



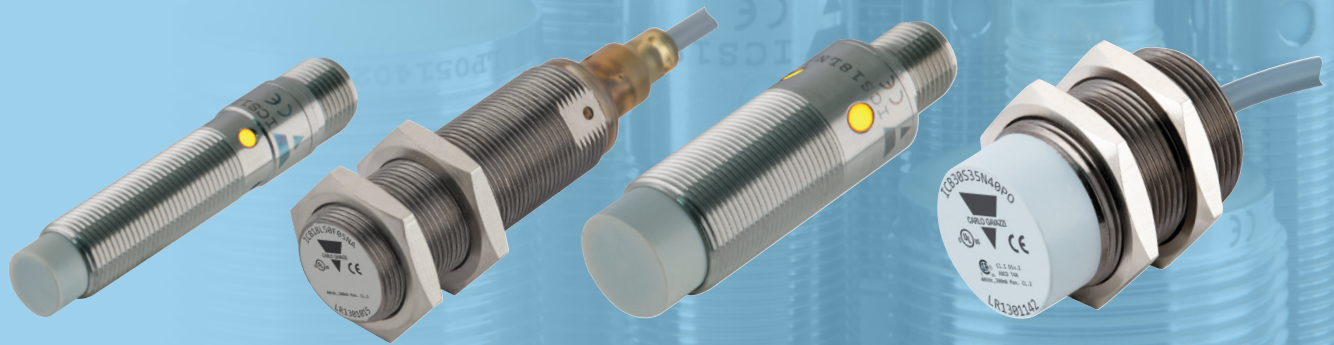
Inductive sensors

Sensors

Inductive sensors

Our wide range

With over 50 years of experience in manufacturing and selling proximity sensors, Carlo Gavazzi offers a wide range of inductive sensors, built to the highest-quality standards and easily customizable to specific OEM customer applications. Inductive sensors detect all ferrous and non-ferrous metals without physical contact and provide a durable solution in harsh environments, conveying reliable signals to the PLC on the position/presence of moving parts of the machinery. They are also used for rotational speed monitoring. They are not affected by dust, oil, water, or vibrations and they can operate at high switching frequencies without reducing their long operating life.



High performance inductive proximity sensors

The applications of inductive sensors are numerous in many industrial markets: material handling, food & beverage, agriculture, heavy and mobile equipment as well as machine tools and packaging.

Carlo Gavazzi's inductive sensors provide a reliable and cost effective solution in machinery and automation equipment.

The range includes:

- M5, M8, M12, M18, M30 housings
- Flat pack and rectangular type series
- Slot sensors
- Sensing distance from 0.8 up to 40 mm
- 2-wire, 3-wire and 4-wire
- NAMUR, DC and AC

Power supply type:

- 2-wire, 3-wire and 4-wire
- DC and AC
- NAMUR

Several installation possibilities:

- Flush, quasi-flush, non-flush versions
- Quick-disconnect or cable versions
- NPN or PNP output types with NO, NC or antivalent output functions

Excellent performance:

- High precision and temperature stability
- Fully protected against short circuit, reverse polarity and transients
- Enhanced diagnostic functions such as short circuit and overload indication and set-up assistance
- Permanently legible, laser-engraved serial number and part number for assured traceability

High performance inductive proximity sensors

ICB Basic

All the ICB sensors have a rugged nickel plated brass construction and feature a new generation of microprocessor, which allows final calibration of the sensor at the end of the assembly process, providing repeatable and highly accurate operation and increased EMC robustness.

ICB Triple distance

The ICB is also available with an extended sensing range of up to three times the standard sensing distance, with a complete range in M12, M18 and M30 housings and advanced diagnostic LED clearly visible from any direction.



ICS Washdown

The ICS series features an extremely robust design with a high grade stainless steel housing and extended operating temperature of between -40°C and +85°C (-40°F to +185°F), a superior resistance to high pressure and high temperature cleaning processes

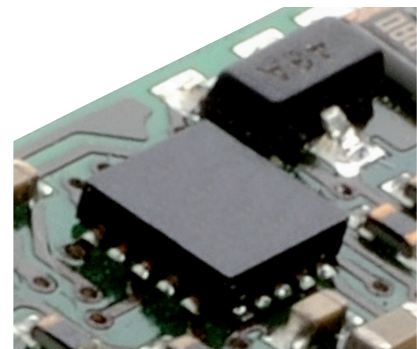
and the ability to prevent water and vapour access through the front cap or connector of the sensors. The ICS sensors are ECOLAB certified and rated to IP67, IP68 and IP69K standards.



IA Miniature

The IA05, IA06 and IA08 series are available in short and long stainless steel housings to provide a high level of mechanical protection.

They are the ideal solution where space is limited, meeting the trend of more and more compact machinery. There are quick-disconnect or cable versions.



Special versions

The range is completed by a series of special versions such as:

- the EI flat pack series, ideal for use in conveying and material handling applications
- the IC/ID rectangular types suitable for the control of axial and rotational movements
- the DU slotted sensors for small part detection
- the IC40 rotatable-head switches with the sensing face adjustable to up to 5

positions

- the IA high temperature series with extended operating temperature range.

Carlo Gavazzi is committed to providing the right solution to our OEM customers and their demanding application requirements. This means that we are ready to customize proximity sensors to meet these specific demands for almost any application.



Inductive sensors

Selection guide

Market applications

Machine tool

CNC machines repeat precise sequences and are able to produce the most complex pieces.

Tool changing machines, for example, automatically change the specific tool.

A drill machine has a variety of drill bits to make holes of several sizes.

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

correct location.

ICB series represents a suitable solution, thanks to the improved vibration, shock performance, and a reliable connection system between the cable and the barrel.

The very high resolution and quick response time of the ICB sensors allow an optimized and reliable solution.



Agriculture

Inductive sensors are mainly used for non-contact detection of the position of a part on the machine or equipment itself.

Thanks to its excellent quality and to the complete product range, ICB series are particularly suitable for the agricultural sector.

The possibility to have customizable termination options together with

the high durability and resistance to extreme conditions, such as oily and dusty environment, make ICB sensors the ideal solution.



Material handling systems

Material handling systems interconnect the different processes of production, from the raw material to the final product. In these systems it is mandatory to ensure the automatic and reliable flow of goods.

Inductive sensors are critical to obtaining higher productivity and quality from the automated process.

ICB series is an ideal choice, thanks

to the high precision and temperature stability. The microcontroller allows personalized solutions with programmable sensing distance and frequency.



Heavy mobile equipment

The installation of high reliability electronic components in earth-moving vehicles is critical, due to the harsh conditions of the environment. These machineries are exposed to difficult outdoor conditions, such as wide temperature variations, high stress due to cleaning processes with high pressure and high temperature steam jets. The ICS sensors provide reliable

position detection of the moving parts even in such harsh environment, thanks to the excellent tightness with certified IP68 and IP69K ratings, and to the wide operating temperature range. The high operating frequency also allows for high speed detection of a rotating gear.



Packaging and food & beverage

Companies that manufacture packaging machines for food need the right electronic components to assure the best application control, and continuous operation even after the periodic harsh cleaning process. The ICS washdown sensors have been designed for food & beverage applications. The ECOLAB certification ensures the resistance to industrial

cleaning agents, such as alkaline or chlorine foam and acid foam disinfectants. The material used for the plastic cap is FDA certified. The robust design along with the IP68 and IP69K protection ratings, make the ICS the optimal choice in these demanding applications.



Renewable energy

A solar tracker keeps a solar photovoltaic panel oriented toward the sun throughout the day, in order to maximize energy output. Inductive sensors can be used to provide feedback on the position of the tracker during the normal working function, or in some particular situations, such as wind security position. ICS proximity sensors ensure maximum

performance, durability, and reliability in any condition, thanks to a robust mechanical design and to the onboard advanced microprocessor, that provides the most accurate detection in the whole temperature range, between -40°C and +85°C (-40°F and +185°F).



