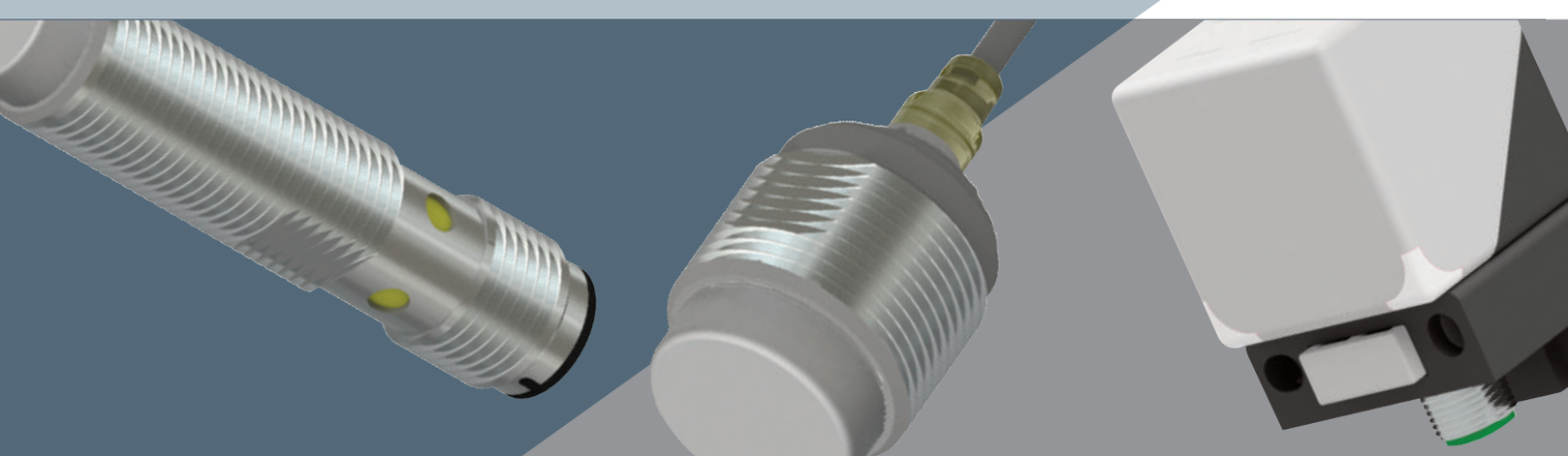

PROXIMITY SENSORS

COMEPI

Proximity Sensors

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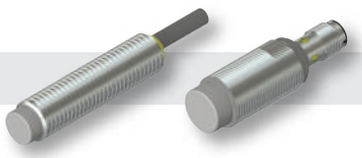
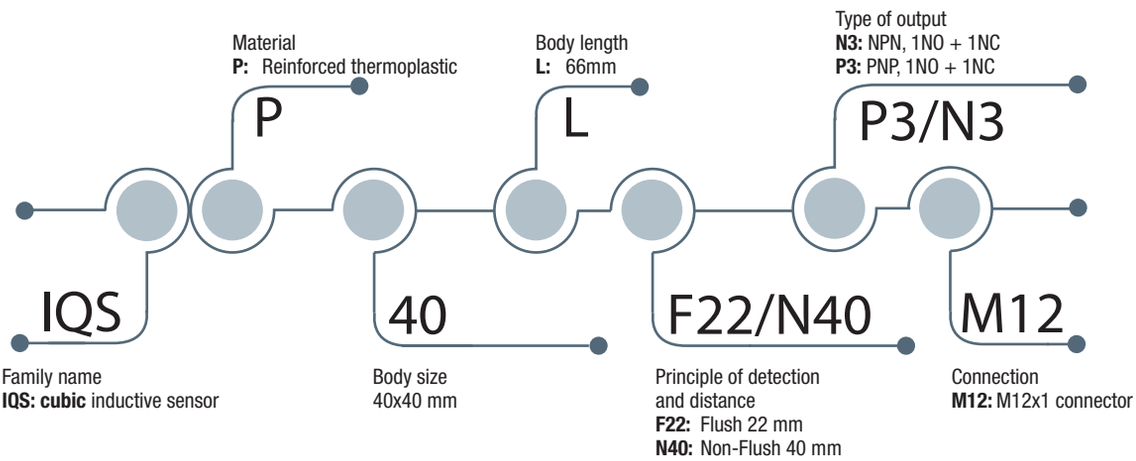


Proximity Sensors

Inductive sensors - Cubic 40x40 - Summary

APPROVALS: UL 508

UL CATEGORY: NRKH FILE: E506808



HOW IS IT MADE?

01 Sensitive part
- Flush or non flush, tournable head

02 Fixing
- Push-lock mounting system

03 Signalling
- 4 LEDs in the corners, status indication or problem detection

04 Connection
- M12 x 1, 4 pin, male connector

Proximity Sensors

Inductive sensors - Cubic 40x40 - Summary

APPLICATIONS

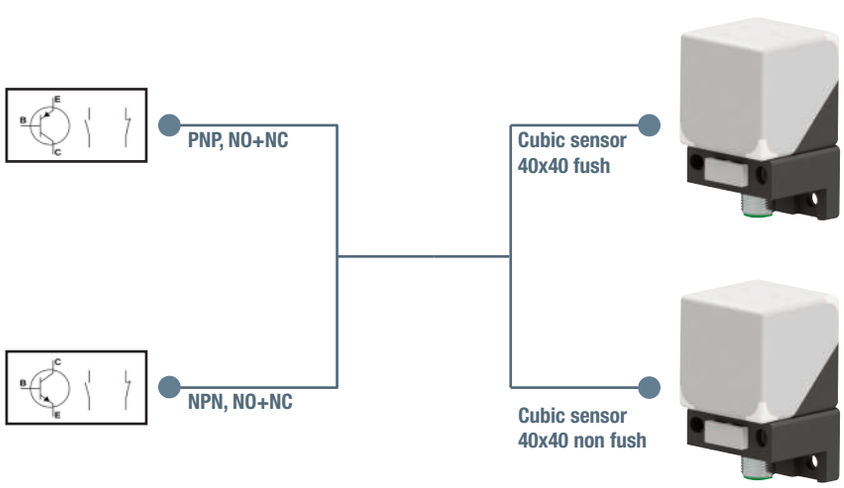
- Non contact detection of metal objects in general position-sensing and presence-sensing in industrial applications
- Conveyor systems, material handling and logistic, agriculture, escalators.

DESCRIPTION

Inductive proximity sensors with 40 mm x 40 mm rectangular housings for use in harsh ambient conditions to detect metal objects without contact and wear-free. The sensors generate an electromagnetic eld which interacts with the detected object and are characterized by a long service life and extreme ruggedness. The long sensing distance of up to 40 mm makes them particularly suitable also for use in conveyor systems, assuring a stable and reliable detection even in harsh environments, also thanks to the integrated advanced electronics which ensures optimal performance with temperature variations.

MAIN FEATURES

- Easy and quick mounting or replacement without the need of additional tools thanks to the plug-and-play mounting system.
- The tournable head in different positions allows greater flexibility in all applications.
- The detection is reliable and accurate over the entire temperature range, thanks to the advanced integrated electronics.
- Safer installation thanks to the long sensing range up to 40 mm.
- Reliable switching performance even in harsh environments with low and high temperature (-25°C to +80°C).
- Degree of protection IP68, IP69K.
- Sensor switching and operating status can be clearly seen from any directions thanks to the 4 corner LEDs.
- Integrated diagnostic functions with flashing LEDs in the event of short-circuit or overload.



