

Cylindrical and Rectangular Designs



The product portfolio of inductive sensors comprises threaded barrels and rectangular types which cover the entire scope of tasks. The sensors are available in robust M8, M12, M18 and M30 threaded barrels. Of the M8, M12 and M18 designs, the portfolio even includes different lengths. The rectangular inductive sensors are available in the variable 40 × 40 mm housings of the CK40 and the tool-free adjustable QV40 designs. The housing of the rectangular variants is made in the especially abrasion-resistant and chemically resistant plastic PBT.

For mains connection, you can choose between 2 m and 7 m cables as well as between M8 and M12 male connection types.

Features

- Robust housing materials
- High switching distances
- Many connection possibilities
- Many electrical output functions
- Optimal fastening
- Good visible LED

Type code

N	I	50	U	-	QV40	.	-	A	P	6	X2	-	H1	1	4	1
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N	I	50	U	Functional Principle	-	QV40	.	Design	-	A	P	6	X2	Electrical Version	-
				Special functions									Indication		
				U	uprox® or uprox®+ or uprox®3 Factor 1 sensors								X LED		
													X... Number of LEDs or multicolor LED		
				Rated switching distance									Voltage range		
				50	Switching distance								4 10...65 VDC, (K)		
													6 10...30 VDC, (K)		
				Functional principle									Output mode		
				I	Inductive								N NPN output		
													P PNP output		
				Installation									Output function		
				B	Flush								A Working current (NO)		
				N	Non-flush								V Complementary contact		

M8 – 3-Wire DC



General data

Operating voltage	10...30 VDC	Switching element function	NO contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn
Housing designation	M8 × 1	Active area material	Plastic, PP-GF20

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI2-M08-AP6X	4602901	2 mm,	NO contact, PNP	2 m Cable	8 x 32.1 mm	w001	d001
BI2-M08-AN6X	4602926	2 mm,	NO contact, NPN	2 m Cable	8 x 32.1 mm	w002	d001
BI2-M08E-AN6X	4602951	2 mm,	NO contact, NPN	2 m Cable	8 x 42.1 mm	w002	d002
BI2-M08E-AP6X	4602954	2 mm,	NO contact, PNP	2 m Cable	8 x 42.1 mm	w001	d002
BI2-M08K-AN6X	4602963	2 mm,	NO contact, NPN	2 m Cable	8 x 24.1 mm	w002	d003
BI2-M08K-AP6X	4602966	2 mm,	NO contact, PNP	2 m Cable	8 x 24.1 mm	w001	d003
BI2-M08-AN6X-V1131	4602927	2 mm,	NO contact, NPN	Connector, M8 × 1	8 x 39.7 mm	w003	d004
BI2-M08-AP6X-V1131	4602903	2 mm,	NO contact, PNP	Connector, M8 × 1	8 x 39.7 mm	w004	d004
BI2-M08E-AN6X-V1131	4602953	2 mm,	NO contact, NPN	Connector, M8 × 1	8 x 49.7 mm	w003	d005
BI2-M08E-AP6X-V1131	4602956	2 mm,	NO contact, PNP	Connector, M8 × 1	8 x 49.7 mm	w004	d005
BI2-M08K-AN6X-V1131	4602965	2 mm,	NO contact, NPN	Connector, M8 × 1	8 x 31.7 mm	w003	d006
BI2-M08K-AP6X-V1131	4602968	2 mm,	NO contact, PNP	Connector, M8 × 1	8 x 31.7 mm	w004	d006
NI3-M08-AN6X	4602932	3 mm,	NO contact, NPN	2 m Cable	8 x 32.1 mm	w002	d007
NI3-M08-AP6X	4602929	3 mm,	NO contact, PNP	2 m Cable	8 x 32.1 mm	w001	d007
NI3-M08E-AN6X	4602831	3 mm,	NO contact, NPN	2 m Cable	8 x 42.1 mm	w002	d008
NI3-M08E-AP6X	4602834	3 mm,	NO contact, PNP	2 m Cable	8 x 42.1 mm	w001	d008
NI3-M08K-AN6X	4602847	3 mm,	NO contact, NPN	2 m Cable	8 x 24.1 mm	w002	d009
NI3-M08K-AP6X	4602851	3 mm,	NO contact, PNP	2 m Cable	8 x 24.1 mm	w001	d009
NI3-M08-AP6X-V1131	4602930	3 mm,	NO contact, PNP	Connector, M8 × 1	8 x 39.7 mm	w004	d010
NI3-M08-AN6X-V1131	4602933	3 mm,	NO contact, NPN	Connector, M8 × 1	8 x 39.7 mm	w003	d010
NI3-M08E-AN6X-V1131	4602833	3 mm,	NO contact, NPN	Connector, M8 × 1	8 x 49.7 mm	w003	d011
NI3-M08E-AP6X-V1131	4602836	3 mm,	NO contact, PNP	Connector, M8 × 1	8 x 49.7 mm	w004	d011
NI3-M08K-AN6X-V1131	4602849	3 mm,	NO contact, NPN	Connector, M8 × 1	8 x 31.7 mm	w003	d012
NI3-M08K-AP6X-V1131	4602853	3 mm,	NO contact, PNP	Connector, M8 × 1	8 x 31.7 mm	w004	d012

