

Описание на дозирующие мембранные и поршневые насосы. Серия GM, GH, GX, GD, GW, JMX, JX, FROY

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To compete with fair play, and to innovate with infinite creativity



## Metering Pump Selection Manual

NANFANG PUMP INDUSTRY CO.,LTD.

# Company Profile



Founded in 1991, Nanfang Pump Industry Co., Ltd. (hereinafter referred to as CNP) has been listed on the Shenzhen Stock Exchange on 9th December 2010; Stock name: CNP; Stock code: 300145.

As the first enterprise specializing in the research and large-scale production of stainless steel stamping welded centrifugal pump in China, CNP is currently the professional manufacturer with the highest volume of production and marketing in that industry. It ranks first in the country in terms of product scope, sales volume, and production quality. The company has set up a complete network of marketing services to meet the requirements of overseas markets as well as domestic needs. The products have seen a wide range of application in the area of pressurization, industry, living water, cycling of air-conditioning water, heat supply, fire extinguishing system, pumping of underground water, treatment of sewage and waste water, chemical industry and desalination of sea water etc.

CNP has now entered into the fast track of development and has taken a major step forward in forging China Strong Pump Enterprise and World's famous brand in the Pump Industry. In order to better meet the client's needs and requirements for expansion, it has set up a wide network of selling and service, as well as offices and service centers in major cities in China, which are aimed at providing timely and effective services for our clients. Meanwhile, our company has successfully penetrated into the world market by forging a good business relationship with more than 50 countries and regions in the Europe, Northern American, and Southeast Asia etc.

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## GW Series Mechanical Diaphragm metering Pump



### Technical Data:

Flow Rate:5L/h-53L/h  
Maximum discharge pressure:10bar  
Regulating ratio:10:1, Steady precision: ±2%  
Suction lift:0.5M  
Maximum temperature:40°C  
Maximum suction pressure:1bar

### Main Features:

#### Hydraulic End

- Diaphragm is mechanically driven, no diaphragm protecting plate at the material side ,easy to let material getting through.
- Many kind of pump head material like PVC,PVDF,316SS, fit for all kinds of materials.
- Self-cleaning one-way valve structure.

#### Driving End

- Variable eccentric institutions regulation , insure flow pulsation gently vary.
- Enchanted structure design , suitable for tough operation environment.

#### Control Mode

- Power supply:380V/220V -50Hz/60Hz/single phase/three phase.
- motor controller,control motor with mode "run/stop", adjust output flow.

### Main components material of hydraulic end

#### GW005—GW055

| Hydraulic end material | Pump head material | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring       | Connection |
|------------------------|--------------------|------------|------------|------------|-----------|-----------------|------------|
| PVC                    | PVC                | PVDF       | PVDF       | Ceramic    | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF               | PVDF       | PVDF       | Ceramic    | PTFE      | PTFE            | PVDF       |
| 316SS                  | 316SS              | 316SS      | 316SS      | 316SS      | PTFE      | Fluorous rubber | 316SS      |

#### Accessory

- Provide system required accessories as : Filter, Adjusting pillar,Buffer,Safety Valve and Back Pressure valve etc.
- GW 005-GW055 range and pump with PVC pump head , along with the dosing pump to provide injection valve, foot valve, counter weight and 6 meters tube ,except the high viscosity pump head and PVDF pump head.

### Standard configuration motor performance parameters

- Power supply:380V220V -50Hz/60Hz/single phase/three phase
- Protection grade: IP 54
- Insulation class: F
- All the motors accord with international electrical association IEC standard or US electrical committee NEC standards.

### Major Applications

Reverse osmosis,industrial water and waste water, swimming pool etc, all kinds of water treatment process.

### GW series mechanical diaphragm metering pump product code and flow pressure gauge

| Code | Series | Flow Rate | Hydraulic end | Port | Motor |
|------|--------|-----------|---------------|------|-------|
|      | GW     |           |               |      |       |

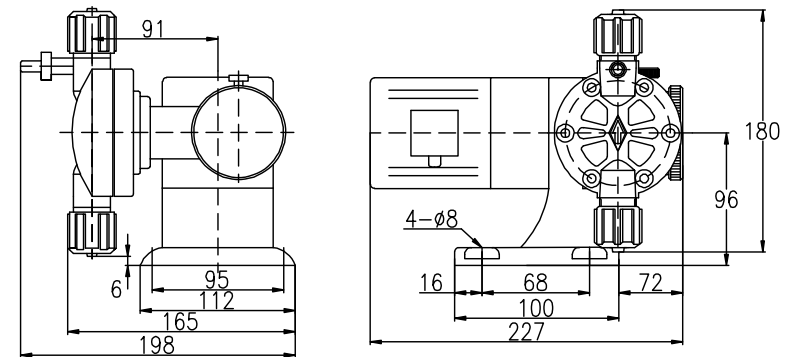
| Series | Code | Description                                  |
|--------|------|----------------------------------------------|
|        | GW   | GW series mechanical diaphragm metering pump |

| Flow rate | Code  | LPH@Pmax | SPM(mm) | Pmax(bar) | stroke (mm) | diagram (mm) | Motor power (W) | Weight (kg) |
|-----------|-------|----------|---------|-----------|-------------|--------------|-----------------|-------------|
|           | GW005 | 6        | 30      | 10        | 4           | 60           | 25              | 3.5         |
|           | GW010 | 13       | 50      |           |             |              |                 |             |
|           | GW025 | 24       | 83      | 7         |             |              |                 |             |
|           | GW030 | 30       | 100     |           |             |              |                 |             |
|           | GW035 | 36       | 120     | 5         |             |              |                 |             |
|           | GW045 | 46       | 150     | 4         |             |              |                 |             |
|           | GW055 | 53       | 166     | 2         |             |              |                 |             |

| Hydraulic end | Code | Description        | Port | Code | Description                                          | GW005-055                           |            |        |
|---------------|------|--------------------|------|------|------------------------------------------------------|-------------------------------------|------------|--------|
|               | P    | PVC hydraulic end  |      |      |                                                      | PVC                                 | PVDF       | 316    |
|               | S    | 316 hydraulic end  |      | P    | NPT threaded port                                    | 1/2" F                              | ----       | 1/2" F |
|               | T    | PVDF hydraulic end |      | Q    | The inner pipe mouth hard tube intubation port DN 15 | DN15                                | ----       | 1/2" F |
|               |      |                    |      | R    | Intubation 8x12 Tube                                 | 8 x 12                              | 8 x 12 (*) | ----   |
|               |      |                    |      | X    | Special port                                         | Consult CNP,indicate when ordering. |            |        |

| Motor | Code | Description                       |
|-------|------|-----------------------------------|
|       | 1    | 25W,1440rpm,3-50-380V,IP55/F/TEFC |
|       | 2    | 25W,1440rpm,1-50-220V,IP55/F/TEFC |

### Dimension figure





## GD Series Mechanical Diaphragm metering Pump



### Technical Data:

Maximum Flow Rate:130L/H  
Maximum discharge pressure:10bar  
Regulating ratio:10:1  
Steady precision: ±2%  
Suction lift:2M  
Maximum suction pressure:2bar  
Maximum temperature:40°C

### Main Features:

#### Hydraulic End

- ①Diaphragm is mechanically driven, it adopt multi-layer structure with PTFE and elastic rubber, no leaks, durable
- ②No diaphragm protecting plate at the material side ,easy to let material getting through.
- ③Many kind of pump head material like PVC,PVDF,316SS, fit for all kinds of materials.
- ④Self-cleaning one-way valve structure.

#### Driving End

- ①Double cam structure, suitable for tough operation environment, low noise, easy to disassemble and repair .
- ②Oil bath lubrication,driving components have long working life.
- ③Flow regulation in downtime or running state.
- ④The highly accurate worm and gear enables it run smoothly.

### Major Applications

Deliver chemicals in many areas, e.g. Environmental protection, municipal engineering, pharmacy, food, waste water treatment etc.

### Main components material of hydraulic end

#### GD030-GD050

| Hydraulic end material | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring       | Connection |
|------------------------|------------|------------|------------|-----------|-----------------|------------|
| PVC                    | PVC        | PVDF       | Zirconia   | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF       | PVDF       | Zirconia   | PTFE      | Fluorous rubber | PVDF       |
| 316SS                  | 316SS      | 316SS      | 316SS      | PTFE      | Fluorous rubber | 316SS      |

#### GD055-GD130

| Hydraulic end material | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring       | Connection |
|------------------------|------------|------------|------------|-----------|-----------------|------------|
| PVC                    | PVC        | PVDF       | Zirconia   | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF       | PVDF       | Zirconia   | PTFE      | Fluorous rubber | PVDF       |
| 316SS                  | 316SS      | 316SS      | 316SS      | PTFE      | Fluorous rubber | 316SS      |

### Control Mode

- ①Motor controller, control motor with mode "run/stop", adjust output flow through adjusting handle.
- ②Power supply:220V -50Hz-single phase/380V-50Hz-three phase .
- ③Variable frequency controller,accept external control signal,adjust stroke speed.
- Power supply:200V -50Hz-single phase/380V-50Hz-three phase .
- Input signal:4-20mA analog signal.

### Accessory

Provide system required accessories as:Filter, Adjusting pillar,Buffer,Safety valve and Back pressure valve etc.

Safety valve is mandatory. (GD030,GD050 and pump with connection code R PVC/PVDF pump head, along with the dosing pump to provide injection valve ,foot valve, counter weight and 6 meters tube.



## GD series mechanical diaphragm metering pump product code and flow pressure gauge

|      | Series | Flow Rate | Hydraulic end | Port | Motor |
|------|--------|-----------|---------------|------|-------|
| Code | GD     |           |               |      |       |

| Series | Code | Description                                  |
|--------|------|----------------------------------------------|
|        | GD   | GD series mechanical diaphragm metering pump |

| Flow rate | Code | LPH@Pmax | Stroke(mm) | SPM | Pmax(bar) | Motor power |
|-----------|------|----------|------------|-----|-----------|-------------|
|           | 030  | 34       | 4          | 80  | 10        | 0.2kW       |
|           | 050  | 44       | 4          | 116 | 10        |             |
|           | 055  | 59       | 4          | 96  | 10        |             |
|           | 070  | 71       | 4          | 116 | 10        |             |
|           | 085  | 91       | 6          | 80  | 10        |             |
|           | 100  | 101      | 6          | 96  | 8         |             |
|           | 130  | 135      | 6          | 116 | 8         |             |

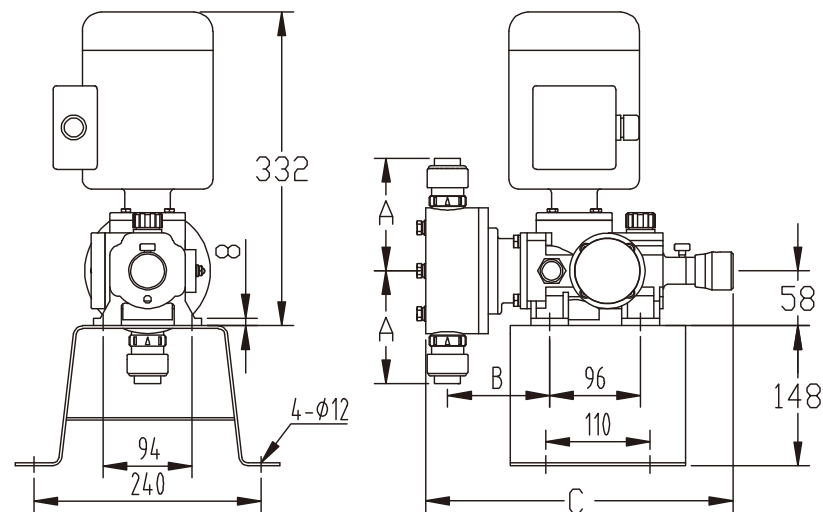
| Hydraulic end | Code | Description                                                        |
|---------------|------|--------------------------------------------------------------------|
|               | P    | PVC hydraulic end                                                  |
|               | S    | 316 hydraulic end                                                  |
|               | T    | PVDF hydraulic end                                                 |
|               | Z    | Special material hydraulic end.Consult CNP,indicate when ordering. |

| Port | Code | Description                                    | GD030-050                           |      |        | GD055-130 |        |        |
|------|------|------------------------------------------------|-------------------------------------|------|--------|-----------|--------|--------|
|      |      |                                                | PVC                                 | PVDF | 316    | PVC       | PVDF   | 316    |
|      | P    | NPT threaded port                              | ----                                | ---- | 1/2" F | 1/2" F    | 1/2" F | 1/2" F |
|      | Q    | The inner pipe mouth hard tube intubation port | DN15                                | DN15 | ----   | DN15      | DN15   | ----   |
|      | R    | Intubation 6x12 Tube                           | 6x12                                | 6x12 | ----   | ----      | ----   | ----   |
|      | X    | Special port                                   | Consult CNP,indicate when ordering. |      |        |           |        |        |

| Motor | Code | Description                                          |
|-------|------|------------------------------------------------------|
|       | 1    | 200W,1440rpm,3-50-380V. IP55/F/TEFC                  |
|       | 2    | 200W.Capacitor start. 1440rpm,1-50-220V. IP55/F/TEFC |
|       | 3    | Others.Consult CNP,indicate when ordering.           |

| Baseplate | Code | Description  |
|-----------|------|--------------|
|           | N    | No baseplate |
|           | Y    | Baseplate    |

## Dimension figure



| Pump head material | GD030-050 |     |    |     | GD055-130 |     |     |     |
|--------------------|-----------|-----|----|-----|-----------|-----|-----|-----|
|                    | Port code | A   | B  | C   | Port code | A   | B   | C   |
| PVC                | P         | 101 | 91 | 301 | P         | 119 | 108 | 327 |
|                    | Q         | 101 |    |     | Q         | 119 |     |     |
|                    | R         | 108 |    |     | R         |     |     |     |
| PVDF               | P         | 101 | 91 | 301 | P         | 119 | 108 | 327 |
|                    | Q         | 101 |    |     | Q         | 119 |     |     |
|                    | R         | 108 |    |     | R         |     |     |     |
| 316                | P         | 95  | 91 | 301 | P         | 123 | 108 | 327 |
|                    | Q         |     |    |     | Q         |     |     |     |
|                    | R         |     |    |     | R         |     |     |     |

## GMGB Series Mechanical Diaphragm Metering Pump



### Main Function Parameter

- Single-head maximum flow: 1800L/H
- Maximum discharge pressure: 12bar
- Regulating ratio 10:1, Steady precision  $\pm 2\%$
- Suction lift: 3m
- Maximum suction pressure: 2bar
- Maximum temperature: 40°C

### Main features

#### Hydraulic end

- Diaphragm is mechanically driven, no diaphragm protecting plate at the material side, ripe for material getting through
- Many kind of pump head material like PVC, PVDF, 316SS, high viscosity, sizing agent, fit for all kinds of materials
- Self-cleaning one-way valve structure

#### Driving end

- Variable eccentric institutions regulation, insure flow pulsation gently vary
- Enhanced structure design, suitable for tough operation environment
- Wear-resisting ball bearings, running is more stable
- Oil bath lubrication, driving components have long working life
- Flow regulation in downtime or running state, adjustment mode can be selected manually, motor-driven or frequency conversion

#### Control mode

- Electric stroke controller, accept external control signal, adjust stroke length
- Power supply: 220V-50Hz-single phase
- Input signal: 4-20mA analog signal
- Output signal: 4-20mA/1-5V analog signal, for records shown and control system usage
- Variable frequency controller, accept external control signal, adjust stroke speed
- Power supply: 220V-50Hz-single phase/380-50Hz-three phase
- Input signal: 4-20mA analog signal
- Motor controller, control three phase motor with mode "run/stop", adjust output flow
- Power supply: 200-240V-50/60Hz-single phase
- Control mode: can accept 4-20mA analog signal, external pulse signal or manual adjustment

### Major Applications

- Municipal, industrial water and waste water, swimming pool etc. all kinds of water treatment process

