

Inductive Sensors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	+
K	I	N	-	T	1	2	N	S	/	0	0	4	-	K	L	2			
Product group			Type of enclosure				Output		Sensing distance				Options						

Product group		
1	K	Non-contact proximity switch
2	I	Inductive
3	B	Flush mount
	N	Non-flush mount
	R	Ring sensor
4	-	Dash (fixed)
Type of enclosure		
5	M	Metric thread (metal enclosure)
	T	Metric thread (plastic enclosure)
	D	Round enclosure (metal)
	R	Round enclosure (plastic)
	Q	Cuboid enclosure (metal)
	P	PG thread (metal)
	E	Rectangular enclosure (plastic)
	S	Slot proximity switch (plastic)
	N	Standard mounting (to DIN 50025/50037)
	C	Compact enclosure
6 – 7		Two-digit number for:
		Round types = Ø as specified
		Threaded types = standard designation
		Rectangular types = consecutive type numbers

Design examples		
	D08	Ø 8 mm (metal)
	R22	Ø 22 mm (plastic)
	M12	Threaded barrel M12 x 1
Rectangular and other types		
	E16	16 x 5 x 5 mm
	E27	27 x 10 x 5.5 mm
	E28	28 x 16 x 11 mm
	E40	40 x 26 x 12 mm
	E50	50 x 25 x 10 mm
	E68	68 x 30 x 15 mm
	G00	Tube thread, general
	N44	41.5 x 41.5 x 120 mm
	Q05	5 x 5 x 25 mm
	Q08	8 x 8 x 40 mm, Side active
	Q12	12 x 12 x 55 mm

Output		
8	P	PNP
	N	NPN
	A	AC 2-wire
	E	NAMUR
	Z	DC 2-wire
	R	Relay
	G	Push-pull
	D	Dual output stage (NPN/PNP selectable)
9	S	NO contact
	Ö	NC contact
	P	Programmable
	A	Analogue
	U	Antivalent (selectable)
10	/	Slash (fixed)
Sensing distance		
11 – 13	f. ex. 1.5	1.5 mm
	f. ex. 002	2.0 mm
	f. ex. 040	40 mm
14	-	Dash (fixed)
Options		
15 – 17		See type code "OPTIONS", p. 173

Capacitive Sensors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	+
K	C	N	-	T	1	2	N	S	/	0	0	4	-	K	L	P	2		
Product group			Type of enclosure				Output		Sensing distance				Options						

Product group		
1	K	Non-contact proximity switch
2	C	Capacitive
3	B	Flush mount
	N	Non-flush mount
4	-	Dash (fixed)
Type of enclosure		
5	M	Metric thread (metal enclosure)
	T	Metric thread (plastic enclosure)
	D	Round enclosure (metal)
	R	Round enclosure (plastic)
	Q	Cuboid enclosure (metal)
	P	PG thread (metal)
	E	Rectangular enclosure (plastic)
	N	Standard mounting (to DIN 50025/50037)
6 – 7		Two-digit number for:
		Round types = Ø as specified
		Threaded types = standard designation
		Rectangular types = consecutive type numbers

Design examples		
	12	Thread M12 x 1
	18	Thread M18 x 1
	30	Thread M30 x 1,5
	32	Thread M32 x 1,5
	34	Ø 34 mm (metal/plastic)
	20	Ø 20 mm (plastic)
	22	Ø 22 mm (plastic)
	50	50 x 25 x 10 mm
	68	68 x 30 x 15 mm
	44	41.5 x 41.5 x 120 mm (Euro standard enclosure)
Output		
8	p	PNP
	N	NPN
	A	AC 2-wire
	E	NAMUR
	Z	DC 2-wire
	R	Relay
	G	Push-pull
	D	Dual output stage (NPN/PNP selectable)

Output		
9	S	NO contact
	Ö	NC contact
	P	Programmable
	A	Analogue
	U	Antivalent (selectable)
10	/	Slash (fixed)
Sensing distance		
11 – 13	e.g. 1.5	1.5 mm
	e.g. 002	2.0 mm
	e.g. 040	40 mm
14	-	Dash (fixed)
Options		
15 – 19		See type code "OPTIONS", p. 173