Proximity Sensors

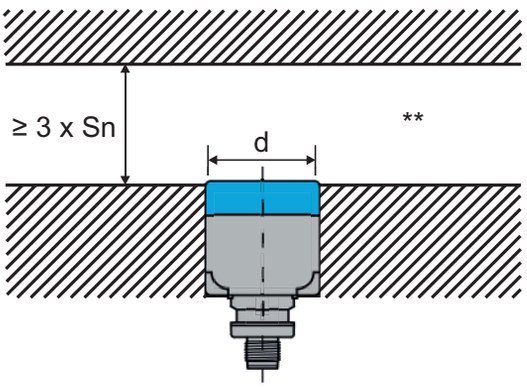
Inductive sensors - Cubic - 40x40 mm - Technical Data

	CUBIC SENSOR
	POWER SUPPLY
Rated operational voltage (U_b)	10 to 30 VDC (ripple included)
Ripple (U_{rpp})	≤ 10%
No load supply current (I_o)	≤ 20 mA
Power ON delay (t_v)	≤ 50 ms
Output functions	NPN or PNP by sensor ype open collector
Output configuration	N.O and N.C.
	OUTPUTS
Output current (I_e)	≤ 200 mA
OFF-state current ($_{Ir}$)	≤ 100 µA
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA
Protection	Reverse polarity, short-circuit and overload
Voltage transient	1 kV/0.5 J
	RESPONSE TIMES
Max. operating frequency (f)	≤ 200 Hz
	INDICATION
Indication for Target not present	Green LED ON, Yellow LED OFF, Output OFF
Indication for Target present	Green LED ON, Yellow LED ON, Output ON
Indication for short circuit/overload	LED blinking (f = 2 Hz)
	ENVIRONMENTAL
Ambient temperature Operating	-25° to +80°C (-13° to +176°F)
Ambient temperature Storage	-25° to +80°C (-13° to +176°F)
Ambient humidity Operating	35% to 95%
Ambient humidity Storage	35% to 95%
Vibration	10 to 55 Hz, amplitude 1.0 mm; sweep cycle 5 min; in X, Y and Z direction IEC 60068-2-6
Shock	30 G /11 ms. 10 shocks in X, Y and Z direction IEC 60068-2-27
Degree of protection	IP67, IP68 (1m submersion for 24h) IP69K
	EMC AND CONFORMITY
EMC protection IEC 60947-5-2	
IEC 61000-4-2 Electrostatic discharge	8 kV air discharge 4 kV contact discharge
IEC 61000-4-3 Radiated radiofrequency	3 V/m
IEC 61000-4-4 Burst immunity	2 kV
IEC 61000-4-6 Conducted radio frequency	3 V
$MTTF_d$	1900 years @ 50°C (122°F)
Approvals	CE cULus UKCA
	MECHANICAL DATA
Mounting	Flush or non flush mountable
Material housing	PBT glass fibres
Wheight max (including mounting bracket)	Flush 116g Non-flush 128g
Max tightening torque	M12 connector: 3Nm Mounting bracket: 1Nm
	ELECTRICAL CONNECTION
Plug	M12x1, 4 pin, male connector

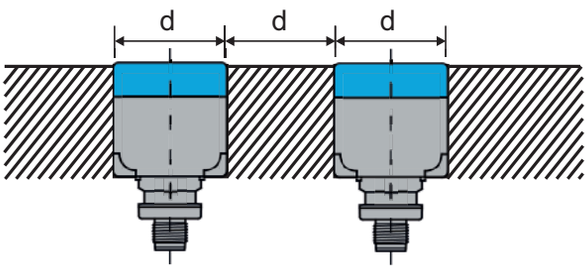
Proximity Sensors

Inductive sensors - Cubic - 40x40 mm - Installation

Flush

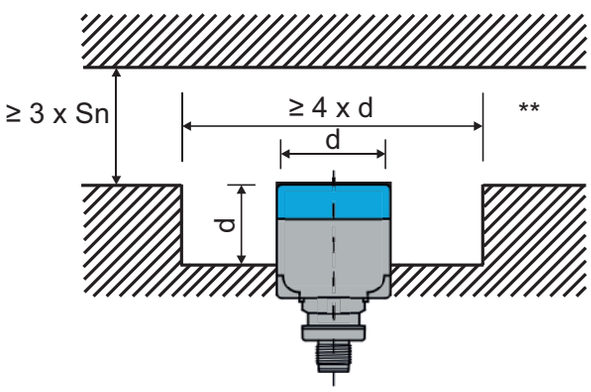


Flush sensor, when installed in damping material

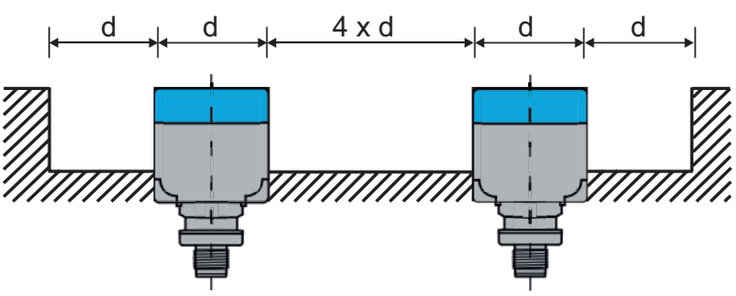


Flush sensors, when installed together in damping material

Non-flush

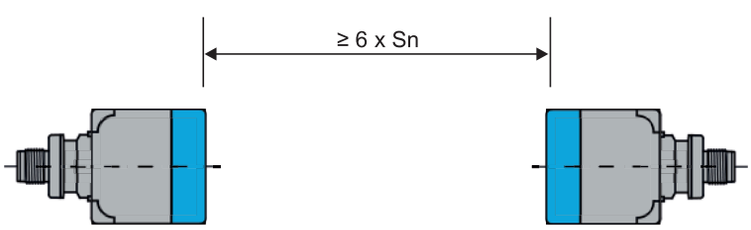


Non-flush sensor, when installed in damping material



Non-flush sensors, when installed together in damping material

Sensor installed opposite each other



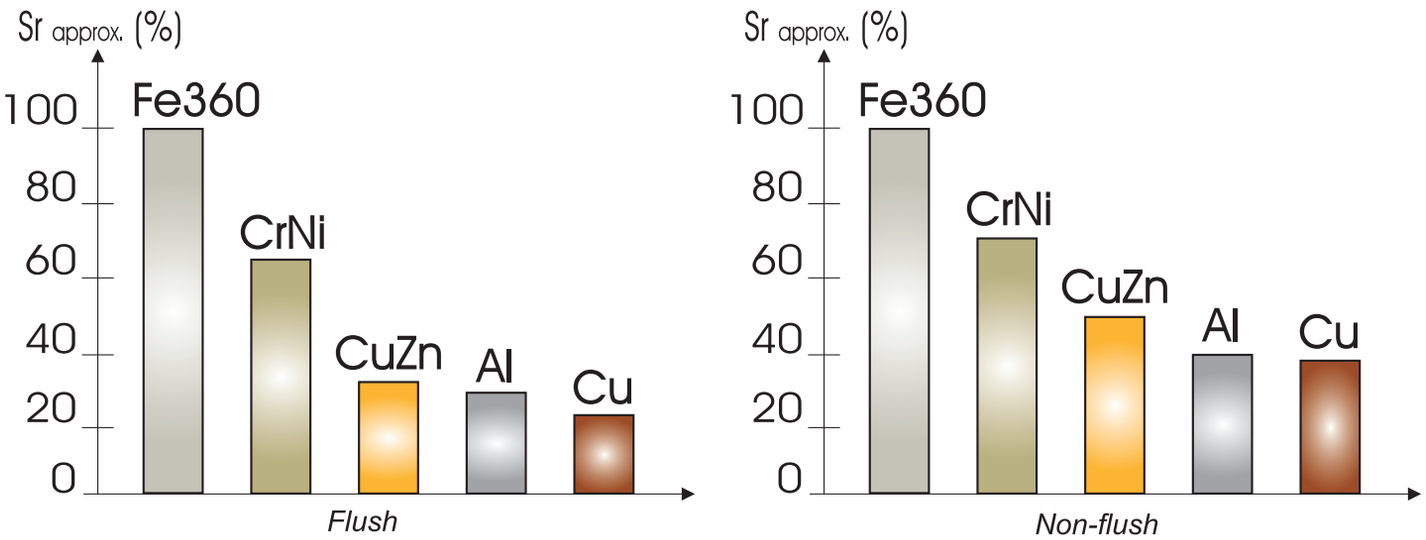
For sensors installed opposite each other, a minimum space of 6 x Sn (the nominal sensing distance) must be observed

