

SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

TO 16 (4) A / 12 (12) A 250 V AC







PRODUCT FEATURES

- ◆ Million times proven double lifting contact system with at least 100 000 mechanical switching cycles
- ◆ High electrical rating up to 16 A
- ◆ High mechanical load capacity up to 750 N (for foot actuation)
- ◆ Great variety
- ◆ Variable housing and pushbutton form with holders
- ◆ With pole separating wall (basic type 1689)

ON REQUEST


































- ◆ Special plastics
- ◆ Other terminal variants
- ◆ Customized actuators and housing contours
- ◆ Cable assembly
- ◆ Behind PCB mountable variants

Mechanical life endurance	10E4
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
Ambient temperature	terminal side -20 °C ... +100 °C ... +125 °C actuating side -20 °C ... +55 °C
Flammability	UL 94 (actuator: V-0, socket: V-1, housing: V-2) UL 94 V-0 (product-dependent)
Glow wire test temperature	850 °C
Material	actuator PBTP / PA Latamid / PA (product-dependent) housing PA / PA glass fiber-reinforced / PA C3U / PA Latamid glass fiber-reinforced (product-dependent) terminals silver plated / tinned / copper bare (product-dependent)
Plug force of the terminals	≤ 80 N
Approval marks	 /  /  /  (product-dependent)
Suitable for appliances of protection class II	



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 single-pole	16 (4) A 250 V AC 1E4	12 (12) A 250 V AC 5E4	12 (12) A 250 V AC 1E4	12 (8) A 250 V AC 1E4	10 (8) A 250 V AC 5E4	16 A 125 - 250 V AC	12 A 125 - 250 V AC 1/2 HP	5 A 125 V AC L	Terminal type	Terminal description	Contact distance in mm	Contact material	Operating force in N	Free position (FP) max. in mm	Operating position (OP) in mm	Permissible total travel position (TP) in mm	EN 60335 cap. 30 conform "G"	Miscellaneous	Actuator description	Stock version
ON / OFF switch (SPST)																				
1681.2102	●					●				vertical	≥ 3	Ag	7.0 ±2.5	26.5	23.8	22.2	●	resting pin		
1681.3104	●					●				4.8 horizontal	≥ 3	Ag	7.0 ±2.5	26.5	23.8	22.2	●			
1681.4403	●					●				horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7	●	resting pin		
1681.4431	●			●	●	●				5.3 long horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.8		flange on the end faces		
1681.1101			●	●		●				4.8 vertical	≥ 3	Ag	7.0 ±2.5	26.5	23.8	22.2				●
1681.1702			●	●		●				4.8 vertical	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7	●			
1681.3101			●	●		●				4.8 horizontal	≥ 3	Ag	7.0 ±2.5	26.5	23.8	22.2				
1681.3701			●	●		●				4.8 horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7				
1681.4402			●	●		●				horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7		rest pin		●
1681.4701			●	●		●				horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7		resting pin		
1681.5701											≥ 3	Ag	7.0 ±2.5	24	21.3	19.7				
Normally closed contact (SPNC)																				
1681.9408		●		●						horizontal	≥ 3	Ag	6.5 ±1.5	26.85	29.4	22.8		resting pin		
Normally open contact (SPNO)																				
1681.1202	●					●				4.8 vertical	≥ 3	Ag	7.0 ±2.5	26.5	23.8	22.2	●			
1681.1304	●					●				4.8 vertical	≥ 3	Ag	7.0 ±2.5	24	≤ 21.3	19.8	●			
1681.1354			●	●		●				4.8 vertical	≥ 3	Au	7.0 ±2.5	24	≤ 21.3	19.7	●	special housing contour		
1681.3501			●	●		●				4.8 horizontal	≥ 3	Ag	7.0 ±2.5	24	21.3	19.7				

