

Description:

- The ABT 120 G brake is an Active Brake, Hydraulically Applied; braking force produced by variation of hydraulic pressure.
- The ABT 120 G brake consists of two independent caliper halves with opposite hydraulic cylinders. ABT brakes are suitable for horizontal and vertical brake discs under any angular displacement.

Design Advantage:

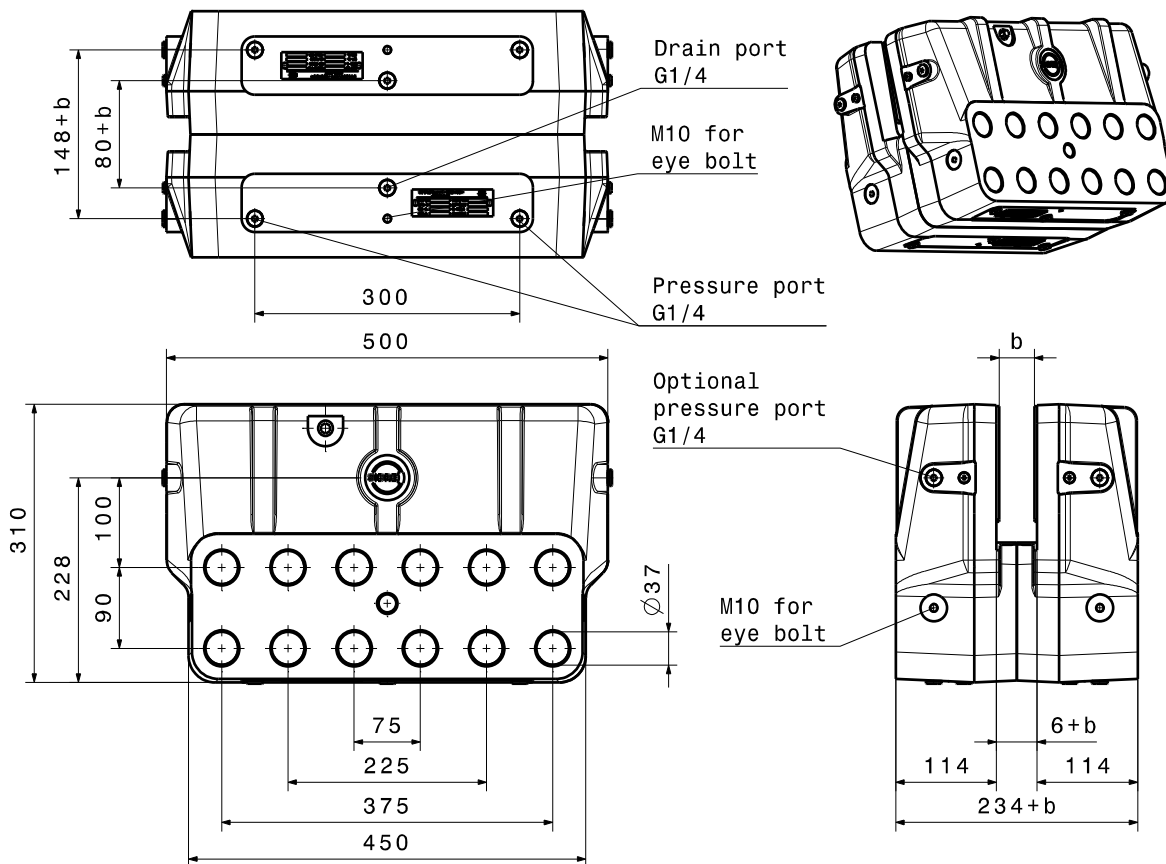
- Compact and robust construction
- Fast response time, fast braking for maximum safety
- Special design to reduce braking noise
- Stainless steel piston
- High performance lining with stable friction coefficient
- Suitable for low temperature application
- Long service life
- Easy maintenance

Application:

Stopping and/or holding brake for wind turbines

Alterations reserved

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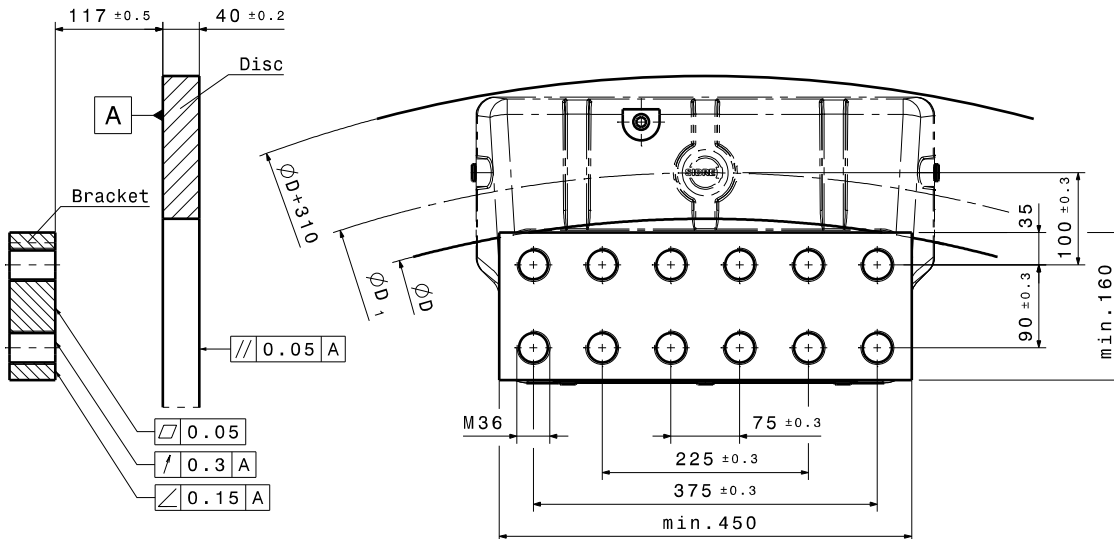


