

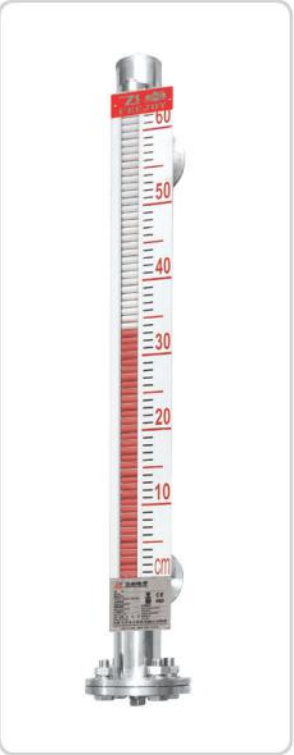
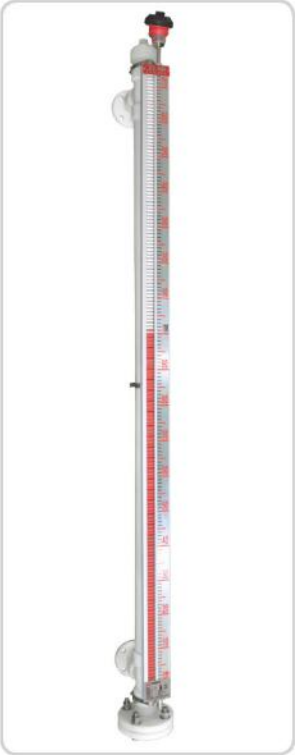


