

AB-1-125-101 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	20-1005
MAX. PRESSURE	21 MPa
MAX. CLAMPING FORCE	257,7 kN
MAX. BRAKING FORCE	103,1 kN
FRICTION COEFFICIENT μ	0,4 [-]
DISC THICKNESS	Not applicable
WEIGHT	25 kg
BRAKE HOUSE MATERIAL	EN-GJS-500-7
TEMPERATURE RANGE	-40 / +70 °C
PISTON DIAMETER	125 mm
SINGLE PISTON SURFACE AREA	122,7 cm ²
LINING TYPE	Organic TR146
LINING DIMENSIONS	144 x 76 mm
LINING THICKNESS	35 mm
FRICTION MATERIAL THICKNESS	10 mm
MAX. PERMITTED LINING WEAR	8 mm

FEATURES

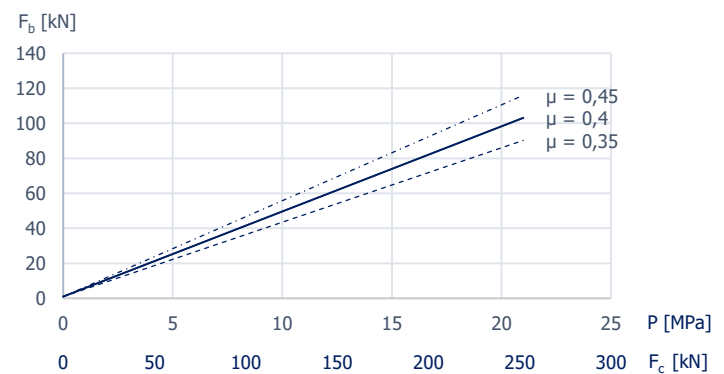
- Double high pressure seal, redundancy
- Grooved brake pads for redirecting fine dust & contamination
- Drain ports for oil leakage, preventing pads contamination
- Brake pads with electric wear indicators

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

$$F_b = 1 \cdot F_c \cdot \mu^*$$

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

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

*External factors have not been taken into consideration

GENERAL ARRANGEMENTS

