



## TYP AK-EX

### FOR LOW-LEAKAGE SHUT-OFF OF VOLUME FLOWS IN POTENTIALLY EXPLOSIVE ATMOSPHERES (ATEX)

Circular shut-off dampers for shutting off ducts, approved and certified for potentially explosive atmospheres (ATEX)

- ATEX-compliant construction and parts
- Approved for all gases, mists and vapours in zones 1 and 2, with electric actuator additionally for dusts in zones 21 and 22
- Suitable for supply air and extract air
- Electric or pneumatic actuator
- Any installation orientation
- Closed blade air leakage to EN 1751, class 4
- Casing air leakage to EN 1751, class C

Optional equipment and accessories

- Spring return actuator
- Auxiliary switch with adjustable switching points for capturing the end positions

## Application



Application

- Circular EXCONTROL shut-off dampers Type AK-Ex for shutting off or restricting the airflow in ventilation ducts of air conditioning systems
- For use in potentially explosive atmospheres (ATEX)
- Input signal to control shut-off damper blade is to be provided by others

Special features

- ATEX mark and certification

- ATEX equipment group II, approved for use in zones 1 and 2; electric actuator also for zones 21 and 22

## Description



### Construction

- Galvanised sheet steel
- P1: Inner duct powder-coated, silver grey (RAL 7001)
- A2: Inner duct in stainless steel

### Parts and characteristics

- Ready-to-install shut-off damper
- Damper blade with blade mechanism
- Connection for equipotential bonding
- Cable bushings suitable for use in potentially explosive atmospheres
- ATEX-compliant actuator is factory assembled and wired

### Attachments

- Electronic actuator:
- Auxiliary switch for capturing the end positions
- Pneumatic actuator

### Construction features

- Circular casing
- Construction and materials comply with the EU directive for use in potentially explosive atmospheres (ATEX)
- Spigot with lip seal, for circular connecting ducts to EN 1506 or EN 13180

### Materials and surfaces

- Casing and damper blade made of galvanised sheet steel
- Blade seal made of TPE plastic
- Plain bearings made of polyurethane
- Electric actuator made of die cast aluminium
- Pneumatic actuator made of plastic

## INFORMACJE TECHNICZNE

|   |              |
|---|--------------|
| Nominal sizes                           | 125 – 400 mm |
| Acceptable static differential pressure | 1500 Pa      |
| Operating temperature                   | 10 – 50 °C   |

**Quick sizing: Static differential pressure and sound pressure levels with open damper blade**

| Nominal size | V    |                   | Differential pressure | Air-regenerated noise |
|--------------|------|-------------------|-----------------------|-----------------------|
|              | l/s  | m <sup>3</sup> /h | $\Delta p_{st}$<br>Pa | $L_{pA}$<br>dB(A)     |
| 125          | 49   | 177               | 5                     | 20                    |
|              | 74   | 265               | 12                    | 28                    |
|              | 98   | 353               | 21                    | 34                    |
|              | 147  | 530               | 46                    | 45                    |
| 160          | 80   | 290               | 4                     | 18                    |
|              | 121  | 434               | 10                    | 26                    |
|              | 161  | 579               | 17                    | 32                    |
|              | 241  | 869               | 39                    | 40                    |
| 200          | 126  | 452               | 4                     | 17                    |
|              | 188  | 679               | 8                     | 24                    |
|              | 251  | 905               | 14                    | 29                    |
|              | 377  | 1357              | 32                    | 37                    |
| 250          | 196  | 707               | 3                     | 16                    |
|              | 295  | 1060              | 6                     | 22                    |
|              | 393  | 1414              | 11                    | 28                    |
|              | 589  | 2121              | 25                    | 37                    |
| 315          | 312  | 1122              | 2                     | 16                    |
|              | 468  | 1683              | 4                     | 24                    |
|              | 623  | 2244              | 8                     | 30                    |
|              | 935  | 3367              | 18                    | 41                    |
| 400          | 503  | 1810              | 1                     | 26                    |
|              | 754  | 2714              | 3                     | 37                    |
|              | 1005 | 3619              | 5                     | 45                    |
|              | 1508 | 5429              | 10                    | 58                    |

Circular shut-off dampers for shutting off or restricting the airflow in potentially explosive atmospheres, for supply air or extract air, available in 6 nominal sizes.

Suitable for duct pressures up to 1500 Pa.

Ready-to-install unit consists of the casing with damper blade, and parts for equipotential bonding and for use in potentially explosive atmospheres.

Spigot with lip seal, for circular connecting ducts to EN 1506 or EN 13180.

Closed blade air leakage to EN 1751, class 4 (nominal sizes 125 and 160, class 3).

Casing air leakage to EN 1751, class C.

**Special features**

- ATEX mark and certification
- ATEX equipment group II, approved for use in zones 1 and 2; electric actuator also for zones 21 and 22

**Materials and surfaces**

- Casing and damper blade made of galvanised sheet steel
- Blade seal made of TPE plastic
- Plain bearings made of polyurethane
- Electric actuator made of die cast aluminium
- Pneumatic actuator made of plastic

**Construction**

- Galvanised sheet steel
- P1: Inner duct powder-coated, silver grey (RAL 7001)
- A2: Inner duct in stainless steel

**Technical data**

- Nominal sizes: 125 – 400 mm
- Acceptable static differential pressure: 1500 Pa

AK-Ex

AK-Ex – P1 / 125 / T0F / NO

1

2

3

4

5

**1 Type**

**AK-Ex** Shut-off damper for potentially explosive atmospheres

**2 Material**

**P1** No entry; galvanised sheet steel  
Inner duct powder-coated, silver grey (RAL 7001)  
**A2** Inner duct in stainless steel

**3 Nominal size [mm]**

125  
160  
200  
250  
315  
400

**4 Actuator**

**T0S** Electronic Actuator  
**T0F** Spring return actuator  
**T0X** Actuator with auxiliary switch  
**T0Y** Spring return actuator with auxiliary switch  
**P50** Pneumatic Actuator

**5 Damper blade position**

Only for spring return actuators and pneumatic actuators  
**NO** Power off/Pressure off to open  
**NC** Power off/Pressure off to close