# Gear Metering Pump

For more than 10 years,CIXI Instrument has provided process industries with precise, pulse less and reliable precision gear metering pumps

- **Precise, accurate, consistent, reliable**

Your demanding application requires a precise volume of fluid dispensed – reliably, accurately and consistently. The CX-GWMP Series metering gear pump is the industry standard for true precision metering for challenging applications in a wide variety of industrial processes. For years, engineers just like you have relied on CIXI Instrument to provide precision fluid handling solutions for the most difficult pumping applications. That's why CIXI Instrument gear pumps can be found wherever precise, pulse less and reliable fluid metering performance is required.

- **Technology that works for you**

The design utilizes high standard external spur gears enclosed within a close tolerance housing assembly. This provides you the precise volume of fluid dispensed per shaft revolution. The housing is constructed from a precision ground and lapped three-plate assembly. This assembly is aligned with dowels to allow close control of operating clearances. This construction method in combination with several proprietary internal features is what ensures precise, pulseless and reliable flow under varying process conditions. When CIXI Instrument pumps are coupled with a pre-packaged, integrated, closed-loop speed control and a compact motor driver assembly (AC or

DC), CIXI Instrument is able to provide the most precise and flexible metering gear pump system on the market.

- **Benefits**

**High accuracy:** Stable, repeatable flows are assured under varying conditions of temperature, viscosity and pressure.

**Uniform flow**: Unique design offers virtually pulseless flow without valves or flexible elements that add complexities, increase cost and hinder performance.

**Specific engineered solutions:** A variety of pump heads and drive combinations are pre-configured to provide you a range of standard options.

**Consistent precision:** Unparalleled mechanical precision, combined with closed-loop accuracy, ensures exact volume per revolution without expensive flow meters.

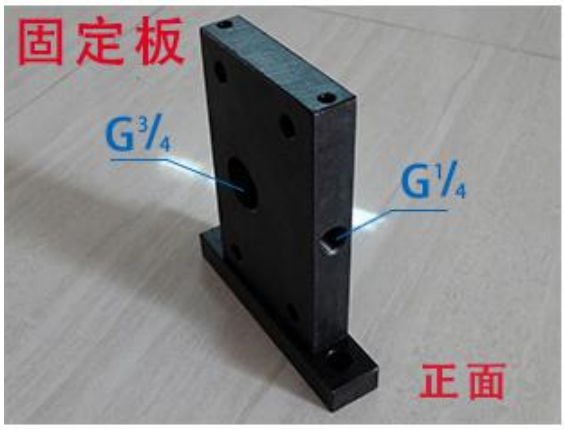
**Low cost of ownership:** Only three moving parts and hardened abrasion resistant materials provide excellent wear, corrosion and self-lubricating performance.

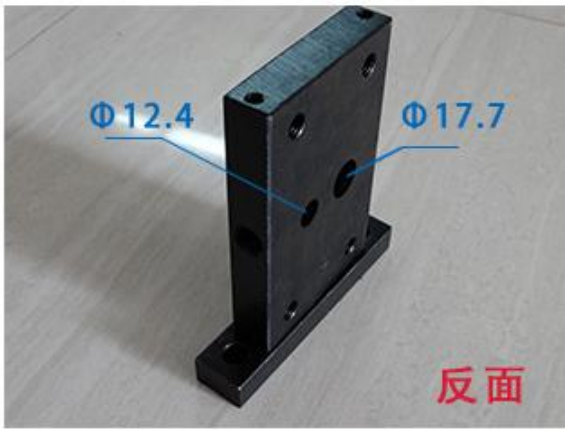
**Proven applications:** Years of practical application experience, backed by a technical staff with a variety of technical credentials, eliminates the guesswork.

