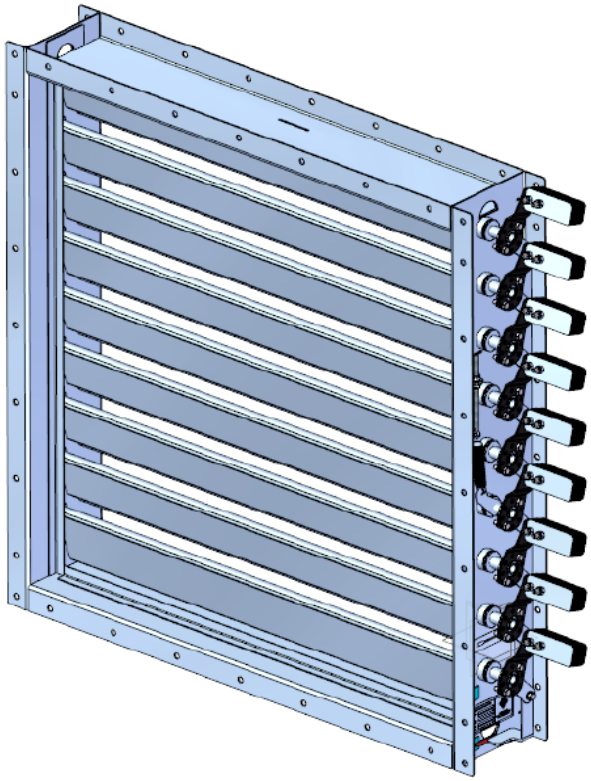
BACK FLOW DAMPER

TYPE
BFD



APPLICATION
The back flow (or non return) damper is used in ventilation system where back flow or return air is to be prevented. Typically used for two fans in parallel (one running, one standby) to prevent backflow over idle fan. The damper is fully mechanically, opening on air flow, closing on gravity.

EXECUTION
Designed for marine application. Standard execution in aisi316L, …
Made in custom made sizes, from size 100x100 mm to 1600x1600 mm
Made in balanced version for low pressure drop (suitable for low air speeds), or unbalanced version for higher air speed (at lower cost).

OPTIONAL EXECUTION
- Frame in hot dip galvanized execution, blades in stainless steel (304/316) or alum.
- Frame in alum and blades in alum or stainless steel.

SPECIAL DESIGN
Can be made with smaller depth (200 and 250 mm) if space is limited.

INSTALLATIONS
- Vertical (for horizontal air flow)
- Horizontal, air up
- Horizontal, air down

OPTIONS
- Regulation possibility (to allow damper to work as regulating damper as well)
- Low or high temperature operation
- With sealing gaskets for low leakage (norsok demand)
- Adapting plates for circular adaption
- Lenkage arm on right side (seen from outlet)
- With special flange
- With spring for closing
- With circular adapter (for duct of fan connection)
- Special thickness (e.g. if installed under fan)

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BACK FLOW (NON RETURN) DAMPERS

