



Capacitive sensors ensure accurate detection of positions and levels



Capacitive sensors



Easy parameter setting via IO-Link before installation of the sensor

Versatile data processing via IO-Link

Plastic or metal housings for different applications

Sensors for position and level detection

Mounting accessories for installation on tanks or sight glasses (bypass)



Capacitive sensors

Capacitive sensors are used for non-contact detection of any types of objects and for level monitoring. In contrast to inductive sensors, which only detect metallic objects, capacitive sensors can also detect non-metallic materials.

IO-Link for more convenience

IO-Link allows direct detection of the process value or switch-on/switch-off delays of the output. The parameters are set via the IO-Link interface.

Capacitive touch sensors

Capacitive touch sensors are wear and maintenance-free since switching does not require any pressure. Their operating principle is dynamic, static or latching. They are typically used as start / stop buttons or enable switches.

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Position sensors


Sensors for level and position detection DC


Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Drawing no.	Order no.
Cable 2 m · Output function  · DC PNP · Wiring diagram no. 1									
	M12 / L = 69	4 f	high-grade stainless steel	10...36	IP 65	50	100	1	KF5014
	M12 / L = 70	8 nf	high-grade stainless steel	10...36	IP 65	50	100	2	KF5015
Cable 2 m · Output function  · DC PNP · Wiring diagram no. 2									
	M18 / L = 77	8 nf	PP	10...36	IP 65 / IP 67	10	200	3	KG5069
M12 connector · Output function  · DC PNP · Wiring diagram no. 19 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M30 / L = 116	nf	PPS	10...30	IP 67	10	200	4	KN5121
M12 connector · Output function  · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 87	12 nf	PBT	10...36	IP 65 / IP 67	10	200	5	KG5066
	M18 / L = 87	8 nf	PBT	10...36	IP 65 / IP 67	10	200	5	KG5071
	M30 / L = 90	20 nf	PBT	10...36	IP 65 / IP 67	10	200	6	KI5083
M12 connector · Output function  · DC PNP/NPN · Wiring diagram no. 20 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M30 / L = 90	20 nf	PBT	10...36	IP 65 / IP 67	10	200	6	KI5082
M12 connector · Output function  · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 60	4 f	High-grade st. steel	10...36	IP 65	50	100	7	KF5001
	M12 / L = 61	8 nf	High-grade st. steel	10...36	IP 65	50	100	8	KF5002
M12 connector · Output function  · DC NPN · Wiring diagram no. 4 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 60	4 f	High-grade st. steel	10...36	IP 65	50	100	7	KF5013

Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Drawing no.	Order no.
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M12 connector · Output function  · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202

	M30 / L = 90	8 f	High-grade st. steel	10...30	IP 65 / IP 67	10	100	9	KI5085
	M30 / L = 90	15 nf	High-grade st. steel	10...30	IP 65 / IP 67	10	100	10	KI5087

M12 connector · Output function  · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204




	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	11	KG6000
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f = flush / nf = non flush / qf = quasi-flush



Sensors for level and position detection AC/DC


Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f AC / DC [Hz]	I _{load} AC / DC [mA]	Drawing no.	Order no.
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Cable 2 m · Output function  · AC/DC · Wiring diagram no. 5

	M18 / L = 84	8 nf	PBT	20...250	IP 67	25 / 50	150 / 100	12	KG0009*
	M30 / L = 81	15 nf	PBT	20...250	IP 65	25 / 40	200	13	KI0016*
	120 x 80 x 30	60 nf	modified PPO	20...250	IP 65	10	200	14	KD0012*

Cable 2 m · Output function  · AC/DC · Wiring diagram no. 6

	M18 / L = 84	8 nf	PBT	20...250	IP 67	25 / 50	150 / 100	12	KG0010*
	M30 / L = 81	15 nf	PBT	20...250	IP 65	25 / 40	200	13	KI0020*

1/2" UNF-Connector · Output function  · AC/DC · Wiring diagram no. 7 · Connector group 33

	M18 / L = 87	12 nf	PBT	20...250	IP 65 / IP 67	10	100	15	KG0016*
	M30 / L = 90	20 nf	PBT	20...250	IP 65 / IP 67	10	100	16	KI0054*



Position sensors

Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f AC / DC [Hz]	I _{load} AC / DC [mA]	Drawing no.	Order no.
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Terminals · Output function · AC/DC · Wiring diagram no. 8

	M30 / L = 125	15 nf	PBT	20...250	IP 65	25 / 40	200	17	KI0024*
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Terminals · Output function · AC/DC · Wiring diagram no. 21

	105 x 80 x 40	60 nf	modified PPO	20...250	IP 65	10	200	18	KD0009*
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f = flush / nf = non flush / qf = quasi-flush

* Note on use of miniature fuses for electrical connection

Miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting) Recommendation: check the unit for reliable function after a short circuit.

Sensors with IO-Link

Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Drawing no.	Order no.
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M12 connector · Output function · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204

	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	19	KI6000
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Cable 2 m · Output function · DC NPN · Wiring diagram no. 9

	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5300
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Cable 2 m · Output function · DC PNP · Wiring diagram no. 10

	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5301
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Cable 2 m · Output function · DC NPN · Wiring diagram no. 11














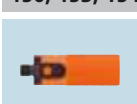


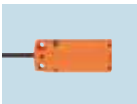
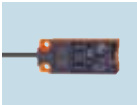


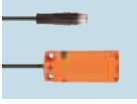
	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5302
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Cable 2 m · Output function · DC PNP · Wiring diagram no. 10

	M30 / L = 92	15 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5304
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Cable 2 m · Output function · DC PNP · Wiring diagram no. 1













