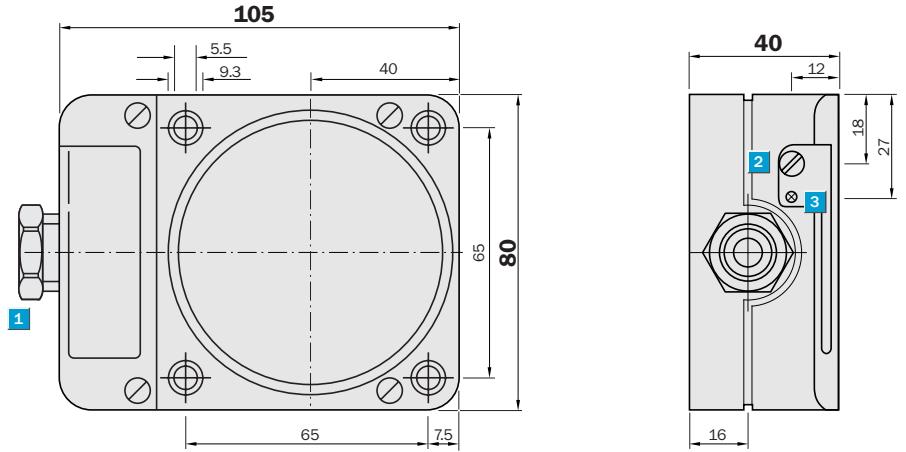


Sensing range
60 mm

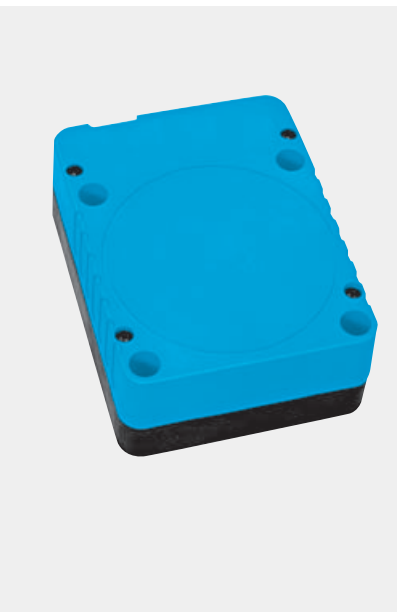
Inductive sensor

- Adjustable switching distance between 20 to 60 mm
- Programmable NO/NC function
- Short-circuit protection (pulsed)
- Terminal connection
- Enclosure rating IP 65

Dimensional drawing



- 1 Connection
- 2 Potentiometer
- 3 Display LED

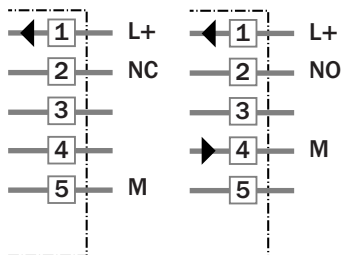


Connection type

IQ80-60NPP-KKO



Terminal M20 x 1.5



Technical data		IQ80-	60NPP-KKO										
Sensing range S_n	60 mm												
Electrical configuration	DC 3-wire												
Supply voltage V_s	DC 10 ... 36 V												
Voltage drop V_d	$\leq 2.5 V^{1)}$												
Current consumption	$\leq 15 mA^{2)}$												
Continuous current I_a	$\leq 250 mA$												
Time delay before availability t_v	$\leq 250 ms$												
Hysteresis H (of s_r)	1 ... 15 %												
Repeatability R	$\leq 10 \% (U_b \text{ and } T_a \text{ constant})^{3)}$												
Temperature drift, of s_r	$\pm 10 \%$												
EMC	According to EN 60 947-5-2												
Switching output	PNP												
Output function	Programmable												
Connection types	Cable gland, terminal M20 x 1.5												
Enclosure rating	IP 65 ⁴⁾												
VDE protection class	<input type="checkbox"/>												
Max. switching frequency	4 Hz												
Dimensions	80 x 40 x 105 mm ⁵⁾												
Wire-break protection	-												
Short-circuit protection	✓ ⁶⁾												
Reverse polarity protection	✓												
Power-up pulse suppression	✓												
Shock / vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm												
Ambient temperature T_a	-25 °C ... +80 °C												
Housing material	Plastic												

¹⁾ at I_a max and U_b 24 V
²⁾ without load

³⁾ of s_r
⁴⁾ according to EN 60 529

⁵⁾ width x height x depth
⁶⁾ (pulsed)

