

IMB THE TOUGHEST DECISION YOU CAN MAKE

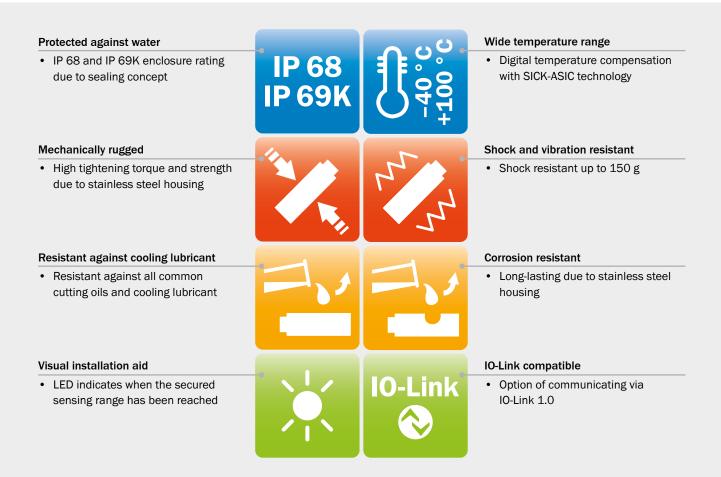


Inductive Proximity Sensors



Inductive sensors have to be tough enough to cope with anything that's thrown at them. So it's about time that one took the lead and showed the others how it's done.

The IMB from SICK is both more resilient on the outside and more intelligent on the inside, boasting levels of chemical and mechanical resistance unmatched by any other device of the same construction, allowing it to withstand lubricants, oils, and coolants, as well as extreme temperatures and weather conditions. The IMB effortlessly defies the preconception that tough guys aren't very intelligent, with its ASIC technology and the option of communication via IO-Link: Making its switching as reliable as its exterior is rugged. It doesn't matter how extreme the conditions are at your installation location – from now on the focus is on the survival of the smartest rather than the fittest. We think that's intelligent.



WEAR-RESISTANT

MACHINE TOOLING

The IMB is setting a new standard for inductive proximity sensors in the machine building industry.



Typical applications

- CNC machining center
- Tool changer
- Workpiece handling

Advantages

- Optimal resistance against oils and cooling lubricant
- Extreme mechanical ruggedness
- Quick and easy mounting due to visual adjustment indicator
- High levels of flexibility and numerous communication options due to IO-Link



HARSH ENVIRONMENT APPLICATIONS

When outdoors or anywhere, in which difficult application conditions prevail, the IMB utilizes its features in a particularly impressive way, its sensor covering a variety of applications.



Typical applications

- Container spreaders
- · Wind power plants
- · Car wash plants
- Outdoor gates and barriers

Advantages

- Protected against water
- Immune to temperature fluctuations
- Extreme mechanical ruggedness
- Shock and vibration resistant
- Corrosion resistant



TOUGH AND RELIABLE

Some situations demand significant reliability and toughness. The versatility of the inductive proximity sensor IMB is up to the challenge. Equipped with features tough enough for anything the market can throw at it, it's able to deal with any situation – regardless of the challenges presented by the site of operation. In the end, opting for the IMB is a simple decision.



Water – the source of all life. But not all of its aspects are positive: Too much can also be harmful. Being immersed in it for extended periods or being cleaned with high-pressure washers can shorten the life of many sensors. Not the case for the IMB. Frequent contact with water is unable to harm it, regardless of whether it is being immersed or sprayed with highly pressurized jets.



The wheel screws on cars are often tightened at 100 Nm – just to make sure. This also applies to the IMB, as it is equipped with extra high tightening torque values up to 100 Nm.



What does the IMB have to do with pickled olives? At first glance, nothing. But unlike cooking oils, cutting oils and cooling lubricant are extremely aggressive towards system components and often cause sensor malfunctions. The IMB, on the other hand, is designed for frequent contact with these substances – therefore remaining as fresh as olives in oil when in contact with cooling lubricant.



Novosibirsk in winter: -40 °C. While others may freeze, the IMB carries on its work unaffected.

Death Valley: Scorching sun and surface temperatures over +80 °C. Even in conditions such as these, the IMB doesn't show any signs of weakness. Even temperatures that can evaporate water are no sweat for the IMB.



During reentry into orbit, the Apollo capsule experienced approximately 6.4 G. 100 G is the maximum value that human beings can survive when it comes to accidents or severe injuries. And even machines have their limits. These limits, however, are significantly higher with the IMB: It can effortlessly withstand loads of up to 150 G.



The ravages of time gnaw away at almost everything, leaving noticeable impacts behind. Perhaps most noticeably of all when corrosion attacks surfaces in the form of rust. Due to its stainless steel housing and laser engraving, the IMB does not leave any surface vulnerable to attack, continuing to gleam long after others have started to rust.

SICK - WE HAVE UNDERSTOOD

In addition to their high performance, the inductive sensors by SICK are simply perfect all-rounders. Global availability, optimum delivery performance and a large portfolio characterize the inductive sensors – and make SICK the right partner.

If the right sensor is not available despite the large product range, customizations provide an even higher degree of flexibility. Our aim is give you the right sensor for your application – at the right time.

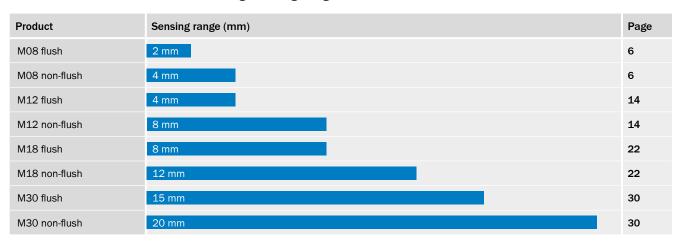
Even when it is a tricky task. Thanks to a global support network in over 88 countries, SICK can always work with you to find a solution.



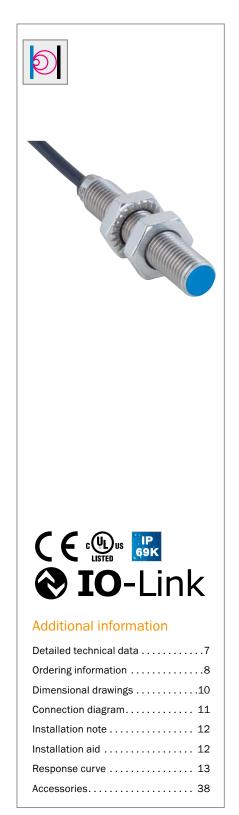


As a major player in automation technology, partnership with SICK offers a variety of benefits. We are committed to driving innovation in the industry, even in areas neglected by others – and we want to do this on a global scale in all sectors. Our global network of production plants with unified quality standards guarantees a safe and reliable supply. Our elaborate logistics concept ensures rapid availability on site, regardless of which of our over 40,000 products you require. The individual needs of our customers are paramount to SICK. Our local sales department will advise and support you with your automation projects. Together with our regional development and competence centers, we will always create a solution which adds value for our customers.

The IMB is available with the following sensing ranges:



THE RUGGED STANDARD FOR USE IN HARSH ENVIRONMENTS



Product description

The inductive IMB proximity sensor is a byword for reliability in harsh working conditions, whether it is in contact with cooling lubricants or being used outdoors. With its extended sensing ranges, made highly precise thanks to the use of SICK ASIC technology, the IMB ensures reliable, stable processes. What's more, its wide-ranging specification limits allow the IMB to be used in applications where specialist devices were once the only solution – a huge benefit when it

At a glance

- Type M08
- Extended sensing ranges: 2 to 4 mm
- Electrical wiring: DC 2/3/4-wire
- Enclosure rating: IP 68, IP 69K
- Temperature range: -40 °C to 100 °C

Your benefits

- Straightforward product selection as fewer sensor variants are required

 one sensor suits a whole range of applications
- Stable processes thanks to extended, highly precise sensing ranges enabled through the use of the latest SICK ASIC technology
- Reduced machine downtimes thanks to longer sensor service life, even in harsh working conditions

comes to product selection and warehousing. The visual adjustment indicator and self-locking nuts save time during commissioning and help cut down on errors. Communication via IO-Link is also possible, creating more flexibility and adding more functions for automation applications. With an extensive standard product portfolio available, even special devices can be put into action quickly and easily.

- Rugged stainless steel housing, sensing face made of plastic (LCP)
- Visual installation aid, IO-Link-compatible
- Resistant to oils and cooling lubricants; suitable for use outdoors
- Quick and easy installation thanks to visual installation aid and self-locking nuts
- High degree of flexibility and communication options thanks to IO-Link
- Easy to implement customer-specific variants within the standard product portfolio

www.mysick.com/en/IMB08

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



Detailed technical data

Features

	DC 2-wire	DC 3-wire	DC 4-wire
Housing	Cylindrical		
Thread size	M8 x 1		
Sensing range S _n			
Flush	2 mm		
Non-flush	4 mm		
Assured sensing range S _a			
Flush	1.62 mm		
Non-flush	3.24 mm		
Installation type	Flush / non-flush (depending	on type)	
Switching frequency	4,000 Hz		
Output type	-	NPN / PNP (depending on type	e)
Output function	NO	NC / NO (depending on type)	Complementary
Electrical wiring	DC 2-wire	DC 3-wire	DC 4-wire
Enclosure rating	IP 68 ¹⁾ IP 69K ²⁾		
Special features	Resistant against coolant lubricants, visual installation aid	Resistant against coolant lubricants, visual installation aid Capable of communication via IO-Link 1.0 (depending on type)	Resistant against coolant lubricants Capable of communication via IO-Link 1.0 (depending on type)

¹⁾ According to EN 60529.

 $^{\scriptscriptstyle 2)}$ According to ISO 20653:2013-03.