### Options

- Two diaphragm pump heads
- Two diaphragm pump heads, broken pressure gauge detection and pressure switch detection
- Stroke count sensor
- PNP output/NPN output/Relay output



### The material of the main components of hydraulic end

#### GM0002 ~ GM0050

| Hydraulic end material | Hydraulic end cover | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring       | Connection |
|------------------------|---------------------|------------|------------|------------|-----------|-----------------|------------|
| PVC                    | PVC                 | PVDF       | PVDF       | Ceramic    | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF                | PVDF       | PVDF       | Ceramic    | PTFE      | PTFE            | PVDF       |
| 316 SS                 | 316 SS              | 316 SS     | 316 SS     | 316 SS     | PTFE      | Fluorous rubber | 316 SS     |

#### GM0090 ~ GM0500

| Hydraulic end material | Hydraulic end cover | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring       | Connection |
|------------------------|---------------------|------------|------------|------------|-----------|-----------------|------------|
| PVC                    | PVC                 | PVC        | PVC        | Glass      | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF                | PVDF       | PVDF       | Ceramic    | PTFE      | PTFE            | PVDF       |
| 316 SS                 | 316 SS              | 316 SS     | 316 SS     | 316 SS     | PTFE      | Fluorous rubber | 316 SS     |

#### GB0080 ~ GB1200

| Hydraulic end material | Hydraulic end cover | Valve body | Valve seat | Valve ball | Diaphragm | Seal ring            | Connection |
|------------------------|---------------------|------------|------------|------------|-----------|----------------------|------------|
| PVC                    | PVC                 | PVC        | PVC        | Ceramic    | PTFE      | Fluorous rubber      | PVC        |
| PVDF                   | PVDF                | PVDF       | PVDF       | Ceramic    | PTFE      | PTFE                 | PVDF       |
| 316 SS                 | 316 SS              | 316 SS     | 316 SS     | 316 SS     | PTFE      | Fluorous rubber/PTFE | 316 SS     |

#### GM1500-GM1800

| Hydraulic end material | Hydraulic end cover | Valve body /Bush | Valve plate /Lift limit plate | Spring      | Diaphragm | Seal ring       | Connection |
|------------------------|---------------------|------------------|-------------------------------|-------------|-----------|-----------------|------------|
| PVC                    | PVC                 | PVC/PVC          | PVC/PVC                       | Hastelloy c | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF                | PVDF/PVDF        | PVDF/PVDF                     | Hastelloy c | PTFE      | PTFE            | PVDF       |
| 316 SS                 | 316 SS              | 316 SS/316 SS    | 316 SS/316 SS                 | Hastelloy c | PTFE      | Fluorous rubber | 316 SS     |

### Accessory

Provide system required accessories as: Filter, Adjusting pillar, Buffer, Safety valve and Back pressure valve etc., Safety valve is mandatory.  
(GM0002-GM0050 range and pump with PVC/PVDF pump head, along with the dosing pump to provide injection valve, foot valve, counter weight and 6 meters tube, except the high viscosity pump head)

### Standard configuration motor performance parameters

Power supply: 380V-50Hz-three phase/220V-50Hz-single phase

Protection grade: IP55

Insulation class: F

Explosion-proof motor, 60Hz motor can be chosen. All the motors accord with international electrical association IEC standard or US electrical committee NEC standards

## GM&GB series mechanical diaphragm metering pump product code and flow pressure table

| Code   | Series | Flow                                       | Hydraulic end | Port      | Motor                                          | Adjustment                                 | Baseplate | Option |           |                                 |
|--------|--------|--------------------------------------------|---------------|-----------|------------------------------------------------|--------------------------------------------|-----------|--------|-----------|---------------------------------|
|        |        |                                            |               |           |                                                |                                            |           |        |           |                                 |
| Series | Code   | Description                                |               |           | Code                                           | Description                                |           |        |           |                                 |
|        | GM     | GM series mechanical diaphragm dosing pump |               |           | GB                                             | GB series mechanical diaphragm dosing pump |           |        |           |                                 |
| Flow   | Code   | LPH@Pmax                                   | SPM           | Pmax(bar) | Motor rate                                     | Code                                       | LPH@Pmax  | SPM    | Pmax(bar) | Motor rate                      |
|        | GM0002 | 2.25                                       | 36            | 12        | 0.25kW <sup>(1)</sup>                          | GB0080                                     | 82        | 36     | 10        | 0.55kW<br>0.75kW <sup>(1)</sup> |
|        | GM0005 | 4.5                                        | 72            |           |                                                | GB0180                                     | 167       | 72     |           |                                 |
|        | GM0010 | 9                                          | 144           |           |                                                | GB0250                                     | 237       | 102    |           |                                 |
|        | GM0025 | 25                                         | 72            |           |                                                | GB0350                                     | 334       | 144    |           |                                 |
|        | GM0050 | 50                                         | 144           | 10        |                                                | GB0450                                     | 416       | 180    | 7         |                                 |
|        | GM0090 | 85                                         | 72            |           |                                                | GB0500                                     | 464       | 144    |           |                                 |
|        | GM0120 | 115                                        | 72            | 7         | 0.25kW <sup>(1)</sup><br>0.37kW <sup>(2)</sup> | GB0600                                     | 583       | 180    | 3.5       |                                 |
|        | GM0170 | 170                                        | 144           |           |                                                | GB0700                                     | 656       | 102    |           |                                 |
|        | GM0240 | 235                                        | 144           |           |                                                | GB1000                                     | 946       | 144    |           |                                 |
|        | GM0330 | 315                                        | 144           | 5         | 0.37kW <sup>(2)</sup>                          | GB1200                                     | 1200      | 180    | 3         | 0.75kW                          |
|        | GM0400 | 400                                        | 144           |           |                                                | GB1500                                     | 1500      | 180    |           |                                 |
|        | GM0500 | 500                                        | 180           |           |                                                | GB1800                                     | 1800      | 206    |           |                                 |

1) This power is available for constant speed or frequency conversion 5~50Hz conversion need to use inverter motor;  
2) This power is available for single phase and inverter motor.

| Hydraulic end | Code | Description                           | Code | Description                                                                     |
|---------------|------|---------------------------------------|------|---------------------------------------------------------------------------------|
|               | P    | PVC hydraulic end                     | V    | High viscosity application, PVC hydraulic end                                   |
|               | S    | 316 hydraulic end                     | K    | Sizing agent application, GM0025~0500; 316 hydraulic end; GB: PVC hydraulic end |
|               | T    | PVDF hydraulic end                    | M    | Mixture application, GM: PVDF hydraulic end                                     |
|               | F    | NaClO application; PVC hydraulic end* | Z    | Special materials hydraulic end, consult CNP, indicate when ordering            |
|               |      |                                       |      |                                                                                 |

(\*) GM0002~0050: EPDM O-ring; GM0090~0500, GB: PTFE covering O-ring

| Port | Code                                           | Description                         | GM0002~0050 |      |      | GM0090~0500 |      |      | GB0080~0450 |      |      | GB0500~1200 |      |     | GB1500 |      |     | GB1800 |      |     |
|------|------------------------------------------------|-------------------------------------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|-----|--------|------|-----|--------|------|-----|
|      |                                                |                                     | PVC         | PVDF | 316  | PVC         | PVDF | 316  | PVC         | PVDF | 316  | PVC         | PVDF | 316 | PVC    | PVDF | 316 | PVC    | PVDF | 316 |
| P    | NPT threaded port                              |                                     | —           | —    | 1/2" | 1/2"        | 1/2" | 1/2" | 1/2"        | 1/2" | 1/2" | 1"          | 1"   | 1"  | 1"     | 1"   | 1"  | 1"     | 1"   | 1"  |
| Q    | The inner pipe mouth hard tube intubation port | DN15                                | —           | —    | —    | DN15        | —    | —    | DN15        | —    | —    | DN25        | —    | —   | DN40   | —    | —   | —      | —    | —   |
| R    | Intubation 6 x 12 Tube                         | 6 x 12                              | —           | —    | —    | —           | —    | —    | —           | —    | —    | —           | —    | —   | —      | —    | —   | —      | —    | —   |
| H    | GM tube High viscosity application dedication  | 15 x 23<br>9 x 12                   | —           | —    | —    | DN15        | —    | —    | —           | —    | —    | —           | —    | —   | —      | —    | —   | —      | —    | —   |
| X    | Special port                                   | Consult CNP, indicate when ordering |             |      |      |             |      |      |             |      |      |             |      |     |        |      |     |        |      |     |

Dash area is standard configuration, firstly high viscosity pump head V, sizing agent K, mixture pump head MJ, if no special optional, choose port according hydraulic end  
(\*) the default features configured tube is PVC material, if need PVDF tube (6m), order additionally, and enquiry to factory.

| Motor | Code | Description ( GM )                                                | Description ( GB )                                                 |
|-------|------|-------------------------------------------------------------------|--------------------------------------------------------------------|
|       | 1    | 250W IEC71, 1440rpm, 3~50~220/380V, IP55, F/TEFC                  | 550W, IEC71, 1440rpm, 3~50~220/380V, IP55/TEFC                     |
|       | 2    | 1/3hp, NEMA 56C, 1440rpm, 3~50~220/380V, NEMA 3/TEFC              | 1hp, NEMA 56C, 1440rpm, 3~50~220/380V, NEMA 3/TEFC                 |
|       | 3    | 370W IEC71, 1440rpm, 3~50~220/380V, IP55/F/TEFC, Ex-d, IIBT4      | 550W, IEC71, 1440rpm, 3~50~220/380V, IP55/F/TEFC, Ex-d, IIBT4      |
|       | 4    | 370W IEC71, 1440rpm, 3~50~220/380V, IP55, F/TEFC                  | 750W, IEC80, 1440rpm, 3~50~220/380V, IP55/F/TEFC                   |
|       | 5    | 250W Capacitor start type, IEC71, 1440rpm, 1~50~220V, IP55/F/TEFC | 750W, IEC80, 1440rpm, 3~50~220/380V, IP55/F/TEFC, Ex-d, IIBT4      |
|       | 6    | 250W IEC71, 1440rpm, 3~50~200/400V, 3~60~230/460V, IP55/F/TEFC    | 550W, Capacitor start type, IEC80, 1440rpm, 1~60~220V, IP55/F/TEFC |
|       | 7    | 370W IEC71, 1440rpm, 3~50~200/380V, 3~60~230/460V, IP55/F/TEFC    | 750W, Capacitor start type, IEC80, 1440rpm, 1~60~220V, IP55/F/TEFC |
|       | 8    |                                                                   | 550W, IEC80, 1440rpm, 3~50~220/380V, IP55/F/TEFC                   |
|       | 9(5) | Pump default without motor, retain IEC71 port                     | Pump default without motor, retain IEC71 port                      |
|       | 9(6) | 370W Capacitor start type, IEC71, 1440rpm, 1~50~220V, IP55/F/TEFC | Pump default without motor, retain IEC80 port                      |
|       | 9    | Other, pls consult CNP company                                    | Other, pls consult CNP company                                     |

Single phase motor can not be used with the motor switch at the same time.

| Adjustment | Code | Description ( GM )                                    | Description ( GB )                                       | Remarks            |
|------------|------|-------------------------------------------------------|----------------------------------------------------------|--------------------|
|            | M    | Manual stroke adjusting                               | Manual stroke adjusting                                  |                    |
|            | N    | Electric stroke adjusting, 4~20mA, 220VAC~1Ph         | Electric stroke adjusting, 4~20mA, 220VAC~1Ph            |                    |
|            | E    |                                                       | Electric stroke adjusting, 4~20mA, 220VAC~1Ph, Ex, Proof |                    |
|            | F    | Frequency conversion control                          | Frequency conversion control                             |                    |
|            | T    | Motor switch controller and electric stroke adjusting |                                                          | Apply to GM series |
|            | P    | Motor switch controller ( 1Ph-50Hz~220VAC )           |                                                          | Apply to GM series |

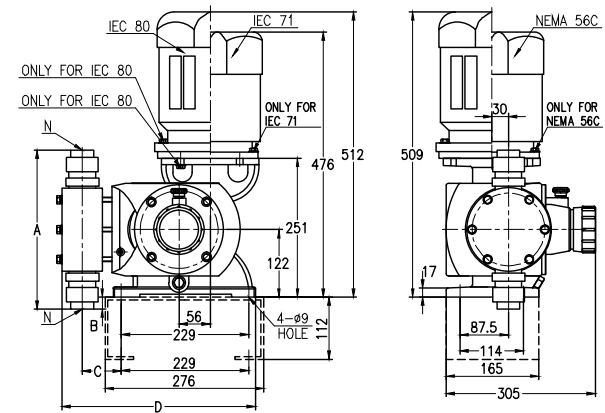
| Baseplate | Code | Description ( GM ) | Description ( GB ) | Remarks |
|-----------|------|--------------------|--------------------|---------|
|           | N    | No baseplate       | No baseplate       |         |
|           | Y    | Baseplate(2)       | Baseplate          |         |

| Options | Code | Description ( GM )                                                                | Description ( GB )                                                             | Remarks                                                        |
|---------|------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------|
|         | N    | No option                                                                         | No option                                                                      |                                                                |
|         | A    | Stroke count sensor                                                               | Stroke count sensor                                                            |                                                                |
|         | B    | The diaphragm rupture test and pressure gauge                                     | The diaphragm rupture test and pressure gauge                                  | Pressure gauge                                                 |
|         | C    | The diaphragm rupture test and pressure gauge switch(2)                           | The diaphragm rupture test and pressure gauge switch                           | Normal pressure switch, including baseplate                    |
|         | D    | The diaphragm rupture test and pressure gauge, explosion-proof pressure switch(2) | The diaphragm rupture test and pressure gauge, explosion-proof pressure switch | Normal pressure switch and pressure gauge, including baseplate |
|         | X    | Other, pls consult CNP company                                                    | Other, pls consult CNP company                                                 | Special configuration indicated in the contract                |
|         |      |                                                                                   |                                                                                |                                                                |

Remarks: This code is used for G series dosing pump made by CNP, this code apply to the usage in marketing.  
(2), GM series two diaphragm with pressure switch, default with baseplate, and should choose "N" in the options of baseplate

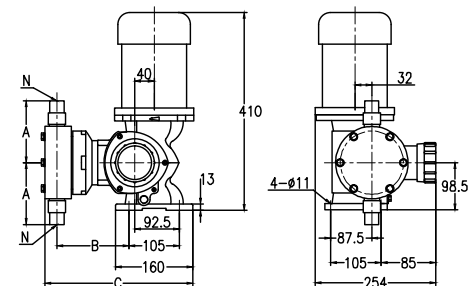
## GB pump

| Model | GB40(80~450)              |            | GB60(500~600)             |          | GB80(700~1200)            |          | GB60(1500) |          | GB80(1800)   |              |
|-------|---------------------------|------------|---------------------------|----------|---------------------------|----------|------------|----------|--------------|--------------|
| Size  | Plastics                  | Metal      | Plastics                  | Metal    | Plastics                  | Metal    | Plastics   | Metal    | Plastics     | Metal        |
| A     | 237                       | 260        | 296                       | 338      | 362                       | 414      | 374        | 446      | 420          | 458          |
| B     | 5                         | 4          | 19                        | 46       | 59                        | 85       | 54         | 100      | 87           | 102          |
| C     | 60.3                      | 60.3       | 71.4                      | 76.2     | 96.4                      | 100      | 96.4       | 100      | 96.4         | 100          |
| D     | 333                       | 333        | 351.2                     | 348      | 373.1                     | 373.1    | 373.1      | 373.1    | 373.1        | 373.1        |
| N     | 1/2" F NPT                | 1/2" F NPT | 1" F NPT                  | 1" M NPT | 1" F NPT                  | 1" M NPT | 1" F NPT   | 1" M NPT | 1 1/2" F NPT | 1 1/2" M NPT |
|       | DN15 (PVC pump head only) | —          | DN25 (PVC pump head only) | —        | DN25 (PVC pump head only) | —        | —          | —        | —            | —            |



## GM pump

| Pump head | GM0002 – GM0050 |     |     |     | GM0090 – GM0500 |     |     |     |
|-----------|-----------------|-----|-----|-----|-----------------|-----|-----|-----|
| Material  | Port code       | A   | B   | C   | Port code       | A   | B   | C   |
| PVC       | P               | 108 | 116 | 250 | Q               | 127 | 159 | 322 |
| PVDF      | P               | 108 |     |     | N               | 131 |     |     |
| 316       | N               | 102 |     |     | N               | 131 |     |     |





## GX Series Mechanical Diaphragm Metering Pump



### Technical Data:

Single-end maximum Flow Rate:2100L/h  
Maximum discharge pressure:9bar  
Regulating ratio:10:1  
Steady precision: ±2%  
Suction lift:2.5M  
Maximum temperature:40°C

### Main features

- ©Diaphragm is mechanically driven, no diaphragm protecting plate at the material side, easy to let material getting through.
- ©Many kind of pump head material like PVC,PVDF,316SS, high viscosity, sizing agent,fit for all kinds of materials. Self-cleaning one-way valve structure.
- ©variable eccentric institution regulation , insure flow pulsation gently vary. Suitable for tough operation environment.
- ©Oil bath lubrication, driving components have long working life.
- ©Flow regulation in downtime or running state.