# BI

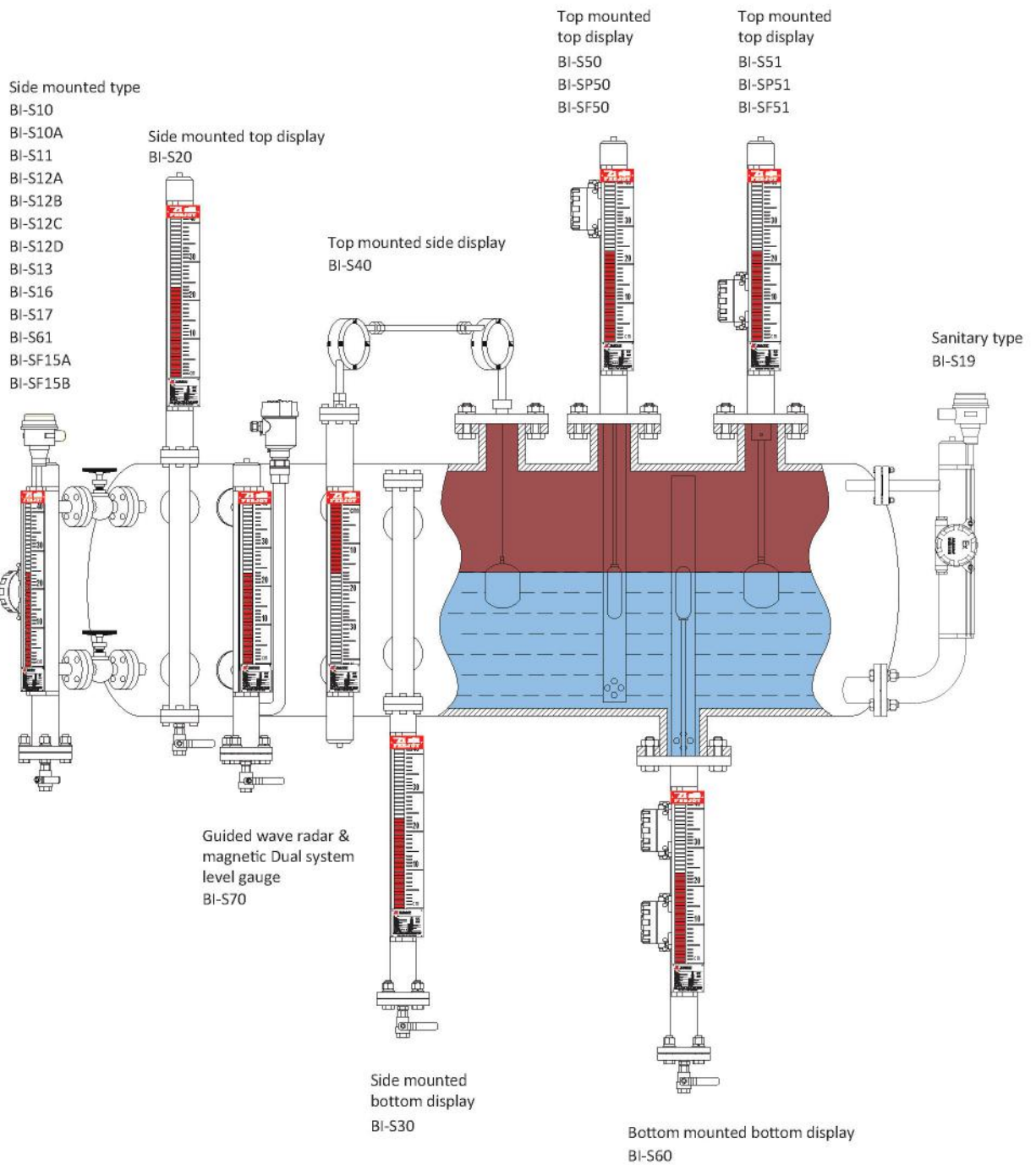
## Magnetic level gauge

Magnetic level gauge is installed on the side or on the top of a tank to give an uninterrupted and immediate indication of liquid in the tank no matter the tank is open or closed. The indicator consists of magnetic color chips. When the magnetic floating ball in the tube rises with the liquid level, the magnetic color chips will turn over from one color to another. The gauge can be widely applied in various types of liquid like oil, water, chemical, etc.

### Product Series



# Product list



## BI- Basic models for selection

Code of materials: S: S: 304 / S6: 316L / P: PP / PR: PPR / C: PVC / UC: UPVC / CC: CPVC / SF: 304 lined with PTFE / SP: 304 lined with PP / SC: lined with PVC

Code of basic types: 1: side mounted with side display / 2: side mounted with top display / 3: side mounted with bottom display / 4: float ball top mounted with side display / 5: top mounted / 6: bottom mounted / 7: guided wave radar & magnetic dual system level gauge

Code of types:

Code	Medium&condiations			Flange connection		Wetted material	Installation
	Temperature (°C)	Pressure MPa	Density g/cm <sup>3</sup>	Diameter DN(mm)	Pressure grade PN(MPa)		
S10	-20~80	1.0	0.5~2.0	25	1.0, 2.5	304	Side mounted side display
S10A	-20~200	2.5					
S11	≤ 420	2.5	0.5~2.0	25	2.5	304 316	
S12A	≤ 450	4.0	0.5~2.0	25	4.0		
S12B	≤ 450	6.4	0.45~2.0	25	6.4		
S12C	≤ 450	10.0	0.45~2.0	25	10.0		
S12D	≤ 520	16.0	0.45~2.0	25	16.0		
S13	-80~100	4.0	0.38~1.2	25	4.0		
S14	-196~100	4.0	0.38~1.2	25	4.0		
S16	≤ 250	4.0	0.4~2.0	20	4.0		
S17	-20~200	1.6	≥ 0.6	20	1.0		
S19	-20~150	0.6	0.9~1.2	25	0.6		
SP10 SC10	-20~80	0.6	0.6~2.0	25	1.0	304 lined with PP/PVC	
SF15A	-20~200	2.5	0.5~2.0	25	1.6, 2.5	304+PTFE	
SF15B	-20~200	2.5	0.5~2.0	25	1.6, 2.5		
P10 C10	-20~50	0.4	0.5~2.0	25	0.1	PP/PVC	
UC10	-20~60	0.4	0.5~2.0	25	1.0	UPVC	
S20	-20~200	4.0	0.65~2.0	25	4.0	304	Side mounted top display
S30	-20~200	4.0	0.65~2.0	25	4.0	316	Side mounted low display
S40	-20~200	1.6	0.6~2.0	200	1.6	304	Top mounted side display
S50	-40~200	4.0	0.4~1.2	100	4.0	304 316	Top mounted top display
UC50	-20~80	1.0	0.65~2.0	80	1.0	UPVC	
SP50	-20~80	1.0	0.65~2.0	100	1.0	PPR	
SF50	-30~200	2.0	0.65~2.0	100	1.0	PTFE	
S51	-30~200	2.5	0.5~2.0	150	2.5	304 316	
S52	-40~200	4.0	≥ 0.35	80	4.0		
S60	-40~200	4.0	0.4~1.2	100	4.0		
S70	-40~200	2.5	0.35~2.0	25	2.5		
S80	-196~520	25	0.35~2.0	25, 40	2.5~25		
S90	-40~200	2.5	0.35~2.0	25	2.5		