Mechanics/electronics

	DC 2-wire	DC 3-wire	DC 4-wire
Supply voltage	10 V DC 30 V DC		
Ripple	≤ 10 %		
Voltage drop	\leq 4 V ¹⁾ \leq 4.5 V ²⁾	$\leq 2 V^{2}$	
Current consumption	-	≤ 10 mA ³⁾	
Time delay before availability	≤ 100 ms		
Hysteresis	3 % 20 %		
Repeatability ^{4) 5)}	≤ 2 %		
Temperature drift (of S _r)	± 10 %		
EMC	According to EN 60947-5-2		
Continuous current I _a	≤ 100 mA	≤ 200 mA	
Off-state current	Typ. 0.8 mA (\leq 1.2 mA at Ub max and 100 ° C)	-	
Load resistance, min.	≥ 3 mA	-	

¹⁾ At I_a = 30 mA.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

	DC 2-wire	DC 3-wire	DC 4-wire			
Connection type	Cable, 2 m, PUR Male connector, M8 ⁶⁾ (depending on type)	Cable, 2 m, PUR Male connector, M8 ⁶⁾ Male connector, M12 ⁶⁾ (depending on type)	Male connector, M12 ⁶⁾			
Short-circuit protection	V					
Reverse polarity protection	v	V				
Power-up pulse protection	-	v				
Power-up pulse	≤ 5 ms	-				
Shock and vibration resistance	100 g / 11 ms / 1000 cycl 15 g	es; 150 g / 1 Mio cycles; 10 Hz	55 Hz, 1 mm / 55 z 500 Hz /			
Ambient operating temperature	-40 °C +100 °C					
Housing material	V2A (1.4305)					
Sensing face material	Plastic (LCP)	Plastic (LCP)				
Tightening torque, max. 7)	Typ. 14 Nm	Typ. 14 Nm				
$^{1)}$ At L = 20 mA						

¹⁾ At I_a = 30 mA. ²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	
Flush	Approx. 0.74
Non-flush	Approx. 0.69
Aluminum (Al)	
Flush	Approx. 0.43
Non-flush	Approx. 0.37
Copper (Cu)	
Flush	Approx. 0.33
Non-flush	Approx. 0.28
Brass (Br)	
Flush	Approx. 0.46
Non-flush	Approx. 0.4

Ordering information

Other models -> www.mysick.com/en/IMB08

DC 2-wire

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
		Short body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB08-02BDSVU2K	1075585
Flush	2 mm	Short-body	Male connector, M8, 3-pin	NO	Cd-246	IMB08-02BDSVT0K	1075583
Flush	2 mm	Chan dand	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB08-02BDSVU2S	1074354
		Standard	Male connector, M8, 3-pin	NO	Cd-246	IMB08-02BDSVTOS	1074348

INDUCTIVE PROXIMITY SENSORS IMB08

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
		Charthadu	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB08-04NDSVU2K	1075586
Non-flush	4	Short-body	Male connector, M8, 3-pin	NO	Cd-246	IMB08-04NDSVT0K	1075584
Non-Ilush	4 mm	Standard	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB08-04NDSVU2S	1074358
			Male connector, M8, 3-pin	NO	Cd-246	IMB08-04NDSVTOS	1076276

DC 3-wire

Installa- tion type	Sensing range S _n	Housing	Connection	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
					NC	-	Cd-003	IMB08-02BN0VU2K	1072700
			Cable, 3-wire,	NPN	NO	-	Cd-001	IMB08-02BNSVU2K	1072699
			2 m, PUR		NC	-	Cd-003	IMB08-02BP0VU2K	1072698
				PNP	NO	~	Cd-001	IMB08-02BPSVU2K	1072697
		Short-body		NIDNI	NC	-	Cd-004	IMB08-02BNOVT0K	1072693
			Male connector,	NPN	NO	-	Cd-002	IMB08-02BNSVT0K	1072762
			M8, 3-pin		NC	-	Cd-004	IMB08-02BPOVT0K	1072692
				PNP	NO	~	Cd-002	IMB08-02BPSVT0K	1072691
				NIDNI	NC	-	Cd-003	IMB08-02BN0VU2S	1072686
_, ,			Cable, 3-wire,	NPN	NO	-	Cd-001	IMB08-02BNSVU2S	1072685
Flush	2 mm		2 m, PUR	DND	NC	-	Cd-003	IMB08-02BP0VU2S	1072684
				PNP	NO	~	Cd-001	IMB08-02BPSVU2S	1072683
				NIDNI	NC	-	Cd-008	IMB08-02BN0VC0S	1072676
		Standard	Male connector,	NPN	NO	-	Cd-007	IMB08-02BNSVC0S	1072675
			M12, 4-pin	DND	NC	-	Cd-008	IMB08-02BP0VC0S	1072674
				PNP	NO	~	Cd-007	IMB08-02BPSVC0S	1072673
					NC	-	Cd-004	IMB08-02BN0VT0S	1072591
			Male connector, M8, 3-pin	NPN	NO	-	Cd-002	IMB08-02BNSVT0S	1072590
				DND	NC	-	Cd-004	IMB08-02BPOVT0S	1072589
				PNP	NO	~	Cd-002	IMB08-02BPSVT0S	1070168
				NDN	NC	-	Cd-003	IMB08-04NNOVU2K	1072703
			Cable, 3-wire,	NPN	NO	-	Cd-001	IMB08-04NNSVU2K	1072702
			2 m, PUR		NC	-	Cd-003	IMB08-04NP0VU2K	1072454
		Charthady		PNP	NO	~	Cd-001	IMB08-04NPSVU2K	1072701
		Short-body		NPN	NC	-	Cd-004	IMB08-04NNOVTOK	1072696
			Male connector,	INPIN	NO	-	Cd-002	IMB08-04NNSVT0K	1070169
			M8, 3-pin		NC	-	Cd-004	IMB08-04NPOVT0K	1072695
Non fluch	4 100 100			PNP	NO	~	Cd-002	IMB08-04NPSVT0K	1072694
Non-flush	4 mm			NDN	NC	-	Cd-003	IMB08-04NNOVU2S	1072690
			Cable, 3-wire,	NPN	NO	-	Cd-001	IMB08-04NNSVU2S	1072689
		Chan dand	2 m, PUR		NC	-	Cd-003	IMB08-04NP0VU2S	1072688
				PNP	NO	~	Cd-001	IMB08-04NPSVU2S	1072687
		Standard			NC	-	Cd-008	IMB08-04NNOVCOS	1072682
			Male connector,	NPN – ale connector.	NO	-	Cd-007	IMB08-04NNSVCOS	1072681
			M12, 4-pin		NC	-	Cd-008	IMB08-04NPOVCOS	1072678
				PNP	NO	~	Cd-007	IMB08-04NPSVC0S	1070170

Installa- tion type	Sensing range S _n	Housing	Connection	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
				NPN stor,	NC	-	Cd-004	IMB08-04NNOVTOS	1072671
Non fluch	1	Ctondoud	Male connector,		NO	-	Cd-002	IMB08-04NNSVT0S	1072594
Non-flush	4 mm	Standard	M8, 3-pin	DND	NC	-	Cd-004	IMB08-04NP0VT0S	1072593
			PNP	NO	~	Cd-002	IMB08-04NPSVT0S	1072592	

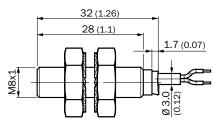
DC 4-wire

• Housing: standard

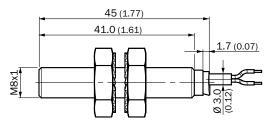
Installation type	Sensing range S _n	Connection	Output type	Output function	IO-Link	Connection diagram	Туре	Part no.
-	•	Male con-	NPN	Complementary	-	Cd-006	IMB08-02BNPVC0S	1074352
Flush		nector, M12, 4-pin	PNP	Complementary	~	Cd-006	IMB08-02BPPVC0S	1074349
		Male con-	NPN	Complementary	-	Cd-006	IMB08-04NNPVC0S	1074353
Non-flush 4 mm	nector, M12, 4-pin	PNP	Complementary	~	Cd-006	IMB08-04NPPVC0S	1074350	

Dimensional drawings (Dimensions in mm (inch))

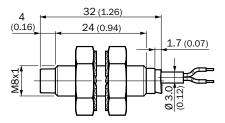
IMB08 Short-body housing, cable, flush



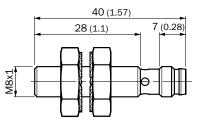
IMB08 Standard, cable, flush



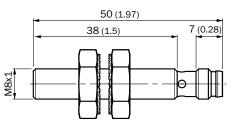
IMB08 Short-body housing, cable, non-flush



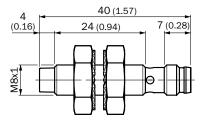
IMB08 Short-body housing, connector M8, flush



IMB08 Standard, connector, M8, flush



IMB08 Short-body housing, connector M8, non-flush



Р

7 (0.28)

8.9 (0.35)

IMB08 Standard, connector M8, non-flush

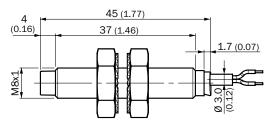
34 (1.34)

IMB08 Standard, connector M12, non-flush

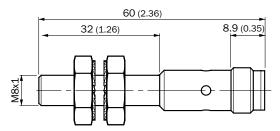
28 (1.1)

60 (2.36)

IMB08 Standard, cable, non-flush

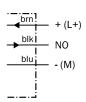


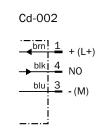
IMB08 Standard, connector, M12, flush

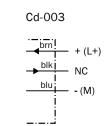


Connection diagram

Cd-001







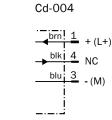
4 (0.16)

M8x1

4

(0.16)

M8x1



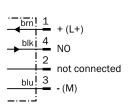
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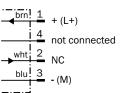
blki 4 NO

wht 2 blu 3 - (M) Cd-007



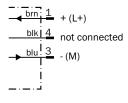
Cd-008

Cd-012



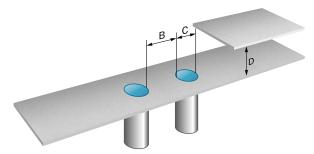


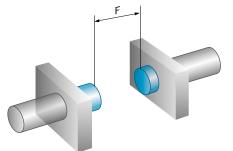




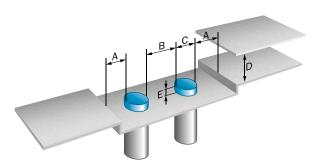
Installation note

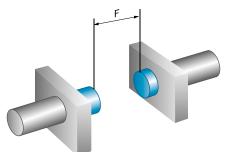
Flush installation





Non-flush installation



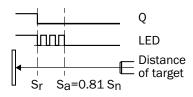


Installation note

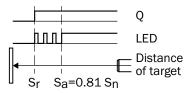
	Installation	Sensing range Sn	А	В	С	D	E	F
IMB08-02Bxxxxxx	Flush	2 mm	-	6.5 mm	8 mm	6 mm	-	16 mm
IMB08-04Nxxxxxx	Non-flush	4 mm	8 mm	18 mm	8 mm	12 mm	8 mm	32 mm

Installation aid

Normally closed



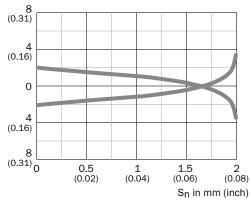
Normally open



Response curve

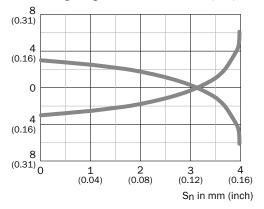
Flush installation

Distance target edge from the sensor in mm (inch)

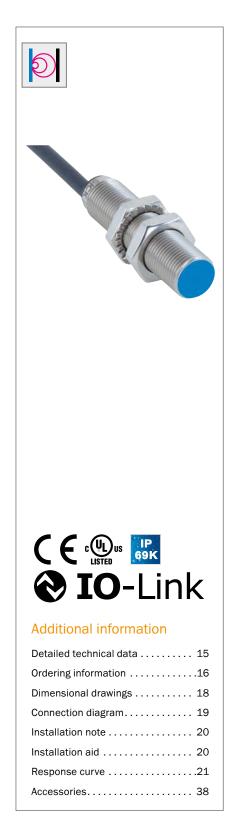


Non-flush installation

Distance target edge from the sensor in mm (inch)



THE RUGGED STANDARD FOR USE IN HARSH ENVIRONMENTS



Product description

The inductive IMB proximity sensor is a byword for reliability in harsh working conditions, whether it is in contact with cooling lubricants or being used outdoors. With its extended sensing ranges, made highly precise thanks to the use of SICK ASIC technology, the IMB ensures reliable, stable processes. What's more, its wide-ranging specification limits allow the IMB to be used in applications where specialist devices were once the only solution – a huge benefit when it

At a glance

- Type M12
- Extended sensing ranges: 4 to 8 mm
- Electrical wiring: DC 2/3/4-wire
- Enclosure rating: IP 68, IP 69K
- Temperature range: -40 °C to 100 °C

Your benefits

- Straightforward product selection as fewer sensor variants are required

 one sensor suits a whole range of applications
- Stable processes thanks to extended, highly precise sensing ranges enabled through the use of the latest SICK ASIC technology
- Reduced machine downtimes thanks to longer sensor service life, even in harsh working conditions

comes to product selection and warehousing. The visual adjustment indicator and self-locking nuts save time during commissioning and help cut down on errors. Communication via IO-Link is also possible, creating more flexibility and adding more functions for automation applications. With an extensive standard product portfolio available, even special devices can be put into action quickly and easily.