Optoelectronic Sensors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
O	M	1	2	R	T	-	D	H	T	P	-	0	2	0	0	-	C	L	
Product group		Enclosure size		Operating principle			Type of voltage	Output				Sensing range					Type of connection	Options	

Product group		
1	O	Optoelectronic sensor
2	M	Metric brass enclosure
	N	Metric stainless steel enclosure
	T	Metric thermoplastic enclosure
	R	Rectangular type
	Z	Cylindrical type
Enclosure size details		
3 – 4	e.g. 12	M12
	e.g. 18	M18
	e.g. 20	Type 20
Operating principle		
5 – 6	ES	Through-beam sensor assy (set)
	EE	Receiver, through-beam sensor
	SE	Transmitter, through-beam sensor
	LC	Fibre optic switching amplifier (light barrier with fibre optic cable connection)
	RH	Diffuse-reflection sensor with background suppression
	RS	Retro-reflective sensor
	RT	Diffuse –reflection sensor
	FF	Convergent beam sensor, fixed focus
	PS	Retro-reflective sensor, polarised
7	-	Dash (fixed)
Type of voltage		
8	A	AC
	D	DC
	M	Multi-voltage
	P	Programmable (AC or DC)

Output function		
9	A	Antivalent (light and dark activated)
	D	Dark activated
	H	Light activated
	O	No output (transmitter for through-beam sensors)
	P	Programmable (light and dark activated)
	X	Customer-specific output
Type of output		
10	A	Analogue output
	N	NAMUR
	O	No output
	Q	Triac
	R	Relay
	S	Other
	T	Transistor
	Y	Thyristor
11	N	NPN transistor output
	P	PNP transistor output
	G	Push-pull output stage
	S	Transmitter, through-beam sensor
	U	PNP/NPN selectable
	X	Customer-specific output
	2	2-wire output
	3	3-wire output
	4	4-wire output
12	-	Dash (fixed)

Sensing range		
13 – 16	The range and sensing distance are always a 4-digit specification – Millimetre values with no decimal point – Metre values with decimal point	
	e.g. 06.0	6 m
	e.g. 15.0	15 m
	e.g. 0500	500 mm
17	-	Dash (fixed)
Type of connection		
18	A	Connection space
	B	Self-configured cable connector
	C	Cable type (standard C = 2 m or length in m)
	S	Plug connector
Options		
19	C	Control input
	D	LED for switching status and operating reserve
	E	Adjustable sensitivity
	I	Electrically programmable
	F	Operating reserve output and LED
	G	LED for switching status, operating voltage indicator and light path monitoring
	H	LED for indicating operating voltage and switching status
	L	LED for switching status
	T	Adjustable time stage
	V	LED for indicating operating voltage
	W	Radial optical system
	X	Customer-specific option
	Z	Inbuilt time stage

Magnetic Switches

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
M	A	K	-	0	1	1	2	-	D	-	1	-	S	O	K			
Product group			Type			Contact specifications				Cable length			Special features					

Product group		
1	M	Magnetic switch
2	Type of output	
	A	Reed contact
	R	Relay
3	Enclosure material	
	A	Aluminium
	N	Stainless steel
	M	Brass, nickel-plated
	K	Plastic, general
	O	Other materials
4	-	Dash (fixed)
Type		
5 – 6	01 – 99	Cylindrical and rectangular types (see next page for details)
Contact specifications		
7	Number of contacts	
	e.g. 1	1 Reed contact
	e.g. 2	2 Reed contacts
	...	etc.

