



Efficient communication without wear

INDUCTIVE COUPLERS



Fixed wiring of sensors and actuators comes with drawbacks: cable and contacts are often severely loaded in automation, and cables can fatigue and break. In the worst case scenario this can result in a machine failure. Our BIC inductive couplers transmit data and power contactlessly across an air gap. Thus, no mechanical wear is produced. The system availability is higher, the cycle times are shorter and the sequences are more flexible. The units can quickly be disconnected, are easy to handle and are maintenance-free. This enables you to meet new demands quickly.

Features

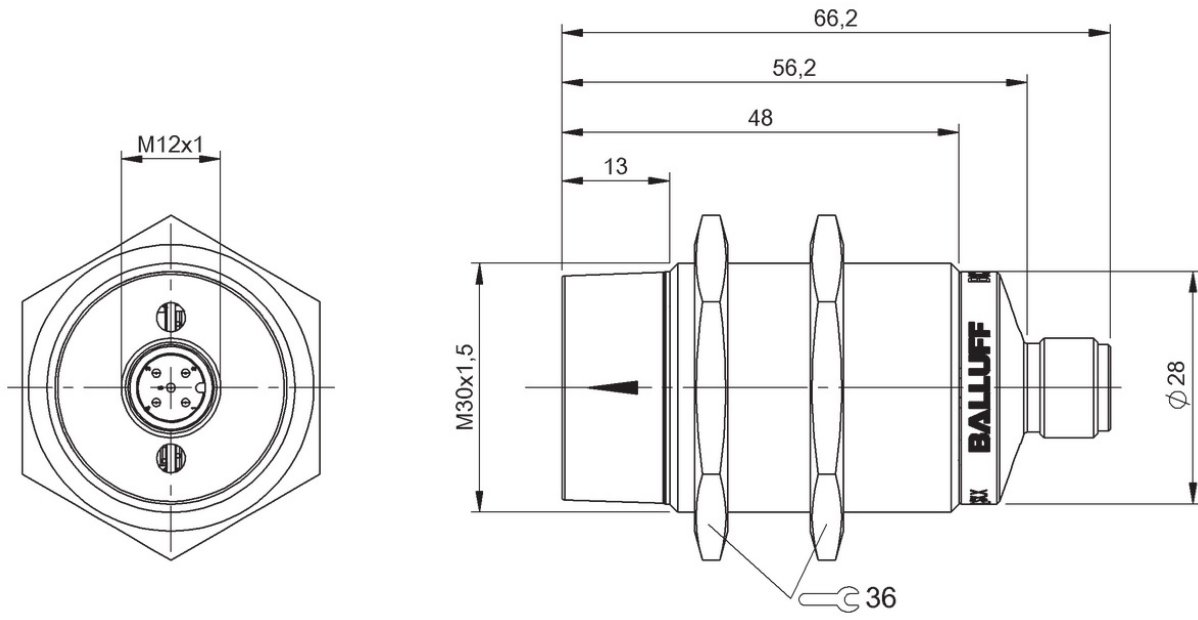
- No mechanical wear
- Higher system availability, shorter cycle times, more flexible sequences
- Quickly disconnectable, easy to handle, maintenance free



