature)</b></p> Terminal block Voltage used Power Consumption Output nodes Rotation rate Operating temperature Specific Gravity Connection Torque Voltage resistance Specific Gravity suitable Cable entrance Direction of mounting Protection class	
 <p><b>XK30</b></p>	<p align="center"><b>XK30 (Ordinary threaded)</b></p> Terminal block Power Consumption Output nodes Rotation rate Operating temperature Specific Gravity Connection	

 <p><b>XK31</b></p> <p>Dimensions: 155 (height), 130 (flange diameter), 124 (motor width), 100mm (paddle length)</p>	<p align="center"><b>XK31 (Ordinary Flanged)</b></p> <table border="1"> <tr><td>Terminal block</td><td>Aluminum alloy IP65</td></tr> <tr><td>Power Consumption</td><td>4W</td></tr> <tr><td>Output nodes</td><td>5A/250VAC SPDT</td></tr> <tr><td>Rotation rate</td><td>1RPM</td></tr> <tr><td>Operating temperature</td><td>-10~80℃</td></tr> <tr><td>Specific Gravity</td><td>0.5g/cm<sup>3</sup></td></tr> <tr><td>Connection</td><td>DN65 PN0.6 (or PN10)</td></tr> </table>	Terminal block	Aluminum alloy IP65	Power Consumption	4W	Output nodes	5A/250VAC SPDT	Rotation rate	1RPM	Operating temperature	-10~80℃	Specific Gravity	0.5g/cm <sup>3</sup>	Connection	DN65 PN0.6 (or PN10)
Terminal block	Aluminum alloy IP65														
Power Consumption	4W														
Output nodes	5A/250VAC SPDT														
Rotation rate	1RPM														
Operating temperature	-10~80℃														
Specific Gravity	0.5g/cm <sup>3</sup>														
Connection	DN65 PN0.6 (or PN10)														
 <p><b>XK32</b></p> <p>Dimensions: 155 (height), 130 (flange diameter), 143 (motor width), 250 (paddle length)</p>	<p align="center"><b>XK32 (shaft tube protection)</b></p> <table border="1"> <tr><td>Terminal block</td><td>Aluminum Alloy IP65</td></tr> <tr><td>Power Consumption</td><td>4W</td></tr> <tr><td>Output nodes</td><td>5A/250VAC SPDT</td></tr> <tr><td>Rotation rate</td><td>1RPM</td></tr> <tr><td>Operating temperature</td><td>-10~80℃</td></tr> <tr><td>Specific Gravity</td><td>0.5g/cm<sup>3</sup></td></tr> <tr><td>Connection</td><td>DN65 PN0.6 (Customized)</td></tr> </table>	Terminal block	Aluminum Alloy IP65	Power Consumption	4W	Output nodes	5A/250VAC SPDT	Rotation rate	1RPM	Operating temperature	-10~80℃	Specific Gravity	0.5g/cm <sup>3</sup>	Connection	DN65 PN0.6 (Customized)
Terminal block	Aluminum Alloy IP65														
Power Consumption	4W														
Output nodes	5A/250VAC SPDT														
Rotation rate	1RPM														
Operating temperature	-10~80℃														
Specific Gravity	0.5g/cm <sup>3</sup>														
Connection	DN65 PN0.6 (Customized)														
 <p><b>XK33</b></p> <p>Dimensions: 175 (motor width), 90 (paddle length)</p>	<p align="center"><b>XK33 (high temperature threaded)</b></p> <table border="1"> <tr><td>Terminal block</td><td>Aluminum Alloy IP65</td></tr> <tr><td>Power Consumption</td><td>4W</td></tr> <tr><td>Output nodes</td><td>5A/250VAC SPDT</td></tr> <tr><td>Rotation rate</td><td>1RPM</td></tr> <tr><td>Operating temperature</td><td>-10~200℃</td></tr> <tr><td>Specific Gravity</td><td>0.5g/cm<sup>3</sup></td></tr> <tr><td>Connection</td><td>G1"/G1-1/2" /G3/4"</td></tr> </table>	Terminal block	Aluminum Alloy IP65	Power Consumption	4W	Output nodes	5A/250VAC SPDT	Rotation rate	1RPM	Operating temperature	-10~200℃	Specific Gravity	0.5g/cm <sup>3</sup>	Connection	G1"/G1-1/2" /G3/4"