M8 – 4-Wire DC



General data

Operating voltage	10...30 VDC	Switching element function	Complementary contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn
Housing designation	M8 × 1	Active area material	Plastic, PP-GF20

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI2-M08-VN6X 7M	4602806	2 mm,	Complementary contact, NPN	7 m Cable	8 x 32.1 mm	w005	d001
BI2-M08-VP6X 7M	4602810	2 mm,	Complementary contact, PNP	7 m Cable	8 x 32.1 mm	w006	d001
BI2-M08E-VN6X 7M	4602957	2 mm,	Complementary contact, NPN	7 m Cable	8 x 42.1 mm	w005	d002
BI2-M08E-VP6X 7M	4602960	2 mm,	Complementary contact, PNP	7 m Cable	8 x 42.1 mm	w006	d002
BI2-M08K-VN6X 7M	4602969	2 mm,	Complementary contact, NPN	7 m Cable	8 x 24.1 mm	w005	d003
BI2-M08K-VP6X 7M	4602803	2 mm,	Complementary contact, PNP	7 m Cable	8 x 24.1 mm	w006	d003
BI2-M08-VN6X-H1341	4602808	2 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 47.6 mm	w007	d013
BI2-M08-VP6X-H1341	4602811	2 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 47.6 mm	w008	d013
BI2-M08E-VN6X-H1341	4602958	2 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 57.6 mm	w007	d014
BI2-M08E-VP6X-H1341	4602961	2 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 57.6 mm	w008	d014
BI2-M08K-VN6X-H1341	4602801	2 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 39.6 mm	w007	d015
BI2-M08K-VP6X-H1341	4602804	2 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 39.6 mm	w008	d015
NI3-M08E-VN6X 7M	4602837	3 mm,	Complementary contact, NPN	7 m Cable	8 x 42.1 mm	w005	d008
NI3-M08E-VP6X 7M	4602844	3 mm,	Complementary contact, PNP	7 m Cable	8 x 42.1 mm	w006	d008
NI3-M08K-VN6X 7M	4602854	3 mm,	Complementary contact, NPN	7 m Cable	8 x 24.1 mm	w005	d009
NI3-M08K-VP6X 7M	4602857	3 mm,	Complementary contact, PNP	7 m Cable	8 x 24.1 mm	w006	d009
NI3-M08-VN6X-H1341	4602863	3 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 47.6 mm	w007	d016
NI3-M08-VP6X-H1341	4602866	3 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 47.6 mm	w008	d016
NI3-M08E-VN6X-H1341	4602838	3 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 57.6 mm	w007	d017
NI3-M08E-VP6X-H1341	4602845	3 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 57.6 mm	w008	d017
NI3-M08K-VN6X-H1341	4602855	3 mm,	Complementary contact, NPN	Connector, M12 × 1	8 x 39.6 mm	w007	d018
NI3-M08K-VP6X-H1341	4602858	3 mm,	Complementary contact, PNP	Connector, M12 × 1	8 x 39.6 mm	w008	d018

