



SERIES 1010 - OPEN SNAP-ACTION SWITCHES

TO 6 (2) A 250 V AC



PRODUCT FEATURES

- Powerful snap-action switch with C-spring contact system according to design DIN 41635C
- High switching reliability due to large contact forces directly after switching
- Small size, large travel and difference travel
- Short bounce time
- Contact system insensitive to vibrations

ON REQUEST

- Extended overtravel
- Special base forms
- Special actuating cams
- In addition to a wide range of normally closed contacts, normally open contacts and changeover switches and spring sets without snap function (basic type 1017) are available

Design	DIN 41635 C
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 00
Ambient temperature	-20 °C ... +85 °C ... 120 °C (basic type 1014)
Flammability	UL 94 V-2 or UL 94 HB
Glow wire test temperature	850 °C
Material actuator housing terminals	spring steel / PA glass fiber-reinforced / PA / metal (only 1017.0153) PA glass fiber-reinforced / PA silver plated
Bounce time	< 5 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 'N' DRIVE



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TO 6 (2) A 250 V AC

	6 (2) A 250 V AC 25E3	2 (0.5) A 250 V AC 20E4	2 (0.5) A 250 V AC 5E4	2 A 12 V DC 10E4	1 A 24 V DC 10E4	0.5 A 15 V 5E4	0.1 A 24 V DC 5E4	30 mA 12 V 5E4	Terminal type	Terminal description	Contact material	Operating force (N)	Operating position (OP) (mm)	Difference travel max. (mm)	Free position (FP) max. (mm)	Permissible total travel position (TP) (mm)	Actuator description	Mechanical life endurance	Miscellaneous	Stock version
Normally closed contact (SPNC)																				
1010.7601		○								9.5 long	Ag	0.25 - 0.6	2.2 ±0.6	0.9	0.4	3.5		1E6		
Normally open contact (SPNO)																				
1010.7401		○								9.5 long	Ag	0.25 - 0.6	2.2 ±0.6	0.9	0.4	3.5		1E6		
1010.7402		○								9.5 long	Ag	0.45 - 1.05	2.2 ±0.6	0.9	0.4	3.5		1E6		
1017.0801						○				9.2 long	CuBe silver plated	0.15 - 0.5	2.2 ±0.6		0	3.2		1E6	without approval mark	○
1017.5701						○					CuSn silver plated	0.15 - 0.5	1.4 ±0.6		3.6	0.4		1E6	without approval mark	
1017.0851							○			9.2 long	Au	0.15 - 0.5	2.2 ±0.6		0	3.2		1E6	without approval mark	
Changeover switch (SPDT momentary)																				
1010.9705	○	○									Au	0.45 - 1.05	3.8 ±0.6	0.9	6.6	2		10E4		
1010.9752	○	○									Ag	0.45 - 1.05	6.9 ±0.6	0.9	9.7	5.1		10E4		
1010.9802	○	○									Ag	0.45 - 1.05	3.8 ±0.6	0.9	6.6	2		10E4		
1010.9852	○	○									Ag	0.45 - 1.05	6.9 ±0.6	0.9	9.7	5.1		10E4		○
1010.0101		○								6.5 long	Ag	0.25 - 0.6	2.2 ±0.6	0.9	0.4	3.5		1E6	without approval mark	○
1010.3001		○								6.5 long	Ag	0.25 - 0.6	0.9 ±0.6	0.9	3.6	0.2		1E6		
1010.4402		○								straight	Ag	0.25 - 0.6	1.3 ±0.6	0.9	4.1	0		1E6	small base without approval mark	
1010.0304		○								9.5 long	Ag	0.25 - 0.6	2.2 ±0.6	0.9	0.4	3.5		1E6		
1010.2003		○								9.5 long	Au	0.45 - 1.05	2.2 ±0.6	0.9	0.4	3.5		1E6		
1010.4103		○								straight	Au	0.25 - 0.6	2.2 ±0.6	0.9	0.4	3.5		1E6	without approval mark	○
1010.6002		○								standing	Au	0.45 - 1.05	11.2 ±0.6	0.9	13.8	9.9		1E6		○
1010.6003		○								standing	Ag	0.25 - 0.6	11.2 ±0.6	0.9	13.8	9.9		1E6		○
1010.7102		○								6.5 long	Ag	0.45 - 1.05	2.2 ±0.6	0.9	0.4	3.5		1E6	without approval mark	
1010.7172		○								6.5 long	Au	0.45 - 1.05	0.9 ±0.6	0.9	3.6	0.2		1E6	without approval mark	
1010.7352		○								9.5 long	Ag	0.45 - 1.05	0.9 ±0.6	0.9	3.6	0.2		1E6		
1010.8102		○								straight	Ag	0.45 - 1.05	2.2 ±0.6	0.9	0.4	3.5		1E6	without approval mark	
1014.6151			○	○						standing	Au	0.3 - 0.8	6.6 ±0.5	0.6	8.6	5.3		50E4	without approval mark	
Changeover switch with OFF position in the center (SPDT momentary - Center OFF)																				
1017.0153						○				9.2 long	Au		≤ 2.1		0	0.5		1E6	without approval mark operating range max. 4.2	

