

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

TACT 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				

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TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

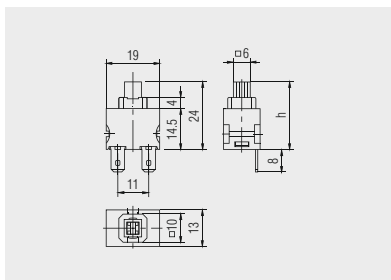
SENSORS

SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

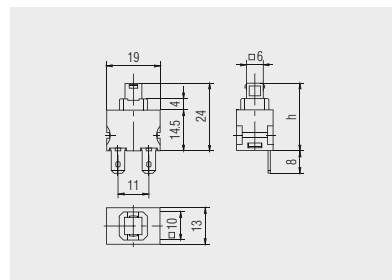
TO 16 (4) A / 12 (12) A 250 V AC



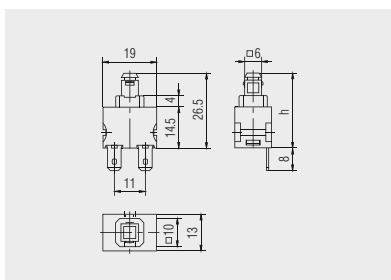
Basic type 1681
single-pole



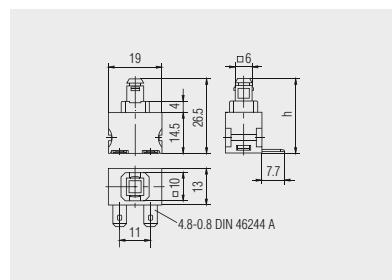
Quick-connect terminal 4.8 x 0.8
vertical (actuator with holder for
different caps)



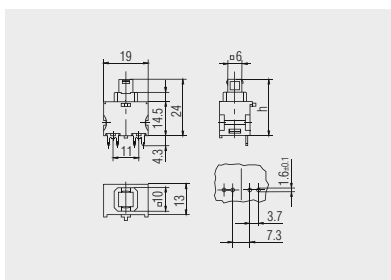
Quick-connect terminal 4.8 x 0.8
vertical (shortened actuator)



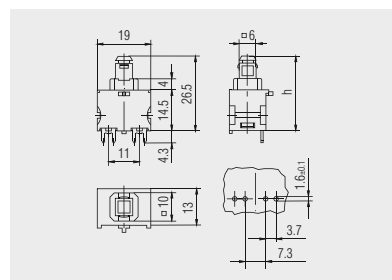
Quick-connect terminal 4.8 x 0.8
vertical (standard actuator)



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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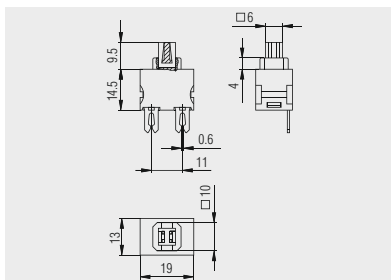
SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

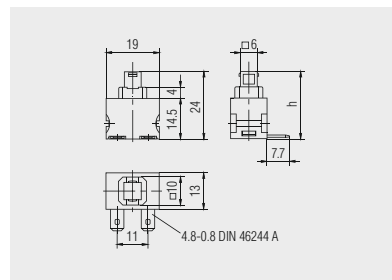
SENSORS



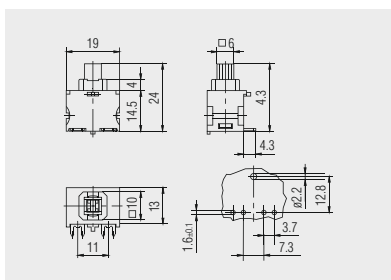
Basic type 1681
single-pole



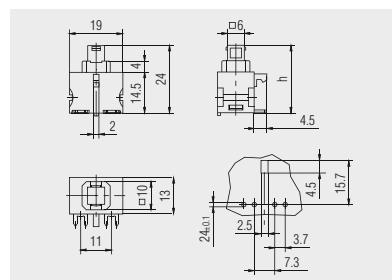
⌋ Cut terminal
(actuator with holder for different caps)



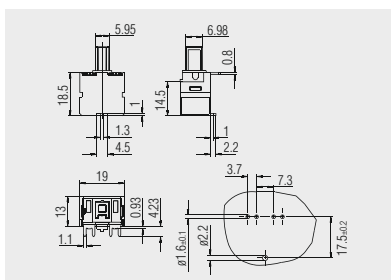
⌋ Quick-connect terminal 4.8 x 0.8
horizontal (shortened actuator)



