



**Model Number**

**NJ20+U4+E2**

**Features**

- **Comfort series**
- **20 mm flush**

**Technical Data**

**General specifications**

Switching element function	PNP	NO
Rated operating distance	$s_n$	20 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 16.2 mm
Reduction factor $r_{Al}$		0.35
Reduction factor $r_{Cu}$		0.35
Reduction factor $r_{304}$		0.8

**Nominal ratings**

Operating voltage	$U_B$	10 ... 60 V
Switching frequency	$f$	0 ... 150 Hz
Hysteresis	$H$	1 ... 10 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.8$ V

**Voltage drop at  $I_L$**

Voltage drop $I_L = 1$ mA, switching element on $U_d$	0.5 ... 2.3 V typ. 0.9 V
Voltage drop $I_L = 10$ mA, switching element on $U_d$	0.8 ... 2.2 V typ. 1.4 V
Voltage drop $I_L = 20$ mA, switching element on $U_d$	0.9 ... 2.3 V typ. 1.5 V
Voltage drop $I_L = 50$ mA, switching element on $U_d$	0.9 ... 2.5 V typ. 1.6 V
Voltage drop $I_L = 100$ mA, switching element on $U_d$	1 ... 2.6 V typ. 1.8 V
Voltage drop $I_L = 200$ mA, switching element on $U_d$	1.2 ... 2.8 V typ. 2 V

Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40$ °C, switching element off		$\leq 100$ $\mu$ A
No-load supply current	$I_0$	$\leq 10$ mA
Time delay before availability	$t_v$	$\leq 50$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

**Ambient conditions**

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

**Mechanical specifications**

Connection type	screw terminals
Core cross-section	up to 2.5 mm <sup>2</sup>
Housing material	PBT/metal
Sensing face	PBT
Degree of protection	IP68

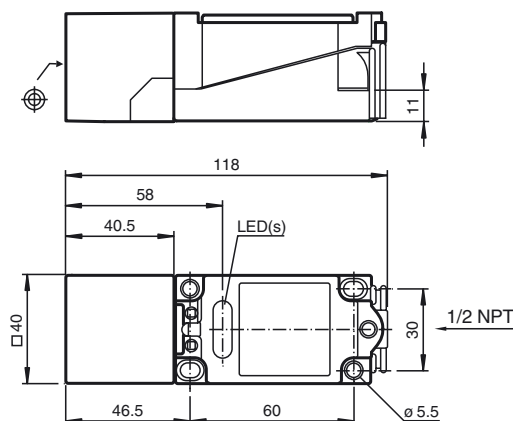
**Compliance with standards and directives**

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

**Approvals and certificates**

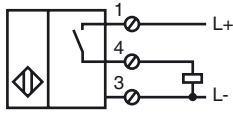
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

**Dimensions**



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Electrical Connection



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