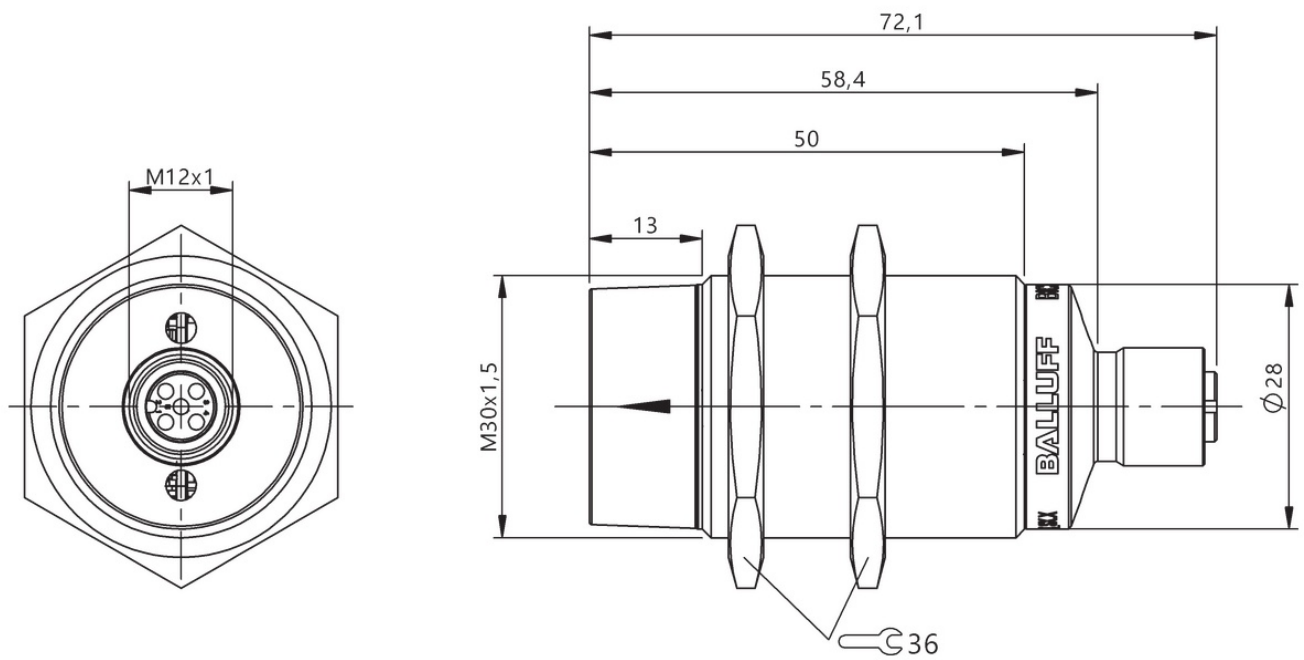
	BIC007L BIC 1B0-ITA50-M30MF1-SM4A5A	BIC007E BIC 2B0-ITA50-M30MF1-SM4A5A	
Function	IO-Link signal transmission	IO-Link signal transmission	
Signal type	bi-directional	bi-directional	
Transmission distance	0...10 mm	0...10 mm	
Component	Base	Remote	
Interface	IO-Link 1.1	IO-Link 1.1	
Connection	Connector, M12x1 connector, 5-pin	Connector, M12x1 connector, 5-pin	
Rated operating voltage U _e	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	650 mA	
Output current max.	—	5 A / 0.12 ms	
Housing material	Brass	Brass	
Dimension	Ø 30 x 66.2 mm	Ø 30 x 72.1 mm	
Ambient temperature	-5...55 °C	-5...55 °C	
Protection degree	IP67	IP67	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Additive cycle time	Device + 2.0 ms	Device + 2.0 ms	
Process data in	0...32 bytes	0...32 bytes	
Process data out	0...32 bytes	0...32 bytes	
SIO mode	yes	yes	
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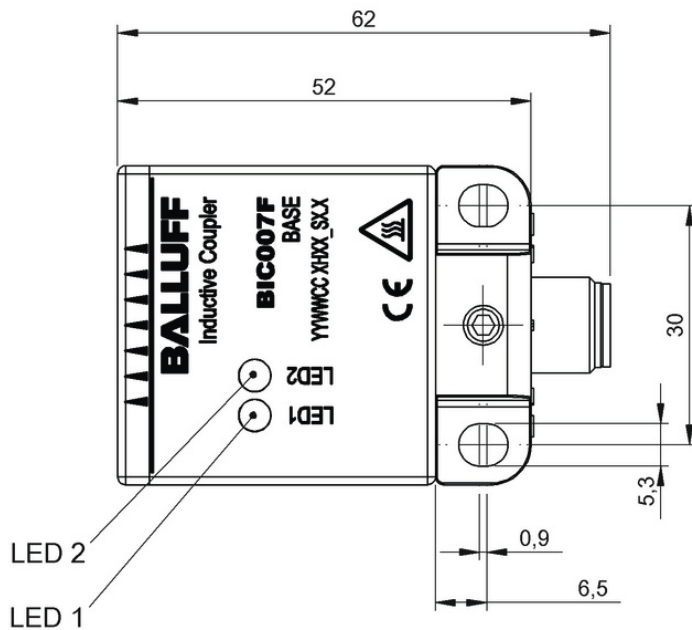
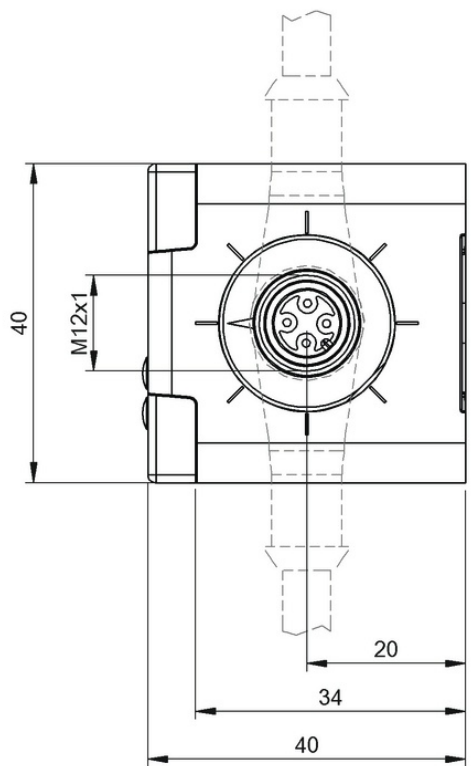
	BIC007F BIC 1B0-IT1A7-Q40KFU-SM4A4A	BIC007H BIC 2B0-IT1A7-Q40KFU-SM4A5A	BIC0070 BIC 1B0-ITA50-Q40KFU-SM4A4A	BIC0071 BIC 2B0-ITA50-Q40KFU-SM4A5A
	IO-Link signal transmission	IO-Link signal transmission	IO-Link signal transmission	IO-Link signal transmission
	bi-directional	bi-directional	bi-directional	bi-directional
	0...5 mm	0...5 mm	0...5 mm	0...5 mm
	Base	Remote	Base	Remote
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 5-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 5-pin
	24 VDC	—	24 VDC	—
	—	24 VDC	—	24 VDC
	—	1.7 A	—	500 mA
	—	5 A / 1 ms	—	5 A / 0.05 ms
	PBTP	PBTP	PBTP	PBTP
	40 x 40 x 62 mm	40 x 40 x 60.8 mm	40 x 40 x 62 mm	40 x 40 x 63 mm
	-5...55 °C	-5...55 °C	-5...65 °C	-5...65 °C
	IP67	IP67	IP67	IP67
	COM2 (38.4 kBaud), COM3 (230.4 kBaud)	COM2 (38.4 kBaud), COM3 (230.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	Device + 2.8 ms	Device + 2.8 ms	Device + 2.0 ms	Device + 2.0 ms
	0...32 bytes	0...32 bytes	0...32 bytes	0...32 bytes
	0...32 bytes	0...32 bytes	0...32 bytes	0...32 bytes
	no	no	yes	yes
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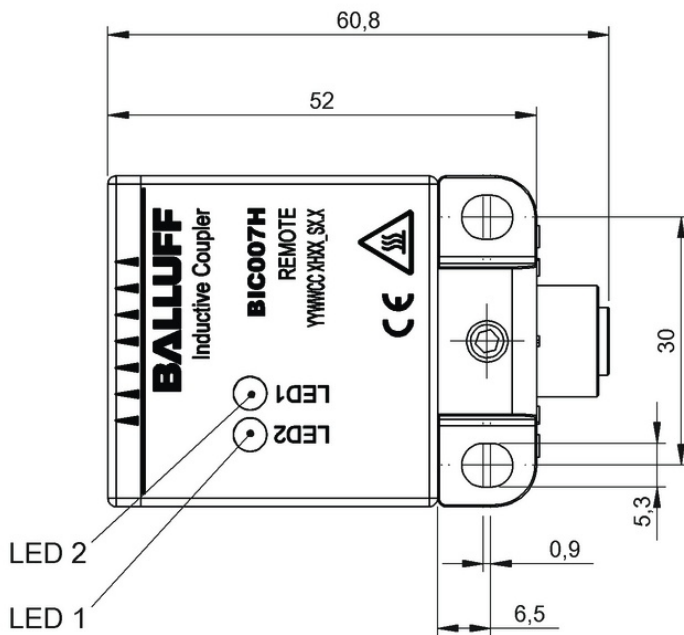
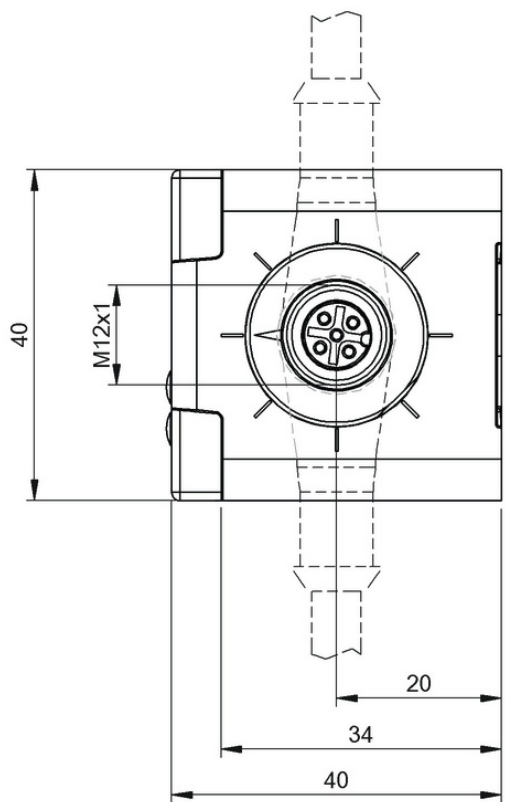
BIC007L



