

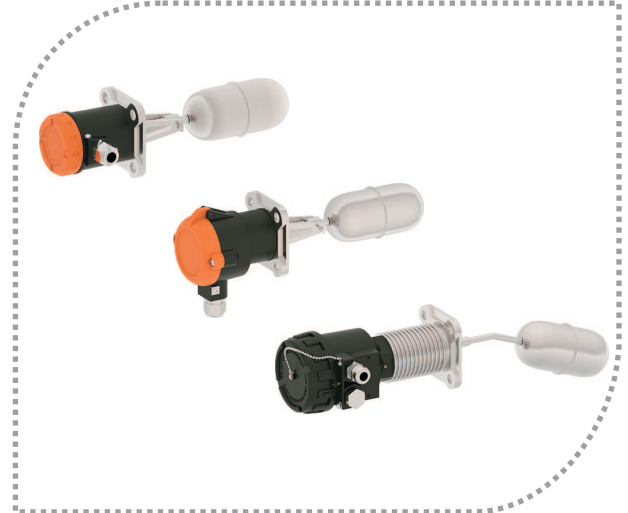
ELB level switches are used for measuring and checking level of tank. It is preferred in food, ship machine, boiler and storage tank applications with its advantages such as resistance to high temperature, long life contact structure, which is operable in each, vertical or horizontal connection.

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 10e Economical	ELB 10 / ELB 10a Economical
Mounting Type	Horizontal	Horizontal
Flange Material	304 St. St.	316 St. St.
Float Material	304 St. St.	316 St. St.
Min. Density	0.75 g/cm ³ Std.	0.7 g/cm ³ Std.
Case Material	Aluminum Injection	Aluminum Injection
Flange Dimension	92 mm x 92 mm	92 mm x 92 mm
Max. Pressure/Temp.	16 bar / 150 °C	16 bar / 150 °C
Ambient Temperature	(-) 20 °C / (+) 80 °C	(-) 20 °C / (+) 80 °C
Protection Class	IP 65	IP 65
Weight	1.6 kg....2.5 kg	1.8 kg....2.5 kg
Float Test Pressure	25 bar	25 bar

MODEL	ELB 11 Standard	ELB 12 Long Rod
Mounting Type	Horizontal	
Flange Material	316 Stainless Steel	
Float Material	316 Stainless Steel	
Min. Density	0.7 g/cm ³ 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 10e
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 ³ Standard	0.85 g / cm ³ Standard
Case Material	304 Stainless Steel	Aluminum Injection
Flange Dimension	92 mm x 92 mm	Flange PN 100
Max. Pressure/Temp.	16 bar / 150°C	100 bar / 150°C
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

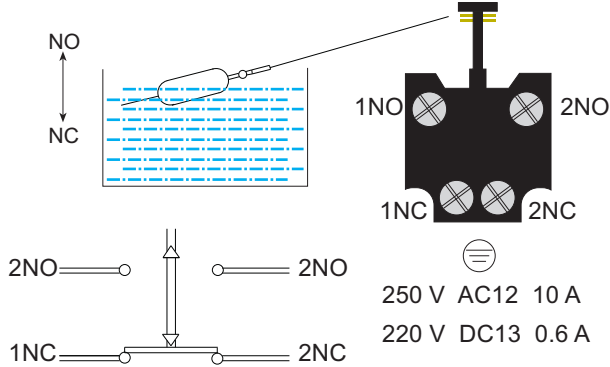
MODEL	ELB 21 L Type Rod	ELB 22 L Type Rod	ELB 31 Adjustable	ELB 61	ELB 71 For hot oil
Mounting Type	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Flange Material	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Float Material	316 Stainless Steel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

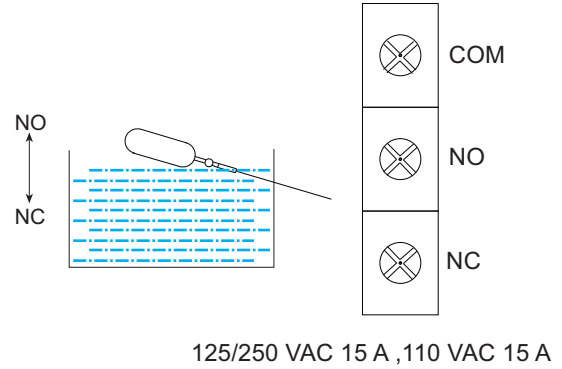
MODEL	ELB 51 Pneumatic Proportional Output
Mounting Type	Vertical
Flange Material	316 Stainless Steel
Float Material	316 Stainless Steel
Min. Density	0.7 g / cm ³
Case Material	Aluminum Injection, Painted
Flange Dimension	92 mm x 92 mm
Max. Pressure/Temp.	25 bar / 250 °C
Ambient Temperature	(-) 20 °C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