	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5303
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Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Draw- ing no.	Order no.
Cable 2 m · Output function  · DC PNP · Wiring diagram no. 12									
	M30 / L = 92	15 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	20	KI5305
M12 connector · Output function  · DC NPN · Wiring diagram no. 4 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5306
M12 connector · Output function  · DC PNP · Wiring diagram no. 13 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5307
M12 connector · Output function  · DC NPN · Wiring diagram no. 14 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5308
M12 connector · Output function  · DC PNP · Wiring diagram no. 15 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M30 / L = 92	25 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5309
M12 connector · Output function  · DC PNP · Wiring diagram no. 13 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M30 / L = 92	15 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5310
M12 connector · Output function  · DC PNP · Wiring diagram no. 15 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M30 / L = 92	15 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	40	200	21	KI5311
Cable 2 m · Output function  /  · DC PNP · Wiring diagram no. 2									
	20 x 7 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	22	KQ5100
	20 x 14 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	23	KQ6002
Cable with connector 0.04 m · Output function  /  · DC PNP · Wiring diagram no. 3 · Connector groups 1, 2, 3, 78, 84, 145, 146									
	20 x 7 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	24	KQ5102







Position sensors

Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Draw- ing no.	Order no.
Cable with connector 0.04 m · Output function · DC PNP · Wiring diagram no. 3 · Connector groups 4, 5, 80, 86, 147									
	20 x 14 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	25	KQ6004
Cable with connector 0.1 m · Output function · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	20 x 7 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	26	KQ5101
	20 x 14 x 48	12 nf	PBT	10...30	IP 65 / IP 67	10	100	27	KQ6005
M12 connector · Output function · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	11	KG6000
Cable 2 m · Output function · DC NPN · Wiring diagram no. 9									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5300
Cable 2 m · Output function · DC PNP · Wiring diagram no. 10									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5301
Cable 2 m · Output function · DC NPN · Wiring diagram no. 11									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5302
Cable 2 m · Output function · DC PNP · Wiring diagram no. 1									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5303
Cable 2 m · Output function · DC PNP · Wiring diagram no. 10									
	M18 / L = 92.5	8 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5304
Cable 2 m · Output function · DC NPN · Wiring diagram no. 1									
	M18 / L = 92.5	8 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	28	KG5305

Type	Dimensions [mm]	Sensing range [mm]	Material	U _b [V]	Protection	f [Hz]	I _{load} [mA]	Drawing no.	Order no.
M12 connector · Output function  · DC NPN · Wiring diagram no. 4 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5306
M12 connector · Output function  · DC PNP · Wiring diagram no. 13 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5307
M12 connector · Output function  · DC NPN · Wiring diagram no. 14 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5308
M12 connector · Output function  · DC PNP · Wiring diagram no. 15 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 92.5	15 nf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5309
M12 connector · Output function  · DC PNP · Wiring diagram no. 13 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 92.5	8 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5310
M12 connector · Output function  · DC PNP · Wiring diagram no. 15 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	M18 / L = 92.5	8 qf	PBT	10...30	IP 65 / IP 67 / IP 69K	30	200	29	KG5311

f = flush / nf = non flush / qf = quasi-flush

Sensors with ATEX approval

Type	Dimensions [mm]	Sensing range [mm]	Material	U _{nom.} at 1 KΩ [V]	U _b [V]	Internal capac. [nF]	Internal inductance [μH]	f [Hz]	Drawing no.	Order no.
Cable 2 m · Output function  · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 16										
	M30 / L = 81	15 nf	PBT	8.2 DC	7.5...15	375	1	40	13	KI5030
Cable 2 m · Output function  · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 17										
	M34 / L = 92	15 nf	Brass	8.2 DC	7.5...15	375	1	40	30	KX5001



Position sensors

Type	Dimensions [mm]	Sensing range [mm]	Material	U _{nom.} at 1 K Ω [V]	U _b [V]	Internal capacit. [nF]	Internal inductance [μ H]	f [Hz]	Draw- ing no.	Order no.
Terminals · Output function · DC PNP · Wiring diagram no. 18										
	M30 / L = 150	15 nf	PBT	10...30 DC	–	–	–	10	31	KI503A
	M30 / L = 125	15 nf	PBT	10...30 DC	–	–	–	10	32	KI505A
Terminals · Output function · AC/DC · Wiring diagram no. 22										
	M30 / L = 150	15 nf	PBT	20...250 DC / 30...250 AC	–	–	–	10	31	KI000A*
	M30 / L = 125	15 nf	PBT	20...250 DC / 30...250 AC	–	–	–	10	32	KI001A*
Terminals · Output function · AC/DC · Wiring diagram no. 21										
	105 x 80 x 42	60 nf	modified PPE	20...250 AC/DC	–	–	–	4	33	KD001A*
Terminals · Output function · DC PNP · Wiring diagram no. 23										
	105 x 80 x 42	60 nf	modified PPO	10...36 DC	–	–	–	10	33	KD501A


f = flush / nf = non flush / qf = quasi-flush

* Note on use of miniature fuses for electrical connection












Miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting) Recommendation: check the unit for reliable function after a short circuit.

Switching amplifiers with ATEX approval

Type	U _b [V]	Power / current consumption [VA] / [mA]	f [Hz]	T _a [°C]	Output	Protection	Draw- ing no.	Order no.
	115	1.0 /	10	-20...60	relay (1 changeover contact)	IP 20	34	N0030A
	230	1.0 /	10	-20...60	relay (1 changeover contact)	IP 20	34	N0031A
	115	1.3 /	10	-20...60	relay (1 changeover contact per channel)	IP 20	34	N0032A
	230	1.3 /	10	-20...60	relay (1 changeover contact per channel)	IP 20	34	N0033A
	24	/ < 23	10	-20...60	relay (1 changeover contact)	IP 20	34	N0530A

Type	U _b [V]	Power / current consumption [VA] / [mA]	f [Hz]	T _a [°C]	Output	Protection	Draw- ing no.	Order no.
	24	/ < 50	5000	-20...60	2 transistor outputs PNP (100 mA, short-circuit protection)	IP 20	34	N0531A
	24	/ < 50	5000	-20...60	2 outputs (optocoupler, bipolar, 100 mA, short-circuit protection)	IP 20	34	N0532A
	24	/ < 50	10	-20...60	relay (1 changeover contact per channel)	IP 20	34	N0533A
	24	/ < 50	5000	-20...60	2 transistor outputs PNP (100 mA, short-circuit protection)	IP 20	34	N0534A

