



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, inductive Naherungsschalter, induktiv

- ▶ **Miniature, $\varnothing 3$ mm... $\varnothing 5 \times 5$ mm**
Miniatur, $\varnothing 3$ mm... $\varnothing 5 \times 5$ mm
- ▶ High performance with up to $4 \times S_n$
Hochleistung mit bis zu $4 \times S_n$
- ▶ Closed stainless steel housing with IP69k
Geschlossene Edelstahlgehuse mit IP69k
- ▶ High temperature proof versions up to 180 °C | 356 °F
Hochtemperaturfeste Ausfuhungen bis 180 °C
- ▶ Low temperature -40 °C | -40 °F, food grade, IP69k
Tiefemperatur -40 °C, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausfuhungen bis 1000 bar
- ▶ Devices with analog output
Gerate mit Analogausgang
- ▶ 2-wire 10...55 V_{DC} | 20...250 V_{AC}
2-Leiter 10...55 V_{DC} | 20...250 V_{AC}

>5000 different proximity switches



Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current consumption	<10 mA
Current load capability	200 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

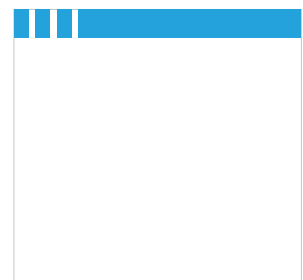
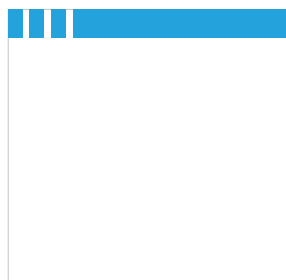
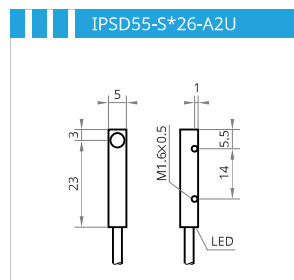
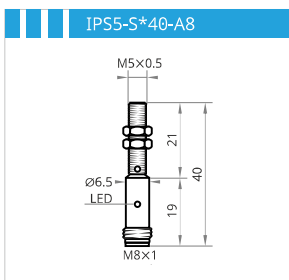
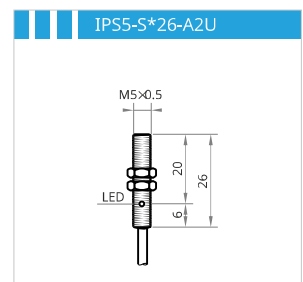
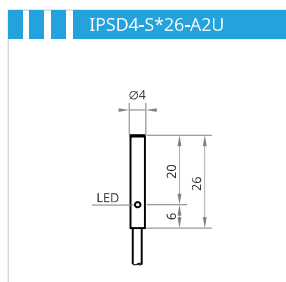
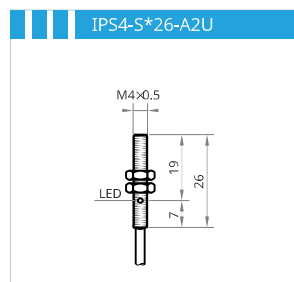
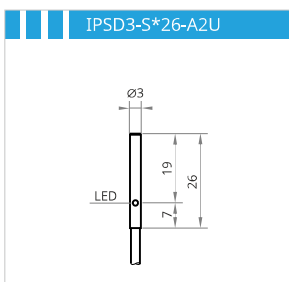
Technische Daten (typ.)

Versorgungsspannung	10...30 V _{DC}
Verpolungsschutz	integriert
Eigenstromaufnahme	<10 mA
Ausgangsbelastbarkeit	200 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 length · Gehäuselänge [mm]		Housing material Gehäusematerial	Switching frequency Schaltfrequenz
				18	40		
Ø3 mm	●	0.6	Cable 2 m, PUR	IPSD3-S06PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPSD3-S06PO26-3U8		Stainless steel Edelstahl	2000 Hz
		1	Cable 2 m, PUR	IPSD3-S1PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPSD3-S1PO26-3U8		Stainless steel Edelstahl	2000 Hz
M4x0.5	●	0.6	Cable 2 m, PUR	IPS4-S06PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPS4-S06PO26-3U8		Stainless steel Edelstahl	2000 Hz
		1	Cable 2 m, PUR	IPS4-S1PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPS4-S1PO26-3U8		Stainless steel Edelstahl	2000 Hz
Ø4 mm	●	0.8	Cable 2 m, PUR	IPSD4-S08PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPSD4-S08PO26-3U8		Stainless steel Edelstahl	2000 Hz
		1.5	Cable 2 m, PUR	IPSD4-S1.5PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IPSD4-S1.5PO26-3U8		Stainless steel Edelstahl	2000 Hz
M5x0.5	●	0.8	Cable 2 m, PUR	IP55-S08PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IP55-S08PO26-3U8		Stainless steel Edelstahl	2000 Hz
			Connector M8	IP55-S08PO40-A8		Stainless steel Edelstahl	2000 Hz
		1.5	Cable 2 m, PUR	IP55-S1.5PO26-A2U		Stainless steel Edelstahl	2000 Hz
			30 cm, PUR, M8	IP55-S1.5PO26-3U8		Stainless steel Edelstahl	2000 Hz
			Connector M8	IP55-S1.5PO40-A8		Stainless steel Edelstahl	2000 Hz
Ø5x5	●	0.8	Cable 2 m, PUR	IP555-S08PO26-A2U		Nickel plated brass Messing vernickelt	2000 Hz
			30 cm, PUR, M8	IP555-S08PO26-3U8		Nickel plated brass Messing vernickelt	2000 Hz
		1.5	Cable 2 m, PUR	IP555-S1.5PO26-A2U		Nickel plated brass Messing vernickelt	2000 Hz
			30 cm, PUR, M8	IP555-S1.5PO26-3U8		Nickel plated brass Messing vernickelt	2000 Hz

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.



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Tiefemperatur -40 °C, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausfuhungen bis 1000 bar
- ▶ Devices with analog output
Gerate mit Analogausgang
- ▶ 2-wire 10...55 V_{DC} | 20...250 V_{AC}
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Technical data (typ.)

Supply voltage	10...30 V _{DC}
Reverse polarity protection	built-in
Current consumption	<10 mA
Current load capability	200 mA
Short circuit protection	built-in, self-resetting
Voltage drop	<1.2 V @ 200 mA
Switching indicator	LED, yellow
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IP code	IP67

Technische Daten (typ.)

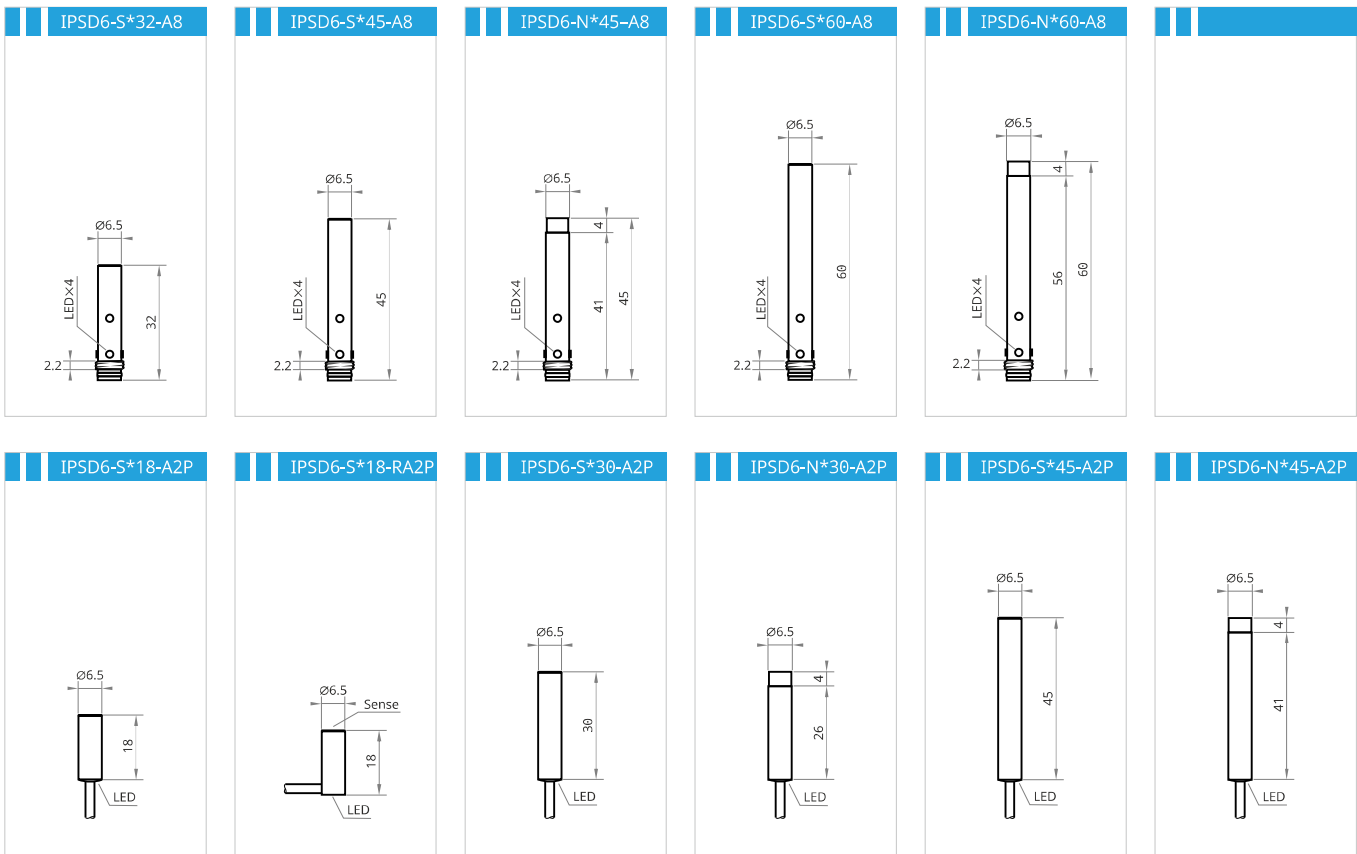
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Spannungsabfall	<1,2 V @ 200 mA
Schaltanzeige	LED, gelb
Betriebstemperatur	$-20...+70$ °C
Schutzart	IP67