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Technical drawing of a mechanical part, showing a side view and a top view. The side view includes dimensions: 15 (total height), 10 (height to the start of the angled section), 60° (angle of the section), 6.5 (width of the upper section), 14.5 (width of the lower section), 2.1 (width of the base), and 2.6 (width of the base). The top view includes dimensions: 5 (width), 5 (width), and 3 (width). The side view also shows labels: RL (Roller), FP (Flange Pin), OP (Outer Pin), and IP (Inner Pin). The top view shows a dimension of 2.2 ± 0.4 for the distance between the pins.

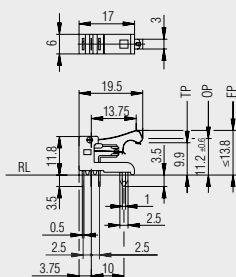
Technical drawing of a mechanical part (Fig. 1.10) showing a front view and a side view. The front view includes dimensions: 15, 10, 9.5, 14.5, 2.1, 2.6, 3.5, and 0.4. It also shows a 90° angle and labels 'RL', 'FP', 'OP', and 'TP'. The side view shows dimensions 5 and 3.

[illegible]

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Basic type 1010

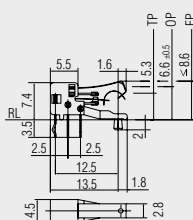


PCB terminal vertical:

A switch actuation vertical to the PCB can be implemented in a confined space with this version.



Basic type 1014



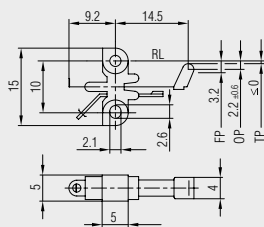
Vertical PCB terminal:

According to the same functional principle as basic type 1010, but in smaller size.

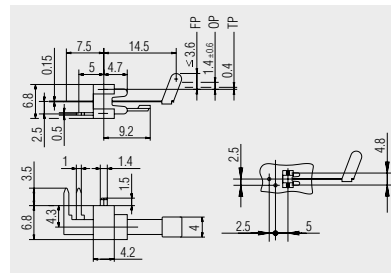
This basic type is designed for low voltages and has no approval mark.



