



Model Number

NJ20+U2+E

Features

- Comfort series
- 20 mm flush

Accessories

MHW 01
Modular mounting bracket

Technical Data

General specifications

Switching element function		NPN	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	≤ 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		≤ 100 μ A	
No-load supply current	I_0	≤ 10 mA	
Time delay before availability	t_v	≤ 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 ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP68

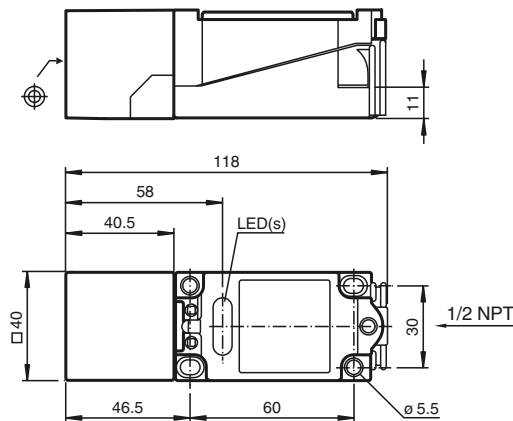
Compliance with standards and directives

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

Approvals and certificates

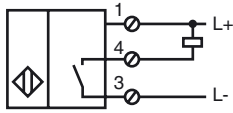
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Certified by China Compulsory Certification (CCC)

Dimensions



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Electrical Connection



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