8	Contact function	
	1	NC contact
	2	NO contact
	3	Changeover contact
	4	Bistable (ON/OFF)
	5	Bistable (changeover contact)
	6	NC, NO contact; separate contacts
	7	Coded, BG
	8	Currently not used
	9	Currently not used
	0	Other outputs
9	-	Dash (fixed)
10	Contact type/power of reed contacts	
	A	250 VDC ; 0.5 A; 20 VA
	B	250 VDC ; 0.5 A; 10 VA
	C	250 VDC ; 0.5 A; 30 VA
	D	250 VDC ; 0.5 A; 30 VA
	E	250 VDC ; 1.5 A; 30 VA
	F	250 VDC ; 3.0 A; 100 VA
	G	250 VDC ; 5.0 A; 250 VA
	H	250 VDC ; 1.0 A; 60 VA
	K	250 VDC ; 0.5 A; 30 VA
	L	250 VDC ; 1.0 A; 60 VA
	M	250 VDC ; 1.0 A; 80 VA
	N	250 VDC ; 1.0 A; 60 VA
	O	120 VDC ; 0.5 A; 10 VA
	P	250 VDC ; 5.0 A; 250 VA
	R	28 VDC ; 0.25 A; 3 VA
	W	250 VDC ; 1.0 A; 60 VA
	X	100 VDC ; 0.25 A; 5 VA
	Y	100 VDC ; 0.5 A; 10 VA

TRIAC		
	K	24 – 250 VDC ; 1.5 A a. 300 VA b. 330 VA
Hall		
11	-	Dash (fixed)
Cable length in metres		
12	e.g. 1	1 m cable
	e.g. 2	2 m cable
	...	etc.
13	-	Dash (fixed)
Special features		
14 – 17	T	Temperature resistant from -40 °C to +150 °C
	SI	With miniature fuse
	VDR	With VDR
	WID	With resistor
	LED	With LED
	SPK	Spiral cable
	SK	Special cable
	SOK	Connector type without head (without device socket)
	SMK	Connector type with head (with device socket)
	PG11	Type of thread
	RZ	Time delay with relay
	220 V	220 Volt version
	24 V	24 Volt version
	STK	Connector

Magnetic Switches

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
M	A	K	-	0	1	1	2	-	D	-	1	-	S	O	K			
Product group			Type			Contact specifications				Cable length			Special features					

Type		
5 – 6	01 – 99	Cylindrical and rectangular types
	01	45 x 13 x 9 mm [MA-01] PA
	02	80 x 20 x 15 mm [MA-02] PA/AL
	03	110 x 58 x 29 mm [MA-03] AL
	04	∅ 15.5 x 87 mm [MA-04] PC
	05	Currently not used
	06	∅ 12 x 81 mm [MA-06] AL
	07 – 10	Currently not used
	11	28.6 x 18 x 6.4 mm [MA-11] PA
	12	80 x 20 x 15 mm [MA-12] PA
	13	68 x 30 x 15 mm [MA-13] PC
	14	Currently not used
	15	∅ 12 x 81 mm [MA-15] PA
	16	∅ 12 x 81 mm [MA-13] VA
	17	PG9 x 60 mm [MA-17] PA
	18	M12 x 1 x 60 mm [MA-18] Ms
	19	M18 x 1 x 80 mm [MA-19] Ms
	20	Currently not used
	21	PG9 x 80 mm [MA-21] PA
	22	Currently not used
	23	M12 x 1 x 80 mm [MA-23] Ms
	24/25	Currently not used
	26	∅ 12 x 81 mm [MA-26] PA
	27	Currently not used
	28	M12 x 1 x 60 mm [MA-28] PA
	29	M18 x 1 x 80 mm [MA-29] PA
	30	∅ 6 x 30 mm [MA-30] PA
	31	Currently not used
	32	85 x 26 x 26 mm [MA-32] PBT
	33	M12 x 1 x 80 mm [MA-33] PA
	34/35	Currently not used

	36	∅ 13 x 96 mm [MA-36] PA
	37–39	Currently not used
	40	M10 x 1 x 40 mm [MA-40] PPE
	41	50 x 31 x 11 mm [MA-41] PA
	42	88 x 25 x 13 mm [MA-42] PA
	43	PG9 x 80 mm [MA-43] Ms
	44	80 x 30 x 15 mm [MA-44] PA
	45	45 x 25.5 x 9 mm [MA-45] PA
	46	∅ 6.5 x 39.34 mm [MA-46] PA
	47	Currently not used
	48	80 x 30 x 15 mm [MA-48] PA
	49–51	Currently not used
	52	43 x 26 x 13 mm [MA-52] PBT
	53	M30 x 1.5 mm [MA-53] PA
	54	Currently not used
	55	12 x 12 x 55 mm [MA-55] S
	56–59	Currently not used
	60	M8 x 1 mm [MA-60] S
	61	M10 x 1 mm [MA-61] S
	62	M12 x 1 mm [MA-62] S
	63	M18 x 1 mm [MA-63] S
	64	M30 x 1.5 mm [MA-64] S
	65–69	Currently not used
	70	∅ 6.5 mm [MA-70] S
	71/72	Currently not used
	73	68 x 30 x 15 mm [MA-73] S
	74–79	Currently not used
	80	8 x 8 x 40 mm [MA-80] S
	81–98	Currently not used
	99	other [MA-99] S