M12 – 3-Wire DC



General data			
Operating voltage	10...30 VDC	Switching element function	NO contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M12 × 1	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI2-M12-AP6X	46050	2 mm,	NO contact, PNP	2 m Cable	12 x 54 mm	w001	d019
BI2-M12-AN6X	46051	2 mm,	NO contact, NPN	2 m Cable	12 x 54 mm	w002	d019
BI2-M12-AP6X-H1141	46065	2 mm,	NO contact, PNP	Connector, M12 × 1	12 x 52 mm	w004	d020
BI2-M12-AN6X-H1141	46066	2 mm,	NO contact, NPN	Connector, M12 × 1	12 x 52 mm	w003	d020
BI4-M12-AP6X	4607006	4 mm,	NO contact, PNP	2 m Cable	12 x 54 mm	w001	d019
BI4-M12-AP6X 7M	4607012	4 mm,	NO contact, PNP	7 m Cable	12 x 54 mm	w001	d019
BI4-M12-AN6X	4607130	4 mm,	NO contact, NPN	2 m Cable	12 x 54 mm	w002	d019
BI4-M12-AN6X 7M	4607131	4 mm,	NO contact, NPN	7 m Cable	12 x 54 mm	w002	d019
BI4-M12-AP6X-H1141	46070	4 mm,	NO contact, PNP	Connector, M12 × 1	12 x 52 mm	w004	d020
BI4-M12-AN6X-H1141	46071	4 mm,	NO contact, NPN	Connector, M12 × 1	12 x 52 mm	w003	d020
NI8-M12-AP6X-H1141	4611310	8 mm,	NO contact, PNP	Connector, M12 × 1	12 x 52 mm	w004	d021
NI8-M12-AN6X-H1141	4611315	8 mm,	NO contact, NPN	Connector, M12 × 1	12 x 52 mm	w003	d021

M12 – 4-Wire DC



General data			
Operating voltage	10...30 VDC	Switching element function	Complementary contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M12 × 1	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI4-M12-VP6X	1633300	4 mm,	Complementary contact, PNP	2 m Cable	12 x 54 mm	w006	d019
BI4-M12-VP6X 7M	1633301	4 mm,	Complementary contact, PNP	7 m Cable	12 x 54 mm	w006	d019
BI4-M12-VN6X	1643300	4 mm,	Complementary contact, NPN	2 m Cable	12 x 54 mm	w005	d019
BI4-M12-VN6X 7M	1643301	4 mm,	Complementary contact, NPN	7 m Cable	12 x 54 mm	w005	d019
BI4-M12-VP6X-H1141	1633200	4 mm,	Complementary contact, PNP	Connector, M12 × 1	12 x 52 mm	w008	d020
BI4-M12-VN6X-H1141	1643200	4 mm,	Complementary contact, NPN	Connector, M12 × 1	12 x 52 mm	w007	d020
BI4-M12E-VP6X-H1141	4608031	4 mm,	Complementary contact, PNP	Connector, M12 × 1	12 x 62 mm	w008	d022

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI4-M12E-VN6X-H1141	1643201	4 mm, 	Complementary contact, NPN	Connector, M12 x 1	12 x 62 mm	w007	d022
NI8-M12-VP6X 7M	4611327	8 mm, 	Complementary contact, PNP	7 m Cable	12 x 54 mm	w006	d023
NI8-M12-VN6X 7M	4611326	8 mm, 	Complementary contact, NPN	7 m Cable	12 x 54 mm	w005	d023
NI8-M12-VP6X-H1141	4611324	8 mm, 	Complementary contact, PNP	Connector, M12 x 1	12 x 52 mm	w008	d021
NI8-M12-VN6X-H1141	4611323	8 mm, 	Complementary contact, NPN	Connector, M12 x 1	12 x 52 mm	w007	d021