** Free zone or non-dampig material
S_n: nominal sensing distance
d: 40 mm

Inductive sensors - Cubic - 40x40 mm - Elements tabel

CORRECTION FACTORS

The specific operating distance S_n refers to defined measuring conditions. The following data have to be considered as general guidelines.



Fe360: Steel; **CrNi:** Chrome-nickel; **CuZn:** Brass; **Al:** Aluninium; **Cu:** Copper; **Sr:** Effective operating distance.

The rated operating distance is reduced by the use of metals and alloys other than Fe360. The most important reduction factors for inductive proximity sensors are shown in the figure.

ACCURACY

Repeat accuracy (R)	≤ 5%

Proximity Sensors

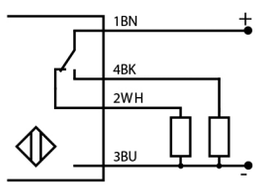
Inductive sensors - Cubic - 40x40 mm

Electrical connection:

M12: M12x1 connector

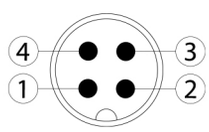
P40 Cubic sensor with M12 connector

Connection Diagram PNP

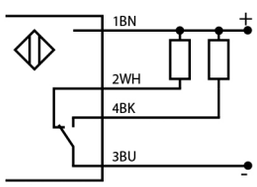


BN: Brown	WH: White	BK: Black	BU: Blue

M12 Connector

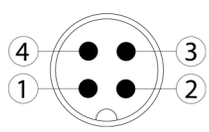


Connection Diagrams NPN



BN: Brown	WH: White	BK: Black	BU: Blue

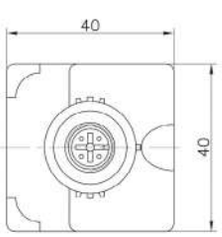
M12 Connector

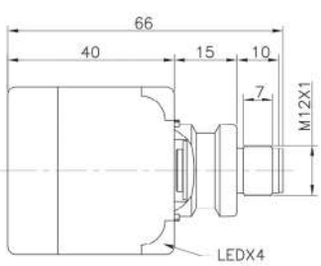


Weight **128 g**

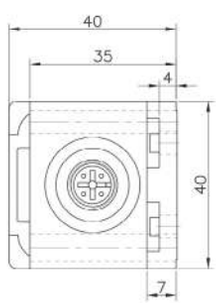
Output type		
PNP, 1NO + 1NC	IQSP40LF22P3M12	Flush sensor, nominal operating distance Sn 22mm
PNP, 1NO + 1NC	IQSP40LN40P3M12	Non flush sensor, nominal operating distance Sn 40mm
NPN, 1NO + 1NC	IQSP40LF22N3M12	Flush sensor, nominal operating distance Sn 22mm
NPN, 1NO + 1NC	IQSP40LN40N3M12	Non flush sensor, nominal operating distance Sn 40mm

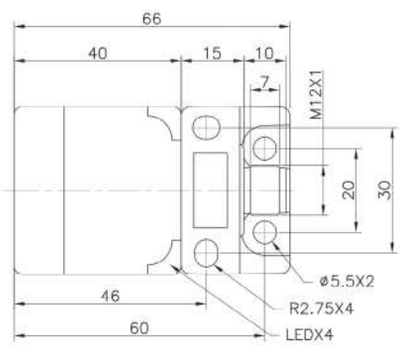
DIMENSIONS





Sensor dimensions





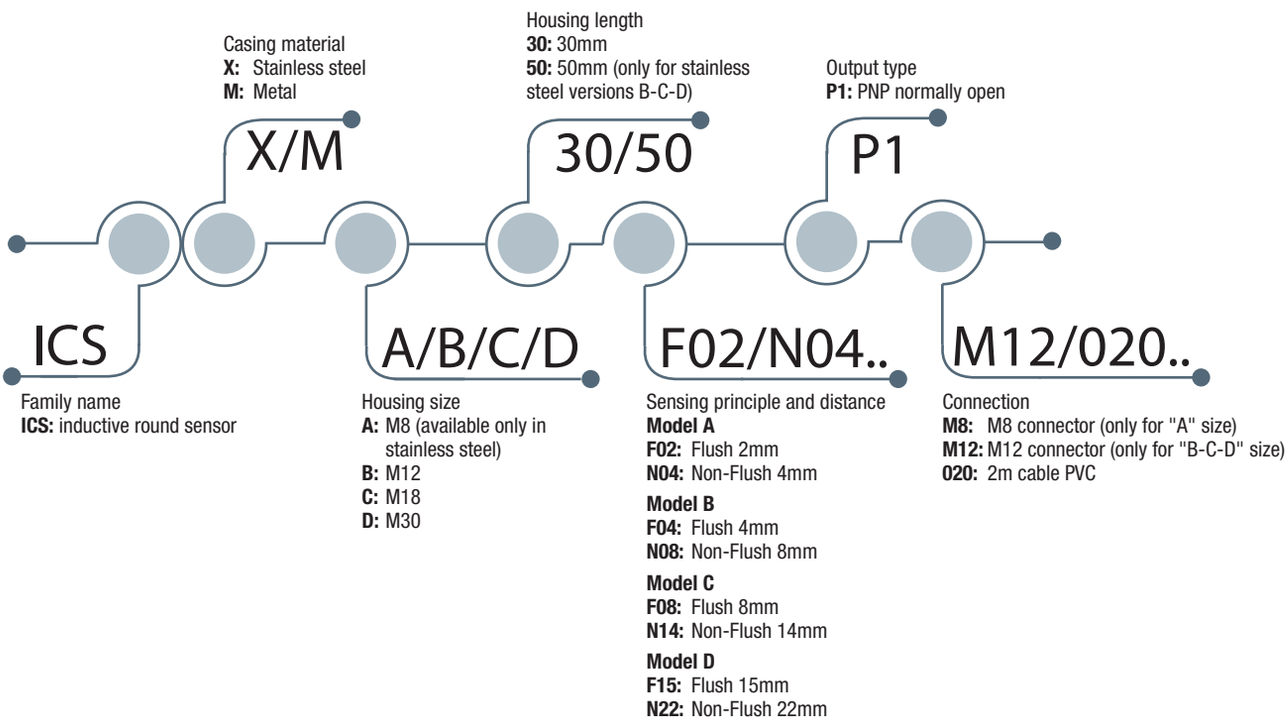
Sensor dimensions with bracket

Proximity Sensors

Inductive sensors - Round - Summary

APPROVALS: UL 508

UL CATEGORY:



Family name
ICS: inductive round sensor

Casing material
X: Stainless steel
M: Metal

Housing size
A: M8 (available only in stainless steel)
B: M12
C: M18
D: M30

Housing length
30: 30mm
50: 50mm (only for stainless steel versions B-C-D)

Sensing principle and distance
Model A
F02: Flush 2mm
N04: Non-Flush 4mm
Model B
F04: Flush 4mm
N08: Non-Flush 8mm
Model C
F08: Flush 8mm
N14: Non-Flush 14mm
Model D
F15: Flush 15mm
N22: Non-Flush 22mm

Output type
P1: PNP normally open

Connection
M8: M8 connector (only for "A" size)
M12: M12 connector (only for "B-C-D" size)
020: 2m cable PVC

HOW IS IT MADE?