Dynamic capacitive touch sensors


Type	U _b [V]	I _{load} [mA]	Current consumption [mA]	Ambient temperature [°C]	Protection	Draw- ing no.	Order no.
Cable 2 m · Output function  · DC PNP							
	24	200	30	-40...85	IP 67 / IP 69K	35	KT5010
Cable with connector 0.3 m · Output function  · DC PNP · Connector groups 4, 5, 80, 86, 147							
	24	200	30	-40...85	IP 67 / IP 69K	35	KT5011
Cable 2 m · Output function  · DC PNP							
	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	36	KT5309
Cable with connector 0.3 m · Output function  · DC PNP · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204							
	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5102
	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5112
Cable 2 m · Output function  · DC PNP							
	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5111




Position sensors


Static capacitive touch sensors


Type	U _b [V]	I _{load} [mA]	Current consumption [mA]	Ambient temperature [°C]	Protection	Drawing no.	Order no.
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Cable 2 m · Output function  · DC PNP


	24	200	30	-40...85	IP 67 / IP 69K	35	KT5012
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Cable with connector 0.3 m · Output function  · DC PNP · Connector groups 4, 5, 80, 86, 147

	24	200	30	-40...85	IP 67 / IP 69K	35	KT5013
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Cable with connector 0.3 m · Output function  · DC PNP · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204


	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5106
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Cable 2 m · Output function  · DC PNP


	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5110
	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	36	KT5310

Capacitive touch sensors with latching evaluation principle


Type	U _b [V]	I _{load} [mA]	Current consumption [mA]	Ambient temperature [°C]	Protection	Drawing no.	Order no.
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Cable 2 m · Output function  · DC PNP


	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5150
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Cable 0.3 m · Output function  · DC PNP · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204

	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	37	KT5151
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Cable 2 m · Output function  · DC PNP


	24	200	30	-40...85	IP 65 / IP 67 / IP 69K	36	KT5350
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Cable 0.3 m · Output function  · DC PNP · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204











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Product selectors and further information can be found at: www.ifm.com

Software

Type	Description	Order no.
	LR DEVICE (USB stick) · Parameter setting of the units via the network · Software for clear online and offline parameter setting of IO-Link sensors via USB adapter · Use via USB connection cable (drivers are supplied): E30396 IO-Link interface or E30390 IO-Link master (note the respective data sheet) · IODD import and update from ifm's homepage · Reading of IODDs via storage media · Automatic sensor identification · Graphic representation of the process values and history incl. export function · Documentation and archiving · Transferable parameter sets · Full memory plug support for IO-Link 1.1	QA0011
	LR DEVICE (download) · Parameter setting of the units via the network · Software for clear online and offline parameter setting of IO-Link sensors via USB adapter · Use via USB connection cable (drivers are supplied): E30396 IO-Link interface or E30390 IO-Link master (note the respective data sheet) · IODD import and update from ifm's homepage · Reading of IODDs via storage media · Automatic sensor identification · Graphic representation of the process values and history incl. export function · Documentation and archiving · Transferable parameter sets · Full memory plug support for IO-Link 1.1	QA0012

Accessories

Type	Description	Order no.
	Memory plug · Parameter memory for IO-Link sensors · Storage capacity: 2 Kbytes · Housing materials: PA PACM 12 / PET / sealing: FPM / nut: stainless steel 316L / 1.4404 / connector: TPU	E30398
	Cover ring 100 mm · for type KT50 · Housing materials: polycarbonate-ABS yellow	E80372
	Cover ring 100 mm · for type KT50 · Housing materials: polycarbonate-ABS green	E80373
	Cover ring 100 mm · for type KT50 · Housing materials: polycarbonate-ABS Red	E80374
	Cover ring 100 mm · for type KT50 · Housing materials: polycarbonate-ABS blue	E80375
	Cover ring 100 mm · for type KT50 · Housing materials: polycarbonate-ABS orange	E80376
	Symbol disc (plastic) · Ø 20.4 mm · for type KT51 / KT53 · Start symbol · Housing materials: Polyamide	E12377
	Symbol disc (plastic) · Ø 20.4 mm · for type KT51 / KT53 · Symbol Stop · Housing materials: Polyamide	E12378
	Symbol disc (plastic) · Ø 20.4 mm · for type KT51 / KT53 · Symbol ON · Housing materials: Polyamide	E12379
	Symbol disc (plastic) · Ø 20.4 mm · for type KT51 / KT53 · Symbol OFF · Housing materials: Polyamide	E12380



Position sensors








Type	Description	Order no.
	Symbol disc (plastic) · Ø 20.4 mm · for type KT51 / KT53 · Without symbol, transparent · Housing materials: Polyamide	E12386

Accessories mounting adapters

Type	Description	Order no.
	Mounting adapter · M18 x 1 - G $\frac{3}{4}$ · Housing materials: POM	E43900
	Mounting adapter · M18 x 1 - G 1 · Housing materials: POM	E43904
	Mounting adapter · M30 x 1.5 - G $1\frac{1}{4}$ · Housing materials: PVDF / EPDM	E11036
	Mounting adapter · M30 x 1.5 - G $1\frac{1}{2}$ · Housing materials: PVDF / EPDM	E11034
	Mounting adapter · Ø 34 mm - G $1\frac{1}{2}$ · Housing materials: POM	E11027
	Locknut · G $\frac{3}{4}$ · for mounting adapter · Housing materials: POM	E43902
	Locknut · G $1\frac{1}{4}$ · for mounting adapter · Housing materials: PVDF	E11030
	Locknut · G $1\frac{1}{2}$ · for mounting adapter · Housing materials: PVDF	E11032
	Protective cover · G $1\frac{1}{4}$ · for mounting adapter · Housing materials: PES black transparent	E11078