Electrical and Pneumatic Connection:

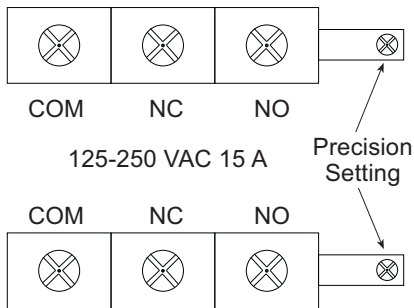
For ELB 11 / 12 / 21 / 22 / 31



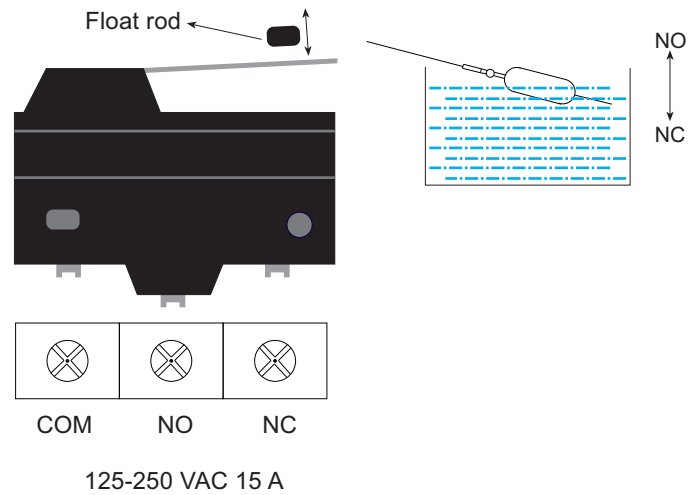
For ELB 10e / 10 / 10a / 10h / 10x / 61



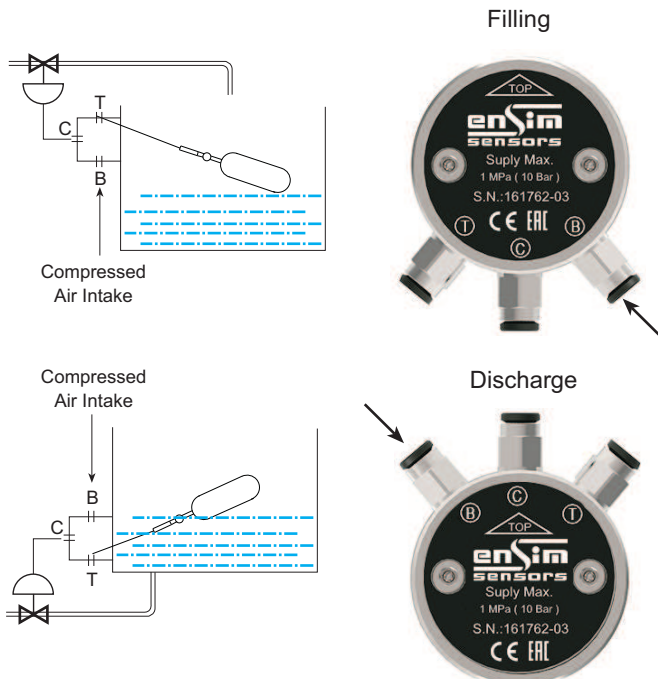
For ELB 41



For ELB 71



For ELB 51

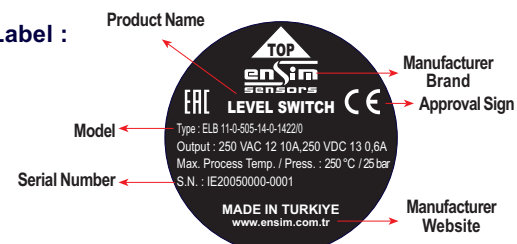


Air Input (bar)	Control Output (bar)	
	Min.	Max.
2	0,25	1,5
4	0,6	3,1
6	1,1	4,8
8	1,8	6,5
10	2,5	8,3