### Major Applications

- ©municipal , industrial water and waste water, swimming pool etc.
- ©Petrochemical industry,chemical industry, Electricity,Metallurgy,Pharmacy,Food industry,etc.

### Main components material of hydraulic end

| Hydraulic end material | Pump head | Pump body | Valve seat  | Valve ball   | Diaphragm | Oring           | Connection |
|------------------------|-----------|-----------|-------------|--------------|-----------|-----------------|------------|
| PVC                    | PVDF      | PVC       | PVDF        | Ceramic/PVDF | PTFE      | Fluorous rubber | PVC        |
| PVDF                   | PVDF      | PVDF      | PVDF        | Ceramic/PVDF | PTFE      | Fluorous rubber | PVDF       |
| 316SS                  | 316SS     | 316SS     | Hastelloy C | 316SS        | PTFE      | Fluorous rubber | 316SS      |

### Control mode

- ©Power supply:380V/220V -50Hz/60Hz/single phase/three phase.
- ©Variable frequency controller,accept external control signal,adjust stroke speed.Input signal:4-20mA analog signal.
- ©Motor controller,control three phase motor with mode "run/stop", adjust output flow.



## GX series mechanical diaphragm metering pump product code and flow pressure gauge

| Code | Series | Flow Rate | Hydraulic end | Port | Motor |
|------|--------|-----------|---------------|------|-------|
|      | GX     |           |               |      |       |

| Series | Code | Description                                  |
|--------|------|----------------------------------------------|
|        | GX   | GX series mechanical diaphragm metering pump |

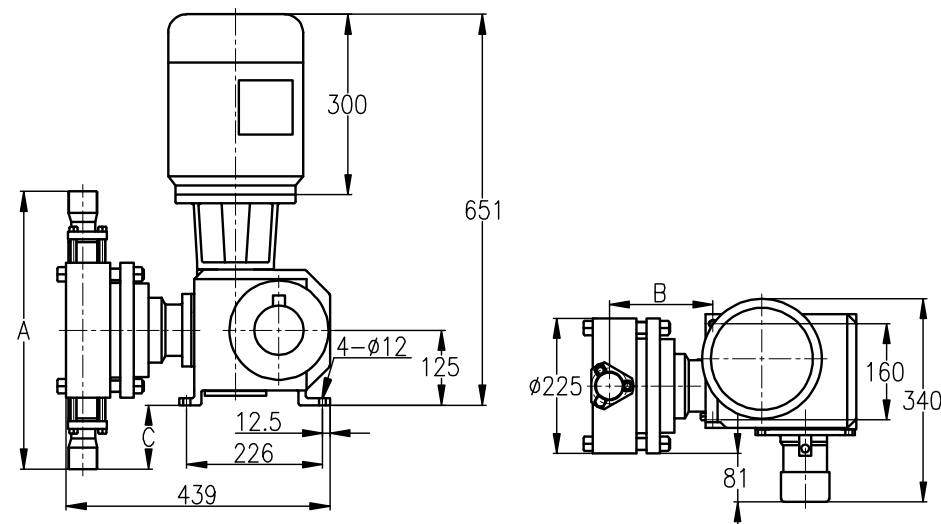
| Flow rate | Code   | LPH@Pmax | Pmax(Mpa)     | SPM (min-1) | Stroke(mm) | Motor power(kw) | Weight(kg) |
|-----------|--------|----------|---------------|-------------|------------|-----------------|------------|
|           | GX900  | 910      | 0.6(PVC/PVDF) | 89          | 20         | 1.5             | 75±10      |
|           |        | 910      | 0.8(316SS)    | 89          |            |                 |            |
|           | GX1350 | 1350     | 0.6(PVC/PVDF) | 130         |            |                 |            |
|           |        | 1350     | 0.8(316SS)    | 130         |            |                 |            |
|           | Gx1800 | 1820     | 0.6           | 178         |            |                 |            |
|           | GX2100 | 2100     | 0.6           | 203         |            |                 |            |

| Hydraulic end | Code | Description         |
|---------------|------|---------------------|
|               | P    | PVC hydraulic end   |
|               | T    | PVDF hydraulic end  |
|               | S    | 316SS hydraulic end |

| Port | Code | Description                                    | GX 900                               |      |      | GX1350/1800/2100 |          |          |
|------|------|------------------------------------------------|--------------------------------------|------|------|------------------|----------|----------|
|      |      |                                                | PVC                                  | PVDF | 316  | PVC              | PVDF     | 316      |
|      | P    | NPT threaded port                              | 1" F                                 | 1" F | 1" M | 1/2" F           | 1-1/2" F | 1-1/2" F |
|      | Q    | The inner pipe mouth hard tube intubation port | DN25                                 | DN25 | ---- | ----             | ----     | ----     |
|      | X    | Special port                                   | Consult CNP, indicate when ordering. |      |      |                  |          |          |

| Motor | Code | Description                                                      |
|-------|------|------------------------------------------------------------------|
|       | 1    | Three-phase 200V/380V..1440rpm. IP55/F                           |
|       | 2    | 220V.50Hz. 1440rpm.1-50-220V. IP55/F                             |
|       | 3    | Three-phase explosion-proof 220/380V.50Hz. 1440rpm.IP55/F,DIIBT4 |
|       | 4    | Three-phase frequency conversion 220/380V.50Hz. 1440rpm.IP55/F   |
|       | 5    | Pump default without motor, retain IEC90 port.                   |
|       | 6    | Other motors. Consult CNP, indicate when ordering.               |

## Dimension figure



| Pump head material | GX900     |     |       |      | GX1350/1800/2100 |     |       |     |
|--------------------|-----------|-----|-------|------|------------------|-----|-------|-----|
|                    | Port code | A   | B     | C    | Port code        | A   | B     | C   |
| PVC                | P         | 362 | 165.5 | 56   | P                | 420 | 165.5 | 85  |
|                    | Q         | 362 | 165.5 | 56   | Q                | 420 | 165.5 | 85  |
| PVDF               | P         | 362 | 165.5 | 56   | P                | 420 | 165.5 | 85  |
|                    | Q         | 362 | 165.5 | 56   | Q                | 420 | 165.5 | 85  |
| 316SS              | P         | 433 | 172.5 | 91.5 | P                | 462 | 172.5 | 106 |

## GH Series Hydraulic Diaphragm Metering Pump



### Technical Data:

Maximum Flow Rate: 500L/h  
Maximum discharge pressure: 40bar  
Regulating ratio: 10:1  
Steady precision: ±2%  
Suction lift: 3M

### Main features

#### Driving end

- ◎ Eccentric institutions drive, compact structure, less space required;
- ◎ Unique worm / gear structure ensure the steady working of the mechanical parts.
- ◎ The tampered roller bearings at the end of gear ensure stable operation under heavy load for a long time.
- ◎ Oil bath lubrication, change oil regularly, no need special maintenance for lubrication system.
- ◎ All the working components are oil bath, they have long working life.
- ◎ Flow regulation in downtime or running state. Adjustment mode can be selected manually, motor-driven, pneumatic-driven or frequency conversion.

### Control mode

#### Hydraulic end

- ◎ Diaphragm is hydraulic -driven, long service life.
- ◎ The high precision design of one way check valve ensure the accuracy of the pump.
- ◎ The built-in structure of pressure relief valve will protect pump head and diaphragm automatically.
- ◎ Many kind of pump head material like PVC, PVDF, 316SS, Alloy 20, Hastelloy Alloy, suit for variable materials.
- ◎ Option: pressure double diaphragm leak detection (local/long-distance) alarm.

### Major Applications

- ◎ Petrochemical industry, chemical industry, refinery process
- ◎ Power plant boiler water treatment

## GH series hydraulic diaphragm dosing pump product code

| Series  | Flow Rate | Pressure | Material | Motor | Port | Adjustment | Detection | Baseplate |
|---------|-----------|----------|----------|-------|------|------------|-----------|-----------|
| Code GH |           |          |          |       |      |            |           |           |

| Series | Code | Description                                 |
|--------|------|---------------------------------------------|
|        | GH   | GH Series hydraulic diaphragm metering pump |

| Flow rate | e. g. 025 stand for the flow rate is 25l/h |
|-----------|--------------------------------------------|
|-----------|--------------------------------------------|

| Pressure    | Code | G      | A      | B      | C      | D      | E      | F      |
|-------------|------|--------|--------|--------|--------|--------|--------|--------|
| Implication |      | 40 bar | 30 bar | 25 bar | 20 bar | 15 bar | 12 bar | 10 bar |

| Hydraulic end | Code     | P   | S     | T    | A       | B       |
|---------------|----------|-----|-------|------|---------|---------|
|               | Material | PVC | 316SS | PVDF | Alloy20 | Alloy22 |

| Motor | Code | Description                                               |
|-------|------|-----------------------------------------------------------|
|       | 1    | 550W.IEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC           |
|       | 2    | 550W.IEC80, 1440rpm, 1-50-220V, IP55/F/TEFC               |
|       | 3    | 550W.IEC71, 1440rpm, 3-50-220/380V, IP55/F/TEFC/Ex-dllBT4 |
|       | 4    | 750W.IEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC           |
|       | 5    | 750W.IEC80, 1440rpm, 1-50-220V, IP55/F/TEFC               |
|       | 6    | 750W.IEC80, 1440rpm, 3-50-220/380V, IP55/F/TEFC/Ex-dllBT4 |
|       | 7    | Pump default without motor, retain IEC71 port.            |
|       | 8    | Pump default without motor, retain IEC80 port.            |

| Adjustment | Code | Description                                                          |
|------------|------|----------------------------------------------------------------------|
|            | M    | Manual stroke adjusting                                              |
|            | N    | Manual stroke adjusting, 4-20mA, 220VAC-1Ph                          |
|            | E    | Electric stroke adjusting 4-20mA, 220VAC-1Ph, Ex, Proof              |
|            | F    | Frequency conversion control, (0.55kw increase to 0.75kw, no 0.75KW) |

| Port | Code | Description                                    |                                      |
|------|------|------------------------------------------------|--------------------------------------|
|      | P    | NPT threaded port                              | 1/2" F                               |
|      | Q    | The inner pipe mouth hard tube intubation port | DN15(PVC hydraulic end only)         |
|      | X    | Special port                                   | Consult CNP, indicate when ordering. |

| Detection | Code | Description                                                                   | Note                       |
|-----------|------|-------------------------------------------------------------------------------|----------------------------|
|           | N    | No detection                                                                  | Single hydraulic diaphragm |
|           | B    | Diaphragm break detection and pressure gauge                                  | Double hydraulic diaphragm |
|           | C    | Diaphragm break detection, pressure gauge and explosion-proof pressure switch |                            |

| Baseplate | Code | Description  |
|-----------|------|--------------|
|           | N    | No baseplate |
|           | Y    | Baseplate    |

Remarks: (1) This code is used for GH series dosing pump made by CNP, this code apply to the usage in marketing;  
(2) Beyond (less or more than) the flow or pressure range in the catalogue, or beyond the content, please consult CNP.

# GH series hydraulic diaphragm metering pump flow pressure gauge

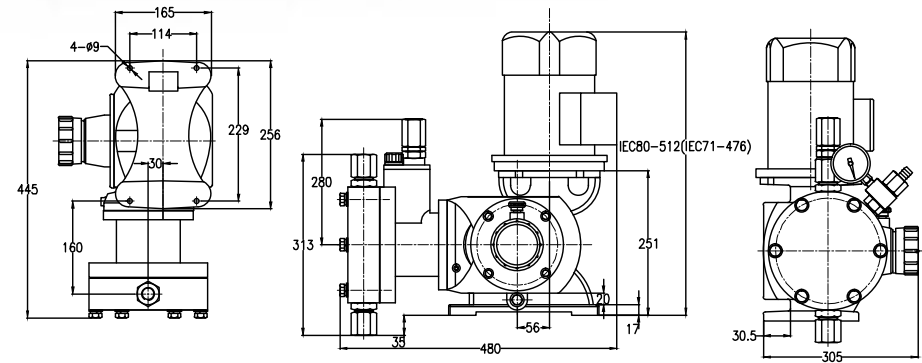
| Series | plunger diameter | Stroke (mm) | Code   | Speed Ratio | SPM | LPH@Pmax | Pmax(bar) | Motor power(KW) |
|--------|------------------|-------------|--------|-------------|-----|----------|-----------|-----------------|
| GH     | Φ30mm            | 16mm        | GH015G | 40:1        | 36  | 15       | 40        | 0.55            |
|        |                  |             | GH030G | 20:1        | 72  | 30       | 40        |                 |
|        |                  |             | GH040G | 14:1        | 102 | 40       | 40        |                 |
|        |                  |             | GH060G | 10:1        | 144 | 60       | 40        |                 |
|        |                  |             | GH080G | 8:1         | 180 | 80       | 40        | 0.75            |
|        |                  |             | GH090G | 7:1         | 206 | 90       | 40        |                 |
|        | Φ35mm            |             | GH025A | 40:1        | 36  | 25       | 30        | 0.55            |
|        |                  |             | GH050A | 20:1        | 72  | 50       | 30        |                 |
|        |                  |             | GH075A | 14:1        | 102 | 75       | 30        |                 |
|        |                  |             | GH105A | 10:1        | 144 | 105      | 30        |                 |
|        |                  |             | GH130A | 8:1         | 180 | 130      | 30        | 0.75            |
|        |                  |             | GH145A | 7:1         | 206 | 145      | 30        |                 |
|        | Φ40mm            |             | GH032B | 40:1        | 36  | 32       | 25        | 0.55            |
|        |                  |             | GH065B | 20:1        | 72  | 65       | 25        |                 |
|        |                  |             | GH100B | 14:1        | 102 | 100      | 25        |                 |
|        |                  |             | GH125B | 10:1        | 144 | 125      | 25        |                 |
|        |                  |             | GH150B | 8:1         | 180 | 150      | 25        | 0.75            |
|        |                  |             | GH200B | 7:1         | 206 | 200      | 25        |                 |
|        | Φ45mm            |             | GH045C | 40:1        | 36  | 45       | 20        | 0.55            |
|        |                  |             | GH090C | 20:1        | 72  | 90       | 20        |                 |
|        |                  |             | GH130C | 14:1        | 102 | 130      | 20        |                 |
|        |                  |             | GH190C | 10:1        | 144 | 190      | 20        |                 |
|        |                  |             | GH220C | 8:1         | 180 | 220      | 20        | 0.75            |
|        |                  |             | GH270C | 7:1         | 206 | 270      | 20        |                 |
|        | Φ50mm            |             | GH060D | 40:1        | 36  | 60       | 15        | 0.55            |
|        |                  |             | GH120D | 20:1        | 72  | 120      | 15        |                 |
|        |                  |             | GH160D | 14:1        | 102 | 160      | 15        |                 |
|        |                  |             | GH230D | 10:1        | 144 | 230      | 15        |                 |
|        |                  |             | GH300D | 8:1         | 180 | 300      | 15        | 0.75            |
|        |                  |             | GH340D | 7:1         | 206 | 340      | 15        |                 |
|        | Φ55mm            |             | GH070E | 40:1        | 36  | 70       | 12        | 0.55            |
|        |                  |             | GH140E | 20:1        | 72  | 140      | 12        |                 |
|        |                  |             | GH200E | 14:1        | 102 | 200      | 12        |                 |
|        |                  |             | GH280E | 10:1        | 144 | 280      | 12        |                 |
|        |                  |             | GH360E | 8:1         | 180 | 360      | 12        | 0.75            |
|        |                  |             | GH400E | 7:1         | 206 | 400      | 12        |                 |
|        | Φ60mm            |             | GH085F | 40:1        | 36  | 85       | 10        | 0.55            |
|        |                  |             | GH170F | 20:1        | 72  | 170      | 10        |                 |
|        |                  |             | GH240F | 14:1        | 102 | 240      | 10        |                 |
|        |                  |             | GH350F | 10:1        | 144 | 350      | 10        |                 |
|        |                  |             | GH450F | 8:1         | 180 | 450      | 10        | 0.75            |
|        |                  |             | GH500F | 7:1         | 206 | 500      | 10        |                 |

Remarks :The Speed Ratio in the gauge refers to nominal Speed Ratio  
The Pmax of plastic hydraulic end is less than 10 bar.

