



Ex position switch Ex 97

Features/Options:

- Ex zone 1 and 21
- Thermoplastic enclosure
- Cold-resistant down to -60 °C
- High degree of protection IP 66 / IP 67 / IP 69
- Design to EN 50047
- Wiring compartment
- Double insulated
- Available with contact overlapping
- Actuator can be repositioned by 4 x 90°
- Rocking lever can be repositioned by 10° steps
- With 3 contacts available on request
- Attention: Please state required international approvals with your order!

Notes

- 1 Ex"e" cable gland M20x1.5 included in delivery

Technical data

Applied standards	EN 60947-5-1, EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31, EN ISO 13849-1, EN ISO 14119
Enclosure	thermoplastic, glass-fibre reinforced, impact resistant, self-extinguishing UL 94 V-0
Cover	thermoset, glass-fibre reinforced, impact resistant, self-extinguishing UL 94 V-0
Sealing	silicone
Switch type	type 1
Coding level	no coding
Tightening torque	cover screws: 0.4 ... 0.45 Nm connecting thread of cable gland: max. 2 Nm cap nut of cable gland: max. 5 Nm
Degree of protection	IP 66 to EN 60079-0 + IEC/EN 60529 (... -60 °C) IP 67 to EN 60079-0 + IEC/EN 60529 (... -20 °C) IP 67 / IP 69 to IEC/EN 60529 IP 69K to ISO 20653
B _{10d} (10 % load)	2 million
T _M	max. 20 years
Switch insert	Type 8080/1 ...
Contact material	Silver, nickel-plated
Switching system	slow or snap action, positive break NC contacts \ominus ; positive break depends on the actuator used
Switching elements	1 NC/1 NO, 2 NC or 1 NC/1 NO contact with contact overlapping, type Zb
Connection	screw connection terminals
Cable cross-section	min. 0,75 mm ² / AWG 18, max. 1,5 mm ² / AWG 16, incl. conductor ferrules

Errors and omissions excepted.



Ex position switch Ex 97

Technical data

Cable entry	M20 x 1,5; screwing depth max. 9 mm; use only Ex approved and certified cable glands with min. degree of protection IP 66 and suitable for the specified ambient temperature range
Utilisation category	AC-15
Rated operating current I_e	max. 2 A or 4 A <input type="checkbox"/>
Rated operating voltage U_e	max. 500 VAC, 2Ö: max. 400 VAC max. 250 VAC for unequal potential
Degree of pollution	3
Mechanical life	> 1 million operations
Impact energy	max. 7 J
Temperature class	T6
Ambient temperature	-60 °C ... +55 °C max. 4 A, +60 °C max. 2 A
Short-circuit protection	2 A / 4 A gG/gN fuse
Ex marking	II 2G Ex db eb IIC T6 Gb, II 2D Ex tb IIIC T80 °C Db IECEX Ex db eb IIC T6 Gb, Ex tb IIIC T80 °C Db
Approvals	BVS 16 ATEX E 052 IECEX BVS 16.0052



Ordering details



Plunger with collar W, * with safety function

* with safety function

Type
Ex ES 97 W-11 -60°C
Ex ES 97 W-02 -60°C
Ex ES 97 W-11U -60°C

Ex EM 97 W-11 -60°C

Material no.
1292311
1430320
on request

1430318



Ex position switch Ex 97

Ordering details



Roller plunger R, * with safety function

* with safety function

Type
Ex ES 97 R-11 -60°C
Ex ES 97 R-02 -60°C
Ex ES 97 R-11U -60°C

Ex EM 97 R-11 -60°C

Material no.
1336578
1430395
1217578

1430872



Long roller plunger RL, * with safety function

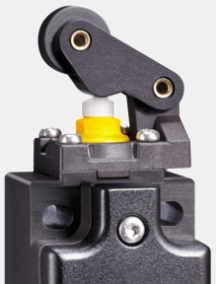
* with safety function

Type
Ex ES 97 RL-11 -60°C
Ex ES 97 RL-02 -60°C
Ex ES 97 RL-11U -60°C

Ex EM 97 RL-11 -60°C

Material no.
1336619
1430443
on request

1431037



Roller lever with collar WH, * with safety function

* with safety function

Type
Ex ES 97 WH-11 -60°C
Ex ES 97 WH-02 -60°C
Ex ES 97 WH-11U -60°C

Ex EM 97 WH-11 -60°C

Material no.
1336662
1430485
on request

1431110



Parallel roller lever with collar WPH, * with safety function

* with safety function

Type
Ex ES 97 WPH-11 -60°C
Ex ES 97 WPH-02 -60°C
Ex ES 97 WPH-11U -60°C

Ex EM 97 WPH-11 -60°C

Material no.
1336702
1430536
on request

1431162



Ex position switch Ex 97

Ordering details



Rocking lever D, * with safety function

* with safety function

Type
Ex ES 97 D-11 -60°C
Ex ES 97 D-02 -60°C
Ex ES 97 D-11U -60°C

Ex EM 97 D-11 -60°C

Material no.
1336746
1430584
on request

1431213



Rocking lever with rubber roller D50, * with safety function

* with safety function

Type
Ex ES 97 D50-11 -60°C
Ex ES 97 D50-02 -60°C
Ex ES 97 D50-11U -60°C

Ex EM 97 D50-11 -60°C

Material no.
1404832
1430640
on request

1431266



Adjustable rocking lever DS

Type
Ex ES 97 DS-11 -60°C
Ex ES 97 DS-02 -60°C
Ex ES 97 DS-11U -60°C

Ex EM 97 DS-11 -60°C

Material no.
1336789
1430692
1225938

1431346



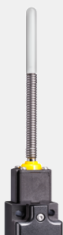
Rod lever DD

Type
Ex ES 97 DD-11 -60°C
Ex ES 97 DD-02 -60°C
Ex ES 97 DD-11U -60°C

Ex EM 97 DD-11 -60°C

Material no.
1336834
1430751
on request

1431494



Spring rod with plastic tip TK

Type
Ex ES 97 TK-11 -60°C
Ex ES 97 TK-02 -60°C

Ex EM 97 TK-11 -60°C

Material no.
1415038
1430809

1336295

Errors and omissions excepted.



Ex position switch Ex 97

Ordering details



Plastic spring rod TTK

Type
Ex ES 97 TTK-11 -60°C
Ex EM 97 TTK-11 -60°C

Material no.
1451424
1450769

Accessories



Ex e cable glands for series Ex
97 / Ex 99

Type
Ex e cable gland M20x1.5 -60 °C

Material no.
1405448