	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]					Switching frequency Schaltfrequenz
				18	30	32	45	60	
Standard	●	1	Cable 2 m, PVC		IPSD6-S1PO30-A2P		IPSD6-S1PO45-A2P		2000 Hz
			Connector M8				IPSD6-S1PO45-A8	IPSD6-S1PO60-A8	
	○	2	Cable 2 m, PVC		IPSD6-N2PO30-A2P		IPSD6-N2PO45-A2P		2000 Hz
			Connector M8				IPSD6-N2PO45-A8	IPSD6-N2PO60-A8	
Increased · Erhöht	●	2	Cable 2 m, PVC	IPSD6-S2PO18-A2P	IPSD6-S2PO30-A2P		IPSD6-S2PO45-A2P		2000 Hz
			Cable 2 m, radial	IPSD6-S2PO18-RA2P					
			30 cm, PUR, M8	IPSD6-S2PO18-3U8	IPSD6-S2PO30-3U8				
			30cm, M8, radial	IPSD6-S2PO18-R3U8					
			Connector M8			IPSD6-S2PO32-A8	IPSD6-S2PO45-A8	IPSD6-S2PO60-A8	
	○	4	Cable 2 m, PVC		IPSD6-N4PO30-A2P		IPSD6-N4PO45-A2P		1000 Hz
			Connector M8				IPSD6-N4PO45-A8	IPSD6-N4PO60-A8	
Extended · Erweitert	●	3	Cable 2 m, PVC	IPSD6-S3PO18-A2P	IPSD6-S3PO30-A2P		IPSD6-S3PO45-A2P		1000 Hz
			Cable 2 m, radial	IPSD6-S3PO18-RA2P					
			30 cm, PUR, M8	IPSD6-S3PO18-3U8	IPSD6-S3PO30-3U8				
			30 cm, M8, radial	IPSD6-S3PO18-R3U8					
			Connector M8			IPSD6-S3PO32-A8	IPSD6-S3PO45-A8	IPSD6-S3PO60-A8	
	○	6	Cable 2 m, PVC		IPSD6-N64PO30-A2P		IPSD6-N6PO45-A2P		500 Hz
			Connector M8				IPSD6-N6PO45-A8	IPSD6-N6PO60-A8	

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.
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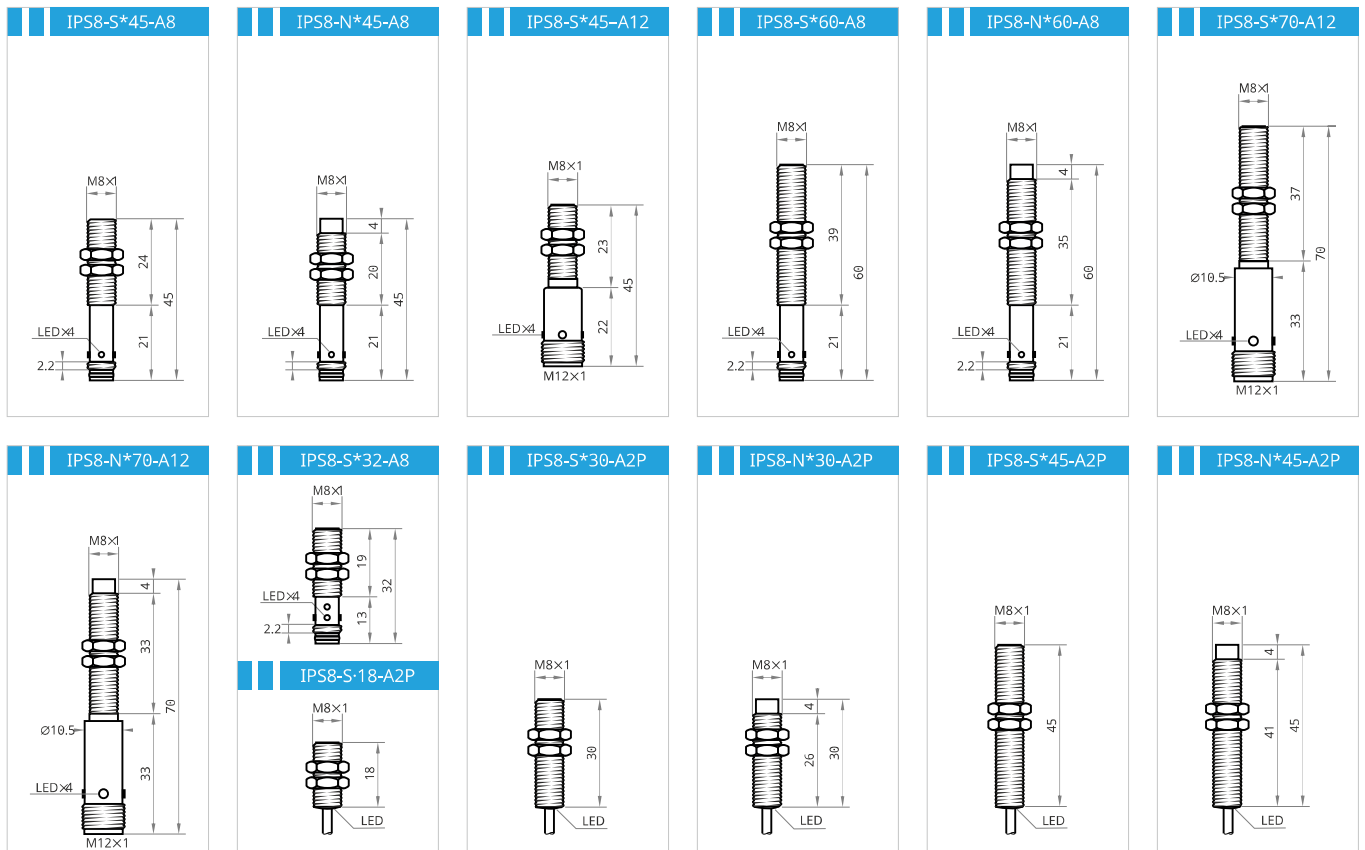


M8x1

	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]						
				18	30	32	45	60	70	
Standard	●	1	Cable 2 m, PVC	IPS8-S1PO18-A2P	IPS8-S1PO30-A2P		IPS8-S1PO45-A2P			2000 Hz
			Connector M8			IPS8-S1PO32-A8	IPS8-S1PO45-A8	IPS8-S1PO60-A8		
	○	2	Cable 2 m, PVC		IPS8-N2PO30-A2P		IPS8-N2PO45-A2P	IPS8-N2PO60-A8		2000 Hz
			Connector M8				IPS8-N2PO45-A8			
Increased · Erhöht	●	2	Cable 2 m, PVC	IPS8-S2PO18-A2P	IPS8-S2PO30-A2P		IPS8-S2PO45-A2P			2000 Hz
			30 cm, PUR, M8	IPS8-S2PO18-3U8						
			Connector M8			IPS8-S2PO32-A8	IPS8-S2PO45-A8	IPS8-S2PO60-A8		
			Connector M12				IPS8-S2PO45-A12		IPS8-S2PO70-A12	
	○	4	Cable 2 m, PVC		IPS8-N4PO30-A2P		IPS8-N4PO45-A2P			1000 Hz
			Connector M8				IPS8-N4PO45-A8	IPS8-N4PO60-A8	IPS8-N4PO70-A12	
Extended · Erweitert	●	3	Cable 2 m, PVC	IPS8-S3PO18-A2P	IPS8-S3PO30-A2P		IPS8-S3PO45-A2P			1000 Hz
			30 cm, PUR, M8	IPS8-S3PO18-3U8						
			Connector M8			IPS8-S3PO32-A8	IPS8-S3PO45-A8	IPS8-S3PO60-A8		
			Connector M12				IPS8-S3PO45-A12		IPS8-S3PO70-A12	
	○	6	Cable 2 m, PVC		IPS8-N6PO30-A2P		IPS8-N6PO45-A2P			500 Hz
			Connector M8				IPS8-N6PO45-A8	IPS8-N6PO60-A8	IPS8-N6PO70-A12	
Performance	●	4	Cable 2 m, PVC	IPS8-S4PO18-A2P	IPS8-S4PO30-A2P		IPS8-S4PO45-A2P			500 Hz
			30 cm, PUR, M8	IPS8-S4PO18-3U8						
			Connector M8			IPS8-S4PO32-A8	IPS8-S4PO45-A8	IPS8-S4PO60-A8		
			Connector M12				IPS8-S4PO45-A12		IPS8-S4PO70-A12	

