

Proximity Sensors Inductive ABS Housing Types DJ, Ø 50, Ø 77 and EI, Ø 77

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- ABS housing, Ø 50 mm, Ø 77 mm
- Sensing distance: 25 to 40 mm
- Power supply: 8.2 VDC (Namur)
24 VDC
- Output: Namur (DIN 19234)
Transistor NPN, make switching (DJ 25 E)
Transistor NPN or PNP,
make or break switching (EI 8040)
- Protection: Reverse polarity
- 2 m cable

Product Description

Special-design proximity switch with long sensing distance, up to 40 mm. With transistor NPN, PNP or made in accordance with Namur DIN 19234. Sturdy ABS housing.

Ordering Key

DJ 25 E

Type: Inductive proximity switch
Housing
Rated operating dist. (mm)
Output type

EI 8040 NPOP

Type Selection

Housing diameter	Rated operating dist. (S _n)	Ordering no. Namur	Ordering no. Transistor NPN Make switching	Ordering no. Transistor NPN Break switching	Ordering no. Transistor NPN Make switching	Ordering no. Transistor NPN Break switching
Ø 50 mm	25 mm ¹⁾	DJ 25	DJ 25 E	EI 8040 NPCP	EI 8040 PPOP	EI 8040 PPCP
Ø 77 mm	40 mm ¹⁾	DJ 40	EI 8040 NPOP			

¹⁾For non-flush mounting in metal

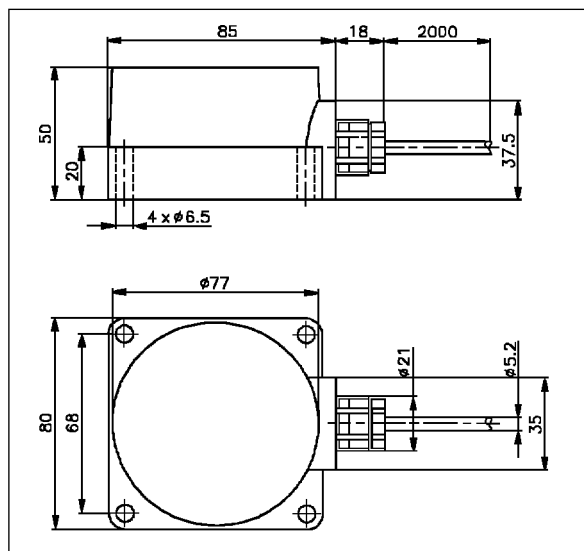
Specifications

	Namur	Transistor NPN/PNP
Rated operational volt. (U _a) (U _B)	8.2 VDC 7 to 9 VDC (6 to 35 VDC, all specifications not observed in extended supply range)	24 VDC DJ 25 E 21.6 to 26.4 VDC (ripple included) EI 8040 10 to 40 VDC (ripple included)
Self-inductance	≤ 500 µH	
Self-capacitance	≤ 120 nF	
Ripple		max. 10%
Rated operational current (I _a)		≤ 200 mA
No-load supply current (I _o)	Activated: ≤ 1 mA Not activated: ≥ 2.8 mA Max.: 9.35 mA	DJ 25 E ≤ 15 mA (output ON and OFF) EI 8040 ≤ 7 mA (output ON) ≤ 3 mA (output OFF)
Voltage drop (U _d)		DJ 25 E ≤ 1.5 VDC (at max. load) EI 8040 ≤ 2 VDC (at max. load)
Protection	Reverse polarity	DJ 25 E reverse polarity EI 8040 reverse polarity, short-circuit, reverse polarity, transients
Transient voltage	≤ 1 kV/0.5 J (prepared)	≤ 1 kV/0.5 J (prepared)
Power ON delay		DJ 25 E none EI 8040 typ. 5 ms
Frequency of operating cycles (f)	DJ 25 250 Hz DJ 40 100 Hz	DJ 25 E 200 Hz EI 8040 70 Hz

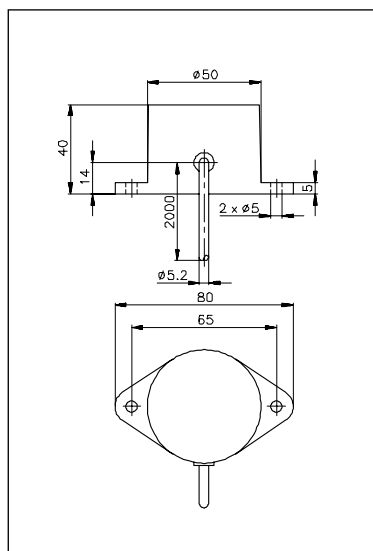
Specifications (cont.)

	Namur	Transistor NPN/PNP
Indication for output ON		DJ 25 E none EI 8040 LED, yellow
Assured operating dist. (S _a)	DJ 25 0 to 18 mm DJ 40 0 to 28 mm	DJ 25 E 0 to 18 mm EI 8040 0 to 32 mm
Repeat accuracy (R)	≤ 10%	DJ 25 E ≤ 10% EI 8040 ≤ 5%
Hysteresis (H) (Differential travel)	Dependent on amplifier relay	1 to 15% of sensing distance
Effective operating dist. (S _r)	0.9 x S _n ≤ S _r ≤ 1.1 x S _n	0.9 x S _n ≤ S _r ≤ 1.1 x S _n
Usable operating dist. (S _u)	0.8 x S _r ≤ S _u ≤ 1.2 x S _r	DJ 25 E 0.8 x S _r ≤ S _u ≤ 1.2 x S _r EI 8040 0.9 x S _r ≤ S _u ≤ 1.1 x S _r
Ambient temperature Operating Storage	-20° to +60°C (-4° to +140°F) -25° to +70°C (-13° to +158°F)	-20° to +60°C (-4° to +140°F) -25° to +70°C (-13° to +158°F)
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)	IP 67 (Nema 1, 3, 4, 6, 13)
Housing material	Blue ABS	DJ 25 E ABS, blue EI 8040 ABS, grey
Cable	2 m, 2 x 0.50 mm ² grey PVC, oil proof	2 m, 3 x 0.25 mm ² grey PVC, oil proof
Weight (cable included)	DJ 25 220 g DJ 40 500 g	DJ 25 E 220 g EI 8040 500 g
CE-marking	Yes	

Dimensions



DJ 40/EI 8040



DJ 25 .

Wiring Diagrams

Refer to "Wiring Diagrams", Technical Information.

Installation Hints

Refer to "Installation Hints", Technical Information.

Power Supplies

Power supplies VAC: > SS 110.
Power supplies VDC: > SS 130/140

Namur, Amplifier Relays

> SD 110/210. Refer to Technical Information.
> SD 170/270.