BK2 HYDRAULIC BRAKE

Introduction

BK2 series brake is one kind of hydraulic wet disc brake. The brake force is caused by the spring, and hydraulic pressure releases the brake force.
Features as follows:
* BK2 series adopts the special friction disc and high strength spring design: long life endurance, low noise, high braking reliability.
* with 4 Drain port design , the brake can be used in different applications.
* compact structure, easy mounting.
* it can be used preferentially together with BMP, BMR, BMS series hydraulic motor.

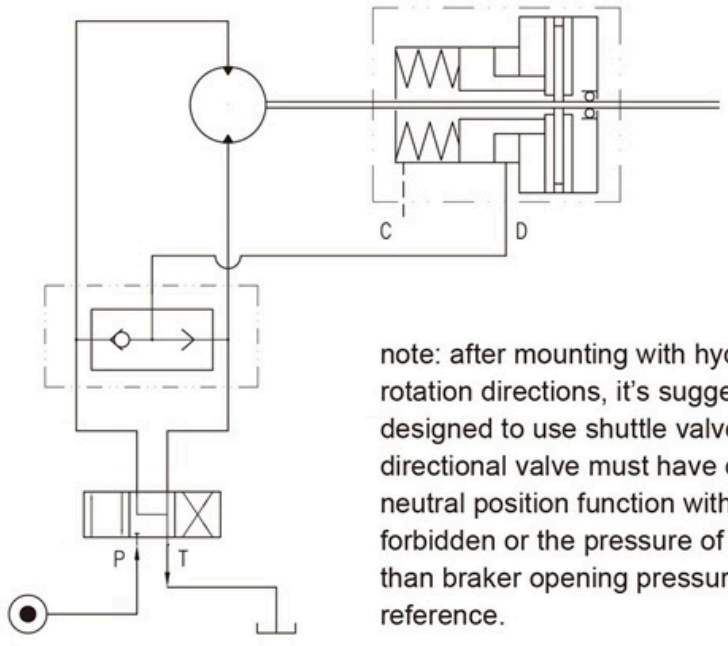
Application

BK2 series hydraulic brake stays in braking condition since delivery out of the factory. During normal operation, there exists the braking force in the brake disc, only if the pressure of hydraulic system, that the brake links , is lower than the pressure required by the release of brake, the spring force shall keep the brake in braking condition.
BK2 series hydraulic brake is widely used in heavy duty machinery, such as engineering machinery, cranes, off-highway machinery vehicles, construction machinery, material handling machinery, agricultural machinery, mining, sanitation machinery, timber industries. They are also used in winches and in hydrostatic drive systems for automatization engines.
Special Note: such kind of brake is only used in static parking brake.Dynamic braking is not recommended.

Intruction Manual

一、In order to make the BK2 series brake work under the best situation, we recommend the normal requirements as follows:
1.Assembly: 1st of all , we have to mount the brake BK2 with hydraulic motor, and then fill the brake with lubrication oil through the drain port, and then mount with other parts.
2.Fluid type：Mineral based-HM(GB/T763.2-87) (ISO6743/4) or HLP(DIN51524).
3.Temperature range:normal -20℃—90℃the best optimal situation 20℃—60℃
4.Viscosity range：20～75mm^2/s; the best optimal situation 42～74mm^2/s at 40℃.
5.Filtration：nominal filtration of 25 micron, ISO code 20/16.
6.Maintenance: changed after the first 50～100h； then after every 500～1000h.

Typical Applications Drawing

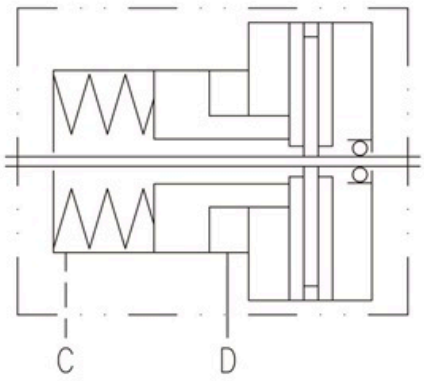


note: after mounting with hydraulic motor, if the motor needs both rotation directions, it's suggested that the hydraulic system is designed to use shuttle valve, and the neutral position of the directional valve must have off-load function(type Y or H), the neutral position function without off-load function (type O) is forbidden or the pressure of the outlet port in the system is larger than braker opening pressure. Please check the drawing for reference.

