

## IL8/IL9

### IL9/CN-3A

**Ind.8x8,NPN-NC,Cable,Sch-LD**  
**8 X 8 MM CUBIC MINIATURIZED INDUCTIVE SENSORS**

## OVERVIEW

- Complete range of cubic inductive sensors:
  1. IL8 series: 8x8 mm with sensing head at the top
  2. IL9 series: 8x8 mm with sensing head at the centre
- IP67 protection degree



## TECHNICAL FEATURES

### Detection properties

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Nominal sensing distance | 2mm                                                                  |
| Operanting distance      | 0...1,62mm                                                           |
| Standard target          | 8x8mm FE360                                                          |
| Correction Factor        | copper: 0,19 / aluminium: 0,15 / brass: 0,25 / stainless steel: 0,61 |
| Thermal drift of Sr      | < 10%                                                                |
| Repeat Accuracy          | < 5% (UB 24V Ta=23°C ±5°C)                                           |

|            |           |
|------------|-----------|
| Hysteresis | 1 ... 20% |
|------------|-----------|

Application

|             |                            |
|-------------|----------------------------|
| Description | 8x8x40mm cubic flush mount |
|-------------|----------------------------|

|           |           |
|-----------|-----------|
| Functions | Proximity |
|-----------|-----------|

Outputs

|             |     |
|-------------|-----|
| Output type | NPN |
|-------------|-----|

|                 |    |
|-----------------|----|
| Output Function | NC |
|-----------------|----|

|                     |        |
|---------------------|--------|
| Switching frequency | ≤ 5kHz |
|---------------------|--------|

Electrical data

|                   |            |
|-------------------|------------|
| Operating Voltage | 10...30Vdc |
|-------------------|------------|

|                        |        |
|------------------------|--------|
| No-Load supply current | ≤ 10mA |
|------------------------|--------|

|              |         |
|--------------|---------|
| Load current | ≤ 200mA |
|--------------|---------|

|                 |        |
|-----------------|--------|
| Leakage current | ≤ 10μA |
|-----------------|--------|

|                     |               |
|---------------------|---------------|
| Output voltage drop | ≤ 1,5V @200mA |
|---------------------|---------------|

|                    |       |
|--------------------|-------|
| Max ripple content | ≤ 10% |
|--------------------|-------|

|                |                       |
|----------------|-----------------------|
| LED indicators | Blue LED output state |
|----------------|-----------------------|

|                                |        |
|--------------------------------|--------|
| Time delay before availability | ≤ 50ms |
|--------------------------------|--------|

|                          |     |
|--------------------------|-----|
| Short-circuit protection | Yes |
|--------------------------|-----|

|  |  |
|--|--|
|  |  |
|--|--|

|                                    |     |
|------------------------------------|-----|
| Reverse Polarity Protection        | Yes |
| Impulsive Overvoltage Protection   | Yes |
| Protection against inductive loads | Yes |

**Mechanical data**

|                       |                                              |
|-----------------------|----------------------------------------------|
| Dimensions            | 8 x 8 / L = 40mm / active head in the centre |
| Mounting              | Shielded                                     |
| Material              | AISI303 Stainless Steel                      |
| Housing material      | AISI303 Stainless Steel                      |
| Weight                | 35g                                          |
| Connections           | 2m PUR Cable                                 |
| Active Head Material  | PBT                                          |
| Operating temperature | -25°C...+70°C                                |
| Diameter/Dimension    | 8x8x40mm                                     |

**Test/Approvals**

|                       |                                                |
|-----------------------|------------------------------------------------|
| Approvals             | CE cULus                                       |
| EMC compatibility     | IEC 60947-5-2                                  |
| Shocks and vibrations | Vibration IEC 60068-2-6 / Shock IEC 60068-2-27 |
| Degree of protection  | IP67                                           |

## Generical Data

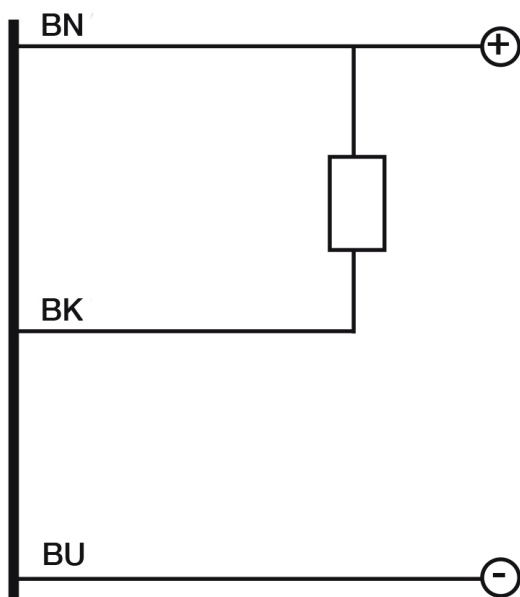
|            |                                              |
|------------|----------------------------------------------|
| Dimensions | 8 x 8 / L = 40mm / active head in the centre |
|------------|----------------------------------------------|

|                       |               |
|-----------------------|---------------|
| Operating Temperature | -25°C...+70°C |
|-----------------------|---------------|

|                       |      |
|-----------------------|------|
| Mechanical Protection | IP67 |
|-----------------------|------|