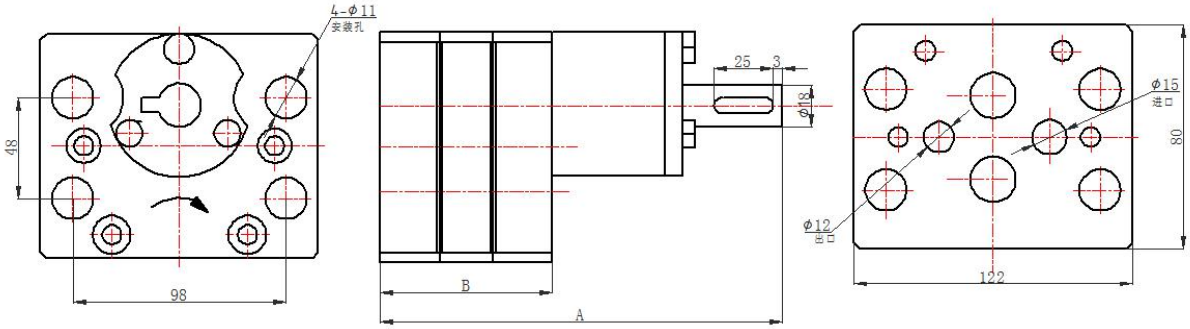
## ● Parameter

| Model | Displacement (CC/R) | Total height | manifold base height | Min Pressure | Max outlet pressure | Accuracy | Working temperature |
|---|---|---|---|---|---|---|---|
| GWMP-0.15 | 0.15 | 83 | 28.1 | <0.2 | <30 | ±3% | 200 |
| GWMP-0.3 | 0.3 | 85 | 30.2 | <0.2 | <30 | ±3% | 200 |
| GWMP-0.6 | 0.6 | 85 | 32 | <0.2 | <30 | ±3% | 200 |
| GWMP-1.2 | 1.2 | 90 | 34 | <0.2 | <30 | ±3% | 200 |
| GWMP-2.4 | 2.4 | 100 | 42 | <0.2 | <30 | ±3% | 200 |
| GWMP-3.6 | 3.6 | 105 | 50 | <0.2 | <30 | ±3% | 200 |
| GWMP-6 | 6 | 130 | 41 | <0.2 | <30 | ±3% | 200 |
| GWMP-9 | 9 | 135 | 46 | <0.2 | <30 | ±3% | 200 |
| GWMP-12 | 12 | 140 | 51 | <0.2 | <30 | ±3% | 200 |
| GWMP-15 | 15 | 145 | 56 | <0.2 | <30 | ±3% | 200 |
| GWMP-20 | 20 | 150 | 64 | <0.2 | <30 | ±3% | 200 |
| GWMP-30 | 30 | 165 | 80 | <0.2 | <30 | ±3% | 200 |
| GWMP-40 | 40 | 90 | 215 | <0.2 | <30 | ±3% | 200 |
| GWMP-50 | 50 | 97 | 215 | <0.2 | <30 | ±3% | 200 |
| GWMP-60 | 60 | 104.5 | 230 | <0.2 | <30 | ±3% | 200 |
| GWMP-75 | 75 | 112 | 230 | <0.2 | <30 | ±3% | 200 |
| GWMP-80 | 80 | Customize | Customize | <0.2 | <30 | ±3% | 200 |
| GWMP-125 | 125 | Customize | Customize | <0.2 | <30 | ±3% | 200 |