Specification Data

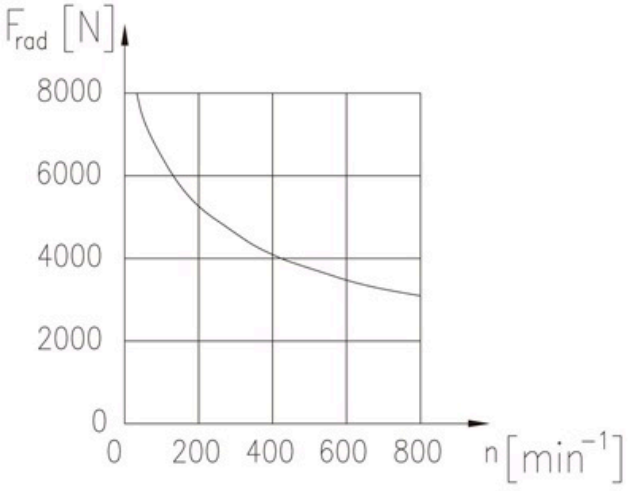
Item	BK2-1		BK2-2
Min. static Torque [Nm]	200～230	410～450	410～450
Min. Opening Pressure [MPa]	1.7～2.3		
Max. Opening Pressure [MPa]	30		
Min.oil quantity for brake releasing[cm^3]	7～8		
Oil volume [cm^3]	50～120		
Max. pressure in drain space [MPa]	0.05		
Weight [kg]	9		9.5

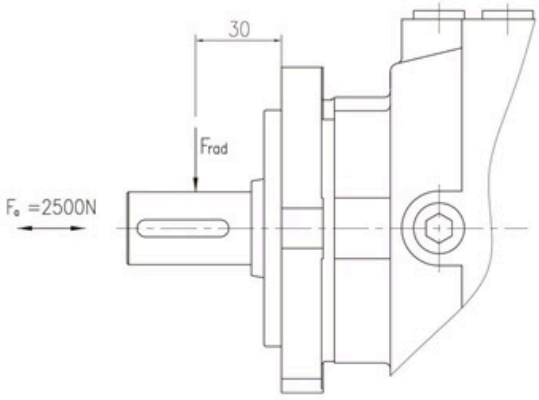
*Static torque is obtained at working pressure 0 MPa



