OPERATING MANUEL

Model : WATERSENS

LIQUID WARNING DEDECTOR

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 :

WATERSENS
WATERSENS-K
WATERSENS-P / N / R

CE

Important Notes:

Used Symbols :

: Caution : Note : Disposal

- Please read this manual carefully before installation of the **liquid warning dedector**. User is responsible for accidents and losses arising from failure to comply with the warnings in this manual.
- In the event that **liquid warning dedector** 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.

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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

WATERSENS is used in order to detect the flood in advance and to take precaution at homes and offices. It can be powered by 9V. battery. It can be ensured to stop any water leakage by commanding relay output to a solenoid valve. It can avail people around it to take precautions by attracting their attention through siren.

Applications:

Operation rooms, computer rooms, warehouses, generator rooms, compressor rooms, air conditioner rooms, baths, kitchens and
all locations having possibility of flood, fire alarm systems etc

WATERSENS P / N / R is used in order to determine the water level and to take precaution in the facilities. It ensures the people in the ambient to take precaution by attracting their attention through siren in order to determine high water or low water level.
Its electronic card is in the upper box and it is insulated with resin.
It is not affected by water. Electrode material has been selected as stainless steel and its electronic design has been performed specially in order that there is no electrolysis in the lead terminals. It is appropriate to submerge a weight onto the tooth on the submersion probe.

WATERSENS - K is used in order to determine the water level and to take precaution in the facilities. It ensures the people in the ambient to take precaution by attracting their attention through siren in order to determine high water or low water level.
Its electronic card is in the upper box and it is insulated with resin.
It is not affected by water. Electrode material has been selected as stainless steel and its electronic design has been performed specially in order that there is no electrolysis in the lead terminals. It is appropriate to submerge a weight onto the tooth on the submersion probe.

Applications:

Wells, warehouse, the possibility of overflowing places, for high water detection , ship tanks, water level control, water leakage.

Ambient Conditions: Relative Humidity: 5-95 %RH Ambient temperature: 50 °C (It is not used under -5 °C)

1.3. Working Principle

When at least two of the electrodes under the body come into contact with water, the siren will sound a warning.

Advantages :

* Easy to assembly
* Long life battery
* Can be connected to the panel
* Economical

1.4. Label Information:

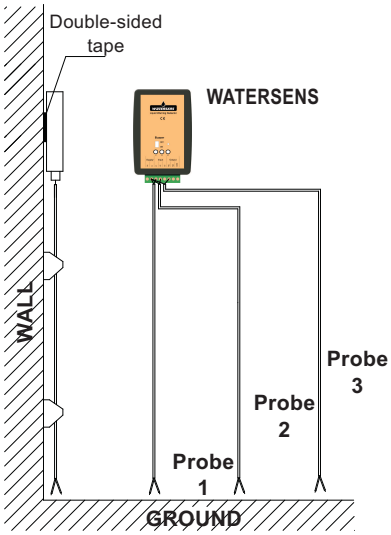
Label :



1.5. Features and Material Information

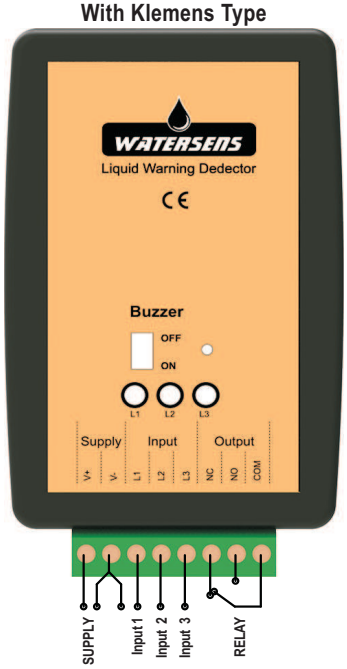
Technicial Specifications : **WATERSENS**

