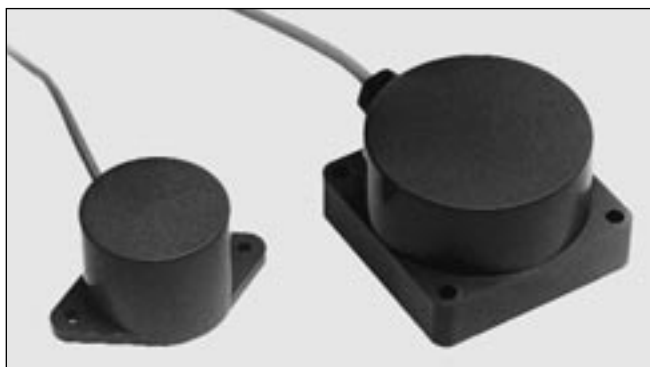


Proximity Sensors Inductive ABS Housing Types DJ, Ø 77 and EI, Ø 77

CARLO GAVAZZI



- 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 _n)	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 ¹⁾	EI8040NACP	EI 8040 NPOP	EI 8040 NPCP	EI 8040 PPOP	EI 8040 PPCP

¹⁾ For non-flush mounting in metal

Specifications

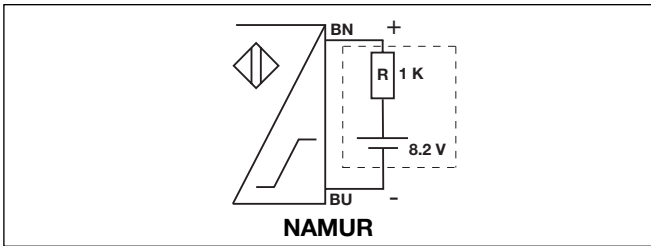
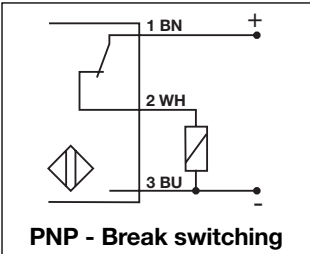
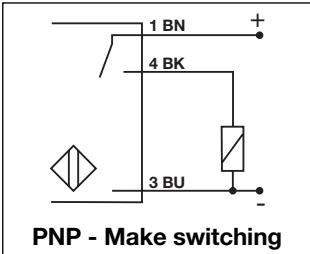
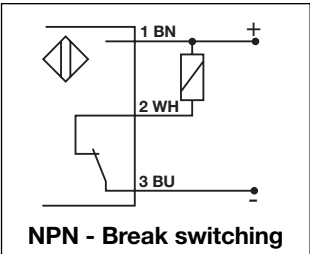
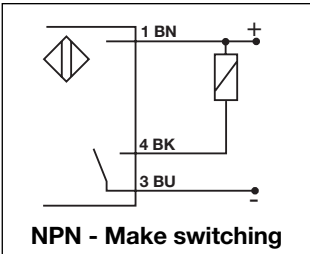
	NAMUR	Transistor NPN/PNP
Rated operational volt. (U _e) (U _B)	8.2 VDC 7 to 9 VDC (6 to 35 VDC, all specifications not observed in extended supply range)	24 VDC 10 to 40 VDC (ripple included)
Self-inductance	≤ 500 µH	-
Self-capacitance	≤ 120 nF	-
Ripple	-	max. 10%
Rated operational current (I _e)	-	≤ 200 mA
No-load supply current (I _o)	Activated: ≤ 1 mA Not activated: ≥ 2.8 mA Max.: 9.35 mA	≤ 7 mA (output ON) ≤ 3 mA (output OFF)
Voltage drop (U _d)	-	≤ 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 _a)	0 to 28 mm	0 to 32 mm
Repeat accuracy (R)	≤ 10%	≤ 5%



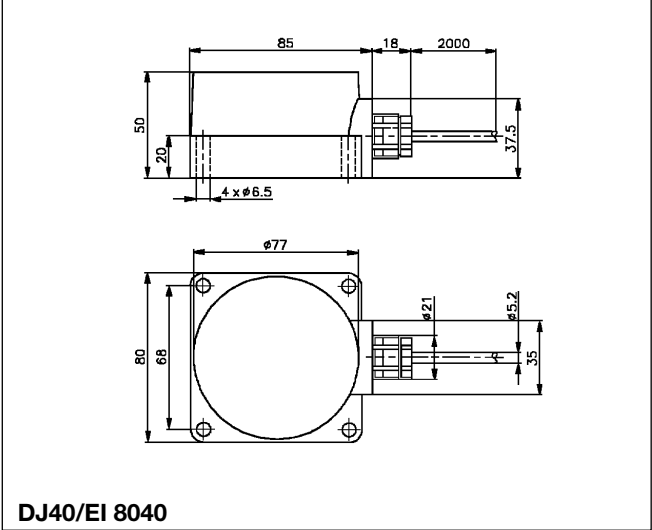
Specifications (cont.)

	NAMUR	Transistor NPN/PNP
Hysteresis (H) (Differential travel)	Dependent on amplifier relay	1 to 15% of sensing distance
Effective operating dist. (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
Usable operating dist. (S_u)	$0.8 \times S_r \leq S_u \leq 1.2 \times S_r$	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$
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 ² grey PVC, oil proof	2 m, 3 x 0.25 mm ² 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

To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables

Relief of cable strain

The cable should not be pulled

Protection of the sensing face

A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier

Any repetitive flexing of the cable should be avoided