Accessories mounting components

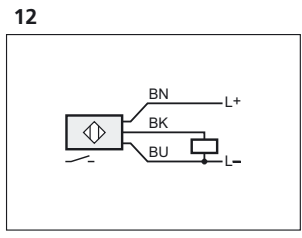
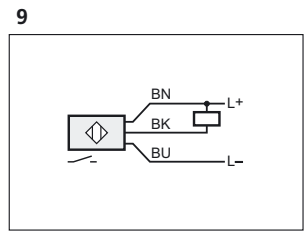
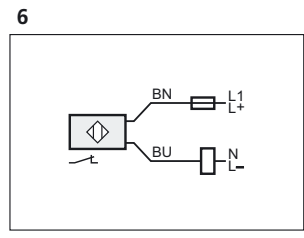
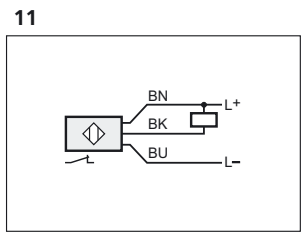
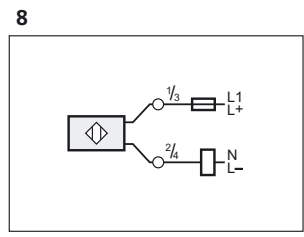
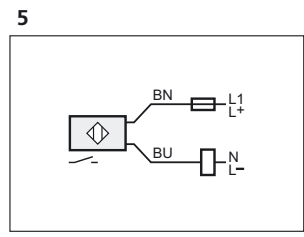
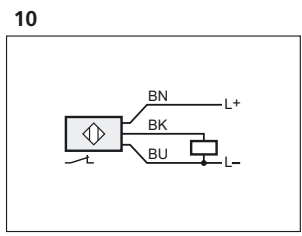
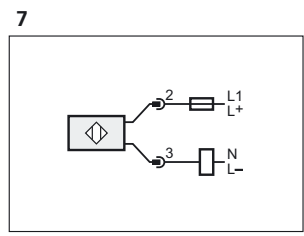
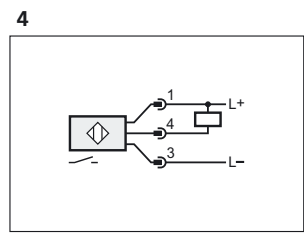
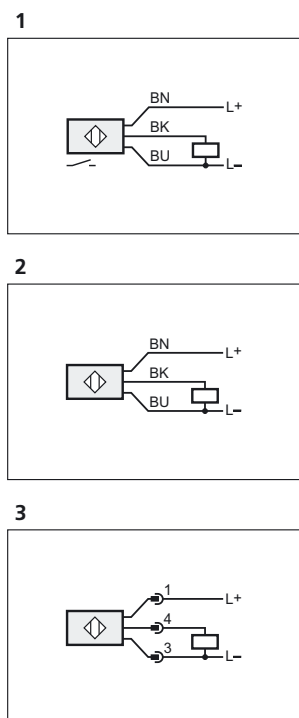
Type	Description	Order no.
	Mounting clamp · Ø 20 mm - Ø 18 mm · with reducing bush · for type M18 · Housing materials: PBT	E10076
	Mounting clamp · Ø 34 mm - Ø 30 mm · with reducing bush · for type M30 · Housing materials: PBT	E10077

Type	Description	Order no.
	Angle bracket · for type M12 · Housing materials: stainless steel	E10735
	Angle bracket · for type M18 · Housing materials: stainless steel	E10736
	Angle bracket · for type M30 · Housing materials: stainless steel	E10737
	Mounting adapter for free-standing mounting · for type KQ5, KQ6 · Housing materials: adapter: PBT / inserts: Brass / screw: steel galvanised	E12153
	Mounting adapter · Pipe and tube installation KQ5 / KQ6 with cable ties · Fixing of the types KQ5 and KQ6 to pipes and tubes · Housing materials: Mounting adapter: PA 12 black	E12163
	Fixing strap · Length: 760 mm · for capacitive level sensors · for type KNQ, KQ5, KQ6 · Housing materials: PA	E10880
	Mounting set · M30 x 1.5 / G 1/4...G 1 · for capacitive sensors on rising pipes G 1/4" - 1" · Housing materials: POM	E11037

Wiring diagrams

Core colours

- BN brown
- BU blue
- BK black
- GN/YE green/yellow

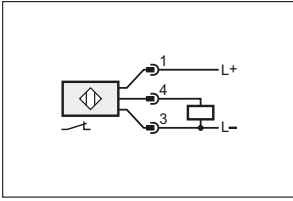




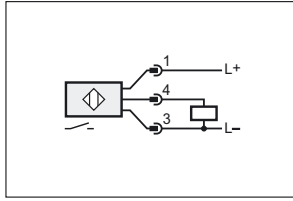
Position sensors

Wiring diagrams

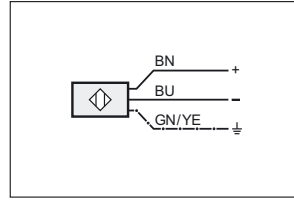
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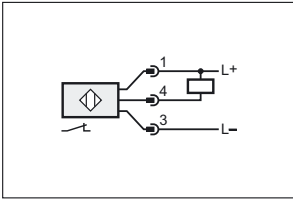
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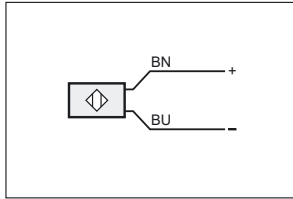
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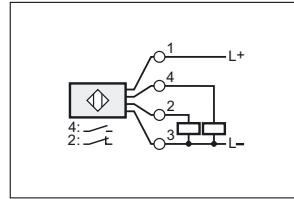
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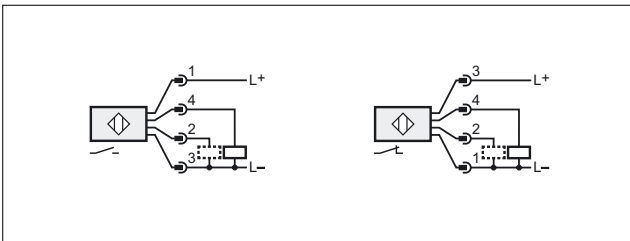
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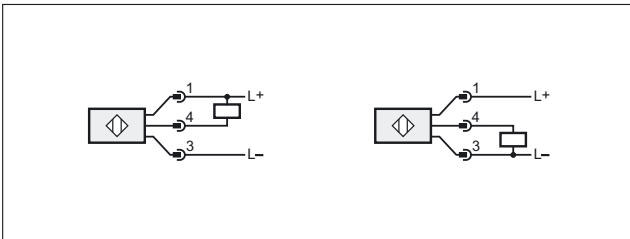