Display	3 ea. Alarm LED
Siren	1 ea. Siren + On /Off Button
Sensor	Bipolar Cable, 1 m. std. Three sensors can connect devices
Supply	1 x 9 V (6LR22) Battery or 24 VDC
Output	2 A / 125 VAC NO / NC
Battery life	2 years for storage
Housing	ABS Plastic, Black Colour (Opt.Grey) (Inbox; 1 ea. watersens and probe 1 ea. Battery, 1 ea. Double-sided tape 2 ea. Wall mounting bracket)
Weight (With package)	190 g.
Dimenson	70 mm x 100 mm x 22 mm



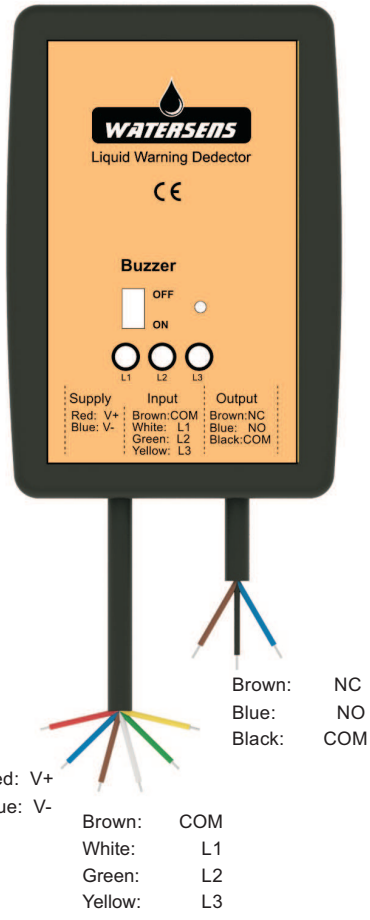
Electrical Connections:

WATERSENS
With Klemens Type

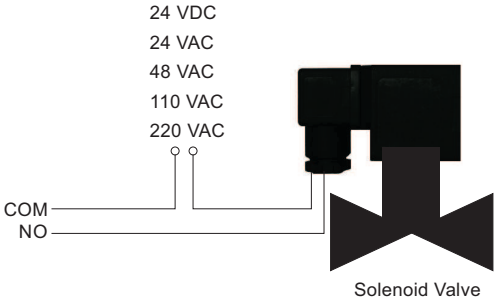


Note: The probe cable must supply by the customer

WATERSENS
With Cable Type

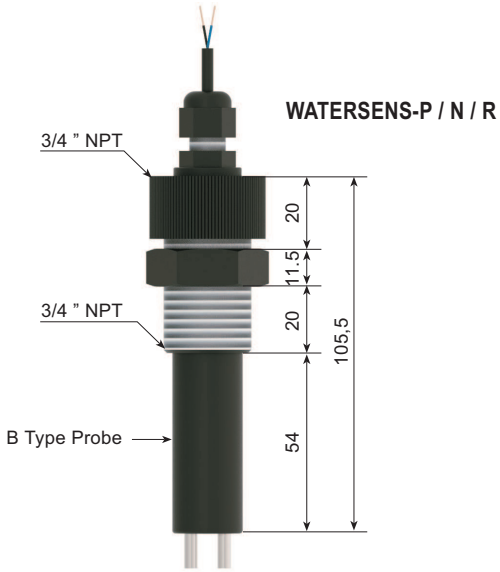


Sample applications:



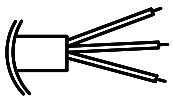
Technicial Specifications : **WATERSENS-P / N / R**

Supply	18 - 29 VDC
Cable	3 x 022 mm² or 5 x 022 mm² , 2 m. Std.
Output	PNP-NO or NC Max. 100 mA NPN-NO or NC Max. 100 mA RELAY-NO / NC Max. 300 mA In order to be indicated.
Connection	3/4 ” NPT Double Sided
Body Material	Polypropylene Opt. Stainless Steel
Working Temperature	Max. 85 °C
Working Pressure	Max. 20 bar
Mounting	Connected Vertically or Horizontally
Protection Class	IP 67
Min. Conductivity	100 microSiemens / cm