Inductive sensors

Selection guide

DC application

Diameter	M5	Ø 6.5	Ø 6.5
Sensing distance (S _r)	1 mm 0.8 mm (IA05.....NCP)	1 mm	2 mm
Range	Standard	Standard	Standard
Mounting	Flush	Flush	Non-flush








Family	IA05	IA06	IA06
Housing	Short body	Short body	Short body
Dimensions (mm)	26.5 (cable) 40 (plug)	30	30
Thread (mm)	20.5 (cable) 21 (plug)	-	-
Material	Stainless steel	Stainless steel	Stainless steel
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	2 kHz	2 kHz	2 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 30 V DC	10 to 30 V DC	10 to 30 V DC
Approvals/Marks	CE	CE	CE

References

2-wire	Cable		NO			
			NC			
2-wire	Plug		NO			
			NC			
3-wire	Cable	NPN	NO	IA05BSF10NOP *	IA06BSF10NO	IA06BSN20NO
			NC	IA05BSF10NCP	IA06BSF10NC	IA06BSN20NC
	PNP	NO	IA05BSF10POP *	IA06BSF10PO	IA06BSN20PO	
		NC	IA05BSF10PCP	IA06BSF10PC	IA06BSN20PC	
	Plug	NPN	NO	IA05BSF10NOM5P		
			NC	IA05BSF10NCM5P		
	PNP	NO	IA05BSF10POM5P			
		NC	IA05BSF10PCM5P			
4-wire	Cable	NPN	NO+NC			
		PNP	NO+NC			
	Plug	NPN	NO+NC			
		PNP	NO+NC			

* Also available Ø4 version

DC application

M8	M8	M8	M8	M8
1.5 mm	1.5 mm	2 mm	2.5 mm	2.5 mm
Standard Flush	Standard Flush	Extended Flush	Standard Non-flush	Standard Non-flush
				
IA08 Short body	IA08 Long body	IA08 Short body	IA08 Short body	IA08 Long body
30 (cable) 45 (plug)	45 (cable) 70 (plug M1); 60 (plug M5)	30 (cable 2-wire) 35 (cable 3-wire) 50 (plug)	30 (cable) 45 (plug)	45 (cable) 70 (plug M1); 60 (plug M5)
30 (cable) 25 (plug)	45 (cable) 43 (plug M1); 40 (plug M5)	30 (cable 2-wire) 35 (cable 3-wire) 30 (plug)	27 (cable) 22 (plug)	42 (cable) 40 (plug M1); 37 (plug M5)
Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67
2 kHz	2 kHz	2 kHz	2 kHz	2 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 30 V DC	10 to 30 V DC	10 to 60 V DC (2-wire) 10 to 30 V DC (3-wire)	10 to 30 V DC	10 to 30 V DC
CE, UL, CSA	CE, UL, CSA	CE, UL (except for 2-wire), CSA	CE, UL, CSA	CE, UL, CSA
IA08BSF02DO				
IA08BSF02DC				
IA08BSF15NO	IA08BLF15NO	IA08BSF20NO	IA08BSN25NO	IA08BLN25NO
IA08BSF15NC	IA08BLF15NC	IA08BSF20NC	IA08BSN25NC	IA08BLN25NC
IA08BSF15PO	IA08BLF15PO	IA08BSF20PO	IA08BSN25PO	IA08BLN25PO
IA08BSF15PC	IA08BLF15PC	IA08BSF20PC	IA08BSN25PC	IA08BLN25PC
IA08BSF15NOM5	IA08BLF15NOMx	IA08BSF20NOM5	IA08BSN25NOM5	IA08BLN25NOMx
IA08BSF15NCM5	IA08BLF15NCM1	IA08BSF20NCM5	IA08BSN25NCM5	IA08BLN25NCM1
IA08BSF15POM5	IA08BLF15POMx	IA08BSF20POM5	IA08BSN25POM5	IA08BLN25POMx
IA08BSF15PCM5	IA08BLF15PCMx	IA08BSF20PCM5	IA08BSN25PCM5	IA08BLN25PCMx

x = 1 → M12-plug version
= 5 → M8-plug version

Inductive sensors

Selection guide

DC application

Diameter	M8	M12	M12
Sensing distance (S_r)	4 mm	2 mm	2 mm
Range	Extended	Standard	Standard
Mounting	Non-flush	Flush	Flush




Family	IA08	ICB12	ICB12
Housing	Short body	Short body	Long body
Dimensions (mm)	30 (cable 2-wire) 35 (cable 3-wire) 50 (plug)	46.8 (cable) 50.2 (plug)	66.8 (cable) 70.2 (plug)
Thread (mm)	26 (cable 2-wire) 32 (cable 3-wire) 27 (plug)	30	50
Material	Stainless steel	Nickel-plated brass	Nickel-plated brass
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	2 kHz (2-wire) 1 kHz (3-wire)	2 kHz	2 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 60 V DC (2-wire) 10 to 30 V DC (3-wire)	10 to 36 V DC	10 to 36 V DC
Approvals/Marks	CE, UL (except for 2-wire), CSA	CE, cULus, cCSAus	CE, cULus, cCSAus

References

2-wire	Cable		NO	IA08BSN04DO		
			NC	IA08BSN04DC		
2-wire	Plug		NO			
			NC			
3-wire	Cable	NPN	NO	IA08BSN40NO	ICB12S30F02NO	ICB12L50F02NO
			NC	IA08BSN40NC	ICB12S30F02NC	ICB12L50F02NC
	PNP	NO	IA08BSN40PO	ICB12S30F02PO	ICB12L50F02PO	
		NC	IA08BSN40PC	ICB12S30F02PC	ICB12L50F02PC	
	Plug	NPN	NO	IA08BSN40NOM5	ICB12S30F02NOM1	ICB12L50F02NOM1
			NC	IA08BSN40NCM5	ICB12S30F02NCM1	ICB12L50F02NCM1
Plug	PNP	NO	IA08BSN40POM5	ICB12S30F02POM1	ICB12L50F02POM1	
		NC	IA08BSN40PCM5	ICB12S30F02PCM1	ICB12L50F02PCM1	
4-wire	Cable	NPN	NO+NC		ICB12S30F02NA	ICB12L50F02NA
			NO+NC		ICB12S30F02PA	ICB12L50F02PA
	Plug	NPN	NO+NC		ICB12S30F02NAM1	ICB12L50F02NAM1
			NO+NC		ICB12S30F02PAM1	ICB12L50F02PAM1

DC application

M12	M12	M12	M12	M12
2 mm	2 mm	2 mm	2 mm	4 mm
Standard	Standard	Standard	Standard	Standard
Flush	Flush	Flush	Flush	Non-flush
				
ICS12	EI12	EI12	EI12	ICB12
Long body	Long body	Short body	Long body	Short body
64.8	66	46 (cable) 54.5 (plug)	66 (cable) 74.5 (plug)	50.8 (cable) 54.2 (plug)
38.7	50	30	50	30
Stainless steel	Thermoplastic polyester	Stainless steel	Stainless steel	Nickel-plated brass
IP 67, IP68, IP69K	IP 67	IP 67	IP 67	IP 67
2 kHz	800 Hz	800 Hz	800 Hz	2 kHz
-40° to 80°C (-40° to 176°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 36 V DC	10 to 40 V DC	10 to 40 V DC	10 to 40 V DC	10 to 36 V DC
CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, cULus, cCSAus
	EI1202NPOPL	EI1202NPOSS	EI1202NPOSL	ICB12S30N04NO
		EI1202NPCSS		ICB12S30N04NC
	EI1202PPOPL	EI1202PPOSS	EI1202PPOSL	ICB12S30N04PO
		EI1202PPCSS	EI1202PPCSL	ICB12S30N04PC
ICS12LF02NOM1-FB		EI1202NPOSS-1	EI1202NPOSL-1	ICB12S30N04NOM1
ICS12LF02NCM1-FB		EI1202NPCSS-1		ICB12S30N04NCM1
ICS12LF02POM1-FB		EI1202PPOSS-1	EI1202PPOSL-1	ICB12S30N04POM1
ICS12LF02PCM1-FB		EI1202PPCSS-1		ICB12S30N04PCM1
				ICB12S30N04NA
				ICB12S30N04PA
				ICB12S30N04NAM1
				ICB12S30N04PAM1

Inductive sensors

Selection guide

DC application			
Diameter	M12	M12	M12
Sensing distance (S_r)	4 mm	4 mm	4 mm
Range	Standard	Standard	Standard
Mounting	Non-flush	Non-flush	Non-flush



Family	ICB12	ICS12	EI12
Housing	Long body	Long body	Short body
Dimensions (mm)	70.8 (cable) 74.2 (plug)	64.8	50
Thread (mm)	50	32.5	30
Material	Nickel-plated brass	Stainless steel	Thermoplastic polyester
Degree of protection	IP 67	IP 67, IP68, IP69K	IP 67
Operating frequency	2 kHz	2 kHz	500 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-40° to 80°C (-40° to 176°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 36 V DC	10 to 40 V DC
Approvals/Marks	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA

References

2-wire	Cable		NO		
			NC		
	Plug		NO		
			NC		
3-wire	Cable	NPN	NO	ICB12L50N04NO	
			NC	ICB12L50N04NC	
		PNP	NO	ICB12L50N04PO	EI1204PPOPS
			NC	ICB12L50N04PC	
	Plug	NPN	NO	ICB12L50N04NOM1	ICS12LN04NOM1-FB
			NC	ICB12L50N04NCM1	ICS12LN04NCM1-FB
		PNP	NO	ICB12L50N04POM1	ICS12LN04POM1-FB
			NC	ICB12L50N04PCM1	ICS12LN04PCM1-FB
4-wire	Cable	NPN	NO+NC	ICB12L50N04NA	
		PNP	NO+NC	ICB12L50N04PA	
	Plug	NPN	NO+NC	ICB12L50N04NAM1	
		PNP	NO+NC	ICB12L50N04PAM1	

