



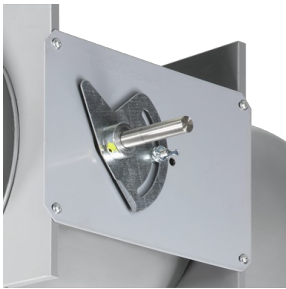
**PLASTIC SHUT-OFF  
DAMPER WITH FLANGE  
(AKK-FL)**

Variant with electric actuator



**VARIANT WITH CIRCULAR  
SPIGOT**

Variant with circular spigot



**VARIANT FOR MANUAL  
OPERATION**

Variant for manual operation



**TESTED TO  
VDI 6022**

Tested to VDI 6022

## AKK

### FOR CONTAMINATED AIR

Plastic circular shut-off dampers for shutting off aggressive media volume flows in air conditioning systems

- Maintenance-free damper blade mechanism
- Closed blade air leakage to EN 1751, class 3
- Casing air leakage to EN 1751, class B

Optional equipment and accessories

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

### Application

- Plastic circular shut-off dampers Type AKK for shutting off or restricting the airflow in ventilation ducts of air conditioning systems
- Suitable for contaminated air

### Special features

- Damper blade can be actuated manually, electrically or pneumatically
- Low-leakage shut-off
- Safety function provided by optional spring return actuator

### Nominal sizes

- 125, 160, 200, 250, 315, 400

### Variants

- AKK: Shut-off damper
- AKK-FL: Shut-off damper with flanges on both ends

### Parts and characteristics

- Ready-to-install shut-off damper
- Damper blade with blade mechanism

### Attachments

- Open/Close actuators: For the opening and closing of shut-off dampers in air conditioning systems
- Auxiliary switch for capturing the end positions

### Accessories

- Matching flanges for both ends, including seals

### Technical data

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

### Standards and guidelines

- Meets the hygiene requirements of VDI 6022
- Closed blade air leakage to EN 1751, class 3
- Meets the general requirements of DIN 1946, part 4, with regard to the acceptable closed blade air leakage
- Casing air leakage to EN 1751, class B

### Maintenance

- Maintenance-free, as construction and materials are not subject to wear and tear

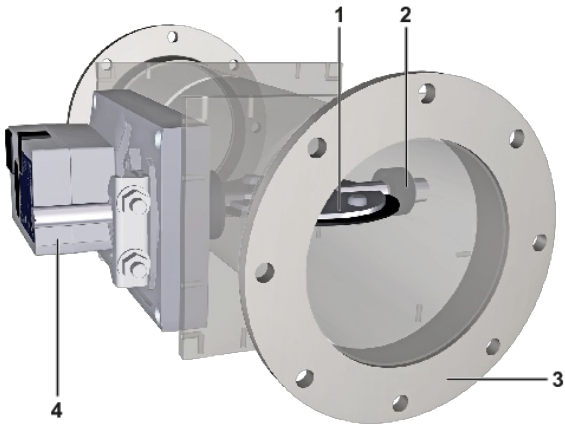
## TECHNICAL INFORMATION

### Functional description

For airtight shut-off of volume flows in round plastic air ducts - typically for contaminated extract air in laboratories. The basic version is shut off by manually actuating the damper blade. Electrically or pneumatically operated actuators, which are available in different versions, can also be used to operate the damper blade. The versions differ with regard to the power supply and safety position (de-energised or de-pressurised state). Actuators with auxiliary switches for electrical monitoring of the damper blade position are also available.

The actuator of a damper blade must be controlled by a customer-side circuit and then moves the damper blade to the OPEN or CLOSED position.

### AKK: schematic diagram (version with flange)



- 1 Damper blade
- 2 Plain bearings
- 3 Flange (optional)
- 4 Actuator (optional)

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

Circular shut-off dampers in PPs plastic for air conditioning systems, available in 6 nominal sizes. Suitable for shutting off or restricting extract air flows containing aggressive substances since all components coming into contact with the airflow are made of plastic (no interior metal parts).

Suitable for duct pressures up to 1500 Pa.

Ready-to-install unit consists of the casing with a damper blade.

Spigot, suitable for ducts according to DIN 8077.

Position of the damper blade indicated externally at the shaft extension.

Closed blade air leakage to EN 1751, class 3.

Casing air leakage to EN 1751, class B.

### **Special features**

- Damper blade can be actuated manually, electrically or pneumatically
- Low-leakage shut-off
- Safety function provided by optional spring return actuator

### **Materials and surfaces**

- Casing and damper blade made of flame-resistant polypropylene (PPs)
- Plain bearings made of polypropylene (PP)
- Damper blade seals in chloroprene rubber (CR)

### **Technical data**

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

### **Sizing data**

- $q_v$  [m<sup>3</sup>/h]
- Air-regenerated noise
- LPA [dB(A)]

AKK - FL / 160 / GK / BP0 / NO  
 | 1 | 2 | 3 | 4 | 5 | 6

**1 Type**

AKK Shut-off damper, plastic

**2 Flange**

No entry: none

FL Flanges on both ends

**3 Nominal size [mm]**

125, 160, 200, 250, 315, 400

**4 Accessories**

No entry: without accessories

GK Matching flanges both ends

**5 Actuator**

No entry: Shut-off damper, manually adjustable Open/Close actuators

B30 24 V AC/DC, 3-point

B32 24 V AC/DC, 3-point, with auxiliary switch

B40 230 V AC, 3-point

B42 230 V AC, 3-point, with auxiliary switch Open/Close actuators with safe position

BP0 24 V AC/DC, spring return

BP2 24 V AC/DC, spring return, with auxiliary switch

BR0 24 - 240 V AC, 24 - 125 V DC, spring return

BR2 24 - 240 V AC, 24 - 125 V DC, spring return, with auxiliary switch Modulating actuators

B20 24 V AC/DC, modulating, 2 - 10 V DC pneumatic actuator with safe position

B22 24 V AC/DC, modulating, 2 - 10 V DC, with auxiliary switch

Pneumatic actuator with safe position

TNO Pneumatic actuator 0.2 - 1 bar

**6 Damper blade position**

Only with spring return actuator or pneumatic actuator

NO pressure off/power off to OPEN (Normally Open)

NC power off/pressure off to CLOSE (Normally Closed) Order example: AKK-FL/160/GK/BP0/NO

**Order example: AKK-FL/160/GK/BP0/NO**

Type	AKK
Flange	Flanges on both ends
Nominal size [mm]	160
Accessories	Matching flanges both ends
Actuator	24 V AC/DC, spring return actuator
Nominal size	pressure off/power off to OPEN (Normally Open)