

3.1



# HBK series Hydraulic brake

The HBK series brakes are normally-off oil wet static hydraulic brakes, which utilize spring action to produce the braking force, while oil pressure is used to release the brake.



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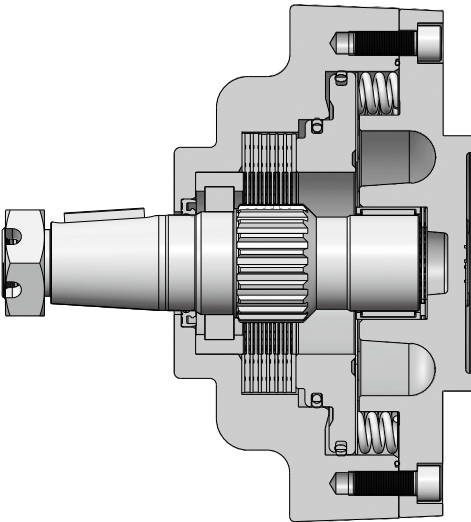
## Advantages

The HBK series brakes are normally-off oil wet static hydraulic brakes, which utilize spring action to produce the braking force, while oil pressure is used to release the brake.

## Overview

- A combination of roller bearings and needle roller bearings ensure a high-strength load capacity.
- It features unique friction-resistant materials and a high-strength spring design, allowing for a long service life and high braking reliability
- All core components are immersed in oil in order to further extend service life and reduce noise.

## Standard structure



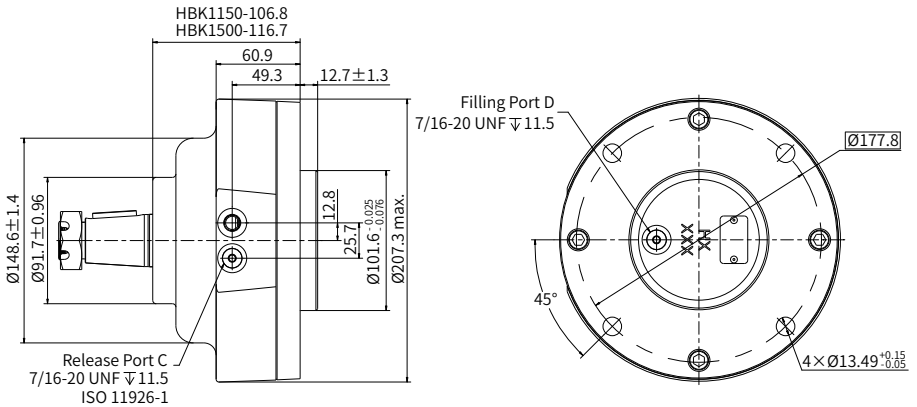
P-0012

## Specification

Type	HBK1150	HBK1500
Min. static torque (Nm)	1150	1500
Brake release pressure (bar)	28	
Max. bearing capacity (bar)	250	
Min. amount of brake release oil (cm <sup>3</sup> )	11.5	
Max. speed (rpm)	250	
Volume of lubricating oil in brake cavity (cm <sup>3</sup> )	180	
Max. working oil temperature (°C)	82	
Weight (kg)	16.1	17.2

T - 0039

## Installation size



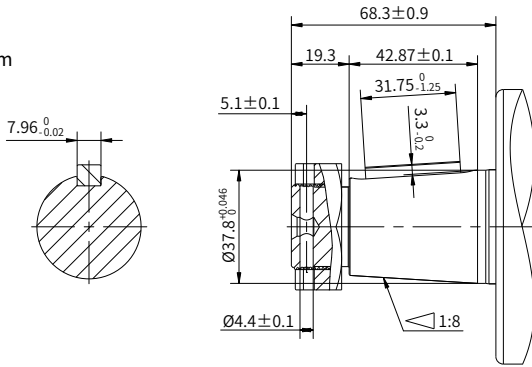
**B01** 7/16-20UNF

P-0013

# Shaft end dimensions

**T7**

Ø38.1mm Tapered  
 Parallel key 7.96×7×31.75  
 Tightening torque 410-540Nm  
 Max. Torque: 1200Nm



