



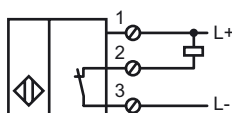
### Model Number

NJ20+U1+E1

### Features

- Comfort series
- 20 mm embeddable

### Connection



### Accessories

#### V1-G

4-pin, M12 female field-attachable connector

#### V1-W

4-pin, M12 female field-attachable connector

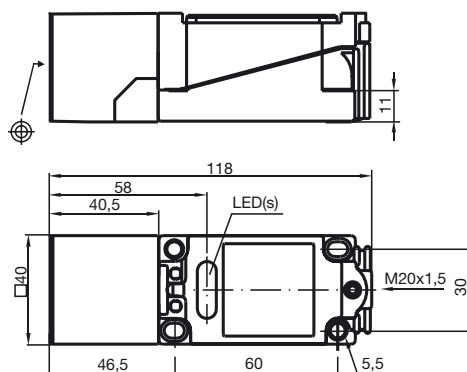
#### MHW 01

Modular mounting bracket

#### V1-M20-80

Receptacles, M12/M20; plastic version

### Dimensions



### Technical Data

#### General specifications

Switching element function		NPN	NC
Rated operating distance	$s_n$	20 mm	
Installation		embeddable	
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 $r_{303}$		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 protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.8$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	$I_0$	$\leq 10$ mA
Operating voltage display		LED, green
Indication of the switching state		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
Sensing face	PBT
Protection degree	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