Inductive sensors for all application areas

Inductive sensors

Sensors for all application areas

Wide choice of housing types and operating voltages

High-quality housing materials

Vast selection of assembly and connection technology

IO-Link

K plus same sensing range for all metals

IP 67 IP 68 IP 69 K

Temperature range –40...+85°C

High-grade stainless steel

c UL us LISTED

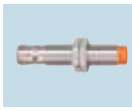
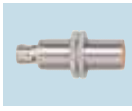
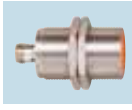
Inductive sensors

Inductive sensors offer ideal characteristics compared to mechanical switches: non-contact operation free from any wear and tear, high switching frequencies and accuracy. In addition, they are insensitive to vibration, dust and moisture. Inductive sensors detect all metals without contact.

Application sensors

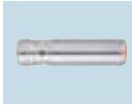
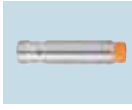
Temperature shocks, mechanical influences or aggressive cleaning agents are just a few of the possible environmental influences to which sensors are subjected. ifm therefore offers inductive sensors which have been developed for special applications. The use of selected housing materials such as stainless steel, LCP, PEEK, PBT or Duroplast and an innovative, consistent sealing concept from the sensor to the connector ensure ideal protection against penetrating media.

Sensors with IO-Link

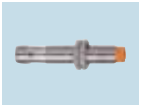
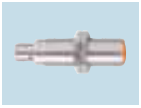
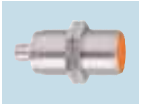
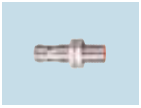
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ / ⎍ · 3-wire · DC PNP/NPN · Wiring diagram no. 36 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 60	0.375...3.75 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	600	100	1	**IF6123**
	M12 / L = 60	0.7...7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	600	100	2	**IF6124**
	M18 / L = 60	0.75...7.5 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	3	**IG6615**
	M18 / L = 60	1.3...13 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	4	**IG6616**
	M30 / L = 65	1.3...13 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	5	**II5973**
	M30 / L = 65	2.3...23 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	6	**II5974**
M12 connector · Output function ⎍ / ⎍ · 3-wire · DC PNP/NPN · Wiring diagram no. 37 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 54	2.1...21 f	PA (polyamide)	10...30	IP 67	100	100	7	**IM5172**
	40 x 40 x 54	2.6...26 nf	PA (polyamide)	10...30	IP 67	100	100	7	**IM5173**

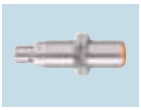
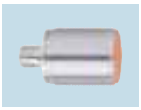
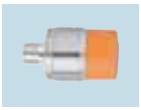
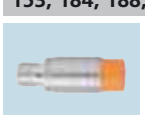
f = flush / nf = non flush / qf = quasi-flush

Sensors for industrial applications with increased sensing range

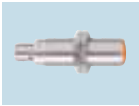
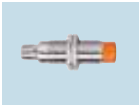
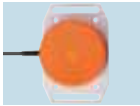
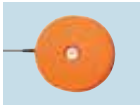
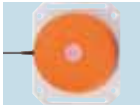
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 67	700	100	8	**IFS200**
	M12 / L = 50	7 nf	Brass	10...30	IP 67	700	100	9	**IFS201**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 38 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 46	8 f	Brass	10...30	IP 67	300	100	10	**IGS200**

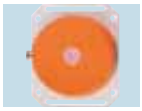
You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 38 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 51	12 nf	Brass	10...30	IP 67	250	100	11	**IGS201**
M12 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 70	4 f	Brass	10...30	IP 67	500	100	12	**IFS208**
	M12 / L = 70	7 nf	Brass	10...30	IP 67	500	100	13	**IFS209**
	M18 / L = 70	8 f	Brass	10...30	IP 67	400	100	14	**IGS208**
	M18 / L = 70	12 nf	Brass	10...30	IP 67	300	100	15	**IGS209**
	M30 / L = 70	15 f	Brass	10...36	IP 67	100	100	16	**IIS206**
	M30 / L = 70	22 nf	Brass	10...36	IP 67	100	100	17	**IIS207**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 67	700	100	18	**IFS204**
	M12 / L = 50	7 nf	Brass	10...30	IP 67	700	100	19	**IFS205**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 70	4 f	Brass	10...30	IP 67	700	100	20	**IFS212**
	M12 / L = 70	7 nf	Brass	10...30	IP 67	700	100	21	**IFS213**
	M18 / L = 45	8 f	Brass	10...30	IP 67	400	100	22	**IGS204**
	M18 / L = 50	12 nf	Brass	10...30	IP 67	300	100	23	**IGS205**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M18 / L = 70	8 f	Brass	10...36	IP 67	400	100	14	**IGS212**
	M18 / L = 70	12 nf	Brass	10...36	IP 67	300	100	15	**IGS213**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 202									
	M30 / L = 50	15 f	Brass	10...30	IP 67	100	100	24	**IIS204**
	M30 / L = 50	22 nf	Brass	10...30	IP 67	100	100	25	**IIS205**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M30 / L = 70	15 f	High-grade st. steel	10...36	IP 67	100	100	16	**IIS210**
	M30 / L = 70	22 nf	High-grade st. steel	10...36	IP 67	100	100	17	**IIS211**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 67	700	100	18	**IFS206**
	M12 / L = 50	7 nf	Brass	10...30	IP 67	700	100	19	**IFS207**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 3									
	M18 / L = 45	8 f	Brass	10...30	IP 67	400	100	22	**IGS206**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M18 / L = 50	12 nf	Brass	10...30	IP 67	300	100	23	**IGS207**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 202									
	M30 / L = 50	15 f	Brass	10...30	IP 67	100	100	24	**IIS208**
	M30 / L = 50	22 nf	Brass	10...30	IP 67	100	100	25	**IIS209**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎽/⎍⎽ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 70	8 f	Brass	10...36	IP 68	400	100	26	**IG5953**
	M18 / L = 72	12 nf	Brass	10...36	IP 68	250	100	27	**IG5954**
M8 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	M12 / L = 46	4 f	Brass	10...36	IP 67	700	100	28	**IFS210**
	M12 / L = 51	7 nf	Brass	10...36	IP 67	700	100	29	**IFS211**
	M18 / L = 46	8 f	Brass	10...36	IP 67	400	100	30	**IGS210**
Cable 2 m · Output function ⎍⎽ · 2-wire · AC · Wiring diagram no. 4									
	Ø 100	70 nf	PBT	90...250	IP 65	5	200	31	**I12001***
	Ø 100	70 nf	PBT	90...250	IP 65	5	200	32	**I12003***
	Ø 164	120 nf	PBT	90...250	IP 65	3	200	33	**I22001***
	Ø 164	120 nf	PBT	90...250	IP 65	3	200	34	**I22003***
Cable 2 m · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 5									
	Ø 100	70 nf	PBT	10...36	IP 65	5	250	31	**I17001**
	Ø 100	70 nf	PBT	10...36	IP 65	5	250	32	**I17003**
	Ø 164	120 nf	PBT	10...36	IP 65	3	250	33	**I27001**

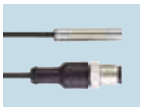
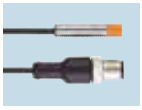
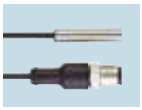
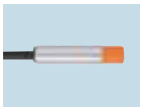
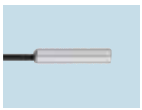
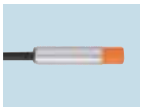
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
7/8" connector · Output function ⎓ · 2-wire · AC · Wiring diagram no. 6 · Connector groups 35, 36									
	Ø 164	120 nf	PBT	90...250	IP 65	3	200	35	**I22006***

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

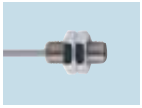
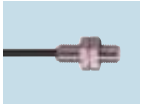
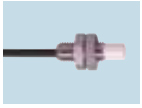
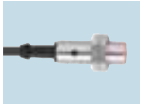
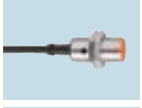
*** Note on use of miniature fuses for electrical connection**

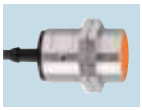
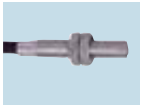
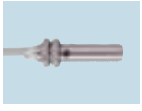
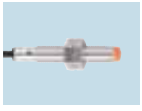
Miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting) Recommendation: check the unit for reliable function after a short circuit.

Sensors for industrial applications, threaded housings

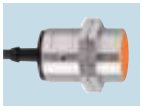
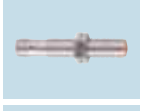
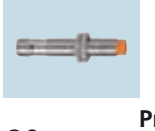
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 0.3 m · with M12 connector · Output function ⎓ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M8 / L = 37	3 f	Brass	10...30	IP 67	1000	100	36	**IE5351**
	M8 / L = 37	5 nf	Brass	10...30	IP 67	700	100	37	**IE5352**
Cable 0.3 m · with M8 connector (snap-fit) · Output function ⎓ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 1, 2, 3									
	M8 / L = 37	3 f	Brass	10...30	IP 67	1000	100	38	**IE5344**
	M8 / L = 37	5 nf	Brass	10...30	IP 67	700	100	39	**IE5346**
Cable 2 m · Output function ⎓ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 41									
	M8 / L = 37	3 f	Brass	10...30	IP 67	1000	100	40	**IE5343**
	M8 / L = 37	5 nf	Brass	10...30	IP 67	700	100	39	**IE5345**
Cable 2 m · Output function ⎓ · 3-wire · DC PNP · Wiring diagram no. 5									
	M8 / L = 35	1 f	Brass	10...36	IP 67	750	200	41	**IE5072**
	M8 / L = 35	2 nf	PBT	10...36	IP 67	800	200	41	**IE5099**
	M8 / L = 50	1 f	Brass	10...36	IP 67	750	200	42	**IE5121**

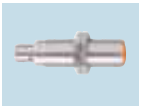
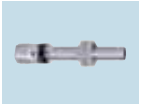
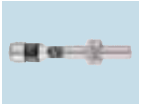
You can find wiring diagrams and scale drawings from page 134

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 ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M8 / L = 50	1 f	PBT	10...36	IP 67	1000	200	42	**IE5129**
	M8 / L = 20	1.5 f	stainless steel	10...30	IP 67	4000	200	43	**IE5348**
	M8 / L = 27	2 f	High-grade st. steel	10...30	IP 67	1500	100	44	**IE5368**
	M8 / L = 27	4 nf	High-grade st. steel	10...30	IP 67	500	100	45	**IE5369**
	M12 / L = 35	2 f	Brass	10...36	IP 67	1500	150	46	**IF5188**
	M12 / L = 35	4 nf	Brass	10...36	IP 67	1500	150	47	**IF5249**
	M12 / L = 71	2 f	Brass	10...55	IP 67	800	250	48	**IF5297**
	M12 / L = 71	2 f	PBT	10...55	IP 67	800	250	48	**IF5313**
	M12 / L = 71	4 nf	Brass	10...36	IP 67	1500	250	49	**IF5329**
	M12 / L = 71	4 nf	PBT	10...36	IP 67	400	250	48	**IF5345**
	M18 / L = 38	5 f	Brass	18...36	IP 67	500	125	50	**IG5221**
	M18 / L = 38	8 nf	Brass	18...36	IP 67	200	125	51	**IG5285**
	M18 / L = 80	5 f	Brass	10...36	IP 67	500	250	52	**IG5397**
	M18 / L = 80	8 nf	Brass	10...36	IP 67	300	250	53	**IG5398**
	M18 / L = 80	5 f	PBT	10...36	IP 67	500	250	52	**IG5399**
	M18 / L = 80	8 nf	PBT	10...36	IP 67	300	250	52	**IG5401**

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 ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M30 / L = 45	10 f	Brass	18...36	IP 67	300	125	54	**II5166**
	M30 / L = 81	10 f	Brass	10...36	IP 67	250	250	55	**II5256**
	M30 / L = 81	15 nf	Brass	10...36	IP 67	250	250	56	**II5284**
	M30 / L = 81	15 nf	PBT	10...36	IP 67	250	250	55	**II5300**
	M30 / L = 45	15 nf	Brass	18...36	IP 67	250	125	57	**II5346**
	M30 / L = 81	10 f	PBT	10...36	IP 67	250	250	55	**II5369**
	M5 / L = 30	0.8 f	stainless steel	10...36	IP 65	2000	100	58	**IY5029**
	M5 / L = 27	1.5 nf	stainless steel	10...30	IP 67	1800	100	59	**IY5049**
	M5 / L = 23	0.8 f	stainless steel	10...30	IP 65	2000	100	60	**IY5051**
	M5 / L = 23	1.2 f	stainless steel	10...30	IP 65	2000	100	60	**IY5052**
Cable 2 m · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 42									
	M8 / L = 50	2 nf	PBT (Pocan)	5...36	IP 67	2000	200	42	**IE5202**
	M8 / L = 50	1 f	Brass	5...36	IP 67	2000	200	42	**IE5222**
	M8 / L = 50	2 nf	Brass	5...36	IP 67	2700	200	61	**IE5238**
	M12 / L = 71	4 nf	PBT	10...55	IP 67	1500	400	48	**IF5597**
	M12 / L = 71	2 f	PBT	10...55	IP 67	1100	400	48	**IF5644**

You can find wiring diagrams and scale drawings from page 134

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 ⎍⎓ / ⎍⏚ · 2-wire · DC PNP/NPN · Wiring diagram no. 42									
	M12 / L = 71	2 f	Brass	10...55	IP 67	1100	400	48	**IF5645**
	M12 / L = 71	4 nf	Brass	10...55	IP 67	1500	400	49	**IF5646**
	M18 / L = 80	8 nf	PBT	10...55	IP 67	300	400	52	**IG5533**
	M18 / L = 80	5 f	PBT	10...55	IP 67	700	400	52	**IG5593**
	M18 / L = 80	5 f	Brass	10...55	IP 67	700	400	52	**IG5594**
	M18 / L = 80	8 nf	Brass	10...55	IP 67	300	400	53	**IG5596**
	M30 / L = 81	15 nf	PBT	10...55	IP 67	200	400	55	**II5436**
	M30 / L = 81	10 f	PBT	10...55	IP 67	450	400	55	**II5488**
	M30 / L = 81	10 f	Brass	10...55	IP 67	450	400	55	**II5489**
	M30 / L = 81	15 nf	Brass	10...55	IP 67	200	400	56	**II5491**
	M30 / L = 45	10 f	Brass	10...55	IP 67	450	400	54	**II5493**
M12 connector · Output function ⎍⎓ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 45	2 f	Brass	10...30	IP 67	700	100	18	**IFS214**
	M12 / L = 50	4 nf	Brass	10...30	IP 67	700	100	19	**IFS215**
M12 connector · Output function ⎍⎓ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 70	2 f	Brass	10...36	IP 67	700	100	12	**IFS216**
	M12 / L = 70	4 nf	Brass	10...36	IP 67	700	100	13	**IFS217**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M18 / L = 45	5 f	Brass	10...30	IP 67	400	100	22	**IGS214**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M18 / L = 70	5 f	Brass	10...36	IP 67	400	100	14	**IGS216**
	M18 / L = 70	8 nf	Brass	10...36	IP 67	300	100	15	**IGS217**
	M8 / L = 53	1 f	Brass	10...36	IP 67	750	200	62	**IE5090**
	M8 / L = 62	4 nf	Brass	10...36	IP 67	300	200	63	**IE5288**
	M8 / L = 62	2 f	Brass	10...36	IP 67	1000	250	64	**IE5312**
	M8 / L = 50	2 f	High-grade st. steel	10...36	IP 68 / IP 69K	1000	100	65	**IE5379**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M8 / L = 62	2 f	Brass	10...36	IP 67	800	250	66	**IE5327**
M12 connector · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 8, 10, 19, 21, 23									
	M8 / L = 69	1 f	Brass	5...36	IP 67	2700	200	67	**IE5203**
	M12 / L = 83	2 f	Brass	10...55	IP 67	1100	300	68	**IF5598**
	M12 / L = 83	4 nf	Brass	10...55	IP 67	1500	300	69	**IF5647**
	M18 / L = 70	5 f	Brass	10...55	IP 67	700	400	70	**IG5595**
	M18 / L = 76	8 nf	Brass	10...55	IP 67	300	400	71	**IG5597**
	M30 / L = 78	10 f	Brass	10...55	IP 67	450	400	72	**II5490**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 8, 10, 19, 21, 23									
	M30 / L = 78	15 nf	Brass	10...55	IP 67	200	400	73	**II5492**
M8 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 1, 2, 3									
	M8 / L = 40	3 f	Brass	10...30	IP 65 / IP 67	800	100	74	**IE5338**
	M8 / L = 40	5 nf	High-grade st. steel	10...30	IP 65 / IP 67	600	100	75	**IE5340**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	M8 / L = 50	2 f	Brass	10...36	IP 65 / IP 67	1300	200	76	**IE5287**
	M8 / L = 30.5	2 f	High-grade st. steel	10...30	IP 65 / IP 67	800	100	77	**IE5366**
	M8 / L = 30.5	4 nf	High-grade st. steel	10...30	IP 65 / IP 67	800	100	78	**IE5367**
	M5 / L = 45	0.8 f	stainless steel	10...36	IP 65	2000	100	79	**IY5036**
	M5 / L = 41	1.5 nf	stainless steel	10...30	IP 67	1800	100	80	**IY5048**
M8 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 43 · Connector groups 1, 2, 3									
	M8 / L = 40	3 f	Brass	10...30	IP 65 / IP 67	800	100	74	**IE5349**
	M8 / L = 40	5 nf	High-grade st. steel	10...30	IP 65 / IP 67	600	100	75	**IE5350**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 7 · Connector groups 1, 2, 3									
	M8 / L = 50	1 f	Brass	10...36	IP 65 / IP 67	2000	200	76	**IE5258**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Terminals · Output function ⎓ / ⎓ · 2-wire · DC PNP/NPN · Wiring diagram no. 44									
	M18 / L = 110	5 f	PBT	10...55	IP 65	800	400	81	**IG5718**
	M18 / L = 110	8 nf	PBT	10...55	IP 65	300	400	81	**IG5719**

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

Sensors for industrial applications with smooth sleeve

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 ⎓ · 3-wire · DC PNP · Wiring diagram no. 5									
	Ø 20 / L = 77	10 nf	PBT	10...36	IP 67	300	250	82	**IA5082**
	Ø 34 / L = 82	20 nf	PBT	10...36	IP 67	60	250	83	**IB5096**
	Ø 6.5 / L = 35	1 f	Brass	10...36	IP 67	900	200	84	**IT5001**
	Ø 6.5 / L = 19	2 f	stainless steel	10...30	IP 67	1000	200	85	**IT5039**
	Ø 6.5 / L = 27	2 f	High-grade st. steel	10...30	IP 67	1500	100	86	**IT5042**
	Ø 4 / L = 30	0.8 f	stainless steel	10...36	IP 65	2000	100	87	**IZ5026**
	Ø 4 / L = 27	1.5 nf	stainless steel	10...30	IP 67	1800	100	88	**IZ5047**
	Ø 3 / L = 27	1 nf	stainless steel	10...30	IP 67	5000	100	89	**IZ5048**
	Ø 4 / L = 23	0.8 f	stainless steel	10...30	IP 65	2000	100	90	**IZ5051**
	Ø 4 / L = 23	1.2 f	stainless steel	10...30	IP 65	2000	100	90	**IZ5052**

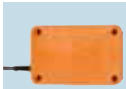
You can find wiring diagrams and scale drawings from page 134

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 ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 42									
	Ø 20 / L = 77	10 nf	PBT	10...55	IP 67	300	400	82	**IA5108**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	Ø 20 / L = 93	10 nf	PBT	10...36	IP 67	300	250	91	**IA5127**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	Ø 4 / L = 41	1.5 nf	stainless steel	10...30	IP 67	1800	100	92	**IZ5046**
	Ø 6.5 / L = 50	1 f	Brass	10...36	IP 65 / IP 67	2000	200	93	**IT5021**
	Ø 6.5 / L = 50	1.5 f	Brass	10...36	IP 65 / IP 67	1700	200	93	**IT5034**
	Ø 6.5 / L = 30.5	2 f	High-grade st. steel	10...30	IP 65 / IP 67	800	100	94	**IT5040**
	Ø 6.5 / L = 50	4 nf	High-grade st. steel	10...30	IP 67	300	100	95	**IT5044**
	Ø 4 / L = 45	0.8 f	stainless steel	10...36	IP 65	2000	100	96	**IZ5035**
Terminals · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 8									
	Ø 20 / L = 92	10 nf	PBT	10...36	IP 65	300	250	97	**IA5062**
Terminals · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 8									
	Ø 20 / L = 92	10 nf	PBT	10...36	IP 65	300	250	97	**IA5063**
Terminals · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 44									
	Ø 20 / L = 92	10 nf	PBT	10...55	IP 65	300	300	97	**IA5122**
	Ø 34 / L = 98	20 nf	PBT	10...55	IP 65	300	300	98	**IB5124**

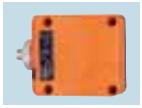
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Terminals · Output function ⎓ / ⎓ · 3-wire · DC PNP · Wiring diagram no. 8									
	Ø 34 / L = 98	20 nf	PBT	10...36	IP 65	350	250	98	**IB5063**
	Ø 34 / L = 98	30 nf	PBT	10...36	IP 65	350	200	98	**IB5133**

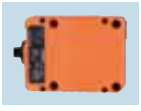
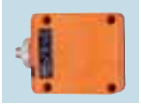
f = flush / nf = non flush / qf = quasi-flush

Sensors for industrial applications, rectangular housings

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 ⎓ · 3-wire · DC PNP · Wiring diagram no. 5									
	120 x 80 x 30	50 nf	PPE	10...36	IP 67	100	250	99	**ID5026**
	40 x 8 x 8	2 f	Brass	10...36	IP 65	2000	250	100	**IL5002**
	40 x 8 x 8	2 f	Brass	10...36	IP 65	2000	250	101	**IL5003**
	40 x 8 x 8	2.5 f	Brass	10...36	IP 65	2000	250	100	**IL5020**
	25 x 5 x 5	0.8 f	aluminium	10...30	IP 67	1000	100	102	**IL5022**
	40 x 12 x 26	2 f	PBT	10...36	IP 67	1400	250	103	**IN5121**
	40 x 12 x 26	4 nf	PBT	10...36	IP 67	1300	250	103	**IN5129**
	28 x 10 x 16	2 f	PBT	10...30	IP 67	800	200	104	**IS5001**
	28 x 10 x 16	3 nf	PBT	10...30	IP 67	100	200	104	**IS5031**
	28 x 10 x 16	4 nf	PBT	10...36	IP 67	2000	250	105	**IS5070**
	60 x 36 x 10	5 f	PBT	10...36	IP 67	400	250	106	**IW5051**

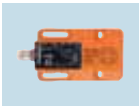
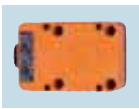
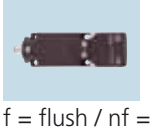
You can find wiring diagrams and scale drawings from page 134