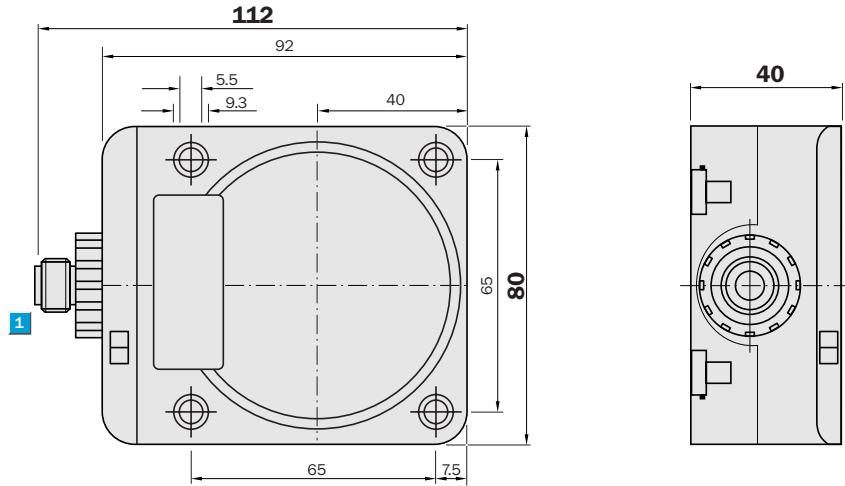
Order information	
Type	Order no.
IQ80-60NPP-KKO	7 900 227

Sensing range
44.5 / 50 mm

Inductive sensor

- Can be installed non-flush, flush or over flush in metal
- Switching distance 50 mm (flush or over flush installation) switching distance max. 5.5 mm reduced (non-flush installation)
- Antivalent output functions
- Connector M12 (rotatable in 45°-steps)
- Switching mode, yellow

Dimensional drawing

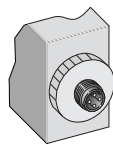


1 Connection

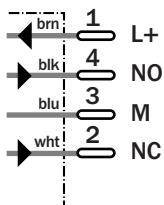


Connection type

IQ80-50BPP-KC0



M12, 4-pin



See chapter Accessories

Connector, M12, 4-pin

Technical data		IQ80-	50BPP-KCO										
Sensing range S_n	44.5 / 50 / 50 mm												
Electrical configuration	DC 4-wire												
Supply voltage V_s	DC 10 ... 36 V												
Voltage drop V_d	$\leq 2.5 V^{1)}$												
Current consumption	$\leq 20 mA^{2)}$												
Continuous current I_a	$\leq 250 mA$												
Hysteresis H (of s_r)	1 ... 15 %												
Repeatability R	$\leq 10 \% (U_b \text{ and } T_a \text{ constant})^{3)}$												
Temperature drift, of s_r	$\pm 10 \%$												
EMC	According to EN 60 947-5-2												
Switching output	PNP												
Output function	Complementary												
Installation	Non-flush / Overflush / Flush												
Connection types	Plug, M12, 4-pin												
Enclosure rating	IP 67 ⁴⁾												
VDE protection class	<input type="checkbox"/>												
Max. switching frequency	70 Hz												
Dimensions	80 x 40 x 112 mm ⁵⁾												
Short-circuit protected	✓												
Short-circuit protection	✓ ⁶⁾												
Reverse polarity protection	✓												
Power-up pulse suppression	✓												
Shock / vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm												
Ambient temperature T_a	-25 °C ... +70 °C												
Housing material	PPE, zinc-die cast, nickel special coated												

¹⁾ at I_a max and U_b 24 V
²⁾ without load

³⁾ of s_r
⁴⁾ according to EN 60 529

⁵⁾ width x height x depth
⁶⁾ (pulsed)