- Rugged stainless steel housing, sensing face made of plastic (LCP)
- Visual installation aid, IO-Link-compatible
- Resistant to oils and cooling lubricants; suitable for use outdoors
- Quick and easy installation thanks to visual installation aid and self-locking nuts
- High degree of flexibility and communication options thanks to IO-Link
- Easy to implement customer-specific variants within the standard product portfolio

www.mysick.com/en/IMB12

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



Detailed technical data

Features

	DC 2-wire	DC 3-wire	DC 4-wire
Housing	Cylindrical		
Thread size	M12 x 1		
Sensing range S _n			
Flush	4 mm		
Non-flush	8 mm		
Assured sensing range S _a			
Flush	3.24 mm		
Non-flush	6.48 mm		
Installation type	Flush / non-flush (depending	on type)	
Switching frequency	2,000 Hz		
Output type	-	NPN / PNP (depending on type	e)
Output function	NO	NC / NO (depending on type)	Complementary
Electrical wiring	DC 2-wire	DC 3-wire	DC 4-wire
Enclosure rating	IP 68 ¹⁾ IP 69K ²⁾		
Special features	Resistant against coolant lubricants, visual installation aid	Resistant against coolant lubricants, visual installation aid Capable of communication via IO-Link 1.0 (depending on type)	Resistant against coolant lubricants Capable of communication via IO-Link 1.0 (depending on type)

¹⁾ According to EN 60529.

 $^{\scriptscriptstyle 2)}$ According to ISO 20653:2013-03.

Mechanics/electronics

	DC 2-wire	DC 3-wire	DC 4-wire
Supply voltage	10 V DC 30 V DC		
Ripple	≤ 10 %		
Voltage drop	\leq 4 V ¹⁾ \leq 4.5 V ²⁾	$\leq 2 V^{2}$	
Current consumption	-	≤ 10 mA ³⁾	
Time delay before availability	≤ 100 ms		
Hysteresis	3 % 20 %		
Repeatability ^{4) 5)}	≤ 2 %		
Temperature drift (of S _r)	± 10 %		
EMC	According to EN 60947-5-2		
Continuous current I _a	≤ 100 mA	≤ 200 mA	
Off-state current	Typ. 0.8 mA (\leq 1.2 mA at Ub max and 100 ° C)	-	
Load resistance, min.	≥ 3 mA	-	

¹⁾ At I_a = 30 mA.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

 $^{\rm 8)}$ Reference voltage DC 50 V.

IMB12 INDUCTIVE PROXIMITY SENSORS

	DC 2-wire	DC 3-w	vire DC 4-wire
Connection type	Cable, 2 m, PUR Male connector, M12 ⁶⁾ (depending on type)		Male connector, M12 ⁶⁾
Short-circuit protection	V		
Reverse polarity protection	 ✓ 		
Power-up pulse protection	-	v	
Power-up pulse	≤ 5 ms	-	
Shock and vibration resistance	100 g / 11 ms / 1000 cyc 15 g	es; 150 g / 1 Mio cycle	es; 10 Hz 55 Hz, 1 mm / 55 z 500 Hz /
Ambient operating temperature	-40 °C +100 °C		
Housing material	V2A (1.4305)		
Sensing face material	Plastic (LCP)		
Tightening torque, max. 7)	Typ. 32 Nm		
Protection class ⁸⁾	II		
¹⁾ At I _a = 30 mA.			

- ²⁾ At I_a max. ³⁾ Without load.
- ⁴⁾ Ub and Ta constant.
- ⁵⁾ Of Sr.
- ⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

⁸⁾ Reference voltage DC 50 V.

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	
Flush	Approx. 0.65
Non-flush	Approx. 0.67
Aluminum (Al)	
Flush	Approx. 0.35
Non-flush	Approx. 0.42
Copper (Cu)	
Flush	Approx. 0.24
Non-flush	Approx. 0.35
Brass (Br)	
Flush	Approx. 0.38
Non-flush	Approx. 0.42

Ordering information

Other models -> www.mysick.com/en/IMB12

DC 2-wire

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
	ush 4 mm Standard	Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB12-04BDSVU2K	1074368
Flush			Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB12-04BDSVU2S	1074365
		Standard	Male connector, M12, 4-pin	NO	Cd-015	IMB12-04BDSVC0S	1074364

INDUCTIVE PROXIMITY SENSORS IMB12

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
	Non-flush 8 mm	Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB12-08NDSVU2K	1076281
Non-flush			Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB12-08NDSVU2S	1076278
		Standard	Male connector, M12, 4-pin	NO	Cd-015	IMB12-08NDSVC0S	1076277

DC 3-wire

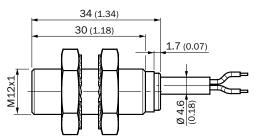
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
					NC	-	Cd-003	IMB12-04BN0VU2K	1072757
			Cable,	NPN	NO	-	Cd-001	IMB12-04BNSVU2K	1072756
			3-wire, 2 m, PUR		NC	-	Cd-003	IMB12-04BPOVU2K	1072755
			,	PNP	NO	~	Cd-001	IMB12-04BPSVU2K	1072754
		Short-body		NEN	NC	-	Cd-008	IMB12-04BNOVCOK	1072749
			Male	NPN	NO	-	Cd-007	IMB12-04BNSVC0K	1070172
			connector, M12, 4-pin	DND	NC	-	Cd-008	IMB12-04BPOVC0K	1072748
Flue	4			PNP	NO	~	Cd-007	IMB12-04BPSVC0K	1072747
Flush	4 mm				NC	-	Cd-003	IMB12-04BN0VU2S	1072742
			Cable,	NPN	NO	-	Cd-001	IMB12-04BNSVU2S	1072741
			3-wire, 2 m, PUR	PNP	NC	-	Cd-003	IMB12-04BP0VU2S	1072765
		a		PNP	NO	~	Cd-001	IMB12-04BPSVU2S	1072455
		Standard	Male		NC	-	Cd-008	IMB12-04BNOVCOS	1072738
				NPN	NO	-	Cd-007	IMB12-04BNSVC0S	1072737
			connector, M12, 4-pin		NC	-	Cd-008	IMB12-04BPOVCOS	1072736
				PINP	NO	~	Cd-007	IMB12-04BPSVC0S	1072763
			Cable, 3-wire, 2 m, PUR	NPN	NC	-	Cd-003	IMB12-08NNOVU2K	1072761
				INFIN	NO	-	Cd-001	IMB12-08NNSVU2K	1072760
				PNP	NC	-	Cd-003	IMB12-08NPOVU2K	1072759
		Short-body		FINE	NO	~	Cd-001	IMB12-08NPSVU2K	1072758
		Short-bouy		NPN	NC	-	Cd-008	IMB12-08NNOVCOK	1072753
			Male connector,	INFIN	NO	-	Cd-007	IMB12-08NNSVC0K	1072752
			M12, 4-pin	PNP	NC	-	Cd-008	IMB12-08NPOVC0K	1072751
Non-flush	8 mm			FINE	NO	v	Cd-007	IMB12-08NPSVC0K	1072750
Non-Indan	0 mm			NPN	NC	-	Cd-003	IMB12-08NNOVU2S	1072746
			Cable, 3-wire,	INFIN	NO	-	Cd-001	IMB12-08NNSVU2S	1072745
			2 m, PUR	PNP	NC	-	Cd-003	IMB12-08NPOVU2S	1072744
		Standard		FINE	NO	~	Cd-001	IMB12-08NPSVU2S	1072743
		Stanuaru		NPN	NC	-	Cd-008	IMB12-08NNOVCOS	1072740
			Male connector,		NO	-	Cd-007	IMB12-08NNSVCOS	1072764
			M12, 4-pin	PNP	NC	-	Cd-008	IMB12-08NPOVCOS	1072739
				1 111	NO	~	Cd-007	IMB12-08NPSVC0S	1070171

DC 4-wire

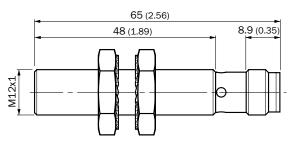
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.			
		Short hady	Male	NPN	Comple- mentary	-	Cd-006	IMB12-04BNPVC0K	1074367			
Flush	4 mm	Short-body	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB12-04BPPVC0K	1074366			
Flush	4 mm		Ctondoud	Ct and and	Male	NPN	Comple- mentary	-	Cd-006	IMB12-04BNPVCOS	1074361	
		Standard	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB12-04BPPVC0S	1074359			
		Short-body	Male	NPN	Comple- mentary	-	Cd-006	IMB12-08NNPVC0K	1076280			
Non-flush	8 mm		Short-bouy	Short-body	Short-body	Short-body	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB12-08NPPVC0K
NON-IIUSH	Standard	Standard	Male	NPN	Comple- mentary	-	Cd-006	IMB12-08NNPVCOS	1074362			
		connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB12-08NPPVC0S	1074360				

Dimensional drawings (Dimensions in mm (inch))

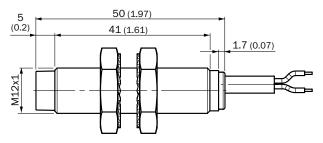
IMB12 Short-body housing, cable, flush



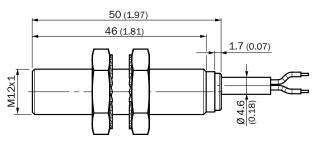
IMB12 Standard, connector, M12, flush



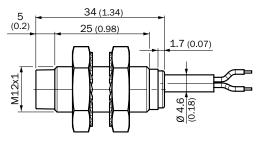
IMB12 Standard, cable, non-flush



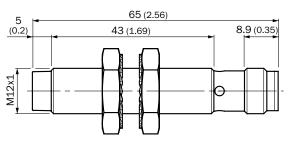
IMB12 standard, cable, flush



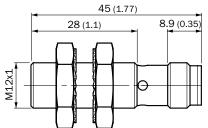
IMB12 Short-body housing, cable, non-flush



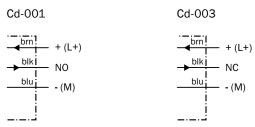
IMB12 Standard, connector M12, non-flush

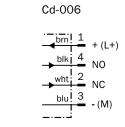


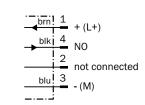
IMB12 Short-body housing, connector M12, flush



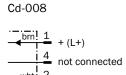
Connection diagram







Cd-007

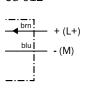


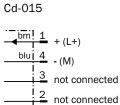
wht 2 NC

..!