## Accessory

Provide system required accessories as:Filter,Buffer,Safety valve and Back pressure valve etc.

Dimension figure







## Main components material of Pump head

| Hydraulic end material | Pump head    | Valve body   | Valve seat   | Valve ball   | Diagram | Seal ring       | Spring        |
|------------------------|--------------|--------------|--------------|--------------|---------|-----------------|---------------|
| PVC                    | PVC          | PVC          | PVDF         | Ceramic      | PTFE    | Fluorous rubber | —             |
| PVDF                   | PVDF         | PVDF         | PVDF         | Ceramic      | PTFE    | Fluorous rubber | —             |
| 316SS                  | 316SS        | 316SS        | 316SS        | 316SS        | PTFE    | Fluorous rubber | 316SS         |
| Alloy20                | Alloy20      | Alloy20      | Alloy20      | Alloy20      | PTFE    | Fluorous rubber | HastelloyC276 |
| HastelloyC22           | HastelloyC22 | HastelloyC22 | HastelloyC22 | HastelloyC22 | PTFE    | Fluorous rubber | HastelloyC276 |

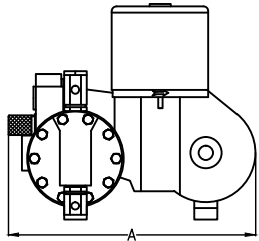
## Accessory

Provide system required accessories as:Filter,Buffer,Safety valve and Back pressure valve etc.

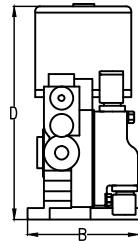
## The outline drawing of FROY series hydraulic diaphragm metering pump

### Product Dimensions

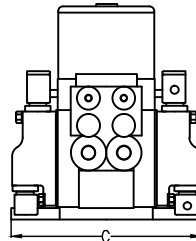
| Series   | A(mm) | B(mm) | C(mm) | D(max)(mm) |
|----------|-------|-------|-------|------------|
| RA,RH,RP | 302   | 152   | 267   | 609        |
| RB       | 476   | 192   | 343   | 650        |
| RT       | 384   | 165   | N/A   | 497        |
| RW       | 567   | 204   | N/A   | 705        |



Side view of single-head pump & double-head pump

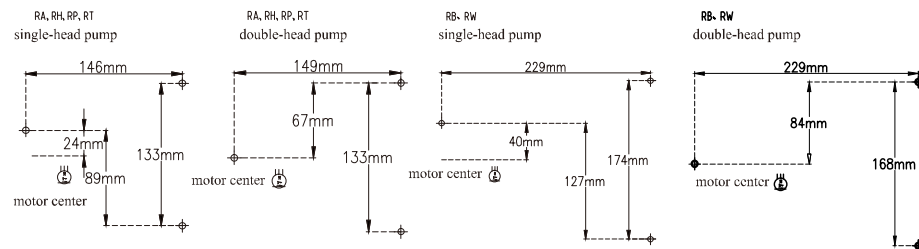


Front view of single-head pump



Front view of double-head pump

## Footing size



## FROY series hydraulic diaphragm metering pump flow rate and pressure gauge

| Series                 | Plunger diameter     | Stroke (mm) | Model | Speed Ratio | SPM(ref) 1425rpm | Maximum Consistency CP | Metal pump head(l/h)-1425rpm |       |       |       | Plastic pump head |       | motor  |
|------------------------|----------------------|-------------|-------|-------------|------------------|------------------------|------------------------------|-------|-------|-------|-------------------|-------|--------|
|                        |                      |             |       |             |                  |                        | 7bar                         | 14bar | 20bar | 24bar | 7bar              | 10bar |        |
| A                      | 7/16"<br>( Φ11.1mm ) | 20.8 mm     | RA002 | 48:1        | 30               | 1760                   | 2.3                          | 2.2   | 2.1   | 2.0   |                   |       | 0.25kw |
|                        |                      |             | RA008 | 15:1        | 96               | 310                    | 7.9                          | 7.7   | 7.3   | 7.2   |                   |       |        |
|                        | RA005                |             | 48:1  | 30          | 1760             | 5.0                    | 4.7                          | 4.5   | 4.4   |       |                   |       |        |
|                        | 5/8"<br>( Φ15.9mm )  |             | RA020 | 48:1        | 30               | 150                    | 19                           | 19    | 18    | 17    | 18                | 18    |        |
|                        |                      |             | RA040 | 24:1        | 60               | 75                     | 39                           | 38    | 36    | 36    | 36                | 35    |        |
|                        |                      |             | RA060 | 15:1        | 96               | 40                     | 61                           | 60    | 58    | 57    | 57                | 57    |        |
|                        |                      |             | RA090 | 9.5:1       | 152              | 35                     | 94                           | 91    | ----- | ----- | -----             | ----- |        |
|                        |                      |             | RA120 | 8:1         | 178              | 30                     | 116                          | 112   | ----- | ----- | -----             | ----- |        |
| 1-1/16"<br>( Φ27.0mm ) |                      |             |       |             |                  |                        |                              |       |       |       |                   |       |        |

| Series | Plunger diameter                        | Stroke (mm) | Model | Speed Ratio | SPM(ref) 1425rpm | Maximum Consistency CP | Metal pump head(l/h)-1425rpm |                    |                    |       |       | Plastic pump head |      | motor |                                                                                  |
|--------|-----------------------------------------|-------------|-------|-------------|------------------|------------------------|------------------------------|--------------------|--------------------|-------|-------|-------------------|------|-------|----------------------------------------------------------------------------------|
|        |                                         |             |       |             |                  |                        | 7bar                         | 17bar              | 24bar              | 28bar | 67bar | 103bar            | 7bar |       | 10bar                                                                            |
| B      | 19/32" <sup>(1)</sup><br>(Φ15.1mm)      | 40.6 mm     | RB020 | 25:1        | 60               | 102                    | 22                           | 22                 | 21                 | 21    | 19    | 18                | ---- | ----  | Standard Configuration is 0.75kw<br><br>1.1kw is optional when regulating speed. |
|        |                                         |             | RB030 | 19:1        | 80               | 74                     | 30                           | 29                 | 28                 | 28    | 22    | 22                | ---- | ----  |                                                                                  |
|        |                                         |             | RB040 | 12:1        | 120              | 44                     | 42                           | 40                 | 40                 | 40    | 38    | 36                | ---- | ----  |                                                                                  |
|        |                                         |             | RB050 | 9.5:1       | 152              | 38                     | 55                           | 54                 | 53                 | 53    | 49    | 47                | ---- | ----  |                                                                                  |
|        |                                         |             | RB070 | 19:1        | 80               | 169                    | 66                           | 64                 | 62                 | 61    | 50    | ----              | 66   | 66    |                                                                                  |
|        | 7/8"<br>(Φ22.2mm)                       |             | RB090 | 12:1        | 120              | 114                    | 96                           | 94                 | 92                 | 91    | 80    | ----              | 96   | 95    |                                                                                  |
|        |                                         |             | RB120 | 9.5:1       | 152              | 88                     | 125                          | 122                | 120                | 119   | 105   | ----              | 125  | 124   |                                                                                  |
|        |                                         |             | RB180 | 19:1        | 80               | 58                     | 179                          | 171                | 166                | 160   | ----  | ----              | 179  | 176   |                                                                                  |
|        |                                         |             | RB270 | 12:1        | 120              | 34                     | 267                          | 259                | 254                | 248   | ----  | ----              | 267  | 264   |                                                                                  |
|        |                                         |             | RB330 | 9.5:1       | 152              | 26                     | 329                          | 318                | 310                | 303   | ----  | ----              | 329  | 326   |                                                                                  |
| D      | 1-7/16"<br>(double-head B)<br>(Φ36.5mm) |             | RD170 | 38:1        | 40               | 100                    | 170                          | 152 <sup>(1)</sup> | 142 <sup>(1)</sup> | ----  | ----  | ----              | 170  | 163   |                                                                                  |
|        |                                         |             | RD260 | 25:1        | 60               | 80                     | 264                          | 246 <sup>(1)</sup> | 236 <sup>(1)</sup> | ----  | ----  | ----              | 264  | 258   |                                                                                  |
|        |                                         |             | RD360 | 19:1        | 80               | 58                     | 358                          | 340 <sup>(2)</sup> | ----               | ----  | ----  | ----              | 358  | 352   |                                                                                  |
|        |                                         |             | RD530 | 12:1        | 120              | 34                     | 534                          | 516 <sup>(2)</sup> | ----               | ----  | ----  | ----              | 534  | 528   |                                                                                  |
|        |                                         |             | RD660 | 9.5:1       | 152              | 26                     | 659                          | 639 <sup>(2)</sup> | ----               | ----  | ----  | ----              | 659  | 651   |                                                                                  |

(1) The maximum pressure is 24bar. (2) The maximum pressure is 17bar. (3) Metal pump head only.

| Series | Plunger diameter | Stroke (mm) | Model        | Speed Ratio | SPM(ref) 1425rpm | Maximum Consistency CP | Metal pump head(l/h)-1425rpm |       |       |       |        |        | motor  |
|--------|------------------|-------------|--------------|-------------|------------------|------------------------|------------------------------|-------|-------|-------|--------|--------|--------|
|        |                  |             |              |             |                  |                        | 7bar                         | 28bar | 55bar | 83bar | 103bar | 124bar |        |
| H      | 7/16" (Φ11.1mm)  | 20.8 mm     | <i>RH002</i> | 77:1        | 19               | 2660                   | <i>1.8</i>                   | 1.7   | 1.6   | 1.4   | 1.4    | 1.2    | 0.25kw |
|        |                  |             | <i>RH003</i> | 48:1        | 30               | 1760                   | <i>2.5</i>                   | 2.2   | 1.9   | 1.9   | 1.9    | 1.9    |        |
|        |                  |             | <i>RH005</i> | 24:1        | 60               | 720                    | <i>5.3</i>                   | 5.0   | 4.7   | 4.4   | 4.1    | 3.8    |        |
|        |                  |             | <i>RH009</i> | 15:1        | 96               | 310                    | <i>8.8</i>                   | 8.2   | 7.9   | 7.2   | 6.6    | 6.3    |        |
|        |                  |             | <i>RH014</i> | 9.5:1       | 152              | 210                    | <i>14.0</i>                  | 12.9  | 12.6  | 11.4  | 10.4   | 9.7    |        |
|        |                  |             | <i>RH015</i> | 8:1         | 178              | 180                    | <i>17.0</i>                  | 15.8  | 15.4  | 13.9  | 12.7   | 12.0   |        |

| Series                       | Plunger diameter        | Stroke (mm) | Model | Speed Ratio | SPM(ref) 1425rpm | Maximum Consistency CP | Metal pump head(l/h)-1425rpm |      |      |      | Plastic pump head | motor |
|------------------------------|-------------------------|-------------|-------|-------------|------------------|------------------------|------------------------------|------|------|------|-------------------|-------|
| P High viscosity application | 7/16"<br>( Φ 11.1mm )   | 20.8 mm     | RP001 | 77:1        | 19               | 12200                  | 1.6                          | 1.6  | 1.5  | 1.5  | 0.25kw            |       |
|                              |                         |             | RP002 | 48:1        | 30               | 7500                   | 2.3                          | 2.2  | 2.1  | 2.0  |                   |       |
|                              |                         |             | RP008 | 15:1        | 96               | 2000                   | 7.9                          | 7.7  | 7.3  | 7.2  |                   |       |
|                              | 5/8"<br>( Φ 15.9mm )    |             | RP005 | 48:1        | 30               | 5000                   | 5.0                          | 4.7  | 4.5  | 4.4  |                   |       |
|                              |                         |             | RP011 | 24:1        | 60               | 2500                   | 11.0                         | 10.7 | 10.3 | 10.0 |                   |       |
|                              |                         |             | RP015 | 15:1        | 96               | 1250                   | 17.6                         | 17.0 | 16.7 | 16.0 |                   |       |
|                              | 1-1/16"<br>( Φ 27.0mm ) |             | RP020 | 12:1        | 120              | 600                    | 21.9                         | 21.1 | 20.7 | 19.9 |                   |       |
|                              |                         |             | RP035 | 24:1        | 60               | 1000                   | 34.6                         | 33.9 | 32.1 | 31.1 |                   |       |
|                              |                         |             | RP050 | 15:1        | 96               | 500                    | 55.0                         | 54.4 | 52.2 | 50.9 |                   |       |
|                              |                         |             | RP070 | 12:1        | 120              | 300                    | 68.4                         | 67.6 | 64.9 | 63.3 |                   |       |

| Series | Plunger diameter | Stroke (mm) | Model        | Speed Ratio | SPM(ref) 1425rpm | Maximum Consistency CP | Metal pump head(l/h)-1425rpm |        |             | motor  |
|--------|------------------|-------------|--------------|-------------|------------------|------------------------|------------------------------|--------|-------------|--------|
|        |                  |             |              |             |                  |                        | 140bar                       | 175bar | 211bar      |        |
| T      | 11/32" (Φ8.7mm)  | 20.8 mm     | <i>RT001</i> | 48:1        | 30               | 1760                   | 1.4                          | 1.3    | <i>1.2</i>  | 0.55kw |
|        |                  |             | <i>RT002</i> | 24:1        | 60               | 700                    | 2.8                          | 2.5    | <i>2.3</i>  |        |
|        |                  |             | <i>RT004</i> | 15:1        | 96               | 337                    | 4.3                          | 4.0    | <i>3.8</i>  |        |
|        |                  |             | <i>RT006</i> | 9.5:1       | 152              | 143                    | 6.8                          | 6.4    | <i>6.0</i>  |        |
|        |                  |             | <i>RT007</i> | 8:1         | 180              | 95                     | 8.1                          | 7.6    | <i>7.1</i>  |        |
| W      | 1/2" (Φ12.7mm)   | 40.6 mm     | <i>RW008</i> | 38:1        | 40               | 650                    | 8.8                          | 8.4    | <i>7.8</i>  | 1.1kw  |
|        |                  |             | <i>RW012</i> | 25:1        | 60               | 285                    | 13.5                         | 12.6   | <i>11.9</i> |        |
|        |                  |             | <i>RW015</i> | 19:1        | 80               | 160                    | 18.3                         | 17.0   | <i>15.8</i> |        |
|        |                  |             | <i>RW025</i> | 12:1        | 120              | 43                     | 29.0                         | 27.1   | <i>25.2</i> |        |
|        |                  |             | <i>RW030</i> | 9.5:1       | 152              | 41                     | 34.1                         | 31.9   | <i>29.7</i> |        |

Remarks : 1. The Speed Ratio above is nominal.

