

Shortron_M12_4pol_Connect_Alle

28.10.2021

Pushbutton with 4-pole M12 connector



General Data

Type reference	S(VA)(SW)(T)(N)(TLR(L))(f)(WA)(WB)(WC)(L)(SSA...)(I)(O)(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
Protection class	II (protective insulation)
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 Ie	4 A	2 A
Breaking capacity	-	-
Continuous thermal current	4 A	-



Technical Data - Lamp

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

Mounting aperture	22.3 mm
Tightening torque (mounting nut)	1.5 ... 1.9 Nm
Release	twist release, left or right
Mounting position	any
Standards	EN 60947-5-1, EN 61058-1
Material group	I
Overvoltage category	II
Pollution degree	2

Electrical features gold-plated contacts

Operational voltage	20 mV...35 V AC/DC
Switching current	1 mA ... 100mA
Breaking capacity (ohmic load)	250 mW
Contact resistance (new state)	< 50 mOhm
Tightening torque (M12-connector)	max. 0.4 Nm

Note

O / I ...NC contact / NO contact

S ...Shortron
 VA ...stainless steel
 SW ...black
 N ...pilot light
 T ...pushbutton
 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
 01 - - - - -
 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. 4A
- for selector / key switches with bridged connection ("COM", pin assignment 08,09) a max. of 1A is allowed

Photos (exemplary)

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

Rating

24VDC 2A general purpose



