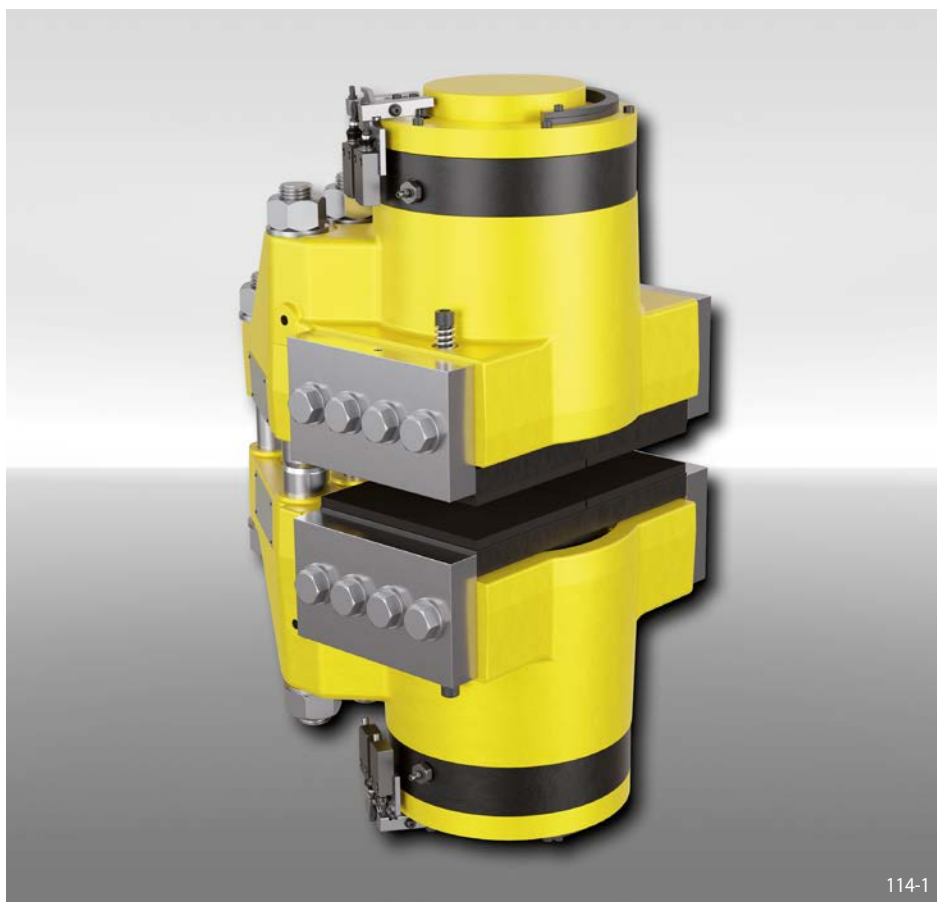


Brake Caliper HW 165 FHM

spring activated – hydraulically released



| Features | Code |
|------------------------------------------------------|------|
| Brake Caliper | H |
| Standard | W |
| Frame size 165 | 165 |
| Spring activated | F |
| Hydraulically released | H |
| Manual adjustment to accommodate friction block wear | M |
| Max. clamping force 405 kN | 405 |

Example for ordering

Brake Caliper HW 165 FHM, max. clamping force 405 kN:

HW 165 FHM-405

Technical Data

| Brake disc diameter mm | Braking torque Nm |
|---------------------------|------------------------------|
| 800 | 95 000 |
| 1 000 | 127 400 |
| 1 250 | 168 000 |
| 1 600 | 224 700 |
| 2 000 | 289 600 |
| 3 000 | 451 700 |
| 3 500 | 532 800 |
| 4 000 | 613 900 |
| Clamping force | 405 kN |
| Oil pressure | min. 230 bar max. 250 bar |
| Oil volume | max. 120 cm ³ |
| Thickness of brake disc W | min. 30 mm |
| Weight | 425 kg |

