Level sensors are used for tank level and control.
When magnetic field of magnet within the buoy moving along tube according to liquid level comes up to the reed sensor, it opens or closes the electric circuit. Continuous type serial aligned resistance and reed relays are engaged and disengaged. Such changes of reed sensors and alarm or level information can be assessed through a relay circuit or control device.
Precision of reed sensor increases according to lowness of its placement range. It is preferred by the users due to the advantages of providing analogue output within the housing.
Furthermore, it is possible to follow and to control the process in the field through UDS indicator.



ELS-tx

LEVEL TRANSMITTER

ELS-tx

Advantages :

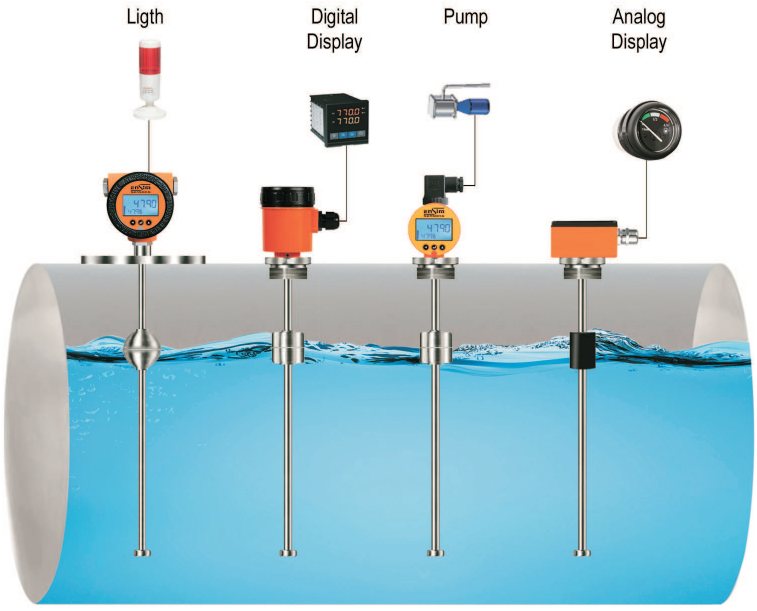
* Different material options according to liquid type
* Different contact options
* Fast delivery
* Different type applications possible

Model: 39-2026-009

Areas of Application :

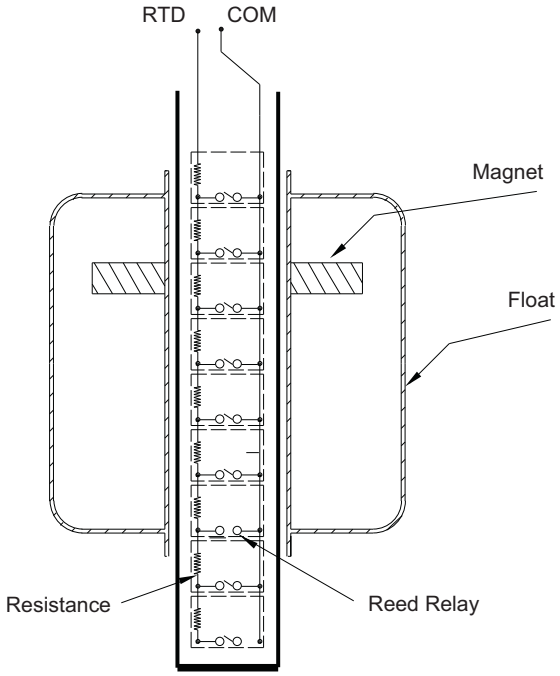
Tank level measuriing and control, boiler control, storage control.

Application Examples :