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

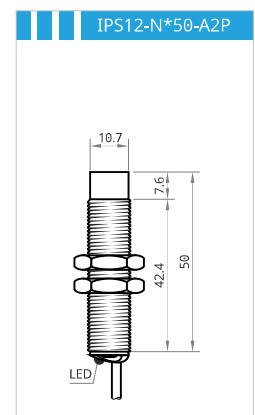
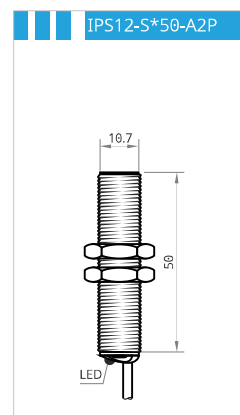
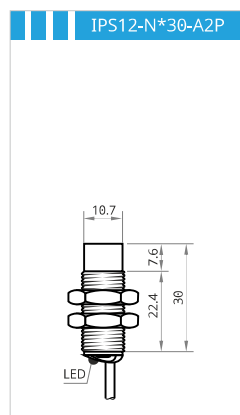
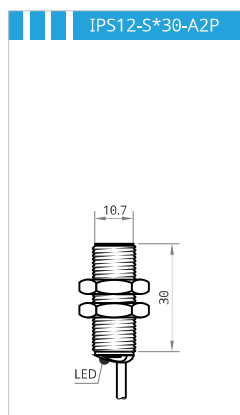
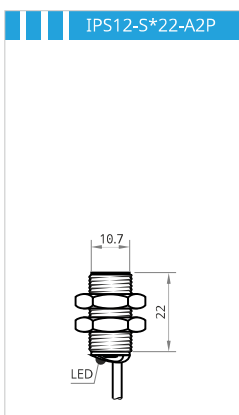
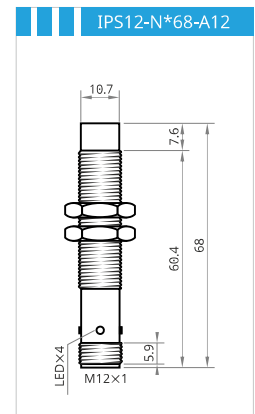
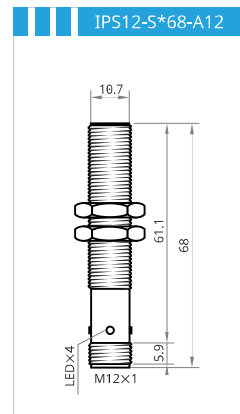
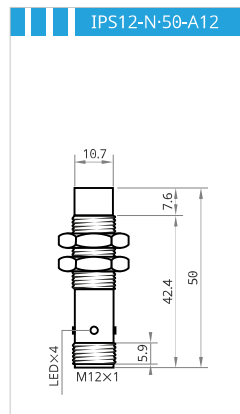
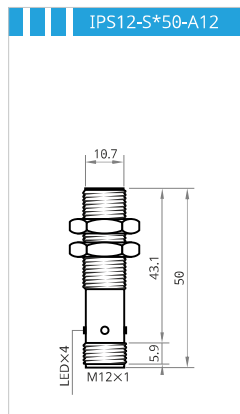
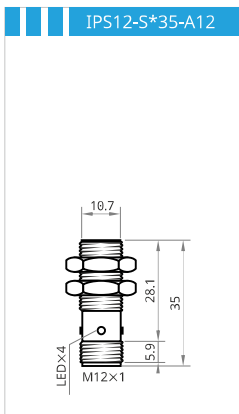
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	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]					Switching frequency Schaltfrequenz
				22	30	35	50	68	
Standard	●	2	Cable 2 m, PVC		IPS12-S2PO30-A2P		IPS12-S2PO50-A2P		2000 Hz
			Connector M12				IPS12-S2PO50-A12	IPS12-S2PO68-A12	
	○	4	Cable 2 m, PVC		IPS12-N4PO30-A2P		IPS12-N4PO50-A2P		1000 Hz
			Connector M12				IPS12-N4PO50-A12	IPS12-N4PO68-A12	
Increased · Erhöht	●	4	Cable 2 m, PVC	IPS12-S4PO22-A2P	IPS12-S4PO30-A2P		IPS12-S4PO50-A2P		1000 Hz
			30 cm, PUR, M12	IPS12-S4PO22-3U12					
			Connector M12			IPS12-S4PO35-A12	IPS12-S4PO50-A12	IPS12-S4PO68-A12	
	○	8	Cable 2 m, PVC		IPS12-N8PO30-A2P		IPS12-N8PO50-A2P		500 Hz
			Connector M12				IPS12-N8PO50-A12	IPS12-N8PO68-A12	
Extended · Erweitert	●	6	Cable 2 m, PVC	IPS12-S6PO22-A2P	IPS12-S6PO30-A2P		IPS12-S6PO50-A2P		800 Hz
			30 cm, PUR, M12	IPS12-S6PO22-3U12					
			Connector M12			IPS12-S6PO35-A12	IPS12-S6PO50-A12	IPS12-S6PO68-A12	
	○	10	Cable 2 m, PVC		IPS12-N10PO30-A2P		IPS12-N10PO50-A2P		400 Hz
			Connector M12				IPS12-N10PO50-A12	IPS12-N10PO68-A12	
Performance	●	8	Cable 2 m, PVC	IPS12-S8PO22-A2P	IPS12-S8PO30-A2P		IPS12-S8PO50-A2P		500 Hz
			30 cm, PUR, M12	IPS12-S8PO22-3U12					
			Connector M12			IPS12-S8PO35-A12	IPS12-S8PO50-A12	IPS12-S8PO68-A12	

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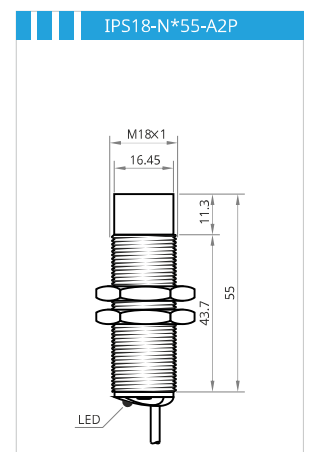
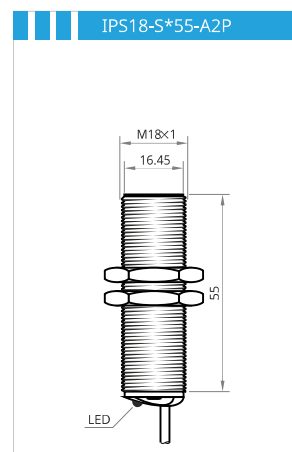
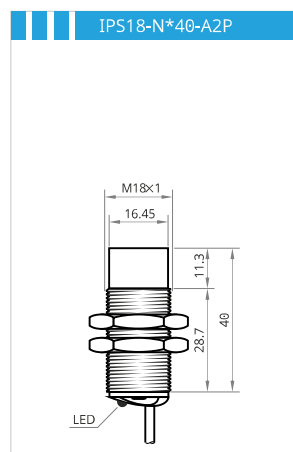
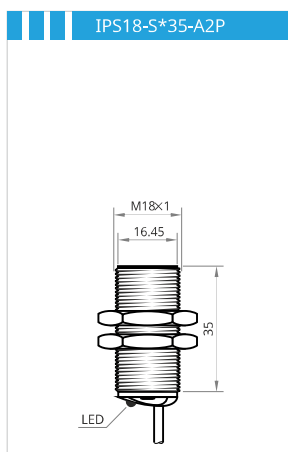
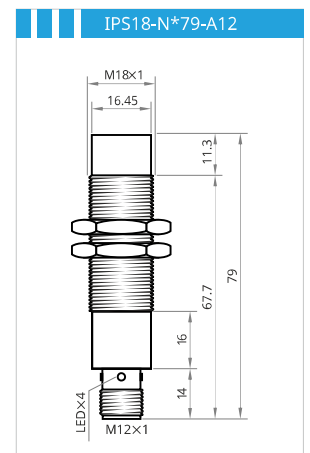
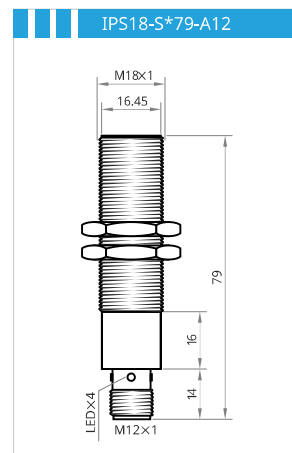
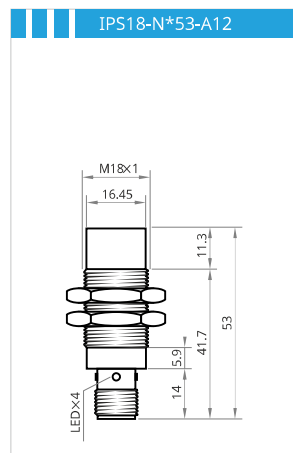
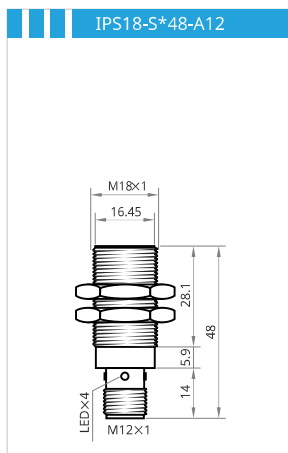