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

Working conditions

- Ambient temperature: -20 °C / +60 °C
- Air humidity: <90%

Monitoring switch

- 240 VAC 1.5 A; 250 VDC 0.1 A
- Cable 5 x 0.75 mm², length 2 m, outer diameter 7.5 mm
- Protection type IP67

Options

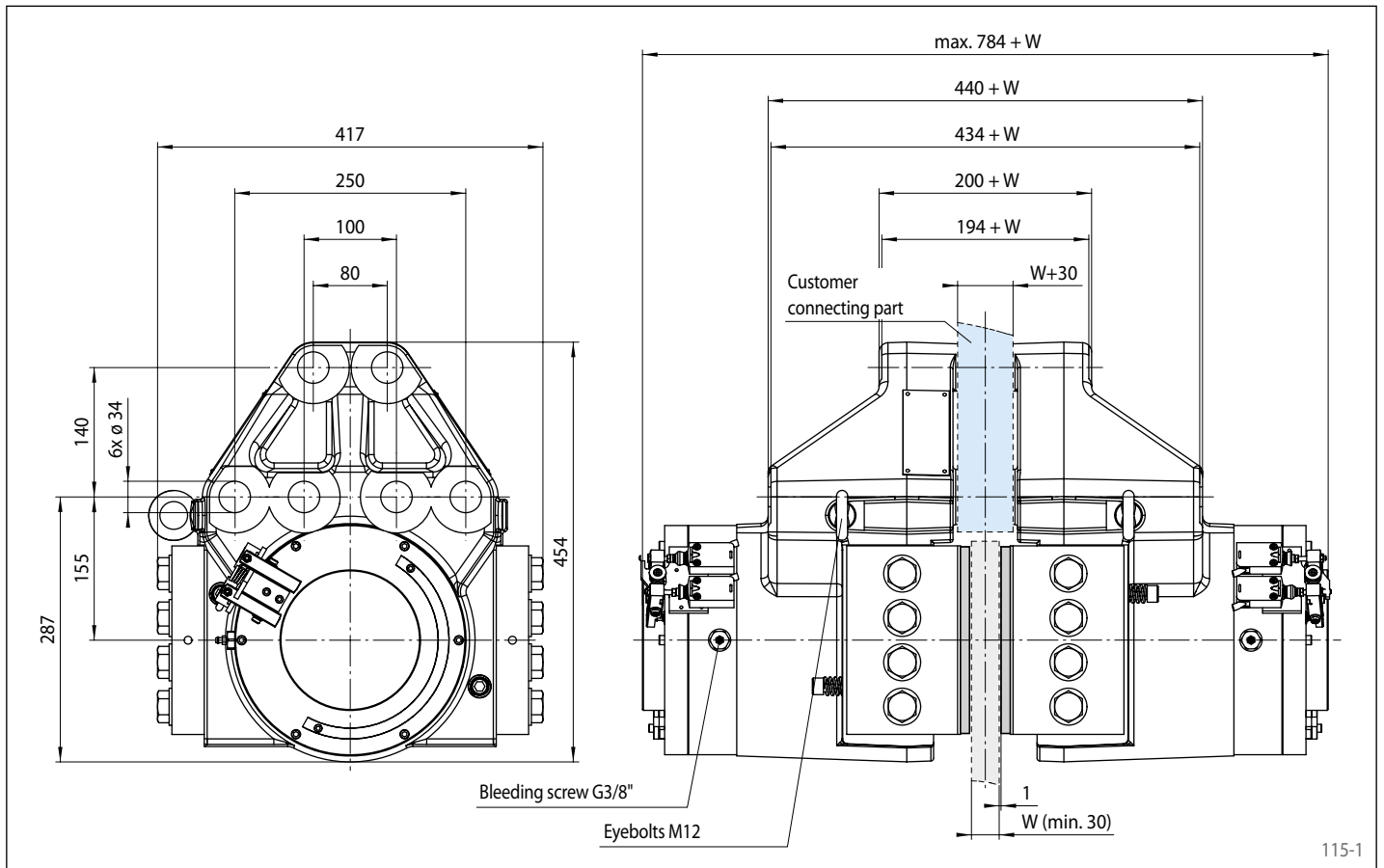
- Friction pads with wear indicator cables or sintered friction linings (for high temperatures)
- Corrosion-protected version
- Low temperature version
- Offshore certifications
- ATEX certifications for hazardous areas

