Passive rotor brakes -fail safe-

DELLNER BRAKES JHS

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Automatic wear adjustment of this passive rotor brake keeps the gap between the brake pad and disc consistent. The result: short response times – just like here with us.

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JHS-PRC-317-AWA

- Spring applied and hydraulically released fail-safe disc brake with a clamping force up to 27,000N; working temperature range down to -40°C
- Large brake pad area, lower brake pad disc t, long life time on the brake pad
- Constant small air between brake pad and disc given by the Automatic Wear Adjustment (AWA) System, short response time, fast braking
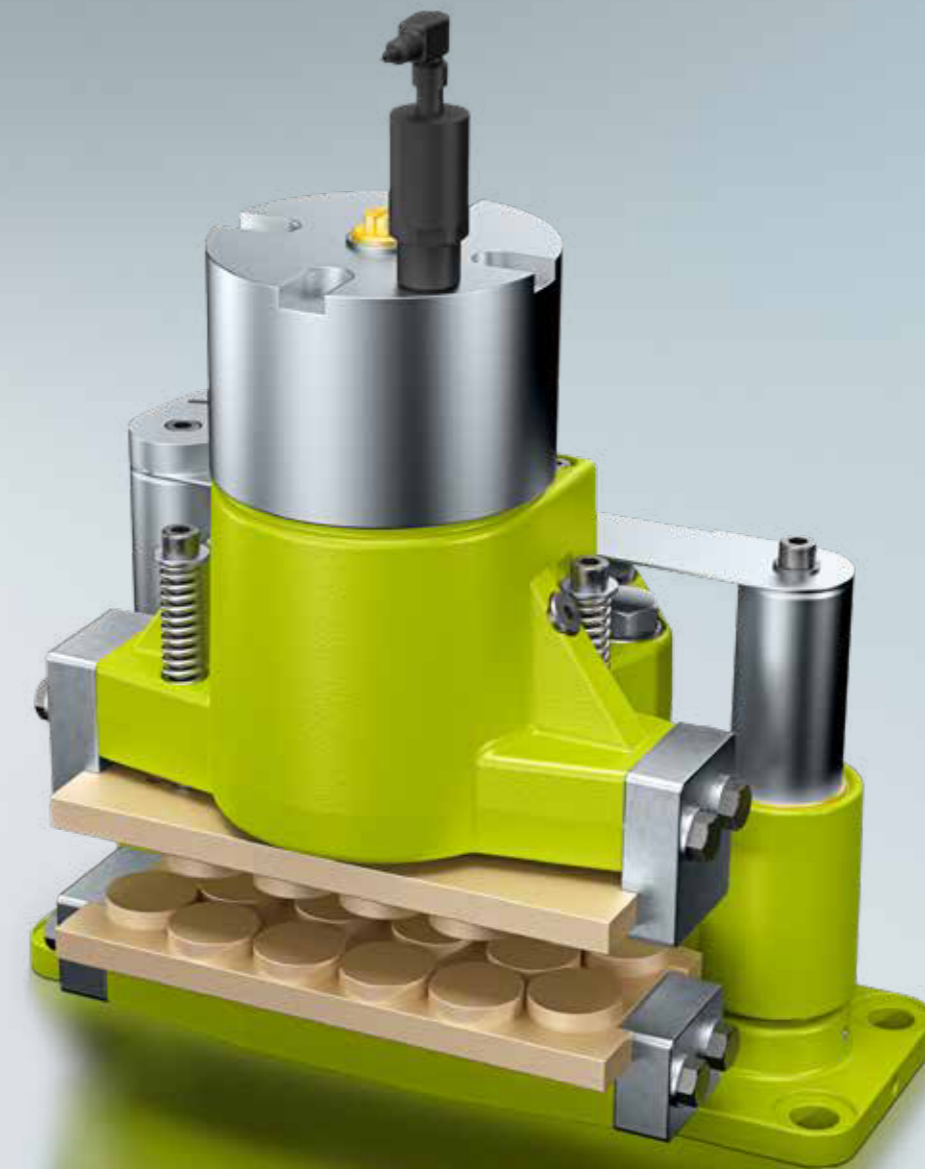
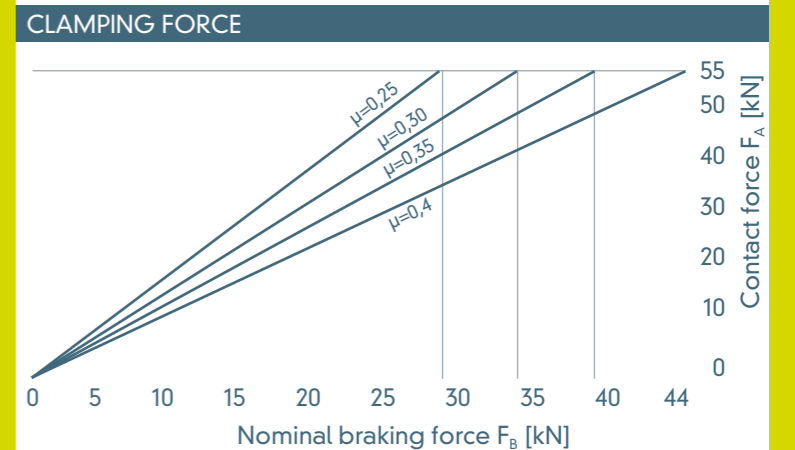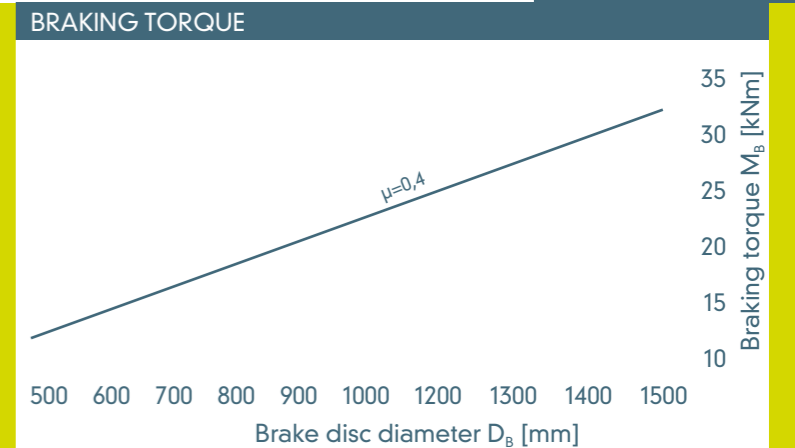- Easy mounting, using 4xM20 screws only, reduce installation costs
- Drain ports for hydraulic oil leakage, prevent oil on brake disc, high safety
- Few moving parts, easy maintenance, reduces maintenance costs
- Sinter brake pad, suitable for high speed or high torque braking occasions
- Removable brake pad holders, easy to exchange brake pad, low maintenance cost
- Apply to damp, dust and corrosive working environment

