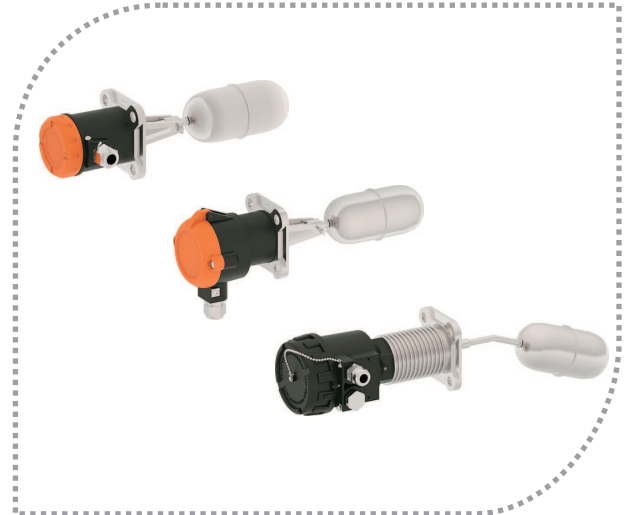


ELB level switches are used for measuring and checking level of tank. It is preferred in food, ship machine, boiler and storage tank applications with its advantages such as resistance to high temperature, long life contact structure, which is operable in each, vertical or horizontal connection.

**Working Principle:**

Microswitch changes direction with the movement, occurring after magnet in float arm, moving by changing liquid level, affects magnet inside body, magnetically obtained contact information is assessed by transferring into applications such as pump, solenoid valve etc.



**Areas of Application :**

Food, ship, machine, boiler and storage tanks...

**Technical Specifications :**

MODEL	ELB 10 ELB 10a Economical
Mounting Type	Horizontal
Flange Material	316 Stainless Steel
Float Material	316 Stainless Steel
Min. Density	0.7 g/cm <sup>3</sup> Standard
Case Material	Aluminum Injection
Flange Dimension	92 mm x 92 mm
Max. Pressure/Temp.	16 bar / 150 °C
Ambient Temperature	(-) 20 °C / (+) 80 °C
Protection Class	IP 65
Weight	1.8 kg...2.5 kg
Float Test Pressure	25 bar

MODEL	ELB 11 ELB 12 Standard Long Rod
Mounting Type	Horizontal
Flange Material	316 Stainless Steel
Float Material	316 Stainless Steel
Min. Density	0.7 g/cm <sup>3</sup> Standard
Case Material	Aluminum Injection, Painted
Flange Dimension	92 mm x 92 mm
Max. Pressure/Temp.	25 bar / 250 °C
Ambient Temperature	(-) 20 °C / (+) 80 °C
Protection Class	IP 65
Weight	1.8 kg...2.5 kg
Float Test Pressure	40 bar

**ELB LEVEL SWITCH (SIDE MOUNTING)**

- ELB 10 , ELB 10a , ELB 10x, ELB 10h**
- ELB 11 , ELB 12**
- ELB 21 , ELB 22**
- ELB 31 , ELB 41**
- ELB 51 , ELB 61 , ELB 71**

**Advantages :**

- \* Max. 400 bar working pressure
- \* Max. 400 °C working temperature
- \* The apparatus diversity



**Technical Specifications :**

MODEL	ELB 10x Complete Stainless Steel	ELB 10h High Pressure
Mounting Type	Horizontal	Horizontal
Flange Material	316 Stainless Steel	316 Stainless Steel
Float Material	316 Stainless Steel	316 Stainless Steel
Min. Density	0.7 g / cm <sup>3</sup> Standard	0.85 g / cm <sup>3</sup> Standard
Case Material	304 Stainless Steel	Aluminum Injection
Flange Dimension	92 mm x 92 mm	Flange PN 100
Max. Pressure/Temp.	16 bar / <b>150°C</b>	100 bar / <b>150°C</b>
Ambient Temperature	(-) 20 °C / (+) 80 °C	(-) 20 °C / (+) 80 °C
Protection Class	IP 65	IP 65
Weight	3.5 kg	3,1 kg
Float Test Pressure	40 bar	160 bar

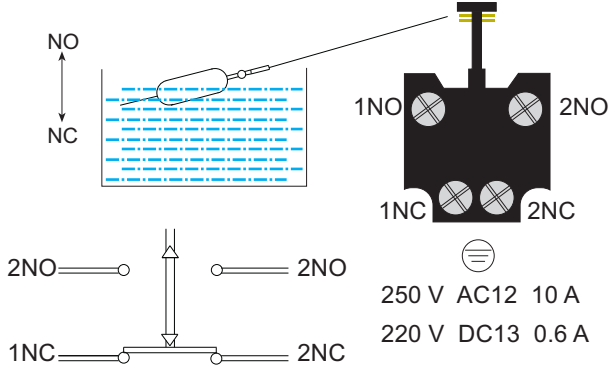
MODEL	ELB 21 L Type Rod	ELB 22 L Type Rod	ELB 31 Adjustable	ELB 61	ELB 71 For hot oil
Mounting Type	Horizontal			Horizontal	Horizontal
Flange Material	316 Stainless Steel			316 Stainless Steel	316 Stainless Steel
Float Material	316 Stainless Steel			316 Stainless Steel	316 Stainless Steel
Min. Density	0.7 g / cm <sup>3</sup>			0.75 g / cm <sup>3</sup>	0.75 g/cm <sup>3</sup>
Case Material	Aluminum Injection, Painted			Aluminum Injection	Aluminum Injection, Painted
Flange Dimension	92 mm x 92 mm			92 x 92 mm	92 mm x 92 mm
Max. Pressure/Temp.	25 bar / <b>250 °C</b>			16 bar / <b>150°C</b>	16 bar / <b>400 °C</b>
Ambient Temperature	(-) 20 °C / (+) 80 °C			-20 / +80 °C	(-) 20 °C / (+) 80 °C
Protection Class	IP 65			IP 65	IP 65
Weight	1.8 kg....2.5 kg			2.5 kg	1.8 kg....2.5 kg
Float Test Pressure	40 bar			25 bar	40 bar