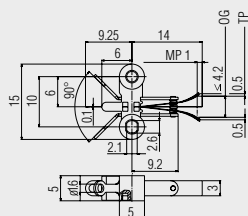
Basic type 1017
without snap function



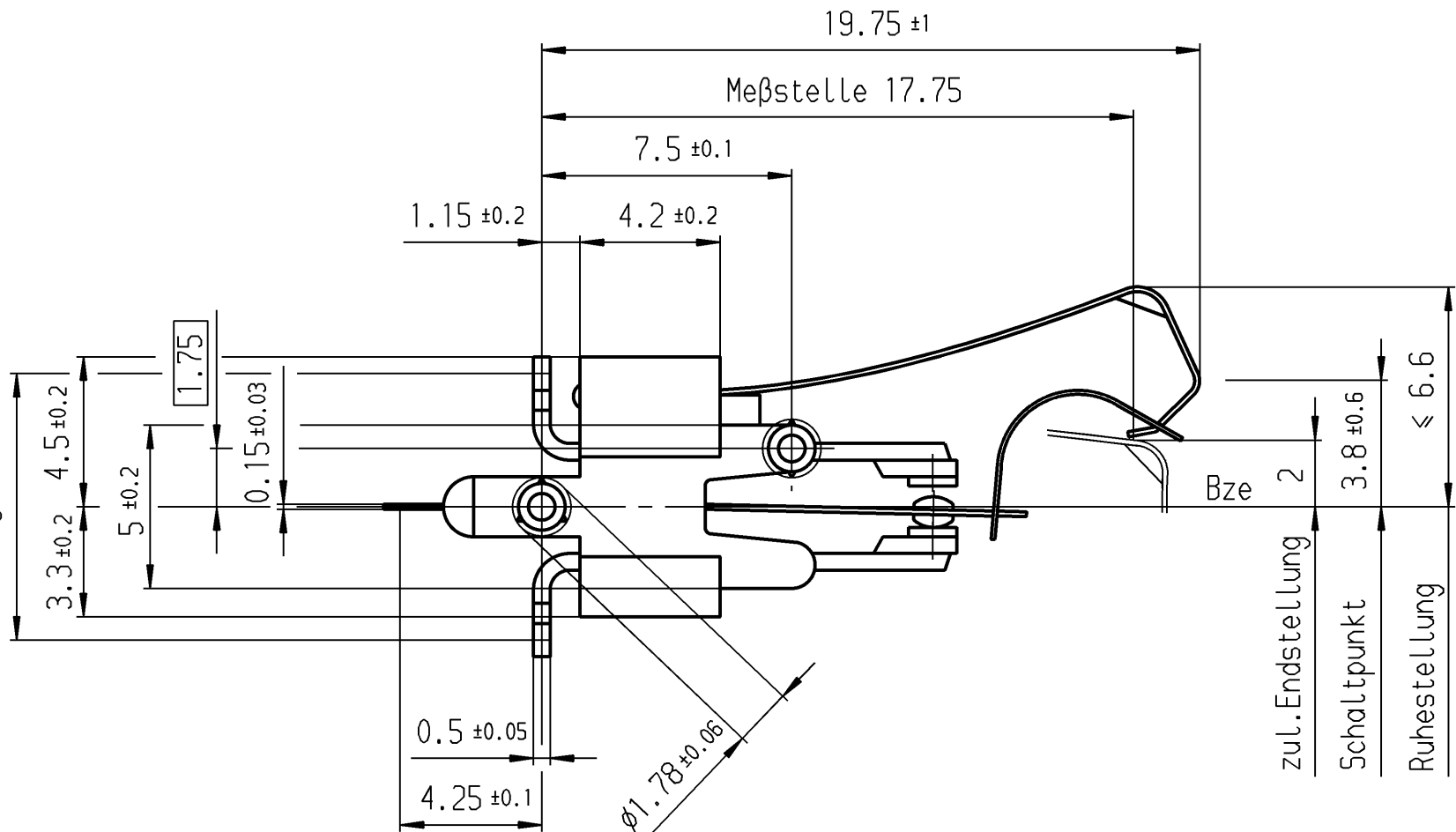
Solder terminal
normally open contact version



