



COMPACT CATALOG

KOMPAKTKATALOG

◆ LED INDICATORS

LED-ANZEIGEN

◆ ELECTRONIC BUTTONS

ELEKTRONISCHE TASTER

◆ PHOTOELECTRIC SENSORS

OPTISCHE SENSOREN

◆ INDUCTIVE PROXIMITY SWITCHES

INDUKTIVE NÄHERUNGSSCHALTER

◆ CAPACITIVE PROXIMITY SWITCHES

KAPAZITIVE NÄHERUNGSSCHALTER

Proximity Switches, capacitive

Naherungsschalter, kapazitiv

- ▶ **Metal housings from $\varnothing 6.5$ mm...M30**
Metallgehause $\varnothing 6,5$ mm...M30
- ▶ **Chemical resistant PTFE housings for M18 and M30**
Chemisch bestandige PTFE-Gehause fur M18 und M30
- ▶ Highest sensing distances in its class
Hochste Schaltabstande ihrer Klasse
- ▶ Sensitivity adjustment by multi-turn potentiometer
Einstellung des Schaltpunktes mit Mehrgang-Potentiometer
- ▶ Plastic housings made of PBT M12...M30
Kunststoffgehause aus PBT M12...M30



Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current consumption	<10 mA
Short circuit protection	built-in, self-resetting
Voltage drop	<1,2 V @ 200 mA
Switching indicator	LED, yellow
Operating temperature	-20...+70 °C -4...+158 °F
IP code	IP67

Technische Daten (typ.)

Versorgungsspannung	10...30 V _{DC}
Verpolungsschutz	integriert
Eigenstromaufnahme	<10 mA
Kurzschlusschutz	integriert, selbstruckstellend
Spannungsabfall	<1,2 V @ 200 mA
Schaltanzeige	LED, gelb
Betriebstemperatur	-20...+70 °C
Schutzart	IP67



	Mounting Montage	S _n [mm]	Connection Anschluss	Housing Material Gehäusematerial	Housing length · Gehäuselänge [mm]			
					45	60	70	80
M8x1	●	2	Cable 2 m, PVC	Brass · Messing	CS8-S2PO45-A2P			
			Connector M8	Brass · Messing		CS8-S2PO60-A8		
			Connector M12	Brass · Messing			CS8-S2PO70-A12	
	○	4	Cable 2 m, PVC	Brass · Messing	CS8-N4PO45-A2P			
			Connector M8	Brass · Messing		CS8-N4PO60-A8		
			Connector M12	Brass · Messing			CS8-N4PO70-A12	
M12x1	●	4	Cable 2 m, PVC	Brass · Messing		CS12-S4PO60-A2P		
			Connector M12	Brass · Messing		CS12-S4PO60-A12		
		6	Cable 2 m, PVC	Brass · Messing		CS12-S6PO60-A2P		
			Connector M12	Brass · Messing		CS12-S6PO60-A12		
	○	8	Cable 2 m, PVC	Brass · Messing		CS12-N8PO60-A2P		
			Connector M12	Brass · Messing		CS12-N8PO60-A12		
		10	Cable 2 m, PVC	Brass · Messing		CS12-N10PO60-A2P		
			Connector M12	Brass · Messing		CS12-N10PO60-A12		
M18x1	●	8	Cable 2 m, PVC	Brass · Messing				CS18-S8PO80-A2P
			Cable 2 m, PTFE	PTFE				CS18-S8PO80T-A2P
			Connector M12	Brass · Messing				CS18-S8PO80-A12
		12	Cable 2 m, PVC	Brass · Messing				CS18-S12PO80-A2P
			Cable 2 m, PTFE	PTFE				CS18-S12PO80T-A2P
			Connector M12	Brass · Messing				CS18-S12PO80-A12
	○	15	Cable 2 m, PVC	Brass · Messing				CS18-N15PO80-A2P
			Cable 2 m, PTFE	PTFE				CS18-N15PO80T-A2P
			Connector M12	Brass · Messing				CS18-N15PO80-A12
		20	Cable 2 m, PVC	Brass · Messing				CS18-N20PO80-A2P
			Cable 2 m, PTFE	PTFE				CS18-N20PO80T-A2P
			Connector M12	Brass · Messing				CS18-N20PO80-A12
M30x1.5	●	20	Cable 2 m, PVC	Brass · Messing				CS30-S20PO80-A2P
			Cable 2 m, PTFE	PTFE				CS30-S20PO80T-A2P
			Connector M12	Brass · Messing				CS30-S20PO80-A12
		25	Cable 2 m, PVC	Brass · Messing				CS30-S25PO80-A2P
			Cable 2 m, PTFE	PTFE				CS30-S25PO80T-A2P
			Connector M12	Brass · Messing				CS30-S25PO80-A12
	○	30	Cable 2 m, PVC	Brass · Messing				CS30-N30PO80-A2P
			Cable 2 m, PTFE	PTFE				CS30-N30PO80T-A2P
			Connector M12	Brass · Messing				CS30-N30PO80-A12
		35	Cable 2 m, PVC	Brass · Messing				CS30-N35PO80-A2P
			Cable 2 m, PTFE	PTFE				CS30-N35PO80T-A2P
			Connector M12	Brass · Messing				CS30-N35PO80-A12