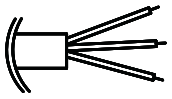
Electric Conncection:

WATERSENS-Po / Pc



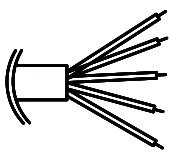
Brown: 18-29 VDC
Black: NPN NO or NC, Max. 100 mA
Blue: GND

WATERSENS-No / Nc



Brown: 18-29 VDC
Black: NPN NO or NC, Max. 100 mA
Blue: GND

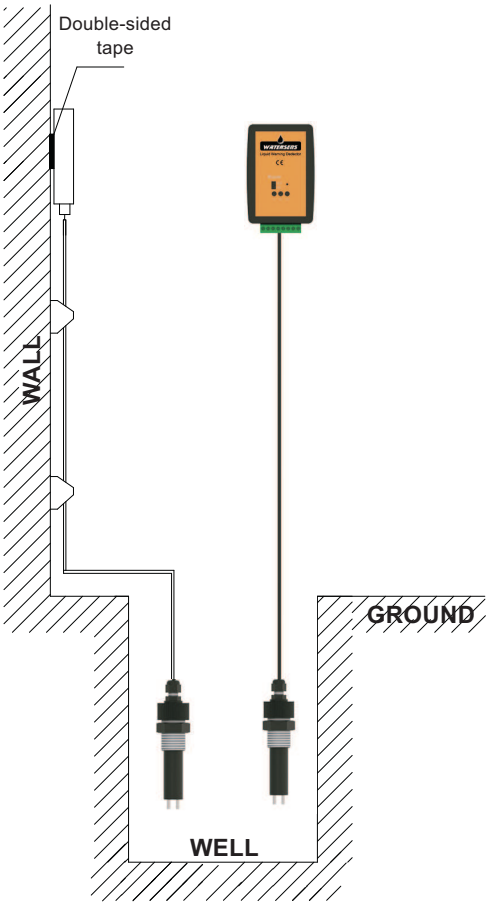
WATERSENS-R
Std. Product

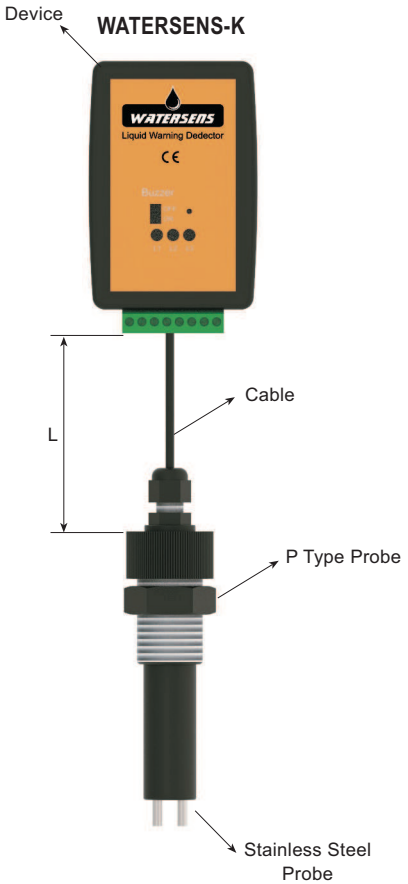


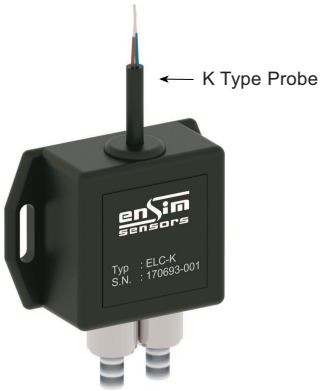
Brown: 18-29 VDC
Green: Relay NO, Max. 300 mA
White: Relay NC, Max. 300 mA
Yellow: Relay Coomon Pole
Blue: GND