M18 – 3-Wire DC



General data

Operating voltage	10...30 VDC	Switching element function	NO contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M18 x 1	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI5-M18-AP6X	46110	5 mm, 	NO contact, PNP	2 m Cable	18 x 54 mm	w001	d024
BI5-M18-AN6X	46111	5 mm, 	NO contact, NPN	2 m Cable	18 x 54 mm	w002	d024
BI5-M18-AP6X-H1141	46145	5 mm, 	NO contact, PNP	Connector, M12 x 1	18 x 52 mm	w004	d025
BI5-M18-AN6X-H1141	46146	5 mm, 	NO contact, NPN	Connector, M12 x 1	18 x 52 mm	w003	d025
BI8-M18-AP6X	4615030	8 mm, 	NO contact, PNP	2 m Cable	18 x 54 mm	w001	d024
BI8-M18-AP6X 7M	4615031	8 mm, 	NO contact, PNP	7 m Cable	18 x 54 mm	w001	d024
BI8-M18-AN6X	4615130	8 mm, 	NO contact, NPN	2 m Cable	18 x 54 mm	w002	d024
BI8-M18-AN6X 7M	4615131	8 mm, 	NO contact, NPN	7 m Cable	18 x 54 mm	w002	d024
BI8-M18-AP6X-H1141	46150	8 mm, 	NO contact, PNP	Connector, M12 x 1	18 x 52 mm	w004	d025
BI8-M18-AN6X-H1141	4615100	8 mm, 	NO contact, NPN	Connector, M12 x 1	18 x 52 mm	w003	d025
NI14-M18-AP6X-H1141	4611400	14 mm, 	NO contact, PNP	Connector, M12 x 1	18 x 52 mm	w004	d026
NI14-M18-AN6X-H1141	4611410	14 mm, 	NO contact, NPN	Connector, M12 x 1	18 x 52 mm	w003	d026

M18 – 4-Wire DC



General data			
Operating voltage	10...30 VDC	Switching element function	Complementary contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M18 x 1	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI8-M18-VP6X	4605154	8 mm,	Complementary contact, PNP	2 m Cable	18 x 54 mm	w006	d024
BI8-M18-VP6X 7M	4590706	8 mm,	Complementary contact, PNP	7 m Cable	18 x 54 mm	w006	d024
BI8-M18-VN6X	4605155	8 mm,	Complementary contact, NPN	2 m Cable	18 x 54 mm	w005	d024
BI8-M18-VN6X 7M	4590705	8 mm,	Complementary contact, NPN	7 m Cable	18 x 54 mm	w005	d024
BI8-M18-VP6X-H1141	4605156	8 mm,	Complementary contact, PNP	Connector, M12 x 1	18 x 52 mm	w008	d025
BI8-M18-VN6X-H1141	4605157	8 mm,	Complementary contact, NPN	Connector, M12 x 1	18 x 52 mm	w007	d025
BI8-M18E-VP6X-H1141	4605226	8 mm,	Complementary contact, PNP	Connector, M12 x 1	18 x 72 mm	w008	d027
BI8-M18E-VN6X-H1141	4605227	8 mm,	Complementary contact, NPN	Connector, M12 x 1	18 x 72 mm	w007	d027
NI14-M18-VP6X 7M	4590610	14 mm,	Complementary contact, PNP	7 m Cable	18 x 54 mm	w006	d028
NI14-M18-VN6X 7M	4590609	14 mm,	Complementary contact, NPN	7 m Cable	18 x 54 mm	w005	d028
NI14-M18-VP6X-H1141	4590620	14 mm,	Complementary contact, PNP	Connector, M12 x 1	18 x 52 mm	w008	d026
NI14-M18-VN6X-H1141	4690630	14 mm,	Complementary contact, NPN	Connector, M12 x 1	18 x 52 mm	w007	d026