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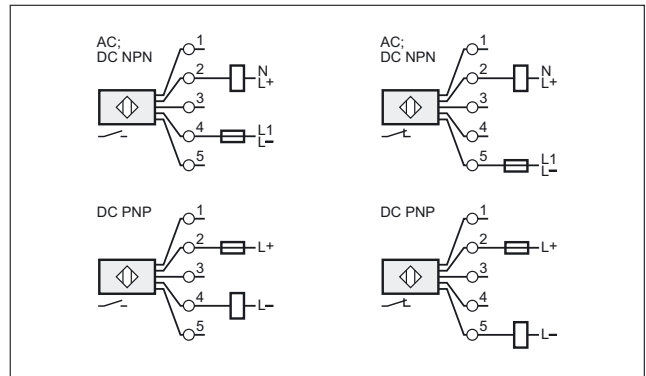


2: function check output / programming wire

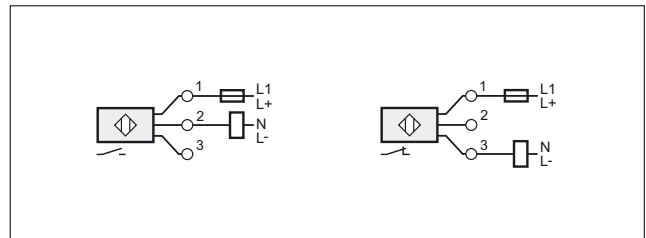
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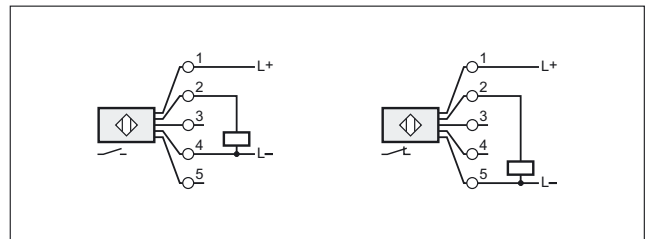
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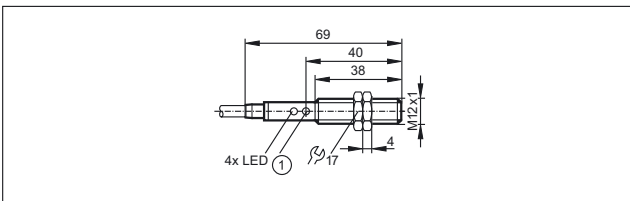


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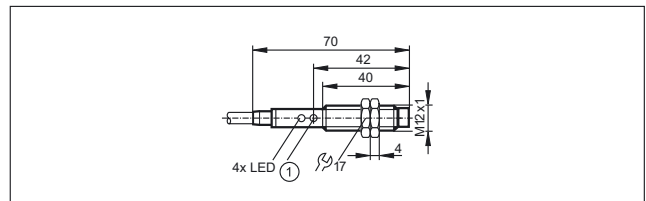


Scale drawings / drawing no. – CAD download: www.ifm.com

1

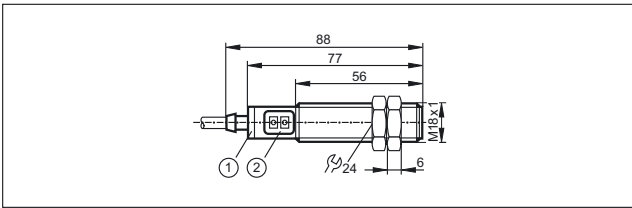


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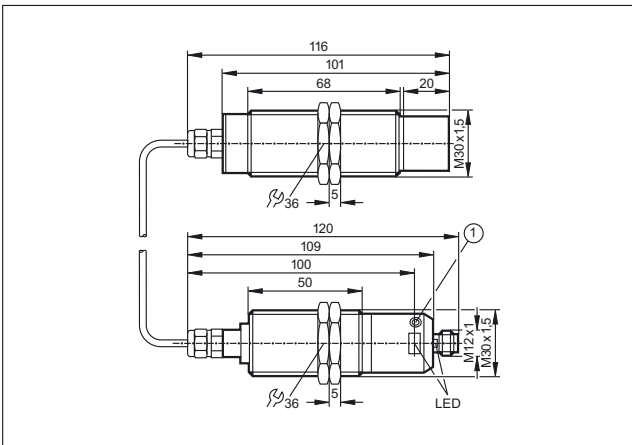
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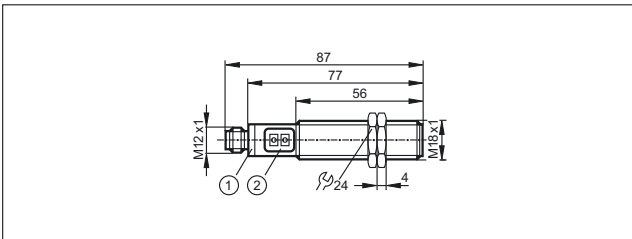
1: LED ring, 2: Programming buttons

