

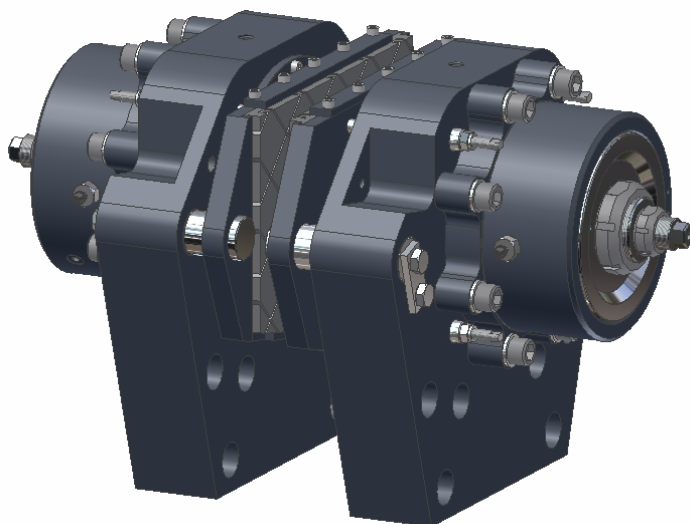
DISC BRAKE – MODEL SKP 220

SPRING APPLIED, HYDRAULIC PRESSURE RELEASED DISC BRAKE

Dellner Brakes model SKP 220 spring applied, hydraulically released disc brake offers a reliable and safe method of braking linear or rotary motion.

The brake consists of two symmetrical halves and can be supplied with or without a mounting stand.

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 applied.

The disc spring pack must be adjusted to compensate for brake lining wear and to maintain full brake capacity. An extension of the brake piston through the adjustment nut gives an easy visual way to tell when adjustment is needed.

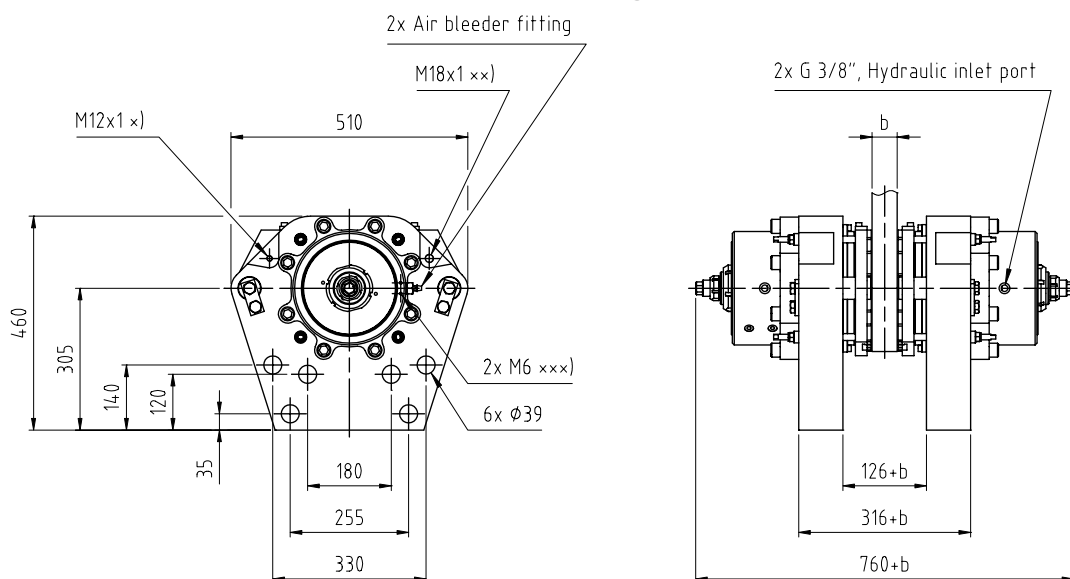
As an option the brake can be equipped with proximity switches to indicate brake ON/OFF and/or NEED OF ADJUSTMENT.

Model	Tangential braking force F		Releasing pressure	Air gap between brake disc and lining		Estimated life of disc spring pack		Friction area per brake	Weight [kg]
	[N] ¹⁾			[mm]	[no. of strokes]				
	max. ²⁾	min. ³⁾	min. ⁵⁾		max. ⁶⁾	min. ⁷⁾	max. ⁸⁾		
SKP 220-98	111500	98700	70	2x2,0	2x4,0	> 2x10 ⁶	> 2x10 ⁶	1815	410
SKP 220-123	135900	123800	80	2x2,0	2x4,0	> 2x10 ⁶	> 2x10 ⁶	1815	410
SKP 220-160	209100	163400	130	2x2,0	2x4,0	> 2x10 ⁶	> 2x10 ⁶	1815	410
SKP 220-205	252600	209100	150	2x2,0	2x4,0	> 2x10 ⁶	> 2x10 ⁶	1815	410
SKP 220-248	294400	252600	170	2x2,0	2x4,0	> 2x10 ⁶	> 2x10 ⁶	1815	410

- 1) Calculated with an average frictional coefficient $\mu=0,42$. Consideration has not been taken for external factors.
- 2) Braking force with correctly adjusted disc spring pack.
- 3) Braking force with maximum recommended air gap before adjustment is needed.
- 4) Pressure to fully release brake.
- 5) Air gap for correctly adjusted brake.
- 6) Maximum recommended air gap before adjustment is needed.
- 7) Valid for minimum spring pack compression.
- 8) Valid for maximum spring pack compression.



SKP 220 without mounting stand



- x) Mounting holes for brake ON/OFF indicator (option)
 xx) Mounting holes for brake pad wear indicator (option)
 xxx) Mounting holes for braking force adjustment indicator (option)

b = Brake disc thickness

Torque table

Brake torques listed in table below are in Nm. ($M_{\text{brake}} = \text{no. of brakes} * F[\text{N}] * (D[\text{m}]-H[\text{m}]) / 2$)

Brake model	Tangential braking force F [N]		H [m]	Disc diameter D [mm]							
	max. ²⁾	min. ³⁾		Ø1000	Ø1200	Ø1400	Ø1600	Ø1800	Ø2000	Ø2200	Ø2500
SKP 220-98	111500	98700	0,26	36500	46300	56200	66100	75900	85800	95700	110500
				41200	52400	63500	74700	85800	97000	108100	124800
SKP 220-123	135900	123800	0,26	45800	58100	70500	82900	95300	107700	120000	138600
				50200	63800	77400	91000	104600	118200	131800	152200
SKP 220-160	209100	163400	0,26	60400	76700	93100	109400	125800	142100	158400	183000
				77300	98200	119100	140000	161000	181900	202800	234100
SKP 220-205	252600	209100	0,26	77300	98200	119100	140000	161000	181900	202800	234100
				93400	118700	143900	169200	194500	219700	245000	282900
SKP 220-248	294400	252600	0,26	93400	118700	143900	169200	194500	219700	245000	282900
				108900	138300	167800	197200	226600	256100	285500	329700

- 1) Calculated with an average frictional coefficient $\mu=0,42$. Consideration has not been taken for external factors.
- 2) Braking force with correctly adjusted disc spring pack.
- 3) Braking force with maximum recommended air gap before adjustment is needed.

Suitable applications

Dellner Brakes model SKP 220 is suitable wherever safety brakes are needed, for example in the following types of applications:

🚧 Cranes
 🚧 Winches

🚧 Conveyors
 🚧 Wind mills

🚧 Draglines
 🚧 Draw works