

Active rotor brakes



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As an engineer, it's always a special feeling when an idea is ready for market. Maybe it's not the same for everyone, but the certification of the JHS-3000 by German-Lloyd was a very emotional moment.

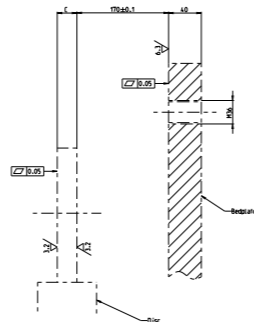
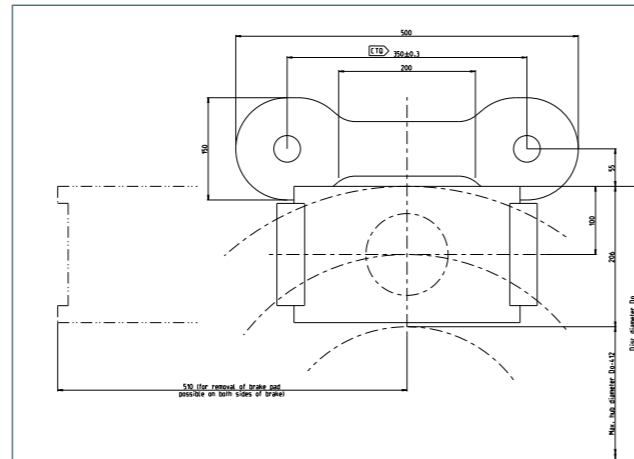
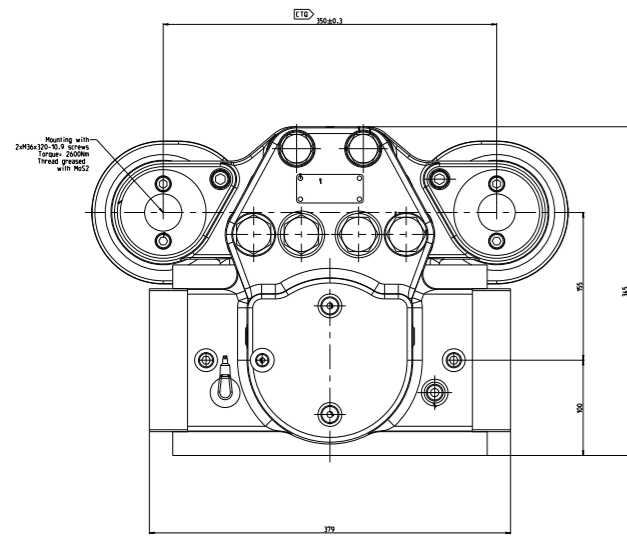
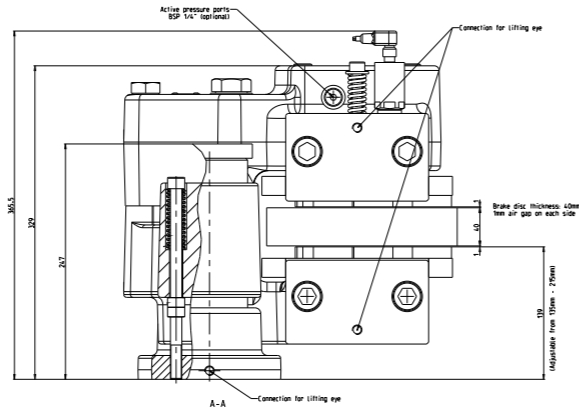
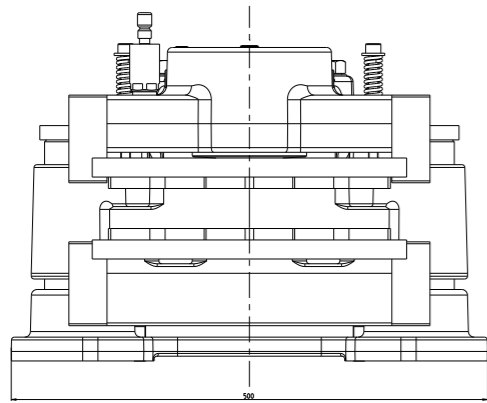
Altan Kökgöz, Engineering