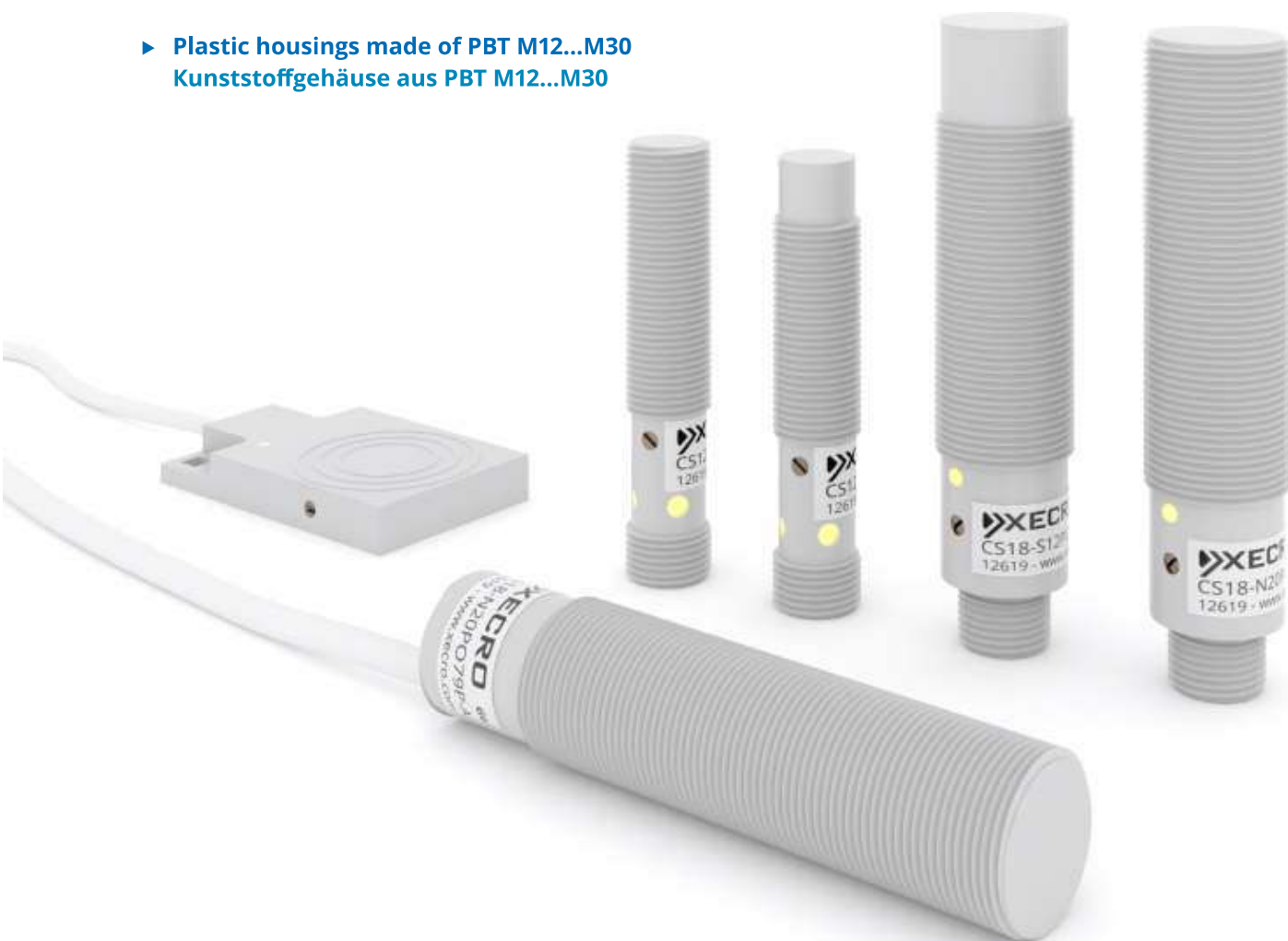
Selection from our range of products.
Auszug aus unserem Lieferprogramm.