DC application				
M12	M12	M12	M12	M12
4 mm	4 mm	4 mm	4 mm	4 mm
Standard	Standard	Standard	Extended	Extended
Non-flush	Non-flush	Non-flush	Flush	Flush
				
E112	E112	E112	IA12	ICB12
Long body	Short body	Long body	Short body	Extra short body
70	50 (cable) 58.5 (plug)	70 (cable) 78.5 (plug)	54 (cable) 63.2 (plug)	25.4
50	30	50	38	23.4
Thermoplastic polyester	Stainless steel	Stainless steel	Nickel-plated brass	Nickel-plated brass
IP 67	IP 67	IP 67	IP 67	IP 67
500 Hz	500 Hz	500 Hz	1 kHz	2 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 80°C (-13° to 176°F)
10 to 40 V DC	10 to 40 V DC	10 to 40 V DC	10 to 40 V DC	10 to 36 V DC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, cULus, cCSAus
IA12DSF04DO				
IA12DSF04DC				
IA12ASF04DOM1				
IA12ASF04DCM1				
E11204NPOPL	E11204NPOSS	E11204NPOSL	ICB12S23F04NO	
	E11204NPCSS		ICB12S23F04NC	
E11204PPOPL	E11204PPOSS	E11204PPOSL	ICB12S23F04PO	
	E11204PPCSS	E11204PPCSL	ICB12S23F04PC	
	E11204NPOSS-1	E11204NPOSL-1		
	E11204NPCSS-1			
	E11204PPOSS-1	E11204PPOSL-1		
	E11204PPCSS-1			

Inductive sensors

Selection guide

DC application

Diameter	M12	M12	M12
Sensing distance (S_n)	4 mm	4 mm	4 mm
Range	Extended	Extended	Extended
Mounting	Flush	Flush	Flush



Family	ICB12	ICB12	ICS12
Housing	Short body	Long body	Long body
Dimensions (mm)	46.8 (cable) 50.2 (plug)	66.8 (cable) 70.2 (plug)	64.8
Thread (mm)	30	50	38.7
Material	Nickel-plated brass	Nickel-plated brass	Stainless steel
Degree of protection	IP 67	IP 67	IP 67, IP68, IP69K
Operating frequency	2 kHz	2 kHz	2 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-40° to 80°C (-40° to 176°F)
Rated operating voltage	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
Approvals/Marks	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus

References

2-wire	Cable		NO			
			NC			
2-wire	Plug		NO			
			NC			
3-wire	Cable	NPN	NO	ICB12S30F04NO	ICB12L50F04NO	
			NC	ICB12S30F04NC	ICB12L50F04NC	
		PNP	NO	ICB12S30F04PO	ICB12L50F04PO	
	NC		ICB12S30F04PC	ICB12L50F04PC		
	Plug	NPN	NO	ICB12S30F04NOM1	ICB12L50F04NOM1	ICS12LF04NOM1-FB
			NC	ICB12S30F04NCM1	ICB12L50F04NCM1	ICS12LF04NCM1-FB
PNP		NO	ICB12S30F04POM1	ICB12L50F04POM1	ICS12LF04POM1-FB	
	NC	ICB12S30F04PCM1	ICB12L50F04PCM1	ICS12LF04PCM1-FB		
4-wire	Cable	NPN	NO+NC	ICB12S30F04NA	ICB12L50F04NA	
		PNP	NO+NC	ICB12S30F04PA	ICB12L50F04PA	
	Plug	NPN	NO+NC	ICB12S30F04NAM1	ICB12L50F04NAM1	
		PNP	NO+NC	ICB12S30F04PAM1	ICB12L50F04PAM1	

DC application

M12	M12	M12	M12	M12
6 mm	6 mm	8 mm	8 mm	8 mm
Increased	Increased	Extended	Extended	Extended
Quasi-flush	Quasi-flush	Non-flush	Non-flush	Non-flush



ICB12	ICB12	ICB12	ICB12	ICB12
Short body	Long body	Extra short body	Short body	Long body
47.8 (cable) 51.2 (plug)	67.8 (cable) 71.2 (plug)	29.4	50.8 (cable) 54.2 (plug)	70.8 (cable) 74.2 (plug)
30	50	23.4	30	50
Nickel-plated brass IP 67	Nickel-plated brass IP 67	Nickel-plated brass IP 67	Nickel-plated brass IP 67	Nickel-plated brass IP 67
2 kHz	2 kHz	2 kHz	2 kHz	2 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 80°C (-13° to 176°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus

ICB12S30F06NO	ICB12L50F06NO	ICB12S23N08NO	ICB12S30N08NO	ICB12L50N08NO
ICB12S30F06NC	ICB12L50F06NC	ICB12S23N08NC	ICB12S30N08NC	ICB12L50N08NC
ICB12S30F06PO	ICB12L50F06PO	ICB12S23N08PO	ICB12S30N08PO	ICB12L50N08PO
ICB12S30F06PC	ICB12L50F06PC	ICB12S23N08PC	ICB12S30N08PC	ICB12L50N08PC
ICB12S30F06NOM1	ICB12L50F06NOM1		ICB12S30N08NOM1	ICB12L50N08NOM1
ICB12S30F06NCM1	ICB12L50F06NCM1		ICB12S30N08NCM1	ICB12L50N08NCM1
ICB12S30F06POM1	ICB12L50F06POM1		ICB12S30N08POM1	ICB12L50N08POM1
ICB12S30F06PCM1	ICB12L50F06PCM1		ICB12S30N08PCM1	ICB12L50N08PCM1
			ICB12S30N08NA	ICB12L50N08NA
			ICB12S30N08PA	ICB12L50N08PA
			ICB12S30N08NAM1	ICB12L50N08NAM1
			ICB12S30N08PAM1	ICB12L50N08PAM1

Inductive sensors

Selection guide

DC application			
Diameter	M12	M12	M12
Sensing distance (S _r)	8 mm	8 mm	10 mm
Range	Extended	Extended	Increased
Mounting	Non-flush	Non-flush	Non-flush



Family	ICS12	IA12	ICB12
Housing	Long body	Short body	Short body
Dimensions (mm)	64.8	58 (cable) 67.2 (plug)	50.8 (cable) 54.2 (plug)
Thread (mm)	32.5	38	30
Material	Stainless steel	Nickel-plated brass	Nickel-plated brass
Degree of protection	IP 67, IP68, IP69K	IP 67	IP 67
Operating frequency	2 kHz	800 Hz	2 kHz
Operating temperature	-40° to 80°C (-40° to 176°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 40 V DC	10 to 36 V DC
Approvals/Marks	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, cULus, cCSAus

References					
2-wire	Cable	NO	IA12DSN08DO		
		NC	IA12DSN08DC		
	Plug	NO	IA12ASN08DOM1		
		NC	IA12ASN08DCM1		
3-wire	Cable	NPN	NO	ICB12S30N10NO	
			NC	ICB12S30N10NC	
		PNP	NO	ICB12S30N10PO	
			NC	ICB12S30N10PC	
	Plug	NPN	NO	ICS12LN08NOM1-FB	ICB12S30N10NOM1
			NC	ICS12LN08NCM1-FB	ICB12S30N10NCM1
		PNP	NO	ICS12LN08POM1-FB	ICB12S30N10POM1
			NC	ICS12LN08PCM1-FB	ICB12S30N10PCM1
4-wire	Cable	NPN	NO+NC		
		PNP	NO+NC		
	Plug	NPN	NO+NC		
		PNP	NO+NC		

DC application

M12	M18	M18	M18
10 mm	5 mm	5 mm	5 mm
Increased	Standard	Standard	Standard
Non-flush	Flush	Flush	Flush



ICB12	ICB18	ICB18	ICS18
Long body	Short body	Long body	Long body
70.8 (cable) 74.2 (plug)	53 (cable) 54 (plug)	73.1 (cable) 74 (plug)	63
50	30	50	35
Nickel-plated brass IP 67	Nickel-plated brass IP 67	Nickel-plated brass IP 67	Stainless steel IP 67, IP68, IP69K
2 kHz	1.5 kHz	1.5 kHz	1.5 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-40° to 80°C (-40° to 176°F)
10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus

ICB12L50N10NO	ICB18S30F05NO	ICB18L50F05NO	
ICB12L50N10NC	ICB18S30F05NC	ICB18L50F05NC	
ICB12L50N10PO	ICB18S30F05PO	ICB18L50F05PO	
ICB12L50N10PC	ICB18S30F05PC	ICB18L50F05PC	
ICB12L50N10NOM1	ICB18S30F05NOM1	ICB18L50F05NOM1	ICS18LF05NOM1-FB
ICB12L50N10NCM1	ICB18S30F05NCM1	ICB18L50F05NCM1	ICS18LF05NCM1-FB
ICB12L50N10POM1	ICB18S30F05POM1	ICB18L50F05POM1	ICS18LF05POM1-FB
ICB12L50N10PCM1	ICB18S30F05PCM1	ICB18L50F05PCM1	ICS18LF05PCM1-FB
	ICB18S30F05NA	ICB18L50F05NA	
	ICB18S30F05PA	ICB18L50F05PA	
	ICB18S30F05NAM1	ICB18L50F05NAM1	
	ICB18S30F05PAM1	ICB18L50F05PAM1	

