Model: 37-2026-011

OPERATING MANUEL

Model : ELS

LEVEL SWITCH

Information in this manual is reviewed and completely reliable. Responsibility is not assumed due to any typing error.
Products in this manual are available only for information purpose and they may be changed without notice.



Models :

ELS , ELSy , ELSp , ELSm

Important Notes:

Used Symbols :

: Caution : Note : Disposal

- Please read this manual carefully before installation of the **level switch**. User is responsible for accidents and losses arising from failure to comply with the warnings in this manual.
- In the event that **level switch** is broken, take measures in order to prevent accidents and losses which can occur in its system.
- There is not any fuse and circuit breaker on the instrument; they should have been added to the system by the user.
- This manual should be stored in an easily accessible place for subsequent use.
- The manufacturer's liability cannot exceed the purchase price of the device according to the law.
- Do not make any modification on the instrument and do not try to repair it. Reparation should be made by authorized service staff.
- Do not operate the system before making assembly in compliance with the assembly chart related to the instrument.
- Products which do not contain label and serial number are considered to be excluded from the warranty scope.
- The instrument's useful life, determined and announced by the ministry, is 10 years.

Table of Contents :

1. **General Information** 2
2. **Installation** 4
3. **Failure Detection** 16
4. **Disassembly of Instrument** 16
5. **Service** 16
6. **Recalibration** 16
7. **Repair** 16
8. **Disposal** 16
9. **Terms of Warranty** 16
10. **Terms of Return** 16

1. General Information :

1.1. Material Acceptance

Check that there is no damage on the packages during the transportation immediately after the material acceptance. If packages are damaged, open the packages immediately and check whether products are affected or not, if there is any damage, send your complaint report to the transporter company and its photocopy to the address of our company.

1.2. Information about Areas of Use

It should be used in allowed using medium and application areas! It is not used in the corrosive mediums, ambient with explosive and flammable material. Conformity with medium to be measured should be also taken into consideration. Responsibility is not assumed in case of inappropriate use, modification and injure, and such cases are not covered by warranty.

Ambient Conditions: Relative Humidity: 5-95 %RH **Ambient temperature:** 60 °C (It is not used under -20 °C)

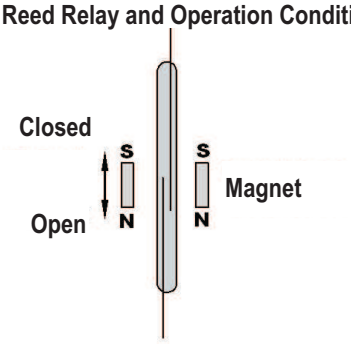
1.3. Working Principle

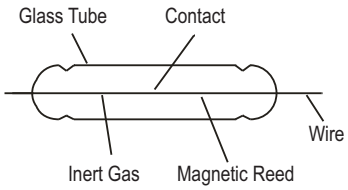
ELS level switches are used for checkin level of tank. It is preferred by machine manufacturers, especially in terms of its ease ofg use and economy. The ELS level switched can be mounted in litte places because of their mini design. The switches are made by stainless steel material and so can be used in various liquids.

When magnetic field of magnet in the float is aligned withreed sensor in the tube , it opens or closes the electric circuit.When float moves away , sensor reverts back (upon demand , drawn contact may be made).

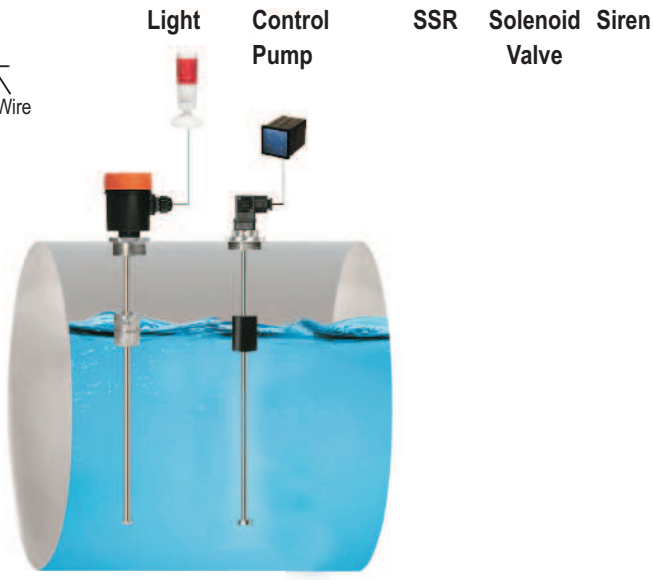
Level informationcan be assessed with a relay circuit.

Reed Relay and Operation Conditions

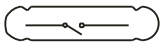




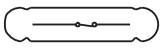
Example of application :



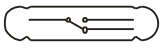
SPST-NO
Single Pole-Single Throw
Normally Open



SPST-NC
Single Pole-Single Throw
Normally Closed

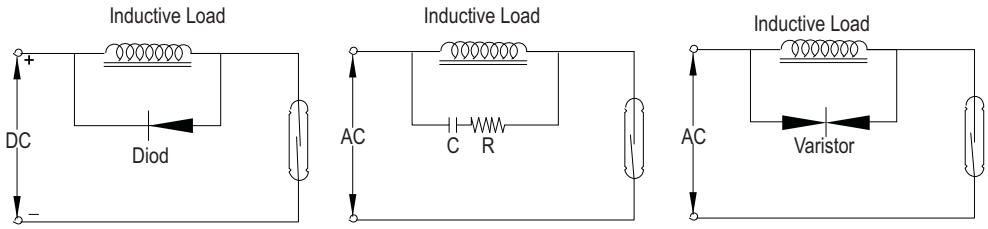


SPDT-NO/NC
Single Pole-Double Throw
Open / Closed Contact



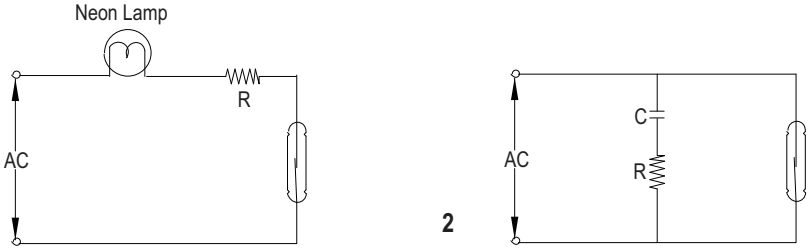
Inductive Load

When reed switch is used for loads such as electromagnetic relay ,contactor or solenoid, reed switch may be exposed to very high voltage depending on value of inductive load. This causes either failure of switch or shortening its service life. Therefore, it is recommended to be used as follows depending on used voltage, for the purpose of protection of switch.



Capacitive Load

When reed switch is used with capacitive load, it may cause that high current passes over reed switch, depending on value of capacity during Charge –'96 Discharge of capacity. So this may cause failure of switch. It is recommended to be used as follows depending on used voltage, for the purpose of protection of switch.