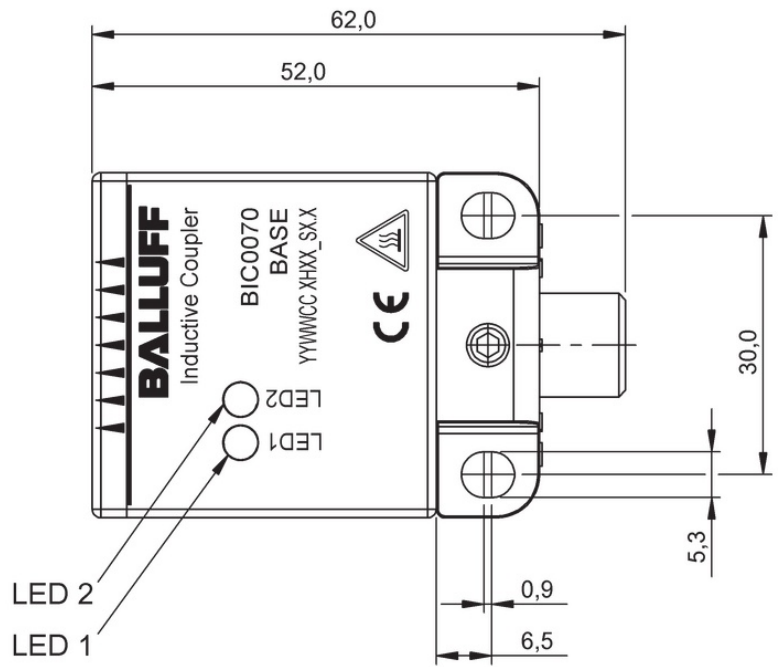
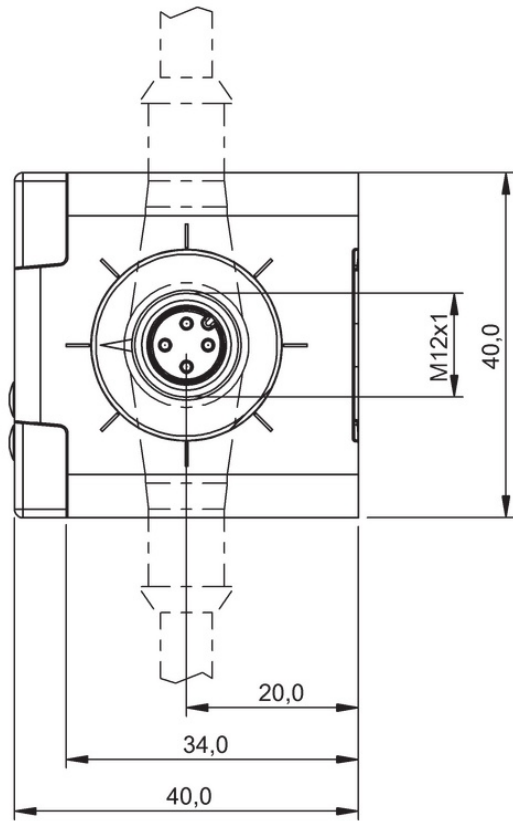
BIC007E



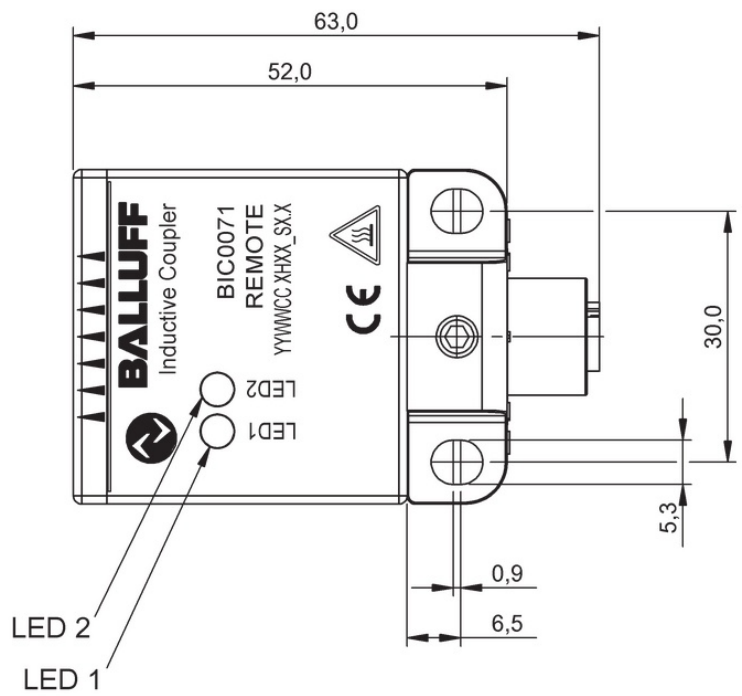
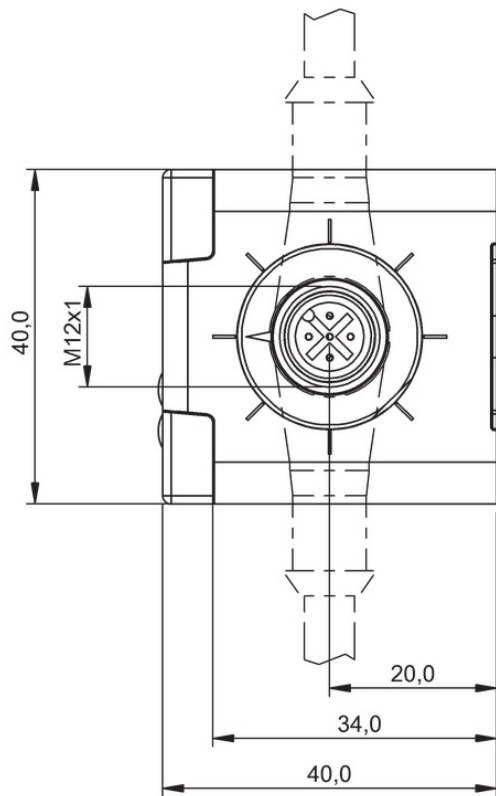
BIC007F



