

DX-ELC level switches are used for checking liquid level of tanks and boilers. As it does not have any movable part, it can be used in the critical ambient and in the liquids with solid particle, low density and high viscosity.

Working Principle:

When liquid level comes to the level of isolated electrode, current passage starts or stops between electrode and liquid. Strengthened this AC current may be assessed with a relay circuit.

Areas of Application :

It is an economic and safe solution for air pressure tank applications, water level control of steam boilers and conductive tanks.



DX-ELC

LEVEL SWITCH

Conductivity Type

DX-ELC 21, DX-ELC 31 , DX-ELC 41

Advantages :

- * Economical
- * Easy to install
- * No moving parts



Model: 05-2019-005

Certification



II 1/2 G Ex d IIC Tx*1 Ga/Gb For Gas

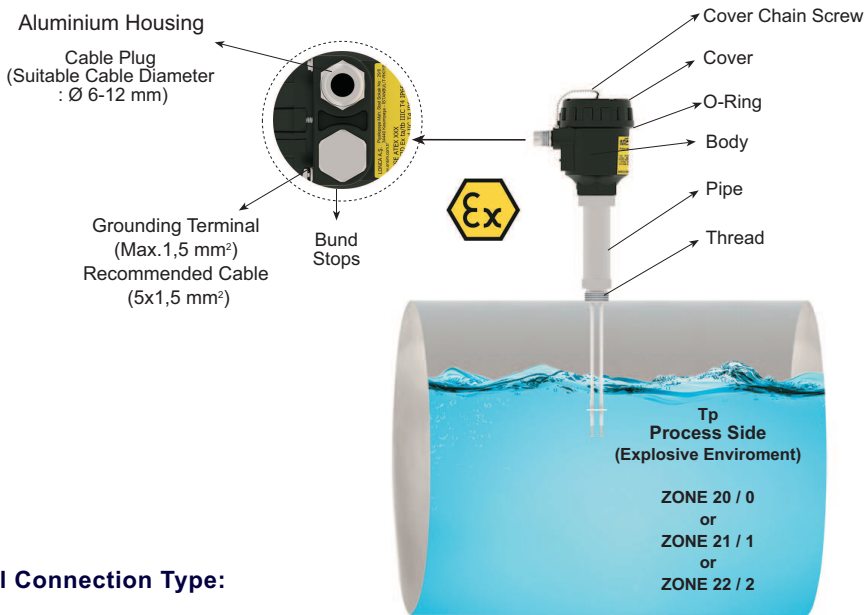
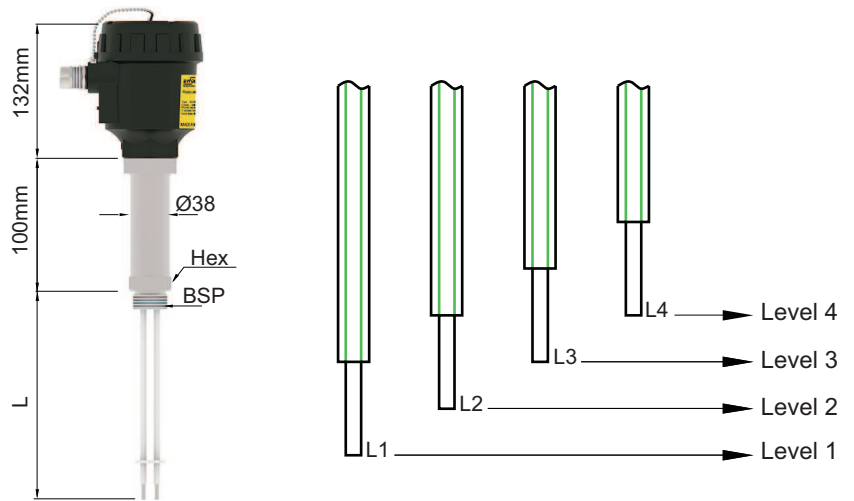
II 1/2 D Ex (ta/tb)*3 IIIC Tx*2 For Dust

*Have a look at the temperature class chart.

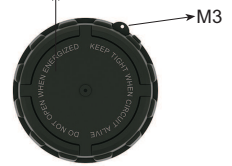
DX-ELC 21 / 31 / 41

Working Temp. (Tp)	Max. 238 °C
Ambient Humidity	0-98 % Rh (Non-condensing)
Working Press.	Max. 32 bar g
Ambient Temp. (Ta)	(-) 20 °C ... (+) 60 °C
Material	304 St.st. (Std.) Opt. 316 St.st.
Connection Housing	Aluminium Injection - AISi12Fe (Std) Black (RAL 9005)
Electrod	304 St.st. (Std.) Opt. 316 St.st.
Pipe	304 St.st.
Isolation	PTFE
Connection	2" BSP (Std.) Opt. Selectable from Table
Number of electrodes	1 (Std.)
Stem Length	500 mm / 1000 mm / 1500 mm (Thread Included)
Electrical Connection	Terminals
Cable and Plug Entry	M20 x 1,5 (Std.)
Protection Class	IP 66 (EN60529)
Certifications and Approvals	CE Declaration , EMC , LVD , ATEX