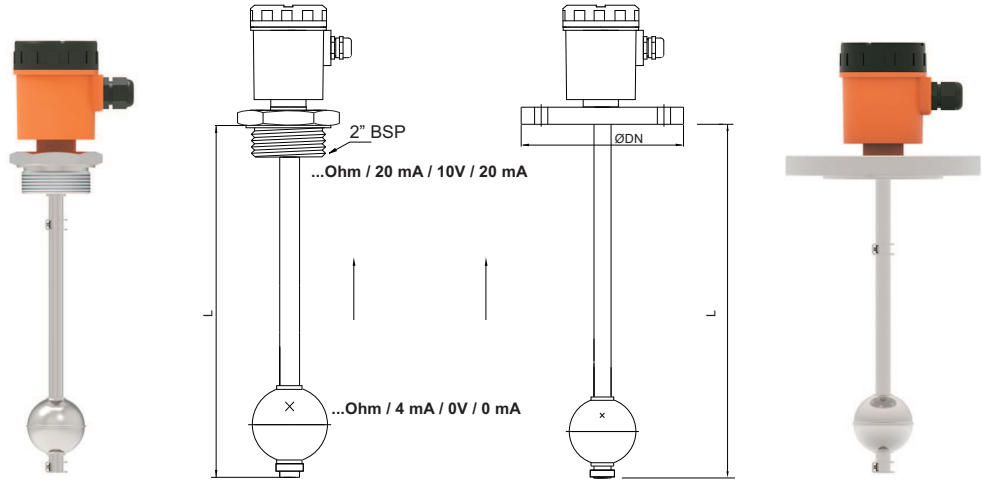


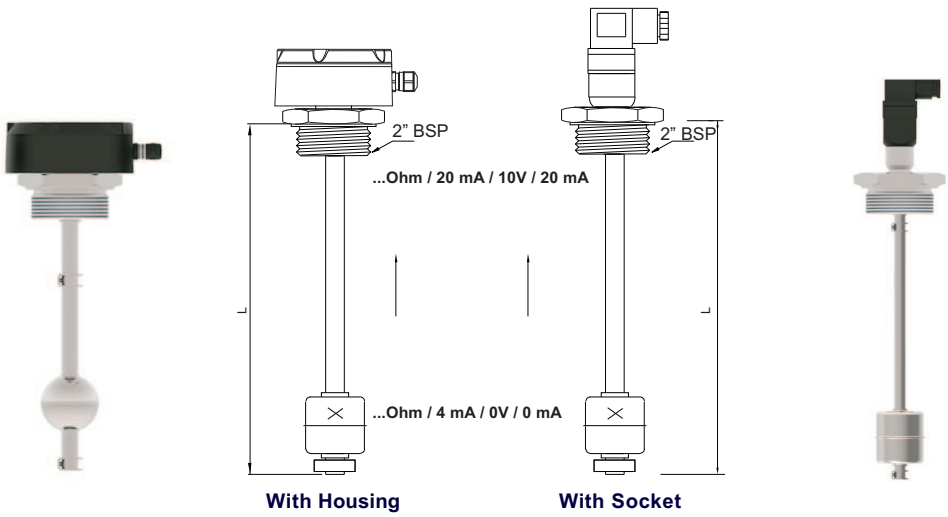
Technical Specifications :

	ELS-tx
Float Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Wetted Parts Material	304 Stainless Steel
Pipe Material	304 Stainless Steel
Float Type	S4A or S40A (Std.) Selectable from Table
Working Temperature	Max. 125 °C
Mechanical Connection	2" BSP (Std.) Opt. (eligible)
Electrical Connection	Terminal , With Cable , With Socket
Number of Float	1 (Std.)
Stem Length	Max. 6000 mm **(Thread Including)**
Power Supply	12....36 VDC
Output	4.20 mA Std. Two wire Opt. 4-20 mA , 0-20 mA , 0-10 V, Three wire , Ohm
Frequency of Detection	Std. 15 mm / 10 mm / 5 mm
Protection Class	IP 65 (Std.) , IP 66



Sample Models :





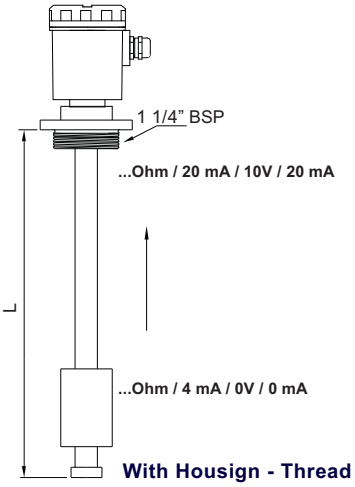
Technical Specifications :

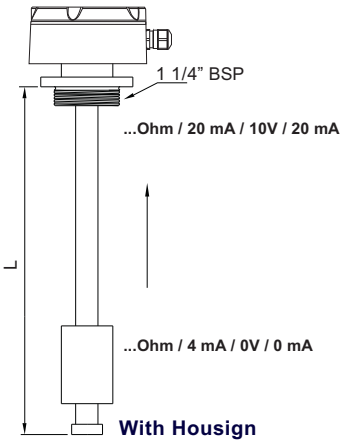
ELSy-tx

Float Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Wetted Parts Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Pipe Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Float Type	S4A or S40A (Std.) Selectable from Table
Working Temperature	Max. 125 °C
Mechanical Connection	1 1/4" BSP (Std.) Opt. (eligible)
Electrical Connection	Terminal , With Cable , With Socket
Number of Float	1 (Std.)
Stem Length	Max. 6000 mm **(Thread Including)**
Power Supply	12....36 VDC
Output	4.20 mA Std. Two wire Opt. 4-20 mA , 0-20 mA , 0-10 V, Three wire , Ohm
Frequency of Detection	Std. 15 mm / 10 mm / 5 mm
Protection Class	IP 65 (Std.) , IP 66

Sample Models :