MODEL	ELB 41 Economical Mini
Mounting Type	Horizontal
Record and Nut Material	Brass
Float Material	304 Stainless Steel
Min. Density	0.80 g / cm <sup>3</sup>
Case Material	Steel Sheet, Painted
Connection	1" Male Thread
Max. Pressure/Temp.	7 bar / 160 °C
Ambient Temperature	(-) 20 °C / (+) 80 °C
Protection Class	IP 40
Weight	1.2 kg
Float Test Pressure	16 bar

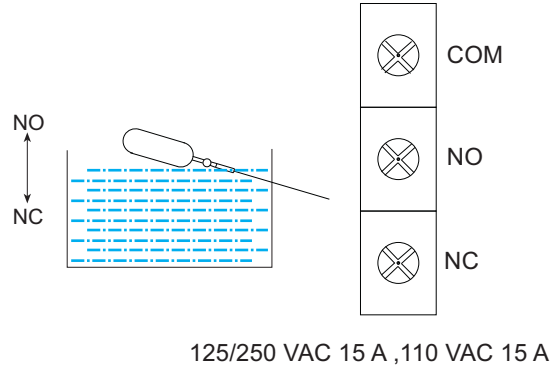
MODEL	ELB 51 Pneumatic Proportional Output
Mounting Type	Vertical
Flange Material	316 Stainless Steel
Float Material	316 Stainless Steel
Min. Density	0.7 g / cm <sup>3</sup>
Case Material	Aluminum Injection, Painted
Flange Dimension	92 mm x 92 mm
Max. Pressure/Temp.	25 bar / <b>250 °C</b>
Ambient Temperature	(-) 20 °C / (+) 80 °C
Protection Class	IP 65
Weight	1.75 kg
Float Test Pressure	40 bar

