



Z3 range

Subminiature Microswitches



- > For harsh environment: shocks, vibrations temperature
- > Snap action switch - unsealed
- > Gold plated contacts
- > Mounting holes for M2 screws
- > Dimensions compliant with DIN 41635 standard
- > Terminals: solder terminals
- > Pin, integral or auxiliary actuator

Application:

- Operating temperature: -55°C to +150°C
- Rated breaking capacity: from few mA up to 4A
- Degree of protection: IP40, IP54
- Mechanical service life: 500 000 cycles

Environmental characteristics:

- Salt spray resistance: 96h
- Humidity: 93% relative humidity, +40° duration 168h
- Mechanical shocks resistance: 40g duration 11ms 18 shocks
- Sinusoidal vibrations resistance: 5_2000Hz, 50g in each of 3 orthogonal axis
- Random vibrations: 10_2000Hz, 0.30g²/Hz in each of 3 orthogonal axis

Mechanical characteristics:

Microswitches Types	Without accessory		With flexible levers (accessories)			
	Z3ANS		Z3ANS + L11Z Z3ANS + L11GZ		Z3ANS + L13Z Z3ANS + L13GZ	
Actuating lever pivot point			I	II	I	II
Max. operating force	N	2.50	2.00	2.50	2.50	3.60
Min. release force	N	0.70	0.60	0.80	0.70	1.0
Pretravel	mm	0.17 ... 0.42	—	—	—	—
Max. differential movement	mm	0.06	—	—	—	—
Min. overtravel (1)	mm	0.10	—	—	—	—

(1) Do not exceed this value in use

Electrical characteristics:

Ratings (electrical load on one throw only)		30 mV ... 5 V d.c.	30 V d.c.	115 V d.c. 400 Hz	220 V a.c. - 50 Hz
Version 5 A	— resistive load	10 mA	4 A	1 A	1 A
	— inductive load	0.025 (L/R ≤ 5 ms)	0.5 (L/R φ ≥ 5ms)	—	0.5 (Cos φ ≥ 0.5)
Electrical service life	cycles	100 000	100 000	100 000	100 000
Changeover time	ms	≤ 10	≤ 10	≤ 10	≤ 10
Contact resistance	mΩ	≤ 25 mΩ under 6 V d.c. - 100 mA according to MIL-PRF-8805 (As new, wires or cable not included)			
Dielectric strength (50 Hz - 1 mn)					
— between terminals	V a.c.	500			
— between all terminals and earth (ground)	V a.c.	1500			
Insulation resistance	MΩ	≥ 100 MΩ under 500 V d.c. - (at 23 °C with < 80 % relative humidity)			

Approvals and Compliance to Standards:

Z3 microswitches are designed to replace Z5661-1 and Z5667 microswitches approved by French Air Ministry as per letters 39.974/STAE/EQ2 dated July 24, 1975 and 42.893/STAE/EQ2 dated December 28, 1970 (AIR equipment sheets No 6.551.225 and 6.551.220).

Main compliance or performance equivalences with MIL-PRF-8805 standard requirements.