*Flow Rate 3.5 -6.0 NI / dk

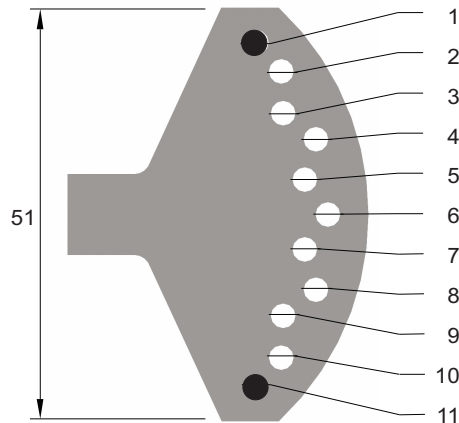
Product Label :

B : Air Input
T : Discharge Output
C : Control Output



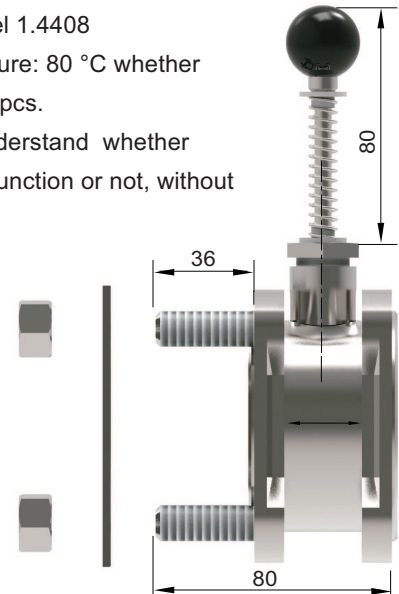
Adjusting Apparatus

Material: Stainless Steel 1.4571
11 Holes



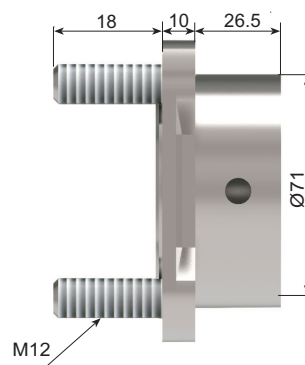
Test Apparatus

Material: Stainless Steel 1.4408
Max. Working Temperature: 80 °C whether
Bolt: M12 x 1.5 mm², 4 pcs.
It is used in order to understand whether level switch makes its function or not, without discharging tank.



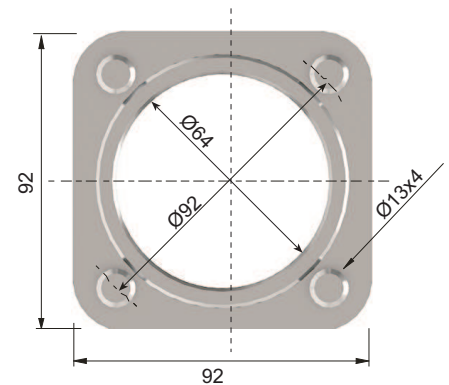
Counter Flange

Material: Stainless Steel 1.4408
Bolt: M12 x 1.5 mm² 4 pcs.



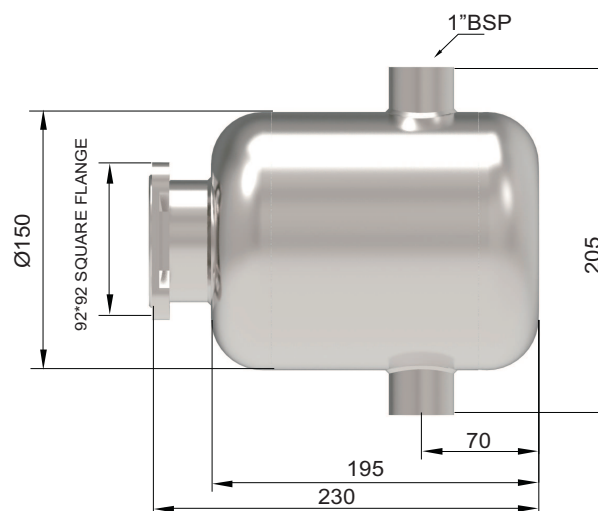
Flange

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 x 92 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.



