

## CAPACITIVE LEVEL TRANSMITTER

# ECASe

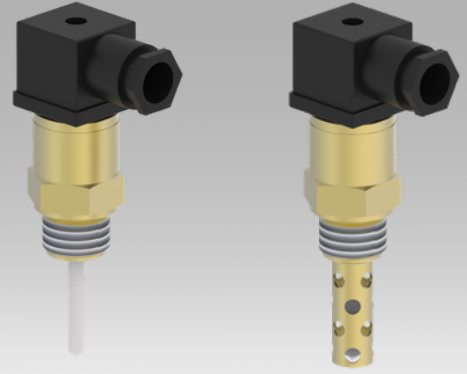
level sensor is a capacitive level sensor used for level control in conductive liquids and low-conductivity liquids.

When the product comes into contact with the sensor, it creates a change in capacitance. When this change exceeds the set threshold, the sensor provides a contact output.

It is designed for demanding process conditions. Models with cooling elements can be manufactured for high-temperature and high-pressure applications. The sensor can be installed either horizontally or vertically.

### Advantages

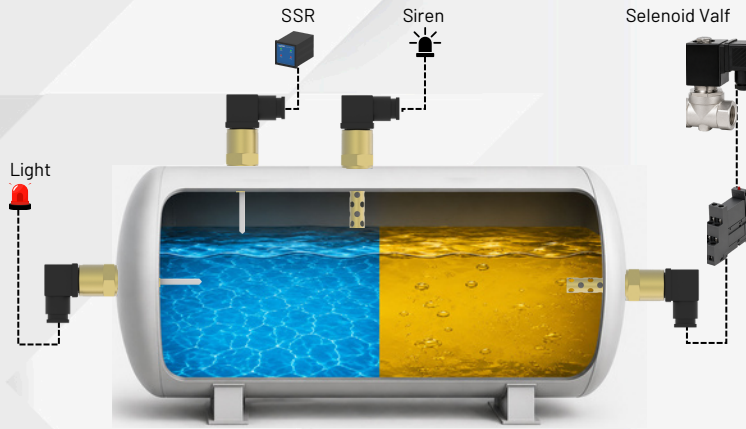
- Easy to install and sensitivity adjustment can be performed easily.
- Unaffected by foam, liquid splashing, and probe coating.
- Unaffected by vibration.



CE EAC

### Model

- ECASe 101
- ECASe 203



### Technical Specifications

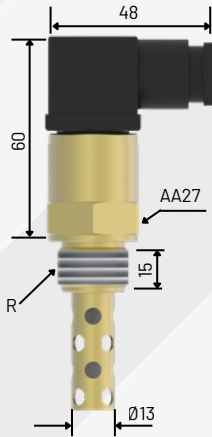
| Medium                     | Conductive Liquids<br>Low-Conductivity Liquids                                                                                                                    |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply                     | 10...30 VDC Max.35 V                                                                                                                                              |
| Output                     | NPN or PNP Open-Collector Transistor<br>NO or NC (please specify when ordering)<br>Ensure that the relay operating voltage is compatible with the supply voltage. |
| Accuracy                   | Standard as factory default                                                                                                                                       |
| Min. Dielectric Constant   | 1,6 $\epsilon_r$                                                                                                                                                  |
| Mechanical Connection      | R 1/2" std. Male                                                                                                                                                  |
| Connection Material        | Brass (Std.) Opt. 304/316 SS                                                                                                                                      |
| Insulation Material        | PVDF (Std.) Opt. PTFE                                                                                                                                             |
| Working Pressure           | Max. 20 bar                                                                                                                                                       |
| Working Temperature        | (-) 40 °C / (+) 120 °C                                                                                                                                            |
| Ambient Temperature        | (-) 20 °C / (+) 80 °C                                                                                                                                             |
| Power Consumption          | Max. 1 W                                                                                                                                                          |
| Electrical Connection      | Opt. ISO 4400- connector socket (Std.)                                                                                                                            |
| Protection Class (EN60529) | IP 65(Std.), IP 66, IP 67, IP 68                                                                                                                                  |
| Lenght                     | 50 mm. (Std)                                                                                                                                                      |
| Test                       | EMC, Low Voltage                                                                                                                                                  |
| Force Applied to the Probe | Maks. 20 Nm                                                                                                                                                       |
| Weight                     | Maks.115 gr.                                                                                                                                                      |
| Optional                   | (Sızdırmazlık için) Vibro Seal 516                                                                                                                                |