2. The parts which font is bold and italic, the flow rate is rated.

## JX Series Plunger Metering Pump



### Technical Data:

Single-end Maximum Flow Rate:940L/h  
Maximum discharge pressure:50MPa  
Regulating ratio:10:1  
Steady precision :  $\pm 1\%$   
Suction lift: 2.5m  
Medium temperature:-10°C-100°C  
Maximum ambient temperature:40°C  
Maximum Altitude:1000m

### Main features

- ◎Solid and compact structure,pump head size is small, optimizable connection.
- ◎High volumetric efficiency
- ◎High measure precision and steady precision can reach  $\pm 1\%$ .
- ◎Fit for high pressure environment, it can convey media with high viscosity. Corrosive medium and dangerous chemicals are not recommended.
- ◎Variable eccentric institution regulation, insure flow pulsation gently vary.
- ◎The application of imported hydraulic composite seal enables the good performance of leak-proof and long service life.

### Control Mode:

- ◎Power supply:380V/220V -50Hz/60Hz/single phase/three phase
- ◎Variable frequency controller,accept external control signal,adjust stroke speed; input signal:4-20mA analog signal.
- ◎Motor controller,control three phase motor with mode"run/stop", adjust output flow..

### Major Applications:

◎Petrochemical /Electricity/Metallurgy/Pharmaceuticals Industry /Food Industry, Especially outstanding in the area of high precision, high pressure, high temperature.

### Main components material of hydraulic end

| Hydraulic end material | Pump head material | Valve seat/ Valve body | Valve bal      | Plunger       | Filler          | O-ring          |
|------------------------|--------------------|------------------------|----------------|---------------|-----------------|-----------------|
| 304SS                  | 304SS              | 304SS                  | 316SS/ Ceramic | 316SS+Ceramic | Fluorous rubber | Fluorous rubber |
| 316SS                  | 316SS              | 316SS                  | 316SS/ Ceramic | 316SS+Ceramic | Fluorous rubber | Fluorous rubber |

### JX series series plunger metering pump product code

| Code | Series | Flow Rate pressure | Hydraulic end | Port | Motor |
|------|--------|--------------------|---------------|------|-------|
|      | JX     |                    |               |      |       |

| Series | Code | Description                     |
|--------|------|---------------------------------|
|        | JX   | JX series plunger metering pump |

### Flow rate /Pressure

| Code      | LPH@Pmax<br>(L/h) | Pmax(Mpa) | Plunger<br>diameter<br>(mm) | SPM<br>(min-1) | Stroke<br>(mm) | Motor<br>(kw) | Weight<br>(kg) |  |  |
|-----------|-------------------|-----------|-----------------------------|----------------|----------------|---------------|----------------|--|--|
| JX940/0.9 | 940               | 0.9       | 90                          | 130            | 20             | 1.5           | 87             |  |  |
| JX940/0.7 |                   | 0.7       |                             |                |                | 1.1           |                |  |  |
| JX940/0.5 |                   | 0.5       |                             |                |                | 0.75          |                |  |  |
| JX840/1.1 | 840               | 1.1       | 85                          |                |                | 1.5           |                |  |  |
| JX840/0.8 |                   | 0.8       |                             |                |                | 1.1           |                |  |  |
| JX840/0.5 |                   | 0.5       |                             |                |                | 0.75          |                |  |  |
| JX740/1.2 | 740               | 1.2       | 80                          |                |                | 1.5           |                |  |  |
| JX740/0.9 |                   | 0.9       |                             |                |                | 1.1           |                |  |  |
| JX740/0.6 |                   | 0.6       |                             |                |                | 0.75          |                |  |  |
| JX650/1.4 | 650               | 1.4       | 75                          |                |                | 1.5           | 82             |  |  |
| JX650/1.0 |                   | 1         |                             |                |                | 1.1           |                |  |  |
| JX650/0.7 |                   | 0.7       |                             |                |                | 0.75          |                |  |  |
| JX570/1.6 | 570               | 1.6       | 70                          |                |                | 1.5           |                |  |  |
| JX570/1.1 |                   | 1.1       |                             |                |                | 1.1           |                |  |  |
| JX570/0.8 |                   | 0.8       |                             |                |                | 0.75          |                |  |  |
| JX490/1.8 | 490               | 1.8       | 65                          |                |                | 1.5           |                |  |  |
| JX490/1.3 |                   | 1.3       |                             |                |                | 1.1           |                |  |  |
| JX490/0.9 |                   | 0.9       |                             |                |                | 0.75          |                |  |  |
| JX410/2.1 | 410               | 2.1       | 60                          |                |                | 1.5           |                |  |  |
| JX410/1.6 |                   | 1.6       |                             |                |                | 1.1           |                |  |  |
| JX410/1.1 |                   | 1.1       |                             |                |                | 0.75          |                |  |  |
| JX360/2.4 | 360               | 2.4       | 56                          |                |                | 1.5           |                |  |  |
| JX360/1.8 |                   | 1.8       |                             |                |                | 1.1           |                |  |  |
| JX360/1.2 |                   | 1.2       |                             |                |                | 0.75          |                |  |  |
| JX280/3.1 | 280               | 3.1       | 50                          |                |                | 1.5           |                |  |  |
| JX280/2.2 |                   | 2.2       |                             |                |                | 1.1           |                |  |  |
| JX280/1.5 |                   | 1.5       |                             |                |                | 0.75          |                |  |  |
| JX230/3.8 | 230               | 3.8       | 45                          |                |                | 1.5           |                |  |  |
| JX230/2.8 |                   | 2.8       |                             |                |                | 1.1           |                |  |  |
| JX230/1.9 |                   | 1.9       |                             |                |                | 0.75          |                |  |  |
| JX180/4.8 | 180               | 4.8       | 40                          |                |                | 1.5           |                |  |  |
| JX180/3.5 |                   | 3.5       |                             |                |                | 1.1           |                |  |  |
| JX180/2.4 |                   | 2.4       |                             |                |                | 0.75          |                |  |  |
| JX140/6.2 | 140               | 6.2       | 35                          |                |                | 1.5           |                |  |  |
| JX140/4.6 |                   | 4.6       |                             |                |                | 1.1           |                |  |  |
| JX140/3.1 |                   | 3.1       |                             |                |                | 0.75          |                |  |  |

# Flow rate /Pressure

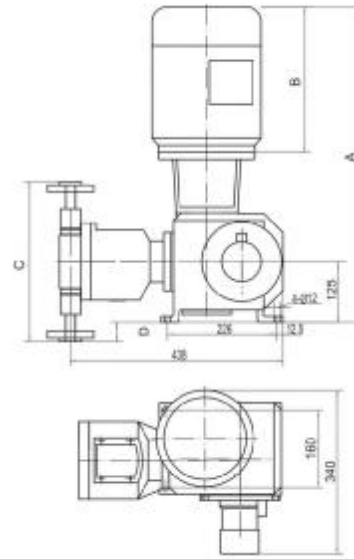
| Code        | LPH@Pmax<br>(L/h) | Pmax(Mpa) | Plunger<br>diameter<br>(mm) | SPM<br>(min-1) | Stroke<br>(mm) | Motor<br>(kw) | Weight<br>(kg) |
|-------------|-------------------|-----------|-----------------------------|----------------|----------------|---------------|----------------|
| JX100/ 8. 5 | 100               | 8. 5      | 30                          | 130            | 20             | 1. 5          | 82             |
| JX100/ 6. 2 |                   | 6. 2      |                             |                |                | 1. 1          |                |
| JX100/ 4. 2 |                   | 4. 2      |                             |                |                | 0. 75         |                |
| JX70/12. 0  | 70                | 12        | 25                          |                |                | 1. 5          |                |
| JX70/ 8. 8  |                   | 8. 8      |                             |                |                | 1. 1          |                |
| JX70/ 6. 0  |                   | 6         |                             |                |                | 0. 75         |                |
| JX55/ 15. 8 | 55                | 15. 8     | 22                          |                |                | 1. 5          | 78             |
| JX55/ 11. 7 |                   | 11. 7     |                             |                |                | 1. 1          |                |
| JX55/ 8. 0  |                   | 8         |                             |                |                | 0. 75         |                |
| JX45/ 19    | 45                | 19        | 20                          |                |                | 1. 5          |                |
| JX45/ 13. 9 |                   | 13. 9     |                             |                |                | 1. 1          |                |
| JX45/ 9. 5  |                   | 9. 5      |                             |                |                | 0. 75         |                |
| JX35/ 23. 5 | 35                | 23. 5     | 18                          |                |                | 1. 5          |                |
| JX35/ 17. 0 |                   | 17        |                             |                |                | 1. 1          |                |
| JX35/ 12. 0 |                   | 12        |                             |                |                | 0. 75         |                |
| JX25/ 34. 0 | 25                | 34        | 15                          |                |                | 1. 5          |                |
| JX25/ 25. 0 |                   | 25        |                             |                |                | 1. 1          |                |
| JX25/ 17. 0 |                   | 17        |                             |                |                | 0. 75         |                |
| JX15/ 50. 0 | 15                | 50        | 12                          |                |                | 1. 5          |                |
| JX15/ 36. 0 |                   | 36        |                             |                |                | 1. 1          |                |
| JX15/ 25. 0 |                   | 25        |                             |                |                | 0. 75         |                |
| JX10/ 50. 0 | 10                | 50        | 10                          |                |                | 1. 5          |                |
| JX10/ 36. 0 |                   | 36        |                             |                |                | 1. 1          |                |
| JX10/ 25. 0 |                   | 25        |                             |                |                | 0. 75         |                |

| Hydraulic end | Code | Description |
|---------------|------|-------------|
|               | S    | 304SS       |
|               | L    | 316SS       |

| Port | Code | Description       | JX10-55                            | JX70-410 | JX490-940 |
|------|------|-------------------|------------------------------------|----------|-----------|
|      | P    | NPT threaded port | 1/2"M                              | 1/2"F    | 1"F       |
|      | F    | Flange port       | DN15                               | DN20     | DN25      |
|      | K    | Cutting sleeve    | DN10                               | DN15     | None      |
|      | X    | Special port      | Consult CNP,indicate when ordering |          |           |

| Motor | Code | Description                                                     |
|-------|------|-----------------------------------------------------------------|
|       | 1    | Three-phase 200V/380V..1440rpm. IP55/F                          |
|       | 2    | 200V.50Hz. 1440rpm.1-50-220V. IP55/F                            |
|       | 3    | Three-phase explosion-proof 220/380V.50Hz.1440rpm.IP55/Ex-dIBT4 |
|       | 4    | Three-phase frequency conversion 220/380V.50Hz.1440rpm.IP55/F   |
|       | 5    | Pump default without motor, retain IEC90 port.                  |
|       | 6    | Other motors. Consult CNP,indicate when ordering.               |

# Dimension figure



# Installation dimension of JX series plunger metering pump

| Model     | A   | B   | C   | D  | Power (kw) | Weight (kg) |
|-----------|-----|-----|-----|----|------------|-------------|
| JX940/0.9 | 655 | 300 | 360 | 55 | 1.5        | 88          |
| JX940/0.7 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX940/0.5 | 615 | 260 | 360 | 55 | 0.75       |             |
| JX840/1.1 | 655 | 300 | 360 | 55 | 1.5        |             |
| JX840/0.8 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX840/0.5 | 615 | 260 | 360 | 55 | 0.75       |             |
| JX740/1.2 | 655 | 300 | 360 | 55 | 1.5        |             |
| JX740/0.9 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX740/0.6 | 615 | 260 | 360 | 55 | 0.75       |             |
| JX650/1.4 | 655 | 300 | 360 | 55 | 1.5        |             |
| JX650/1.0 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX650/0.7 | 615 | 260 | 360 | 55 | 0.75       |             |
| JX570/1.6 | 655 | 300 | 360 | 55 | 1.5        |             |
| JX570/1.0 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX570/0.8 | 615 | 260 | 360 | 55 | 0.75       |             |
| JX490/1.8 | 655 | 300 | 360 | 55 | 1.5        |             |
| JX490/1.3 | 635 | 280 | 360 | 55 | 1.1        |             |
| JX490/0.9 | 615 | 260 | 360 | 55 | 0.75       |             |

# Installation dimension of JX series plunger metering pump

| Model     | A   | B   | C   | D   | Power (kw) | Weight (kg) |
|-----------|-----|-----|-----|-----|------------|-------------|
| JX410/2.1 | 655 | 300 | 225 | -13 | 1.5        | 83          |
| JX410/1.6 | 635 | 280 | 225 | -13 | 1.1        |             |
| JX410/1.1 | 615 | 260 | 225 | -13 | 0.75       |             |
| JX360/2.4 | 655 | 300 | 220 | -15 | 1.5        |             |
| JX360/1.8 | 635 | 280 | 220 | -15 | 1.1        |             |
| JX360/1.2 | 615 | 260 | 220 | -15 | 0.75       |             |
| JX280/3.1 | 655 | 300 | 215 | -18 | 1.5        |             |
| JX280/2.2 | 635 | 280 | 215 | -18 | 1.1        |             |
| JX280/1.5 | 615 | 260 | 215 | -18 | 0.75       |             |
| JX230/3.8 | 655 | 300 | 210 | -20 | 1.5        |             |
| JX230/2.8 | 635 | 280 | 210 | -20 | 1.1        |             |
| JX230/1.9 | 615 | 260 | 210 | -20 | 0.75       |             |
| JX180/4.8 | 655 | 300 | 205 | -23 | 1.5        |             |
| JX180/3.5 | 635 | 280 | 205 | -23 | 1.1        |             |
| JX180/2.4 | 615 | 260 | 205 | -23 | 0.75       |             |
| JX140/6.2 | 655 | 300 | 200 | -25 | 1.5        |             |
| JX140/4.6 | 635 | 280 | 200 | -25 | 1.1        |             |
| JX140/3.1 | 615 | 260 | 200 | -25 | 0.75       |             |
| JX100/8.5 | 655 | 300 | 195 | -28 | 1.5        | 77          |
| JX100/6.2 | 635 | 280 | 195 | -28 | 1.1        |             |
| JX100/4.2 | 615 | 260 | 195 | -28 | 0.75       |             |
| JX70/12.0 | 655 | 300 | 190 | -30 | 1.5        |             |
| JX70/8.8  | 635 | 280 | 190 | -30 | 1.1        |             |
| JX70/6.0  | 615 | 260 | 190 | -30 | 0.75       |             |
| JX55/15.8 | 655 | 300 | 265 | 8   | 1.5        |             |
| JX55/11.7 | 635 | 280 | 265 | 8   | 1.1        |             |
| JX55/8.0  | 615 | 260 | 265 | 8   | 0.75       |             |
| JX45/19.0 | 655 | 300 | 260 | 5   | 1.5        |             |
| JX45/13.9 | 635 | 280 | 260 | 5   | 1.1        |             |
| JX45/9.5  | 615 | 260 | 260 | 5   | 0.75       |             |
| JX35/23.5 | 655 | 300 | 260 | 5   | 1.5        |             |
| JX35/17.0 | 635 | 280 | 260 | 5   | 1.1        |             |
| JX35/12.0 | 615 | 260 | 260 | 5   | 0.75       |             |
| JX25/34.0 | 655 | 300 | 260 | 5   | 1.5        |             |
| JX25/25.0 | 635 | 280 | 260 | 5   | 1.1        |             |
| JX25/17.0 | 615 | 260 | 260 | 5   | 0.75       |             |
| JX15/50.0 | 655 | 300 | 260 | 5   | 1.5        | 77          |
| JX15/36.0 | 635 | 280 | 260 | 5   | 1.1        |             |
| JX15/25.0 | 615 | 260 | 260 | 5   | 0.75       |             |
| JX10/50.0 | 655 | 300 | 260 | 5   | 1.5        |             |
| JX10/36.0 | 635 | 280 | 260 | 5   | 1.1        | 77          |
| JX10/25.0 | 615 | 260 | 260 | 5   | 0.75       |             |

## JMX Series Hydraulic Diaphragm Metering Pump



### Technical Data:

Flow rate: 45L/h ~ 1100L/h  
 Maximum discharge pressure: 19MPa  
 Regulating ratio 10:1  
 Steady precision: ±1%  
 Maximum suction lift: 2m  
 Medium temperature: -10℃~100℃  
 Maximum ambient temperature: +40℃  
 Maximum altitude: 1000m

### Main features

- ◎Solid, compact design; fixed seal, no leakage, the seal performance is better than plunger pump
- ◎Variable eccentric institutions regulation, ensure flow pulsation gently vary
- ◎High metering precision, steady precision can be ±1%
- ◎Built-in limited fill oil valve to ensure liquid oil capacity, built-in safety valve to ensure diaphragm to avoid liquid
- ◎When deliver corrosive slurry and flammable and explosive chemicals, you can choose double diaphragm, which is equip with diaphragm break alarm.