BIC007H



BIC0070



BIC0071

Accessories

Connectivity

Power Supply

Industrial Networking

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	BIC007J BIC 1I3-P2A50-Q40KFU-EPX0-002-M4CA	BIC007K BIC 2I3-P2A50-Q40KFU-EPX0-002-M4CA	
Function	Signal transmission	Signal transmission	
Signal type	unidirectional	unidirectional	
Digital inputs	—	8x PNP	
Digital outputs	8x PNP	—	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 12-pin, 0.20 m, PUR	Connector, M12x1, 12-pin, 0.20 m, PUR	
Rated operating voltage U _e	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	PBTP	PBTP	
Dimension	40 x 40 x 52 mm	40 x 40 x 52 mm	
Ambient temperature	-5...65 °C	-5...65 °C	
Protection degree	IP67	IP67	
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	BIC0077 BIC 111-P2A05-M12MM-BPX0-003-M45A	BIC0078 BIC 211-P2A05-M12MF-BPX0-003-M44A	BIC007T BIC 1122-P2A02-M18MN2-EPX07-050	BIC007U BIC 2122-P2A02-M18MF2-EPX07-050
	Signal transmission	Signal transmission	Signal transmission	Signal transmission
	unidirectional	unidirectional	unidirectional	unidirectional
	—	2x PNP	—	4x PNP
	2x PNP	—	4x PNP	—
	0...2.5 mm	0...2.5 mm	1...3 mm	1...3 mm
	Base	Remote	Base	Remote
	Connector, M12x1, 5-pin, 0.30 m, PUR	Connector, M12x1, 5-pin, 0.30 m, PUR	Cable, 5.00 m, PUR	Cable, 5.00 m, PUR
	24 VDC	—	24 VDC	12 VDC
	—	24 VDC	—	24 VDC
	—	50 mA	—	100 mA
	Brass	Brass	Brass	Brass
	Ø 12 x 65 mm	Ø 12 x 41 mm	Ø 18 x 94 mm	Ø 18 x 61 mm
	-10...50 °C	-10...50 °C	0...50 °C	0...50 °C
	IP67	IP67	IP67	IP67
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	BIC0009 BIC 1I3-P2A50-M30MI3-SM4ACA	BIC005J BIC 2I3-P2A50-M30MI3-BPX0C-002-M4CA	
Function	Signal transmission	Signal transmission	
Signal type	unidirectional	unidirectional	
Digital inputs	—	8x PNP	
Digital outputs	8x PNP	—	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 12-pole	Connector, M12x1, 12-pin, 0.20 m, PUR	
Rated operating voltage U _e	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	Brass	Brass	
Dimension	Ø 30 x 107 mm	Ø 30 x 85.5 mm	
Ambient temperature	0...55 °C	0...55 °C	
Protection degree	IP67	IP67	
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BIC000A BIC 2I3-P2A50-M30MI3-SM4ACA			
Signal transmission			
unidirectional			
8x PNP			
—			
0...5 mm			
Remote			
Connector, M12x1, 12-pole			
—			
24 VDC			
500 mA			
Brass			
Ø 30 x 106 mm			
0...55 °C			
IP67			
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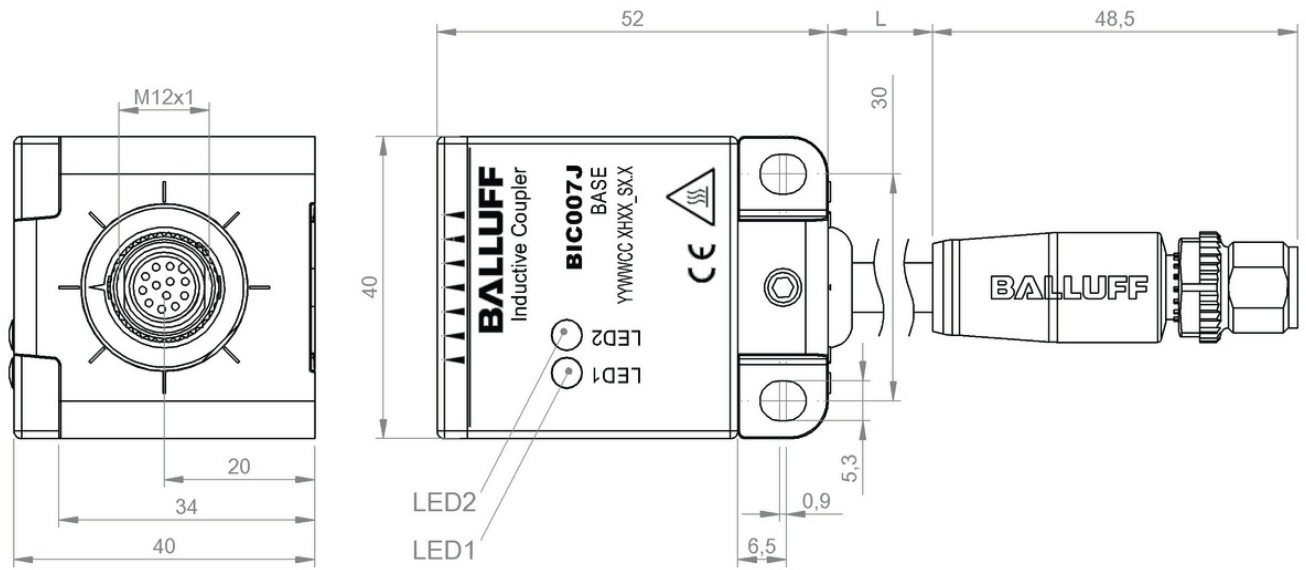
Safety