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 ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	60 x 36 x 10	8 nf	PBT	10...36	IP 67	300	250	106	**IW5058**
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 9									
	40 x 12 x 26	2 f	PBT	10...36	IP 67	1400	250	103	**IN5186**
	40 x 12 x 26	4 nf	PBT	10...36	IP 67	1300	250	103	**IN5188**
	60 x 36 x 10	8 nf	PBT	10...36	IP 67	300	250	107	**IW5053**
Cable 2 m · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 42									
	40 x 12 x 26	2 f	PBT	10...55	IP 67	1300	400	103	**IN5207**
	40 x 12 x 26	4 nf	PBT	10...55	IP 67	1200	300	103	**IN5208**
	28 x 10 x 16	2 f	PBT	5...36	IP 67	2000	200	104	**IS5026**
M12 connector · 2-wire · AS-i · Wiring diagram no. 10 · Connector groups 8, 10, 19, 21, 23									
	40 x 40 x 54	15 f	PBT	26.5...31.6	IP 67	100	–	7	**IM5118**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	92 x 80 x 40	50 f	PPE	10...36	IP 67	70	250	108	**ID5055**
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	100	200	7	**IM5115**
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	80	200	7	**IM5116**
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	60	200	7	**IM5117**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	109	**IM5119**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5120**
M12 connector · Output function ⎍⎽ · 2-wire · DC PNP/NPN · Wiring diagram no. 48 · Connector groups 8, 10, 19, 21, 23									
	40 x 40 x 54	15 f	PA (polyamide)	10...36	IP 67	200	100	174	**IM5127**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	7	**IM5128**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5129**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	7	**IM5130**
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	200	200	7	**IM5131**
M12 connector · Output function ⎍⎽ / ⎍⏚ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	105 x 80 x 40	60 nf	PPE	10...36	IP 67	100	250	110	**ID5046**
M12 connector · Output function ⎍⎽+⎍⏚ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	109	**IM5124**
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5125**
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5126**
M12 connector · Output function ⎍⎽+⎍⏚ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	92 x 80 x 40	50 f	PPE	10...36	IP 67	70	250	108	**ID5058**

You can find wiring diagrams and scale drawings from page 134

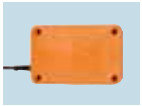
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	7	**IM5132**
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 9, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 151, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	7	**IM5133**
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	80	200	7	**IM5134**
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 9, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 151, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67 / IP 69K	200	200	7	**IM5135**
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	60	200	7	**IM5136**
M12 connector · Output function ⎍⎍+⎍⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 10, 19, 21, 23									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	100	200	7	**IM5123**
M8 connector · Output function ⎍⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	40 x 8 x 8	2 f	Brass	10...36	IP 65	2000	250	111	**IL5004**
	40 x 8 x 8	2 f	Brass	10...36	IP 65	2000	250	112	**IL5005**
	40 x 12 x 26	4 nf	PBT	10...36	IP 65	1300	250	113	**IN5212**
	40 x 12 x 26	2 f	PBT	10...36	IP 67	1400	250	113	**IN5230**
	28 x 10 x 16	2 f	PBT	10...36	IP 67	800	200	114	**IS5035**
	28 x 10 x 16	4 nf	PBT	10...36	IP 67	2000	250	114	**IS5071**

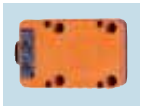
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	60 x 36 x 10	8 nf	PBT	10...36	IP 65	300	250	115	**IW5064**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 7 · Connector groups 1, 2, 3									
	60 x 36 x 10	8 nf	PBT	10...36	IP 67	300	250	115	**IW5062**
Terminals · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 44									
	40 x 40 x 120	15 f	PPE	10...55	IP 65	350	400	116	**IM5037**
	40 x 40 x 120	20 nf	PPE	10...55	IP 65	300	400	116	**IM5038**
Terminals · Output function ⎍ / ⎍ · 3-wire · DC PNP · Wiring diagram no. 8									
	40 x 40 x 120	20 nf	PPE	10...36	IP 65	350	250	116	**IM5019**
	40 x 40 x 120	15 f	PPE	10...36	IP 65	350	250	116	**IM5020**
	40 x 40 x 120	30 nf	PPE	10...36	IP 65	100	250	116	**IM5046**
Terminals · Output function ⎍ / ⎍ · 3-wire · DC PNP · Wiring diagram no. 45									
	90 x 60 x 40	40 nf	PPE	10...36	IP 65	15	250	117	**IC5005**
	105 x 80 x 40	60 nf	PPE	10...36	IP 65	100	250	118	**ID5005**
Terminals · Output function ⎍+⎍ · 3-wire · DC PNP · Wiring diagram no. 12									
	40 x 40 x 118	20 f	PA 6.6	10...30	IP 68 / IP 69K	400	200	119	**IV5004**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 118	20 f	PA 6.6	10...30	IP 68 / IP 69K	5	200	120	**IV5060**

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

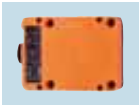
You can find wiring diagrams and scale drawings from page 134

Sensors for industrial applications, AC and 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.
1/2" connector · Output function ⎍ · 2-wire · AC/DC · Wiring diagram no. 13 · Connector group 33									
	40 x 40 x 66	35 nf	PPE	20...250	IP 67	20 / 50	250 / 100	121	**IM0049***
Cable 2 m · Output function ⎍ · 2-wire · AC · Wiring diagram no. 4									
	M12 / L = 71.5	2 f	PBT	20...250	IP 67	25	200	122	**IF0001***
	M12 / L = 71.5	4 nf	PBT	20...250	IP 67	25	200	122	**IF0003***
	M12 / L = 71.5	2 f	Brass	20...250	IP 67	25	200	122	**IF0005***
	M12 / L = 71	4 nf	Brass	20...250	IP 67	25	200	123	**IF0007***
Cable 2 m · Output function ⎍ · 2-wire · AC/DC · Wiring diagram no. 14									
	Ø 20 / L = 77	10 nf	PBT	20...250	IP 67	25 / 70	250 / 100	82	**IA0004***
	Ø 34 / L = 82	20 nf	PBT	20...250	IP 67	25 / 50	250 / 100	83	**IB0004***
	Ø 34 / L = 82	30 nf	PBT	20...250	IP 67	25 / 50	250 / 100	83	**IB0026***
	120 x 80 x 30	50 nf	modified PPE	20...250	IP 65	25 / 35	250 / 100	99	**ID0014***
	M18 / L = 80	5 f	PBT	20...250	IP 67	25 / 50	250 / 100	52	**IG0005***
	M18 / L = 80	8 nf	PBT	20...250	IP 67	25 / 50	250 / 100	52	**IG0006***
	M18 / L = 80	5 f	Brass	20...250	IP 67	25 / 50	250 / 100	52	**IG0011***
	M18 / L = 80	8 nf	Brass	20...250	IP 67	25 / 50	250 / 100	53	**IG0012***
	M30 / L = 81	10 f	PBT	20...250	IP 67	25 / 50	250 / 100	55	**II0005***

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f AC / DC [Hz]	I_{load} AC / DC [mA]	Drawing no.	Order no.
Cable 2 m · Output function ⎓ · 2-wire · AC/DC · Wiring diagram no. 14									
	M30 / L = 81	15 nf	PBT	20...250	IP 67	25 / 50	250 / 100	55	**II0006***
	M30 / L = 81	10 f	Brass	20...250	IP 67	25 / 50	250 / 100	55	**II0011***
	M30 / L = 81	15 nf	Brass	20...250	IP 67	25 / 50	250 / 100	56	**II0012***
	40 x 12 x 26	2 f	PBT	20...250	IP 67	25 / 50	250 / 100	103	**IN0073***
	40 x 12 x 26	4 nf	PBT	20...250	IP 67	25 / 50	250 / 100	103	**IN0081***
Cable 2 m · Output function ⎓ · 2-wire · AC/DC · Wiring diagram no. 15									
	Ø 20 / L = 77	10 nf	PBT	20...250	IP 67	25 / 70	250 / 100	82	**IA0027***
	Ø 34 / L = 82	20 nf	PBT	20...250	IP 67	25 / 50	250 / 100	83	**IB0017***
	Ø 34 / L = 82	30 nf	PBT	20...250	IP 67	25 / 50	250 / 100	83	**IB0027***
	40 x 12 x 26	2 f	PBT	20...250	IP 67	25 / 50	250 / 100	103	**IN0077***
	40 x 12 x 26	4 nf	PBT	20...250	IP 67	25 / 50	250 / 100	103	**IN0085***
M12 connector · Output function ⎓ · 2-wire · AC/DC · Wiring diagram no. 13 · Connector group 7									
	40 x 40 x 66	35 nf	PPE	20...250	IP 67	20 / 50	250 / 100	124	**IM0053***
	92 x 80 x 40	50 f	modified PPE	20...250	IP 67	25	250 / 100	108	**ID0049***
	40 x 40 x 66	20 f	PPE	20...250	IP 67	25 / 140	250 / 100	124	**IM0054***
Terminals · Output function ⎓ / ⎓ · 2-wire · AC/DC · Wiring diagram no. 46									
	90 x 60 x 40	40 nf	PPE	20...250	IP 65	10	250 / 100	117	**IC0003***

You can find wiring diagrams and scale drawings from page 134

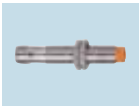
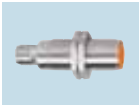
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f AC / DC [Hz]	I_{load} AC / DC [mA]	Drawing no.	Order no.
Terminals · Output function ⎓ / ⏦ · 2-wire · AC/DC · Wiring diagram no. 46									
	105 x 80 x 40	60 nf	modified PPE	20...250	IP 65	4	250 / 100	118	**ID0013***
Terminals · Output function ⎓ / ⏦ · 2-wire · AC/DC · Wiring diagram no. 16									
	Ø 20 / L = 92	10 nf	PBT	20...250	IP 65	25 / 70	250 / 100	97	**IA0032***
	Ø 34 / L = 98	20 nf	PBT	20...250	IP 65	25 / 50	250 / 100	98	**IB0016***
	40 x 40 x 120	20 nf	PPE	20...250	IP 65	20 / 55	250 / 100	116	**IM0010***
	40 x 40 x 120	15 f	PPE	20...250	IP 65	20 / 55	250 / 100	116	**IM0011***

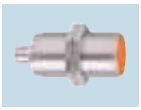
f = flush / nf = non flush / qf = quasi-flush

*** 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.

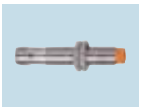
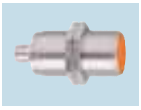
Sensors for industrial applications with analogue output 4...20 mA

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function 4...20 mA analogue · 3-wire · DC analogue · Wiring diagram no. 17 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 70	0.2...2 f	Brass	15...30	IP 67	–	–	12	**IF6028**
	M12 / L = 70	0.4...4 nf	Brass	15...30	IP 67	–	–	13	**IF6030**
	M18 / L = 60	0.8...8 nf	Brass	15...30	IP 67	–	–	125	**IG6083**
	M18 / L = 60	0.5...5 f	Brass	15...30	IP 67	–	–	126	**IG6086**
	M30 / L = 70	1.0...15 nf	Brass	15...30	IP 67	–	–	17	**II5913**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function 4...20 mA analogue · 3-wire · DC analogue · Wiring diagram no. 17 · Connector groups 8, 10, 19, 21, 23									
	M30 / L = 70	1.0...10 f	Brass	15...30	IP 67	–	–	16	**II5916**
	40 x 40 x 54	1...15 f	PA (polyamide)	15...30	IP 67	–	–	7	**IM5139**
	40 x 40 x 54	1...26 nf	PA (polyamide)	15...30	IP 67	–	–	7	**IM5141**

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

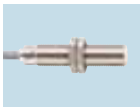
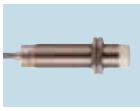
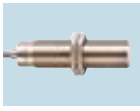
Sensors for industrial applications with analogue output 0...10 V

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function 0...10 V analogue · 3-wire · DC analogue · Wiring diagram no. 17 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 70	0.2...2 f	Brass	15...30	IP 67	–	–	12	**IF6029**
	M12 / L = 70	0.4...4 nf	Brass	15...30	IP 67	–	–	13	**IF6031**
	M18 / L = 60	0.8...8 nf	Brass	15...30	IP 67	–	–	125	**IG6084**
	M18 / L = 60	0.5...5 f	Brass	15...30	IP 67	–	–	126	**IG6087**
	M30 / L = 70	1.0...15 nf	Brass	15...30	IP 67	–	–	17	**II5914**
	M30 / L = 70	1.0...10 f	Brass	15...30	IP 67	–	–	16	**II5917**
	40 x 40 x 54	1...15 f	PA (polyamide)	15...30	IP 67	–	–	7	**IM5140**
	40 x 40 x 54	1...26 nf	PA (polyamide)	15...30	IP 67	–	–	7	**IM5142**

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

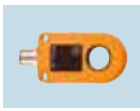
You can find wiring diagrams and scale drawings from page 134

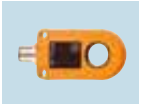
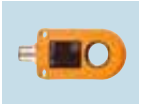
Sensors for industrial high temperature applications

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 5 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M12 / L = 56	3 f	stainless steel	10...35	IP 65	500	120	127	**IF6074**
	M18 / L = 77	8 nf	stainless steel	10...35	IP 65	400	150	128	**IG6119**
	M18 / L = 70	5 f	stainless steel	10...35	IP 65	400	150	129	**IG6614**
	M30 / L = 79	15 nf	stainless steel	10...35	IP 65	200	150	130	**II5930**
	M30 / L = 70	10 f	High-grade st. steel	10...35	IP 65	200	150	131	**II5961**
	M50 / L = 70	20 f	stainless steel	10...35	IP 65	100	150	132	**I95045**

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

Sensors for industrial applications on pipes and tubes

Type	Inside diameter [mm]	Operating principle	Minimum diameter of the steel ball [Ø mm]	Part speed max. [m/s]	Pulse stretching [ms]	Response time / break time [ms]	Drawing no.	Order no.
M12 connector · Output function ⎍ / ⎍⊥ · 3-wire · DC NPN · Wiring diagram no. 18 · Connector groups 8, 10, 19, 21, 23								
	10.1	static	1.5	35	10...150	0.5 / 10	133	**I7R202**
	10.1	dynamic	0.6	35	0.1...150	0.2 / 0.2	133	**I7R204**
	15.1	static	2	35	10...150	0.5 / 10	134	**I7R206**
	15.1	dynamic	0.8	35	0.1...150	0.2 / 0.2	134	**I7R208**
	20.1	static	2.5	35	10...150	0.5 / 10	135	**I7R210**
	20.1	dynamic	1.0	35	0.1...150	0.2 / 0.2	135	**I7R212**

Type	Inside diameter [mm]	Operating principle	Minimum diameter of the steel ball [Ø mm]	Part speed max. [m/s]	Pulse stretching [ms]	Response time / break time [ms]	Draw-ing no.	Order no.
M12 connector · Output function ⎍ / ⎍ · 3-wire · DC NPN · Wiring diagram no. 18 · Connector groups 8, 10, 19, 21, 23								
	25.1	static	3.0	35	10...150	0.5 / 10	136	**I7R214**
	25.1	dynamic	1.2	35	0.1...150	0.2 / 0.2	136	**I7R216**
M12 connector · Output function ⎍ / ⎍ · 3-wire · DC PNP · Wiring diagram no. 19 · Connector groups 8, 10, 11, 18, 19, 21, 23								
	10.1	static	1.5	35	10...150	0.5 / 10	133	**I7R201**
	10.1	dynamic	0.6	35	0.1...150	0.2 / 0.2	133	**I7R203**
	15.1	static	2	35	10...150	0.5 / 10	134	**I7R205**
	15.1	dynamic	0.8	35	0.1...150	0.2 / 0.2	134	**I7R207**
	20.1	static	2.5	35	10...150	0.5 / 10	135	**I7R209**
	20.1	dynamic	1.0	35	0.1...150	0.2 / 0.2	135	**I7R211**
	25.1	static	3.0	35	10...150	0.5 / 10	136	**I7R213**
	25.1	dynamic	1.2	35	0.1...150	0.2 / 0.2	136	**I7R215**
	51	static	6	35	10...150	0.5 / 10	137	**I7R217**

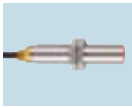
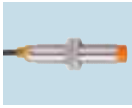
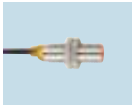
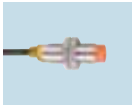
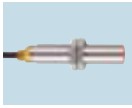
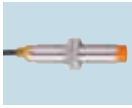
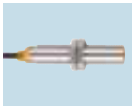
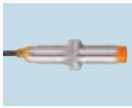
Tube sensors for industrial applications

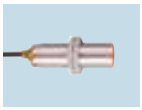
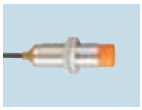
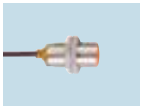
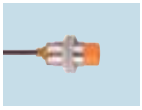
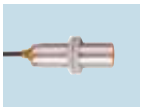
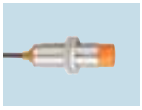
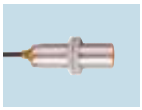
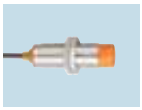
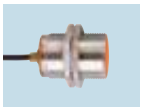
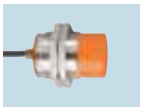
Type	Sensing range [mm]	Operating principle	Minimum diameter of the steel ball [Ø mm]	Part speed max. [m/s]	Pulse stretching [ms]	Response time / break time [ms]	Draw-ing no.	Order no.
Cable 0.09 m · with M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 18 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202								
	≤ 14	static	3.0	35	100	0.5 / 100	138	**I85003**

You can find wiring diagrams and scale drawings from page 134

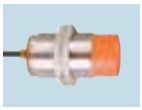
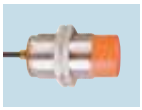
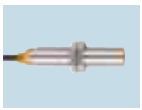
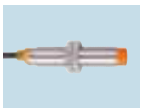
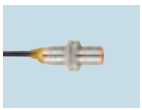
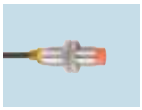
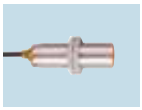
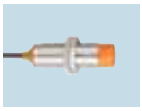
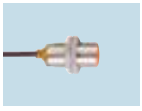
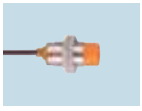
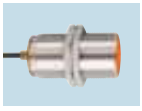
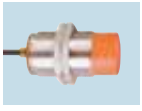
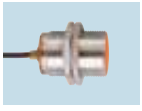
Type	Sensing range [mm]	Operating principle	Minimum diameter of the steel ball [Ø mm]	Part speed max. [m/s]	Pulse stretching [ms]	Response time / break time [ms]	Draw-ing no.	Order no.
Cable 0.09 m · with M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 19 · Connector groups 8, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 153, 154, 184, 188, 190, 193, 202, 203, 204								
	≤ 14	static	3.0	35	100	0.5 / 100	138	**I85002**
M8 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 18 · Connector groups 1, 3, 78, 84, 145								
	≤ 14	static	3.0	35	100	0.5 / 100	139	**I85001**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 19 · Connector groups 1, 2, 3, 78, 84, 145, 146								
	≤ 14	static	3.0	35	100	0.5 / 100	139	**I85000**

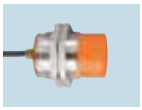
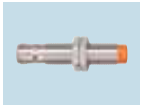
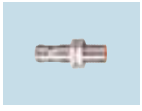
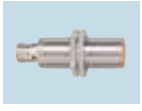
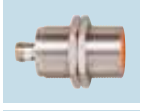
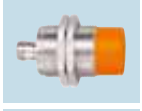
Sensors for industrial applications, oils and coolants and mobile applications with increased sensing range

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 ⎍ · 3-wire · DC NPN · Wiring diagram no. 20									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	140	**IFS254**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	141	**IFS255**
	M12 / L = 40	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	142	**IFS258**
	M12 / L = 40	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	143	**IFS259**
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 9									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	140	**IFS280**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	141	**IFS282**
Cable 2 m · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 21									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	140	**IFS281**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	141	**IFS283**

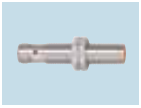
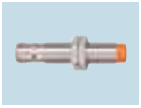
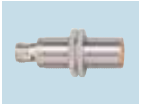
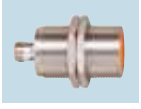
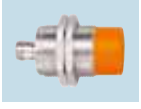
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 2 m · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 20									
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	144	**IGS246**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	145	**IGS247**
	M18 / L = 40	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	146	**IGS250**
	M18 / L = 40	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	147	**IGS251**
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 9									
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	144	**IGS269**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	145	**IGS270**
Cable 2 m · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 21									
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	144	**IGS271**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	145	**IGS272**
Cable 2 m · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 20									
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	148	**IIS240**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	149	**IIS241**
	M30 / L = 45	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	150	**IIS244**
	M30 / L = 45	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	151	**IIS245**
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 9									
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	148	**IIS264**

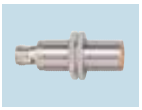
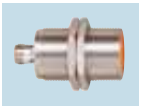
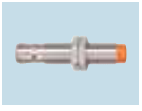
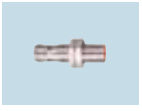
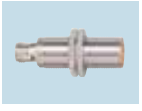
You can find wiring diagrams and scale drawings from page 134

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 ⎍ · 3-wire · DC PNP · Wiring diagram no. 9									
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	149	**IIS263**
Cable 2 m · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 21									
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	148	**IIS265**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	149	**IIS266**
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	140	**IFS252**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	141	**IFS253**
	M12 / L = 40	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	142	**IFS256**
	M12 / L = 40	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	143	**IFS257**
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	144	**IGS244**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	145	**IGS245**
	M18 / L = 40	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	146	**IGS248**
	M18 / L = 40	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	147	**IGS249**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	148	**IIS238**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	149	**IIS239**
	M30 / L = 45	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	150	**IIS242**

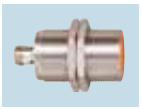
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 2 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M30 / L = 45	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	151	**IIS243**
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	1	**IFS242**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	2	**IFS243**
	M12 / L = 45	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	18	**IFS246**
	M12 / L = 45	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	152	**IFS247**
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	3	**IGS234**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	4	**IGS235**
	M18 / L = 45	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	22	**IGS238**
	M18 / L = 45	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	153	**IGS239**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	154	**IIS228**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	155	**IIS229**
	M30 / L = 50	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	156	**IIS232**
	M30 / L = 50	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	157	**IIS233**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 45	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	152	**IFS245**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	1	**IFS240**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	2	**IFS241**
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	3	**IGS232**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	4	**IGS233**
	M18 / L = 45	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	22	**IGS236**
	M18 / L = 45	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	153	**IGS237**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	154	**IIS226**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	155	**IIS227**
	M30 / L = 50	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	156	**IIS230**
	M30 / L = 50	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	157	**IIS231**
	M12 / L = 45	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	18	**IFS244**
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 23 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	1	**IFS249**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	2	**IFS251**
	M12 / L = 45	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	18	**IFS262**
	M12 / L = 45	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	152	**IFS263**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 23 · Connector groups 8, 10, 19, 21, 23, 202									
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	3	**IGS241**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	4	**IGS243**
	M18 / L = 45	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	22	**IGS254**
	M18 / L = 45	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	153	**IGS255**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	154	**IIS235**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	155	**IIS237**
	M30 / L = 50	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	156	**IIS248**
	M30 / L = 50	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	157	**IIS249**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	1	**IFS248**
	M12 / L = 60	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	2	**IFS250**
	M12 / L = 45	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	18	**IFS260**
	M12 / L = 45	7 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	700	100	152	**IFS261**
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	3	**IGS240**
	M18 / L = 60	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	4	**IGS242**
	M18 / L = 45	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	400	100	22	**IGS252**

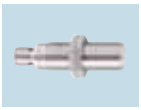
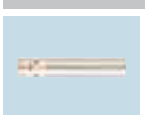
You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23, 202									
	M18 / L = 45	12 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	300	100	153	**IGS253**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	154	**IIS234**
	M30 / L = 60	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	155	**IIS236**
	M30 / L = 50	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	156	**IIS246**
	M30 / L = 50	22 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	157	**IIS247**

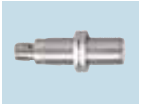
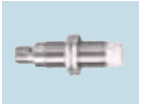
f = flush / nf = non flush / qf = quasi-flush

