

DISC BRAKE – MODEL SKP 95

SPRING APPLIED, HYDRAULIC PRESSURE RELEASED DISC BRAKE

Dellner Brakes model SKP 95 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 support. The brakes supplied with a support are adjusted for a 12 mm thick brake disc. When used with thicker discs the brakes can be supplied with spacers.



Each brake half has two cylindrical guide pins that transmit the tangential braking force from the brake lining to the brake housing and support. As a result, any radial forces on the brake pistons are minimized which contributes to longer brake life.

Two springs on each brake half retract the brake pads from the disc when pressure is applied.

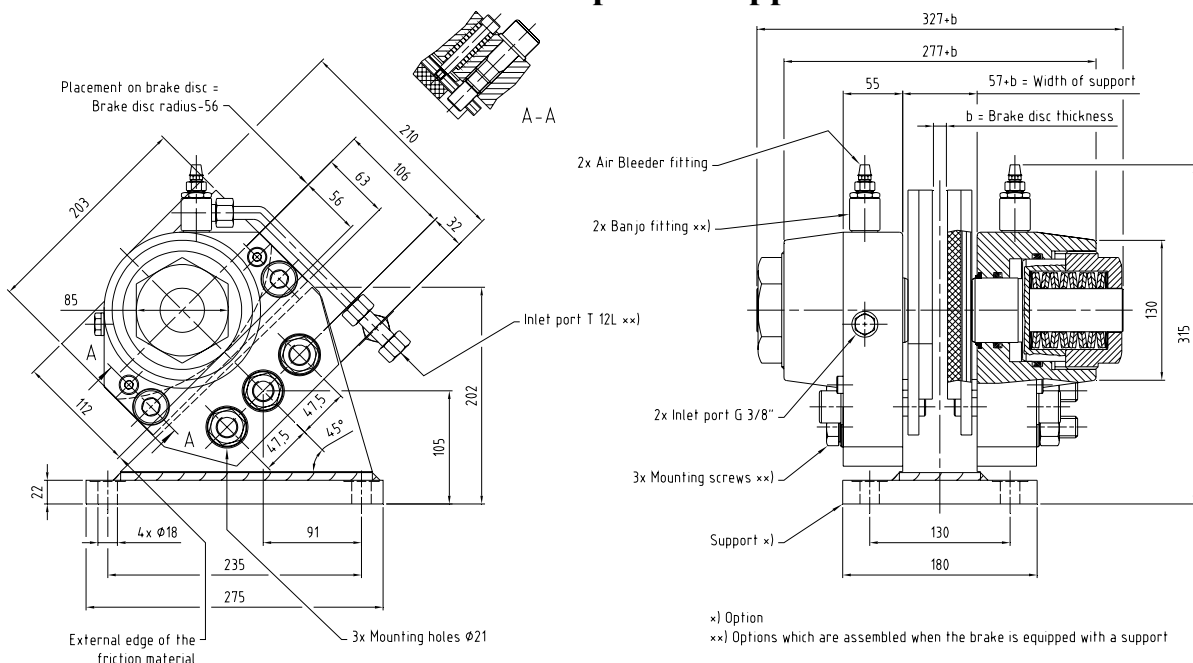
The disc spring pack must be adjusted to compensate for brake lining wear and to maintain full brake capacity. An extension of the brake piston through the adjustment nut gives an easy visual way to tell when adjustment is needed.

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

Model	Tangential braking force F		Releasing pressure [bar] ⁴⁾	Air gap between brake disc and lining [mm]		Estimated life of disc spring pack [no. of strokes]		Friction area per brake [cm ²]	Weight	
	[N] ¹⁾			min. ⁵⁾	max. ⁶⁾	min. ⁷⁾	max. ⁸⁾		Excl. support	Incl. support
	max. ²⁾	min. ³⁾								
SKP 95-10	12600	10700	45	2x1,0	2x2,5	>2x10 ⁶	>2x10 ⁶	402	46	68
SKP 95-14	17800	14300	65	2x1,0	2x2,5	>2x10 ⁶	>2x10 ⁶	402	46	68
SKP 95-18	24000	18200	90	2x1,0	2x2,5	>2x10 ⁶	>2x10 ⁶	402	46	68
SKP 95-27	33500	27800	115	2x1,0	2x2,5	>6x10 ⁵	>1x10 ⁶	402	46	68

- 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 95 with optional support



Torque table

The braking torque is calculated from the following formula:

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

- q = number of brakes
- F = braking force according to the table below [N]
- D_s = brake disc diameter [m]
- H = brake pad height [m] (SKP 95 = 0,120)

Brake model	Tangential braking force F [N] ¹⁾		Disc diameter D [mm]							
	max. ²⁾	min. ³⁾	Ø400	Ø450	Ø500	Ø600	Ø700	Ø800	Ø900	Ø1000
SKP 95-10	12600	10700	1490	1760	2030	2560	3100	3630	4170	4700
			1760	2070	2390	3024	3650	4280	4910	5540
SKP 95-14	17800	14300	2000	2350	2710	3430	4140	4860	5570	6290
			2490	2930	3380	4270	5160	6050	6940	7830
SKP 95-18	24000	18200	2540	3000	3450	4360	5270	6180	7090	8000
			3360	3960	4560	5760	6960	8160	9360	10560
SKP 95-27	33500	27800	3890	4587	5280	6670	8060	9450	10840	12230
			4690	5520	6360	8040	9710	11390	13060	14740

- 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.

Options

- Support
- Proximity or mechanical switches for indicating on/off, pad wear or "time to adjust".
- Tube connection set (connects the two cylinders to one connection point)

Suitable applications

Dellner Brakes model SKP 95 is suitable wherever safety brakes are needed, for example in the following types of applications:

- Cranes
- Winches
- Conveyors
- Wind mills
- Emergency stops
- Parking applications

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