### Application Areas

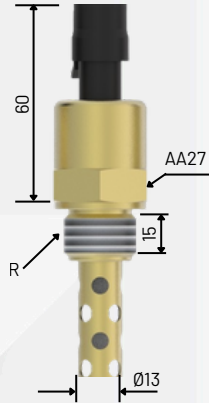


## Dimensions

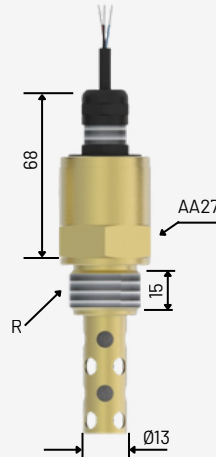
ISO 4400  
Connector



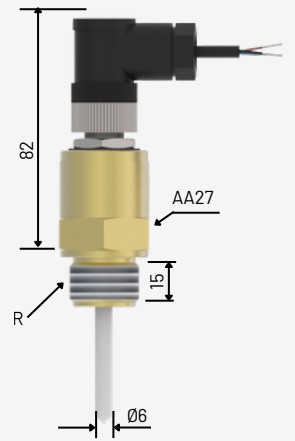
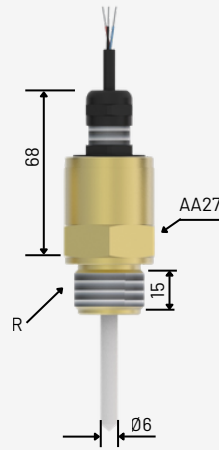
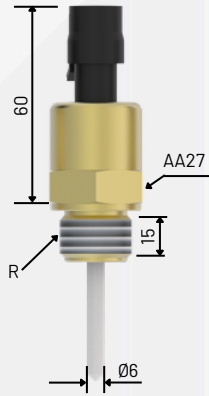
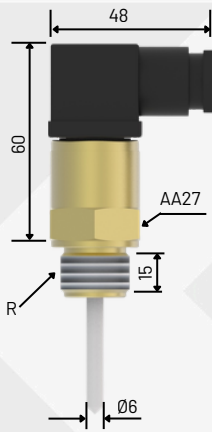
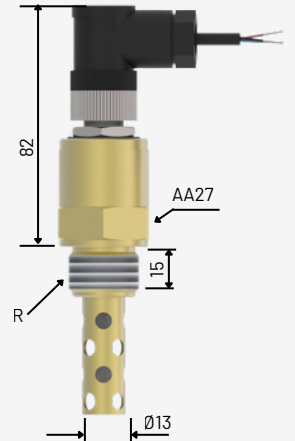
HM Packard 3-Pin  
Connector