**Note:**Direction of rotation: clockwise from the axis of rotation



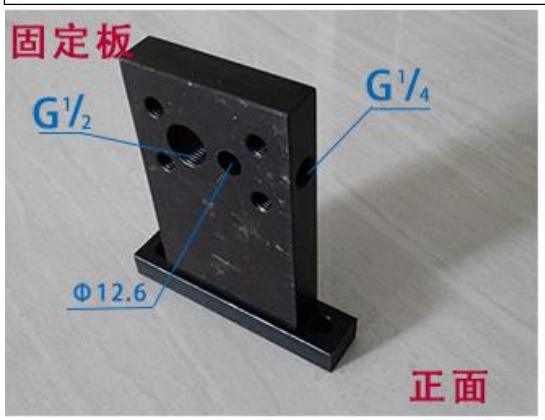



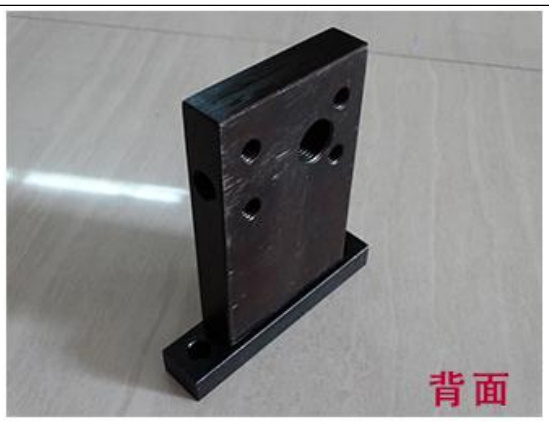

- **Production Dimension:**

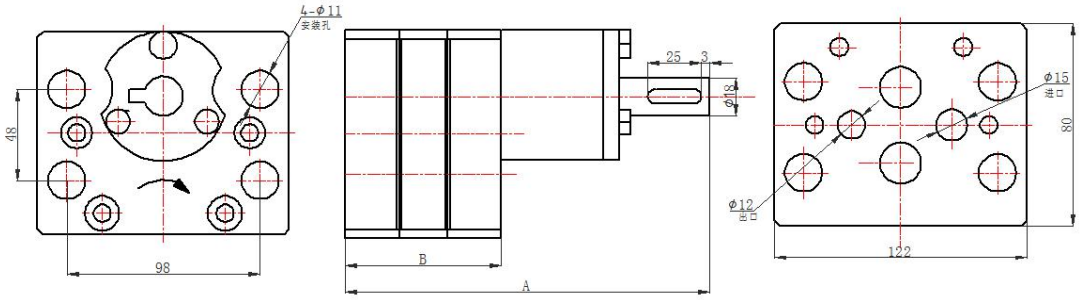
| Model | 6CC | 9CC | 12CC | 15CC | 20CC | 25CC | 30CC |
|---|---|---|---|---|---|---|---|
| A | 130 | 135 | 140 | 145 | 150 | 158 | 165 |
| B | 41 | 46 | 51 | 56 | 64 | 72 | 80 |

Parameters:

| |
|---|
| Min.inlet pressure :<0.2Mpa |
| working speed:5-200r/min |
| Medium:fluid |
| Process temperature:< 200C |
| Max.outlet pressure:<30Mpa |
| nominal flow capacity:6-30(±3%)CC/r |
| Sealing:combined seal |



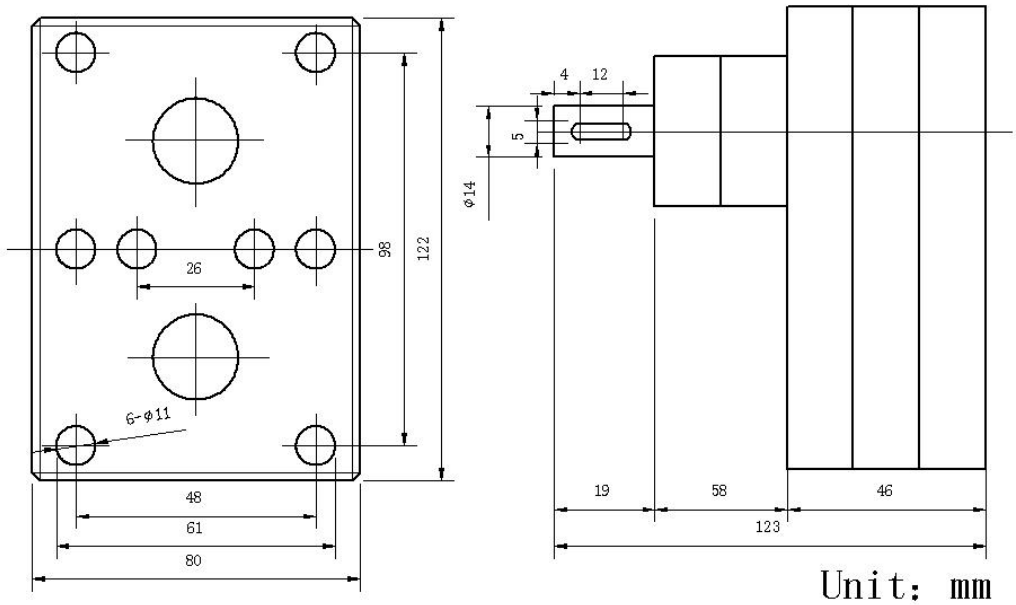



| Item | 0.15CC | 0.3CC | 0.6CC | 1.2CC | 2.4CC | 3.2CC | 3.6CC |
|---|---|---|---|---|---|---|---|
| A | 83 | 85 | 85 | 90 | 100 | 103 | 105 |
| B | 28.1 | 30.2 | 32 | 34 | 42 | 47.6 | 50 |