Magnetic Switch Monitoring Devices

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
M	Ü	Z	-	1	0	2	/	U	2	4	-	F	L	-	2	S	-	E	2	0	-	H	G
Product group			Numb. of magnetic switches	Number of relays			Voltage			Special features													

Product group		
1	M	Magnetic limit switch, general
2	Ü	Monitoring
	C	Controller
3	Z	Control station
	S	Interface
	N	Power supply unit
4	-	Dash (fixed)
Number of connectable magnetic switches		
5	1	1 unit
	2	2 units
	...	etc.
Number of relays		
6 – 7	01	1 unit
	02	2 units
	03	Constant current source
	04	4 units
	...	etc.
8	/	Slash (fixed)

Voltage		
9	A	AC
	D	DC
	U	UC
	1	Mains voltage
	2	Mains voltage
10 – 11	24	24 Volt
	The following applies when there is a "1" in the 9 th position:	
	10	110 Volt
	20	120 Volt
	30	130 Volt
	The following applies when there is a "2" in the 9 th position:	
	10	210 Volt
	20	220 Volt
	30	230 Volt

Special features		
13 – 24	FL	Flat design
	2S	NO contact signal (to outside)
	E20	20 transducer units, externally
	HG	Hall sensor
	VC	Voltage control
	PRT	Print version
	DA	Data output
	Special features are separated by a dash with no specific position assignment.	

Magnetic Sensors / Teachable Slot Sensors / Electronic

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
M	E	K	-	M	1	2	P	S	/	H	1	0	-	K	L	2			
Product group			Type of enclosure			Output			Sensitivity			Options							

Product group		
1	M	Magnetic sensor
2	E	Electronic
3	K	Plastic
	M	Brass
	N	Stainless steel
4	-	Dash (fixed)
Type of enclosure		
5	M	Metric thread
	D	Round enclosure
	E	Rectangular enclosure
	Q	Cuboid enclosure
6 – 7		Two-digit number for:
		Metric enclosure = standard designation
		Round enclosure = Ø as specified
		Rectangular enclosure = enclosure width
		Cuboid enclosure = edge length

Output		
8	P	PNP
	N	NPN
9	S	NO contact
	Ö	NC contact
	B	Bistable
	A	Analogue
	D	Speed
10	/	Slash (fixed)
Sensitivity		
11	H	Hall
	M	Magneto-resistive
12 – 13		Sensitivity in mT
	z. B. 10	10 mT
	z. B. 01	1 mT
14	-	Dash (fixed)
Options		
15		See type code "OPTIONS", see page 173

Ultrasonic Sensors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
U	T	1	8	I	-	D	P	E	0	-	0	6	.	0	-	C	3	I	
Product group		Enclosure size		Installation/use		Type of voltage	Output				Range					Type of connection	Teach-in	Interface	Options

