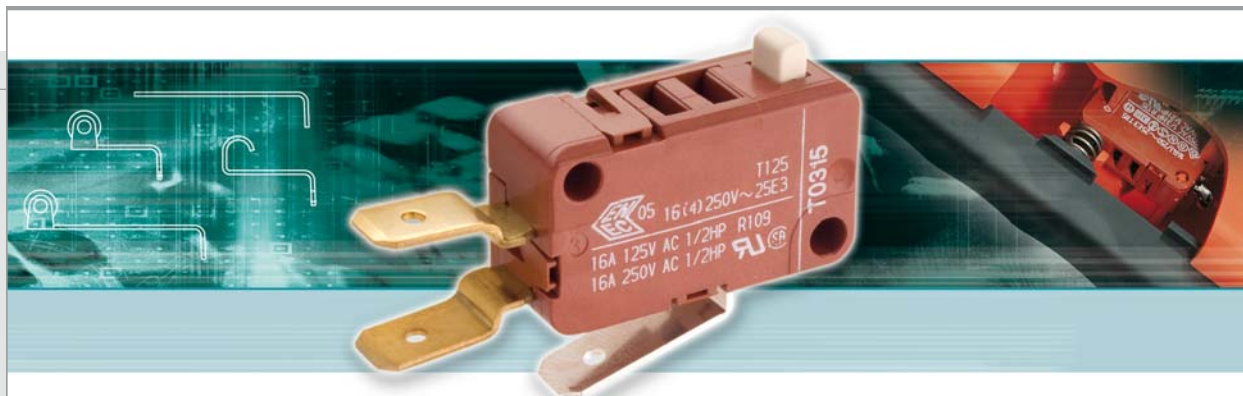


SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

T0 21 (8) A 250 V AC



PRODUCT FEATURES

- ◆ The precise mounting of the moving contact part (milled bearing blade) offers optimum snap-action even with slow actuation
- ◆ Wide range of ratings from 3 (1) A 250 V AC to 21 (8) A 250 V AC
- ◆ Versions with gold-plated contacts for signal current applications
- ◆ Various auxiliary actuators, two suspension points

ON REQUEST

- ◆ Low operating forces (≤ 0.15 N)
- ◆ Customized additional actuators
- ◆ Plug connection 4.8 x 0.5

Design	DIN 41635 A
Mechanical life endurance	2E6 (basic type 1080) 20E4 (basic type 1085)
Contact resistance (new condition)	< 100 mOhm (1 A 12 V DC)
Insulation resistance (new condition)	> 100 MOhm (500 V DC)
Voltage strength at 250 V	1 500 V function insulation / basic insulation 3 000 V reinforced insulation (depending on installation situation) 500 V small contact distance
Proof tracking	250 PTI
Insulation spacing	acc. to EN 61058 for reinforced or double insulation
Protection type	IP 40 (actuator side)
Ambient temperature	-40 °C ... +125 °C
Flammability	UL 94 V-0
Heat and fire resistance	850 °C (category D)
Material	actuator: PETP glass fiber-reinforced additional actuator: stainless steel housing: PA glass fiber-reinforced / PETP glass fiber-reinforced connections: silver-plated / CuZn
Bounce time	< 10 ms
Approval marks	
Suitable for appliances of protection class II under compliance with the installation conditions required on the equipment side	



ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

POWER TOOL SWITCHES

TACT AND KEY SWITCHES





























SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC

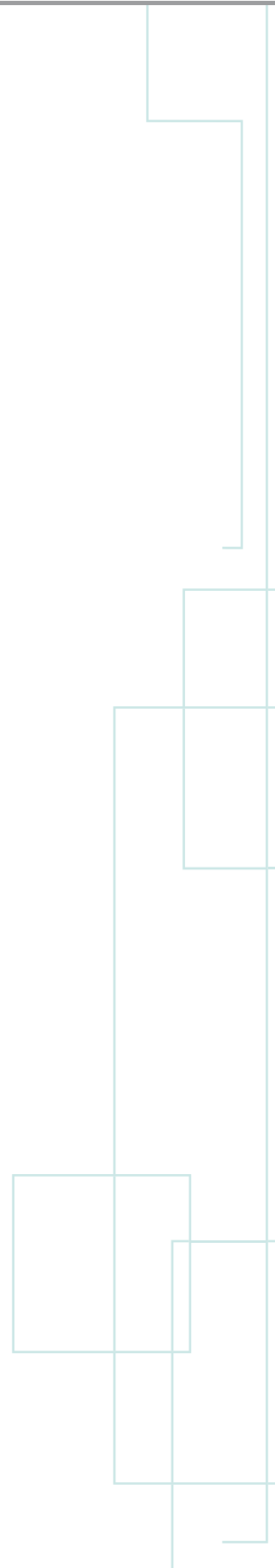
	Normally closed contact (SPNC)		Normally open contact (SPNO)			Changeover switch (SPDT momentary)										
		1080.0464		1080.0440	1085.0342	1080.0585	1080.0103	1080.0203	1080.0304	1080.0403	1080.0503	1080.0603	1080.0903	1080.5906	1080.8403	1085.0103
																