Industrial Networking

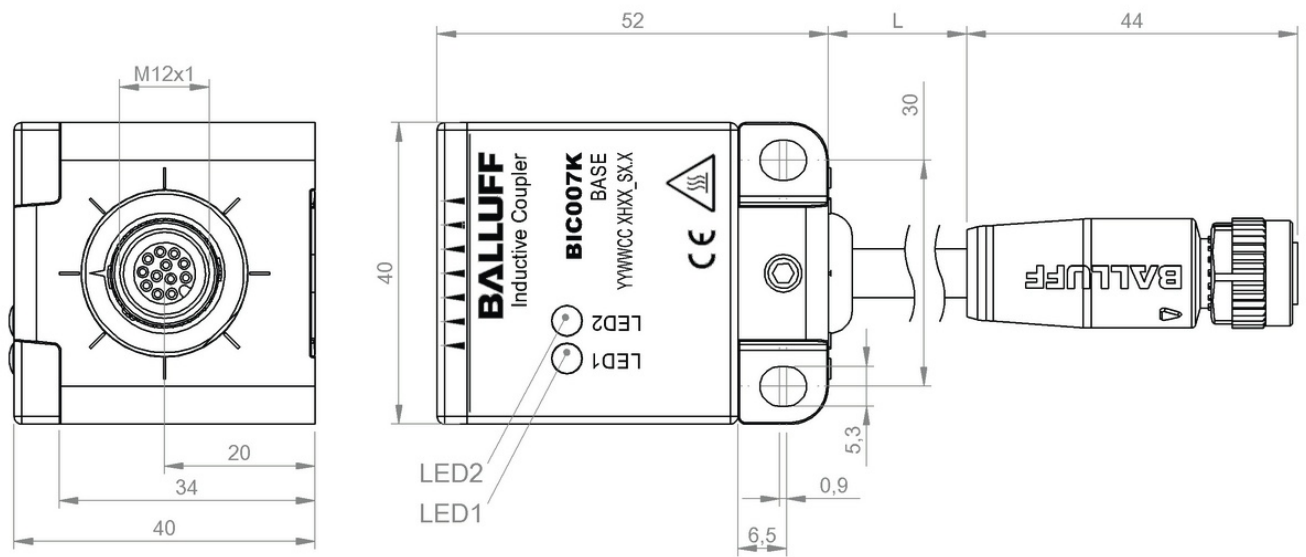
Power Supply

Connectivity

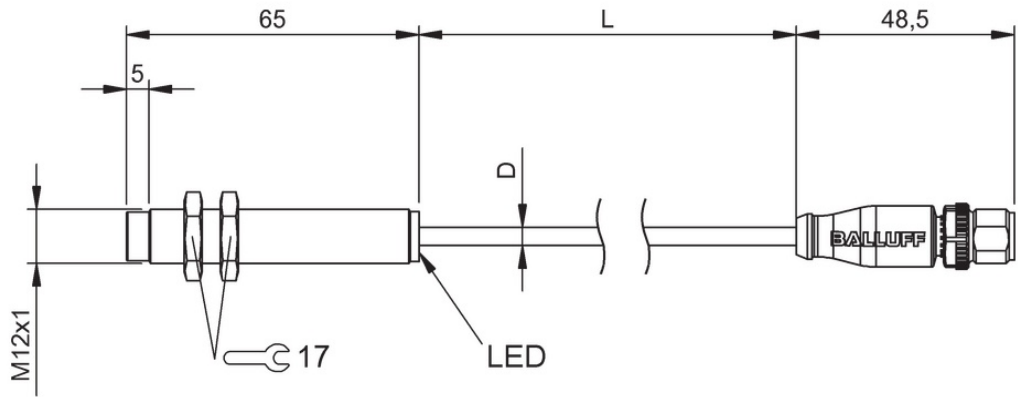
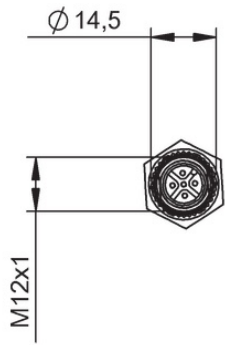
Accessories



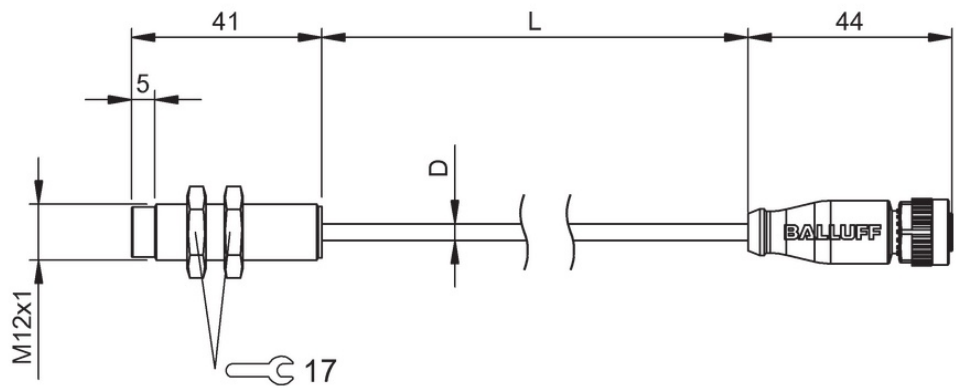
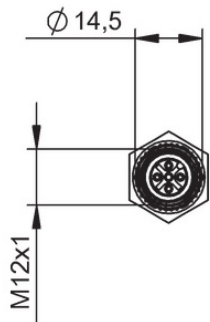
BIC007J