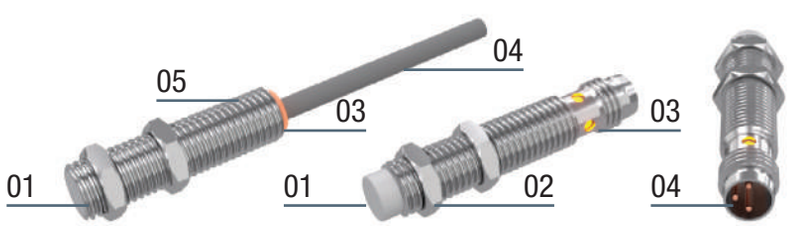
01 Sensing face
- Flush
- Non-flush

02 Fixing
- Easy mounting
- Two nuts for sensor fixing
- Four sizes for sensor: M8, M12, M18, M30

03 Signalling
- Yellow LED visible from every angle
- Flashing output: short circuit or overload indication

04 Connection
- M8 connector
- M12 connector
- 2m cable PVC

05 Main features
- Accurate sensing and suitable for fast speed operations
- Assured traceability and best application control
- Environmentally friendly potting material



Proximity Sensors
Inductive sensors - Round - Description

APPLICATIONS

Machine tool

- CNC machine tool.
- Drill machine.

Inductive sensors are used to check the tool position when changing the tool or to verify the component moved to the correct location.

Agriculture

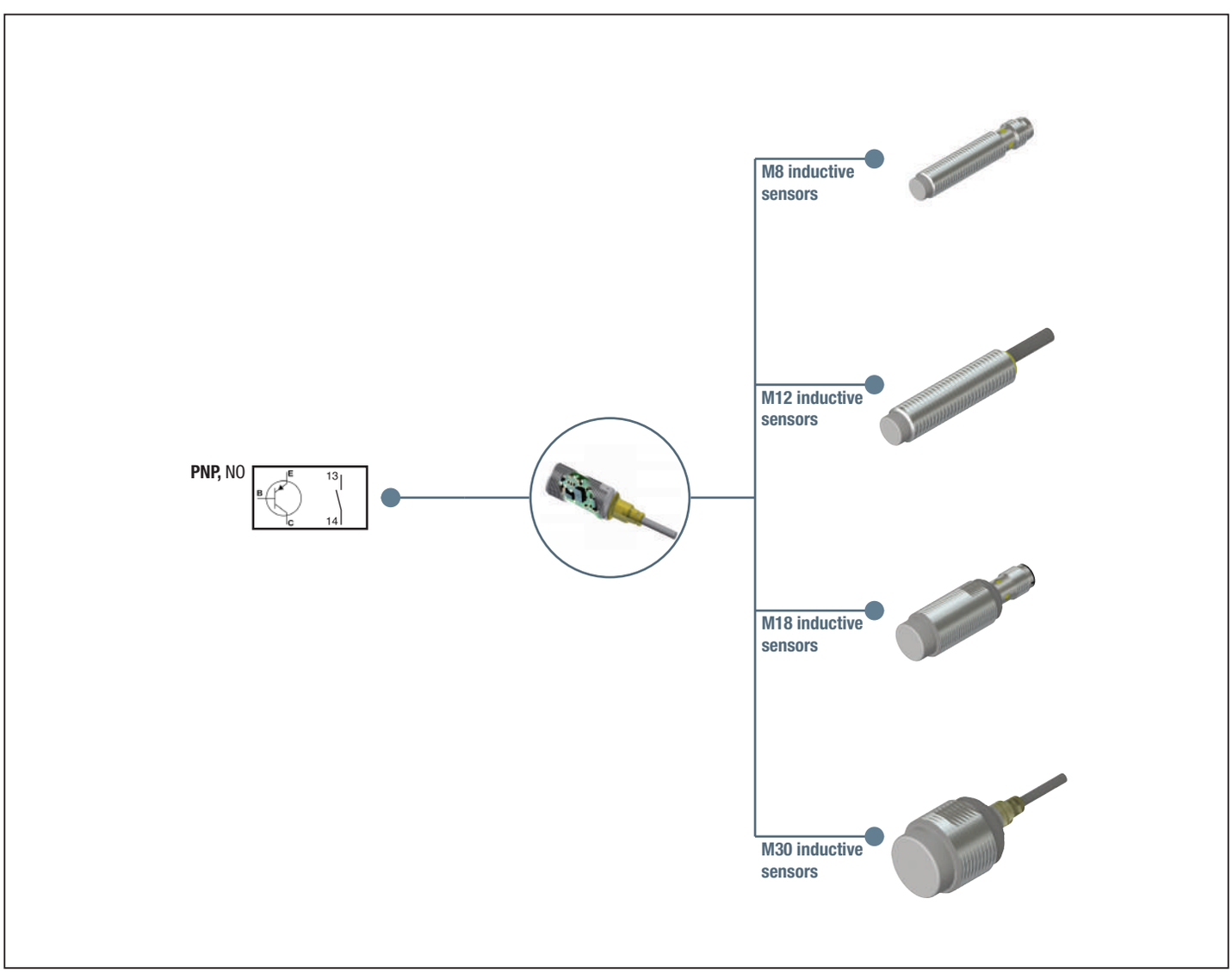
- Thanks to its excellent quality and to the complete product range, ICS series is particularly suitable for the agricultural and earth-moving sectors.

Material handling systems

- In these systems it is mandatory to ensure the automation and reliable ow of goods. Inductive sensors are critical to obtaining the higher productivity and quality from the automated process.

