



Ex position switch Ex 99

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 50041
- 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 approvals for Russia 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 60079-14, 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 IP 67 / 69 to EN 60529
Contact material	Silver, nickel-plated
Switching system	slow or snap action, positive break NC contacts \ominus
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 ² AWG 18, max. 1,5 mm ² 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 _{10d} (10 % Load)	2 million
T _M	max. 20 years
Utilisation category	AC-15
I _e	max. 2 A or 4 A <input type="checkbox"/>
U _e	max. 500 VAC, 2Ö: max. 400 VAC max. 250 VAC for unequal potential

Errors and omissions excepted.



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Technical data

Mechanical life	> 1 million operations
Impact energy	max. 7 J down to -40 °C max. 4 J down to -60 °C
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 E113 X IECEX BVS 16.0076X ERC Ex

Ordering details



Plunger S

* with safety function

Type

Ex ES 99 S-11 -60°C X
Ex ES 99 S-02 -60°C X
Ex ES 99 S-11U -60°C X

Ex EM 99 S-11 -60°C X

Material no.

1349234
1441051
on request

1404450



Roller plunger R

* with safety function

Type

Ex ES 99 R-11 -60°C X
Ex ES 99 R-02 -60°C X
Ex ES 99 R-11U -60°C X

Ex EM 99 R-11 -60°C X

Material no.

1349302
1441132
on request

1442354



Ex position switch Ex 99

Ordering details



Roller lever H

* with safety function

Type
Ex ES 99 H-11 -60°C X
Ex ES 99 H-02 -60°C X
Ex ES 99 H-11U -60°C X

Ex EM 99 H-11 -60°C X

Material no.
1349368
1441184
on request

1442452



Parallel roller lever PH

* with safety function

Type
Ex ES 99 PH-11 -60°C X
Ex ES 99 PH-02 -60°C X
Ex ES 99 PH-11U -60°C X

Ex EM 99 PH-11 -60°C X

Material no.
1349434
1441262
on request

1442544



Rocking lever D

* with safety function

Type
Ex ES 99 D-11 -60°C X
Ex ES 99 D-02 -60°C X

Ex EM 99 D-11 -60°C X

Material no.
1349491
1441962

1442636



Adjustable rocking lever DS

Type
Ex ES 99 DS-11 -60°C X
Ex ES 99 DS-02 -60°C X
Ex ES 99 DS-11U -60°C X

Ex EM 99 DS-11 -60°C X

Material no.
1349735
1442032
on request

1442717



Rod lever DD

Type
Ex ES 99 DD-11 -60°C X
Ex ES 99 DD-02 -60°C X

Ex EM 99 DD-11 -60°C X

Material no.
1349879
1442086

1443254



Ex position switch Ex 99

Ordering details



Spring rod with plastic tip TK

Type
Ex ES 99 TK-02 -60°C X

Material no.
1442152

Ex EM 99 TK-11 -60°C X

1443893