21 (8) A 250 V AC 1E4				●			●									
16 (8) A 250 V AC 1E4		●		●			●									
16 (4) A 250 V AC 5E4				●												
16 (4) A 250 V AC 25E3								●								
10 (4) A 250 V AC 25E3									●							
6 (3) A 250 V AC 6E4																
6 (2) A 250 V AC 5E4																
4 (4) A 250 V AC 5E4																
3 (1) A 250 V AC 5E4																
3 (1) A 250 V AC 25E3																
21 A 250 V AC 2 HP				●												
21 A 125 V AC 1 HP				●												
16 A 250 V AC 1/2 HP		●														
16 A 125 - 250 V AC 1/2 HP								●								
16 A 125 V AC 1/3 HP		●														
10 A 250 V AC 1/3 HP																
10 A 125 V AC 1/8 HP																
6 A 250 V AC 1/4 HP																
6 A 125 V AC 1/10 HP																
3 A 125 - 250 V AC																
Connection type																
Connection description		6.3		6.3 straight	standing	6.3 PITCH 5			standing	6.3	6.3 PITCH 5	6.3 PITCH 7	4.8 x 0.8	4.8 x 0.5 straight	6.3	
Contact material		Ag		Ag	Ag	Au		Ag	Ag	Ag	Ag	Ag	Ag	Ag	Ag	Ag
Operating force in N		≤ 1.0		≤ 1.5	≤ 3.5	≤ 1.0		≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 0.5	≤ 0.28	≤ 4.0
Operating position (OP) in mm		14.7 ± 0.5		14.7 ± 0.5	14.4 ± 0.5	14.7 ± 0.5		14.7 ± 0.5	14.7 ± 0.5	14.7 ± 0.5	14.7 ± 0.5	14.7 ± 0.5	14.7 ± 0.5	15.2 ± 1.2	15.2 ± 2.2	14.7 ± 0.5
Difference travel max. in mm		0.3		0.3	0.8	0.3		0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.5	0.3
Free position (FP) max. in mm		16.2		16.2	16.2	16.2		16.2	16.2	16.2	16.2	16.2	16.2	18.8	21.5	16.2
Permissible total travel position (TP) in mm		13.2		13.2	13.2	13.2		13.2	13.2	13.2	13.2	13.2	13.2	11.7	8.0	13.2
Actuator description																
Lever drawing														L02	L03	
Contact distance		< 3		< 3	> 3	< 3		< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
EN 60335 cap. 30 conform "G"		●				●										
Stock version								●		●						

SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC



	Changeover switch (SPDT momentary)				
	1085.0203	1085.0403	1085.5203	1080.0279	1085.0375
21 (8) A 250 V AC 1E4					
16 (8) A 250 V AC 1E4					
16 (4) A 250 V AC 5E4					
16 (4) A 250 V AC 25E3	●	●	●		
10 (4) A 250 V AC 25E3					
6 (3) A 250 V AC 6E4				●	
6 (2) A 250 V AC 5E4					
4 (4) A 250 V AC 5E4					
3 (1) A 250 V AC 5E4					
3 (1) A 250 V AC 25E3					●
21 A 250 V AC 2 HP					
21 A 125 V AC 1 HP					
16 A 250 V AC 1/2 HP					
16 A 125 - 250 V AC 1/2 HP	●	●	●		
16 A 125 V AC 1/3 HP					
10 A 250 V AC 1/3 HP					
10 A 125 V AC 1/8 HP					
6 A 250 V AC 1/4 HP				●	
6 A 125 V AC 1/10 HP				●	
3 A 125 - 250 V AC					●
Connection type					
Connection description		6.3			standing
Contact material	Ag	Ag	Ag	Au	Ag
Operating force in N	≤ 4.0	≤ 4.0	≤ 1.8	≤ 1.0	≤ 1.7
Operating position (OP) in mm	14.7 ±0.5	14.7 ±0.5	15.3 ±1.5	14.7 ±0.5	14.7 ±0.5
Difference travel max. in mm	0.3	0.3	0.7	0.3	0.3
Free position (FP) max. in mm	16.2	16.2	19.5	16.2	16.2
Permissible total travel position (TP) in mm	13.2	13.2	12.5	13.2	13.2
Actuator description					
Lever drawing			L02		
Contact distance	< 3	< 3	< 3	< 3	< 3
EN 60335 cap. 30 conform "G"					
Stock version		●			

