Brake Calipers HW 150 HUK and HW 180 HUK

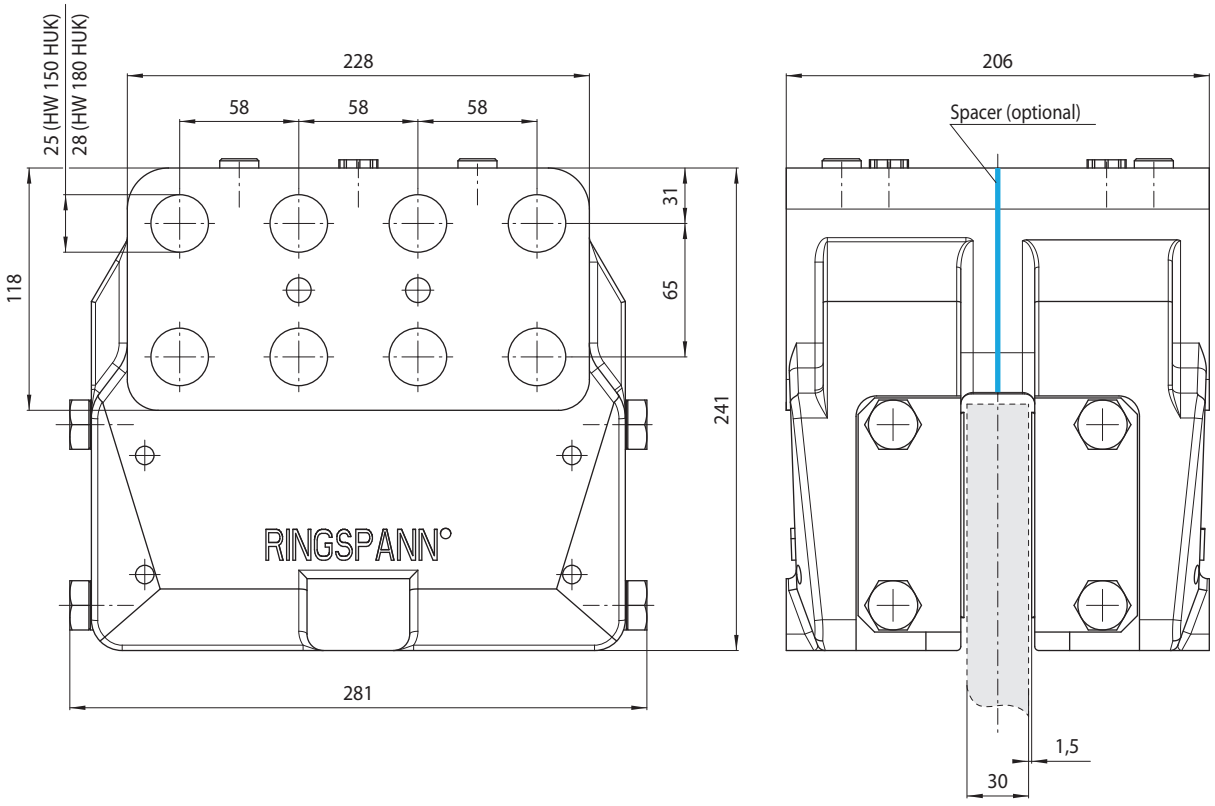
hydraulically activated – non-releasing
as yaw brake in wind turbines

Features	Code
Brake Caliper	H
Standard	W
With piston diameter 2 x 75 mm or piston diameter 2 x 90 mm	150 180
Hydraulically activated	H
Non-releasing	U
No adjustment to counter friction block wear	K
Max. clamping force 140 kN (HW 150) Max. clamping force 200 kN (HW 180)	140 200

Example for ordering

Brake Caliper HW 150 HUK, max. clamping force 140 kN:

HW 150 HUK - 140



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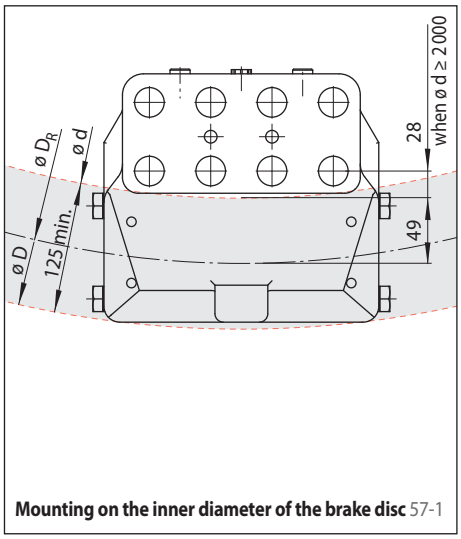
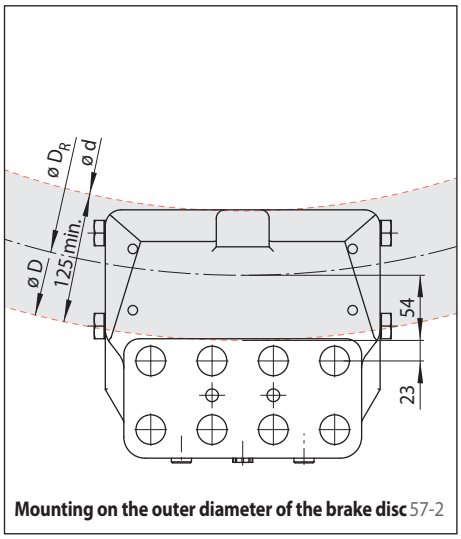
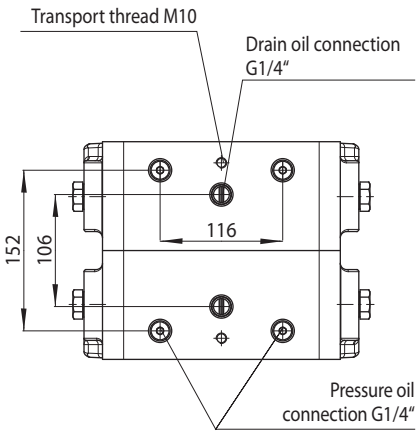
Mounting



Mounting on the inner diameter of the brake disc 57-1



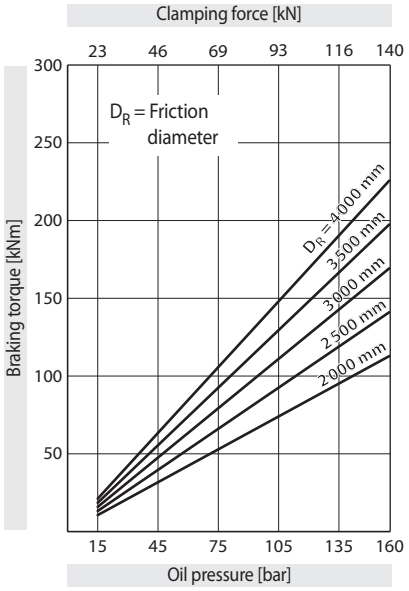
Mounting on the outer diameter of the brake disc 57-2



Supply connections 57-3

Technical Data

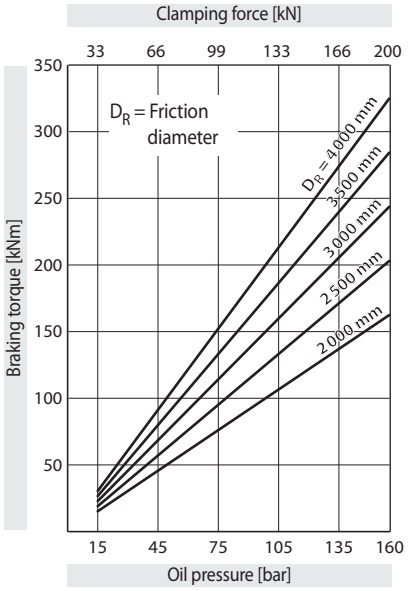
Brake Caliper HW 150 HUK



The braking torques shown in the diagram are based on a theoretical friction coefficient of 0,4.

Oil pressure:	min. 15 bar max. 160 bar
Oil volume:	17 cm^3 per 1 mm stroke
Weight:	ca. 65 kg

Brake Caliper HW 180 HUK



The braking torques shown in the diagram are based on a theoretical friction coefficient of 0,4.

Oil pressure:	min. 15 bar max. 160 bar
Oil volume:	26 cm^3 per 1 mm stroke
Weight:	ca. 65 kg

Other features

- High safety against leakage
- Easy change of friction blocks
- Painted with surface coating class C4-L according to ISO 12944
- For brake disc thickness W = 30 mm; larger brake disc thicknesses can be achieved with the use of a spacer installed by the customer

Accessories

- Optional painting with surface coating class C4-H or C5M-H (offshore) according to ISO 12944

Calculation of the friction diameter

Mounting on the inner diameter of the brake disc:

$D_R = d + (2 \cdot 49\ mm)$

(when $d \geq 2000$ mm)

Mounting on the outer diameter of the brake disc:

$D_R = D - (2 \cdot 54\ mm)$

Calculation of the braking torque

HW 150 HUK:

$$M_B = \frac{D_R}{1{,}132} \cdot p \cdot \mu$$

HW 180 HUK:

$$M_B = \frac{D_R}{0{,}786} \cdot p \cdot \mu$$

Formula symbols

M_B	=	Braking torque [Nm]
D	=	Outer diameter brake disc [mm]
d	=	Inner diameter brake disc [mm]
D_R	=	Friction diameter [mm]
p	=	Oil pressure [bar]
μ	=	Friction coefficient