1.4.Technical Specifications :

MODEL	ELS	ELSy
Float Material	304 Stainless Steel	PU (Std.)
Wetted Parts Material	304 Stainless Steel (Std.) Opt. 316 St.St.	304 Stainless Steel (Std.) Opt. 316 St.St.
Pipe Material	304 Stainless Steel (Std.) Opt. 316 St.St.	304 Stainless Steel (Std.) Opt. 316 St.St.
Float Type	S4A or S40A (Std.) Selectable from Table.	P3 (Std.) Selectable from Table.
Working Temperature	Max. 125 °C	Max. 80 °C
Mechanical Connection	2" BSP (Std.) Opt. Selectable	1 1/4" BSP
Electrical Connection	Terminal, With Cable, With Socket	Terminal, With Cable, With Socket
Number of Float	1 (Std.) Available Numerous	1 (Std.) Available Numerous
Stem Lenght	Max. 2500 mm **(Thread Included)**	Max. 2500 mm **(Thread Included)**
Number of Contact	2 x SPST - NO (Std.) Opt. can be added	2 x SPST - NO (Std.) Opt. can be added
Contact Current	1,5 Amper (Std.)	1,5 Amper (Std.)
Max.Contact Capacity	50 W / VA	50 W / VA
Max. Supply Voltage	200 VDC / 250 VAC (Std.) Opt. Selectable	200 VDC / 250 VAC (Std.) Opt. Selectable

MODEL	ELSp	ELSm
Float Material	PU (Std.)	304 Stainless Steel (Std.) Opt. 316 St.St.
Wetted Parts Material	Aluminium (Std.) Opt. PVC, Delrin, PTFE, PFT	304 Stainless Steel (Std.) Opt. 316 St.St.
Pipe Material	Brass (Std.) Opt. PVC	304 Stainless Steel (Std.) Opt. 316 St.St.
Float Type	P3 (Std.) Selectable from Table.	S1Y (Std.) , Selectable from Table.
Working Temperature	Max. 80 °C	Max. 125 °C
Mechanical Connection	1" BSP + Nut	1/8" BSP + Nut (Std.) Opt. M10 x 1 mm² + Nut
Electrical Connection	Terminal, With Cable, With Socket	With Cable,
Number of Float	1 (Std.) Available Numerous	1 (Std.) Available Numerous
Stem Lenght	Max. 2500 mm **(Thread Included)**	Max. 2500 mm **(HEX Included)**
Number of Contact	2 x SPST - NO (Std.) Opt. can be added	2 x SPST - NO (Std.) Opt. can be added
Contact Current	1,5 Amper (Std.)	1 Amper (Std.)
Max.Contact Capacity	50 W / VA	10 W / VA
Max. Supply Voltage	200 VDC / 250 VAC (Std.) Opt. Selectable	200 VDC / 140 VAC (Std.) Opt. Selectable

Test Rod:

Rod Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel
Arm Material	304 Stainless Steel (Std.) Opt. 316 Stainless Steel

It has been manufactured as spring-operated. Optionally, the handle can be put inside the housing.



Level Control Device :

Power Supply	220 VAC , 2.8 VA
Output	2 pcs. 5A / 250 VAC Relay (Start/Stop)
Working Temperature	(-) 20 °C...(+) 70 °C
Dimension	72 mm x 72 mm
Input	Contact information , coming from ELS



SK P1 / SK P2

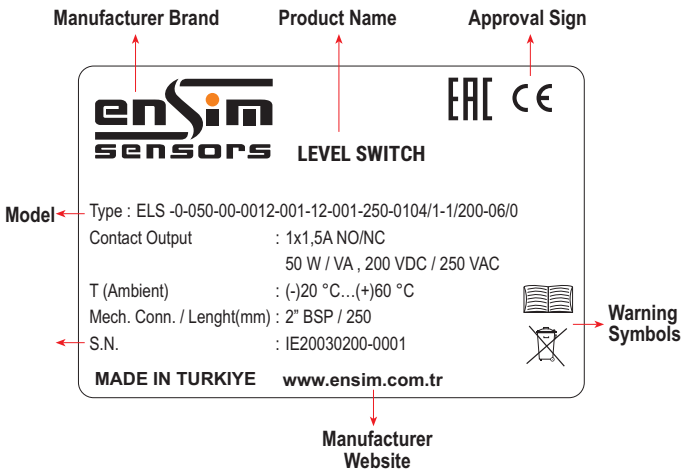
Protection Case :

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

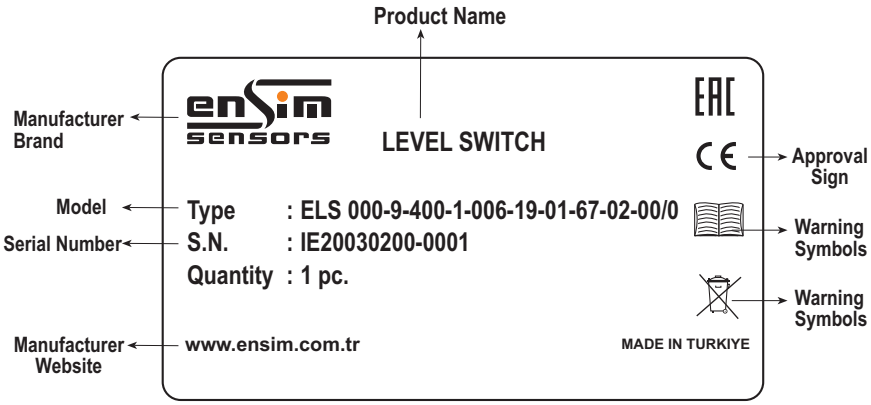


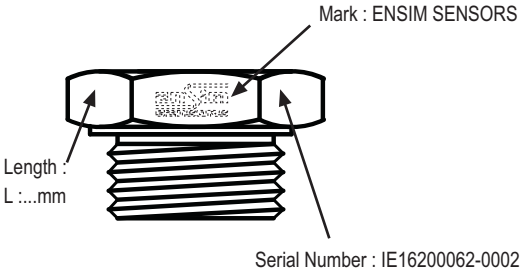
1.5. Product Label :

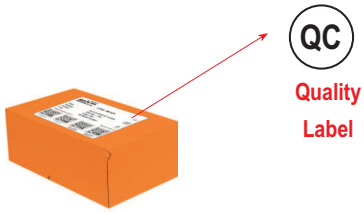
Product Label



Box Label







1.6. Content of Package

Please check whether you have taken delivery of below
listed content completely or not and check its conformity with criterions in your order:
*Level switch
*This operating manual

1.7. Target Group

This operating manual has been prepared for qualified technical personnel.

1.8.Security Notes

Following notes should be taken into consideration in order to avoid dangers which can occur on the operator and around the ambient:
Installation, operation and maintenance of this instrument should be made only by people who have read the operating manual and who are knowledgeable about work safety!
It should be complied with work safety, accident prevention regulations and national installation standards.
Product should be used only within the scope of stated specifications!
You can assemble the instrument only when pressure is not available!

2. Installation :



2.1. General Notes

Installation of the instrument should be made only by authorized personnel.
Do not apply force to the instrument during the installation!
Do not use the level indicator with a greater pressure than recommended pressure.
Do not forget that instrument is precise, carry it carefully and prevent to be damaged.
It should be guaranteed that there are not any magnetic particles.