JHS-PRC-317-AWA

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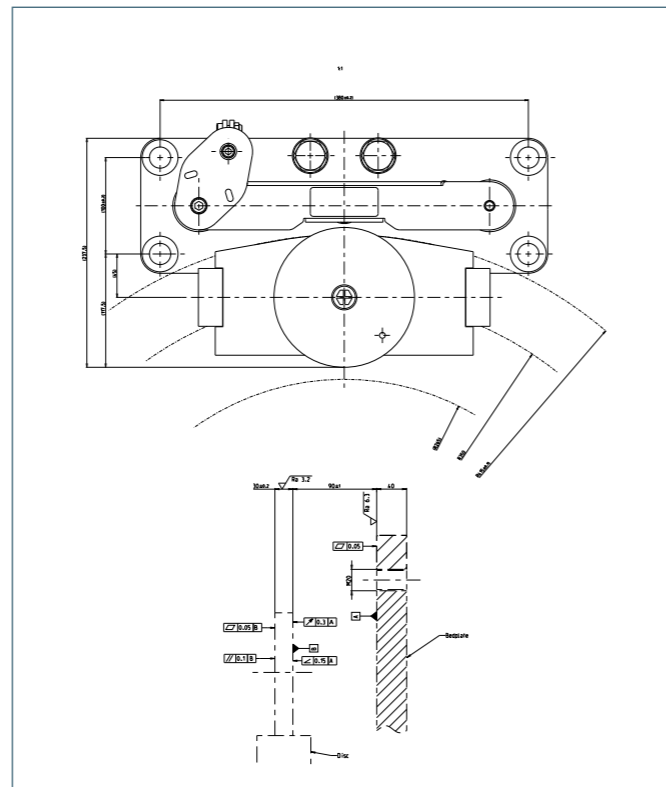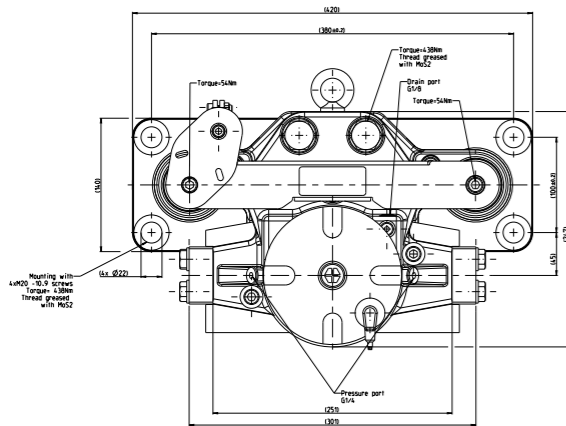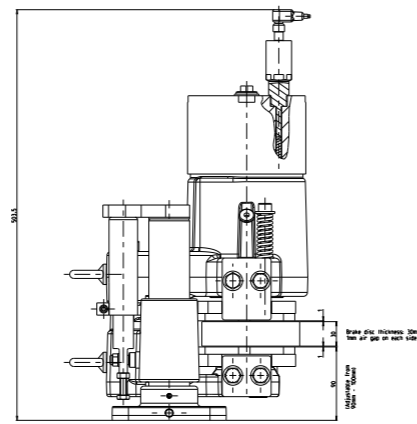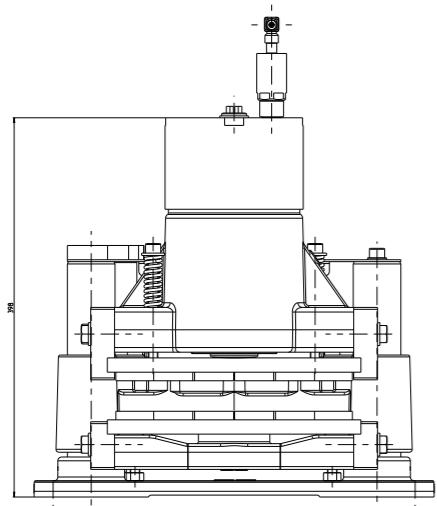
Type JHS-PRC-317-AWA		
Contact force Fa (max)	27	kN
Operation pressure p (max)	55	bar
Piston area	20	cm²
Min. working temperature	-40	°C
Weight	90	kg
Pressure connection port	G1/4	
Drain connection port	G1/8	
BRAKE PAD		
Pad area (sintered)	200	cm²
Brake pad width	126	mm
Floating range in axles	90-100	mm
Away from mounting surface	10	mm
Theor. Friction coefficient	0,4	µm
BRAKE DISC		
Min. brake disc ød2	500	mm
Max. outer coupling diameter	40	mm
Disc thickness (standard)	30	mm

BRAKING TORQUE

Braking torque formula:

$$F_B = F_A \times 2 \times \mu$$
$$M_B = a \times F_B \times D_B / 2$$

F_A = Contact force [kn]

F_B = Nominal braking force [kN]

M_B = Braking torque [kNm]

a = Number of calipers acting on the disc

D_B = Brake disc diameter [m]

BRAKING TORQUE

Braking torque M_B [kNm] vs Brake disc diameter D_B [mm]

µ=0,4

CLAMPING FORCE

Contact force F_A [kN] vs Nominal braking force F_B [kN]

µ=0,25 µ=0,30 µ=0,35 µ=0,4

OPTIONS
• Hydraulic power unit
• Brake pad with different material
• Brake pad wear and on/off indicator
• Temperature sensor