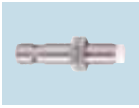
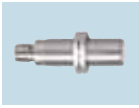
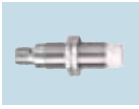
Sensors for oils and coolants with increased sensing range

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 24 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 68	700	100	8	**IFC202**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 47 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 46	8 f	Brass	10...30	IP 68	300	100	10	**IGC202**
	M18 / L = 51	12 nf	Brass	10...30	IP 68	250	100	11	**IGC203**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 68	700	100	8	**IFC200**
	M12 / L = 50	7 nf	Brass	10...30	IP 68	700	100	9	**IFC201**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 38 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 46	8 f	Brass	10...30	IP 68	400	100	10	**IGC200**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎽ · 2-wire · DC PNP/NPN · Wiring diagram no. 38 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 51	12 nf	Brass	10...30	IP 68	250	100	11	**IGC201**
M12 connector · Output function ⎍⎽ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 70	4 f	Brass	10...30	IP 68	500	100	12	**IFC210**
	M18 / L = 70	8 f	Brass	10...30	IP 68	400	100	14	**IGC210**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...30	IP 68	700	100	18	**IFC204**
	M12 / L = 50	7 nf	Brass	10...30	IP 68	700	100	158	**IFC205**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...36	IP 68	700	100	8	**IFC206**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 60	4 f	Brass	10...30	IP 68	700	200	1	**IFC229**
	M12 / L = 60	7 nf	Brass	10...30	IP 68	700	200	2	**IFC230**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 25, 148, 149, 153, 184, 188, 193, 202									
	M12 / L = 70	4 f	Brass	10...30	IP 68	700	100	20	**IFC237**
	M12 / L = 70	7 nf	Brass	10...30	IP 68	700	100	21	**IFC238**
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M18 / L = 46	8 f	Brass	10...36	IP 68	400	100	10	**IGC204**
	M18 / L = 51	12 nf	Brass	10...36	IP 68	300	100	11	**IGC205**

You can find wiring diagrams and scale drawings from page 134

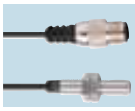
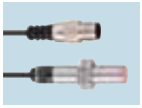
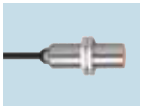
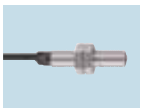
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M18 / L = 46	8 f	Brass	10...36	IP 68	400	100	10	**IGC206**
	M18 / L = 60	12 nf	Brass	10...36	IP 68	300	200	125	**IGC220**
	M18 / L = 60	8 f	Brass	10...36	IP 68	400	200	126	**IGC221**
	M18 / L = 70	8 f	Brass	10...36	IP 68	400	100	14	**IGC224**
	M18 / L = 70	12 nf	Brass	10...36	IP 68	300	100	15	**IGC225**
	M30 / L = 50	15 f	Brass	10...36	IP 68	100	100	159	**IIC200**
	M30 / L = 50	22 nf	Brass	10...36	IP 68	100	100	160	**IIC201**
	M30 / L = 60	15 f	Brass	10...36	IP 68	100	200	161	**IIC206**
	M30 / L = 60	22 nf	Brass	10...36	IP 68	100	200	162	**IIC207**
	M30 / L = 70	15 f	High-grade st. steel	10...36	IP 68	100	100	16	**IIC210**
	M30 / L = 70	22 nf	High-grade st. steel	10...36	IP 68	100	100	17	**IIC211**
	M8 / L = 50	2 f	High-grade st. steel	10...36	IP 67	1000	200	65	**IE5381**
	M8 / L = 50	4 nf	High-grade st. steel	10...36	IP 67	700	200	163	**IE5382**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 50	7 nf	Brass	10...30	IP 68	700	100	158	**IFC208**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3									
	M12 / L = 45	4 f	Brass	10...30	IP 68	700	100	18	**IFC207**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...36	IP 68	700	100	8	**IFC209**
	M18 / L = 46	8 f	Brass	10...36	IP 68	400	100	10	**IGC207**
	M18 / L = 51	12 nf	Brass	10...36	IP 68	300	100	11	**IGC208**
	M18 / L = 46	8 f	Brass	10...36	IP 68	400	100	10	**IGC209**
M12 connector · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 60	4 f	Brass	10...36	IP 68	700	100	164	**IFC234**
	M12 / L = 60	7 nf	Brass	10...36	IP 68	500	100	165	**IFC235**
	M18 / L = 70	8 f	Brass	10...36	IP 68	400	100	14	**IGC222**
	M18 / L = 70	12 nf	Brass	10...36	IP 68	300	100	15	**IGC223**
	M30 / L = 70	15 f	Brass	10...30	IP 68	100	100	16	**IIC208**
	M30 / L = 70	22 nf	Brass	10...30	IP 68	100	100	17	**IIC209**

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

You can find wiring diagrams and scale drawings from page 134

Sensors for oils and coolants, threaded housings

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 0.8 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	M8 / L = 42	2 f	Brass	10...55	IP 67	1000	100	166	**IE9902**
Cable 0.8 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 48 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 54	2 f	Brass	10...55	IP 67	800	100	167	**IF9920**
Cable 2 m · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 25									
	M18 / L = 54	5 f	Brass	10...55	IP 67	700	400	168	**IG5682**
Cable 2 m · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 49									
	M8 / L = 42	2 f	Brass	10...55	IP 67	1000	100	169	**IE9203**
	M12 / L = 54	2 f	Brass	10...55	IP 67	800	100	170	**IF9222**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 60	2 f	Brass	10...55	IP 67	800	100	171	**IF9924**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 45	2 f	Brass	10...36	IP 68	700	200	8	**IFC239**
	M12 / L = 70	2 f	Brass	10...36	IP 68	700	200	12	**IFC241**
	M12 / L = 60	2 f	Brass	10...36	IP 68	700	200	164	**IFC243**

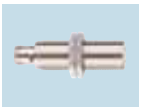
f = flush / nf = non flush / qf = quasi-flush

Sensors for oils and coolants, rectangular housings

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 0.15 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	26 x 26 x 26	10 f	polyamide	10...36	IP 67	250	100	172	**IO5018**
Cable 0.8 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	26 x 26 x 26	10 f	polyamide	10...36	IP 67	250	100	172	**IO5017**
M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 8, 10, 19, 21, 23									
	26 x 26 x 43	10 f	polyamide	10...36	IP 67	250	100	173	**IO5016**

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

Sensors for oils and coolants with correction factor 1

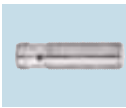
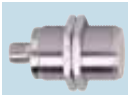
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2									
	M12 / L = 65	8 nf	High-grade st. steel	10...30	IP 68	2000	100	175	**IFC246**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23									
	M18 / L = 65	5 f	High-grade st. steel	10...30	IP 68	2000	100	176	**IGC232**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M18 / L = 65	12 nf	High-grade st. steel	10...30	IP 68	2000	200	177	**IGC233**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector group --									
	M30 / L = 65	10 f	High-grade st. steel	10...30	IP 68	2000	100	178	**IIC218**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M30 / L = 65	22 nf	High-grade st. steel	10...30	IP 68	1000	200	179	**IIC219**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2									
	M12 / L = 65	3 f	stainless steel (316L)	10...30	IP 68	2000	100	180	**IFC259**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	M8 / L = 65	1.5 f	High-grade st. steel	10...30	IP 67	1000	200	181	**IE5390**
	M8 / L = 65	4 nf	High-grade st. steel	10...30	IP 67	1000	200	182	**IE5391**

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

Sensors for oils and coolants with ceramic sensing face

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 70	4 f	Brass	10...30	IP 68	500	100	12	**IFC210**
	M18 / L = 70	8 f	Brass	10...30	IP 68	400	100	14	**IGC210**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...36	IP 68	700	100	8	**IFC206**
	M30 / L = 60	15 f	Brass	10...36	IP 68	100	200	161	**IIC206**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	Brass	10...36	IP 68	700	100	8	**IFC209**
	M18 / L = 46	8 f	Brass	10...36	IP 68	400	100	10	**IGC209**

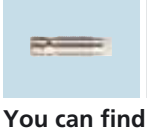
f = flush / nf = non flush / qf = quasi-flush

Sensors for oils and coolants, AS-i system

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · 2-wire · AS-i · Wiring diagram no. 10 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 60	4 f	High-grade st. steel	26.5...31.6	IP 68	100	–	164	**IFC247**
	M18 / L = 60	8 f	High-grade st. steel	26.5...31.6	IP 68	100	–	126	**IGC234**
	M18 / L = 60	12 nf	High-grade st. steel	26.5...31.6	IP 68	100	–	125	**IGC235**
	M30 / L = 60	14 f	High-grade st. steel	26.5...31.6	IP 68	100	–	161	**IIC220**
	M30 / L = 60	22 nf	High-grade st. steel	26.5...31.6	IP 68	100	–	162	**IIC221**

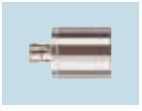
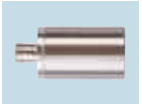
f = flush / nf = non flush / qf = quasi-flush

Electromagnetic field immune Kplus sensors with correction factor 1

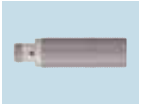
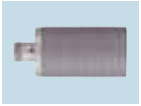
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 145, 146									
	M8 / L = 40	3 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	183	**IES200**
	M8 / L = 40	6 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	184	**IES201**
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2									
	M8 / L = 40	3 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	183	**IEW200**
	M8 / L = 40	6 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	184	**IEW201**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 45	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	18	**IFS289**
	M12 / L = 45	10 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	185	**IFS290**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 202									
	M12 / L = 60	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	1	**IFS285**
	M12 / L = 60	10 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	186	**IFS286**
	M18 / L = 45	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	22	**IGS279**
	M18 / L = 45	15 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	187	**IGS280**
	M18 / L = 60	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	3	**IGS277**
	M18 / L = 60	15 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	188	**IGS278**
	M30 / L = 45	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	189	**IIS269**
	M30 / L = 60	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	154	**IIS267**
	M30 / L = 60	30 nf	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	190	**IIS268**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 148, 153, 184, 188, 193									
	M12 / L = 45	4 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	18	**IFS297**
	M12 / L = 45	8 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	185	**IFS298**
	M12 / L = 45	10 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	185	**IFS299**
	M12 / L = 60	4 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	1	**IFS304**
	M12 / L = 60	8 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	186	**IFS305**
	M12 / L = 60	10 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	186	**IFS306**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23, 148, 153, 184, 188, 193									
	M18 / L = 45	8 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	22	**IGS287**
	M18 / L = 45	12 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	187	**IGS288**
	M18 / L = 45	15 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	187	**IGS289**
	M18 / L = 60	8 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	3	**IGS290**
	M18 / L = 60	12 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	188	**IGS291**
	M18 / L = 60	15 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	188	**IGS292**
	M30 / L = 45	15 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	189	**IIS281**
	M30 / L = 60	15 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	154	**IIS282**
	M30 / L = 60	22 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	190	**IIS283**
	M30 / L = 60	30 nf	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	190	**IIS284**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 140, 141									
	M12 / L = 65	3 f	Brass	10...30	IP 67	2000	100	180	**IFW200**
	M12 / L = 65	8 nf	Brass	10...30	IP 67	2000	100	191	**IFW201**
	M18 / L = 65	5 f	Brass	10...30	IP 67	2000	100	176	**IGW200**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	M18 / L = 65	12 nf	Brass	10...30	IP 67	2000	200	177	**IGW201**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍⎓ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 140, 141									
	M30 / L = 65	10 f	Brass	10...30	IP 67	2000	100	178	**IIW200**
	M30 / L = 65	22 nf	Brass	10...30	IP 67	2000	100	192	**IIW201**
	M12 / L = 65	4 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	180	**IFW204**
	M18 / L = 65	8 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	176	**IGW202**
	M30 / L = 65	15 f	Brass	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2000	100	178	**IIW202**
M12 connector · Output function ⎍⎓ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	109	**IM5119**
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5120**
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5129**
M12 connector · Output function ⎍⎓+⎓⏚ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 137, 138, 139, 140, 141									
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	109	**IM5124**
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5125**
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67	200	200	109	**IM5126**
	40 x 40 x 54	20 f	PA (polyamide)	10...36	IP 67	200	200	7	**IM5132**
M12 connector · Output function ⎍⎓+⎓⏚ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 9, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 151, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 54	35 nf	PA (polyamide)	10...36	IP 67	200	200	7	**IM5133**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍+⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 8, 9, 10, 11, 18, 19, 21, 23, 25, 148, 149, 150, 151, 153, 154, 184, 188, 190, 193, 202, 203, 204									
	40 x 40 x 54	40 nf	PA (polyamide)	10...36	IP 67 / IP 69K	200	200	7	**IM5135**

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

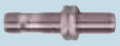
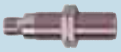
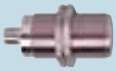
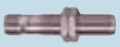
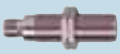
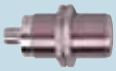
Electromagnetic field immune sensors

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	M12 / L = 60	4 nf	Brass	10...36	IP 67	1000	250	193	**IF5675**
	M18 / L = 60	5 f	Brass	10...36	IP 67	700	250	126	**IG5647**
	M12 / L = 60	2 f	Brass	10...36	IP 67	1000	250	194	**IF5670**
	M12 / L = 60	2 f	Brass	10...36	IP 67	1000	250	194	**IF5750**
	M12 / L = 60	4 nf	Brass	10...36	IP 67	1000	250	193	**IF5751**
	M18 / L = 60	5 f	Brass	10...36	IP 67	700	250	126	**IG5667**
	M30 / L = 60	10 f	Brass	10...36	IP 67	250	250	195	**II5503**
M12 connector · Output function ⎍+⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 137, 138, 139, 140, 141									
	92 x 80 x 40	50 f	PPE	10...36	IP 67	70	250	108	**ID5059**

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

You can find wiring diagrams and scale drawings from page 134

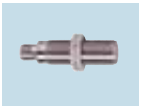
Full metal sensors for oils and coolants

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 45	4 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	18	**IFC275**
	M18 / L = 45	8 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	22	**IGC258**
	M30 / L = 50	15 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	50	100	156	**IIC233**
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 8, 10, 19, 21, 23									
	M8 / L = 60	2 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	196	**IEC203**
	M12 / L = 60	3 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	164	**IFC266**
	M18 / L = 70	5 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	70	**IGC252**
	M30 / L = 70	10 f	High-grade st. steel	10...36	IP 67 / IP 68	50	100	197	**IIC226**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M8 / L = 60	2 f	High-grade st. steel	10...36	IP 67 / IP 68 / IP 69K	100	100	196	**IEC200**
	M12 / L = 60	3 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	164	**IFC258**
	M18 / L = 70	5 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	70	**IGC248**
	M30 / L = 70	10 f	High-grade st. steel	10...36	IP 67 / IP 68	50	100	197	**IIC224**
M8 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 1, 3									
	M8 / L = 50	2 f	High-grade st. steel	10...36	IP 67	100	100	198	**IEC202**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Draw-ing no.	Order no.
M8 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 1, 2, 3									
	M8 / L = 50	2 f	High-grade st. steel	10...36	IP 67	100	100	198	**IEC201**

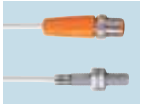
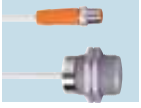
f = flush / nf = non flush / qf = quasi-flush

Full metal sensors for oils and coolants with correction factor 0

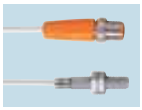
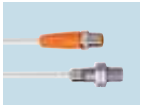
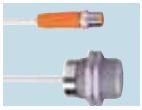
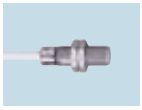
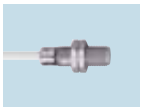
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Draw-ing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 8, 10, 11, 18, 19, 21, 23									
	M12 / L = 60	2.5 f	High-grade st. steel	10...36	IP 68	100	100	164	**IFC263**
	M18 / L = 70	4.5 f	High-grade st. steel	10...36	IP 68	100	100	199	**IGC249**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 8, 10, 19, 21, 23									
	M12 / L = 60	2.5 f	High-grade st. steel	10...36	IP 68	100	100	164	**IFC264**
	M18 / L = 70	4.5 f	High-grade st. steel	10...36	IP 68	100	100	199	**IGC250**

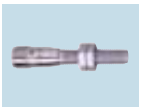
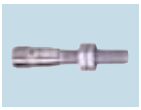
f = flush / nf = non flush / qf = quasi-flush

Full metal sensors with non-stick coating against weld spatter

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Draw-ing no.	Order no.
Cable 0.3 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 1 · Connector groups 137, 140, 141									
	M8 / L = 45	2 f	High-grade st. steel	10...36	IP 67	150	100	200	**IER203**
	M12 / L = 40	4 f	High-grade st. steel	10...36	IP 67	75	100	201	**IFR203**
	M18 / L = 40	6 f	High-grade st. steel	10...36	IP 67	50	100	202	**IGR203**
	M30 / L = 40	12 f	High-grade st. steel	10...36	IP 67	25	100	203	**IIR203**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
Cable 0.3 m · with M12 connector · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 26 · Connector groups 137, 140, 141									
	M8 / L = 45	2 f	High-grade st. steel	10...36	IP 67	150	100	200	**IER206**
	M12 / L = 40	4 f	High-grade st. steel	10...36	IP 67	75	100	201	**IFR206**
	M18 / L = 40	6 f	High-grade st. steel	10...36	IP 67	50	100	202	**IGR206**
	M30 / L = 40	12 f	High-grade st. steel	10...36	IP 67	25	100	203	**IIR206**
Cable 3 m · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 27									
	M8 / L = 45	2 f	High-grade st. steel	10...36	IP 67	150	100	204	**IER204**
	M12 / L = 40	4 f	High-grade st. steel	10...36	IP 67	75	100	205	**IFR204**
	M18 / L = 40	6 f	High-grade st. steel	10...36	IP 67	50	100	206	**IGR204**
	M30 / L = 40	12 f	High-grade st. steel	10...36	IP 67	25	100	207	**IIR204**
Cable 5 m · Output function ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 27									
	M12 / L = 40	4 f	High-grade st. steel	10...36	IP 67	75	100	205	**IFR205**
	M18 / L = 40	6 f	High-grade st. steel	10...36	IP 67	50	100	206	**IGR205**
	M30 / L = 40	12 f	High-grade st. steel	10...36	IP 67	25	100	207	**IIR205**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 140, 141									
	M12 / L = 45	4 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2	100	18	**IFR207**
	M18 / L = 45	8 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2	100	22	**IGR207**
	M30 / L = 50	15 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	2	100	156	**IIR207**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 137, 140, 141									
	M8 / L = 60	2 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	196	**IER201**
	M12 / L = 60	4 f	High-grade st. steel	10...36	IP 67	2	100	164	**IFR202**
	M18 / L = 70	6 f	High-grade st. steel	10...36	IP 67	2	100	70	**IGR202**
	M30 / L = 70	12 f	High-grade st. steel	10...36	IP 67	2	100	197	**IIR202**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 137, 138, 139, 140, 141									
	M8 / L = 60	2 f	High-grade st. steel	10...36	IP 67 / IP 68	100	100	196	**IER200**
	M12 / L = 60	4 f	High-grade st. steel	10...36	IP 67	2	100	164	**IFR200**
	M18 / L = 70	6 f	High-grade st. steel	10...36	IP 67	2	100	70	**IGR200**
	M30 / L = 70	12 f	High-grade st. steel	10...36	IP 67	2	100	197	**IIR200**

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

Full metal sensors for hygienic and wet areas

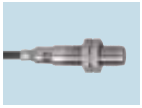
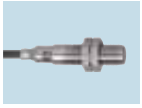
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 153, 184, 188, 193									
	M12 / L = 45	4 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	18	**IFT257**
	M18 / L = 45	8 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	100	100	22	**IGT258**
	M30 / L = 50	15 f	High-grade st. steel	10...30	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K	50	100	156	**IIT243**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 148, 152, 153, 155, 184, 186, 188, 192, 193									
	M12 / L = 70	6 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	500	100	208	**IFT246**
	M18 / L = 70	12 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	500	100	209	**IGT250**
	M30 / L = 70	25 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	250	100	210	**IIT232**
M12 connector · Output function ⎍ · 3-wire · DC NPN · Wiring diagram no. 22 · Connector groups 148, 153, 184, 188, 193									
	M18 / L = 70	5 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	70	**IGT248**
	M12 / L = 60	3 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	164	**IFT244**
	M30 / L = 70	10 f	High-grade st. steel	10...36	IP 68 / IP 69K	50	100	197	**IIT230**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 152, 153, 154, 155, 184, 186, 188, 190, 192, 193									
	M12 / L = 70	6 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	500	100	208	**IFT245**
	M18 / L = 70	12 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	500	100	209	**IGT249**
	M30 / L = 70	25 nf	High-grade st. steel	10...36	IP 65 / IP 67 / IP 68 / IP 69K	250	100	210	**IIT231**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M18 / L = 70	5 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	70	**IGT247**
	M30 / L = 70	10 f	High-grade st. steel	10...36	IP 68 / IP 69K	50	100	197	**IIT228**
	M12 / L = 60	3 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	164	**IFT240**
	Ø 12 / L = 60	3 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	211	**IFT243**

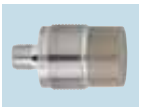
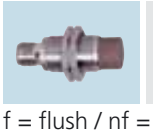
f = flush / nf = non flush / qf = quasi-flush

Sensors for hygienic and wet areas with increased sensing range

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
1/2" UNF-Connector · Output function ⎍ · 2-wire · AC/DC · Wiring diagram no. 28 · Connector group 33									
	M30 / L = 70	22 nf	High-grade st. steel	20...140	IP 68 / IP 69K	25 / 100	80	212	**IIT002**
Cable 10 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M12 / L = 50	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	213	**IFT207**
	M12 / L = 61	7 nf	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	214	**IFT209**
	M18 / L = 57	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	600	100	215	**IGT207**
	M18 / L = 62	12 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	216	**IGT209**
	M30 / L = 59	14 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	217	**IIT206**
	M30 / L = 59	22 nf	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	218	**IIT208**
Cable 6 m · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 5									
	M12 / L = 50	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	213	**IFT206**
	M12 / L = 61	7 nf	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	214	**IFT208**
	M18 / L = 57	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	600	100	215	**IGT206**
	M18 / L = 62	12 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	216	**IGT208**
	M30 / L = 59	22 nf	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	218	**IIT207**
	M30 / L = 59	14 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	217	**IIT209**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M12 / L = 70	7 nf	High-grade st. steel	10...30	IP 68 / IP 69K	700	100	219	**IFT202**
	M12 / L = 70	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	500	100	12	**IFT205**
	Ø 12 / L = 70	7 nf	High-grade st. steel	10...30	IP 68 / IP 69K	700	100	220	**IFT210**
	M18 / L = 70	12 nf	High-grade st. steel	10...30	IP 68 / IP 69K	300	100	221	**IGT202**
	M18 / L = 70	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	400	100	14	**IGT205**
	M30 / L = 70	22 nf	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	17	**IIT202**
	M30 / L = 70	14 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	16	**IIT204**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M12 / L = 50	7 nf	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	222	**IFT200**
	M12 / L = 45	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	8	**IFT203**
	M12 / L = 70	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	700	100	12	**IFT216**
	M12 / L = 70	7 nf	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	13	**IFT217**
	M18 / L = 51	12 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	223	**IGT200**
	M18 / L = 46	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	600	100	10	**IGT203**
	M18 / L = 70	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	400	100	14	**IGT219**
	M18 / L = 70	12 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	15	**IGT220**