Terminal block	Aluminum Alloy IP65														
Power Consumption	4W														
Output nodes	5A/250VAC SPDT														
Rotation rate	1RPM														
Operating temperature	-10~200℃														
Specific Gravity	0.5g/cm <sup>3</sup>														
Connection	G1"/G1-1/2" /G3/4"														
 <p><b>XK34</b></p> <p>Dimensions: 155 (height), 130 (flange diameter), 179 (motor width), 90 (paddle length)</p>	<p align="center"><b>XK34 (high temperature flanged)</b></p> <table border="1"> <tr><td>Terminal block</td><td>Aluminum Alloy IP65</td></tr> <tr><td>Power Consumption</td><td>4W</td></tr> <tr><td>Output nodes</td><td>5A/250VAC SPDT</td></tr> <tr><td>Rotation rate</td><td>1RPM</td></tr> <tr><td>Operating temperature</td><td>-10~200℃</td></tr> <tr><td>Specific Gravity</td><td>0.5g/cm<sup>3</sup></td></tr> <tr><td>Connection</td><td>DN65 PN0.6 (or PN10)</td></tr> </table>	Terminal block	Aluminum Alloy IP65	Power Consumption	4W	Output nodes	5A/250VAC SPDT	Rotation rate	1RPM	Operating temperature	-10~200℃	Specific Gravity	0.5g/cm <sup>3</sup>	Connection	DN65 PN0.6 (or PN10)
Terminal block	Aluminum Alloy IP65														
Power Consumption	4W														
Output nodes	5A/250VAC SPDT														
Rotation rate	1RPM														
Operating temperature	-10~200℃														
Specific Gravity	0.5g/cm <sup>3</sup>														
Connection	DN65 PN0.6 (or PN10)														
 <p><b>XK35</b></p> <p>Dimensions: 155 (height), 130 (flange diameter), 200 (motor width), 250 (paddle length)</p>	<p align="center"><b>XK35 (high temperature with protect tube)</b></p> <table border="1"> <tr><td>Terminal block</td><td>Aluminum Alloy IP65</td></tr> <tr><td>Power Consumption</td><td>4W</td></tr> <tr><td>Output nodes</td><td>5A/250VAC SPDT</td></tr> <tr><td>Rotation rate</td><td>1RPM</td></tr> <tr><td>Operating temperature</td><td>-10~200℃</td></tr> <tr><td>Specific Gravity</td><td>0.5g/cm<sup>3</sup></td></tr> <tr><td>Connection</td><td>DN65 PN0.6 or PN10</td></tr> </table>	Terminal block	Aluminum Alloy IP65	Power Consumption	4W	Output nodes	5A/250VAC SPDT	Rotation rate	1RPM	Operating temperature	-10~200℃	Specific Gravity	0.5g/cm <sup>3</sup>	Connection	DN65 PN0.6 or PN10
Terminal block	Aluminum Alloy IP65														
Power Consumption	4W														
Output nodes	5A/250VAC SPDT														
Rotation rate	1RPM														
Operating temperature	-10~200℃														
Specific Gravity	0.5g/cm <sup>3</sup>														
Connection	DN65 PN0.6 or PN10														

 <p><b>XK36</b></p> <p>120      650~1000</p>	<b>XK36 (shaft length is adjustable)</b>	
	Terminal block	Aluminum Alloy IP65
	Power Consumption	4W
	Output nodes	5A/250VAC SPDT
	Rotation rate	1RPM
	Operating temperature	-10~80℃
	Specific Gravity	0.5g/cm <sup>3</sup>
	Connection	G1"/G1-1/2" /G3/4"
 <p><b>XK38</b></p> <p>120      L ( On order)      75</p>	<b>XK38 (Steel cable)</b>	
	Terminal block	Aluminum Alloy IP65
	Power Consumption	4W
	Output nodes	5A/250VAC SPDT
	Rotation rate	1RPM
	Operating temperature	-10~80℃
	Specific Gravity	0.5g/cm <sup>3</sup>
	Connection	G1"/G1-1/2" /G3/4"