# Model Selection

## Magnetic level gauge

The basic type can be selected from the above table

Flange/Thread Size		Flange/Thread Specifications	
A: 3/8" (10A)	I: 4" (100A)	L: 5kg/cm <sup>2</sup>	U: PN0.6 (6Bar)
B: 1/2" (15A)	J: 5" (125A)	M: 10kg/cm <sup>2</sup>	V: PN1.0 (10Bar)
C: 3/4" (20A)	K: 6" (150A)	N: 150Lbs	W: PN1.6 (16Bar)
D: 1" (25A)	S: Special Specifications	O: 300Lbs	X: PN2.5 (25Bar)
E: 1-1/2" (40A)		P: PT	Y: PN4.0 (40Bar)
F: 2" (50A)		Q: PF	Z: PN6.3 (63Bar)
G: 2-1/2" (65A)		F: NPT	S: Special Specifications
H: 3" (80A)		T: GAS	

Step 1: select junction box for remote display  
 0: No signal output; 1: For general terminal box; 2: Explosion-proof junction box;  
 3: Intelligent display terminal box  
 Step 2: select output signal  
 A: With RF Capacitance / Admittance transmitter output 4 ~ 20mA two-wire system  
 B: With guided wave radar transmitter output 4 ~ 20mA two-wire system  
 R: With resistance transmitter, output 4 ~ 20mA two-wire system  
 J: With magnetostrictive transmitter, output 4 ~ 20mA two-wire system  
 K: With magnetostrictive transmitter, output 4 ~ 20mA three-wire  
 L: With magnetostrictive transmitter, output 4 ~ 20mA four-wire system

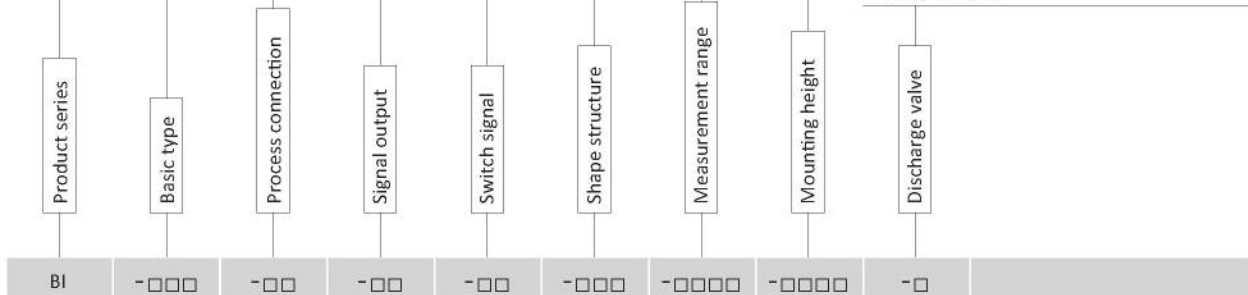
Step 1:  
 Switching the number of options, the corresponding Arabic numerals to 0-6  
 Step 2:  
 0: No  
 A: MS-01 Simple reed switch contact capacity 1A / 250VAC  
 B: MS-02 standard type magnetic reed switch contact capacity 1A / 250VAC  
 C: MS-02E explosion-proof magnetic reed switch contact capacity 1A / 250VAC  
 D: MS-03T / EX cam-driven magnetic level switch 5A / 250VAC