**Electrical and Pneumatic Connection:**

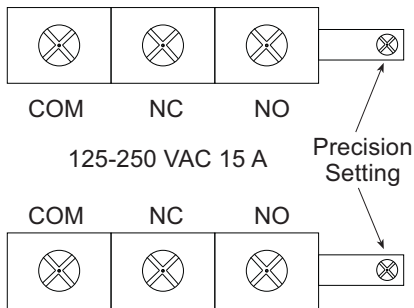
**For ELB 11 / 12 / 21 / 22 / 31**



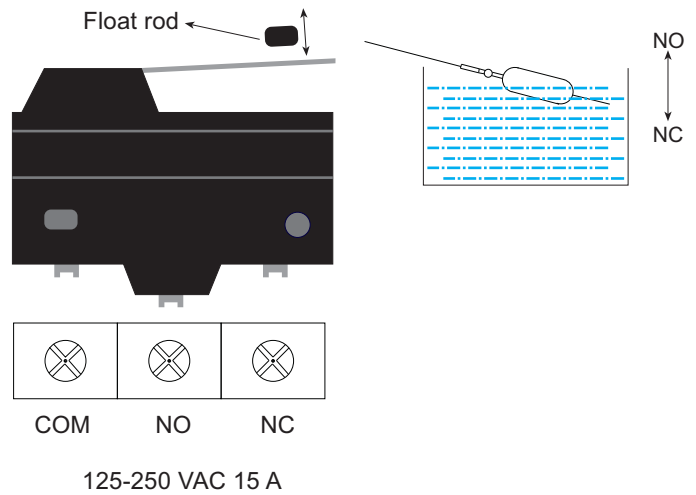
**For ELB 10 / 10a / 10h / 10x / 61**



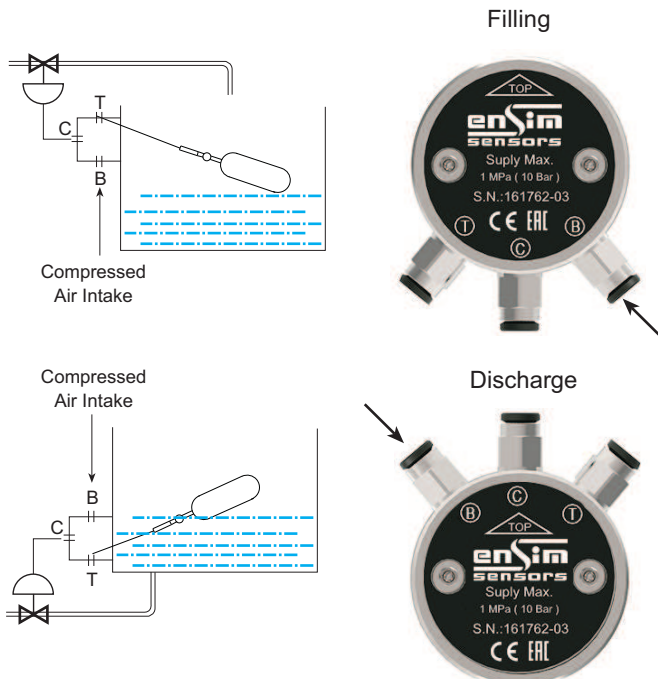
**For ELB 41**



**For ELB 71**



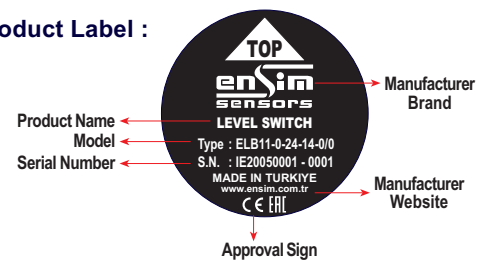
**For ELB 51**



Air Input (bar)	Control Output (bar)	
	Min.	Max.
2	0,25	1,5
4	0,6	3,1
6	1,1	4,8
8	1,8	6,5
10	2,5	8,3

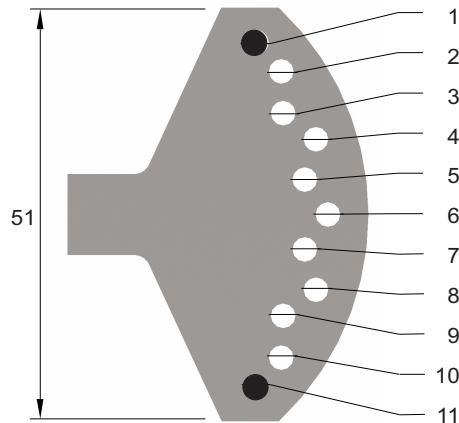
\*Flow Rate 3.5 -6.0 NI / dk

**Product Label :**



### Adjusting Apparatus

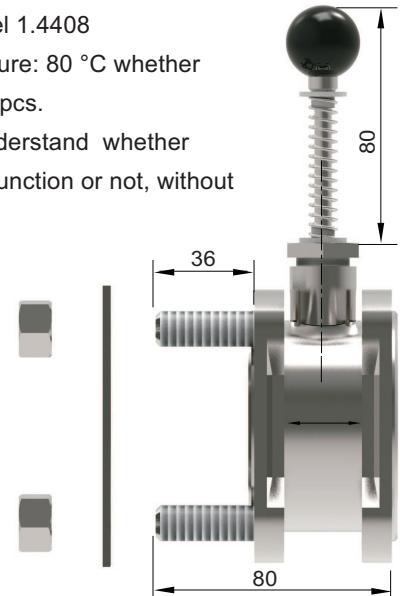
Material: Stainless Steel 1.4571  
11 Holes



### Test Apparatus

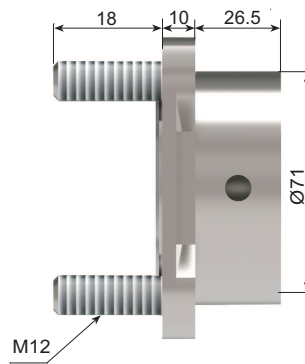
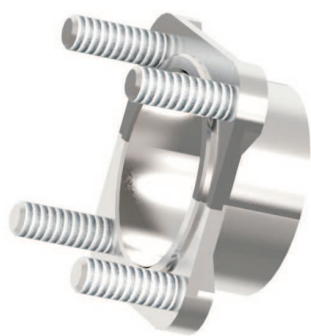
Material: Stainless Steel 1.4408  
Max. Working Temperature: 80 °C whether  
Bolt: M12 x 1.5 mm<sup>2</sup>, 4 pcs.

It is used in order to understand whether level switch makes its function or not, without discharging tank.



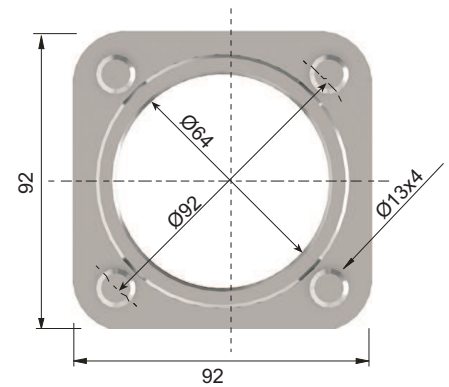
### Counter Flange

Material: Stainless Steel 1.4408  
Bolt: M12 x 1.5 mm<sup>2</sup> 4 pcs.



