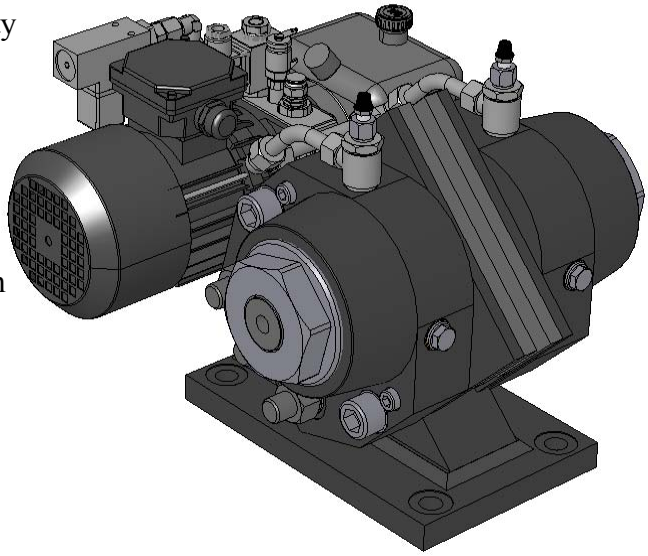
DISC BRAKE SYSTEM – COMPACT 95

SPRING APPLIED, HYDRAULIC PRESSURE RELEASED DISC BRAKE
WITH SUPPORT AND HYDRAULIC POWER PACK

Dellner Compact 95 is a complete, ready to use, safety brake system which includes disc brake, support and hydraulic power pack (HPP) with one interface.



The system is very compact, light weight, durable and suitable for outdoor / dirty environments (IP65).

The HPP is capable to actuate a second brake through a hose (twin mounting). It is also possible to separate the HPP, and mount it remote from the support. (In this case hydraulic tubing is not included).

The Compact 95 systems are designed for 12 mm thick brake discs. When used with thicker discs the systems can be supplied with spacers.

To maintain full brake torque the brakes should be adjusted when below mentioned maximum air gap value is exceeded. An extension of the brake piston through the adjustment nut gives an easy visual way to tell when adjustment is needed. As standard the Compact 95 systems are delivered with Dellner "Easy adjustment" feature.

Compact model	Tangential braking force F [N][1]		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 [kg]
	max.[2]	min.[3]		min.[5]	max.[6]	min.[7]	max.[8]		
95-10	12600	10700	45	2x1,0	2x2,5	>2x10^6	>2x10^6	402	75
95-14	17800	14300	65			>2x10^6	>2x10^6		
95-18	24000	18200	90			>2x10^6	>2x10^6		
95-27	33500	27800	115			>6x10^5	>1x10^6		

1) Calculated with an average frictional coefficient μ=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.

Options

- Proximity or mechanical switches for indicating on/off, pad wear or "time to adjust".
- HPP for remote vertical mounting
- Console for remote mounting of vertical or horizontal HPP
- Other voltages for motor and solenoids than standard.
- ATEX approval available (causes changed outer dimensions on HPP)
- Cover for HPP

Dellner Brakes AB reserves the rights to modification without special notice.

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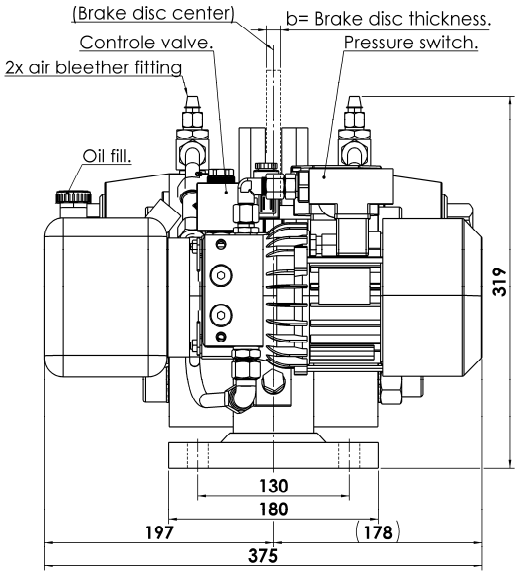
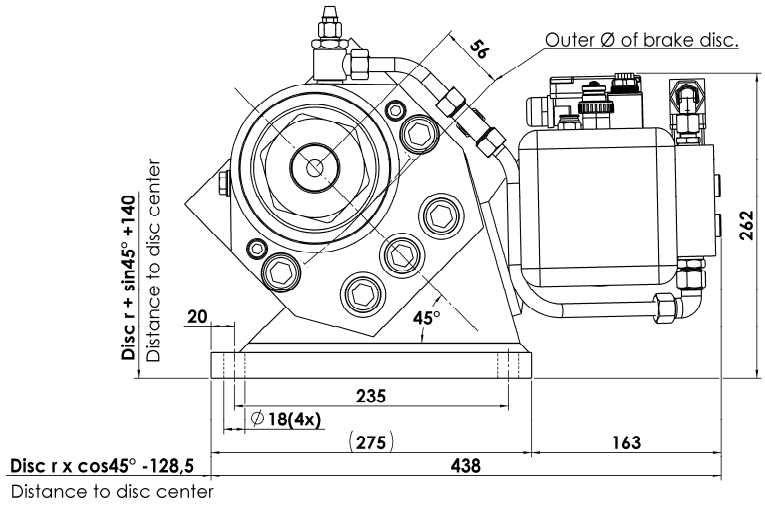
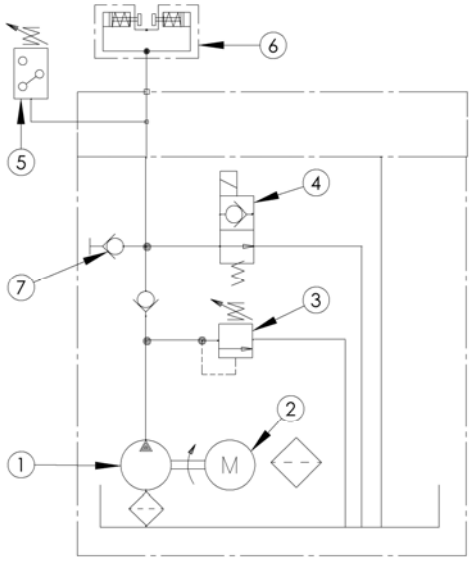
Issue 2

Dimensions / Hydraulic Circuit







Detail	Description
1	Pump *1.4 l/min*
2	Electric motor *230/400 V, 50 Hz, 0.37 kW*
3	Pressure relief valve *150 bar*
4	Control valve (solenoid valve) *24 VDC*
5	Pressure switch *(Set value 120 bar decreasing)*
6	Caliper Disc Brake *SKP 95*
7	Test connector *M16-1/4"*

Torque table

The braking torque is calculated from the following formula:

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

Compact model	Tangential braking force F [N][1]		Disc diameter D [mm]							
	max.[2]	min.[3]	ø400	ø450	ø500	ø600	ø700	ø800	ø900	ø1000
95-10	12600	10700	1490 1760	1760 2070	2030 2390	2560 3024	3100 3650	3630 4280	4170 4910	4700 5540
95-14	17800	14300	2000 2490	2350 2930	2710 3380	3430 4270	4140 5160	4860 6050	5570 6940	6290 7830
95-18	24000	18200	2540 3360	3000 3960	3450 4560	4360 5760	5270 6960	6180 8160	7090 9360	8000 10560
95-27	33500	27800	3890 4690	4587 5520	5280 6360	6670 8040	8060 9710	9450 11390	10840 13060	12230 14740

1) Calculated with an average frictional coefficient μ=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.

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