SEG Flue Gas Damper Solutions

Bypass and isolation dampers for biomass-fired and industrial plants

Designed for demanding flue gas applications

UNIQUE FEATURES

- Suitable for both wet and dry flue gas
- Stuffing-box shaft sealing to limit external leakage
- Custom diameters from Ø250 to Ø2500 mm
- Steel, stainless steel and corrosion-resistant FRP
- Manual, pneumatic or electric operation
- Optional spring-return fail-safe actuation
- Bolted flanges and allowance for insulation

SEGFlu™

GAS DAMPERS

DN / Ø250–2500 mm

SEG A/S | TVT Group

Virkevej 5
DK-7755 Bedsted Thy
Denmark

SEGFlu™ Gas Damper

Reliable control of flue gas flow

SEG designs and supplies robust butterfly-type dampers for bypass and isolation in biomass-fired boiler plants, flue gas cleaning systems and heat-recovery installations. Each damper is adapted to its operating conditions, including gas temperature, composition, pressure and required mode of operation.



SEG damper with pneumatic actuator (illustrative product photograph)

Wet and dry gas service

The damper range can be configured for dry flue gas as well as wet or condensing flue gas. For wet and chemically aggressive duty, suitable corrosion-resistant materials and sealing arrangements are selected for the specified service.

Robust construction

The dampers feature a rigid flanged body and a rotating plate. The shaft penetration uses a stuffing-box seal to help limit leakage to the surroundings. Bolted connection flanges allow straightforward integration in the duct system.

Flexible operation

Choose manual, pneumatic or electric actuation. Pneumatic actuators can be supplied with spring return to a predefined position when air supply is lost, with electrical fail action depending on the control configuration.

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Design features and technical specifications

Shaft sealing and operational reliability

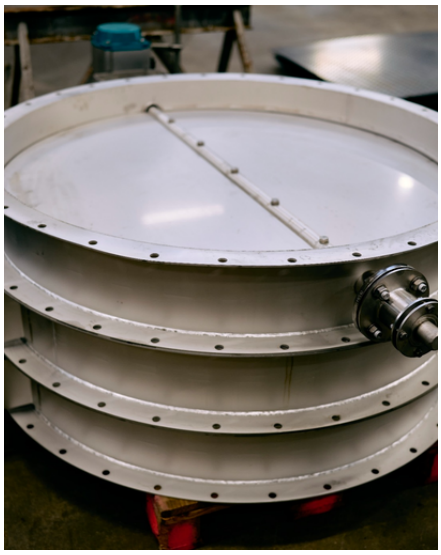
The stuffing-box / gland-packing arrangement is designed to limit flue gas leakage around the damper shaft. This external shaft-sealing function is distinct from the internal shut-off performance of the damper plate. Any internal leakage class or specified gas-tight isolation must be assessed and agreed separately.

Material and temperature selection

Versions are available in carbon steel, stainless steel AISI 304 / AISI 316 and glass-fibre reinforced plastic (FRP) with vinyl ester or high-temperature resin. The appropriate version depends on the gas temperature, corrosive constituents, moisture content and plant duty.

Key technical data

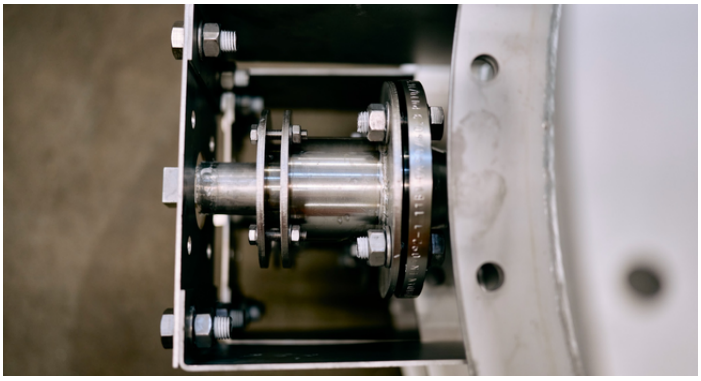
Diameter range	Ø250–Ø2500 mm
Application	Bypass and isolation
Gas conditions	Wet and dry flue gas
Carbon / stainless steel	Up to 250 °C*
FRP construction	Up to 140 °C*
Material alternatives	Carbon steel; AISI 304 / 316; FRP
Shaft sealing	Stuffing-box / gland packing
Actuation	Manual, pneumatic, electric
Pneumatic fail action	Optional spring return
Connections	Bolted DN flanges; insulation space



Damper plate and bolted flange

* Maximum design temperatures depend on material, operating conditions and final engineering.

Construction details



Shaft coupling and stuffing-box region



Pneumatic actuation assembly