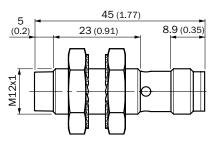
blu! 3 - (M)





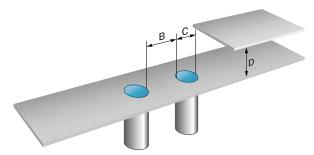


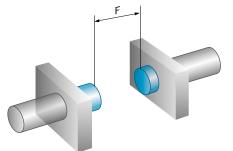
IMB12 Short-body housing, connector M12, non-flush



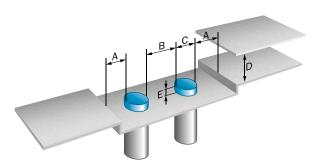
Installation note

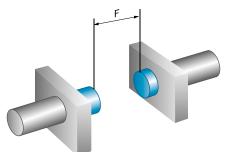
Flush installation





Non-flush installation



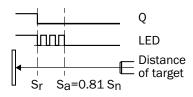


Installation note

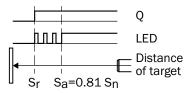
	Installation	Sensing range Sn	Α	В	С	D	E	F
IMB12-04Bxxxxxx	Flush	4 mm	-	12 mm	12 mm	12 mm	-	32 mm
IMB12-08Nxxxxxx	Non-flush	8 mm	12 mm	24 mm	12 mm	24 mm	16 mm	64 mm

Installation aid

Normally closed



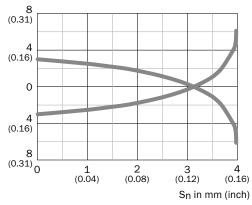
Normally open



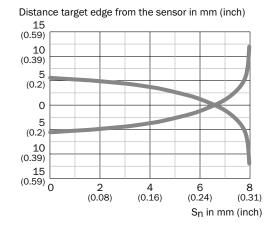
Response curve

Flush installation

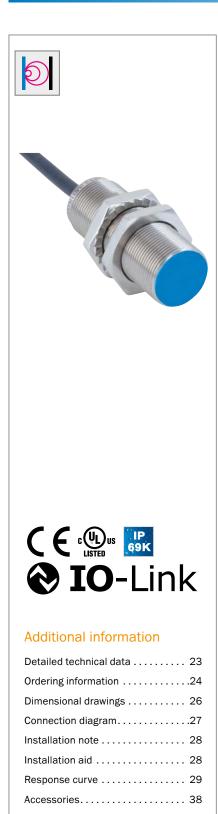
Distance target edge from the sensor in mm (inch)



Non-flush installation



THE RUGGED STANDARD FOR USE IN HARSH ENVIRONMENTS



Product description

The inductive IMB proximity sensor is a byword for reliability in harsh working conditions, whether it is in contact with cooling lubricants or being used outdoors. With its extended sensing ranges, made highly precise thanks to the use of SICK ASIC technology, the IMB ensures reliable, stable processes. What's more, its wide-ranging specification limits allow the IMB to be used in applications where specialist devices were once the only solution – a huge benefit when it

At a glance

- Type M18
- Extended sensing ranges: 8 to 12 mm
- Electrical wiring: DC 2/3/4-wire
- Enclosure rating: IP 68, IP 69K
- Temperature range: -40 °C to 100 °C

Your benefits

- Straightforward product selection as fewer sensor variants are required

 one sensor suits a whole range of applications
- Stable processes thanks to extended, highly precise sensing ranges enabled through the use of the latest SICK ASIC technology
- Reduced machine downtimes thanks to longer sensor service life, even in harsh working conditions

comes to product selection and warehousing. The visual adjustment indicator and self-locking nuts save time during commissioning and help cut down on errors. Communication via IO-Link is also possible, creating more flexibility and adding more functions for automation applications. With an extensive standard product portfolio available, even special devices can be put into action quickly and easily.

- Rugged stainless steel housing, sensing face made of plastic (LCP)
- Visual installation aid, IO-Link-compatible
- Resistant to oils and cooling lubricants; suitable for use outdoors
- Quick and easy installation thanks to visual installation aid and self-locking nuts
- High degree of flexibility and communication options thanks to IO-Link
- Easy to implement customer-specific variants within the standard product portfolio

www.mysick.com/en/IMB18

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



Detailed technical data

Features

	DC 2-wire	DC 3-wire	DC 4-wire
Housing	Cylindrical		
Thread size	M18 x 1		
Sensing range S _n			
Flush	8 mm		
Non-flush	12 mm		
Assured sensing range S _a			
Flush	6.48 mm		
Non-flush	9.72 mm		
Installation type	Flush / non-flush (depending	on type)	
Switching frequency	1,000 Hz		
Output type	-	NPN / PNP (depending on type	e)
Output function	NO	NC / NO (depending on type)	Complementary
Electrical wiring	DC 2-wire	DC 3-wire	DC 4-wire
Enclosure rating	IP 68 ¹⁾ IP 69K ²⁾		
Special features	Resistant against coolant lubricants, visual installation aid	Resistant against coolant lubricants, visual installation aid Capable of communication via IO-Link 1.0 (depending on type)	Resistant against coolant lubricants Capable of communication via IO-Link 1.0 (depending on type)

¹⁾ According to EN 60529.

 $^{\scriptscriptstyle 2)}$ According to ISO 20653:2013-03.

Mechanics/electronics

	DC 2-wire	DC 3-wire	DC 4-wire		
Supply voltage	10 V DC 30 V DC				
Ripple	≤ 10 %				
Voltage drop	$\leq 4 V^{(1)} \leq 2 V^{(2)}$ $\leq 4.5 V^{(2)}$				
Current consumption	-	≤ 10 mA ³⁾			
Time delay before availability	≤ 100 ms				
Hysteresis	3 % 20 %				
Repeatability ^{4) 5)}	≤ 2 %				
Temperature drift (of S _r)	± 10 %				
EMC	According to EN 60947-5-2				
Continuous current I _a	≤ 100 mA	≤ 200 mA			
Off-state current	Typ. 0.8 mA (\leq 1.2 mA at Ub max and 100 ° C)	-			
Load resistance, min.	≥ 3 mA	-			

¹⁾ At I_a = 30 mA.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

 $^{\rm 8)}$ Reference voltage DC 50 V.

IMB18 INDUCTIVE PROXIMITY SENSORS

	DC 2-wire	DC 3-1	wire	DC 4-wire
Connection type	Cable, 2 m, PUR Male connector, M12 ⁶⁾ (depending on type)			Male connector, M12 ⁶⁾
Short-circuit protection	V			
Reverse polarity protection	v			
Power-up pulse protection	-	v		
Power-up pulse	≤ 5 ms	-		
Shock and vibration resistance	100 g / 11 ms / 1000 cyc 15 g	les; 150 g / 1 Mio cyc	les; 10 Hz 5	5 Hz, 1 mm / 55 z 500 Hz /
Ambient operating temperature	-40 °C +100 °C			
Housing material	V2A (1.4305)			
Sensing face material	Plastic (LCP)			
Tightening torque, max. 7)	Typ. 90 Nm			
Protection class ⁸⁾	Ш			
¹⁾ At I _a = 30 mA.				

- ²⁾ At I_a max.
- ³⁾ Without load.
- ⁴⁾ Ub and Ta constant.
- ⁵⁾ Of Sr.
- ⁶⁾ With gold plated contact pins.

⁷⁾ Valid if toothed side of nut is used.

⁸⁾ Reference voltage DC 50 V.

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	
Flush	Approx. 0.55
Non-flush	Approx. 0.7
Aluminum (Al)	
Flush	Approx. 0.24
Non-flush	Approx. 0.43
Copper (Cu)	
Flush	Approx. 0.19
Non-flush	Approx. 0.37
Brass (Br)	
Flush	Approx. 0.24
Non-flush	Approx. 0.43

Ordering information

Other models -> www.mysick.com/en/IMB18

DC 2-wire

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
		Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB18-08BDSVU2K	1074380
Flush	8 mm		Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB18-08BDSVU2S	1074374
		Standard	Male connector, M12, 4-pin	NO	Cd-015	IMB18-08BDSVC0S	1074373

INDUCTIVE PROXIMITY SENSORS IMB18

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
		Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB18-12NDSVU2K	1076283
Non-flush			Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB18-12NDSVU2S	1074375
		Standard	Male connector, M12, 4-pin	NO	Cd-015	IMB18-12NDSVC0S	1076282

DC 3-wire

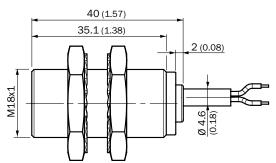
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
					NC	-	Cd-003	IMB18-08BN0VU2K	1072830
			Cable,	NPN	NO	-	Cd-001	IMB18-08BNSVU2K	1072829
			3-wire, 2 m, PUR		NC	-	Cd-003	IMB18-08BPOVU2K	1072456
		.	, -	PNP	NO	~	Cd-001	IMB18-08BPSVU2K	1072828
		Short-body		NEN	NC	-	Cd-008	IMB18-08BNOVCOK	1072823
			Male	NPN	NO	-	Cd-007	IMB18-08BNSVC0K	1070174
			connector, M12, 4-pin		NC	-	Cd-008	IMB18-08BPOVCOK	1072822
Flue	0			PNP	NO	~	Cd-007	IMB18-08BPSVC0K	1072821
Flush	8 mm				NC	-	Cd-003	IMB18-08BN0VU2S	1072816
			Cable,	NPN	NO	-	Cd-001	IMB18-08BNSVU2S	1072815
			3-wire, 2 m, PUR	PNP	NC	-	Cd-003	IMB18-08BPOVU2S	1072814
		Ctondoud		FINE	NO	~	Cd-001	IMB18-08BPSVU2S	1072813
		Standard		NDN	NC	-	Cd-008	IMB18-08BNOVCOS	1072809
			Male connector, M12, 4-pin	NPN	NO	-	Cd-007	IMB18-08BNSVC0S	1072808
				PNP	NC	-	Cd-008	IMB18-08BPOVCOS	1072807
					NO	~	Cd-007	IMB18-08BPSVC0S	1072806
			Cable, 3-wire, 2 m, PUR	NPN	NC	-	Cd-003	IMB18-12NNOVU2K	1072834
				INFIN	NO	-	Cd-001	IMB18-12NNSVU2K	1072833
				PNP	NC	-	Cd-003	IMB18-12NPOVU2K	1072832
		Chart hady		PINP	NO	~	Cd-001	IMB18-12NPSVU2K	1072831
		Short-body			NC	-	Cd-008	IMB18-12NNOVCOK	1072827
			Male	NPN	NO	-	Cd-007	IMB18-12NNSVC0K	1072826
			connector, M12, 4-pin	PNP	NC	-	Cd-008	IMB18-12NPOVC0K	1072825
Non fluch	12 mm			PNP	NO	~	Cd-007	IMB18-12NPSVC0K	1072824
Non-flush	12 11111				NC	-	Cd-003	IMB18-12NNOVU2S	1072820
			Cable,	NPN	NO	-	Cd-001	IMB18-12NNSVU2S	1072819
			3-wire, 2 m, PUR	PNP	NC	-	Cd-003	IMB18-12NPOVU2S	1072818
				PINP	NO	~	Cd-001	IMB18-12NPSVU2S	1072817
		Standard		NDN	NC	-	Cd-008	IMB18-12NNOVCOS	1072812
			Male	NPN	NO	-	Cd-007	IMB18-12NNSVCOS	1072811
			connector, M12, 4-pin		NC	-	Cd-008	IMB18-12NPOVCOS	1072810
				PNP	NO	~	Cd-007	IMB18-12NPSVCOS	1070173