2.2. General Installation Stages

*Remove level indicator from the box carefully
*Check whether gasket is appropriate for fluid or not. If is not appropriate, contact with the producer.
*Then, apply below mentioned explanations according to structure of the design.

2.3. Special Notes

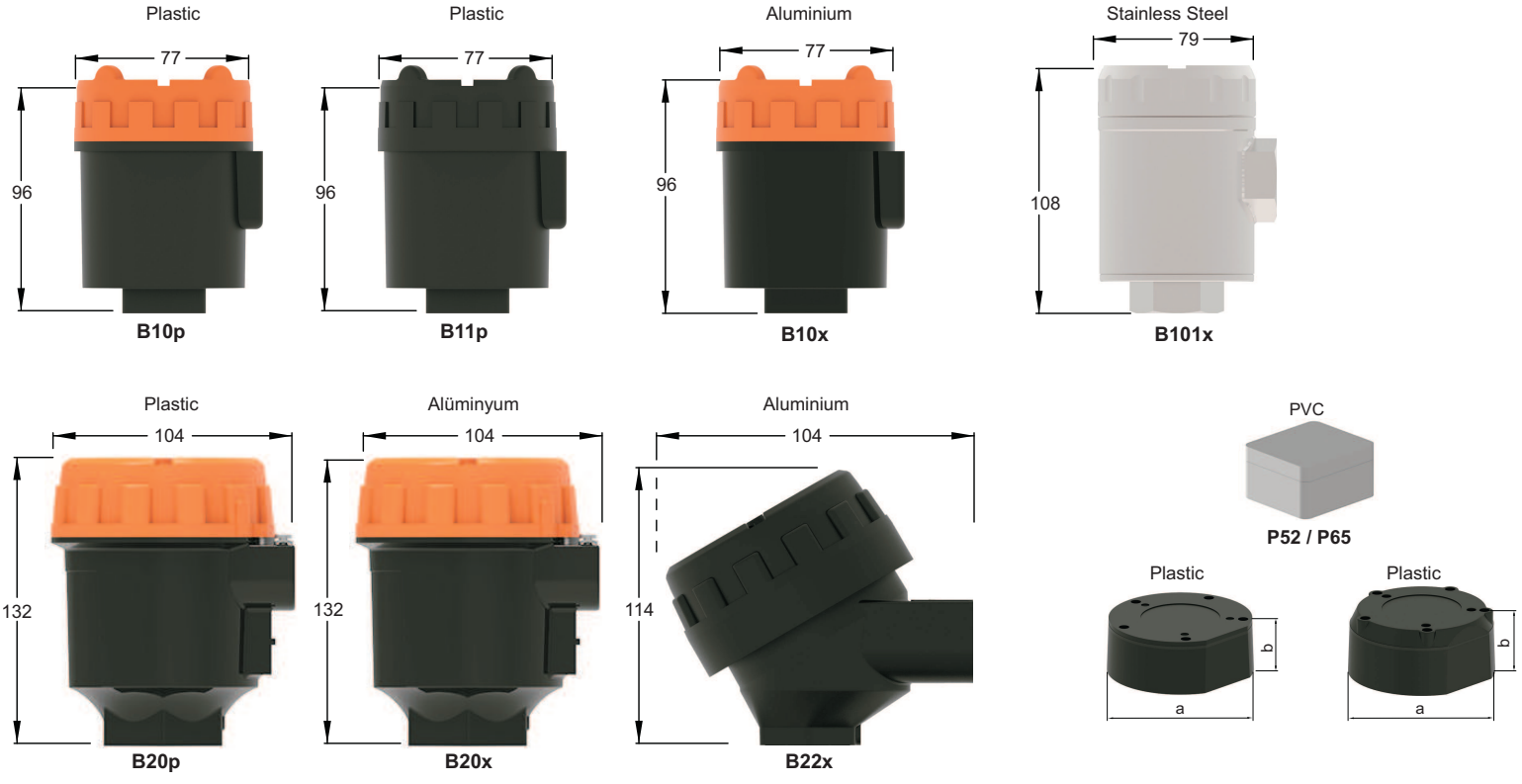
*Please ensure that there is no mechanical stress on the shaft following installation.
Such case will cause slipping in thecharacteristic curve.
*Level indicator should be placed in completely vertical position on the line.
*Allocate valve certainly in the process connection while instrument is used.
*Allocate blowdown valve under bottom flange for blowdown.
*If instrument is mounted outside and if there is any danger of lightning or excessive pressure,
take preventive measures by taking necessary measures.
*In the operating conditions, level indicator may be hot according to situation of fluid,
in this case, do not touch the indicator, otherwise your skin is damaged.

2.4. Installation For Mechanical Connections

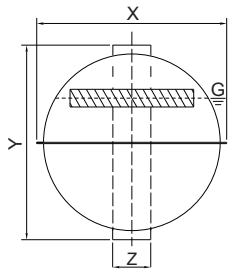
*Use appropriate O-Ring or gasket for tightness.
*Ensure that its surface is clean and smooth.
*Assemble the instrument manually.
*Connect the contacts as shown in the figure.
(G1/8" ve G 1/4" for max. 10 Nm , G1/2" or max. 15 Nm , G1"or max. 20 Nm, G2"or max. 30Nm)

2.5. Housing

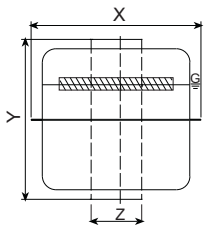
ORDER CODE	TYPE	MATERIAL	PROTECTION CLASS	TEMPERATURE (°C)	SIZE a x b x c (mm)
5030	B10p	Plastic (PBT)	IP 65	(-) 40 °C ...(+) 150 °C	96 x 77
5310	B11p	Plastic (PVDF)	IP 65	(-) 40 °C ...(+) 120 °C	96 x 77
5046	B20p	Plastic (PBT)	IP 65	(-) 40 °C ...(+) 150 °C	132 x 104
5023	B037	Plastic (PBT)	IP 65	(-) 30 °C ...(+) 100 °C	93 x 43
5109	B10x	Aluminium	IP 65	(-) 40 °C ...(+) 150 °C	96 x 77
5150	B20x	Aluminium	IP 66	(-) 40 °C ...(+) 200 °C	132 x 104
5308	B22x	Aluminium	IP 66	(-) 40 °C ...(+) 150 °C	114x102
5081	B010	Aluminium (Double Cell)	IP 68	(-) 40 °C ...(+) 100 °C	91 x 116
5265	B101x	Stainless Steel	IP 65	(-) 40 °C ...(+) 150 °C	108 x 79
5062	P52	PC Grey	IP 65	(-) 20 °C ...(+) 125 °C	52 x 50 x 36
5294	P65	PC Grey	IP 65	(-) 20 °C ...(+) 125 °C	65 x 58 x 36



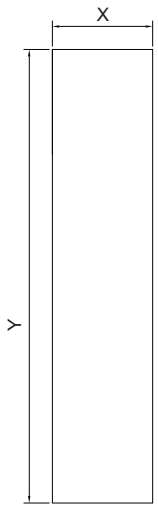
2.6. Float :