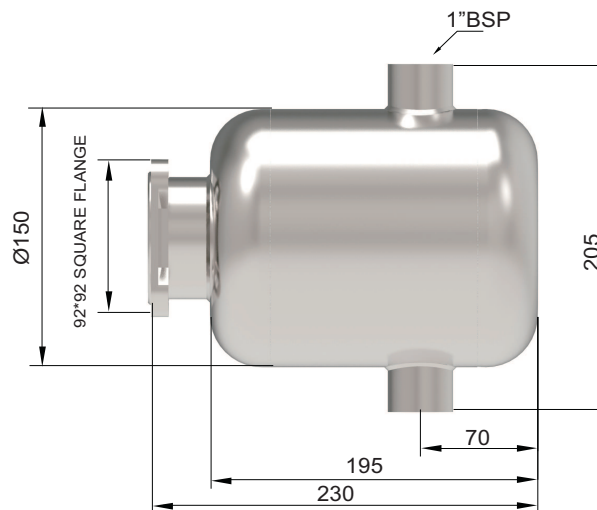
### Flange

Material: Stainless Steel 1.4571  
Measurement: 92 mm x 92 mm Square Type  
Holes Diameter: Ø13 mm 4 Holes  
Opt: DN 150, Special flange up to PN 100



### External Tank

Material: Stainless Steel 1.4571  
Connection: 92 mm x92 mm. Square Flange  
Process Connection: 1" BSP Opt. Flange  
Weight: 2.6 kg  
It can be used as feeding device.  
With bolt, nut and washers.



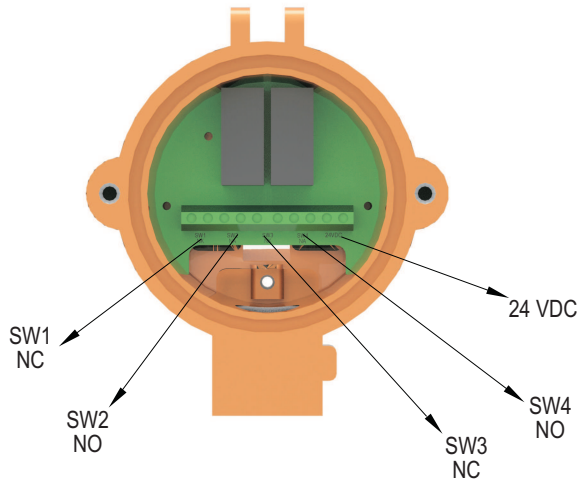
**Contact Apparatus**

ELB level switch has four contacts and one electronic card in it, that you can take signals freely from each other. The contact can be manufactured as NC or NO according customer needs.

Power Supply : 24 VDC

Output : 2 x NO + 2 x NC Relay

Product Working Temperature: Max. 100 °C

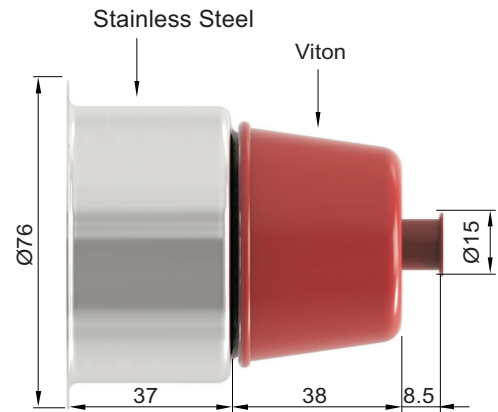


**Protective Bellows Apparatus**

Metal Part: Stainless Steel 1.4571

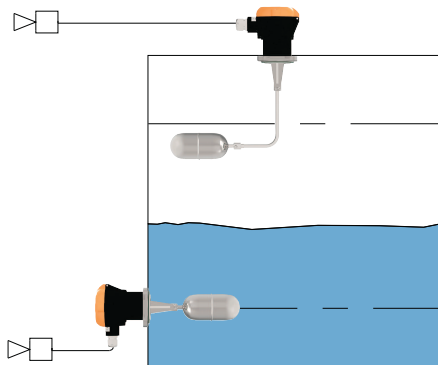
Rubber Part: Viton 200 °C

The apparatus are used in order to enable operation of level switch in the tanks, wich contains particle inside.

