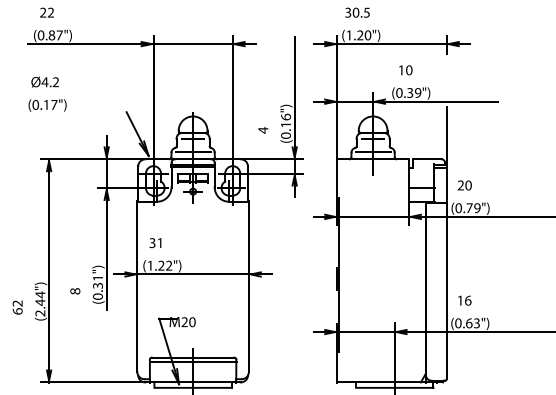


I88 Series



Recommended use

Due to its compact size and wide range of actuators and contacts the I88 series is our most popular line of limit switches. Suitable for a huge range of applications, including safety and position monitoring, these switches offer an IP65 protection rating.

Product advantages

- Standard switch conforming to DIN EN 50047
- Standard actuator conforming to DIN EN 50047, Type A, B, C, E
- Protection class IP65 to VDE 0470 T1
- Enclosure and cover PA 6, self-extinguishing (UL-94-V0)
- Actuator can be repositioned by 4 x 90°
- Cable entry M20 x 1.5
- Connection designation conforming to DIN EN 50013

Options

- Available with M12 connector
- AS interface variants available
- Cable entry M16 x 1.5

Design layout

- Slow-action and snap-action contacts
- Versions: 1 NC/1NO, 2 NC, 2 NO, overlapping contacts
- All NC contacts with \ominus in the circuit diagram are positively opening contacts
- Type: Zb (galvanically isolated changeover contact)
- Latching function on request

Mounting

- Two M4 screws (distance between centers 22 mm), adjustment with slots
- Two M5 screws for safety applications without additional fixing element (Fig. 1)
- Additionally secured by guide plate for lateral approach forces
- Front mounting (depending on type)

Installation advantages

- Snap-on cover can be released with screwdriver
- Cover opening range 135° (cover can also be detached from hinge)
- Cover protects switching element during installation
- Screw connections with self-lifting clamping plates
- Easy to install cover lock (close and press)
- Cover can be additionally secured with screw

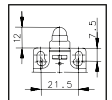


Fig. 1

Technical data

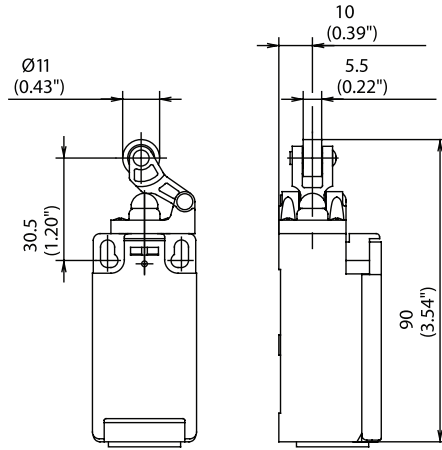
Electrical data	
Rated insulation voltage	U _i max. 250 V AC
Conventional thermal current (up to) ¹	I _{th} 10 A
Rated operating voltage	U _e max. 240 V
Utilization category (up to) ¹	AC-15, U _e /I _e 240 V/3 A
Short-circuit protection (up to) ¹	Fuse 10 A gL/gG
Protection class	II, Insulated
Mechanical data	
Enclosure material	Thermoplastic, glass fibre-reinforced (UL 94-V0)
Ambient temperature	-30 °C to +80 °C
Mechanical service life (up to) ¹	10 x 10 ⁶ switching cycles
B10d (up to) ¹	20 Mio.
Switching frequency	≤ 100/min.
Type of connection	Screw connections
Conductor cross sections	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²
Cable entry	1 x M20 x 1,5
Standards	
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1	

¹ Depending on the switch system.

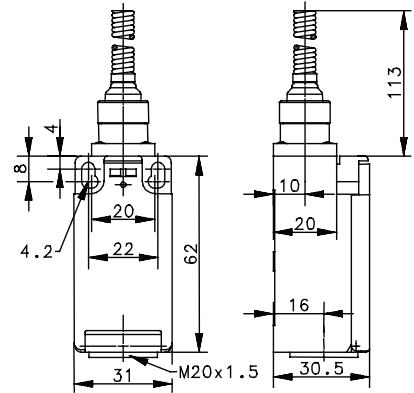
I88 Series



HW RO11 (Form E)



FF

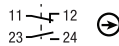


Switching Operation

1 NC / 1 NO Contacts

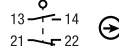
Slow Action

608.6121.021
I88-U1Z HW RO11



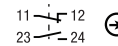
Snap Action

608.6171.022
I88-SU1Z HW RO11



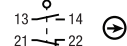
Slow Action

618.6140.217
I88-U1 FF



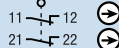
Snap Action

608.6190.078
I88-SU1 FF



2 NC Contacts

608.6821.099
I88-A2Z HW RO11



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2 NO Contacts

608.6821.068
I88-E2 HW RO11



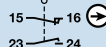
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1 NC / 1 NO Contacts Overlapping

608.6321.100
I88-UV1Z HW RO11



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Replacement actuator:

391.8191.547

391.8401.031

Technical Information

	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V
Max. Switching Amps (up to)*	10A	10A
B10d (up to)*	20 Million	20 Million
Mechanical Service Life (up to)*	3 x 10 ⁶	10 x 10 ⁶
Switching Frequency	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category (up to)*	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	250VAC	250VAC

	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V
Max. Switching Amps (up to)*	10A	10A
B10d (up to)*	20 Million	20 Million
Mechanical Service Life (up to)*	10 x 10 ⁶	10 x 10 ⁶
Switching Frequency	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65
Utilization Category (up to)*	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	250VAC	250VAC

Approvals

* Depending on switching system - see technical information for details



Special features/variants (on request)

- Available with black enclosure
- With steel roller
- Different roller diameters

Special features/variants (on request)

- Available with black enclosure
- Various spring lengths
- Different spring type or spring rod

Drawing dimensions in mm