

Proximity Sensors Capacitive Steel Housing Types DR GE, M 14, PG 21, 1³/₈"

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- Steel housing, cylindrical
- Diameter: M 14, PG 21, 1³/₈"
- 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 chromatinized steel housing with back and front in thermoplastic polyester, sizes

M 14, PG 21, 1³/₈". Transistor NPN and thyristor output. Delivered with 2 m cable.

Ordering Key

DR 3 GE

Type: Capacitive proximity switch
Output type

Type Selection

Housing diameter	Rated operating dist. (S _n) ³⁾	Ordering no. Transistor NPN Make switching	Ordering no. SCR Make switching	Ordering no. SCR Break switching
M 14	3 mm ¹⁾	DR 3 GE		
PG 21	5 mm ²⁾	DR 6 GE		
1 ³ / ₈ "	9 mm ²⁾		DR 10 GT	
1 ³ / ₈ "	10 mm ²⁾	DR 10 GE		DR 10 GTI

¹⁾ For non-flush mounting

²⁾ For flush mounting

³⁾ Object: Grounded steel plate

Type Selection

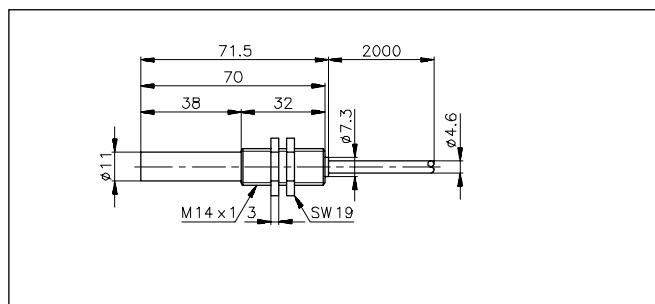
	Transistor NPN	SCR
Rated operational volt. (U _e) (U _B)	12 to 24 VDC 10 to 27 VDC	100 to 220 VAC, 50 to 60 Hz 90 to 240 VAC, 50 to 60 Hz
Ripple	≤ 10%	
Rated operational current (I _e) Continuous Short-time	≤ 200 mA ≤ 200 mA	≤ 150 mA ≤ 1 A, max. 20 ms, 1 Hz
No-load supply current (I _o)	DR 3 GE: ≤ 5 mA DR 6 GE: ≤ 9 mA DR 10 GE: ≤ 15 mA	
Minimum load current		20 mA
OFF-state current (I _r)		Typ. 7 mA, max. 10 mA
Voltage drop (U _d)	≤ 2 V at max. load (DR 6 GE: ≤ 0.25 V)	≤ 11 V at max. load
Protection	None	None
Frequency of oper. cycles (f)	100 Hz	5 Hz
Indication for output ON	None	LED, yellow
Rated operating dist. (S _n)	DR 3 GE 3 mm DR 6 GE 5 mm DR 10 GE 10 mm Reference object: Grounded steel plate. Other objects: Refer to "Reduction Factors", Technical information.	9 mm Reference object: Grounded steel plate. Other objects: Refer to "Reduction Factors", Technical information..
Hysteresis (H) (Differential travel)	1 to 30% of sensing distance	1 to 40% of sensing distance



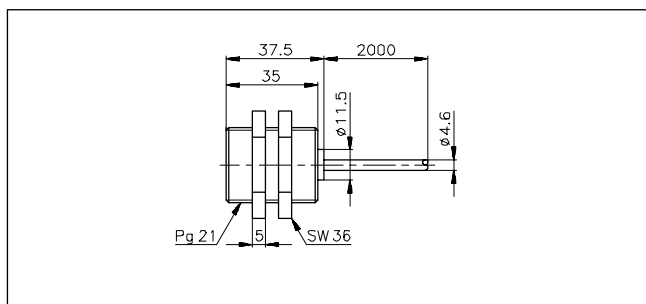
Specifications (cont.)

	Transistor NPN	SCR
Ambient temperature		
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)
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)	IP 67 (Nema 1, 3, 4, 6, 13)
Housing material		
Body	Chromatized steel	Chromatized steel
Front	Yellow thermoplastic polyester	Yellow thermoplastic polyester
Back	Yellow thermoplastic polyester	Yellow thermoplastic polyester
Cable	2 m, 3 x 0.4 mm ² DR 3 GE black PVC DR 6 GE black PVC DR 10 GE grey PVC	2 m, 2 x 0.75 mm ² grey PVC, oil proof
Weight	DR 3 GE 60 g DR 6 GE 150 g DR 10 GE 300 g	300 g
Tightening torque	DR 3 GE 17.5 Nm DR 6 GE 175.0 Nm DR 10 GE 200.0 Nm	DR 10 GT. 200.0 Nm
CE-marking		Yes

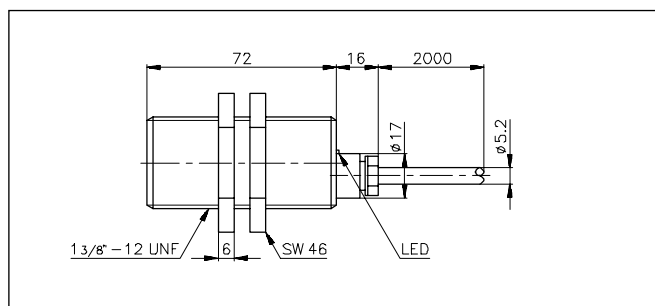
Dimensions



DR 3 GE



DR 6 GE



DR 10 ... (DR 10 GE without LED)
(DR 10 GT. with LED)

Wiring Diagrams

Refer to "Wiring Diagrams",
Technical information.

Power Supplies

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

Installation Hints

Refer to "Installation Hints",
Technical information.