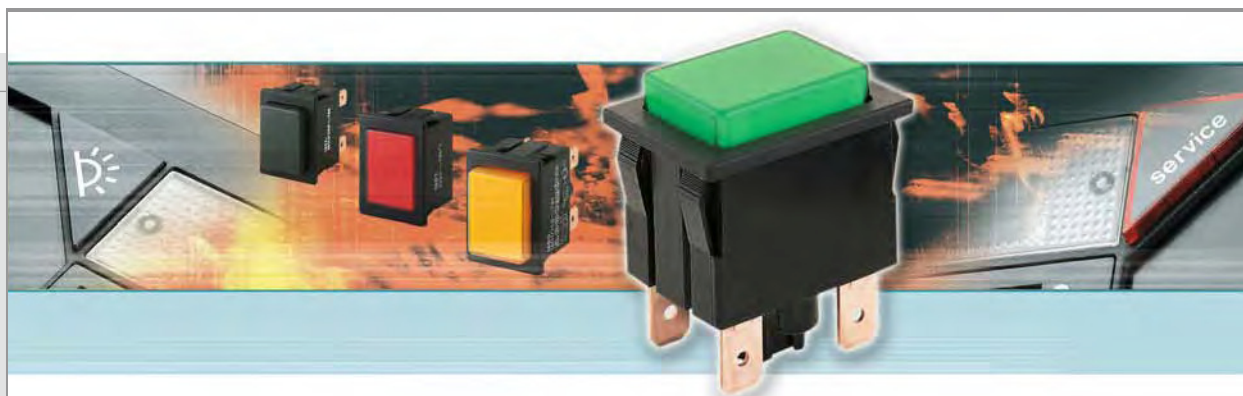


SERIES 1660 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

TO 16 (4) A 250 V AC



PRODUCT FEATURES

- ◆ Illuminated and non-illuminated pushbutton switches
- ◆ Proven jump contact switching system (double interrupting)
- ◆ Opening and closing speed independent of the actuating speed
- ◆ Product-dependent with external lamp terminal

ON REQUEST

- ◆ Other colors
- ◆ Other printing variants
- ◆ Other terminal types
- ◆ Other lamp variants
- ◆ Cable assembly

Mechanical life endurance	5E4
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 ... +85 °C actuating side -20 °C ... +55 °C
Flammability	UL 94 V-2
Glow wire test temperature	850 °C
Material	actuator: PC (product-dependent) / PA housing: PA / PA glass fiber-reinforced (product-dependent) terminals: Cu
Plug force of the terminals	≤ 80 N
Approval marks	CE / UL (product-dependent) / ENEC / CCC
Suitable for appliances of protection class II	



ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

SERIES 1660 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

TO 16 (4) A 250 V AC

 single-pole 	Lighting voltage in V	Actuator color / printing	Housing color	16 (4) A 250 V AC 1E4	16 (4) A 250 V AC	12 (4) A 250 V AC 1E4	12 A 250 V AC 1/2 HP	12 A 125 V AC 1/6 HP	Terminal type	Terminal description	Contact distance in mm	Contact material	Miscellaneous	Stock version
Normally open contact (SPNO)														
1665.3102	230			●						6.3 / 2 x 4.8	≥ 3	Ag	external lamp terminal	
ON / OFF switch (SPST)														
1662.0201				●						6.3	≈ 3	Ag		
Normally open contact (SPNO)														
1662.0101				●						6.3	≈ 3	Ag		●
Changeover switch (SPDT momentary)														
1664.0101						●				4.8	< 3	Ag		
 double-pole 	Lighting voltage in V	Actuator color / printing	Housing color	16 (4) A 250 V AC 1E4	16 (4) A 250 V AC	12 (4) A 250 V AC 1E4	12 A 250 V AC 1/2 HP	12 A 125 V AC 1/6 HP	Terminal type	Terminal description	Contact distance in mm	Contact material	Miscellaneous	Stock version
ON / OFF switch (DPST)														
1660.0201	230			●						6.3	≈ 3	Ag		●
1660.0202	230			●						6.3	≈ 3	Ag		●
1660.3202	230			●						6.3 / 2 x 4.8	≈ 3	Ag	external lamp terminal	
1660.0222	110							●		6.3	≈ 3	Ag		
1661.0220					●		●	●		6.3	≈ 3	Ag		
Normally open contact (DPNO)														
1661.0101				●						6.3	≈ 3	Ag		●
Changeover switch (DPDT)														
1663.0201						●				4.8	< 3	Ag		
Changeover switch (DPDT momentary)														
1663.0101						●				4.8	< 3	Ag		●

ROCKER SWITCHES

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TOGGLE SWITCHES

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FOOT SWITCHES

TACT AND KEY SWITCHES

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MICRO-SIGNAL SWITCHES

SENSORS

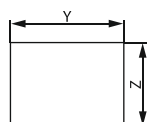
SERIES 1660 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

