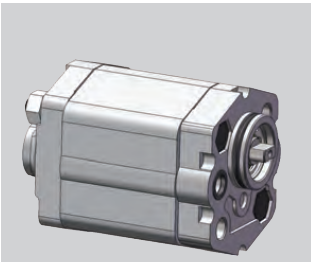
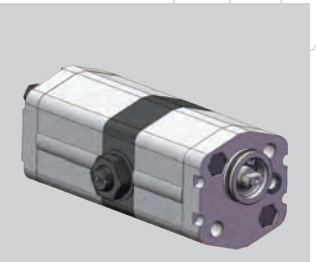
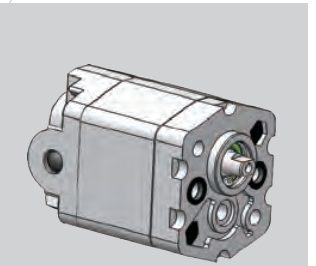
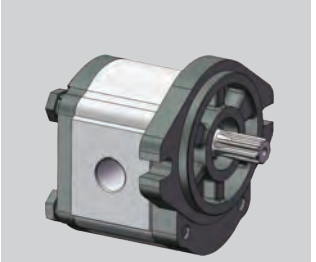
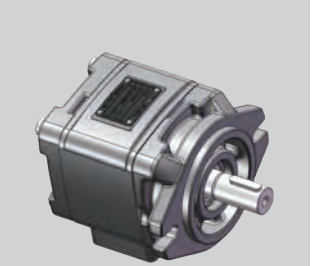
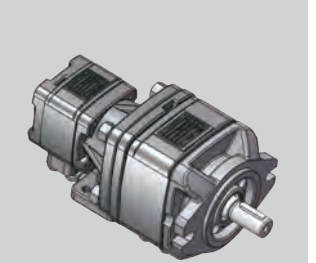
CE ISO9001

IATF16949

VIBO 威博液压 VIBO Hydraulics

# HYDRAULIC GEAR PUMP
# INTERNAL GEAR PUMP

Official Account

International Network


VIBO 威博液压 VIBO Hydraulics

JIANGSU VIBO HYDRAULICS JOINT STOCK CO.,LTD
Add: No 113 East Zhuhai Road, Economic Development Zone,
Huaian City, Jiangsu Province, 223005, P.R. China.
H: 4008800359
T: 0517-83719898
F: 0517-83719555
W: www.vibo-hydraulics.com
E: info @ vibo-hydraulics.com



CN:VC-GP001EN 02/08.2023


China·Huaian

VIBO
威博液压
VIBO Hydraulics



**Victor-From the elite team**

**Belief-The customers in mind**

**Innovation-Advance tech improvement**

**Obligation-Stimulate to move forward**


ISET S.r.l. Unipersonale

CERTIFICATE

Certificat - Certificado - Сертификат - Sertifikat - 证书


Intertek

AUTHORIZATION TO MARK


CERTIFICATION

质量管理体系认证证书

江苏威博液压股份有限公司

ISO9001:2015

液压件、液压动力单元制造及销售(资质许可除外)


NSF ISR

认证证书

江苏威博液压股份有限公司

IATF 16949:2016

认证范围:

NSF International Strategic Registrations

VIBO 威博液压 VIBO Hydraulics

# Contents

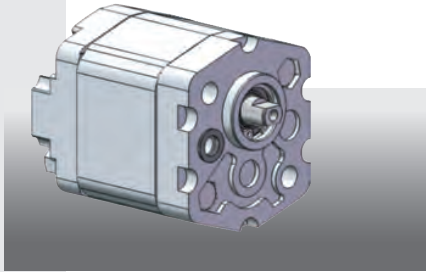
## CBU Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using floating shaft sleeve for axial automatic compensation. The CBU gear pump has the characteristics of small size, light weight, simple structure, reliable work, convenient installation, use and maintenance. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

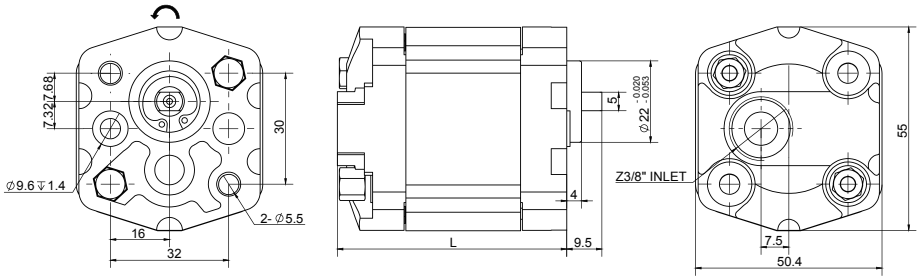
## Code Instruction

CBU – F 1 ***–L B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ①Product code | |
| ②Pressure rating | F: 20MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Direction of rotation | R: CW L:CCW |
| ⑥Axial extension form | B: Oblate key |
| ⑦Oil port form | L: thread Z3/8 L1:thread G3/8 |
| ⑧Oil position | rear inlet front outlet |



## Outline Dimensions

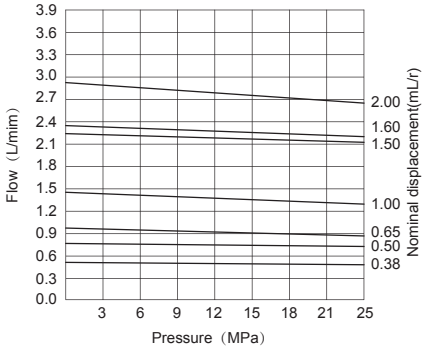



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum pressure | Minimum | Maximum | | |
| CBU-F1019 | 0.19 | 20 | 25 | 1000 | 7000 | 90 | 60.5 |
| CBU-F1025 | 0.25 | 20 | 25 | 1000 | 7000 | 90 | 61 |
| CBU-F1038 | 0.38 | 20 | 25 | 1000 | 7000 | 91 | 62 |
| CBU-F1050 | 0.5 | 20 | 25 | 1000 | 7000 | 91 | 63 |
| CBU-F1065 | 0.65 | 20 | 25 | 1000 | 7000 | 92 | 64 |
| CBU-F1075 | 0.75 | 20 | 25 | 1000 | 7000 | 92 | 65 |
| CBU-F1088 | 0.88 | 20 | 25 | 1000 | 7000 | 92 | 66 |
| CBU-F1100 | 1.0 | 20 | 25 | 850 | 6000 | 92 | 67 |
| CBU-F1125 | 1.25 | 20 | 25 | 700 | 5000 | 92 | 69 |
| CBU-F1150 | 1.5 | 20 | 25 | 600 | 4000 | 92 | 71 |
| CBU-F1160 | 1.6 | 20 | 25 | 600 | 4000 | 92 | 71.8 |
| CBU-F1175 | 1.75 | 20 | 25 | 600 | 4000 | 92 | 73 |
| CBU-F1200 | 2.0 | 20 | 25 | 500 | 3000 | 92 | 75 |

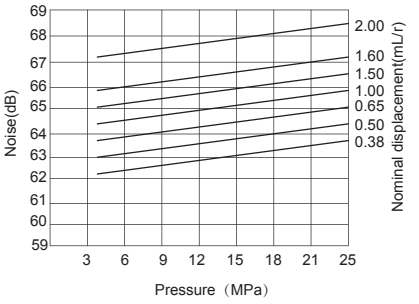
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



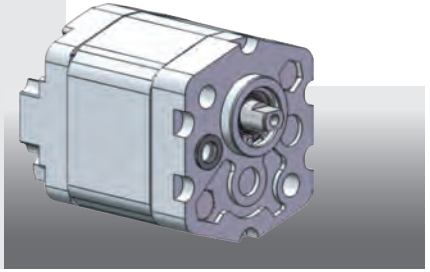
# CBUL Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using floating shaft sleeve for axial automatic compensation. Due to the use of helical gear structure, the noise of the pump is greatly reduced, which is the upgrade of CBU straight pump. With the characteristics of small volume, light weight, low noise, reliable work, convenient installation, use, maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

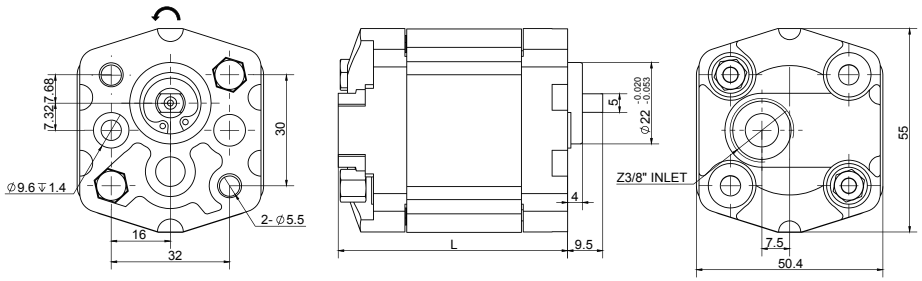
## Code Instruction

CBUL – F 1 ***–R B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ① Product code | |
| ②Pressure rating | F: 20MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Directional of rotation | R: CW L: CCW |
| ⑥Axial extension form | B: oblate key |
| ⑦Oil port form | L: thread Z3/8 L1: thread G3/8 |
| ⑧Oil port | A rear inlet,front outlet |
| | B side inlet,front outlet |



## Outline Dimensions

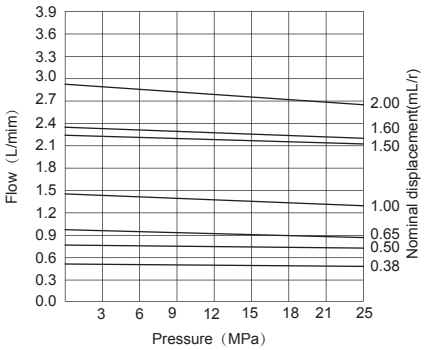



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBUL-F1038 | 0.38 | 20 | 25 | 1000 | 7000 | 91 | 62 |
| CBUL-F1050 | 0.5 | 20 | 25 | 1000 | 7000 | 91 | 63 |
| CBUL-F1065 | 0.65 | 20 | 25 | 1000 | 7000 | 92 | 64 |
| CBUL-F1075 | 0.75 | 20 | 25 | 1000 | 7000 | 92 | 65 |
| CBUL-F1088 | 0.88 | 20 | 25 | 1000 | 7000 | 92 | 66 |
| CBUL-F1100 | 1.0 | 20 | 25 | 850 | 6000 | 92 | 67 |
| CBUL-F1125 | 1.25 | 20 | 25 | 700 | 5000 | 92 | 69 |
| CBUL-F1150 | 1.5 | 20 | 25 | 600 | 4000 | 92 | 71 |
| CBUL-F1160 | 1.6 | 20 | 25 | 600 | 4000 | 92 | 71.8 |
| CBUL-F1175 | 1.75 | 20 | 25 | 600 | 4000 | 92 | 73 |
| CBUL-F1200 | 2.0 | 20 | 25 | 500 | 3000 | 92 | 75 |

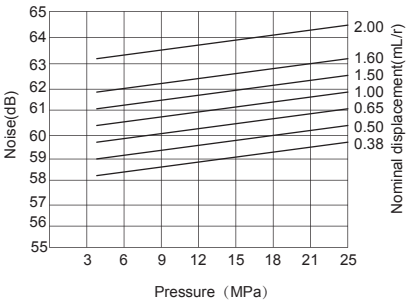
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



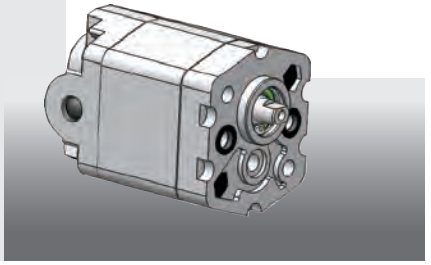
## CBUS Series

The bi-directional gear pump is mainly composed of the pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using the floating shaft sleeve for the axial automatic compensation. There are two check valves inside the pump, which can achieve positive and negative operation.It has the characteristics of small size, simple structure and reliable work,which are mainly used in various small bi-directional hydraulic systems.

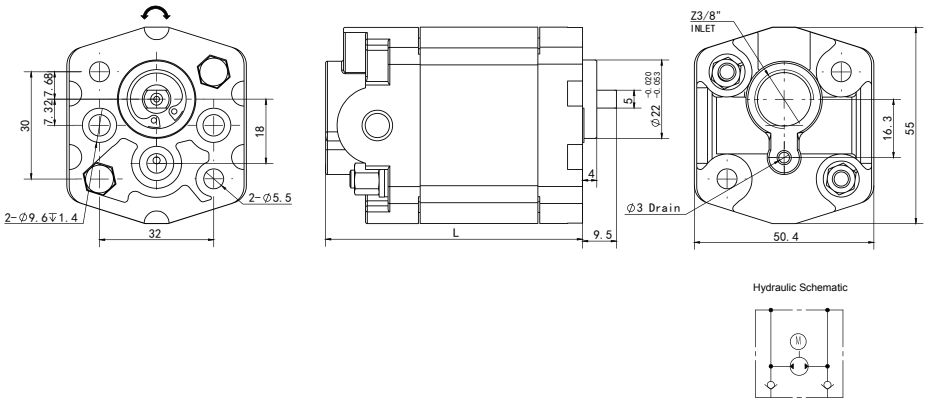
## Code Instruction

CBUS - F 1 ***– S B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ①Product code | |
| ②Pressure rating | F: 20MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Direction of rotation | S: bi-directional |
| ⑥Axial extension form | B: oblate key |
| ⑦ Oil port form | L: thread Z3/8 L1: thread G3/8 |
| ⑧Oil port position | rear inlet front outlet |



## Outline Dimensions



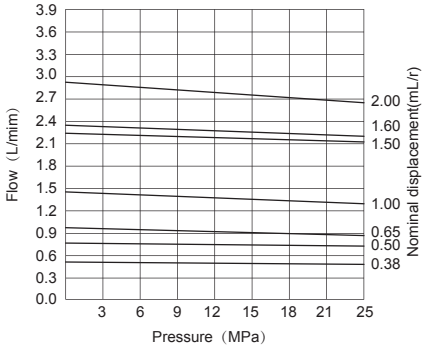

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBUS-F1038 | 0.38 | 20 | 25 | 1000 | 7000 | 90 | 70.0 |
| CBUS-F1050 | 0.5 | 20 | 25 | 1000 | 7000 | 90 | 71.0 |
| CBUS-F1065 | 0.65 | 20 | 25 | 1000 | 7000 | 91 | 72.0 |
| CBUS-F1075 | 0.75 | 20 | 25 | 1000 | 7000 | 91 | 73.0 |
| CBUS-F1088 | 0.88 | 20 | 25 | 1000 | 7000 | 91 | 74.0 |
| CBUS-F1100 | 1.0 | 20 | 25 | 850 | 6000 | 92 | 75.0 |
| CBUS-F1125 | 1.25 | 20 | 25 | 700 | 5000 | 92 | 77.0 |
| CBUS-F1150 | 1.5 | 20 | 25 | 600 | 4000 | 92 | 79.0 |
| CBUS-F1160 | 1.6 | 20 | 25 | 600 | 4000 | 92 | 79.8 |
| CBUS-F1175 | 1.75 | 20 | 25 | 600 | 4000 | 92 | 81.0 |
| CBUS-F1200 | 2.0 | 20 | 25 | 500 | 3000 | 92 | 83.0 |

## Characteristic curve

Flow pressure characteristics:

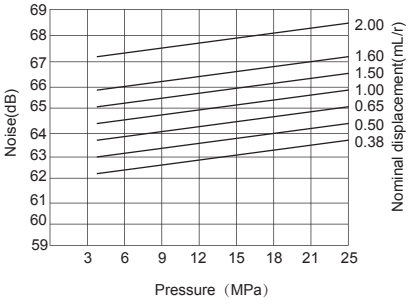
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



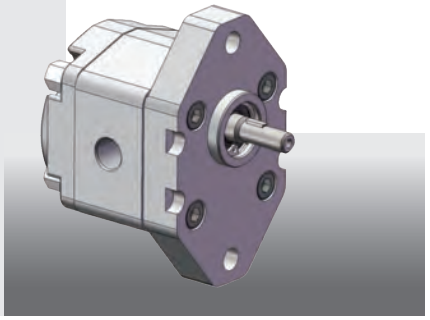
# CBUS1 Series

The bi-directional gear pump is mainly composed of the pump body, shaft sleeve, gear, diamond front cover, rear cover and other main parts, using the floating shaft sleeve for the axial automatic compensation. There are two check valves inside the pump, which can achieve positive and negative operation. Small in size, simple in structure and reliable working are mainly used in various small bidirectional hydraulic systems.

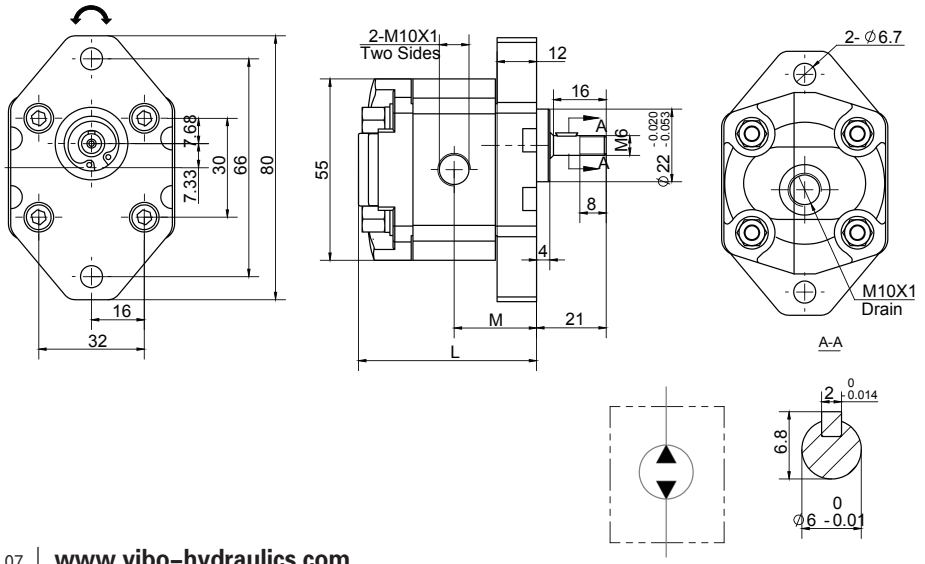
## Code Instruction

CBUS1 - F 1 **-S Y L-*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Production code
②Pressure rating F: 20MPa
③Appearance number
④Nominal displacement
⑤Directional of rotation R: CW L: CCW S: bi-directional
⑥Axial extension form Y: woodruff key
⑦Oil port form L: M10X1
⑧Oil port position side inlet side outlet



## Outline Dimensions

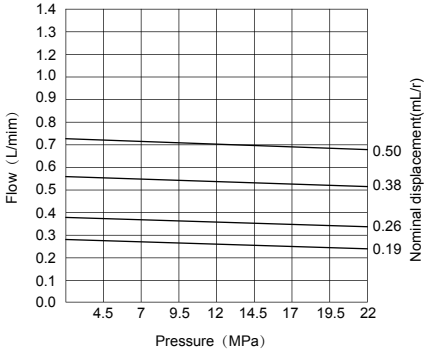



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Mininum | Maximum | | |
| CBUS1-FA1019 | 0.19 | 20 | 22 | 1000 | 7000 | 90 | 54 |
| CBUS1-FA1026 | 0.26 | 20 | 22 | 1000 | 7000 | 90 | 55.1 |
| CBUS1-FA1038 | 0.38 | 20 | 22 | 1000 | 7000 | 90 | 57.0 |
| CBUS1-FA1050 | 0.5 | 20 | 22 | 1000 | 7000 | 90 | 58.9 |

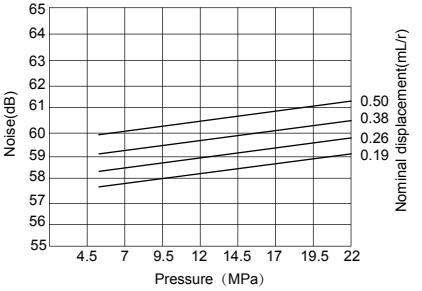
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



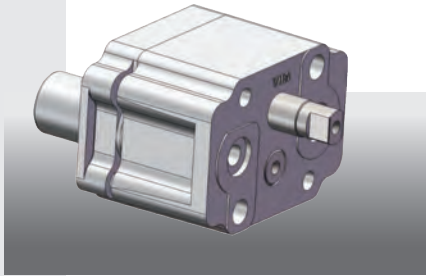
## CBP Series

The bi-directional gear pump is mainly composed of pump body, gear, back cover and other main parts, using fixed gap structure. There are two check valves inside the pump to work in both directions. It has the characteristics of small size, simple structure and reliable work,which are mainly used in various small bi-directional hydraulic systems.

