Cylindrical designs - Plastic



Cylindrically shaped capacitive sensors feature high switching distances and are available in many different designs. The standard types come in plastic housings and sizes from Ø 12 mm to Ø 40 mm, with connection cable, male or terminal chamber.

Besides the usual reliability, capacitive sensors feature standard properties such as automatic wetting compensation, excellent EMC and ESD properties and more flexibility with respect to mounting.

Features

- Excellent reliability
- Automatic wetting compensation
- Excellent EMC properties
- ESD immunity
- Mounting flexibility

Properties



Designs

Cylindrical designs M12 x 1, M18 x 1, M30 x 1.5, Ø 34 mm and Ø 40 mm



Electrical versions

3-wire DC and 4-wire DC, as well as 2-wire AC and NA-MUR devices, PNP and NPN switching; NO, NC contact or with antivalent switching output



Switching distances

From 3 mm to 20 mm flush mountable on all metals and non-metals



Electrical connections

2 m cable, male M12 x 1 or terminal chamber



Materials

Plastic housings PA, PBT, PVDF and ABS



Special features

Fine adjustment via potentiometer, protection class IP68 or IP69K



Internet link

Scan the QR code to access our products on the internet

S12



General data			
Connection	2 m cable	Operating voltage	1030 VDC
Switching distance	4.5 mm,	Housing material	PA12-GF30
Operating current [mA]	200, 🛞	Dimensions	Ø 12 x 63 mm
Adjustment	Potentiometer		

Types and data – selection table

Туре	Output	Approvals	Ambient temperature	w	d
BC3-S12-AP6X	, PNP	_	-25+70 °C	w061	d414
BC3-S12-RP6X	→, PNP	_	-25+70 °C	w062	d414
BC3-S12-AP6X/S100	, PNP	_	-25+100 °C	w061	d414
BC3-S12-RP6X/S90/3GD	±, PNP	€x ∥3G	-25+70 °C	w062	d414
		€x ∥3D			

Many different types available, also as NPN version, see type code $\,$

S18



General data				
Housing material	DA12 CE20	Ambiant tamparatura	25	±70 °C

Types and data – selection table

Туре	Connec- tion	Operating voltage	Output	Switching distance	Approvals	Operating current [mA]	Dimen- sions	Adjustment	W	d
BC5-S18-AP4X- H1141/S250	male, M12 x 1	1065 VDC	, PNP	5 mm, 📶 -	_	200, 🕑	Ø 18 x 83 mm	fixed	w064	d415
BC5-S18-RP4X- H1141/S250	male, M12 x 1	1065 VDC	±, PNP	5 mm,	_	200, 🕑	Ø 18 x 83 mm	fixed	w075	d415
BC5-S18-AP4X	2 m cable	1065 VDC	, PNP	7.5 mm,	-	200, 🕑	Ø 18 x 74 mm	Potentiometer	w061	d416
BC5-S18-RP4X	2 m cable	1065 VDC	±, PNP	7.5 mm,	_	200, 🕑	Ø 18 x 74 mm	Potentiometer	w062	d416
BC5-S18-AZ3X	2 m cable	20250 VAC	, 2-wire	7.5 mm,	=	-	Ø 18 x 74 mm	Potentiometer	w071	d416
BC5-S18-RZ3X	2 m cable	20250 VAC	±, 2-wire	7.5 mm,	_	_	Ø 18 x 74 mm	Potentiometer	w072	d416

Table continues on the next page...

Cylindrical designs - Plastic

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Type	Connec- tion	Operating voltage	Output	Switching distance	Approvals	Operating current [mA]	Dimen- sions	Adjustment	W	d
BC5-S18-Y1X	2 m cable	8.2 VDC	NAMUR	7.5 mm,	€	-	Ø 18 x 74 mm	Potentiometer	w063	d416

Many different types available, also as NPN version, see type code

S185



General data Connection 10...65 VDC 2 m cable Operating voltage Output **Switching distance** 7.5 mm, ____, PNP **Housing material PVDF** Operating current [mA] 200, 🛞 Dimensions Ø 18 x 74.5 mm Adjustment Potentiometer

Types and data - selection table

Туре	Ambient temperature	w	d
BC5-S185-AP4X	-25…+70 °C	w061	d417
BC5-S185-AP4X/S100	-25+100 ℃	w061	d417