Order codes are valid for PNP, NO (PO) configuration. All devices also available in PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) configuration.
Bestellnummern gelten für PNP, NO (PO) Konfiguration. Alle Geräte auch erhältlich als PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) Konfiguration.

Proximity Switches, capacitive

Näherungsschalter, kapazitiv

- ▶ Metal housings from Ø6.5 mm...M30
Metallgehäuse Ø6,5 mm...M30
- ▶ Chemical resistant PTFE housings for M18 and M30
Chemisch beständige PTFE-Gehäuse für M18 und M30
- ▶ **Highest sensing distances in its class**
Höchste Schaltabstände ihrer Klasse
- ▶ Sensitivity adjustment by multi-turn potentiometer
Einstellung des Schaltpunktes mit Mehrgang-Potentiometer
- ▶ **Plastic housings made of PBT M12...M30**
Kunststoffgehäuse aus PBT M12...M30



Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current consumption	<10 mA
Short circuit protection	built-in, self-resetting
Voltage drop	<1.2 V @ 200 mA
Switching indicator	LED, yellow
Housing material	PBT
Operating temperature	-20...+70 °C -4...+158 °F
IP code	IP67

Technische Daten (typ.)

Versorgungsspannung	10...30 V _{DC}
Verpolungsschutz	integriert
Eigenstromaufnahme	<10 mA
Kurzschlusschutz	integriert, selbstrückstellend
Spannungsabfall	<1,2 V @ 200 mA
Schaltanzeige	LED, gelb
Gehäusematerial	PBT
Betriebstemperatur	-20...+70 °C
Schutzart	IP67



	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]			
				60	80	30 × 50 × 7	40 × 40 × 7
M12X1	●	4	Cable 2 m, PVC	CS12-S4PO60P-A2P			
			Connector M12	CS12-S4PO60P-A12			
		6	Cable 2 m, PVC	CS12-S6PO60P-A2P			
			Connector M12	CS12-S6PO60P-A12			
	○	8	Cable 2 m, PVC	CS12-N8PO60P-A2P			
			Connector M12	CS12-N8PO60P-A12			
		10	Cable 2 m, PVC	CS12-N10PO60P-A2P			
			Connector M12	CS12-N10PO60P-A12			
M18X1	●	8	Cable 2 m, PVC		CS18-S8PO80P-A2P		
			Connector M12		CS18-S8PO80P-A12		
		12	Cable 2 m, PVC		CS18-S12PO80P-A2P		
			Connector M12		CS18-S12PO80P-A12		
	○	15	Cable 2 m, PVC		CS18-N15PO80P-A2P		
			Connector M12		CS18-N15PO80P-A12		
		20	Cable 2 m, PVC		CS18-N20PO80P-A2P		
			Connector M12		CS18-N20PO80P-A12		
M30X1	●	20	Cable 2 m, PVC		CS30-S20PO80P-A2P		
			Connector M12		CS30-S20PO80P-A12		
		25	Cable 2 m, PVC		CS30-S25PO80P-A2P		
			Connector M12		CS30-S25PO80P-A12		
	○	30	Cable 2 m, PVC		CS30-N30PO80P-A2P		
			Connector M12		CS30-N30PO80P-A12		
		35	Cable 2 m, PVC		CS30-N35PO80P-A2P		
			Connector M12		CS30-N35PO80P-A12		
30X50 mm	●	6	Cable, 2 m			CS3050-S6PO-A2P	
			30 cm, PUR, M8			CS3050-S6PO-3U8	
	○	10	Cable, 2 m			CS3050-N10PO-A2P	
			30 cm, PUR, M8			CS3050-N10PO-3U8	
40X40 mm	●	20	Screw terminal				CS40-S20POL-PG13
		25	Screw terminal				CS40-S20POL-PG13
	○	30	Screw terminal				CS40-S25POL-PG13
		35	Screw terminal				CS40-S25POL-PG13