DC 4-wire

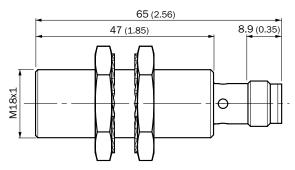
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
	Charthad	Short hady	Male	NPN	Comple- mentary	-	Cd-006	IMB18-08BNPVC0K	1074378
Flush	8 mm	Short-body	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB18-08BPPVC0K	1074376
Flush	Standard	Standard	Male	NPN	Comple- mentary	-	Cd-006	IMB18-08BNPVCOS	1074371
		Stanuaru	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB18-08BPPVC0S	1074369
		Chart hady	Male	NPN	Comple- mentary	-	Cd-006	IMB18-12NNPVC0K	1074379
Non-flush	Short-body	Short-body	connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB18-12NPPVC0K	1074377
NOT-HUSH	ush 12 mm Standard	Standard	Male connector, M12, 4-pin	NPN	Comple- mentary	-	Cd-006	IMB18-12NNPVCOS	1074372
		Stanuaru		PNP	Comple- mentary	~	Cd-006	IMB18-12NPPVCOS	1074370

Dimensional drawings (Dimensions in mm (inch))

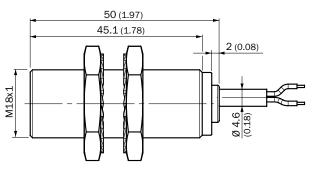
IMB18 Short-body housing, cable, flush



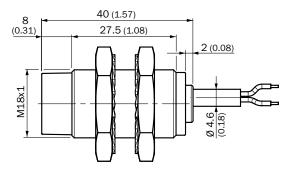
IMB18 Standard, connector, M12, flush



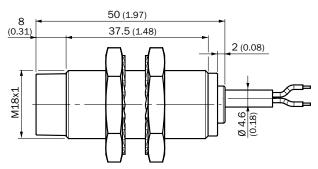
IMB18 Standard, cable, flush



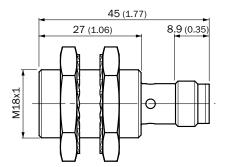
IMB18 Short-body housing, cable, non-flush



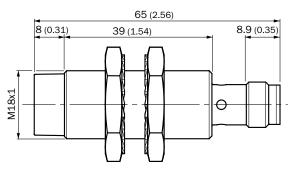
IMB18 Standard, cable, non-flush



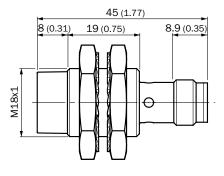
IMB18 Short-body housing, connector M12, flush



IMB18 Standard, connector M12, non-flush



IMB18 Short-body housing, connector M12, non-flush

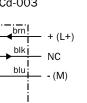


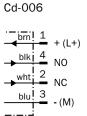
Connection diagram

4 + (L+) 4 not connected

wht 2 NC blu 3 - (M)

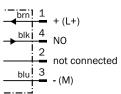






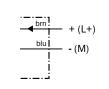


Cd-007

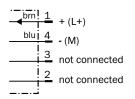




Cd-012

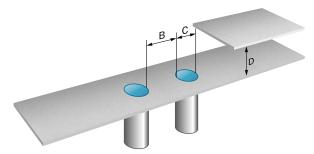


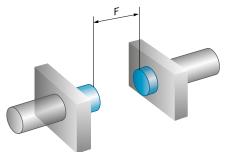
Cd-015



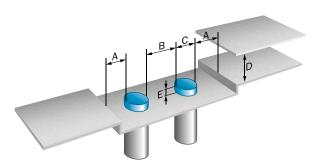
Installation note

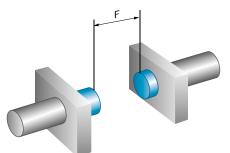
Flush installation





Non-flush installation



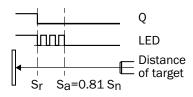


Installation note

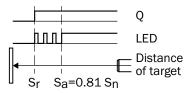
	Installation	Sensing range Sn	А	В	С	D	E	F
IMB18-08Bxxxxxx	Flush	8 mm	9 mm	18 mm	18 mm	24 mm	2 mm	64 mm
IMB18-12Nxxxxxx	Non-flush	12 mm	18 mm	36 mm	18 mm	34 mm	12 mm	96 mm

Installation aid

Normally closed

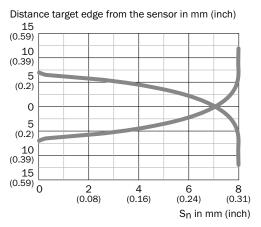


Normally open



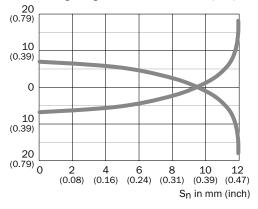
Response curve

Flush installation

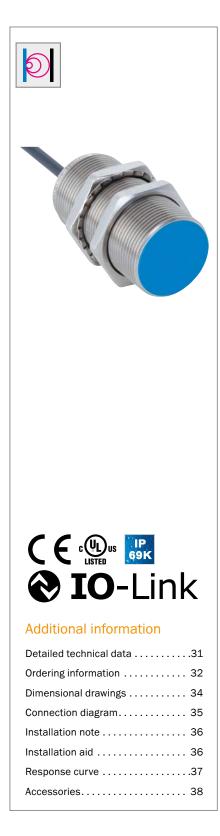


Non-flush installation

Distance target edge from the sensor in mm (inch)



THE RUGGED STANDARD FOR USE IN HARSH ENVIRONMENTS



Product description

The inductive IMB proximity sensor is a byword for reliability in harsh working conditions, whether it is in contact with cooling lubricants or being used outdoors. With its extended sensing ranges, made highly precise thanks to the use of SICK ASIC technology, the IMB ensures reliable, stable processes. What's more, its wide-ranging specification limits allow the IMB to be used in applications where specialist devices were once the only solution – a huge benefit when it

At a glance

- Type M30
- Extended sensing ranges: 15 to 20 mm
- Electrical wiring: DC 2/3/4-wire
- Enclosure rating: IP 68, IP 69K
- Temperature range: -40 °C to 100 °C

Your benefits

- Straightforward product selection as fewer sensor variants are required

 one sensor suits a whole range of
- applications
 Stable processes thanks to extended, highly precise sensing ranges enabled through the use of the latest SICK ASIC technology
- Reduced machine downtimes thanks to longer sensor service life, even in harsh working conditions

comes to product selection and warehousing. The visual adjustment indicator and self-locking nuts save time during commissioning and help cut down on errors. Communication via IO-Link is also possible, creating more flexibility and adding more functions for automation applications. With an extensive standard product portfolio available, even special devices can be put into action quickly and easily.

- Rugged stainless steel housing, sensing face made of plastic (LCP)
- Visual installation aid, IO-Link-compatible
- Resistant to oils and cooling lubricants; suitable for use outdoors
- Quick and easy installation thanks to visual installation aid and self-locking nuts
- High degree of flexibility and communication options thanks to IO-Link
- Easy to implement customer-specific variants within the standard product portfolio

www.mysick.com/en/IMB30

For more information, just enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.



Detailed technical data

Features

	DC 2-wire	DC 3-wire	DC 4-wire			
Housing	Cylindrical					
Thread size	M30 x 1.5					
Sensing range S _n						
Flush	15 mm					
Non-flush	20 mm					
Assured sensing range S _a						
Flush	12.15 mm					
Non-flush	16.2 mm					
Installation type	Flush / non-flush (depending	on type)				
Switching frequency	500 Hz					
Output type	-	NPN / PNP (depending on type	e)			
Output function	NO	NC / NO (depending on type)	Complementary			
Electrical wiring	DC 2-wire	DC 3-wire	DC 4-wire			
Enclosure rating	IP 68 ¹⁾ IP 69K ²⁾					
Special features	Resistant against coolant lubricants, visual installation aid	Resistant against coolant lubricants, visual installation aid Capable of communication via IO-Link 1.0 (depending on type)	Resistant against coolant lubricants Capable of communication via IO-Link 1.0 (depending on type)			

¹⁾ According to EN 60529.

 $^{\scriptscriptstyle 2)}$ According to ISO 20653:2013-03.

Mechanics/electronics

DC 2-wire	DC 3-wire	DC 4-wire
10 V DC 30 V DC		
≤ 10 %		
\leq 4 V ¹⁾ \leq 4.5 V ²⁾	$\leq 2 V^{2}$	
-	\leq 10 mA ³⁾	
≤ 100 ms		
3 % 20 %		
≤ 2 %		
± 10 %		
According to EN 60947-5-2		
≤ 100 mA	≤ 200 mA	
Typ. 0.8 mA (\leq 1.2 mA at Ub max and 100 ° C)	-	
≥ 3 mA	-	
Cable, 2 m, PUR / Male connec	ctor, M12 ⁶⁾ (depending on type)	
	$10 \vee DC 30 \vee DC$ $\leq 10 \%$ $\leq 4 \vee 1^{1}$ $\leq 4.5 \vee 2^{2}$ - $\leq 100 ms$ 3 % 20 % $\leq 2 \%$ $\pm 10 \%$ According to EN 60947-5-2 $\leq 100 mA$ Typ. 0.8 mA ($\leq 1.2 mA$ at Ub max and 100 ° C) $\geq 3 mA$	$10 \vee DC 30 \vee DC$ $\leq 10 \%$ $\leq 4 \vee 1^3$ $\leq 2 \vee 2^3$ $\leq 4 \cdot 5 \vee 2^3$ $\simeq 10 \text{ mA}^{-33}$ $ \leq 10 \text{ mA}^{-33}$ $\leq 100 \text{ mS}$ $= 10 \text{ mA}^{-33}$ $\leq 2 \%$ $= 10 \text{ mA}^{-33}$ $\pm 10 \%$ $= 100 \text{ mA}^{-33}$ According to EN 60947-5-2 $= 200 \text{ mA}^{-33}$ $\leq 100 \text{ mA}$ $\leq 200 \text{ mA}^{-33}$ Typ. 0.8 mA ($\leq 1.2 \text{ mA}$ at Ub max and 100° C) $= 100 \text{ mA}^{-33}$

¹⁾ At I_a = 30 mA.

²⁾ At I max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

7) Valid if toothed side of nut is used.

⁸⁾ Reference voltage DC 50 V.

IMB30 INDUCTIVE PROXIMITY SENSORS

	DC 2-wire	DC 3-wire	DC 4-wire
Short-circuit protection	v		
Reverse polarity protection	v		
Power-up pulse protection	-	v	
Power-up pulse	≤ 5 ms	-	≤ 5 ms
Shock and vibration resistance	100 g / 11 ms / 1000 cycles; 15 g	150 g / 1 Mio cycles; 10 Hz 5	5 Hz, 1 mm / 55 z 500 Hz /
Ambient operating temperature	-40 °C +100 °C		
Housing material	V2A (1.4305)		
Sensing face material	Plastic (LCP)		
Tightening torque, max. 7)	Typ. 100 Nm		
Protection class ⁸⁾	II		

¹⁾ At I_a = 30 mA. ²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Ub and Ta constant.

⁵⁾ Of Sr.

⁶⁾ With gold plated contact pins.

 $^{7)}\ensuremath{\mathsf{Valid}}$ if toothed side of nut is used.