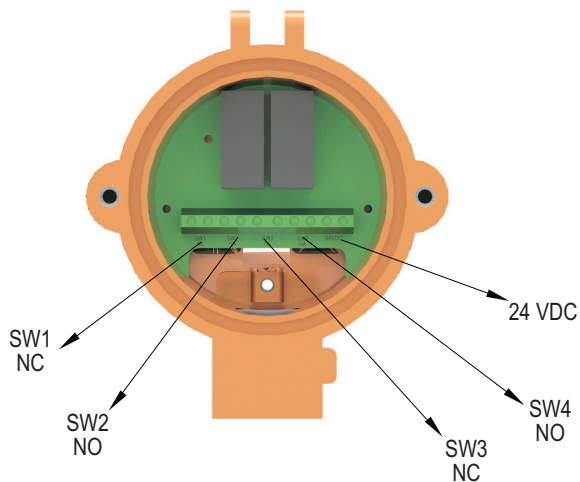
Contact Apparatus

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

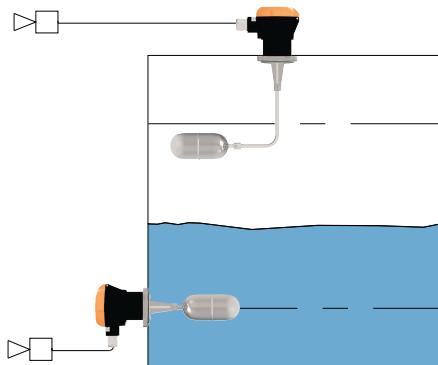
Output : 2 x NO + 2 x NC Relay

Product Working Temperature: Max. 100 °C

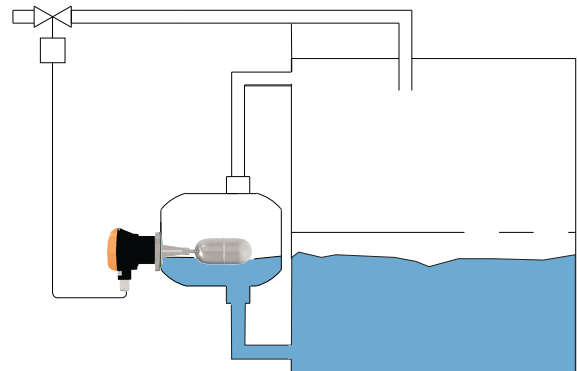


Application Samples:

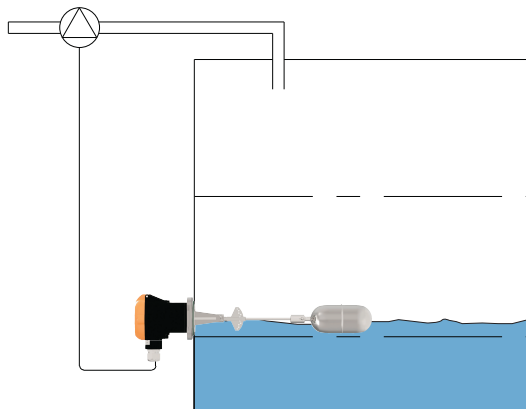
Min. or Max. Control



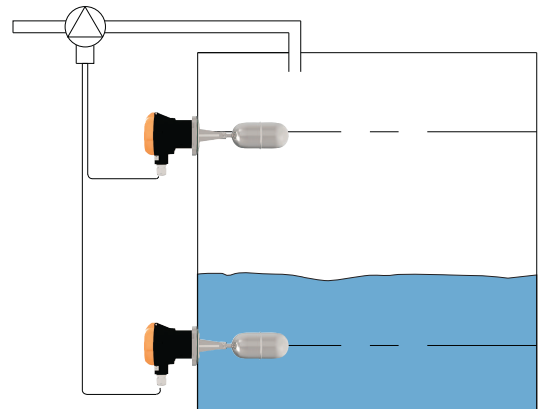
With External Apparatus



Valve and Pump Control



Pump Control

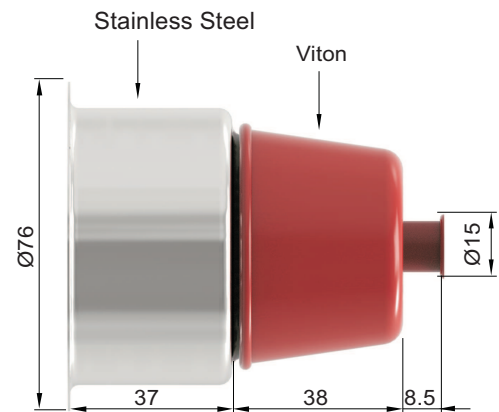


Protective Bellows Apparatus

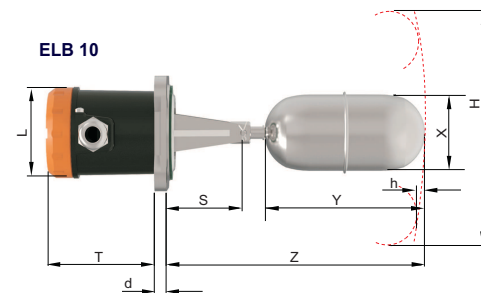
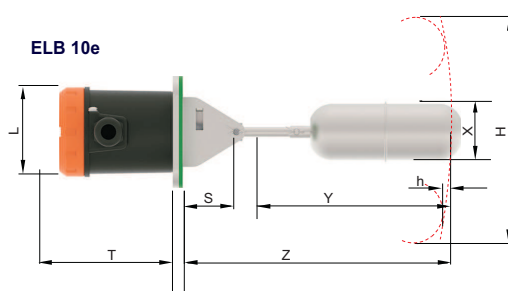
Metal Part: Stainless Steel 1.4571

Rubber Part: Viton 200 °C

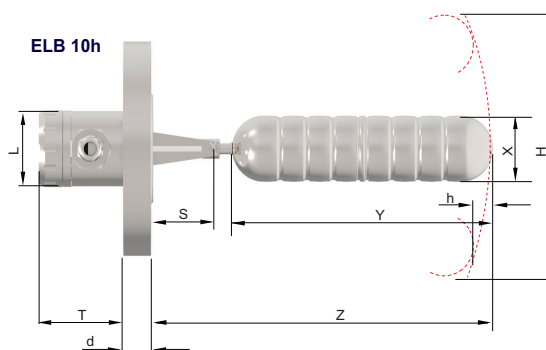
The apparatus are used in order to enable operation of level switch in the tanks, which contains particles inside.



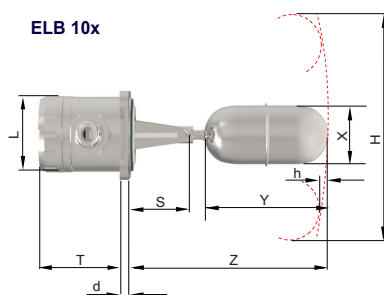
MODEL	ELB 10	ELB 10e
Z	205	234
T	91	95
S	57.5	47,5
L	75	75
Y	140	125
X	64	50
H	127	150
h	4	6
d	10	5



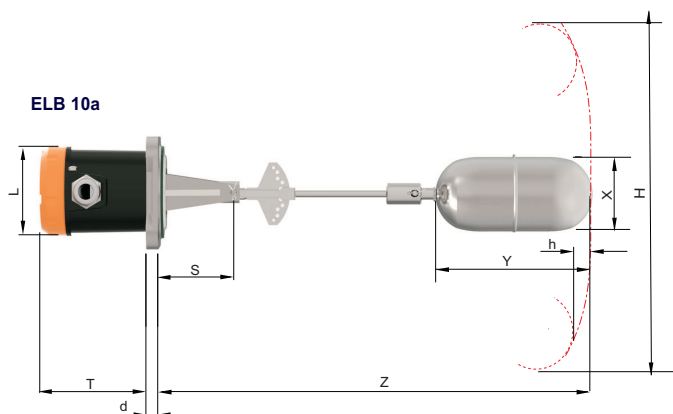
MODEL	ELB 10h
Z	322
T	91
S	57.5
L	75
Y	242
X	64
H	180
h	4
d	26