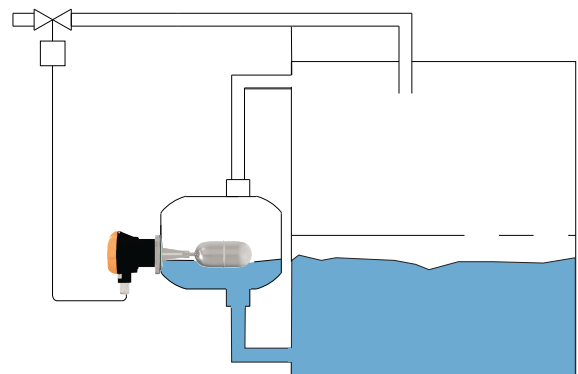


**Application Samples:**

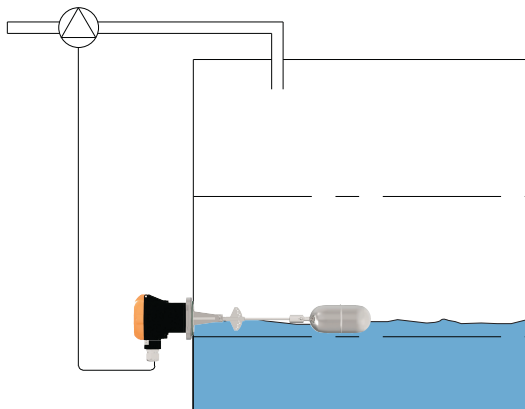
**Min. or Max. Control**



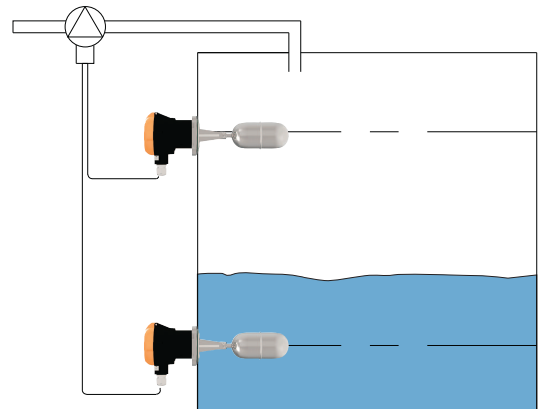
**With External Apparatus**



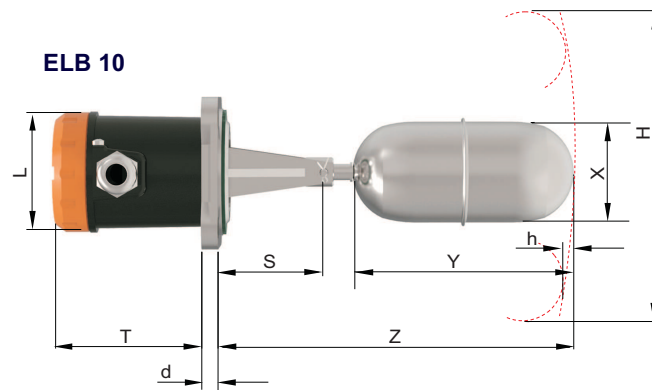
**Valve and Pump Control**



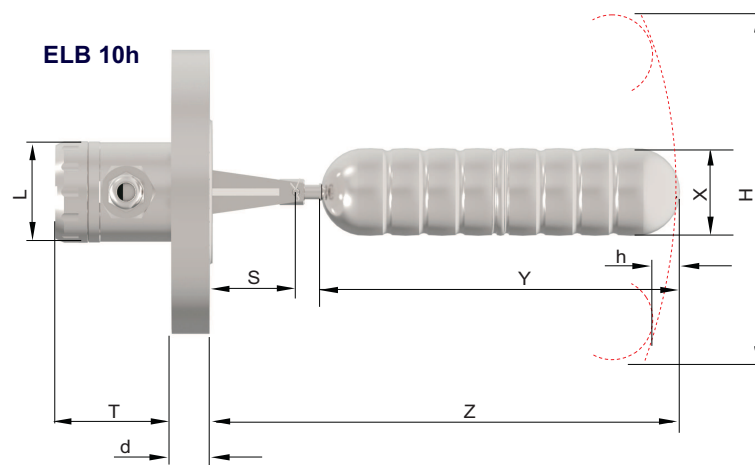
**Pump Control**



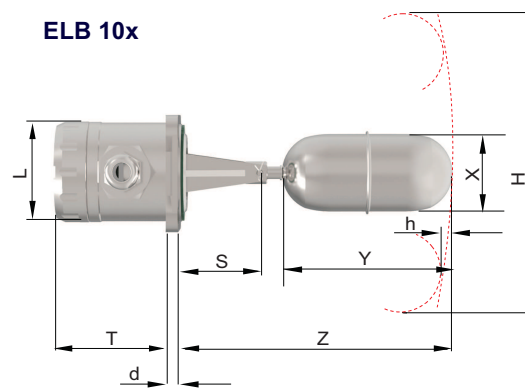
MODEL	ELB 10
Z	205
T	91
S	57.5
L	75
Y	140
X	64
H	127
h	4
d	10



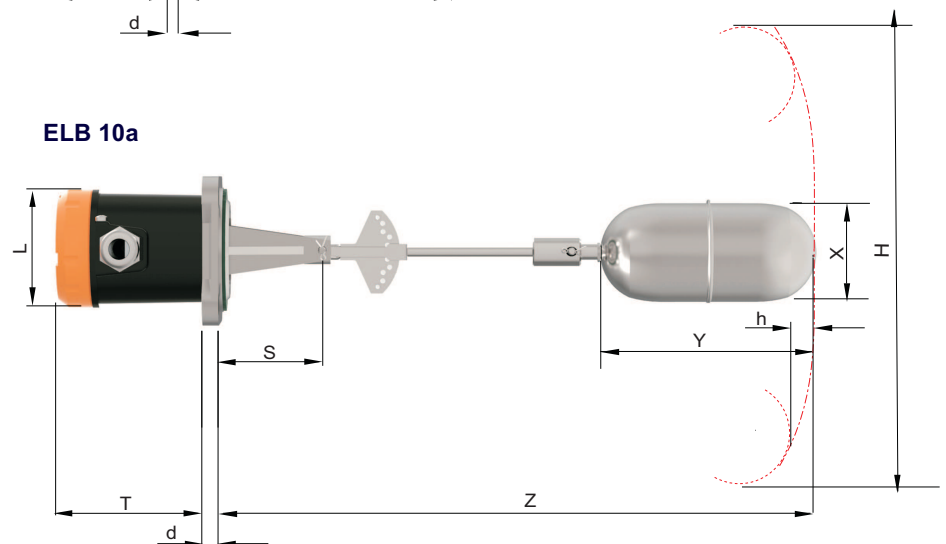
MODEL	ELB 10h
Z	322
T	91
S	57.5
L	75
Y	242
X	64
H	180
h	4
d	26



