



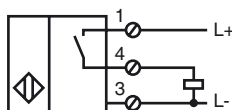
### Model Number

NJ60-FP-E2-P2

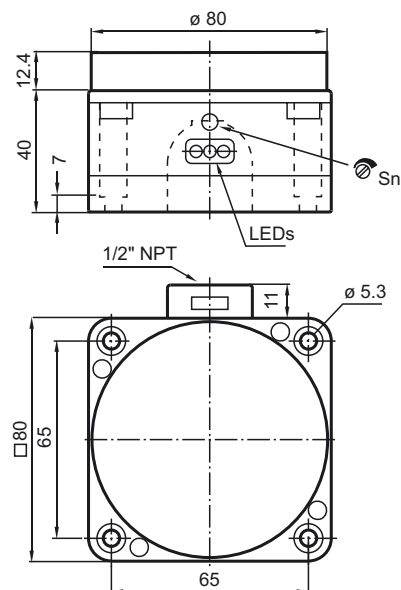
### Features

- 3-wire DC
- Surface mount
- Sensing range 60 mm
- Operating distance adjustable via potentiometer

### Connection



### Dimensions



### Technical Data

#### General specifications

Switching element function	PNP	NO
Rated operating distance	$s_n$	60 mm
Installation		not embeddable
Output polarity		switched high
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
Adjustment aid		LED, green/red

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 20 Hz
Hysteresis	$H$	3 ... 15 typ. 5 %
Reverse polarity protected		yes
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
Operating voltage display		LED, green
Indication of the switching state		LED, red

#### Ambient conditions

Ambient temperature	0 ... 60 °C (32 ... 140 °F)
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#### Mechanical specifications

Connection type	screw terminals
Core cross-section	up to 2.5 mm <sup>2</sup>
Housing material	POM
Sensing face	POM
Protection degree	IP65

#### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

#### Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

**Installation hint**

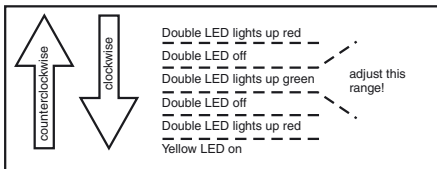
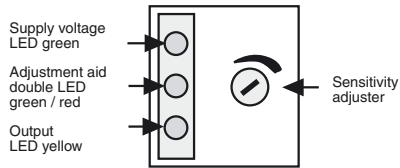
**Installation:**

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).  
The green LED is on.
2. If the output is activated, the yellow LED is on
3. 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.