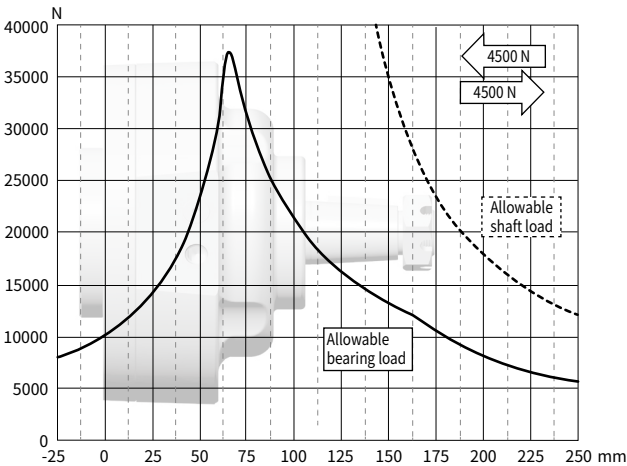
P - 0014

# Allowable shaft load/bearing curve

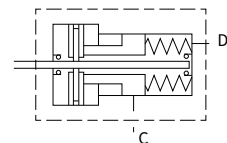
As shown in the figure, when the axial load is 0, the radial allowable load of the output shaft is related to the distance from the flange mounting surface to the load action point.

The solid line shows the allowable radial load of the bearing. It is based on L<sub>10</sub> bearing life 2000 hrs at 100 RPM with rated output torque.

The dash line shows max radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of failure.



# Hydraulic diagram



P - 0015

P - 0005

## Ordering information



Pos.1	2	3	4	5	6	7
Series code	Displacement	Mount, Port	Output shaft	Rotation direction	Paint option	Special features
HBK	1150 1500	B01 4 × Ø13.1 round flange, Port 7/16-20UNF, Rear pilot Ø10.1.6 × 12.8	T7 Ø38.1 Tapered, Parallel key 7.96 × 7 × 31.75	N None	N No Paint B Black C Hengli blue	A Standard

T - 0040

Note: When using the order information, the user can select the motor series, displacement, installation flange, port, shaft and other information. If the selected specification is not in the table or has special requirements, please contact us.

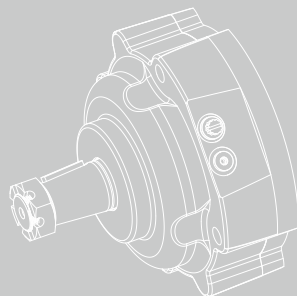


3.2



# HBD series Hydraulic brake

The HBD series brakes are normally-off oil wet static hydraulic brakes, which utilize spring action to produce the braking force, while oil pressure is used to release the brake.



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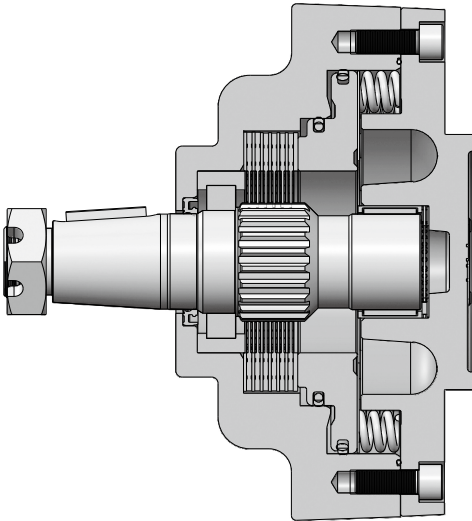
## Advantages

The HBD series brakes are normally-off oil wet static hydraulic brakes, which utilize spring action to produce the braking force, while oil pressure is used to release the brake.

## Overview

- A combination of roller bearings and needle roller bearings ensure a high-strength load capacity.
- It features unique friction-resistant materials and a high-strength spring design, allowing for a long service life and high braking reliability
- All core components are immersed in oil in order to further extend service life and reduce noise.

