

# Welding immune inductive sensors **LR30XBF15DxxA-E2** series



## Features

- ◆ PTFE housing design, prevent welding slag adhesion;
- ◆ Anti-magnetic interference;
- ◆ Full metal detection, attenuation coefficient is about to be 1;
- ◆ Extended sensing distance, easier location setting and target control;
- ◆ Lanbao ASIC technology, stable performance.



## Part number

NPN NO LR30XBF15DNOA-E2

PNP NO LR30XBF15DPOA-E2

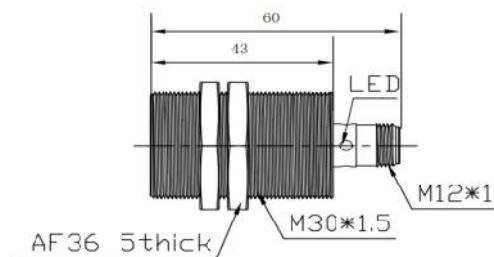
NPN NC LR30XBF15DNCA-E2

PNP NC LR30XBF15DPCA-E2

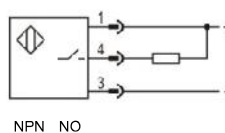
## Technical specifications

|                            |                                |                         |                                                                                                       |
|----------------------------|--------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------|
| Mounting                   | Flush                          | Current consumption     | ≤20mA                                                                                                 |
| Rated distance [Sn]        | 15mm                           | Circuit protection      | Short-circuit, overload and reverse polarity                                                          |
| Assured distance [Sa]      | 0...11.75mm                    | Output indicator        | Yellow LED                                                                                            |
| Dimensions                 | M30*60mm                       | Ambient temperature     | -40°C...70°C                                                                                          |
| Output                     | NO/NC (depends on part number) | Ambient humidity        | 35...95%RH                                                                                            |
| Supply voltage             | 10...30 VDC                    | Switching frequency [F] | 500 Hz                                                                                                |
| Standard target            | ST45 45*45*1t                  | Special characteristic  | Attenuation coefficient is about to be 1 (Iron, copper, aluminum, stainless steel attenuation < ±10%) |
| Switch-point drifts [%/Sr] | ≤ ±10%                         | Voltage withstand       | 1000V/AC 50/60Hz 60s                                                                                  |
| Hysteresis range [%/Sr]    | 1...20%                        | Insulation resistance   | ≥50MΩ (500VDC)                                                                                        |
| Repeat accuracy [R]        | ≤5%                            | Vibration resistance    | Complex amplitude 1.5mm 10...50Hz (2 hours each in X, Y, and Z directions)                            |
| Load current               | ≤100mA                         | Degree of protection    | IP67                                                                                                  |
| Residual voltage           | ≤2.5V                          | Housing material        | Brass coated with PTFE                                                                                |
| Anti magnetic interference | <100mT                         | Connection type         | M12 connector                                                                                         |
| Temperature drift          | <15%                           |                         |                                                                                                       |

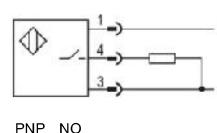
## Dimensions



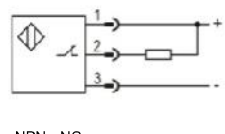
## Wiring diagram



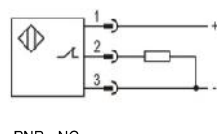
NPN NO



PNP NO



NPN NC



PNP NC