M30 – 3-Wire DC



General data			
Operating voltage	10...30 VDC	Switching element function	NO contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M30 x 1.5	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI10-M30-AP6X	46170	10 mm,	NO contact, PNP	2 m Cable	30 x 64 mm	w001	d029
BI10-M30-AN6X	46171	10 mm,	NO contact, NPN	2 m Cable	30 x 64 mm	w002	d029
BI10-M30-AP6X-H1141	46175	10 mm,	NO contact, PNP	Connector, M12 x 1	30 x 62 mm	w004	d030
BI10-M30-AN6X-H1141	46176	10 mm,	NO contact, NPN	Connector, M12 x 1	30 x 62 mm	w003	d030
BI15-M30-AP6X	4618530	15 mm,	NO contact, PNP	2 m Cable	30 x 64 mm	w001	d029
BI15-M30-AP6X 7M	4618532	15 mm,	NO contact, PNP	7 m Cable	30 x 64 mm	w001	d029
BI15-M30-AN6X	4618620	15 mm,	NO contact, NPN	2 m Cable	30 x 64 mm	w002	d029

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI15-M30-AN6X 7M	4618621	15 mm, 	NO contact, NPN	7 m Cable	30 x 64 mm	w002	d029
BI15-M30-AP6X-H1141	46185	15 mm, 	NO contact, PNP	Connector, M12 x 1	30 x 62 mm	w004	d030
BI15-M30-AN6X-H1141	4618600	15 mm, 	NO contact, NPN	Connector, M12 x 1	30 x 62 mm	w003	d030
NI20-M30-AP6X-H1141	4670510	20 mm, 	NO contact, PNP	Connector, M12 x 1	30 x 62 mm	w004	d031
NI20-M30-AN6X-H1141	4670515	20 mm, 	NO contact, NPN	Connector, M12 x 1	30 x 62 mm	w003	d031

M30 – 4-Wire DC



General data

Operating voltage	10...30 VDC	Switching element function	Complementary contact
Ambient temperature	-25...+70 °C	Protection class	IP67
LED	LED	Housing material	CuZn, Chrome-plated
Housing designation	M30 x 1.5	Active area material	Plastic, PA12-GF30

Types and Features – Selection Table

Type	ID number	Switching distance	Output	Electrical connection	Dimensions	w	d
BI15-M30-VP6X	4590716	15 mm, 	Complementary contact, PNP	2 m Cable	30 x 64 mm	w006	d029
BI15-M30-VP6X 7M	4590715	15 mm, 	Complementary contact, PNP	7 m Cable	30 x 64 mm	w006	d029
BI15-M30-VN6X	4590717	15 mm, 	Complementary contact, NPN	2 m Cable	30 x 64 mm	w005	d029
BI15-M30-VN6X 7M	4590714	15 mm, 	Complementary contact, NPN	7 m Cable	30 x 64 mm	w005	d029
BI15-M30-VP6X-H1141	4590718	15 mm, 	Complementary contact, PNP	Connector, M12 x 1	30 x 62 mm	w008	d030
BI15-M30-VN6X-H1141	4590719	15 mm, 	Complementary contact, NPN	Connector, M12 x 1	30 x 62 mm	w007	d030
NI20-M30-VP6X 7M	4590611	20 mm, 	Complementary contact, PNP	7 m Cable	30 x 64 mm	w006	d032
NI20-M30-VN6X 7M	4590613	20 mm, 	Complementary contact, NPN	7 m Cable	30 x 64 mm	w005	d032
NI20-M30-VP6X-H1141	4590612	20 mm, 	Complementary contact, PNP	Connector, M12 x 1	30 x 62 mm	w008	d031
NI20-M30-VN6X-H1141	4590614	20 mm, 	Complementary contact, NPN	Connector, M12 x 1	30 x 62 mm	w007	d031

CK40 – 4-Wire DC



General data			
Switching distance	50 mm, 	Electrical connection	Connector, M12 x 1
Operating voltage	10...65 VDC	Dimensions	40 x 40 x 65 mm
Ambient temperature	-30...+85 °C	Protection class	IP68
Power-on indication	2 x LEDs	Housing material	PBT-GF20-V0
LED	LED	Active area material	Plastic, PA12-GF30, yellow
Housing designation	CK40		d033
Switching element function	Complementary contact		

Types and Features – Selection Table

Type	ID number	Output	
NI50U-CK40-VP4X2-H1141	1538302	Complementary contact, PNP	w008
NI50U-CK40-VN4X2-H1141	1625806	Complementary contact, NPN	w007