Inductive sensors

Selection guide

DC application

Diameter	M18	M18	M18
Sensing distance (S_n)	5 mm	5 mm	5 mm
Range	Standard	Standard	Standard
Mounting	Flush	Flush	Flush



Family	EI18	EI18	EI18
Housing	Long body	Short body	Long body
Dimensions (mm)	77	57 (cable) 55 (plug)	77 (cable) 75 (plug)
Thread (mm)	50	30	50
Material	Thermoplastic polyester	Stainless steel	Stainless steel
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	500 Hz	500 Hz	500 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 40 V DC	10 to 40 V DC	10 to 40 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA

References

2-wire	Cable		NO			
			NC			
	Plug		NO			
			NC			
3-wire	Cable	NPN	NO	EI1805NPOPL	EI1805NPOSS	EI1805NPOSL
			NC		EI1805NPCSS	EI1805NPCSL
		PNP	NO	EI1805PPOPL	EI1805PPOSS	EI1805PPOS�
			NC		EI1805PPCSS	EI1805PPCSL
	Plug	NPN	NO		EI1805NPOSS-1	EI1805NPOSL-1
			NC		EI1805NPCSS-1	
		PNP	NO		EI1805PPOSS-1	EI1805PPOS�-1
			NC		EI1805PPCSS-1	EI1805PPCSL-1
	4-wire	Cable	NPN	NO+NC		
			PNP	NO+NC		
		Plug	NPN	NO+NC		
			PNP	NO+NC		

DC application

M18	M18	M18	M18	M18
8 mm	8 mm	8 mm	8 mm	8 mm
Standard	Standard	Standard	Standard	Standard
Non-flush	Non-flush	Non-flush	Non-flush	Non-flush
				
ICB18	ICB18	ICS18	EI18	EI18
Short body	Long body	Long body	Short body	Long body
63 (cable) 64 (plug)	83.1 (cable) 84 (plug)	63	65 (cable) 63 (plug)	85 (cable) 83 (plug)
30	50	27	30	50
Nickel-plated brass	Nickel-plated brass	Stainless steel	Thermoplastic polyester	Thermoplastic polyester
IP 67	IP 67	IP 67	IP 67	IP 67
1.5 kHz	1.5 kHz	1.5 kHz	400 Hz	400 Hz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 40 V DC	10 to 40 V DC
CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, UL, CSA
ICB18S30N08NO	ICB18L50N08NO		EI1808NPOPS	EI1808NPOPL
ICB18S30N08NC	ICB18L50N08NC			
ICB18S30N08PO	ICB18L50N08PO		EI1808PPOPS	EI1808PPOPL
ICB18S30N08PC	ICB18L50N08PC			EI1808PPCPL
ICB18S30N08NOM1	ICB18L50N08NOM1	ICS18LN08NOM1-FB		
ICB18S30N08NCM1	ICB18L50N08NCM1	ICS18LN08NCM1-FB		
ICB18S30N08POM1	ICB18L50N08POM1	ICS18LN08POM1-FB	EI1808PPOPS-1	EI1808PPOPL-1
ICB18S30N08PCM1	ICB18L50N08PCM1	ICS18LN08PCM1-FB		EI1808PPCPL-1
ICB18S30N08NA	ICB18L50N08NA			
ICB18S30N08PA	ICB18L50N08PA			
ICB18S30N08NAM1	ICB18L50N08NAM1			
ICB18S30N08PAM1	ICB18L50N08PAM1			

Inductive sensors

Selection guide

DC application

Diameter	M18	M18	M18
Sensing distance (S_n)	8 mm	8 mm	8 mm
Range	Standard	Standard	Extended
Mounting	Non-flush	Non-flush	Flush



Family	EI18	EI18	ICB18
Housing	Short body	Long body	Short body
Dimensions (mm)	65 (cable) 63 (plug)	85 (cable) 83 (plug)	53 (cable) 54 (plug)
Thread (mm)	30	50	30
Material	Stainless steel	Stainless steel	Nickel-plated brass
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	400 Hz	400 Hz	1.5 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 40 V DC	10 to 40 V DC	10 to 36 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, cULus, cCSAus

References

2-wire	Cable		NO					
			NC					
	Plug		NO					
			NC					
3-wire	Cable	NPN	NO	EI1808NPOSS	EI1808NPOSL	ICB18S30F08NO		
			NC	EI1808NPCSS		ICB18S30F08NC		
		PNP	NO	EI1808PPOSS	EI1808PPOSL	ICB18S30F08PO		
			NC	EI1808PPCSS	EI1808PPCSL	ICB18S30F08PC		
	Plug	NPN	NO	EI1808NPOSS-1	EI1808NPOSL-1	ICB18S30F08NOM1		
			NC	EI1808NPCSS-1		ICB18S30F08NCM1		
		PNP	NO	EI1808PPOSS-1	EI1808PPOSL-1	ICB18S30F08POM1		
			NC	EI1808PPCSS-1	EI1808PPCSL-1	ICB18S30F08PCM1		
	4-wire	Cable	NPN	NO+NC			ICB18S30F08NA	
			PNP	NO+NC			ICB18S30F08PA	
		Plug	NPN	NO+NC				ICB18S30F08NAM1
			PNP	NO+NC				ICB18S30F08PAM1

DC application				
M18	M18	M18	M18	M18
8 mm	8 mm	8 mm	12 mm	12 mm
Extended	Extended	Extended	Increased	Increased
Flush	Flush	Flush	Quasi-flush	Quasi-flush
				
ICB18	ICS18	IA18	ICB18	ICB18
Long body	Long body	Short body	Short body	Long body
73.1 (cable) 74 (plug)	63	57 (cable) 55 (plug)	54 (cable) 55 (plug)	74.1 (cable) 75 (plug)
50	35	30	30	50
Nickel-plated brass	Stainless steel	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
IP 67	IP 67, IP68, IP69K	IP 67	IP 67	IP 67
1.5 kHz	1.5 kHz	500 Hz	1.5 kHz	1.5 kHz
-25° to 70°C (-13° to 158°F)	-40° to 80°C (-40° to 176°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 36 V DC	10 to 36 V DC	10 to 40 V DC	10 to 36 V DC	10 to 36 V DC
CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, cULus, cCSAus	CE, cULus, cCSAus
IA18DSF08DO				
IA18DSF08DC				
IA18ASF08DOM1				
IA18ASF08DCM1				
ICB18L50F08NO			ICB18S30F12NO	
ICB18L50F08NC			ICB18S30F12NC	
ICB18L50F08PO			ICB18S30F12PO	
ICB18L50F08PC			ICB18S30F12PC	
ICB18L50F08NOM1		ICS18LF08NOM1-FB	ICB18S30F12NOM1	
ICB18L50F08NCM1		ICS18LF08NCM1-FB	ICB18S30F12NCM1	
ICB18L50F08POM1		ICS18LF08POM1-FB	ICB18S30F12POM1	
ICB18L50F08PCM1		ICS18LF08PCM1-FB	ICB18S30F12PCM1	
ICB18L50F08NA				
ICB18L50F08PA				
ICB18L50F08NAM1				
ICB18L50F08PAM1				

Inductive sensors

Selection guide

DC application

Diameter	M18	M18	M18
Sensing distance (S_n)	12 mm	14 mm	14 mm
Range	Extended	Extended	Extended
Mounting	Non-flush	Non-flush	Non-flush



Family	ICS18	ICB18	ICB18
Housing	Long body	Short body	Long body
Dimensions (mm)	63	63 (cable) 64 (plug)	83.1 (cable) 84 (plug)
Thread (mm)	27	30	50
Material	Stainless steel	Nickel-plated brass	Nickel-plated brass
Degree of protection	IP 67, IP68, IP69K	IP 67	IP 67
Operating frequency	1.5 kHz	1.5 kHz	1.5 kHz
Operating temperature	-40° to 80°C (-40° to 176°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
Approvals/Marks	CE, cULus, ECOLAB, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus

References

2-wire	Cable		NO				
			NC				
	Plug		NO				
			NC				
3-wire	Cable	NPN	NO		ICB18S30N14NO	ICB18L50N14NO	
			NC		ICB18S30N14NC	ICB18L50N14NC	
		PNP	NO		ICB18S30N14PO	ICB18L50N14PO	
			NC		ICB18S30N14PC	ICB18L50N14PC	
	Plug	NPN	NO	ICS18LN12NOM1-FB	ICB18S30N14NOM1	ICB18L50N14NOM1	
			NC	ICS18LN12NCM1-FB	ICB18S30N14NCM1	ICB18L50N14NCM1	
		PNP	NO	ICS18LN12POM1-FB	ICB18S30N14POM1	ICB18L50N14POM1	
			NC	ICS18LN12PCM1-FB	ICB18S30N14PCM1	ICB18L50N14PCM1	
	4-wire	Cable	NPN	NO+NC		ICB18S30N14NA	ICB18L50N14NA
			PNP	NO+NC		ICB18S30N14PA	ICB18L50N14PA
		Plug	NPN	NO+NC		ICB18S30N14NAM1	ICB18L50N14NAM1
			PNP	NO+NC		ICB18S30N14PAM1	ICB18L50N14PAM1

DC application

M18	M18	M18	M30	M30
14 mm	20 mm	20 mm	10 mm	10 mm
Extended	Increased	Increased	Standard	Standard
Non-flush	Non-flush	Non-flush	Flush	Flush



IA18	ICB18	ICB18	ICB30	ICB30
Short body	Short body	Long body	Short body	Long body
65 (cable) 63 (plug)	63 (cable) 64 (plug)	83.1 (cable) 84 (plug)	59 (cable) 55 (plug)	79 (cable) 75 (plug)
30	30	50	30	50
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
IP 67	IP 67	IP 67	IP 67	IP 67
400 Hz	1.5 kHz	1.5 kHz	1 kHz	1 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F) (*)	-25° to 70°C (-13° to 158°F) (*)
10 to 40 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
CE, UL, CSA	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus

IA18DSN14DO

IA18DSN14DC

IA18ASN14DOM1

IA18ASN14DCM1

ICB18S30N20NO ICB18L50N20NO ICB30S30F10NO ICB30L50F10NO

ICB18S30N20NC ICB18L50N20NC ICB30S30F10NC ICB30L50F10NC

ICB18S30N20PO ICB18L50N20PO ICB30S30F10PO ICB30L50F10PO

ICB18S30N20PC ICB18L50N20PC ICB30S30F10PC ICB30L50F10PC

ICB18S30N20NOM1 ICB18L50N20NOM1 ICB30S30F10NOM1 ICB30L50F10NOM1

ICB18S30N20NCM1 ICB18L50N20NCM1 ICB30S30F10NCM1 ICB30L50F10NCM1

ICB18S30N20POM1 ICB18L50N20POM1 ICB30S30F10POM1 ICB30L50F10POM1

ICB18S30N20PCM1 ICB18L50N20PCM1 ICB30S30F10PCM1 ICB30L50F10PCM1

ICB30S30F10NA ICB30L50F10NA

ICB30S30F10PA ICB30L50F10A

ICB30S30F10NAM1 ICB30L50F10NAM1

ICB30S30F10PAM1 ICB30L50F10PAM1

(*) Operating temperature:
Plug version -40° to +70°C (-40° to +158°F)

Inductive sensors

Selection guide

DC application

Diameter	M30	M30	M30
Sensing distance (S_n)	10 mm	10 mm	10 mm
Range	Standard	Standard	Standard
Mounting	Flush	Flush	Flush



Family	ICS30	ICS30	EI30
Housing	Short body	Long body	Long body
Dimensions (mm)	47.5	67.5	79
Thread (mm)	30	50	50
Material	Stainless steel	Stainless steel	Thermoplastic polyester
Degree of protection	IP 67, IP68, IP69K	IP 67, IP68, IP69K	IP 67
Operating frequency	1 kHz	1 kHz	300 Hz
Operating temperature	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 36 V DC	10 to 40 V DC
Approvals/Marks	CE, cULus, ECOLAB, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA

References

2-wire	Cable		NO		
			NC		
2-wire	Plug		NO		
			NC		
3-wire	Cable	NPN	NO		EI301ONPOPL
			NC		
	PNP	NO		ICS30SF10NOM1-FB	ICS30LF10NOM1-FB
		NC		ICS30SF10NCM1-FB	ICS30LF10NCM1-FB
	Plug	NPN	NO	ICS30SF10POM1-FB	ICS30LF10POM1-FB
			NC	ICS30SF10PCM1-FB	ICS30LF10PCM1-FB
4-wire	Cable	NPN	NO+NC		
		PNP	NO+NC		
	Plug	NPN	NO+NC		
		PNP	NO+NC		

DC application

M30	M30	M30	M30	M30
10 mm	10 mm	15 mm	15 mm	15 mm
Standard	Standard	Standard	Standard	Standard
Flush	Flush	Non-flush	Non-flush	Non-flush



Ei30	Ei30	ICB30	ICB30	ICS30
Short body	Long body	Short body	Long body	Short body
59 (cable) 55.5 (plug)	79 (cable) 75.5 (plug)	71 (cable) 67 (plug)	91 (cable) 87 (plug)	59.5
30	50	30	50	30
Stainless steel	Stainless steel	Nickel-plated brass	Nickel-plated brass	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67, IP68, IP69K
300 Hz	300 Hz	1 kHz	1 kHz	1 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F) (*)	-25° to 70°C (-13° to 158°F) (*)	-40° to 85°C (-40° to 185°F)
10 to 40 V DC	10 to 40 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
CE, UL, CSA	CE, UL, CSA	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus

EI3010NPOSS

EI3010NPOSL

ICB30S30N15NO

ICB30L50N15NO

EI3010NPCSS

ICB30S30N15NC

ICB30L50N15NC

EI3010PPOSS

EI3010PPOSL

ICB30S30N15PO

ICB30L50N15PO

EI3010PPCSS

EI3010PPCSL

ICB30S30N15PC

ICB30L50N15PC

ICB30S30N15NOM1

ICB30L50N15NOM1

ICS30SN15NOM1-FB

ICB30S30N15NCM1

ICB30L50N15NCM1

ICS30SN15NCM1-FB

EI3010PPOSS-1

EI3010PPOSL-1

ICB30S30N15POM1

ICB30L50N15POM1

ICS30SN15POM1-FB

ICB30S30N15PCM1

ICB30L50N15PCM1

ICS30SN15PCM1-FB

ICB30S30N15NA

ICB30L50N15NA

ICB30S30N15PA

ICB30L50N15PA

ICB30S30N15NAM1

ICB30L50N15NAM1

ICB30S30N15PAM1

ICB30L50N15PAM1

(*) Operating temperature:
Plug version -40° to +70°C (-40° to +158°F)

Inductive sensors

Selection guide

DC application			
Diameter	M30	M30	M30
Sensing distance (S_n)	15 mm	15 mm	15 mm
Range	Standard	Standard	Standard
Mounting	Non-flush	Non-flush	Non-flush



Family	ICS30	EI30	EI30
Housing	Long body	Short body	Long body
Dimensions (mm)	79.5	71	91
Thread (mm)	50	30	50
Material	Stainless steel	Thermoplastic polyester	Thermoplastic polyester
Degree of protection	IP 67, IP68, IP69K	IP 67	IP 67
Operating frequency	1 kHz	100 Hz	100 Hz
Operating temperature	-40° to 85°C (-40° to 185°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 40 V DC	10 to 40 V DC
Approvals/Marks	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, UL, CSA

References

2-wire	Cable		NO		
			NC		
2-wire	Plug		NO		
			NC		
3-wire	Cable	NPN	NO	EI3015NPOPS	
			NC		
	Plug	PNP	NO	EI3015PPOPL	
			NC		
	3-wire	Plug	NPN	NO	ICS30LN15NOM1-FB
				NC	ICS30LN15NCM1-FB
Plug		PNP	NO	ICS30LN15POM1-FB	
			NC	ICS30LN15PCM1-FB	
4-wire	Cable	NPN	NO+NC		
		PNP	NO+NC		
	Plug	NPN	NO+NC		
		PNP	NO+NC		

DC application

M30	M30	M30	M30	M30
15 mm	15 mm	15 mm	15 mm	15 mm
Standard	Standard	Extended	Extended	Extended
Non-flush	Non-flush	Flush	Flush	Flush



E130	E130	ICB30	ICB30	ICS30
Short body	Long body	Short body	Long body	Short body
71 (cable) 67.5 (plug)	91 (cable) 87.5 (plug)	59 (cable) 55 (plug)	79 (cable) 75 (plug)	47.5
30	50	30	50	30
Stainless steel	Stainless steel	Nickel-plated brass	Nickel-plated brass	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67, IP68, IP69K
100 Hz	100 Hz	1 kHz	1 kHz	1 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F) (*)	-25° to 70°C (-13° to 158°F) (*)	-40° to 85°C (-40° to 185°F)
10 to 40 V DC	10 to 40 V DC	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
CE, UL, CSA	CE, UL, CSA	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus