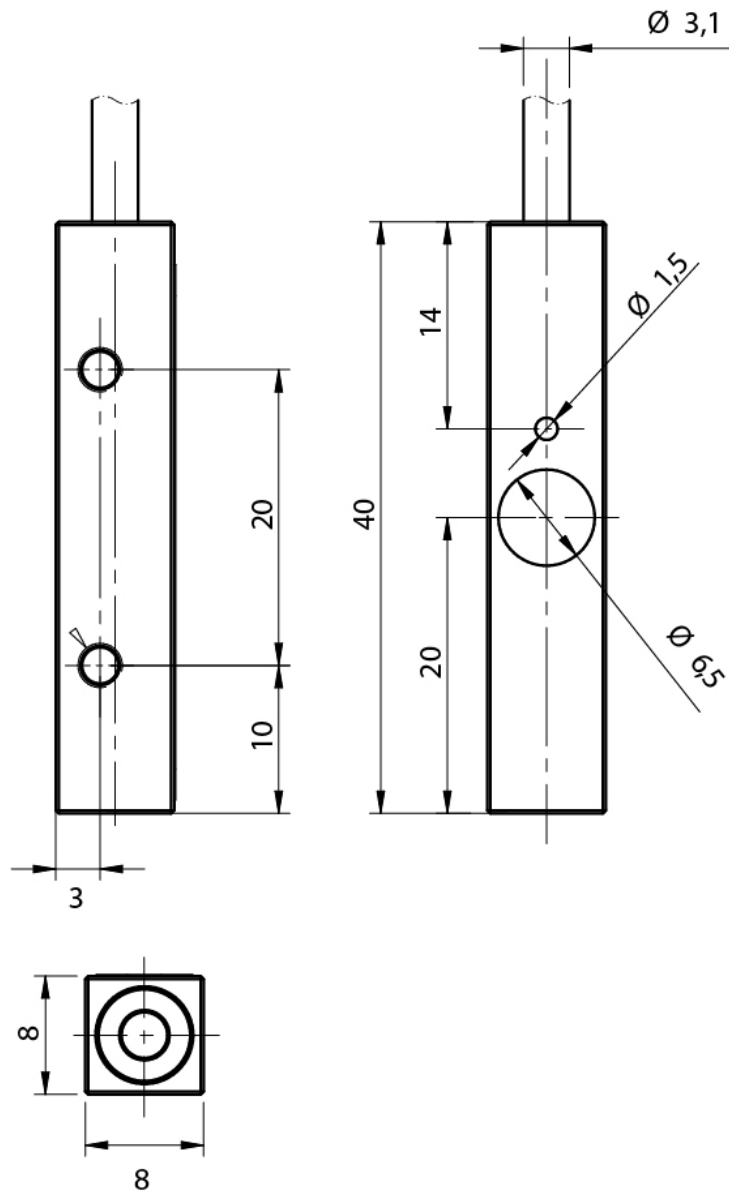
## CONNECTIONS

Electrical diagram

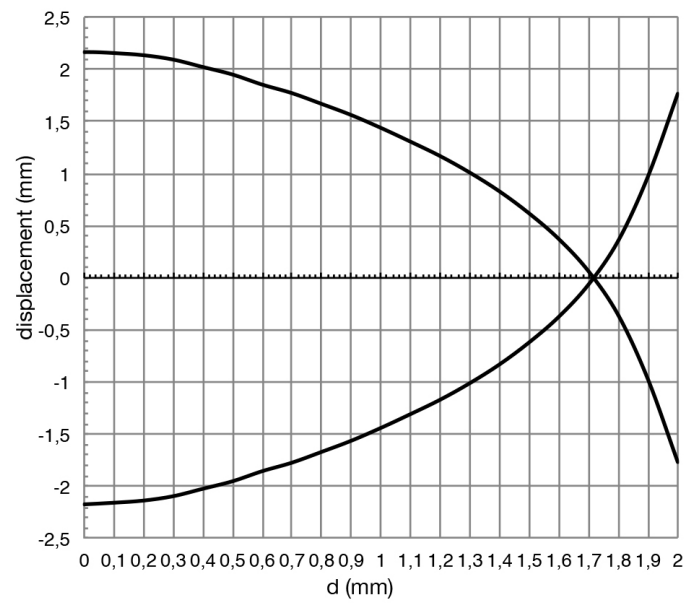


## OTHERS

Dimensions



Response curves



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