DESCRIPTION

The robust and hig hly reliable ICS series is now available in increased operating distance. In M8, M12, M18 and M30 stainless steel or nickel plated brass housings. These sensors are extremely accurate and represent the best choice for non-contact detection of metallic targets at a distance up to 40 mm, the largest sensing distance available on the market for an inductive sensor. The powerful design of ICS oers the ideal solution in demanding installation conditions typical of industrial environments. The eco-friendly high performance potting material protects the electronic components and provides increased reliability with higher resistance to mechanical stress and vibrations than the traditional proximity sensors. ICS inductive proximity sensors thanks to an operating distance up to 3 times the standard, allows to position the sensor at an higher distance from a metal target. The result is an increased sensor's lifetime especially when the metal target has greater tolerances, being the sensor well protected. A. The sensors are rated to IP67 and the mechanical design of the back part ensures an excellent sealing against water and humidity penetration. Thanks to the built in microcontroller, all sensors are individually compensated to ensure repeatable and highly accurate operation over the whole temperature range, granting the sensing distance between -25 and +70°C (-13° to +158°F).
They comply with the requirements of European Directives (Low Voltage and RoHS) and are conform to European and International Standards.
The CE declaration of these products are available in the download section of website www.comepi.it or by writing to the following email address: tecnico@comepi.it
DDC12 - Proximity sensors



Proximity Sensors

Inductive sensors - Round - Technical Data

	M8	M12
	POWER SUPPLY	
Rated operational voltage (U_b)	10 to 36 VDC (ripple included)	
Ripple (U_{rpp})	≤ 10%	
No load supply current (I_o)	≤ 16 mA	≤ 15 mA
Power ON delay (t_v)	≤ 20 ms	
	OUTPUTS	
Output current (I_e)	≤ 200 mA @ 50°C ≤ 150 mA @ 50-80°C)	≤ 200 mA @ 50°C ≤ 150 mA @ 50-70°C)
OFF-state current ($_{Ir}$)	≤ 50 µA	
Voltage drop (U_d)	Max. 1.6 VDC @ 200 mA	Max. 2.5 VDC @ 200 mA
Protection	Reverse polarity, short-circuit, transients	
Voltage transient	1 kV/0.5 J	
	RESPONSE TIMES	
Max. operating frequency (f)	≤ 2000 Hz	
	INDICATION	
Indication for output ON	Activated LED, yellow	
NO version	Target present	
Indication for short circuit/overload	LED blinking (f = 2 Hz)	
	ENVIRONMENTAL	
Ambient temperature Operating	-25° to +80°C (-13° to +176°F)	-25° to +70°C (-13° to +158°F)
Ambient temperature Storage	-30° to +80°C (-22° to +176°F)	
Ambient humidity Operating	35% to 95%	5% to 95% humidity, non-condensing
Ambient humidity Storage	35% to 95%	5% to 95% humidity, non-condensing
Vibration	10 to 55 Hz, amplitude 1.0 mm; sweep cycle 5 min; in X, Y and Z direction IEC 60068-2-6	IEC 60947-5-2/7.4
Shock	30 G /11 ms. 10 shocks in X, Y and Z direction IEC 60068-2-27	IEC 60947-5-2/7.4
Degree of protection	IP67	
	EMC AND CONFORMITY	
EMC protection IEC 60947-5-2		
IEC 61000-4-2 Electrostatic discharge	8 kV air discharge 4 kV contact discharge	
IEC 61000-4-3 Radiated radiofrequency	3 V/m	
IEC 61000-4-4 Burst immunity	2 kV	
IEC 61000-4-6 Conducted radio frequency	3 V	
IEC 61000-4-8 Power frequency magnetic fields	30 A/m	
$MTTF_d$	2914 years @ 50°C (122°F)	750 years @ 50°C (122°F)
Approvals	CE cULus	CE cULus
	MECHANICAL DATA	
Mounting	Flush or non flush mountable	
Material housing	Stainless steel AISI304	nickel-plated brass
Material front cap	Grey thermoplastic polyester	
Max tightening torque	7 Nm	10 Nm
	ELECTRICAL CONNECTION	
Cable	2m, 3 x 0.14 mm², Ø3.2 mm PVC, grey, oil proof, laser write	2m, 3 x 0.25 mm², Ø4.1 mm grey PVC, oil proof
Connector	M8 male connector	M12 male connector

Proximity Sensors

Inductive sensors - Round - Technical Data

	M18	M30
	POWER SUPPLY	
Rated operational voltage (U_b)	10 to 36 VDC (ripple included)	
Ripple (U_{rpp})	≤ 10%	
No load supply current (I_o)	≤ 15 mA	
Power ON delay (t_v)	≤ 20 ms	≤ 300 mA
	OUTPUTS	
Output current (I_e)	≤ 200 mA @ 50°C ≤ 150 mA @ 50-70°C)	
OFF-state current ($_{Ir}$)	≤ 50 µA	
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA	
Protection	Reverse polarity, short-circuit, transients	
Voltage transient	1 kV/0.5 J	
	RESPONSE TIMES	
Max. operating frequency (f)	≤ 1500 Hz	≤ 1000 Hz
	INDICATION	
Indication for output ON	Activated LED, yellow	
NO version	Target present	
Indication for short circuit/overload	LED blinking (f = 2 Hz)	
	ENVIRONMENTAL	
Ambient temperature Operating	-25° to +70°C (-13° to +158°F)	cable: -25° to +70°C (-13° to +158°F) plug: -40° to +70°C (-22° to +158°F)
Ambient temperature Storage	-30° to +80°C (-22° to +176°F)	-40° to +80°C (-22° to +176°F)
Ambient humidity Operating	5% to 95% humidity, non-condensing	
Ambient humidity Storage	5% to 95% humidity, non-condensing	
Vibration	IEC 60947-5-2/7.4	IEC 60947-5-2/7.4
Shock	IEC 60947-5-2/7.4	IEC 60947-5-2/7.4
Degree of protection	IP67	
	EMC AND CONFORMITY	
EMC protection IEC 60947-5-2		
IEC 61000-4-2 Electrostatic discharge	8 kV air discharge 4 kV contact discharge	
IEC 61000-4-3 Radiated radiofrequency	3 V/m	12 V/m
IEC 61000-4-4 Burst immunity	2 kV	4 kV
IEC 61000-4-6 Conducted radio frequency	3 V	10 V
IEC 61000-4-8 Power frequency magnetic fields	30 A/m	
$MTTF_d$	550 years @ 50°C (122°F)	
Approvals	CE cULus	CE cULus
	MECHANICAL DATA	
Mounting	Flush or non flush mountable	
Material housing	nickel-plated brass	
Material front cap	Grey thermoplastic polyester	
Max tightening torque	25 Nm	
	ELECTRICAL CONNECTION	
Cable	2m, 3 x 0.25 mm², Ø4.1 mm grey PVC, oil proof	2m, 3 x 0.34 mm², Ø5.2 mm grey PVC, oil proof
Connector	M12 male connector	