Many different types available, also as NPN version, see type code

S30



General data

Switching distance 15 mm,
→ Housing material PA12-GF30

Ambient temperature -25...+70 °C Adjustment Potentiometer

Types and data - selection table

Туре	Connection	Operating voltage	Output	Approvals	Operating current [mA]	Dimensions	W	d
BC10-S30-VP4X-H1141	male, M12 x 1	1065 VDC	, PNP	_	200, 🛞	Ø 30 x 60 mm	w069	d418
BC10-S30-VP4X	2 m cable	1065 VDC	, PNP	_	200, 🛞	Ø 30 x 62.5 mm	w067	d419
BC10-S30-AZ3X	2 m cable	20250 VAC	, 2-wire	_	-	Ø 30 x 62.5 mm	w071	d419
BC10-S30-RZ3X	2 m cable	20250 VAC	→, 2-wire	_	_	Ø 30 x 62.5 mm	w072	d419
BC10-S30-Y1X	2 m cable	8.2 VDC	NAMUR	€x 2G €x 1D	-	Ø 30 x 62.5 mm	w063	d419
				SIL2				

Many different types available, also as NPN version, see type code

P30SR



General data			
Connection	Terminal chamber	Switching distance	15 mm, 🚟 -
Housing material	ABS	Ambient temperature	-25+70°C
Dimensions	Ø 30 x 115 mm	Adjustment	Potentiometer

Types and data – selection table

Туре	Operating voltage	e Output	Approvals	Operating current [mA]	w	d
BC10-P30SR-VP4X2	1065 VDC	, PNP	_	200, 🛞	w073	d420
BC10-P30SR-VP4X2/3GD	1065 VDC	, PNP	€ 113 G € 113 D	200, 🕲	w073	d420
BC10-P30SR-FZ3X2	20250 VAC	connection programmable, 2-wire	_	_	w074	d420

Many different types available, also as NPN version, see type code

PT30



General data			
Connection	2 m cable	Operating voltage	1065 VDC
Output	-, PNP	Switching distance	15 mm,
Housing material	PVDF	Operating current [mA]	200, 🛞
Ambient temperature	-25+70 °C	Dimensions	Ø 30 x 80 mm
Adjustment	Potentiometer		

Types and data – selection table

Туре	w	d
BC10-PT30-VP4X2	w067	d421

Many different types available, also as NPN version, see type code

K34



General data Switching distance 22.5 mm, Housing material PBT Ambient temperature -25...+70 $^{\circ}$ C Adjustment Potentiometer

Types and data - selection table

Туре	Connection	Operating voltage	Output	Operating current [mA]	Dimensions	w	d
BC15-K34-AP4X-H1141	male, M12 x 1	1065 VDC	, PNP	200, 🛞	Ø 34 x 60 mm	w064	d422
BC15-K34-VP4X	2 m cable	1065 VDC	-, PNP	200, 🛞	Ø 34 x 80 mm	w067	d423
BC15-K34-AZ3X	2 m cable	20250 VAC	, 2-wire	_	Ø 34 x 80 mm	w071	d423
BC15-K34-RZ3X	2 m cable	20250 VAC	, 2-wire	_	Ø 34 x 80 mm	w072	d423

Many different types available, also as NPN version, see type code

K34SR



General dataSwitching distance22.5 mm,ConnectionTerminal chamberSwitching distance22.5 mm,Housing materialPBTAmbient temperature $-25...+70 \,^{\circ}\text{C}$ Dimensions \emptyset 34 x 106 mmAdjustmentPotentiometer

Types and data – selection table

Туре	Operating voltage	Output	Operating current [mA]	w	d
BC15-K34SR-VP4X2	1065 VDC	, PNP	200, 🛞	w073	d424
BC15-K34SR-FZ3X2	20250 VAC	connection programmable, 2-wire	_	w074	d424

Many different types available, also as NPN version, see type code

KT34



General data Connection 2 m cable Operating voltage 10...65 VDC Output ____, PNP **Switching distance** 20 mm, **Housing material PVDF** Operating current [mA] 200, 🛞 Ambient temperature -25...+70 °C **Dimensions** Ø 34 x 80 mm **Adjustment** Potentiometer

Types and data – selection table

Туре	w	d
NC20-KT34-VP4X2	w067	d425

Many different types available, also as NPN version, see type code

K40SR



Types and data – selection table

Туре	Connection	Output	W	d
BC20-K40SR-VP4X2	Terminal chamber	, PNP	w073	d426
BC20-K40SR-VP4X2-H1141	male, M12 x 1	, NPN	w078	d427

Many different types available, also as NPN version, see type code

K40WDTC



General data			
Connection	Terminal cham- ber, Removable cage clamp terminals	Operating voltage	1065 VDC
Output	-, PNP	Switching distance	30 mm,
Housing material	Grilamid LV-30H FWA	Operating current [mA]	200, 🛞
Ambient temperature	-25+70 °C	Dimensions	Ø 40 x 91 mm
Adjustment	Potentiometer		

Types and data – selection table

Туре	w	d
BC20-K40WDTC-VP4X2/S930	w073	d428