M18x1

	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]						
				35	40	48	53	55	79	
Standard	●	5	Cable 2 m, PVC	IPS18-S5PO35-A2P				IPS18-S5PO55-A2P		1000 Hz
			Connector M12			IPS18-S5PO48-A12			IPS18-S5PO79-A12	
	○	8	Cable 2 m, PVC		IPS18-N8PO40-A2P			IPS18-N8PO55-A2P		500 Hz
			Connector M12			IPS18-N8PO53-A12			IPS18-N8PO79-A12	
Increased · Erhöht	●	8	Cable 2 m, PVC	IPS18-S8PO35-A2P				IPS18-S8PO55-A2P		500 Hz
			Connector M12			IPS18-S8PO48-A12			IPS18-S8PO79-A12	
	○	16	Cable 2 m, PVC		IPS18-N16PO40-A2P			IPS18-N16PO55-A2P		150 Hz
			Connector M12			IPS18-N16PO53-A12			IPS18-N16PO79-A12	
Extended · Erweitert	●	12	Cable 2 m, PVC	IPS18-S12PO35-A2P				IPS18-S12PO55-A2P		300 Hz
			Connector M12			IPS18-S12PO48-A12			IPS18-S12PO79-A12	
	○	20	Cable 2 m, PVC		IPS18-N20PO40-A2P			IPS18-N20PO55-A2P		100 Hz
			Connector M12			IPS18-N20PO53-A12			IPS18-N20PO79-A12	

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Auszug aus unserem Lieferprogramm.

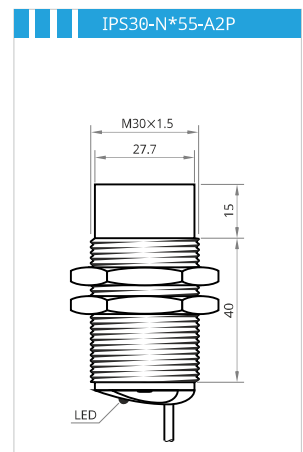
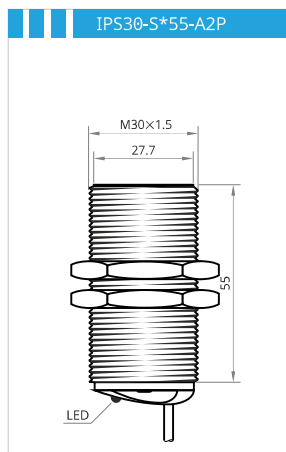
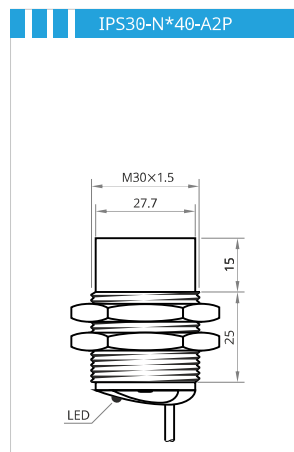
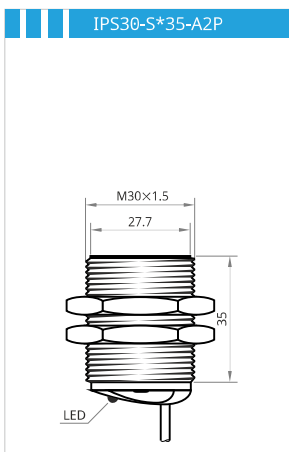
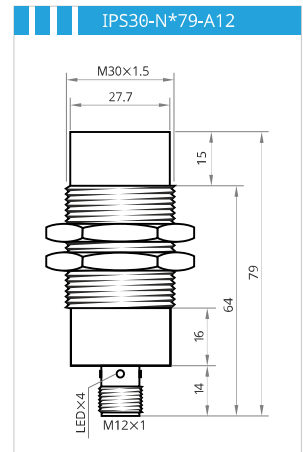
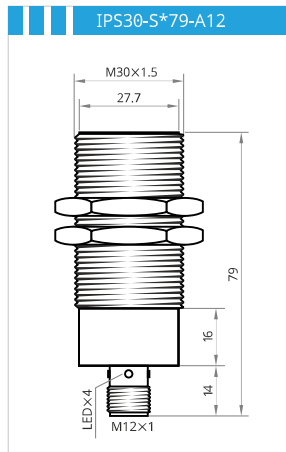
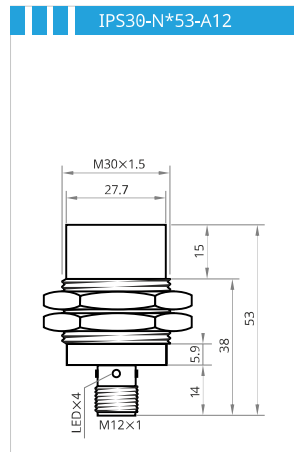
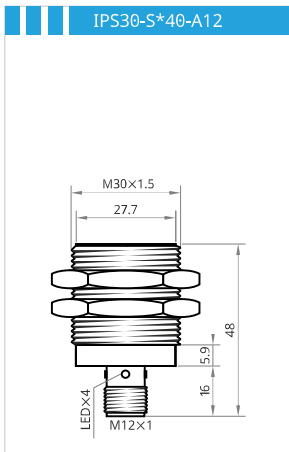
Order codes are valid for PNP, NO (PO) configuration. All devices also available in PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) configuration.
Bestellnummern gelten für PNP, NO (PO) Konfiguration. Alle Geräte auch erhältlich als PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) Konfiguration.



	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]						
				35	40	48	53	55	79	
Standard	●	10	Cable 2 m, PVC	IPS30-S10PO35-A2P				IPS30-S10PO55-A2P		1000 Hz
			Connector M12			IPS30-S10PO48-A12		IPS30-S10PO79-A12		
	○	15	Cable 2 m, PVC	IPS30-N15PO40-A2P				IPS30-N15PO55-A2P		500 Hz
			Connector M12			IPS30-N15PO53-A12		IPS30-N15PO79-A12		
Increased · Erhöht	●	16	Cable 2 m, PVC	IPS30-S16PO35-A2P				IPS30-S16PO55-A2P		500 Hz
			Connector M12			IPS30-S16PO48-A12		IPS30-S16PO79-A12		
	○	25	Cable 2 m, PVC	IPS30-N25PO40-A2P				IPS30-N25PO55-A2P		150 Hz
			Connector M12			IPS30-N25PO53-A12		IPS30-N25PO79-A12		
Extended · Erweitert	●	22	Cable 2 m, PVC	IPS30-S22PO35-A2P				IPS30-S22PO55-A2P		300 Hz
			Connector M12			IPS30-S22PO48-A12		IPS30-S22PO79-A12		
	○	40	Cable 2 m, PVC	IPS30-N40PO40-A2P				IPS30-N40PO55-A2P		100 Hz
			Connector M12			IPS30-N40PO53-A12		IPS30-N40PO79-A12		
Performance	○	50	Cable 2 m, PVC	IPS30-N50PO40-A2P				IPS30-N50PO55-A2P		100 Hz
			Connector M12			IPS30-N50PO53-A12		IPS30-N50PO79-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, inductive Naherungsschalter, induktiv

- ▶ Miniature, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
Miniatur, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
- ▶ High performance with up to $4 \times S_n$
Hochleistung mit bis zu $4 \times S_n$
- ▶ **Closed stainless steel housing with IP69k**
Geschlossene Edelstahlgehause mit IP69k
- ▶ High temperature proof versions up to $180 \text{ }^\circ\text{C}$ | $356 \text{ }^\circ\text{F}$
Hochtemperaturfeste Ausfuhungen bis $180 \text{ }^\circ\text{C}$
- ▶ Low temperature $-40 \text{ }^\circ\text{C}$ | $-40 \text{ }^\circ\text{F}$, food grade, IP69k
Tieftemperatur $-40 \text{ }^\circ\text{C}$, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausfuhungen bis 1000 bar
- ▶ Devices with analog output
Gerate mit Analogausgang
- ▶ 2-wire $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$
2-Leiter $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$



Technical data (typ.)