Technicial Specifications : **WATERSENS-K**

Supply	1 x 9 V (6LR22) Battery or 24 VDC
Cable	3 x 022 mm² or 5 x 022 mm² , 2 m Std.
Output	2 A / 125 VAC NA / NK
Battery Life	2 years for storage
Housing	ABS Plastic, Black Colour (Opt.Grey) (Inbox; 1 ea watersens and probe 1 ea. Battery, 1 ea. Double-sided tape 2 ea. Wallmounting bracket)
Connection	3/4 " NPT Double Sided
Body Material	Polypropylene Opt. Stainless Steel
Working Temperature	Max. 85 °C
Working Pressure	Max. 20 bar
Mounting	Connected Vertically or Horizontally
Protection Class	IP 67
Min. Conductivity	100 microSiemens / cm







1.6. Target Group

This operating manual has been prepared for qualified technical personel.

1.7. 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.
Escaping steam or hot water when working on boilers.Wait for the pressure gets down to zero to intervene the device
Electrical shock while working with terminal strip which has 220-240 VAC on all terminals possibly.always cut off the power before interventions.
Product should be used only within the scope of stated specifications!
You can assemble the instrument only when pressure is not available!

1.8. 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:
·Liquid Warning Dedector
·This operating manual

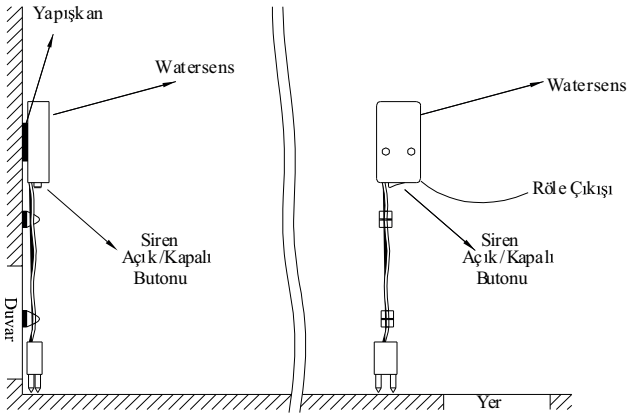
2. Installation

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 dedector 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 the device from cardboard box.
-Remove the battery from nylon and attach it by opening back cover of the device.
-Open ties of sensor and concact output cables and remove them without drawing.
-Check the end of sensor by touching wet cloth to it. Alarm has LED light and siren sound (while bottom button is ON).
When you turn the button OFF, siren will stop. But LED will continue to light. Whenever probe gets off the humid atmosphere, LED will go OFF. Turn the button ON
-Assemble the sensor onto the surface through the adhesive behind it.
-Assemble the device onto an upper point through the adhesive behind it.
-If you use the relay output, you can attach it to your alarm panel, solenoid valve or similar control system.
-Due to the fact that device does not consume any energy other other than alarm position, you do not need to replace the battery.
Battery waiting life is 2 years according to production date.



2.3. Electrical Installation

Make the electrical connection of the device according to the data on the label and the tables and cable shapes in this manual.

2.4. Order Form

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

1 MODEL

.....WATERSENS
.....WATERSENS-P
.....WATERSENS-K
.....WATERSENS-N
.....WATERSENS-R

2 CERTIFICATE

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

3 HOUSING

ABS , Gray , B026p.....304
ABS , Black, B025p.....303
Special x

4 ELECTRICAL CONNECTION

Terminal (For Housing Models) 00
PVC Cable (max. 60 ° C) 80
PVC Cable (Max.105 ° C) 81
Silicon Cable 82
Probe.....xp
Special x

5 CONTACT STRUCTURE

NPN - NO.....00
NPN - NC.....01
PNP - NO.....03
PNP - NC.....04
Relay NO / NC.....10
Special x