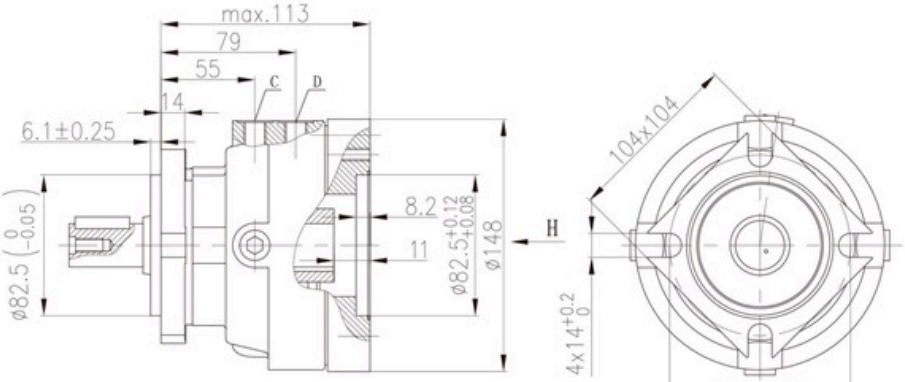
symble drawing

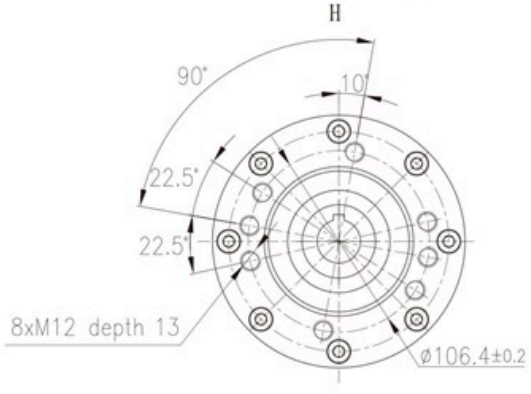
Load Curve





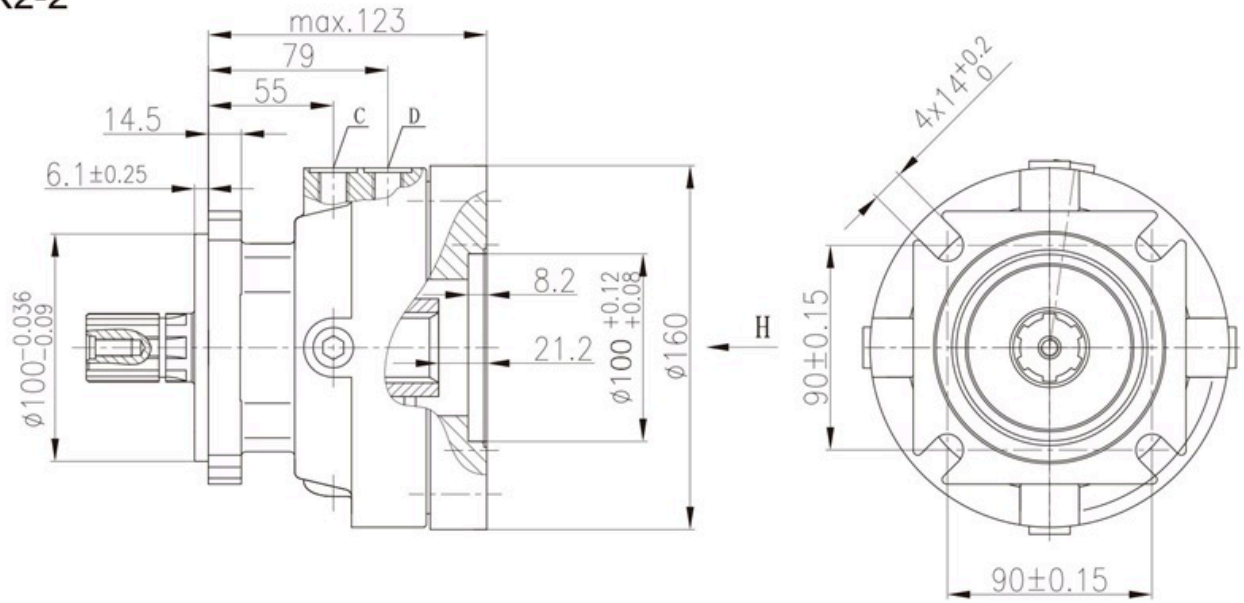
Mounting Data
Model BK2-1



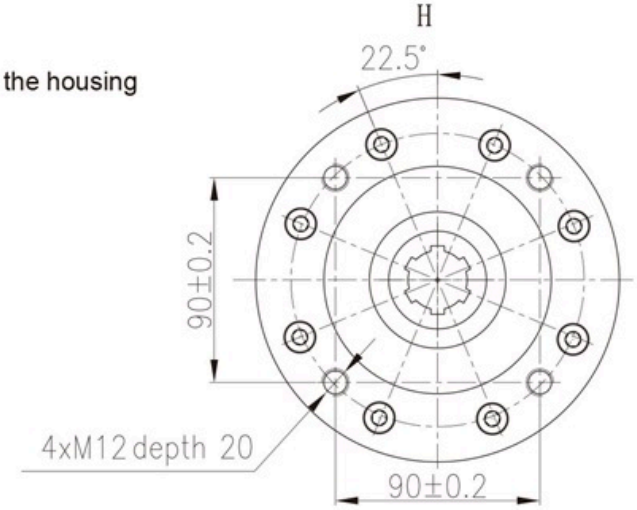


C Drain port——G1/4, 9mm depth; Infuse port in the housing
D Brake release port——G1/4, 9mm depth

Model BK2-2

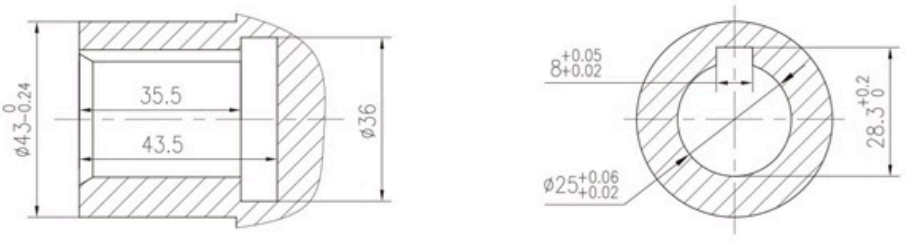


C Drain port——G1/4, 9mm depth; Infuse port in the housing
D Brake release port——G1/4, 9mm depth

