

DISC BRAKE – MODEL SKD 4x125

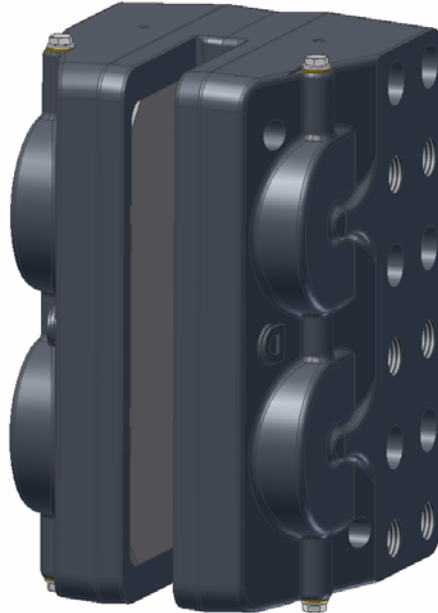
PRESSURE APPLIED, SPRING RELEASED DISC BRAKE

Dellner Brakes four cylinder model SKD 4x125 disc brake is a direct acting, hydraulic pressure 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.

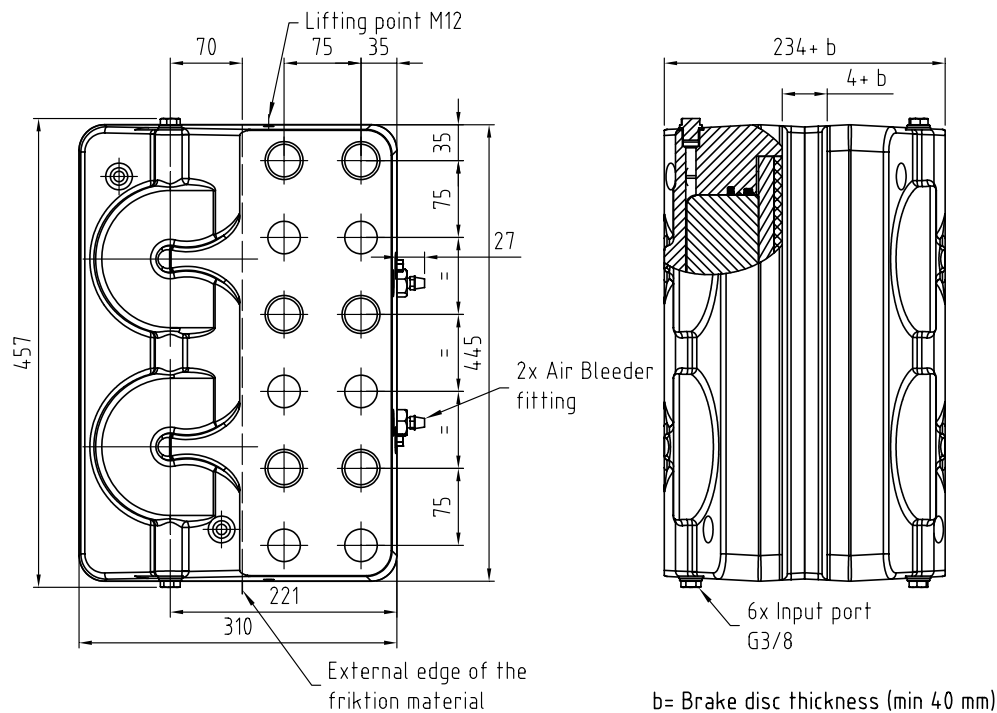
The tangential braking force is directly transmitted to the brake housing. As a result, the brake pistons are not subject to any radial forces, which contributes to longer brake life.

Brake pad wear is automatically compensated for with increased piston stroke.



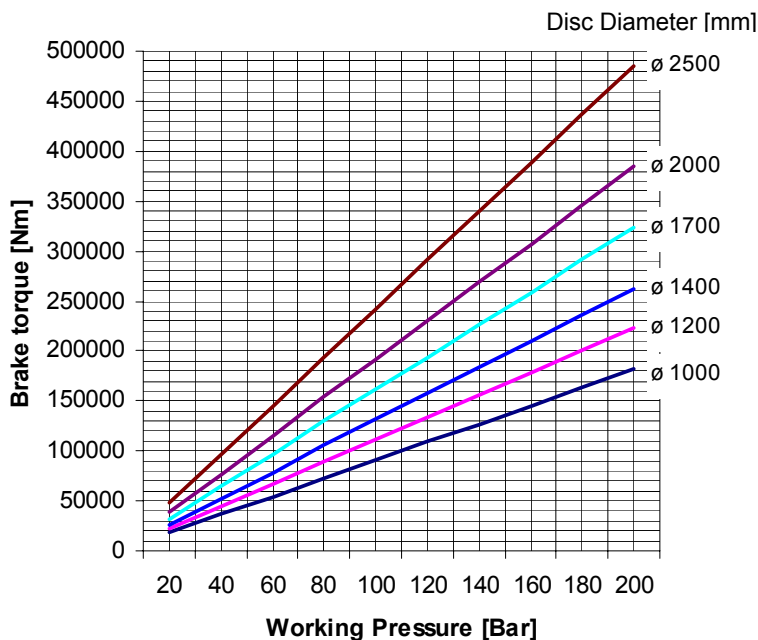
Braking force ¹⁾		Max hydraulic pressure [bar]	Friction area per brake [cm ²]	Max. working oil volume per brake ²⁾ [cm ³]	Piston area per brake half [cm ²]	Weight [kg]
F ₁ [N/bar]	F _{max} [N]					
2021	404200	200	1056	393	245	177

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



Torque table

SKD 4x125



The braking torque is calculated from the following formula:

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

q = number of brakes

F₁ = braking force according to the table on page 1 [N]

p = pressure [bar]

D_s = brake disc diameter [m]

H = brake pad height [m] (SKD 4x125: 0,140)

Options

- Support structure
- Proximity switches for on/off or pad wear indication.
- Return springs and screws

Suitable applications

Dellner Brakes model SKD 4x125 is suitable wherever service, stopping and holding brakes are needed, for example in the following types of applications:

- Propulsion propeller shafts
- Wind mills
- Metal forming
- Test rigs