MODEL	ELB 10x
Z	205
T	91
S	57.5
L	75
Y	140
X	64
H	127
h	4
d	10

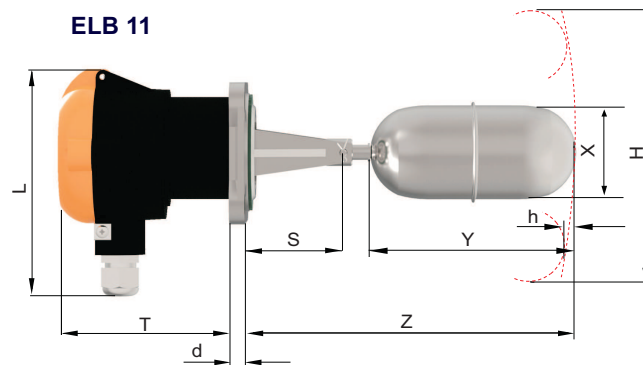


MODEL	ELB 10a (I and II Between the holes)
Z	355
T	91
S	57.5
L	75
Y	140
X	64
H	424
h	73
d	10

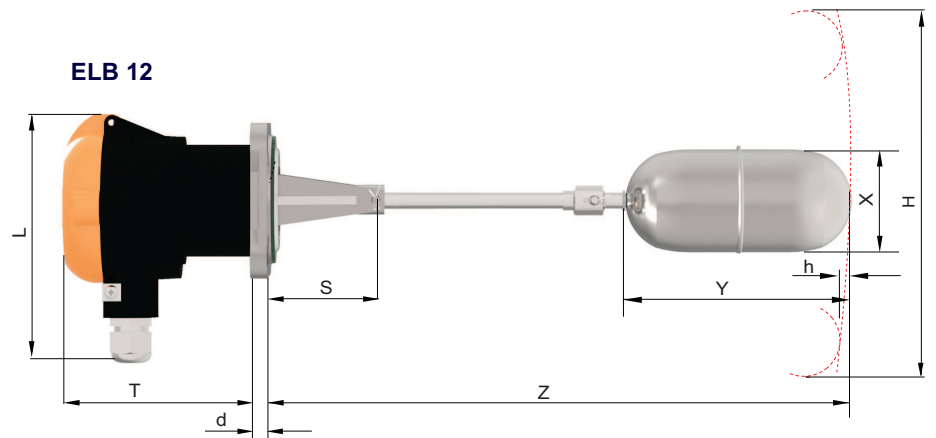


All dimensions are stated as mm.

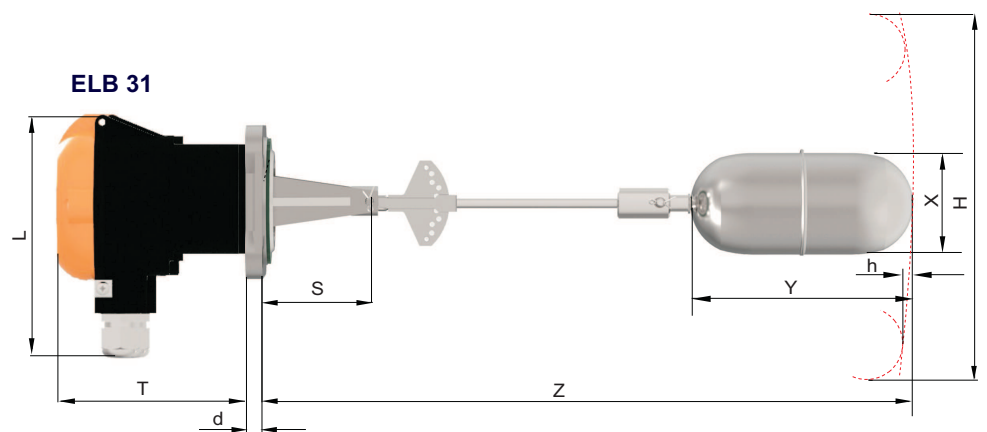
MODEL	ELB 11
Z	225
T	110
S	57.5
L	142
Y	140
X	64
H	127
h	5
d	10



MODEL	ELB 12		
Z	500	750	1000
T	110	110	110
S	57.5	57.5	57.5
L	142	142	142
Y	140	140	140
X	64	64	64
H	260	380	501
h	12	19.5	27
d	10	10	10