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M30 / L = 50	22 nf	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	224	**IIT200**
	M30 / L = 50	14 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	159	**IIT205**
	M30 / L = 70	15 f	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	16	**IIT212**
	M30 / L = 70	22 nf	High-grade st. steel	10...36	IP 68 / IP 69K	100	100	17	**IIT213**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 148, 153, 184, 188, 193									
	M18 / L = 46	8 f	High-grade st. steel	10...36	IP 68 / IP 69K	600	100	10	**IGT204**
	M12 / L = 50	7 nf	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	222	**IFT201**
	M12 / L = 45	4 f	High-grade st. steel	10...36	IP 68 / IP 69K	800	100	8	**IFT204**
	M18 / L = 51	12 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	223	**IGT201**

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

Sensors for hygienic and wet areas

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 ⎍+⎍ · 4-wire · DC PNP · Wiring diagram no. 29									
	M18 / L = 80	8 nf	High-grade st. steel	10...36	IP 67	320	250	53	**IG5202**
M12 connector · Output function ⎍ · 3-wire DC PNP · 2-wire DC PNP/NPN · Wiring diagram no. 39 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M18 / L = 70	8 nf	High-grade st. steel	10...36	IP 68 / IP 69K	300	100	221	**IGT240**
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M8 / L = 70	1 f	High-grade st. steel	10...36	IP 67	2000	200	225	**IE5215**

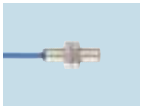
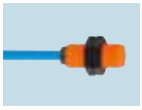
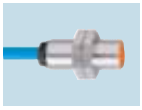
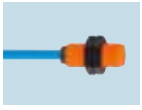
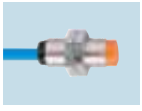
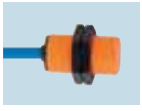
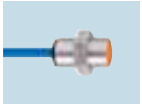
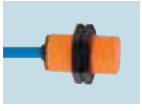
You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M8 / L = 55	2 nf	High-grade st. steel	10...36	IP 67	2000	200	226	**IE5295**
	M12 / L = 59	2 f	High-grade st. steel	10...36	IP 67	1100	200	227	**IF5514**
	M12 / L = 83	4 nf	High-grade st. steel	10...36	IP 67	400	250	69	**IF5594**
	M12 / L = 44	4 nf	High-grade st. steel	10...36	IP 67	1400	125	228	**IF5796**
	M12 / L = 59	4 nf	High-grade st. steel	10...36	IP 67	1400	250	229	**IF5813**
	M12 / L = 44	2 f	High-grade st. steel	10...36	IP 67	1200	250	230	**IF5815**
	M12 / L = 83	2 f	High-grade st. steel	10...36	IP 67	800	250	68	**IF5851**
	M18 / L = 90	8 nf	High-grade st. steel	10...36	IP 67	300	250	231	**IG5602**
	M18 / L = 76	5 f	High-grade st. steel	10...36	IP 67	500	250	232	**IG5813**
	M30 / L = 92	10 f	High-grade st. steel	10...36	IP 67	250	250	233	**II5689**
	M30 / L = 92	15 nf	High-grade st. steel	10...36	IP 67	200	250	234	**II5776**
M12 connector · Output function ⎍ / ⏚ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 148, 153, 184, 188, 193									
	M12 / L = 83	2 f	High-grade st. steel	10...55	IP 67	1100	400	68	**IF5759**
	M12 / L = 83	4 nf	High-grade st. steel	10...55	IP 67	1500	300	69	**IF5760**
	M18 / L = 77	8 nf	High-grade st. steel	10...55	IP 67	300	300	235	**IG5772**

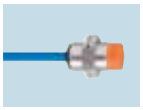
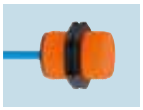
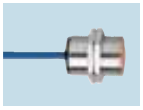
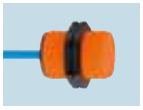
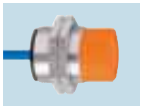
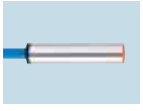
Type	Dimensions [mm]	Sensing range [mm]	Material	U_b [V]	Protection	f [Hz]	I_{load} [mA]	Drawing no.	Order no.
M12 connector · Output function ⎍ / ⎍ · 2-wire · DC PNP/NPN · Wiring diagram no. 40 · Connector groups 148, 153, 184, 188, 193									
	M18 / L = 90	5 f	High-grade st. steel	10...55	IP 67	700	400	236	**IG5806**
	M30 / L = 78	15 nf	High-grade st. steel	10...55	IP 67	200	400	73	**II5733**
	M30 / L = 92	10 f	High-grade st. steel	10...55	IP 67	450	400	233	**II5751**
M12 connector · Output function ⎍+⎍ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 148, 150, 153, 154, 184, 188, 190, 193									
	M18 / L = 45	10 nf	High-grade st. steel	10...36	IP 67	300	250	237	**IG5846**

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

Sensors with ATEX approval 1D / 2G

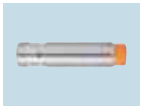
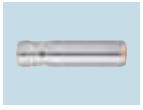
Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Drawing no.	Order no.
Cable 2 m · Output function ⎍ · 2-wire · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 30										
	M8 / L = 30	1 f	Brass	8.2 DC	7.5...30	80	70	2000	238	**NE5001**
	M12 / L = 30	2 f	PBT	8.2 DC	7.5...30	140	340	1200	239	**NF5001**
	M12 / L = 30	2 f	Brass	8.2 DC	7.5...30	140	340	1200	239	**NF5002**
	M12 / L = 30	4 nf	PBT	8.2 DC	7.5...30	140	130	1500	239	**NF5003**
	M12 / L = 30	4 nf	Brass	8.2 DC	7.5...30	140	130	1500	240	**NF5004**
	M18 / L = 33	5 f	PBT	8.2 DC	7.5...30	145	45	720	241	**NG5001**
	M18 / L = 33	5 f	Brass	8.2 DC	7.5...30	145	45	720	241	**NG5002**
	M18 / L = 33	8 nf	PBT	8.2 DC	7.5...30	155	50	300	241	**NG5003**

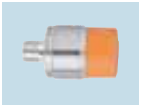
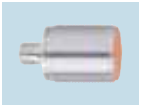
You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
Cable 2 m · Output function ⏦ · 2-wire · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 30										
	M18 / L = 33	8 nf	Brass	8.2 DC	7.5...30	155	50	300	242	**NG5004**
	M30 / L = 41	10 f	PBT	8.2 DC	7.5...30	145	140	450	243	**NI5001**
	M30 / L = 41	10 f	Brass	8.2 DC	7.5...30	145	140	450	243	**NI5002**
	M30 / L = 41	15 nf	PBT	8.2 DC	7.5...30	145	110	200	243	**NI5003**
	M30 / L = 41	15 nf	Brass	8.2 DC	7.5...30	145	110	200	244	**NI5004**
	40 x 12 x 26	4 nf	PBT	8.2 DC	7.5...30	110	135	400	245	**NN5002**
	28 x 10 x 16	2 f	PBT	8.2 DC	7.5...30	80	110	800	246	**NS5002**
	Ø 6.5 / L = 30	1 f	Brass	8.2 DC	7.5...30	80	70	2000	247	**NT5001**

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

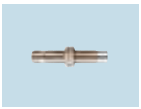
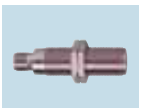
Sensors with ATEX approval 1D / 1G / 2G

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
M12 connector · Output function ⏦ · 2-wire · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 31 · Connector groups 195, 197										
	M12 / L = 50	7 nf	Brass	8.2 DC	7.5...30	210	145	700	9	**NF500A**
	M12 / L = 45	4 f	Brass	8.2 DC	7.5...30	210	115	700	8	**NF501A**
	M18 / L = 51	12 nf	Brass	8.2 DC	7.5...30	200	85	300	11	**NG500A**
	M18 / L = 46	8 f	Brass	8.2 DC	7.5...30	200	190	400	10	**NG501A**

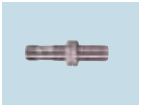
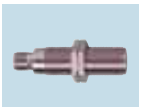
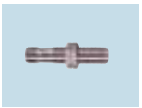
Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
M12 connector · Output function ⏥ · 2-wire · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 31 · Connector groups 195, 197										
	M30 / L = 50	22 nf	Brass	8.2 DC	7.5...30	250	120	100	160	**NI500A**
	M30 / L = 50	15 f	Brass	8.2 DC	7.5...30	230	210	100	159	**NI501A**
M12 connector · Output function ⏥ · 2-wire · Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW · Wiring diagram no. 32 · Connector group 197										
	40 x 40 x 66	20 f	PPE	8.2 DC	7.5...30	250	450	200	124	**NM500A**
	40 x 40 x 66	35 nf	PPE	8.2 DC	7.5...30	220	710	100	124	**NM501A**

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

Sensors with ATEX approval 3D/3G

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
M12 connector · Output function ⏥+⏥ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 196, 198										
	40 x 40 x 54	40 nf	PC	10...30 DC	–	–	–	60	248	**IM511A**
	40 x 40 x 54	20 f	PC	10...30 DC	–	–	–	100	248	**IM512A**
	40 x 40 x 54	30 nf	PC	10...30 DC	–	–	–	100	248	**IM513A**
M12 connector · Output function ⏥ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 196, 198										
	M12 / L = 70.2	6 nf	High-grade st. steel	10...36 DC	–	–	–	500	249	**IF505A**
	M18 / L = 70	12 nf	High-grade st. steel	10...36 DC	–	–	–	500	209	**IG511A**
	M30 / L = 70	25 nf	High-grade st. steel	10...36 DC	–	–	–	250	210	**II503A**
	M18 / L = 70	5 f	High-grade st. steel	10...36 DC	–	–	–	100	70	**IG510A**

You can find wiring diagrams and scale drawings from page 134

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
M12 connector · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 2 · Connector groups 196, 198										
	M30 / L = 70	10 f	High-grade st. steel	10...36 DC	–	–	–	50	250	**II502A**
	M12 / L = 60	3 f	High-grade st. steel	10...36 DC	–	–	–	100	251	**IF503A**
M12 connector · Output function ⎍⎿ · 3-wire · DC PNP · Wiring diagram no. 3 · Connector groups 196, 198										
	M18 / L = 70	5 f	High-grade st. steel	10...36 DC	–	–	–	100	70	**IG512A**
	M12 / L = 60	3 f	High-grade st. steel	10...36 DC	–	–	–	100	251	**IF504A**

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

Sensors with ATEX approval 3D

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
Cable 2 m · Output function ⎍⎽ · 2-wire · AC/DC · Wiring diagram no. 14										
	M18 / L = 80	8 nf	Brass	20...250 AC/DC	–	–	–	25 / 50	252	**IG001A***
Cable 2 m · Output function ⎍⎽ · 3-wire · DC PNP · Wiring diagram no. 5										
	M18 / L = 80	8 nf	Brass	10...30 DC	–	–	–	300	252	**IG513A**
Cable 2 m · Output function ⎍⎽ / ⎍⎿ · 2-wire · DC PNP/NPN · Wiring diagram no. 42										
	M18 / L = 80	8 nf	Brass	10...30 DC	–	–	–	300	252	**IG515A**
Cable 6 m · Output function ⎍⎽ · 2-wire · AC/DC · Wiring diagram no. 14										
	M30 / L = 81	15 nf	Brass	20...250 AC/DC	–	–	–	25 / 50	253	**II001A***
M12 connector · Output function ⎍⎽+⎍⎿ · 4-wire · DC PNP · Wiring diagram no. 11 · Connector groups 196, 198										
	M18 / L = 80	10 nf	High-grade st. steel	10...30 DC	–	–	–	300	254	**IG514A**

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
Terminals · Output function ⎓+⏚ · 4-wire · DC · Wiring diagram no. 33										
	40 x 40 x 105	20 f	PC	10...30 DC	–	–	–	100	255	**IM510A**
Terminals · Output function ⎓ · 4-wire · DC · Wiring diagram no. 34										
	40 x 40 x 105	20 f	PC	10...30 DC	–	–	–	100	255	**IM509A**
Terminals · Output function ⎓/⏚ · 2-wire · AC/DC · Wiring diagram no. 46										
	105 x 80 x 42	60 nf	PPE	20...250 AC/DC	–	–	–	4	256	**ID002A***
Terminals · Output function ⎓/⏚ · 2-wire · AC/DC · Wiring diagram no. 50										
	40 x 40 x 105	40 nf	PC	20...250 AC/DC	–	–	–	10	255	**IM002A***
Terminals · Output function ⎓/⏚ · 2-wire · DC · Wiring diagram no. 51										
	40 x 40 x 105	20 f	PC	10...55 DC	–	–	–	100	255	**IM508A**
Terminals · Output function ⎓/⏚ · 3-wire · AC/DC · Wiring diagram no. 50										
	40 x 40 x 105	20 f	PC	20...250 AC/DC	–	–	–	10	255	**IM001A***
Terminals · Output function ⎓/⏚ · 3-wire · DC PNP · Wiring diagram no. 45										
	105 x 80 x 42	60 nf	PPE	10...30 DC	–	–	–	100	256	**ID502A**
Terminals · Output function ⎓/⏚ · 4-wire · DC · Wiring diagram no. 52										
	40 x 40 x 105	20 f	PC	10...30 DC	–	–	–	100	255	**IM506A**
	40 x 40 x 105	40 nf	PC	10...30 DC	–	–	–	100	255	**IM507A**

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.

You can find wiring diagrams and scale drawings from page 134

Sensors with ATEX approval 2D / 3G

Type	Dimensions [mm]	Sensing range [mm]	Material	$U_{nom.}$ at 1 KΩ [V]	U_b [V]	Internal capacit. [nF]	Internal inductance [µH]	f [Hz]	Draw-ing no.	Order no.
M12 connector · Output function ⎍ · 3-wire · DC PNP · Wiring diagram no. 35 · Connector groups 196, 198										
	M30 / L = 70	10 f	High-grade st. steel	10...36 DC	–	–	–	50	250	**II504A**
Terminals · Output function ⎍ / ⎍ · 3-wire · DC PNP · Wiring diagram no. 53										
	105 x 80 x 42	60 nf	modified PPE	10...30 DC	–	–	–	100	256	**ID503A**

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

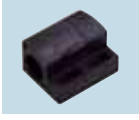
Switching amplifiers with ATEX approval

Type	Description	Order no.
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 1-channel · Relay output · Programmable output function · Short-circuit and wire monitoring	**N0031A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 2-channel · Relay outputs · Programmable output function · Short-circuit and wire monitoring	**N0032A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 2-channel · Relay outputs · Programmable output function · Short-circuit and wire monitoring	**N0033A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 1-channel · Relay output · Programmable output function · Short-circuit and wire monitoring	**N0530A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 1-channel · Transistor outputs · Programmable output function · Short-circuit and wire monitoring	**N0531A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 2-channel · Optocoupler output · Programmable output function · Short-circuit and wire monitoring	**N0532A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 2-channel · Relay outputs · Programmable output function · Short-circuit and wire monitoring	**N0533A**
	Switching amplifier for Namur sensors according to 94/9/EG (ATEX) · ATEX approval · Group II, category (1) G D · 2-channel · Transistor outputs · Programmable output function · Short-circuit and wire monitoring	**N0534A**

Accessories for sensors with smooth sleeve

Type	Description	Order no.
	Mounting clip · Ø 12 mm · for smooth body switches - Ø 12 mm · Form V · Housing materials: stainless steel	**E11530**
	Mounting clip · Ø 18 mm · for smooth body switches - Ø 18 mm · Form V · Housing materials: stainless steel	**E11531**
	Mounting clamp · Ø 4 mm · Housing materials: TPE	**E10204**
	Mounting clamp · Ø 6.5 mm · Housing materials: PPE	**E10014**
	Mounting clamp · Ø 20 mm · Housing materials: PA	**E10192**
	Mounting clamp · Ø 34 mm · Housing materials: PA	**E10193**
	Mounting clamp · Ø 20 mm · Housing materials: Mounting clamp: PBT / socket screw: steel galvanised	**E10016**
	Mounting clamp · Ø 34 mm · Housing materials: PBT	**E10017**
	Limit plungers · for type Ø 6.5 mm · with Sn = 1 mm f · Housing materials: Limit plungers: free cutting steel / plunger: C45K hardened on front / nut: Brass nickel-plated	**E10155**

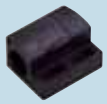
Accessories for threaded M8 housings

Type	Description	Order no.
	Angle bracket · for type M8 · Housing materials: stainless steel	**E10734**
	Mounting clamp · Ø 8 mm · Housing materials: aluminium black anodised	**E10221**
	Mounting clamp · Ø 8 mm · with end stop · for type M8 · Housing materials: PC	**E11521**
	Mounting sleeve · M12 x 1 - Ø 8 mm · 32 mm · with end stop · for type M8 · Housing materials: Brass special coating	**E10848**

You can find wiring diagrams and scale drawings from page 134

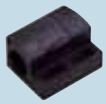
Type	Description	Order no.
	Mounting sleeve · M12 x 1 - Ø 8 mm · 42 mm · with end stop · for type M8 · Housing materials: Brass special coating	**E10849**
	Limit plungers · for types M8 x 1 · with Sn = 1 mm f, 2 mm f and 3 mm f · Housing materials: Limit plungers: free cutting steel / plunger: C45K hardened on front / nut: Brass nickel-plated	**E10154**

Accessories for threaded M12 housings

Type	Description	Order no.
	Angle bracket · for type M12 · Housing materials: stainless steel	**E10735**
	Mounting clip · O-shaped · for type M12 · Housing materials: stainless steel	**E11533**
	Mounting clamp · Ø 12 mm · Housing materials: PBT	**E10015**
	Mounting clamp · Ø 12 mm · with end stop · for type M12 · Housing materials: PC	**E11047**
	Mounting clamp · Ø 12 mm · with end stop · For sensors with 45° chamfer · for type M12 · Housing materials: PC	**E11994**
	Mounting sleeve · M16 x 1 - Ø 12 mm · 45 mm · with end stop · for type M12 · Housing materials: Brass nickel-plated	**E10741**
	Mounting sleeve · M16 x 1 - Ø 12 mm · 34 mm · with end stop · for type M12 · Housing materials: Brass nickel-plated	**E10806**
	Mounting sleeve · M16 x 1 - Ø 12 mm · with end stop · for type M12 · Housing materials: Brass nickel-plated	**E11114**
	Mounting sleeve · M16 x 1 - Ø 12 mm · 33.5 mm · with end stop · for type M12 · Housing materials: Brass anti-spatter / nut: Brass anti-spatter	**E12452**
	Lock nuts metal · M12 x 1 · Housing materials: Brass nickel-plated	**E10024**
	Lock nuts metal · M12 x 1 · Housing materials: stainless steel 316Ti / 1.4571	**E10025**

Type	Description	Order no.
	serrated washer · Ø 13 mm / Ø 18 mm · for type M12 · Housing materials: steel anti-spatter	**E12412**

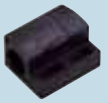
Accessories for threaded M18 housings

Type	Description	Order no.
	Angle bracket · for type M18 · Housing materials: stainless steel	**E10736**
	Mounting clip · O-shaped · for type M18 · Housing materials: stainless steel	**E11534**
	Mounting clamp · Ø 20 mm - Ø 18 mm · with reducing bush · for type M18 · Housing materials: PBT	**E10076**
	Mounting clamp · Ø 18 mm · with end stop · for type M18 · Housing materials: PC	**E11048**
	Mounting clamp · Ø 18 mm · with end stop · For sensors with 45° chamfer · for type M18 · Housing materials: PC	**E11995**
	Mounting sleeve · M24 x 1.5 - Ø 18 mm · 58 mm · with end stop · for type M18 · Housing materials: Brass nickel-plated	**E10742**
	Mounting sleeve · M24 x 1.5 - Ø 18 mm · 36 mm · with end stop · for type M18 · Housing materials: Brass nickel-plated	**E10807**
	Mounting sleeve · M22 x 1 - Ø 18 mm · with end stop · for type M18 · Housing materials: Brass white bronze coated	**E11115**
	Mounting sleeve · M22 x 1 - Ø 18 mm · 33.5 mm · with end stop · for type M18 · Housing materials: Brass anti-spatter / nut: Brass anti-spatter	**E12453**
	Plastic nut for flow plate · M18 x 1 · Housing materials: POM	**E19503**
	Lock nuts metal · M18 x 1 · Housing materials: Brass nickel-plated	**E10027**
	Lock nuts metal · M18 x 1 · Housing materials: stainless steel 316Ti / 1.4571	**E10028**

You can find wiring diagrams and scale drawings from page 134

Type	Description	Order no.
	serrated washer · Ø 19 mm / Ø 27 mm · for type M18 · Housing materials: steel anti-spatter	**E12413**

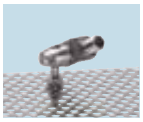
Accessories for threaded M30 housings

Type	Description	Order no.
	Angle bracket · for type M30 · Housing materials: stainless steel	**E10737**
	Mounting clamp · Ø 34 mm - Ø 30 mm · with reducing bush · for type M30 · Housing materials: PBT	**E10077**
	Mounting clamp · Ø 30 mm · with end stop · for type M30 · Housing materials: PC	**E11049**
	Mounting clamp · Ø 30 mm · with end stop · For sensors with 45° chamfer · for type M30 · Housing materials: PC	**E11996**
	Mounting sleeve · M36 x 1.5 - Ø 30 mm · 58 mm · with end stop · for type M30 · Housing materials: Brass nickel-plated	**E10743**
	Mounting sleeve · M36 x 1.5 - Ø 30 mm · 36 mm · with end stop · for type M30 · Housing materials: Brass nickel-plated	**E10808**
	Mounting sleeve · M36 x 1.5 - Ø 30 mm · 33.5 mm · with end stop · for type M30 · Housing materials: Brass anti-spatter / nut: Brass anti-spatter	**E12454**
	Lock nuts metal · M30 x 1.5 · Housing materials: Brass nickel-plated	**E10030**
	Lock nuts metal · M30 x 1.5 · Housing materials: stainless steel 316Ti / 1.4571	**E10031**
	serrated washer · Ø 31.6 mm / Ø 45 mm · for type M30 · Housing materials: steel anti-spatter	**E12414**

Accessories for rectangular housings

Type	Description	Order no.
	Mounting bracket · with integrated snap-on rail · for type IDC · Housing materials: stainless steel	**E10730**

System components

Type	Description	Order no.
	Mounting set · Ø 18.5 mm · Clamp mounting · Free-standing M10 · for type OG, IG, KG · Housing materials: clamp: diecast zinc / fixture: steel	**E20718**
	Mounting set · Ø 18.5 mm · Clamp mounting · Free-standing M10 · for type OG, IG, KG · Housing materials: clamp: diecast zinc / fixture: steel	**E20719**
	Mounting set · Ø 12.2 mm · Clamp mounting · free-standing M8 · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc	**E20856**
	Mounting set · Ø 12.2 mm · Clamp mounting · free-standing M8 · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: stainless steel	**E20857**
	Mounting set · Ø 12.2 mm · Clamp mounting · free-standing M8 · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc	**E20860**
	Mounting set · Ø 12.2 mm · Clamp mounting · free-standing M8 · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: stainless steel	**E20861**
	Mounting set · Ø 12.2 mm · Clamp mounting · aluminium profile · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc / Cube: diecast zinc	**E20864**
	Mounting set · Ø 12.2 mm · Clamp mounting · aluminium profile · for type OF, IF · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc / Cube: diecast zinc	**E20865**
	Mounting set · Ø 18.5 mm · Clamp mounting · aluminium profile · for type OG, IG, KG · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc / Cube: diecast zinc	**E20866**
	Mounting set · Ø 18.5 mm · Clamp mounting · aluminium profile · for type OG, IG, KG · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc / Cube: diecast zinc	**E20867**
	Mounting set · Ø 18.5 mm · Clamp mounting · Free-standing M10 · for type OG, IG, KG · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: stainless steel	**E20869**
	Mounting set · Ø 18.5 mm · Clamp mounting · Free-standing M10 · for type OG, IG, KG · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: stainless steel	**E20870**
	Mounting set · Ø 30.2 mm · Clamp mounting · free-standing M12 · for type OI, II, KI · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc	**E20873**
	Mounting set · Ø 30.2 mm · Clamp mounting · free-standing M12 · for type OI, II, KI · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: stainless steel	**E20874**