EI3015NPOSS

EI3015NPOSL

ICB30S30F15NO

ICB30L50F15NO

EI3015NPCSS

EI3015NPCSL

ICB30S30F15NC

ICB30L50F15NC

EI3015PPOSS

EI3015PPOSL

ICB30S30F15PO

ICB30L50F15PO

EI3015PPCSS

ICB30S30F15PC

ICB30L50F15PC

EI3015NPOSS-1

ICB30S30F15NOM1

ICB30L50F15NOM1

ICS30SF15NOM1-FB

ICB30S30F15NCM1

ICB30L50F15NCM1

ICS30SF15NCM1-FB

EI3015PPOSS-1

EI3015PPOSL-1

ICB30S30F15POM1

ICB30L50F15POM1

ICS30SF15POM1-FB

ICB30S30F15PCM1

ICB30L50F15PCM1

ICS30SF15PCM1-FB

ICB30S30F15NA

ICB30L50F15NA

ICB30S30F15PA

ICB30L50F15PA

ICB30S30F15NAM1

ICB30L50F15NAM1

ICB30S30F15PAM1

ICB30L50F15PAM1

(*) Operating temperature:
Plug version -40° to +70°C (-40° to +158°F)

Inductive sensors

Selection guide

DC application

Diameter	M30	M30	M30
Sensing distance (S_n)	15 mm	15 mm	22 mm
Range	Extended	Extended	Extended
Mounting	Flush	Flush	Non-flush








Family	ICS30	IA30	ICB30
Housing	Long body	Short body	Short body
Dimensions (mm)	67.5	59 (cable) 55 (plug)	71 (cable) 67 (plug)
Thread (mm)	50	30	30
Material	Stainless steel	Nickel-plated brass	Nickel-plated brass
Degree of protection	IP 67, IP68, IP69K	IP 67	IP 67
Operating frequency	1 kHz	400 Hz	1 kHz
Operating temperature	-40° to 85°C (-40° to 185°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F) (*)
Rated operating voltage	10 to 36 V DC	10 to 40 V DC	10 to 36 V DC
Approvals/Marks	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, cULus, cCSAus

References

2-wire	Cable		NO	IA30DSF15DO	
			NC	IA30DSF15DC	
	Plug		NO	IA30ASF15DOM1	
			NC	IA30ASF15DCM1	
3-wire	Cable	NPN	NO	ICB30S30N22NO	
			NC	ICB30S30N22NC	
		PNP	NO	ICB30S30N22PO	
			NC	ICB30S30N22PC	
	Plug	NPN	NO	ICS30LF15NOM1-FB	ICB30S30N22NOM1
			NC	ICS30LF15NCM1-FB	ICB30S30N22NCM1
		PNP	NO	ICS30LF15POM1-FB	ICB30S30N22POM1
			NC	ICS30LF15PCM1-FB	ICB30S30N22PCM1
4-wire	Cable	NPN	NO+NC	ICB30S30N22NA	
		PNP	NO+NC	ICB30S30N22PA	
	Plug	NPN	NO+NC	ICB30S30N22NAM1	
		PNP	NO+NC	ICB30S30N22PAM1	

(*) Operating temperature:
Plug version -40° to +70°C (-40° to +158°F)

DC application				
M30	M30	M30	M30	M30
22 mm	22 mm	22 mm	22 mm	22 mm
Extended	Extended	Extended	Extended	Increased
Non-flush	Non-flush	Non-flush	Non-flush	Quasi-flush
				
ICB30	ICS30	ICS30	IA30	ICB30
Long body	Short body	Long body	Short body	Short body
91 (cable) 87 (plug)	59.5	79.5	71 (cable) 67 (plug)	35 (cable) 60 (plug)
50	30	50	30	35
Nickel-plated brass	Stainless steel	Stainless steel	Nickel-plated brass	Nickel-plated brass
IP 67	IP 67, IP68, IP69K	IP 67, IP68, IP69K	IP 67	IP 67
1 kHz	1 kHz	1 kHz	200 Hz	100 Hz
-25° to 70°C (-13° to 158°F) (*)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
10 to 36 V DC	10 to 36 V DC	10 to 36 V DC	10 to 40 V DC	10 to 36 V DC
CE, cULus, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, cULus, ECOLAB, cCSAus	CE, UL, CSA	CE, cULus, cCSAus
IA30DSN22DO				
IA30DSN22DC				
IA30ASN22DOM1				
IA30ASN22DCM1				
ICB30L50N22NO		ICB30S35F22NO		
ICB30L50N22NC		ICB30S35F22NC		
ICB30L50N22PO		ICB30S35F22PO		
ICB30L50N22PC		ICB30S35F22PC		
ICB30L50N22NOM1	ICS30SN22NOM1-FB	ICS30LN22NOM1-FB	ICB30S35F22NOM1	
ICB30L50N22NCM1	ICS30SN22NCM1-FB	ICS30LN22NCM1-FB	ICB30S35F22NCM1	
ICB30L50N22POM1	ICS30SN22POM1-FB	ICS30LN22POM1-FB	ICB30S35F22POM1	
ICB30L50N22PCM1	ICS30SN22PCM1-FB	ICS30LN22PCM1-FB	ICB30S35F22PCM1	
ICB30L50N22NA				
ICB30L50N22PA				
ICB30L50N22NAM1				
ICB30L50N22PAM1				

(*) Operating temperature:
Plug version -40° to +70°C (-40° to +158°F)

Inductive sensors

Selection guide

DC application






Diameter	M30	M30	M30
Sensing distance (S_n)	22 mm	40 mm	40 mm
Range	Increased	Increased	Increased
Mounting	Quasi-flush	Non-flush	Non-flush



Family	ICB30	ICB30	ICB30
Housing	Long body	Short body	Long body
Dimensions (mm)	50 (cable) 75 (plug)	47 (cable) 72 (plug)	62 (cable) 87 (plug)
Thread (mm)	50	35	50
Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	100 Hz	100 Hz	100 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 36 V DC	10 to 36 V DC	10 to 36 V DC
Approvals/Marks	CE, cULus, cCSAus	CE, cULus, cCSAus	CE, cULus, cCSAus

References

2-wire	Cable		NO			
			NC			
	Plug		NO			
			NC			
3-wire	Cable	NPN	NO	ICB30L50F22NO	ICB30S35N40NO	ICB30L50N40NO
			NC	ICB30L50F22NC	ICB30S35N40NC	ICB30L50N40NC
		PNP	NO	ICB30L50F22PO	ICB30S35N40PO	ICB30L50N40PO
			NC	ICB30L50F22PC	ICB30S35N40PC	ICB30L50N40PC
	Plug	NPN	NO	ICB30L50F22NOM1	ICB30S35N40NOM1	ICB30L50N40NOM1
			NC	ICB30L50F22NCM1	ICB30S35N40NCM1	ICB30L50N40NCM1
		PNP	NO	ICB30L50F22POM1	ICB30S35N40POM1	ICB30L50N40POM1
			NC	ICB30L50F22PCM1	ICB30S35N40PCM1	ICB30L50N40PCM1
	4-wire	Cable	NPN	NO+NC		
			PNP	NO+NC		
		Plug	NPN	NO+NC		
			PNP	NO+NC		

AC application				
M12	M12	M18	M18	M18
2 mm	4 mm	5 mm	5 mm	5 mm
Standard	Standard	Standard	Standard	Standard
Flush	Non-flush	Flush	Flush	Flush
				
E112	E112	E118	E118	E118
Long body	Long body	Short body	Long body	Short body
66 (cable) 74.5 (plug)	70 (cable) 78.5 (plug)	57	77	57 (cable) 55 (plug)
50	50	30	50	30
Stainless steel	Stainless steel	Thermoplastic polyester	Thermoplastic polyester	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67
25 Hz	25 Hz	25 Hz	25 Hz	25 Hz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
20 to 265 V AC	20 to 265 V AC	20 to 250 V AC	20 to 250 V AC	20 to 265 V AC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
E11202TBOSL	E11204TBOSL	E11805TBOPS	E11805TBOPL	E11805TBOSS
E11202TBCSL	E11204TBCSL			E11805TBCSS
E11202TBOSL-6	E11204TBOSL-6			E11805TBOSS-6

Inductive sensors






Selection guide

AC application				
Diameter	M18	M18	M18	M18
Sensing distance (S_n)	5 mm	8 mm	8 mm	8 mm
Range	Standard	Standard	Standard	Standard
Mounting	Flush	Non-flush	Non-flush	Non-flush




Family	E118	E118	E118	E118
Housing	Long body	Long body	Short body	Long body
Dimensions (mm)	77 (cable) 75 (plug)	85 (cable) 83 (plug)	65 (cable) 63 (plug)	85 (cable) 83 (plug)
Thread (mm)	50	50	30	50
Material	Stainless steel	Thermoplastic polyester	Stainless steel	Stainless steel
Degree of protection	IP 67	IP 67	IP 67	IP 67
Operating frequency	25 Hz	25 Hz	25 Hz	25 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	20 to 265 V AC	20 to 250 V AC	20 to 265 V AC	20 to 265 V AC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA

