

# ➔ 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

<b>Mechanical life endurance</b>	10E4
<b>Contact resistance (new condition)</b>	< 100 mOhm (1 A 12 V DC)
<b>Insulation resistance (new condition)</b>	> 100 MOhm (500 V DC)
<b>Proof tracking</b>	250 PTI
<b>Protection type</b>	IP 40
<b>Ambient temperature</b>	terminal side -20 °C ... +100 °C ... +105 °C ... +125 °C (product-dependent) actuating side -20 °C ... +55 °C
<b>Flammability</b>	UL 94 (actuator: V-0, socket: V-1, housing: V-2) UL 94 V-0 (product-dependent)
<b>Glow wire test temperature</b>	850 °C
<b>Material</b>	actuator: PBTP / PA / 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)
<b>Plug force of the terminals</b>	≤ 80 N
<b>Approval marks</b>	 /  /  /  /  (product-dependent)
<b>Suitable for appliances of protection class II</b>	



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


 single-pole	8 (8) A 250 V AC 1E4	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 (mm)	Contact material	Operating force (N)	Free position (FP) max. (mm)	Operating position (OP) (mm)	Permissible total travel position (TP) (mm)	EN 60335 cap. 30 conform "G"	Miscellaneous	Actuator description	Stock version
	<b>ON / OFF switch (SPST)</b>																				
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				
<b>Normally closed contact (SPNC)</b>																					
1681.9408			○			○					horizontal	≥ 3	Ag	6.5 ±1.5	26.85	29.4	22.8		resting pin		
<b>Normally open contact (SPNO)</b>																					
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  
 ECO  
 PUSH/DRIVE



# SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

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

 double-pole	8 (8) A 250 V AC 1E4	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 (mm)	Contact material	Operating force (N)	Free position (FP) max. (mm)	Operating position (OP) (mm)	Permissible total travel position (TP) (mm)	EN 60335 cap. 30 conform "G"	Miscellaneous	Actuator description	Stock version
	<b>ON / OFF switch (DPST)</b>																				
1682.7704	○					○					6.3 vertical	≥ 3	Ag	9.0 ± 3	24	21.3	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	○			
1682.2701					○	○	○				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	24	23.8	22.2	○			
1682.6101					○	○	○				180° angled	≥ 3	Ag	9.0 ± 3	24	21.3	19.8	○			
1682.6401	○										180° angled	≥ 3	Ag	10 ± 3	0.4 ± 0.3	2.3 ± 0.3	3.9 ± 0.3	○			
<b>Normally open contact (DPNO)</b>																					
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

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SWAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH/DRIVE

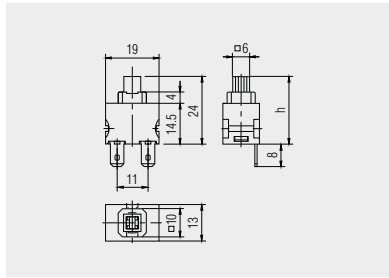


# SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

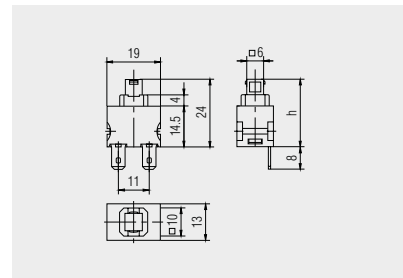
TO 16 (4) A / 12 (12) A 250 V AC



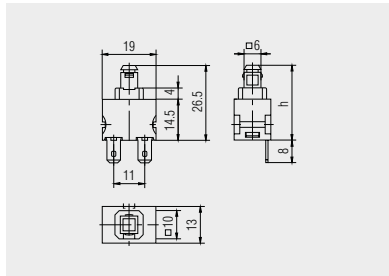
Basic type 1681  
single-pole



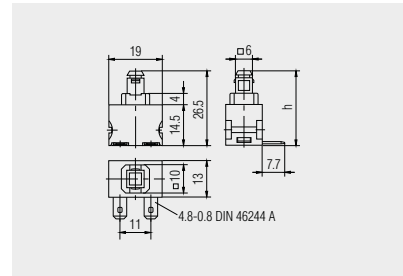
Quick-connect terminal 4.8 x 0.8  
vertical  
(actuator with holder for different caps)



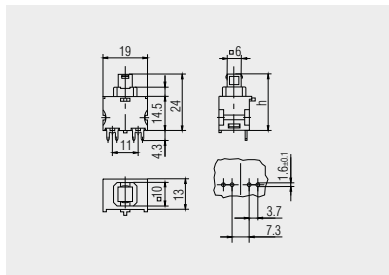
Quick-connect terminal 4.8 x 0.8  
vertical (shortened actuator)



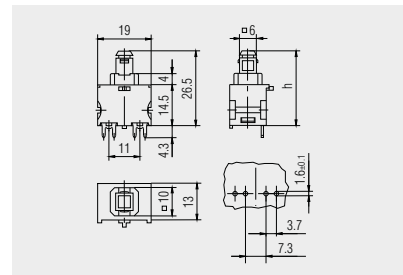
Quick-connect terminal 4.8 x 0.8  
vertical (standard actuator)



