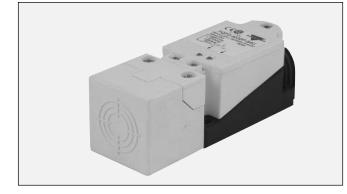
# Proximity Sensors Inductive Thermoplastic Polyester Housing Type IC 40, 40 x 40 x 118 mm





- Rotable-head, 5 positions
- Mounting dimensions in accordance with DIN 43694
- Thermoplastic polyester housing
- Sensing distance: 30 mm
- LED-indication for power and output ON
- Fully protected
- DC types 4-wire NO & NC, 10-30 VDC
- AC/DC types 2-wire NO or NC, 20-250 VAC/DC
- AC type 2-wire NO & NC

#### **Product Description**

Inductive proximity switch in standard limit switch housing. Rugged polyester housing. Sensing face adjustable

in up to 5 positions. 2-wire AC/DC for maximum efficiency.

Ordering Key	IC40CNN30NAT1
Ind. prox. switch Housing style Housing size Housing material Housing length Detection principle Sensing distance Output type Output configuration Connection	

#### **Type Selection - DC**

Rated	Ordering no.	Ordering no.
operating	Transistor NPN	Transistor PNP
dist. (S <sub>n</sub> )	Normally open & normally closed	Normally open & normally closed
30 mm <sup>1)</sup>	IC40CNN30NAT1	IC40CNN30PAT1

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

## Type Selection - AC and AC/DC

Rated	Ordering no.	Ordering no.	Ordering no.
operating	Power MOSFET	Power MOSFET	Power MOSFET
dist. (S <sub>n</sub> )	Normally open, AC/DC	Normally closed, AC/DC	Normally open & closed, AC
30 mm <sup>1)</sup>	IC40CNN30COT1	IC40CNN30CCT1	IC40CNN30TAT1 <sup>2)</sup>

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

<sup>2)</sup> Delivered: NO

Specifications are subject to change without notice (27.08.13)



# **Specifications**

	Transistor NPN/PNP	Power MOSFET output AC types
Rated operational voltage $(U_B)$	10 to 30 VDC (rippled included)	20 to 250 VAC/VDC (VAC: 45 to 65 Hz)
Ripple	≤ <b>15%</b>	-
Rated operational current (I <sub>e</sub> ) Continuous Short-time	≤ 200 mA -	5 - 200 mA @ 25°C 5 - 160 mA @ 70°C ≤ 2 A, t ≤ 20 ms (Max. 1 pulse per s)
No-load supply current (I <sub>o</sub> )	≤ 25 mA	-
Minimum load current	-	5 mA
OFF-state current (Ir) (leakage)	50 μA	≤ 2.5 mA
Voltage drop (U <sub>d</sub> )	< 1.5 VDC	≤ 10.0 VAC; ≤ 8.0 VDC
Protection	Reverse polarity, short-circuit	Short-circuit (except for IC40CNN30TAT1)
Power ON delay	≤ 100 ms	≥ 100 ms
Frequency of operating cycles (f)	≤ 100 Hz	≤ 25 Hz AC; 40 Hz DC
Indication for supply ON (LED 2)	LED, green	LED, green
Indication for output ON (LED 1)	LED, red	LED, red
Rated operating dist. (Sn)	30 mm	30 mm
Repeat accuracy (R)	≤ <b>1</b> %	≤ 1%
Hysteresis (H) (Differential travel)	3 to 20% of sensing distance	3 to 20% of sensing distance
Effective operating dist. (S <sub>r</sub> )	$0.9 \ x \ S_n \leq S_r \leq 1.1 \ x \ S_n$	$0.9 \ x \ S_n \le S_r \le 1.1 \ x \ S_n$
Usable operating dist. (S <sub>u</sub> )	$0.9 \ x \ S_r \leq S_u \leq 1.1 \ x \ S_r$	$0.9 \ x \ S_r \le S_u \le 1.1 \ x \ S_r$
<b>Ambient temperature</b> Operating Storage	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)	-25° to +70°C (-13° to +158°F) -30° to +80°C (-22° to +176°F)
Degree of protection	IP 67(Nema 1, 3, 4, 6, 13)	IP 67 (Nema 1, 3, 4, 6, 13)
Shock resistance	30 G/ 11 ms	30 G/ 11 ms
Vibration resistance	10 to 50 Hz/1 mm/5 min.	10 to 50 Hz/1 mm/5 min.
Housing material	PBT	PBT
Terminal block	4 terminals for 2 x 2.5 mm <sup>2</sup> wires, self-lifting	2 terminals for 2 x 2.5 mm <sup>2</sup> wires, self-lifting
Cable gland	M20 x 1.5	M20 x 1.5
Weight	200 g	200 g
CE-marking	Yes	Yes

### **Wiring Diagrams**

