

DX-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.

Application Areas :

Food, ship, machine, boiler and storage tanks.



Certification

- II 2G Ex db IIC Tx Gb For Gas
 - II 1/2 G Ex h IIC Tx Ga/Gb For Gas
 - II 2D Ex tb IIIC Tx Db For Dust
 - II 1/2 D Ex h IIIC Tx Da/Db For Dust
- *Have a look at the temperature class chart.

DX-ELB

LEVEL SWITCH - SIDE MOUNTED

- DX-ELB 11 , DX-ELB 12**
- DX-ELB 21 , DX-ELB 22**
- DX-ELB 31**
- DX-ELB 61**

Advantages:

- * Max. 25 bar operating pressure
- * Max. 250 °C operating temperature
- * Apparatus variety

Technical specifications **DX- ELB11 / ELB12 / 21 / 22 / 31 / 61**

Working Temperature (Tp)	Max. 125 °C / 200 °C / 250 °C
Ambient Humidity	0-98 % Rh (Non-condensing)
Ambient Temperature (Ta)	(-) 20 °C ... (+) 60 °C
Material	Stainless Steel 1.4408 (CF=8M)
Connection	92x92mm Flanged (Std.) Opt. Special flange can be made.
Housing	Aluminum Injection - AlSi12Fe (Std) Black (RAL: 9005)
Float	Stainless Steel 1.4436 (316)
Wet Parts	Stainless Steel 1.4436 (316)
Min. Density	0,70 g. / cm ³
Float Number	1 (Std.)
Working Cressure	Max. 25 bar
Electrical Connection	Terminal
Cable and plug input	M20 x 1,5 (Std)
Output	250V AC12 10A 250V DC13 0,6A
Protection Class	IP 66/68 (EN60529)
Certifications and Approvals	CE Declaration , EMC , LVD , ATEX

CE 2284

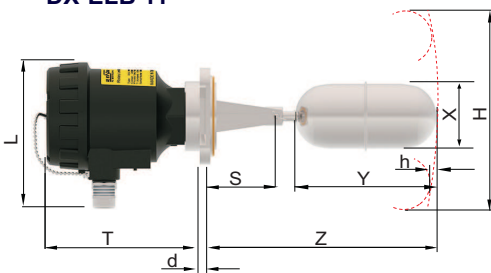


Sample Models :

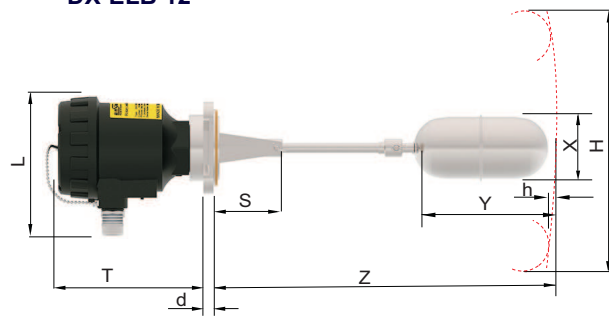
MODEL	DX-ELB 11
Z	225
T	110
S	57.5
L	142
Y	140
X	64
H	127
h	5
d	10