Variable orientation of active face in 5 directions

QV40 – 3-Wire DC



General data			
Switching distance	50 mm, 	Electrical connection	Connector, M12 x 1
Operating voltage	10...30 VDC	Dimensions	40 x 40 x 65 mm
Ambient temperature	-30...+85 °C	Protection class	IP68
Power-on indication	2 x LEDs	Housing material	PBT-GF30-V0
LED	LED	Active area material	Plastic, PA6-GF30-X, yellow
Housing designation	QV40		d034
Switching element function	NO contact		

Types and Features – Selection Table

Type	ID number	Output	
NI50U-QV40-AP6X2-H1141	1625853	NO contact, PNP	w004
NI50U-QV40-AN6X2-H1141	1625865	NO contact, NPN	w003

Variable orientation of active face in 5 directions without tools

UNT Design

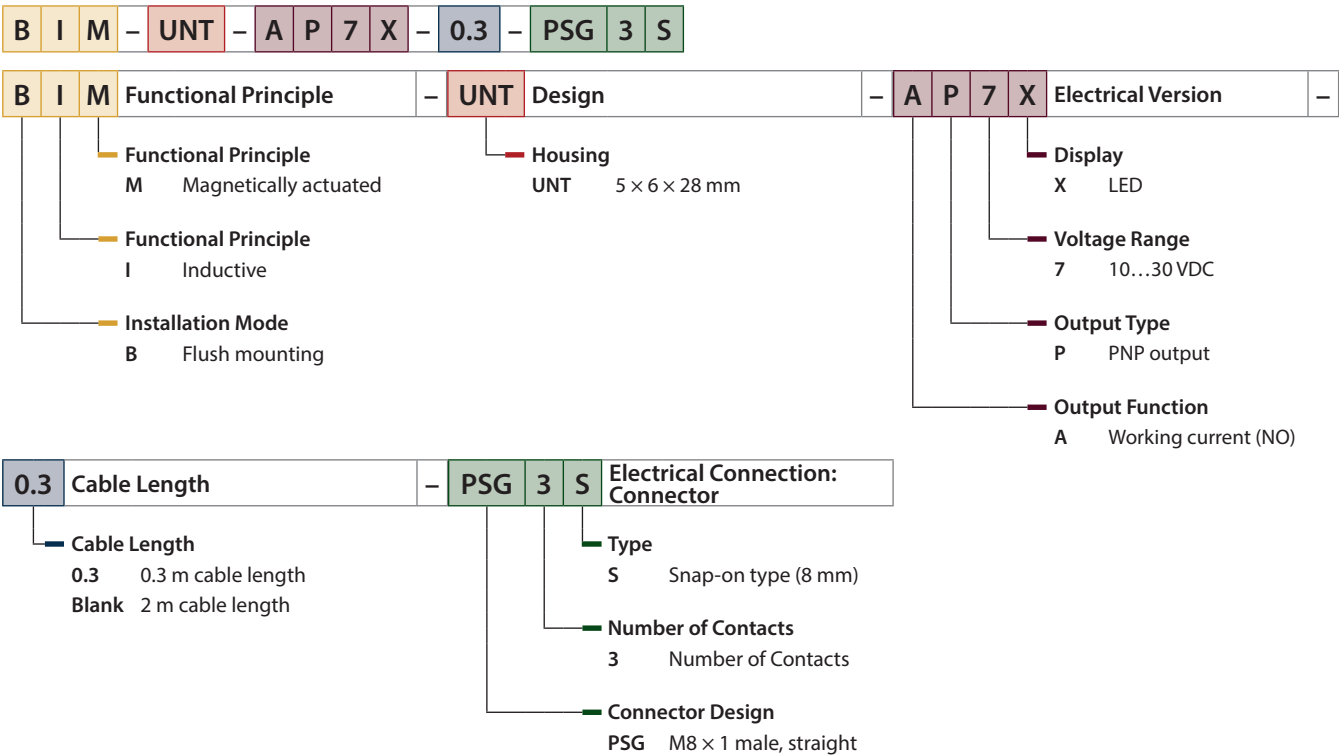


The universal magnetic field sensors of the series UNT are especially compact and characterized above all by a fast and flexible installation. Thanks to the pre-fixation lip, they fit on T-groove cylinders and can even be mounted overhead with one hand only and without tools. With the optionally available accessories you can also mount them on round, tie-rod and dovetail cylinders. The bright and all-round visible LED allows to see the switching state from any perspective.