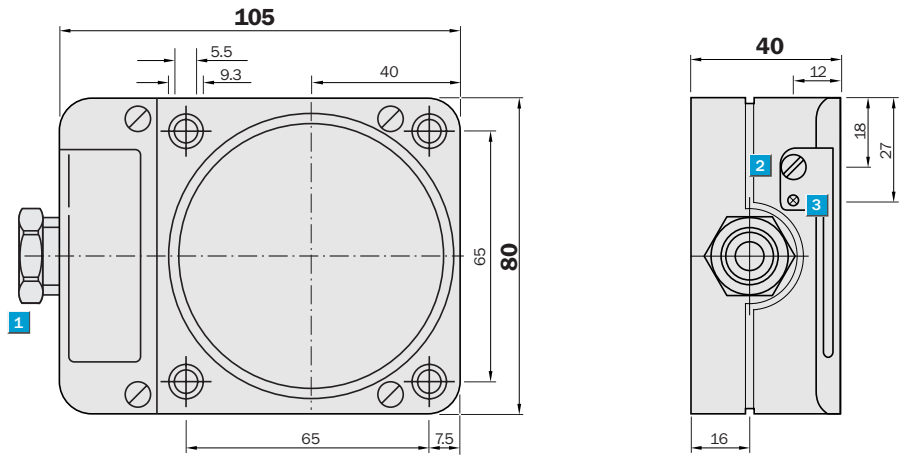
Order information	
Type	Order no.
IQ80-50BPP-KCO	6 026 473

Sensing range
60 mm

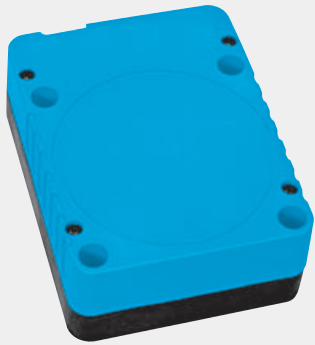
Inductive sensor

- Adjustable switching distance between 20 and 60 mm
- Broad supply voltage range in AC and DC
- Programmable switching output: NO or NC
- Enclosure rating IP 65
- Terminal connection

Dimensional drawing

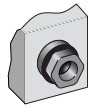


- 1 Connection
- 2 Potentiometer
- 3 Display LED



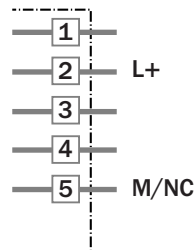
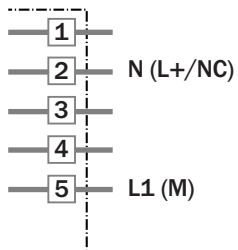
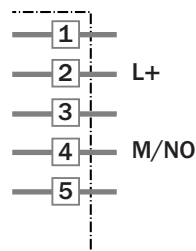
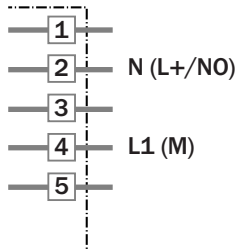
Connection type

IQ80-60NUP-KKO



Terminal M20 x 1.5
AC / DC (NPN)

DC (PNP)



Technical data		IQ80-	60NUP-KKO										
Sensing range S_n	60 mm												
Electrical configuration	AC / DC 2-wire												
Supply voltage V_s	AC / DC 20 ... 250 V												
Voltage drop V_d AC / DC	≤ 6.5 V / ≤ 6 V												
Continuous current I_a	≤ 350 mA AC (... + 50 °C)												
	≤ 250 mA AC (... + 80 °C)												
	≤ 100 mA DC												
Peak current I_k	2.2 A 20 ms/0.5 Hz												
Min. load current	> 5 mA												
Residual current	≤ 2.5 mA (250 V AC)												
	≤ 1.3 mA (110 V AC)												
	≤ 0.8 mA (24 V DC)												
Time delay before availability t_v	≤ 8 ms												
Hysteresis H (of s_r)	1 ... 15 %												
Repeatability R	≤ 10 % (U_b and T_a constant) ¹⁾												
Temperature drift, of s_r	± 10 %												
EMC	According to EN 60 947-5-2												
Switching output	PNP/NPN config.												
Output function	Programmable												
Installation	Non-flush												
Connection types	Cable gland, terminal M20 x 1.5												
Enclosure rating	IP 65 ²⁾												
VDE protection class	<input type="checkbox"/>												
Max. switching frequency	4 Hz												
Dimensions	80 x 40 x 105 mm ³⁾												
Wire-break protection	-												
Short-circuit protection	-												
Reverse polarity protection	-												
Power-up pulse suppression	✓												
Shock / vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm												
Ambient temperature T_a	-25 °C ... +80 °C												
Housing material	Plastic												

¹⁾ of s_r

²⁾ according to EN 60 529

³⁾ width x height x depth

Order information	
Type	Order no.
IQ80-60NUP-KKO	7 902 138