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



PCB terminal vertical



PCB terminal vertical  
(standard actuator)

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

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FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH-IN DRIVE

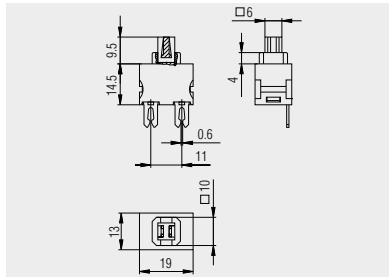


# SERIES 1680 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

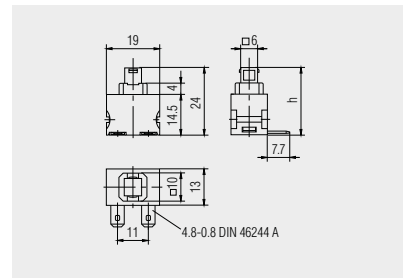
TO 16 (4) A / 12 (12) A 250 V AC



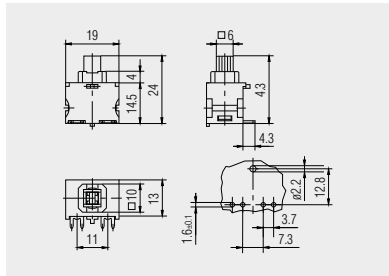
Basic type 1681  
single-pole



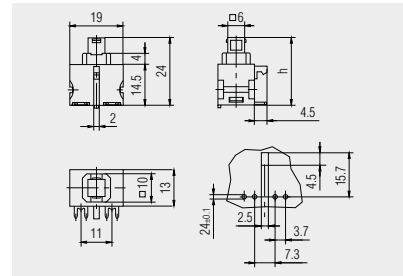
U Cut terminal  
(actuator with holder for different caps)



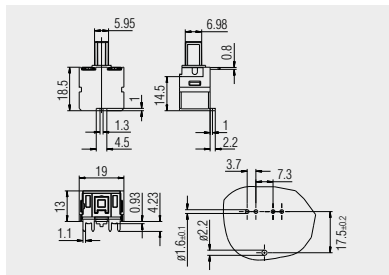
U Quick-connect terminal 4.8 x 0.8  
horizontal (shortened actuator)



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



U PCB terminal horizontal  
(shortened actuator)



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

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SWAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH'DRIVE

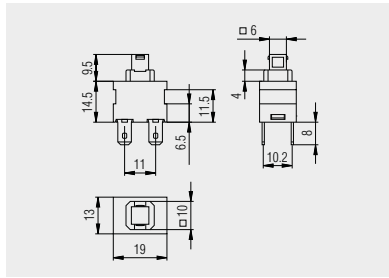


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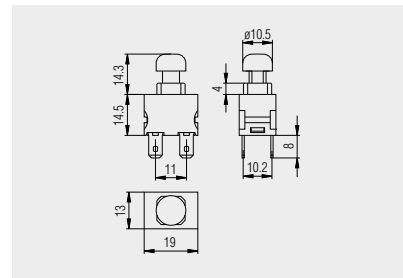
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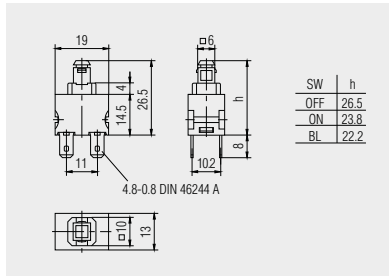
Basic types 1682 and 1689 double-pole



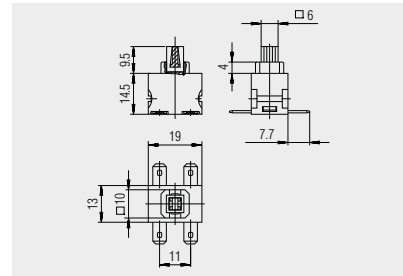
Quick-connect terminal 4.8 x 0.8 vertical (shortened actuator)



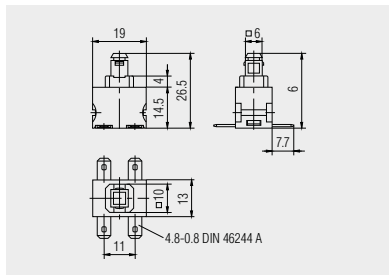
Quick-connect terminal 4.8 x 0.8 vertical (with mounted cap)



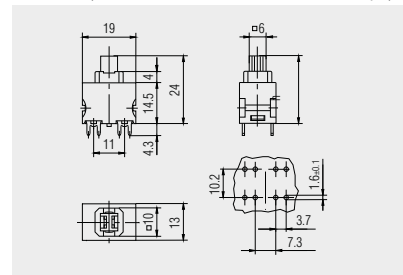
Quick-connect terminal 4.8 x 0.8 vertical (standard actuator)



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)