Step 1: shape structure  
 1. Standard (flat Gaijia Se head / double flange stopper head)  
 2. Double flange type (upper and lower ends are all dual flange stopper head)  
 3. Dips (body heat pipe steam jacketed mix)  
 4. Electric heating (electric heating tube body)  
 5. Flat cover plug type (top mounted only)  
 6. Falan Se head type (top mounted only)  
 7. Anti-wave tube (top loading / bottom mounted only)  
 8. Vacuum jacket  
 Step 2: operating pressure  
 1: 0.6MPa; 2: 1.0MPa; 3: 1.6MPa; 4: 2.0MPa; 5: 2.5MPa; 6: 4.0MPa;  
 7: 6.4MPa; 8: 10.0MPa; 9: 16.0MPa  
 Step 3: operating temperature  
 1: -20~100°C ; 2: -20~180°C ; 3: -20~400°C ; 4: -80~100°C ; 5: -196~100°C

Unit: mm

Unit: mm, (Side-mounted side without this option)

W: No; Y: Have



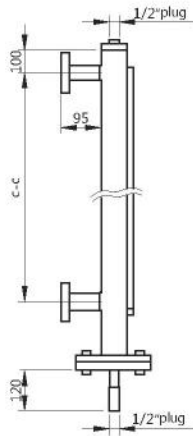
Special specifications such as: electric heating / Smart Transmitter / magnetostrictive transmitter / cam switches, etc., please consult the Company.

## Example of model selection

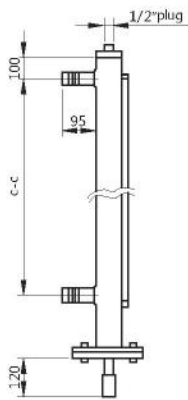
### BI-S10-CX-1R-2B-121-1500-Y

It represents SUS304 material, side-mounted installation, connection specifications DN20PN2.5MPa RF, 4-20mA remote transmission and 2 limit switches, Standard type, operating pressure of 1.0MPa, measuring range of 1500 mm, With drain valve, Operating temperature -20~100°C