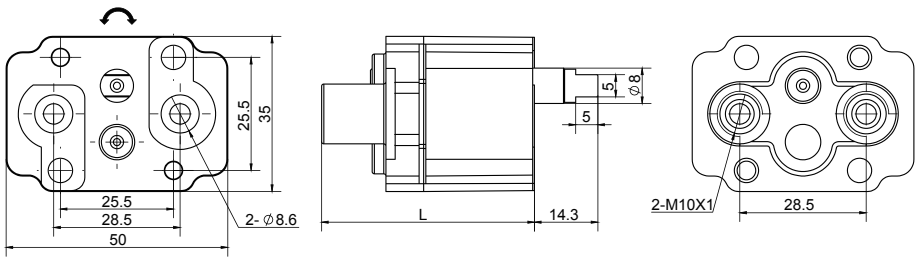
### Code Instruction

CBP - F 1 **-S B L-*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

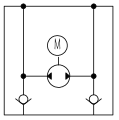
| | |
|---|---|
| ①Product code | |
| ②Pressure rating | D: 10MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Direction of rotation | S: bi-directional |
| ⑥Axial extension form | B: Oblate key |
| ⑦Oil port form | L: M10X1 |
| ⑧Oil port position | rear inlet front outlet |



### Outline Dimensions




Hydraulic Schematic



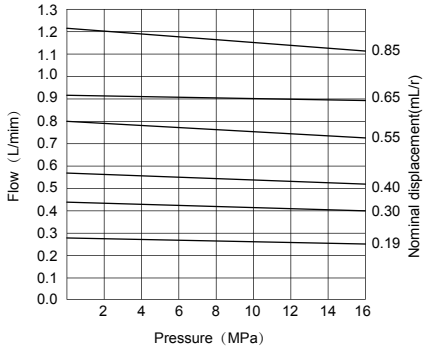
### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum pressure | Minimum | Maximum | | |
| CBP-F1019 | 0.19 | 10 | 16 | 600 | 6000 | 89 | 38.1 |
| CBP-F1030 | 0.30 | 10 | 16 | 600 | 6000 | 89 | 39.8 |
| CBP-F1040 | 0.40 | 10 | 16 | 600 | 6000 | 89 | 41.3 |
| CBP-F1055 | 0.55 | 10 | 16 | 600 | 6000 | 90 | 43.6 |
| CBP-F1065 | 0.65 | 10 | 16 | 600 | 6000 | 90 | 45.2 |
| CBP-F1085 | 0.85 | 10 | 16 | 600 | 6000 | 90 | 48 |

### Characteristic curve

Flow pressure characteristics:

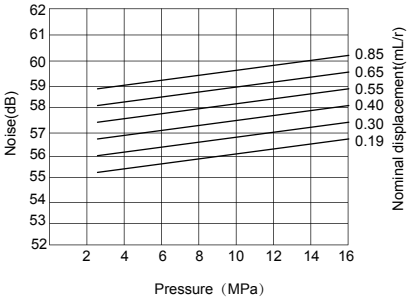
Test condition: n=1450r/min V=46mm ²/s t=40℃




### Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=40℃



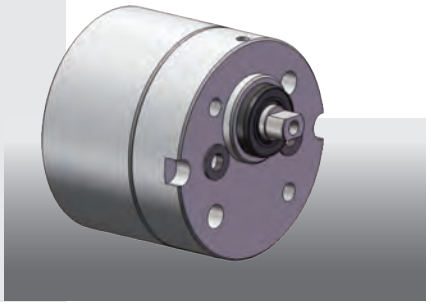
## CBW Series

The bi-directional gear pump is mainly composed of the pump body, the floating side plate, the gear, the rear cover and other main parts, using the floating shaft sleeve for the axial automatic compensation. There are two check valves inside the pump, which can achieve positive and negative operation. Small in size, simple in structure and reliable working are mainly used in various small bidirectional hydraulic systems.

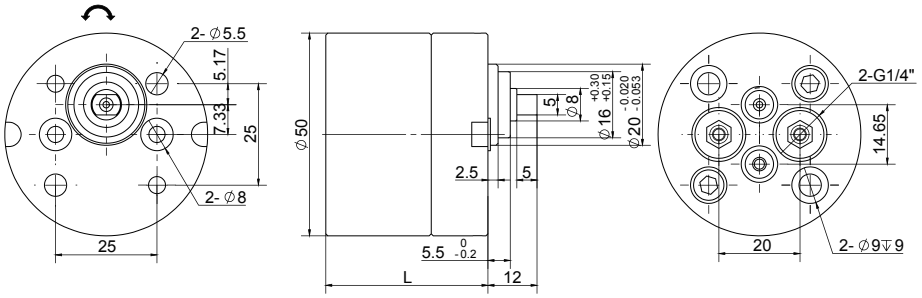
## Code Instruction

CBW - F 1 **-S B L-*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

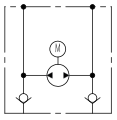
| | |
|---|---|
| ①Product code | |
| ②Pressure rating | F: 20MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Directional of rotation | S: bi-directional |
| ⑥Axial extension form | B: Oblate key |
| ⑦Oil port form | L: G1/4 |
| ⑧Oil port position | rear inlet front outlet |



## Outline Dimensions




Hydraulic Schematic



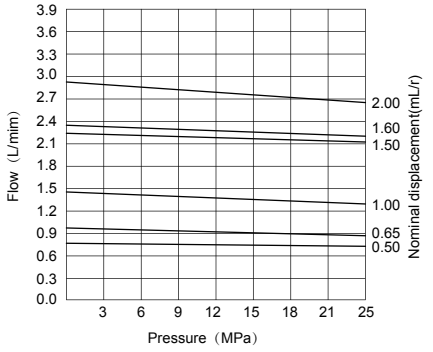
## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBW-F1050 | 0.5 | 20 | 25 | 1000 | 7000 | 90 | 39 |
| CBW-F1065 | 0.65 | 20 | 25 | 1000 | 7000 | 91 | 40 |
| CBW-F1075 | 0.75 | 20 | 25 | 1000 | 7000 | 91 | 41 |
| CBW-F1088 | 0.88 | 20 | 25 | 1000 | 7000 | 91 | 42 |
| CBW-F1100 | 1.0 | 20 | 25 | 850 | 6000 | 92 | 43 |
| CBW-F1125 | 1.25 | 20 | 25 | 700 | 5000 | 92 | 45 |
| CBW-F1150 | 1.5 | 20 | 25 | 600 | 4000 | 92 | 47 |
| CBW-F1160 | 1.6 | 20 | 25 | 600 | 4000 | 92 | 47.8 |
| CBW-F1175 | 1.75 | 20 | 25 | 600 | 4000 | 92 | 49 |
| CBW-F1200 | 2.0 | 20 | 25 | 500 | 3000 | 92 | 51 |

## Characteristic curve

Flow pressure characteristics:

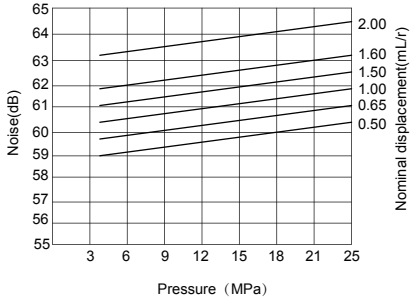
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



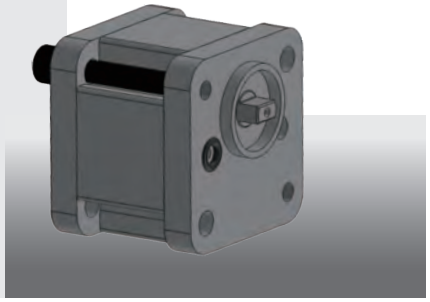
## CBY Series

CBY gear oil pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other main components, and adopts floating shaft sleeve for axial automatic compensation. It has the characteristics of small size, simple structure and reliable operation, and is mainly used in automobiles, construction machinery and various small hydraulic systems.

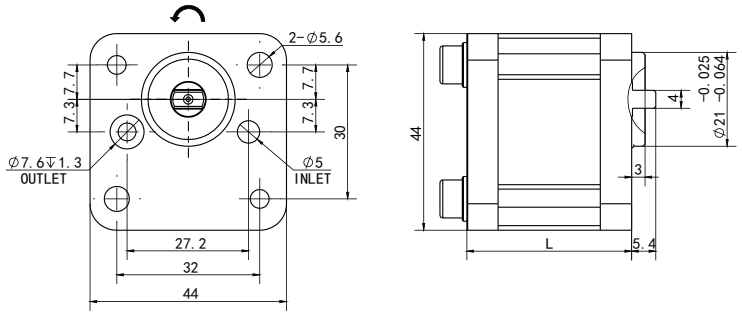
### Code Instruction

CBY - E 1 **-L B L-*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating E: 16MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form B: Oblate key
⑦Oil port form L: bore diameter φ5
⑧Oil port position front inlet front outlet



### Outline Dimensions

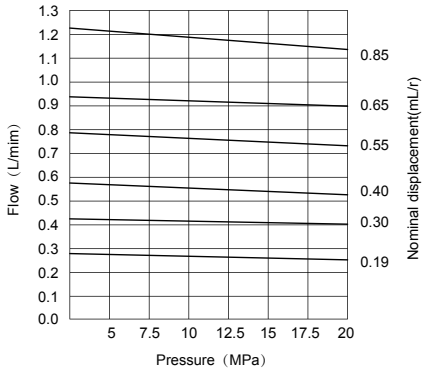



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBY-E1019 | 0.19 | 16 | 20 | 600 | 4000 | 90 | 33.8 |
| CBY-E1030 | 0.30 | 16 | 20 | 600 | 4000 | 90 | 35.4 |
| CBY-E1040 | 0.40 | 16 | 20 | 600 | 4000 | 91 | 36.9 |
| CBY-E1055 | 0.55 | 16 | 20 | 600 | 4000 | 91 | 39.1 |
| CBY-E1065 | 0.65 | 16 | 20 | 600 | 4000 | 91 | 40.6 |
| CBY-E1085 | 0.85 | 16 | 20 | 600 | 4000 | 91 | 43.5 |

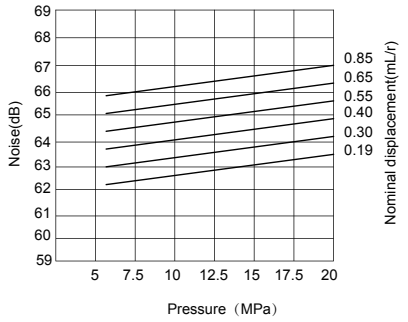
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



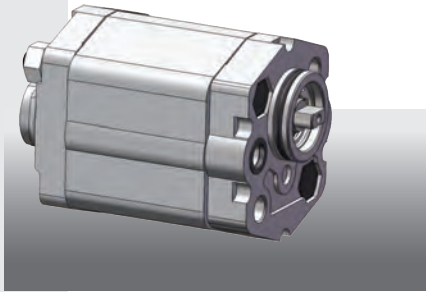
## CBK Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other parts, and the floating shaft sleeve is used for automatic axial compensation. With the characteristics of small volume, light weight, low noise, reliable work, convenient use and installation also maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

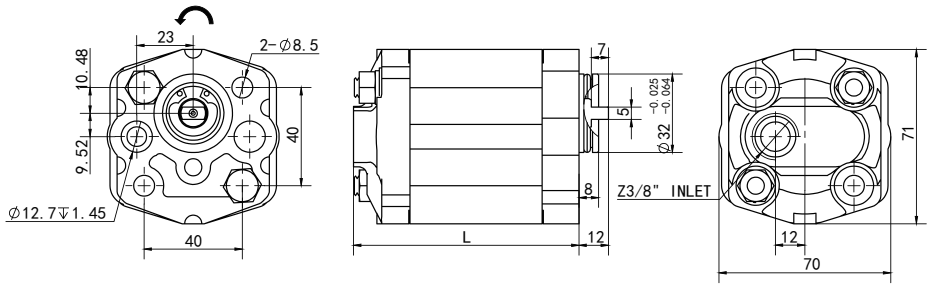
## Code Instruction

CBK – F 1 ***–L B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ① Production code | |
| ② Pressure rating | F: 20MPa |
| ③ Appearance number | |
| ④ Nominal displacement | |
| ⑤ Direction of rotation | R: CW L: CCW |
| ⑥ Axial extension form | B: Oblate key |
| ⑦ Oil port form | L: thread Z3/8 L1: thread G3/8 |
| ⑧ Oil position | rear inlet front outlet |



## Outline Dimensions



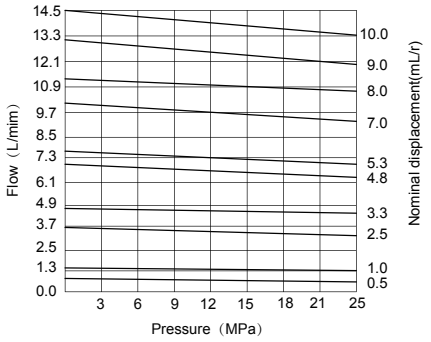

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBK-F1050 | 0.5 | 20 | 25 | 1000 | 6000 | 90 | 54 |
| CBK-F1065 | 0.65 | 20 | 25 | 1000 | 6000 | 90 | 54.5 |
| CBK-F1075 | 0.75 | 20 | 25 | 1000 | 6000 | 91 | 55 |
| CBK-F1100 | 1.0 | 20 | 25 | 1000 | 6000 | 91 | 56 |
| CBK-F1130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 57 |
| CBK-F1160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 58 |
| CBK-F1200 | 2.0 | 20 | 25 | 1000 | 6000 | 92 | 60 |
| CBK-F1250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 62 |
| CBK-F1330 | 3.3 | 20 | 23 | 800 | 5000 | 92 | 64 |
| CBK-F1370 | 3.7 | 20 | 23 | 800 | 4500 | 92 | 66 |
| CBK-F1420 | 4.2 | 20 | 23 | 800 | 4000 | 93 | 68 |
| CBK-F1480 | 4.8 | 19 | 21 | 800 | 3500 | 93 | 70 |
| CBK-F1053 | 5.3 | 19 | 21 | 600 | 3500 | 93 | 72.4 |
| CBK-F1058 | 5.8 | 19 | 21 | 600 | 3000 | 93 | 74 |
| CBK-F1070 | 7.0 | 16 | 18 | 600 | 2500 | 93 | 78 |
| CBK-F1080 | 8.0 | 16 | 18 | 600 | 2000 | 93 | 82 |
| CBK-F1090 | 9.0 | 16 | 18 | 600 | 1500 | 93 | 86 |
| CBK-F1110 | 10.0 | 16 | 18 | 600 | 1500 | 93 | 88.5 |

## Characteristic curve

Flow pressure characteristics:

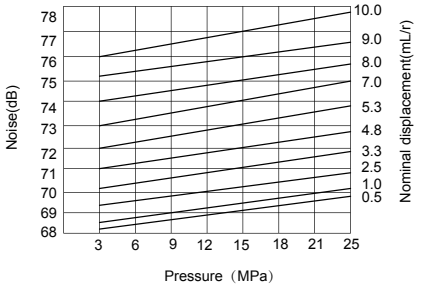
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



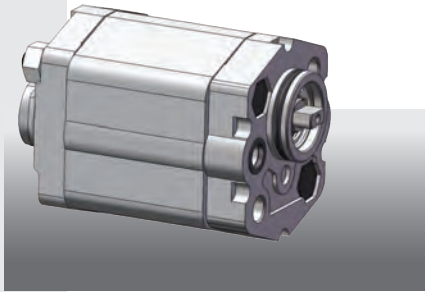
## CBKL Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other parts, and the floating shaft sleeve is used for automatic axial compensation. Due to the helical gear structure, the noise of the pump is greatly reduced,which is the upgrade of CBK straight pump products. With the characteristics of small volume, light weight, low noise, reliable work, convenient use and installation also maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

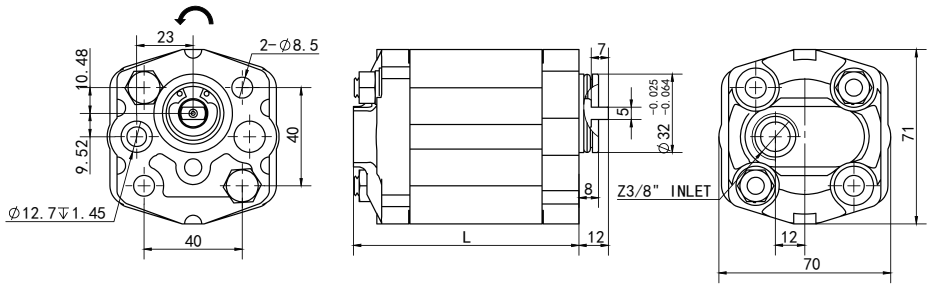
## Code Instruction

CBKL – G 2 ***–L B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Production code
② Pressure rating G: 20MPa
③ Appearance number
④ Nominal displacement
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form B: Oblate key
⑦ Oil port form L: thread Z3/8 L1: thread G3/8
⑧ Oil port position rear inlet front outlet



## Outline Dimensions

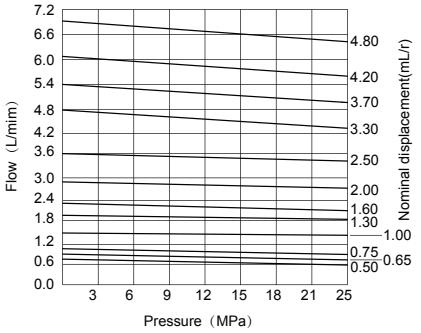



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum pressure | Minimum | Maximum | | |
| CBKL-G2050 | 0.5 | 20 | 25 | 1000 | 6000 | 90 | 78.4 |
| CBKL-G2065 | 0.65 | 20 | 25 | 1000 | 6000 | 91 | 79.1 |
| CBKL-G2075 | 0.75 | 20 | 25 | 1000 | 6000 | 91 | 79.6 |
| CBKL-G2100 | 1.0 | 20 | 25 | 1000 | 6000 | 91 | 80.8 |
| CBKL-G2130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 82.2 |
| CBKL-G2160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 83.7 |
| CBKL-G2200 | 2.0 | 20 | 25 | 1000 | 6000 | 92 | 85.6 |
| CBKL-G2250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 88 |
| CBKL-G2330 | 3.3 | 20 | 25 | 800 | 5000 | 92 | 91.8 |
| CBKL-G2370 | 3.7 | 20 | 25 | 800 | 4500 | 92 | 93.8 |
| CBKL-G2420 | 4.2 | 20 | 25 | 800 | 4000 | 93 | 96.2 |
| CBKL-G2480 | 4.8 | 20 | 25 | 800 | 3500 | 93 | 99 |

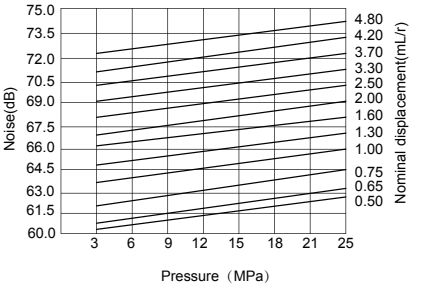
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



## CBKLH Series

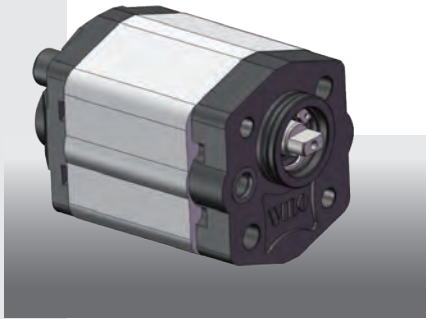
Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using cast iron pump cover and floating shaft sleeve for the automatic axial compensation. With the characteristics of small volume, light weight, low noise, reliable work, convenient installation, use, and maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

## Code Instruction

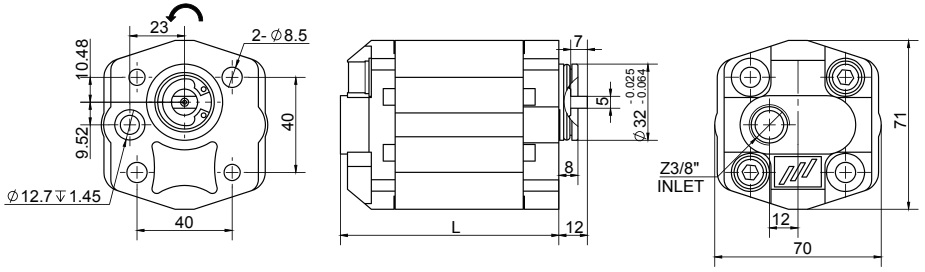
CBKLH - G 2 **-L B L-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 25MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form B: Oblate key
⑦Oil port form L: thread Z3/8 L1: thread G3/8
⑧Oil port position rear inlet front outlet



## Outline Dimensions

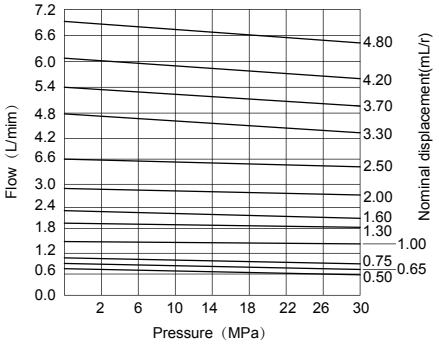



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBKLH-G2050 | 0.5 | 25 | 30 | 1000 | 6000 | 90 | 77.4 |
| CBKLH-G2065 | 0.65 | 25 | 30 | 1000 | 6000 | 91 | 78.1 |
| CBKLH-G2075 | 0.75 | 25 | 30 | 1000 | 6000 | 91 | 78.6 |
| CBKLH-G2100 | 1.0 | 25 | 30 | 1000 | 6000 | 91 | 79.8 |
| CBKLH-G2130 | 1.3 | 25 | 30 | 1000 | 6000 | 92 | 81.2 |
| CBKLH-G2160 | 1.6 | 25 | 30 | 1000 | 6000 | 92 | 82.7 |
| CBLKH-G2200 | 2.0 | 25 | 30 | 1000 | 6000 | 92 | 84.6 |
| CBKLH-G2250 | 2.5 | 25 | 30 | 1000 | 6000 | 92 | 87.0 |
| CBKLH-G2330 | 3.3 | 25 | 30 | 800 | 5000 | 92 | 90.8 |
| CBKLH-G2370 | 3.7 | 23 | 28 | 800 | 4500 | 92 | 92.8 |
| CBKLH-G2420 | 4.2 | 23 | 28 | 800 | 4000 | 93 | 95.2 |
| CBKLH-G2480 | 4.8 | 23 | 28 | 800 | 3500 | 93 | 98.0 |

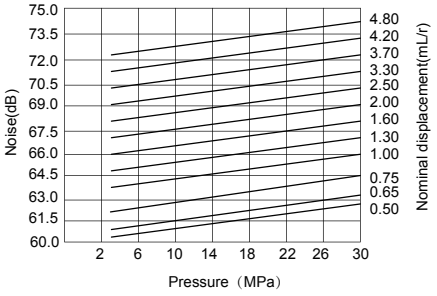
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



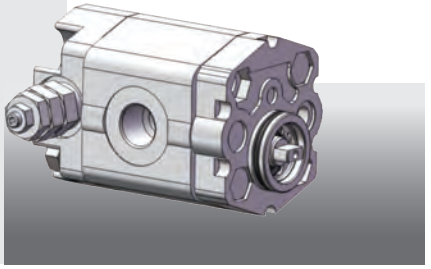
## CBKLY Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover, overflow valve and other parts, and the floating shaft sleeve is used for automatic axial compensation. Due to the use of inclined gear structure, the noise of the pump is greatly reduced, which is the upgrade of CBK straight tooth pump product. With the characteristics of small volume, light weight, low noise, reliable work, convenient installation, use, maintenance and so on, the pump with the overflow valve can control the pressure, which is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

