

ACTIVE BRAKES / hydraulic pressure applied

There are two variations of the Active brakes: Dual-Action and Mono-Action

Dual-Action

The Dual-Action brake consists of two caliper halves designed for mounting on a bracket. As the only moving parts are the brake pistons the Dual-Action brake is a very simple and reliable brake.



BSAB 75 Dual-Action

Clamping force: 0 to 141.000 N
Nominal braking force: 0 to 112.800 N*



BSAB 120 Dual-Action

Clamping force: 0 to 543.000 N
Nominal braking force: 0 to 434.000 N*



BSAK 300 Dual-Action

Hydraulic pressure applied and spring return.
Clamping force: 0 to 55.000 N
Nominal braking force: 0 to 44.800 N*

Typical application for a BSAK 300 Mono-Action brake is as a rotor brake in a wind turbine positioned on the high speed side of the turbine gearbox. Other typical applications for the BSAK 300 brake would be areas such as: Winches, Ships Propeller Shafts, Ski Lifts, Escalators and Conveyor Systems.



BSAK 3000 Dual-Action

Hydraulic pressure applied and spring return.
Clamping force: 0 to 130.000 N
Nominal braking force: 0 to 104.000 N*

Common applications for the BSAK 3000 brake would be as rotor brakes in wind turbines positioned on the high speed side of the turbine gearbox. Other applications for BSAK 3000 brakes would be the following areas: Conveyor gearboxes Mono-Action), Winches, Ships Propeller Shafts, Ski Lifts, and Escalators and Conveyor Systems.

Mono-Action

The Mono-Action brake is a combination of a three parts: an active calliper half and a passive calliper mounted on a base plate suitable for side mounting. The brake caliper assembly is free floating on guide shafts allowing for a certain degree of axial disc movement.



BSAB 90 Dual-Action

Clamping force: 0 to 200.000 N
Nominal braking force: 0 to 160.000 N*

The BSAB brakes are multi piston Dual-Action brakes with integrated and fixed pad holders. Typical application for the BSAB brake range is yawing systems in wind turbines and slewing systems on cranes, as well as azimuth systems on ship propulsion systems.



BSAK 300 Mono-Action

Hydraulic pressure applied and spring return.
Clamping force: 0 to 55.000 N
Nominal braking force: 0 to 44.000 N*



BSAK 3000 Mono-Action

Hydraulic pressure applied and spring return.
Clamping force: 0 to 130.000 N
Nominal braking force: 0 to 104.000 N*