Features

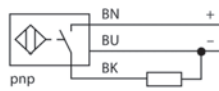
- Compact design
- Fast and flexible installation
- Stable mounting on T-groove cylinders without mounting accessories
- Mounting accessories for mounting on all conventional pneumatic cylinders
- Tool for fine adjustments and stopper directly mountable on the sensor
- 2 m connection cable or 0.3 m cable with connector, M8 × 1
- Excellent EMC immunity
- Good visible LED

Type code

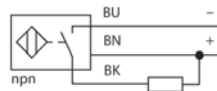


Wiring Diagrams

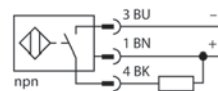
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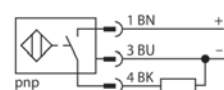
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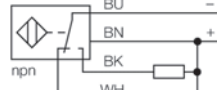
w003



w004



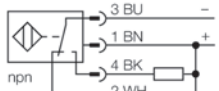
w005



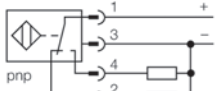
w006



w007

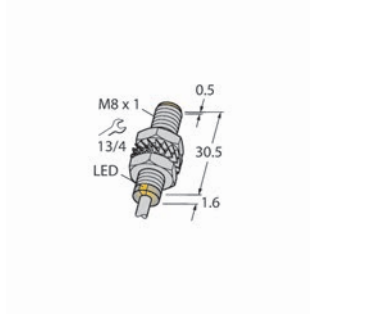


w008

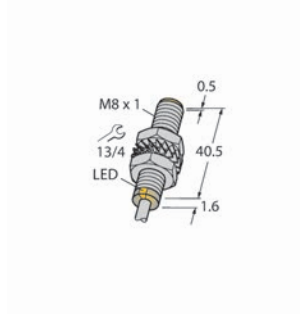


Dimension Drawings

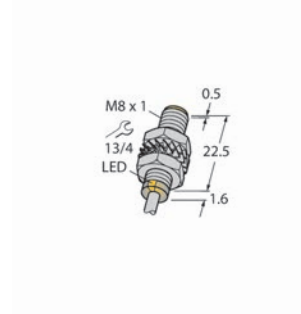
d001



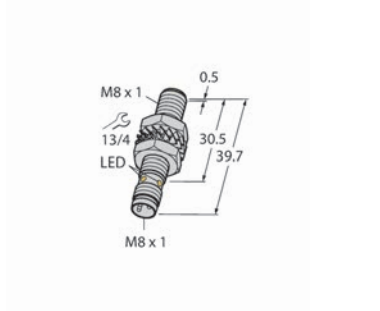
d002



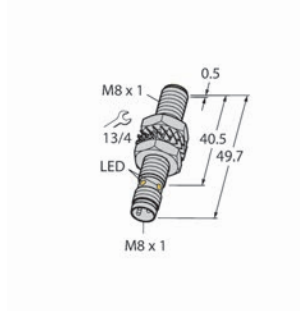
d003



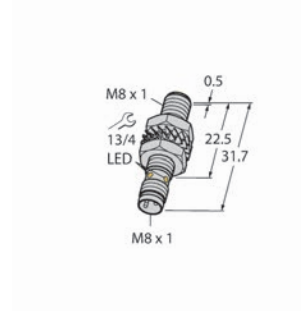
d004



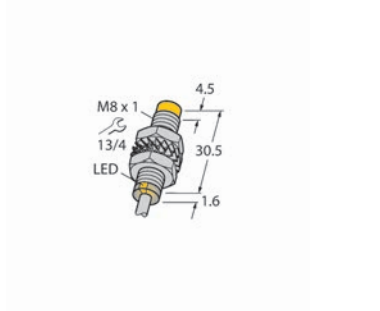
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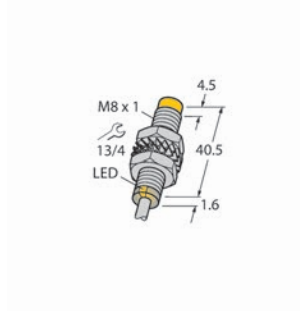
d006



