



SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

TO 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 terminal 4.8 x 0.5 mm

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)
Proof tracking	250 PTI
Protection type	IP 40 (actuator side)
Ambient temperature	-40 °C ... +125 °C
Flammability	UL 94 V-0
Glow wire test temperature	850 °C
Material	actuator: PETP glass fiber-reinforced additional actuator: stainless steel housing: PA glass fiber-reinforced / PETP glass fiber-reinforced terminals: 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

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH-IN DRIVE



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	Normally closed contact (SPNC)		Normally open contact (SPNO)					Changeover switch (SPDT momentary)									
		1080.0464		1080.0440	1080.0539	1085.0342	1080.0585	1080.0103	1080.0203	1080.0304	1080.0403	1080.0903	1080.5906	1085.0103	1085.0403	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 (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																	
3 A 125 - 250 V AC																○	
Terminal type																	
Terminal description		6.3		6.3 straight	6.3 PITCH 5	standing	6.3 PITCH 5			standing	6.3	4.8 x 0.8	4.8 x 0.5 straight		6.3	standing	
Contact material		Ag		Ag	Ag	Ag	Au	Ag	Ag	Ag	Ag	Ag	Ag	Ag	Ag	Au	
Operating force (N)		≤ 1.0		≤ 1.5	≤ 1.0	≤ 3.5	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 0.5	≤ 4.0	≤ 4.0	≤ 1.7	
Operating position (OP) (mm)		14.7 ± 0.5		14.7 ± 0.5	14.7 ± 0.3	14.4 ± 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	14.7 ± 0.5	14.7 ± 0.5	14.7 ± 0.5		
Difference travel max. (mm)		0.3		0.3	0.3	0.8	0.3	0.3	0.3	0.3	0.3	0.7	0.3	0.3	0.3		
Free position (FP) max. (mm)		16.2		16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	18.8	16.2	16.2	16.2		
Permissible total travel position (TP) (mm)		13.2		13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	11.7	13.2	13.2	13.2		
Actuator description																	
Lever drawing												L02					
Contact distance (mm)		< 3		< 3	< 3	> 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
EN 60335 cap. 30 conform "G"		○			○		○										
Stock version											○				○		

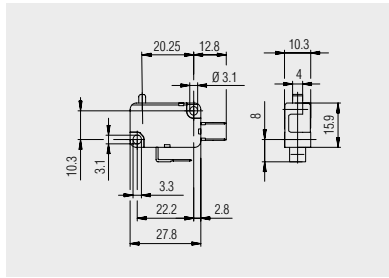


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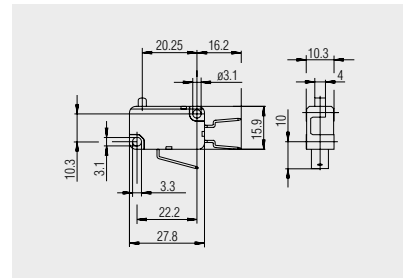
TO 21 (8) A 250 V AC



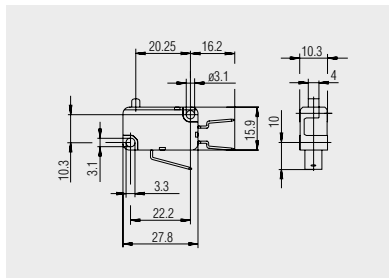
Terminal variants



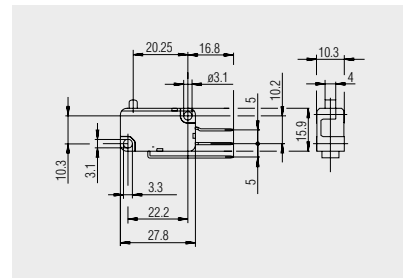
Quick-connect terminal 4.8 x 0.5 special version straight



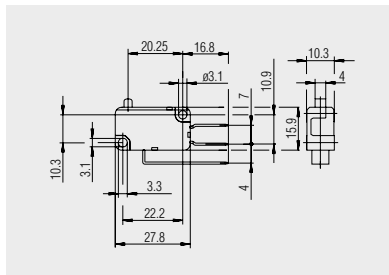
Quick-connect terminal 4.8 x 0.8



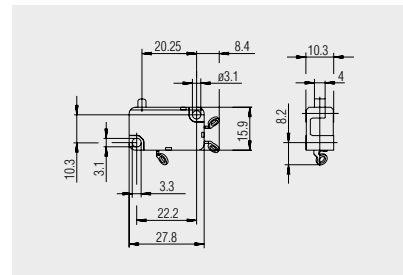
Quick-connect terminal 6.3 x 0.8



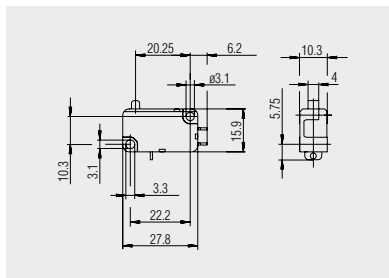
Quick-connect terminal 6.3 x 0.8 PITCH 5