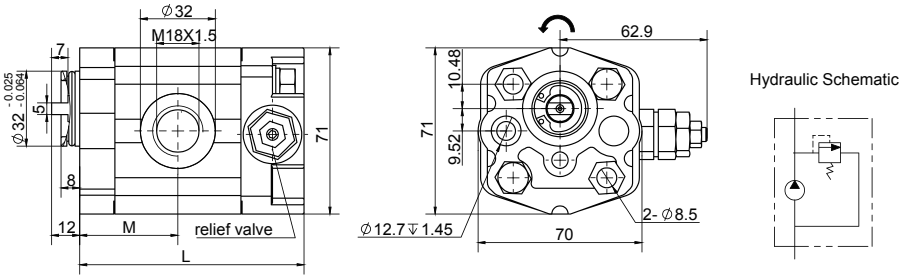
## Code Instruction

CBKLY – G 2 ***–L B L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ① Product code | |
| ② Pressure rating | G: 20MPa |
| ③ Appearance number | |
| ④ Nominal displacement | |
| ⑤ Direction of rotation | R: CW L: CCW |
| ⑥ Axial extension form | B: Oblate key |
| ⑦ Oil port form | L: thread M18X1.5 |
| ⑧ Oil port position | side inlet side outlet |



## Outline Dimensions



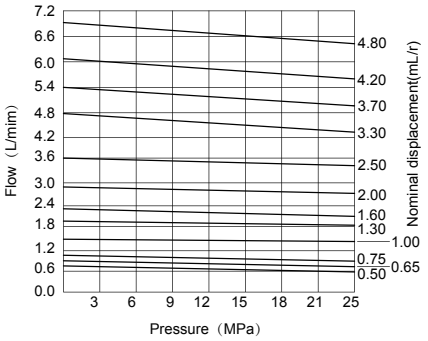

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBKLY-G1050 | 0.5 | 20 | 25 | 1000 | 6000 | 90 | 82.4 | 35.2 |
| CBKLY-G1065 | 0.65 | 20 | 25 | 1000 | 6000 | 90 | 83.1 | 35.6 |
| CBKLY-G1075 | 0.75 | 20 | 25 | 1000 | 6000 | 90 | 83.6 | 35.8 |
| CBKLY-G1100 | 1.0 | 20 | 25 | 1000 | 6000 | 90 | 84.8 | 36.4 |
| CBKLY-G1130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 86.2 | 37.1 |
| CBKLY-G1160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 87.7 | 37.9 |
| CBKLY-G1200 | 2.0 | 20 | 25 | 1000 | 6000 | 92 | 89.6 | 38.8 |
| CBKLY-G1250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 92.0 | 40 |
| CBKLY-G1330 | 3.3 | 20 | 25 | 800 | 5000 | 92 | 93.0 | 41.9 |
| CBKLY-G1370 | 3.7 | 20 | 25 | 800 | 4500 | 92 | 95.8 | 42.9 |
| CBKLY-G1420 | 4.2 | 20 | 25 | 800 | 4000 | 93 | 97.8 | 44.1 |
| CBKLY-G1480 | 4.8 | 20 | 25 | 800 | 3500 | 93 | 100.2 | 45.5 |

## Characteristic curve

Flow pressure characteristics:

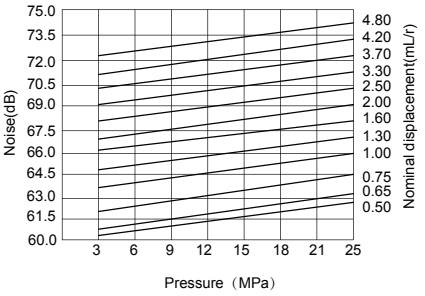
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



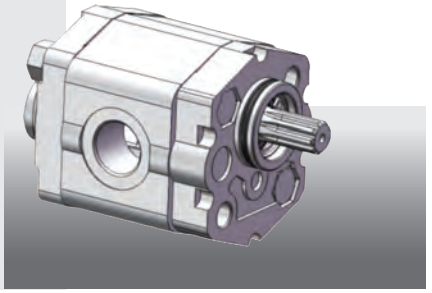
## CBKL 9T Series

Gear pump is mainly composed of pump body, shaft sleeve, gear, front cover, rear cover and other parts, and the floating shaft sleeve is used for automatic axial compensation. Due to the use of helical gear structure, the noise of the pump is greatly reduced, is the upgrade of CBK straight pump products. With the characteristics of small volume, light weight, low noise, reliable work, convenient installation, use, maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, construction machinery and other hydraulic systems.

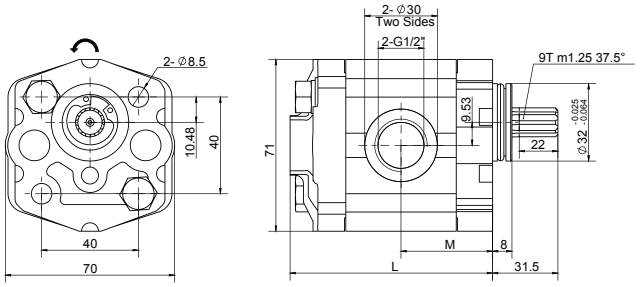
### Code Instruction

CBKL 9T – G 2 ***–L H L–*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① ①Product code
② Pressure rating G: 20MPa
③ Appearance number
④ Nominal displacement
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form H: 9T Spline key
⑦ Oil port form L: thread G1/2
⑧ Oil port position side inlet side outlet



### Outline Dimensions

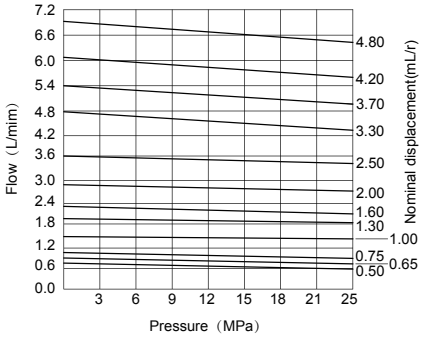



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBKL 9T-G2050 | 0.5 | 20 | 25 | 1000 | 6000 | 90 | 78.4 | 35.2 |
| CBKL 9T-G2065 | 0.65 | 20 | 25 | 1000 | 6000 | 91 | 79.1 | 35.6 |
| CBKL 9T-G2075 | 0.75 | 20 | 25 | 1000 | 6000 | 91 | 79.6 | 35.8 |
| CBKL 9T-G2100 | 1.0 | 20 | 25 | 1000 | 6000 | 91 | 80.8 | 36.4 |
| CBKL 9T-G2130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 82.2 | 37.1 |
| CBKL 9T-G2160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 83.7 | 37.9 |
| CBKL 9T-G2200 | 2.0 | 20 | 25 | 1000 | 6000 | 92 | 85.6 | 38.8 |
| CBKL 9T-G2250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 88 | 40.0 |
| CBKL 9T-G2330 | 3.3 | 20 | 25 | 800 | 5000 | 92 | 91.8 | 41.9 |
| CBKL 9T-G2370 | 3.7 | 20 | 25 | 800 | 4500 | 92 | 93.8 | 42.9 |
| CBKL 9T-G2420 | 4.2 | 20 | 25 | 800 | 4000 | 93 | 96.2 | 44.1 |
| CBKL 9T-G2480 | 4.8 | 20 | 23 | 800 | 3500 | 93 | 99 | 45.5 |

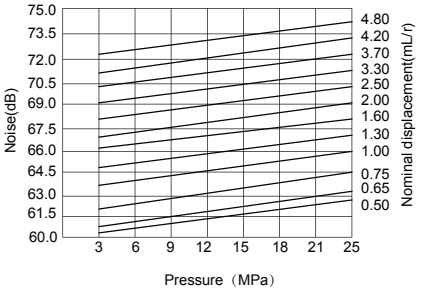
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



# 2CBKL Duplex pump Series

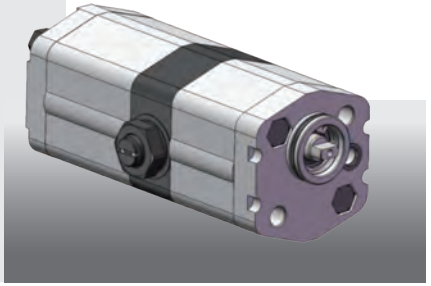
The duplex gear pump is mainly composed of two gear pumps in series composition, and the floating shaft sleeve is used for automatic axial compensation. Due to the use of helical gear structure, the noise of the pump is greatly reduced. With the different setting pressure of the relief valve, the automatic switching of low pressure& high flow and high pressure&low flow of the system ,which can save energy. It is mainly used in hydraulic power unit, all kinds of hydraulic machinery, construction machinery and other hydraulic systems.

## Code Instruction

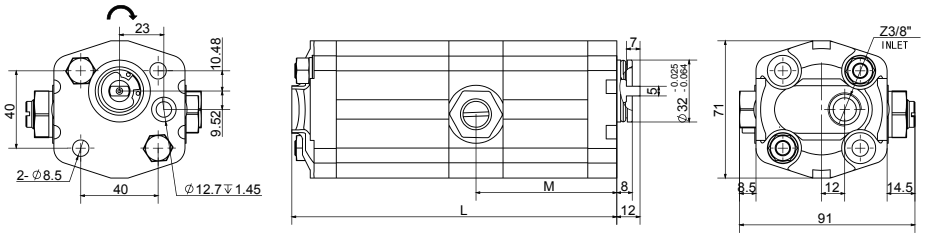
2CBKL - G 2 **-R B L-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

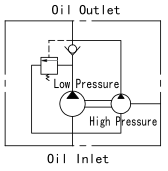
| | |
|---|---|
| ①Product code | |
| ②Pressure rating | G: 20MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Directional of rotation | R: CW L: CCW |
| ⑥Axial extension form | B: Oblate key |
| ⑦Oil port form | L: thread Z3/8 L1: thread G3/8 |
| ⑧Oil port position | rear inlet front outlet |



## Outline Dimensions




Hydraulic Schematic



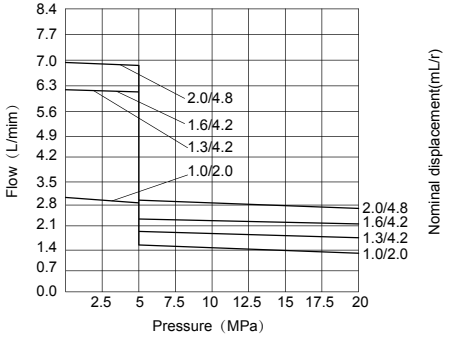

## Performance Parameter

| Code | Nominal displacement (mL/r) | | Pressure (MPa) | | Speed (r/min) | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | Low pressure | High pressure | Relief valve | Working pressure | Working speed | | |
| 2CBKL-G2100/G2200 | 1.0 | 2.0 | Range：1.4-6.3<br>Initial set value：4.2 | 20 | 3000 | 91 | 171.4 |
| 2CBKL-G2130/G2330 | 1.3 | 3.3 | | 20 | 3000 | 91 | 179.0 |
| 2CBKL-G2130/G2370 | 1.3 | 3.7 | | 20 | 3000 | 91 | 181.0 |
| 2CBKL-G2130/G2420 | 1.3 | 4.2 | | 20 | 3000 | 91 | 183.4 |
| 2CBKL-G2100/G2420 | 1.0 | 4.2 | | 20 | 3000 | 91 | 182.0 |
| 2CBKL-G2160/G2420 | 1.6 | 4.2 | | 20 | 3000 | 91 | 184.9 |
| 2CBKL-G2130/G2480 | 1.3 | 4.8 | | 20 | 3000 | 91 | 186.2 |
| 2CBKL-G2200/G2480 | 2.0 | 4.8 | | 20 | 3000 | 91 | 189.6 |

## Characteristic curve

Flow pressure characteristics：

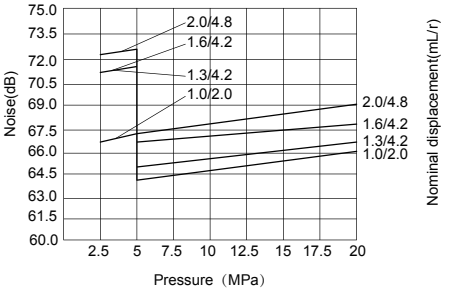
Test condition：n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics：

Test condition：n=1450r/min V=46mm ²/s t=55℃



## CBTL Series

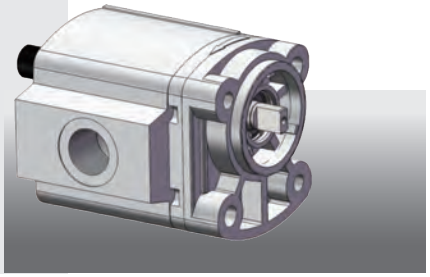
High pressure gear pump consists of pump body, shaft sleeve, gear, front cover and other parts. Adopt the two-segment structure of shell and front cover,which greatly improves the strength of the gear pump shell, The helical gear structure is adopted to reduce the noise of gear pump. Use the floating shaft sleeve for the automatic axial compensation. With the characteristics of low noise, small volume, light weight, simple structure, reliable work, mainly used in hydraulic power units, various hydraulic machinery, construction machinery, textile machinery, agricultural machinery and other hydraulic systems.

## Code Instruction

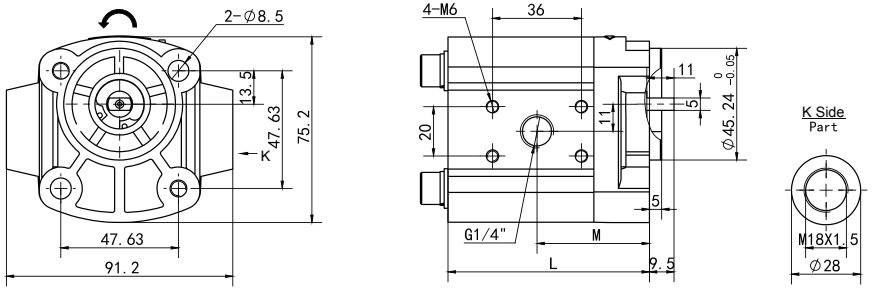
CBTL - G 2 ***-L B L-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 20MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension Oblate key B: 5 B1: 3.8
⑦Oil port form L: thread M18X1.5
⑧Oil port position side inlet side outlet



## Outline Dimensions

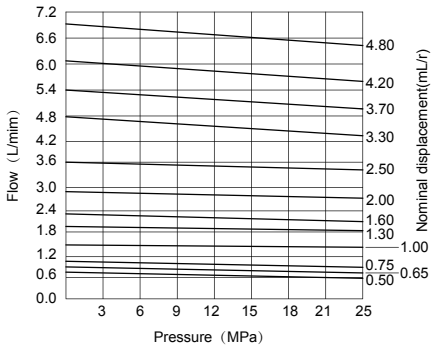



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum pressure | Minimum | Maximum | | | |
| CBTL-G2050 | 0.5 | 20 | 25 | 1000 | 6000 | 90 | 76 | 42.7 |
| CBTL-G2065 | 0.65 | 20 | 25 | 1000 | 6000 | 91 | 76.5 | 43.1 |
| CBTL-G2075 | 0.75 | 20 | 25 | 1000 | 6000 | 91 | 77 | 43.3 |
| CBTL-G2100 | 1.0 | 20 | 25 | 1000 | 6000 | 91 | 78.5 | 43.9 |
| CBTL-G2130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 79.5 | 44.6 |
| CBTL-G2160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 81.5 | 45.4 |
| CBTL-G2200 | 2.0 | 20 | 25 | 1000 | 6000 | 92 | 83 | 46.3 |
| CBTL-G2250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 85.5 | 47.5 |
| CBTL-G2330 | 3.3 | 20 | 23 | 800 | 5000 | 92 | 89.5 | 49.4 |
| CBTL-G2370 | 3.7 | 20 | 23 | 800 | 4500 | 92 | 91.5 | 50.4 |
| CBTL-G2420 | 4.2 | 20 | 23 | 800 | 4000 | 93 | 93.5 | 51.6 |
| CBTL-G2480 | 4.8 | 19 | 21 | 800 | 3500 | 93 | 96.5 | 53.0 |

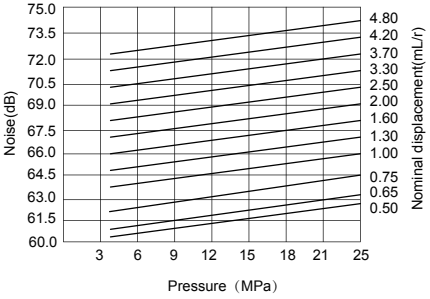
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



## CBT2A Series

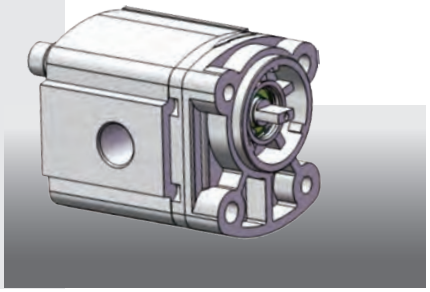
High pressure gear pump consists of pump body, shaft sleeve, gear, front cover and other parts. The strength of the gear pump shell is greatly improved by using the housing and the front cover. The straight gear structure is used to greatly reduce the axial force and thus reduce the loss. Use the floating shaft sleeve for the automatic axial compensation. With the characteristics of low noise, small volume, light weight, simple structure, reliable work, mainly used in hydraulic power units, various hydraulic machinery, construction machinery, textile machinery, agricultural machinery and other hydraulic systems.

### Code Instruction

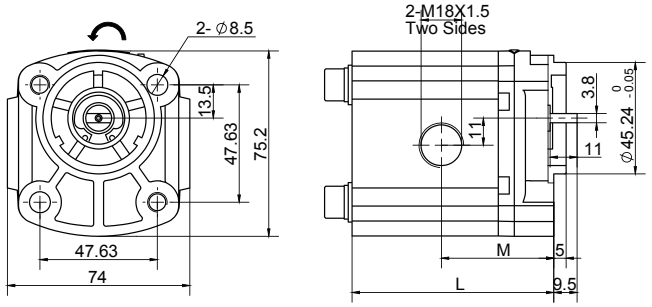
CBT2A - G 2 ***-L B L-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 20MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form Oblate key B: 5 B1: 3.8
⑦Oil port form L: thread M18*1.5
⑧Oil port position side inlet side outlet



### Outline Dimensions

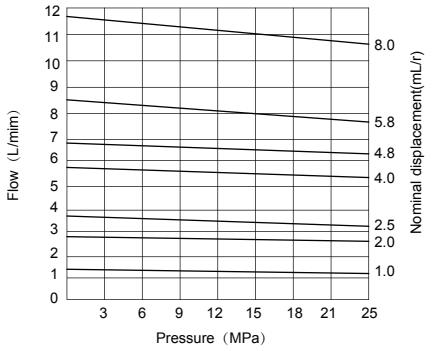



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBT2A-G2065 | 0.65 | 20 | 25 | 1000 | 6000 | 90 | 71.8 | 40.8 |
| CBT2A-G2100 | 1 | 20 | 25 | 1000 | 6000 | 91 | 73.2 | 41.5 |
| CBT2A-G2130 | 1.3 | 20 | 25 | 1000 | 6000 | 92 | 74.4 | 42.1 |
| CBT2A-G2160 | 1.6 | 20 | 25 | 1000 | 6000 | 92 | 75.6 | 42.7 |
| CBT2A-G2200 | 2 | 20 | 25 | 1000 | 6000 | 92 | 77.2 | 43.5 |
| CBT2A-G2250 | 2.5 | 20 | 25 | 1000 | 6000 | 92 | 79.2 | 44.5 |
| CBT2A-G2310 | 3.1 | 20 | 25 | 1000 | 6000 | 92 | 81.5 | 45.7 |
| CBT2A-G2400 | 4 | 20 | 25 | 1000 | 6000 | 93 | 85.2 | 47.5 |
| CBT2A-G2420 | 4.2 | 20 | 25 | 800 | 5000 | 93 | 86 | 47.9 |
| CBT2A-G2480 | 4.8 | 20 | 25 | 800 | 4500 | 93 | 88.4 | 49.1 |
| CBT2A-G2520 | 5.2 | 16 | 20 | 800 | 3500 | 93 | 90 | 49.9 |
| CBT2A-G2580 | 5.8 | 16 | 20 | 600 | 3000 | 93 | 92.4 | 51.1 |
| CBT2A-G2700 | 7 | 16 | 20 | 600 | 2500 | 93 | 97.2 | 53.5 |
| CBT2A-G2800 | 8 | 16 | 20 | 600 | 2000 | 93 | 101.2 | 55.5 |
| CBT2A-G2900 | 9 | 16 | 20 | 600 | 1500 | 93 | 105.2 | 57.5 |
| CBT2A-G2111 | 10 | 16 | 20 | 600 | 1500 | 93 | 109.2 | 59.5 |

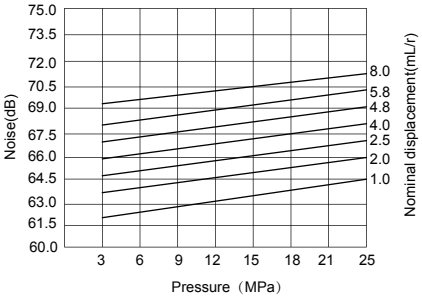
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



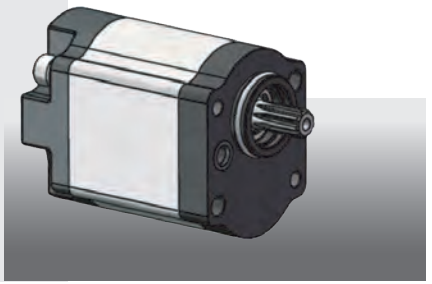
## CBH Series

Gear oil pump is mainly composed of pump body, sleeve, gear, front cover, back cover and other parts, and adopts floating sleeve for axial automatic compensation. It adopts bi-directional pump structure and can be reversed to realize energy recovery, which is an upgraded product of CBK straight gear pump. It has the characteristics of small volume, light weight, low noise, reliable work, easy installation, use and maintenance, etc. It is mainly used in hydraulic power units, various hydraulic machinery, engineering machinery and other hydraulic systems.