You can find wiring diagrams and scale drawings from page 134

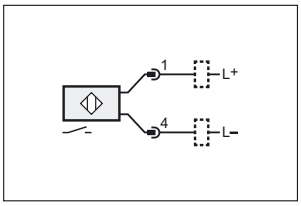
Type	Description	Order no.
	Mounting set · Ø 30.2 mm · Clamp mounting · aluminium profile · for type II, KI, OID, OI · Housing materials: fixture: stainless steel 316Ti / 1.4571 / clamp: diecast zinc / Cube: diecast zinc	E20875

Wiring diagrams

Core colours

BN	brown
BU	blue
BK	black
WH	white

1



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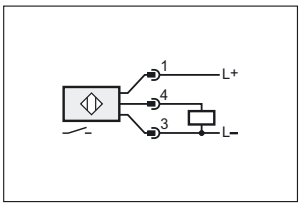

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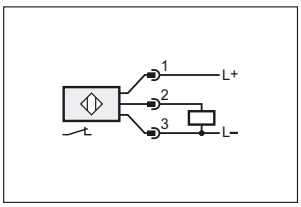

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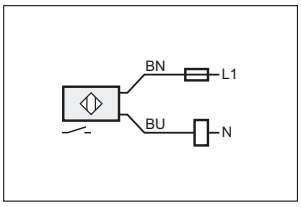

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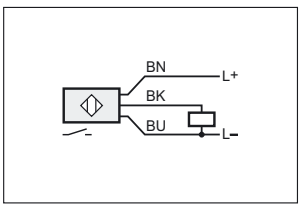

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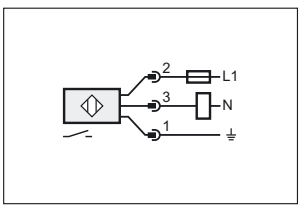

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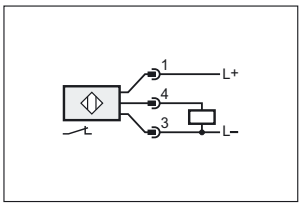

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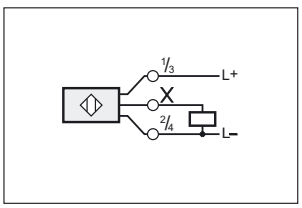

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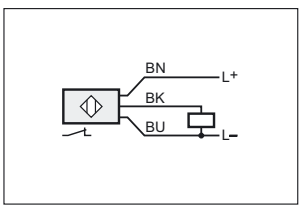

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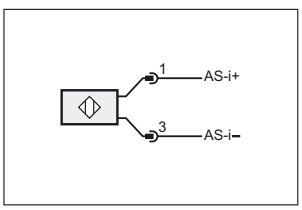

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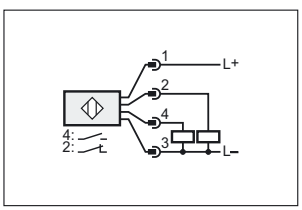

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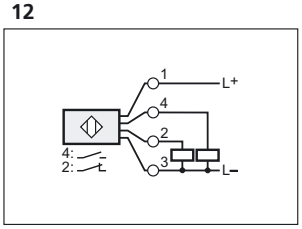

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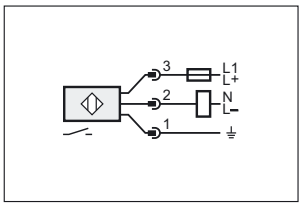

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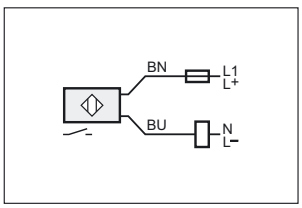

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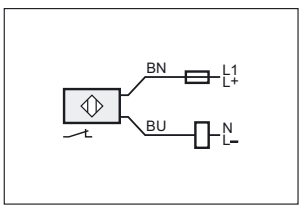

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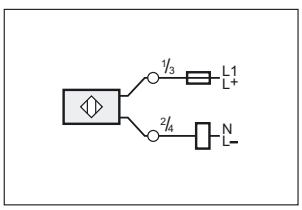

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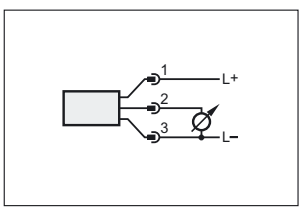

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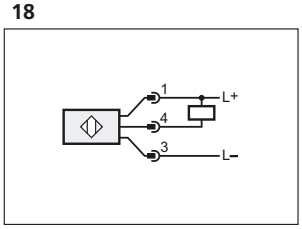

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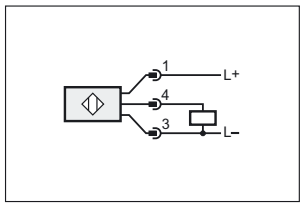

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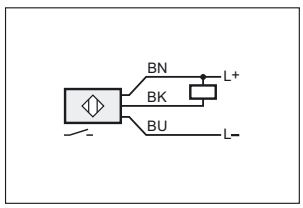

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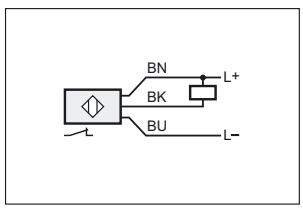

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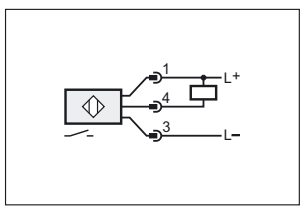

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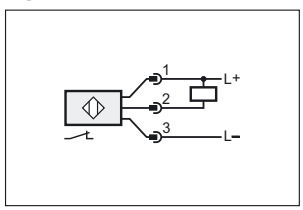

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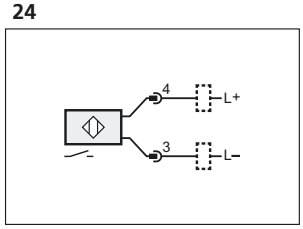

Wiring diagrams

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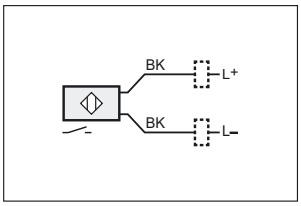

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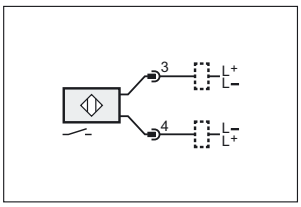

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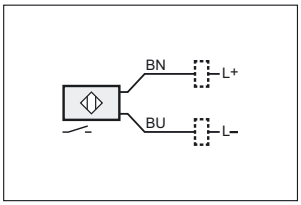

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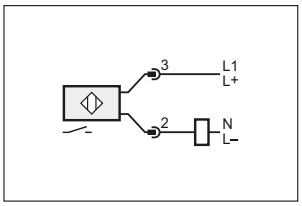

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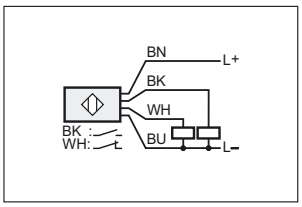

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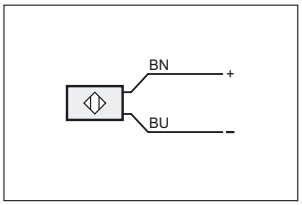

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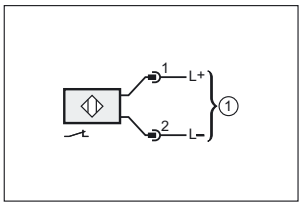
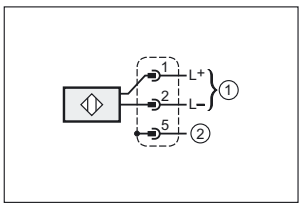


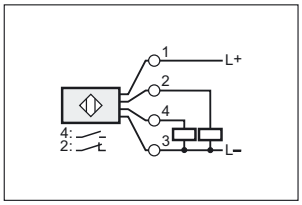
1: connection to NAMUR-amplifier

32



1: connection to NAMUR-amplifier, 2: Potential equalisation plug housing

33



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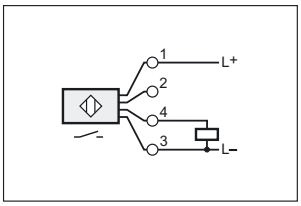

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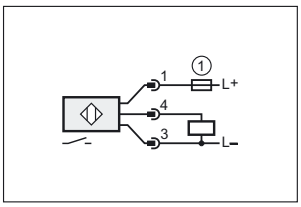
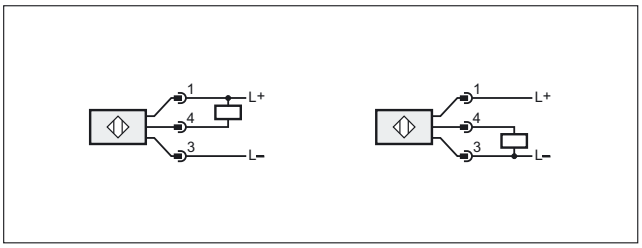


1: fuse

36



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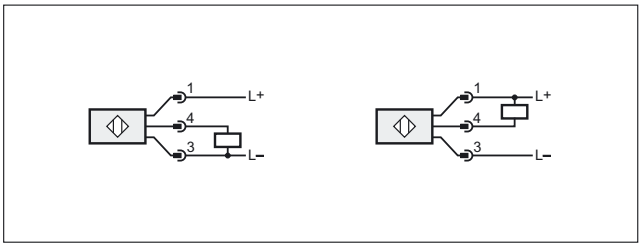

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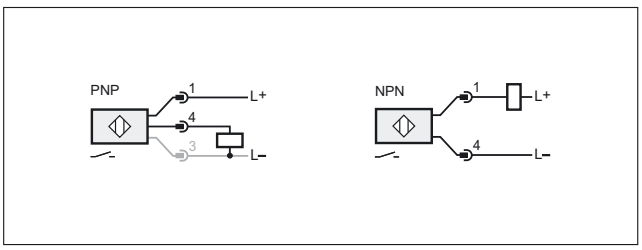

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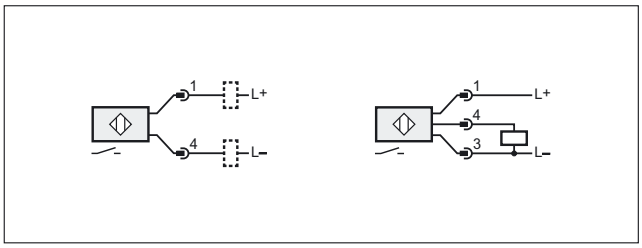

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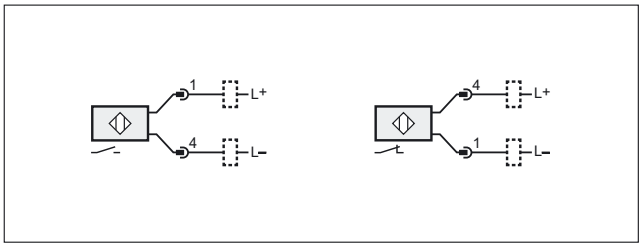

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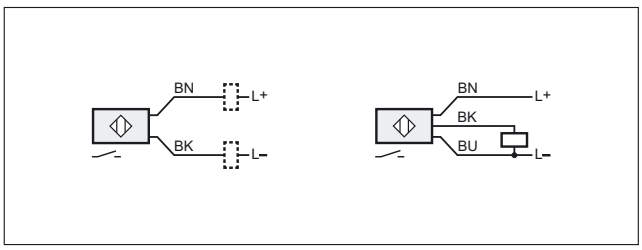

Wiring diagrams

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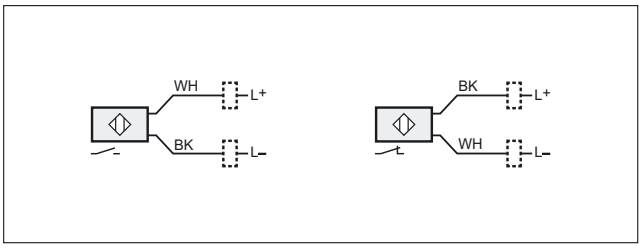

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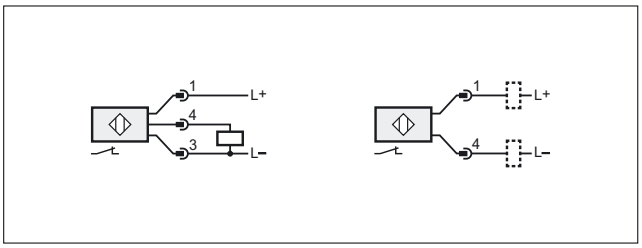

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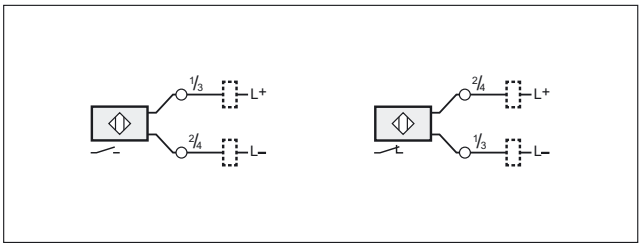

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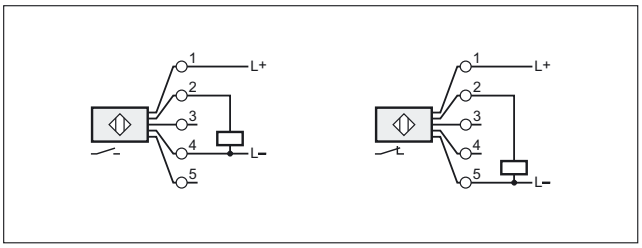

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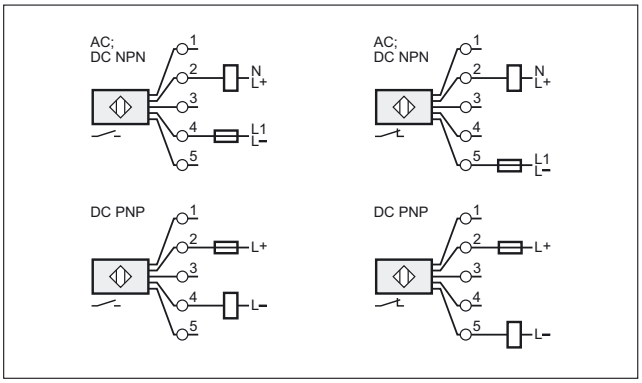

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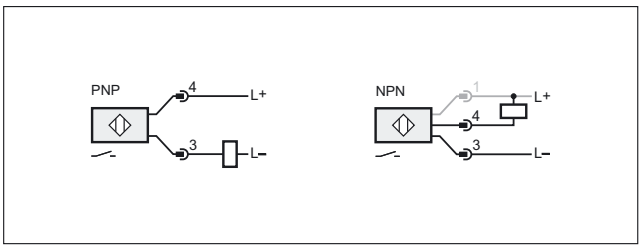

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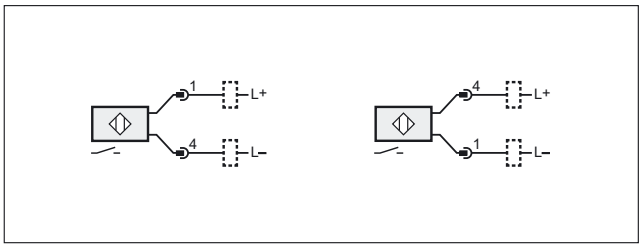

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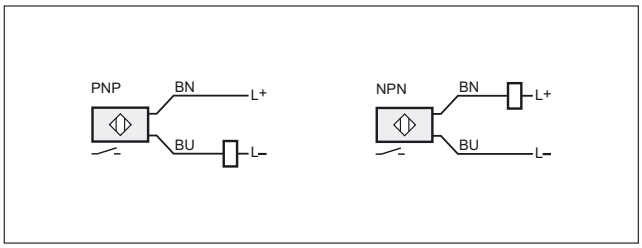

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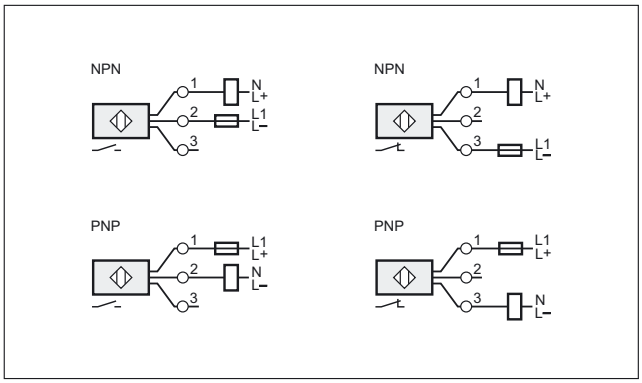

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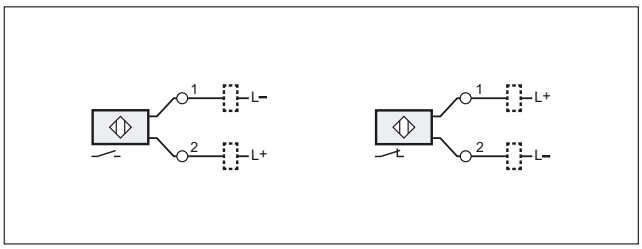

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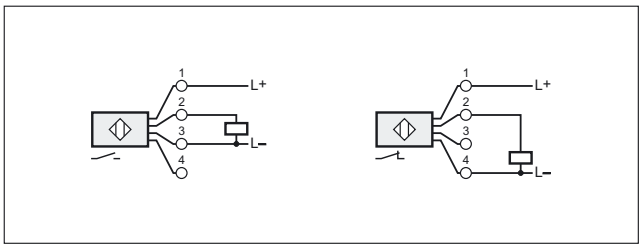

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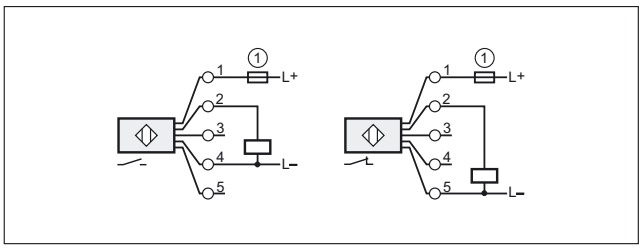

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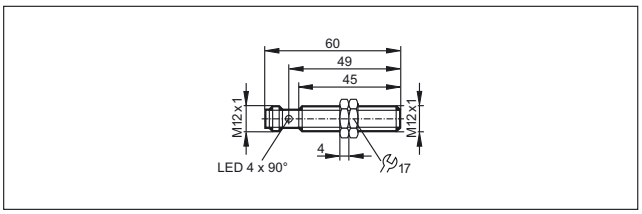

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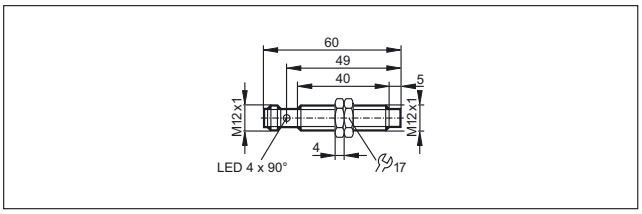

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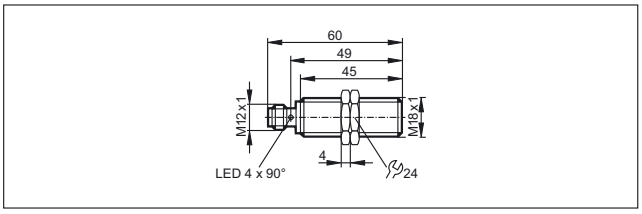

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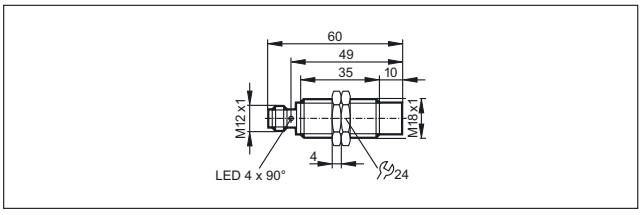

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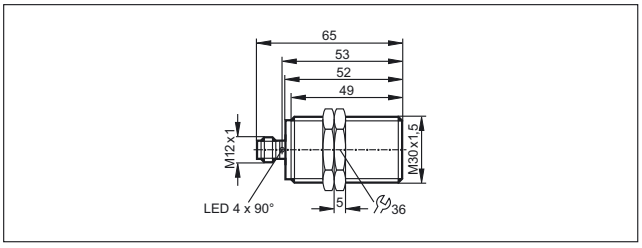

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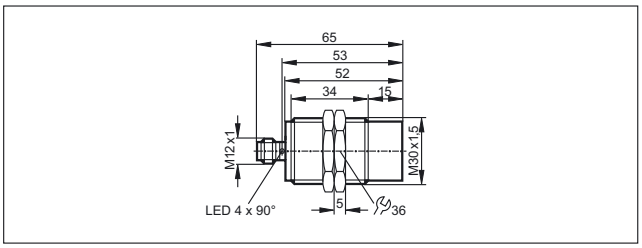

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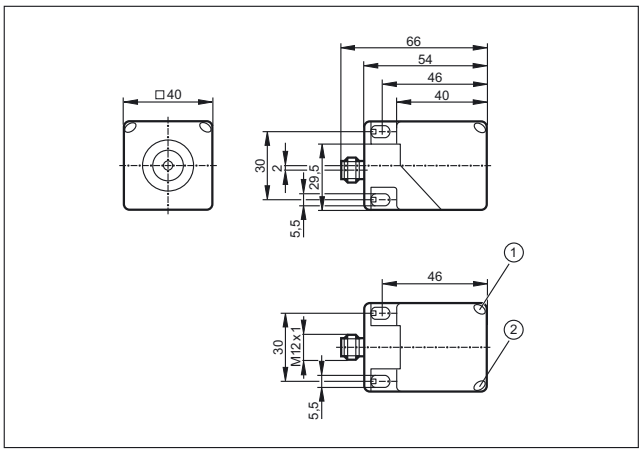

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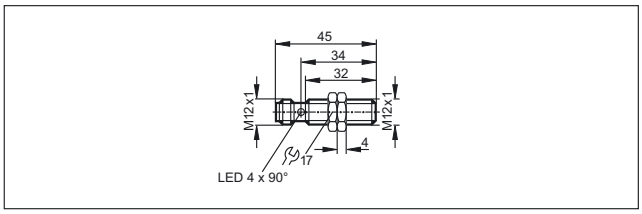

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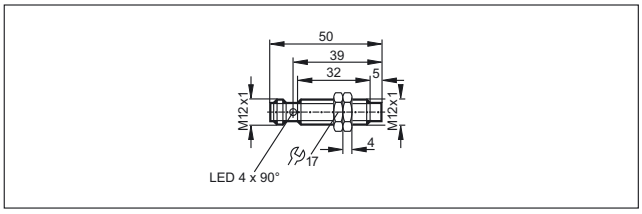