Product group			Digital output			Type of connection		
1		Ultrasonic sensor	8	0	None	17	C	Cable type (standard C = 2 m or length in m)
2	T	Thermoplastic enclosure		P	PNP		S	Connector (M12, 5-pin)
	N	Stainless steel enclosure		N	NPN		V	Connector (M8, 4-pin)
Enclosure size details			9	0	None		B	Connector (M16, 8-pin)
3 – 4	e.g. 12	M12 (stainless steel)		E	Electrically programmable NC/NO	Teach-in method		
	e.g. 15	M30 (stainless steel)		...	etc.	18	0	None
	e.g. 18	M18 (stainless steel)	Analogue output				1	Button
	e.g. 30	M30 (plastic)	10	0	None		2	Serial interface
	e.g. 25	30 x 25 x 11 (plastic)		I	Current – analogue		3	Contact
	e.g. 80	80 x 80 x 43 (plastic)		U	Voltage – analogue		...	etc.
	e.g. 36	101 x 36 x 22 (plastic)	11	-	Dash (fixed)	Serial interface		
Installation/use			Range			19	0	None
5	I	Internal transductor	12 – 15	The range and sensing distance are always a 4-digit specification			1	RS232
	S	True scan transmitter and receiver		– Millimetre values with no decimal point – Metre values with decimal point			2	RS485
6	-	Dash (fixed)		e.g. 06.0	6 m		3	I/O link
Type of voltage				e.g. 15.0	15 m		4	CANopen
7	A	AC		e.g. 0500	500 mm		...	etc.
	D	DC 12–30 V	16	-	Dash (fixed)	Options		
						20 on-wards	e.g.	Preset switching points
							...	etc.

Float Switches, Standard Range

1	2	3	4	5	6	7	8	9	10	11	12	13						
M	A	A	-	7	1	3		K	S	S		1	0	0	0			
Product group		Immersion tube/float combination		General design		Number of switching points	Contact function	Switching power	Connection head	Range	Switch length in mm							

Product group		
1	M	Magnetic switch
2	Type of output	
	A	Reed contact
	I	Triac
Immersion tube/float combination		
3	Immersion tube material 1.4571	
	A	Cylindrical float rd. 40 x 27 POM
	V	Cylindrical float rd. 42 x 44 PVC
	T	Cylindrical float rd. 30 x 44 PP
	R	Cylindrical float rd. 30 x 44 NBR
	N	Cylindrical float rd. 45 x 47 1.4571
	E	Ball float rd. 52 1.4571
	B	Ball float rd. 62 1.4571
	G	Ball float rd. 84 1.4571
	Immersion tube material brass MS63	
	M	Cylindrical float rd. 40 x 27 POM
	L	Cylindrical float rd. 42 x 44 PVC
	C	Cylindrical float rd. 30 x 44 PP
	S	Cylindrical float rd. 30 x 44 NBR
	P	Cylindrical float rd. 45 x 47 1.4571
	F	Ball float rd. 52 1.4571
	O	Ball float rd. 62 1.4571
	H	Ball float rd. 84 1.4571
	Immersion tube material PVC	
	K	Cylindrical float rd. 40 x 27 POM
	D	Cylindrical float rd. 42 x 44 PVC
	I	Cylindrical float rd. 30 x 44 PP
	U	Cylindrical float rd. 30 x 44 NBR
4	-	Dash (fixed)

General design		
5	7	Float switch
Number of switching points		
6	1	1 switching point
	2	2 switching points
	...	etc.
Contact function		
7	1	NC contact
	2	NO contact
	3	Changeover contact
	4	Mixed configuration (NC, NO, CO)
8		Space (fixed)
Switching power		
9	B	250 V; 0.5 A; 10 VA
	F	250 V; 3.0 A; 100 VA
	K	250 V; 0.5 A; 30 VA
	L	250 V; 1.0 A; 60 VA
	P	250 V; 5.0 A; 250 VA
	X	100 V; 0.25 A; 5 VA
Connection head		
10	Straight immersion tube	
	A	Half cable gland G3/8"
	V	Cable gland PG9
	D	Degussa plastic enclosure
	F	Aluminium enclosure DIN 43729
	K	PVC screw connection R2" connector DIN 43650
	N	PVC screw connection R1.5" connector Amphenol
	O	PVC screw connection R2" connector Amphenol
	R	PVC screw connection R1.5" connector DIN 43650