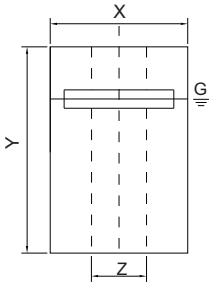
S2A / S5A / S6A
S40A / S41A / S53A



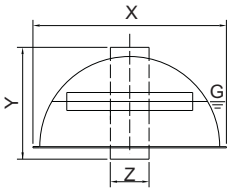
S1Y / S1A / S7A / S17A
S10Y / S11A / S54A



P25

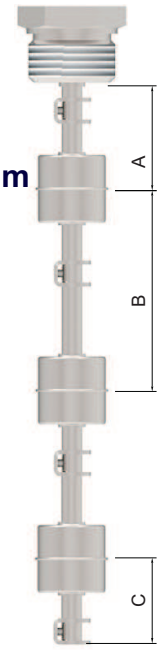


P3 / P6 / P7 P9



S42A / S52A

For Minimum Distance



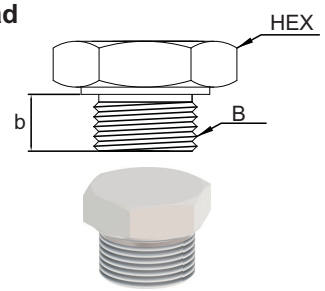
Order Code	Type	Material	X	Y	Z	Boru Çapı	Maks. Basınç	Maks. Sıcaklık	Yoğunluk	A	B	C
0001	S1Y	304 St. St.	28	28	9.5	8	10	150	0.80	25	50	25
0101	S1A	316 St. St.	28	28	9.5	8	10	150	0.80	25	50	25
0006	S10Y	304 St. St.	25,4	24,5	9.5	8	10	110	0,82	22	45	22
0110	S11A	316L St. St.	28,6	28	9.5	8	15	200	0,70	26	52	26
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
0228	S38A	316L St. St.	38	26	9,5	8	10	150	0,47	40	75	40

Order Code	Type	Material	X	Y	Z	Pipe Diameter	Maks. pressure	Maks. Temperature	Min. Density	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
0206	P25-1	PU	25	150	-	-	1	80	0.80	-	-	-
0207	P13	PU	30	32	12	10	1	80	0.90	28	75	40

All dimensions are stated as mm.

2.7. Installation For Mechanical Connection :

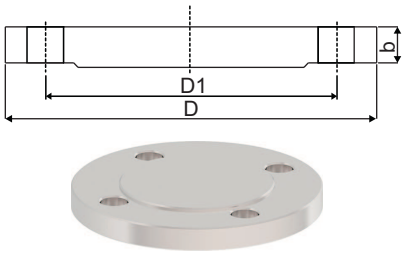
Thread



(ISO228-1)

Order Code	Dimension B	AA (mm)	Thread Length 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

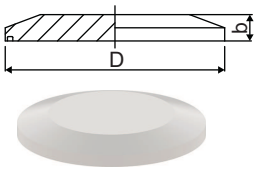


Order Code	(ISO1092-1) PN 16	D (mm)	D1 (mm)	b (mm)
0502	DN 25	165	85	16
0503	DN 32	140	100	16
0505	DN 50	165	125	18
0507	DN 80	200	160	20
0508	DN100	220	180	20

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

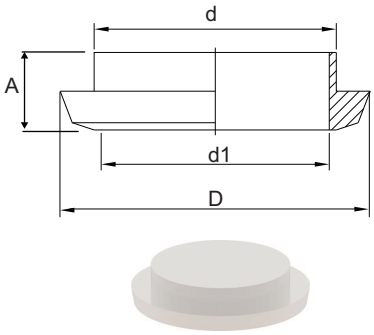
Order Code	(ANSI B16.5) 150 LBS	D (mm)	D1 (mm)	b (mm)
1005	DN 50	152,4	121	19
1006	DN 65	177,8	139,7	22,2
1007	DN 80	190,5	152,4	23,8
1008	DN 100	228,6	157,2	23,8

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

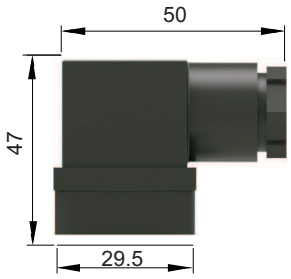
Dairy



Order Code	Dimension	Dimension	D (mm)	d1 (mm)	A (mm)
1600	DN 40	DN 40	56	48	13
1601	DN 50	DN 50	68	61	14
1602	DN1 00	DN 100	121	114	20

Electrical Connection Type:

P01 / P03 / P04



K01 / K02 / K03

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

ML-2 / ML-5



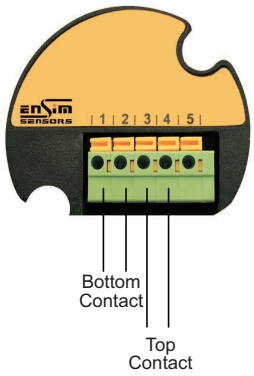
All dimensions are stated as mm.

2.8. Electrical Installation

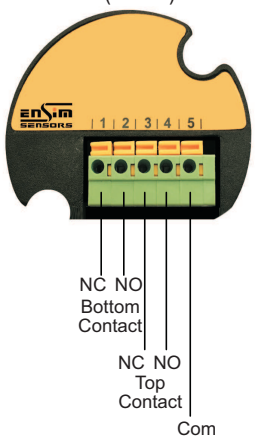
Make the electrical connection of the instrument according to details on its label, table and cable figures in this manual

B10p, B10x , B101x Housing

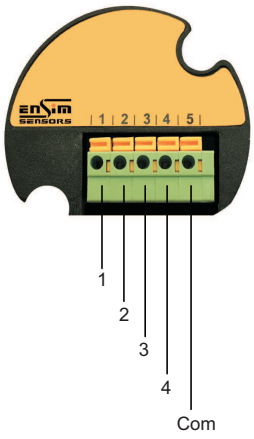
Two pieces independent contact
NO or NC



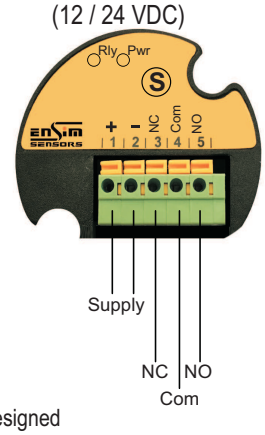
Two pieces double contact
NO / NC (SPDT)

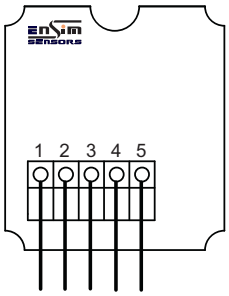


Four pieces contact
NO or NC



Liquid Level Contact
(12 / 24 VDC)



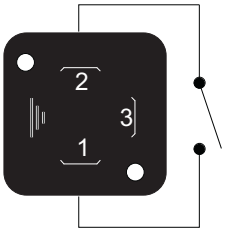


B035, P52, P65
Housing

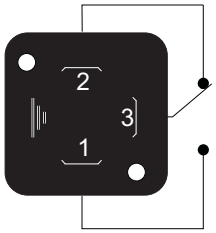
Note: RLY LED has been designed to turn off the pump is running.