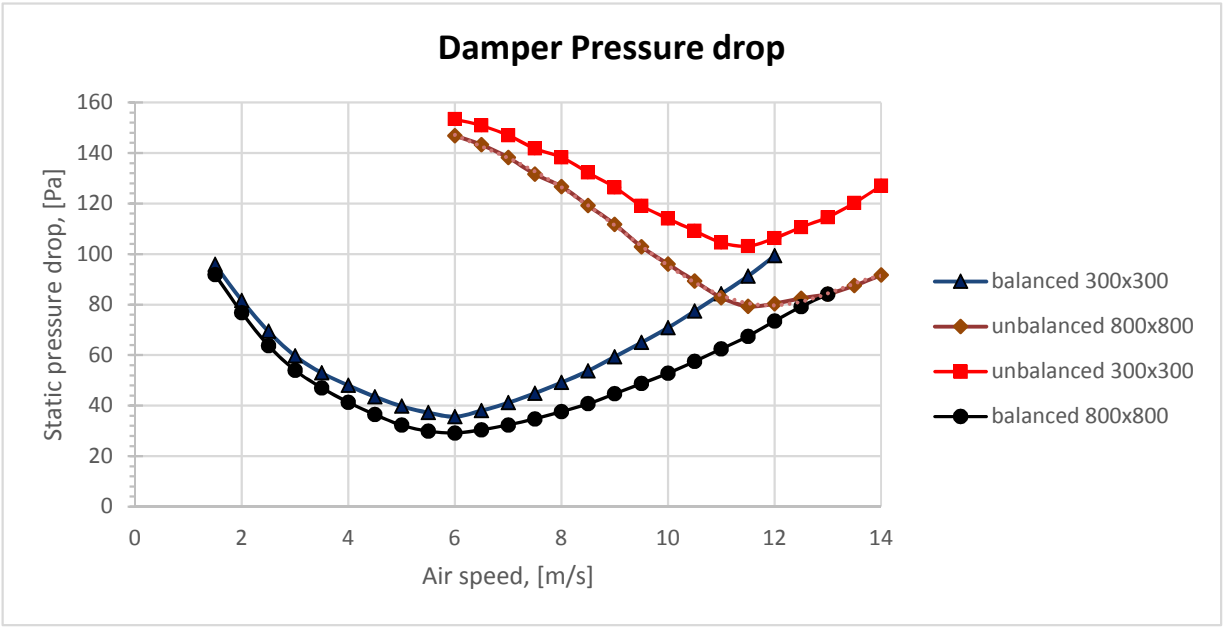
Performance data at 20°C., r = 1,205kg/m³

BFD

Damper Data

Max pressure	4000Pa (higher pressures on request)
Closed damper blade leakage	Class 2 acc to EN1751: 1998
Casing leakage	Class 3 acc to EN1751:1998
Earthing boss	Standard, on lenkage arm side
Max recommended air speed	15 m/s (higher on request)
Flange	Iso 15138 or Nyborg standard
Position indicator	yes, open/close

Operating temperature	-20 to +60C (lower and/or higher temperature optional)
Material frame	aisi316L (aisi304, alum or hot dip galvanized as option)
Material blades	Aisi316L (alternative aisi304)
Lenkage arm side	Left side seen from outlet
Regulating possibility	Optional
Installation	Vertical, horizontal (air up) or horizontal (air down)



Pressure drops for sizes 300mm x 300mm and 800mm x 800mm, balanced and unbalanced respectively.

Pressure drops increases with smaller damper sizes. Interpolate in for other sizes

Pressure drop for rectangular duct connection to damper, for circular adaption, pressure drop will be higher