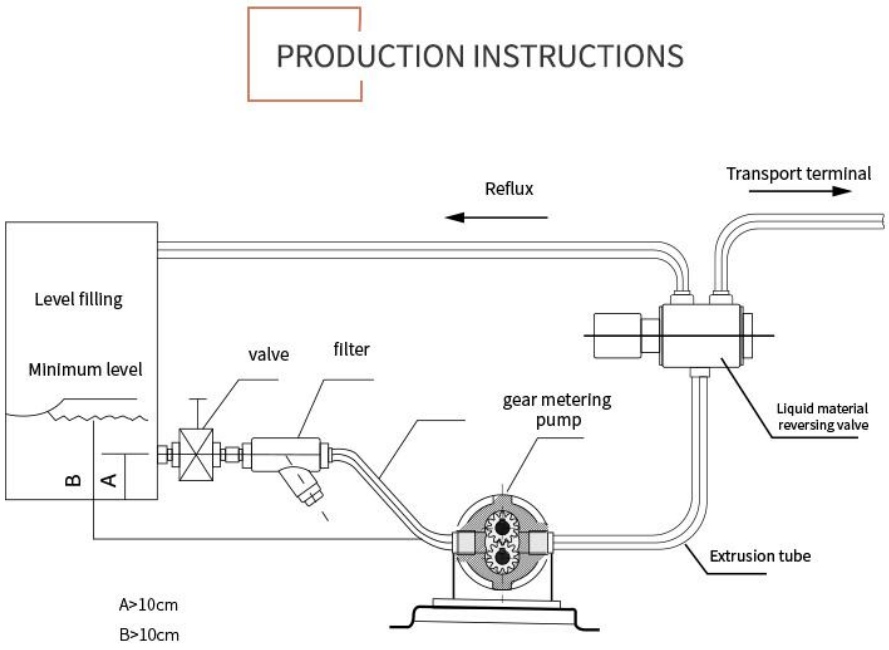
Parameters

| |
|---|
| Min.inlet pressure :<0.2Mpa |
| working speed:5-200r/min |
| Medium:fluid |
| Process temperature:< 200C |
| Max.outlet pressure:<30Mpa |
| nominal flow capacity:0.15-3.6(±3%)CC/r |
| Sealing:combined seal |

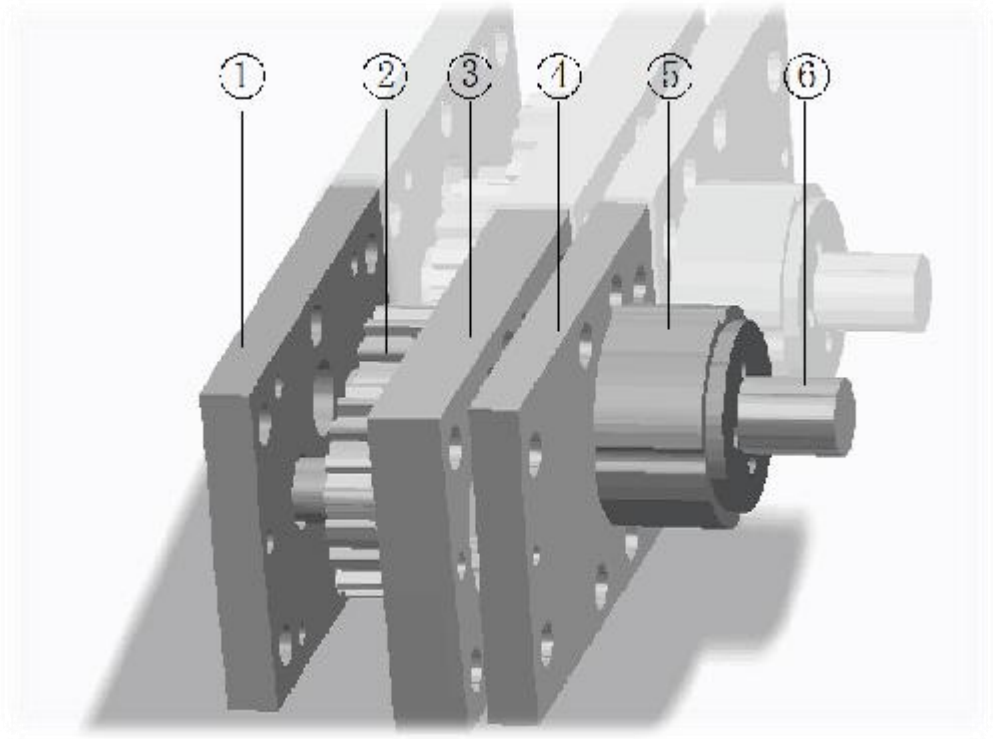
- **Installation Drawing**



**Application:**




**Three-dimensional analysis：**



| No. | Name： | Material： |
|---|---|---|
| 1 | Bottom cap | tool steel |
| 2 | Gear | tool steel |
| 3 | Gear cavity plate | tool steel |
| 4 | Top cap | tool steel |
| 5 | Seal cap | iron |
| 6 | Shaft | tool steel |

- **Selection guidelines:**

To ensure the correct selection, please offer us the follow question answers. Thank you for your cooperation!

1. The machine you use?
2. The material you handle; is your material raw or recycled?
3. The viscosity of your material?
4. The hourly output?/How much kg per hour???? productivity (capacity) for each pump
5. The working temperature?
6. The working pressure?
7. What is your final product?