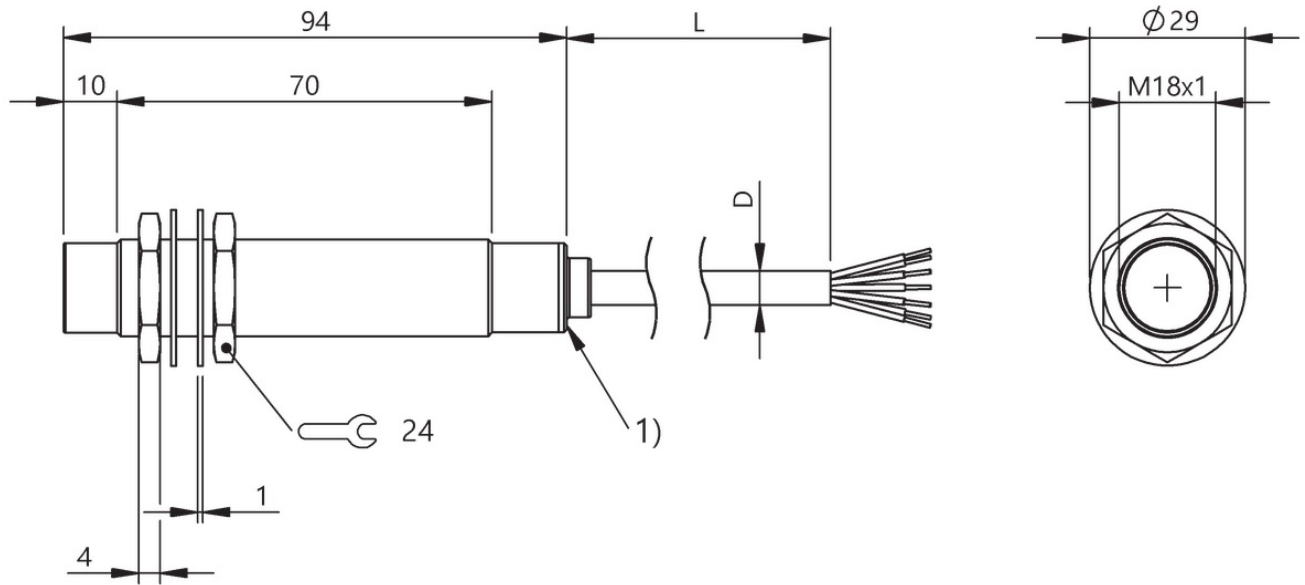
BIC007K



BIC0077

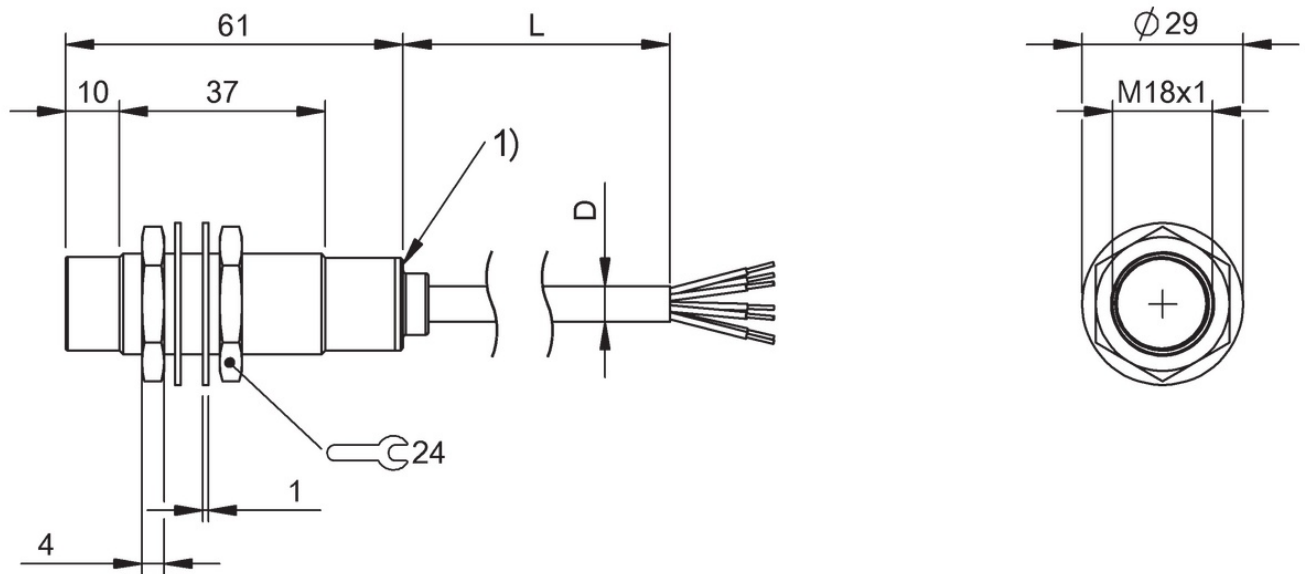


BIC0078



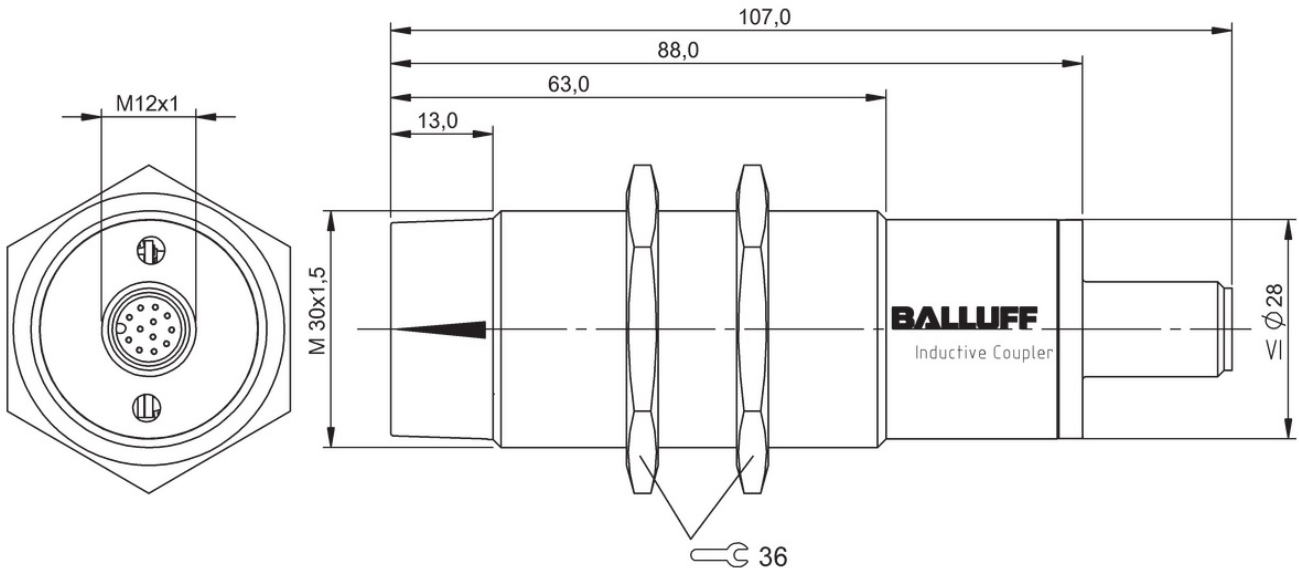
1) LED function indicator

BIC007T

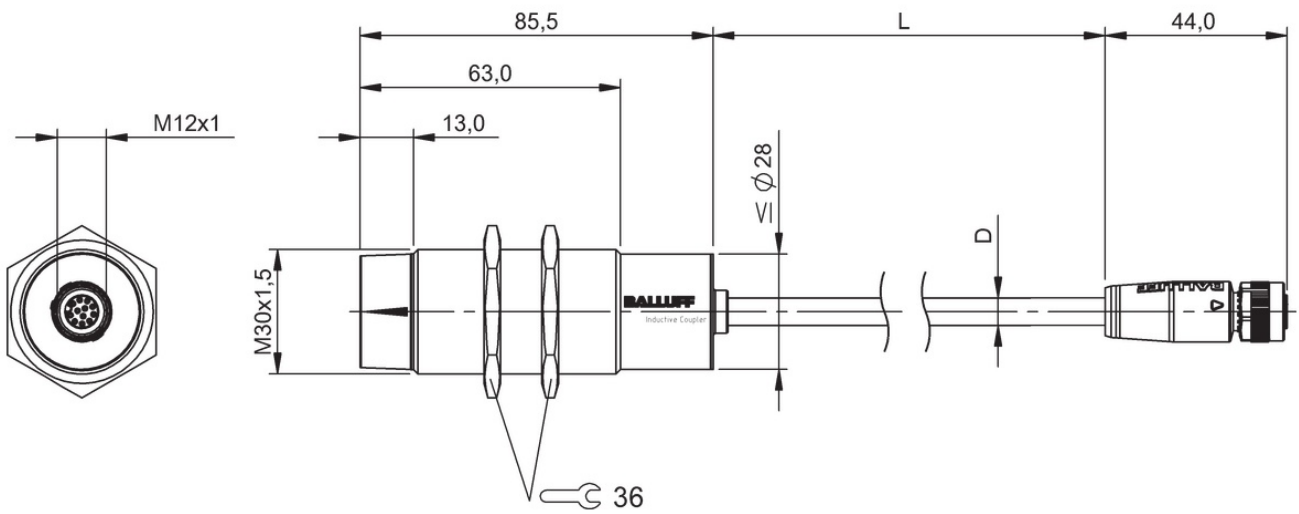


1) LED function indicator

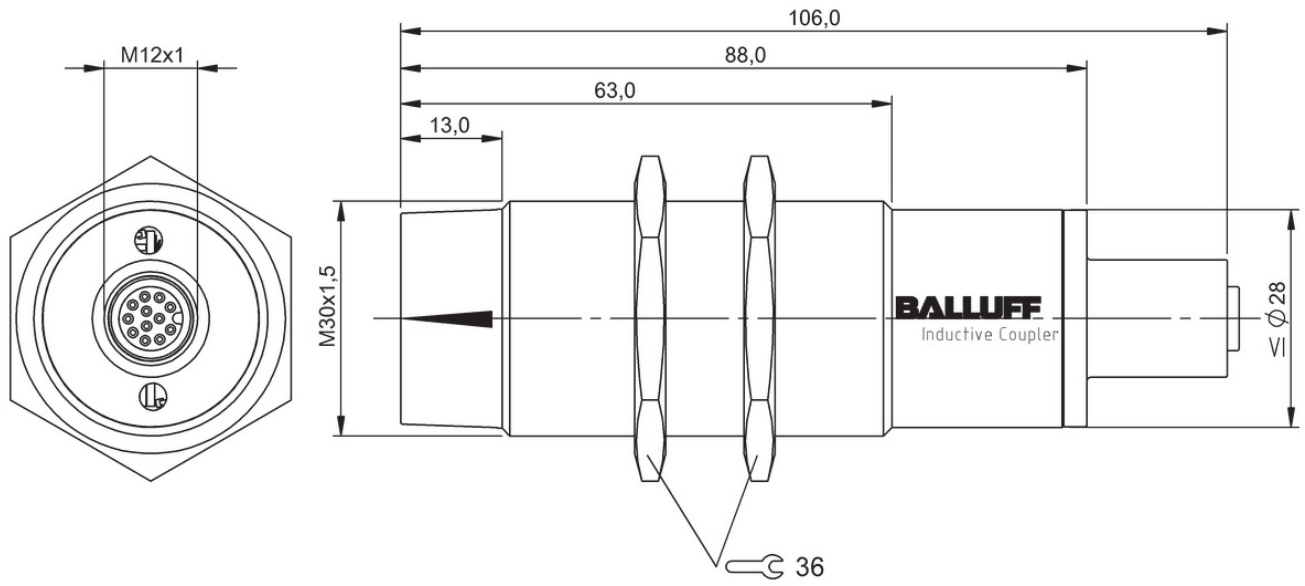
BIC007U



BIC0009



BIC005J



BIC000A

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	BIC0007 BIC 1P0-P2A50-M30MI3-SM4A4A	BIC0008 BIC 2P0-P2A50-M30MI3-SM4A5A	
Function	Power only	Power only	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 4-pin	Connector, M12x1, 5-pin	
Rated operating voltage U _e	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	Brass	Brass	
Dimension	Ø 30 x 100 mm	Ø 30 x 107.5 mm	
Ambient temperature	-5...55 °C	-5...55 °C	
Protection degree	IP67	IP67	