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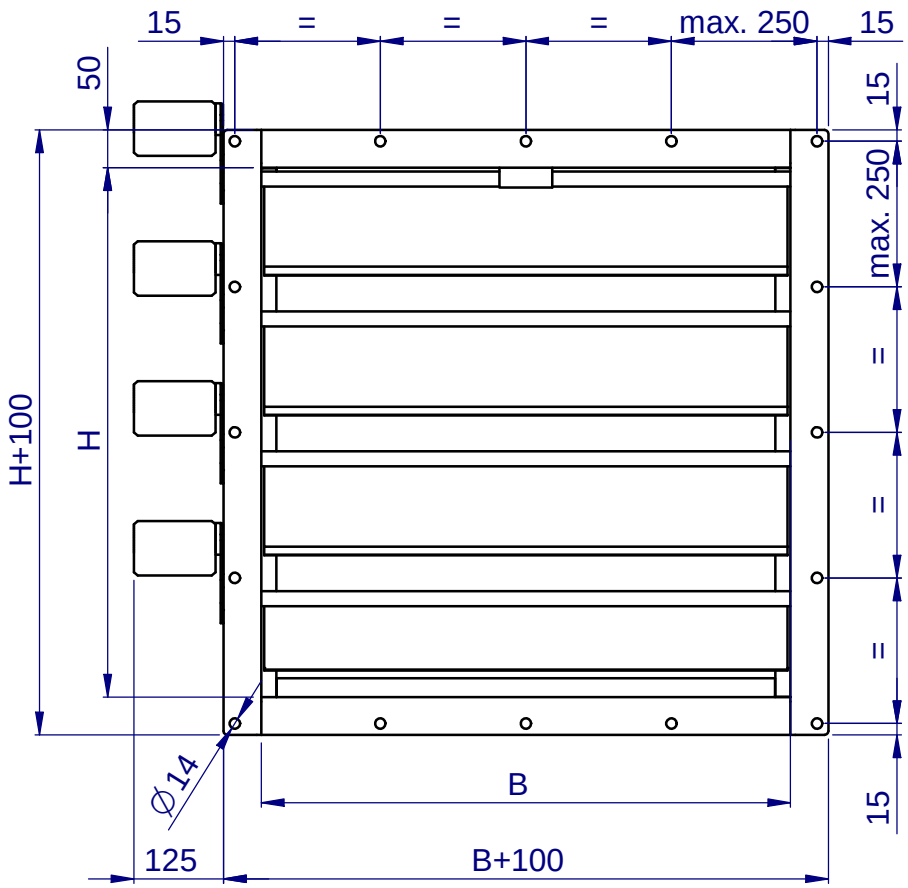
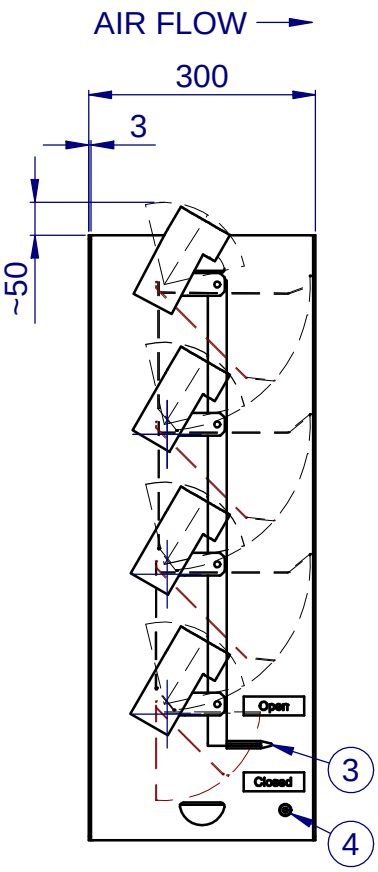
Back Flow Damper

BFD - BxH





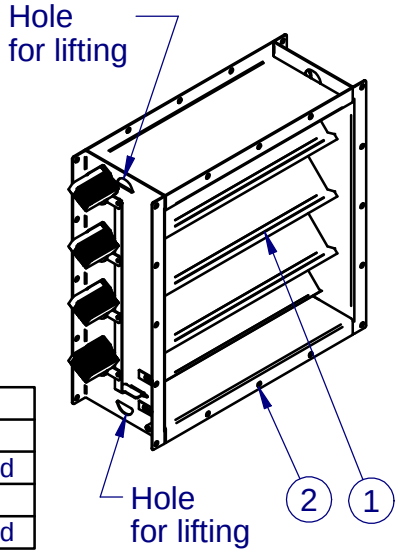
H- Standard Heights
370
555
740
925
1110
1295
1480
1665
1850
2035
2220
2405
2590

Damper to be made in custom made sizes BxH
Frame – optional material: AISI316L
Optional flange standard: acc. to ISO 15138
Optional – counter weights for balanced damper

Installations:
Vertical (horizontal air flow)
Horizontal (vertical air flow, up)
Horizontal (vertical air flow, down)

Max width of damper, normal design 1500mm

Item	Description	Material
1	Blade Assembly	AISI 304/316L
2	Housing	Mild Steel, HD Galvanized
3	Indicator	AISI 304/316L
4	Earthing Stud	Mild Steel, HD Galvanized



Drawing no. 4-50000

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