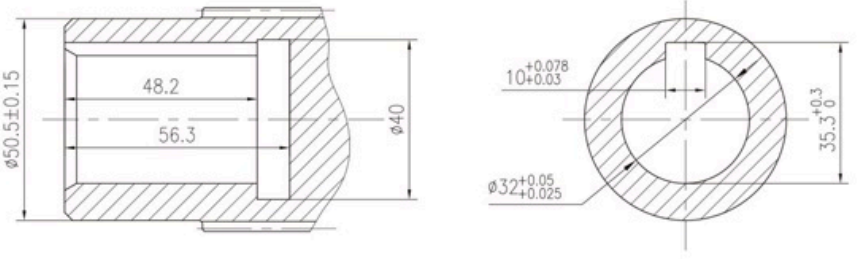


INPUT & OUTPUT SHAFT DATA
INPUT SHAFT HOLES

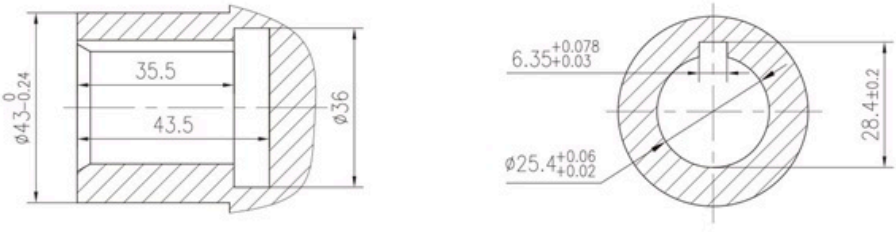
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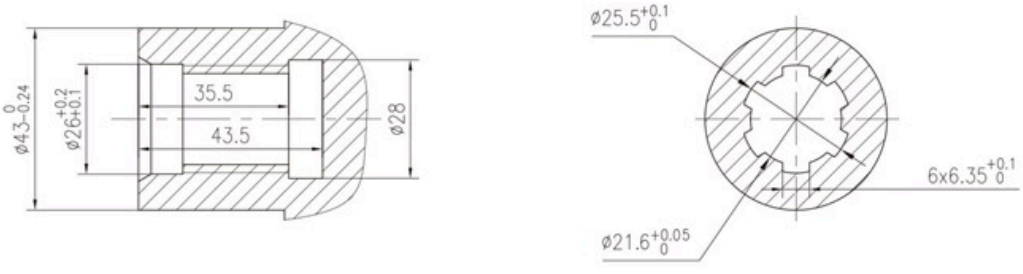
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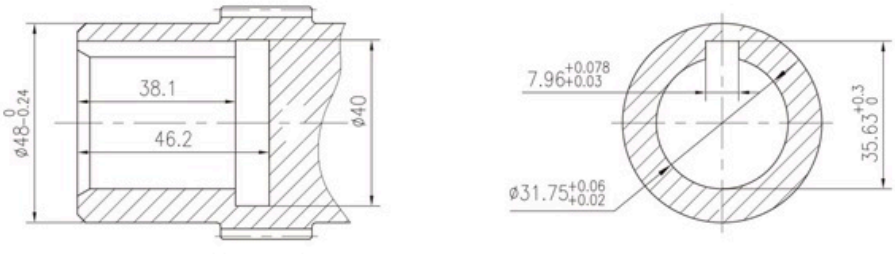
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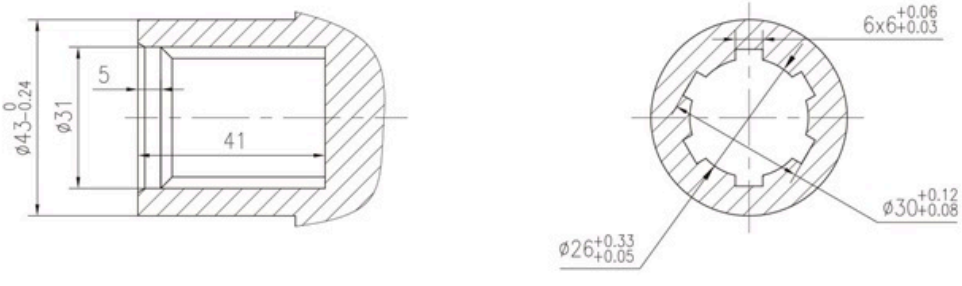
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G