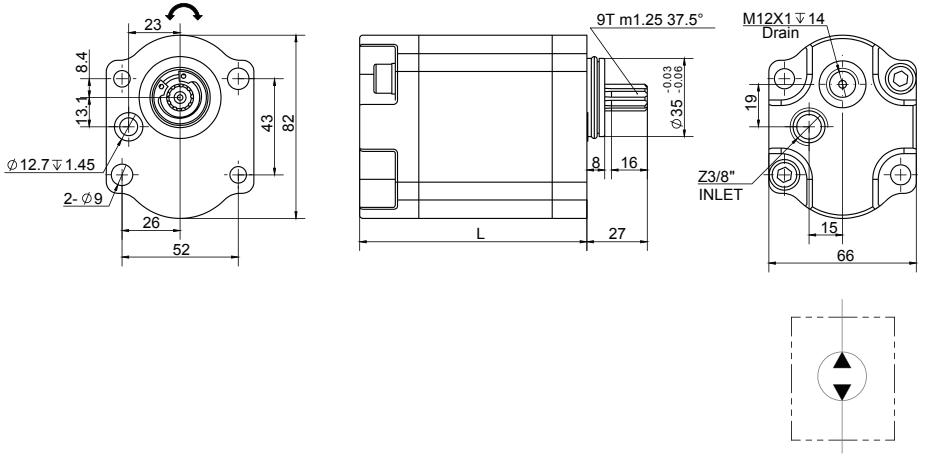
## Code Instruction

CBH - G 2 ***-L H L- *
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product Code
②Pressure Rating G: 25MPa
③Appearance number
④Nominal displacement
⑤Directional of rotation R: CW L: CCW S: bi-directional
⑥Axial extension form H: 9T tooth spline key
⑦Oil port form L: thread Z3/8 L1: thread G3/8
⑧Oil position rear inlet front outlet



## Outline Dimensions

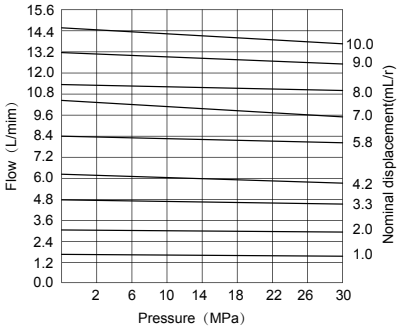



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L(mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBH-G1100 | 1 | 25 | 30 | 1000 | 6000 | 91 | 77.7 |
| CBH-G1130 | 1.3 | 25 | 30 | 1000 | 6000 | 92 | 78.5 |
| CBH-G1160 | 1.6 | 25 | 30 | 1000 | 6000 | 92 | 79.3 |
| CBH-G1200 | 2 | 25 | 30 | 1000 | 6000 | 92 | 80.4 |
| CBH-G1250 | 2.5 | 25 | 30 | 1000 | 6000 | 92 | 81.8 |
| CBH-G1330 | 3.3 | 25 | 30 | 800 | 5000 | 92 | 83.9 |
| CBH-G1370 | 3.7 | 25 | 30 | 800 | 4500 | 92 | 85.0 |
| CBH-G1420 | 4.2 | 25 | 30 | 800 | 4000 | 92 | 86.3 |
| CBH-G1480 | 4.8 | 25 | 30 | 800 | 3500 | 92 | 88.0 |
| CBH-G1530 | 5.3 | 25 | 30 | 600 | 3500 | 93 | 89.3 |
| CBH-G1580 | 5.8 | 25 | 30 | 600 | 3000 | 93 | 90.7 |
| CBH-G1600 | 6 | 25 | 33 | 600 | 3000 | 93 | 91.2 |
| CBH-G1700 | 7 | 25 | 30 | 600 | 2500 | 93 | 93.9 |
| CBH-G1800 | 8 | 25 | 30 | 600 | 2000 | 93 | 96.6 |
| CBH-G1900 | 9 | 25 | 30 | 600 | 1500 | 93 | 99.3 |
| CBH-G1110 | 10 | 25 | 30 | 600 | 1500 | 93 | 101.7 |

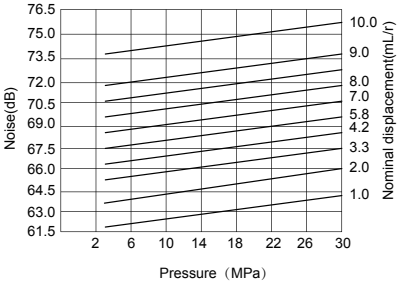
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55 ℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55 ℃



## CBN Series

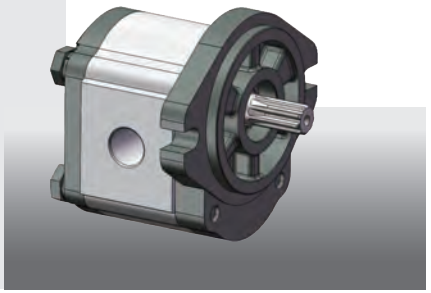
Gear pump is composed of pump body, shaft sleeve, gear, front cover, rear cover and other main components, and the floating shaft sleeve is used for axial automatic compensation. It has characteristics of small size, light weight, simple structure, reliable work,and easy access for convenient installation, use and maintenance .This product is mainly used in various construction machinery, agricultural machinery and other hydraulic systems.

## Code Instruction

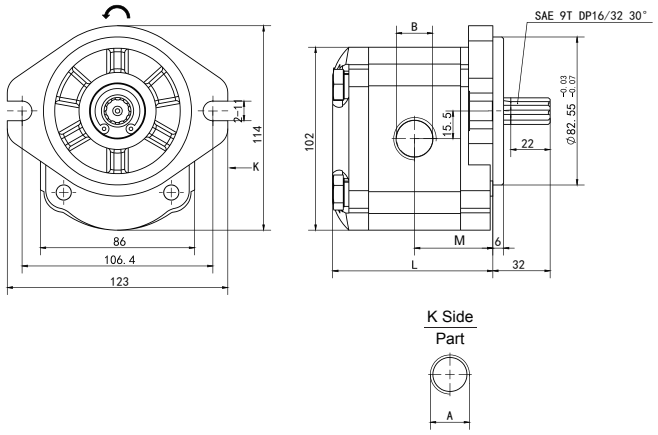
CBN - G 2 **–L H L –*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 25MPa
③Appearance number
④ Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form H: SAE 9 tooth spline key
⑦Oil port form L: thread G1/2
⑧Oil port position side inlet side outlet



## Outline Dimensions

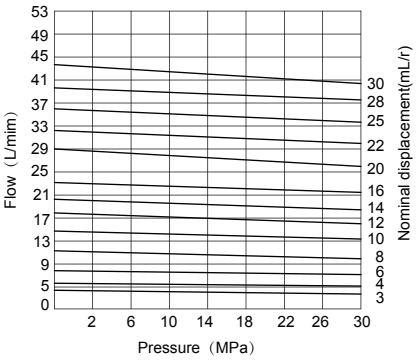



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | A | B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | |
| CBN-G2030 | 3 | 25 | 30 | 800 | 4000 | 92 | 86.9 | 42.4 | G1/2-14 | G1/2-14 |
| CBN-G2040 | 4 | 25 | 30 | 600 | 4000 | 92 | 88.5 | 43.2 | G1/2-14 | G1/2-14 |
| CBN-G2060 | 6 | 25 | 30 | 600 | 4000 | 92 | 91.7 | 44.9 | G1/2-14 | G1/2-14 |
| CBN-G2080 | 8 | 25 | 30 | 500 | 3500 | 92 | 95.0 | 46.5 | G1/2-14 | G1/2-14 |
| CBN-G2100 | 10 | 25 | 30 | 500 | 3500 | 92 | 90.9 | 44.5 | G1/2-14 | G1/2-14 |
| CBN-G2120 | 12 | 25 | 30 | 500 | 3500 | 92 | 101.4 | 49.7 | G1/2-14 | G1/2-14 |
| CBN-G2140 | 14 | 25 | 28 | 500 | 3500 | 92 | 104.7 | 51.3 | G3/4-14 | G1/2-14 |
| CBN-G2160 | 16 | 25 | 28 | 500 | 3500 | 92 | 107.9 | 53.0 | G3/4-14 | G1/2-14 |
| CBN-G2180 | 18 | 25 | 28 | 400 | 3500 | 92 | 111.2 | 54.6 | G3/4-14 | G1/2-14 |
| CBN-G2200 | 20 | 22 | 25 | 400 | 3200 | 92 | 114.4 | 56.2 | G3/4-14 | G1/2-14 |
| CBN-G2220 | 22 | 22 | 25 | 400 | 3000 | 92 | 117.6 | 57.8 | G1-11 | G3/4-14 |
| CBN-G2250 | 25 | 20 | 23 | 400 | 3000 | 92 | 122.5 | 60.3 | G1-11 | G3/4-14 |
| CBN-G2280 | 28 | 18 | 20 | 400 | 2500 | 92 | 127.4 | 62.7 | G1-11 | G3/4-14 |
| CBN-G2300 | 30 | 16 | 18 | 400 | 2500 | 92 | 130.6 | 64.3 | G1-11 | G3/4-14 |

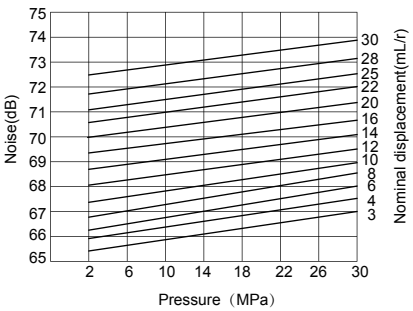
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



## CBN-B Series

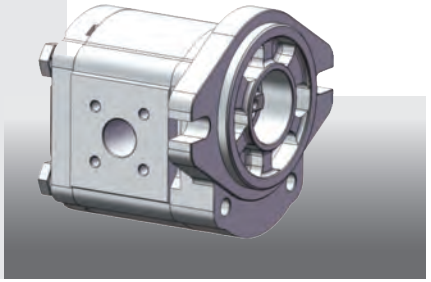
Gear pump is composed of the pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using the floating shaft sleeve for the axial automatic compensation. With a small size, light weight, simple structure, reliable work, convenient installation, use, maintenance and other characteristics, this product is mainly used in various construction machinery, agricultural machinery and other hydraulic systems.

### Code Instruction

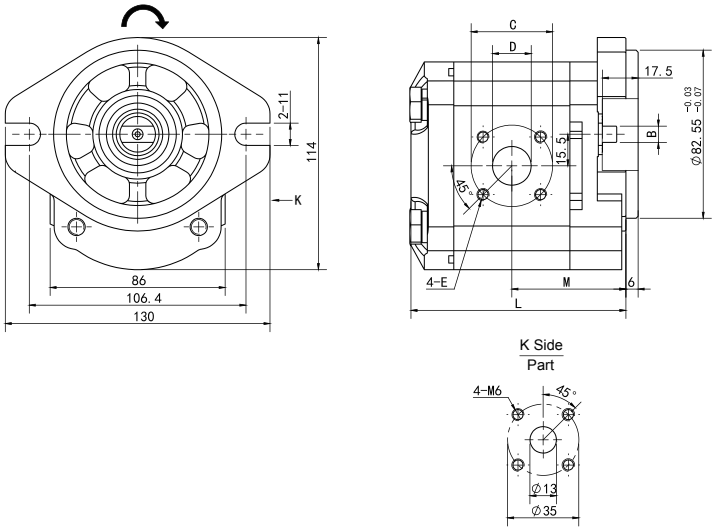
CBN - G 2 **–R B F –*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 25MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form Oblate key B: 8 B1: 10
⑦Oil port form F: flange type
⑧Oil port position side inlet side outlet



### Outline Dimensions

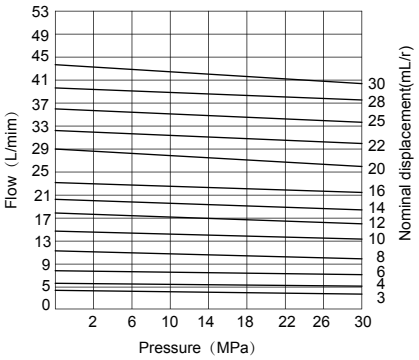



### Performance Parameter

| | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | | | |
| CBN-G2030-B | 3 | 25 | 30 | 800 | 4000 | 92 | 97.4 | 51.9 | 8 | 40 | 15 | M6 |
| CBN-G2040-B | 4 | 25 | 30 | 600 | 4000 | 92 | 99.0 | 52.7 | 8 | 40 | 15 | M6 |
| CBN-G2060-B | 6 | 25 | 30 | 600 | 4000 | 92 | 102.2 | 54.4 | 8 | 40 | 15 | M6 |
| CBN-G2080-B | 8 | 25 | 30 | 500 | 3500 | 92 | 105.5 | 56.0 | 8 | 40 | 15 | M6 |
| CBN-G2100-B | 10 | 25 | 30 | 500 | 3500 | 92 | 101.4 | 54.0 | 10 | 40 | 20 | M6 |
| CBN-G2120-B | 12 | 25 | 30 | 500 | 3500 | 92 | 111.9 | 59.2 | 10 | 40 | 20 | M6 |
| CBN-G2140-B | 14 | 25 | 28 | 500 | 3500 | 92 | 115.2 | 60.8 | 10 | 40 | 20 | M6 |
| CBN-G2160-B | 16 | 25 | 28 | 500 | 3500 | 92 | 118.4 | 62.5 | 10 | 40 | 20 | M6 |
| CBN-G2180-B | 18 | 25 | 28 | 400 | 3500 | 92 | 121.7 | 64.1 | 10 | 55 | 26 | M8 |
| CBN-G2200-B | 20 | 22 | 25 | 400 | 3200 | 92 | 124.9 | 65.7 | 10 | 55 | 26 | M8 |
| CBN-G2220-B | 22 | 22 | 25 | 400 | 3000 | 92 | 128.1 | 67.3 | 10 | 55 | 26 | M8 |
| CBN-G2250-B | 25 | 20 | 23 | 400 | 3000 | 92 | 133.0 | 69.8 | 10 | 55 | 26 | M8 |
| CBN-G2280-B | 28 | 18 | 20 | 400 | 2500 | 92 | 137.9 | 72.2 | 10 | 55 | 26 | M8 |
| CBN-G2300-B | 30 | 16 | 18 | 400 | 2500 | 92 | 141.1 | 73.8 | 10 | 55 | 26 | M8 |

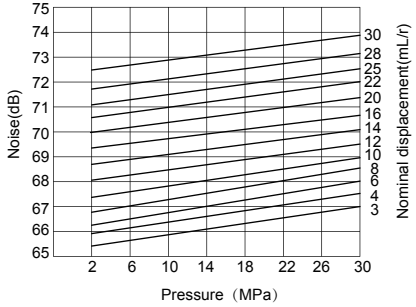
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



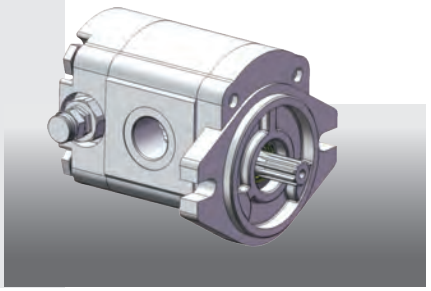
## CBNY Series

Gear pump is composed of the pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using the floating shaft sleeve for the axial automatic compensation. With a small volume, light weight, simple structure, reliable work, convenient installation, use, maintenance and other characteristics, the pump with the relief valve can control the pressure. This product is mainly used in various construction machinery, agricultural machinery and other hydraulic systems.

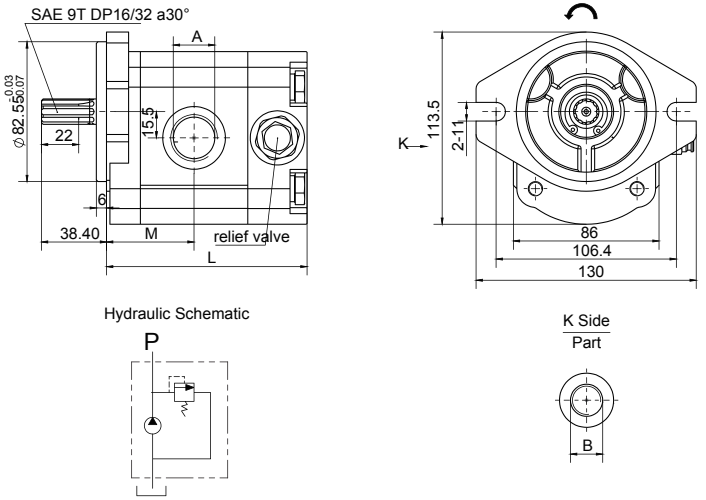
### Code Instruction

CBNY - G 2 **–L H L –*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①Product code
②Pressure rating G: 25MPa
③Appearance number
④Nominal displacement
⑤Direction of rotation R: CW L: CCW
⑥Axial extension form H: SAE 9 tooth spline key
⑦Oil port form L: thread G3/4
⑧Oil port position side inlet side outlet



### Outline Dimensions

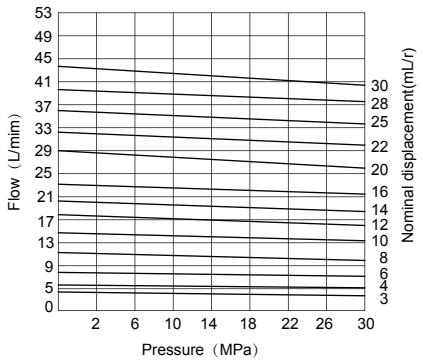



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | A | B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | |
| CBNY-G2030 | 3 | 25 | 30 | 800 | 4000 | 92 | 86.9 | 42.4 | G1/2-14 | G1/2-14 |
| CBNY-G2040 | 4 | 25 | 30 | 600 | 4000 | 92 | 88.5 | 43.2 | G1/2-14 | G1/2-14 |
| CBNY-G2060 | 6 | 25 | 30 | 600 | 4000 | 92 | 91.7 | 44.9 | G1/2-14 | G1/2-14 |
| CBNY-G2080 | 8 | 25 | 30 | 500 | 3500 | 92 | 95.0 | 46.5 | G1/2-14 | G1/2-14 |
| CBNY-G2100 | 10 | 25 | 30 | 500 | 3500 | 92 | 90.9 | 44.5 | G1/2-14 | G1/2-14 |
| CBNY-G2120 | 12 | 25 | 30 | 500 | 3500 | 92 | 101.4 | 49.7 | G1/2-14 | G1/2-14 |
| CBNY-G2140 | 14 | 25 | 28 | 500 | 3500 | 92 | 104.7 | 51.3 | G3/4-14 | G1/2-14 |
| CBNY-G2160 | 16 | 25 | 28 | 500 | 3500 | 92 | 107.9 | 53.0 | G3/4-14 | G1/2-14 |
| CBNY-G2180 | 18 | 25 | 28 | 400 | 3500 | 92 | 111.2 | 54.6 | G3/4-14 | G1/2-14 |
| CBNY-G2200 | 20 | 22 | 25 | 400 | 3200 | 92 | 114.4 | 56.2 | G3/4-14 | G1/2-14 |
| CBNY-G2220 | 22 | 22 | 25 | 400 | 3000 | 92 | 117.6 | 57.8 | G1-11 | G3/4-14 |
| CBNY-G2250 | 25 | 20 | 23 | 400 | 3000 | 92 | 122.5 | 60.3 | G1-11 | G3/4-14 |
| CBNY-G2280 | 28 | 18 | 20 | 400 | 2500 | 92 | 127.4 | 62.7 | G1-11 | G3/4-14 |
| CBNY-G2300 | 30 | 16 | 18 | 400 | 2500 | 92 | 130.6 | 64.3 | G1-11 | G3/4-14 |

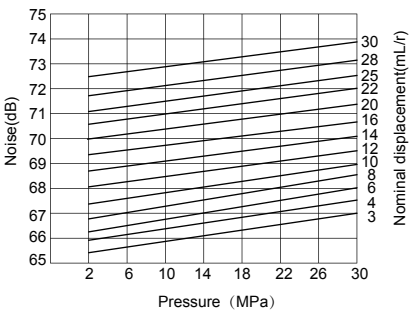
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



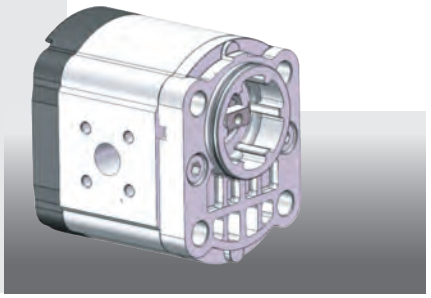
## CBR Series

Gear pump is composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using floating split shaft sleeve for axial automatic compensation. No side gap meshing, the product is relatively ordinary external meshing pump noise greatly reduced, has the characteristics of small volume, light weight, simple structure, reliable work, convenient installation, use, maintenance and so on, this product is mainly used in a variety of construction machinery, agricultural machinery and other hydraulic systems.