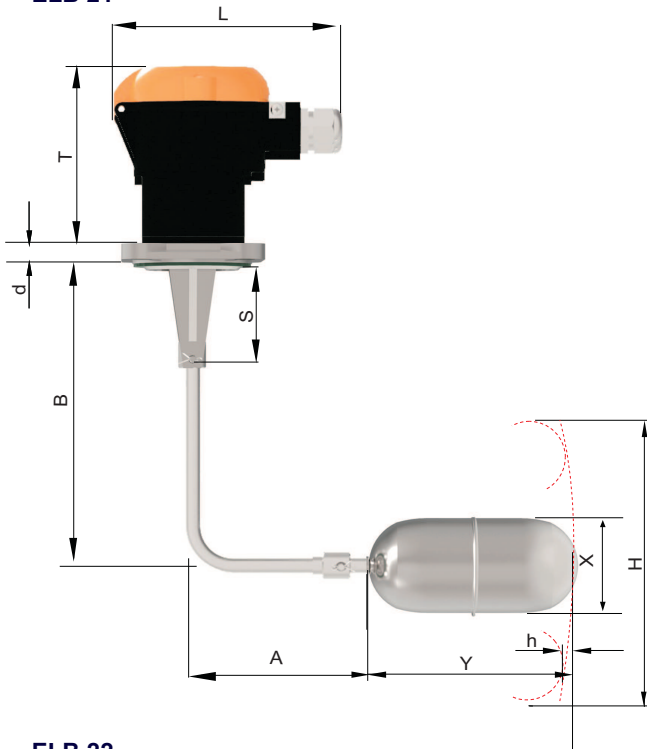


MODEL	ELB 31 ( I and II Between the holes)		
Z	355	455	555
T	110	110	110
	(91)	(91)	(91)
S	57.5	57.5	57.5
L	142	142	142
Y	140	140	140
X	64	64	64
H	424	562	702
h	73	101	129
d	10	10	10



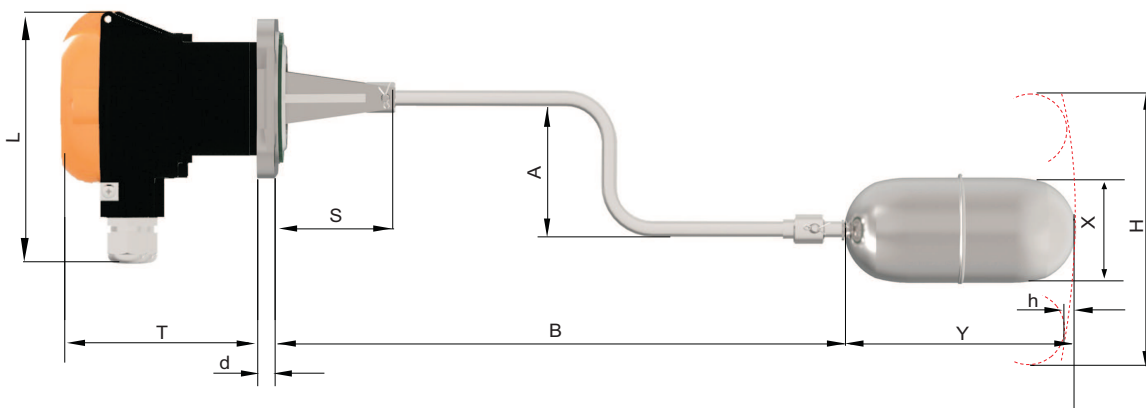
All dimensions are stated as mm.

**ELB 21**



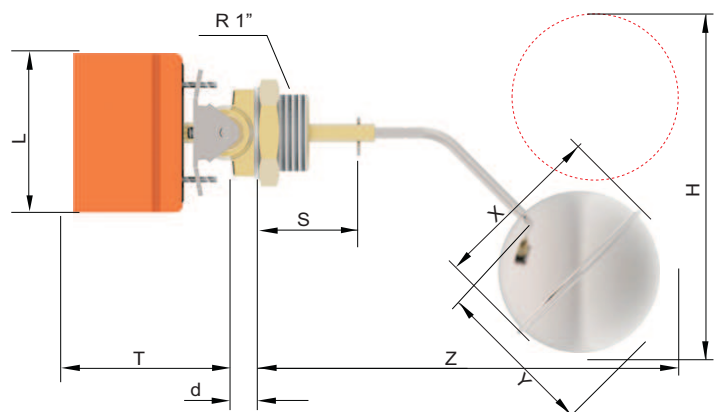
MODEL	ELB 21	ELB 22
A	Min.50	Min.50
B	Min.120	Min.120
A+B	Max.1000	Max.1000
T	110	110
S	57.5	57.5
L	142	142
Y	140	140
X	64	64
H	127	127
h	4	4
d	10	10