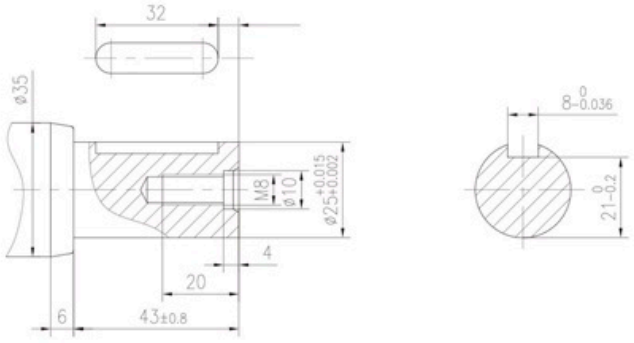


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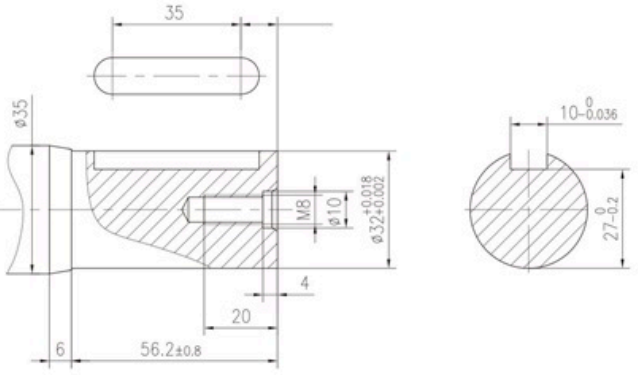


OUTPUT SHAFT EXTENSIONS

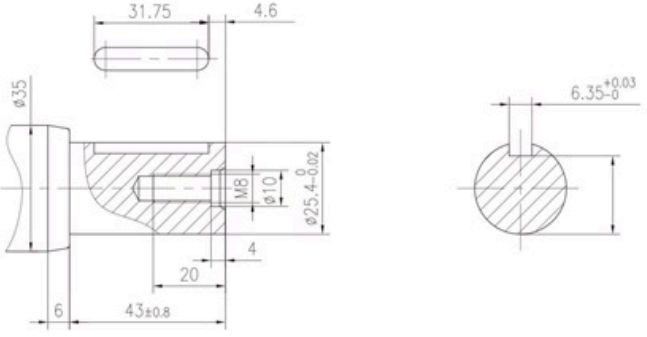
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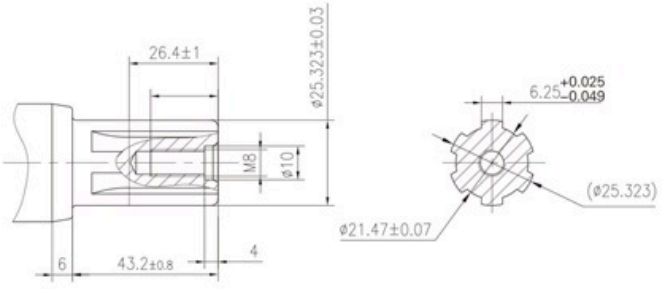
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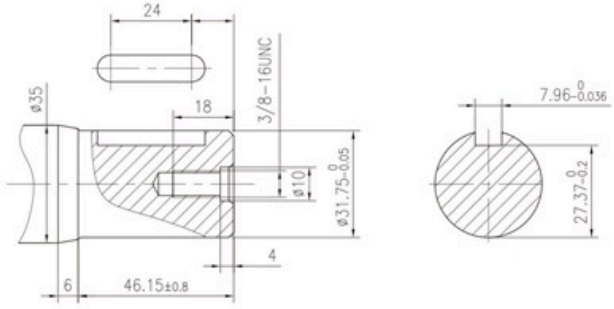
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