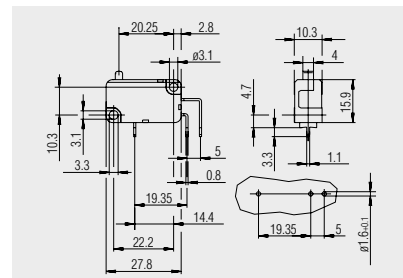
Quick-connect terminal 6.3 x 0.8 PITCH 7



Solder terminal



Short solder terminal



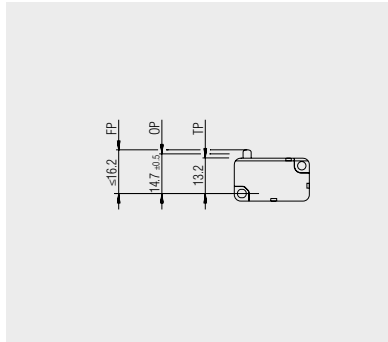
PCB terminal standing

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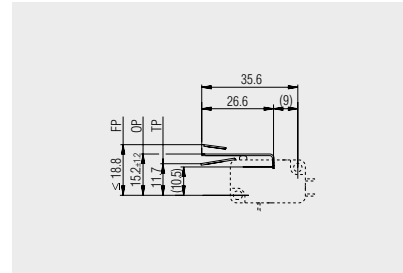
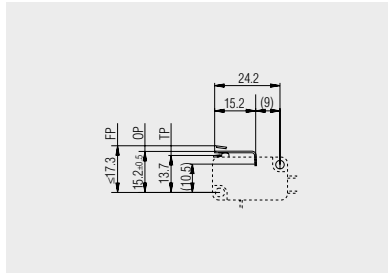
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FP: free position
OP: operating position
TP: permissible total travel position

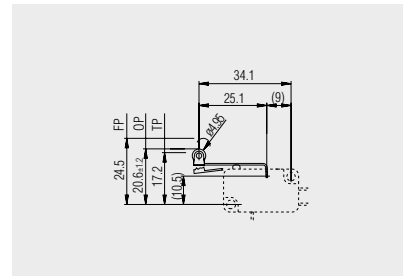
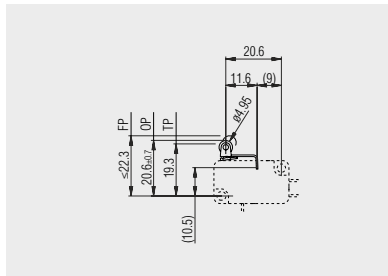
Switching positions



Auxiliary actuators

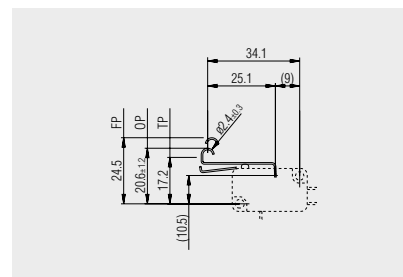
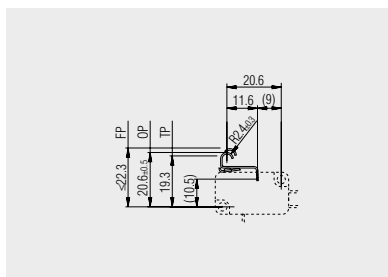
L01: straight lever
191.080.091