## Standard structure



P-0012

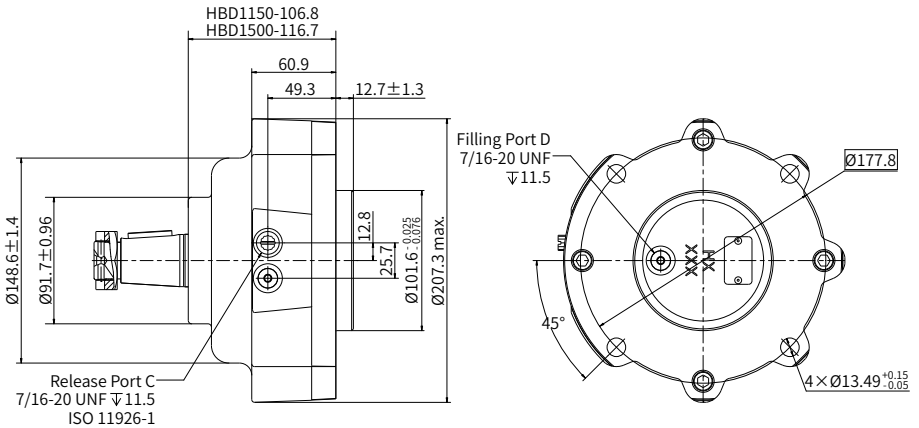


## Specification

Type	HBD1150	HBD1500
Min. static torque (Nm)	1150	1500
Brake release pressure (bar)	28	
Max. bearing capacity (bar)	250	
Min. amount of brake release oil (cm <sup>3</sup> )	11.5	
Max. speed (rpm)	250	
Volume of lubricating oil in brake cavity (cm <sup>3</sup> )	180	
Max. working oil temperature (°C)	82	
Weight (kg)	16.1	17.2

T - 0155

## Installation size

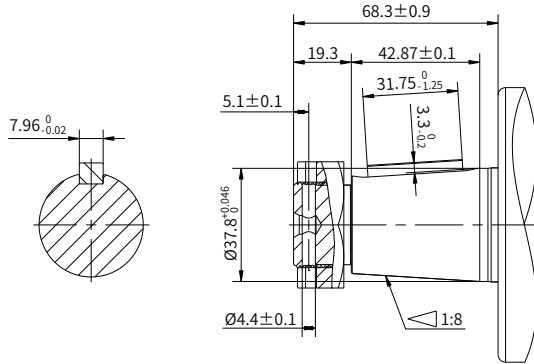


**B01** 7/16-20UNF

P-0192

## Shaft end dimensions

**T7**  
 Ø38.1mm Tapered  
 Parallel key 7.96×7×31.75  
 Tightening torque 410-540Nm  
 Max. Torque: 1200Nm



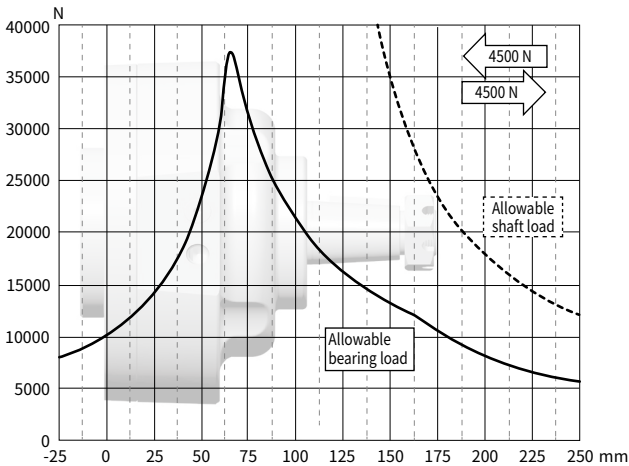
P - 0014

## Allowable shaft load/bearing curve

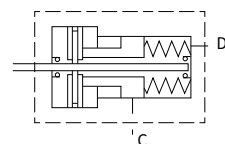
As shown in the figure, when the axial load is 0, the radial allowable load of the output shaft is related to the distance from the flange mounting surface to the load action point.

The solid line shows the allowable radial load of the bearing. It is based on  $L_{10}$  bearing life 2000 hrs at 100 RPM with rated output torque.

The dash line shows max radial shaft load. Any shaft load exceeding the values quoted in the curve will involve a risk of failure.



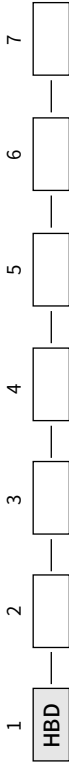
## Hydraulic diagram



P - 0015

P - 0065

## Ordering information



Pos.1	2	3	4	5	6	7
Series code	Displacement	Mount, Port	Output shaft	Rotation direction	Paint option	Special features
HBD	1150 1500	B01 4 × Ø13.1 round flange, Port 7/16-20UNF, Rear pilot Ø10.1.6 × 12.8	T7 Ø38.1 Tapered, Parallel key 7.96 × 7 × 31.75	N None	N No Paint B Black C Hengli blue	A Standard

T - 0156

Note: When using the order information, the user can select the motor series, displacement, installation flange, port, shaft and other information. If the selected specification is not in the table or has special requirements, please contact us.