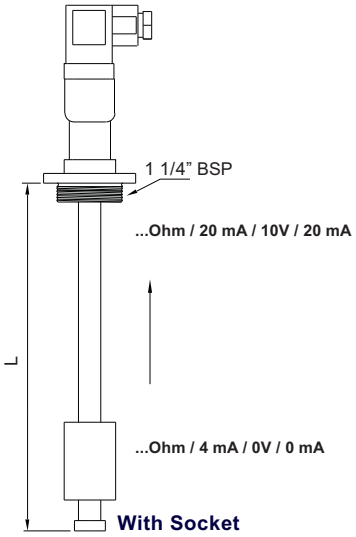


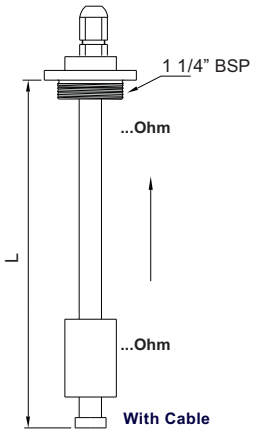














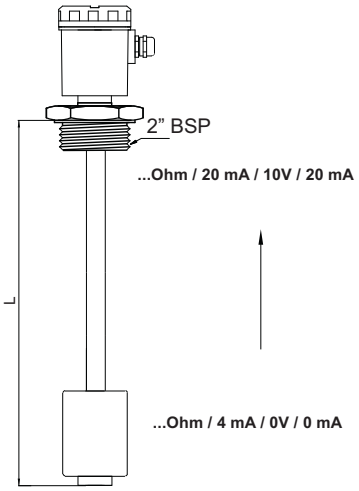
Technical Specifications :

ELSp-tx

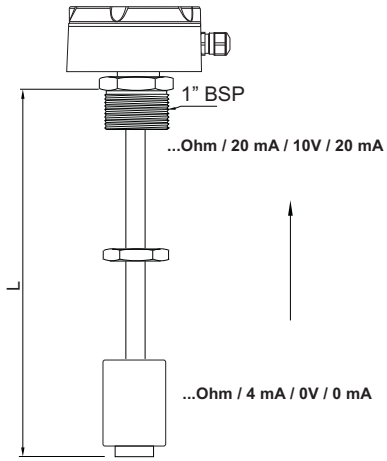
Float Material	PU (Std.)
Wetted Parts Material	PVC (Std.) Opt. Delrin, PTFE
Pipe Material	PVC (Std.)
Float Type	P6 (Std.) Selectable from Table
Working Temperature	Max. 80 °C
Mechanical Connection	1" BSP , 2" BSP (Std.) Opt. (eligible)
Electrical Connection	Terminal , With Cable , With Socket
Number of Float	1 (Std.)
Stem Length	Max. 2000 mm **(Thread Including)**
Power Supply	12....36 VDC
Output	4.20 mA Std. Two wire Opt. 4-20 mA , 0-20 mA , 0-10 V, Three wire , Ohm
Frequency of Detection	Std. 15 mm / 10 mm / 5 mm
Protection Class	IP 65 (Std.) IP 66 , IP 67

Sample Models :





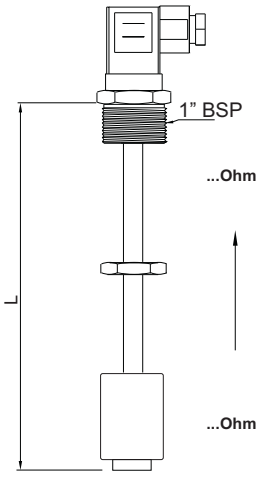
With Housign - Thread



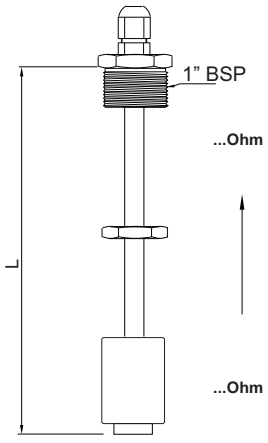


With Housign





With Socket





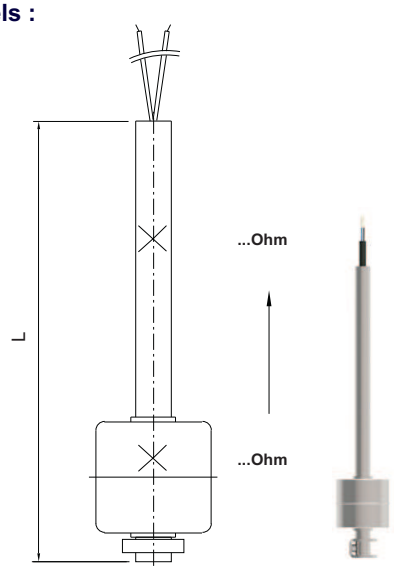
With Cable

Technical Specifications :