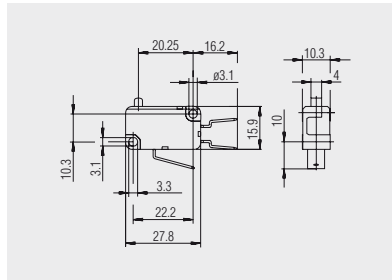


SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

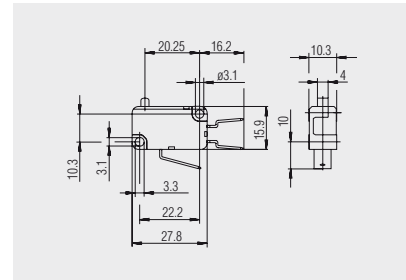
TO 21 (8) A 250 V AC



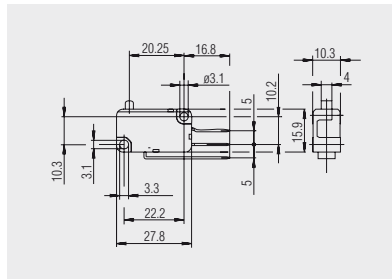
Terminal variants



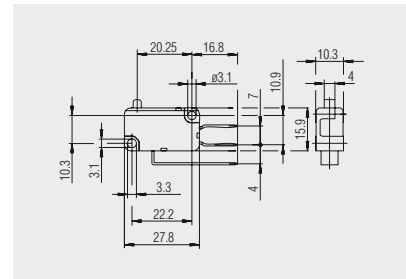
Quick-connect terminal 4.8 x 0.8



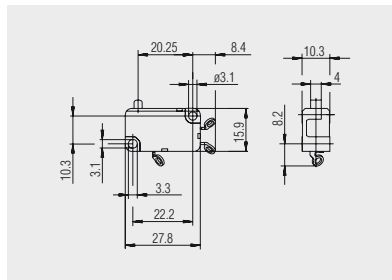
Quick-connect terminal 6.3



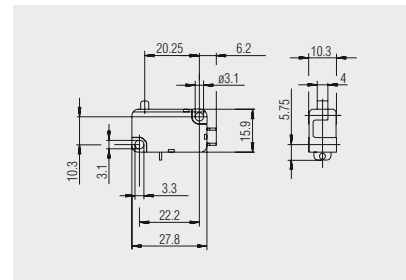
Quick-connect terminal 6.3 PITCH 5



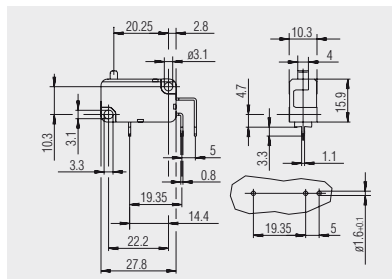
Quick-connect terminal 6.3 PITCH 7



Solder terminal



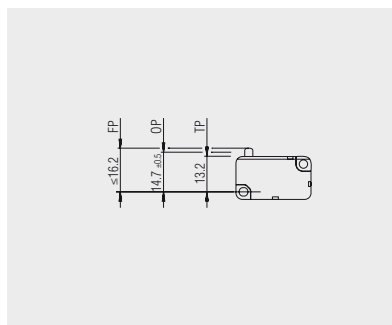
Short solder terminal



PCB terminal standing



Switching positions



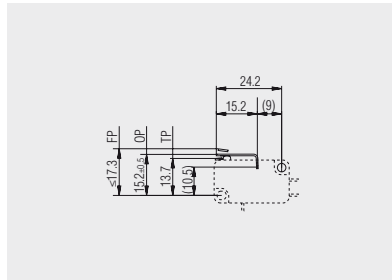
FP: free position
OP: operating position
TP: total travel position

SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

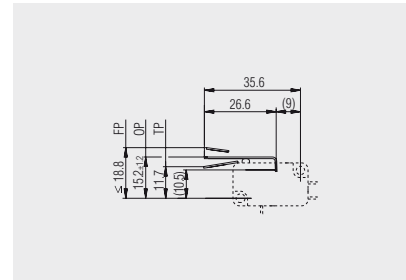
TO 21 (8) A 250 V AC



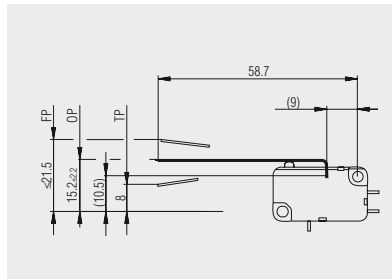
Auxiliary actuators



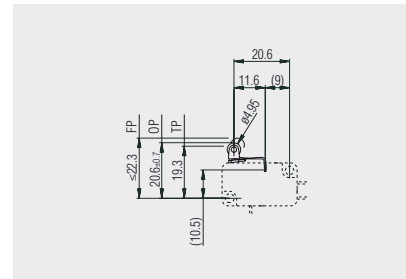
L01: straight lever
191.080.091



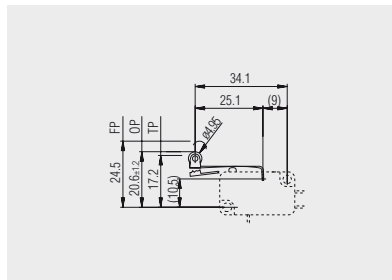
L02: straight lever
191.080.101



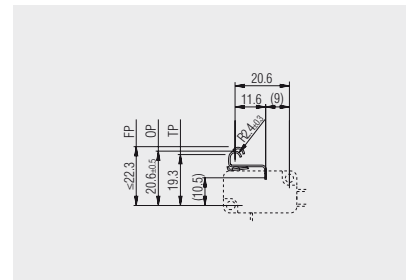
L03: straight lever



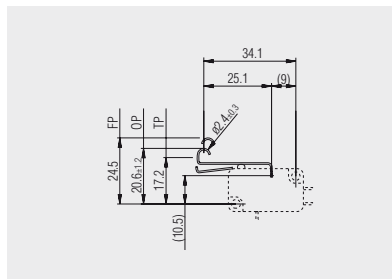
L11: roller lever
191.079.013



L12: roller lever
191.079.023



L21: simulated roller
191.080.451



L22: simulated roller
191.080.471

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

POWER TOOL SWITCHES






TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES














MICRO-SIGNAL SWITCHES

SENSORS

















APPROVAL MARKS

	ENEC 05 (KEMA)		UL (USA)
	ENEC 10 (VDE)		UL (USA + Canada)
	VDE		CSA (Canada)
			CSA (Canada + USA)

TERMINAL SYMBOLS

	Quick-connect terminal		Cable
	Solder terminal		Terminal strip
	Short solder terminal		Push-in terminal
	PCB terminal		Snap-in terminal
	PCB terminal angled to left		Cut terminal
	PCB terminal angled to right		Screw terminal
	Socket terminal		

ACTUATOR SYMBOLS

	Straight lever		Lever simulated roller with adjusting screw
	Lever simulated roller		Lever with adjusting screw and roller
	Lever with roller		Lever with cams
	Differential lever		Housing cams
	Spring lever		Pushbutton
	Spring lever bent		Rotary shaft
	Spring lever with molded spring cam		Standard actuator
	Lever with adjusting screw		Mushroom-shaped actuator

ABBREVIATIONS TECHNICAL DRAWINGS

ad	Adjustable	OP	Operating position
AN	Anode	OP NC	Operating position normally closed contact
BL	Block	OP NO	Operating position normally open contact
FH	Fixing hole, locating hole fixing pin	OR	On request
FI	Fields for function indicator	RC	Recommended cut-out
FP	Free position	RL	Reference level
FX	Fixing pin	SH	Snap-in hole
ju	Adjusted	SL	Symbol limit
MC	Marking cathode	SP	Solder pads
MF	Mounting frame	ST	Slide travel
MP	Measuring point	SW	Switching position
OFF	Off	TH	Terminal hole
off-range	Zero position	tk	Thick
OG	Operating range	to	Top
ON	On	TP	Total travel position

SWITCHING FREQUENCY (ABBREVIATIONS)

e.g. 5E4 switching cycles $\hat{=}$ 50 000 switching cycles