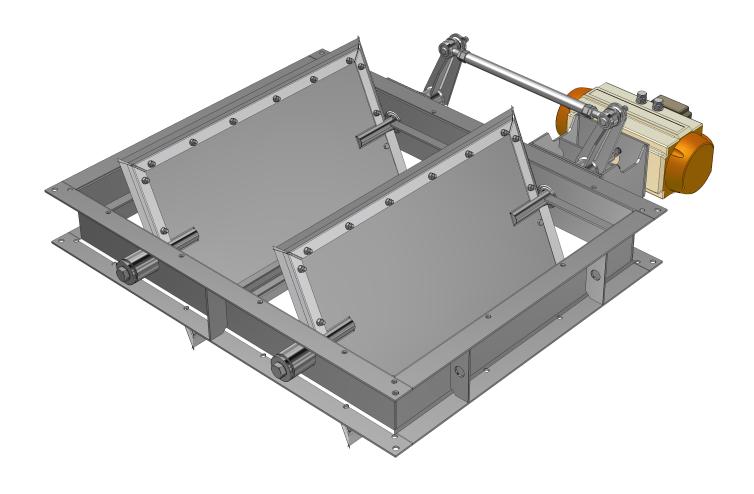


AFT-LDV max. 12000x12000mm



Damper valve for rectangular channels



Technical description

Damper valves type AFT-LDV serve for the shut-off and/or flow regulation of media such as air and process gas. Such valves find application in installations such as flue gas extraction, flue gas desulphurisation, gas utilisation SO2, SO3, NOx, dedusting of furnaces, glass factories, metallurgical plants for copper, zinc, plumb as well as cement factories, etc.

The construction is of welded nature, blades can be joined with shafts by welding (fixed blades) or by pins (dismountable blades).

Depending on the strength calculation such valves (in particular louver types) can be executed as divided into segments with shaft supports inside the ducts. The driving torque is transmitted to the second blades segment. Taking into account the plant requirements and valve function, the valve can be delivered as quick-closing or quick-opening by using special actuating-damping devices.

Dampers of large dimensions are designed and manufactured in modules, which enable standard truck transport in segments and are mounted on site.

Product properties

Dimension range (WxH)

max. 12000x12000mm (W – width, H – height)

Mounting connection

- flanges acc. to DIN 24193
- customised acc. to customer requirements
- welding ends
- body adopted for direct connection of fabric compensator

Design pressure

< 0,5 bar

Temperature range

-20°C up to +750°C or acc. to customer request (max. working temperature 1100°C)

Mounting of actuator

- acc. to ISO 5211
- customised acc. to customer requirements (for linear actuators and actuators with driving levers)

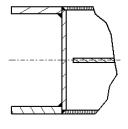
Gland packing

- graphite
- (other depending on medium an temparature)
- with sealing air

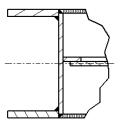
Working positions of damper valve

- horizontal shaft
- vertical shaft
- shaft at required angle

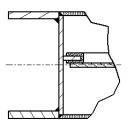
Geometric tightness according to constructional solution applied



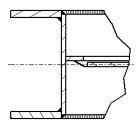
Geometric tightness >95%



Geometric tightness >98%



Geometric tightness >99% (soft sealing) Greater tightness is achieved by special profiled band mounted on seat ledges or sealing profile mounted directly on blade edge

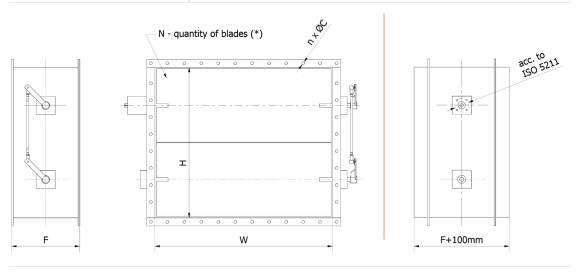


Geometric tightness >99% (lamel sealing) Greater tightness is achieved through metal sealing by high alloy steel; high elasticity, high anticorrosivity and resistance to high temperatures