Proximity Sensors

Inductive INOX sensors - Round - Technical Data

	M12	M18	M30
	POWER SUPPLY		
Rated operational voltage (U_b)	8 a 60 VCC (ripple included)		
Ripple (U_{rpp})	≤ 10%		
No load supply current (I_o)	≤ 10 mA		
Power ON delay (t_v)	≤ 50 ms		
	OUTPUTS		
Output current (I_e)	≤ 200 mA @ 50°C		
OFF-state current OFF ($_{Ir}$)	≤ 500 µA		
Voltage drop (U_d)	2.5 VCC @ 200 mA		
Electrical protection	Short-circuit, inductive load, overload, reverse polarity and transients		
Voltage transient	1 kV/0.5 J		
	RESPONSE TIMES		
Max. operating frequency (f)	≤ 1300 Hz ICS "B" Flush ≤ 1000 Hz ICS "B" Non flush	≤ 900 Hz	≤ 300 Hz
	INDICATION		
LED yellow OFF	Output OFF, NO Output, target not present		
LED yellow ON	Output ON, NO Output, target present		
LED green OFF	Sensoris not operational		
LED green ON	Sensor is operational		
Indication for short circuit/overload	LED yellow blinking (f = 2 Hz)		
	ENVIRONMENTAL		
Ambient temperature Operating	-40° a +85°C (-40° a +185°F)		
Ambient temperature Storage	-40° a +85°C (-40° a +185°F)		
Rapid temperature changes -40.. +85 °C	EN 60068-2-14 Na		TA = -40 °C; TB = 85 °C
Salt spray test EN60068-2-52 Kb	Test method 5 (4 cycles)		
Ambient humidity Operating	5% to 95% humidity, non-condensing		
Ambient humidity Storage	5% to 95% humidity, non-condensing		
Vibration EN 60068-2-6 Fc	20 g (10...3000 Hz) 50 sweep cycles per frequency; 1 octave per minute in 3 axes		
Shock EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes		
Continuous shock resistance EN 60068-2-27 Ea	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes		
Degree of protection IEC 60529; EN 60947-1	IP67, IP68 (2m submersion for 24h), IP69K		
	EMC AND CONFORMITY		
EMC protection IEC 60947-5-2			
ISO 11452-2 Radiated noise	200 V/m 20 MHz to 2 GHz		
EN 61000-4-2 Electrostatic discharge (ESD)	CD: 8 kV / AD: 8 kV Severity level IV / IV		
EN 61000-4-3 Radiated radiofrequency	30 V/m (80...2500 MHz)		
EN 61000-4-4 Burst immunity	4 kV Severity level III		
EN 61000-4-5 Surge	0,5 kV mains line to line		
EN 61000-4-6 HF Conducted radiofrequency	10 V (0.01...80 MHz) Severity level III		
EN 61000-4-8 Power frequency magnetic fields	300 A/m		
Protezione Load-dump	DIN ISO 7637-2/SAE J1113-11 Pulse 1, 2a, 2b, 3a, 3b, 4, 5a (load dump) degree of level 4		
MTTFd	1678 years @50°C (122°F)	1813 years @50°C (122°F)	1812 years @50°C (122°F)
Approvals	CE cULus		
	MECHANICAL DATA		
Mounting	Flush or non flush mountable		
Material housing	stainless steel AISI 304		
Material front cap	Grey thermoplastic polyester		
Max tightening torque	17.5 Nm	27.5 Nm	50 Nm
	ELECTRICAL CONNECTION		
Cable	2m, 3 x 0.34 mm², ∅4 mm PUR, grey, oil proof	2m, 3 x 0.34 mm², ∅5.2 mm PUR, grey, oil proof	2m, 3 x 0.34 mm², ∅5.2 mm PUR, grey, oil proof
Connector	M12 x 1, 4 pin, male connector		

Proximity Sensors

Inductive sensors - Round - Installation

The given values are minimum values. They cause changes of the sensing range less than 10%.
Cylindrical proximity switches devices with the same diameter may have dierent switching distances.

The following table shows typical examples:

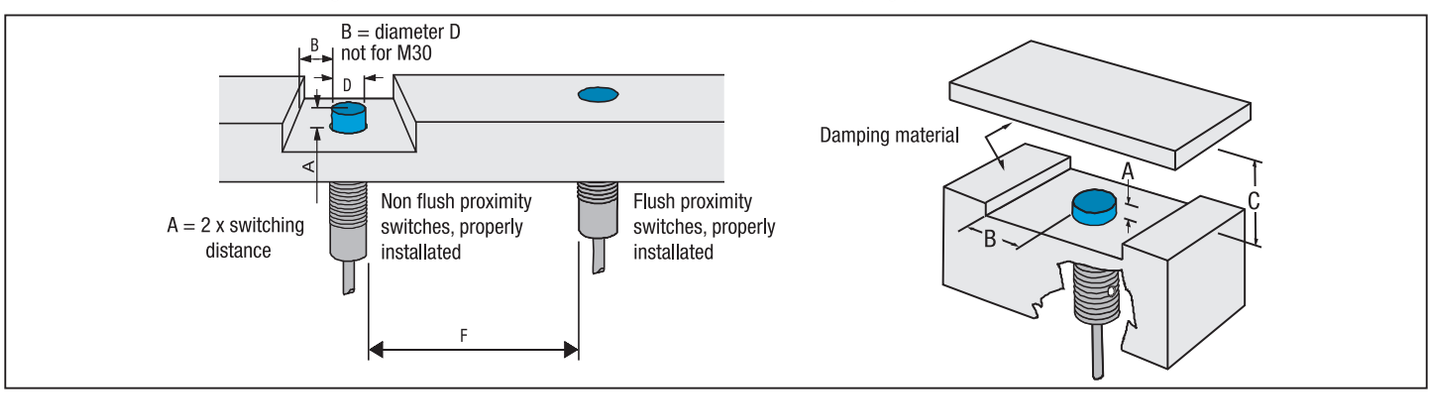
Diameter (mm)	Switching distance Sn	
	flush	non flush
8	2	4
12	4	8
18	8	14
30	15	22

An inductive proximity switch utilizes coils for generating the electromagnetic field. To achieve a particular direction of the field these colls are wound in an encapsulated core. Nonetheless, some of this fileds will radiate sideways. To avoid these products with a large range to be already attenuated by the environment, a clear space must be created around the sensor element complying with the minimum values in the following table.

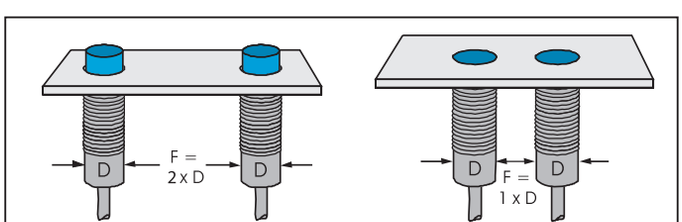
Dimensions (mm)			
A	B	C	F
≥ 2 x Sn	B ≥ D B ≥ 1.5 D*	≥ 3 x Sn	flush F = D non flush F = 3 x D

*Only for sensor M30

The safe assured release distance is guaranteed at a minimum distance to a measurement plate (target)/metal environment of at least 3 x S n.



The minimum distances F specied in the table above must be kept to prevent any mutual interference.

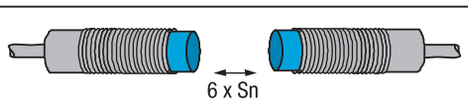


Non flush installed proximity sensor, F must be 2 times the housing diameter.
For sensor diameter M30 F = 4 x D

Flush installed proximity sensor, F must be equivalent to the housing diameter.

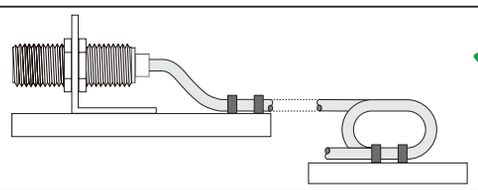
see pag 8 for **CORRECTION FACTORS**

Sensors installed opposite each other



For sensors installed opposite each other, a minimum space of 6 x Sn (the nominal sensing distance) must be observed

Cable version



Proximity Sensors

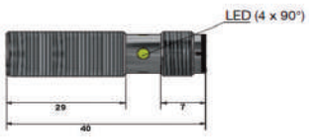
Inductive sensors - Round - M8

Electrical connection:

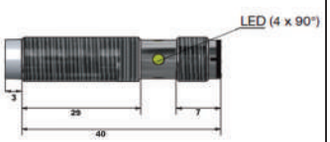
M8: M8 connector

020: Cable lenght 2m.

