

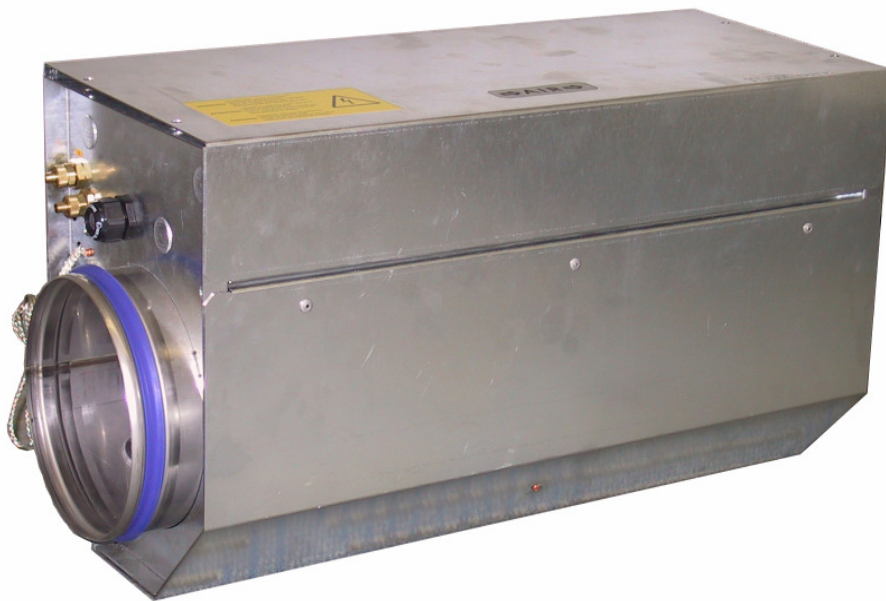
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## Product Information Ex Shut-Off Damper



### AK-Ex



Gebrüder Trox GmbH

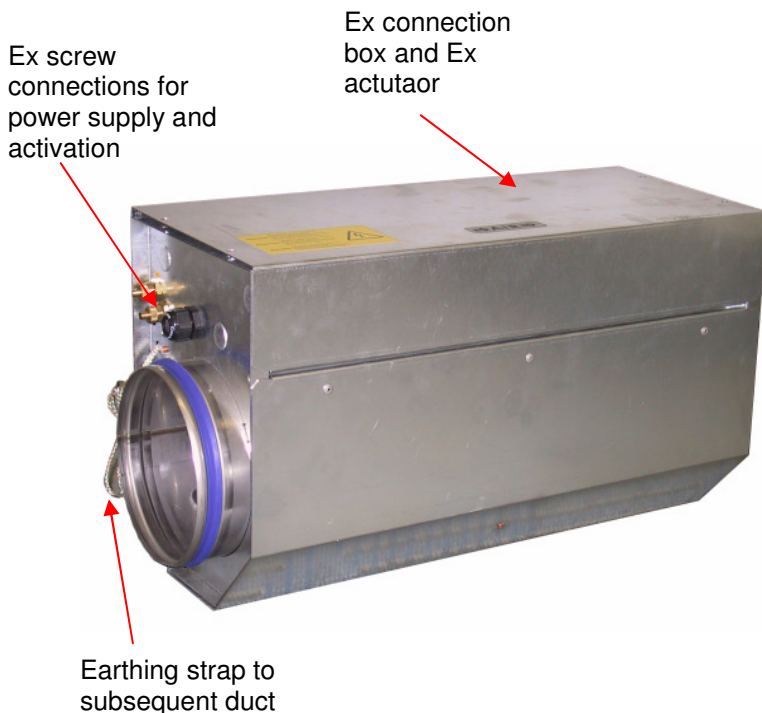
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## Product Information Ex Shut-Off Damper

### Shut-off damper

The AK-Ex shut-off damper including, the Ex actuator, is used for shutting off volume flow in ventilation and air conditioning systems in Group II potentially explosive atmosphere, zone 1 and 2. The housing of the AK-Ex shut-off damper is made of galvanised sheet steel. All parts and components that are exposed to the process air are made from stainless steel (1.4301) and are therefore resistant to chemicals. The shut off damper is designed and certified in compliance with ATEX requirements. The electrical components mounted in the potentially explosive atmosphere are ATEX certified, verified by the manufacturer's certificates supplied with the unit.