JHS-3000



- Brake hydraulically applied; working temperature range down to -40 °C
- Large brake pad area, lower brake disc temperature, long life time on the brake pads
- Small airgap between brake pad and disc, short response time, fast braking
- Easy mounting, using 2 x M36 only, reduced installation costs
- Drain ports for hydraulic oil leakage, prevents 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-3000



TYPE JHS-3000

| | |
|------------------------------|----------------------|
| Contact force F_A (max) | 130 kN |
| Operating pressure p (max) | 115 bar |
| Piston area | 113 cm ² |
| Volume at 1 mm stroke | 11,3 cm ³ |
| Min. working temperature | -40 °C |
| Weight | 180 kg |
| Pressure connection port | G1/4 |
| Drain connection port | G1/8 |

BRAKE PAD

| | |
|-----------------------|---------------------|
| Pad area (organic) | 596 cm ² |
| Pad area (sintered) | 360 cm ² |
| Brake pad width | 200 mm |
| Max. wear of each pad | 5 mm |

| | |
|--|-----------|
| Floating range on axles towards mounting surface | 5 mm |
| Floating range on axles away from mounting surface | 10 mm |
| Theor. friction coefficient | 0,4 μ |

BRAKE DISC

| | |
|------------------------------|------------------|
| Min. brake disc ϕd_2 | 800 mm |
| Max. outer coupling diameter | = $d_2 - 412$ mm |
| Disc thickness (standard) | 40 mm |

BRAKING TORQUE

Braking torque formula:

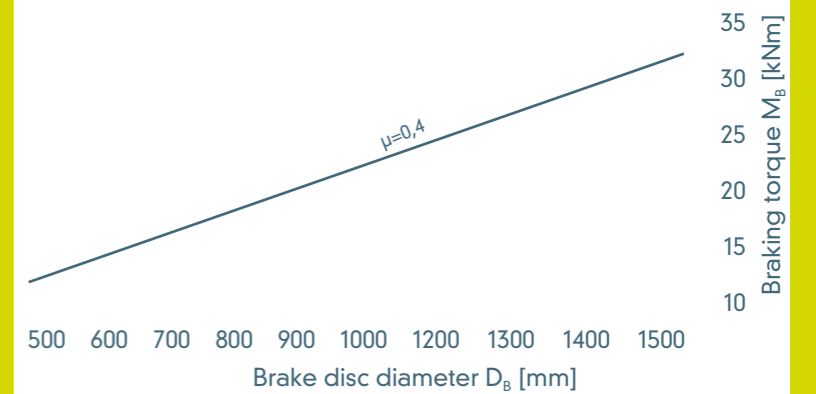
$$F_A = p \times 1,131$$

$$F_B = F_A \times 2 \times \mu$$

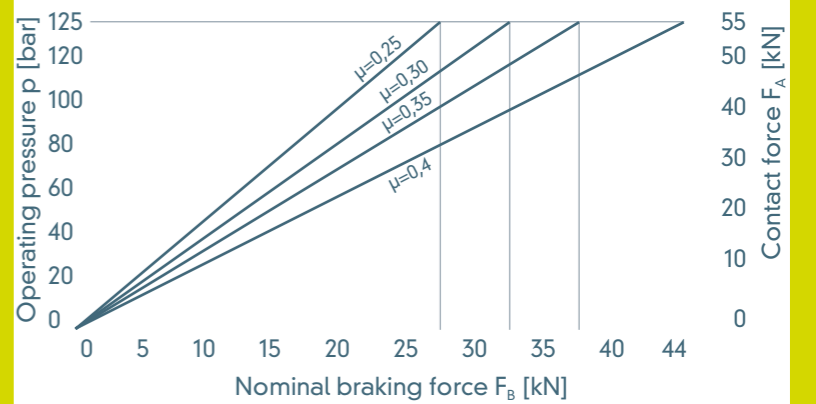
$$M_B = a \times F_B \times D_B / 2$$

- F_A = Contact force [kN]
- p = Operating pressure [bar]
- 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



CLAMPING FORCE



OPTIONS

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