### Control Mode:

- ◎Supply power: 380V/220V-50Hz/60Hz/Three phase/Single phase
- ◎Variable frequency controller, accept external control signal, adjust stroke speed, input signal: 4-20mA analog signal
- ◎Motor controller, control three phase motor with run/stop, adjust output flow

### Major Applications:

◎Environmental protection, petrochemical industry, chemical industry, electricity, metallurgy, Pharmacy, Food Etc., excellent performance especially in the condition of high precision, high pressure, high temperature

### Main components material of hydraulic end

| Hydraulic end material | Pump head/Valve body | Valve seat | Valve ball    | Diagram | Plunger     | Filling          | Seal ring |
|------------------------|----------------------|------------|---------------|---------|-------------|------------------|-----------|
| 304SS                  | 304SS                | 316SS      | 316ss/Ceramic | PTFE    | 316+Ceramic | Fluorours rubber | PTFE      |
| 316SS                  | 316SS                | 316SS      | 316ss/Ceramic | PTFE    | 316+Ceramic | Fluorours rubber | PTFE      |
| PVC                    | PVC                  | PVDF       | Ceramic       | PTFE    | 316+Ceramic | Fluorours rubber | PTFE      |
| PVDF                   | PVDF                 | PVDF       | Ceramic       | PTFE    | 316+Ceramic | Fluorours rubber | PTFE      |

### JMX series hydraulic diaphragm metering pump product code

|      | Series | Flow rate /Pressure | Hydraulic end | Port | Motor | Option |
|------|--------|---------------------|---------------|------|-------|--------|
| Code | JMX    |                     |               |      |       |        |

| Series | Code | Description                                  | Code | Description                                         |
|--------|------|----------------------------------------------|------|-----------------------------------------------------|
|        | JMX  | JMX Series Hydraulic Diaphragm Metering Pump | J2MX | JMX series hydraulic double diaphragm metering pump |

### Flow rate /Pressure

| Code        | LPH@Pmax<br>(L/h) | Pmax(Mpa) | Plunger<br>diameter<br>(mm) | SPM<br>(min-1) | Stroke<br>(mm) | Motor<br>(kw) |
|-------------|-------------------|-----------|-----------------------------|----------------|----------------|---------------|
| JMX1100/0.5 | 1100              | 0.5       | 100                         | 130            | 20             | 1.5           |
| JMX1100/0.3 |                   | 0.3       |                             |                |                | 1.1           |
| JMX1100/0.2 |                   | 0.2       |                             |                |                | 0.75          |
| JMX1000/0.7 | 1000              | 0.7       | 95                          |                |                | 1.5           |
| JMX1000/0.5 |                   | 0.5       |                             |                |                | 1.1           |
| JMX1000/0.3 |                   | 0.3       |                             |                |                | 0.75          |
| JMX940/0.9  | 940               | 0.9       | 90                          |                |                | 1.5           |
| JMX940/0.7  |                   | 0.7       |                             |                |                | 1.1           |
| JMX940/0.5  |                   | 0.5       |                             |                |                | 0.75          |
| JMX840/1.1  | 840               | 1.1       | 85                          |                |                | 1.5           |
| JMX840/0.7  |                   | 0.7       |                             |                |                | 1.1           |
| JMX840/0.5  |                   | 0.5       |                             |                |                | 0.75          |
| JMX740/1.2  | 740               | 1.2       | 80                          |                |                | 1.5           |
| JMX740/0.9  |                   | 0.9       |                             |                |                | 1.1           |
| JMX740/0.6  |                   | 0.6       |                             |                |                | 0.75          |
| JMX650/1.4  | 650               | 1.4       | 75                          |                |                | 1.5           |
| JMX650/1.0  |                   | 1         |                             |                |                | 1.1           |
| JMX650/0.7  |                   | 0.7       |                             |                |                | 0.75          |
| JMX570/1.6  | 570               | 1.6       | 70                          |                |                | 1.5           |
| JMX570/1.1  |                   | 1.1       |                             |                |                | 1.1           |
| JMX570/0.8  |                   | 0.8       |                             |                |                | 0.75          |
| JMX490/1.8  | 490               | 1.8       | 65                          |                |                | 1.5           |
| JMX490/1.3  |                   | 1.3       |                             |                |                | 1.1           |
| JMX490/0.9  |                   | 0.9       |                             |                |                | 0.75          |
| JMX410/2.1  | 410               | 2.1       | 60                          |                |                | 1.5           |
| JMX410/1.6  |                   | 1.6       |                             |                |                | 1.1           |
| JMX410/1.1  |                   | 1.1       |                             |                |                | 0.75          |
| JMX360/2.4  | 360               | 2.4       | 56                          |                |                | 1.5           |
| JMX360/1.8  |                   | 1.8       |                             |                |                | 1.1           |
| JMX360/1.2  |                   | 1.2       |                             |                |                | 0.75          |

| Flow rate / Pressure | Code        | LPH@Pmax (L/h) | Pmax(Mpa) | Plunger diameter (mm) | SPM (min-1) | Stroke (mm) | Motor (KW) |
|----------------------|-------------|----------------|-----------|-----------------------|-------------|-------------|------------|
|                      | JMX280/3. 1 | 280            | 3. 1      | 50                    | 130         | 20          | 1. 5       |
|                      | JMX280/2. 2 |                | 2. 2      |                       |             |             | 1. 1       |
|                      | JMX280/1. 5 |                | 1. 5      |                       |             |             | 0. 75      |
|                      | JMX230/3. 8 | 230            | 3. 8      | 45                    |             |             | 1. 5       |
|                      | JMX230/2. 8 |                | 2. 8      |                       |             |             | 1. 1       |
|                      | JMX230/1. 9 |                | 1. 9      |                       |             |             | 0. 75      |
|                      | JMX180/4. 8 | 180            | 4. 8      | 40                    |             |             | 1. 5       |
|                      | JMX180/3. 5 |                | 3. 5      |                       |             |             | 1. 1       |
|                      | JMX180/2. 4 |                | 2. 4      |                       |             |             | 0. 75      |
|                      | JMX140/6. 2 | 140            | 6. 2      | 35                    |             |             | 1. 5       |
|                      | JMX140/4. 6 |                | 4. 6      |                       |             |             | 1. 1       |
|                      | JMX140/3. 1 |                | 3. 1      |                       |             |             | 0. 75      |
|                      | JMX100/8. 5 | 100            | 8. 5      | 30                    |             |             | 1. 5       |
|                      | JMX100/6. 2 |                | 6. 2      |                       |             |             | 1. 1       |
|                      | JMX100/4. 2 |                | 4. 2      |                       |             |             | 0. 75      |
|                      | JMX70/12. 0 | 70             | 12        | 25                    |             |             | 1. 5       |
|                      | JMX70/8. 8  |                | 8. 8      |                       |             |             | 1. 1       |
|                      | JMX70/6. 0  |                | 6         |                       |             |             | 0. 75      |
|                      | JMX55/15. 8 | 55             | 15. 8     | 22                    |             |             | 1. 5       |
|                      | JMX55/11. 7 |                | 11. 7     |                       |             |             | 1. 1       |
|                      | JMX55/8. 0  |                | 8         |                       |             |             | 0. 75      |
|                      | JMX45/19    | 45             | 19        | 20                    |             |             | 1. 5       |
|                      | JMX45/13. 9 |                | 13. 9     |                       |             |             | 1. 1       |
|                      | JMX45/9. 5  |                | 9. 5      |                       |             |             | 0. 75      |

| Hydraulic end | Code | Material                                                            | Remark | Code | Material | Remark                                                                                                                            |
|---------------|------|---------------------------------------------------------------------|--------|------|----------|-----------------------------------------------------------------------------------------------------------------------------------|
|               | S    | 304SS                                                               |        | P    | PVC      | PVC&PVDF hydraulic end only suit for flow rate 570L/h to 1100L/h. The maximum bearing pressure of plastic hydraulic end is 10bar. |
|               | L    | 316SS                                                               |        |      |          |                                                                                                                                   |
|               | Z    | Special material hydraulic end. Consult CNP,indicate when ordering. |        | T    | PVDF     |                                                                                                                                   |

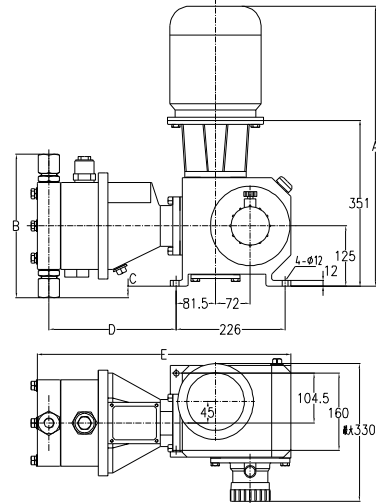
| Port | Code | Description       | JMX45-55                           | JMX70-490 | JMX570-1100         |                       |                                      |
|------|------|-------------------|------------------------------------|-----------|---------------------|-----------------------|--------------------------------------|
|      |      |                   |                                    |           | Metal hydraulic end | Plastic hydraulic end |                                      |
|      | P    | NPT threaded port | 1/2″M                              | 1/2″F     | 1″M                 | 1″F                   |                                      |
|      | F    | Flange port       | DN15                               | DN20      | DN25                |                       |                                      |
|      | K    | Cutting sleeve    | DN10                               | DN15      | NO                  |                       |                                      |
|      | X    | Special port      | Consult CNP,indicate when ordering |           |                     |                       | Dash area is standard configuration. |

| Motor | Code | Description                                                 | Code             | Description                                                  |
|-------|------|-------------------------------------------------------------|------------------|--------------------------------------------------------------|
|       | 1    | Three-phase 220V/380V,50Hz,1440rpm,IP55/F dIIBT4            | 4 <sup>(1)</sup> | Three-phase variable frequency 220V/380V,50Hz,1440rpm,IP55/F |
|       | 2    | Single-phase 220V,50Hz,1440rpm,IP55/F                       | 5 <sup>(1)</sup> | Pump default without motor, retain IEC90 port.               |
|       | 3    | Three-phase explosion-proof 380V,50Hz,1440rpm,IP55/F dIIBT4 | 6 <sup>(1)</sup> | Other motors. Consult CNP,indicate when ordering.            |

| Option | Code             | Description                                                                   | Remark                                                  |
|--------|------------------|-------------------------------------------------------------------------------|---------------------------------------------------------|
|        | N                | No option                                                                     | -----                                                   |
|        | B <sup>(2)</sup> | The diaphragm rupture test and pressure gauge                                 | With pressure gauge                                     |
|        | C <sup>(2)</sup> | The diaphragm rupture test and pressure gauge,pressure switch                 | With normal pressure switch and pressuregauge           |
|        | D <sup>(2)</sup> | The diaphragm rupture test and pressure gauge,explosion-proof pressure switch | With explosion-proof pressure switch and pressure gauge |

1.When you choose variable frequency motor ,the power lever should be one grade more than normal.  
2.If you choose double diaphragm rupture test, the flow rate will decrease 5%

Dimension figure



JMX installation dimension

| Model       | Motor Power (kW) | A (mm) | B(mm) Metal pump head | C(mm) Plastic pump head | D(mm) Metal pump head | E(mm) Plastic pump head |
|-------------|------------------|--------|-----------------------|-------------------------|-----------------------|-------------------------|
| JMX1100/0.2 | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX1100/0.3 | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX1100/0.5 | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX1000/0.3 | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX1000/0.5 | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX1000/0.7 | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX940/0.5  | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX940/0.7  | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX940/0.9  | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX840/0.5  | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX840/0.7  | 1.1              | 620    | 418                   | 84                      | 266.5                 | 550                     |
| JMX840/1.1  | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX740/0.6  | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX740/0.9  | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX740/1.2  | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX650/0.7  | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX650/1.0  | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX650/1.4  | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |
| JMX570/0.8  | 0.75             | 591    | 356                   | 53                      | 278.5                 | 552                     |
| JMX570/1.1  | 1.1              | 620    | 356                   | 53                      | 278.5                 | 552                     |
| JMX570/1.6  | 1.5              | 666    | 356                   | 53                      | 278.5                 | 552                     |

JMX installation dimension

| Model      | Motor Power (kW) | A (mm) | B(mm) Metal pump head | C(mm) Plastic pump head | D(mm) Metal pump head | E(mm) Plastic pump head |
|------------|------------------|--------|-----------------------|-------------------------|-----------------------|-------------------------|
| JMX490/0.9 | 0.75             | 591    | 298                   | 24                      | 264.5                 | 527                     |
| JMX490/1.3 | 1.1              | 620    |                       |                         |                       |                         |
| JMX490/1.8 | 1.5              | 666    |                       |                         |                       |                         |
| JMX410/1.1 | 0.75             | 591    |                       |                         |                       |                         |
| JMX410/1.6 | 1.1              | 620    |                       |                         |                       |                         |
| JMX410/2.1 | 1.5              | 666    |                       |                         |                       |                         |
| JMX360/1.2 | 0.75             | 591    |                       |                         |                       |                         |
| JMX360/1.8 | 1.1              | 620    |                       |                         |                       |                         |
| JMX360/2.4 | 1.5              | 666    |                       |                         |                       |                         |
| JMX280/1.5 | 0.75             | 591    |                       |                         |                       |                         |
| JMX280/2.2 | 1.1              | 620    | 278                   | 14                      | 264.5                 | 527                     |
| JMX280/3.1 | 1.5              | 666    |                       |                         |                       |                         |
| JMX230/1.9 | 0.75             | 591    |                       |                         |                       |                         |
| JMX230/2.8 | 1.1              | 620    |                       |                         |                       |                         |
| JMX230/3.8 | 1.5              | 666    |                       |                         |                       |                         |
| JMX180/2.4 | 0.75             | 591    |                       |                         |                       |                         |
| JMX180/3.5 | 1.1              | 620    |                       |                         |                       |                         |
| JMX180/4.8 | 1.5              | 666    |                       |                         |                       |                         |
| JMX140/3.1 | 0.75             | 591    |                       |                         |                       |                         |
| JMX140/4.6 | 1.1              | 620    |                       |                         |                       |                         |
| JMX140/6.2 | 1.5              | 666    | 332                   | 41                      | 264.5                 | 527                     |
| JMX100/4.2 | 0.75             | 591    |                       |                         |                       |                         |
| JMX100/6.2 | 1.1              | 620    |                       |                         |                       |                         |
| JMX100/8.5 | 1.5              | 666    |                       |                         |                       |                         |
| JMX70/6.0  | 0.75             | 591    |                       |                         |                       |                         |
| JMX70/8.8  | 1.1              | 620    |                       |                         |                       |                         |
| JMX70/12.0 | 1.5              | 666    |                       |                         |                       |                         |
| JMX55/8.0  | 0.75             | 591    |                       |                         |                       |                         |
| JMX55/11.7 | 1.1              | 620    |                       |                         |                       |                         |
| JMX55/15.8 | 1.5              | 666    |                       |                         |                       |                         |
| JMX45/9.5  | 0.75             | 591    |                       |                         |                       |                         |
| JMX45/13.9 | 1.1              | 620    |                       |                         |                       |                         |
| JMX45/19.0 | 1.5              | 666    |                       |                         |                       |                         |