6 PROBE TYPE

Without Probe.....0
Cable Probe.....1
With Supply B Type Probe.....3
Without Supply K Type Probe.....4
Without Supply P Type Probe.....5
Special x

7 CABLE LENGTH (m) L

.....m

8 OPTIONAL

None...../ 0
Special x

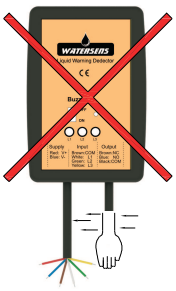
EXAMPLE

WATERSENS -0-304-00-10-0-00-3/0
WATERSENS , Relay NO / NC , Grey Boxed

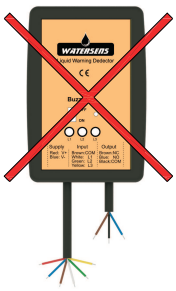
2.5.

WARNINGS!!!

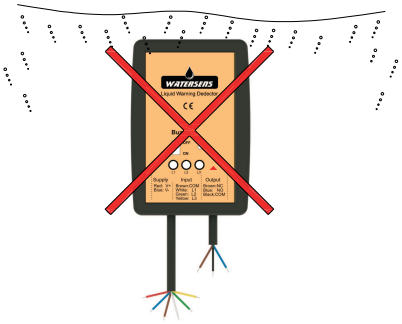
Please pay attention to following matters in order to operate your level switch properly.



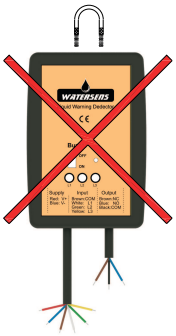
Do not pull the cable strongly, otherwise the characteristics might be changed.



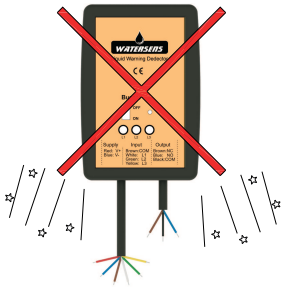
It should not be placed on metal conductive surfaces.



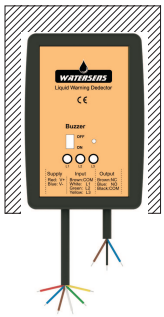
In case vapour splash cable potting points,insulation problem may cause.



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



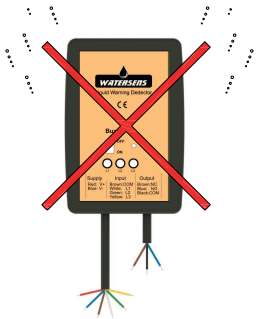
Excess current , to be drawn as a result of direct connection to motor, may burn relay of switch



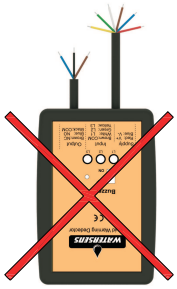
It can be fixed to the wall with screws.



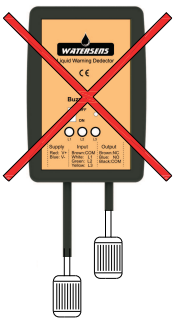
Tighten the cable connections firmly.



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.



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

3. Failure Detection

Breakdown	Probable	Failure detection/correction
No relay output / Continous relay output	-The whole device is stuck in the water. -A high current was applied to the contacts of the device. -The battery may be low, please check it. -The probe cable was torn off while replacing the battery.	-Notify the authorized service.
Broken or dissolved housing	-Product was dropped or hit from outside	-Notify the authorized service.

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 liquid warning dedector.

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 Mahallesi Gazipaşa Caddesi No:104 A 34888 Ataşehir / İSTANBUL - TÜRKİYE

Tel:+90 216 505 05 55 Faks:+90 216 515 45 84 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.