TO 16 (4) A 250 V AC

 Lamp	Lighting voltage in V	Actuator color / printing	Housing color	16 (4) A 250 V AC 1E4	16 (4) A 250 V AC	12 (4) A 250 V AC 1E4	12 A 250 V AC 1/2 HP	12 A 125 V AC 1/6 HP	Terminal type	Terminal description	Contact distance in mm	Contact material	Miscellaneous	Stock version
Lamp														
1667.0101	230									6.3				
1667.0102	230									6.3				
1667.0104	230									6.3				

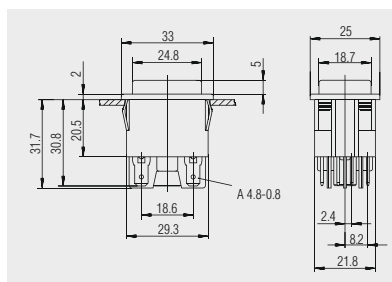


Basic types 1660, 1661 and 1663
double-pole
illuminated / non-illuminated

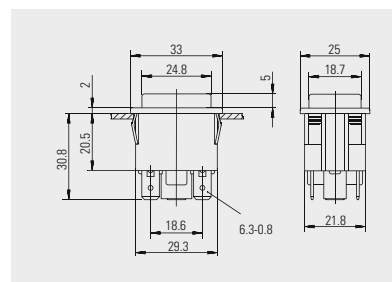


X = wall thickness

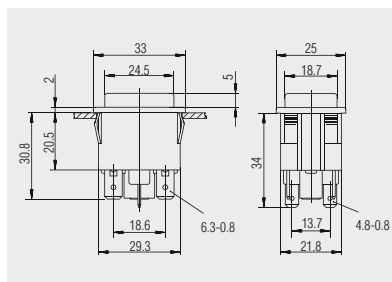
X	Y	Z
0.75 ... 1.0	30 +0.1	22.2 +0.2
1.0 ... 1.5	30.2 +0.1	22.2 +0.2
1.5 ... 3.0	30.4 +0.1	22.2 +0.2



Quick-connect terminal
4.8 x 0.8



Quick-connect terminal
6.3 x 0.8



Quick-connect terminal
6.3 x 0.8 / 2 x 4.8 x 0.8
with external lamp terminal

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MICRO-SIGNAL SWITCHES

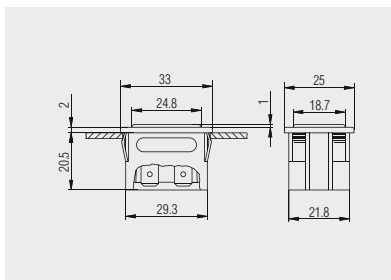
SENSORS

SERIES 1660 - SINGLE AND DOUBLE-POLE PUSHBUTTON SWITCHES

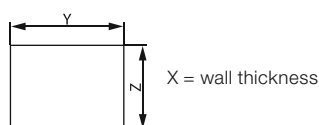
TO 16 (4) A 250 V AC



Basic type 1667
lamp



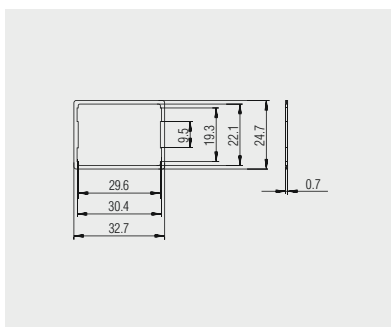
Quick-connect terminal
6.3 x 0.8



X	Y	Z
0.75 ... 1.0	30 +0.1	22.2 +0.2
1.0 ... 1.5	30.2 +0.1	22.2 +0.2
1.5 ... 3.0	30.4 +0.1	22.2 +0.2



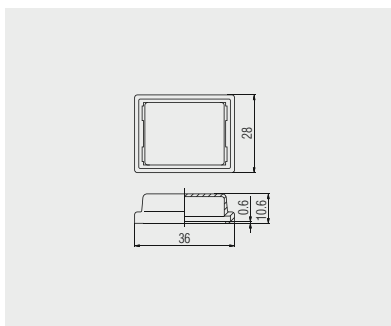
Gasket
340.040.011



Gasket of EPDM black for sealing
between switch and appliance for
increased dust and water protection.



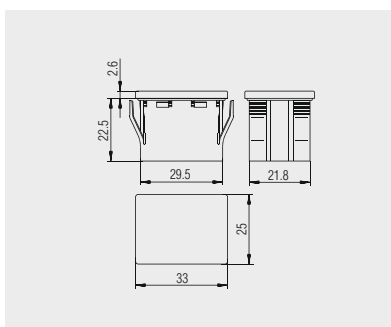
Protection cap
203.201.011



Transparent PVC - protection cap
for switches of the basic types 1660,
1662, 1663, 1664, 1665 and 1667.
Serves as dust and water protection
of the actuation side.



Dummy piece
203.028.013



Dummy piece for size of basic type
1667 of PA with housing and cover
in black and with mounted gasket
(340.040.011) for dust and water
protection.