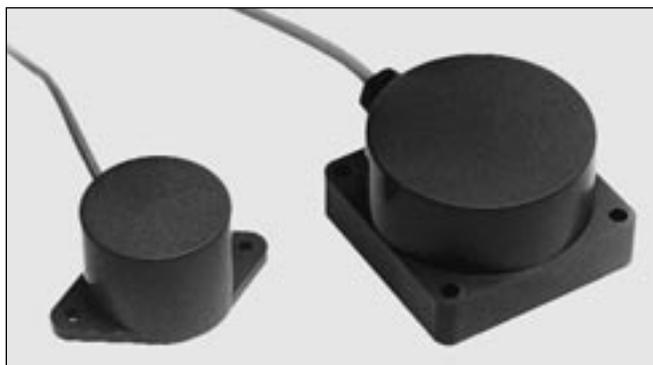


# Proximity Sensors Inductive ABS Housing Types DJ, Ø 77 and EI, Ø 77



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

## Product Description

Special-design proximity switch with long sensing distance (40 mm). With transistor NPN, PNP or made in accordance with NAMUR DIN 19 234. Sturdy ABS housing.

## Ordering Key

Type \_\_\_\_\_  
Housing \_\_\_\_\_  
Rated operating dist. (mm) \_\_\_\_\_  
Output type \_\_\_\_\_

**EI 8040 NPOP**

**DJ 40**

## Type Selection

Housing diameter	Rated operating dist. (S <sub>n</sub> )	Ordering no. NAMUR	Ordering no. Transistor NPN Make switching	Ordering no. Transistor NPN Break switching	Ordering no. Transistor PNP Make switching	Ordering no. Transistor PNP Break switching
Ø 77 mm	40 mm <sup>1)</sup>	DJ 40	EI 8040 NPOP	EI 8040 NPCP	EI 8040 PPOP	EI 8040 PPCP
	Order No	1184-700	1170-001	1170-002	1170-003	1170-004

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

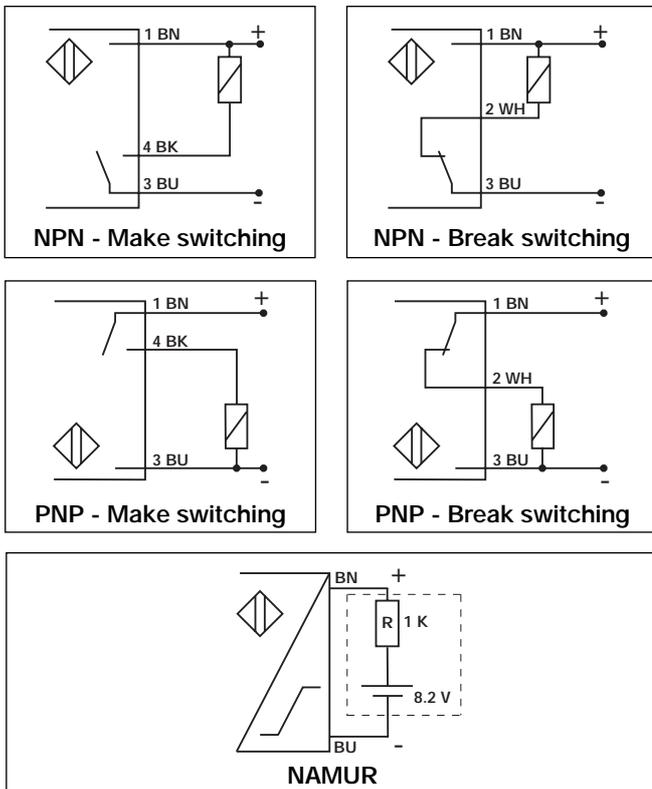
## Specifications

	NAMUR	Transistor NPN/PNP
Rated operational volt. (U <sub>e</sub> ) (U <sub>B</sub> )	8.2 VDC 7 to 9 VDC (6 to 35 VDC, all specifications not observed in extended supply range)	24 VDC 10 to 40 VDC (ripple included)
Self-inductance	≤ 500 µH	-
Self-capacitance	≤ 120 nF	-
Ripple	-	max. 10%
Rated operational current (I <sub>e</sub> )	-	≤ 200 mA
No-load supply current (I <sub>o</sub> )	Activated: ≤ 1 mA Not activated: ≥ 2.8 mA Max.: 9.35 mA	≤ 7 mA (output ON) ≤ 3 mA (output OFF)
Voltage drop (U <sub>d</sub> )	-	≤ 2 VDC (at max. load)
Protection	Reverse polarity	short-circuit, reverse polarity, transients
Transient voltage	≤ 1 kV/0.5 J (prepared)	≤ 1 kV/0.5 J (prepared)
Power ON delay	-	typ. 5 ms
Frequency of operating cycles (f)	100 Hz	70 Hz
Indication for output ON	-	LED, yellow
Assured operating dist. (S <sub>a</sub> )	0 to 28 mm	0 to 32 mm
Repeat accuracy (R)	≤ 10%	≤ 5%

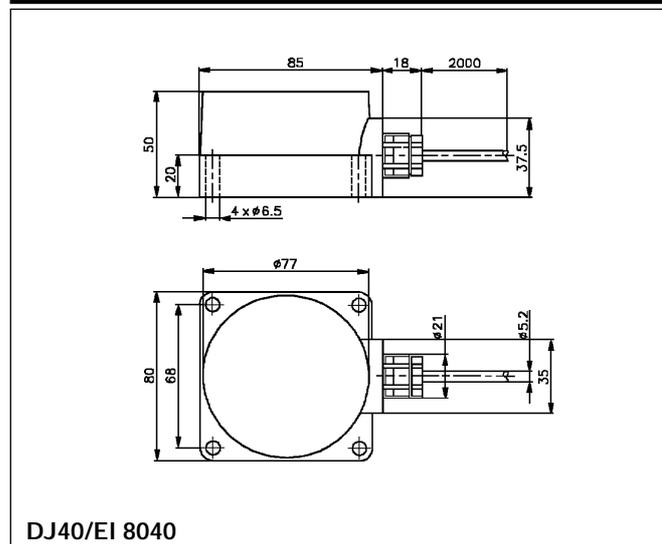
## Specifications (cont.)

	NAMUR	Transistor NPN/PNP
Hysteresis (H) (Differential travel)	Dependent on amplifier relay	1 to 15% of sensing distance
Effective operating dist. (S <sub>r</sub> )	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
Usable operating dist. (S <sub>u</sub> )	$0.8 \times S_r \leq S_u \leq 1.2 \times S_r$	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$
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	ABS, grey	ABS, grey
Cable	2 m, 2 x 0.50 mm <sup>2</sup> grey PVC, oil proof	2 m, 3 x 0.25 mm <sup>2</sup> grey PVC, oil proof
Weight (cable included)	500 g	500 g
CE-marking	Yes	-

## Wiring Diagrams



## Dimensions



## 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.

## Installation Hints

