



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 ³ /h	Δp_{st} Pa	L_{pA} 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