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

Technische Daten (typ.)

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



	Mounting Montage	S _n [mm]	Connection Anschluss	Housing length · Gehäuselänge [mm]					
				30	45	50	60	68	70
M8×1	●	2	Cable 2 m, PVC	IMF8-S2PO30-A2P	IMF8-S2PO45-A2P				
			Connector M8		IMF8-S2PO45-A8		IMF8-S2PO60-A8		
			Connector M12						IMF8-S2PO70-A12
	○	3.5	Cable 2 m, PVC	IMF8-N4PO30-A2P	IMF8-N4PO45-A2P				
			Connector M8		IMF8-N4PO45-A8		IMF8-N4PO60-A8		
			Connector M12						IMF8-N4PO70-A12
M12×1	●	4	Cable 2 m, PVC	IMF12-S4PO30-A2P		IMF12-S4PO50-A2P			
			Connector M12			IMF12-S4PO50-A12		IMF12-S4PO68-A12	
			Cable 2 m, PVC	IMF12-N6PO30-A2P		IMF12-N6PO50-A2P			
	○	6	Connector M12			IMF12-N6PO50-A12		IMF12-N6PO68-A12	
			35	48	53	55	79		
M18×1	●	8	Cable 2 m, PVC	IMF18-S8PO35-A2P			IMF18-S8PO55-A2P		
			Connector M12		IMF18-S8PO48-A12			IMF18-S8PO79-A12	
	○					not available · nicht erhältlich			
M30×1.5	●	10	Cable 2 m, PVC	IMF30-S10PO35-A2P			IMF30-S10PO55-A2P		
			Connector M12		IMF30-S10PO48-A12			IMF30-S10PO79-A12	
			Cable 2 m, PVC	IMF30-N15PO35-A2P			IMF30-N15PO55-A2P		
	○	15	Connector M12			IMF30-N15PO53-A12		IMF30-N15PO79-A12	

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.

Inductive Metal Face

The dimensions of the IMF series correspond to those of the IPS series on the pages 26–29.

Induktiv Vollmetall

Die Abmessungen der IMF-Serie entsprechen denen der IPS-Serie auf den Seiten 26–29.

Proximity Switches, inductive Näherungsschalter, induktiv

- ▶ Miniature, Ø3 mm...Ø5×5 mm
Miniatur, Ø3 mm...Ø5×5 mm
- ▶ High performance with up to 4× S_n
Hochleistung mit bis zu 4× S_n
- ▶ Closed stainless steel housing with IP69k
Geschlossene Edelstahlgehäuse mit IP69k
- ▶ **High temperature proof versions up to 180 °C | 356 °F**
Hochtemperaturfeste Ausführungen bis 180 °C
- ▶ Low temperature –40 °C | –40 °F, food grade, IP69k
Tiefemperatur –40 °C, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausführungen bis 1000 bar
- ▶ Devices with analog output
Geräte mit Analogausgang
- ▶ 2-wire 10...55 V_{DC} | 20...250 V_{AC}
2-Leiter 10...55 V_{DC} | 20...250 V_{AC}



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	on request
Operating temperature	–20... °C –4... °F
IP code	IP67

Annotation:

To simplify mechanical setup, all high temperature proximity switches up to 150 °C can optionally be equipped with a LED to indicate the status of the switching output. High temperature can damage permanently this LED. However, the failure of the LED does not affect the function of the device.

A failure of the LED is no warranty case.

Technische Daten (typ.)

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



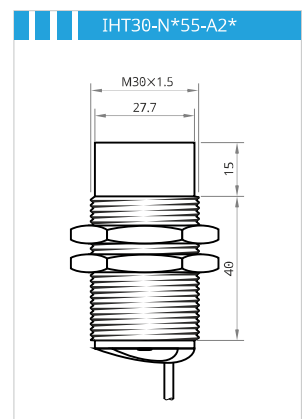
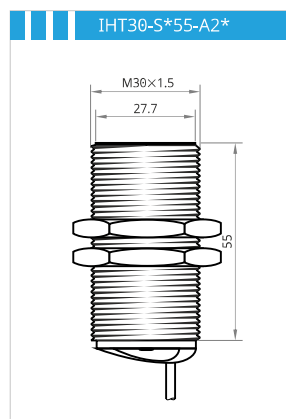
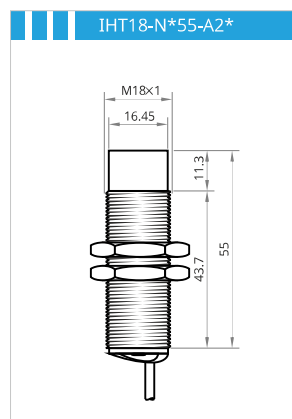
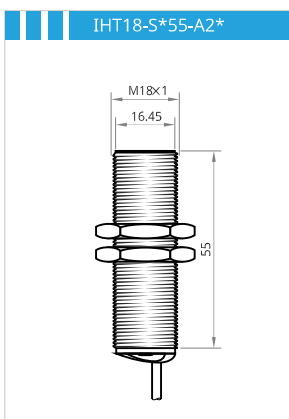
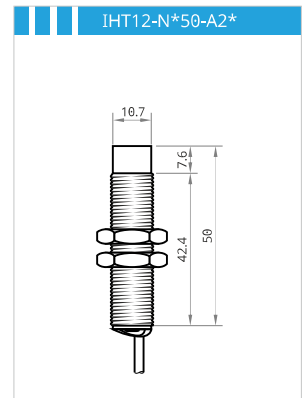
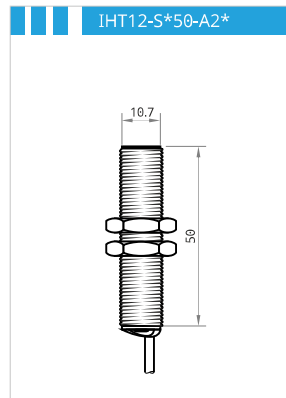
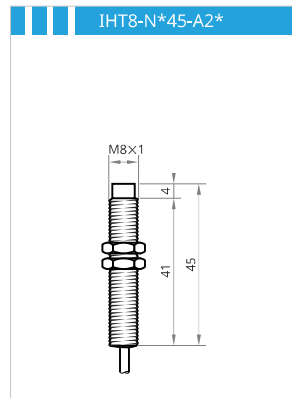
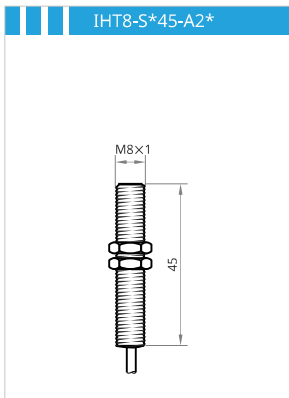
Anmerkung:

Zur Erleichterung der mechanischen Einrichtung können optional alle Hochtemperatur-Näherungsschalter bis 150 °C mit einer LED zur Anzeige des Schaltzustands ausgerüstet werden. Hohe Temperaturen werden diese LED ggf. dauerhaft schädigen. Der Ausfall der LED hat jedoch keinen Einfluss auf die Funktion des Gerätes.

Ein Ausfall der LED ist kein Garantiefall.