L02: straight lever
191.080.101



L11: roller lever
191.079.013

L12: roller lever
191.079.023



L21: simulated roller
191.080.451

L22: simulated roller
191.080.471

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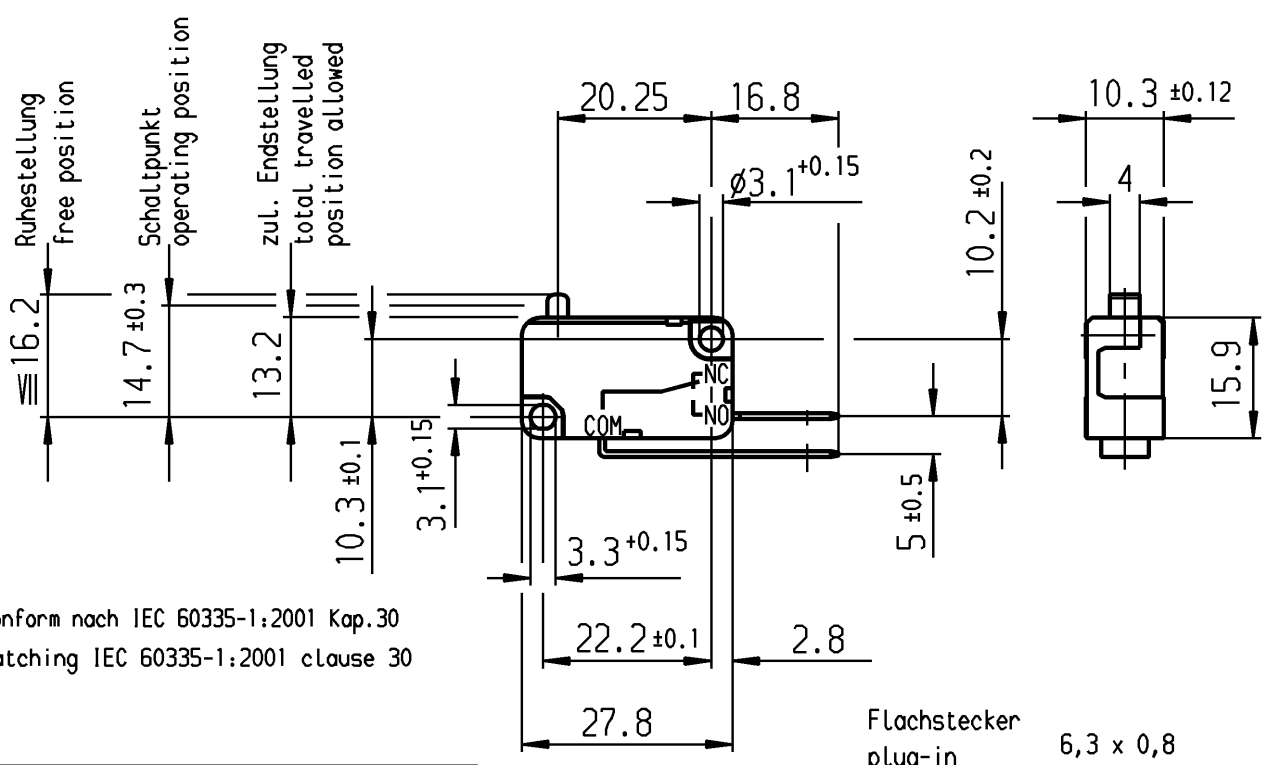
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G: Konform nach IEC 60335-1:2001 Kap.30
 G: matching IEC 60335-1:2001 clause 30

Flachstecker
 plug-in 6,3 x 0,8
 EN 61058 / EN 61210 / DIN 46244
 Steckflächen gal Ag
 surfaces of connectors
 silver plated

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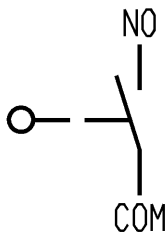
**Aufschrift
 Marking**

MARQUARDT

1080 μ 40T125
 16(4)/250~50E3
 16(8)/250~10E3



16A 125V AC 1/3HP
 16A 250V AC 1/2HP
 R135



**Schließer 1-polig
 SPNO**

Schalt-Betätigungskraft
 actuating force ≤ 1 N
 Rückschaltkraft
 release force ≥ 0.3 N
 Differenzweg
 movement differential ≤ 0.3 mm
 Schutzklasse nach DIN 40 050
 protection class IP 40

Herstelljahr/-woche nach year and week of production acc. to DIN EN 60062
 Auf Verpackung / on box: G
 Beim Einbau geeignete isolierte Steckhülsen verwenden
 For mounting suitable insulated sleeve must be used

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Allgemeintoleranzen/UNTOLERANCED DIMENSIONS					PROJECTION		Pause COPY	Blatt SHEET		Zeichn./DRAWING NO. K 1080.0539
Für Längen und Radien FOR LENGTHS AND RADII.	Abmaße in mm für Nennmaßbereich in mm ALL DIMENSIONS ARE IN MILLIMETRES			Für Winkel FOR ANGLE	Original DIN A4	Maßstab SCALE 1:1				
	bis/UP TO 6	über/OVER 6 bis/UP TO 30	über/OVER 30				± 2°			
d	25629	10.12.97	gc	i	63606	10.07.09	mtr	0 10 20 30 mm		Schnappschalter Snap Action Switch
c	25386	24.09.97	gc	h	60742	30.10.08	mp			
b	23491	26.07.95	lm	g	50298	25.05.07	ron	gez./DRAWN BY 07.10.94 mk mzs		
a	23384	08.06.95	mk	f	32883	04.12.01	vor	Ersatz für/REPLACEMENT OF		
				e	24233	15.01.98	gc	MARQUARDT Marquardt GmbH, D-78604 Rietheim-Weilheim		
Ausg. ISSUE	Anderung REVISION	gez. DRAWN BY		Ausg. ISSUE	Anderung REVISION	gez. DRAWN BY				