M8 Flush sensor with M8 connector



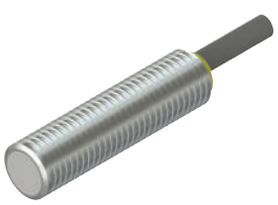
M8 Non flush sensor with M8 connector

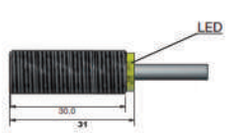


Connection M8

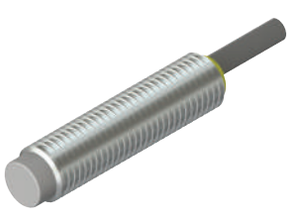
Output type	Rated operating distance Sn / Weight	M8 Flush sensor with M8 connector	M8 Non flush sensor with M8 connector
		2 mm / 16 g	4 mm / 16 g
PNP, NO		ICSXA30F02P1M8	ICSXA30N04P1M8

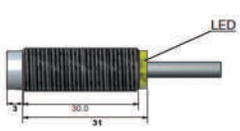
M8 Flush sensor with cable



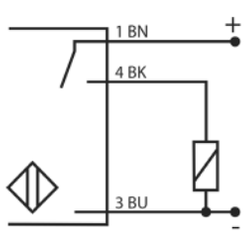


M8 Non flush sensor with cable





Connection Diagrams



Output type	Rated operating distance Sn / Weight	M8 Flush sensor with cable	M8 Non flush sensor with cable
		2 mm / 45 g	4 mm / 45 g
PNP, NO		ICSXA30F02P1020	ICSXA30N04P1020

Proximity Sensors

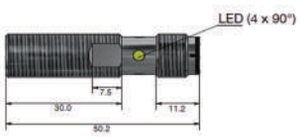
Inductive sensors - Round - M12

Electrical connection:

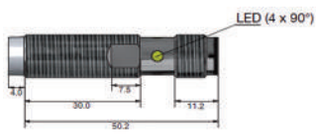
M12: M12 connector

020: Cable lenght 2m.

M12 Flush sensor with M12 connector



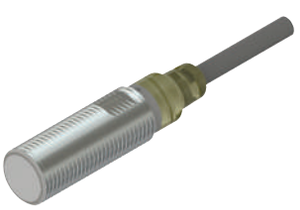
M12 Non flush sensor with M12 connector

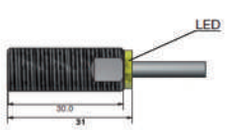


Connection M12

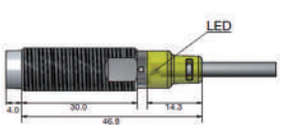
Output type	Rated operating distance Sn / Weight	M12 Flush sensor with M12 connector	M12 Non flush sensor with M12 connector
		4 mm / 30 g	8 mm / 30 g
PNP, NO		ICSMB30F04P1M12	ICSMB30N08P1M12

M12 Flush sensor with cable

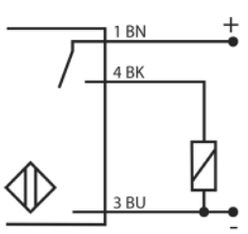




M12 Non flush sensor with cable



Connection Diagrams



Output type	Rated operating distance Sn / Weight	M12 Flush sensor with cable	M12 Non flush sensor with cable
		4 mm / 120 g	8 mm / 120 g
PNP, NO		ICSMB30F04P1020	ICSMB30N08P1020

Proximity Sensors

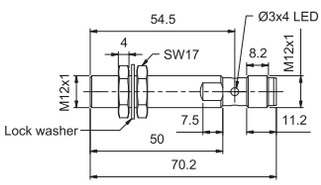
Inductive sensors INOX - Round - M12

Electrical connection:

M12: M12 connector

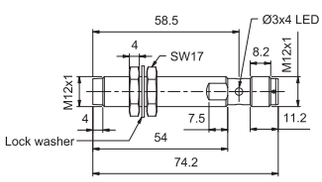
020: Cable lenght 2m.

M12 Flush INOX sensor with M12 connector



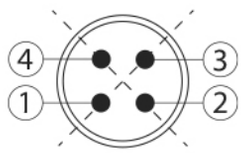
Rated operating distance Sn 4 mm
Weight 33 g

M12 Non flush INOX sensor Connection M12 with M12 connector



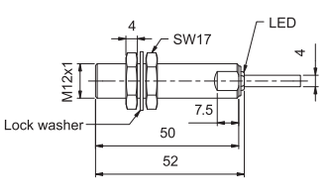
Rated operating distance Sn 8 mm
Weight 33 g

Connection M12



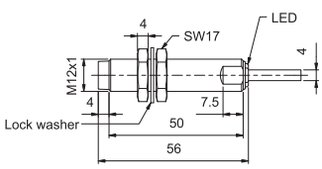
Output type		
PNP, NA	ICSXB50F04P1M12	ICSXB50N08P1M12

M12 Flush INOX sensor with cable



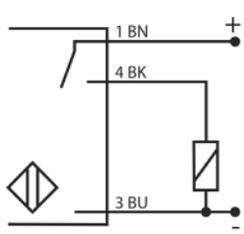
Rated operating distance Sn 4 mm
Weight 79 g

M12 Non flush INOX sensor with cable



Rated operating distance Sn 8 mm
Weight 79 g

Connection Diagrams



Output type		
PNP, NA	ICSXB50F04P1020	ICSXB50N08P1020

Proximity Sensors

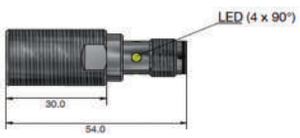
Inductive sensors - Round - M18

Electrical connection:

M18: M12 connector

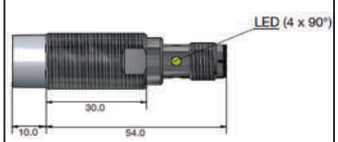
020: Cable lenght 2m.

M18 Flush sensor with M12 connector



Rated operating distance Sn 8 mm
Weight 70 g

M18 Non flush sensor with M12 connector

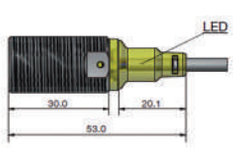


Rated operating distance Sn 14 mm
Weight 70 g

Connection M12

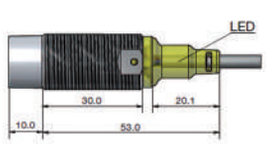
Output type		
PNP, NO	ICSMC30F08P1M12	ICSMC30N14P1M12

M18 Flush sensor with cable



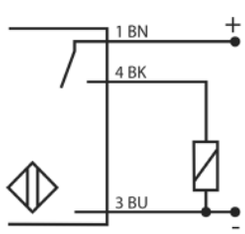
Rated operating distance Sn 8 mm
Weight 150 g

M18 Non flush sensor with cable



Rated operating distance Sn 14 mm
Weight 150 g

Connection Diagrams



Output type		
PNP, NO	ICSMC30F08P1020	ICSMC30N14P1020

Proximity Sensors

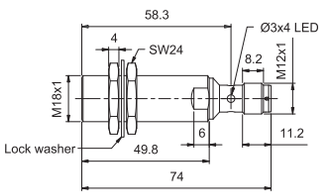
Inductive INOX sensors - Round - M18

Electrical connection:

M12: M12 connector

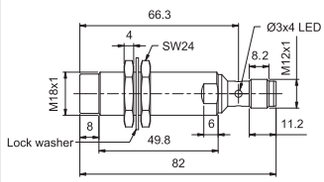
020: Cable lenght 2m.

