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 brief)
Flammability		UL 94 V-2 UL 94 HB
Glow wire test temperature		850 °C
Material	actuator	spring steel / PA glass fiber-reinforced / PA / metal (only 1017.0153)
	housing	PA glass fiber-reinforced / PA
	terminals	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		







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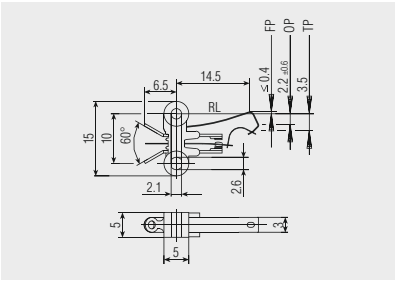
	6 (2) A 250 V AC 25E3	2 (0.5) A 250 V AC 20E4	2 (0.5) A 250 V AC 5E4	2 A 12 V DC 10E4	1 A 24 V DC 10 E4	0.5 A 15 V 5E4	0.1 A 24 V DC 5E4	30 mA 12 V 5E4	Terminal type	Terminal description	Contact material	Operating force in N	Operating position (OP) in mm	Difference travel max. in mm	Free position (FP) max. in mm	Permissible total travel position (TP) in 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							●				CuBe 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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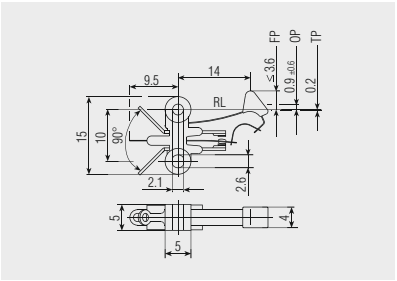
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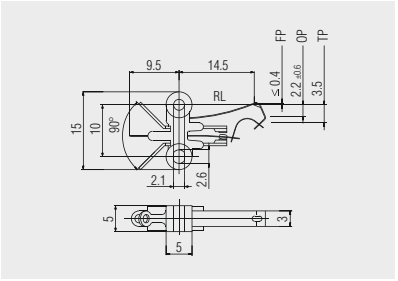
Basic type 1010



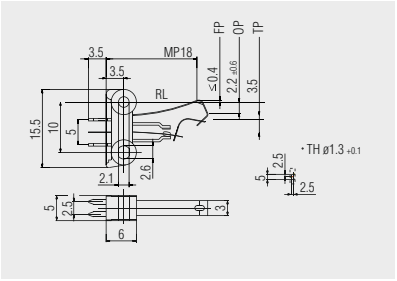
Solder terminal 30° angled



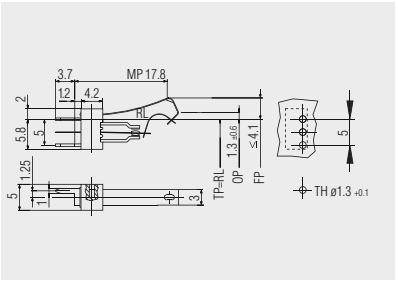
Solder terminal 45° angled



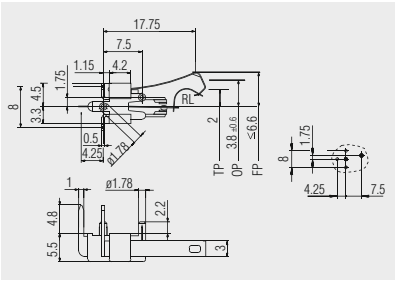
Solder terminal 45° angled



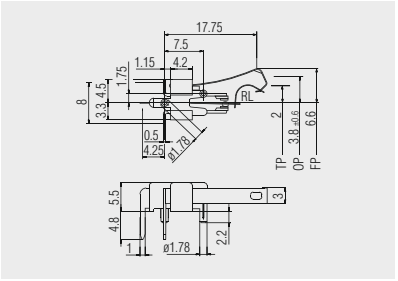
PCB terminal straight



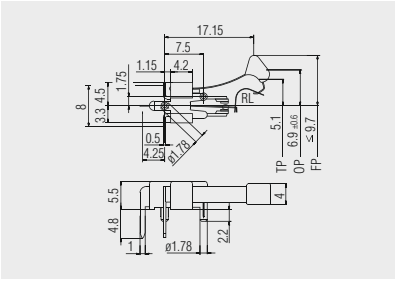
PCB terminal straight



PCB terminal left angled



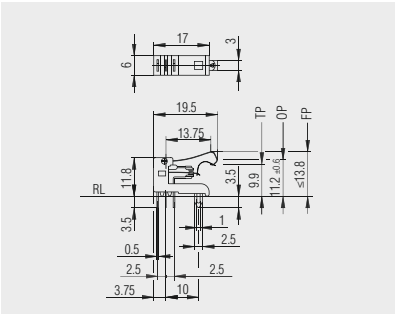
PCB terminal right angled
1010.9802



PCB terminal right angled
1010.9852



Basic type 1010



PCB terminal vertical:

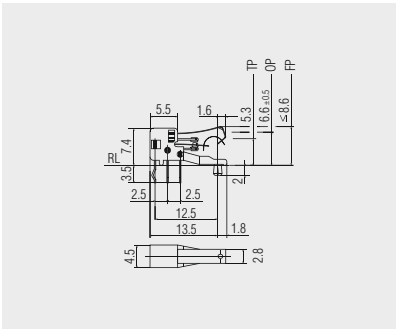
A switch actuation vertical to the PCB can be implemented in a confined space with this version.

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Basic type 1014



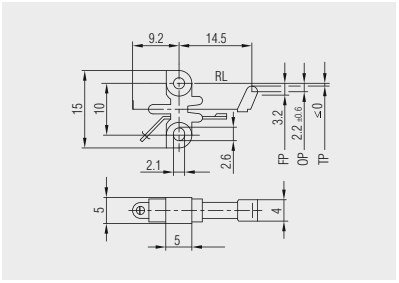
Vertical PCB terminal:

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

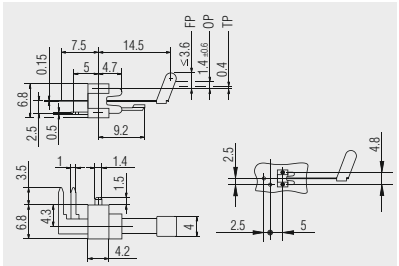
This basic type is designed for low voltages and has no approval mark.



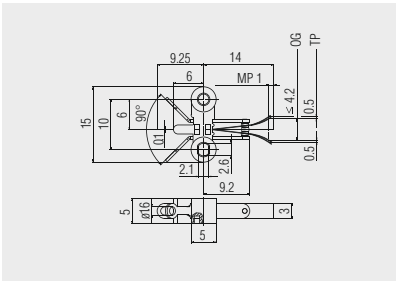
Basic type 1017
without snap function



Solder terminal
normally open contact version



PCB terminal left angled



Changeover switch with OFF position
in the center

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 ≙ **50 000** switching cycles