MODEL	DX-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

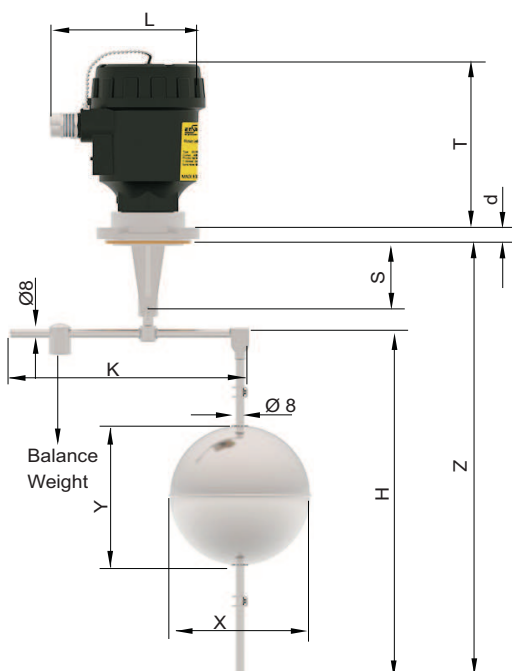
DX-ELB 11



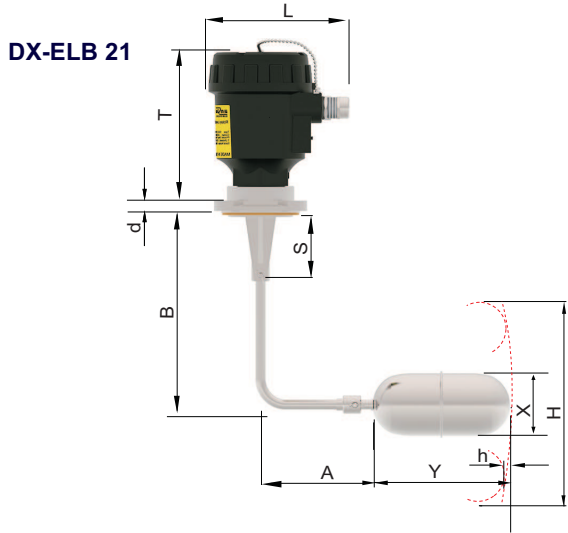
DX-ELB 12



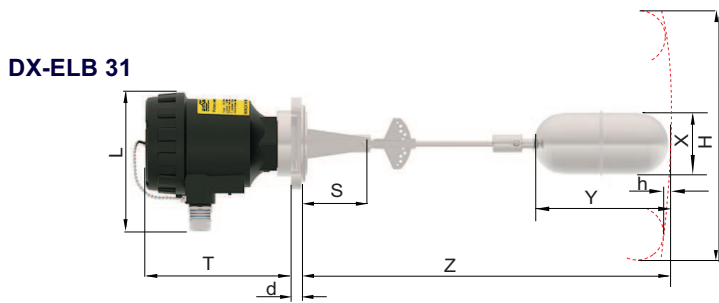
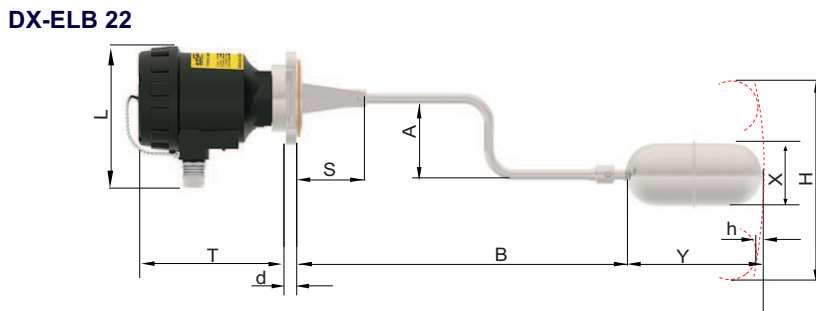
DX-ELB 61



