



Shortron_M12_4pol_Connect_Alle

06.02.2023

Pushbutton with 4-pole M12 connector



General Data	
Type reference	$ S(VA)(SW)(T)(N)(TLR(L))(f)(WA)(WB)(WC)(L)(SSA)(I)(OI)(II)_Cyx \\ x $
Description	Short-stroke pushbutton with integrated M12 connector
Approvals	CE, cURus, ENEC10, VDE, UKCA
Contact type	2 NO / 1 NC + 1 NO / 1 NC + L / 1 NO + L / 1 NC / L
Degree of protection	IP65/67 (T,TLR,N, in the front); IP65 (SSA,STA,STB,WA,WB,WC, in the front); IP65/67 (on the rear)
Operation travel	2.3 mm (pushbutton)
Connection type	4-pole M12 connector (integrated), A coded
Contact material	AgNi / AgNi, gold-plated 5µm (_AU)
Max. storage temperature	-40°C 80°C
Max. operating temperature	-25°C 70°C
Mechanical life	switching cycles: 1 million (T, TL) 30,000 (WA, WAL, WB, WC, SSA)
Electrical life (rated load)	switching cycles: 1 million (T, TL), DC13: max. 100,000 30,000 (WA, WAL, WB, WC, SSA)
Contact resistance NO	< 50 mOhm (new state)
Contact resistance NC	< 50 mOhm (new state)
Bouncing time NO	< 10ms
Bouncing time NC	< 10ms
Positive opening contact	acc. to EN60947-5-1,appendix K

Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

	alternate current	direct current
Utilisation category	AC15	DC13
Rated insulation voltage Ui	50 V	50 V
Rated operating voltage Ue	35 V	35 V
Rated operating current le	4 A	2 A
Breaking capacity		-
Continuous thermal current	4 A	-





Technical	Data -	Lamp
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Lamp socket none, with integrated 3 mm LED white

Max. lamp voltage 30 V AC/DC

Max. lamp output 14 mA (at 24 V DC)

Additional data

22.3 mm Mounting aperture

1.5 ... 1.9 Nm Tightening torque (mounting nut)

Release twist release, left or right

Mounting position any

Standards EN 60947-5-1, EN 61058-1

Material group

Overvoltage category Ш

Pollution degree 2

Electrical features gold-plated contacts

Operational voltage 20 mV...35 V AC/DC

Switching current 1 mA ... 100 mA

Breaking capacity (ohmic load) 250 mW

Contact resistance (new state) < 50 mOhm

Tightening torque (M12-connector) max. 0.4 Nm

Note

NC / NO ...NC contact / NO contact

S ...Shortron

VA ...stainless steel

SW ...black

N ...pilot light

T ...pushbutton head

 $TLR(L)(f) \ ... pushbutton \ with \ ring \ illumination \ (f=colour: W,R,Y,G,B)^{*2}; \ (L=lasered)$

SSA12-31 ...key switches

WA ...selector switch, 2 positions, maintained

WB ...selector switch, 3 positions, maintained

WC ...selector switch, 3 positions, maintained/momentary

L ...illumination option

*2 with ring illumination

...Cyxx
"y" version
0 = 4-pole connector, silver contact

3 = 4-pole connector, gold-plated contact







"xx" pin assignment xx Pin 1 Pin 2 Pin 3 Pin 4 Type 02 NO (1) NO (1) NO (2) NO (2) 2 NO 03 NC NC NO NO 1 NC 1 NO 04 NC NC LED - LED + 1 NC + LED 05 NO NO LED - LED + 1 NO + LED 06 NC NC n.c. n.c. 1 NC 07 NO NO n.c. n.c. 1 NO 08 COM NC n.c. NO 1 NC 1 NO 09 COM NO (1) n.c. NO (2) 2 NO 10 n.c. n.c. LED - LED + LED

Safety instructions / mounting instructions

- the connector must not be connected or disconnected under load
 the single connector pin may be loaded with max. 4 A
- for types with bridged connection ("COM", pin assignment xx = 08, 09) a max. of 1 A is allowed

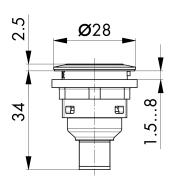
Photos (exemplary)

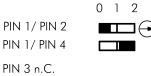
Test data acc. to UL60947-5-1 / C22.2 No. 60947-5-1

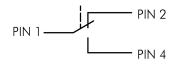
Rating

24 V DC 2 A general purpose





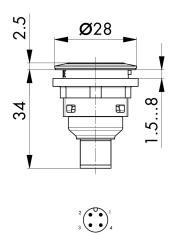


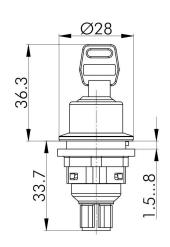






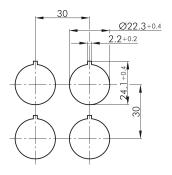












[Bild exemplarisch]