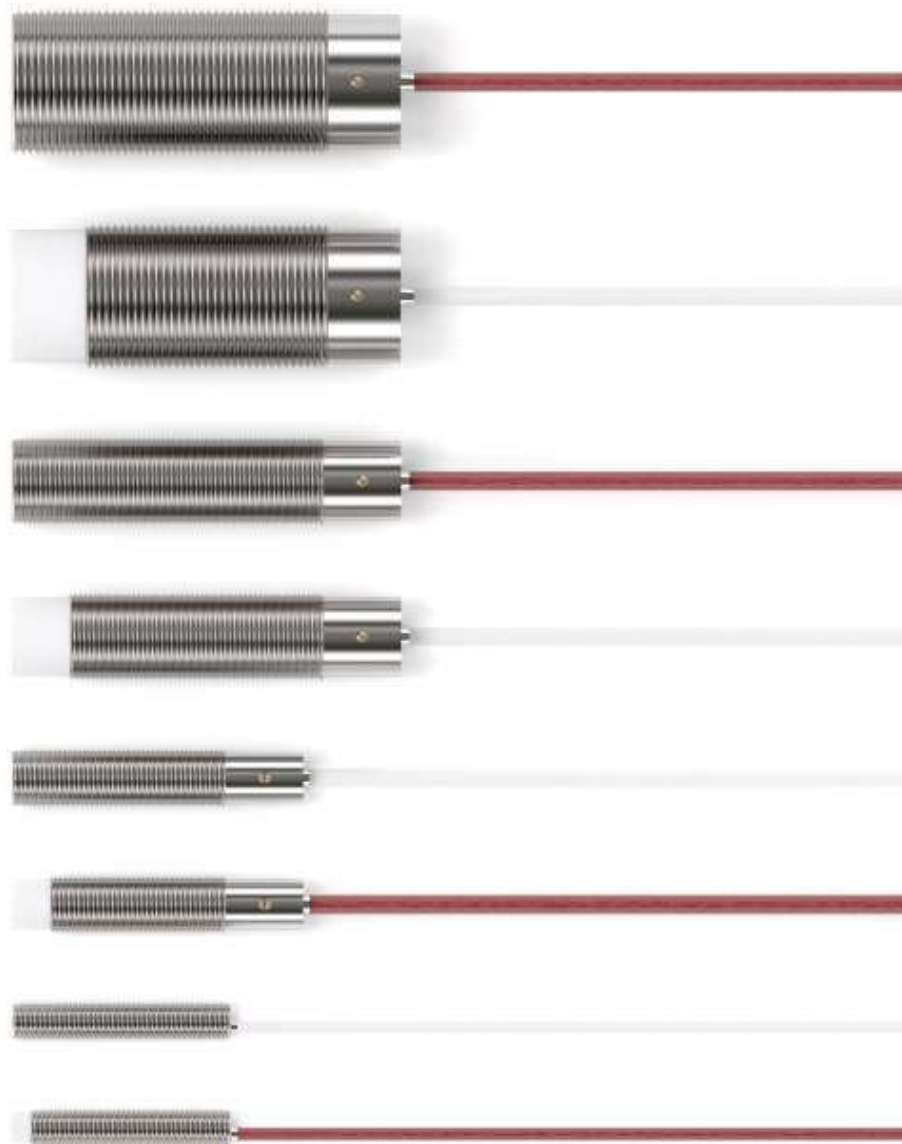
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Proximity Switches, capacitive

Näherungsschalter, kapazitiv

- ▶ **Permanent temperature up to 150 °C | 302 °F**
Dauerhaft temperaturbeständig bis zu 150 °C
- ▶ Highest sensing distances in its class
Höchste Schaltabstände ihrer Klasse
- ▶ Sensitivity adjustment by multi-turn potentiometer
Einstellung des Schaltpunktes mit Mehrgang-Potentiometer
- ▶ Metal housings Ø6.5 mm...M30
Metallgehäuse Ø6,5 mm...M30



Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current consumption	<10 mA
Short circuit protection	built-in, self-resetting
Voltage drop	<1.2 V @ 200 mA
Operating temperature	-20... °C -4... °F
IP code	IP67

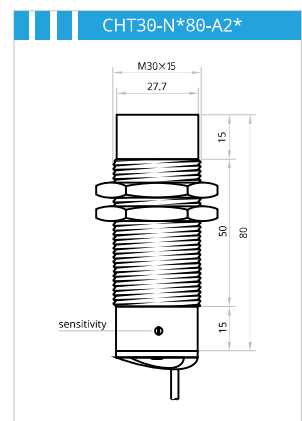
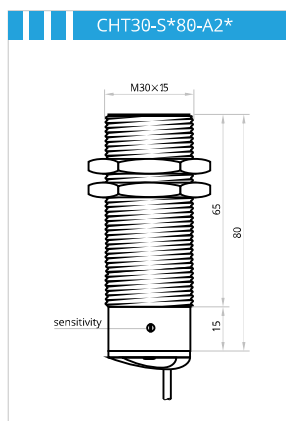
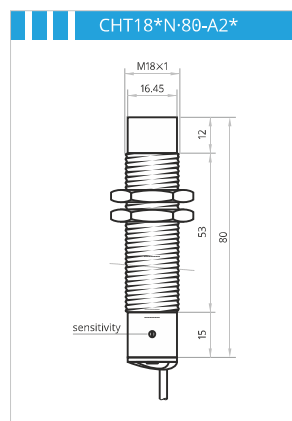
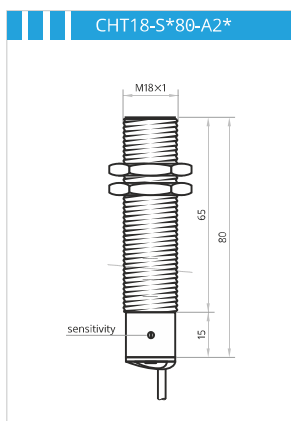
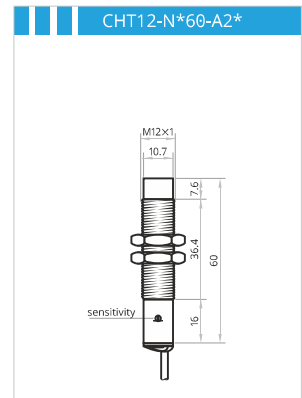
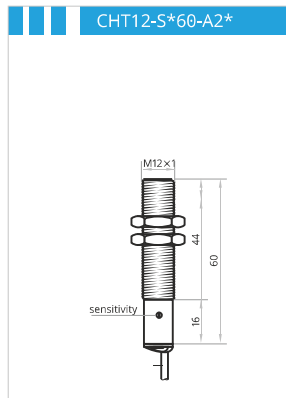
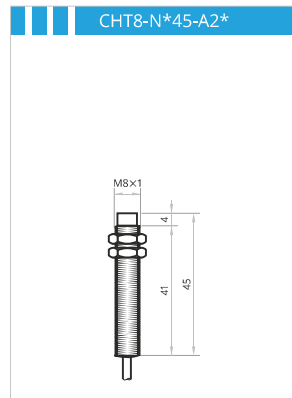
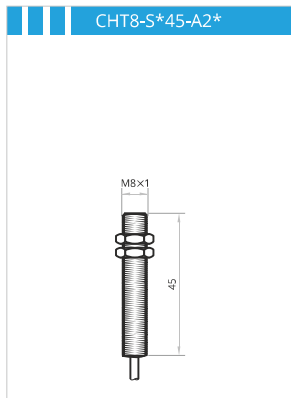
Technische Daten (typ.)