⁸⁾ Reference voltage DC 50 V.

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	
Flush	Approx. 0.62
Non-flush	Approx. 0.78
Aluminum (Al)	
Flush	Approx. 0.26
Non-flush	Approx. 0.44
Copper (Cu)	
Flush	Approx. 0.17
Non-flush	Approx. 0.36
Brass (Br)	
Flush	Approx. 0.27
Non-flush	Approx. 0.46

Ordering information

Other models → www.mysick.com/en/IMB30

DC 2-wire

Installation type	Sensing range S _n	Housing	Connection	Output function	Connection diagram	Туре	Part no.
		Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB30-15BDSVU2K	1074420
Flush	Flush 15 mm	Standard	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB30-15BDSVU2S	1074413
			Male connector, M12, 4-pin	NO	Cd-015	IMB30-15BDSVC0S	1074410
		Short-body	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB30-20NDSVU2K	1076284
Non-flush	Non-flush 20 mm	Standard	Cable, 2-wire, 2 m, PUR	NO	Cd-012	IMB30-20NDSVU2S	1074414
			Male connector, M12, 4-pin	NO	Cd-015	IMB30-20NDSVC0S	1076291

DC 3-wire

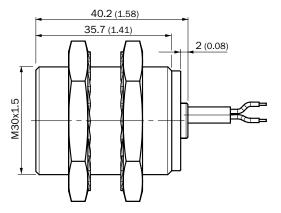
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.
				NDN	NC	-	Cd-003	IMB30-15BN0VU2K	1072858
			Cable,	NPN	NO	-	Cd-001	IMB30-15BNSVU2K	1072857
			3-wire, 2 m, PUR	DND	NC	-	Cd-003	IMB30-15BP0VU2K	1072856
		Chart hade		PNP	NO	~	Cd-001	IMB30-15BPSVU2K	1072457
		Short-body	Male		NC	-	Cd-008	IMB30-15BNOVC0K	1072851
				NPN	NO	-	Cd-007	IMB30-15BNSVC0K	1072850
			connector, M12, 4-pin	DND	NC	-	Cd-008	IMB30-15BPOVC0K	1072849
Fluch	15			PNP	NO	~	Cd-007	IMB30-15BPSVC0K	1070176
Flush	15 mm				NC	-	Cd-003	IMB30-15BN0VU2S	1072844
			Cable, 3-wire, 2 m, PUR	NPN	NO	-	Cd-001	IMB30-15BNSVU2S	1072843
				PNP	NC	-	Cd-003	IMB30-15BP0VU2S	1072842
		Other walks and		PNP	NO	~	Cd-001	IMB30-15BPSVU2S	1072841
		Standard	Male connector, M12, 4-pin	NDN	NC	-	Cd-008	IMB30-15BN0VC0S	1072837
				NPN	NO	-	Cd-007	IMB30-15BNSVC0S	1072836
				PNP	NC	-	Cd-008	IMB30-15BPOVCOS	1072835
					NO	~	Cd-007	IMB30-15BPSVC0S	1072602
					NC	-	Cd-003	IMB30-20NNOVU2K	1072862
			Cable,	NPN	NO	-	Cd-001	IMB30-20NNSVU2K	1072861
			3-wire, 2 m, PUR	DND	NC	-	Cd-003	IMB30-20NPOVU2K	1072860
		Chauthadu.		PNP	NO	~	Cd-001	IMB30-20NPSVU2K	1072859
		Short-body			NC	-	Cd-008	IMB30-20NNOVC0K	1072855
			Male	NPN	NO	-	Cd-007	IMB30-20NNSVC0K	1072854
			connector, M12, 4-pin		NC	-	Cd-008	IMB30-20NPOVC0K	1072853
Non-flush	20 mm			PNP	NO	~	Cd-007	IMB30-20NPSVC0K	1072852
Non-IIUSI)	20 mm			NDN	NC	-	Cd-003	IMB30-20NNOVU2S	1072848
			Cable, 3-wire,	NPN	NO	-	Cd-001	IMB30-20NNSVU2S	1072847
		Oton doud	2 m, PUR		NC	-	Cd-003	IMB30-20NPOVU2S	1072846
				PNP	NO	~	Cd-001	IMB30-20NPSVU2S	1072845
		Standard		NDN	NC	-	Cd-008	IMB30-20NNOVCOS	1072840
			Male	NPN	NO	-	Cd-007	IMB30-20NNSVC0S	1070175
			connector, M12, 4-pin		NC	-	Cd-008	IMB30-20NPOVCOS	1072839
				PNP	NO	~	Cd-007	IMB30-20NPSVC0S	1072838

DC 4-wire

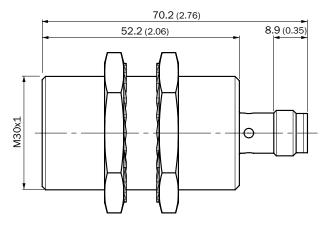
Installa- tion type	Sensing range S _n	Housing	Connec- tion	Output type	Output function	IO-Link	Con- nection diagram	Туре	Part no.							
	Chart hadu	Short-body	Male connector,	NPN	Comple- mentary	-	Cd-006	IMB30-15BNPVC0K	1074417							
		Shorebody	Short-body	M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB30-15BPPVC0K	1074406						
Flush	15 mm	Cable, 4-wire, 2 m, PUR	PNP	Comple- mentary	V	Cd-005	IMB30-15BPPVU2S	1074415								
		Standard	Standard	Standard	Male	NPN	Comple- mentary	-	Cd-006	IMB30-15BNPVC0S	1074408					
			connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB30-15BPPVC0S	1074411							
		Short-body		Short body	Shart hady	Chart hady	Short body	Short body	Short body	Male	NPN	Comple- mentary	-	Cd-006	IMB30-20NNPVC0K	1074418
Non-flush	20 mm		connector, M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB30-20NPPVC0K	1074416							
NON-HUSH	20 11111	Chandand	Chandand	Ctondord	Male connector,	NPN	Comple- mentary	-	Cd-006	IMB30-20NNPVC0S	1074409					
	Standard	Stanuard	M12, 4-pin	PNP	Comple- mentary	~	Cd-006	IMB30-20NPPVC0S	1074407							

Dimensional drawings (Dimensions in mm (inch))

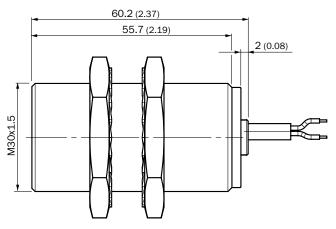
IMB30 Short-body housing, cable, flush



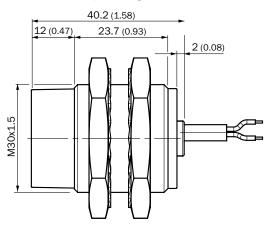
IMB30 Standard, connector, M12, flush

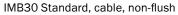


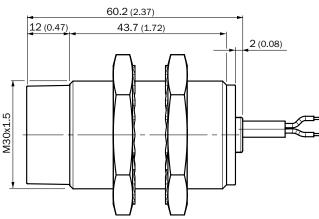
IMB30 Standard, cable, flush



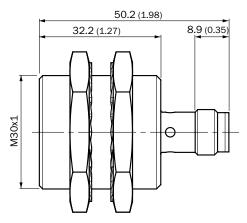
IMB30 Short-body housing, cable, non-flush





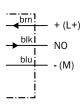


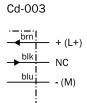
IMB30 Short-body housing, connector M12, flush



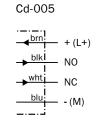
Connection diagram

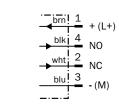
Cd-001











Cd-006

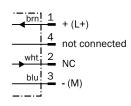
Cd-007

brn! 1 + (L+) blki 4 NO

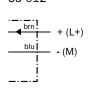
1 = 1 NO 2 = 1 not connected $\frac{blu!}{3} = -(M)$

Cd-008

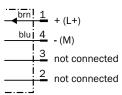
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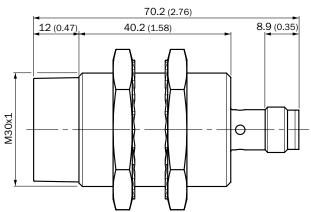




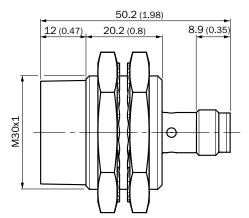
Cd-015



IMB30 Standard, connector M12, non-flush

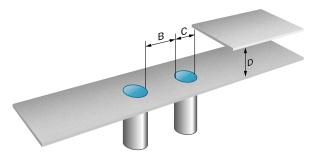


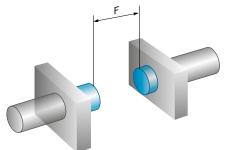
IMB30 Short-body housing, connector M12, non-flush



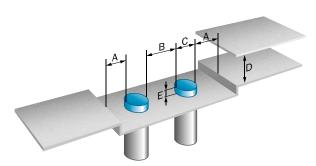
Installation note

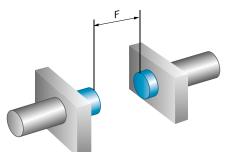
Flush installation





Non-flush installation



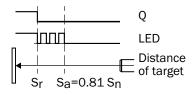


Installation note

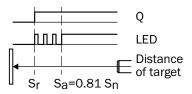
	Installation	Sensing range Sn	А	В	С	D	E	F
IMB30-15Bxxxxxx	Flush	15 mm	-	40 mm	30 mm	45 mm	-	120 mm
IMB30-20Nxxxxxx	Non-flush	20 mm	20 mm	62 mm	30 mm	60 mm	20 mm	160 mm

Installation aid

Normally closed



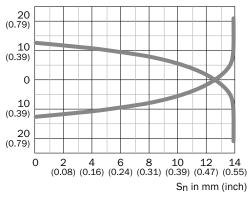
Normally open



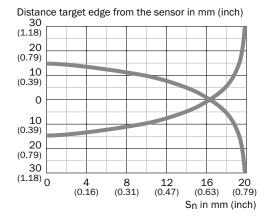
Response curve

Flush installation

Distance target edge from the sensor in mm (inch)