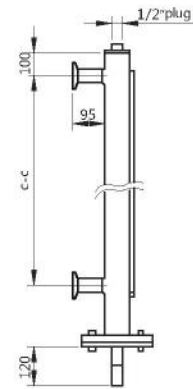
## Structure of basic modes



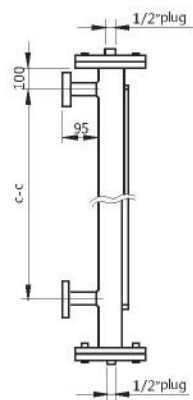
Basic



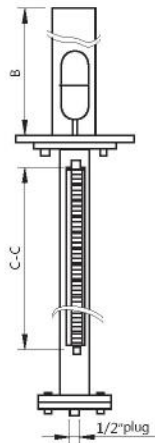
Thread mount



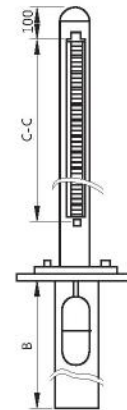
Health chuck type



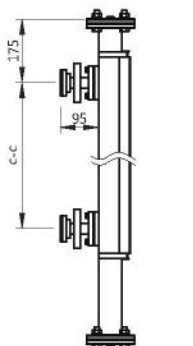
Down double flange



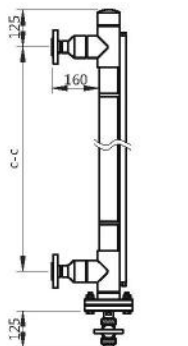
Bottom mount



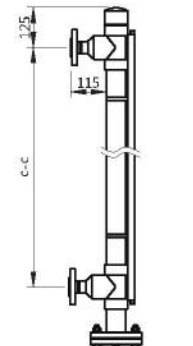
Top-loading type



Stainless steel PTFE lined

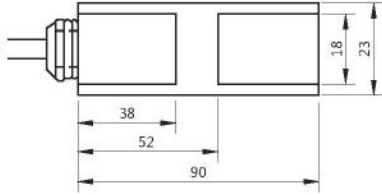


CPVC Material

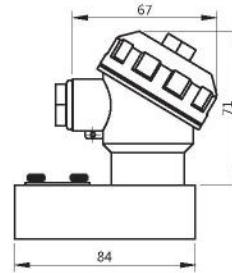


PP Material

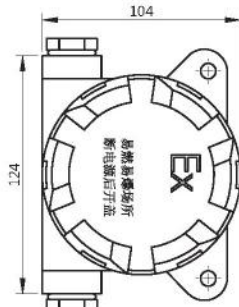
## Size of Switches



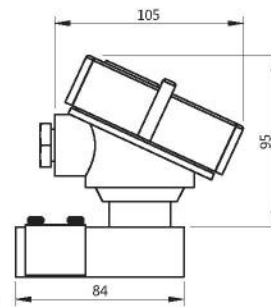
Model: MS-01  
 Contact Part: magneticreed switch  
 Contact Capacity: 1A/250VAC/220VDC  
 Working Temperature: -30~150°C  
 Action Form: keeping SPDT  
 Protection Level: IP 67  
 Qualification specification: 1m high temperature silicone line



Model: MS-02  
 Contact Part: magneticreed switch  
 Contact Capacity: 1A/250VAC/220VDC  
 Working Temperature: -30~150°C  
 Action Form: keeping SPDT  
 Junction Box Material: aluminum alloy  
 Protection Level: IP 65

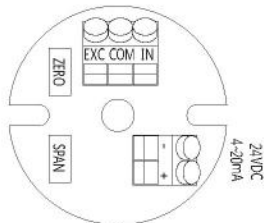
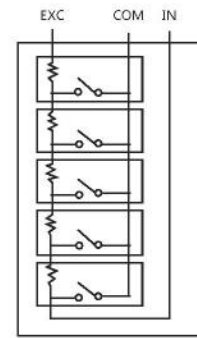
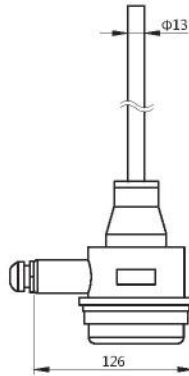
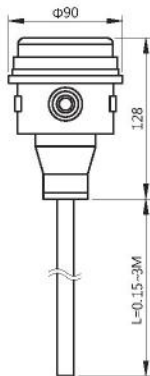


Model: MS-03T  
 Contact Part: magneticreed switch  
 Contact Capacity: 5A/250VAC/220VDC  
 Working Temperature: -30~150°C  
 Action Form: keeping SPDT  
 Junction Box Material: aluminum alloy  
 Protection Level: IP 65



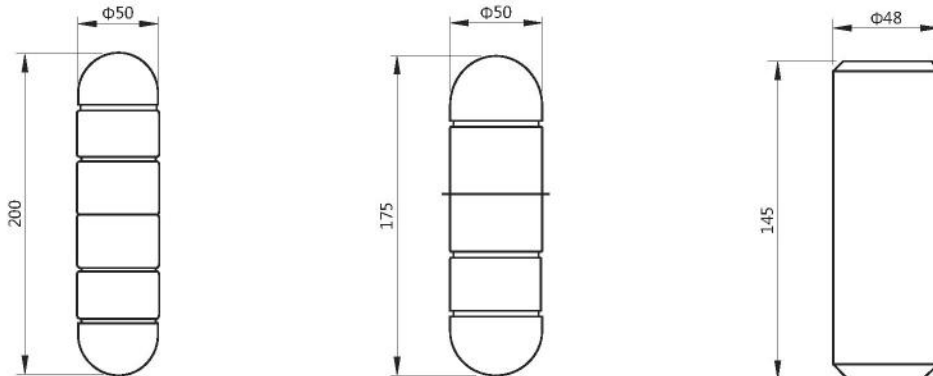
Model: MS-02E  
 Contact Part: magneticreed switch  
 Contact Capacity: 1A/250VAC/220VDC  
 Working Temperature: -30~150°C  
 Action Form: keeping SPDT  
 Junction Box Material: aluminum alloy  
 Protection Level: IP 65