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	BIC0075 BIC 1P0-P25A0-Q120AE-SA3A40	BIC0076 BIC 2P0-P25A0-Q120AE-SA3A40	BIC0073 BIC 1P0-P25A0-Q120AE-SA3A50	BIC0074 BIC 2P0-P25A0-Q120AE-SA3A50
	Power only	Power only	Power only	Power only
	0...4 mm	0...4 mm	0...4 mm	0...4 mm
	Base	Remote	Base	Remote
	Connector, 7/8", 4-pole	Connector, 7/8", 4-pole	Connector, 7/8", 5-pole	Connector, 7/8", 5-pole
	24 VDC	—	24 VDC	—
	—	24 VDC	—	24 VDC
	—	5 A	—	5 A
	Aluminum, black anodized	Aluminum, black anodized	Aluminum, black anodized	Aluminum, black anodized
	120 x 45 x 120 mm	120 x 45 x 120 mm	120 x 45 x 120 mm	120 x 45 x 120 mm
	-10...50 °C	-10...50 °C	-10...50 °C	-10...50 °C
	IP67	IP67	IP67	IP67
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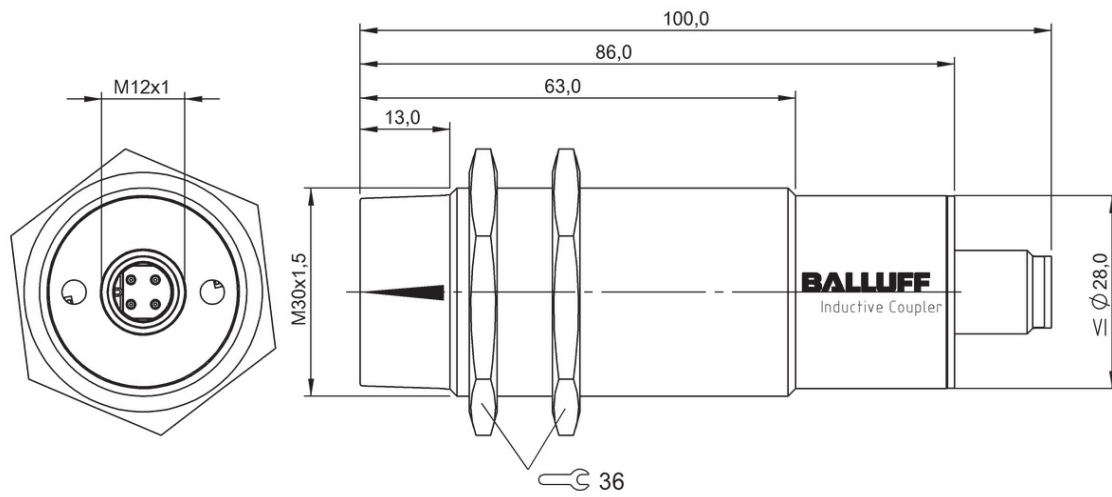
Safety

