

AB-2-90-102 YAW BRAKE

Yaw brakes are mounted at the nacelle base frame to control the position of the nacelle during operation, as it rotates with the changing wind direction to maximize power and efficiency.

DATASHEET SPECIFICATION

ARTICLE NUMBER	20-1523
MAX. PRESSURE	20 MPa
MAX. CLAMPING FORCE	254,4 kN
MAX. BRAKING FORCE	203,5 kN
FRICTION COEFFICIENT μ	0,4 [-]
DISC THICKNESS	30 mm
WEIGHT	78 kg
BRAKE HOUSE MATERIAL	EN-GJS-500-7
TEMPERATURE RANGE	-40 / +70 °C
PISTON DIAMETER	90 mm
SINGLE PISTON SURFACE AREA	63,6 cm ²
LINING TYPE	Organic TR146
LINING DIMENSIONS	2 x Ø104 mm
LINING THICKNESS	16 mm
FRICTION MATERIAL THICKNESS	10 mm
MAX. PERMITTED LINING WEAR	8 mm

FEATURES

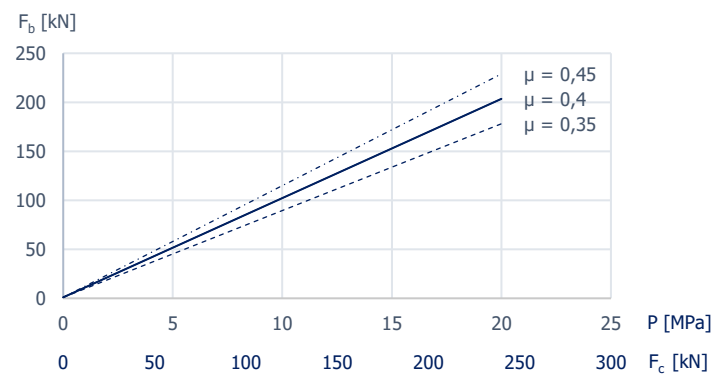
- Double high pressure seal, redundancy
- Applicable for several disc thicknesses
- Air gap brake pads according to customer specification
- Inspection holes for brake pad wear
- Grooved brake pads for redirecting fine dust & contamination
- Drain ports for oil leakage, preventing pads contamination
- Lifting eyes for good handling and fitting
- Brake pads with electric wear indicators

CALCULATION LEGENDA

- F_b** = Braking Force
- F_c** = Clamping Force
- μ** = Friction Coefficient
- M_b** = braking Torque
- z** = Number of Brakes
- D_{av}** = Effective Diameter of brake