Versorgungsspannung	10...30 V _{DC}
Verpolungsschutz	integriert
Eigenstromaufnahme	<10 mA
Kurzschlusschutz	integriert, selbstrückstellend
Spannungsabfall	<1,2 V @ 200 mA
Betriebstemperatur	-20... °C
Schutzart	IP67



	Mounting Montage	Sn [mm]	Connection Anschluss	Temperature · Temperatur [permanent]		Output load capability Ausgangsbelastbarkeit
				120 °C 250 °F	150 °C 300 °F	
M8x1	●	2	Cable 2 m, silicone	CHT8-S2APO45-N2S	CHT8-S2BPO45-N2S	<120 mA
			Cable 2 m PTFE	CHT8-S2APO45-N2T	CHT8-S2BPO45-N2T	<120 mA
	○	4	Cable 2 m, silicone	CHT8-N4APO45-N2S	CHT8-N4BPO45-N2S	<120 mA
			Cable 2 m PTFE	CHT8-N4APO45-N2T	CHT8-N4BPO45-N2T	<120 mA
M12x1	●	2	Cable 2 m, silicone	CHT12-S2APO60-N2S	CHT12-S2BPO60-N2S	<120 mA
			Cable 2 m PTFE	CHT12-S2APO60-N2T	CHT12-S2BPO60-N2T	<120 mA
	○	4	Cable 2 m, silicone	CHT12-N4APO60-N2S	CHT12-N4BPO60-N2S	<120 mA
			Cable 2 m PTFE	CHT12-N4APO60-N2T	CHT12-N4BPO60-N2T	<120 mA
	●	4	Cable 2 m, silicone	CHT12-S4APO60-N2S	CHT12-S4BPO60-N2S	<120 mA
			Cable 2 m PTFE	CHT12-S4APO60-N2T	CHT12-S4BPO60-N2T	<120 mA
	○	8	Cable 2 m, silicone	CHT12-N8APO60-N2S	CHT12-N8BPO60-N2S	<120 mA
			Cable 2 m PTFE	CHT12-N8APO60-N2T	CHT12-N8BPO60-N2T	<120 mA
M18x1	●	5	Cable 2 m, silicone	CHT18-S5APO80-N2S	CHT18-S5BPO80-N2S	<150 mA
			Cable 2 m PTFE	CHT18-S5APO80-N2T	CHT18-S5BPO80-N2T	<150 mA
	○	8	Cable 2 m, silicone	CHT18-N8APO80-N2S	CHT18-N8BPO80-N2S	<150 mA
			Cable 2 m PTFE	CHT18-N8APO80-N2T	CHT18-N8BPO80-N2T	<150 mA
M30x1.5	●	10	Cable 2 m, silicone	CHT30-S10APO80-N2S	CHT30-S10BPO80-N2S	<150 mA
			Cable 2 m PTFE	CHT30-S10APO80-N2T	CHT30-S10BPO80-N2T	<150 mA
	○	15	Cable 2 m, silicone	CHT30-N15APO80-N2S	CHT30-N15BPO80-N2S	<150 mA
			Cable 2 m PTFE	CHT30-N15APO80-N2T	CHT30-N15BPO80-N2T	<150 mA

Order codes are for PNP, NO (PO) configuration. All devices also available in PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) configuration.
 Bestellnummern für PNP, NO (PO) Konfiguration. Alle Geräte auch erhältlich als PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) Konfiguration.



Ring Sensors — inductive, capacitive, and photoelectric

Ringsensoren — induktive, kapazitive und optische

- ▶ Inductive ring sensors to detect metal parts
Induktive Ringsensoren zur Erkennung von Metallteilen
- ▶ Capacitive sensors to detect liquids in tubes
Kapazitive Sensoren zur Erkennung von Flüssigkeiten in Schläuchen
- ▶ Optical ring sensors to detect metallic or non-metallic parts
Optische Ringsensoren für die Erkennung von metallischen oder nicht-metallischen Teilen
- ▶ Versions with impulse lengthening are available
Ausführungen mit Impulsverlängerung erhältlich



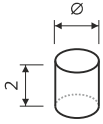
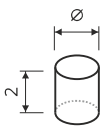
Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current load capability	200 mA
Short circuit protection	built-in, self-resetting
Voltage drop	<1.5 V @ 200 mA
Inductive, Capacitive	
Housing material	PBT
Ring material	PA 6.6
Current consumption	<10 mA
Photoelectric	
Housing material	Zinc die-cast, black painted
Ring material	PMMA
Current consumption	<50 mA
Switching indicator	LED, yellow
Operating temperature	-20...+70 °C -4...+158 °F
IP code	IP67

Technische Daten (typ.)