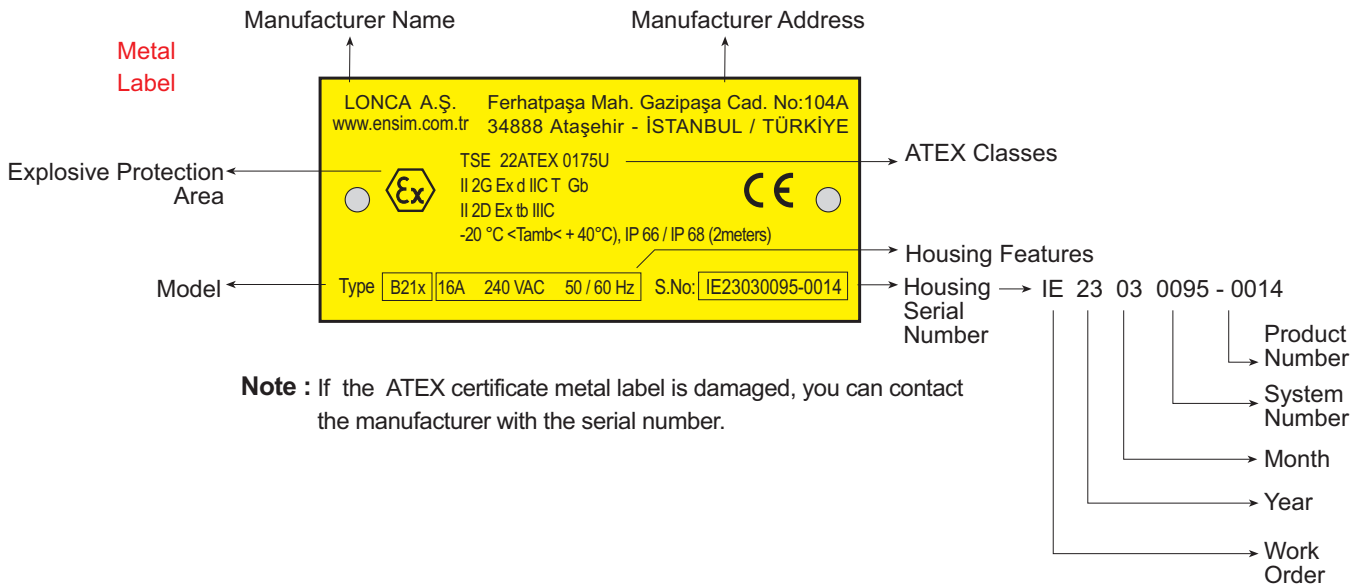
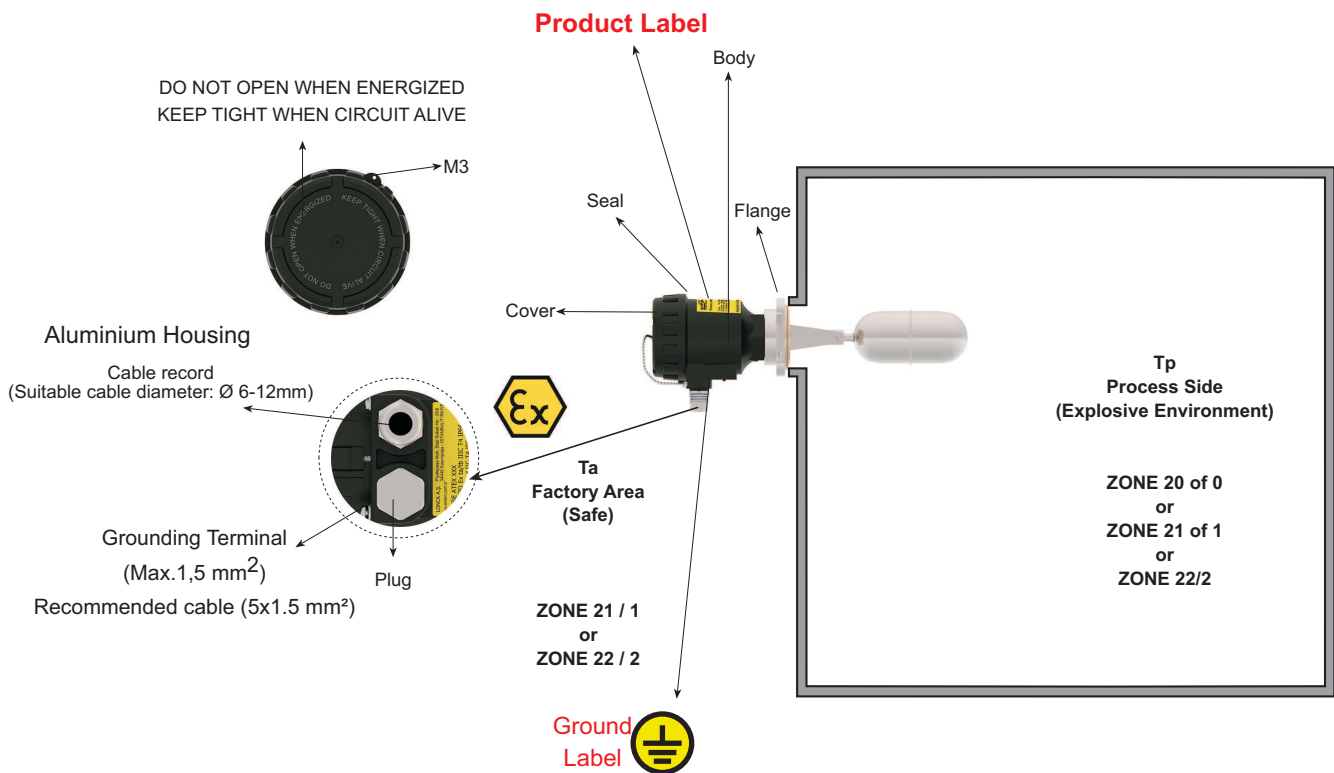
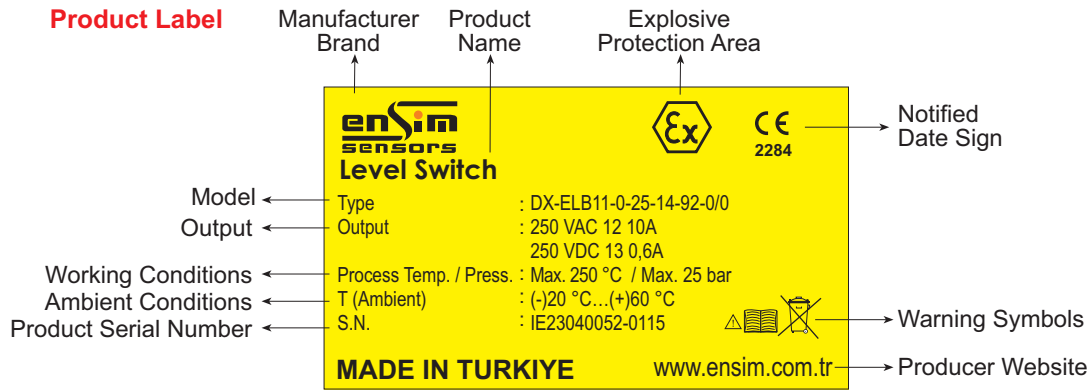
MODEL	DX-ELB 61
Z	Max.1080
T	91
S	57.5
L	142
K	214
Y	122
X	125
H	Max.1000
d	10



