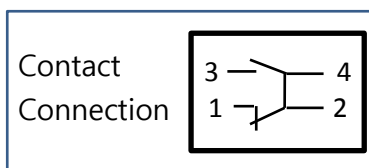


## APPLICATION

- ▶ Limit switch for use on machine, door and plant controls
- ▶ Auxiliary switch in e.g. cam switches and control devices
- ▶ Electromechanical switching element for automation tasks with separate electric loads
- ▶ Sensor for NC, PLC and computer controls
- ▶ Safety limit switch in control panels and electrical installations
- ▶ Assemblies subject to high shock and vibration
- ▶ Command controllers and reversers for battery-operated and diesel trucks
- ▶ Household appliances
- ▶ DC magnet and contactor control
- ▶ Function to prohibit welding of contacts

## FEATURES



- ▶ Positive opening operation
- ▶ Double break contacts
- ▶ Roller lever only
- ▶ Screw-type terminals
- ▶ Dimensions (L × D × H): 50 × 12 × 50.50 mm
- ▶ Weight: 32.5 g
- ▶ Ordering code: M28 RS-SS

## TECHNICAL DESCRIPTION

This is snap-action switch and has one NO contact and one NC contact. The change of the switching position is made rapidly. This switch allows the switching of high currents.

This switch is Form Z SPDT with double-break contacts, snap-action mechanism, and fulfills positive opening operation in case of contact welding. This makes them ideally suited for use in safety related applications.

The contact system is placed in a small desing made of transparent plastic material with high electrical and mechanical characteristics.

## ELECTRICAL TECHNICAL DATA FOR SWITCH

Contact configuration	1NC, 1NO
Contact resistance	≤ 20mΩ
Rated impulse withstand voltage	4kV
Conventional thermal current I <sub>t</sub> , A	10A
Rated insulation voltage U <sub>i</sub> , V	400V
Connecting wire type	1.5 ~ 2.5mm <sup>2</sup>
Utilization category DC	110V/1A, 40V/2.5A, 12V/8A
Utilization category AC	230V/3A
Minimum switching capacity	5mA

## MECHANICAL TECHNICAL DATA FOR SWITCH

Actuating speed	1mm/sec Min. 1m/sec Max.
Actuating force	2.3N
Contact gap	2 × 1.2mm

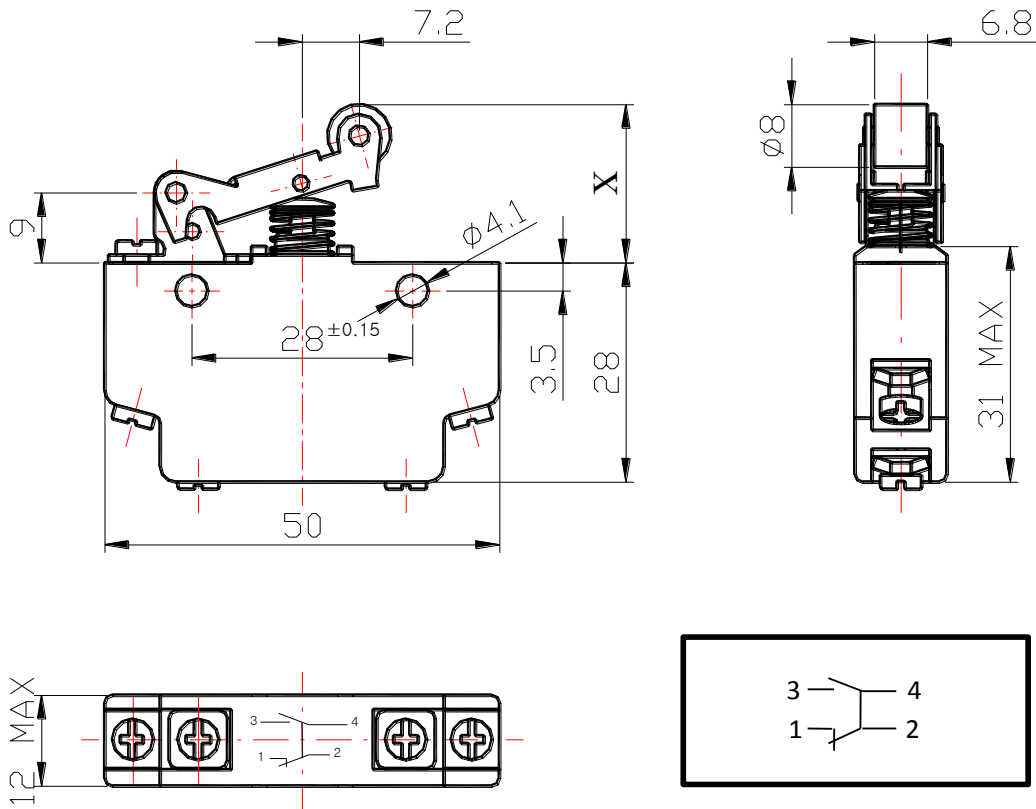
## PERFORMANCE

Mechanical life, cycles	10 <sup>7</sup>
Electrical life, cycles	10 <sup>6</sup>
Maximum operating frequency	Mechanical 240cycles/minute Electrical 20cycles/minute
Protection degree(EN 60529)	Contact system IP40 Terminals IP00
Ambient temperature	-40°C~+85°C
Vibration resistance	30g, 10...500Hz all directions
Shock resistance	50g

## MATERIAL & USAGE

Contact material	Silver(Ag)
Casing material	Polycarbonate, transparent
Mounting	Side mounting

## DRAWING



## MOVEMENT DATA FOR SWITCH(DIMENSION X)

Free position	20.00mm ± 0.35mm
Operating position	16.00mm ± 0.50mm
Release position	18.00mm ± 0.50mm
Limit position	12.40 mm

## STANDARD CONFORMITY

STANDARD	CODE	FIELD	DECISION
CE (AN 50200970 0001)	IEC 60947-5-2	LOW VOLTAGE SWITCHGEAR	PASS
ISO 9001	-	QUALITY MANAGEMENT	PASS
ISO 14001	-	ENVIRONMENT MANAGEMENT	PASS

## ORDER CODE

M28 XX-XX-X

①② ③④ ⑤

M28	RS(①②)	SS(③④)	R(⑤)
Switch type	Lever	Mount & Terminal	Etc.
Snap action switch	P Standard RS Short roller lever RL Long roller lever	SS Screw type SF Flat quick connect MS Mounting bracket Screw type MF Mounting bracket Flat quick connect M(Angle)S Angled mounting bracket Screw type M(Angle)F Angled mounting bracket Flat quick connect	R Rivet