**ELB 22**



MODEL	ELB 41
Z	Max. 210
T	78
S	48
L	105
Y	70
X	78
H	Max.175
h	30
d	10

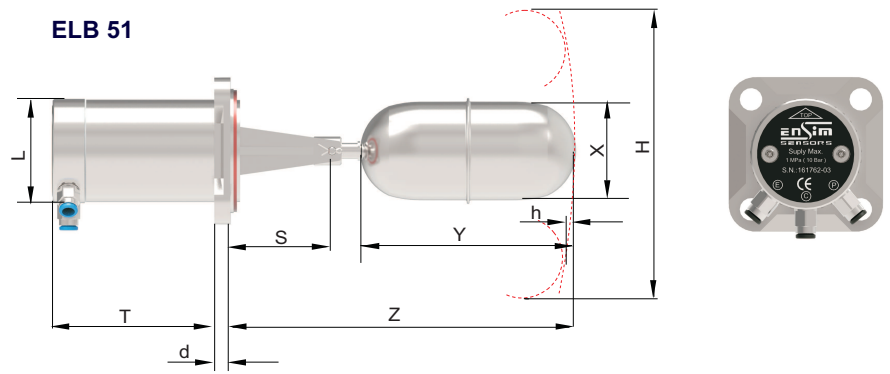
**ELB 41**



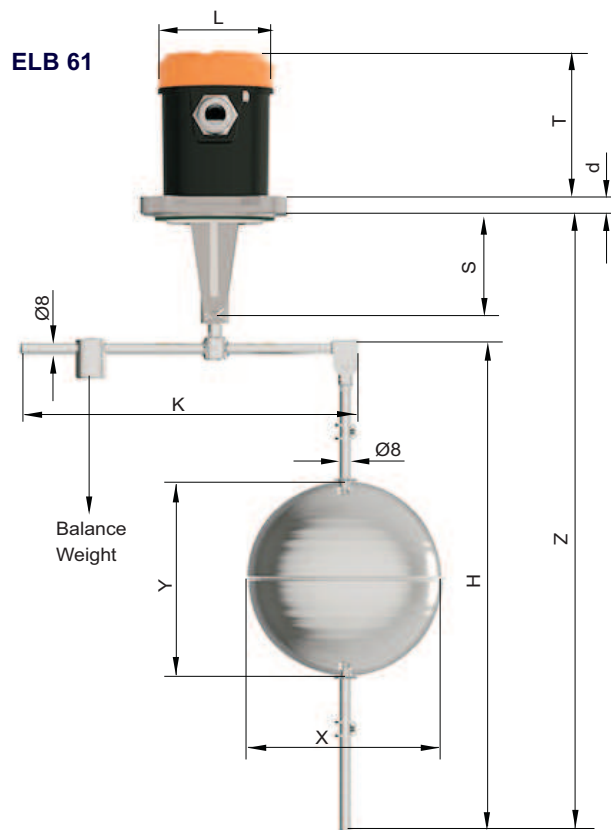
All dimensions are stated as mm.



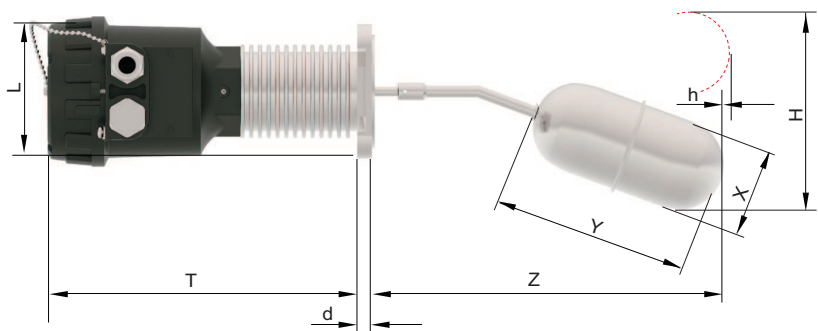
MODEL	ELB 51
Z	205
T	100
L	65
Y	140
X	n64
H	127
h	4
d	10



MODEL	ELB 61
Z	Max.1080
T	91
S	57.5
L	75
K	214
Y	122
X	125
H	Max.1000
d	10



MODEL	ELB 71
Z	205
T	212
L	155
Y	140
X	64
H	77
h	4
d	10



All dimensions are stated as mm.

## Order Form: Please consider sample models when coding!..

### 1 MODEL ELB

Economic.....	10	Standard.....	11
Economic , Adjustable Rod.....	10a	Standard, Long Rod.....	12
Stainless Steel Housing.....	10x	L Type Rod, Horizontal.....	21
High Pressure.....	10h	L Type Rod, Vertical.....	22
		Adjustable Rod.....	31
		Economic , Mini.....	41
		Pneumatic Proportional Output.....	51
		Vertical Model.....	61
		For Hot Oil..(Coming Soon).....	71

### 2 CERTIFICATE

None.....	0	(EN10204-3-1) Material Certification.....	1
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### 3 HOUSING

Aluminium Housing , B11x .....	505	Stainless Steel Housing , B102x.....	801
Aluminium Housing , B10x .....	504	Aluminium Housing , B41x.....	850
Aluminium Housing , B20x .....	603	Special.....	x

### 4 OUTPUT

Relay NO / NC (10 A).....	14	Pnomatic (0,2 bar ... 1 bar).....	28
Relay NO / NC (5 A).....	15	Special.....	x

### 5 ROD SIZE (mm)

Std. ....	0	Special.....	x
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### 6 CONNECTION

1" BSP Male Thread .....	0006	DN50 , ANSI 150 Flanged.....	1005
Square Flanged 92x92mm.....	1422	DN65 , ANSI 150 Flanged.....	1006
DN50 , PN16 Flanged.....	0505	DN80 , ANSI 150 Flanged.....	1007
DN65 , PN16 Flanged.....	0506		
DN80 , PN16 Flanged.....	0507		

### 7 OPTIONAL

None.....	/ 0	Relay Apparatus.....	/ R
Counter Flange.....	/ F	External Tank.....	/ T
Protective Bellows Apparatus.....	/ K	Special .....	/ x
Test Apparatus.....	/ A		

### EXAMPLE

ELB 11 - 0 - 505 - 15 - 0 / 0 Standard Model  
ELB 10 - 0 - 051 - 14 - 0 / 0 Ekonomik Model