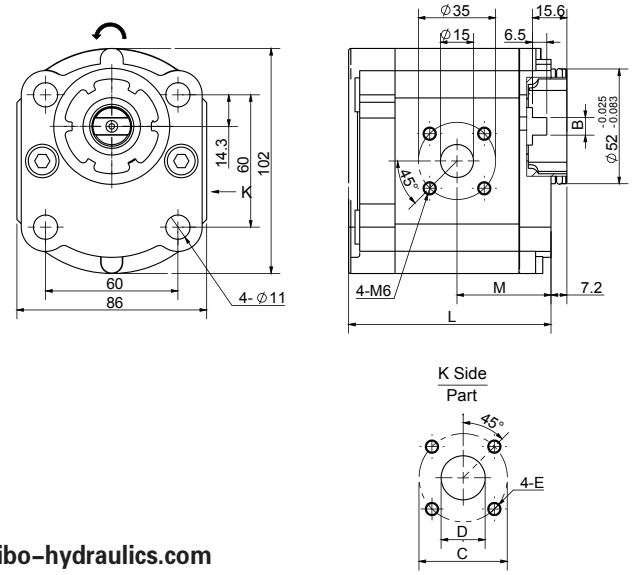
## Code Instruction

CBR - G 2 **–L B F –*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product code
② Pressure rating G: 25MPa
③ Appearance number
④ Nominal displacement
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form Oblate key B: 8 B1: 10
⑦ Oil port form F: flange type
⑧ Oil port position side inlet side outlet



## Outline Dimensions

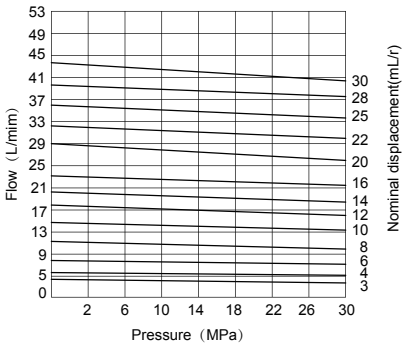



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | | | |
| CBR-G2030 | 3 | 25 | 30 | 800 | 4000 | 92 | 78.5 | 36.0 | 8 | 40 | 15 | M6 |
| CBR-G2040 | 4 | 25 | 30 | 600 | 4000 | 92 | 80.1 | 36.8 | 8 | 40 | 15 | M6 |
| CBR-G2060 | 6 | 25 | 30 | 600 | 4000 | 92 | 83.4 | 38.5 | 8 | 40 | 15 | M6 |
| CBR-G2080 | 8 | 25 | 30 | 500 | 3500 | 92 | 86.7 | 40.1 | 8 | 40 | 15 | M6 |
| CBR-G2100 | 10 | 25 | 30 | 500 | 3500 | 92 | 90.0 | 41.8 | 10 | 40 | 20 | M6 |
| CBR-G2120 | 12 | 25 | 30 | 500 | 3500 | 92 | 93.3 | 43.4 | 10 | 40 | 20 | M6 |
| CBR-G2140 | 14 | 25 | 28 | 500 | 3500 | 92 | 96.6 | 45.1 | 10 | 40 | 20 | M6 |
| CBR-G2160 | 16 | 25 | 28 | 500 | 3500 | 92 | 99.9 | 46.7 | 10 | 40 | 20 | M6 |
| CBR-G2180 | 18 | 25 | 28 | 400 | 3500 | 92 | 103.2 | 48.4 | 10 | 55 | 26 | M8 |
| CBR-G2200 | 20 | 22 | 25 | 400 | 3200 | 92 | 106.5 | 50.0 | 10 | 55 | 26 | M8 |
| CBR-G2220 | 22 | 22 | 25 | 400 | 3000 | 92 | 109.8 | 51.7 | 10 | 55 | 26 | M8 |
| CBR-G2250 | 25 | 20 | 23 | 400 | 3000 | 92 | 114.8 | 54.1 | 10 | 55 | 26 | M8 |
| CBR-G2280 | 28 | 18 | 20 | 400 | 2500 | 92 | 119.7 | 56.6 | 10 | 55 | 26 | M8 |
| CBR-G2300 | 30 | 16 | 18 | 400 | 2500 | 92 | 123.0 | 58.3 | 10 | 55 | 26 | M8 |

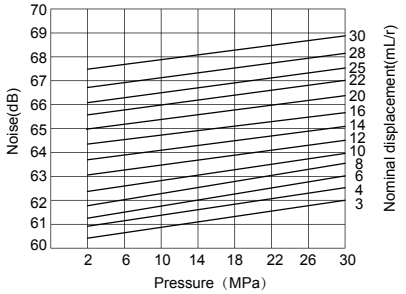
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



## CBR-B Series

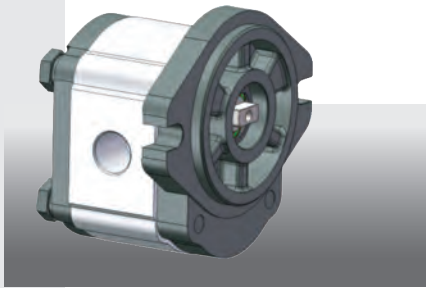
Gear pump is composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using floating split shaft sleeve for axial automatic compensation. No side gap meshing, the product is relatively ordinary external meshing pump noise greatly reduced, has the characteristics of small volume, light weight, simple structure, reliable work, convenient installation, use, maintenance and so on, this product is mainly used in a variety of construction machinery, agricultural machinery and other hydraulic systems.

### Code Instruction

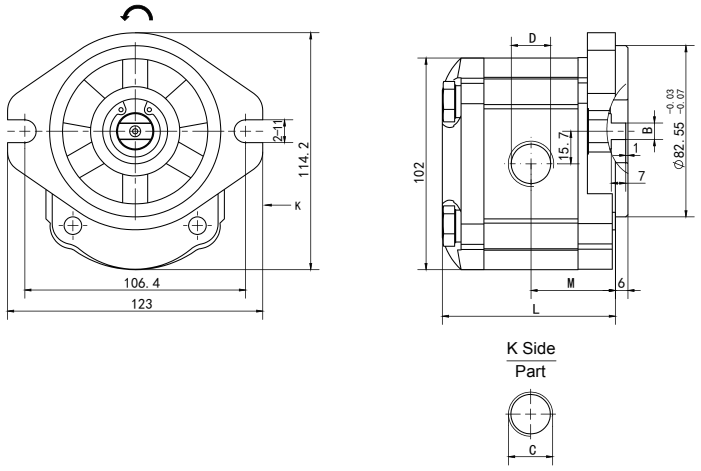
CBR - G 2 **–L B L –*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product code
② Pressure rating G: 25MPa
③ Appearance number
④ Nominal displacement
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form Oblate key B: 8 B1: 10
⑦ Oil port form L: thread G1/2
⑧ Oil port position side inlet side outlet



### Outline Dimensions

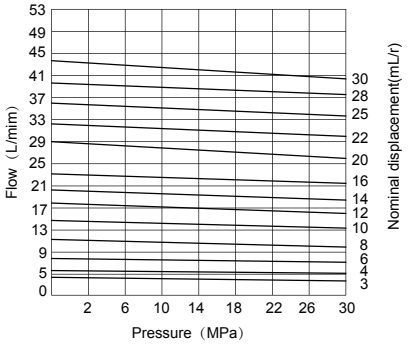



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | B | C | D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | | |
| CBR-G2030-B | 3 | 25 | 30 | 800 | 4000 | 92 | 81.0 | 39.5 | 8 | G1/2-14 | G1/2-14 |
| CBR-G2040-B | 4 | 25 | 30 | 600 | 4000 | 92 | 82.6 | 40.3 | 8 | G1/2-14 | G1/2-14 |
| CBR-G2060-B | 6 | 25 | 30 | 600 | 4000 | 92 | 85.9 | 42.0 | 8 | G1/2-14 | G1/2-14 |
| CBR-G2080-B | 8 | 25 | 30 | 500 | 3500 | 92 | 89.2 | 43.6 | 8 | G1/2-14 | G1/2-14 |
| CBR-G2100-B | 10 | 25 | 30 | 500 | 3500 | 92 | 92.5 | 45.3 | 10 | G1/2-14 | G1/2-14 |
| CBR-G2120-B | 12 | 25 | 30 | 500 | 3500 | 92 | 95.8 | 46.9 | 10 | G1/2-14 | G1/2-14 |
| CBR-G2140-B | 14 | 25 | 28 | 500 | 3500 | 92 | 99.1 | 48.6 | 10 | G3/4-14 | G1/2-14 |
| CBR-G2160-B | 16 | 25 | 28 | 500 | 3500 | 92 | 102.4 | 50.2 | 10 | G3/4-14 | G1/2-14 |
| CBR-G2180-B | 18 | 25 | 28 | 400 | 3500 | 92 | 105.7 | 51.9 | 10 | G3/4-14 | G1/2-14 |
| CBR-G2200-B | 20 | 22 | 25 | 400 | 3200 | 92 | 109.0 | 53.5 | 10 | G3/4-14 | G1/2-14 |
| CBR-G2220-B | 22 | 22 | 25 | 400 | 3000 | 92 | 112.3 | 55.2 | 10 | G1-11 | G3/4-14 |
| CBR-G2250-B | 25 | 20 | 23 | 400 | 3000 | 92 | 117.3 | 57.6 | 10 | G1-11 | G3/4-14 |
| CBR-G2280-B | 28 | 18 | 20 | 400 | 2500 | 92 | 122.2 | 60.1 | 10 | G1-11 | G3/4-14 |
| CBR-G2300-B | 30 | 16 | 18 | 400 | 2500 | 92 | 125.5 | 61.8 | 10 | G1-11 | G3/4-14 |

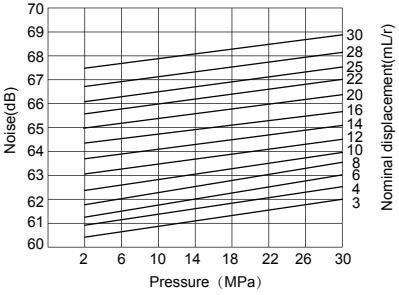
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



# CBN3 Series

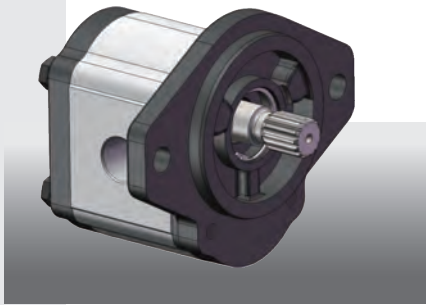
Gear pump is composed of pump body, shaft cover, gear, front cover, rear cover and other main parts, using cast iron pump cover and floating shaft cover for the automatic axial compensation. With the characteristics of small size, light weight, simple structure, reliable work, convenient installation, use and maintenance , this product is mainly used in various construction machinery, agricultural machinery and other hydraulic systems.

## Code Instruction

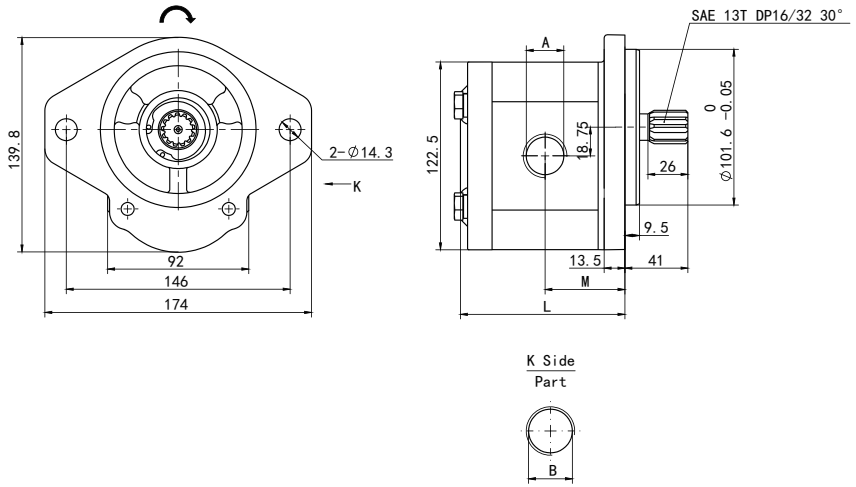
CBN - G 3 **-R H L -*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ①Product code | |
| ②Pressure rating | G: 25MPa |
| ③Appearance number | |
| ④Nominal displacement | |
| ⑤Direction of rotation | R: CW L: CCW |
| ⑥Axial extension form | H: SAE 13 tooth spline key |
| ⑦Oil port form | L: thread G3/4 |
| ⑧Oil port position | side inlet side outlet |



## Outline Dimensions



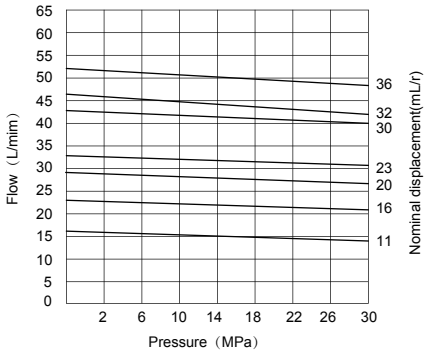

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | A | B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | |
| CBN-G311 | 11 | 25 | 30 | 600 | 4000 | 92 | 104.1 | 48.5 | G3/4-14 | G1/2-14 |
| CBN-G316 | 16 | 25 | 30 | 600 | 3500 | 92 | 111.3 | 52.1 | G3/4-14 | G1/2-14 |
| CBN-G320 | 20 | 25 | 30 | 600 | 3000 | 92 | 117.1 | 55 | G3/4-14 | G1/2-14 |
| CBN-G323 | 23 | 25 | 30 | 600 | 3000 | 92 | 121.5 | 57.2 | G1-11 | G3/4-14 |
| CBN-G330 | 30 | 23 | 26 | 600 | 3000 | 92 | 131.6 | 62.3 | G1-11 | G3/4-14 |
| CBN-G332 | 32 | 23 | 26 | 600 | 2600 | 92 | 134.1 | 63.6 | G1-11 | G3/4-14 |
| CBN-G336 | 36 | 20 | 25 | 600 | 2750 | 92 | 140.3 | 66.7 | G1-11 | G3/4-14 |

## Characteristic curve

Flow pressure characteristics:

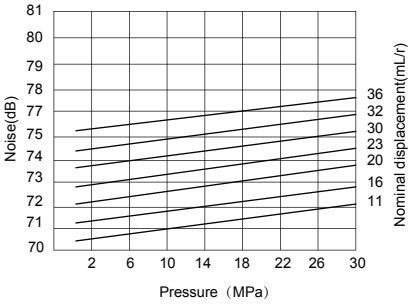
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



## CBN4 Series

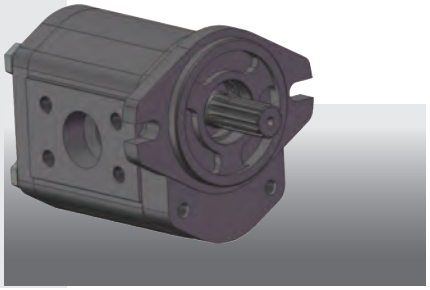
Gear pump is composed of pump body, shaft sleeve, gear, front cover, rear cover and other main parts, using cast iron shell, pump cover and floating shaft cover for the automatic axial compensation. With the characteristics of small size, light weight, simple structure, reliable work, convenient installation, use and maintenance, this product is mainly used in various construction machinery, agricultural machinery and other hydraulic systems.

### Code Instruction

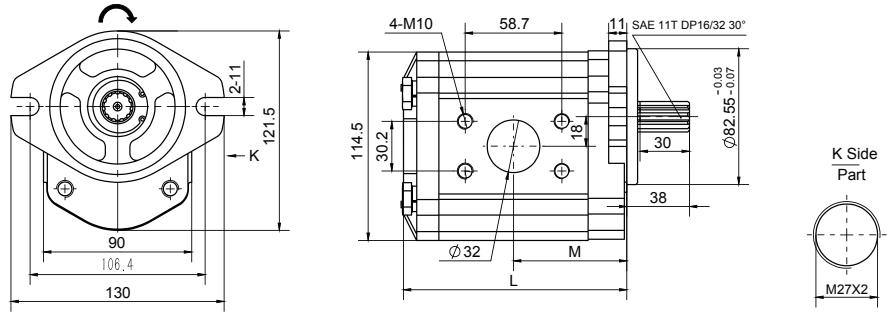
CBN - G 4 **–R H F –*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ① Product code | |
| ② Pressure rating | G: 25MPa |
| ③ Appearance number | |
| ④ Nominal displacement | |
| ⑤ Directional of rotation | R: CW L: CCW |
| ⑥ Axial extension form | H: SAE 11 tooth spline key |
| ⑦ Oil port form | F: flange type |
| ⑧ Oil port position | side inlet side outlet |



### Outline Dimensions



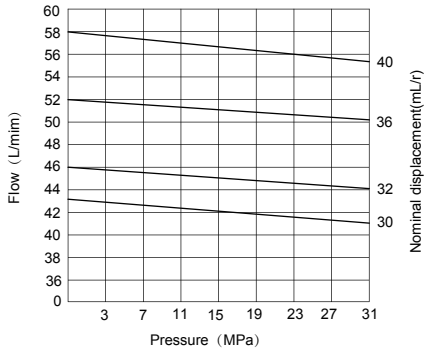

### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBN-G430 | 30 | 25 | 31 | 600 | 3000 | 92 | 104.1 | 48.5 |
| CBN-G432 | 32 | 25 | 31 | 600 | 3000 | 92 | 111.3 | 52.1 |
| CBN-G436 | 36 | 25 | 31 | 600 | 3000 | 92 | 117.1 | 55 |
| CBN-G440 | 40 | 25 | 31 | 600 | 3000 | 92 | 121.5 | 57.2 |

### Characteristic curve

Flow pressure characteristics:

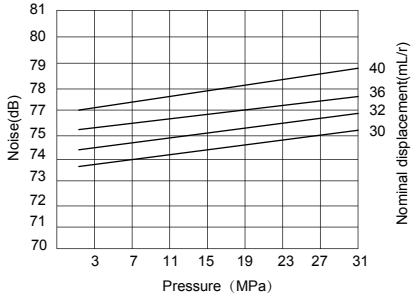
Test condition: n=1450r/min V=46mm ²/s t=55 ℃




### Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55 ℃



# 2CBN4 Module Series

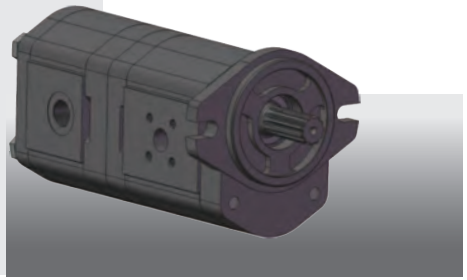
The duplex gear pump is mainly composed of two gear pumps in parallel composition.. The gear pump is composed of the pump body, shaft sleeve, gear, front cover, rear cover and other main parts. The cast iron shell, pump cover and floating shaft sleeve are used for the axial automatic compensation. With the characteristics of small volume, light weight, low noise, reliable work, convenient installation, use, maintenance and so on, it is mainly used in a variety of hydraulic machinery, construction machinery, agricultural machinery and other hydraulic systems.

## Code Instruction

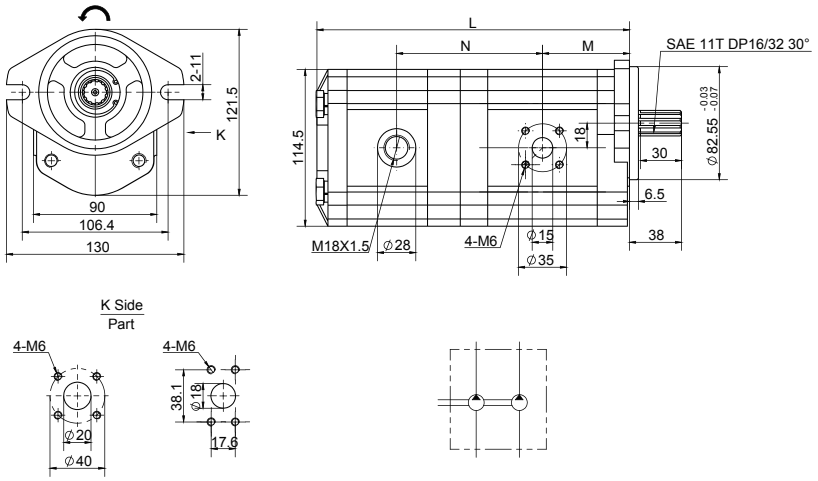
2CBN - G 4 **–L H F - *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product code
② Pressure rating G: 25MPa
③ Appearance number
④ Nominal displacement
⑤ Directional of rotation R: CW L: CCW
⑥ Axial extension form H: SAE 11 tooth spline key
⑦ Oil port form F: flange type
⑧ Oil port position side inlet side outlet



## Outline Dimensions



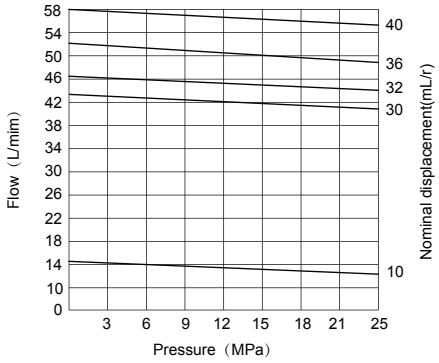

## Performance Parameter

| Code | Nominal displacement (mL/r) | | Pressure (MPa) | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) | N (mm) |
|---|---|---|---|---|---|---|---|---|---|
| | Front pump | Rear pump | Maximum | Minimum | Maximum | | | | |
| 2CBN-G430/G410 | 30 | 10 | 25 | 600 | 3000 | 91 | 228.2 | 63.5 | 106.5 |
| 2CBN-G432/G410 | 32 | 10 | 25 | 600 | 3000 | 91 | 230.3 | 64.6 | 107.6 |
| 2CBN-G436/G410 | 36 | 10 | 25 | 600 | 3000 | 91 | 234.6 | 66.7 | 109.7 |
| 2CBN-G440/G410 | 40 | 10 | 25 | 600 | 3000 | 91 | 238.9 | 68.9 | 111.9 |

## Characteristic curve

Flow pressure characteristics:

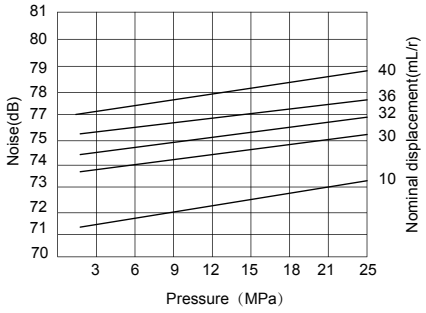
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



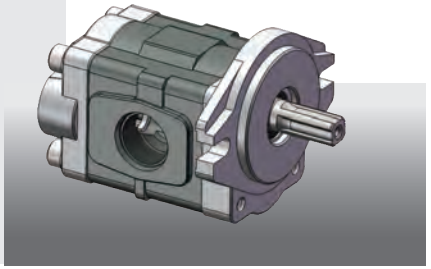
## CBEF Series

The low-noise gear pump is mainly composed of pump body, floating side plate, gear, front cover, rear cover and other main parts. It adopts asymmetric tooth double-modular gear and double pump structure design, and the floating side plate is used for axial automatic compensation. With the characteristics of low noise, high efficiency and reliable work, it is used in the hydraulic system of internal combustion forklift truck, battery forklift truck and construction machinery and other products.