		ABT 120 G
Piston diameter	$\varnothing d_p$	120 mm
Piston area each side	A_p	33929 mm ²
Operating pressure	p	160 bar
Max. plant pressure	p_{max}	180 bar
Oil volume per 1 mm stroke	V_{oil}	68 cm ³
Lining type		organic
Lining surface	A_L	522 cm ²
Max. lining wear	s_L	7 mm
Nominal friction static	μ	0.4
Max. braking force ($\mu = 0.4$)	$F_{Br max}$	434 000 N
Disc thickness	b	40 – 60 mm
Min. disc diameter	D	2000 mm
Temperature range (for lower temperatures please contact us)	T	-20 °C to 70 °C
Weight	m	195 kg

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Example for inside mounting (b = 40)



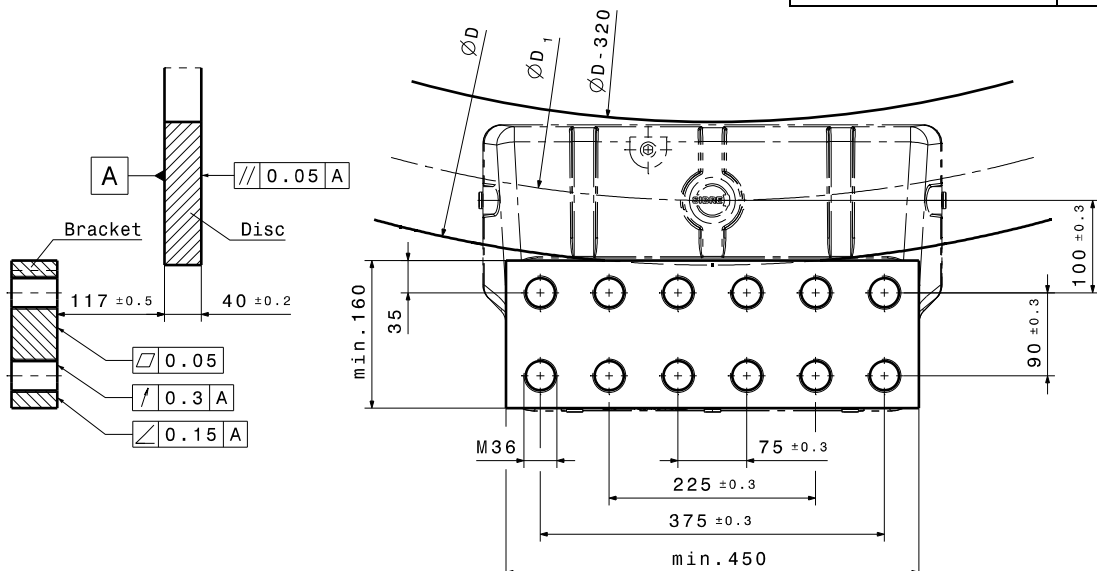
ØD	ØD1
2500	2600
2700	2804
3000	3106
3300	3408
3600	3710
3900	4012
4200	4314
≥ 4500	D+116

Calculation of Braking Torque

$$M_{Br} = F_{Br} \cdot \frac{D_1}{2} = 2 \cdot A_P \cdot p \cdot \mu \cdot \frac{D_1}{2} = A_P \cdot p \cdot \mu \cdot D_1$$

	ABT 120 G
Mounting bolts M	M36-10.9
Torque (MoS2 greased)	2560 Nm

Example for outside mounting (b = 40)



	ABT 120 G
Mounting bolts M	M36-10.9
Torque (MoS2 greased)	2560 Nm

Calculation of Braking Torque

$$D_1 = D - 136$$

$$M_{Br} = F_{Br} \cdot \frac{D_1}{2} = 2 \cdot A_P \cdot p \cdot \mu \cdot \frac{D_1}{2} = 2 \cdot A_P \cdot p \cdot \mu \cdot \left(\frac{D}{2} - 68 \right)$$

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