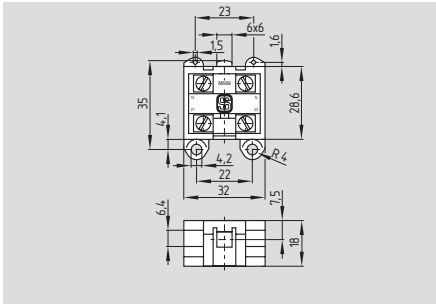


Micro switches

M 689



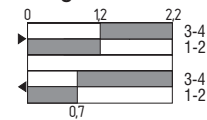
- Thermoplastic enclosure
- Change-over contact, double break
- Snap action with self-cleaning contacts
- Galvanically separated contact bridges
- Screw terminal
- Suitable for low actuating speeds

Technical data

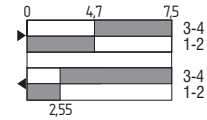
Standards: IEC/EN 60947-5-1
 Enclosure: plastic, anti-tracking
 Actuator: thermoplastic
 Protection class: IP 40, terminals IP 00
 to EN 60529
 Degree of pollution: 2
 Contact material: silver
 Contact type: change-over contact,
 double break with 2 separate
 contact bridges, same potential
 Switching system: snap action,
 self-cleaning contacts
 Termination: screw terminals
 Cable section: max. 2.5 mm²
 (incl. conductor ferrules)
 U_{imp} : 4 kV
 U_i : 250 V
 I_{the} : 6 A
 Utilisation category: AC-15
 I_e/U_e : 2.5 A / 230 VAC
 Max. fuse rating: 10 A gL/gG D-fuse
 Actuating force: approx. 4 N
 Ejection force: min. 0.8 N
 Contact opening: 2 x 0.5 mm
 Switchover time: ≤ 10 ms
 (with actuating speed
 10 mm/min on plunger)
 Bounce duration: ≤ 1.5 ms
 Ambient temperature: - 30 °C ... + 120 °C
 Mechanical life: ≥ 30 million operations
 Switching frequency: 10000/h
 Actuating speed: min. 1 mm/min
 Repeat accuracy
 of switching points: ± 0.02 mm at plunger

Contact variants

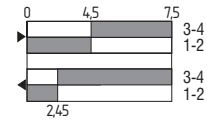
Plunger and actuator 8 B 9



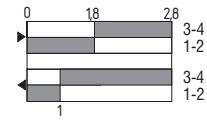
Actuator 8 A



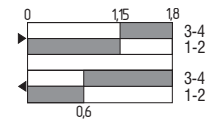
Actuator 8 E and 8 F



Actuator 8 M



Actuator 8 V



Approvals



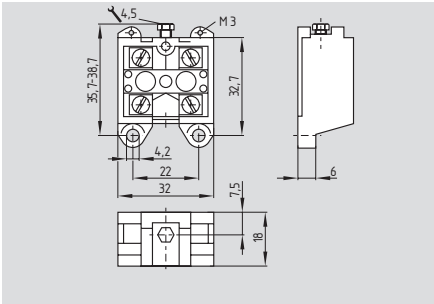
Ordering details

M 689-11-1-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

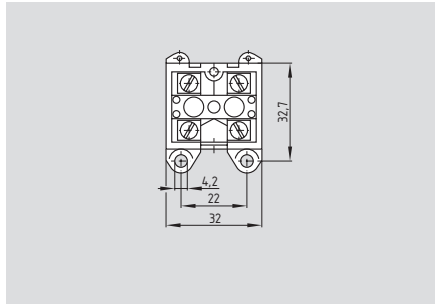
Micro switches

Plunger P4



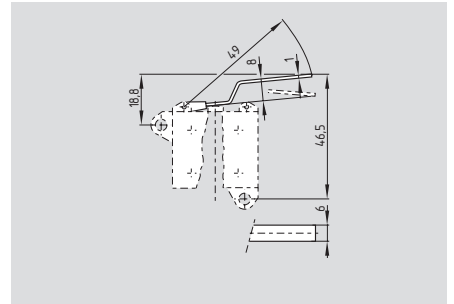
- Plunger with setting screw
- Actuating force approx. 4 N

Plunger P5



- Actuator flush with housing
- Actuating force approx. 4 N

Actuator 8 A



- Actuating force approx. 0.9 N

Approvals



Ordering details

M 689-11-1-P4-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

Approvals



Ordering details

M 689-11-1-P5-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

Approvals



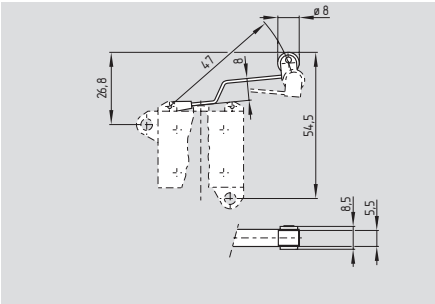
Ordering details

M 689-11-1-8 A-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

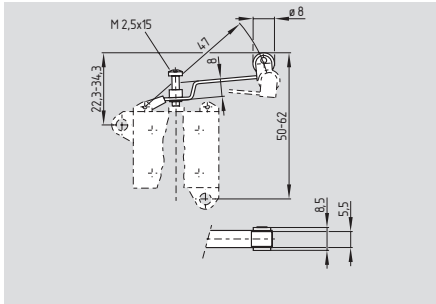
Micro switches

Actuator 8 E



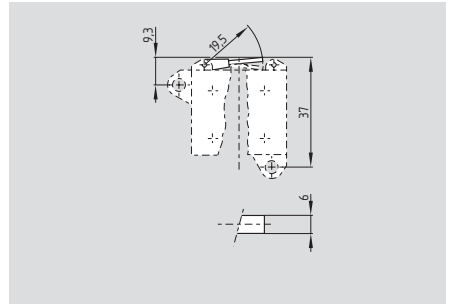
- Actuating force approx. 0.95 N

Actuator 8 F



- Actuating force approx. 0.95 N
- Adjustable actuator

Actuator 8 M



- Actuating force approx. 2.4 N

Approvals



Ordering details

M 689-11-1-8 E-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

Approvals



Ordering details

M 689-11-1-8 F-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

Approvals



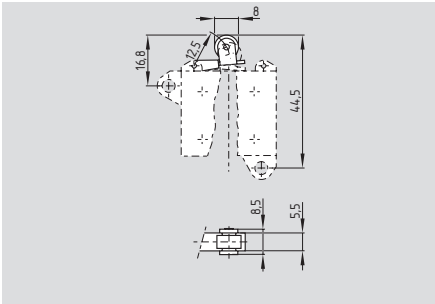
Ordering details

M 689-11-1-8 M-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

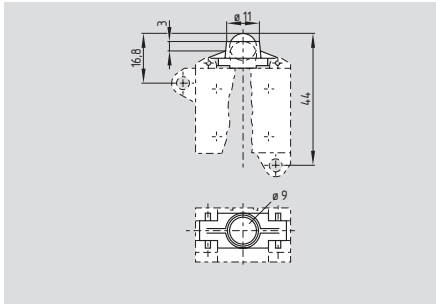
Micro switches

Actuator 8 V



- Actuating force approx. 4 N

Actuator 8 B 9



- Actuating force approx. 4 N
- Actuator head with captive metal ball actuator
- Ball Ø 9 mm

Approvals



Ordering details

M 689-11-1-8 V-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover

Approvals



Ordering details

M 689-11-1-8 B 9-①

No.	Replace	Description
①	i	Without terminal cover With terminal cover