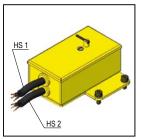# ExSwitch Auxiliary switch, retrofit

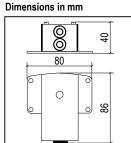## 2 potential free contacts, adjustable on site, adaptable to ExMax actuators size S and M

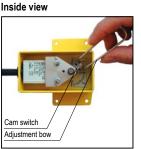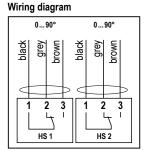| Type	Technical data	Installation area
ExSwitch	Explosion proof, auxiliary switch with 2 adjustable contacts, potential free	Zone 1, 2, 21, 22
... - CT	Housing with seawater resistant coating	

Product views

ExSwitch	Dimensions in mm	Inside view	Wiring diagram	Adaption to actuator

HS 1
HS 2

80 / 40 / 86

Cam switch
Adjustment bow

0...90° 0...90°
black grey brown   black grey brown
1 2 3   1 2 3
HS 1   HS 2

Description

ExSwitch is an adaptable auxiliary switch for use in hazardous areas. It indicates end and interim position.

ExSwitch has 2 potential free contacts installed in a housing. Both contacts can be adjusted separately, even during operation.

ExSwitch fits on any ExMax actuator size S and M and can be mounted directly on the actuator's shaft. ExSwitch is delivered with a cable of approx. 1 m. For electrical connection inside hazardous areas, an Ex-e terminal box is required (see accessories ExBox).

Technical data

Adaption to actuator	direct mounting to the actuator
Function	2 auxiliary switches with potential free contacts
Max. current	24 VAC/DC / 3 A – 250 VAC / 0.25 A
	min. 5 V / 4 mA
Mechanical life	2×10^6 switch cycles
Cable connection	1 cable for each switch, approx. 1 m cable length,
	3×0.75 mm², cable diameter ~ Ø 7,2 mm
Ambient temperature	−40...+60 °C
Accuracy	< 5°
Switch hysteresis	approx. 5 %
Housing material	Steel, painted
Housing material switches	Plastic, Thermoplast
Material switch contact	Silver, gold-plated
Delivery	ExSwitch, squared connection (mechanical linkage to
	ExMax actuators), 4 screws, 1 adjustment bow for
	adjustment of switching position, position indicator

Mounting and adjustment

1. Put the mechnical linkage into the squared connection of the actuator.
2. Mount the ExSwitch to the actuator and fix it with the 4 screws.
3. Wire the actuator (Ex-e terminal box required!).
4. Drive actuator to lower end position.
5. Open the ExSwitch and adjust each switch with the adjustment bow. You have to open the screw to turn the cam switch, afterwards tighten the screw.
6. Make a mechanical check that the switches are working in the required position.
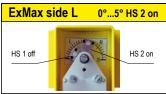7. Lock the enclosure.

ExMax side L   0°...5° HS 2 on
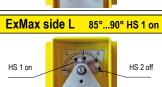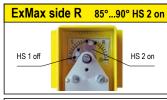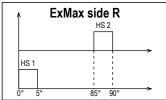

HS 1 off   HS 2 on

ExMax side R   0°...5° HS 1 on

HS 1 on   HS 2 off

ExMax side L   85°...90° HS 1 on

HS 1 on   HS 2 off

ExMax side R   85°...90° HS 2 on

HS 1 off   HS 2 on

ExMax side L
HS 2
HS 1
0° 5° 85° 90°

ExMax side R
HS 2
HS 1
0° 5° 85° 90°

Accessories

ExBox-...	Terminal box Ex-e

Approbations

Switches:		
ATEX directive	2014/34/EU	
EC type-approved	EPS 14 ATEX 1 766 X	
IECEx certified	IECEx EPS 14.0092 X	
Approval for gas	II 2 G Ex d IIC T6, T5 Gb	
Types ...-CT	II 2 G Ex d IIB T6, T5 Gb	
Approval for dust	II 2 D Ex tb IIIC T80°C T95°C Db	
IP protection	IP66 in acc. with EN 60529	
Housing ExSwitch:		
IP protection	IP43 in acc. with EN 60529	

Subject to change!