Cable  
Outlet

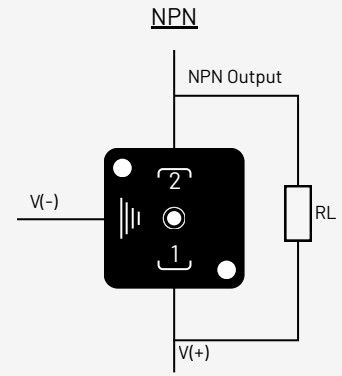
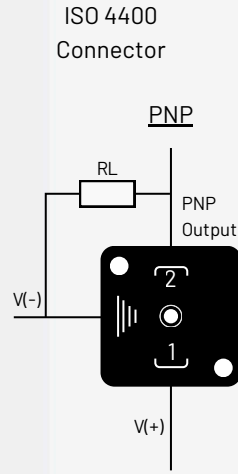
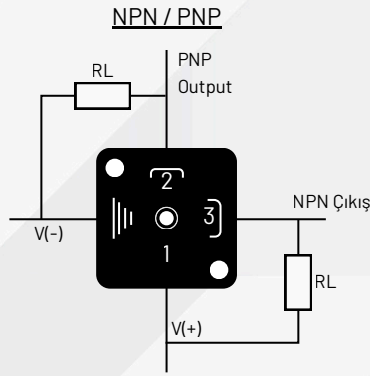


M12 5-Pin  
Connector

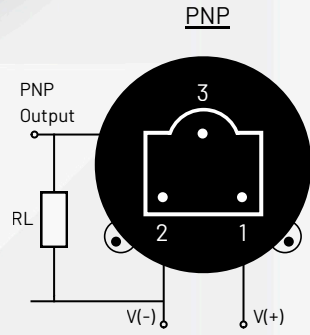


## Label

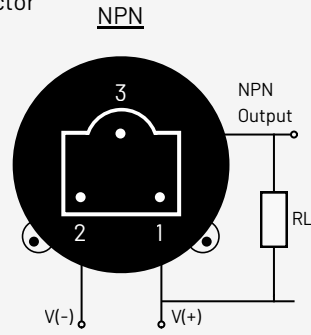
|                           | Manufacturer Brand                                     | Product Name        | Approval Mark |
|---------------------------|--------------------------------------------------------|---------------------|---------------|
| Model                     | <b>ensim</b><br>sensors                                | <b>LEVEL SWITCH</b> | <b>EMC CE</b> |
| Type                      | : ECASe 101-0-0-004-00-07-066-041-50/0                 |                     |               |
| Power Supply              | : 24 VDC ± %10                                         |                     |               |
| Output                    | : 1 x PNP - NO                                         |                     |               |
| Process Temp.             | : (-)40 °C" (+)120 °C                                  |                     |               |
| T (Ambient)               | : (-)20 °C" (+)80 °C                                   |                     |               |
| Mech. Conn. / Lenght (mm) | : 1/2" BSP / 50                                        |                     |               |
| S.N.                      | : IE20060002-0001                                      |                     |               |
| Serial Number             | : IE20060002-0001                                      |                     |               |
|                           | <b>MADE IN TURKIYE</b>                                 |                     |               |
|                           |                                                        |                     |               |
|                           | <a href="http://www.ensim.com.tr">www.ensim.com.tr</a> |                     |               |



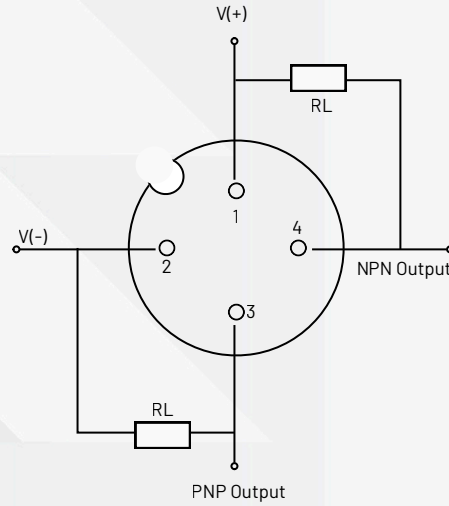
HM Packard  
3-Pin  
Connector



1 : V(-)  
2 : V(+)  
3 : PNP Output



1 : V(-)  
2 : V(+)  
3 : NPN Output



M12 5-Pin  
Connector



3 Wire

1 : Brown      V(-)  
2 : Blue        V(+)  
3 : Black        NPN or PNP Output



4 Wire

1 : White        V(-)  
2 : Brown       V(+)  
3 : Yellow       PNP  
4 : Green        NPN