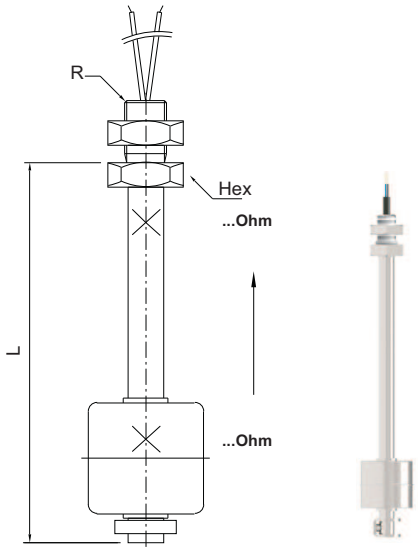
ELSm-tx

Float Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Wetted Parts Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Pipe Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Float Type	S4A or S40A (Std.) Selectable from Table
Working Temperature	Max. 125 °C
Mechanical Connection	3/8" BSP or 1/2" BSP (Std.) Opt. (eligible)
Electrical Connection	With Cable
Number of Float	1 (Std.)
Stem Length	Max. 2000 mm **(Hex Including)**
Power Supply	12....36 VDC
Output	Ohm
Frequency of Detection	Std. 15 mm / 10 mm / 5 mm
Protection Class	IP 67

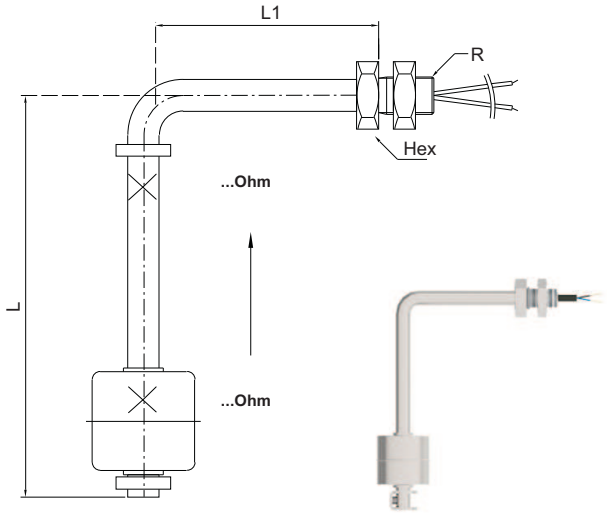
Sample Models :



Without Thread

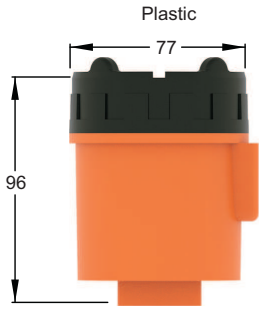


Straight Type

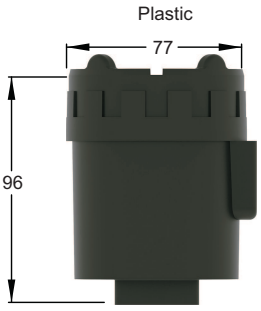


Elbow Type

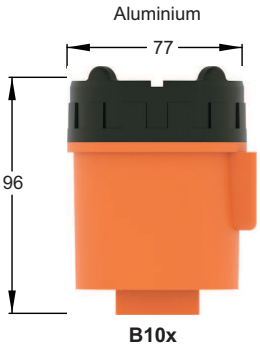
Housing :



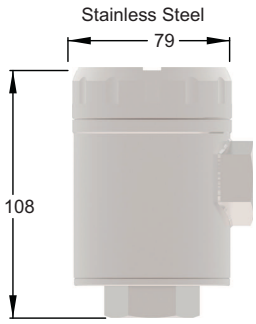
B10p



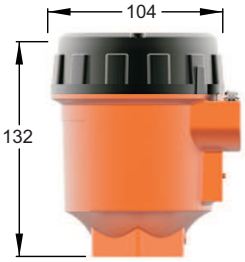
B11p



B10x



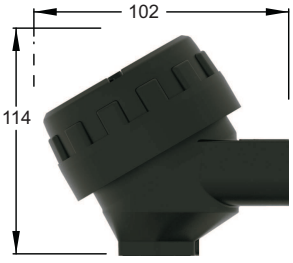
B101x



B20p

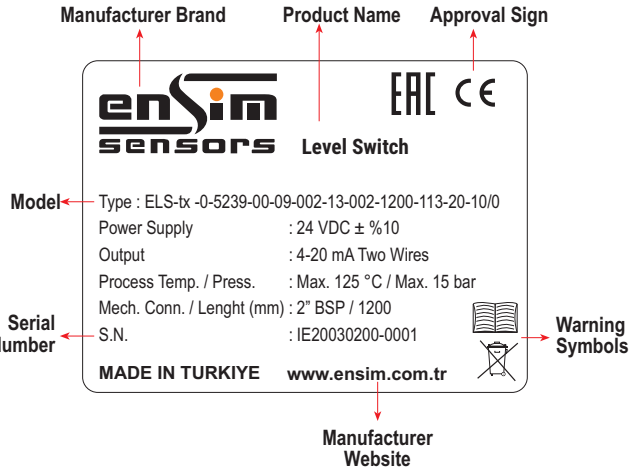


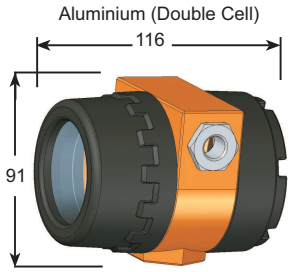
B20x



B22x

Product Label :