## J(M)XS Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0-100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



### Technical Data:

| Model                 | Flow rate (L/h) | motor power |        |        | Plunger diameter (mm) | Dimension figure |
|-----------------------|-----------------|-------------|--------|--------|-----------------------|------------------|
|                       |                 | 0.25kw      | 0.37kw | 0.55kw |                       |                  |
| J(M)XS0.8/40/50/60    | 0.8             | 40          | 50     | 60     | 3                     |                  |
| J(M)XS3.3/20/28/36    | 3.3             | 20          | 28     | 36     | 6                     |                  |
| J(M)XS7.3/11/14/20    | 7.3             | 11          | 14     | 20     | 9                     |                  |
| J(M)XS15/5.5/8/11     | 15              | 5.5         | 8.0    | 11     | 13                    |                  |
| J(M)XS30/2.5/3.2/5    | 30              | 2.5         | 3.2    | 5.0    | 18                    |                  |
| J(M)XS48/1.5/2/3      | 48              | 1.5         | 2.0    | 3.0    | 23                    |                  |
| J(M)XS70/1/1.5/2      | 70              | 1.0         | 1.5    | 2.0    | 28                    |                  |
| J(M)XS100/0.8/1.2/1.5 | 100             | 0.8         | 1.2    | 1.5    | 33                    |                  |
| J(M)XS130/0.7/0.9/1.2 | 130             | 0.7         | 0.9    | 1.2    | 38                    |                  |
| J(M)XS165/0.5/0.6/1.0 | 165             | 0.5         | 0.6    | 1.0    | 43                    |                  |
| J(M)XS210/0.4/0.5/0.8 | 210             | 0.4         | 0.5    | 0.8    | 48                    |                  |
| J(M)XS255/0.3/0.4/0.6 | 255             | 0.3         | 0.4    | 0.6    | 53                    |                  |
| J(M)XS305/0.2/0.3/0.5 | 305             | 0.2         | 0.3    | 0.5    | 58                    |                  |

## J(M)XL Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0-100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



### Technical Data:

| Model                 | Flow rate (L/h) | motor power |        |        | Plunger diameter (mm) | Dimension figure |
|-----------------------|-----------------|-------------|--------|--------|-----------------------|------------------|
|                       |                 | 0.25kw      | 0.37kw | 0.55kw |                       |                  |
| J(M)XL0.8/40/50/55    | 0.8             | 40          | 50     | 55     | 3                     |                  |
| J(M)XL3.3/30/32/40    | 3.0             | 30          | 32     | 40     | 6                     |                  |
| J(M)XL7.2/20/22/30    | 7.0             | 20          | 22     | 30     | 8                     |                  |
| J(M)XL14/12/15/19     | 14              | 12          | 15     | 19     | 13                    |                  |
| J(M)XL27/6/8/13       | 27              | 6.0         | 8.0    | 13     | 18                    |                  |
| J(M)XL45/3.3/6/8.2    | 45              | 3.3         | 6.0    | 8.2    | 23                    |                  |
| J(M)XL65/2/3/4.2      | 65              | 2.0         | 3.0    | 4.2    | 28                    |                  |
| J(M)XL90/1.5/2/3.5    | 90              | 1.5         | 2.0    | 3.5    | 33                    |                  |
| J(M)XL120/1.2/1.7/2.5 | 120             | 1.2         | 1.7    | 2.5    | 38                    |                  |
| J(M)XL150/1/1.5/2.2   | 150             | 1.0         | 1.5    | 2.2    | 43                    |                  |
| J(M)XL195/0.8/1.3/2.1 | 195             | 0.8         | 1.3    | 2.1    | 48                    |                  |
| J(M)XL235/0.7/1/1.9   | 235             | 0.7         | 1.0    | 1.9    | 53                    |                  |
| J(M)XL285/0.5/0.8/1.5 | 285             | 0.5         | 0.8    | 1.5    | 58                    |                  |
| J(M)XL330/0.4/0.7/1.3 | 330             | 0.4         | 0.7    | 1.3    | 63                    |                  |
| J(M)XL390/0.3/0.4/0.8 | 390             | 0.3         | 0.4    | 0.8    | 68                    |                  |
| J(M)XL450/0.2/0.3/0.6 | 450             | 0.2         | 0.3    | 0.6    | 73                    |                  |

## J(M)X Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ U-cam regulating structure, compact and reliable, able to adjust stroke from 0-100%.
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability
- ◎ Oil bath lubrication, driving components have long working life.
- ◎ Adjustable range: 0-100%, measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven..
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



Technical Data:

| Model              | Flow rate (L/h) | motor power          |        | Plunger diameter (mm) | Dimension figure |
|--------------------|-----------------|----------------------|--------|-----------------------|------------------|
|                    |                 | 0.37kw               | 0.55kw |                       |                  |
|                    |                 | Outlet pressure(Mpa) |        |                       |                  |
| 2J(M)X270/100      | 2.0             | 70                   | 100    | 5                     |                  |
| 2J(M)X6/25/46      | 6.0             | 25                   | 46     | 8                     |                  |
| 2J(M)X10/15/29     | 10              | 15                   | 29     | 10                    |                  |
| 2J(M)X16/12/22     | 16              | 12                   | 22     | 12                    |                  |
| 2J(M)X26/7.5/13    | 26              | 7.5                  | 13     | 15                    |                  |
| 2J(M)X50/4.2/8     | 50              | 4.2                  | 8.0    | 20                    |                  |
| 2J(M)X76/2.6/4.8   | 76              | 2.6                  | 4.8    | 25                    |                  |
| 2J(M)X110/1.8/3.2  | 110             | 1.8                  | 3.2    | 30                    |                  |
| 2J(M)X150/1.3/2.4  | 150             | 1.3                  | 2.4    | 35                    |                  |
| 2J(M)X200/1/1.8    | 200             | 1.0                  | 1.8    | 40                    |                  |
| 2J(M)X250/0.8/1.5  | 250             | 0.8                  | 1.5    | 45                    |                  |
| 2J(M)X310/0.65/1.2 | 310             | 0.65                 | 1.2    | 50                    |                  |
| 2J(M)X390/0.5/1    | 390             | 0.5                  | 1.0    | 55                    |                  |
| 2J(M)X340/1/1.8    | 340             | 1.0                  | 1.8    | 40                    |                  |
| 2J(M)X420/0.8/1.5  | 420             | 0.8                  | 1.5    | 45                    |                  |
| 2J(M)X520/0.65/1.2 | 520             | 0.65                 | 1.2    | 50                    |                  |
| 2J(M)X640/0.5/1    | 640             | 0.5                  | 1.0    | 55                    |                  |

## J(M)ZS Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ All-in-one structure of variable worm gearing, low noise, efficient.
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- ◎ Adjustable range: 0-100%, measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



Technical Data:

| Model               | Flow rate (L/h) | motor power          |       | Plunger diameter (mm) | Dimension figure |
|---------------------|-----------------|----------------------|-------|-----------------------|------------------|
|                     |                 | 0.75kw               | 1.5kw |                       |                  |
|                     |                 | Outlet pressure(Mpa) |       |                       |                  |
| J(M)ZS16/16/40      | 16              | 16                   | 40    | 8                     |                  |
| J(M)ZS30/12/30      | 30              | 12                   | 30    | 13                    |                  |
| J(M)ZS60/7/15       | 60              | 7.0                  | 15    | 18                    |                  |
| J(M)ZS100/4.5/10    | 100             | 4.5                  | 10    | 23                    |                  |
| J(M)ZS150/2.5/7     | 150             | 2.5                  | 7.0   | 28                    |                  |
| J(M)ZS210/2.1/5     | 210             | 2.1                  | 5.0   | 33                    |                  |
| J(M)ZS280/1.5/4     | 280             | 1.5                  | 4.0   | 38                    |                  |
| J(M)ZS360/1.2/3     | 360             | 1.2                  | 3.0   | 43                    |                  |
| J(M)ZS450/1/2.5     | 450             | 1.0                  | 2.5   | 48                    |                  |
| J(M)ZS550/0.8/2     | 550             | 0.8                  | 2.0   | 53                    |                  |
| J(M)ZS660/0.5/1.5   | 660             | 0.6                  | 1.5   | 58                    |                  |
| J(M)ZS780/0.5/1.2   | 780             | 0.5                  | 1.2   | 63                    |                  |
| J(M)ZS900/0.45/1    | 900             | 0.45                 | 1.0   | 68                    |                  |
| J(M)ZS1000/0.4/0.8  | 1000            | 0.4                  | 0.8   | 73                    |                  |
| J(M)ZS1200/0.32/0.6 | 1200            | 0.32                 | 0.6   | 78                    |                  |
| J(M)ZS1360/0.3/0.5  | 1360            | 0.3                  | 0.5   | 83                    |                  |
| J(M)ZS1500/0.25/0.4 | 1500            | 0.25                 | 0.4   | 88                    |                  |

## J(M)Z Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ Mechanical diaphragm pump no need plunger to seal, it use high performance diaphragm, failure free period is longer than normal pump. No pump head leakage in diaphragm warranty period.
- ◎ Simple structure, convenient operation and maintenance.
- ◎ The check valve fitted with high precision anti-corrosion and abrasive resistance check emery ceramic ball, linear seal to ensure the measurement smooth and accurate.
- ◎ Adjustable range: 0-100%, measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



### Technical Data:

| Model         | Flow rate | Pressure | motor power | Dimension figure |
|---------------|-----------|----------|-------------|------------------|
| J(M)Z320/1.0  | 320       | 1.0      | 0.55        |                  |
| J(M)Z400/0.8  | 400       | 0.8      | 0.55        |                  |
| J(M)Z550/0.6  | 550       | 0.6      | 0.55        |                  |
| J(M)Z670/0.6  | 670       | 0.6      | 0.55        |                  |
| J(M)Z800/0.7  | 800       | 0.7      | 0.75        |                  |
| J(M)Z1000/0.6 | 1000      | 0.6      | 0.75        |                  |
| J(M)Z1200/0.5 | 1200      | 0.5      | 0.75        |                  |
| J(M)Z1500/0.5 | 1500      | 0.5      | 0.75        |                  |
| J(M)Z1800/0.4 | 1800      | 0.4      | 0.75        |                  |

## J(M)ZL Metering Pump

### Performance description

- ◎ Pump head can be hydraulic diaphragm type, plunger type and piston type.
- ◎ Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- ◎ With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- ◎ The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- ◎ High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- ◎ Adjustable range: 0-100%, measurement precision:  $\pm 0.5\%$ .
- ◎ Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- ◎ Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



### Technical Data:

| Model               | Flow rate (L/h) | motor power |       | Plunger diameter (mm) | Dimension figure |
|---------------------|-----------------|-------------|-------|-----------------------|------------------|
|                     |                 | 0.75kw      | 1.5kw |                       |                  |
| J(M)ZL16/16/50      | 16              | 16          | 50    | 8                     |                  |
| J(M)ZL36/12/35      | 30              | 12          | 35    | 13                    |                  |
| J(M)ZL60/7/20       | 60              | 7.0         | 20    | 18                    |                  |
| J(M)ZL100/4.5/13    | 100             | 4.5         | 13    | 23                    |                  |
| J(M)ZL150/2.5/8     | 150             | 2.5         | 8.0   | 28                    |                  |
| J(M)ZL210/2.1/6     | 210             | 2.1         | 6.0   | 33                    |                  |
| J(M)ZL280/1.5/5     | 280             | 1.5         | 5.0   | 38                    |                  |
| J(M)ZL360/1.2/3.5   | 360             | 1.2         | 3.5   | 43                    |                  |
| J(M)ZL450/1/3       | 450             | 1.0         | 3.0   | 48                    |                  |
| J(M)ZL550/0.8/2.5   | 550             | 0.8         | 2.5   | 53                    |                  |
| J(M)ZL660/0.6/2     | 660             | 0.6         | 2.0   | 58                    |                  |
| J(M)ZL780/0.5/1.6   | 780             | 0.5         | 1.6   | 63                    |                  |
| J(M)ZL900/0.45/1.4  | 900             | 0.45        | 1.4   | 68                    |                  |
| J(M)ZL1000/0.4/1.2  | 1000            | 0.4         | 1.2   | 73                    |                  |
| J(M)ZL1200/0.32/1   | 1200            | 0.32        | 1.0   | 78                    |                  |
| J(M)ZL1360/0.3/0.8  | 1360            | 0.3         | 0.8   | 83                    |                  |
| J(M)ZL1500/0.23/0.7 | 1500            | 0.23        | 0.7   | 88                    |                  |
| J(M)ZL1700/0.2/0.6  | 1700            | 0.2         | 0.6   | 93                    |                  |
| J(M)ZL1900/0.15/0.5 | 1900            | 0.15        | 0.5   | 98                    |                  |
| J(M)ZL2300/0.13/0.4 | 2300            | 0.13        | 0.4   | 108                   |                  |
| J(M)ZL2750/0.1/0.3  | 2750            | 0.1         | 0.3   | 118                   |                  |
| J(M)ZL3200/0.1/0.3  | 3200            | 0.1         | 0.3   | 128                   |                  |



## J(M)Z Metering Pump

### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.
- Can connect in parallel (from 2 to 12 sets) as proportioning pump, pulse smooth.



## J(M)DL Metering Pump

### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



### Technical Data:

| Model               | Flow rate (L/h) | motor power          |       | Plunger diameter (mm) | Dimension figure |
|---------------------|-----------------|----------------------|-------|-----------------------|------------------|
|                     |                 | 0.75kw               | 1.5kw |                       |                  |
|                     |                 | Outlet pressure(Mpa) |       |                       |                  |
| 2J(M)Z20/40/64      | 20              | 40                   | 64    | 10                    |                  |
| 2J(M)Z34/23/56      | 34              | 23                   | 56    | 12                    |                  |
| 2J(M)Z56/15/34      | 56              | 15                   | 34    | 15                    |                  |
| 2J(M)Z96/8/19       | 96              | 8.0                  | 19    | 20                    |                  |
| 2J(M)Z160/5.2/12    | 160             | 5.2                  | 12    | 25                    |                  |
| 2J(M)Z230/4.4/8.8   | 230             | 4.4                  | 8.8   | 30                    |                  |
| 2J(M)Z310/3.2/6.5   | 310             | 3.2                  | 6.5   | 35                    |                  |
| 2J(M)Z400/2.4/4.8   | 400             | 2.4                  | 4.8   | 40                    |                  |
| 2J(M)Z520/2/3.7     | 520             | 2.0                  | 3.7   | 45                    |                  |
| 2J(M)Z640/1.6/3     | 640             | 1.6                  | 3.0   | 50                    |                  |
| 2J(M)Z780/1.3/2.4   | 780             | 1.3                  | 2.4   | 55                    |                  |
| 2J(M)Z920/1/2       | 920             | 1.0                  | 2.0   | 60                    |                  |
| 2J(M)Z1090/0.8/1.7  | 1090            | 0.8                  | 1.7   | 65                    |                  |
| 2J(M)Z1260/0.65/1.5 | 1260            | 0.65                 | 1.5   | 70                    |                  |
| 2J(M)Z1450/0.56/1.3 | 1450            | 0.56                 | 1.3   | 75                    |                  |
| 2J(M)Z1650/0.45/1.2 | 1650            | 0.45                 | 1.2   | 80                    |                  |
| 2J(M)Z1860/0.4/1    | 1860            | 0.4                  | 1.0   | 85                    |                  |
| 2J(M)Z2090/0.36/0.9 | 2090            | 0.36                 | 0.9   | 90                    |                  |
| 2J(M)Z2320/0.32/0.8 | 2320            | 0.32                 | 0.8   | 95                    |                  |
| 2J(M)Z2580/0.25/0.7 | 2580            | 0.25                 | 0.7   | 100                   |                  |
| 2J(M)Z2840/0.2/0.65 | 2840            | 0.2                  | 0.65  | 85                    |                  |
| 2J(M)Z3130/0.18/0.6 | 3130            | 0.18                 | 0.6   | 90                    |                  |
| 2J(M)Z3490/0.56/0.5 | 3490            | 0.56                 | 0.5   | 95                    |                  |
| 2J(M)Z3860/0.5/0.4  | 3860            | 0.5                  | 0.4   | 100                   |                  |

