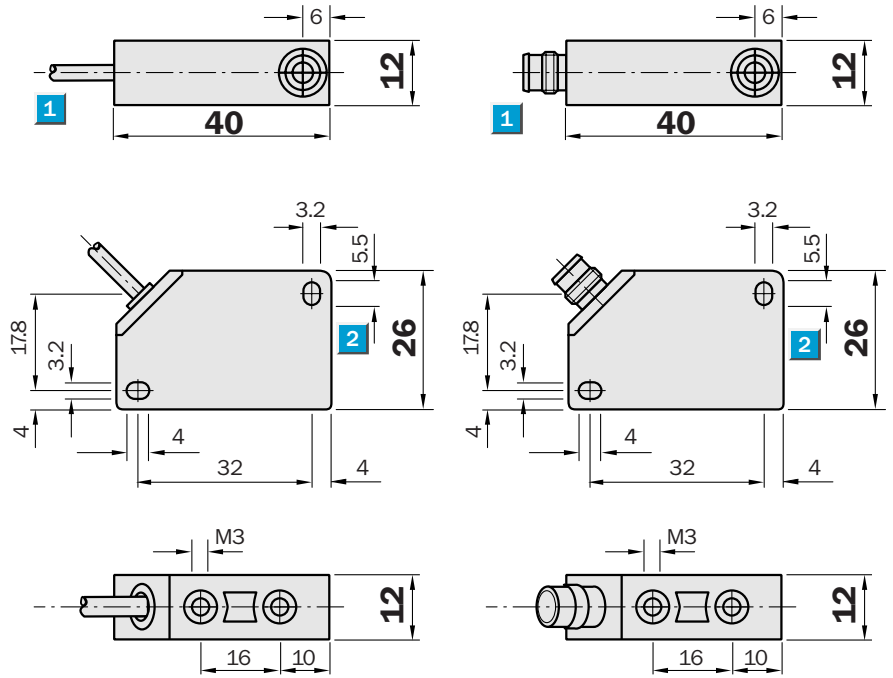


**Sensing range**  
3 / 6 mm

Inductive sensor

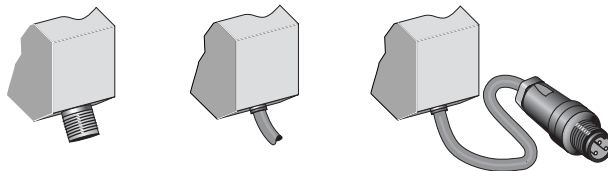
- Can be installed flush or non-flush in metal
- High switching frequency
- Short-circuit protection (pulsed)
- Plastic housing
- Enclosure rating IP 67
- ATEX 3D

### Dimensional drawing



### Connection type

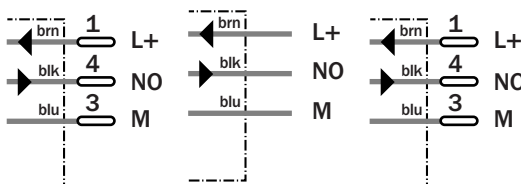
IQ12-03BNS-KTO	IQ12-03BNS-KUO	IQ12-06NPS-KQX
IQ12-03BPS-KTO	IQ12-03BPS-KUO	
IQ12-06NPS-KTO	IQ12-06NPS-KUO	



**Accessories**

Connector, M12, 4-pin
Connector, M8, 3-pin

M8, 3-pin	3 x 0.25 mm <sup>2</sup>	M12, 3-pin
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Technical specifications		IQ12-	03BNS -KU0	03BPS -KU0	03BNS -KTO	03BPS -KTO	06NPS -KU0	06NPS -KTO	06NPS -KQX			
<b>Sensing range <math>S_n</math></b>	3 mm											
	6 mm											
<b>Electrical configuration</b>	DC 3-wire											
<b>Supply voltage <math>V_s</math></b>	DC 6 ... 36 V											
Ripple $U_{pp}$	$\leq 10\%$ <sup>1)</sup>											
Voltage drop $U_d$	$\leq 1.5\text{ V}$ <sup>2)</sup>											
Power consumption	$\leq 5\text{ mA}$ <sup>3)</sup>											
<b>Continuous current <math>I_a</math></b>	$\leq 300\text{ mA}$											
	100 mA											
Time delay before availability $t_v$	$\leq 10\text{ ms}$											
Hysteresis H, of $s_r$	1 ... 15 %											
Repeatability R	$\leq 1\%$ ( $U_b$ and $T_a$ constant) <sup>4)</sup>											
Temperature drift, of $s_r$	$\pm 10\%$											
EMC	According to EN 60947-5-2											
<b>Switching output</b>	NPN											
	PNP											
<b>Output function</b>	Normally open											
<b>Installation</b>	Flush											
	Non-flush											
<b>Connection type</b>	Cable, PUR-PVC, 2 m											
	Connector, M8, 3-pin											
	Cable with plug, M12, 3-pin, 300 mm											
<b>Enclosure rating</b>	IP 67 <sup>5)</sup>											
<b>Approval for ATEX-zone</b>	3D <sup>6)</sup>											
Max. switching frequency	3,000 Hz											
	1,000 Hz											
Dimensions	12 x 26 x 40 mm <sup>7)</sup>											
	12 x 26 x 49 mm <sup>7)</sup>											
<b>Wire-break protection</b>	✓											
<b>Short-circuit protection</b>	✓ <sup>8)</sup>											
<b>Reverse polarity protection</b>	✓											
<b>Power-up pulse suppression</b>	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm											
Ambient temperature $T_a$	-25 °C ... +75 °C											
	-20 °C ... +60 °C											
<b>Housing material</b>	Plastic											

<sup>1)</sup> of  $U_b$   
<sup>2)</sup> at  $I_a$  max

<sup>3)</sup> without load  
<sup>4)</sup> of  $s_r$

<sup>5)</sup> according to EN 60529  
<sup>6)</sup> Ex II 3D T 80° C

<sup>7)</sup> Width x height x depth  
<sup>8)</sup> (pulsed)

#### Ordering information

Type	Part Number
IQ12-03BNS-KU0	1 016 299
IQ12-03BPS-KU0	1 016 275
IQ12-03BNS-KTO	1 016 461
IQ12-03BPS-KTO	1 016 276
IQ12-06NPS-KU0	1 016 463
IQ12-06NPS-KTO	1 016 467
IQ12-06NPS-KQX	1 029 594