B010



P52 / P65



B037p

ORDER CODE	TYPE	MATERIAL	PROTECTION CLASS	TEMPERATURE (°C)	SIZE a x b x c (mm)
050	B10p	Plastic (PBT)	IP 65	(-) 40 °C ...(+) 150 °C	96 x 77
053	B11p	Plastic (PVDF)	IP 65	(-) 40 °C ...(+) 120 °C	96 x 77
103	B20p	Plastic (PBT)	IP 65	(-) 40 °C ...(+) 150 °C	132 x 104
193	B037p	Plastic (PBT)	IP 65	(-) 30 °C ...(+) 100 °C	93 x 43
503	B10x	Aluminium	IP 65	(-) 40 °C ...(+) 150 °C	96 x 77
603	B20x	Aluminium	IP 66	(-) 40 °C ...(+) 200 °C	132 x 104
750	B22x	Aluminium	IP 66	(-) 40 °C ...(+) 150 °C	114x102
851	B010x	Aluminium (Double Cell)	IP 68	(-) 40 °C ...(+) 100 °C	91 x 116
800	B101x	Stainless Steel	IP 65	(-) 40 °C ...(+) 150 °C	108 x 79
250	P52	PC Grey	IP 65	(-) 20 °C ...(+) 125 °C	52 x 50 x 36
252	P65	PC Grey	IP 65	(-) 20 °C ...(+) 125 °C	65 x 58 x 36

Protection Case :

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

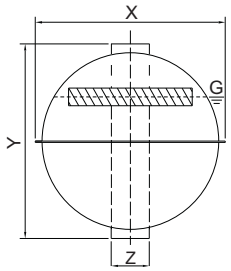


Digital Control Device (On / Off, PID)

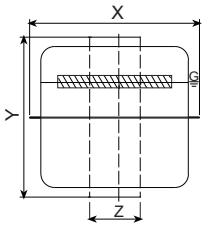
Power Supply	100-240 VAC or 24 VAC / DC
Output	4-20 mA, Two Contact Opt. Rs485 ModBus RTU
Working Temp.	0 / +50 °C
Dimensions	72 mm x 72 mm
Input	Universal (mA, mV, V, RT, TC)



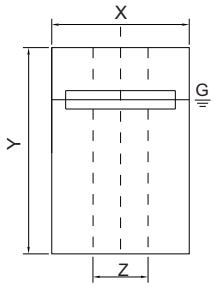
Float :



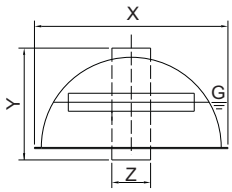
S2A / S5A / S6A
S40A / S41A / S53A



S1Y / S1A / S7A / S17A
S10Y / S11A / S54A

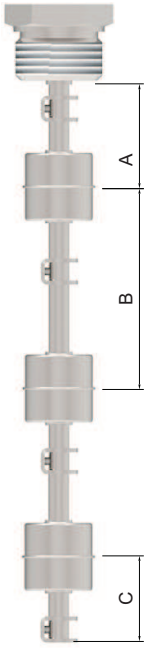


P3 / P6 / P7 P9



S42A / S52A

Minimum Distances



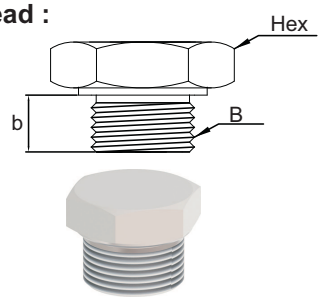
Order Code	Type	Material	X	Y	Z	Pipe Dia.	Max. Pressure (bar)	Max. Temp. (°C)	Density (g/cm³)	A	B	C
0102	S2A	316 St. St.	43	43	11	10	15	150	0.80	34	68	34
0104	S5A	316 St. St.	73	73	20	16	30	150	0.65	50	99	50
0105	S6A	316 St. St.	73	73	17	15	30	150	0.65	50	99	50
0106	S7A	316 St. St.	43	52	15	13	30	150	0.88	34	68	34
0111	S17A	316 St. St.	52	35	15	13	30	150	0.85	39	78	39
0113	S40A	316 St. St.	55	55	15	13	30	150	0.80	42	82	42
0114	S41A	316 St. St.	55	55	15	13	30	150	0,9	42	82	42
0115	S42A	316 St. St.	55	30	15	13	20	150	1,2	42	55	42
0118	S52A	316 St. St.	73	40	20	16	20	150	0,9	50	65	50
0119	S53A	316L St. St.	52,5	50,2	15,5	14	10	200	0,6	42	82	42
0120	S54A	316L St. St.	51	61,2	15,5	14	10	200	0,47	50	90	50