Industrial Networking

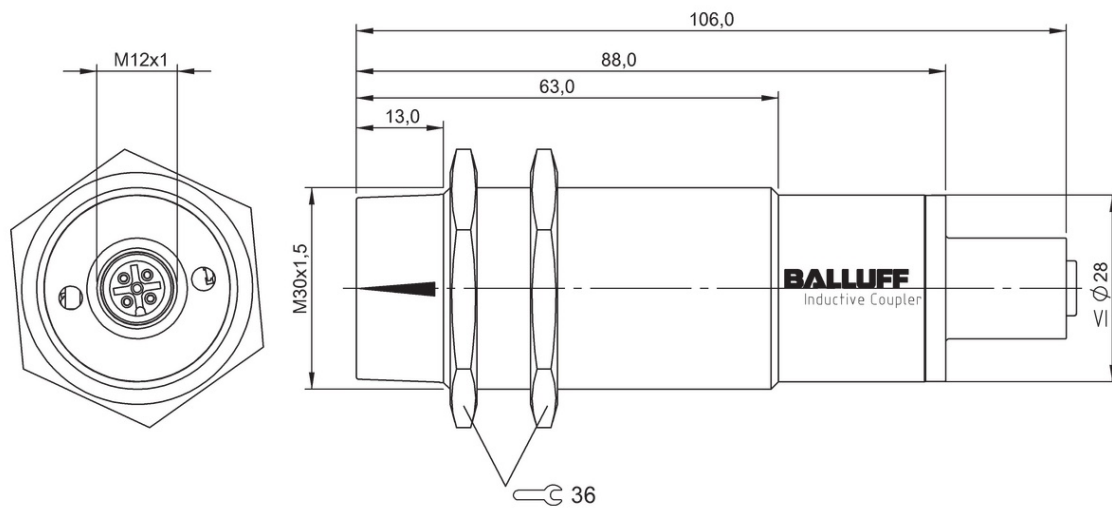
Power Supply

Connectivity

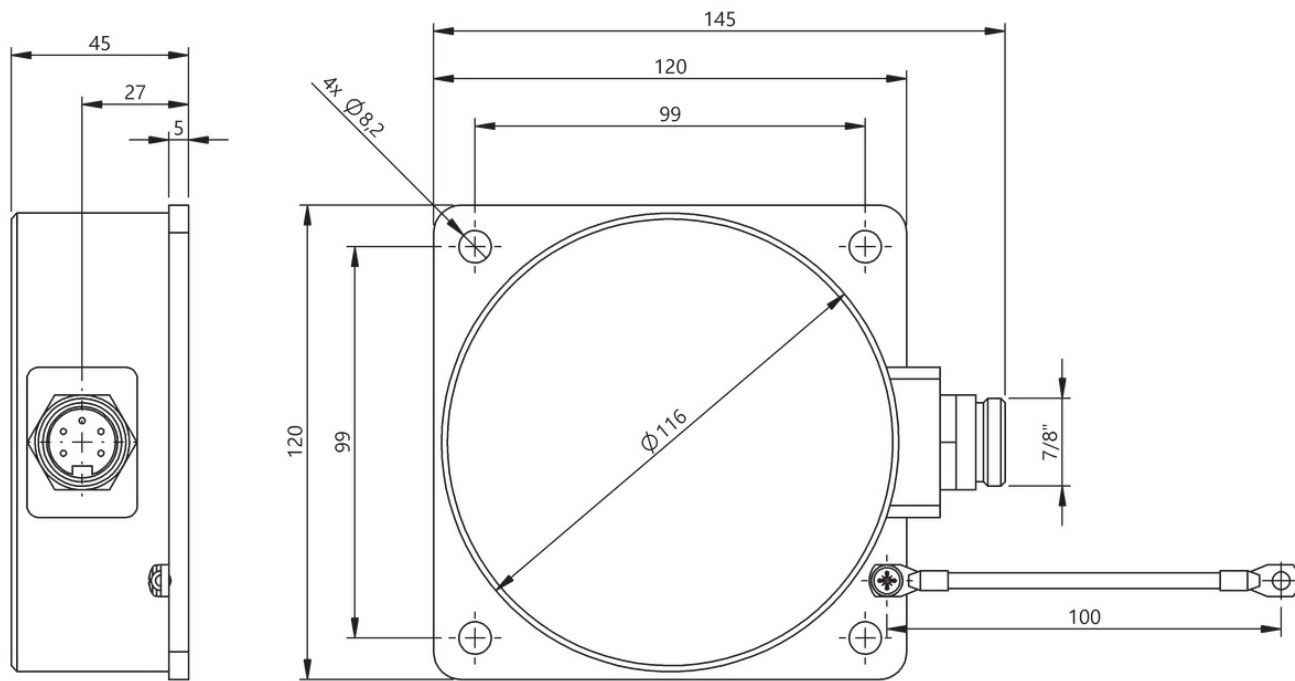
Accessories



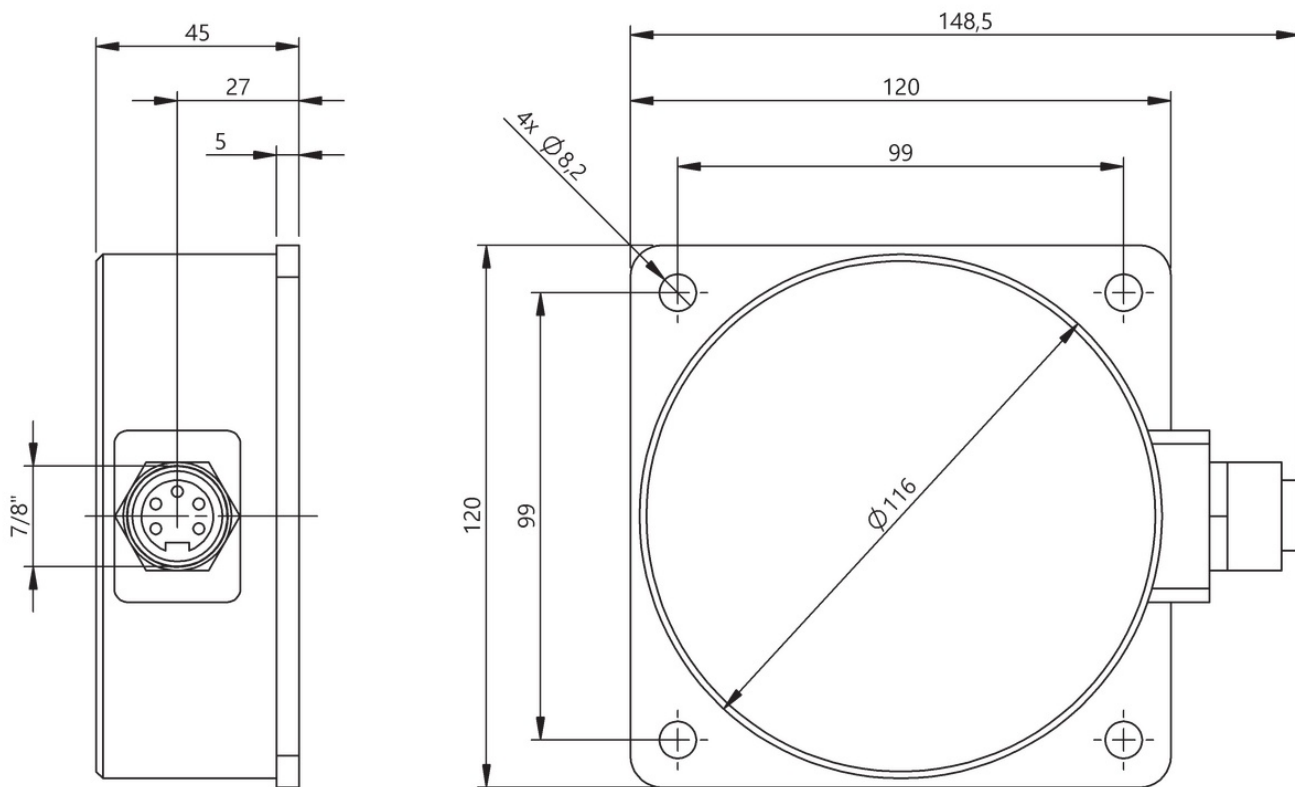
BIC0007



BIC0008



BIC0075, BIC0073



BIC0076, BIC0074