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

FACT AND KEY SWITCHES






























SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

TO 16 (4) A / 12 (12) A 250 V AC

 double-pole	16 (4) A 250 V AC 1E4	12 (12) A 250 V AC 5E4	12 (12) A 250 V AC 1E4	12 (8) A 250 V AC 1E4	10 (8) A 250 V AC 5E4	16 A 125 - 250 V AC	12 A 125 - 250 V AC 1/2 HP	5 A 125 V AC L	Terminal type	Terminal description	Contact distance in mm	Contact material	Operating force in N	Free position (FP) max. in mm	Operating position (OP) in mm	Permissible total travel position (TP) in mm	EN 60335 cap. 30 conform "G"	Miscellaneous	Actuator description	Stock version
ON / OFF switch (DPST)																				
1682.7704	●					●				6.3 vertical	≥ 3	Ag	9.0 ±3	24	21.3	19.7	●			
1689.1302	●			●	●	●				4.8 vertical	≥ 3	Ag	9.0 ±3	24	≤ 20.95	19.7	●			
1689.3803	●		●		●	●				4.8 horizontal	≥ 3	Ag	9.0 ±3	24	≤ 20.95	19.7	●	special housing contour		
1682.1101				●	●	●				4.8 vertical	≥ 3	Ag	9.0 ±3	26.5	23.8	22.2				●
1682.1702				●	●	●				4.8 vertical	≥ 3	Ag	9.0 ±3	24	21.3	19.7	●			
1682.1802				●	●	●				4.8 vertical	≥ 3	Ag	9.0 ±3	24	21.3	19.7		special housing contour		
1682.2701				●	●	●				vertical	≥ 3	Ag	9.0 ±3	24	21.3	19.7				
1682.3101				●	●	●				4.8 horizontal	≥ 3	Ag	9.0 ±3	26.5	23.8	22.2				●
1682.3702				●	●	●				4.8 horizontal	≥ 3	Ag	9.0 ±3	26.5	23.8	22.2	●			
1682.6101				●	●	●				180° angled	≥ 3	Ag	9.0 ±3	24	21.3	19.8	●			
Normally open contact (DPNO)																				
1689.4202	●			●	●	●				horizontal	≥ 3	Ag	9.0 ±3	24	≤ 20.95	19.7	●	rest pin		
1682.1201				●	●	●				4.8 vertical	≥ 3	Ag	9.0 ±3	26.5	23.8	22.2				
1682.1902				●	●	●	●			4.8 vertical	≥ 3	Ag	9.0 ±3	28.8	26.1	24.5		with cap 205.021.011		
1682.3201				●	●	●				4.8 horizontal	≥ 3	Ag	9.0 ±3	26.5	23.8	22.2				

ROCKER SWITCHES

PUSHBUTTON SWITCHES

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SLIDE SWITCHES

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FOOT SWITCHES

FACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

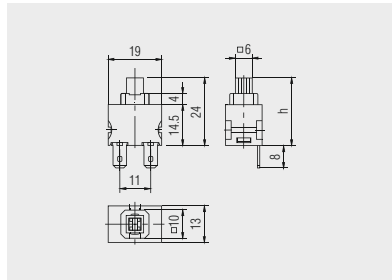
SENSORS

SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

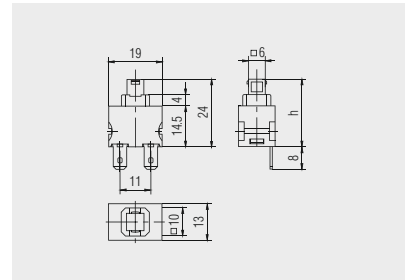
TO 16 (4) A / 12 (12) A 250 V AC



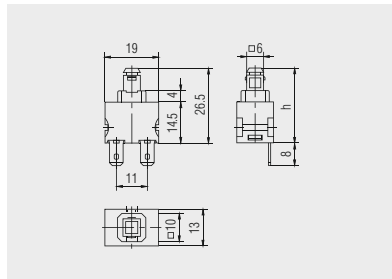
Basic type 1681
single-pole



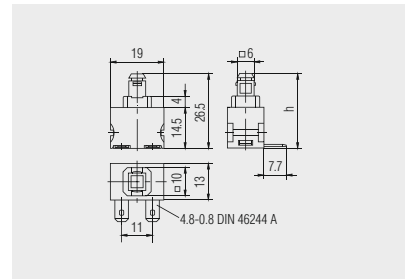
Quick-connect terminal 4.8 x 0.8
vertical (actuator with holder for
different caps)



