

AB-3-120-105-HP 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	20-1479
MAX. PRESSURE	25 MPa
MAX. CLAMPING FORCE	848,3 kN
MAX. BRAKING FORCE	678,6 kN
FRICTION COEFFICIENT μ	0,4 [-]
DISC THICKNESS	40 mm
WEIGHT	219 kg
BRAKE HOUSE MATERIAL	EN-GJS-500-7
TEMPERATURE RANGE	-40 / +70 °C
PISTON DIAMETER	120 mm
SINGLE PISTON SURFACE AREA	113,1 cm ²
LINING TYPE	Organic TR146
LINING DIMENSIONS	3 x Ø128 mm
LINING THICKNESS	18 mm
FRICTION MATERIAL THICKNESS	10 mm
MAX. PERMITTED LINING WEAR	8 mm

FEATURES

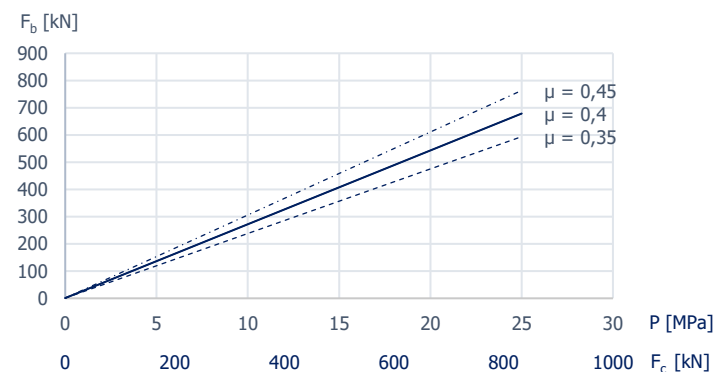
- Double high pressure seal, redundancy
- Applicable for several disc thicknesses
- Air gap brake pads according to customer specification
- Inspection holes for brake pad wear
- Grooved brake pads for redirecting fine dust & contamination
- Drain ports for oil leakage, preventing pads contamination
- 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

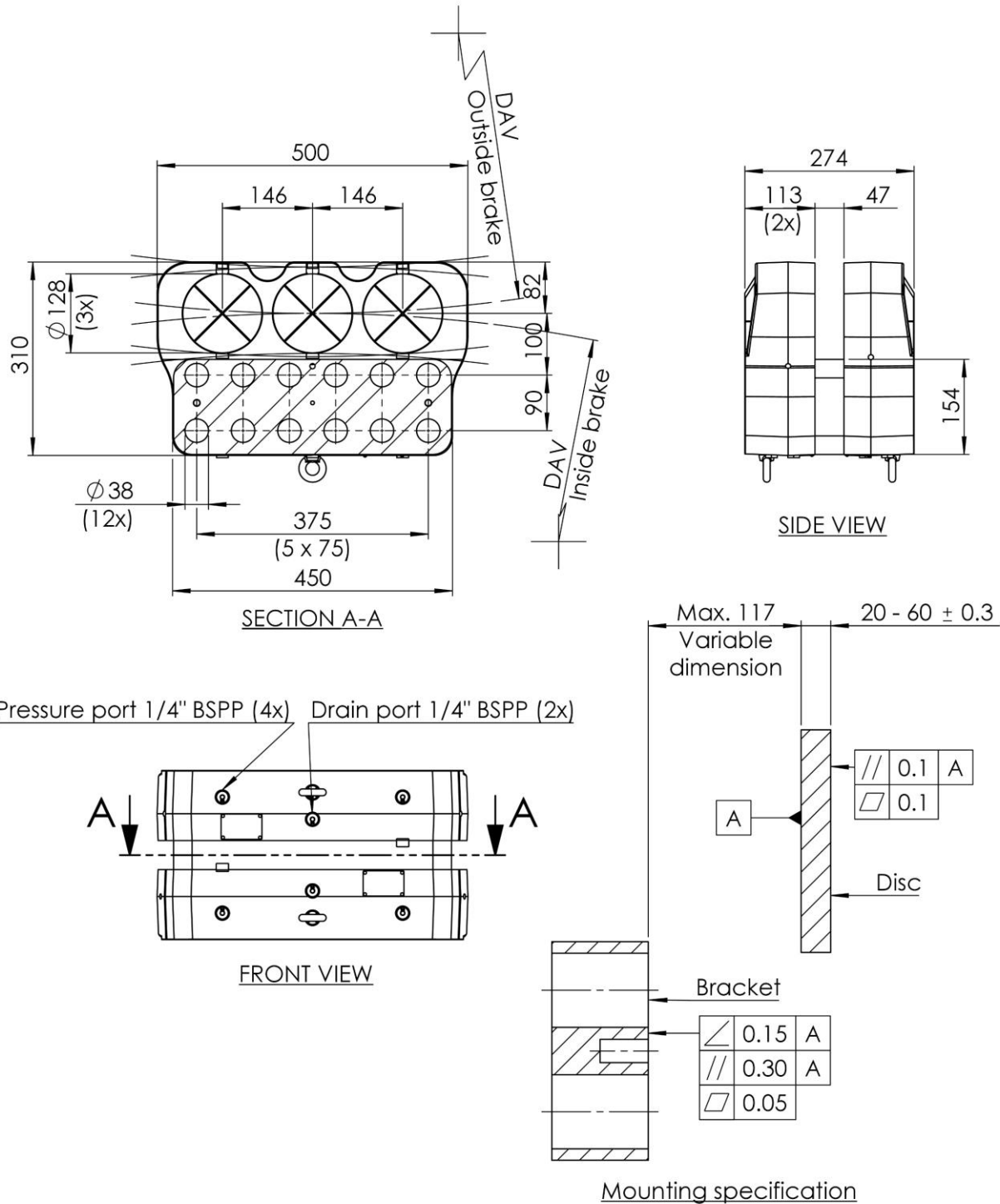
$$F_b = 2 \cdot F_c \cdot \mu^*$$

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

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

*External factors have not been taken into consideration

GENERAL ARRANGEMENTS



Trebu reserves the rights to modification without prior notification