Order Code	Type	Material	X	Y	Z	Pipe Dia.	Max. Pressure (bar)	Max. Temp. (°C)	Density (g/cm³)	A	B	C
0201	P3	PU	30	45	12	10	1	80	0.76	28	60	40
0203	P6	PU	35	42	15	13	1	80	0.65	35	65	40
0204	P7	PU	44	50	18	15	1	80	0.40	38	70	50
0213	P9	PP	46	44	17	15	5	80	0.65	38	76	38
0207	P13	PU	30	32	12	10	1	80	0.90	28	75	40

All dimensions are stated as mm.

Mechanical Connections:

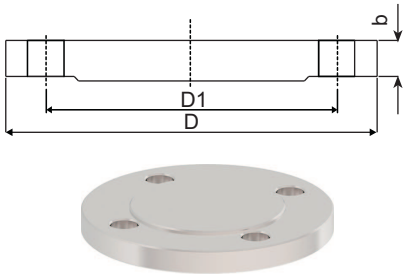
Thread :



(ISO228-1)

Order Code	Dimension B	Hex (mm)	Thread Size b (mm)
0001	1/8” BSP	17	12
0002	1/4” BSP	17	12
0003	3/8” BSP	24	20
0004	1/2” BSP	27	14
0005	3/4” BSP	32	14
0006	1” BSP	41	23
0008	1 1/4” BSP	51	23
0009	1 1/2” BSP	60	23
0012	2” BSP	70	23

Flanged

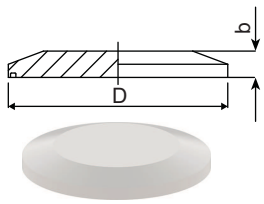


Order Code	(ISO1092-1) PN 16	D (mm)	D1 (mm)	b (mm)
0502	DN 25	165	85	16
0503	DN 32	140	100	16
0505	DN 50	165	125	18
0507	DN 80	200	160	20
0508	DN 100	220	180	20

Order Code	(ISO1092-1) PN 40	D (mm)	D1 (mm)	b (mm)
0702	DN 25	115	85	18
0703	DN 32	140	100	20
0705	DN 50	165	125	20
0707	DN 80	200	160	20
0708	DN 100	235	190	24

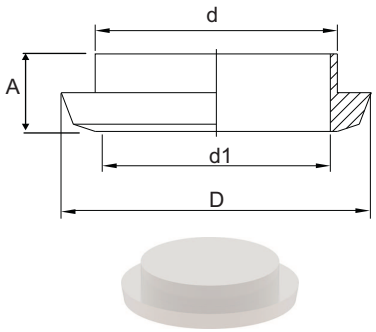
Order Code	(ANSI B16.5) 150 LBS	D (mm)	D1 (mm)	b (mm)
1005	DN 50	152,4	121	19
1006	DN 65	177,8	139,7	22,2
1007	DN 80	190,5	152,4	23,8
1008	DN 100	228,6	157,2	23,8

Clamp



Order Code	(ISO2852) Dimension	D (mm)	b (mm)
1501	DN 32	50,5	15
1502	DN 50	64	17
1503	DN 65	91	17

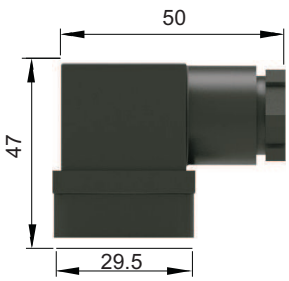
Dairy



Order Code	Dimension	Dimension	D (mm)	d1 (mm)	A (mm)
1600	DN 40	DN 40	56	48	15
1601	DN 50	DN 50	68	61	16
1602	DN 100	DN 100	121	114	20

Electrical Connection Type:

P01 / P03 / P04



K01 / K02 / K03

Order Code	Material	Protection Class	AA	L
01	Metal	PG7	14 AA	22
02	Metal	PG9	17 AA	22
03	Metal	PG11	20 AA	25
24	Plastic	PG13.5	24 AA	31
05	Metal-Ex 1/2” NPT	IP66/68 CESI 03ATEX	22 AA 305 X	25
06	Metal	R1/2”	22 AA	21