SVENDBORG BRAKES OFFICES

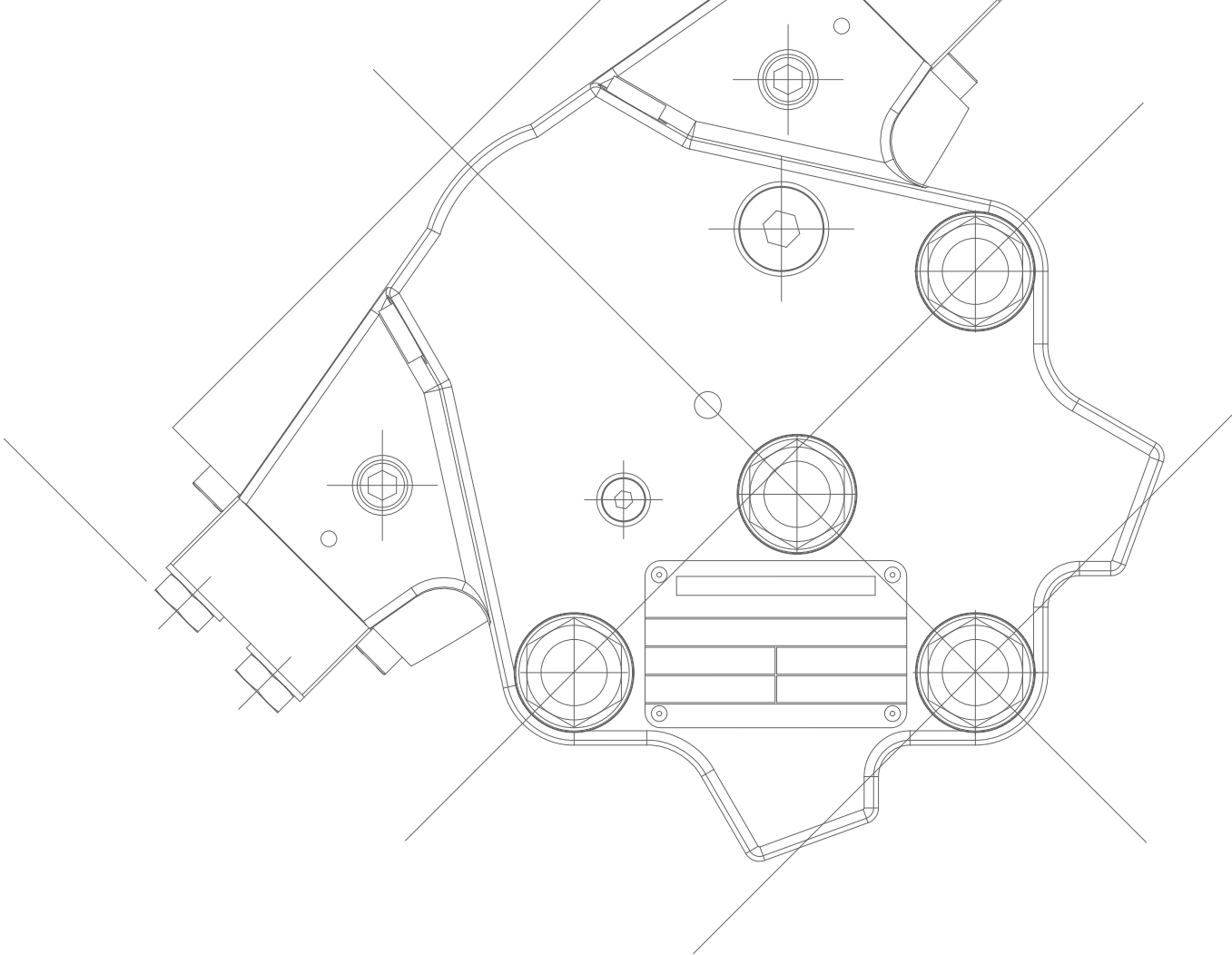
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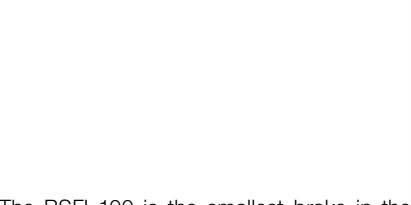


HIGH PERFORMANCE PRODUCTS
ARE OUR BUSINESS

PRODUCT RANGE INDUSTRY

FAILSAFE BRAKES / spring applied and hydraulic released

There are two variations of the Failsafe brakes: Dualspring and Monospring:

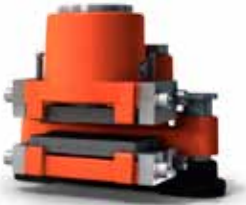


The BSFI 100 is the smallest brake in the complete range. Typical applications are: Industrial gearboxes, mine wagons, rotor brakes in small scale wind turbines.



BSFI 200 Dualspring
Clamping force: 0 to 12.000 N
Nominal braking force: 0 to 9.600 N*

The BSFI 200 brakes are used on a number of applications most common are: Winches on cranes (incl. mobile cranes). Elevators, People movers, Mine Wagons and Elevators, Conveyor gearboxes (monospring), Railway wagons (monospring).



BSFI 200 Monospring
Clamping force: 0 to 12.000 N
Nominal braking force: 0 to 9.600 N*



BSFI 300 Dualspring E-version
Clamping force: 0 to 60.000 N
Nominal braking force: 0 to 48.000 N*

The BSFI 300 brake is available in E and EE version. The EE version has extended spring pack which reduces the loss of spring force. Common applications for the BSFI 300 brakes are: Drawworks, Gearboxes in general (monospring). Wind turbines (monospring fitted to the axis on the high speed side of gearbox), Crane hoists, Winches, Ship propellers, Ski lifts, Escalators and Conveyor systems.



BSFI 300 Monospring E-version
Clamping force: 0 to 60.000 N
Nominal braking force: 0 to 48.000 N*



BSFI 3000 Dualspring
Clamping force: 0 to 120.000 N
Nominal braking force: 0 to 96.000 N*

Typical applications for the BSFI 3000 brake: Wind turbines (monospring fitted to the axis on the high speed side of gearbox), Winches, Conveyors, Escalators.



