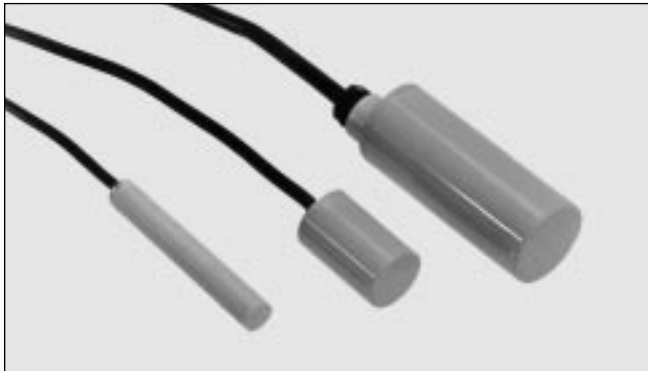


# Proximity Sensors Capacitive Thermoplastic Polyester Housing Type DR E, Ø 11, Ø 22, Ø 30



- Thermoplastic polyester housing, cylindrical
- Diameter: Ø 11, Ø 22, Ø 30
- Sensing distance: 3 to 10 mm
- Power supply: 10 to 27 VDC  
90 to 240 VAC
- LED-indication for output ON (AC types)
- 2 m cable

## Product Description

Capacitive proximity switch in cylindrical polyester housing, Ø 11-30. Transistor NPN and thyristor outputs. Delivered with 2 m cable.

## Ordering Key

**DR 3 E**

Type: Capacitive proximity switch  
Output type

## Type Selection

Housing diameter	Rated operating dist. (S <sub>n</sub> ) <sup>3)</sup>	Ordering no. Transistor NPN Make switching	Ordering no. SCR Make switching	Ordering no. SCR Break switching
Ø 11 mm	3 mm <sup>1)</sup>	<b>DR 3 E</b>		
Ø 22 mm	5 mm <sup>2)</sup>	<b>DR 6 E</b>		
Ø 30 mm	10 mm <sup>1)</sup>		<b>DR 10 T</b>	<b>DR 10 TI</b>

<sup>1)</sup> For non-flush mounting

<sup>2)</sup> For flush mounting

<sup>3)</sup> Object: Grounded steel plate

## Specifications

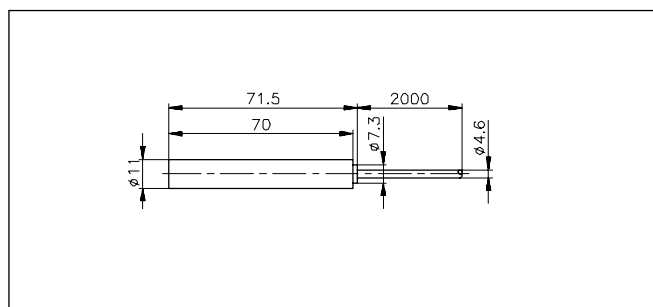
	Transistor NPN	SCR
<b>Rated operational volt.</b> (U <sub>e</sub> ) (U <sub>B</sub> )	12 to 24 VDC 10 to 27 VDC (ripple included)	100 to 220 VAC, 50 to 60 Hz 90 to 240 VAC, 50 to 60 Hz
<b>Ripple</b>	≤ 10%	
<b>Rated operational current</b> (I <sub>e</sub> ) Continuous Short-time	≤ 200 mA ≤ 200 mA	≤ 150 mA ≤ 1 A, max. 20 ms, 1 Hz
<b>No-load supply current</b> (I <sub>o</sub> )	DR 3 E: ≤ 5 mA DR 6 E: ≤ 9 mA	
<b>Minimum load current</b>		20 mA
<b>OFF-state current</b> (I <sub>r</sub> )		Typ. 7 mA, max. 10 mA
<b>Voltage drop</b> (U <sub>d</sub> )	≤ 2 V at max. load (DR 6 E: ≤ 0.25 V)	≤ 11 VAC at max. load
<b>Protection</b>	None	None
<b>Frequency of operating cycles</b> (f)	100 Hz	5 Hz
<b>Indication for output ON</b>	None	LED, yellow
<b>Rated operating dist.</b> (S <sub>n</sub> )	<b>DR 3 E</b> 3 mm <b>DR 6 E</b> 5 mm Reference object: Grounded steel plate. Other objects: Refer to "Reduction Factors", Technical information.	10 mm Reference object: Grounded steel plate. Other objects: Refer to "Reduction Factors", Technical information.
<b>Hysteresis</b> (H) (Differential travel)	1 to 30% of sensing distance	1 to 40% of sensing distance



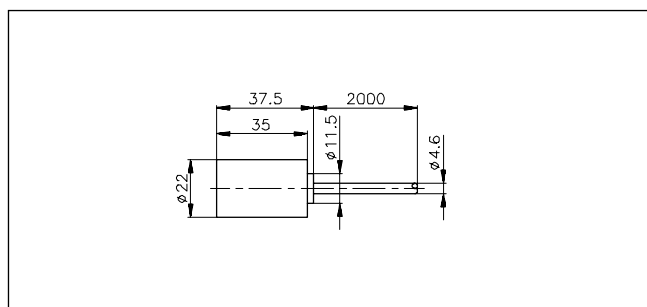
## Specifications (cont.)

	Transistor NPN	SCR
<b>Ambient temperature</b>		
Operating	-20° to +60°C (-4° to +140°F)	-20° to +70°C (-4° to +158°F)
Storage	-20° to +60°C (-4° to +140°F)	-20° to +70°C (-4° to +158°F)
<b>Degree of protection</b>	IP 67 (Nema 1, 3, 4, 6, 13)	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Housing material</b>		
Body	Yellow thermoplastic polyester	Yellow thermoplastic polyester
Back	Yellow thermoplastic polyester	Yellow thermoplastic polyester
<b>Cable</b>	2 m, 3 x 0.4 mm <sup>2</sup> black PVC	2 m, 2 x 0.75 mm <sup>2</sup> black PVC
<b>Weight</b>	<b>DR 3 E</b> 50 g <b>DR 6 E</b> 50 g	110 g

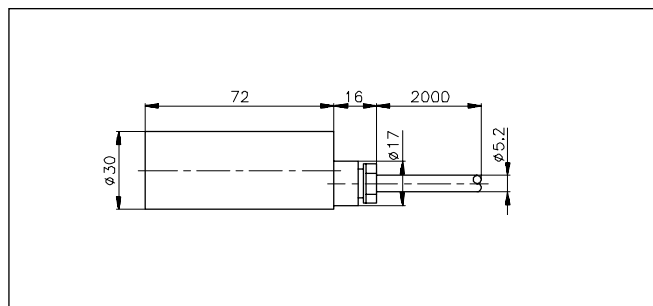
## Dimensions



DR 3 E



DR 6 E



DR 10 ..

### Wiring Diagrams

Refer to "Wiring Diagrams",  
Technical information.

### Installation Hint

Refer to "Installation Hints",  
Technical information.

### Power Supplies

Power supplies VDC:  
> SS 130/140.  
Power supplies with amplifier  
relays: > SV 190.

### Accessories

Refer to "Accessories",  
Technical information.