



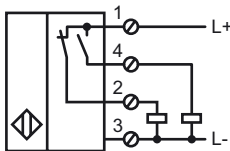
Model Number

NJ60-FP-A2-P1-Y237069

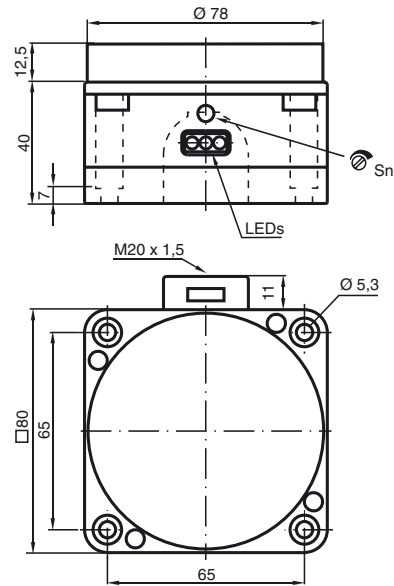
Features

- 60 mm not embeddable
- Detects stainless steel tubes in bottles
- Steam resistant
- 1. oscillator frequency

Connection



Dimensions



Technical Data

General specifications

Switching element function	PNP	NO/NC
Rated operating distance	s_n	60 mm
Installation	not embeddable	
Output polarity	switched high	
Assured operating distance	s_a	0 ... 50 mm
Measuring body	high grade steel tube	
Reduction factor r_{Al}	0.4	
Reduction factor r_{Cu}	0.3	
Reduction factor r_{303}	0.85	
Bottle speed	ca. 2.5 m/s (65000 btl./h)	
Adjustment aid	LED, green/red	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 100 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
No-load supply current	I_0	≤ 20 mA
Operating voltage display	LED, green	
Indication of the switching state	LED, yellow	

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 ²
Housing material	POM
Sensing face	POM
Protection degree	IP68

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

Release date: 2011-08-08 07:54 Date of issue: 2011-08-08 237069_eng.xml

Installation hint

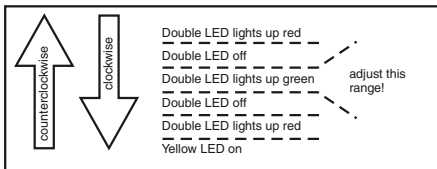
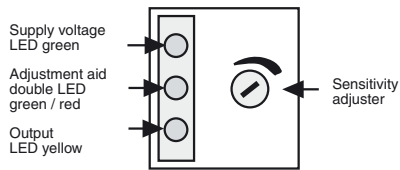
Installation:

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.