References						
2-wire	Cable	NO	EI1805TBOSL	EI1808TBOPL	EI1808TBOSS	EI1808TBOSL
		NC	EI1805TBCSL	EI1808TBCPL	EI1808TBCSS	EI1808TBCSL
	Plug	NO	EI1805TBOSL-6		EI1808TBOSS-6	EI1808TBOSL-6
		NC		EI1808TBCPL-6		EI1808TBCSL-6






AC application					
M30	M30	M30	M30	M30	M30
10 mm	10 mm	10 mm	15 mm	15 mm	15 mm
Standard	Standard	Standard	Standard	Standard	Standard
Flush	Flush	Flush	Non-flush	Non-flush	Non-flush
					
EI30	EI30	EI30	EI30	EI30	EI30
Long body	Short body	Long body	Long body	Short body	Long body
79	59	79 (cable) 75.5 (plug)	91	87.5 (cable) 67.5 (plug)	91 (cable) 71 (plug)
50	30	50	50	30	50
Thermopl. polyester	Stainless steel	Stainless steel	Thermopl. polyester	Stainless steel	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
25 Hz	25 Hz	25 Hz	25 Hz	25 Hz	25 Hz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
20 to 265 V AC	20 to 265 V AC	20 to 265 V AC	20 to 265 V AC	20 to 265 V AC	20 to 265 V AC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
EI3010TBOPL	EI3010TBOSS EI3010TBCSS	EI3010TBOSL EI3010TBCSL EI3010TBOSL-6	EI3015TBOPL	EI3015TBOSS EI3015TBCSS EI3015TBOSS-6	EI3015TBOSL EI3015TBCSL EI3015TBOSL-6

Inductive sensors

Selection guide

NAMUR				
Diameter	M8 - Ø 6.5	M8	M12	M12
Sensing distance (S _n)	1 mm	2 mm	2 mm	2 mm
Range	Standard	Standard	Standard	Standard
Mounting	Flush	Non-flush	Flush	Flush
				
Family	EI08 - EI06	EI08	IA12	IA12
Housing	Short body	Short body	Short body	Long body
Dimensions (mm)	51	54	46 (cable) 54.5 (plug)	66 (cable) 74.5 (plug)
Thread (mm)	35	35	30	50
Material	Stainless steel	Stainless steel	Thermoplastic polyester	Thermoplastic polyester
Degree of protection	IP 67	IP 67	IP 67	IP 67
Operating frequency	2 kHz	1.5 kHz	1.4 kHz	1.4 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
References				
Cable	EI08(06)01NACS (*)	EI0802NACS	IA12CSF02UC	IA12CLF02UC
Plug			IA12CSF02UCM1	IA12CLF02UCM1

(*) **EI0801NACS = M8**
EI0601NACS = Ø 6.5

NAMUR				
M12	M12	M12	M12	M12
2 mm	2 mm	4 mm	4 mm	4 mm
Standard Flush	Standard Flush	Standard Non-flush	Standard Non-flush	Standard Non-flush
				
IA12 Short body	IA12 Long body	IA12 Short body	IA12 Long body	IA12 Short body
46 (cable) 54.5 (plug)	66 (cable) 74.5 (plug)	50 (cable) 58.5 (plug)	70 (cable) 78.5 (plug)	50(cable) 58.5 (plug)
30	50	30	50	30
Stainless steel IP 67	Stainless steel IP 67	Thermoplastic polyester IP 67	Thermoplastic polyester IP 67	Stainless steel IP 67
1.4 kHz	1.4 kHz	1.2 kHz	1.2 kHz	1.2 kHz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
IA12ESF02UC IA12ESF02UCM1	IA12ELF02UC IA12ELF02UCM1	IA12CSN04UC IA12CSN04UCM1	IA12CLN04UC IA12CLN04UCM1	IA12ESN04UC IA12ESN04UCM1

Inductive sensors






Selection guide

NAMUR				
Diameter	M12	M18	M18	M18
Sensing distance (S_n)	4 mm	5 mm	5 mm	5 mm
Range	Standard	Standard	Standard	Standard
Mounting	Non-flush	Flush	Flush	Flush



Family	IA12	IA18	IA18	IA18
Housing	Long body	Short body	Long body	Short body
Dimensions (mm)	70 (cable) 78.5 (plug)	57 (cable) 55 (plug)	77 (cable) 75 (plug)	57 (cable) 55 (plug)
Thread (mm)	50	30	50	30
Material	Stainless steel	Thermoplastic polyester	Thermoplastic polyester	Stainless steel
Degree of protection	IP 67	IP 67	IP 67	IP 67
Operating frequency	1.2 kHz	500 Hz	500 Hz	500 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA

References				
Cable	IA12ELN04UC	IA18CSF05UC	IA18CLF05UC	IA18ESF05UC
Plug	IA12ELN04UCM1	IA18CSF05UCM1	IA18CLF05UCM1	IA18ESF05UCM1

NAMUR				
M18	M18	M18	M18	M18
5 mm	8 mm	8 mm	8 mm	8 mm
Standard	Standard	Standard	Standard	Standard
Flush	Non-flush	Non-flush	Non-flush	Non-flush
				
IA18	IA18	IA18	IA18	IA18
Long body	Short body	Long body	Short body	Long body
77 (cable) 75 (plug)	65 (cable) 63 (plug)	85 (cable) 83 (plug)	65 (cable) 63 (plug)	85 (cable) 83 (plug)
50	30	50	30	50
Stainless steel	Thermoplastic polyester	Thermoplastic polyester	Stainless steel	Stainless steel
IP 67	IP 67	IP 67	IP 67	IP 67
500 Hz	200 Hz	200 Hz	200 Hz	200 Hz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
IA18ELF05UC	IA18CSN08UC	IA18CLN08UC	IA18ESN08UC	IA18ELN08UC
IA18ELF05UCM1	IA18CSN08UCM1	IA18CLN08UCM1	IA18ESN08UCM1	IA18ELN08UCM1

Inductive sensors





Selection guide

NAMUR				
Diameter	M30	M30	M30	M30
Sensing distance (S_n)	10 mm	10 mm	10 mm	10 mm
Range	Standard	Standard	Standard	Standard
Mounting	Flush	Flush	Flush	Flush



Family	IA30	IA30	IA30	IA30
Housing	Short body	Long body	Short body	Long body
Dimensions (mm)	59 (cable) 55.5 (plug)	79 (cable) 75.5 (plug)	59 (cable) 55.5 (plug)	79 (cable) 75.5 (plug)
Thread (mm)	30	50	30	50
Material	Thermoplastic polyester	Thermoplastic polyester	Stainless steel	Stainless steel
Degree of protection	IP 67	IP 67	IP 67	IP 67
Operating frequency	300 Hz	300 Hz	300 Hz	300 Hz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA

References				
Cable	IA30CSF10UC	IA30CLF10UC	IA30ESF10UC	IA30ELF10UC
Plug	IA30CSF10UCM1	IA30CLF10UCM1	IA30ESF10UCM1	IA30ELF10UCM1

NAMUR			
M30	M30	M30	M30
15 mm	15 mm	15 mm	15 mm
Standard	Standard	Standard	Standard
Non-flush	Non-flush	Non-flush	Non-flush
			
IA30	IA30	IA30	IA30
Short body	Long body	Short body	Long body
71 (cable) 67.5 (plug)	91 (cable) 87.5 (plug)	71 (cable) 67.5 (plug)	91 (cable) 87.5 (plug)
30	50	30	50
Thermoplastic polyester	Thermoplastic polyester	Stainless steel	Stainless steel
IP 67	IP 67	IP 67	IP 67
100 Hz	100 Hz	100 Hz	100 Hz
-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
7 to 9 V DC	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC
CE, UL, CSA	CE, UL, CSA	CE, UL, CSA	CE, UL, CSA
IA30CSN15UC IA30CSN15UCM1	IA30CLN15UC IA30CLN15UCM1	IA30ESN15UC IA30ESN15UCM1	IA30ELN15UC IA30ELN15UCM1

Inductive sensors

Selection guide

High temperature			
Diameter	M5	M8	M12
Sensing distance (S _n)	0.8 mm	1 mm	2 mm
Range	Standard	Standard	Standard
Mounting	Flush	Flush	Flush



Family	IA05	IA08	IA12
Housing	Short body	Short body	Short body
Dimensions (mm)	30	45	40 (cable, 3-wire DC) 60 (plug, 3-wire DC) 25 (NAMUR)
Thread (mm)	25	40	40 (3-wire DC) 25 (NAMUR)
Material	Stainless steel	Stainless steel	Nickel-plated brass
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	3 kHz	2 kHz	2 kHz
Operating temperature	-25° to 120°C (-13° to 248°F)	-25° to 120°C (-13° to 248°F)	-40° to 100°C (-40° to 212°F) (*)
Rated operating voltage	10 to 30 V DC	10 to 30 V DC	10 to 30 V DC (**)
Approvals/Marks	CE	CE	CE