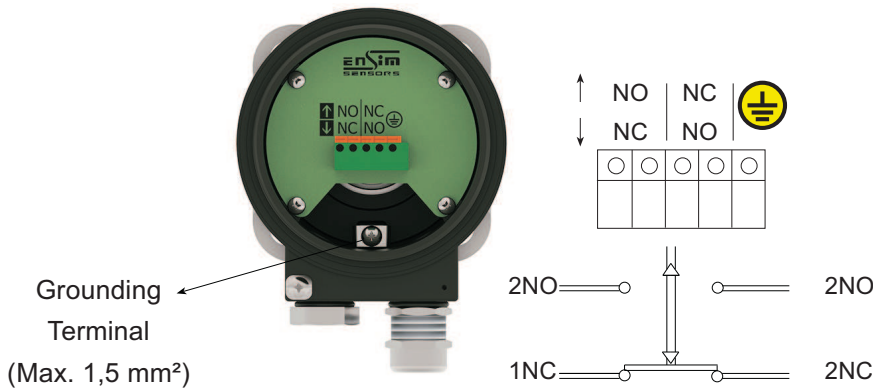
MODEL	DX-ELB 21	DX-ELB 22
A	Min.50	Min.50
B	Min.120	Min.120
A+B	Max.1000	Max.1000
T	110	110
S	57.5	57.5
L	142	142
Y	140	140
X	64	64
H	127	127
h	4	4
d	10	10



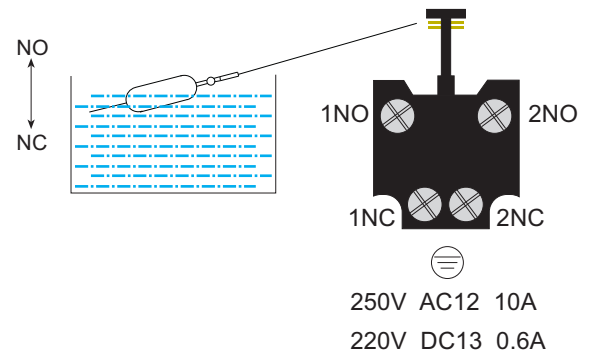
MODEL	DX-ELB 31 (Number 1 and 11 between holes)		
Z	355	455	555
T	110	110	110
S	(91)	(91)	(91)
S	57.5	57.5	57.5
L	142	142	142
Y	140	140	140
X	64	64	64
H	424	562	702
h	73	101	129
d	10	10	10



Electrical Installation :