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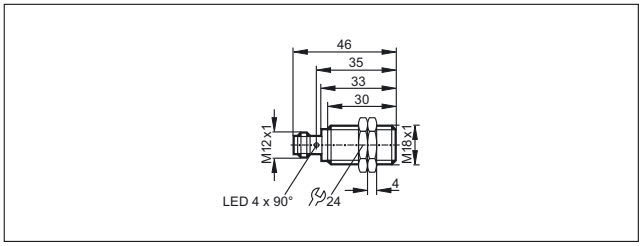

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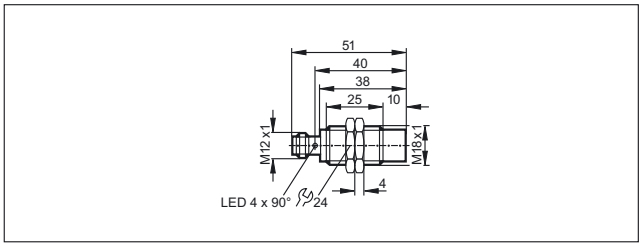

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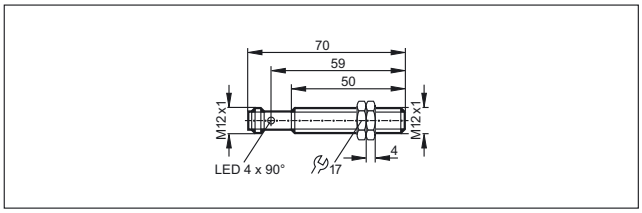

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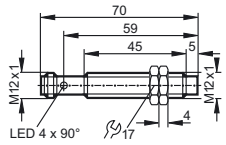

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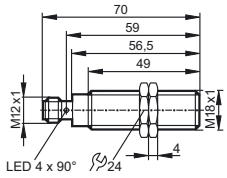

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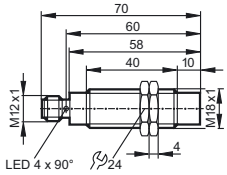

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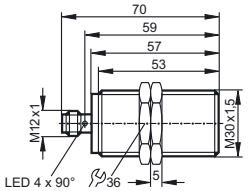

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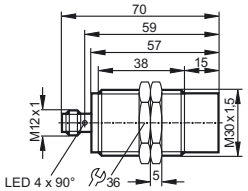

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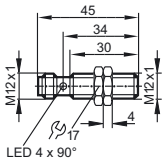

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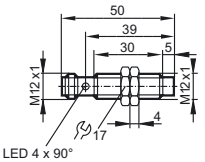

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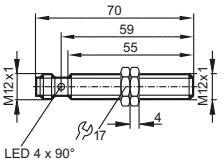

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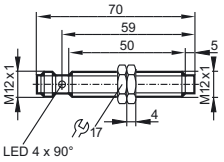

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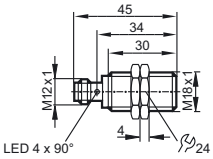

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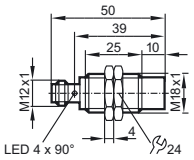

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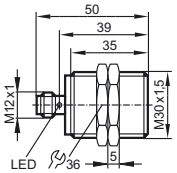

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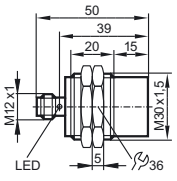

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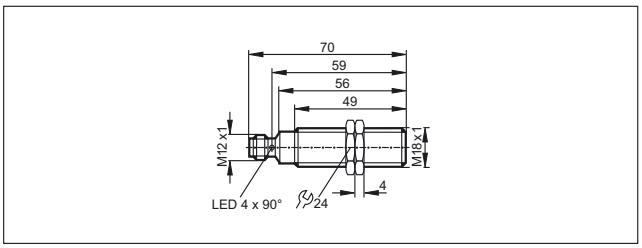

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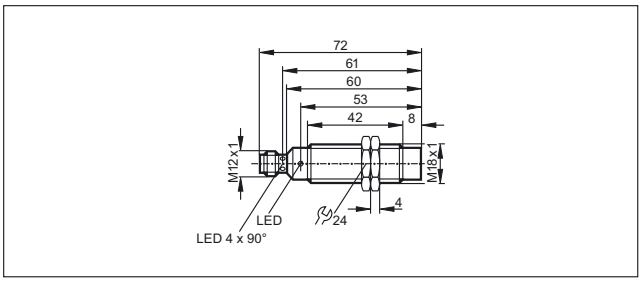

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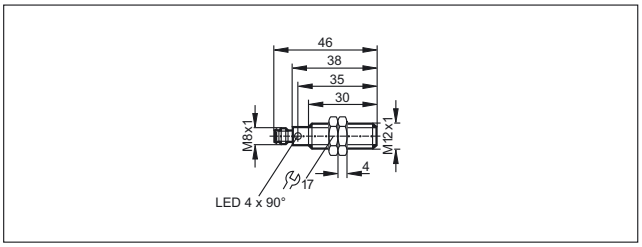

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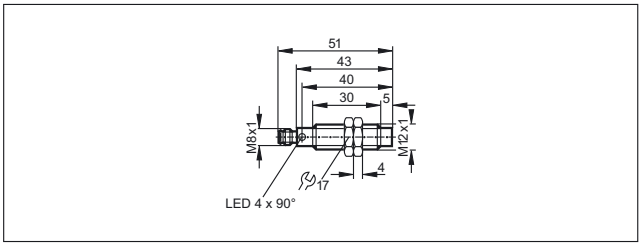

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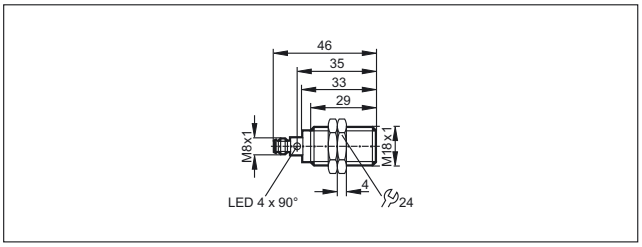

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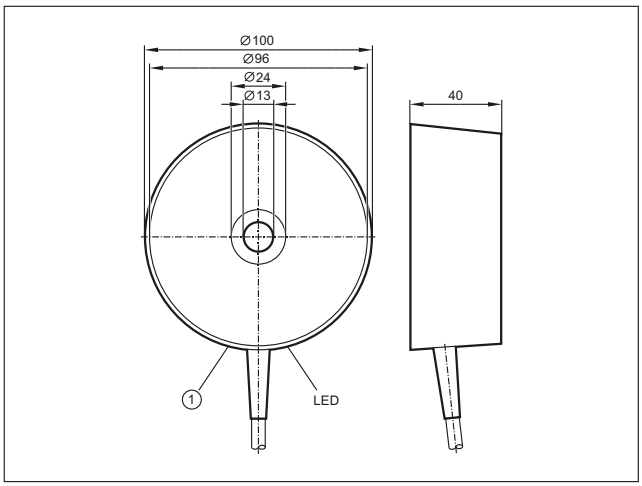

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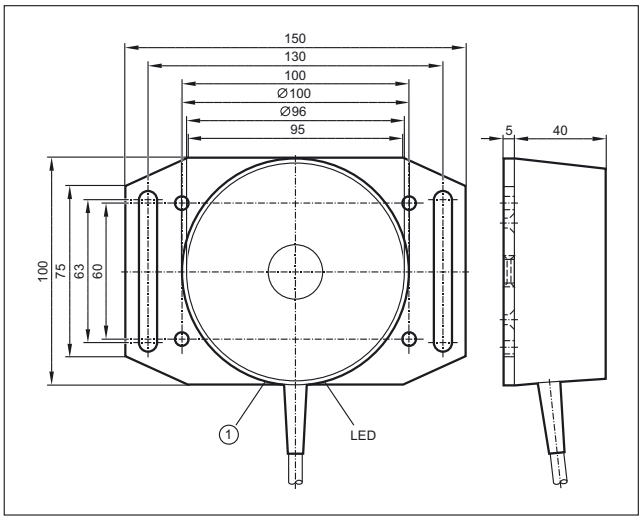

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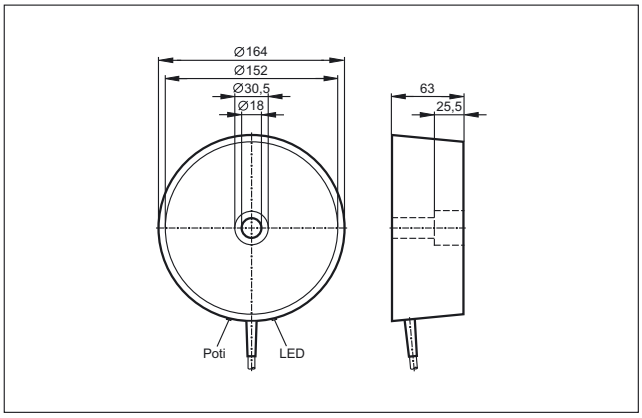

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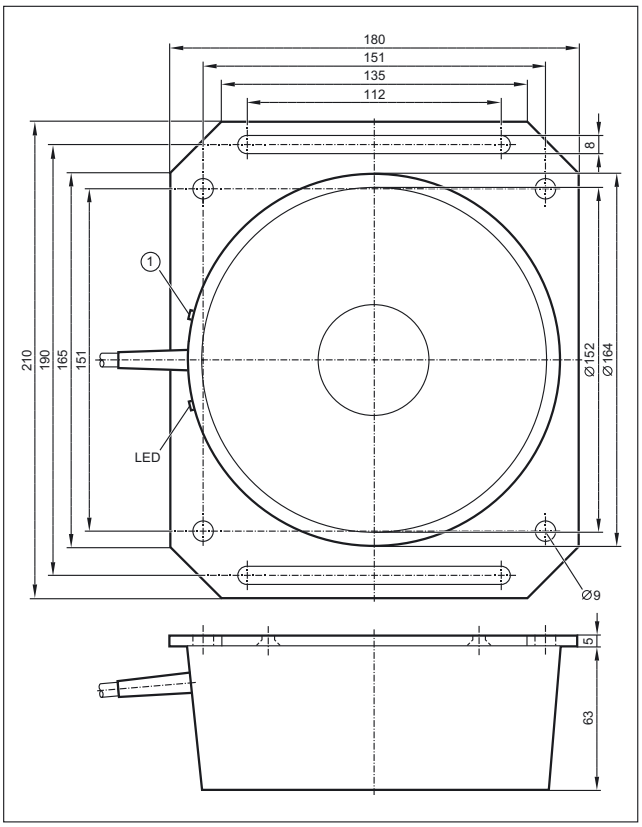

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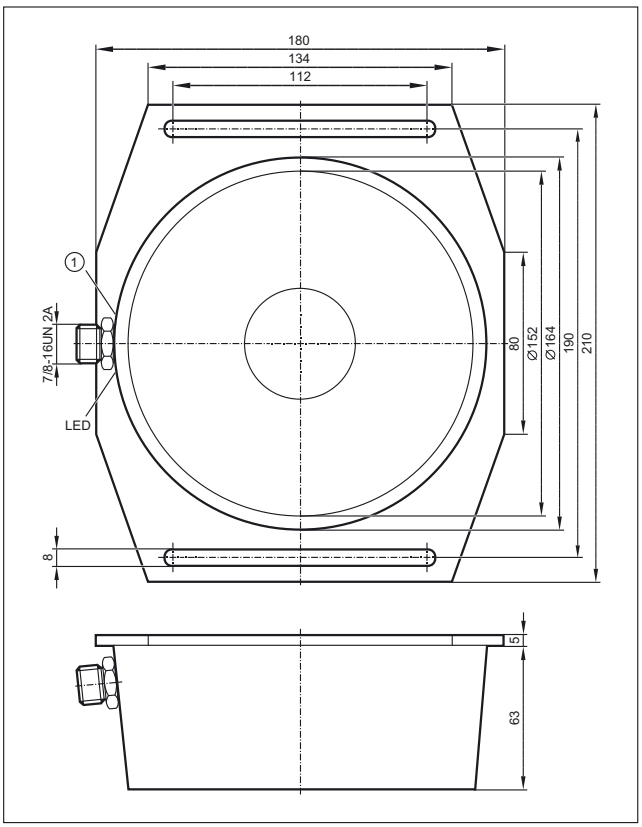

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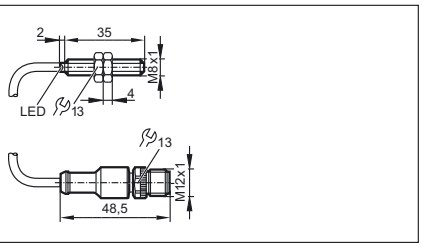

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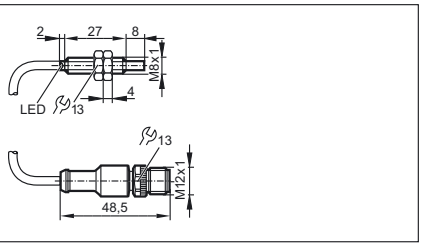

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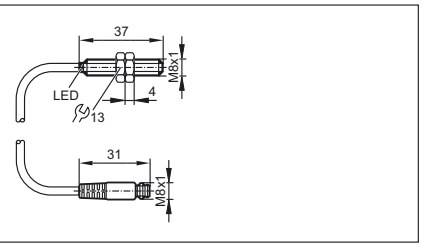

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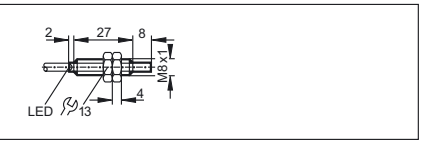

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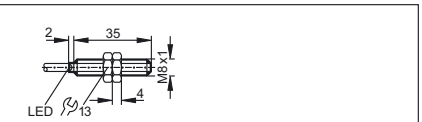

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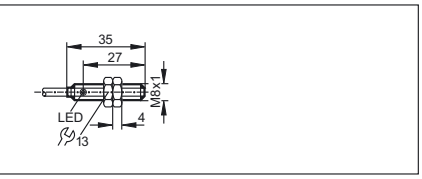

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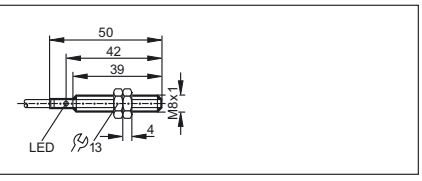

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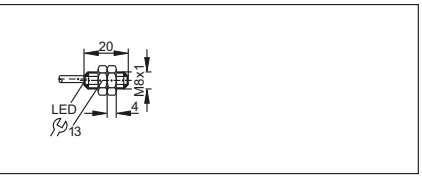

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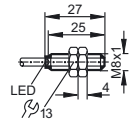

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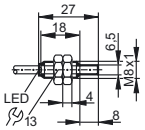

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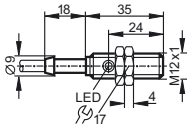

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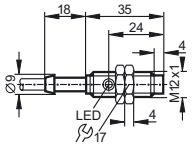

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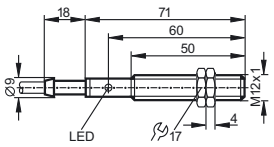

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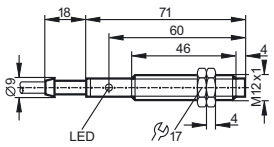

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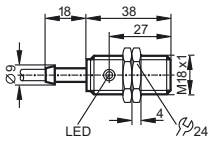

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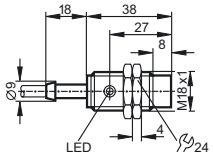

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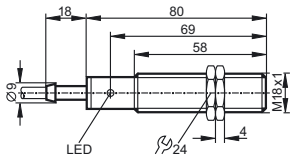

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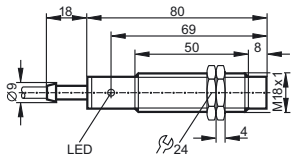

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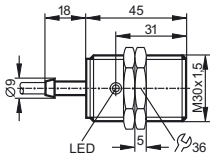

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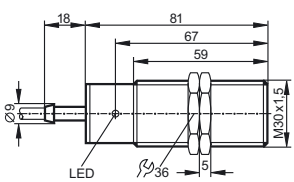

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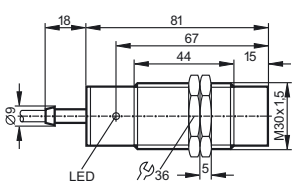

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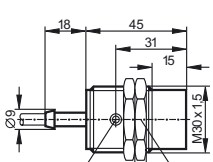

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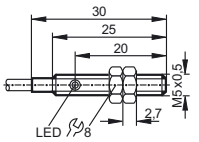

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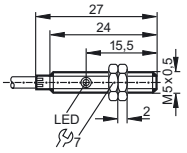

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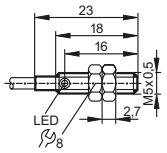

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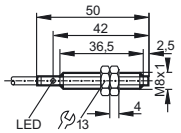

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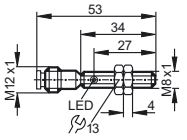

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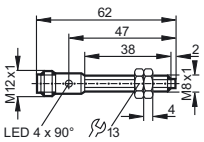

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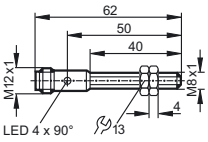

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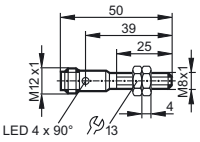

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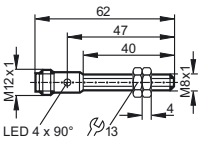

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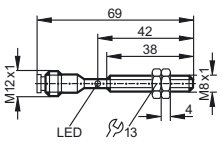

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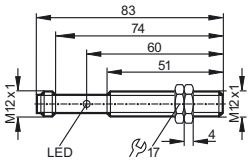

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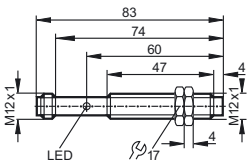

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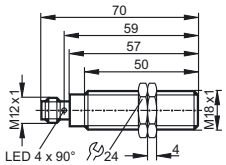

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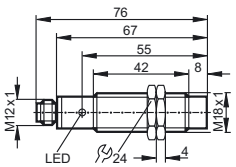

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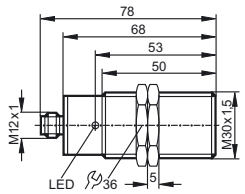

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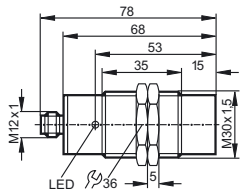

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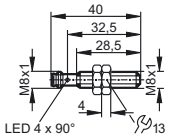

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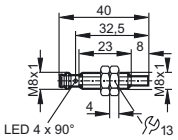

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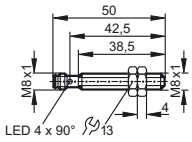

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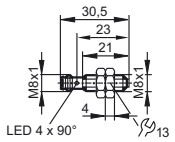

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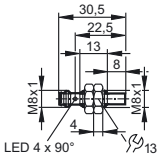

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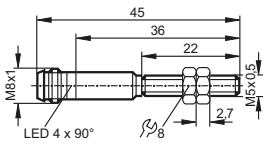

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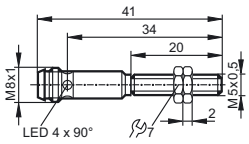

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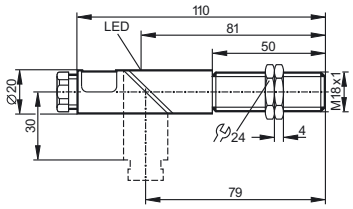

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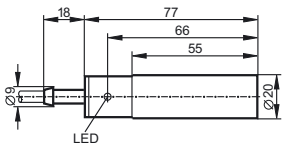

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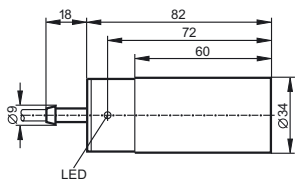

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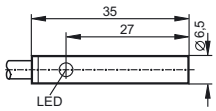

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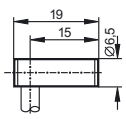

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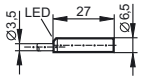

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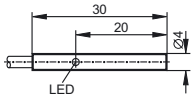

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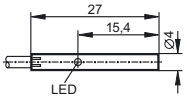

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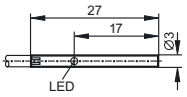

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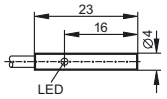

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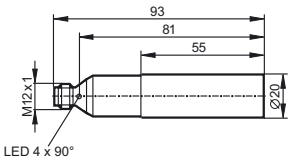

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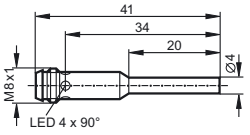

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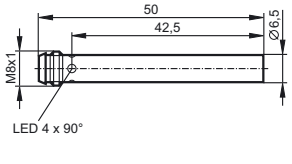

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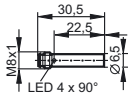

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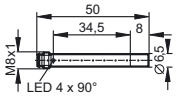

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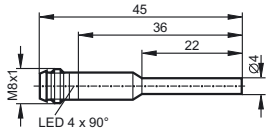

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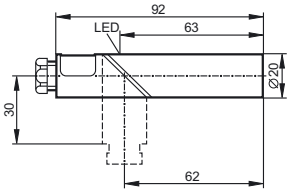

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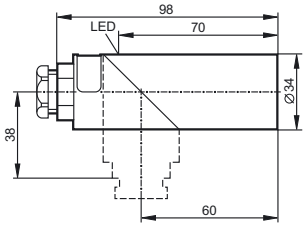

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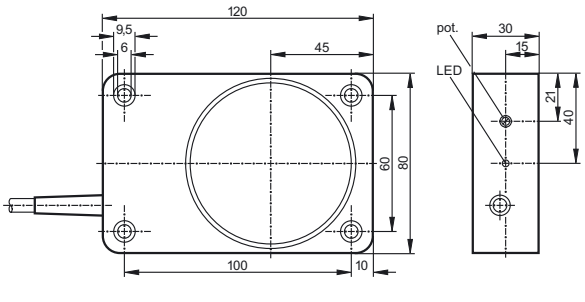

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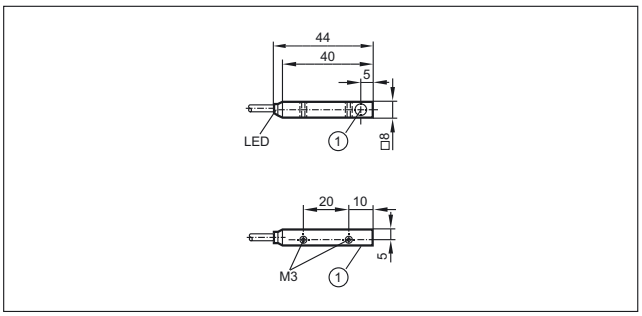

1: sensing face

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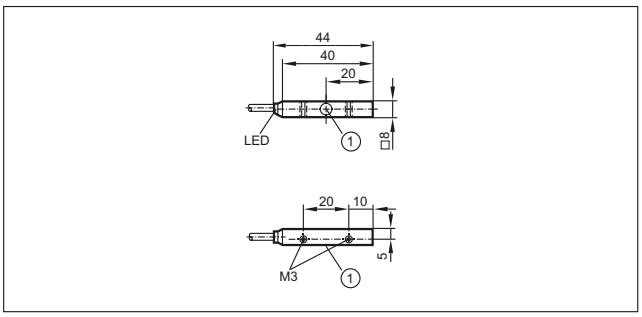

1: sensing face

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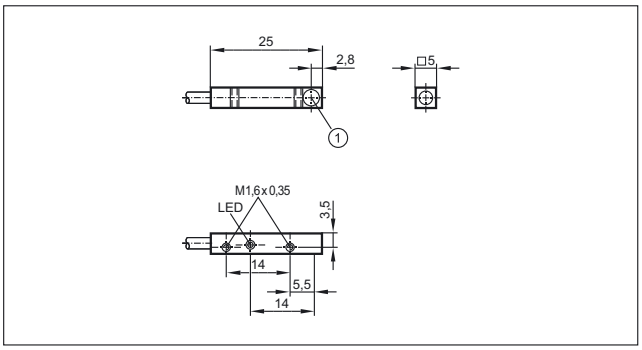

1: sensing face

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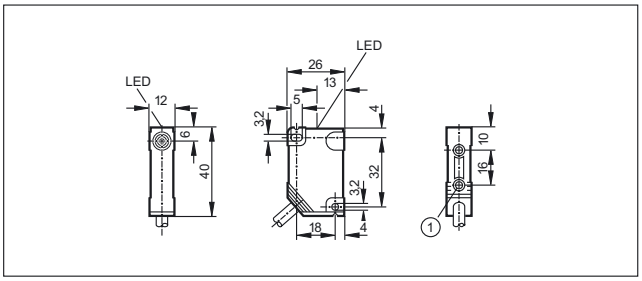
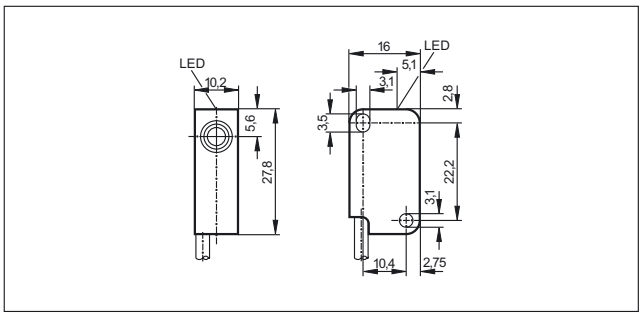
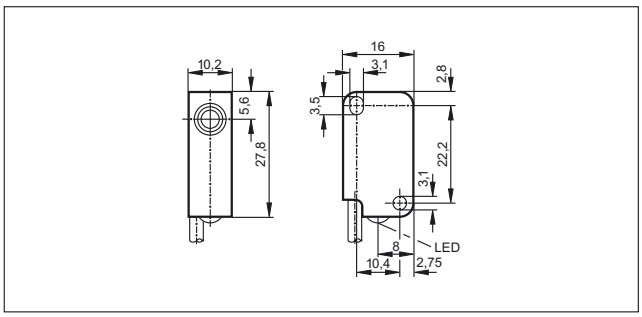


1: threaded insert M3, depth 5.8 mm, max. tightening torque 1.2 Nm (screw fixing class 8.8) when brass insert in contact with counterpart.

