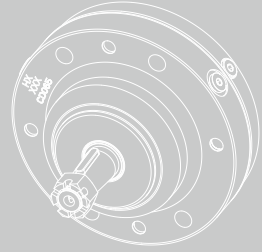


3.2



HBA series Hydraulic brake

The HBA 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.



Contents

Overview	02
Advantages	02
Standard structure	02
Specification	03
Installation size	03
Shaft end dimensions	04
Allowable shaft load/bearing curve	05
Hydraulic diagram	05
Ordering information	06



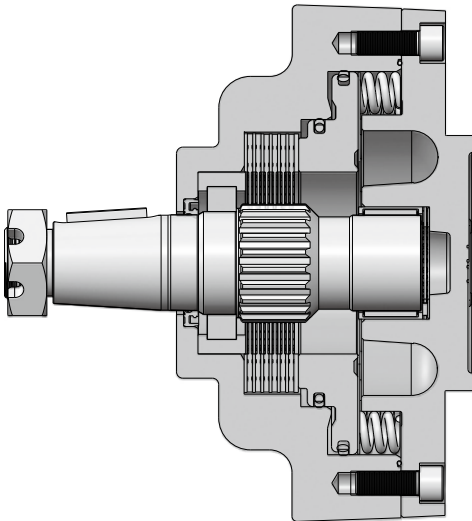
Overview

The HBA 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.

Advantages

- 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.
- Two oil release ports and an oil fill port are available.
- Built-in throttle valve in the release port for smoother braking.

Standard structure



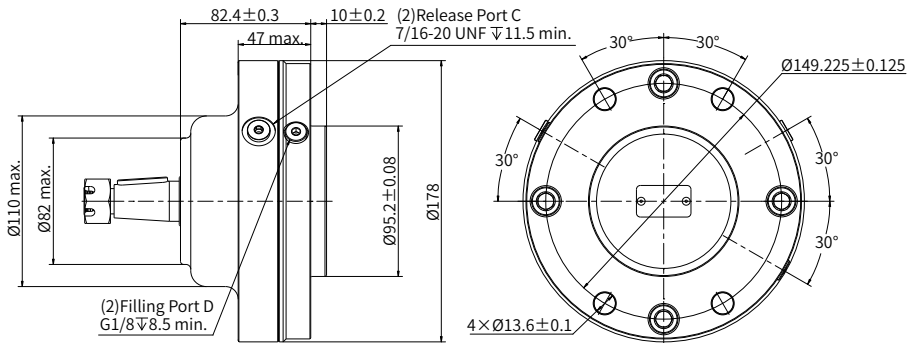
P-0014

Specification

Type	HBA475
Min. static torque (Nm)	475
Brake release pressure (bar)	20
Max. bearing capacity (bar)	207
Min. amount of brake release oil (cm ³)	9
Max. speed(rpm)	250
Volume of lubricating oil in brake cavity (cm ³)	50
Max. working oil temperature (°C)	82
Weight (kg)	10.4

T - 0113

Installation size



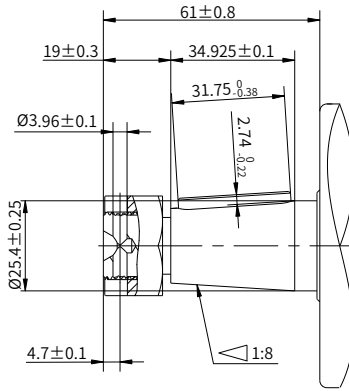
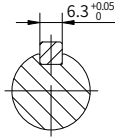
P-0115

B03 7/16-20UNF

Shaft end dimensions

T9

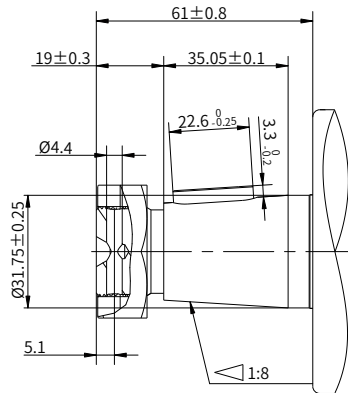
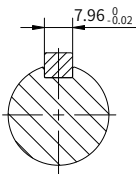
Ø25.4mm Tapered
 Parallel key 6.35×6.35×31.75
 Tightening torque 200Nm
 Max. Torque: 655Nm



P - 0116

T2

Ø31.75mm Tapered
 Parallel key 7.96×7×22.25
 Tightening torque 380Nm
 Max. Torque: 1200Nm



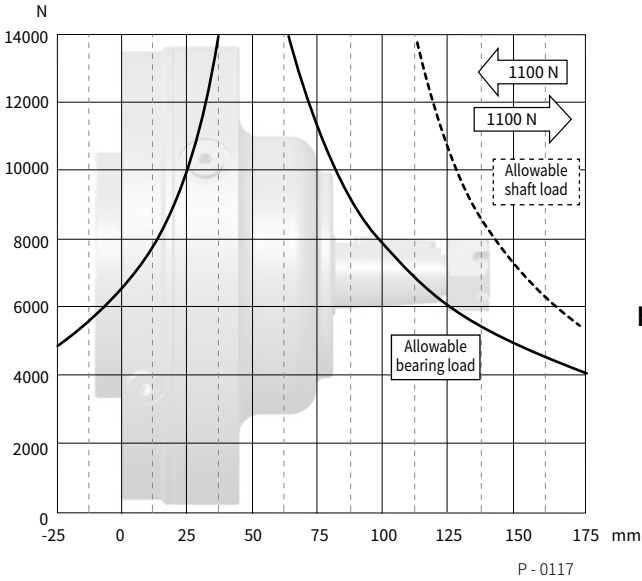
P - 0118

Allowable shaft load/bearing curve

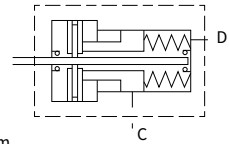
As shown in the figure, when the axial load is 0, the radial allowable load of the output shaft is related to the distance from the flange mounting surface to the load action point.

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.

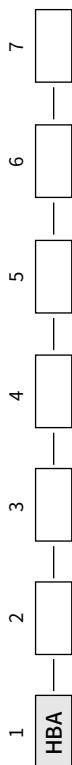


Hydraulic diagram



P - 0016

Ordering information



Pos.1	2	3	4	5	6	7
Series code	Displacement	Mount, Port	Output shaft	Rotation direction	Paint option	Special features
HBA	475	B03 4 × ϕ 13.5 round flange, Port 7/16-20UNF, filling port G1/8, Rear pilot ϕ 95.2 × 10	T9 ϕ 25.4 Tapered, Parallel key 6.35 × 6.35 × 31.75 T2 ϕ 31.75 Tapered, Parallel key 7.96 × 7 × 22.25	None N	No Paint Black Hengli blue	A Standard

T - 0110

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.