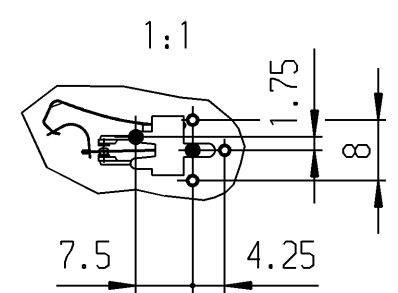
PCB terminal left angled



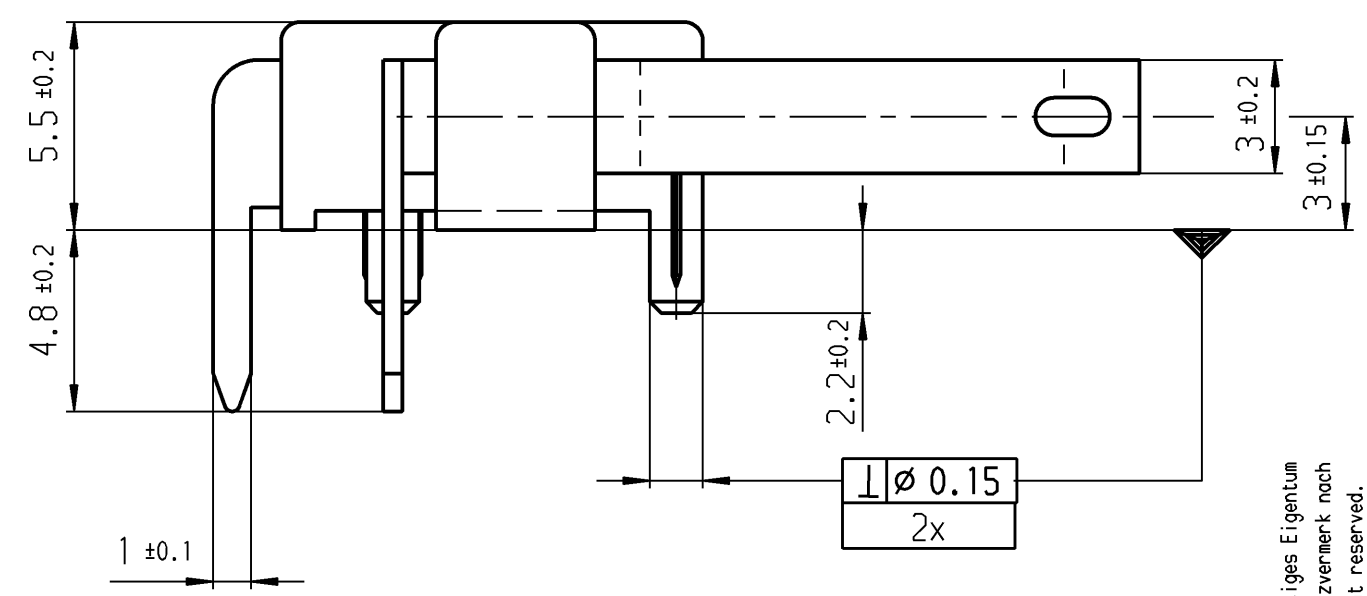
Changeover switch with OFF position
in the center



Empfohlenes Lochbild, Bestückungsseite
Toleranzen nach DIN IEC 326 Teil 3 sehr fein



- ⊕ Anschlußloch $\phi 1.3^{+0.1}$
- Fixierloch $\phi 1.6^{+0.1}$



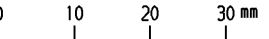
Aufschrift

Ⓜ 1010 μ
G04
Auf Verpackung
MARQUARDT
1010.9802 μ
G04 entspricht:
2(0.5)/250~50E3 T85
6(2)/250~25E3 T85

Wechsler 1-polig

Schalt-Betätigungskraft 0.45 bis 1.05 N
Differenzweg ≤ 0.9 mm

Diese Unterlage ist geistiges Eigentum der Marquardt GmbH. Schutzvermerk nach DIN 34 beachten. Copyright reserved.

Für Form und Lage FOR SHAPE AND LOC.		Allgemeintoleranzen UNTOLERANCED DIMENSIONS		Pause COPY		Blatt SHEET		Typ K	Zeichn./DRAWING NO. 1010.9802	Index i																						
						Original DIN A3					Maßstab SCALE 5:1																					
Für Winkel FOR ANGLE ± 2°		PROJECTION 		Abmasse und Nennmassbereiche Angaben in mm ALL DIMENSIONS ARE IN MILLIMETRES		<table><tr><td></td><td>Laengen LENGTH</td><td>Radien RADII</td></tr><tr><td>0-6</td><td>± 0.1</td><td>± 0.2</td></tr><tr><td>>6-15</td><td>± 0.15</td><td>± 0.3</td></tr><tr><td>>15-30</td><td>± 0.2</td><td>± 0.5</td></tr><tr><td>>30-70</td><td>± 0.3</td><td></td></tr><tr><td>>70-120</td><td>± 0.4</td><td>± 10%</td></tr><tr><td>>120-200</td><td>± 0.8</td><td></td></tr></table>			Laengen LENGTH	Radien RADII	0-6	± 0.1	± 0.2	>6-15	± 0.15	± 0.3	>15-30	± 0.2	± 0.5	>30-70	± 0.3		>70-120	± 0.4	± 10%	>120-200	± 0.8				Schnappschalter	
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0-6	± 0.1	± 0.2																														
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>70-120	± 0.4	± 10%																														
>120-200	± 0.8																															
i	31946	18.07.01	pfu	m		CAD Medusa		Z	MARQUARDT Marquardt GmbH, D-78604 Rietheim-Weilheim																							
h	30626	10.11.00	pfu	l		gez./DRAWN BY 14.07.97 gue																										
g	25481	07.11.97	sig	k		gepr./CHECKED BY																										
f	23442	04.07.95	gue	j		Ersatz für/REPLACEMENT OF Z.gL.Nr.vom 15.01.91																										
Ausg. ISSUE	Änderung REVISION	gez. DRAWN BY	Ausg. ISSUE	Änderung REVISION	gez. DRAWN BY																											