ISO 4400 (DIN 43650A)

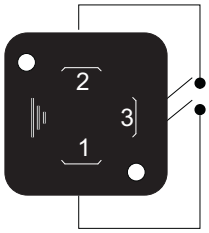
Socket P01 , P03 , P04



Single Contact
NO

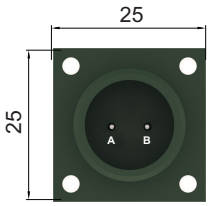


Single Contact
NO / NC (SPDT)



Two pieces single contact
NO

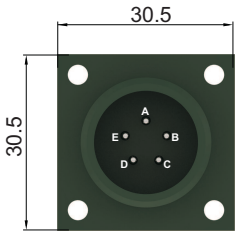
ML-2 Military Type
(CA3101A)



Single Contact
NO

Four Contacts
NO

ML-5 Military Type



A: 1 Contact
B: 2 Contact
C: 3 Contact
D: 4 Contact
E: Common

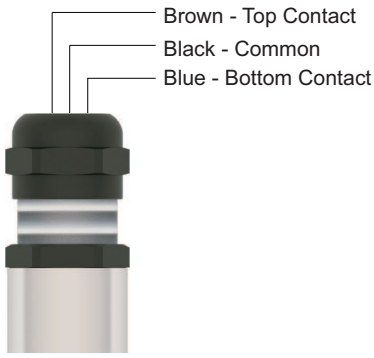
PG Socket or Cable K01 , K02, K03

PVC Cable (105 °C)



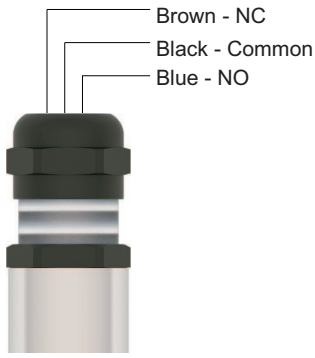
Single contact
NO or NC

PVC Cable (105 °C)



Two pieces single contact
NO or NC

PVC Cable (105 °C)



Single contact
NO / NC (SPDT)

Silicon Cable (200 °C)



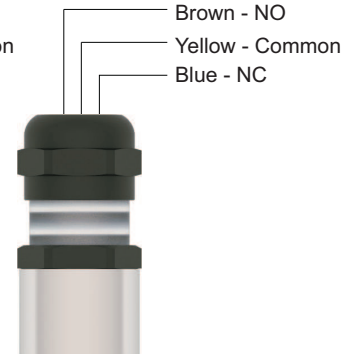
Single contact
NO or NC

Silicon Cable (200 °C)



Two pieces single contact
NO or NC

Silicon Cable (350 °C)



Two pieces single contact
NO or NC

PTFE Cable (230 °C)



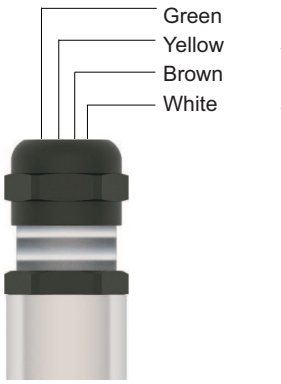
Single contact
NO or NC

PTFE Cable (350 °C)



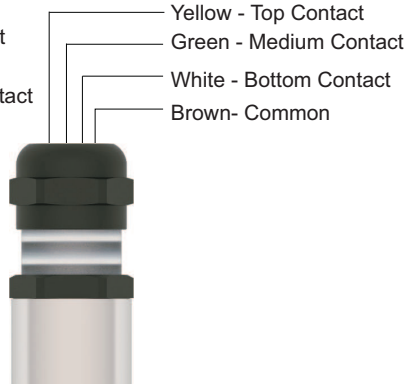
Single contact
NO or NC

PVC Cable (105 °C)



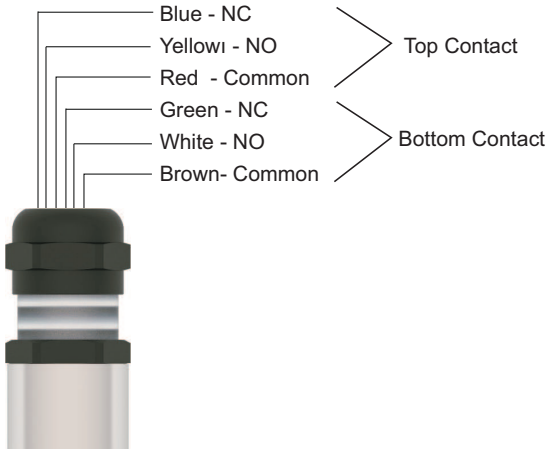
Two pieces independent contact
NO or NC

PVC Cable (105 °C)



Three piecescontact
NO or NC

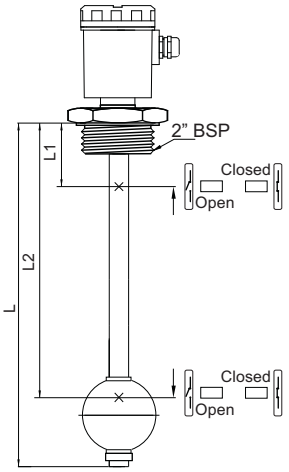
PVC Cable (105 °C)



Two pieces independent contact
NO / NC (SPDT)

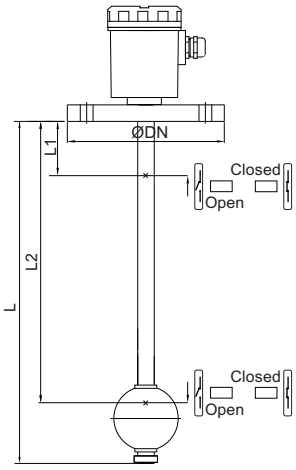
2.9. Sample Models :