BRAKING FORCE GRAPH



BRAKE FORCE CALCULATION

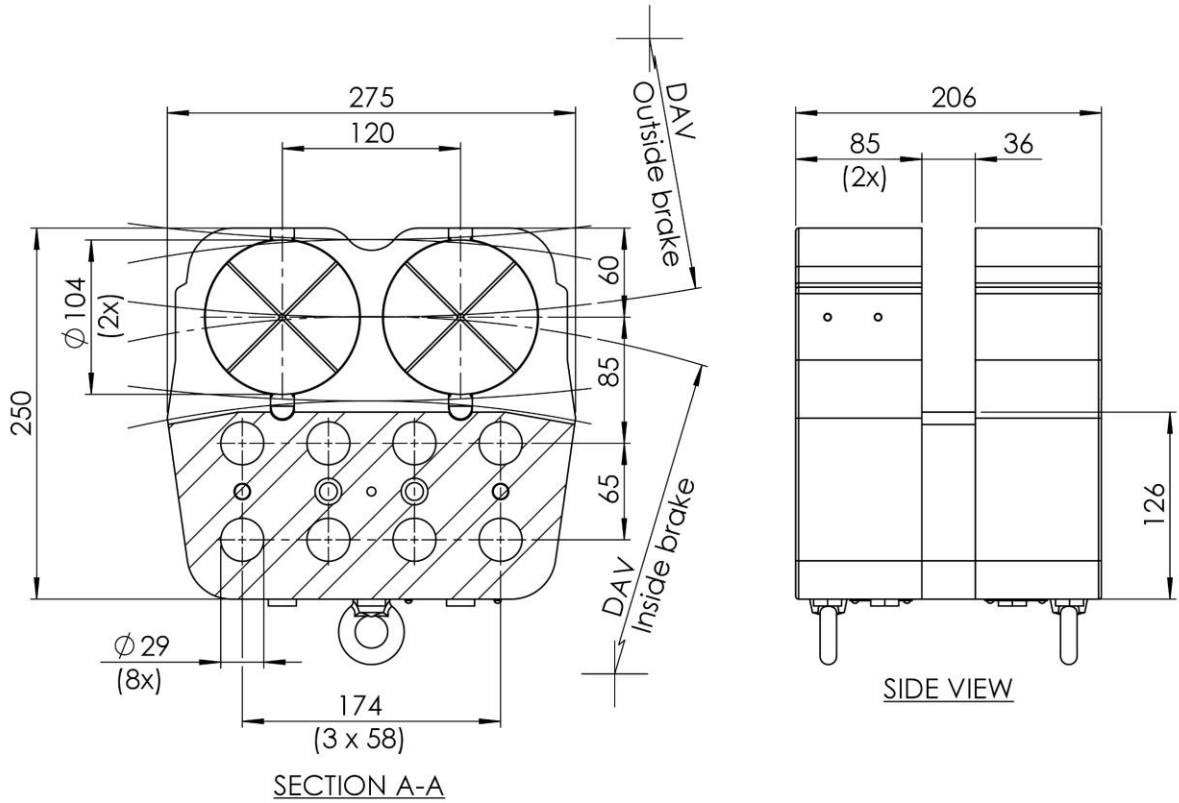
$$F_b = 2 \cdot F_c \cdot \mu^*$$

$$F_c = A \cdot P \cdot 10 \text{ [N]}$$

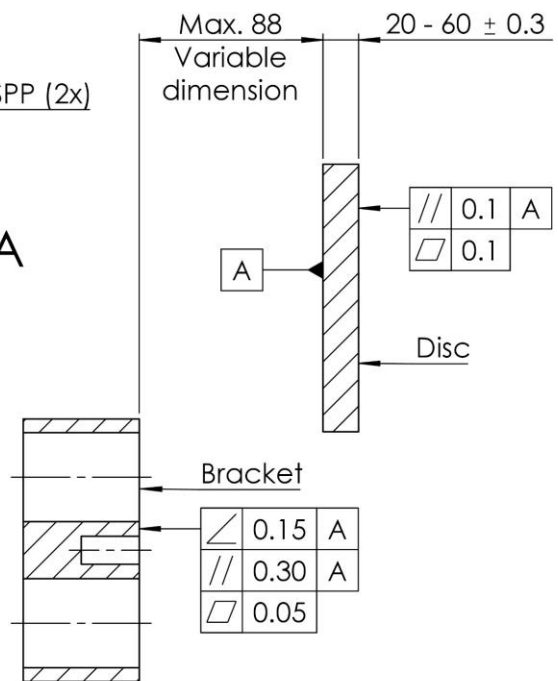
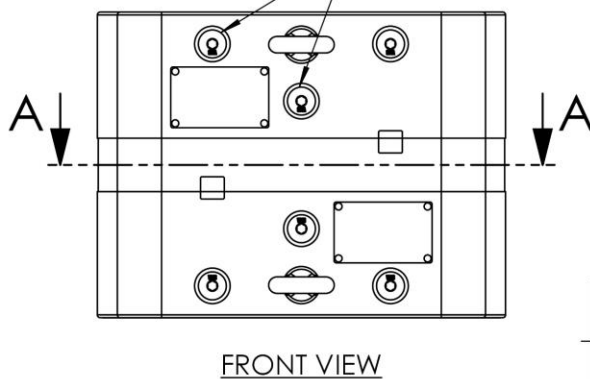
$$M_b = z \cdot F_b \cdot \frac{D_{av}}{2}$$

*External factors have not been taken into consideration

GENERAL ARRANGEMENTS



Pressure port 1/4" BSPP (4x) Drain port 1/4" BSPP (2x)



Mounting specification