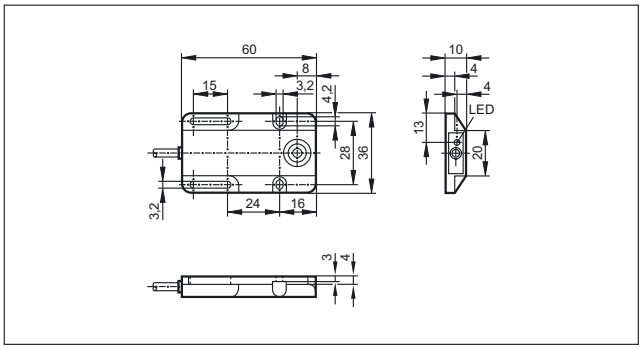
104



105



106



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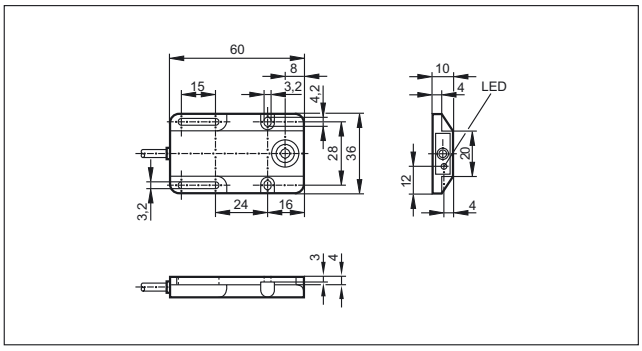

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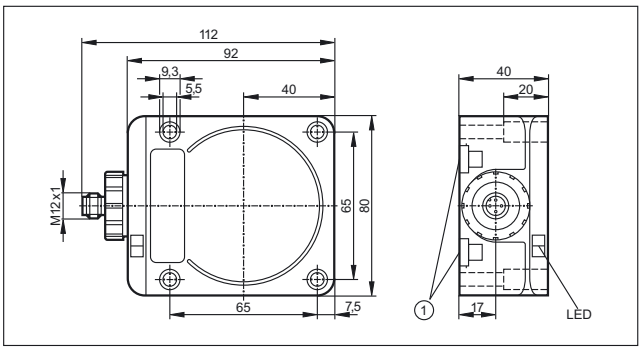
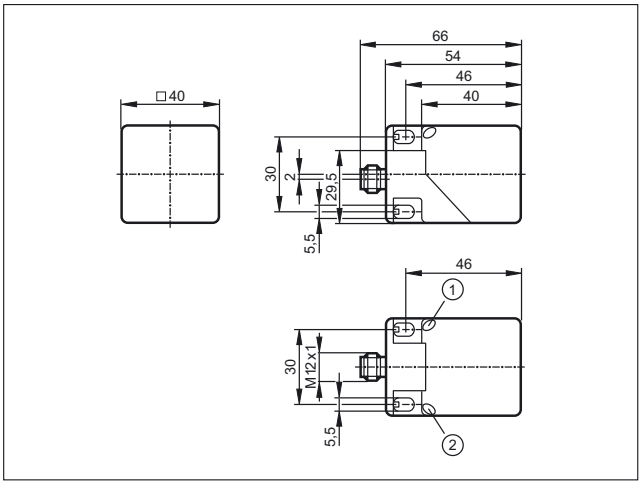
108



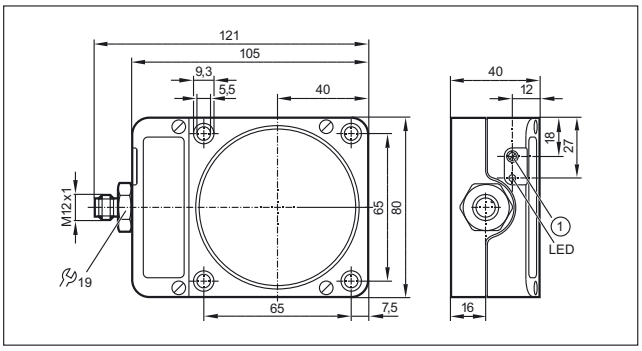
1: Mounting on DIN rail

109



1: LED yellow, 2: LED green

110



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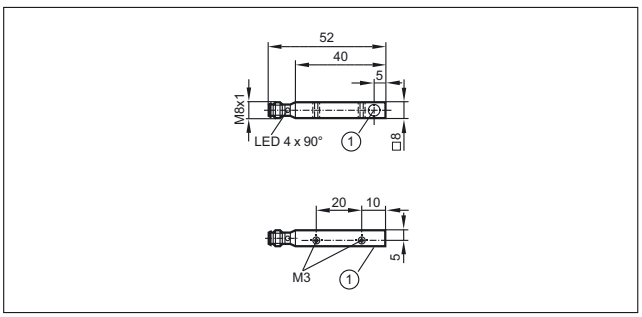
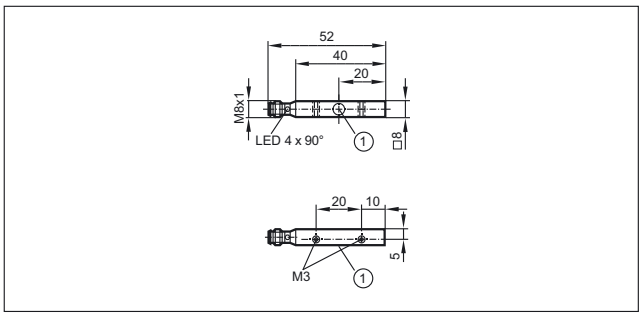


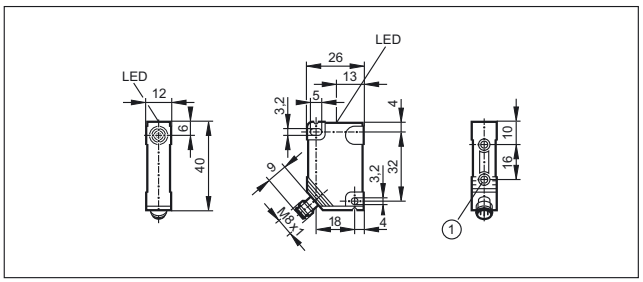
1: sensing face

112



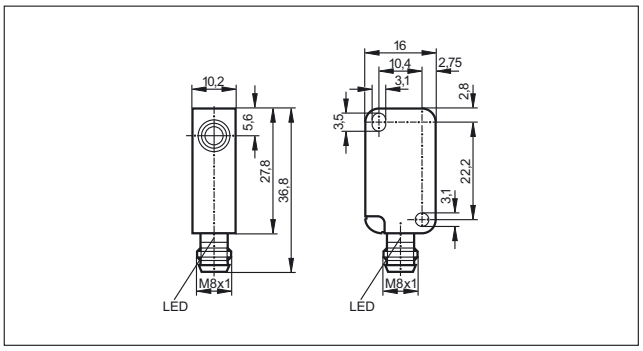
1: sensing face

113



1: threaded insert M3, depth 5.8 mm, max. tightening torque 1.2 Nm (screw fixing class 8.8) when brass insert in contact with counterpart.

114



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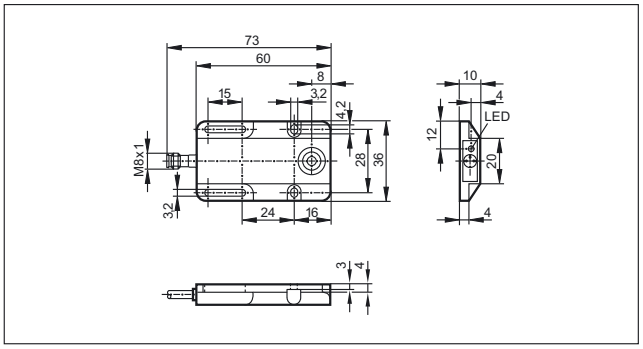

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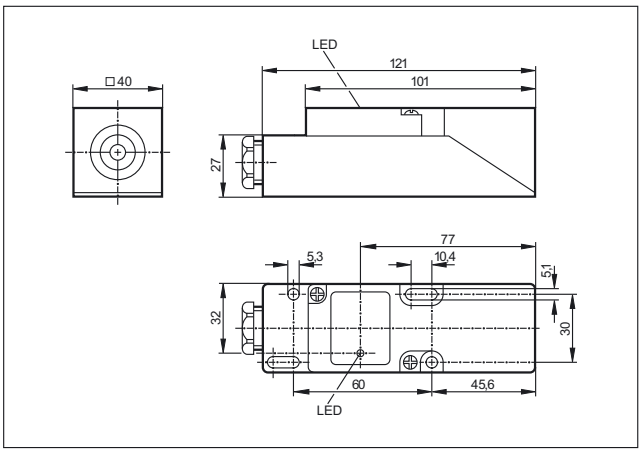

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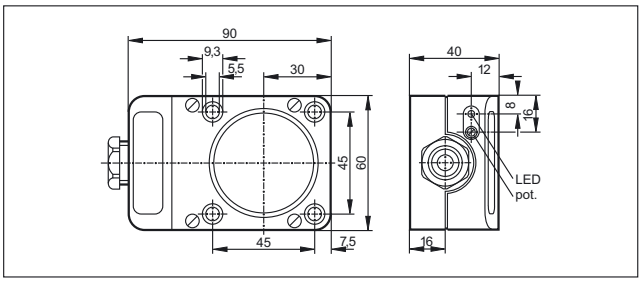

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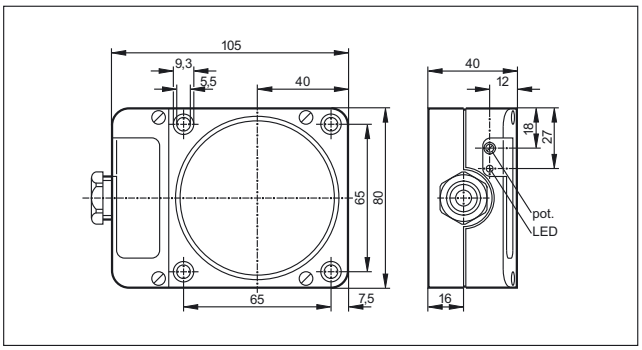

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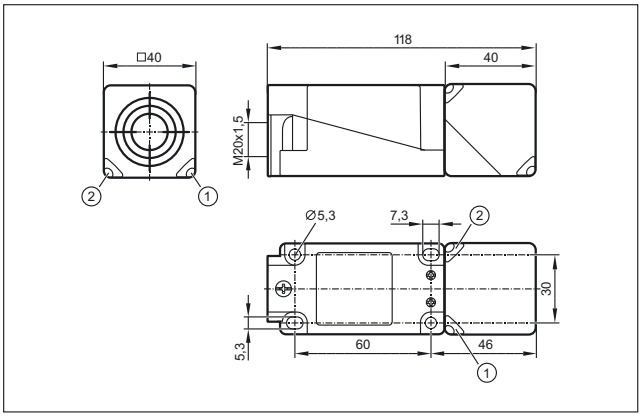
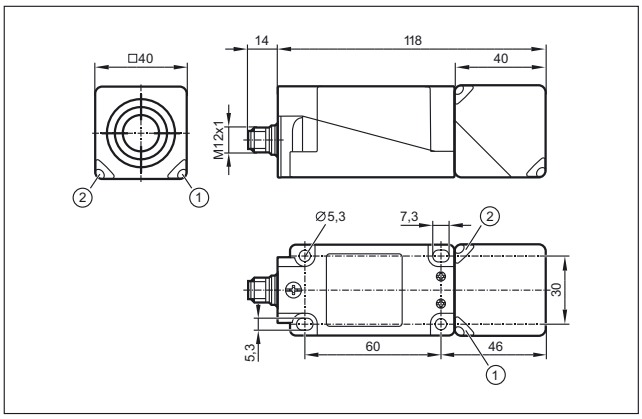


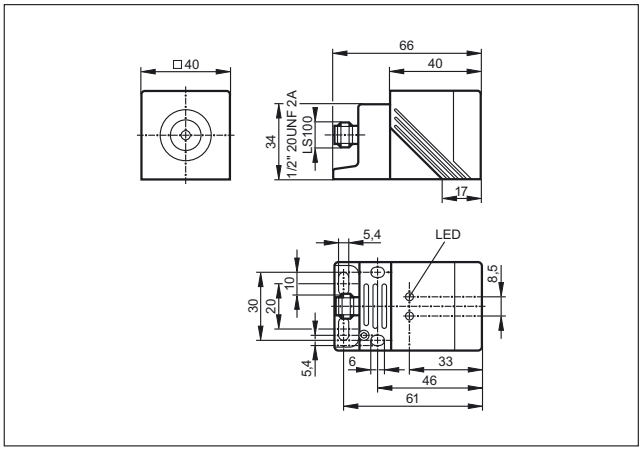
1: LED green, 2: LED yellow

120



1: LED green, 2: LED yellow

121



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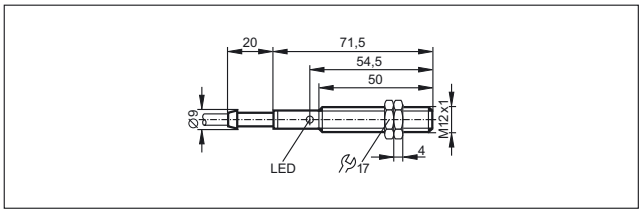

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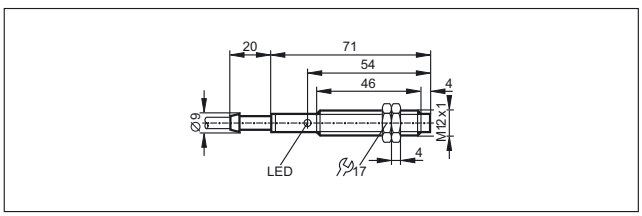

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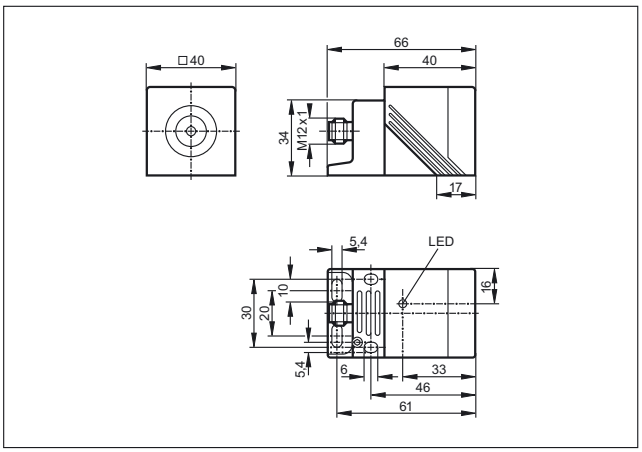

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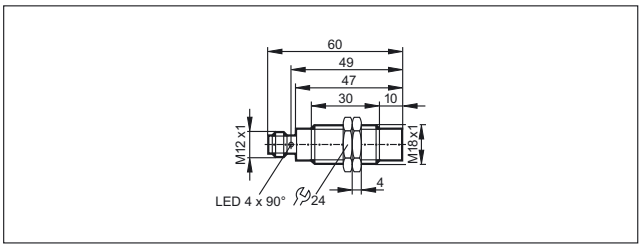

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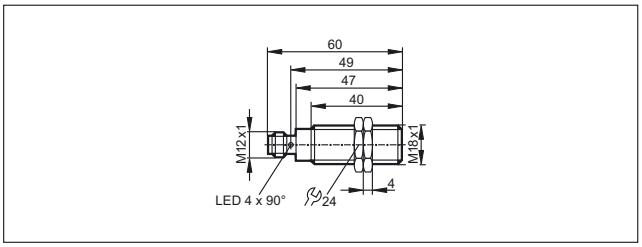

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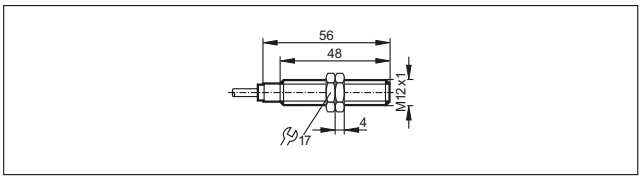

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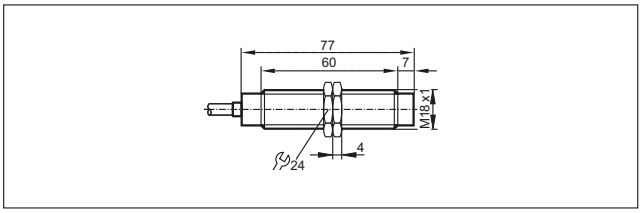

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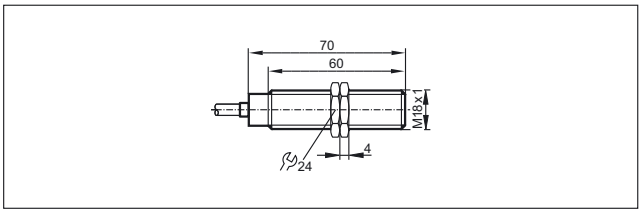

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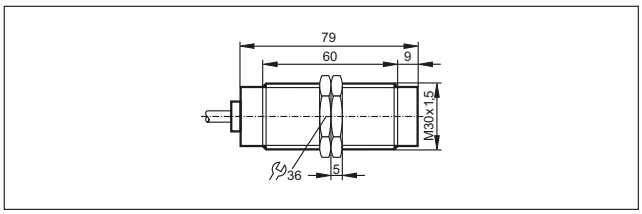

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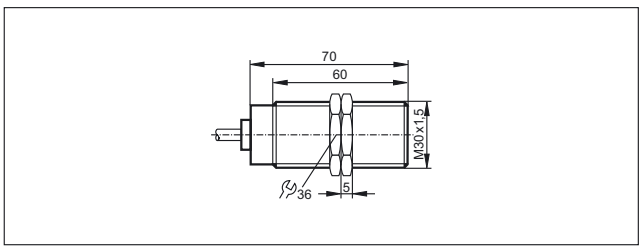

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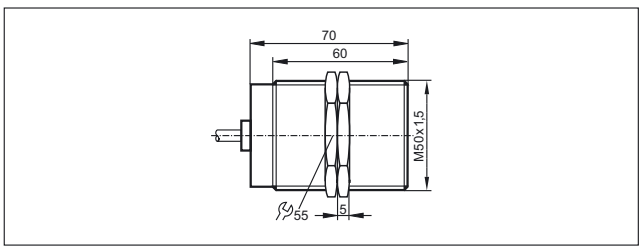

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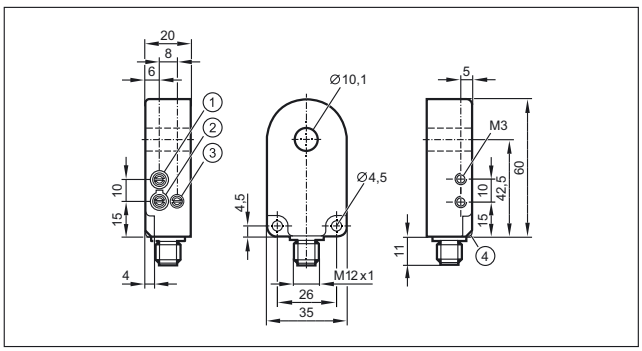

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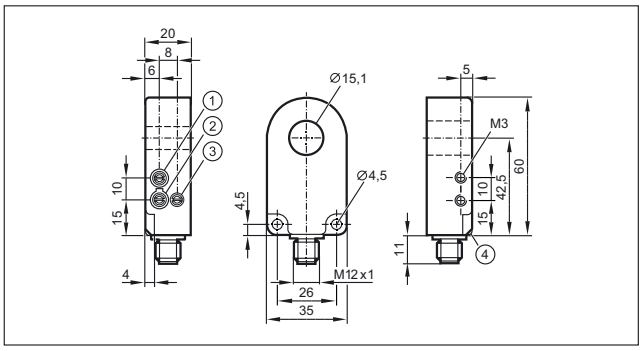

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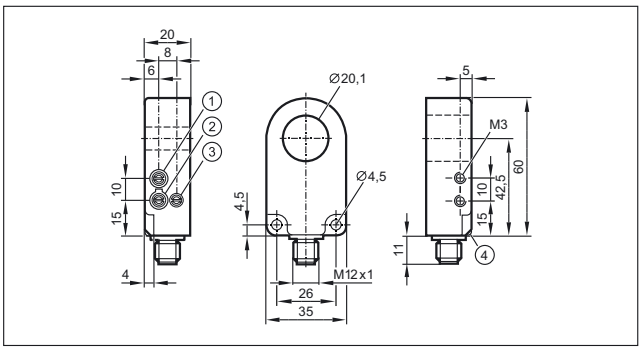