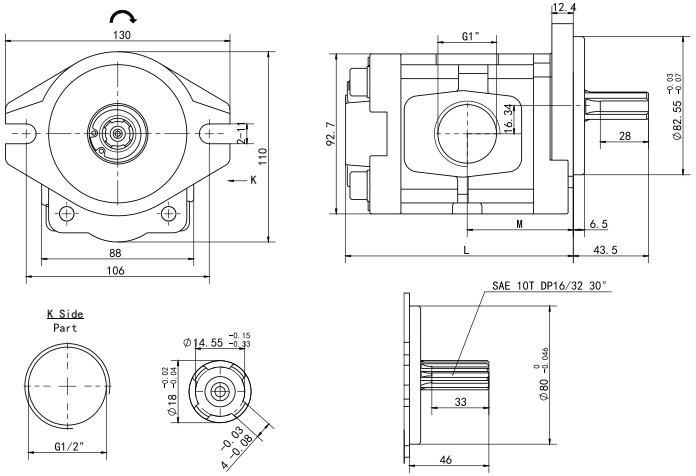
### Code Instruction

CBEF - F 2 **-R H L1-*
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | |
|---|---|
| ①Product code | |
| ② Pressure rating | F: 20MPa |
| ③ Appearance number | |
| ④ Nominal displacement | |
| ⑤ Directional of rotation | R: CW L: CCW |
| ⑥ Axial extension form | H: Rectangular spline key |
| | H1: SAE 10 tooth spline key |
| ⑦Oil port form | L1: thread G1 and G1/2 |
| | L2: thread G3/4 and G1 |
| | L3: thread M33X2 and M22X1.5 |
| ⑧Oil port position | Omit: side inlet,side outlet A -rear inlet, side outlet B-rear inlet,rear outlet C-side inlet,rear outlet |



### Outline Dimensions

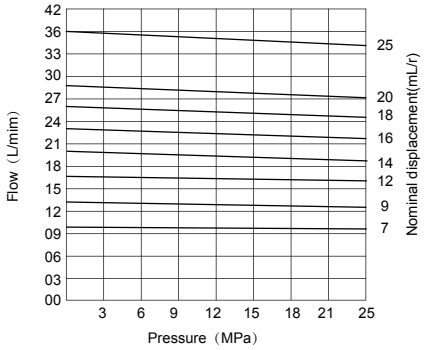



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBEF-F207 | 7 | 20 | 25 | 500 | 3000 | 92 | 114 | 53 |
| CBEF-F209 | 9 | 20 | 25 | 500 | 3000 | 92 | 116 | 54 |
| CBEF-F211 | 11 | 20 | 25 | 500 | 3000 | 92 | 118 | 54.5 |
| CBEF-F212 | 12 | 20 | 25 | 500 | 3000 | 92 | 119 | 55 |
| CBEF-F214 | 14 | 20 | 25 | 500 | 3000 | 92 | 123 | 57 |
| CBEF-F216 | 16 | 20 | 25 | 500 | 3000 | 92 | 125 | 58 |
| CBEF-F218 | 18 | 20 | 25 | 500 | 3000 | 92 | 128 | 59.5 |
| CBEF-F219 | 19 | 20 | 25 | 500 | 3000 | 92 | 130 | 60 |
| CBEF-F220 | 20 | 20 | 25 | 500 | 3000 | 92 | 131 | 61 |
| CBEF-F223 | 23 | 20 | 25 | 500 | 3000 | 92 | 135 | 63 |
| CBEF-F225 | 25 | 20 | 25 | 500 | 3000 | 92 | 141 | 66.5 |

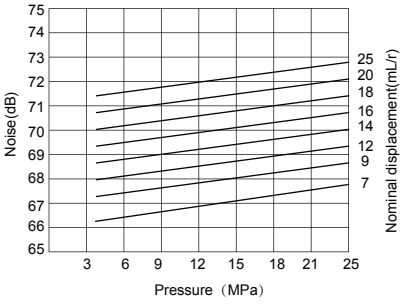
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



# CBGF Series

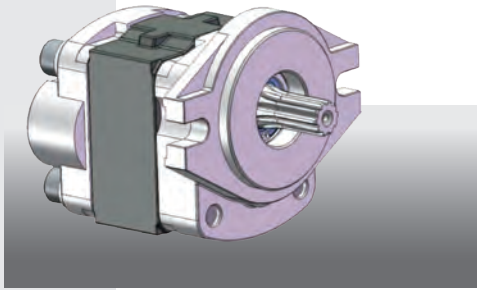
Low noise gear pump mainly consists of pump body, floating side plate, gear, front cover, back cover and other major parts, gears are designed with no side gap structure, floating side plate for axial automatic compensation. With low noise, high efficiency and reliable work, it is used in the hydraulic system of internal combustion forklift, electric forklift and construction machinery.

## Code Instruction

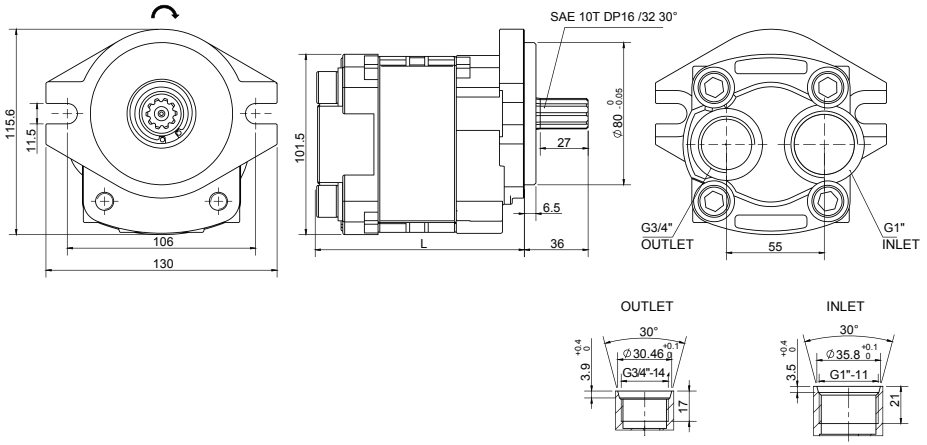
CBGF - G 2 **–R H L –*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product Code
② Pressure Rating G: 20MPa
③ Appearance number
④ Nominal displacement
⑤ Directional of rotation R: CW L: CCW
⑥ Axial extension form H: SAE 10 tooth spline key
⑦ Oil port form L: thread G1
⑧ Oil port position rear inlet rear outlet



## Outline Dimensions



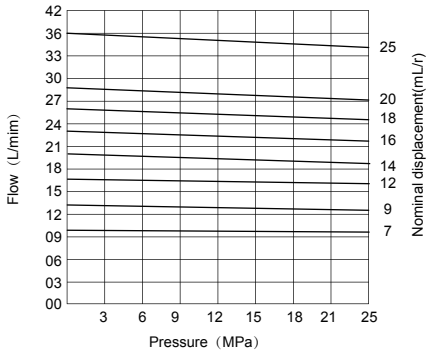

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBGF-G2070 | 7 | 20 | 25 | 600 | 3000 | 92 | 97.3 |
| CBGF-G2090 | 9 | 20 | 25 | 600 | 3000 | 92 | 98.9 |
| CBGF-G2110 | 11 | 20 | 25 | 600 | 3000 | 92 | 102.2 |
| CBGF-G2120 | 12 | 20 | 25 | 600 | 3000 | 92 | 103.5 |
| CBGF-G2140 | 14 | 20 | 25 | 600 | 3000 | 92 | 105.9 |
| CBGF-G2160 | 16 | 20 | 25 | 600 | 3000 | 92 | 108.4 |
| CBGF-G2180 | 18 | 20 | 25 | 600 | 3000 | 92 | 110.9 |
| CBGF-G2190 | 19 | 20 | 25 | 600 | 3000 | 92 | 112.1 |
| CBGF-G2200 | 20 | 20 | 25 | 600 | 3000 | 92 | 113.4 |
| CBGF-G2230 | 23 | 20 | 25 | 600 | 3000 | 92 | 117.1 |
| CBGF-G2250 | 25 | 20 | 25 | 600 | 3000 | 92 | 119.6 |

## Characteristic curve

Flow pressure characteristics:

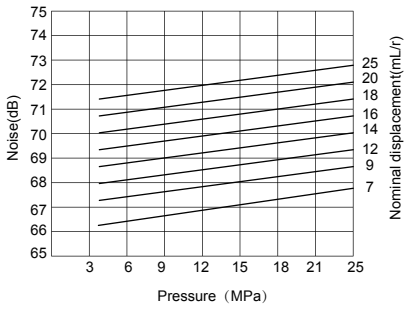
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



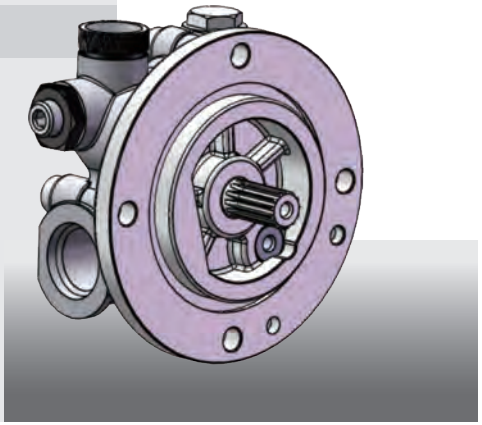
# CBX Series

Gear oil pump mainly consists of gears, front cover, back cover, relief valve and other parts, is a pump fixed gap pump that provides control system of low pressure oil. The pump can control the pressure of the control system through the relief valve on the pump, with small volume, light weight, low noise, reliable work, easy installation, use and maintenance, etc., mainly used in various hydraulic machinery, construction machinery and other hydraulic systems.

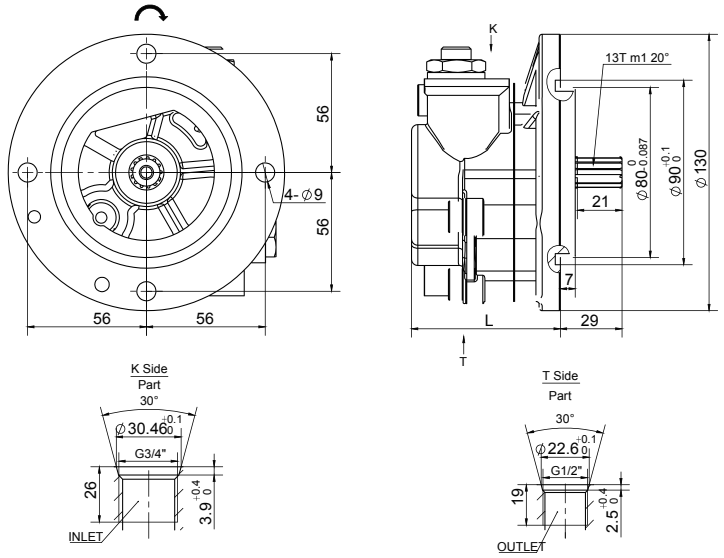
## Code Instruction

CBX – E 2 ***–R H L – *
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | | |
|---|---|---|
| ① | Product Code | |
| ② | Pressure Rating | E: 16MPa |
| ③ | Appearance number | |
| ④ | Nominal displacement | |
| ⑤ | Directional of rotation | R: CW L: CCW |
| ⑥ | Axial extension form | H: m 1 13T tooth spline key |
| ⑦ | Oil port form | L: Thread G3/4 |
| ⑧ | Oil port position | side inlet side outlet |



## Outline Dimensions



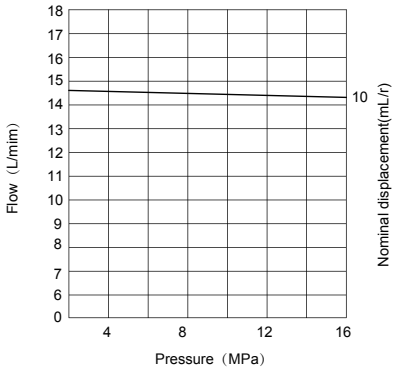

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) |
|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | |
| CBX-E1100 | 10 | 3 | 16 | 1000 | 6000 | 92 |

## Characteristic curve

Flow pressure characteristics:

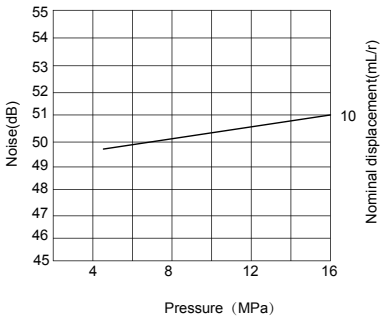
Test condition: n=1450r/min V=46mm ²/s t=55 ℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55 ℃



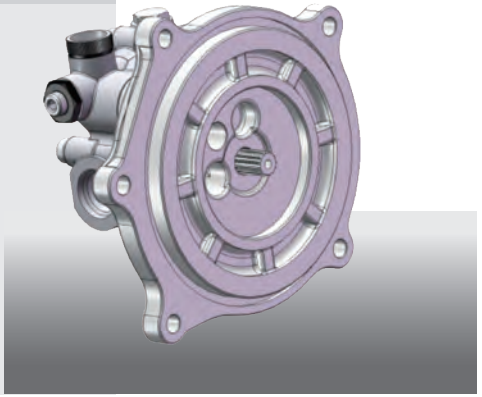
## CBX1 Series

Gear oil pump mainly consists of gears, front cover, back cover, relief valve and other parts, is a pump fixed gap pump that provides control system of low pressure oil. The pump can control the pressure of the control system through the relief valve on the pump, with small volume, light weight, low noise, reliable work, easy installation, use and maintenance, etc., mainly used in various hydraulic machinery, construction machinery and other hydraulic systems.

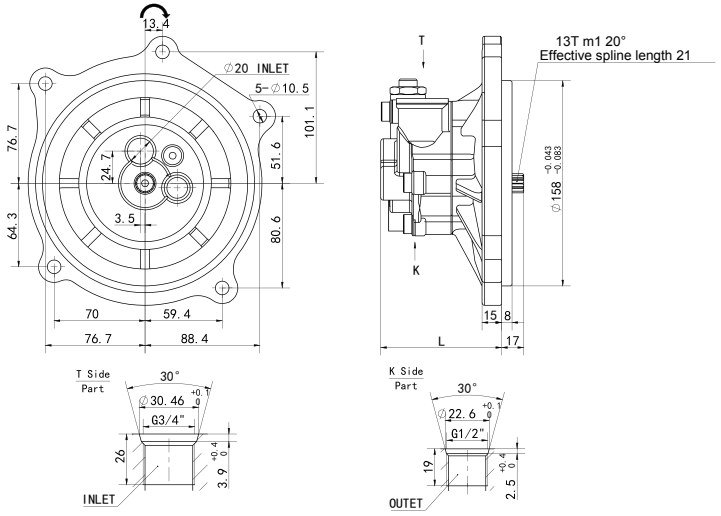
### Code Instruction

CBX1 – E 2 ***–R H L – *
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | | |
|---|---|---|
| ① | Product Code | |
| ② | Pressure Rating | E: 16MPa |
| ③ | Appearance number | |
| ④ | Nominal displacement | |
| ⑤ | Directional of rotation | R: CW L: CCW |
| ⑥ | Axial extension form | H: m 1 13T tooth spline key |
| ⑦ | Oil port form | L: Thread G3/4 |
| ⑧ | Oil port position | side inlet side outlet |



### Outline Dimensions



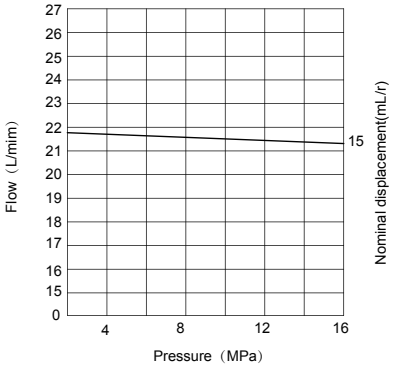

### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) |
|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | |
| CBX1-E1500 | 15 | 3 | 16 | 1000 | 6000 | 92 |

### Characteristic curve

Flow pressure characteristics:

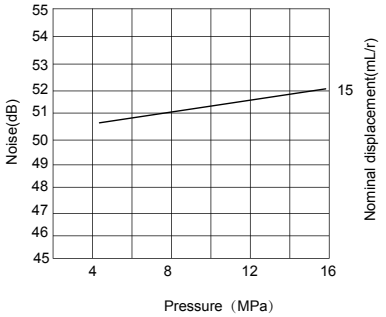
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



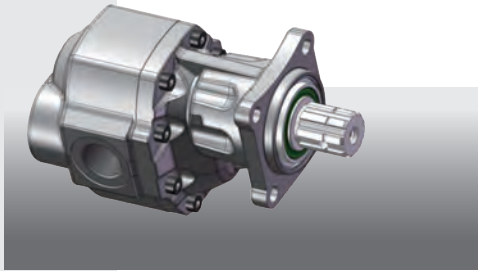
## CBC Series

Gear pump is a two-way gear pump structure with positive and negative rotation of the main shaft. The pump body, front cover and rear cover are made of high strength wear-resistant cast iron material, mainly composed of the pump body, front cover, back cover, floating side plate, gear, seals and connecting shaft and other main parts. The floating side plate is used for axial automatic compensation. Because of the front cover with bearing and connecting shaft structure, can make the pump bear radial force, and reduce the noise of the pump. With high pressure impact resistance, anti-disturbance, anti-pollution ability, suitable for construction machinery, heavy load hydraulic system.

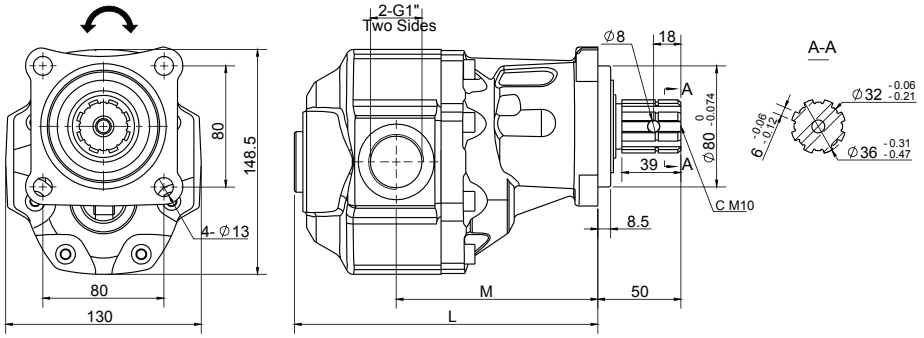
### Code Instruction

CBC – G 51–S H F L
① ② ③ ④ ⑤ ⑥ ⑦

① Product Code
② Pressure Rating G: 25MPa
③ Normal displacement:
④ Directional of rotation S: bi-direction
⑤ Axial extension form H: rectangular spline
⑥ Mounting form F: Square flange
⑦ Oil port form L: G1



### Outline Dimensions

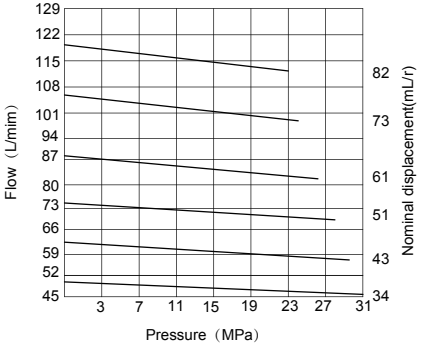



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L (mm) | M (mm) |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| CBC-G82 | 82 | 20 | 23 | 300 | 3500 | 92 | 219 | 146.5 |
| CBC-G73 | 73 | 21 | 24 | 300 | 3500 | 92 | 214 | 141.5 |
| CBC-G61 | 61 | 23 | 26 | 300 | 3500 | 92 | 206 | 138.5 |
| CBC-G51 | 51 | 25 | 28 | 300 | 3500 | 92 | 200 | 132.5 |
| CBC-G43 | 43 | 27 | 30 | 300 | 3500 | 92 | 195 | 127.5 |
| CBC-G34 | 34 | 28 | 31 | 300 | 4200 | 92 | 189 | 130.5 |

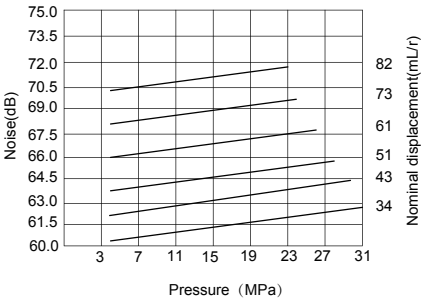
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55 ℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55 ℃



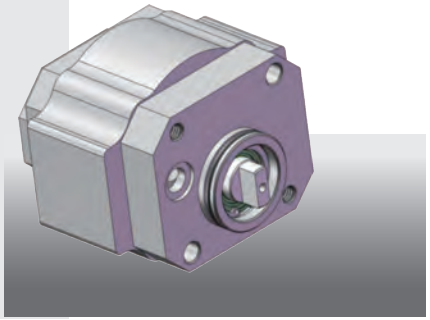
## CBIS1 Series

The internal gear pump consists of pump body, inner gear ring, gear shaft, front cover, rear cover, flow distribution plate, crescent plate, sealing rod and other parts. It is designed for axial and radial pressure compensation. With the characteristics of high working pressure, wide speed range, low noise, small volume, light weight, reliable work, mainly suitable for all kinds of hydraulic machinery, construction machinery and other hydraulic systems.

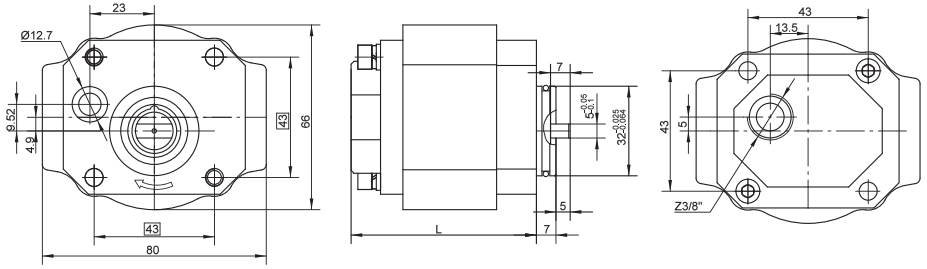
## Code Instruction

CBIS1 - F ***-R B L-*
① ② ③ ④ ⑤ ⑥ ⑦

① Product code
② Pressure rating F: 20MPa
③ Nominal displacement
④ Direction of rotation R: CW L: CCW
⑤ Axial extension form B: Oblate Key
⑥ Oil port form L: thread Z3/8
⑦ Oil port position A: rear inlet,front outlet
B: side inlet,side outlet



## Outline Dimensions

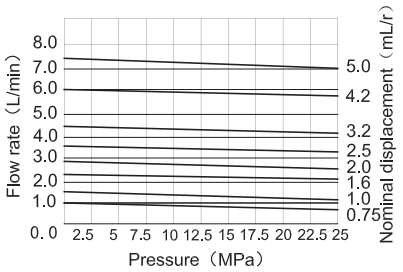



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| CBIS1-F075 | 0.75 | 20 | 25 | 200 | 4000 | 93 | 53.8 |
| CBIS1-F100 | 1.0 | | | | | | 55 |
| CBIS1-F160 | 1.6 | | | | | | 58 |
| CBIS1-F200 | 2.0 | | | | | | 60 |
| CBIS1-F250 | 2.5 | | | | | | 62.5 |
| CBIS1-F320 | 3.2 | | | | | | 66 |
| CBIS1-F420 | 4.2 | | | | | | 71 |

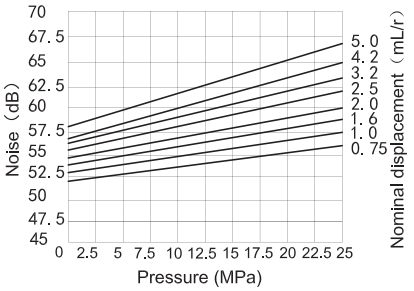
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



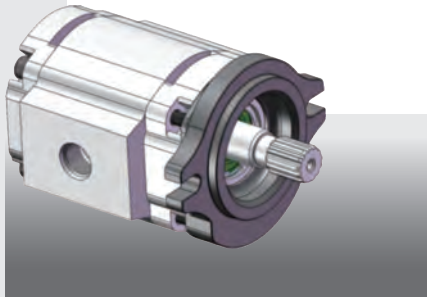
## CBIS2A Series

The internal gear pump consists of pump body, inner gear ring, gear shaft, front cover, rear cover, flow distribution plate, crescent plate, sealing rod and other parts. It is designed for axial and radial pressure compensation. It has the characteristics of high working pressure, wide speed range, low noise, reliable work, and is mainly used in battery forklift, internal combustion forklift, various hydraulic machinery, construction machinery and other hydraulic systems.