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

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PUSH-IN DRIVE

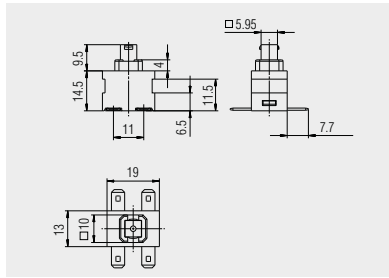


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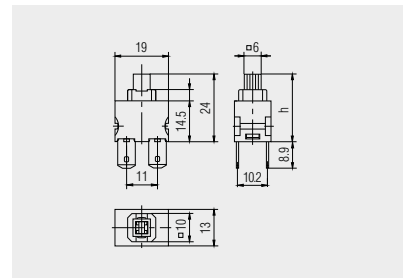
TO 16 (4) A / 12 (12) A 250 V AC



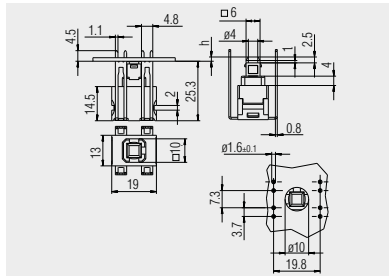
Basic types 1682 and 1689 double-pole



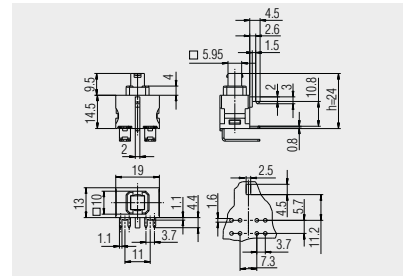
Quick-connect terminal 4.8 x 0.8 horizontal (shortened actuator without cut-out)



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)

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SWAP-ACTION SWITCHES

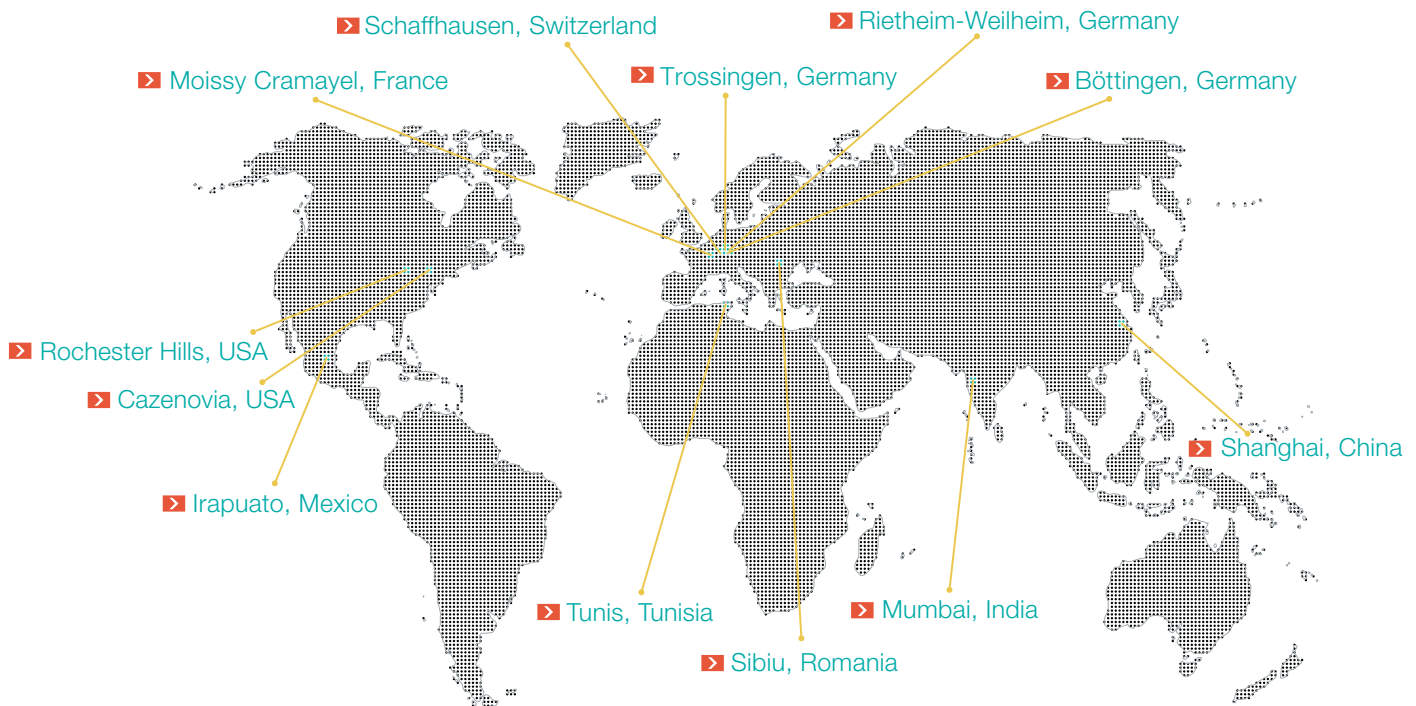
MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH'DRIVE

# MARQUARDT INTERNATIONAL.



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## Geuken



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