DX-ELC 21 , DX-ELC 31 , DX-ELC 41



**DO NOT OPEN WHEN ENERGIZED
KEEP TIGHT WHEN CIRCUIT ALIVE**

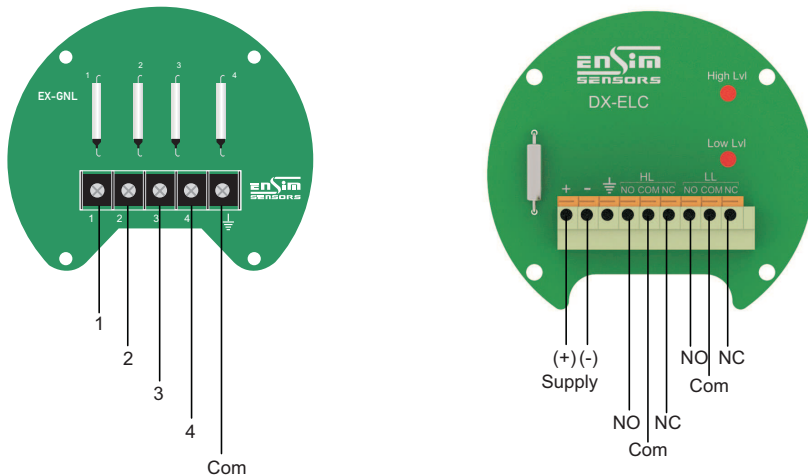


**Ta
Factory Area
(Safe)**

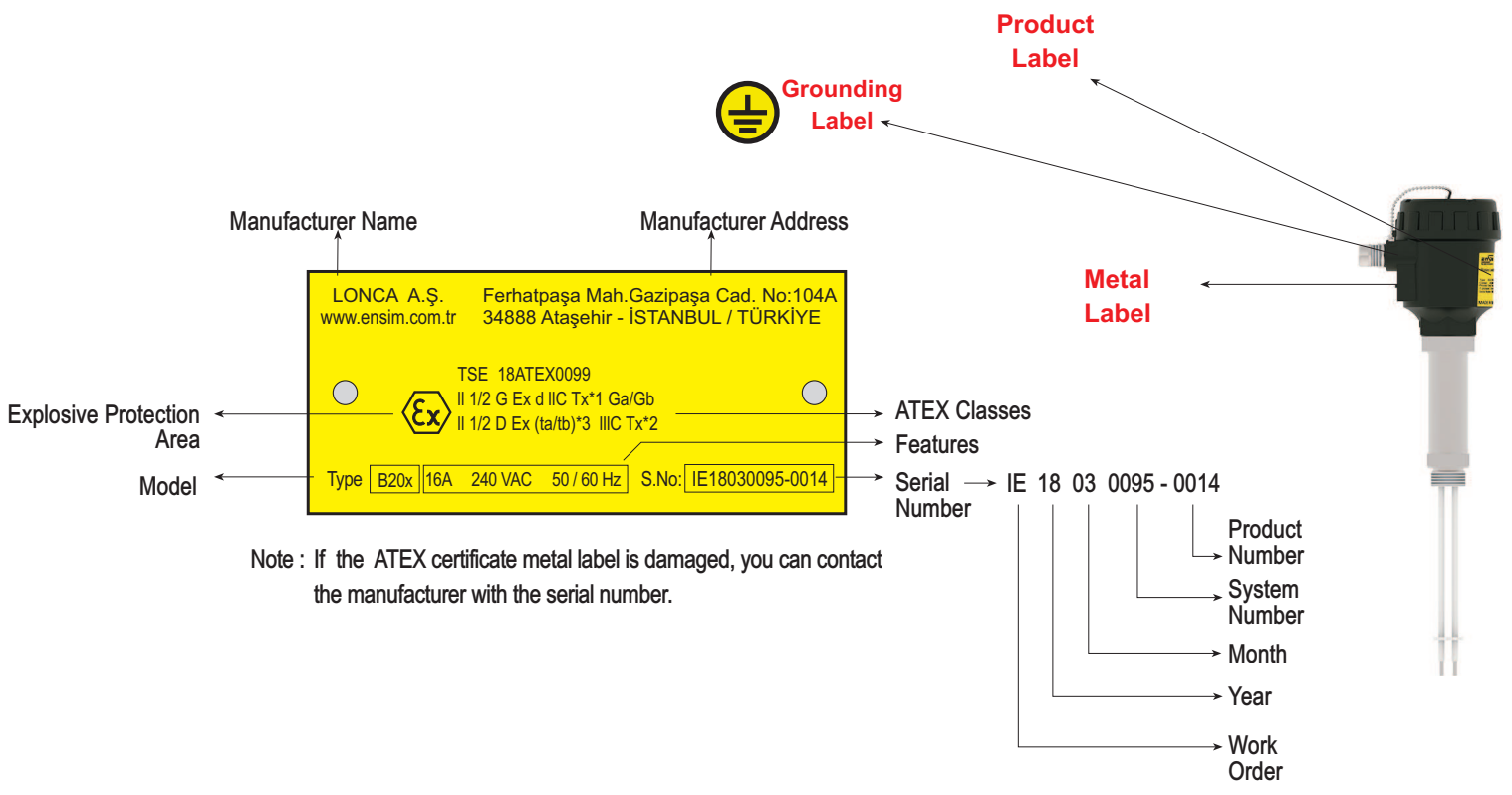
**ZONE 21 / 1
or
ZONE 22 / 2**

Electrical Connection Type:

**Four Electrode
NO or NC**

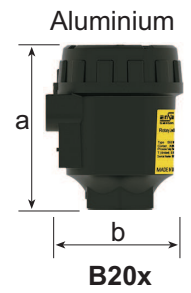


Note : It has been produced according to IPC A 600 class 2 conditions and tested with 100 % E-test. Moreover, HASL (non-lead) surface test has been applied.



Housign :

ORDER CODE	TYPE	MATERIAL	PROTECTION CLASS	TEMPERATURE (°C)	SIZE a x b (mm)
25	B20x	Aluminium	IP 66	(-) 40...(+) 200	132 x 104



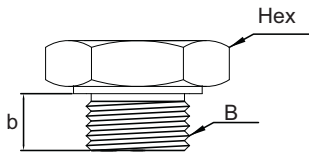
Protection Case:



Material: 304 Stainless Steel
 Welded manufacturing
 With hinge
 To protect the switch against external conditions

Mechanical Connection:

Thread



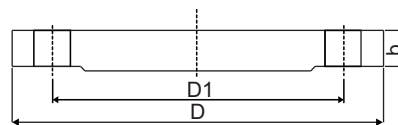
(ISO228-1)

Order Code	Dimension B	Hex [mm]	Stem Length b [mm]
006	1" BSP	41	23
007	1 1/4" BSP	51	23
008	1 1/2" BSP	60	23
009	2" BSP	70	23

Flanged

Order (ISO1092-1)

Code	PN 16	D (mm)	D1 (mm)	b (mm)
103	DN25	165	85	16
104	DN32	140	100	16
106	DN50	165	125	18
108	DN80	200	160	20
109	DN100	220	180	20



Order (ISO1092-1)

Code	PN 40	D (mm)	D1 (mm)	b (mm)
303	DN25	115	85	18
304	DN32	140	100	20
306	DN50	165	125	20
308	DN80	200	160	20
309	DN100	235	190	24

Order (ANSI B16.5)

Code	150 LBS	D (mm)	D1 (mm)	b (mm)
606	DN50	152,4	121	19
607	DN65	177,8	139,7	22,2
608	DN80	190,5	152,4	23,8
609	DN100	228,6	157,2	23,8

Max Surface Temperature:

Temperature Class Chart

STD. MODEL	DX-ELC
Working Temperature	(-) 20 °C...(+) 238 °C
Waiting Period before opening the cover	20 Min.

Thermal Protection Insurance is 105 °C.

(-) 20 °C ≤ T ambient ≤ (+) 30 °C...(+) 60 °C		Working Temperature : (-) 20 °C...(+) 238 °C	
DX-ELC Metal			
T Ambient MAX. AMBIENT TEMPERATURE ZONE 21 / 1	T Process MAX. PROCESS TEMPERATURE ZONE 20 / 0	T Surface MAX. SURFACE TEMPERATURE	TEMPERATURE CLASS
30 °C	238 °C	50 °C	T6
40 °C	238 °C	60 °C	T6
50 °C	238 °C	70 °C	T6
60 °C	238 °C	80 °C	T6

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

1 MODEL DX-ELC

2 Electrode.....	21	3 Electrode.....	31
		4 Electrode.....	41

2 CERTIFICATE

None.....	0	(EN10204-3-1) Material Certification	1
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3 CONNECTION (BSP)

1" BSP (Std.).....	006	Special.....	X
2" BSP.....	009		

4 CONNECTION MATERIAL

304 St. St.	01	Special.....	X
316 St. St.	02		

5 ELECTROD MATERIAL

304 St. St.	01	Titanium.....	09
316 St. St.	02	Special.....	X

6 INSULATION MATERIAL

PTFE (Std.).....	66	PFA.....	67
		Special.....	X

7 HOUSING

Aluminium B20x.....	368	Special.....	X
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8 STEM LENGTH (LL)

500 mm.....	500	1500 mm.....	1500
1000 mm.....	1000	Special.....	X

9 ELECTRICAL CONNECTION

With Terminals.....	00	Special.....	X
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10 OPTIONAL

None.....	/ 0	Special.....	X
Liquid Level Relay.....	/ SSR		

SAMPLE

DX-ELC 41 - 0 - 006 - 02 - 02 - 06 - 368 - 1000 - 00 / 0

DX-ELC 41 , 4 Electrode - 1" 316 St. St. Connection - Electrode 316 St.St. - With Terminals