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

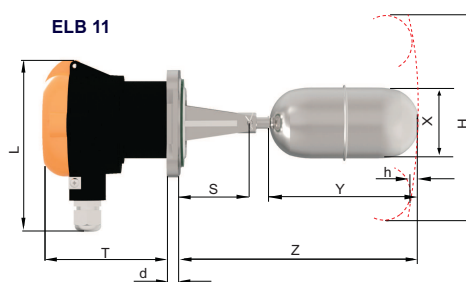


MODEL	ELB 10a (I and II Between the holes)
Z	355
T	91
S	57.5
L	75
Y	140
X	64
H	424
h	73
d	10

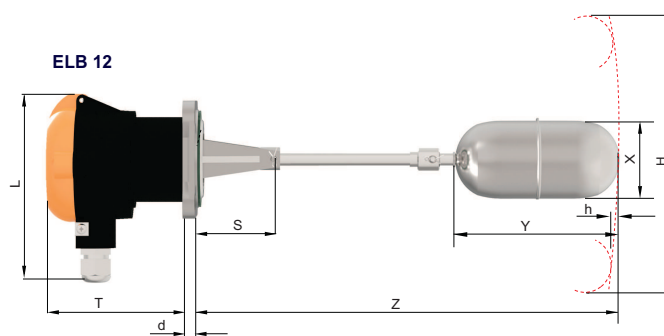


All dimensions are stated as mm.

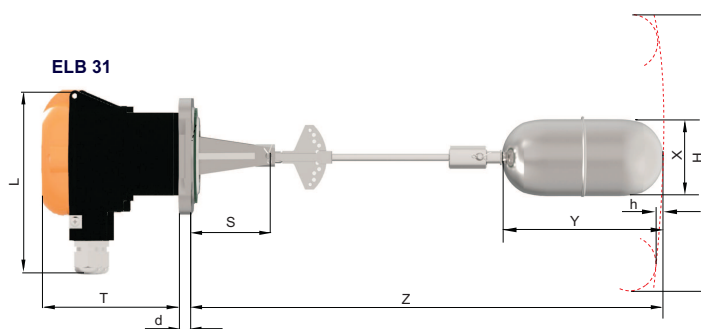
MODEL	ELB 11
Z	225
T	110
S	57.5
L	142
Y	140
X	64
H	127
h	5
d	10



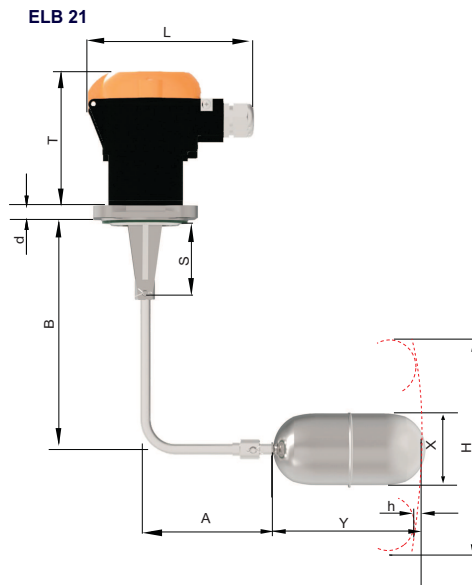
MODEL	ELB 12		
Z	500	750	1000
T	110	110	110
S	57.5	57.5	57.5
L	142	142	142
Y	140	140	140
X	64	64	64
H	260	380	501
h	12	19.5	27
d	10	10	10



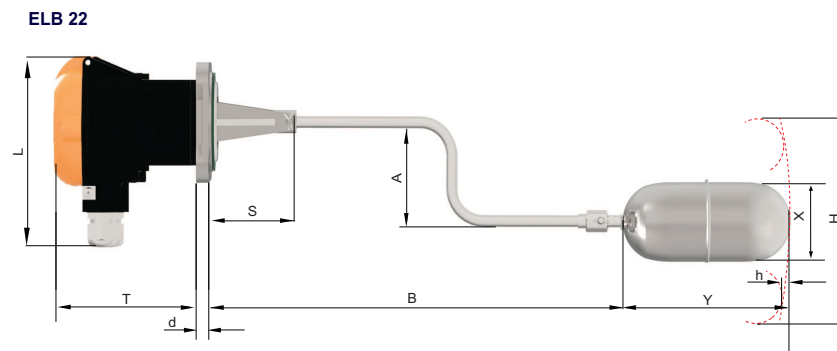
MODEL	ELB 31 (I and II Between the holes)		
Z	355	455	555
T	110 (91)	110 (91)	110 (91)
S	57.5	57.5	57.5
L	142	142	142
Y	140	140	140
X	64	64	64
H	424	562	702
h	73	101	129
d	10	10	10



