

## Brake Calipers HW 150 HUK and HW 180 HUK

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

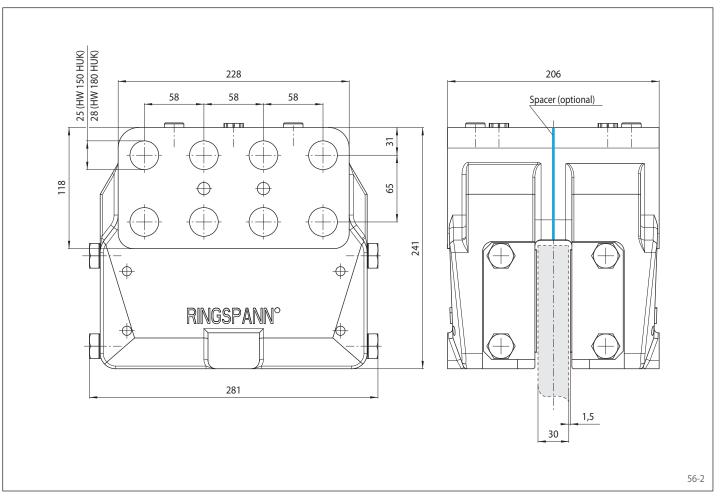




Features	Code
Brake Caliper	Н
Standard	W
With piston diameter 2 x 75 mm or piston diameter 2 x 90 mm	150 180
Hydraulically activated	Н
Non-releasing	U
No adjustment to counter friction block wear	К
Max. clamping force 140 kN (HW 150) Max. clamping force 200 kN (HW 180)	140 200
<b>Example for ordering</b>	

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

HW 150 HUK - 140

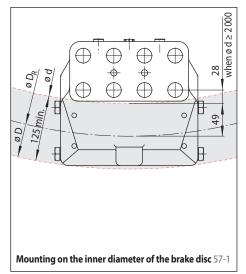


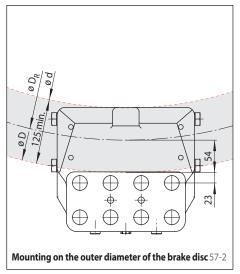
### **Brake Calipers HW 150 HUK and HW 180 HUK**

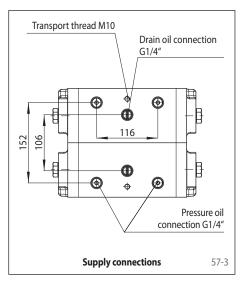
# hydraulically activated – non-releasing as yaw brake in wind turbines



#### Mounting

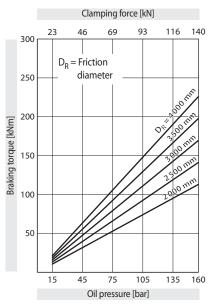






#### **Technical Data**

**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

ca. 65 kg

Oil volume:

17 cm<sup>3</sup> per 1 mm stroke

Weight:

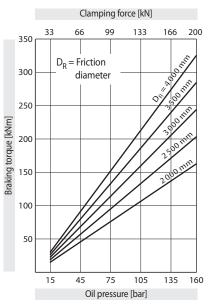
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#### Other features

- · 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

#### 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

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26 cm<sup>3</sup> per 1 mm stroke

Oil volume: Weight:

ca. 65 kg

#### 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:

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

(when  $d \ge 2000 \text{ mm}$ )

Mounting on the outer diameter of the brake disc:

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

#### 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

 $M_R = Braking torque [Nm]$ 

D = Outer diameter brake disc [mm]

d = Inner diameter brake disc [mm]

 $D_{p} = Friction diameter [mm]$ 

p = Oil pressure [bar]

 $\mu$  = Friction coefficient

Any questions? Please contact us.