⌋ PCB terminal horizontal
(actuator with holder for different caps)



⌋ PCB terminal horizontal
(shortened actuator)



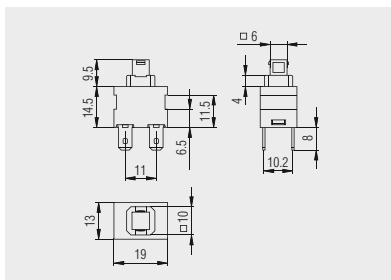
⌋ PCB terminal horizontal 1681.9408
normally closed contact SPNC
(actuator with holder for different caps)

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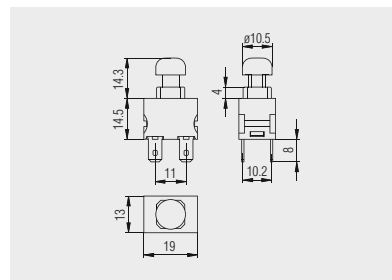
TO 16 (4) A / 12 (12) A 250 V AC



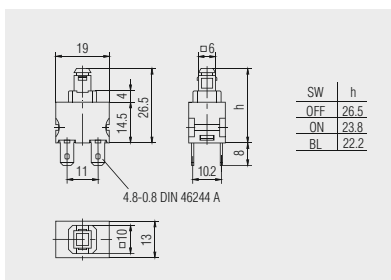
Basic types 1682 and 1689
double-pole



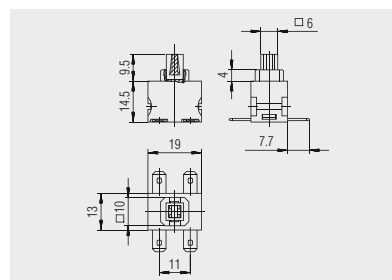
Quick-connect terminal 4.8 x 0.8
vertical (shortened actuator)



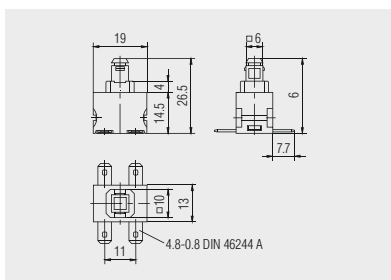
Quick-connect terminal 4.8 x 0.8
vertical (with mounted cap)



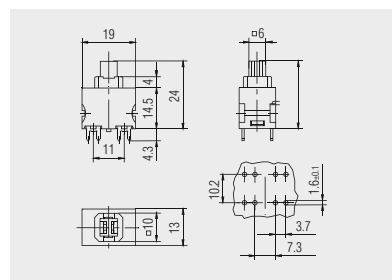
Quick-connect terminal 4.8 x 0.8
vertical (standard actuator)



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



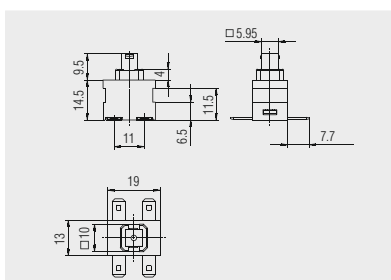
Quick-connect terminal 4.8 x 0.8
horizontal (standard actuator)



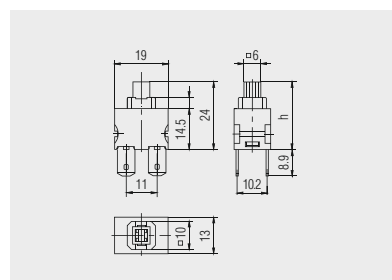
PCB terminal vertical
(actuator with holder for different caps)



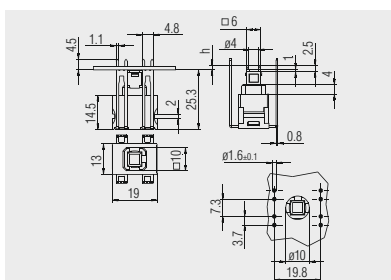
Basic types 1682 and 1689
double-pole



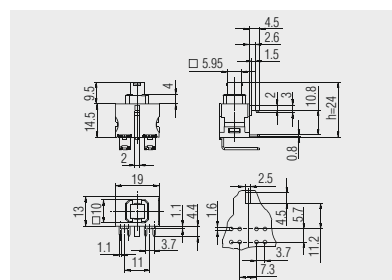
Quick-connect terminal 4.8 x 0.8
horizontal
(shortened actuator without cut-out)



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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