

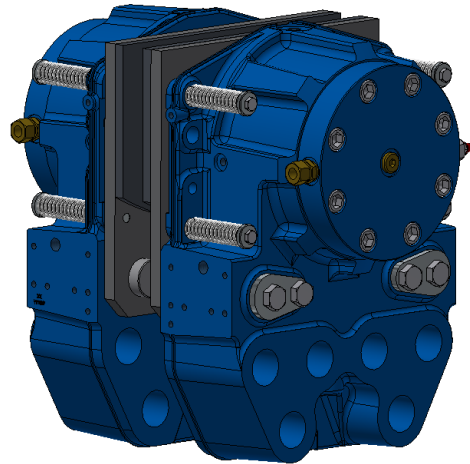
### GENERAL DESCRIPTION AND DATA

Dellner Brakes model SKD 140 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 between which a support structure with variable thickness can be mounted to accommodate any brake disc thickness.

Each brake half has two cylindrical guide pins that transmit the tangential braking force from the brake lining to the brake housing and mounting stand. As a result, the brake pistons are not subject to any radial forces, which contribute to longer brake life.

Four springs on each brake half retract the brake pads from the disc when pressure is released. Brake pad wear is automatically compensated for with increased piston stroke.



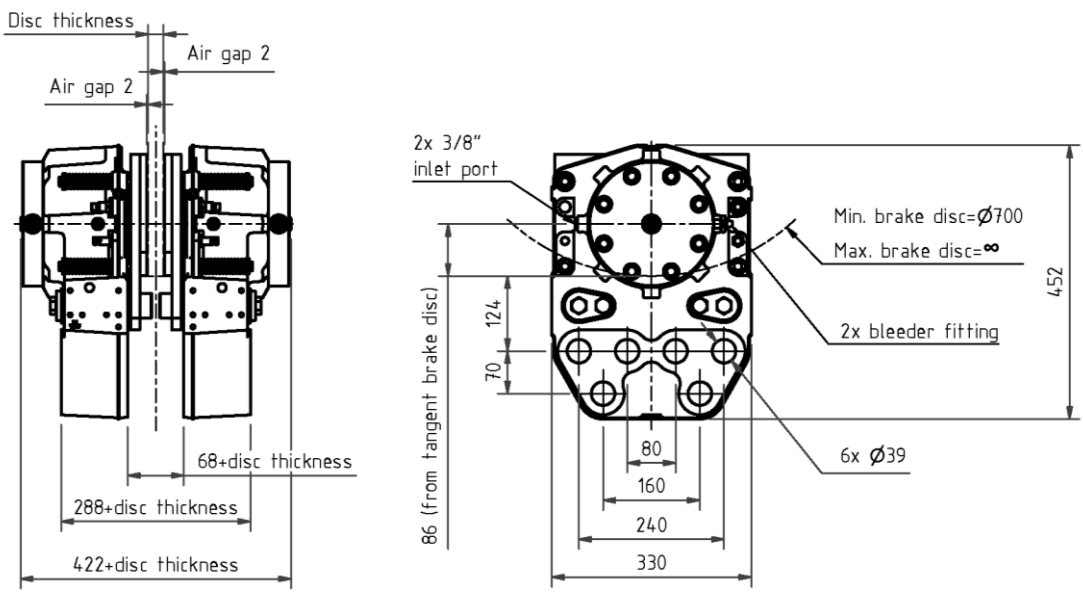
Model	Braking force <sup>1)</sup>		Max hydraulic pressure [bar]	Friction area per brake <sup>2)</sup> [cm <sup>2</sup> ]	Max. working oil volume per brake <sup>3)</sup> [cm <sup>3</sup> ]	Piston area per brake half [cm <sup>2</sup> ]	Weight [kg]
	F1 [N/bar]	Fmax [N]					
SKD 140	1 293	258 600	200	1 200	370 / (431)	154	231

1) Calculated with an average frictional coefficient  $\mu=0,42$ . Consideration has not been taken for external factors.

2) Total allowable wear volume of 1 200 cm<sup>3</sup>

3) Air gap 2 mm and max. recommended pad wear / (air gap 2 mm and fully worn pads)

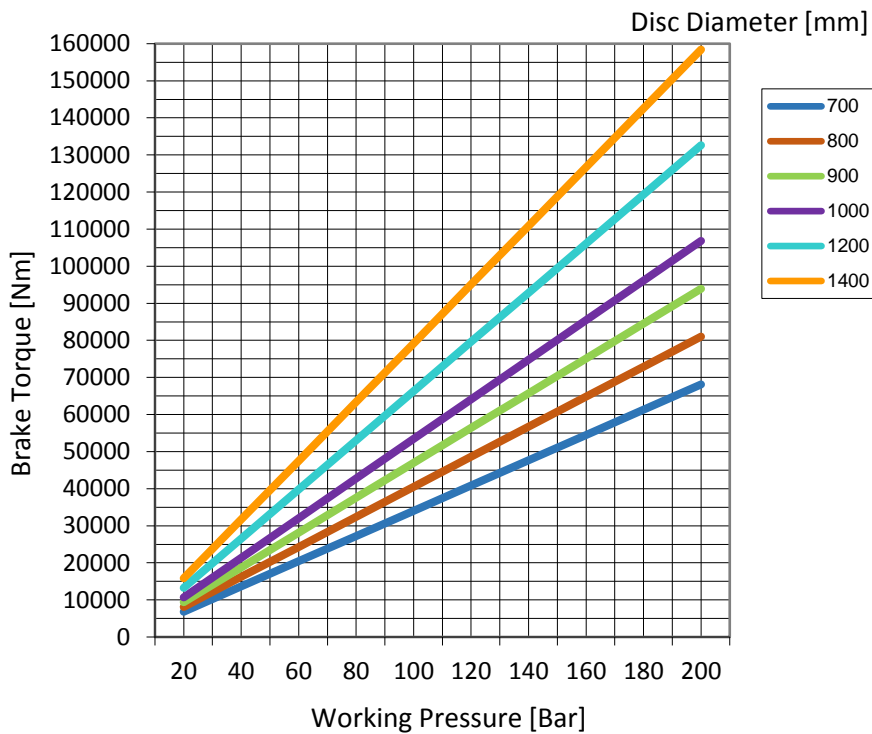
### DIMENSIONS (WITHOUT SUPPORT)



Minimum brake Disc diameter  $\phi D = 700$  mm

Maximum shaft Flange diameter  $\phi F = \text{brake Disc diameter} - 440$  mm

### TORQUE TABLE



Brake torque is calculated using the following formula:

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

$D_s$  = brake disc diameter [m]  
 $H$  = 0.172 [m]  
 $q$  = number of brakes  
 $F$  = braking force, according to product leaflet [N]

### OPTIONS (do not hesitate contacting us for more detailed information)

- Brake pad friction materials (several different materials).
- Support in different design configurations (single and/or double assemblies).
- Spacers for different brake disc thicknesses.
- Tube connection set (connects the housings to one connection point).
- Cylinder sealings (adapted for various hydraulic fluids and/or ambient conditions such as low and/or high temp).
- Double cylinder sealing concept.
- Electrical indicators (brake ON/OFF and/or pad WEAR).

### APPLICATIONS

Dellner Brakes model SKD 140 is suitable wherever disc brakes are needed, for example in the following types of applications:

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