DELLNER BUBENZER

Pressure applied, spring released disc brake

Dellner Bubenzer model SKD 4x125 disc brake is a direct acting, hydraulic applied, spring released unit. The braking force achieved is directly proportional to the applied pressure.

The brake consists of two symmetrical halves that accommodate a standard disc thickness of 40mm. For use with thicker brake discs, the brakes can be supplied with spacers.
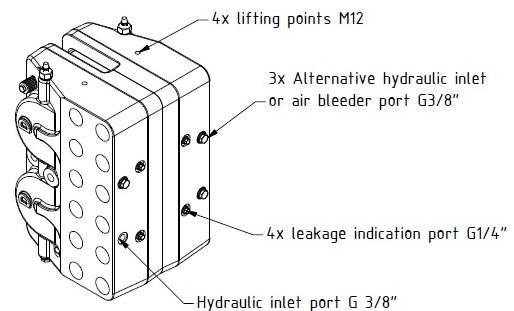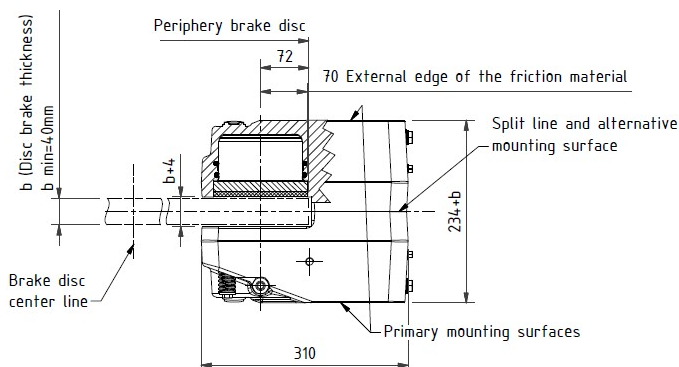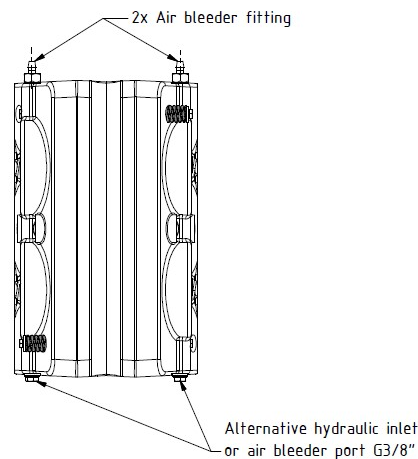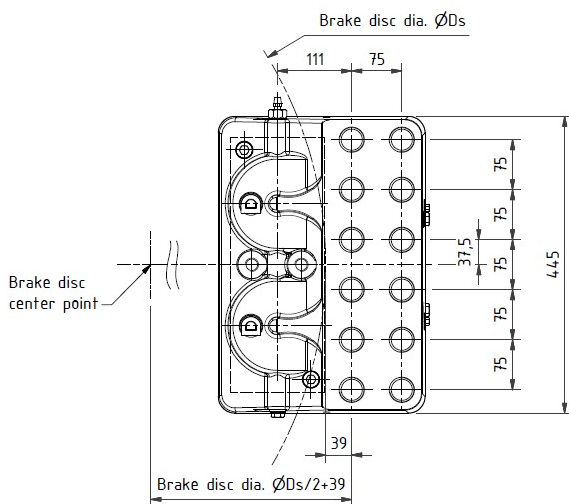
The tangential braking force is directly transmitted to the brake housing. As a result, the brake pistons are not subject to any radial forces, which contributes to longer brake life.
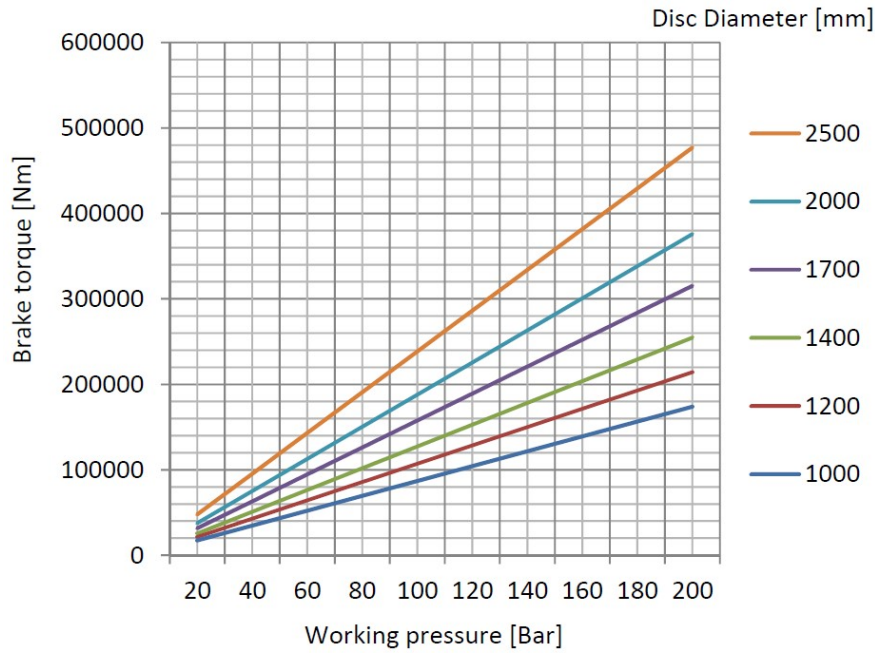
Model	Braking force [1]		Max hydraulic pressure	Friction area per brake [2]	Max. working oil volume per brake [3]	Piston area per brake half	Weight
	F_1 [N/bar]	F_{max} [N]	[bar]	[cm²]	[cm³]	[cm²]	[kg]
SKD 4x125	2021	404200	200	1056	393	245	177

1) Calculated with an average frictional coefficient µ=0,42. Consideration has not been taken for external factors.
2) Oil volume required to engage the brake with fully worn friction pads.

Dellner Bubenzer AB reserves the rights to modification without special notice.

DS-060-01E

TORQUES

Disc Diameter [mm]

Brake torque [Nm] vs Working pressure [Bar]

- 2500
- 2000
- 1700
- 1400
- 1200
- 1000

The braking torque is calculated from the following formula:

$$M_{brake} = \frac{q \times F_1 \times p \times (D_s - 2h)}{2}$$

q = number of brakes
F1 = braking force according to the table on page 1 [N]
p = pressure [bar]
Ds = brake disc diameter [m]
h = distance disc periphery to piston center [m] (SKD 4x125: 0,072)

OPTIONS

• Proximity switches for on/off or pad wear indication
• Brake pads in alternative materials.
• Return springs and screws
• Supports in different configurations (see figure).
• Customer specific colour.
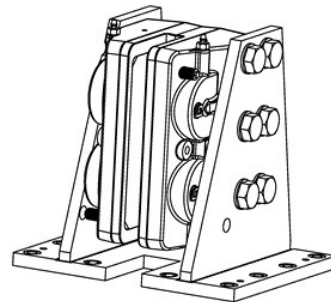
SUITABLE APPLICATIONS

Dellner Bubenzer models SKD are suitable wherever service, stopping, holding and tensioning brakes are needed, for example in the following types of applications:

Propulsion propeller shafts	Wind mills	Top drives
Chipping machines	Amusement rides	Unwinding systems

DELLNER BUBENZER AB
Teknikergatan 1   SE-781 70 BORLÄNGE SWEDEN
Phone: +46 (0)23-78 30 50   info.se@dellnerbubenzer.com   www.dellnerbubenzer.com