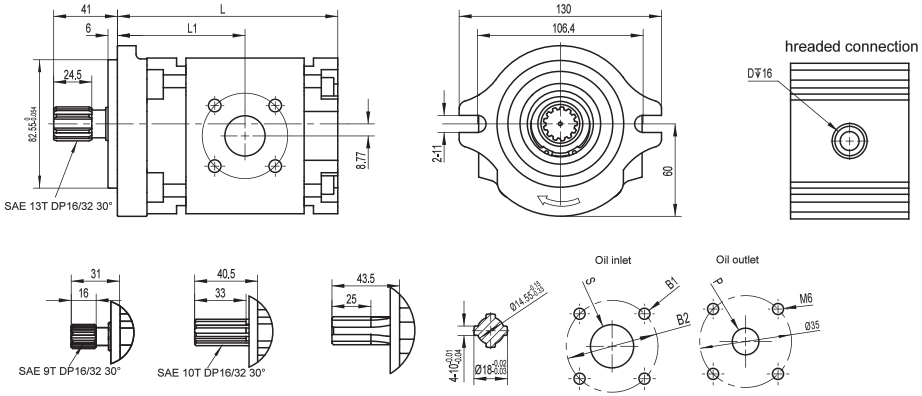
### Code Instruction

CBIS2A - G **-R P L1
① ② ③ ④ ⑤ ⑥

①Product code
②Pressure rating G: 25MPa
③Nominal displacement
④Direction of rotation R: CW L: CCW
⑤Axial extension form P: Flat key H1: SAE spline key 13 tooth
H2: SAE spline key 10 tooth
H3: SAE spline key 9 tooth
H4: Rectangular key B: Oblate key
⑥Oil port form L1: inlet and outlet thread 24x1.5 and 22x1.5
L2: inlet and outlet thread G1 and G1/2
F: Flange type



### Outline Dimensions

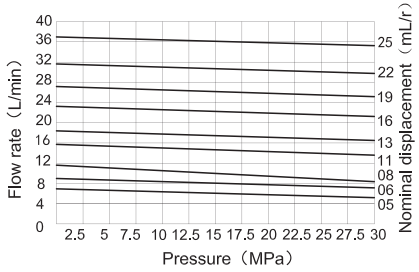



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L1 | L | B1 | B2 | S | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | | | | | |
| CBIS2A-G25 | 25 | 25 | 31.5 | 100 | 3600 | 95 | 84 | 152.5 | M8*15 | 55 | 20 | 12 |
| CBIS2A-G22 | 22 | 25 | 31.5 | 100 | 3600 | 95 | 81 | 146.5 | | | | |
| CBIS2A-G19 | 19 | 25 | 31.5 | 100 | 3600 | 95 | 78 | 140.5 | | | | |
| CBIS2A-G16 | 16 | 25 | 31.5 | 200 | 4000 | 95 | 75 | 134.5 | M6*12 | 40 | 26 | |
| CBIS2A-G13 | 13 | 25 | 31.5 | 200 | 4000 | 94 | 72 | 128.5 | | | | 10 |
| CBIS2A-G11 | 11 | 25 | 31.5 | 200 | 4000 | 93 | 70 | 124.5 | | | | |
| CBIS2A-G08 | 8 | 25 | 31.5 | 200 | 4200 | 93 | 67 | 118.5 | | | | 7 |
| CBIS2A-G06 | 6 | 25 | 31.5 | 200 | 4200 | 92 | 65 | 114.5 | | | | 5 |
| CBIS2A-G05 | 5 | 25 | 31.5 | 200 | 4200 | 91 | 64 | 112.5 | | | | |

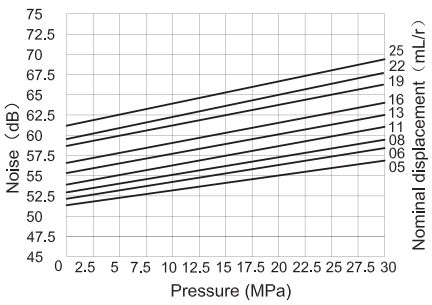
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



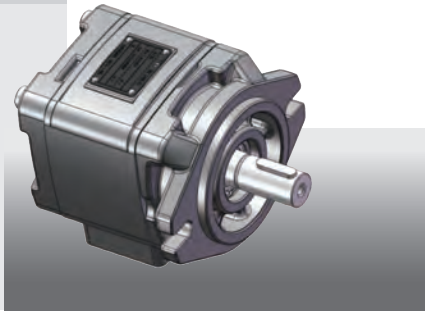
## VG0 Series

Internal gear pump is composed of pump body, inner gear ring, gear shaft, front cover, rear cover, valve plate, crescent plate, sealing rod and other parts. The front and rear cover and pump body are of high strength cast iron structure and are designed with axial and radial pressure compensation. It has the characteristics of high working pressure, wide speed range, low noise and reliable operation. It is mainly used in the hydraulic system of bending machine, die casting machine and other machinery.

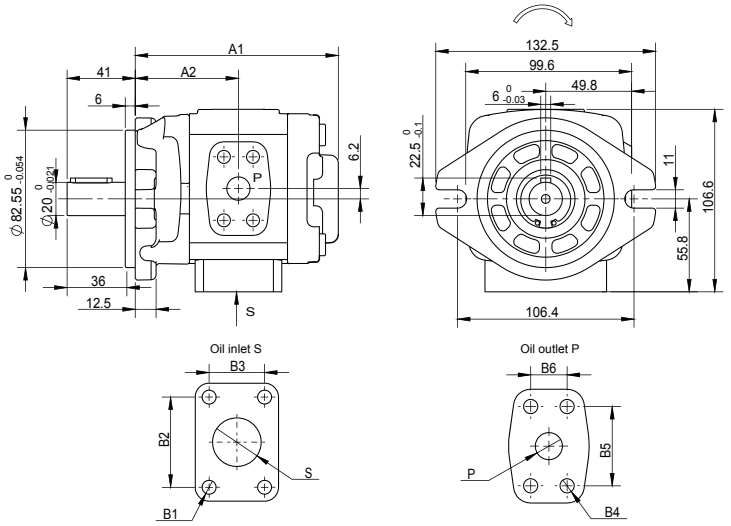
### Code Instruction

VG0 – G **–R P F
① ② ③ ④ ⑤ ⑥

① Production code
② Pressure Rating: G: 31.5MPa
③ Nominal displacement
④ Direction of rotation R: CW L:CCW
⑤ Axial extension form P: flat key
⑥ Oil port type: F: flange type



### Outline Dimensions



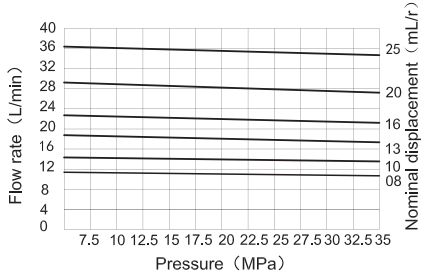

### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| VG0-G08 | 8 | 31.5 | 35 | 200 | 3000 | 92 | 54 | 106 |
| VG0-G10 | 10 | 31.5 | 35 | 200 | 3000 | 92 | 56 | 110 |
| VG0-G13 | 13 | 31.5 | 35 | 200 | 3000 | 92 | 59.5 | 116 |
| VG0-G16 | 16 | 31.5 | 35 | 200 | 3000 | 92 | 62 | 122 |
| VG0-G20 | 20 | 25 | 30 | 200 | 3000 | 92 | 65.5 | 130 |
| VG0-G25 | 25 | 25 | 30 | 200 | 3000 | 92 | 71.5 | 140 |

| Code | Nominal displacement (mL/r) | S | B1 | B2 | B3 | P | B4 | B5 | B6 |
|---|---|---|---|---|---|---|---|---|---|
| VG0-G08 | 8 | Φ19 | M10*15 | 47.6 | 22.6 | Φ13 | M8*13 | 38.1 | 17.5 |
| VG0-G10 | 10 | | | 52.4 | 26.2 | | | | |
| VG0-G13 | 13 | | | | | | | | |
| VG0-G16 | 16 | | | | | | | | |
| VG0-G20 | 20 | Φ26 | | 58.7 | 30.2 | Φ18 | M10*15 | 47.6 | 22.2 |
| VG0-G25 | 25 | Φ28 | | | | Φ19 | | | |

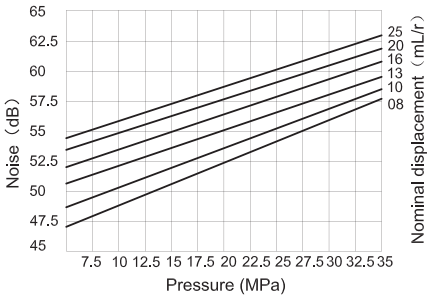
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



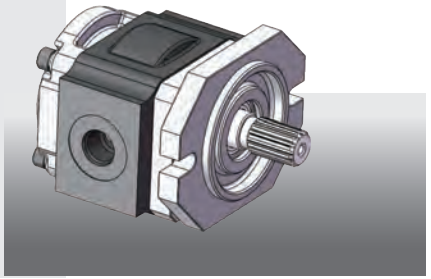
## VG0B Series

The internal gear pump consists of pump body, inner gear ring, gear shaft, front cover, back cover, flow distribution disc, crescent plate, sealing rod and other components. The front and rear covers are made of aluminum alloy and the pump body is made of high-strength cast iron structure with axial and radial pressure compensation design. With high working pressure, wide speed range, low noise, reliable work, etc., it is mainly used in the hydraulic system of new energy vehicles and various construction machinery.

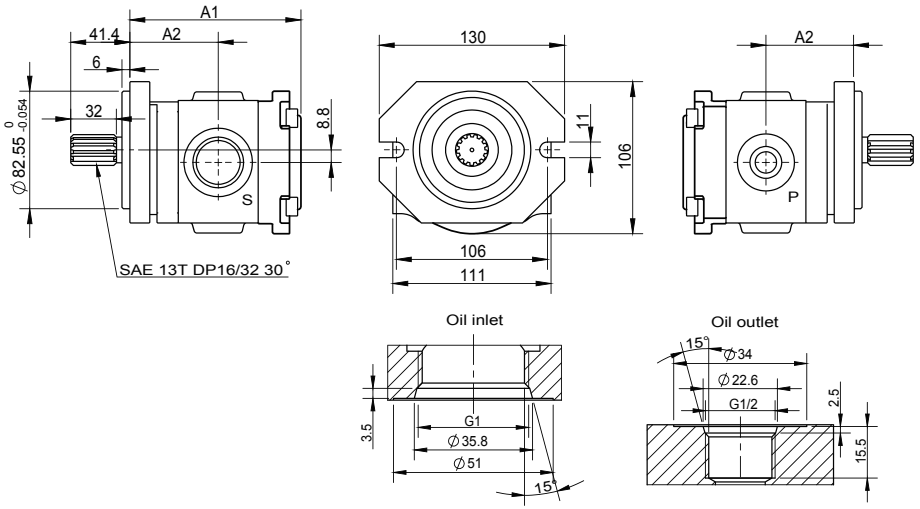
### Code Instruction

VG0B – F ** – R P L2
① ② ③ ④ ⑤ ⑥

① Production code
② Pressure rating F: 21MPa
③ Nominal displacement
④ Direction of rotation R: CW L: CCW
⑤ Axial extension form P: Flat key H1: SAE spline key 13 tooth H2: SAE spline key 10 tooth
⑥ Oil port form L1: inlet and outlet thread 24x1.5 & 22x1.5 L2: inlet and outlet thread G1 & G1/2



### Outline Dimensions

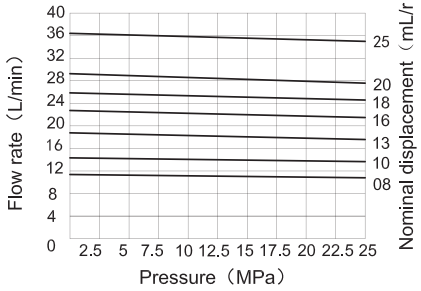



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| VG0B-G08 | 8 | 21 | 25 | 200 | 3000 | 92 | 52 | 100 |
| VG0B-G10 | 10 | 21 | 25 | 200 | 3000 | 92 | 54 | 104 |
| VG0B-G13 | 13 | 21 | 25 | 200 | 3000 | 92 | 57 | 110 |
| VG0B-G16 | 16 | 21 | 25 | 200 | 3000 | 92 | 60 | 116 |
| VG0B-G18 | 18 | 21 | 25 | 200 | 3000 | 92 | 62 | 120 |
| VG0B-G20 | 20 | 21 | 25 | 200 | 3000 | 92 | 64 | 124 |
| VG0B-G25 | 25 | 21 | 25 | 200 | 3000 | 92 | 69 | 134 |

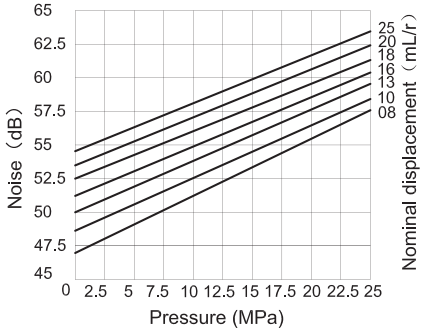
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



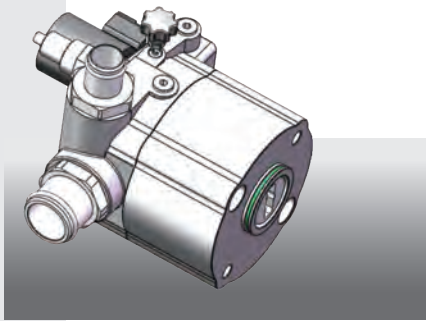
# VG0L Series

The internal gear pump consists of pump body (front cover), inner gear ring, gear shaft, functional back cover, flow distribution disc, crescent plate, sealing bar and other parts, with axial and radial pressure compensation design. The gear pump body is integrated with the functional block and has a combination of relief valve, solenoid valve, check valve, shut-off valve and other hair, which can save a lot of space for customers to use. With high working pressure, wide range of speed, low noise, reliable work and other characteristics, mainly used in battery forklifts, internal combustion forklifts, various hydraulic machinery, construction machinery and other hydraulic systems.

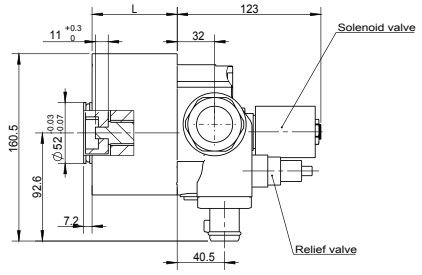
## Code Instruction

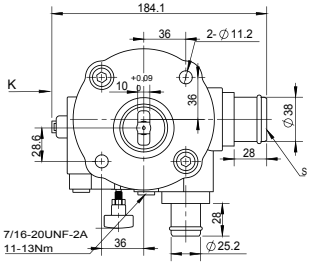
VG0L - E ** - R B F
① ② ③ ④ ⑤ ⑥

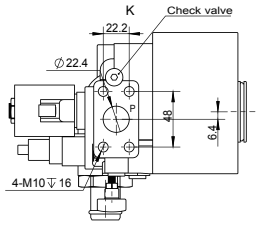
① Production code
② Pressure rating E: 16 Mpa
③ Nominal displacement
④ Direction of rotation R: CW L: CCW
⑤ Axial extension form B: Oblate key
⑥ Oil port form F: flange type



## Outline Dimensions



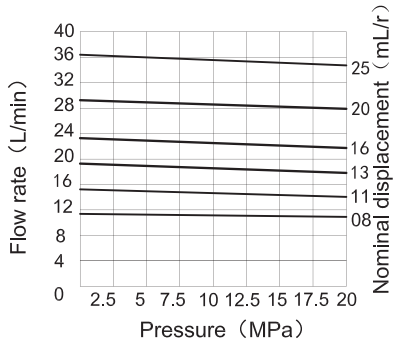




## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | L |
|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | |
| VG0L-G08 | 08 | 16 | 20 | 200 | 3000 | 92 | 74 |
| VG0L-G11 | 11 | 16 | 20 | 200 | 3000 | 92 | 80 |
| VG0L-G13 | 13 | 16 | 20 | 200 | 3000 | 92 | 84 |
| VG0L-G16 | 16 | 16 | 20 | 200 | 3000 | 92 | 90 |
| VG0L-G20 | 20 | 16 | 20 | 200 | 3000 | 92 | 98 |
| VG0L-G25 | 25 | 16 | 20 | 200 | 3000 | 92 | 108 |

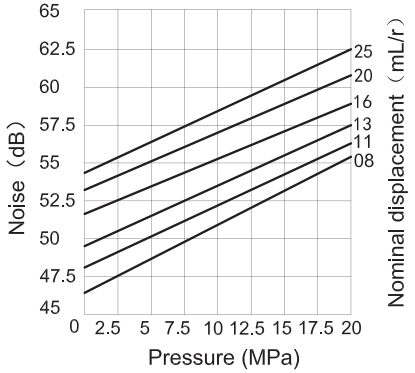
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



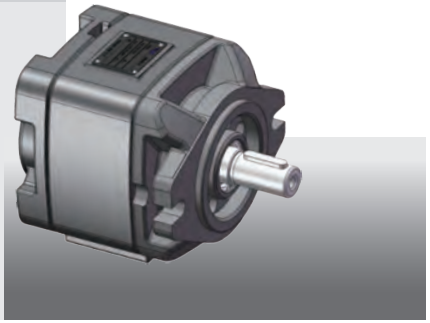
## VG1 Series

Internal gear pump is composed of pump body, inner gear ring, gear shaft, front cover, rear cover, valve plate, crescent plate, sealing rod and other parts. The front and rear cover and pump body are of high strength cast iron structure and are designed with axial and radial pressure compensation. It has the characteristics of high working pressure, wide speed range, low noise and reliable operation. It is mainly used in the hydraulic system of injection molding machine, die casting machine and other machinery.

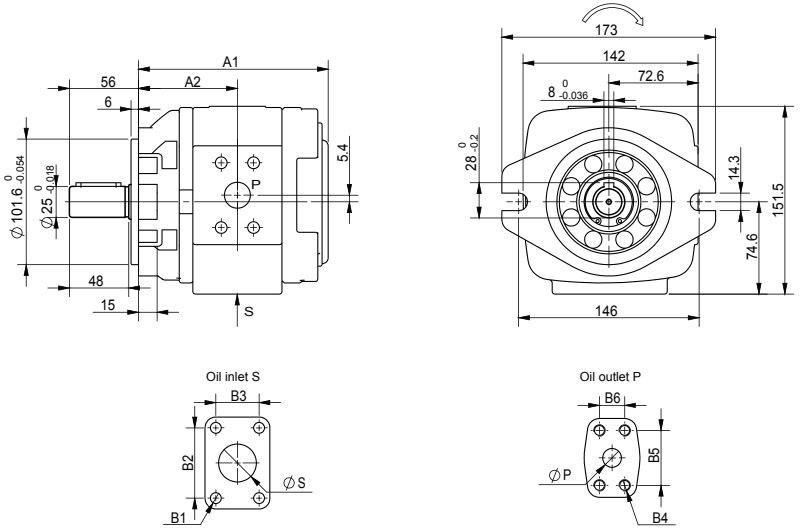
### Code Instruction

VG1 – G **–R P F
① ② ③ ④ ⑤ ⑥

①Product code
②Pressure rating G: 31.5 MPa
③Nominal displacement
④Directional of rotation R: CW L: CCW
⑤Axial extension form P: flat key
⑥Oil port type: F: flange type



### Outline Dimensions



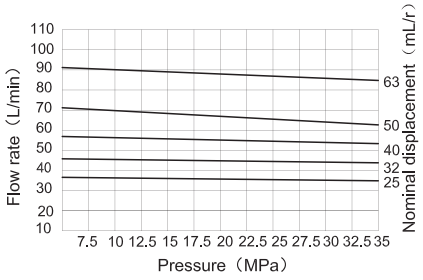

### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| VG1-G25 | 25 | 31.5 | 35 | 200 | 3000 | 92 | 73 | 139 |
| VG1-G32 | 32 | 31.5 | 35 | 200 | 3000 | 92 | 76 | 146 |
| VG1-G40 | 40 | 31.5 | 35 | 200 | 3000 | 92 | 80 | 153 |
| VG1-G50 | 50 | 31.5 | 35 | 200 | 3000 | 92 | 85 | 163 |
| VG1-G63 | 63 | 31.5 | 35 | 200 | 3000 | 92 | 92 | 177 |

| Code | Nominal displacement (mL/r) | S | B1 | B2 | B3 | P | B4 | B5 | B6 |
|---|---|---|---|---|---|---|---|---|---|
| VG1-G25 | 25 | Φ32 | M10*17 | 58.7 | 30.2 | Φ18 | M10*17 | 47.6 | 22.2 |
| VG1-G32 | 32 | | | | | | | | |
| VG1-G40 | 40 | | | | | Φ20 | | 52.4 | 26.2 |
| VG1-G50 | 50 | | | | | | | | |
| VG1-G63 | 63 | | | | | | | | |

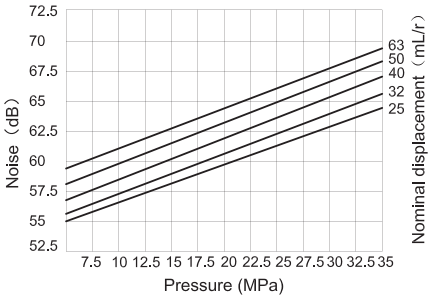
### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



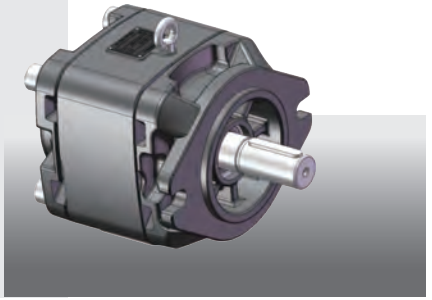
## VG2 Series

Internal gear pump is composed of pump body, inner gear ring, gear shaft, front cover, rear cover, valve plate, crescent plate, sealing rod and other parts. The front and rear cover and pump body are of high strength cast iron structure and are designed with axial and radial pressure compensation. It has the characteristics of high working pressure, wide speed range, low noise and reliable operation. It is mainly used in the hydraulic system of injection molding machine, die casting machine and other machinery.