ELS



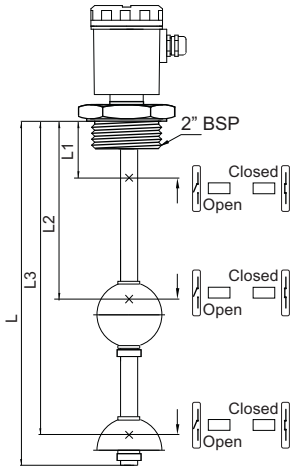


Housing - Thread



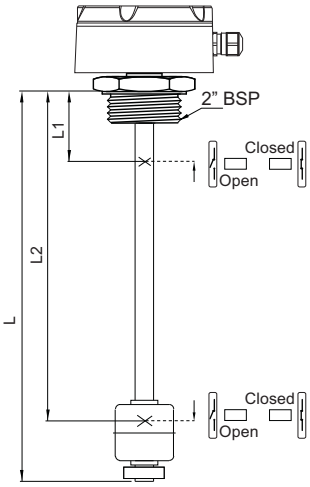


Housing - Flanged



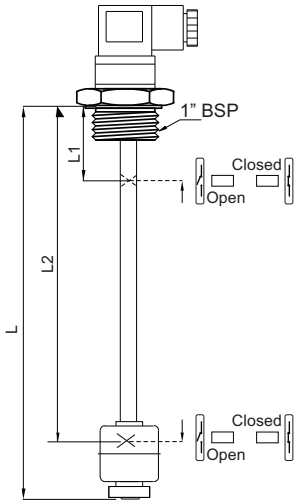


Housing - Double Float



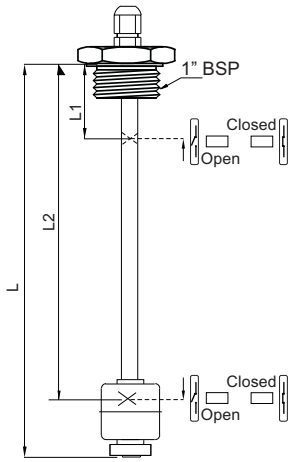


Housing



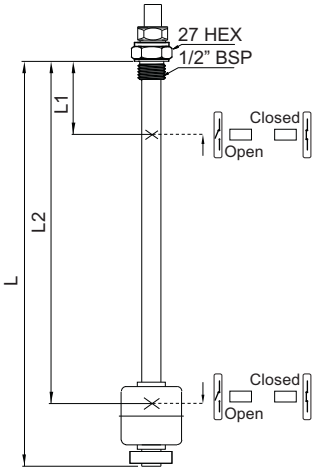


With Socket



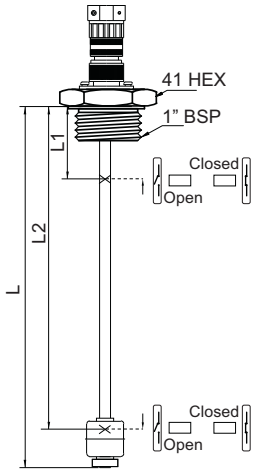


With Cable





Moving Thread

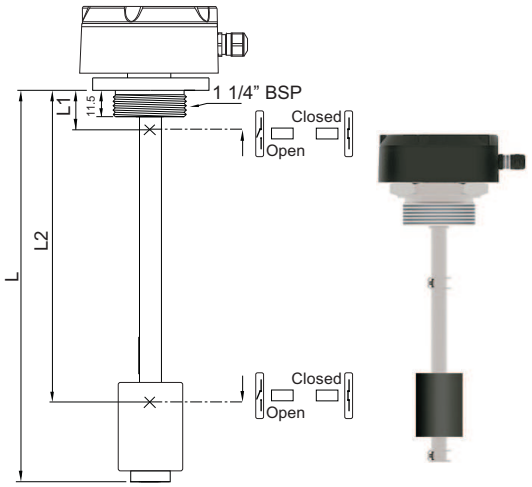




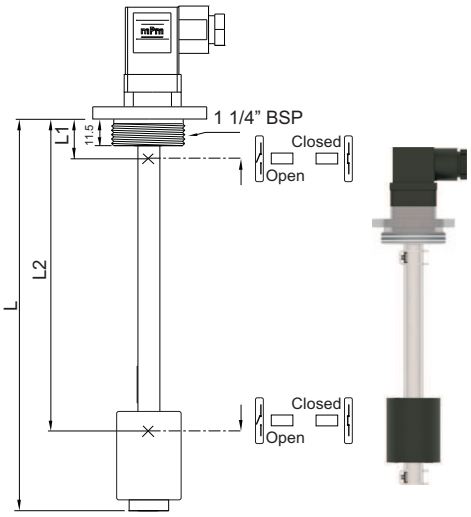
Military Socket

Sample Models :

