



## 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
- N.B.: Please state required international approvals with your order!

### Notes

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

### Technical data

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	glass-fibre reinforced, shock-proof thermoplastic (PA 66), self-extinguishing UL 94-V0
Cover	glass-fibre reinforced, shock-proof thermoset material, self-extinguishing UL 94-V0
Switch type	type 1
Coding level	no coding
Switch insert	Type 8080/1 ...
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
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, min. 0,75 mm <sup>2</sup> AWG 18, max. 1,5 mm <sup>2</sup> AWG 16, incl. conductor ferrules
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
B <sub>10d</sub> (10 % load)	2 million
T <sub>M</sub>	max. 20 years
Utilisation category	AC-15
I <sub>e</sub>	max. 2 A or 4 A <input type="checkbox"/>

Errors and omissions excepted.



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### Technical data

U <sub>e</sub>	max. 500 VAC, 2Ö: max. 400 VAC max. 250 VAC for unequal potential
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
Max. fuse rating	6 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

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



Roller plunger R

\* 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  
on request  
  
1430872



## Ex position switch Ex 97

### Ordering details



Long roller plunger RL

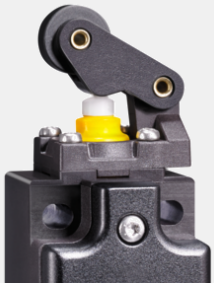
\* with safety function

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

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

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



Rocking lever D

\* 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



## Ex position switch Ex 97

### Ordering details



Rocking lever with rubber roller  
D50

\* 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



Plastic spring rod TTK

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

Material no.  
1451424  
  
1450769



Ex position switch  
Ex 97

## Accessories



Ex e cable glands for series Ex  
97 / Ex 99

Type  
Ex e cable gland M20x1.5 -60°C

Material no.  
1405448