

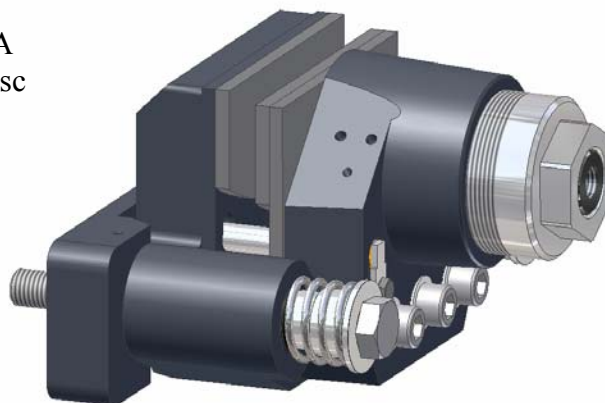
# DISC BRAKE – MODEL SKP 65 SA

SPRING APPLIED, HYDRAULIC PRESSURE RELEASED  
SINGLE ACTING DISC BRAKE

The Dellner Brakes Single Acting model SKP65-SA is a spring applied, hydraulically released caliper disc brake, that offers a reliable and safe method of braking linear or rotary motion.

The Single Acting brake is largely designed with internal parts from Dellner Brakes Double Acting brake, the SKP, a well proven concept.

The Single Acting brake is self aligning and is thus well suited for applications with axial movements or limited installation space. Moreover, it consists of one cylinder halve and a robust low friction sliding system that enables self alignment. The SA caliper concept also has a spring retraction system that ensures full brake release and pad retraction from the brake disc, when the brake cylinder is released with hydraulic pressure.



Cylindrical guide pins help direct the tangential force from the brake lining to the brake housing and support. As a result, any radial forces on the brake piston is minimized which contributes to a longer brake life.

The unique, well proven Dellner Brakes design, with the brake piston extended through to the adjustment nut gives a visual indication when adjustment is required.

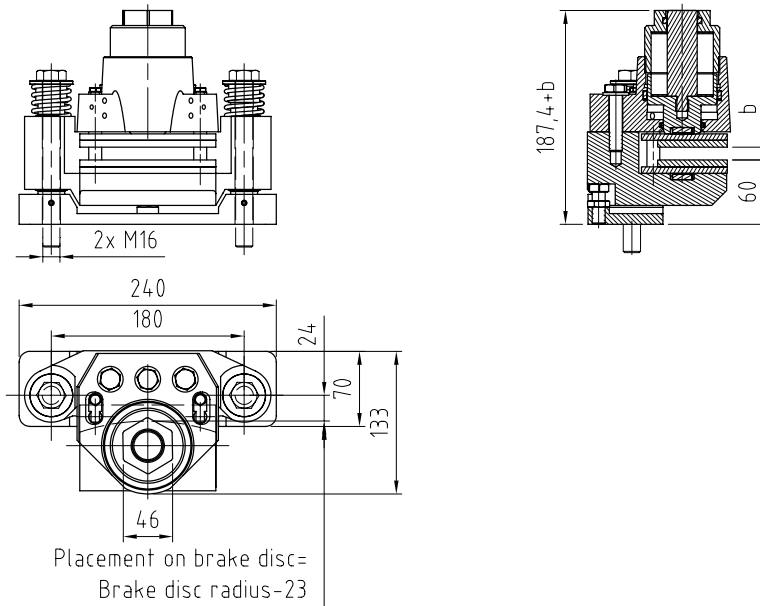
As an option, the brakes can be equipped with proximity switches to indicate brake ON/OFF, PAD WEAR and/or NEED OF ADJUSTMENT. Dellner Brakes also offers a variety of different friction and seal materials to fit any application demands.

Model	Tangential braking force F		Releasing pressure [bar] <sup>4)</sup>	Air gap between brake disc and lining [mm]		Estimated life of disc spring pack [no. of strokes]		Friction area per brake [cm <sup>2</sup> ]	Weight [kg]
	[N] <sup>1)</sup>			min. <sup>5)</sup>	max. <sup>6)</sup>	min. <sup>7)</sup>	max. <sup>8)</sup>		
	max. <sup>2)</sup>	min. <sup>3)</sup>							
SKP 65-02 SA	2100	2000	15	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17
SKP 65-04 SA	6000	3900	40	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17
SKP 65-06 SA	7700	6000	50	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17
SKP 65-08 SA	12000	7900	80	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17
SKP 65-10 SA	13000	9900	85	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17
SKP 65-11 SA	18200	11300	120	2x0,5	2x2,0	>2x10 <sup>6</sup>	>2x10 <sup>6</sup>	152	17

- 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 65 SA



### 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 65 SA = 0,075)

Brake model	Tangential braking force F [N] <sup>1)</sup>		Disc diameter D [mm]							
	max. <sup>2)</sup>	min. <sup>3)</sup>	ø300	ø350	ø400	ø450	ø500	ø600	ø700	ø800
SKP 65-02 SA	2100	2000	220	270	320	370	420	520	620	720
			230	280	340	390	440	550	650	760
SKP 65-04 SA	6000	3900	430	530	630	730	820	1020	1210	1410
			670	820	970	1120	1270	1570	1870	2170
SKP 65-06 SA	7700	6000	670	820	970	1120	1270	1570	1870	2170
			860	1050	1250	1440	1630	1870	2400	2790
SKP 65-08 SA	12000	7900	880	1080	1280	1480	1670	2070	2460	2860
			1350	1650	1950	2250	2550	3150	3750	4350
SKP 65-10 SA	13000	9900	1110	1360	1600	1850	2100	2590	3090	3580
			1460	1780	2110	2430	2760	3410	4060	4710
SKP 65-11 SA	18200	11300	1270	1550	1830	2110	2400	2960	3530	4090
			2040	2500	2950	3410	3860	4770	5680	6590

- 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

- ✚ Proximity switches for indicating on/off, pad wear or “time to adjust”.

### Suitable applications

Dellner Brakes model SKP 65 SA is suitable wherever safety brakes are needed and preferable at narrow locations, for example in the following types of applications:

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

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