References						
3-wire DC	Cable	NPN	NO	IA05BSF08NOHT-K	IA08BSF10NOHT-K	
			NC		IA12ASF02NCHT	
	Plug	PNP	NO	IA05BSF08POHT-K	IA08BSF10POHT-K	IA12ASF02POHT-K
			NC			
NAMUR	Cable	NPN	NO			
			NC		IA12ASF02POM1HT-K	
		PNP	NO		IA12ASF02POM1HT-K	
			NC			
					IA12ASF02UHT-K	

(*) Operating temperature:
NAMUR version -25° to +120°C (-13° to +248°F)

(**) Rated operating voltage:
NAMUR version 8 V DC

High temperature

M12	M18	M18	M30	M30
4 mm	5 mm	8 mm	10 mm	15 mm
Standard	Standard	Standard	Standard	Standard
Non- flush	Flush	Non- flush	Flush	Non- flush



IA12	IA18	IA18	IA30	IA30
Short body	Short body	Short body	Short body	Short body
40 (cable) 60 (plug)	40 (cable) 60 (plug)	40 (cable) 60 (plug)	40 (cable) 60 (plug)	40 (cable) 60 (plug)
34	40	32	40	28
Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
IP 67	IP 67	IP 67	IP 67	IP 67
1 kHz	1 kHz	500 Hz	500 Hz	300 Hz
-40° to 100°C (-40° to 212°F)	-40° to 100°C (-40° to 212°F)	-40° to 100°C (-40° to 212°F)	-40° to 100°C (-40° to 212°F)	-40° to 100°C (-40° to 212°F)
10 to 30 V DC	10 to 30 V DC	10 to 30 V DC	10 to 30 V DC	10 to 30 V DC
CE	CE	CE	CE	CE

IA12ASN04POHT-K IA18ASF05POHT-K IA18ASN08POHT-K IA30ASF10POHT-K IA30ASN15POHT-K

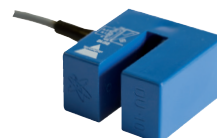
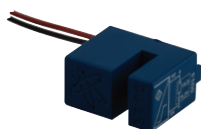
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Inductive sensors

Selection guide

Slotted

Dimensions L x H x W (mm)	15 x 19.2 x 10.2	15 x 19.2 x 10.2	30 x 28.6 x 16.4	45 x 44.5 x 25.6
Slot size	3.5 mm	5 mm	6 mm	10 mm
Range	Standard	Standard	Standard	Standard



Family	DU3.5	DU5	DU6	DU10
Housing	Slot type	Slot type	Slot type	Slot type
Material	ABS	ABS	ABS	ABS
Degree of protection	IP 67	IP 67	IP 67	IP 67
Operating frequency	2 kHz	1.5 kHz	2 kHz	1 kHz
Operating temperature	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Rated operating voltage (*)	7 to 9 V DC	7 to 9 V DC	7 to 9 V DC 21.6 to 26.4 V DC	7 to 9 V DC 21.6 to 26.4 V DC
Approvals/Marks	CE	CE	CE (only Namur)	CE (only Namur)

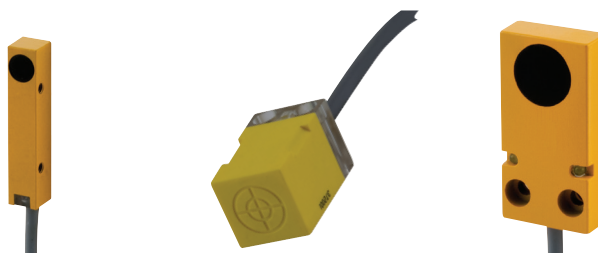
References

3-wire DC	NPN NO		DU6E	DU10E
NAMUR		DU3.5	DU5	DU6

(*) Rated operating voltage:
7 to 9 V DC (Namur)
21.6 to 26.4 V DC (3-wire DC)

Flat pack

Dimensions (mm)	8 x 8 x 40 (...-K) 8 x 8 x 60 (...M5-K)	17.5 x 17 x 28.5	25 x 10 x 50
Sensing distance (S _n)	1.5 mm	4 mm	5 mm
Range	Standard	Standard	Standard
Mounting	Flush	Non-flush	Flush



Family	IC08	IC17	ID25
Housing	Block shaped / square-section	Block shaped / rectangular-section	Block shaped / rectangular-section
Material	Nickel-plated brass	Plastic	Nickel-plated brass
Degree of protection	IP 65 (cable) IP 67 (plug)	IP 67	IP 67
Operating frequency	1 kHz (cable) 2 kHz (plug)	500 Hz	1 kHz
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage	10 to 30 V DC	10 to 30 V DC	10 to 30 V DC
Approvals/Marks	CE	CE	CE

References

3-wire DC	Cable	NPN	NO	IC08ANC15NO-K	IC17CNC04NO-K	ID25ANC05NO-K
		PNP		IC08ANC15PO-K	IC17CNC04PO-K	ID25ANC05PO-K
	Plug	NPN	IC08ANC15NOM5-K			
4-wire DC	Cable	NPN	NO+NC			ID25ANC05NA-K
		PNP				ID25ANC05PA-K

Inductive sensors

Selection guide

Flat pack (EI55) / Rotable head (IC40)

Dimensions (mm)	35 x 55 x 15	35 x 55 x 15	40 x 40 x 118
Sensing distance (S _n)	10 mm	15 mm	30 mm
Range	Standard	Standard	Standard
Mounting	Flush	Non-flush	Non-flush



Family	EI55	EI55	IC40
Housing	Flat-pack	Flat-pack	Rectangular section
Material	Polycarbonate	Polycarbonate	PBT
Degree of protection	IP 67	IP 67	IP 67
Operating frequency	500 Hz	250 Hz	25 Hz (2-wire AC) 40 Hz (2-wire DC) 100 Hz (4-wire DC)
Operating temperature	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)	-25° to 70°C (-13° to 158°F)
Rated operating voltage (*)	10 to 40 V DC	10 to 40 V DC	20 to 250 V AC/DC 20 to 250 V AC 10 to 30 V DC
Approvals/Marks	CE, UL, CSA	CE, UL, CSA	CE

References

2-wire AC/DC	Terminal block	MOSFET	NO	IC40CNN30COT1	
			NC	IC40CNN30CCT1	
2-wire AC	Terminal block		NO+NC	IC40CNN30TAT1	
			NPN	IC40CNN30NAT1	
			PNP	IC40CNN30PAT1	
4-wire DC	Cable	NPN	EI5510NPAP	EI5515NPAP	
		PNP	EI5510PPAP	EI5515PPAP	
	Plug	NPN	EI5510NPAP-1	EI5515NPAP-1	
		PNP	EI5510PPAP-1	EI5515PPAP-1	

(*) Rated operating voltage IC40:
20 to 250 V AC/DC (2-wire AC/DC)
20 to 250 V AC (2-wire AC)
10 to 30 V DC (4-wire DC)

Accessories

IP67 cordset	CONB1...(M12) CONB5...(M8) CONB.3NF-A...(3-wire) CONB.4NF-A...(4-wire)	CONB1...(M12) CONB5...(M8) CONB.3NF-S... (3-wire) CONB.4NF-S...(4-wire)
Plug type	Angled	Straight



References

Jacket		PVC	PUR	PVC	PUR
Cable length	2 m	CONB13(4)NF-A2	CONB1(5)3(4)NF-A2P	CONB13(4)NF-S2	CONB1(5)3(4)NF-S2P
	5 m	CONB13(4)NF-A5	CONB1(5)3(4)NF-A5P	CONB13(4)NF-S5	CONB1(5)3(4)NF-S5P
	10 m	CONB13(4)NF-A10	CONB1(5)3(4)NF-A10P	CONB13(4)NF-S10	CONB1(5)3(4)NF-S10P
	15 m	CONB13(4)NF-A15	CONB1(5)3(4)NF-A15P	CONB13(4)NF-S15	CONB1(5)3(4)NF-S15P

IP69K cordset	CONB1...(M12) CONB5...(M8)	CONB1...(M12) CONB5...(M8)
Plug type	Angled	Straight



References

Jacket		PVC	PVC
Cable length	2 m	CONB1(5)4NF-A2W	CONB1(5)4NF-S2W
	5 m	CONB1(5)4NF-A5W	CONB1(5)4NF-S5W

Mounting bracket	AMB..-A...	AMB..-S...
Shape	Angled	Straight



References

Material		Steel, galvanized	Stainless steel	Steel, galvanized	Stainless steel
Diameter	M8	AMB8-A		AMB8-S	
	M12	AMB12-A	AMB12-A316L	AMB12-S	AMB12-S316L
	M18	AMB18-A	AMB12-A316L	AMB18-S	AMB12-S316L
	M30	AMB30-A		AMB30-S	

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