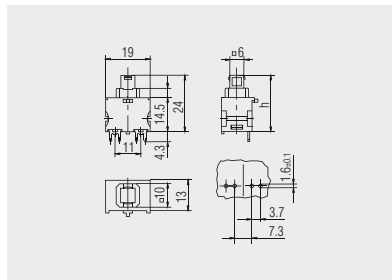
Quick-connect terminal 4.8 x 0.8
vertical (shortened actuator)



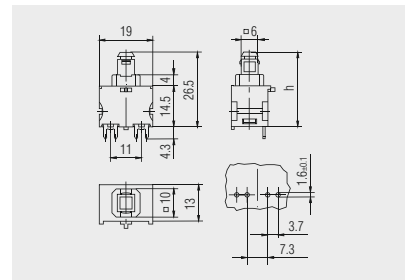
Quick-connect terminal 4.8 x 0.8
vertical (standard actuator)



Quick-connect terminal 4.8 x 0.8
horizontal (standard actuator)



PCB terminal vertical



PCB terminal vertical
(standard actuator)

Further information under

WWW.MARQUARDT-SWITCHES.COM

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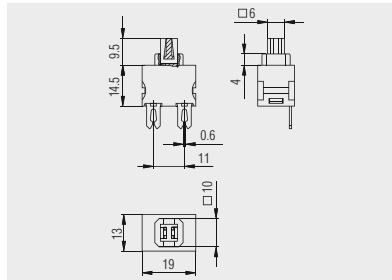
SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

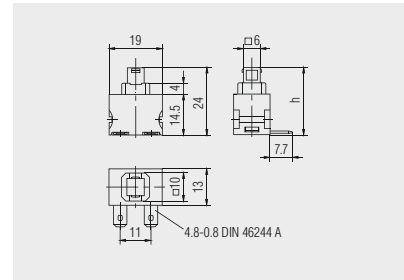
SENSORS



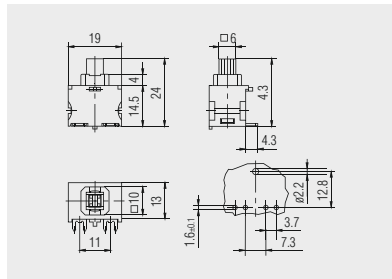
Basic type 1681
single-pole



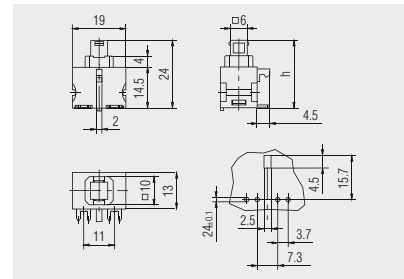
Cut terminal
(actuator with holder for different caps)



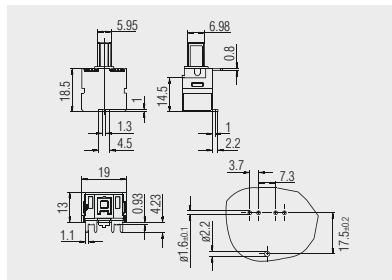
Quick-connect terminal 4.8 x 0.8
horizontal (shortened actuator)



PCB terminal horizontal
(actuator with holder for different caps)



PCB terminal horizontal
(shortened actuator)



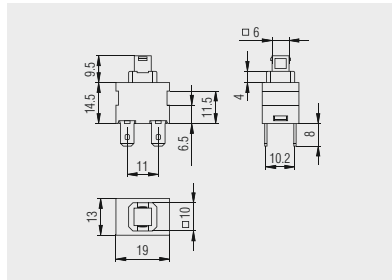
PCB terminal horizontal 1681.9408
normally closed contact SPNC
(actuator with holder for different caps)