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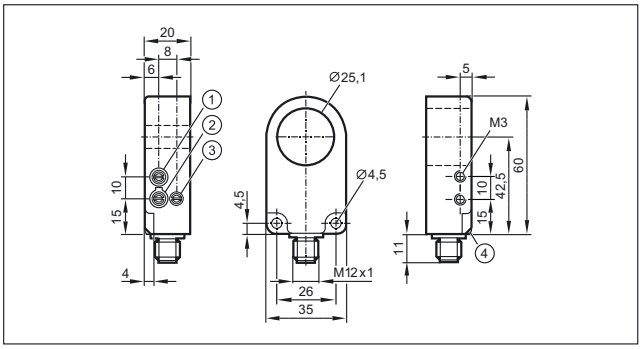

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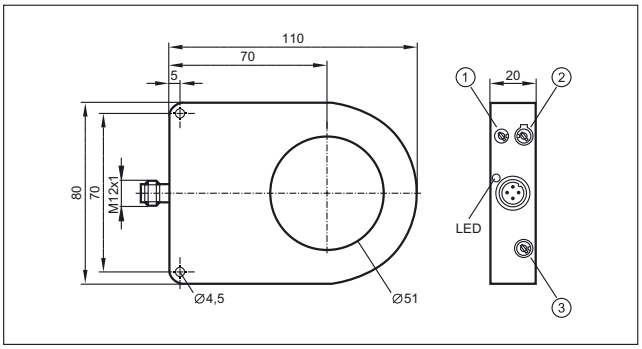

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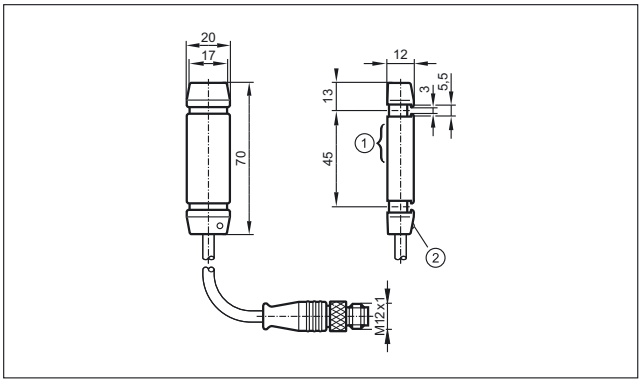
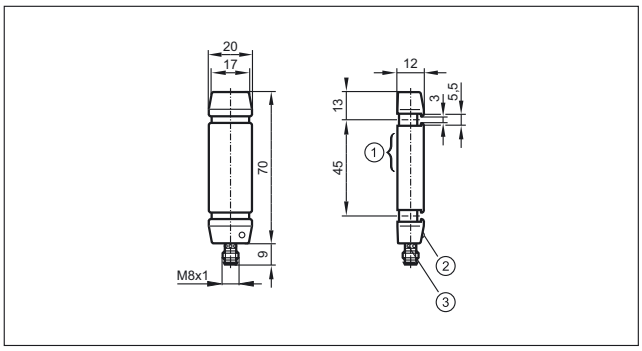


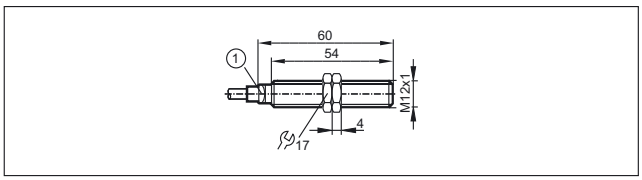
1: sensing face, 2: LED operating status

139



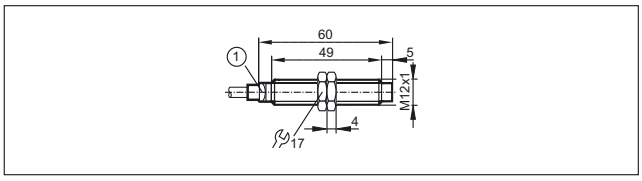
1: sensing face, 2: LED operating status, 3: LED switching status

140



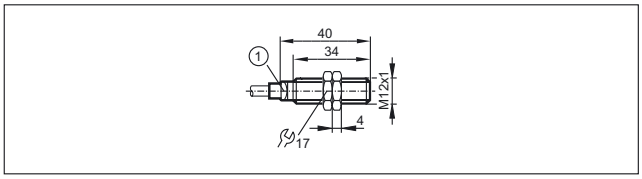
1: LED (yellow)

141



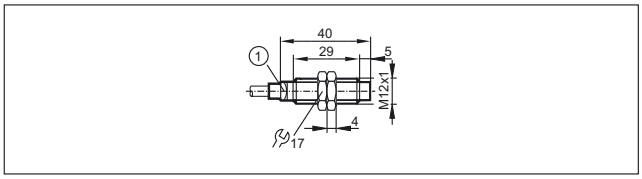
1: LED (yellow)

142



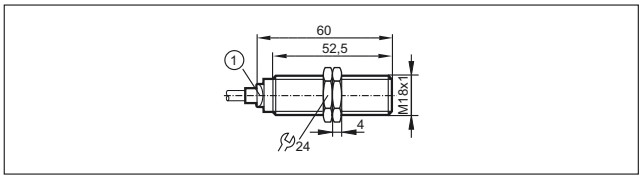
1: LED (yellow)

143



1: LED (yellow)

144



1: LED (yellow)

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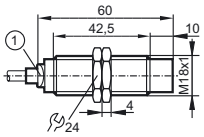
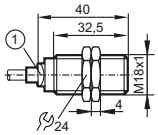


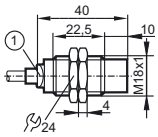
1: LED (yellow)

146



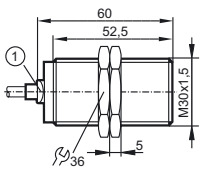
1: LED (yellow)

147



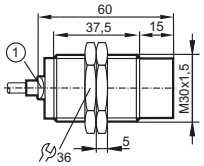
1: LED (yellow)

148



1: LED (yellow)

149



1: LED (yellow)

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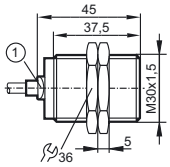
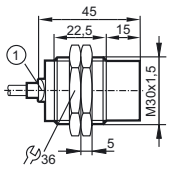


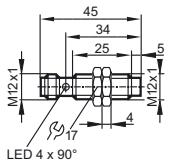
1: LED (yellow)

151



1: LED (yellow)

152



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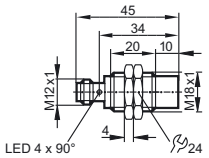

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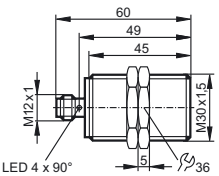

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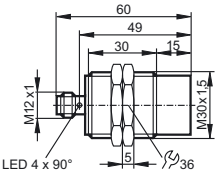

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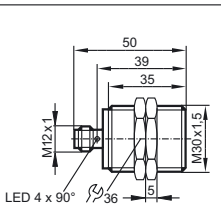

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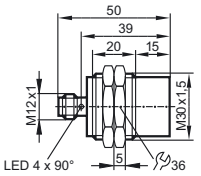

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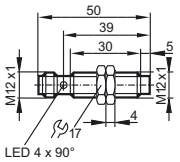

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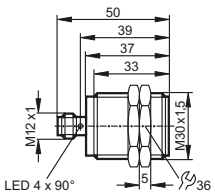

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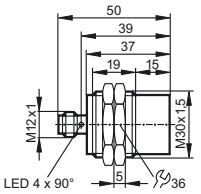

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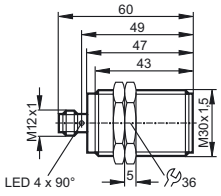

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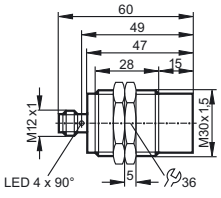

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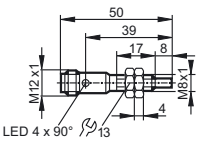

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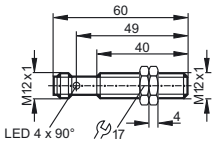

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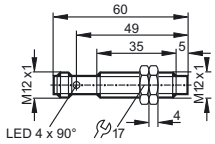

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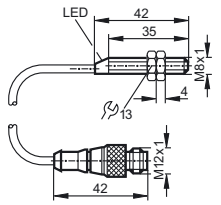

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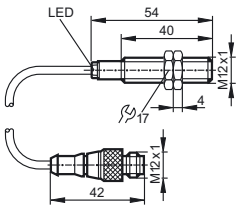

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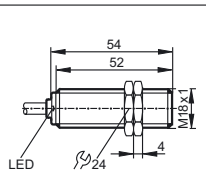

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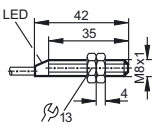

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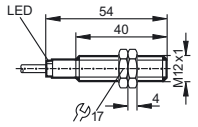

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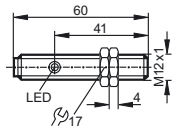

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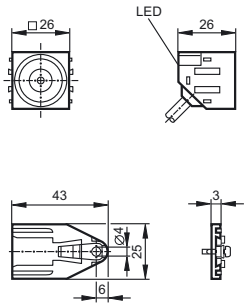

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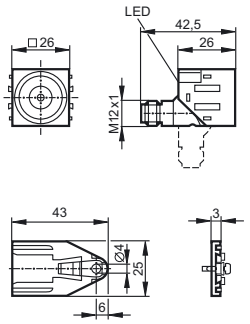

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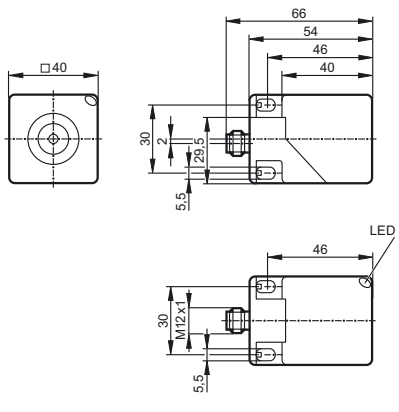

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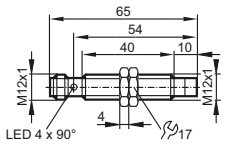

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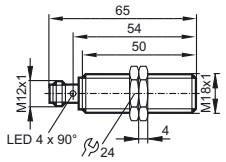

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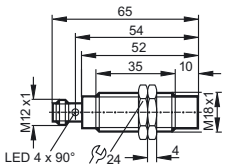

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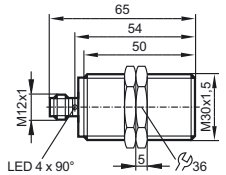

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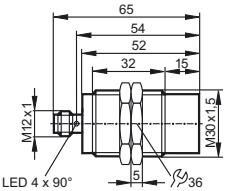

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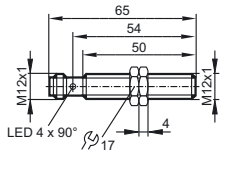

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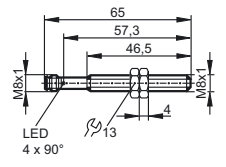

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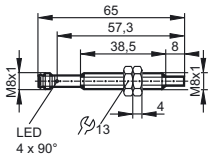

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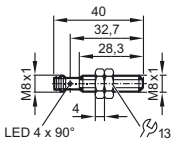

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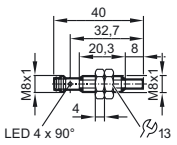

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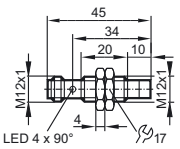

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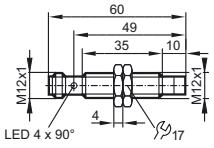

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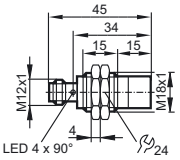

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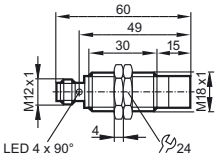

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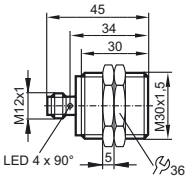

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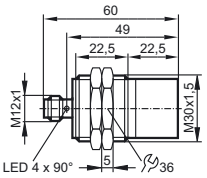

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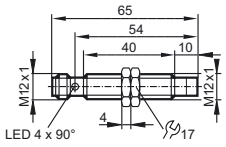

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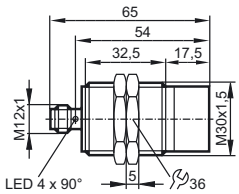

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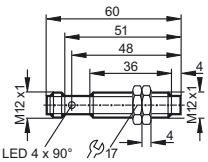

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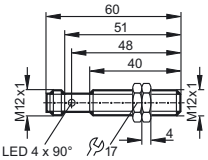

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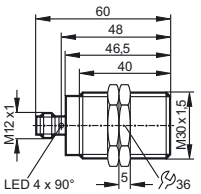

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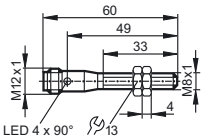

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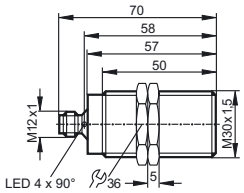

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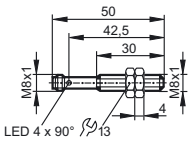

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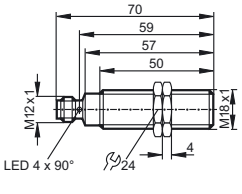

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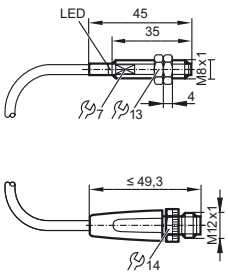

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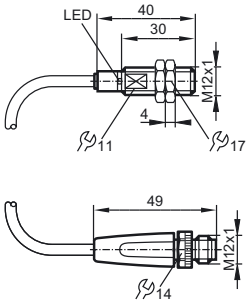

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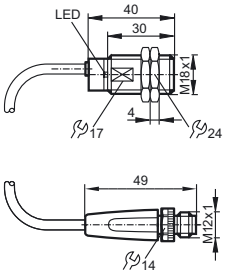

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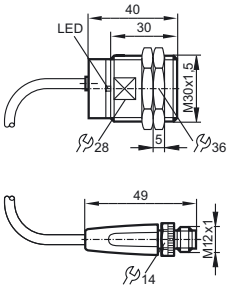

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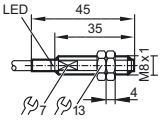

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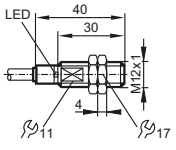

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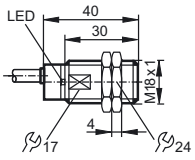

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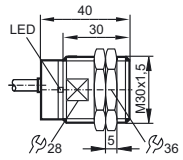

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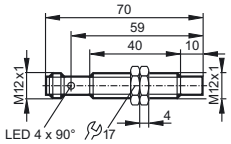

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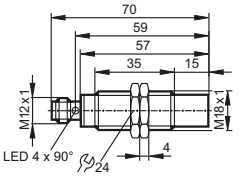

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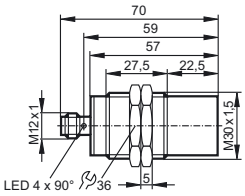

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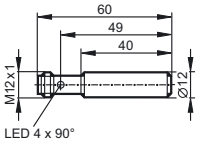

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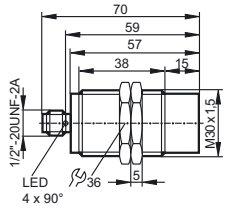

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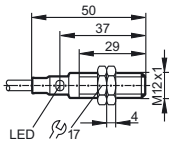

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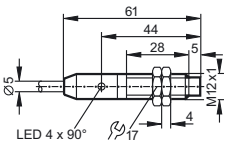

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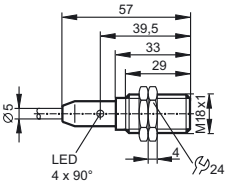

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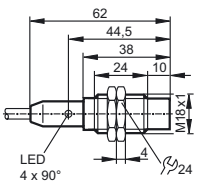

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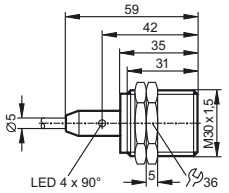

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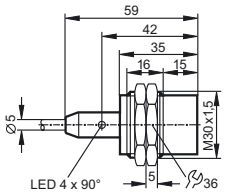

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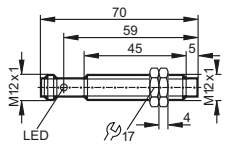

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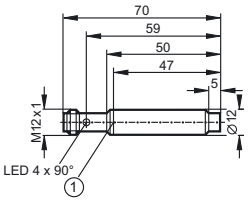

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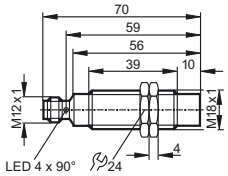

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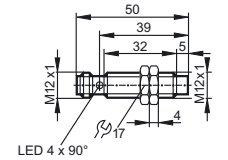

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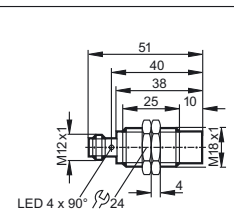

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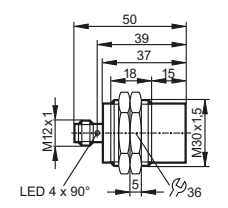

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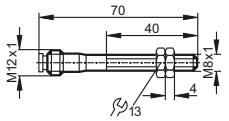

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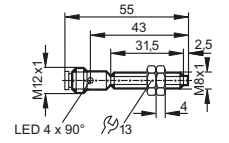

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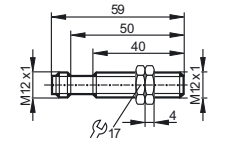

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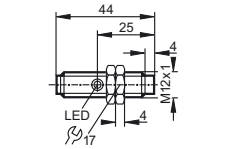

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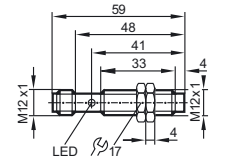

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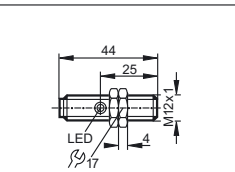

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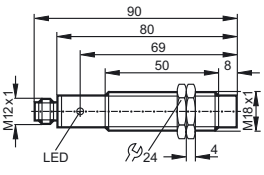

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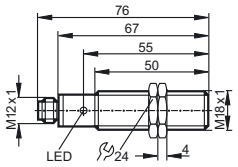
232



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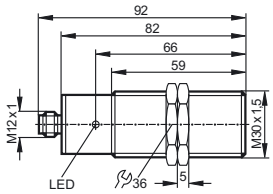

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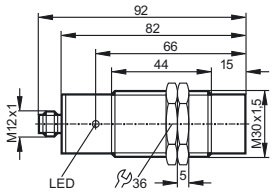

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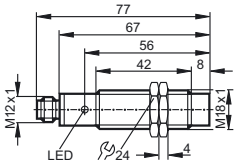

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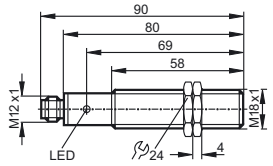

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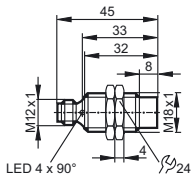

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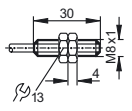

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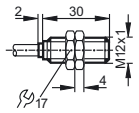

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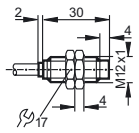

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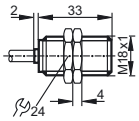

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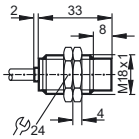

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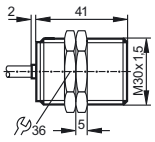

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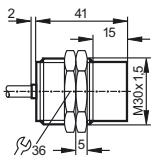

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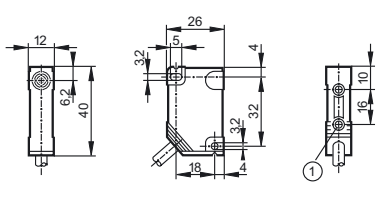

1: threaded insert M3, depth 5.8 mm, max. tightening torque 1.2 Nm (screw fixing class 8.8) when brass insert in contact with counterpart.

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

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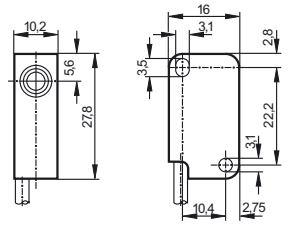

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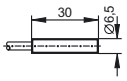

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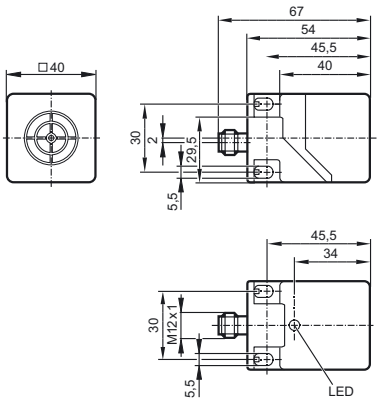

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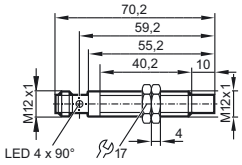

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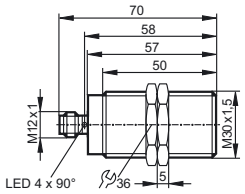

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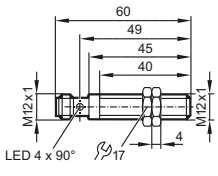

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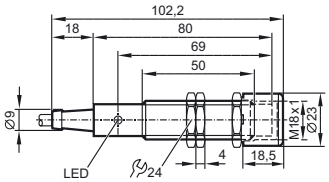

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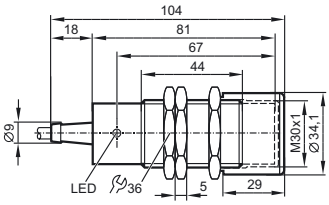
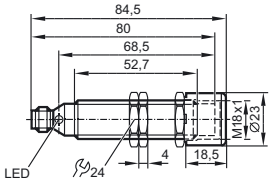


1: Sensor, 2: Sensor with protective cover

254



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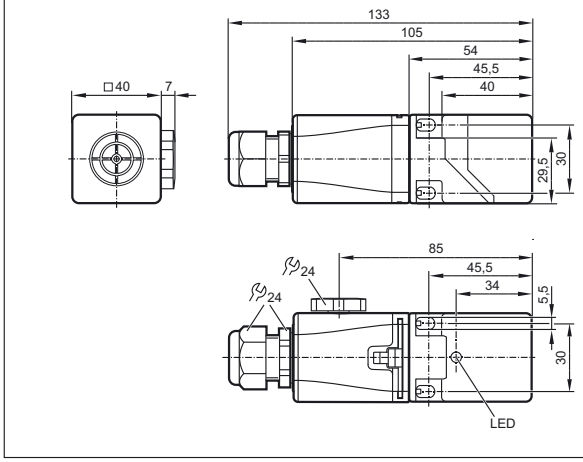

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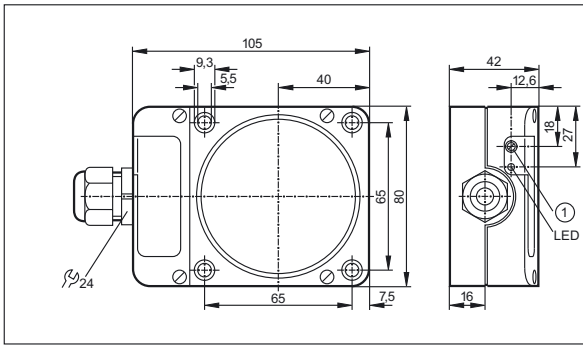

1: potentiometer