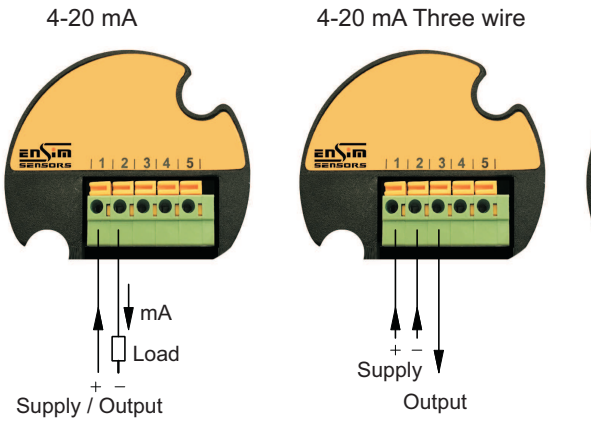
ML-2 / ML-5



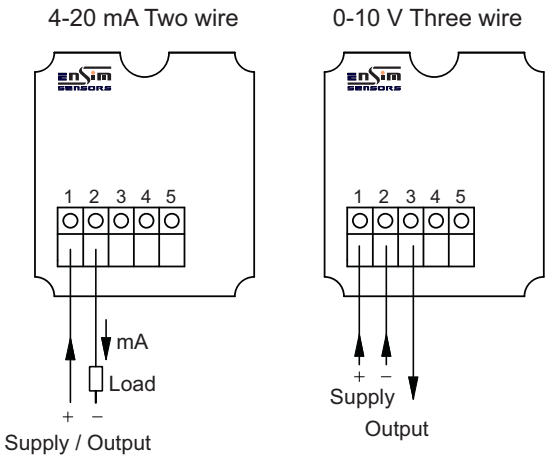
All dimensions are stated as mm.

Electrical Connection Type :

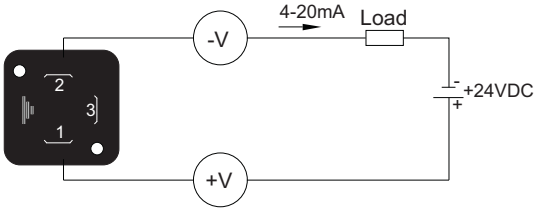
B10p , B10x , B101x With Housing



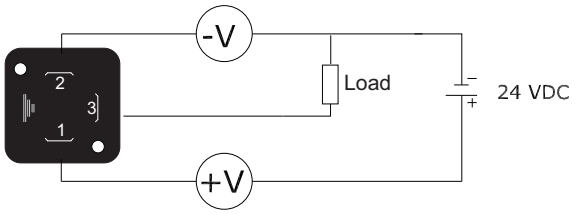
B038, P52, P65 With Housing



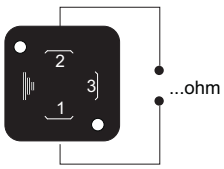
DIN43650 With Socket P01



Output : 4-20 mA Std. Two wire

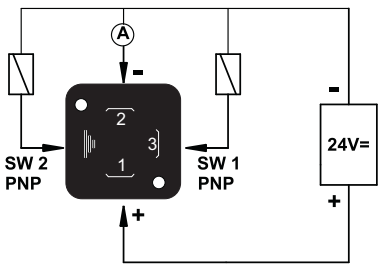


Output : Three wire 4-20 mA, 0-10 V



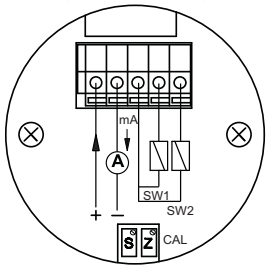
Output : ...ohm

EDS 01 For Display



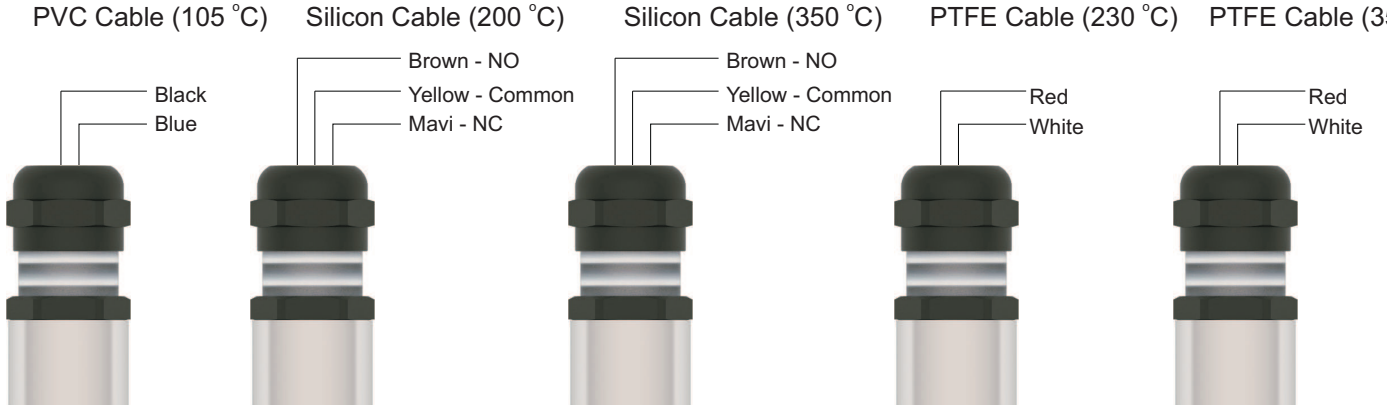
Output : 4-20 mA Two wire + 2 PNP NA

B010 Aluminium Housing
(Double Cell)