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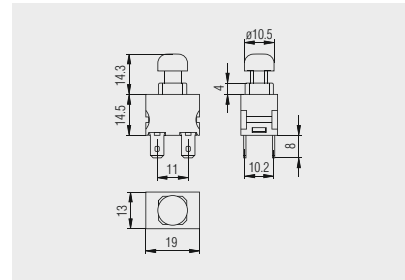
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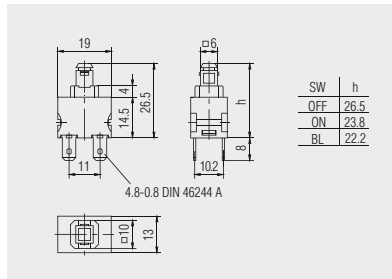
Basic types 1682 and 1689 double-pole



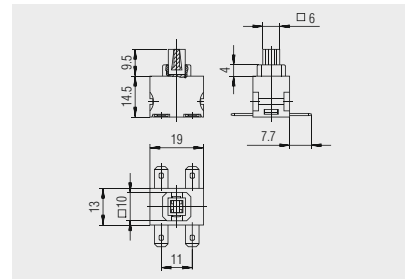
Quick-connect terminal 4.8 x 0.8 vertical (shortened actuator)



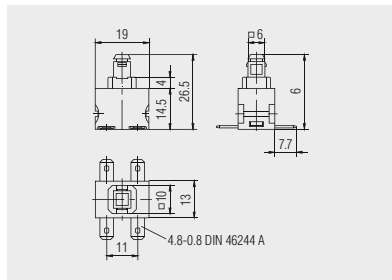
Quick-connect terminal 4.8 x 0.8 vertical (with mounted cap)



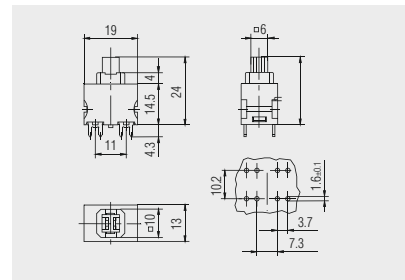
Quick-connect terminal 4.8 x 0.8 vertical (standard actuator)



Quick-connect terminal 4.8 x 0.8 horizontal (actuator with holder for different caps)



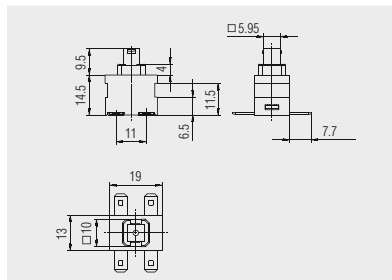
Quick-connect terminal 4.8 x 0.8 horizontal (standard actuator)



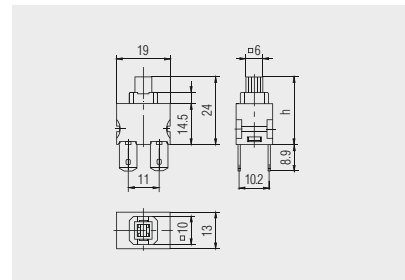
PCB terminal vertical (actuator with holder for different caps)



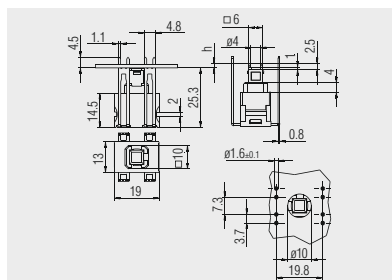
Basic types 1682 and 1689 double-pole



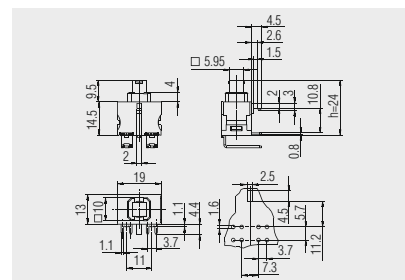
Quick-connect terminal 4.8 x 0.8 horizontal (shortened actuator without cut-out)



Quick-connect terminal 6.3 vertical (actuator with holder for different caps)



PCB terminal 180° angled (shortened actuator)



PCB terminal horizontal (shortened actuator without cut-out)

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