	S	Flange enclosure rd. 78
	T	PC flange rd. 75 connector DIN 43650
	TO	PC oval flange connector DIN 43650
	FL120	Flange enclosure rd. 120
	DN50	Flange DN50 with enclosure 80 x 80
	DN65	Flange DN65 with enclosure 80 x 80
	R1,5	Tank cable gland R1.5" with enclosure 80 x 80
	R2	Tank cable gland R2" with enclosure 80 x 80
	Elbow immersion tube	
	C	Half cable gland G3/8"
	H	Cable gland PG9
	E	Degussa plastic enclosure
	G	Aluminium enclosure DIN 43729
	L	PVC screw connection R2" connector DIN 43650
	M	PVC screw connection R1.5" connector Amphenol
	P	PVC screw connection R2" connector Amphenol
	I	PVC screw connection R1.5" connector DIN 43650
	B	Flange enclosure rd. 78
	W	PC flange rd. 75 connector DIN 43650
	TW	PC oval flange connector DIN 43650
	WFL120	Flange enclosure rd. 120
	WDN50	Flange DN50 with enclosure 80 x 80
	WDN65	Flange DN65 with enclosure 80 x 80
Range		
11	S	Standard range
12		Space (fixed)
Switch length in mm		
13		Switch length - X

Adjustable Float Switches

1	2	3	4	5	6	7	8	9	10	11	12	13						
M	A	N	-	V	S	T	-	R	2,	0	/	0	2	5	0			
Product group		Immersion tube/float combination		Type			Connection head			Switch length in mm								

Product group		
1 – 2	MA	Magnetic switch, reed contact
Immersion tube/float combination		
3	Immersion tube material 1.4571	
	N	Cylindrical float rd. 52 x 55 1.4571
	V	Cylindrical float rd. 52 x 55 PVC
Immersion tube material brass MS63		
	P	Cylindrical float rd. 52 x 55 1.4571
	L	Cylindrical float rd. 52 x 55 PVC
Immersion tube material brass MS63		
	D	Cylindrical float rd. 52 x 55 PVC
4	-	Dash (fixed)

Type		
5 – 7	VST	Adjustable
8	-	Dash (fixed)
Connection head		
9 – 11	R2,0	Tank cable gland R2" with enclosure 80 x 80
	R1,5	Tank cable gland R1.5" with enclosure 80 x 80
	FL165	Flange DN50 with enclosure 80 x 80
	FL185	Flange DN65 with enclosure 80 x 80
	FL120	Flange enclosure rd. 120
	FLS120	Flange enclosure rd. 120 with protective tube
12	/	Slash (fixed)
Switch length in mm		
13		Switch length – X

Miniature Float Switches

1	2	3	4	5	6	7	8	9	10				
MS	K1	-	PVC	-	R1/8	-	OSO		0	3	5	0	
Range	Float		Immersion tube material		Connection head		Position and number of switching points, with switching function		Switch length in mm				

Range		
1	MS	Miniature float switches
Float		
2	K1	rd. 25 x 20, PP
	K2	rd. 25 x 20, PVC
	K3	rd. 20 x 20, NBR
	K4	rd. 23 x 25, NBR
	K5	rd. 23 x 32, NBR
	K6	rd. 17,5 x 25, NBR
	K7	rd. 25 x 20, PVDF
	K8	rd. 25 x 20, PTFE
	N1	rd. 30, 1.4571
	KS	Pivoted float
3	-	Dash (fixed)
Immersion tube material		
4	NI	Stainless steel 1.4571
	MS	Brass MS63
	PVC	Polyvinyl chloride
	PP	Polypropylene
	POM	Polyacetal

Immersion tube material		
	PVDF	Polyvinyl idenfluoride
	PTFE	Polytetrafluoroethylene
	PA	Polyamide
5	-	Dash (fixed)
Connection head		
6	R1/8	Screw connection R1/8"
	R1/4	Screw connection R1/4"
	R3/8	Screw connection R3/8"
	R1	Screw connection R1"
	R1,5	Screw connection R1,5"
	PG7	Screw connection PG7
	PG9	Screw connection PG9
	M12X1	Screw connection M12x1
	M24X1	Screw connection M24x1
	F40	Flange, rd. 40
	FL75	Flange, rd. 75
	FL36	Flange, 36 x 36 with cable
	FL36ST	Flange, 36 x 36 with connector
	TO	Oval flange
	OV	No connection head