Output : 4-20 mA Two wire + 2 PNP NA

PG With Socket or with Cable



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

1 MODEL

Standard Version .....ELS-tx
ELSy (For Yacht Industry).....ELSy-tx
ELSp (For Hydraulic Tanks).....ELSp-tx
ELSm (For Machinery Manufacturing).....ELSm-tx

2 CERTIFICATE

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

3 HOUSING

None.....000
Plastic Housing , B10p 050
Plastic Housing , B11p 053
Plastic Housing , B20p 100
Plastic Housing , B037p.....192
Aluminium Housing , B10x 503
Aluminium Housing , B20x 600
Aluminium Housing , B22x 750
Aluminium Housing , B101x.....851
Stainless Steel Housing , B101x.....800
PC Grey , P52.....250
PC Grey , P65.....252
Special.....x

4 ELECTRICAL CONNECTION

Terminal (For Housing Models).....00
Polyamide Big Socket P01.....50
Polyamide Small Socket P02.....51
Polyamide Big Socket With Light P03.....52
Military Socket ML-2 , 2 Pin.....60
Military Socket ML-5 , 5 Pin.....61
M12-2 Pin.....70
M12-5 Pin.....71
M12-8 Pin.....72
PVC Cable (Max. 60 °C).....80
PVC Cable (Max. 105 °C).....81
Silicon Cable (Max. 200 °C).....82
PTFE Cable (Max. 230 °C).....83
Steel Shielded Cable (Max. 350 °C).....48
Special Cable.....x
Special Socket.....x

5 CONNECTION

With Pipe- Without Thread.....0000
Thread 1/8”BSP.....0001
Thread 1/4”BSP.....0002
Thread 3/8” BSP.....0003
Thread 1/2” BSP.....0004
Thread 3/4” BSP.....0005
Thread 1” BSP.....0006
Thread 1 1/4” BSP.....0008
Thread 1 1/2” BSP.....0009
Thread 2” BSP.....0012
Thread 1/2” BSP (Moving Type).....0112
Thread M10x1 Straight Type.....0113
Thread 1/8” BSP Elbow Type.....0111
Thread M10 x 1 Elbow Type.....0400
Thread 3/8” BSP Elbow Type.....0109
Thread 1/2” BSP Elbow Type 0110
1/8” NPT.....0200
1/4” NPT.....0201
3/8” NPT.....0202
1/2” NPT.....0203
3/4” NPT.....0204
1” NPT.....0205
1 1/4” NPT.....0206
1 1/2” NPT.....0207
2” NPT.....0208
Special.....x

Note: Refer to the table for others.

6 CONNECTION MATERIAL

None.....0
304 Stainless Steel.....001
316 Stainless Steel.....002
Brass.....041
Aluminum.....027
PVC.....061
Special.....x

7 PIPE SIZE (mm) Ø

8 mm.....08
10 mm.....10
12,7 mm.....12
12.7 mm / 13 mm.....13
15 mm.....15
Special.....x

8 PIPE MATERIAL

304 Stainless Steel.....001
316 Stainless Steel.....002
Aluminum.....027
PVC.....061
Special.....x

9 STEM LENGHT (mm) L

.... mm

Note: From the connection, (including thread)

10 FLOAT TYPE

Select from table

Note: Proper connection and radius should be selected.

11 OUTPUT

4-20 mA Two Wires.....19
4-20 mA Three Wires.....20
0-10 V Three Wires.....21
0-20 mA Three Wires.....22
3-180 Ohm.....23
10-180 Ohm.....24
240-33 Ohm.....25
0-180 Ohm.....26
4-mA two wire HART.....43
Special.....x

12 SENSITIVITY RANGE

15 mm.....15
10 mm.....10
5 mm.....05
Special.....x

13 OPTIONEL

None..... / 0
pt100 Sensor..... / P
Analog Display..... / DA
Local Digital Display..... / EDS01
Extarnal Tank (Dimensions should be stated)..... / H
Test Rode..... / T
Float Housing..... / M
Shetter (For the outside of the tank) 304 St. St...../ K6
Special..... x

SAMPLE

ELS-tx -0-050-00-09-002-13-002-1200-113-20-10/0

ELS-tx Level Transmitter, Plastic Housing, 2” BSP Male Thread , Connection and Pipe Material 316 Stainless steel , L= 1200 mm, S40A Float , 4-20 mA Three wire output , Sensing point in every 10 mm

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