For DX-ELB 11 / 12 / 21 / 22 / 31 / 61



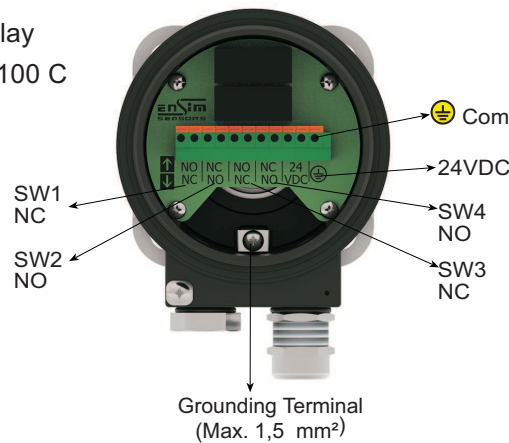
Contact Apparatus

DX-ELB level switch was four free contacts via an electronic card placed in body. The contact can be produced NC or NO according to customer needs.

Power Supply : 24 VDC

Output : 2 x NO + 2 x NC Relay

Working Temperature: Max. 100 C

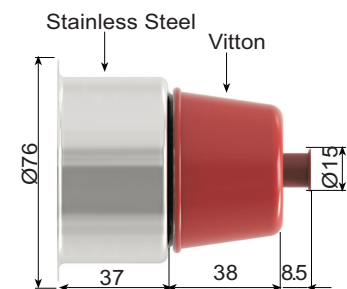


Protective Bellows Apparatus

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, containing particles inside.



Note : It has been produced according to IPC A 600 class 2 conditions and tested with 100 % E-test. Moreover, HASL (non-lead) surface test has been applied.

Housing :

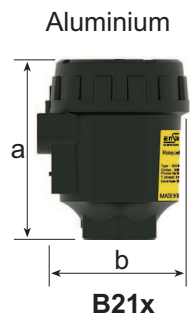
ORDER CODE	TYPE	MATERIAL	PROTECTION CLASS	TEMP. (°C)	SIZE a x b (mm)
704	B21x	Aluminium	IP 66/68	(-) 40...(-) 200	132 x 104

Cover Seal : NBR Nitrile Rubber 120 °C, Opt. FPM (Viton) 200 °C)

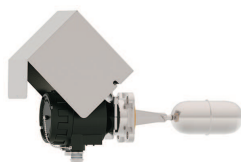
EU-Type Examination Certificate Number : IEP23ATEX1197X

The marking of the equipment :

II 2G Ex d IIC Gb
II 2D Ex tb IIIC



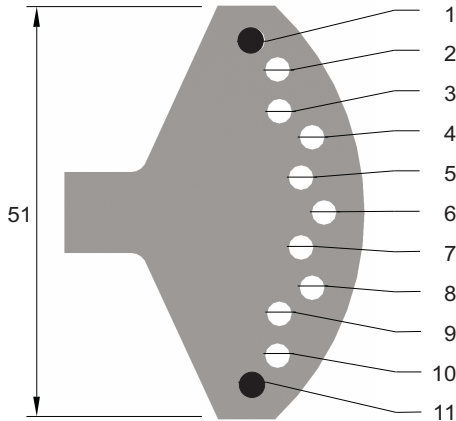
Protection Class :



Material : 304 Stainless Steel
Welded manufacturing
Opens - Closes Hinged
To Protect Against external conditions.

Adjustable Apparatus

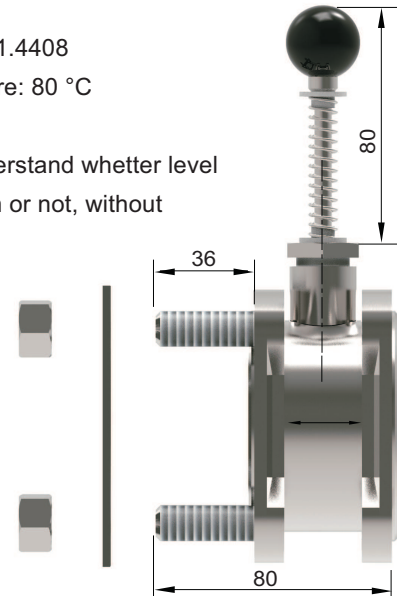
Material: Stainless Steel 1.4571
11 Holes



Test Apparatus

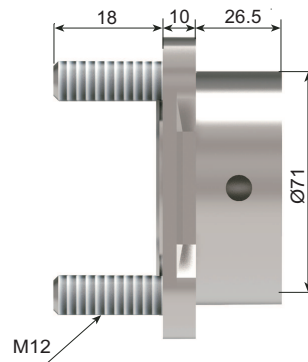
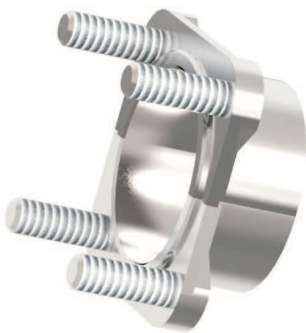
Material: Stainless Steel 1.4408
Max. Working Temperature: 80 °C
Bolt: M12x1.5, 4 pcs.