M18 Flush INOX sensor with M12 connector



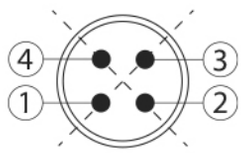
Rated operating distance Sn 8 mm
Weight 66 g

M18 Non flush INOX sensor with M12 connector



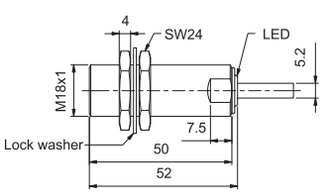
Rated operating distance Sn 14 mm
Weight 68 g

Connection M12



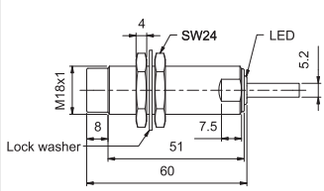
Output type		
PNP, NA	ICSXC50F08P1M12	ICSXC50N14P1M12

M18 Flush INOX sensor with cable



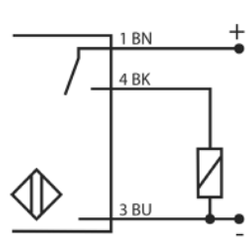
Rated operating distance Sn 8 mm
Weight 126 g

M18 Non flush INOX sensor with cable



Rated operating distance Sn 14 mm
Weight 128 g

Connection Diagrams



Output type		
PNP, NA	ICSXC50F08P1020	ICSXC50N14P1020

Proximity Sensors

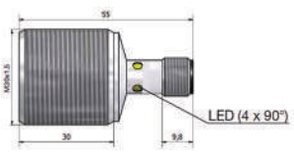
Inductive sensors - Round - M30

Electrical connection:

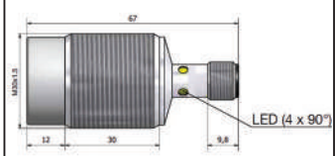
M30: M12 connector

020: Cable lenght 2m.

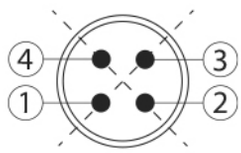
M30 Flush sensor with M12 connector



M30 Non flush sensor with M12 connector

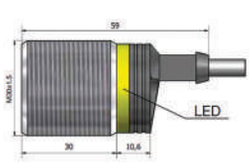


Connection M12

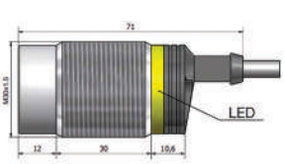


Output type	Rated operating distance Sn / Weight	M30 Flush sensor with M12 connector	M30 Non flush sensor with M12 connector
		15 mm / 185 g	22 mm / 185 g
PNP, NO		ICSMD30F15P1M12	ICSMD30N22P1M12

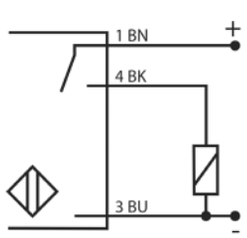
M30 Flush sensor with cable



M30 Non flush sensor with cable



Connection Diagrams



Output type	Rated operating distance Sn / Weight	M30 Flush sensor with cable	M30 Non flush sensor with cable
		15 mm / 190 g	22 mm / 190 g
PNP, NO		ICSMD30F15P1020	ICSMD30N22P1020

Proximity Sensors

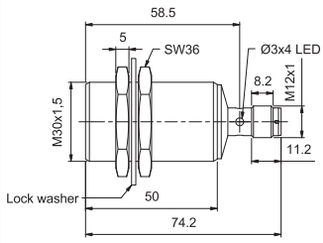
Inductive INOX sensors - Round - M30

Electrical connection:

M12: M12 connector

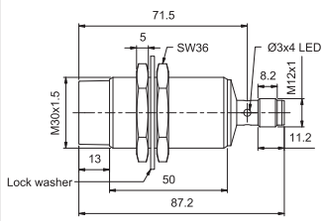
020: Cable lenght 2m.

M30 Flush INOX sensor with M12 connector



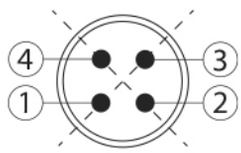
Rated operating distance Sn 15 mm
Weight 144 g

M30 Non flush INOX sensor with M12 connector



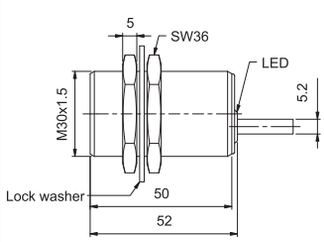
Rated operating distance Sn 22 mm
Weight 146 g

Connection M12



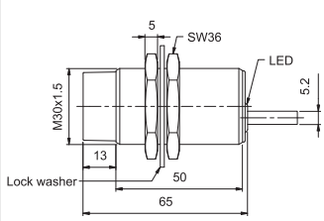
Output type		
PNP, NA	ICSXD50F15P1M12	ICSXD50N22P1M12

M30 Flush INOX sensor with cable



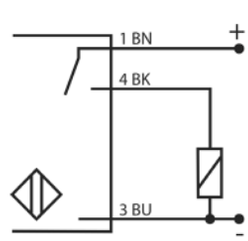
Rated operating distance Sn 15 mm
Weight 201 g

M30 Non flush INOX sensor with cable



Rated operating distance Sn 22 mm
Weight 203 g

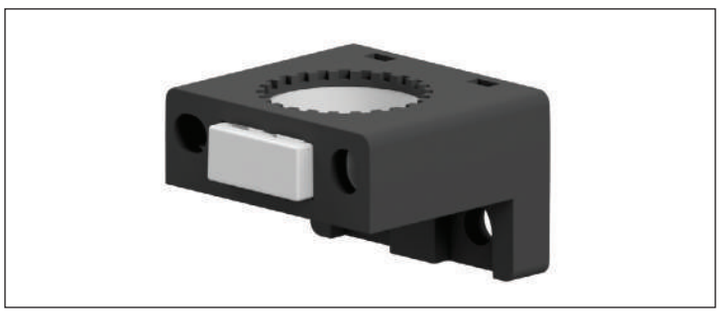
Connection Diagrams



Output type		
PNP, NA	ICSXD50F15P1020	ICSXD50N22P1020

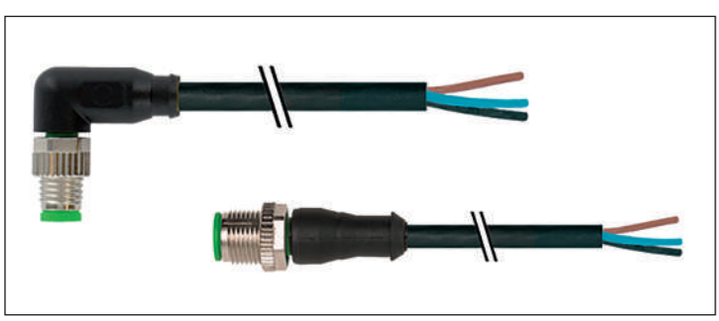
Proximity Sensors
Inductive sensors - Accessories

Bracket



Description	Code
Replacement bracket for cubic sensor IQS	**GR 1707**

Connection cable



Description	Poles	Lenght	Code
M8 female connection cable	3	3m	**XX3D030SM8**
M8 female connection cable	3	5m	**XX3D050SM8**
90° M8 female connection cable	3	3m	**XX3A030SM8**
90° M8 female connection cable	3	5m	**XX3A050SM8**
M12 female connection cable	4	3m	**XX4D030SM**
M12 female connection cable	4	5m	**XX4D050SM**
90° M12 female connection cable	4	3m	**XX4A030SM**
90° M12 female connection cable	4	5m	**XX4A050SM**

Notes

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COMEPI AROUND THE WORLD

Comepi products are available all over the world, the company supplies 76 countries in 5 continents. Our focus on flexibility translates into the ability to create solutions where the market requires new application needs.
Comepi has a network of agents and importers, supported by local distributors. This organization ensures global presence and support.

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