Hydraulic Caliper Disc Brakes SFR Series







Description SFR



Main Features

Monospring caliper brake, ready to operate, with spring pack set to nominal force

Sintered linings

Limit switch release control

Easy, manual pad wear compensation

Horizontal compensation +- 5 mm

Support for direct gear box mounting

Options

Limit switch wear control

Hydraulic power units

Brake discs and couplings

Seals for special fluids

Sensors for remote monitoring and diagnostic, like e.g. spring force-, temperature-, wear- and release gap monitoring

CMB contact force measurement

Applications

The high capacity of these brakes makes them particularly suitable as rotor brakes in wind turbines.

Other applications are possible in material

Other applications are possible in material handling, requiring power and compact design in either direction of rotation, e.g. hoisting applications and conveyor belts.

Use of the brakes for applications with high duty cycles should be specifically indicated during technical selection procedure.

Operating Restrictions

Brakes of this range are tested both mechanically and hydraulically and are set to nominal force. This setting can only be changed by the manufacturer. Operating conditions other than described in this brochure require the manufacturer's approval and may influence the function of the caliper and its components.



Please Note

We supply a detailed operating manual with every order. Nevertheless, we would point out that brakes are only as safe as the servicing and maintenance performed while they are in operation. The guarantee for the correct functioning of our brakes is therefore only valid if the user adheres to the German DIN standard 15434 part 2 (drum and disc brakes, servicing and maintenance in operation), or to comparable standards in his own country.



PINTSCH BUBENZER Service

This includes the verification of the brake selection, if required. A detailed questionnaire is provided for this purpose. Installation and commissioning on site is possible by PINTSCH BUBENZER service engineers. Drawings as DWG/DXF files for your engineering department are available upon request.

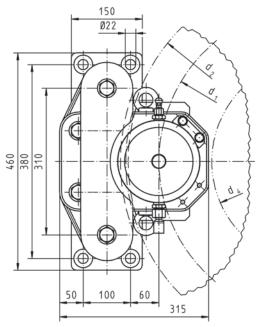
Disc Brake SFR 3-5

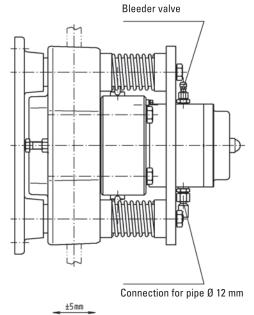
Dimensions and technical data



Rev. 05-08

Brake is available also as "hydraulic applied" version (SFRA, upon request)





Horizontal compensation

D87 453+p1 50

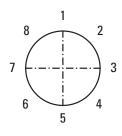
*) Average friction factor of standard material combination

All dimensions in mm Alterations reserved without notice

Type SFR		3	5
Contact force F _A	kN	35	50
Operating pressure	bar	55	80
Max. pressure	bar	135	135
Rel. stroke (per side)	mm	1	1
Oil volume	I	0.023	0.023
Pad surface (1 pad)	cm²	300	300
Theor. friction	μ*	0.4	0.4
Weight	kg	159	159
Bolt	Ø	M20	M20
Bolt material		10.9	10.9
Tighten. torque	Nm	560	560

Brake disc		
Brake disc Ø d ₂	mm	710 1100
Friction Ø d ₁	mm	d2-140
Max. perm. Hub Ø d4	mm	d2-360
Disc thickness b ₁	mm	30 40

Brake torque M_{Br} in $Nm = F_A (kN) x \mu x d_1 (mm)$



(3)

Please indicate mounting position in case of order

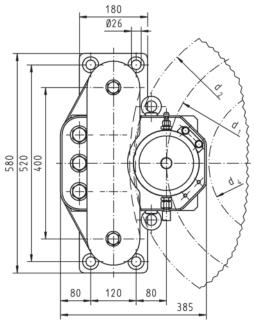
Disc Brake SFR 7-12

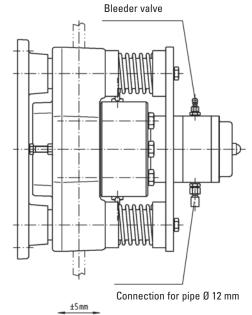
Dimensions and technical data



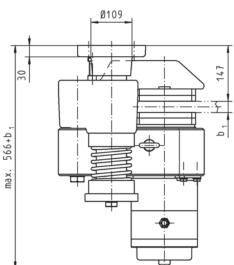
Rev. 11-03

Brake is available also as "hydraulic applied" version (SFRA, upon request)





Horizontal compensation



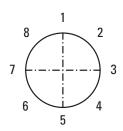
*) Average friction factor of standard material combination

All dimensions in mm Alterations reserved without notice

Type SFR		7	10	12
Contact force F _A	kN	75	100	125
Operating pressure	bar	130	150	160
Max. pressure	bar	180	180	180
Rel. stroke (per side)	mm	1	1	1
Oil volume	I	0.023	0.023	0.023
Pad surface (1 pad)	cm²	400	400	400
Theor. friction	μ*	0.4	0.4	0.4
Weight	kg	279	279	279
Bolt	Ø	M24	M24	M24
Bolt material		10.9	10.9	10.9
Tighten. torque	Nm	960	960	1125

Brake disc		
Brake disc Ø d ₂	mm	800 1700
Friction Ø d ₁	mm	d2-175
Max. perm. Hub Ø d ₄	mm	d2-395
Disc thickness b ₁	mm	30 40

Brake torque M_{Br} in $Nm = F_A (kN) \times \mu \times d_1 (mm)$



③

Please indicate mounting position in case of order

Disc Brake SFR

Hydraulic power unit, example (please also see page B10)