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



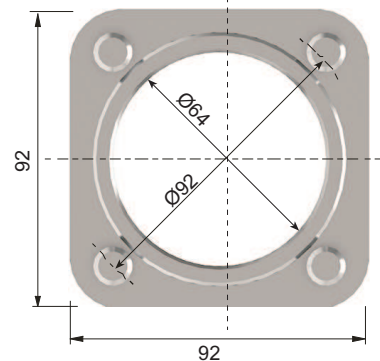
Counter Flange

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



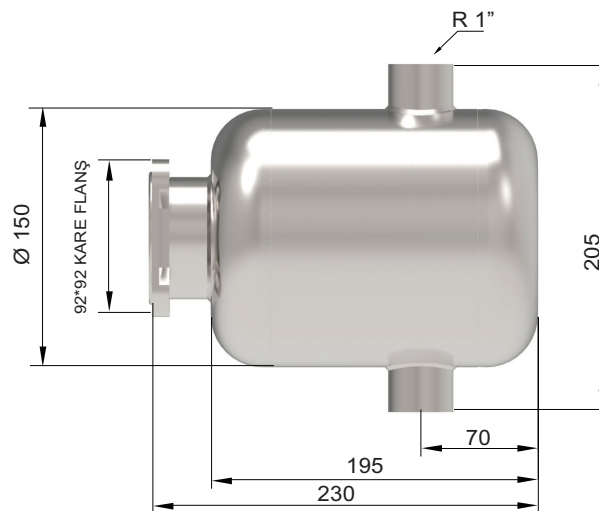
Flange

Material: Stainless Steel 1.4571
Measurement: 92 x 92 mm Square Type
Holes Diameter: Ø 13 mm 4 Holes
Opt: DN150, Special flange up to PN100



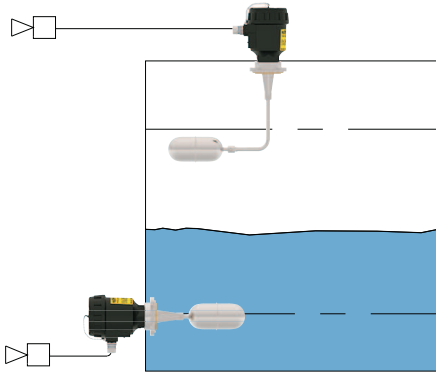
External Tank

Material: Stainless Steel 1.4571
Connection: 92 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.

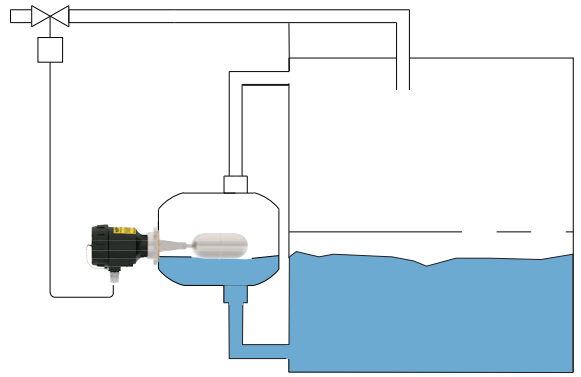


Uygulama Örnekleri:

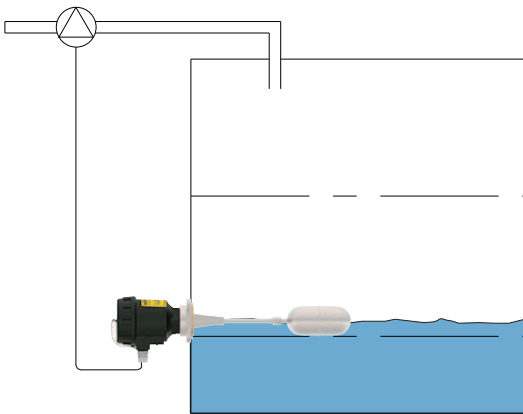
Min. veya Maks. Kontrol



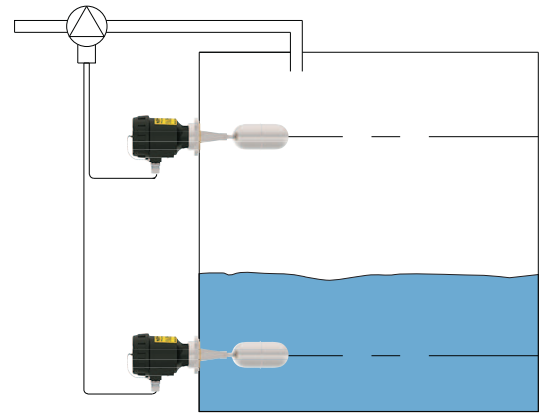
Harici Tank ile



Vana ve Pompa Kontrol



Pompa Kontrol



Maximum Surface Temperature

Temperature Class Table

(-) 20° C ≤ Ta Ambient ≤ (+) 30° C...(+) 60° C Working Temperature: (-) 20° C ... (+) 80° C / 90° C / 125° C / 190° C / 250° C			Group II
MODEL			DX-ELB
Stand by time before opening the cover			20 sec.
Ta AMBIENT TEMPERATURE	Tp PROCESS TEMPERATURE	TEMPERATURE CLASS	
60° C	< 80° C	T6	
60° C	< 90° C	T5	
60° C	< 125° C	T4	
60° C	< 190° C	T3	
60° C	< 250° C	T2	

(-) 20° C ≤ Ta Ambient ≤ (+) 30° C ... (+) 60° C Working Temperature : (-) 20° C ... (+) 80° C / 90° C / 125° C / 190° C / 250° C			Group III
MODEL			DX-ELB
Stand by time before opening the cover			20 sec.
Ta AMBIENT TEMPERATURE	Tp PROCESS TEMPERATURE	TEMPERATURE CLASS	
60° C	< 60° C	T6	

(-) 20° C ≤ Ta Ambient ≤ (+) 30° C...(+) 60° C Working Temperature : (-) 20° C ... (+) 80° C / 90° C / 125° C / 190° C / 250° C			Group II
MODEL			DX-ELB
Stand by time before opening the cover			5 sec.
Ta AMBIENT TEMPERATURE	Tp PROCESS TEMPERATURE	TEMPERATURE CLASS	
60° C	< 60° C	T6	

(-) 20° C ≤ Ta Ambient ≤ (+) 30° C ... (+) 60° C Working Temperature : (-) 20° C ... (+) 80° C / 90° C / 125° C / 190° C / 250° C			Group III
MODEL			DX-ELB
Stand by time before opening the cover			5 sec.
Ta AMBIENT TEMPERATURE	Tp PROCESS TEMPERATURE	TEMPERATURE CLASS	
60° C	< 60° C	T6	

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

1 MODEL DX-ELB

Standart.....	11	L Type Rod, Horizontal.....	21
Standart, Long Rod.....	12	L Type Rod, Vertical.....	22
		Adjustable Rod.....	31
		Pneumatic Proportional Output.....	61

2 CERTIFICATE

No.....	0	(EN10204-3-1) Material Certification	1
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3 HOUSING

Aluminium , B21x , IP66/68.....	704	Special.....	x
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4 OUTPUT

Relay NO / NC (10A).....	14	Special.....	x
Relay NO / NC (5A).....	15		

5 CONNECTION (Connection has been welded with sensor)

92 x 92mm Flange.....	92	Special.....	x
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6 ROD LENGHT (mm)

Std.	0	Special.....	x
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7 OPTIONAL

No.....	/ 0	Shetter (For the outside of the tank) 304 St. St./	K2
Counter Flange.....	/ F	Relay Apparatus.....	/ R
Bellows Apparatus	/ K	External Tank.....	/ T
Test Apparatus.....	/ A	Special Flange.....	/ X

SAMPLE

DX-ELB 11 - 0 - 703 - 14 - 92 - 0 / 0 Standard Model , Relay Output , 92x92mm Flange