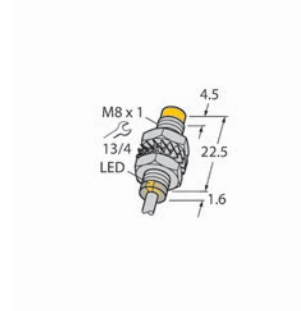
d007



d008



d009



d010



d011

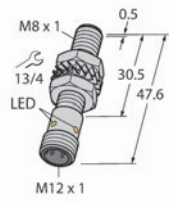


d012

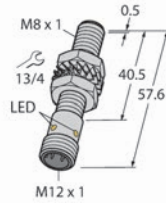


Dimension Drawings

d013



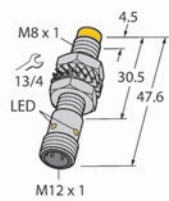
d014



d015



d016



d017



d018



d019



d020



d021



d022



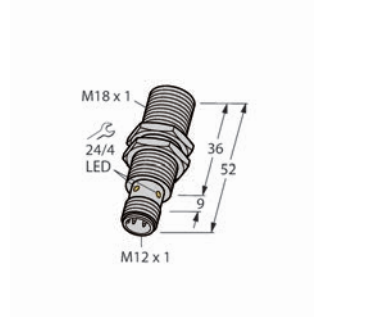
d023



d024



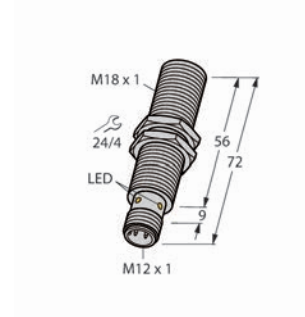
d025



d026



d027



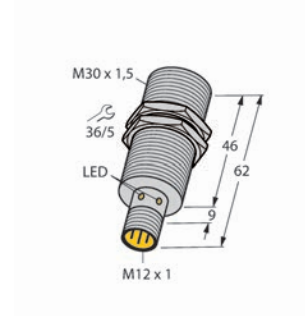
d028



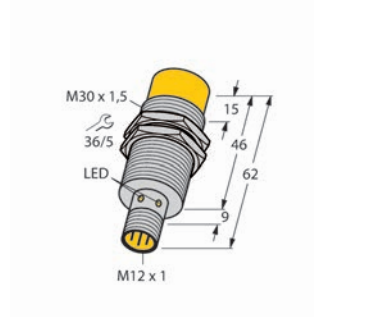
d029



d030



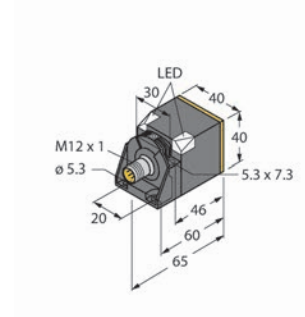
d031



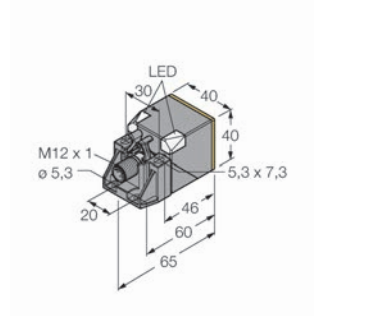
d032



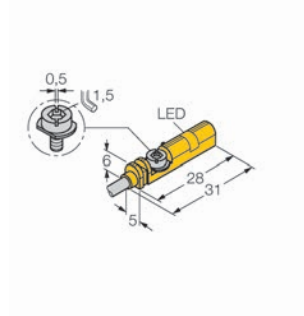
d033



d034



d035



d036