BSFI 3000 Monospring
Clamping force: 0 to 120.000 N
Nominal braking force: 0 to 96.000 N*



BSFG 400 Dualspring
Clamping force: 0 to 120.000 N
Nominal braking force: 0 to 96.000 N*

The BSFG 400 brake is available as Dualspring only, which is specially designed for mine hoists applications. It has been mechanically engineered and certified to comply with the strict mine regulations in various locations.

COMPLETE BRAKING SOLUTIONS FOR ALL TYPES OF INDUSTRIAL APPLICATIONS

Svendborg Brakes produces reliable and safe braking solutions for a wide range of applications. The brake product range comprises both ACTIVE BRAKE CALIPERS (hydraulic pressure applied) and FAIL-SAFE BRAKE CALIPERS (spring applied and hydraulic released) with clamping forces ranging from 500 N to 1,150,000 N.

The brakes are available in several options, standard type as well as off-shore finish which is suitable for corrosive environments. The brakes can be supplied with different brake

pad lining materials engineered and suitable for individual operating conditions.

Svendborg Brakes also manufactures a wide range of hydraulic power packs and intelligent brake control units. These units are highly flexible with full safety functionality and performance. Complete braking solutions can be individually customised, hereby giving you a choice of a one stop braking solution from one single source – guaranteed to suit your specific requirement.



Applying the brake:
Brake is applied on command or at power failure. Power is disconnected to the valves. Oil pressure is dumped from brake to tank applying the brake. Pressure will be maintained in the accumulator ready for next quick start operation.

Quick start:
To prevent the disc from being dragged through partially applied brakes this system is equipped with a fast release feature. Assuming the system

- Special features**
- Fast braking & retraction time
 - Redundant return valves - ensures a fast and secure operation
 - Hand pump for manual release of brake in case of power failure
 - Brake on/off indication
 - Operational in cold climate - down to -30° C / -22° F.

has been energized prior to the event pressure is stored in the accumulator. By energizing all valves this pressure will be transferred to the brakes releasing them instantly after the “brakes-off” signal.

Quick brake contact:
We offer a secure and fast operation according to regulations and directives for various equipment.

Why SOBO®:
SOBO® is a unique and one of it kind brake controller combining today’s technology ensures a number of safety and durability benefits in the heavy industry. Deceleration and stop of heavy load is becoming vital for any modern technology.



Controlled braking is essential for significant reduction of torque peaks. The SOBO® unit - offers you a wide range of be-nefits and features - all take the highest safety aspects into consideration.

- Controlled braking independent of load and load position
- Braking on time or distance
- Adjustable brake ramp / curves
- Compensating for variable friction factors and wear
- Controlled start-up
- Real time monitoring of brake sequence
- Simple interface between the SOBO® and main PLC

FAILSAFE BRAKES / spring applied and hydraulic released

There are two variations of the Failsafe brakes: Dualspring and Monospring:



BSFH 500 Dualspring
Clamping force: 0 to 200.000 N
Nominal braking force: 0 to 160.000 N*

Common applications for the BSFH 500 brakes are: Bucket wheel excavator, Large Diggers (monospring), Draw Work Winches used for raising and lowering the casings during drilling operation, Conveyor systems, Off-shore winches, Mine hoists, Steel mills e.g.



BSFH 500 Monospring
Clamping force: 0 to 200.000 N
Nominal braking force: 0 to 160.000 N*



BSFK 500 Dualspring
Clamping force: 0 to 350.000 N
Nominal braking force: 0 to 240.000 N*

Typical applications for the BSFK 500 brakes are: Bucket wheel excavator, Large diggers (monospring), Off-shore mounted on cranes driving the pipes to and from the drill (monospring), Conveyor systems, Off-shore winches, Mine hoists, Steel mills.



BSFK 500 Monospring
Clamping force: 0 to 270.000 N
Nominal braking force: 0 to 216.000 N*



BSFB 600 Dualspring
Clamping force: 0 to 500.000 N
Nominal braking force: 0 to 400.000 N*

Common applications for the BSFB 600 brakes are: Ball Mill and SAG Mill parking brakes, Draglines, Cranes, Crushers and Overland Conveyors.



BSFB 600 Monospring
Clamping force: 0 to 400.000 N
Nominal braking force: 0 to 320.000 N*

With a clamping force of up to 1.000.000 N the BSFA 1000 is the largest brake in the Svendborg Brakes product line. Common applications for the BSFA 1000 brakes are: Ball Mill and SAG Mill parking brakes.



BSFA 1000 Monospring
Clamping force: 0 to 1.000.000 N
Nominal braking force: 0 to 880.000 N*