	Mounting Montage	S _n [mm]	Connection Anschluss	Temperature · Temperatur [permanent]			Output load capability Ausgangsbelastbarkeit
				120 °C 250 °F	150 °C 300 °F	180 °C 355 °F	
M8x1	●	2	Cable 2 m, silicone	IHT8-S2APO45-N2S	IHT8-S2BPO45-N2S		< 120 mA
			Cable 2 m, PTFE	IHT8-S2APO45-N2T	IHT8-S2BPO45-N2T		< 120 mA
	○	4	Cable 2 m, silicone	IHT8-N4APO45-N2S	IHT8-N4BPO45-N2S		< 120 mA
			Cable 2 m, PTFE	IHT8-N4APO45-N2T	IHT8-N4BPO45-N2T		< 120 mA
M12x1	●	2	Cable 2 m, silicone	IHT12-S2APO50-N2S	IHT12-S2BPO50-N2S		< 120 mA
			Cable 2 m, PTFE	IHT12-S2APO50-N2T	IHT12-S2BPO50-N2T		< 120 mA
	○	4	Cable 2 m, silicone	IHT12-N4APO50-N2S	IHT12-N4BPO50-N2S		< 120 mA
			Cable 2 m, PTFE	IHT12-N4APO50-N2T	IHT12-N4BPO50-N2T		< 120 mA
	●	4	Cable 2 m, silicone	IHT12-S4APO50-N2S	IHT12-S4BPO50-N2S		< 120 mA
			Cable 2 m, PTFE	IHT12-S4APO50-N2T	IHT12-S4BPO50-N2T		< 120 mA
	○	8	Cable 2 m, silicone	IHT12-N8APO50-N2S	IHT12-N8BPO50-N2S		< 120 mA
			Cable 2 m, PTFE	IHT12-N8APO50-N2T	IHT12-N8BPO50-N2T		< 120 mA
M18x1	●	5	Cable 2 m, silicone	IHT18-S5APO55-N2S	IHT18-S5BPO55-N2S	IHT18-S5CPO55-N2S	< 150 mA
			Cable 2 m, PTFE	IHT18-S5APO55-N2T	IHT18-S5BPO55-N2T	IHT18-S5CPO55-N2T	< 150 mA
	○	8	Cable 2 m, silicone	IHT18-N8APO55-N2S	IHT18-N8BPO55-N2S	IHT18-N8CPO55-N2S	< 150 mA
			Cable 2 m, PTFE	IHT18-N8APO55-N2T	IHT18-N8BPO55-N2T	IHT18-N8CPO55-N2T	< 150 mA
M30x1.5	●	10	Cable 2 m, silicone	IHT30-S10APO55-N2S	IHT30-S10BPO55-N2S	IHT30-S10CPO55-N2S	< 150 mA
			Cable 2 m, PTFE	IHT30-S10APO55-N2T	IHT30-S10BPO55-N2T	IHT30-S10CPO55-N2T	< 150 mA
	○	15	Cable 2 m, silicone	IHT30-N15APO55-N2S	IHT30-N15BPO55-N2S	IHT30-N15CPO55-N2S	< 150 mA
			Cable 2 m, PTFE	IHT30-N15APO55-N2T	IHT30-N15BPO55-N2T	IHT30-N15CPO55-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.



Proximity Switches, inductive

Näherungsschalter, induktiv

- ▶ Miniature, Ø3 mm...Ø5×5 mm
Miniatur, Ø3 mm...Ø5×5 mm
- ▶ High performance with up to 4× S_n
Hochleistung mit bis zu 4× S_n
- ▶ Closed stainless steel housing with IP69k
Geschlossene Edelstahlgehäuse mit IP69k
- ▶ High temperature proof versions up to 180 °C | 356 °F
Hochtemperaturfeste Ausführungen bis 180 °C
- ▶ **Low temperature –40 °C | –40 °F, food grade, IP69k**
Tiefemperatur –40 °C, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausführungen bis 1000 bar
- ▶ Devices with analog output
Geräte mit Analogausgang
- ▶ 2-wire 10...55 V_{DC} | 20...250 V_{AC}
2-Leiter 10...55 V_{DC} | 20...250 V_{AC}



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	–40...+70 °C –40...+158 °F
IP code	IP69k / IP67

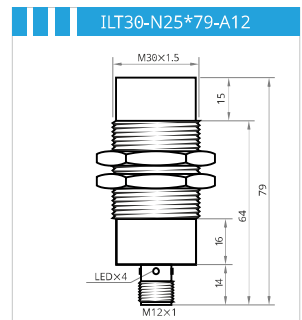
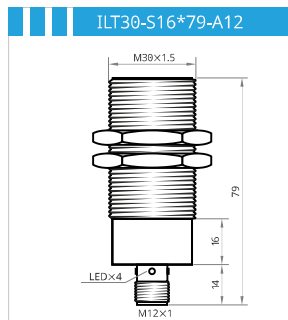
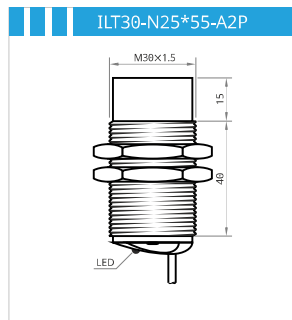
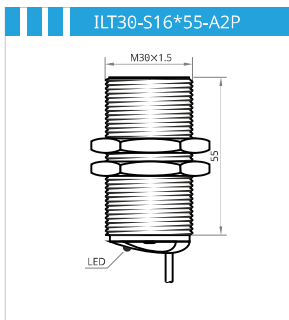
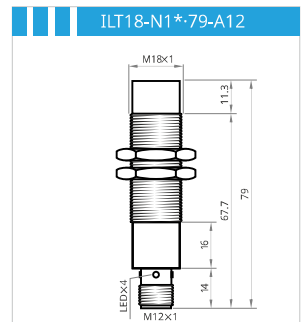
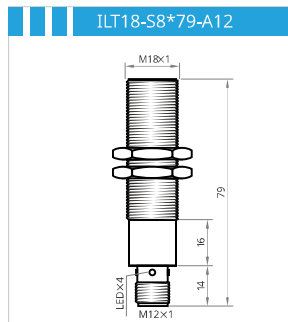
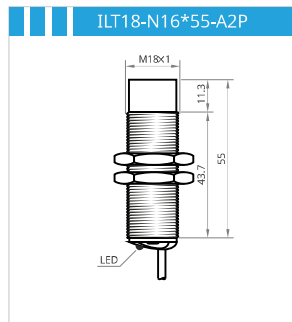
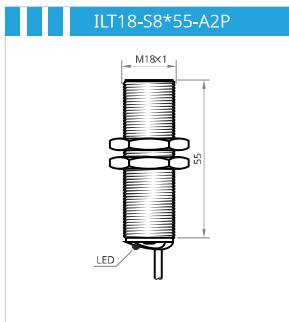
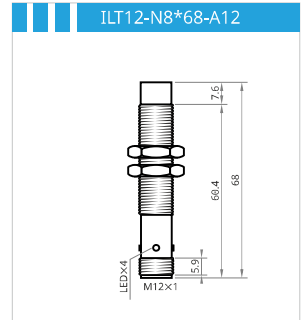
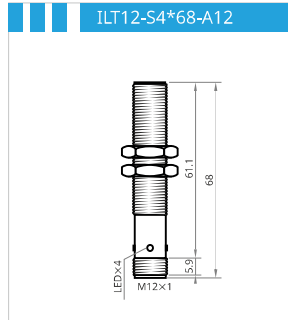
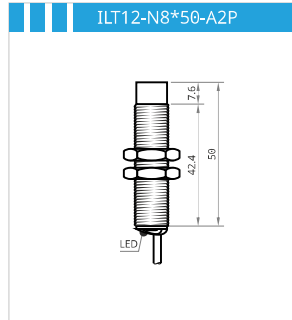
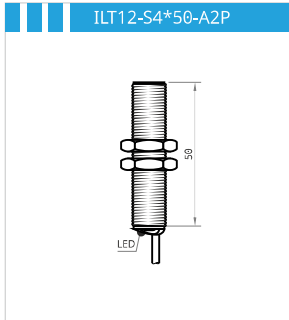
Technische Daten (typ.)

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	–40...+70 °C
Schutzart	IP69k / IP67



	Mounting Montage	S _n [mm]	Connection Anschluss	Output Ausgang	Housing length · Gehäuselänge [mm]				
					50	55	68	79	
M12X1	●	4	Cable 2 m, PVC	ILT12-S4PO50-A2P					1000 Hz
			Connector M12			ILT12-S4PO68-A12			
	○	8	Cable 2 m, PVC	ILT12-N8PO50-A2P					500 Hz
			Connector M12			ILT12-N8PO68-A12			
M18X1	●	8	Cable 2 m, PVC		ILT18-S8PO55-A2P				500 Hz
			Connector M12				ILT18-S8PO79-A12		
	○	16	Cable 2 m, PVC		ILT18-N16PO55-A2P				150 Hz
			Connector M12				ILT18-N25PO79-A12		
M30X1.5	●	16	Cable 2 m, PVC		ILT30-S16PO55-A2P				500 Hz
			Connector M12				ILT30-S16PO79-A12		
	○	25	Cable 2 m, PVC		ILT30-N25PO55-A2P				150 Hz
			Connector M12				ILT30-N16PO79-A12		

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.