Non-flush installation



Mounting systems

Universal bar clamp systems

Figure	Material	Description	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Zinc diecast	Universal bar clamp for mounting bars with 12 mm diameter	BEF-KHS-KH3	5322626	•	•	•	•
10	Stainless steel V2A (1.4301)	Universal clamp bracket for mounting bars with 12 mm diameter	BEF-KHS-KH3N	5322627	•	•	•	•
A 10	Zinc plated steel (sheet), Diecast zinc (clamp)	Plate N05 for universal clamp bracket, M12	BEF-KHS-N05	2051611	-	•	-	-
	Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp)	Plate N05N for universal clamp bracket, M12	BEF-KHS-N05N	2051621	-	•	-	-
an	Zinc plated steel (sheet), Diecast zinc (clamp)	Plate N06 for universal clamp bracket, M18	BEF-KHS-N06	2051612	-	-	•	-
0	Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp)	Plate N06N for universal clamp bracket, M18	BEF-KHS-N06N	2051622	-	-	•	-
90	Zinc plated steel (sheet), Diecast zinc (clamp)	Plate N10 for universal clamp bracket, M30	BEF-KHS-N10	2062372	-	-	_	•
	Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp)	Plate N11N for universal clamp bracket	BEF-KHS-N11N	2071081	•	•	•	•
		Mounting bar, straight, 200 mm, steel	BEF-MS12G-A	4056054	•	•	•	•
	Steel, zinc coated	Mounting bar, straight, 300 mm, steel	BEF-MS12G-B	4056055	•	•	•	•
	Stainlage stack (1.4571)	Mounting bar, straight, 200 mm, stainless steel	BEF-MS12G-NA	4058914	•	•	•	•
	Stainless steel (1.4571)	Mounting bar, straight, 300 mm, stainless steel	BEF-MS12G-NB	4058915	•	•	•	•
		Mounting bar, L-shaped, 150 mm x 150 mm, steel	BEF-MS12L-A	4056052	•	•	•	•
	Steel, zinc coated	Mounting bar, L-shaped, 250 x 250 mm, steel	BEF-MS12L-B	4056053	•	•	•	•
	Steinless steel (1.4574)	Mounting bar, Z-shaped, 150 mm x 70 mm x 150 mm, stainless steel	BEF-MS12Z-NA	4058916	•	•	•	•
	Stainless steel (1.4571)	Mounting bar, Z-shaped, 150 mm x 70 mm x 250 mm, stainless steel	BEF-MS12Z-NB	4058917	•	•	•	•

Mounting brackets

Figure	Material	Description	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Stainless steel	Mounting plate for M12 housing	BEF-WG-M12N	5320950	-	•	-	-

INDUCTIVE PROXIMITY SENSORS Accessories

Figure	Material	Description	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
0° • 30 *	Stainless steel	Mounting plate for M18 housing	BEF-WG-M18N	5320948	-	-	•	-
		Mounting plate for M8 sensors	BEF-WG-M08	5321722	•	-	-	-
	Steel, zinc coated	Mounting plate for M12 sensors	BEF-WG-M12	5321869	-	•	-	-
		Mounting plate for M18 sensors	BEF-WG-M18	5321870	_	-	•	-
		Mounting plate for M30 sensors	BEF-WG-M30	5321871	-	-	-	•

Mounting plates

Figure	Material	Description	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
40		Mounting bracket for M12 hous- ing	BEF-WN-M12N	5320949	-	•	-	-
40		Mounting bracket for M18 hous- ing	BEF-WN-M18N	5320947	-	-	•	-
	Stainless steel	Mounting bracket, M8 thread	BEF-WN-M08	5321721	•	-	-	-
40		Mounting bracket, M12 thread	BEF-WN-M12	5308447	-	•	-	-
40		Mounting bracket, M18 thread	BEF-WN-M18	5308446	-	-	•	-
~		Mounting bracket, M30 thread	BEF-WN-M30	5308445	-	-	-	•

Alignment brackets

Figure	Material	Description	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
0	Plastic	Mounting bracket with ball-and- socket	BEF-WN-M18-ST02	5312973	-	-	•	-

Connection systems

Connecting cables with female connector M8, 3-pin, PP, hygienic systems

- Cable material: PP
- Connector material: PP
- Ambient operating temperature: -40 °C ... +105 °C, stationary position; -25 °C ... +105 °C, flexible use
- Locking nut material: stainless steel (V4A/1.4404/316L)
- Description: Tested detergent: P3-topactive DES, P3-topactive 200, P3-topax 52, P3-topax 66 und P3-topax 91, Silicone-free, halogen-free, LABS-free

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Female connector.		2 m, 3-wire	DOL-0803-G02MRN	6058504	•	-	-	-
	M8, 3-pin, straight,	Cable, open conduc- tor heads	5 m, 3-wire	DOL-0803-G05MRN	6058505	٠	-	-	-
0	unshielded	elded	10 m, 3-wire	DOL-0803-G10MRN	6058506	٠	-	-	-
	Female connector, M8, 3-pin, angled,	Cable, open conduc-	2 m, 3-wire	DOL-0803-L02MRN	6058787	٠	-	-	-
			5 m, 3-wire	DOL-0803-L05MRN	6058788	٠	-	-	-
0	unshielded, with LED		10 m, 3-wire	DOL-0803-L10MRN	6058789	٠	-	-	-
	Female connector,		2 m, 3-wire	DOL-0803-W02MRN	6058507	٠	-	-	-
	M8, 3-pin, angled,	Cable, open conduc- tor heads	5 m, 3-wire	DOL-0803-W05MRN	6058508	٠	-	-	-
61	unshielded	torneads	10 m, 3-wire	DOL-0803-W10MRN	6058509	ullet	-	-	-

Connecting cables with female connector M8, 3-pin, PUR, halogen-free, Oil / grease resistant

- Cable material: PUR, halogen-free
- Connector material: TPU
- Ambient operating temperature: -40 °C ... +80 °C, stationary position; -25 °C ... +80 °C, flexible use
- · Locking nut material: zinc die-cast, nickel-plated

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30	
			1 m, 3-wire	DOL-0803-G01MC	6036455	٠	-	-	-	
		Cable open conduc-	2 m, 3-wire	DOL-0803-G02MC	6025888	ullet	-	-	-	
	Female connector,		Cable, open conduc-	3 m, 3-wire	DOL-0803-G03MC	6038991	٠	-	-	-
	M8, 3-pin, straight, unshielded		5 m, 3-wire	DOL-0803-G05MC	6025889	•	-	-	-	
			10 m, 3-wire	DOL-0803-G10MC	6025890	•	-	-	-	
			20 m, 3-wire	DOL-0803-G20MC	6036456	٠	-	-	-	
			2 m, 3-wire	DOL-0803-L02MC	6039080	٠	-	-	-	
	Female connector.		10 m, 3-wire	DOL-0803-L10MC	6039082	•	-	-	-	
	M8, 3-pin, angled,	Cable, open conduc- tor heads	2 m, 3-wire	DOL-0803-W02MC	6025891	•	-	-	-	
1	unshielded	tor neads	5 m, 3-wire	DOL-0803-W05MC	6025892	•	-	-	-	
			10 m, 3-wire	DOL-0803-W10MC	6025893	٠	-	-	-	

Connecting cables with female connector M12, 4-pin, PP, hygienic systems

- Cable material: PP
- Connector material: PP
- Ambient operating temperature: -40 °C ... +105 °C, stationary position; -25 °C ... +105 °C, flexible use
- Locking nut material: stainless steel (V4A/1.4404)
- **Description:** Tested detergent: P3-topactive DES, P3-topactive 200, P3-topax 52, P3-topax 66 und P3-topax 91, Silicone-free, halogen-free, LABS-free

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
			2 m, 4-wire	DOL-1204-G02MRN	6058291	٠	•	•	•
	Female connector,	Cable, open conduc-	5 m, 4-wire	DOL-1204-G05MRN	6058476	٠	•	٠	•
	M12, 4-pin, straight, unshielded	tor heads	10 m, 4-wire	DOL-1204-G10MRN	6058478	٠	•	•	•
			25 m, 4-wire	DOL-1204-G25MRN	6058480	٠	•	•	•
	Female connector, M12, 4-pin, angled,	4-pin, angled,Cable, open conduc-3 LEDs, un-tor heads	2 m, 4-wire	DOL-1204-L02MRN	6058482	٠	ullet	ullet	ullet
			5 m, 4-wire	DOL-1204-L05MRN	6058483	٠	•	٠	•
	with 3 LEDs, un- shielded		10 m, 4-wire	DOL-1204-L10MRN	6058484	٠	٠	٠	٠
	shielded		25 m, 4-wire	DOL-1204-L25MRN	6058485	٠	٠	٠	٠
-			2 m, 4-wire	DOL-1204-W02MRN	6058474	٠	٠	٠	٠
	Female connector,	Cable, open conduc-	5 m, 4-wire	DOL-1204-W05MRN	6058477	٠	ullet	ullet	ullet
	M12, 4-pin, angled, unshielded	tor heads	10 m, 4-wire	DOL-1204-W10MRN	6058479	٠	ullet	ullet	٠
	unomolucu		25 m, 4-wire	DOL-1204-W25MRN	6058481	٠	•	•	•

Connecting cables with female connector M12, 4-pin, PUR, halogen-free, Oil / grease resistant

- Cable material: PUR, halogen-free
- Connector material: TPU
- Ambient operating temperature: -40 °C ... +80 °C, stationary position; -25 °C ... +80 °C, flexible use
- Locking nut material: zinc die-cast, nickel-plated

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
			2 m, 4-wire	DOL-1204-G02MC	6025900	٠	٠	ullet	ullet
			5 m, 4-wire	DOL-1204-G05MC	6025901	٠	٠	ullet	ullet
	Female connector,	Cable, open conduc-	10 m, 4-wire	DOL-1204-G10MC	6025902	٠	٠	ullet	٠
No.	M12, 4-pin, straight, unshielded	tor heads	15 m, 4-wire	DOL-1204-G15MC	6034749	٠	•	ullet	ullet
			20 m, 4-wire	DOL-1204-G20MC	6034750	٠	٠	ullet	٠
			25 m, 4-wire	DOL-1204-G25MC	6034751	٠	٠	٠	٠
	Female connector,		2 m, 4-wire	DOL-1204-L02MC	6039086	٠	٠	٠	•
	M12, 4-pin, angled, with 3 LEDs, un-	Cable, open conduc- tor heads	5 m, 4-wire	DOL-1204-L05MC	6020398	٠	٠	ullet	ullet
C	shielded		10 m, 4-wire	DOL-1204-L10MC	6039088	٠	ullet	ullet	ullet
			2 m, 4-wire	DOL-1204-W02MC	6025903	٠	٠	ullet	ullet
			5 m, 4-wire	DOL-1204-W05MC	6025904	٠	٠	ullet	ullet
	Female connector, M12, 4-pin, angled, unshielded	Cable, open conduc-	10 m, 4-wire	DOL-1204-W10MC	6025905	٠	٠	ullet	ullet
		12, 4-pin, angled, tor heads	15 m, 4-wire	DOL-1204-W15MC	6034752	٠	٠	ullet	ullet
			20 m, 4-wire	DOL-1204-W20MC	6034753	٠	•	•	•
			25 m, 4-wire	DOL-1204-W25MC	6034754	٠	٠	٠	٠

Connecting cables with male connector M12, 4-pin, PUR, halogen-free, Oil / grease resistant

- Cable material: PUR, halogen-free
- Connector material: TPU
- Ambient operating temperature: -40 °C ... +80 °C, stationary position; -5 °C ... +80 °C, flexible use
- Locking nut material: zinc die-cast, nickel-plated

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
_			2 m, 4-wire	STL-1204-G02MC	6028077	•	ullet	ullet	ullet
	Male connector, M12, 4-pin, straight, unshielded	Cable, open conduc- ' tor heads	5 m, 4-wire	STL-1204-G05MC	6048170	٠	ullet	ullet	ullet
			10 m, 4-wire	STL-1204-G10MC	6041750	٠	٠	٠	٠
•			15 m, 4-wire	STL-1204-G15MC	6048171	٠	٠	٠	٠
$\langle \rangle$	Male connector,	Cable, open conduc-	5 m, 4-wire	STL-1204-W05MC	6037472	٠	•	•	•
6	M12, 4-pin, angled, unshielded	tor heads	15 m, 4-wire	STL-1204-W15MC	6037473	•	•	•	•

Connection cables with female connector and male connector M8, 3-pin, PUR, halogen-free, Oil / grease resistant