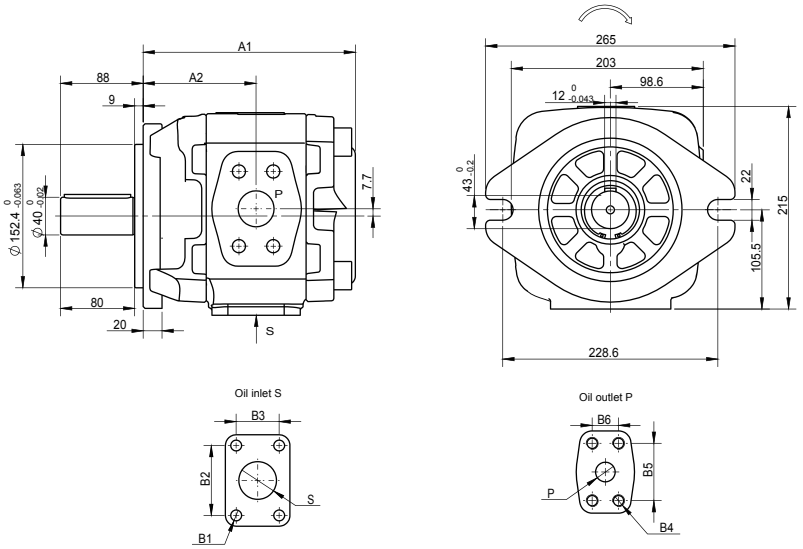
## Code Instruction

VG2 – G ***–R P F
① ② ③ ④ ⑤ ⑥

① Product Code
② Pressure rating G: 31.5 MPa
③ Nominal displacement
④ Directional of rotation R: CW L:CCW
⑤ Axial extension form P: flat key
⑥ Oil port type F: flange type



## Outline Dimensions



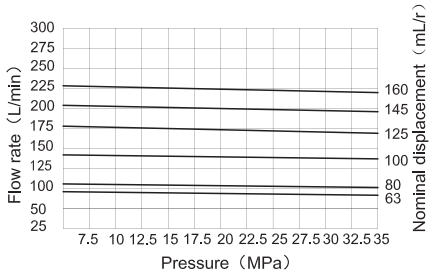

## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | Minimum | Maximum | | | |
| VG2-G063 | 63 | 31.5 | 35 | 200 | 3000 | 92 | 105.5 | 196 |
| VG2-G080 | 80 | 31.5 | 35 | 200 | 3000 | 92 | 109 | 204 |
| VG2-G100 | 100 | 31.5 | 35 | 200 | 3000 | 92 | 114 | 216 |
| VG2-G125 | 125 | 31.5 | 35 | 200 | 3000 | 92 | 120 | 225 |
| VG2-G145 | 145 | 31.5 | 35 | 200 | 3000 | 92 | 124.5 | 235.5 |
| VG2-G160 | 160 | 31.5 | 35 | 200 | 3000 | 92 | 129 | 243 |

| Code | Nominal displacement (mL/r) | S | B1 | B2 | B3 | P | B4 | B5 | B6 |
|---|---|---|---|---|---|---|---|---|---|
| VG2-G063 | 63 | Φ40 | M12*20 | 69.9 | 35.7 | Φ23 | M10*17 | 52.4 | 26.2 |
| VG2-G080 | 80 | Φ51 | | 77.8 | 42.9 | Φ32 | M12*20 | 69.9 | 35.7 |
| VG2-G100 | 100 | | | | | | | | |
| VG2-G125 | 125 | Φ63.5 | | 88.9 | 50.8 | Φ38 | M16*25 | 79.4 | 36.5 |
| VG2-G145 | 145 | | M16*25 | | | | | | |
| VG2-G160 | 160 | Φ76 | | 106.4 | 61.9 | | | | |

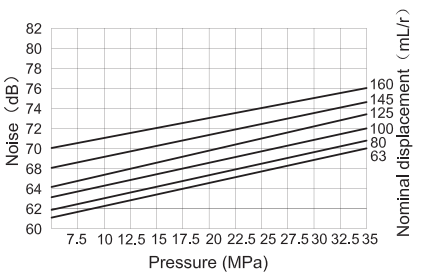
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm²/s t=55℃



## VG10 Series

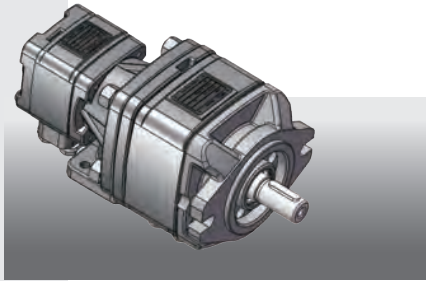
The internal meshing duplex gear pump consists of pump body, inner gear ring, gear shaft, spline coupling, front cover, intermediate, back cover, flow distribution plate, crescent plate, sealing bar and other components. It adopts floating spline coupling type structure, and the rotating shaft is connected in series to play the role of front and rear self-centering. Internal axial and radial pressure compensation design, with high working pressure, wide speed range, low noise, reliable work and other characteristics. The combination is flexible and convenient, and the front and rear displacements of the same series can be combined at will. The rear pump can be rotated 180°, which can flexibly change the position of the inlet and outlet oil direction. Share a drive, greatly reducing the cost of equipment. Reduce installation space. Mainly used in the hydraulic system of injection molding machine, die-casting machine and other machinery.

## Code Instruction

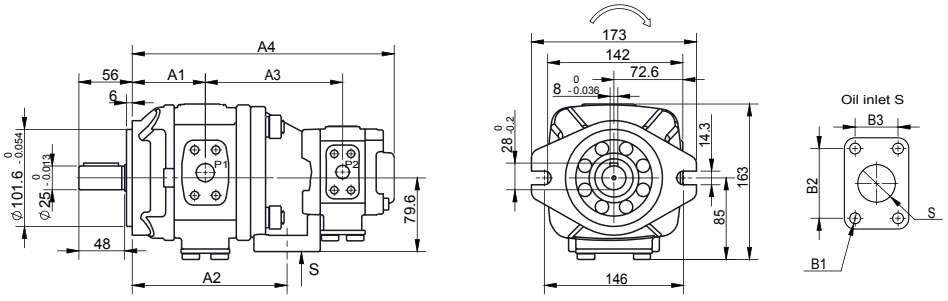
VG10 – G **–**– R P F

① ② ③ ④ ⑤ ⑥ ⑦

① Product Code
② Pressure rating G: 31.5 MPa
③ Front pump rate
④ Rear pump rate
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form P: flat key
⑦ Oil port type F: flange type



## Outline Dimensions




## Performance Parameter

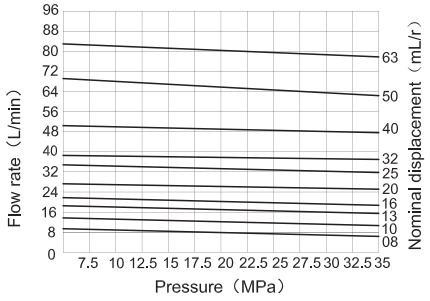
| Front Code | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|
| | Rating | Maximum | Minimum | Maximum | | | |
| VG10-G25-* | 31.5 | 35 | 200 | 3000 | 92 | 73 | 153 |
| VG10-G32-* | 31.5 | 35 | 200 | 3000 | 92 | 76 | 160 |
| VG10-G40-* | 31.5 | 35 | 200 | 3000 | 92 | 80 | 167 |
| VG10-G50-* | 31.5 | 35 | 200 | 3000 | 92 | 85 | 177 |
| VG10-G63-* | 31.5 | 35 | 200 | 3000 | 92 | 92 | 191 |

| Front Code | Rear Code | | | | | | | | | | | | S | B1 | B2 | B3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8 | | 10 | | 13 | | 16 | | 20 | | 25 | | | | | |
| | A3 | A4 | A3 | A4 | A3 | A4 | A3 | A4 | A3 | A4 | A3 | A4 | | | | |
| VG10-G25-* | 73 | 264 | 140 | 268 | 143 | 275 | 146 | 280 | 150 | 288 | 154 | 296 | 51 | M12*20 | 69.9 | 35.7 |
| VG10-G32-* | 76 | 271 | 144 | 275 | 147 | 282 | 150 | 287 | 154 | 295 | 158 | 303 | | | | |
| VG10-G40-* | 80 | 278 | 147 | 282 | 150 | 289 | 153 | 294 | 157 | 302 | 161 | 310 | | | | |
| VG10-G50-* | 85 | 288 | 152 | 292 | 155 | 299 | 158 | 304 | 162 | 312 | 166 | 320 | | | | |
| VG10-G63-* | 92 | 302 | 159 | 306 | 162 | 313 | 165 | 318 | 169 | 326 | 173 | 334 | | | | |

## Characteristic curve

Flow pressure characteristics:

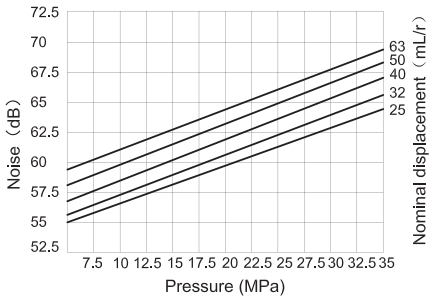
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:

Test condition: n=1450r/min V=46mm ²/s t=55℃



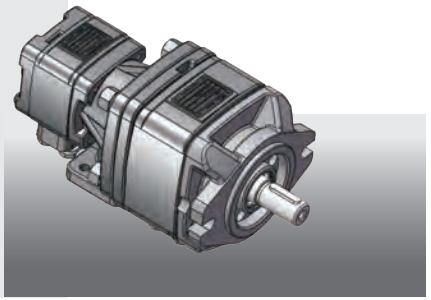
## VG21 Series

The internal meshing duplex gear pump consists of pump body, inner gear ring, gear shaft, spline coupling, front cover, intermediate, back cover, flow distribution plate, crescent plate, sealing bar and other components. It adopts floating spline coupling type structure, and the rotating shaft is connected in series to play the role of front and rear self-centering. Internal axial and radial pressure compensation design, with high working pressure, wide speed range, low noise, reliable work and other characteristics. The combination is flexible and convenient, and the front and rear displacements of the same series can be combined at will. The rear pump can be rotated 180°, which can flexibly change the position of the inlet and outlet oil direction. Share a drive, greatly reducing the cost of equipment. Reduce installation space. Mainly used in the hydraulic system of injection molding machine, die-casting machine and other machinery.

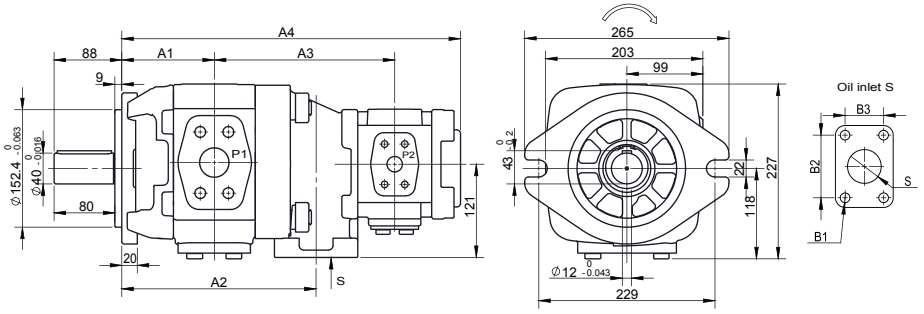
## Code Instruction

VG21 – G **–**–R P F
① ② ③ ④ ⑤ ⑥ ⑦

① Product Code
② Pressure rating G: 31.5 MPa
③ Front pump rate
④ Rear pump rate
⑤ Direction of rotation R: CW L: CCW
⑥ Axial extension form P: flat key
⑦ Oil port type F: flange type



## Outline Dimensions



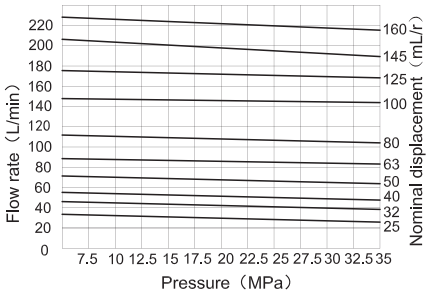

## Performance Parameter

| Front Code | Pressure (MPa) | | Speed (r/min) | | Volumetric efficiency (≥%) | A2 | A1 |
|---|---|---|---|---|---|---|---|
| | Rating | Maximum | Minimum | Maximum | | | |
| VG21-G063-* | 31.5 | 35 | 200 | 3000 | 92 | 105 | 223 |
| VG21-G080-* | 31.5 | 35 | 200 | 3000 | 92 | 109 | 231 |
| VG21-G100-* | 31.5 | 35 | 200 | 3000 | 92 | 114 | 240 |
| VG21-G125-* | 31.5 | 35 | 200 | 3000 | 92 | 120 | 252 |
| VG21-G145-* | 31.5 | 35 | 200 | 3000 | 92 | 124.5 | 261 |
| VG21-G160-* | 31.5 | 35 | 200 | 3000 | 92 | 129 | 270 |

| Front Code | Rear Code | | | | | | | | | | S | B1 | B2 | B3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25 | | 32 | | 40 | | 50 | | 63 | | | | | |
| | A3 | A4 | A3 | A4 | A3 | A4 | A3 | A4 | A3 | A4 | | | | |
| VG21-G063-* | 200 | 372 | 204 | 379 | 207 | 386 | 212 | 396 | 219 | 410 | 76 | M16*25 | 106.4 | 61.9 |
| VG21-G080-* | 204 | 380 | 208 | 387 | 211 | 394 | 216 | 404 | 223 | 418 | | | | |
| VG21-G100-* | 209 | 389 | 212 | 396 | 216 | 403 | 221 | 413 | 228 | 427 | | | | |
| VG21-G125-* | 215 | 401 | 218 | 408 | 222 | 415 | 227 | 425 | 234 | 439 | | | | |
| VG21-G145-* | 220 | 410 | 223 | 417 | 227 | 424 | 232 | 434 | 239 | 448 | | | | |
| VG21-G160-* | 224 | 419 | 227 | 426 | 231 | 433 | 236 | 443 | 243 | 457 | | | | |

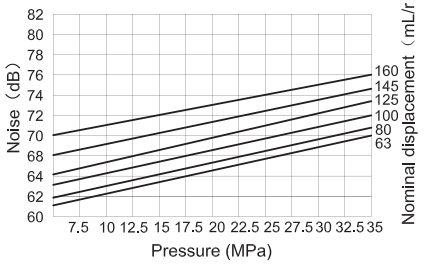
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



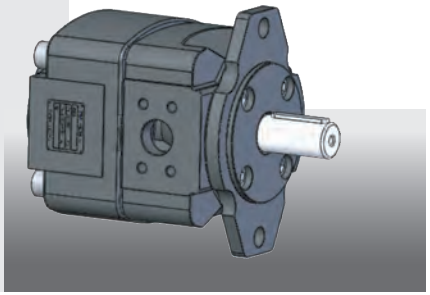
## VG2D Series

The internal four quadrant gear pump consists of pump body, inner gear ring, gear shaft, front cover, back cover, flow distribution disc, crescent plate, seal bar and other components. The front and rear covers and pump body are constructed of high-strength cast iron and designed with axial and radial pressure compensation.The VG2D series drive unit can be used in open or closed loop hydraulic circuits, either as a pump or as a motor. The unit is used as a pump when the load rises, and reverses as a motor when the load falls, allowing for energy recovery. It is mainly used in hydraulic systems for injection molding machines, hydraulic presses, scrap compactors, die casting machines, and other machinery.

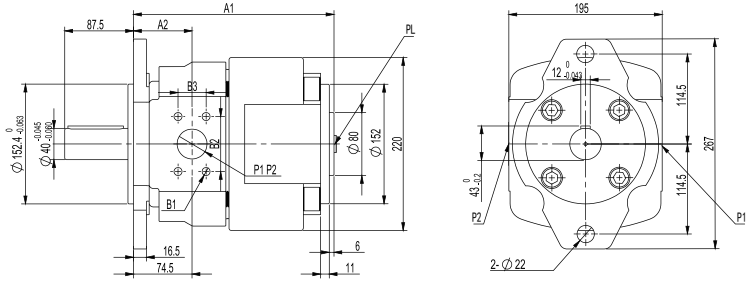
## Code Instruction

VG2D – F **–S P F
① ② ③ ④ ⑤ ⑥

① Product Code
② Pressure rating F: 21MPa
③ Nominal displacement
④ Direction of rotation S: Bi-directional
⑤ Axial extension form P: flat key
⑥ Oil port type: F: flange type



## Outline Dimensions

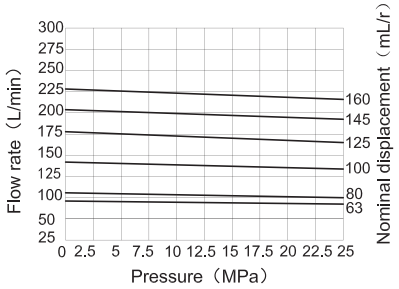



## Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | | Speed (r/min) | | A2 | A1 | P1P2 | B1 | B2 | B3 | PL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rating | Maximum | pump | motor | | | | | | | |
| VG2D-G063 | 63 | 21 | 25 | 2250 | 4000 | 105.5 | 196 | Φ40 | M12*20 | 69.9 | 35.7 | G3/8" |
| VG2D-G080 | 80 | 21 | 25 | 2250 | 4000 | 109 | 204 | Φ47 | | 77.8 | 42.9 | |
| VG2D-G100 | 100 | 21 | 25 | 2050 | 4000 | 114 | 216 | | | | | |
| VG2D-G125 | 125 | 21 | 25 | 1800 | 4000 | 120 | 225 | | | 88.9 | 50.8 | |
| VG2D-G145 | 145 | 21 | 25 | 1600 | 3500 | 124.5 | 235.5 | | | | | |
| VG2D-G160 | 160 | 21 | 25 | 1600 | 3500 | 129 | 243 | Φ56 | M16*25 | 106.4 | 61.9 | G1/2" |

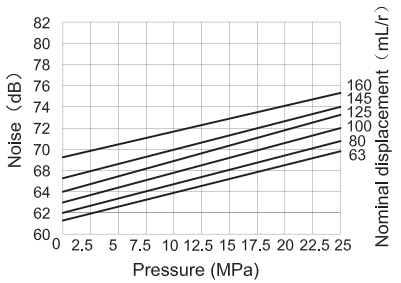
## Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




## Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃



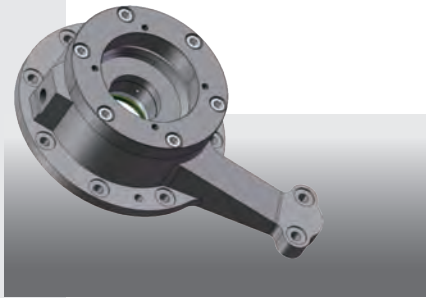
## CBIX Series

CBIX internal meshing lubrication gear pump is composed of bracket, shell, gear ring, gear, end cover and other components, with simple structure and reliable operation. Mainly used in engineering machinery, agricultural machinery, machine tool industry and other lubrication system transport oil.

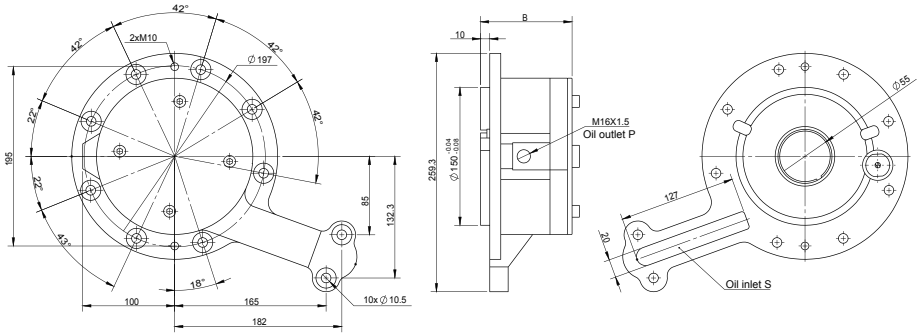
### Code Instruction

CBIX - B **- R P L
① ② ③ ④ ⑤ ⑥

① Product Code
② Pressure Rating B: 0.4 MPa
③ Nominal displacement
④ Directional of rotation R: CW L: CCW
⑤ Axial extension form P: flat key
⑥ Oil port type L: thread



### Outline Dimensions

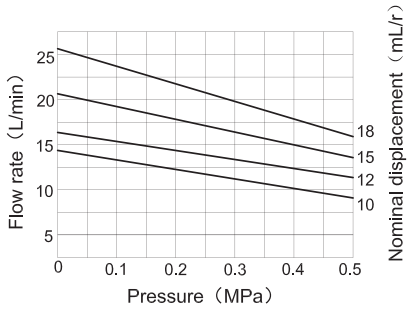



### Performance Parameter

| Code | Nominal displacement (mL/r) | Pressure (MPa) | Speed (r/min) | | B |
|---|---|---|---|---|---|
| | | | Minimum | Maximum | |
| CBIX-10 | 10 | 0.4 | 600 | 2600 | 88.1 |
| CBIX-12 | 12 | | | | 90.7 |
| CBIX-15 | 15 | | | | 94.5 |
| CBIX-18 | 18 | | | | 98.3 |

### Characteristic curve

Flow pressure characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃




### Noise curve

Pressure noise characteristics:
Test condition: n=1450r/min V=46mm ²/s t=55℃