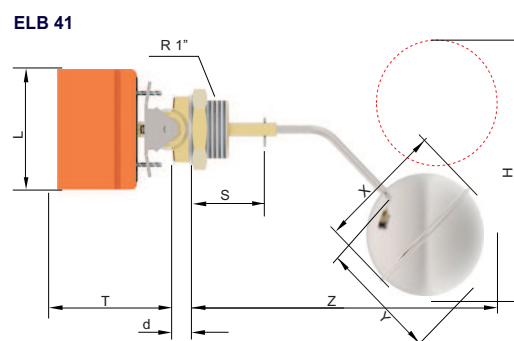
All dimensions are stated as mm.



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

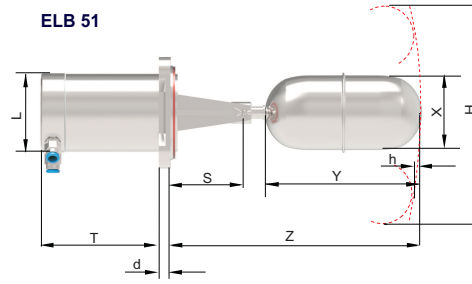


MODEL	ELB 41
Z	Max. 210
T	78
S	48
L	105
Y	70
X	78
H	Max.175
h	30
d	10

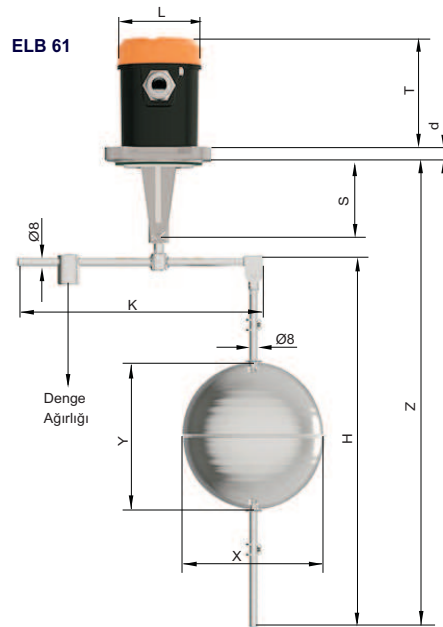


All dimensions are stated as mm.

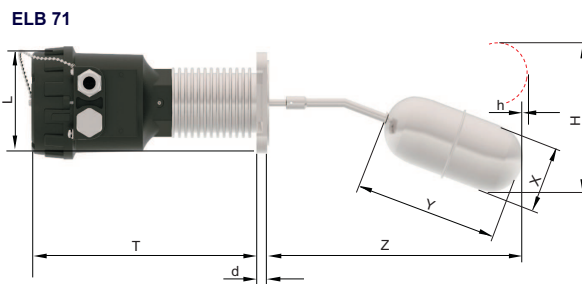
MODEL	ELB 51
Z	205
T	100
L	65
Y	140
X	n64
H	127
h	4
d	10



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.....	10e	Standard.....	11
Economic.....	10	Standard, Long Rod.....	12
Economic , Adjustable Rod.....	10a	L Type Rod, Horizontal.....	21
Stainless Steel Housing.....	10x	L Type Rod, Vertical.....	22
High Pressure.....	10h	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, B10dx straight	503	Stainless Steel Housing , B102x.....	801
Aluminium Housing , B11x	505	Aluminium Housing , B41x.....	850
Aluminium Housing , B10x straight.....	504	Special.....	x
Aluminium Housing , B20x	603		

4 OUTPUT

250 VAC 12 10A, 250 VAC.....	14	Pnomatic (0,2 bar ... 1 bar).....	28
1 x NO / NC - 15A / 250 VAC.....	15	Special.....	x

5 ROD SIZE (mm) L

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	Test Apparatus...../ A
Counter Flange...../ F	Relay Apparatus...../ R
For ELB10e Counter Flange/ Fm	External Tank...../ T
Protective Bellows Apparatus...../ K	Special/ x

EXAMPLE

ELB 11-0-505-0-1422/0 Standard Model