- Cable material: PUR, halogen-free
- Connector material: TPU
- Ambient operating temperature: -40 °C ... +80 °C, stationary position; -25 °C ... +80 °C, flexible use
- Locking nut material: zinc die-cast, nickel-plated

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30				
		Male connector M8	1 m, 3-wire	DSL-0803-G01MC	6029405	٠	-	-	-				
	Female connector, M8, 3-pin, straight, unshielded			2 m, 3-wire	DSL-0803-G02MC	6029406	٠	-	-	-			
			3 m, 3-wire	DSL-0803-G03MC	6037696	٠	-	-	-				
20			3-pin, straight	3-pin, straight		3-pin, straight	3-pin, straight	5 m, 3-wire	DSL-0803-G05MC	6032730	٠	-	-
••			10 m, 3-wire	DSL-0803-G10MC	6032731	٠	-	-	-				
			20 m, 3-wire	DSL-0803-G20MC	6035805	٠	-	-	-				

Connection cables with female connector and male connector M12, 4-pin, PP, hygienic systems

- Cable material: PP
- Connector material: PP
- Ambient operating temperature: -40 °C ... +105 °C, stationary position; -25 °C ... +105 °C, flexible use
- Locking nut material: stainless steel (V4A/1.4404)
- Description: Tested detergent: P3-topactive DES, P3-topactive 200, P3-topax 52, P3-topax 66 und P3-topax 91, Silicone-free, halogen-free, LABS-free

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Female connector, M12, 4-pin, angled, unshielded	Male connector, M12, 4-pin, straight	2 m, 4-wire 5 m, 4-wire	DSL-1204-B02MRN DSL-1204-B05MRN	6058502 6058503	•	•	•	-
4.5.	Female connector,	Male connector, M12,	2 m, 4-wire	DSL-1204-G02MRN	6058499	•	•	•	•
6	M17 A-nin straight	4-pin, straight	5 m, 4-wire	DSL-1204-G05MRN	6058500	•	•	•	•

Connection cables with female connector and male connector M12, 4-pin, PUR, halogen-free, Oil / grease resistant

- Cable material: PUR, halogen-free
- Connector material: TPU
- Ambient operating temperature: -40 °C ... +80 °C, stationary position; -25 °C ... +80 °C, flexible use
- Locking nut material: zinc die-cast, nickel-plated

Figure	Connection type head A	Connection type head B	Connecting cable	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
$\langle \rangle$	Female connector, M12, 4-pin, straight, unshielded	Male connector, M12,	5 m, 4-wire	DSL-1204-G05MC	6033245	•	•	•	•
W. W.		4-pin, straight	10 m, 4-wire	DSL-1204-G10MC	6033698	•	•	•	٠

Female connectors (ready to assemble) M12, 4-pin, hygienic systems

• Locking nut material: stainless steel (V4A/1.4404/316L)

Figure	Connection type head A	Connection type head B	Connector material	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Female connector, M12, 4-pin, straight, unshielded	Screw-type terminals	PA	DOS-1204-GN	6028357	•	•	•	•
6	Female connector, M12, 4-pin, angled, unshielded	Screw-type terminals	PBT	DOS-1204-WN	6028358	•	•	•	•

Male connectors (ready to assemble) M12, 4-pin, hygienic systems

• Locking nut material: stainless steel (V4A/1.4404)

Figure	Connection type head A	Connection type head B	Connector material	Туре	Part no.	IMB08	IMB12	IMB18	IMB30
	Male connector, M12, 4-pin, straight, unshielded		PA	STE-1204-GN	6028359	•	•	•	•
		Screw-type terminals	PBT	STE-1204-TN	6028360	•	•	•	•

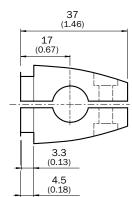
16 (0.63)

5.5 (0.22)

+

Dimensional drawings Mounting systems

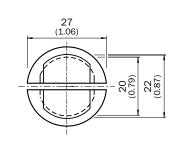
BEF-KHS-KH3



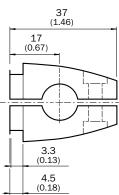
29.8 (1.17)

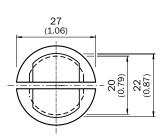
Ø 16 (Ø 0.63)

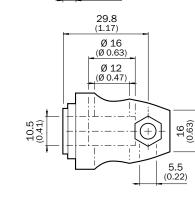
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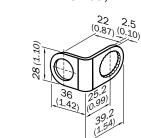
BEF-KHS-KH3N



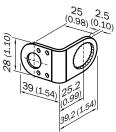




BEF-KHS-N06 / BEF-KHS-N06N

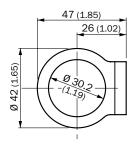


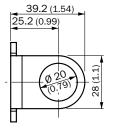
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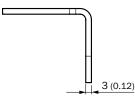


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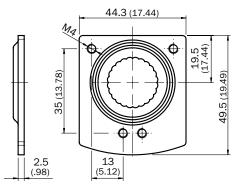
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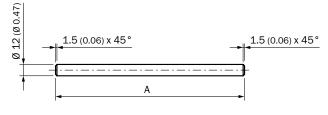




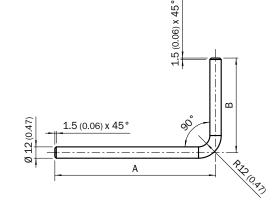


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BEF-MS12G-(N)A / BEF-MS12G-(N)B



BEF-MS12G-(N)A: A = 200 mm
 BEF-MS12G-(N)B: A = 300 mm



BEF-MS12L-A / BEF-MS12L-B

① BEF-MS12L-(N)A: A = 200 mm, B = 150 mm ② BEF-MS12L-(N)B: A = 250 mm, B = 250 mm

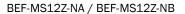
BEF-WG-M08

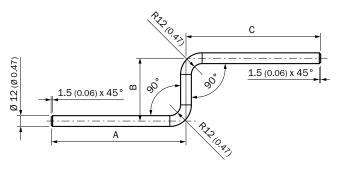
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3.5

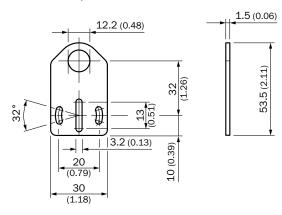
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fil





BEF-WG-M12 / BEF-WG-M12N

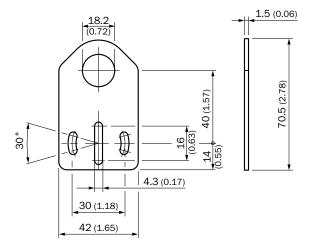


BEF-WG-M18 / BEF-WG-M18N

20

(0.79)

30 (1.18)



(0.06)

53.5 (2.11)

42 (1.65)

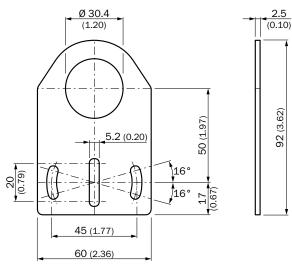
16°

16

3.2

10





26.5 (10.48) (10.48) (10.04)

30 (1.18)

 $\frac{13}{(0.51)}$

10 (0.39)

3.2 (0.13)

Ø

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20

(0.79) 30 (1.18)

BEF-WN-M18-ST02

1.5

BEF-WN-M12 / BEF-WN-M12N

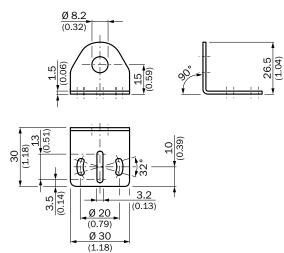
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16°16°

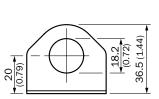
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5 (0.20)

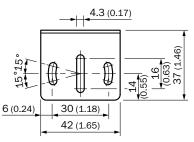
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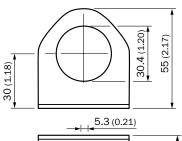
BEF-WN-M18 / BEF-WN-M18N

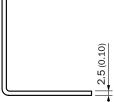


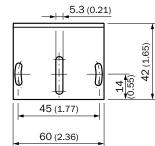


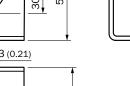


BEF-WN-M30



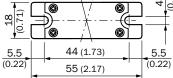




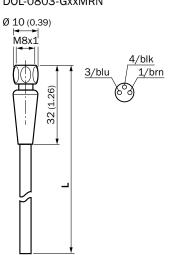




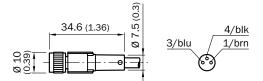
18.1 (0.71) 36 (1.42) 5.5 (0.22) 30° 4.1



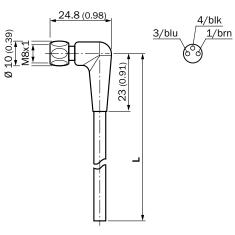
Dimensional drawings Connection systems DOL-0803-GxxMRN



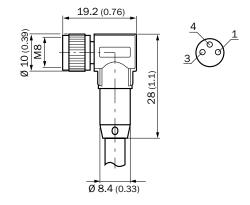
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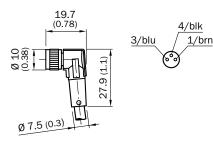
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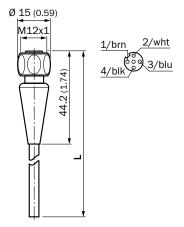
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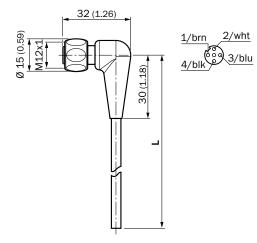
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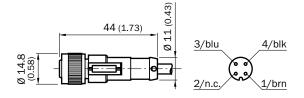
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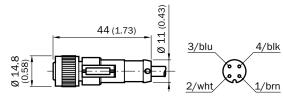
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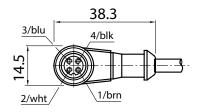


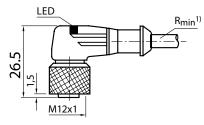
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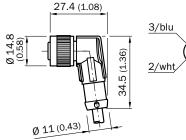
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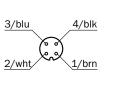
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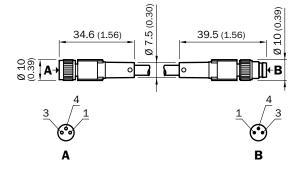


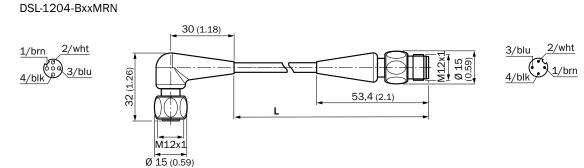


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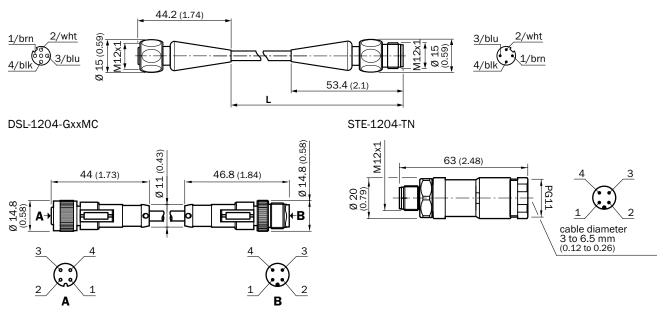








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