

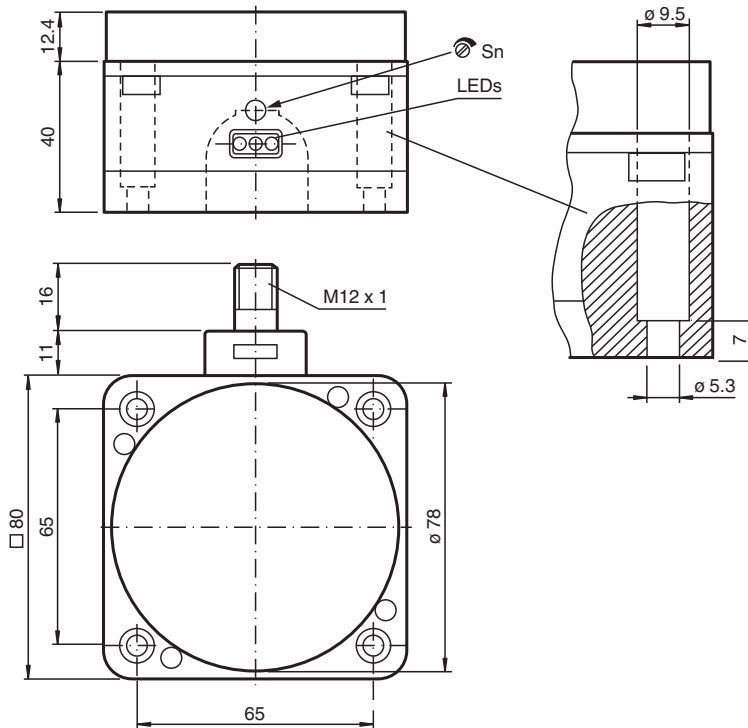


## Inductive sensor NJ60-FP-E2-P2-V1

- 3-wire DC
- 60 mm non-flush
- Operating distance adjustable via potentiometer



### Dimensions



### Technical Data

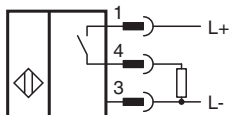
#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	60 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 48.6 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.85

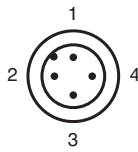
## Technical Data

Output type		3-wire
Adjustment aid		LED, green/red
<b>Nominal ratings</b>		
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	8 Hz
Hysteresis	$H$	typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 200 mA
No-load supply current	$I_0$	$\leq 20$ mA
Time delay before availability	$t_v$	$\leq 20$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
<b>Ambient conditions</b>		
Ambient temperature		0 ... 60 °C (32 ... 140 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug
Housing material		POM
Sensing face		POM
Degree of protection		IP65
Connector		
Threading		M12 x 1
Number of pins		4
Dimensions		
Height		40 mm
Width		80 mm
Length		80 mm

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Mounting

### Installation

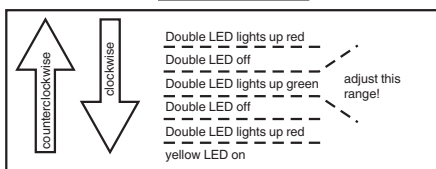
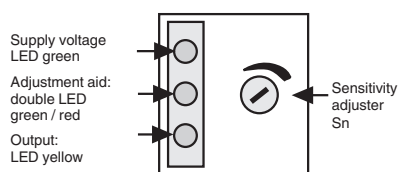
The sensor should be mounted at least 30 mm above the conveyor chain. This ensures, that the sensor will not be influenced by the conveyor chain.

### Adjustment:

For correct operation, the sensor has to be adjusted according to the application. The adjustment has to be carried out without the object, which has to be detected.

- 1) Supply the sensor (10 ... 30 V DC).  
leuchtet die grüne LED.
- 2) If the output is activated,  
the yellow LED is on
- 3) The adjustment is made without  
measuring body

The double LED in the middle has to light up green. If it doesn't, turn the sensitivity adjuster clockwise until the LED lights up yellow. Now turn the sensitivity adjuster counterclockwise until the double LED lights up green.



### Function check:

To check the correct adjustment, test the reliable detection of a stainless steel test tube in the bottle.