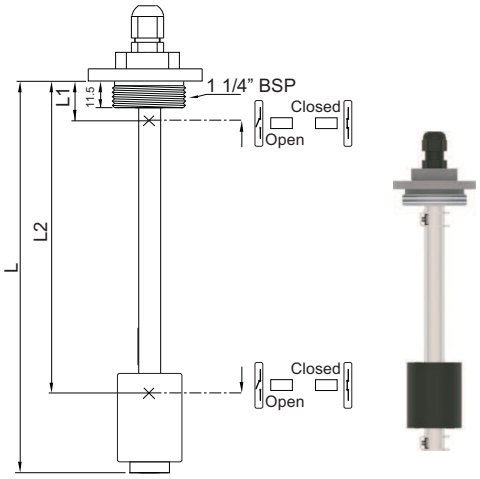
ELSy



Housing

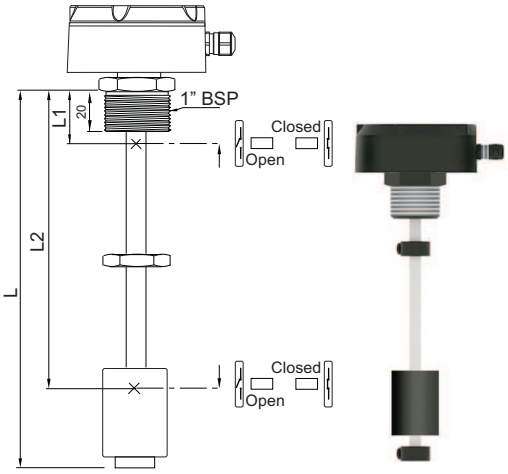


With Socket

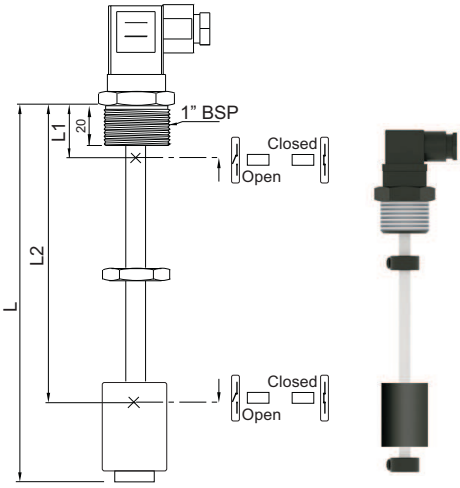


With Cable

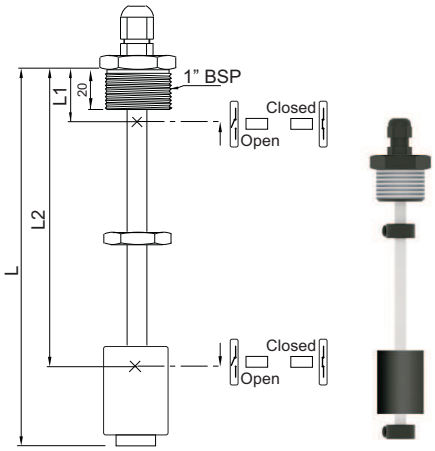
ELSp



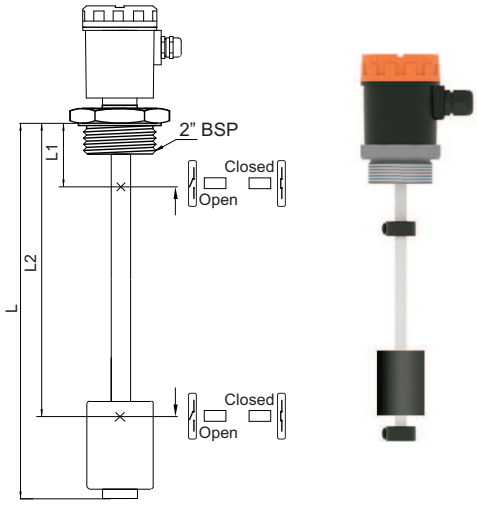
Housing



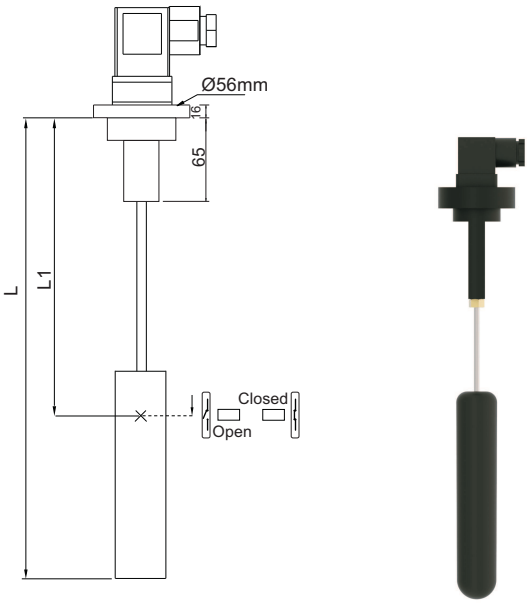
With Socket



With Cable



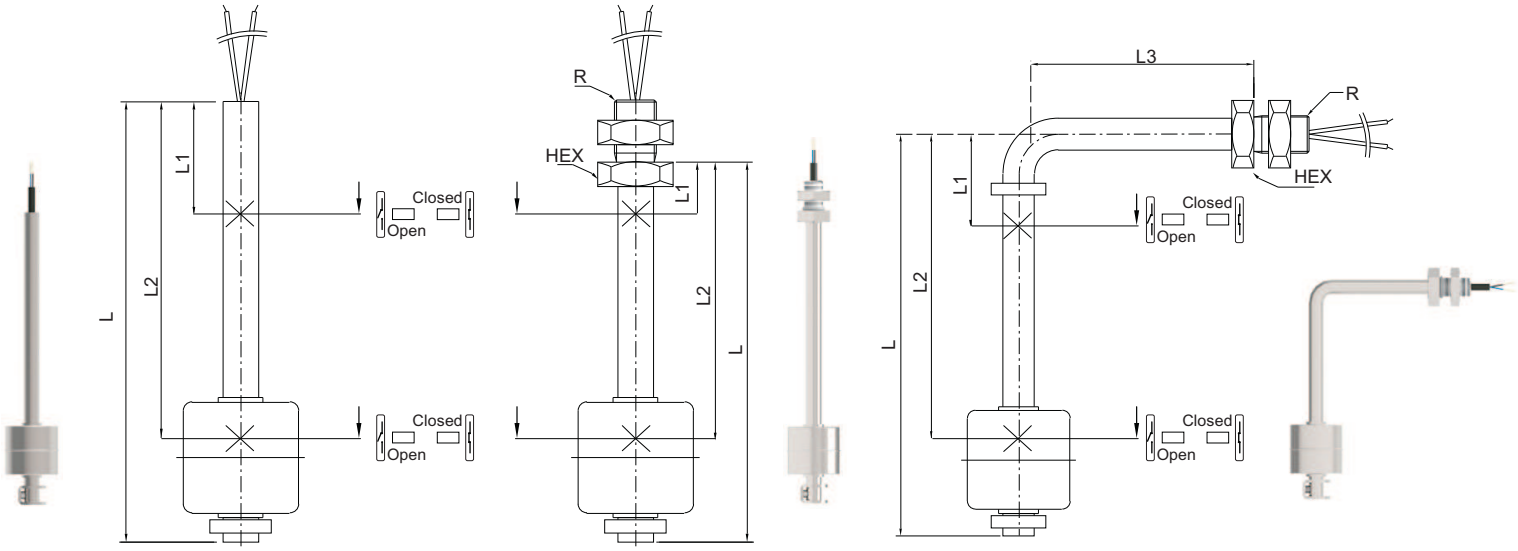
Housing - Thread



Special Type

Sample Models :

ELSm



Without Thread **Straight Type** **Elbow Type**



EMPTYING

Max. — NO — **Start**

Min. — NC — **Stop**



FILLING

Max. — NC — **Stop**

Min. — NO — **Start**

2.10. Order Form :

Order Form : Please consider sample models when coding

1 MODEL

Standart Version .....ELS
ELSy (For Yacht Industry).....ELSy
ELSp (For Hydraulic Tanks).....ELSp
ELSm (For Machinery Manufacturing).....ELSm

2 CERTIFICATE

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

3 HOUSING

None.....0
Plastic Housing , B10p 050
Plastic Housing , B11p 053
Plastic Housing , B20p 103
Plastic Housing , B037 193
Aluminium Housing , B10x 503
Aluminium Housing , B20x 603
Aluminium Housing , B22x 750
Stainless Steel Housing , B101x.....800
PC Grey , P52.....250
PC Grey , P65.....252
Special.....x

4 ELECTRICAL CONNECTION

Terminal (For Housing Models).....00
Polyamide Large Socket P01 50
Polyamide Small Socket P02 51
Polyamide Large Lighted Socket P03 52
Military Socket ML-2, 2 Pins 60
Military Socket ML-5, 5 Pins 61
M12- 2 Pins.....70
M12- 5 Pins.....71
M12- 8 Pins.....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

DN 25 - PN16 Flanged.....0502
DN 32 - PN16 Flanged.....0503
DN 50 - PN16 Flanged.....0505
DN 80 - PN16 Flanged.....0507
DN 100 - PN16 Flanged.....0508
Ø56 Special Flange.....1458
Special.....x

Note: Refer to the table for others.

6 CONNECTION MATERIAL

304 Stainless Steel 001
316 Stainless Steel.....002
Aluminium (with nut for ELSp) 027
PVC.....061
Delrin.....063
PTFE.....066
Special.....x

7 PIPE SIZE (mm) Ø

Ø 8 mm.....08
Ø 10 mm.....10
Ø 12 mm.....11
Ø 12.7 mm.....12
Ø 13 mm.....13
Ø 15 mm.....15
Special.....x

8 PIPE MATERIAL

304 Stainless Steel 001
316 Stainless Steel.....002
Brass.....041
PVC.....061
Special.....x

9 STEM LENGHT (mm) L

.... mm

Note: From the connection, including the thread.

10a FLOAT TYPE

Select from table .....

Note: It must be selected according to the connection and radius.

10b NUMBER OF FLOAT

Numbers...../..Pieces

Note: It must be selected according to the connection and radius.

11a CONTACT NUMBER

Pieces .....

Note: From the connection, including the thread.

11b DISTANCE (mm) L1

Length ...../...mm

Note: From the connection, including the thread.