Notes

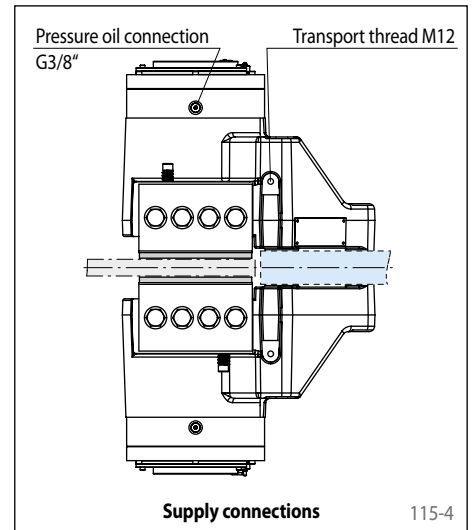
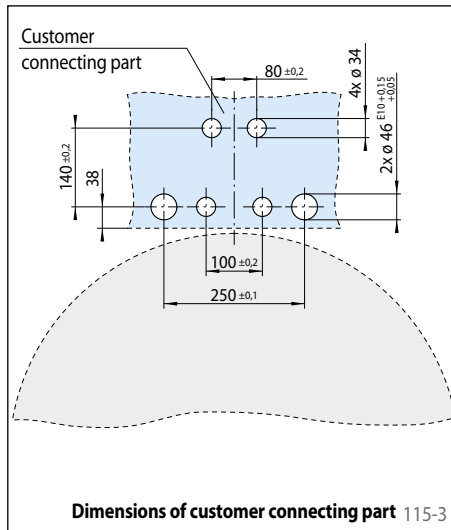
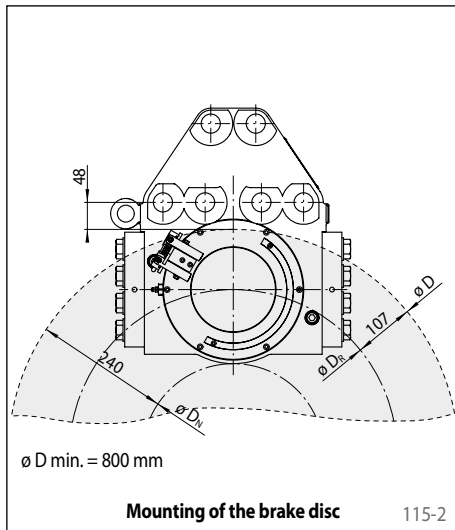
- Includes two pairs of $\varnothing 46_{g6}$ shear pins
- Eyebolts included
- Fastening:
6 screws M33, class 10.9 with tightening torque 1 950 Nm $\pm 5\%$ μ 0.10 (not supplied)

Brake Caliper HW 165 FHM

spring activated – hydraulically released



Mounting



Calculation of the friction diameter

$$D_R = D - 214 \text{ mm}$$

Calculation of the hub diameter

$$D_N = D - 480 \text{ mm}$$

Calculation of the braking torque

$$M_B = F_K \cdot D_R \cdot \mu$$

Formula symbols

D = Outer diameter brake disc [mm]

D_N = Hub diameter [mm]

D_R = Friction diameter [mm]

F_K = Clamping force [N]

M_B = Braking torque [Nm]

μ = Friction coefficient