## FCI Remote configuration and parameter level transmitter

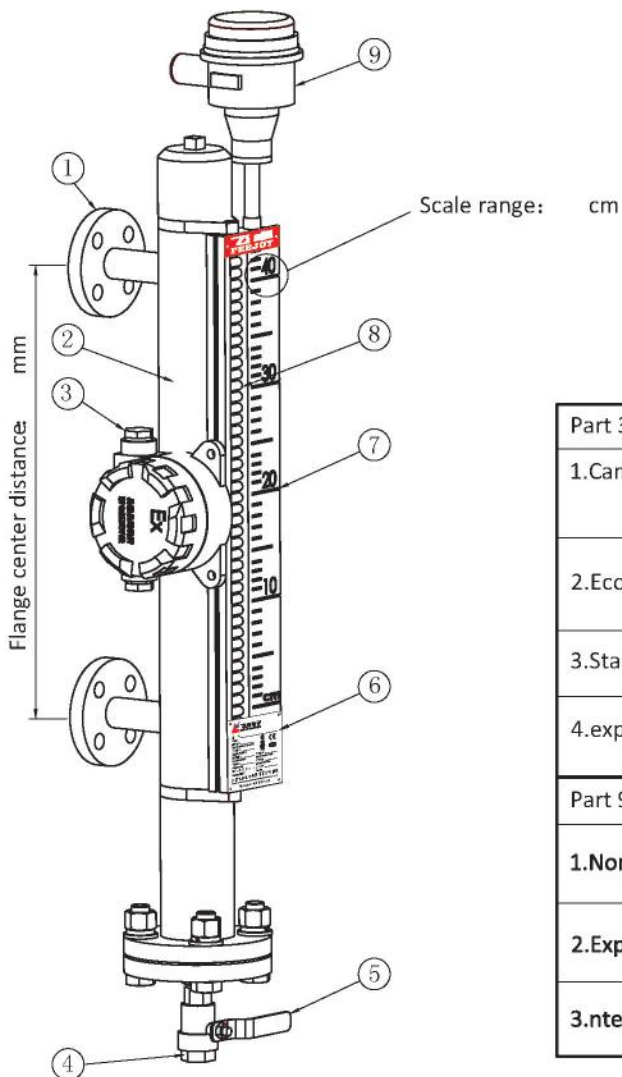


Junction box: aluminum alloy IP65  
 Rod Material: SUS304/316  
 Rod Diameter:  $\Phi 13$  ,  $\Phi 20$   
 Resolution: 10mm , 8mm , 5mm  
 Output: 4 ~ 20mA two-wire system  
 Working Temperature: -30~150°C  
 Voltage: 24VDC  
 Length : 200 ~ 6000mm

## Float Size



## Structure details of basic magnetic level gauge



- ① Process connection flange
- ② Primary duct
- ③ Level switch
- ④ Safety plug
- ⑤ Drain valve L
- ⑥ Name board
- ⑦ Liquid level gauge
- ⑧ Red and white magnetic indicating column
- ⑨ Junction box

Part 3, according to the need to select, Choose one of four :

1. Cam type: MS-03T



2. Economic type: MS-01



3. Standard type: MS-02



4. explosion proof type: MS-02E



Part 9, according to the need to select, Choose one of three :

1. Normal junction box



2. Explosion proof junction box



3. Intelligent display junction box