12 CONTACT TYPE

NO Reed Relay.....06
NC Reed Relay.....07
NO / NC Reed Relay.....08
NO Hold Type Reed Relay.....09
Special.....x

13 OPTIONEL

None...../ 0
Pt100 Sensor...../ P
Liquid Level Relay...../ SSR
Extarnal Tank (Dimensions should be stated)../ H
Test Rod...../ T
Float Housing...../ M
Shetter (For the outside of the tank) 304 St. St...../ K6
Special.....x

SAMPLE

ELS -0-050-00-0005-001-13-001-1500-0001/1-3-1400-3-400/0

ELS Level Switches, Plastic Housing, 3/4" BSP Male Thread, Connection and Pipe Material 304 Stainless Steel
L=1500 mm, S1Y Float , L1= 1400 mm NO / NC Reed Relay Output 1400, L2= 400 mm NO / NC Reed Relay Output

2.11.

WARNING !!!

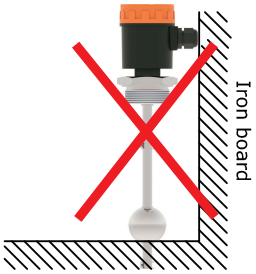
Please pay attention to following matters in order to operate your flow switch properly.



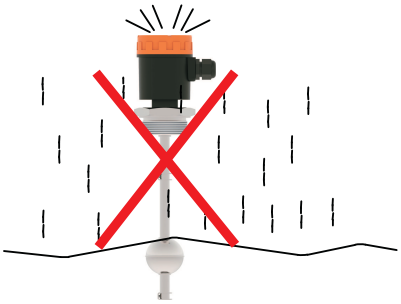
Please do not mount slant way, otherwise switch do not work correctly.



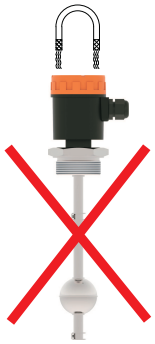
Do not pull the cable strongly, otherwise the characteristics might be changed.



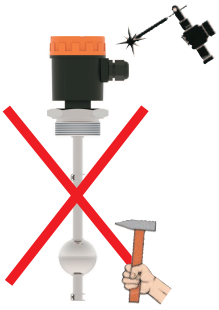
Please keep away from magnetic materials like iron board ; otherwise the characteristics might be affected



Please do not dip cables potting into liquids,otherwise instulation problem may cause.



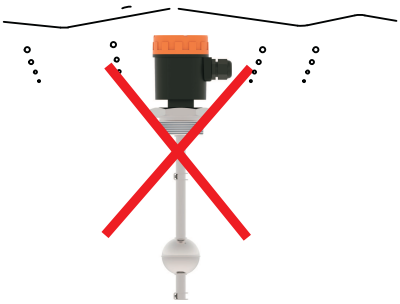
Do not fasten switch reversely , otherwise its characteristics might be changed.



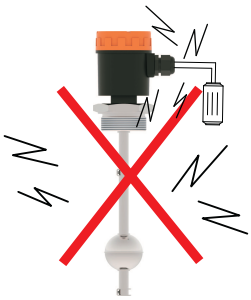
Please do not drop , otherwise the characteristics might be changed.



Vibration might be caused instability.



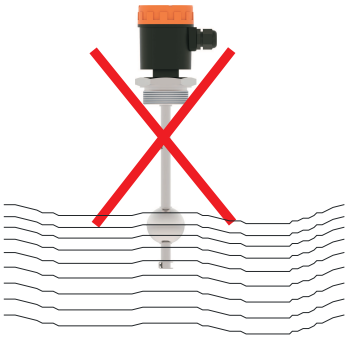
In case vapour splash cable potting points,insulation problem may cause.



Excess current , to be drawn as a result of direct connection to motor, may burn relay of switch



Do not remove the plastic parts of the bottom of the switch body , do not loosen.



Please avoid using with liquids which damage materials of parts ,otherwise quality can not be maintained accurately.



Do not remove the float from connection part. Because its pin might be damaged.

3. Failure Delection

Breakdown	Probable cause	Failure detection\correction
Fluid is leaking	There is a hole on the body.	-Check that is worked under appropriate condition and then contact with producer company.
It does not contact or it contacts continuously	-Socket connection is not touched. -Product was exposed to the magnetic field in the ambient. -Connetion angle is not corrrect. -Contact may have been burned.	-Check for socket connections. -The factor which constitutes the magnetic field should be removed or insulated. -Correct assembly angle. -Inform authorized service.
Body was broken	-Tightening the screws more than adequate during the assembly. -Product falling or taking a blow from outside.	-Inform authorized service.
Unsteady operation in the contact	-Product was exposed to the magnetic field in the ambient. -Product was exposed to vibration. -Product was exposed to high temperature.	-The factor which constitutes the magnetic fieldshould be removed or insulated. -Vibration which will effect the product should be prevented or it should be attached to any place without vibration. -Use in the appropriate opearating temperature.

If you find an error, try to eliminate it by using this table or send the instrument to our service address for repair.



The instrument should be repaired only by authorized service!

4. Disassembly of Instrument

Instrument should be disassembled while feeding and pressure is not available!

5. Service

The instrument does not require maintenance. If it is desired, residue accumulated inside should be blown according to kind of fluid and instrument can be cleaned with soft cleaning solutions. Measures should be taken during the disassembly.

6. Recalibration

Calibration is not required during long period useful life of a level switch.

7. Repair – Manufacturer Address

If irreparable breakdowns occur, the instrument should be sent to us for repair purpose. Before this, the instrument should be cleaned carefully and packaged so as not to be broken. Furthermore, you should also add a detailed explanation which describes the breakdown while instrument is sent. If your instrument contacts with harmful substances, decontamination report should be also sent additionally. In the event that instrument does not have any decontamination report or our service department has doubts about instrument, repair process will not start until an acceptable report is sent.



If the instrument contacts with hazardous substances, necessary measures should be taken for decontamination!
Service -Manufacturer Company Name and Address:

LONCA MAK. SAN. TİC. A.Ş. Ferhatpaşa Mah. 37. Sok. No: 78A Ataşehir - İSTANBUL - TÜRKİYE
Phone:+90 216 50 50 555 E-Mail: lonca@ensim.com.tr Web: www.ensim.com.tr

8. Disposal

The instrument should be disposed according to 2002/96/EC and 2003/108/EC European Directives (waste electrical and electronic instruments). Waste electrical and electronic equipment should not be mixed with domestic wastes!





If the instrument has contacted with harmful substances, special attention should be paid for its disposal!

9. Terms of Warranty

The instrument has warranty legally for 24 months after delivery date. Warranty demands are not accepted in case of inappropriate operation, damage on the instrument or any modification on the instrument.

10. Terms of Return

In the return of materials, user should send an open list related to damage or problem, malfunction of the material to be returned or its operation in the different modification, with the instrument. If it is required to return the material, used in the dangerous, corrosive or toxic fluid, in this case, used part should be cleaned very carefully. Security of personnel should be ensured. All products to be returned should be sent to our company address, which we have stated.