**Ordering Code:** You may refer to the sample models for coding.

|       |                                              |                       |                                          |
|-------|----------------------------------------------|-----------------------|------------------------------------------|
| 1     | <b>MODEL ECASe</b>                           |                       |                                          |
|       | Conductive Liquids - 1                       |                       | Low-Conductivity Liquids - 2             |
| 2     | <b>CERTIFICATE</b>                           |                       |                                          |
|       | None - 0                                     |                       | (EN10204-3-1) Material Certification - 1 |
| 3     | <b>PROBE TYPE</b>                            |                       |                                          |
|       | Single Probe - Insulated (Max. 500 mm) - 1   |                       | Special - x                              |
|       | Coaxial Probe ... (Max. 500 mm) ... Ø 10 - 3 |                       |                                          |
| ----- |                                              |                       |                                          |
| 4     | <b>INSERTION LENGTH (mm) L</b>               |                       |                                          |
|       | 50 mm (Std) - 0                              |                       |                                          |
| 5     | <b>PROCESS TEMPERATURE</b>                   |                       |                                          |
|       | Standart Maks.120 °C - 0                     |                       |                                          |
| 6     | <b>PROCESS CONNECTION</b>                    |                       |                                          |
|       | <b>Thread (ISO 228-1)</b>                    |                       |                                          |
|       | R 1/4" - 0002                                | 1/4" NPT - 0201       |                                          |
|       | R 3/8" - 0003                                | 1/2" NPT - 0203       |                                          |
|       | R 1/2" - 0004                                | 3/4" NPT - 0204       |                                          |
|       | R 3/4" - 0005                                | 1" NPT - 0201         |                                          |
|       | R 1" - 0006                                  | M14 x 1,5 mm - 0305   |                                          |
|       | R 1 1/4" - 0008                              | M16 x 1,5 mm - 0306   |                                          |
|       | R 1 1/2" - 0009                              | M18 x 1,5 mm - 0307   |                                          |
|       | R 2" - 0012                                  | Special - x           |                                          |
| 7     | <b>OUTPUT</b>                                |                       |                                          |
|       | NPN - NA Contact - 00                        | PNP - NA Contact - 03 | NPN / PNP - NO Contact - 05              |
|       | NPN - NK Contact - 01                        | PNP - NK Contact - 04 | PNP / NPN - NC Contact - 06              |
|       | Special - x                                  |                       |                                          |
| 8     | <b>DELAY TIME (Max. 30 sec.)</b>             |                       |                                          |
|       | 7 sn - 07                                    |                       | Special - x                              |
| 9     | <b>INSULATION MATERIAL</b>                   |                       |                                          |
|       | PTFE - 066                                   |                       | PVDF (Std.) - 064                        |

**Ordering Code:** You may refer to the sample models for coding.

## 10 CONNECTION MATERIAL

|                            |                     |
|----------------------------|---------------------|
| Brass (Std.) - <b>041</b>  | 316 SS - <b>002</b> |
| 304 SS (Std.) - <b>001</b> | Special - x         |

## 11 ELECTRICAL CONNECTION

|                                           |                                    |
|-------------------------------------------|------------------------------------|
| Polyamide Large Connector P01 - <b>50</b> | HM Packard Soket 3 pin - <b>92</b> |
| PVC Cable (Maks.105 °C) - <b>81</b>       | M12 - 5 pin Soket- <b>71</b>       |

## 12 OPTIONAL

|                 |                                            |
|-----------------|--------------------------------------------|
| None / <b>0</b> | Vibro Seal (for Thread Sealing) / <b>V</b> |
|                 | Special - <b>x</b>                         |

## SAMPLE

For Conductive Liquids, L = 100 mm, R 1/2", with Cooling Element, 7 sec. Delay Time