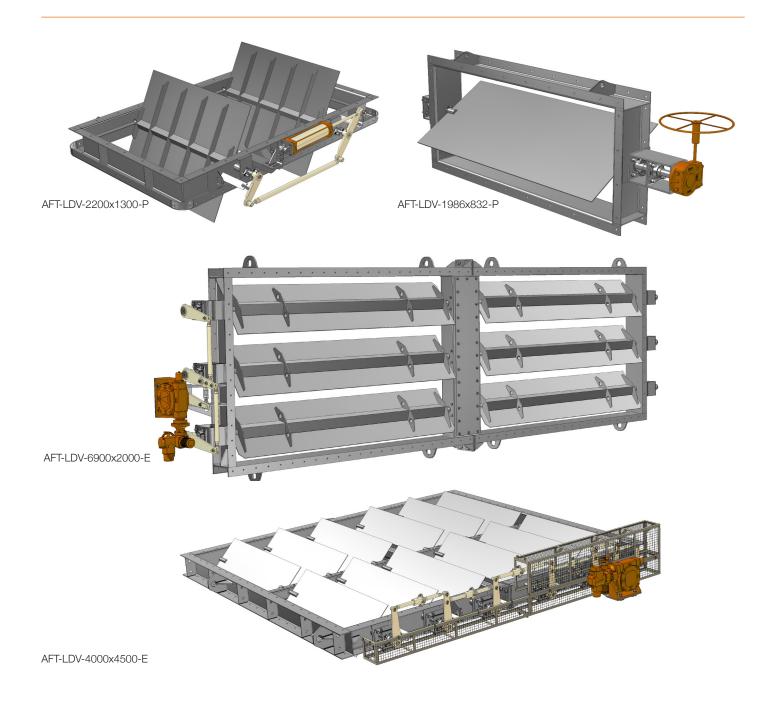


Flange version

Welded version



(*) The valve design is suited to individual customer requirements, taking into consideration medium working parameters (temperature, pressure, flow velocity and volume flow), mounting arrangements and any other process requirements.





Materials*

	Temperature			
	up to 370°C	from 370°C up to 450°C	from 450°C up to 550°C	from 550°C up to 750°C
Body	S235JR or S355JR X5CrNi18-10 (1.4301)	P265GH X5CrNi18-10 (1.4301)	16Mo3 X15CrNiSi20-12 (1.4828)	X15CrNiSi20-12 (1.4828) 253 MA (1.4835)
Blade	S235JR or S355JR X5CrNi18-10 (1.4301)	P265GH X5CrNi18-10 (1.4301)	16Mo3 X15CrNiSi20-12 (1.4828)	X15CrNiSi20-12 (1.4828) 253 MA (1.4835)
Shaft	X20Cr13 (1.4021)	X20Cr13 (1.4021)	X15CrNiSi20-12 (1.4828)	X15CrNiSi20-12 (1.4828)
Sealing	graphite	graphite	graphite	graphite

^{* -} standard executions

Final material execution depends on specific medium, working conditions and customer requirements

For special high temperature executions ceramic lining inside the body is applied according to customer requirements. In special cases to achieve high corrosion resistance, the blades can be lined with high corrosion resistant and high temperature resistant alloy steel.

Actuators and accessories

Manual gear box

Equipment:

electromechanical limit switches or proximity or AS-i

Single or double acting pneumatic actuators (quarter turn, linear)

Equipment:

- solenoid valve
- electromechanical limit switches or proximity
- electropneumatic positioner4-20 mA
- pneumatic accessories AS-i, PROFIBUS, HART

Emergency functions (options)

In case of control air failure the valve:

- closes
- opens
- stays in last position

In case of voltage supply failure the valve:

- closes
- opens
- stays in last position

Open/close or regulating electric actuators

Equipment:

- stroke and torque limit switches
- position transmitter 4-20mA
- positioner
- local control unit
- equipment for PROFIBUS, HART systems etc.

Special executions

- actuating systems equipped with electric actuators, electromagnetic couplings, hydraulic dampers (quick closing or quick opening valves for emergency modes of operation)
- actuating systems with counterweights and return springs (quick mechanical safety actuators in case of emergency – closing or opening)
- chain manual actuators

AFT Sp. z o.o. ul. Naramowicka 76 61-622 Poznań · PL tel. +48 61 820 51 45 fax +48 61 820 69 59 info@aft.pl www.aft.pl