4



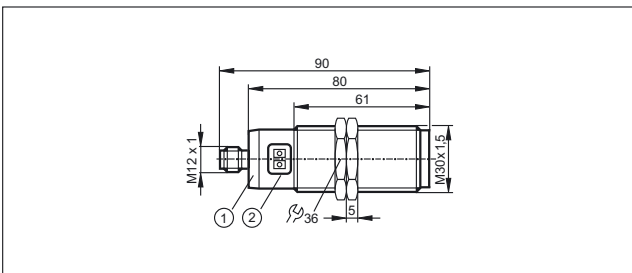
1: Programming button

5



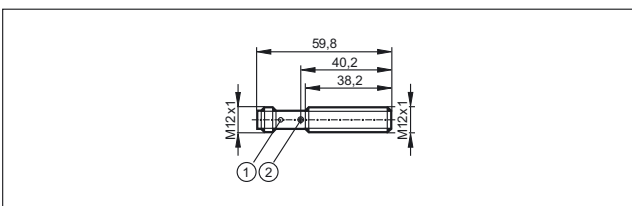
1: LED ring, 2: Programming buttons

6



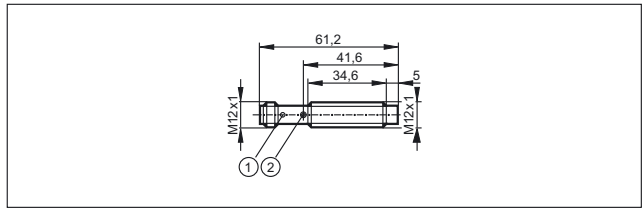
1: LED ring, 2: Programming buttons

7



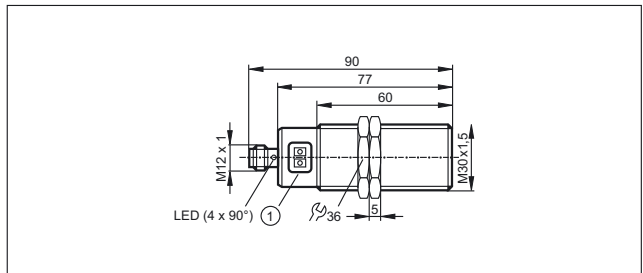
1: LED 4 x 90°, 2: potentiometer

8



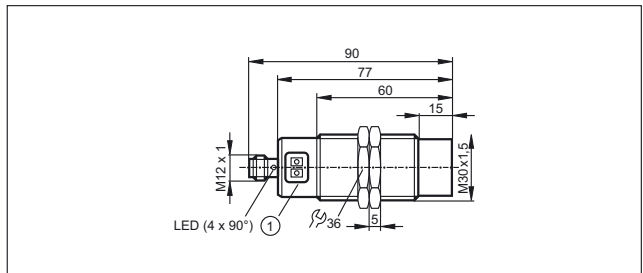
1: LED 4 x 90°, 2: potentiometer

9



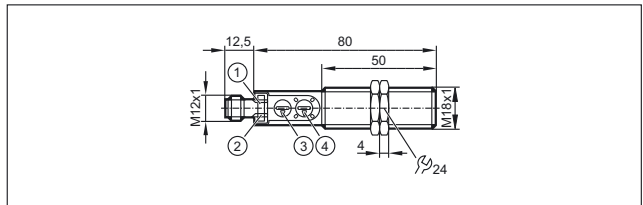
1: Programming buttons

10



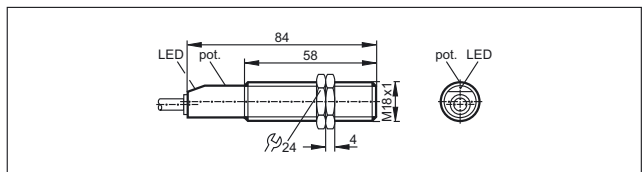
1: Programming buttons

11

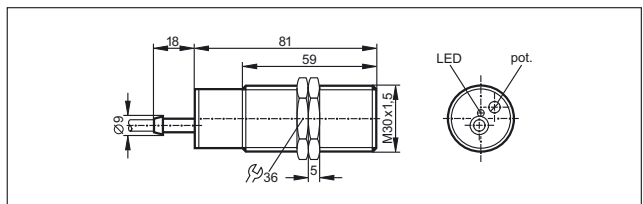


1: LED yellow (output status indication), 2: LED green (output status indication), 3: Potentiometer (sensing range), 4: Potentiometer (switching function)

12



13

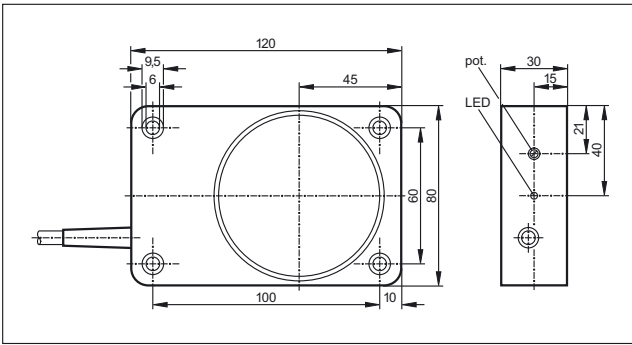




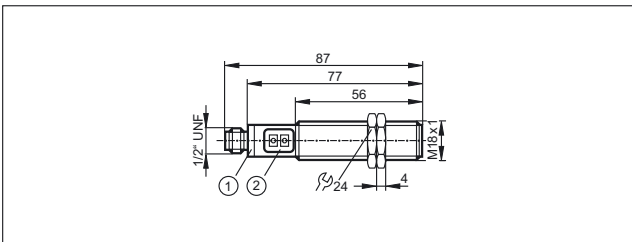
Position sensors

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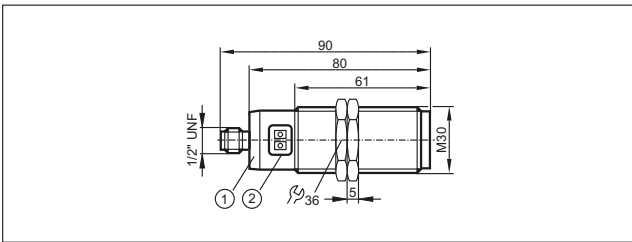
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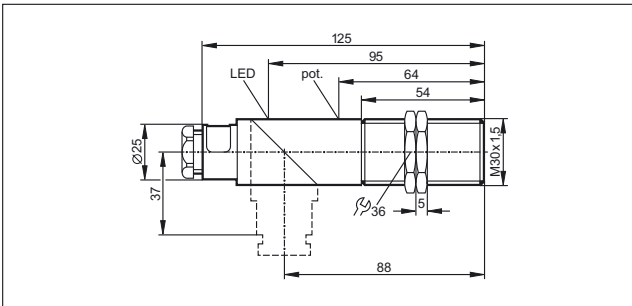