With its plastic seal, the AK-Ex shut-off damper shuts off volume flow airtight in accordance with DIN/EN 1751, Class 4 and Class 3. The shut-off damper is supplied only with an electrical actuator. The actuator is also available as a spring return actuator (TOF) or equipped with limit switches.



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## Product Information Ex Shut-Off Damper

### Design features:

- Designed to be used as a volume flow shut-off element in potentially explosive atmosphere of zone 1 and 2
- Airtight in compliance with DIN EN 1751, Class 4 and Class 3
- Adjustment only via electrical actuator (also available as spring return actuator or with limit switches)
- Maximum duct pressure 1500 Pa
- Maintenance-free control damper mechanism of shut-off damper
- Operating temperature 10–50C

### Housing:

- Please refer to technical data Available dimensions
- Suitable for air ducts conforming to DIN EN 1506 and DIN EN 13180, with inlet bead for sealing system (sealing system included in scope of delivery)
- Leakage air flow rate conforming to Class A, DIN EN 1751

### Materials:

- Housing made from galvanised sheet metal
- All parts and components that are exposed to the process exhaust air are made from stainless steel (1.4301)
- Polyurethane plain bearings

### Connection diagram AK-Ex with Open – Closed override control with/without spring return element

#### Preliminary remarks

The distribution voltage provided by the customer depends on the selected motor duty factor and the selected distribution voltage. The values specified below are approximate values as component-related dispersion can occur within the electronic circuitry. When the distribution voltage is switched on, the switched-mode power supply of the actuator requires approx. 4.5 A for a period of 1 second for initialisation purposes (the cable dimensioning must take this requirement into account).

		Nennstrom in Abhängigkeit der Motorlaufzeit				
Spannung	Strom	3/7,5s	15s	30s	60s	120s
230 V	I <sub>Nenn</sub>	0,5 A	0,3 A	0,15 A	0,10 A	0,10 A
120 V	I <sub>Nenn</sub>	0,75 A	0,4 A	0,3 A	0,25 A	0,25 A
48 V	I <sub>Nenn</sub>	2,0 A	0,5 A	0,3 A	0,2 A	0,2 A
24 V	I <sub>Nenn</sub>	4,7 A	1,45 A	0,52 A	0,4 A <td 0,4 A	

#### Wiring diagram ExMax-5.10-Y and ExMax-15.30-Y

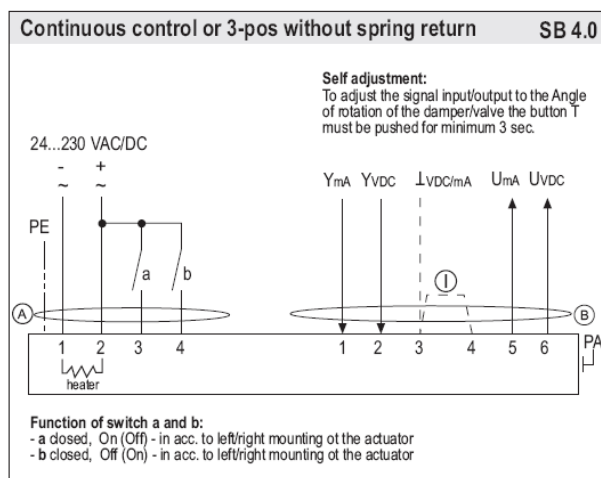


Abb. für T0S



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## Product Information Ex Shut-Off Damper

### Specification text

#### ***Explosion-protected shut-off damper (AK-Ex)***

Circular shut-off damper with protective housing used for shutting off volume flows in ventilation and air conditioning systems. Consisting of galvanised sheet steel housing as well as tube and damper blade made from A2 stainless steel. Shut-off damper designed in compliance with ATEX requirements and ATEX certified. Includes factory-fitted Ex actuator with Ex terminal box. The shut-off damper is approved for its intended use in Group II potentially explosive atmospheres, zone 1 and 2. Housing with control damper is airtight in compliance with DIN EN 1751, Class 4 and Class 3 and suitable for air ducts conforming to DIN EN 1506 and DIN EN 13180 with same connection diameter at both ends. Shut-off damper including inlet bead for sealing system.

Duct pressure up to max. 1500 Pa  
Housing 600mm long  
Available in sizes 125, 160, 200, 250mm

#### *Materials:*

Galvanised sheet steel housing  
Stainless steel housing (1.4301)  
Stainless steel damper blade with TPE seal  
Plastic bearings

#### *ATEX certification*

 **II 2 G    c II T5/T6**

Make: Trox  
Type: AK-Ex