Versorgungsspannung	10...30 V _{DC}
Verpolungsschutz	integriert
Ausgangsbelaubarkeit	200 mA
Kurzschlusschutz	integriert, selbstrückstellend
Spannungsabfall	<1,5 V @ 200 mA
Induktiv, Kapazitiv	
Gehäusematerial	PBT
Ringmaterial	PA 6.6
Eigenstromaufnahme	<10 mA
Optisch	
Gehäusematerial	Zinkdruckguss, schwarz lackiert
Ringmaterial	PMMA
Eigenstromaufnahme	<50 mA
Schaltanzeige	LED, gelb
Betriebstemperatur	-20...+70 °C
Schutzart	IP67



	Resolution Auflösung	Max. object speed Max. Objektgeschw.	Impulse lengthening Impulsverlängerung	Inner diameter Innendurchmesser	Evaluation Auswertung	Connection Anschluss	Order code Bestellnummer					
Inductive	>0.5 mm Ø	 35 m/s	0.1...150 ms adjustable einstellbar	Ø 6.1 mm	Static	Connector M12, straight	IR06S-PS150-A12					
						Connector M12, angled	IR06S-PS150-RA12					
					Dynamic	Connector M12, straight	IR06D-PS150-A12					
						Connector M12, angled	IR06D-PS150-RA12					
	>0.6 mm Ø			Static	Ø 10.1 mm	Connector M12, straight	IR10S-PS150-A12					
						Connector M12, angled	IR10S-PS150-RA12					
				Dynamic	Connector M12, straight	IR10D-PS150-A12						
					Connector M12, angled	IR10D-PS150-RA12						
	>0.8 mm Ø			Static	Ø 15.1 mm	Connector M12, straight	IR15S-PS150-A12					
						Connector M12, angled	IR15S-PS150-RA12					
				Dynamic		Connector M12, straight	IR15D-PS150-A12					
						Connector M12, angled	IR15D-PS150-RA12					
	>1.0 mm Ø			Static	Ø 21.1 mm	Connector M12, straight	IR21S-PS150-A12					
						Connector M12, angled	IR21S-PS150-RA12					
				Dynamic		Connector M12, straight	IR21D-PS150-A12					
						Connector M12, angled	IR21D-PS150-RA12					
capacitive	Depends on permittivity ϵ_r Abhängig von Permittivität ϵ_r	Static	None Keine	Ø 6.1 mm	Static	Connector M12, straight	CR06S-PO-A12					
						Connector M12, angled	CR06S-PO-RA12					
				Ø 10.1 mm		Connector M12, straight	CR10S-PO-A12					
						Connector M12, angled	CR10S-PO-RA12					
				Ø 15.1 mm		Connector M12, straight	CR15S-PO-A12					
						Connector M12, angled	CR15S-PO-RA12					
				Ø 21.1 mm		Connector M12, straight	CR21S-PO-A12					
						Connector M12, angled	CR21S-PO-RA12					
				Photoelectric		>1.0 mm Ø in the center im Zentrum	 30 m/s	0.1...20 ms selectable wählbar	Ø 6.1 mm	Static	Connector M8	OR06S-PS20-A8
										Dynamic	Connector M8	IR06D-PS20-A8
									Ø 10.1 mm	Static	Connector M8	OR10S-PS20-A8
										Dynamic	Connector M8	IR10D-PS20-A8
Ø 15.1 mm	Static	Connector M8	OR15S-PS20-A8									
	Dynamic	Connector M8	IR15D-PS20-A8									
Ø 20.1 mm	Static	Connector M8	OR20S-PS20-A8									
	Dynamic	Connector M8	IR20D-PS20-A8									
Ø 25.1 mm	Static	Connector M8	OR25S-PS20-A8									
	Dynamic	Connector M8	IR25D-PS20-A8									
Ø 20.1 mm	Static	Connector M8	OR30S-PS20-A8									
	Dynamic	Connector M8	IR30D-PS20-A8									

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 Bestellnummern gelten für PNP, NO (PO) oder PNP, NO↔NC (PS) Konfiguration. Alle Geräte auch erhältlich mit NPN Konfiguration.