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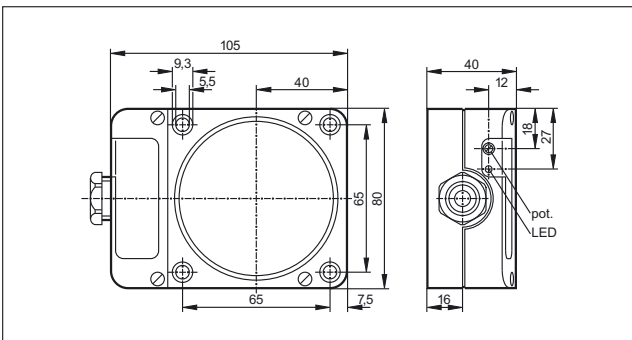


1: LED ring, 2: Programming buttons

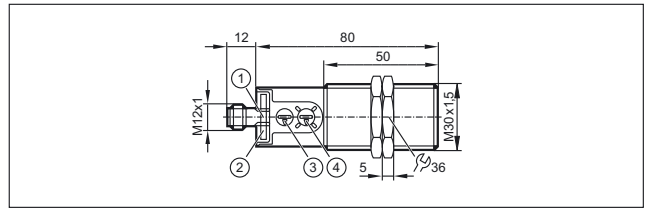
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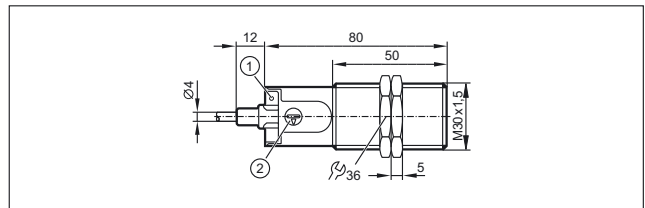


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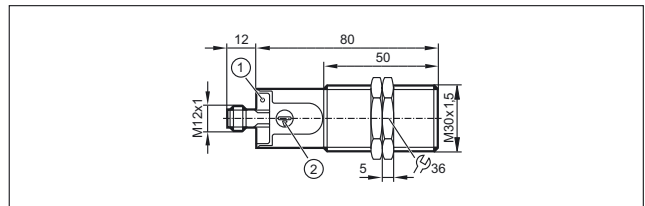
1: LED yellow (output status indication), 2: LED green (output status indication), 3: Potentiometer (sensing range), 4: Potentiometer (switching function)

20



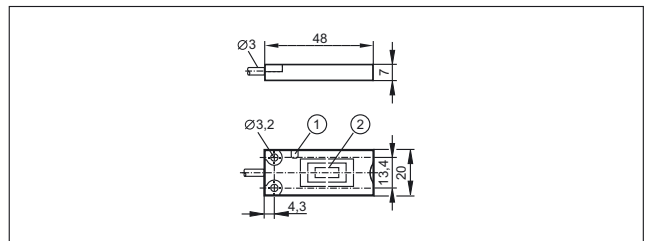
1: LED yellow (output status indication), 2: Potentiometer (sensing range)

21



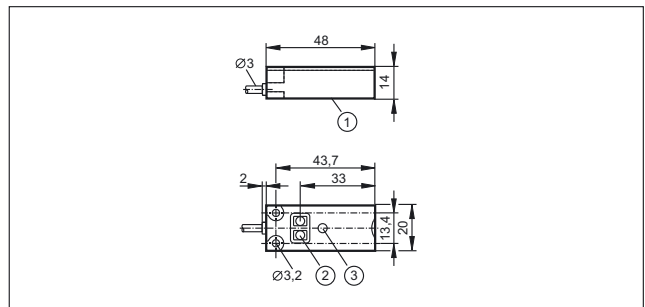
1: LED yellow (output status indication), 2: Potentiometer (sensing range)

22



1: LED, 2: sensing face

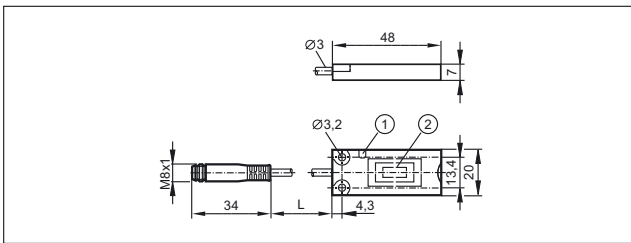
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1: sensing face, 2: Programming buttons, 3: LED

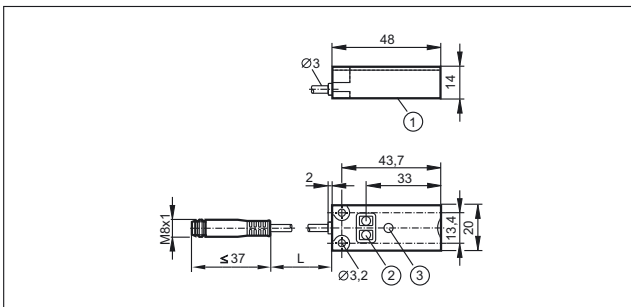
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24



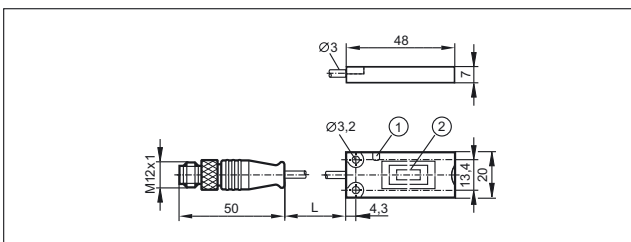
1: LED, 2: sensing face

25



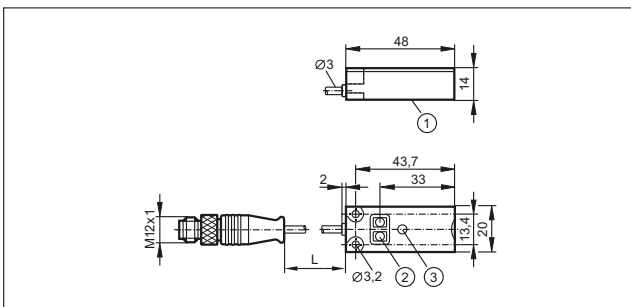
1: sensing face, 2: Programming buttons, 3: LED