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Hochtemperaturfeste Ausführungen bis 180 °C
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Tieftemperatur -40 °C, lebensmitteltauglich, IP69k
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Druckfeste Ausführungen bis 1000 bar
- ▶ Devices with analog output
Geräte mit Analogausgang
- ▶ 2-wire 10...55 V_{DC} | 20...250 V_{AC}
2-Leiter 10...55 V_{DC} | 20...250 V_{AC}



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 — some models
Operating temperature	-20...+70 °C -4...+158 °F
IP code	IP67

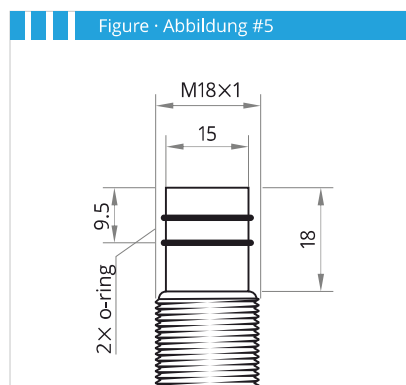
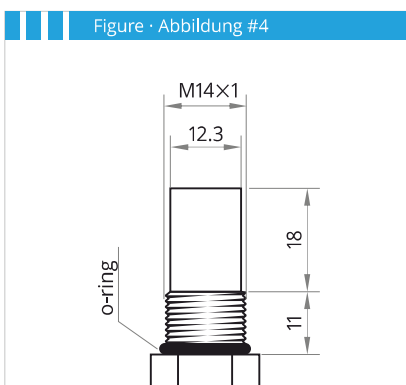
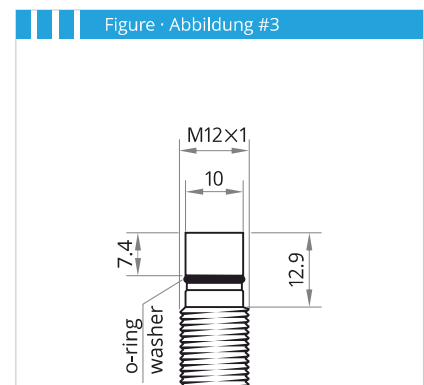
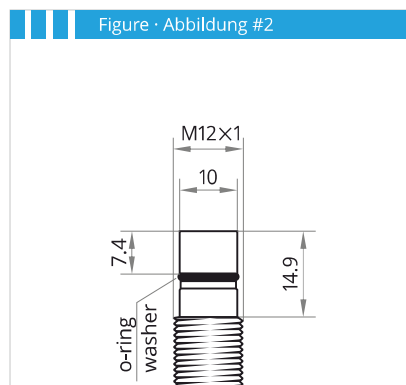
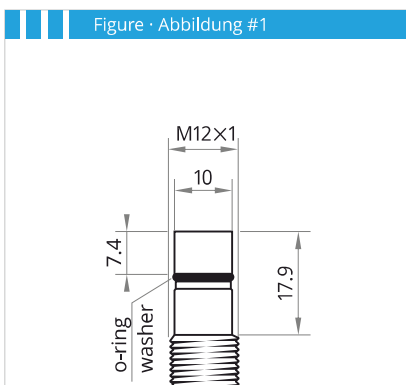
Technische Daten (typ.)

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



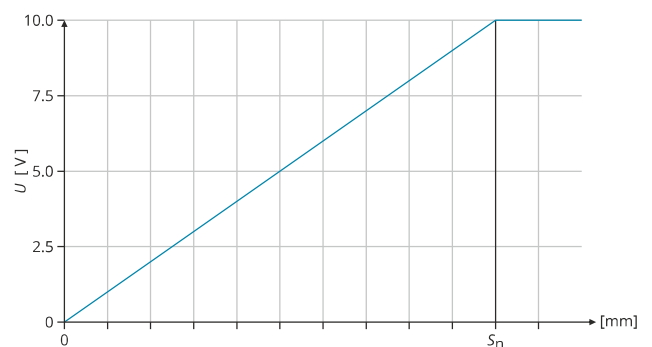
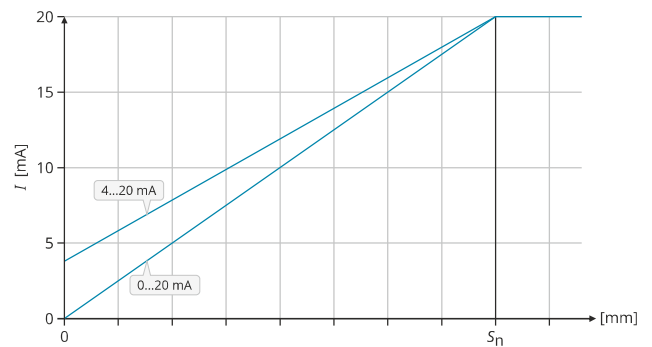
	S _n [mm]	Connection Anschluss	Pressure proof Druckfest	Overall length [mm] Gesamtbaulänge [mm]	Switching indicator · Schaltanzeige		Figure Abbildung
					without · ohne	with · mit	
M12×1	1.5	Cable 2 m, PVC	500 bar 7251 psi	43	IHP12-S1.5PO43-N2P	IHP12-S1.5PO43-A2P	1
	1.5	Cable 2 m, PVC	500 bar 7251 psi	47	IHP12-S1.5PO47-N2P	IHP12-S1.5PO47-A2P	1
	1.5	Connector M12	500 bar 7251 psi	56	IHP12-S1.5PO56-N12		1
	1.5	Connector M12	500 bar 7251 psi	56	IHP12-S1.5PO57-N12		2
	1.5	Connector M12	500 bar 7251 psi	69	IHP12-S1.5PO69-N12	IHP12-S1.5PO69-A12	3
	1.5	Cable 2 m, PVC	500 bar 7251 psi	78	IHP12-S1.5PO78-N2P	IHP12-S1.5PO78-A2P	1
	1.5	Connector M12	500 bar 7251 psi	78	IHP12-S1.5PO78-N12	IHP12-S1.5PO78-A12	1
	1.5	Connector M12	500 bar 7251 psi	93	IHP12-S1.5PO93-N12	IHP12-S1.5PO93-A12	3
	1.5	Connector M12	500 bar 7251 psi	93	IHP12-S1.5PO94-N12	IHP12-S1.5PO94-A12	1
	1.5	Connector M12	500 bar 7251 psi	138	IHP12-S1.5PO138-N12	IHP12-S1.5PO138-A12	3
	2	Connector M12	500 bar 7251 psi	56	IHP12-S2PO56-N12	IHP12-S2PO56-A12	1
	2	Connector M12	500 bar 7251 psi	78	IHP12-S2PO78-N12	IHP12-S2PO78-A12	1
M14×1	3	Cable 2 m, PVC	500 bar 7251 psi	56	IHP14-S3PO56-N2P		4
	3	Connector M12	500 bar 7251 psi	65	IHP14-S3PO65-N12		4
	3	Cable 2 m, PVC	1000 bar 14500 psi	56	IHP14-S3PO56S-N2P		4
	3	Connector M12	1000 bar 14500 psi	65	IHP14-S3PO65S-N12		4
M18×1	3	Cable 2 m, PVC	500 bar 7251 psi	65	IHP18-S3PO65S-N2P	IHP18-S3PO65S-A2P	5
	3	Connector M12	1000 bar 14500 psi	79	IHP18-S3PO79S-N12	IHP18-S3PO79S-A12	5

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.



Proximity Switches, inductive Naherungsschalter, induktiv

- ▶ Miniature, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
Miniatur, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
- ▶ High performance with up to $4 \times S_n$
Hochleistung mit bis zu $4 \times S_n$
- ▶ Closed stainless steel housing with IP69k
Geschlossene Edelstahlgehuse mit IP69k
- ▶ High temperature proof versions up to $180 \text{ }^\circ\text{C}$ | $356 \text{ }^\circ\text{F}$
Hochtemperaturfeste Ausfuhungen bis $180 \text{ }^\circ\text{C}$
- ▶ Low temperature $-40 \text{ }^\circ\text{C}$ | $-40 \text{ }^\circ\text{F}$, food grade, IP69k
Tiefemperatur $-40 \text{ }^\circ\text{C}$, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausfuhungen bis 1000 bar
- ▶ **Devices with analog output**
Gerate mit Analogausgang
- ▶ 2-wire $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$
2-Leiter $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$



Technical data (typ.)

Supply voltage	$18 \dots 35 \text{ V}_{\text{DC}}$
Reverse polarity protection	built-in
Current consumption	$< 10 \text{ mA}$
Output, Pin 4, black	
Voltage	$0 \dots 10 \text{ V}$
Current load capability	$< 7 \text{ mA}$
Bandwidth	500 Hz
Short circuit protection	built-in, self-resetting
Output, pin 2, white	
Current	$0 \dots 20 \text{ mA}$
Bandwidth	500 Hz
Supply indicator	LED, green
Operating temperature	$-20 \dots +70 \text{ }^\circ\text{C}$ $-4 \dots +158 \text{ }^\circ\text{F}$
IP code	IP67

Technische Daten (typ.)