7	-	Dash (fixed)
Position and number of switching points, with switching function		
8	Switching function	
	O	NC contact
	S	NO contact
	U	Changeover contact
Position and number		
	3 switching points	e.g. NC/NO/NC = top/middle/bottom
	2 switching points	e.g. CO/NO = top/bottom
	1 switching point	e.g. NC = bottom
9		Space
Switch length in mm		
10		Switch length - X

Options

1	2	3	4	5	6	7	8	9	10	11	12	13	14				
K	L	2	E	V	P	S	N	T	F	Z	I	D	G				

1	K	Short circuit-proof
2	L	LED
3	2	Cable length in m
4	E	Extended sensing distance (sn large)
5	V	Shortened type
6	P	Potentiometer
7	S	Device connector (terminals)
	PU	PUR cable
	SD	Connector to DIN 43650 (including socket)
	SM	Mini snap-in device connector
	S8	M8 device connector with union nut
	S12	M12 device connector with union nut
	SM8	Mini snap-in / M8 screw-on device connector
	S12A	M12 device connector with union nut, AC version
	S16S	M16 device connector with union nut and dust cap
	S12U	M12 Ultra-Lock device connector
	S5	M5 x 0,5 device connector Screw-connection with cable

8	N	Stainless steel enclosure
9	T	Extended temperature range
10	F	Extended switching frequency
11	Z	Time-delayed
12	I	Programmable (intelligent)
13	D	ATEX products, dust Ex
14	G	ATEX products, gas Ex

Cable Connectors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
W	D	K	-	M	1	2	P	S	/	L	L	2	-	2	P	U			
Device specifications			Type of connection				Classification			LEDs			Cable length	Options					

Device specifications			Classification			LEDs		
1		Cable output	8		Configuration for switch output	12	L	Integrated LED
	W	Elbow		P	PNP (LED to negative)		O	Without LED
	G	Straight		N	N = NPN (LED to positive)	13		Number of LEDs
2		Product group		U	Universal (no LED)		0	No LED
	D	Socket		A	AC (M12 special coding Pin 1 + 2)		1	1 LED
	S	Connector (the sensor connections should always be used as the basis for connecting lines with different outputs)	9		Pin assignments of cable sockets for switch output		2	2 LEDs etc.
	A	Adapter (socket and connector)		S	NO contact 1 - 3 - 4 for M12 1 - 3 - 2 for Mini 1 - 2 for M12 AC	14	-	Dash (fixed)
3		Preassembly		Ö	NC contact 1 - 3 - 2 for M12	Cable length		
	K	Fixed cable		A	Antivalent 1 - 3 - 4 - 2 for M12	15		In m (moulded cable)
	A	Connection space, self-configurable		N	NAMUR 1 - 3 for M12	Options		
	V	Connecting line (extension)		U	More than 4 connections	16 - 17	PU	Polyurethane cable
4	-	Dash (fixed)		T	Teach-in function		HF	Highly flexible cable
Type of connection				/	Slash (fixed)		SD	Connector/socket
5 - 7		Always related to the socket / connector	Manufacturer				BD	Socket both ends
	M12	Union nut M12 x 1	11		Internal information		R	Vibration safeguard
	M08	Union nut M8 x 1					Without	PVC cable
	R06	Round snap-in connection Ø 6.5 mm						
	R12	Round snap-in connection, Ultra-Lock M12						
	M05	M5 x 0.5 screw-on connection						

Mounting Material

1	2	3	4	5	6	7	8	9											
B	K	S	-	D	2	0	P	A											
Product group			Type group				Material												

Product group		
1	B	Mounting material
2		Type of product
	K	Retaining bracket
	W	Mounting bracket
	H	Retaining plate
3		Specification
	S	Bracket, 2-piece
	B	Block, 1-piece
	R	Reducer
	N	90° elbow
4	-	Dash (fixed)

Type group		
5 – 7		For clips:
		Diameter in mm corresponding to matching sensor
		For elbows: Type group
	e.g. L05	Light barrier OR05
	e.g. M06	Magnetic switch M06
Material		
8 – 9		Material
	ST	Steel
	NI	Stainless steel
	AL	Aluminium
	PA	Polyamide
	PP	Polypropylene