26



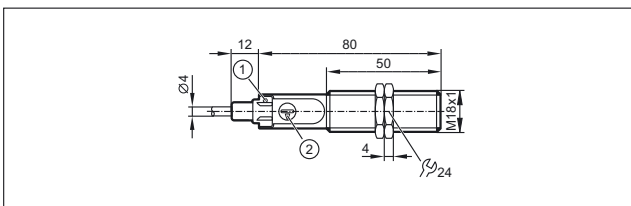
1: LED, 2: sensing face

27

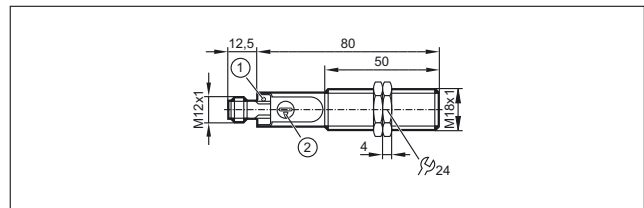


1: sensing face, 2: Programming buttons, 3: LED

28

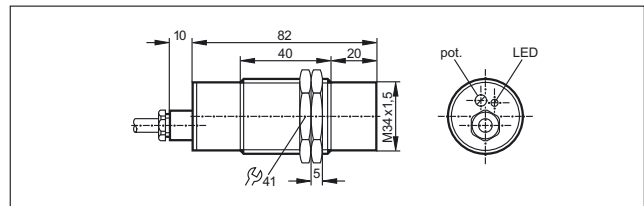


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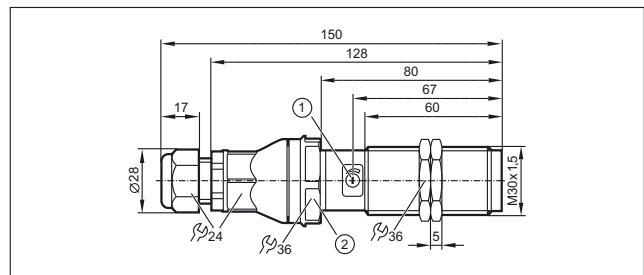


1: LED yellow (output status indication), 2: Potentiometer (sensing range)

30

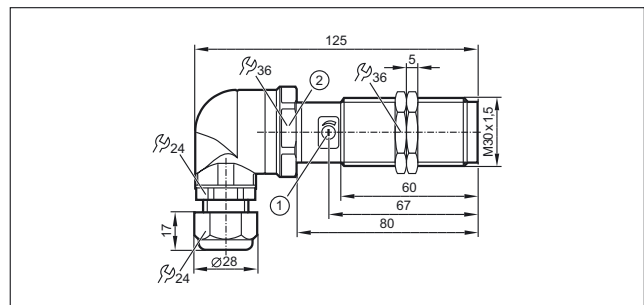


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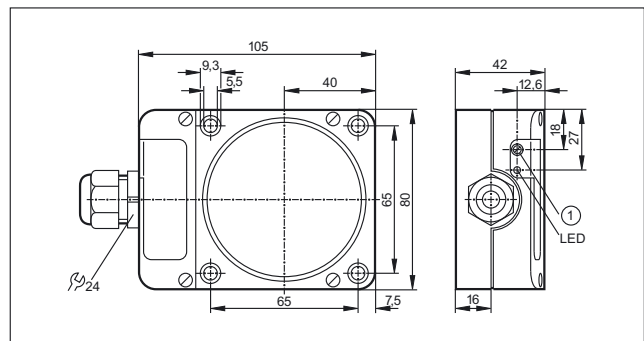
1: potentiometer, 2: tightening torque 10 Nm

32



1: potentiometer, 2: tightening torque 10 Nm

33



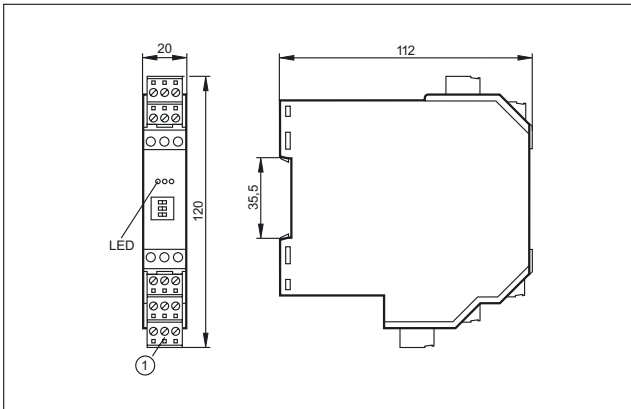
1: potentiometer



Position sensors

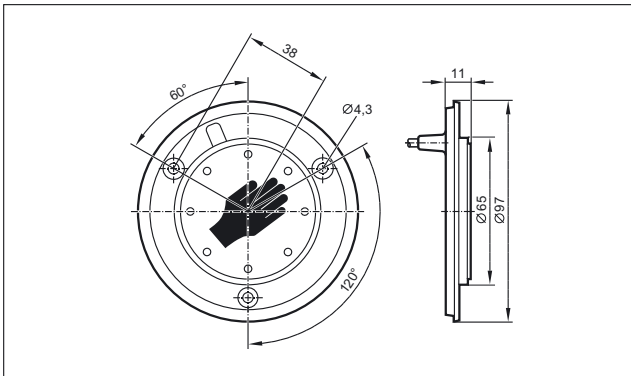
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34

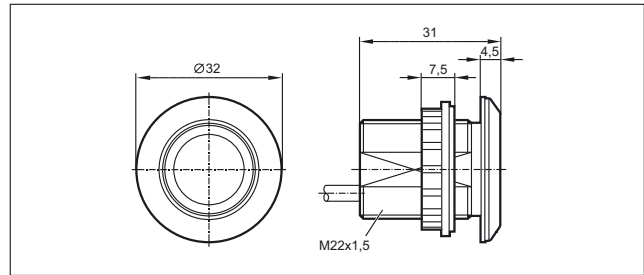


1: Combicon plug with screw terminals (optional)

35



36



37