Versorgungsspannung	$18 \dots 35 \text{ V}_{\text{DC}}$
Verpolungsschutz	integriert
Eigenstromaufnahme	$< 10 \text{ mA}$
Ausgang, Pin 4, schwarz	
Spannung	$0 \dots 10 \text{ V}$
Strombelastbarkeit	$< 7 \text{ mA}$
Bandbreite	500 Hz
Kurzschlusschutz	integriert, selbststruckstellend
Ausgang, Pin 2, wei	
Strom	$0 \dots 20 \text{ mA}$
Bandbreite	500 Hz
Spannungsanzeige	LED, grun
Betriebstemperatur	$-20 \dots +70 \text{ }^\circ\text{C}$
Schutzart	IP67



	Mounting Montage	S _n [mm]	Connection Anschluss	Configuration Konfiguration	Housing length · Gehäuselänge [mm]					
					45	50	55	60	68	79
M8X1	●	2	Cable 2 m, PVC Connector M8	0...10 V 0...10 V	IA8-S2V-G2P			IA8-S2V-G8		
	○	4	Cable 2 m, PVC Connector M8	0...10 V 0...10 V	IA8-N4V-G2P			IA8-N4V-G8		
	●	3	Cable 2 m, PVC Connector M8	0...10 V 0...10 V	IA8-S3V-G2P			IA8-S3V-G8		
	○	6	Cable 2 m, PVC Connector M8	0...10 V 0...10 V	IA8-N6V-G2P			IA8-N6V-G8		
M12X1	●	4	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA	IA12-S4VI0-G2P IA12-S4VI4-G2P					
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA				IA12-S4VI0-G12 IA12-S4VI4-G12		
	○	8	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA	IA12-N8VI0-G2P IA12-N8VI4-G2P				IA12-N8VI0-G12 IA12-N8VI4-G12	
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA						
	●	6	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA	IA12-S6VI0-G2P IA12-S6VI4-G2P					
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA				IA12-S6VI0-G12 IA12-S6VI4-G12		
	○	10	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA	IA12-N10VI0-G2P IA12-N10VI4-G2P					
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA				IA12-N10VI0-G12 IA12-N10VI4-G12		
M18X1	●	8	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA18-S8VI0-G2P IA18-S8VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA18-S8VI0-G12 IA18-S8VI4-G12	
	○	16	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA18-N16VI0-G2P IA18-N16VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA18-N16VI0-G12 IA18-N16VI4-G12	
	●	12	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA18-S12VI0-G2P IA18-S12VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA18-S12VI0-G12 IA18-S12VI4-G12	
	○	20	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA18-N20VI0-G2P IA18-N20VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA18-N20VI0-G12 IA18-N20VI4-G12	
M30X1.5	●	16	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA30-S16VI0-G2P IA30-S16VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA30-S16VI0-G12 IA30-S16VI4-G12	
	○	25	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA30-N25VI0-G2P IA30-N25VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA30-N25VI0-G12 IA30-N25VI4-G12	
	●	20	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA30-S20VI0-G2P IA30-S20VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA30-S20VI0-G12 IA30-S20VI4-G12	
	○	40	Cable 2 m, PVC	0...10 V 0...20 mA 0...10 V 4...20 mA			IA30-N40VI0-G2P IA30-N40VI4-G2P			
			Connector M12	0...10 V 0...20 mA 0...10 V 4...20 mA					IA30-N40VI0-G12 IA30-N40VI4-G12	

Proximity Switches, inductive Naherungsschalter, induktiv

- ▶ Miniature, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
Miniatur, $\varnothing 3 \text{ mm} \dots \varnothing 5 \times 5 \text{ mm}$
- ▶ High performance with up to $4 \times S_n$
Hochleistung mit bis zu $4 \times S_n$
- ▶ Closed stainless steel housing with IP69k
Geschlossene Edelstahlgehuse mit IP69k
- ▶ High temperature proof versions up to $180 \text{ }^\circ\text{C}$ | $356 \text{ }^\circ\text{F}$
Hochtemperaturfeste Ausfuhungen bis $180 \text{ }^\circ\text{C}$
- ▶ Low temperature $-40 \text{ }^\circ\text{C}$ | $-40 \text{ }^\circ\text{F}$, food grade, IP69k
Tiefemperatur $-40 \text{ }^\circ\text{C}$, lebensmitteltauglich, IP69k
- ▶ Pressure proof versions up to 1000 bar | 14500 psi
Druckfeste Ausfuhungen bis 1000 bar
- ▶ Devices with analog output
Gerate mit Analogausgang
- ▶ **2-wire $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$**
2-Leiter $10 \dots 55 \text{ V}_{\text{DC}}$ | $20 \dots 250 \text{ V}_{\text{AC}}$



Technical data (typ.)

Supply voltage	$10 \dots 30 \text{ V}_{\text{DC}}$
Reverse polarity protection	built-in
Current consumption	$< 10 \text{ mA}$
$10 \dots 55 \text{ V}_{\text{DC}}$	
Reverse polarity protection	built-in
Current load capability	200 mA
Short circuit protection	built-in, self-resetting
Voltage drop	$< 1.5 \text{ V @ } 200 \text{ mA}$
$20 \dots 255 \text{ V}_{\text{AC}}$	
Reverse polarity protection	inherently
Current load capability	400 mA
Short circuit protection	none
Switching indicator	LED, yellow
Operating temperature	$-20 \dots +70 \text{ }^\circ\text{C}$ $-4 \dots +158 \text{ }^\circ\text{F}$
IP code	IP67

Technische Daten (typ.)

Versorgungsspannung	$10 \dots 30 \text{ V}_{\text{DC}}$
Verpolungsschutz	integriert
Eigenstromaufnahme	$< 10 \text{ mA}$
$10 \dots 55 \text{ V}_{\text{DC}}$	
Verpolungsschutz	integriert
Ausgangsbelastbarkeit	200 mA
Kurzschlusschutz	integriert, selbstruckstellend
Spannungsabfall	$< 1,5 \text{ V @ } 200 \text{ mA}$
$20 \dots 255 \text{ V}_{\text{AC}}$	
Verpolungsschutz	prinzipbedingt
Ausgangsbelastbarkeit	400 mA
Kurzschlusschutz	ohne
Schaltanzeige	LED, gelb
Betriebstemperatur	$-20 \dots +70 \text{ }^\circ\text{C}$
Schutzart	IP67



▶ 2-wire 10...55 V _{DC}				Housing length · Gehäuselänge [mm]						
Mounting Montage	S _n [mm]	Connection Anschluss	45	50	55	60	68	79		
M8×1	●	2	Cable 2 m, PVC	IPS8-S2DO45-A2P						2000 Hz
			Connector M8				IPS8-S2DO60-A8			
	○	4	Cable 2 m, PVC	IPS8-N4DO45-A2P						2000 Hz
			Connector M8				IPS8-N4DO60-A8			
M12×1	●	4	Cable 2 m, PVC	IPS12-S4DO50-A2P						1000 Hz
			Connector M12				IPS12-S4DO68-A12			
	○	8	Cable 2 m, PVC	IPS12-N8DO50-A2P						500 Hz
			Connector M12				IPS12-N8DO68-A12			
M18×1	●	8	Cable 2 m, PVC	IPS18-S8DO55-A2P						500 Hz
			Connector M12				IPS18-S8DO79-A12			
	○	16	Cable 2 m, PVC	IPS18-N16DO55-A2P						150 Hz
			Connector M12				IPS18-N16DO79-A12			
M30×1.5	●	16	Cable 2 m, PVC	IPS30-S16DO55-A2P						150 Hz
			Connector M12				IPS30-S16DO79-A12			
	○	25	Cable 2 m, PVC	IPS30-N25DO55-A2P						150 Hz
			Connector M12				IPS30-N25DO79-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 gültig für PNP, NO (PO) Konfiguration. Alle Geräte auch erhältlich als PNP, NC (PC), NPN, NO (NO), NPN, NC (NC) Konfiguration.

▶ 2-wire 20...255 V _{AC}				Housing length · Gehäuselänge [mm]				Switching frequency Schaltfrequenz	
Mounting Montage	S _n [mm]	Connection Anschluss	55	60	68	79			
M12×1	●	4	Cable 2 m, PVC	IPS12-S4AO60-A2P					25 Hz
			Connector M12				IPS12-S4AO68-A12		
	○	8	Cable 2 m, PVC	IPS12-N8DO60-A2P					25 Hz
			Connector M12				IPS12-N8AO68-A12		
M18×1	●	8	Cable 2 m, PVC	IPS18-S8AO55-A2P					25 Hz
			Connector M12				IPS18-S8AO79-A12		
	○	16	Cable 2 m, PVC	IPS18-N16AO55-A2P					25 Hz
			Connector M12				IPS18-N16AO79-A12		
M30×1.5	●	16	Cable 2 m, PVC	IPS30-S16AO55-A2P					25 Hz
			Connector M12				IPS30-S16AO79-A12		
	○	25	Cable 2 m, PVC	IPS30-N25AO55-A2P					25 Hz
			Connector M12				IPS30-N25AO79-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.

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



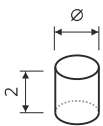
Technical data (typ.)

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
Ausgangslastbarkeit	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

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