### Technical Data:

| Model                  | Flow rate (L/h) | motor power          |       |       | Plunger diameter (mm) | Dimension figure |
|------------------------|-----------------|----------------------|-------|-------|-----------------------|------------------|
|                        |                 | 4kw                  | 5.5kw | 7.5kw |                       |                  |
|                        |                 | Outlet pressure(Mpa) |       |       |                       |                  |
| J(M)DL42/85/90/95      | 42              | 85                   | 90    | 95    | 15                    |                  |
| J(M)DL75/50/73/90      | 75              | 50                   | 73    | 90    | 20                    |                  |
| J(M)DL125/34.5/50/70   | 125             | 34.5                 | 50    | 70    | 25                    |                  |
| J(M)DL182/23/34/48     | 182             | 23                   | 34    | 48    | 30                    |                  |
| J(M)DL247/16/25/35     | 247             | 16                   | 25    | 35    | 35                    |                  |
| J(M)DL320/12.5/19/26   | 320             | 12.5                 | 19    | 26    | 40                    |                  |
| J(M)DL405/9.5/14/20    | 405             | 9.5                  | 14    | 20    | 45                    |                  |
| J(M)DL505/7.5/11.5/16  | 505             | 7.5                  | 11.5  | 16    | 50                    |                  |
| J(M)DL612/6.2/9.2/13.2 | 612             | 6.2                  | 9.2   | 13.2  | 55                    |                  |
| J(M)DL725/5.3/7.8/11   | 725             | 5.3                  | 7.8   | 11    | 60                    |                  |
| J(M)DL855/4.3/6.4/9    | 855             | 4.3                  | 6.4   | 9.0   | 65                    |                  |
| J(M)DL900/3.7/5.5/7.8  | 900             | 3.7                  | 5.5   | 7.8   | 70                    |                  |
| J(M)DL1135/3.3/5/7     | 1135            | 3.3                  | 5.0   | 7.0   | 75                    |                  |
| J(M)DL1295/2.8/4.2/6   | 1295            | 2.8                  | 4.2   | 6.0   | 80                    |                  |
| J(M)DL1480/2.5/3.7/5   | 1480            | 2.5                  | 3.7   | 5.0   | 85                    |                  |
| J(M)DL1660/2.2/3.2/4.6 | 1660            | 2.2                  | 3.2   | 4.6   | 90                    |                  |
| J(M)DL1850/2/3/4.2     | 1850            | 2.0                  | 3.0   | 4.2   | 95                    |                  |
| J(M)DL2050/1.8/2.6/3.7 | 2050            | 1.8                  | 2.6   | 3.7   | 100                   |                  |
| J(M)DL2500/1.5/2.1/3   | 2500            | 1.5                  | 2.1   | 3.0   | 110                   |                  |
| J(M)DL2960/1.2/1.8/2.6 | 2960            | 1.2                  | 1.8   | 2.6   | 120                   |                  |
| J(M)DL3500/1.1/1.6/2.2 | 3500            | 1.1                  | 1.6   | 2.2   | 130                   |                  |
| J(M)DL4050/0.9/1.3/1.7 | 4050            | 0.9                  | 1.3   | 1.7   | 140                   |                  |
| J(M)DL4680/0.8/1.2/1.7 | 4680            | 0.8                  | 1.2   | 1.7   | 150                   |                  |
| J(M)DL5320/0.7/1/1.5   | 5320            | 0.7                  | 1.0   | 1.5   | 160                   |                  |
| J(M)DL5980/0.6/0.9/1.3 | 5980            | 0.6                  | 0.9   | 1.3   | 170                   |                  |

## J(M)TS Metering Pump

### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.



## J(M)TF Metering Pump

### Performance description

- Pump head can be hydraulic diaphragm type, plunger type and piston type.
- Hydraulic balance diaphragm pump with Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.
- With high quality N-crankshaft regulating structure, able to adjust linear stroke with power on or off
- The check valve fitted with high lever anti-corrosion ball valve and linear seal, the measure is smooth and accurate.
- High-performance plunger and imported filler, diaphragm and seal assembly, long service life, good seal ability.
- Adjustable range: 0-100%; measurement precision:  $\pm 0.5\%$ .
- Adjustment mode can be selected manually, motor-driven, frequency conversion driven, automatically driven.
- Many kind of pump head material like 45 steel, 304SS, 316SS and high polymer materials.
- Can connect in parallel (from 2 to 12 sets) as proportioning pump, pulse smooth.



### Technical Data:

| Model                   | Flow rate (L/h) | motor power |      |      | Plunger diameter (mm) | Dimension figure |
|-------------------------|-----------------|-------------|------|------|-----------------------|------------------|
|                         |                 | 7.5kw       | 11kw | 15kw |                       |                  |
| J(M)TS175/60/80/100     | 175             | 60          | 80   | 100  | 25                    |                  |
| J(M)TS255/45/60/80      | 255             | 45          | 60   | 80   | 30                    |                  |
| J(M)TS350/28/37/54      | 350             | 28          | 37   | 54   | 35                    |                  |
| J(M)TS455/19/26/38      | 455             | 19          | 26   | 38   | 40                    |                  |
| J(M)TS715/13/17/26      | 715             | 13          | 17   | 26   | 50                    |                  |
| J(M)TS865/10/13.6/20    | 865             | 10          | 13.6 | 20   | 55                    |                  |
| J(M)TS1030/8/10.8/15.8  | 1030            | 8.0         | 10.8 | 15.8 | 60                    |                  |
| J(M)TS1200/6.4/8.8/12.8 | 1200            | 6.4         | 8.8  | 12.8 | 65                    |                  |
| J(M)TS1610/5.2/7.2/10.4 | 1610            | 5.2         | 7.2  | 10.4 | 75                    |                  |
| J(M)TS1830/4.5/6/8.9    | 1830            | 4.5         | 6.0  | 8.9  | 80                    |                  |
| J(M)TS2070/3.8/5.3/7.8  | 2070            | 3.8         | 5.3  | 7.8  | 85                    |                  |
| J(M)TS2320/3.3/4.5/6.6  | 2320            | 3.3         | 4.5  | 6.6  | 90                    |                  |
| J(M)TS2585/2.9/4/5.8    | 2585            | 2.9         | 4.0  | 5.8  | 95                    |                  |
| J(M)TS3150/2.5/3.5/5    | 3150            | 2.5         | 3.5  | 5.0  | 105                   |                  |
| J(M)TS3465/2.2/3/4.4    | 3465            | 2.2         | 3.0  | 4.4  | 110                   |                  |
| J(M)TS3800/2/2.7/3.9    | 3800            | 2.0         | 2.7  | 3.9  | 115                   |                  |
| J(M)TS4350/1.8/2.4/3.5  | 4350            | 1.8         | 2.4  | 3.5  | 100                   |                  |
| J(M)TS4800/1.6/2.2/3.2  | 4800            | 1.6         | 2.2  | 3.2  | 105                   |                  |
| J(M)TS5800/1.3/1.8/2.6  | 5800            | 1.3         | 1.8  | 2.6  | 115                   |                  |
| J(M)TS7000/1.1/1.5/2.2  | 7000            | 1.1         | 1.5  | 2.2  | 120                   |                  |
| J(M)TS8500/0.9/1.2/1.8  | 8500            | 0.9         | 1.2  | 1.8  | 140                   |                  |
| J(M)TS9300/0.8/1.1/1.6  | 9300            | 0.8         | 1.1  | 1.6  | 145                   |                  |
| J(M)TS9800/0.7/1/1.5    | 9800            | 0.7         | 1.0  | 1.5  | 150                   |                  |
| J(M)TS11200/0.6/0.8/1.3 | 11200           | 0.6         | 0.8  | 1.3  | 160                   |                  |

### Technical Data:

| Model                    | Flow rate (L/h) | motor power |      |      | Plunger diameter (mm) | Dimension figure |
|--------------------------|-----------------|-------------|------|------|-----------------------|------------------|
|                          |                 | 15kw        | 22kw | 37kw |                       |                  |
| J(M)TF235/64/92/120      | 235             | 64          | 92   | 120  | 25                    |                  |
| J(M)TF365/41/60/82       | 365             | 41          | 60   | 82   | 30                    |                  |
| J(M)TF510/29/43/58       | 510             | 29          | 43   | 58   | 35                    |                  |
| J(M)TF680/22/32/44       | 680             | 22          | 32   | 44   | 40                    |                  |
| J(M)TF860/17.5/25.5/34.5 | 860             | 17.5        | 25.5 | 34.5 | 45                    |                  |
| J(M)TF1050/14.3/21/27    | 1050            | 14.3        | 21   | 27   | 50                    |                  |
| J(M)TF1280/12/17/23      | 1280            | 12          | 17   | 23   | 55                    |                  |
| J(M)TF1510/10/14.5/19.7  | 1510            | 10          | 14.5 | 19.7 | 60                    |                  |
| J(M)TF1780/8.5/12/16.2   | 1780            | 8.5         | 12   | 16.2 | 65                    |                  |
| J(M)TF2080/7.2/11/15.4   | 2080            | 7.2         | 11   | 15.4 | 70                    |                  |
| J(M)TF2430/6/10/14       | 2430            | 6           | 10   | 14   | 75                    |                  |
| J(M)TF2750/5.5/9/12.6    | 2750            | 5.5         | 9.0  | 12.6 | 80                    |                  |
| J(M)TF3120/4.8/8/11.6    | 3120            | 4.8         | 8.0  | 11.6 | 85                    |                  |
| J(M)TF3520/4.2/7/10.5    | 3520            | 4.2         | 7.0  | 10.5 | 90                    |                  |
| J(M)TF3920/3.8/6/9.4     | 3920            | 3.8         | 6.3  | 9.4  | 95                    |                  |
| J(M)TF4350/3.5/5.7/8.5   | 4350            | 3.5         | 5.7  | 8.5  | 100                   |                  |
| J(M)TF5280/2.8/4.7/7.3   | 5280            | 2.8         | 4.7  | 7.3  | 110                   |                  |
| J(M)TF6350/2.4/4/6.2     | 6350            | 2.4         | 4.0  | 6.2  | 120                   |                  |
| J(M)TF7480/2/3/5.2       | 7480            | 2.0         | 2.3  | 5.2  | 130                   |                  |
| J(M)TF8620/1.7/2.9/4.6   | 8620            | 1.7         | 2.9  | 4.6  | 140                   |                  |
| J(M)TF9960/1.5/2.5/4.0   | 9960            | 1.5         | 2.5  | 4.0  | 150                   |                  |
| J(M)TF11380/1.3/2.2/3.5  | 11380           | 1.3         | 2.2  | 3.5  | 160                   |                  |
| J(M)TF12860/1.1/1.9/3.0  | 12860           | 1.1         | 1.9  | 3.0  | 170                   |                  |
| J(M)TF14410/1/1.7/2.7    | 14410           | 1.0         | 1.7  | 2.7  | 180                   |                  |
| J(M)TF16000/0.9/1.55/2.4 | 16000           | 0.9         | 1.55 | 2.4  | 190                   |                  |
| J(M)TF17800/0.8/1.4/2.1  | 17800           | 0.8         | 1.4  | 2.1  | 200                   |                  |
| J(M)TF19500/0.7/1.25/1.8 | 19500           | 0.7         | 1.25 | 1.8  | 210                   |                  |
| J(M)TF21600/0.6/1.1/1.5  | 21600           | 0.6         | 1.1  | 1.5  | 220                   |                  |



## J(M)G Metering Pump

### Performance description

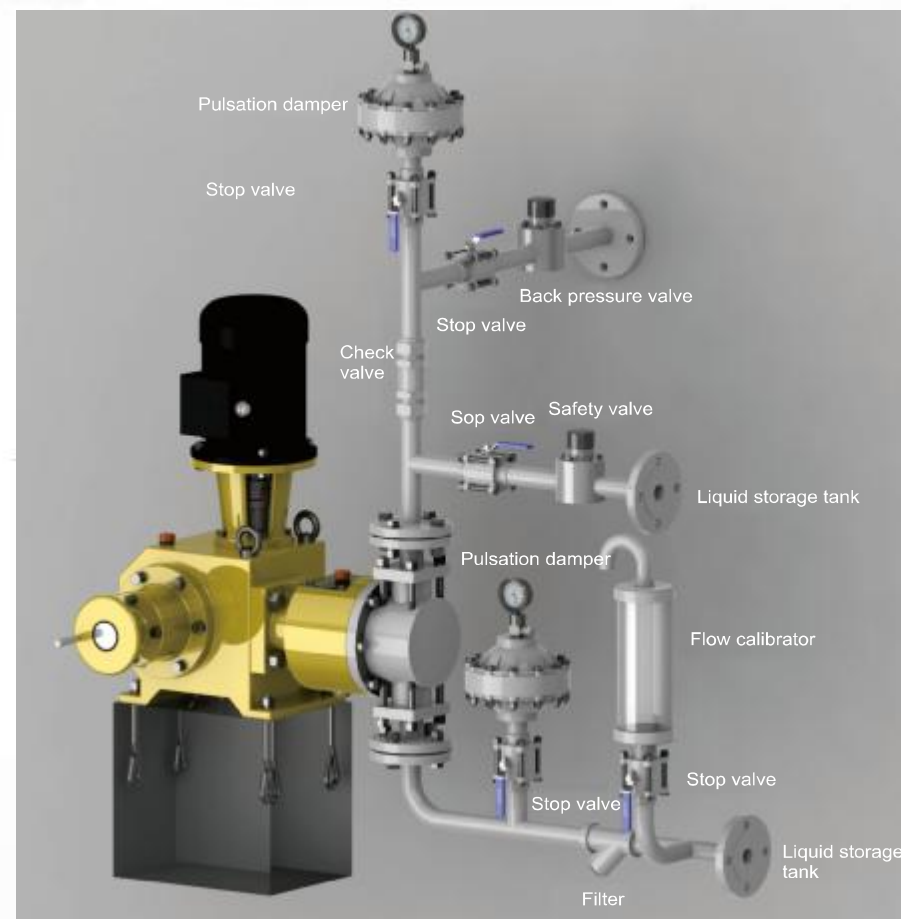
- ①The pump head is equipped with remote handling device, because poly-tetrafluoroethylene has the feature of thermal expansion.
- ②The design of remote pump head shorten the distance between suction valve and discharge valve. It makes the pump able to convey dangerous liquid.
- ③Electric heating appliance attached to remote handling device, so the pump can convey liquid which is 280 °C.
- ④Hydraulic end applies double diaphragm with diaphragm state monitor, the pump can work even when one diaphragm is broken. The material of ball valve is emery grains.
- ⑤The hydraulic system applying German technologies. It consists of safety valve and limit valve. Built-in function of emptying, pressure-relieving and oil adding, superior performance, zero leakage and high safety.



### Technical Data:

| Model              | Flow rate (L/h) | motor power |      | Plunger diameter (mm) | Dimension figure |
|--------------------|-----------------|-------------|------|-----------------------|------------------|
|                    |                 | 2.2kw       | 4kw  |                       |                  |
| J(M)G 40/45/67.5   | 40              | 45          | 67.5 | 15                    |                  |
| J(M)G 77/25/37.5   | 77              | 25          | 37.5 | 20                    |                  |
| J(M)G 120/17/25.5  | 120             | 17          | 25.5 | 25                    |                  |
| J(M)G 175/11/16.5  | 175             | 11          | 16.5 | 30                    |                  |
| J(M)G 238/8.5/13.6 | 238             | 8.5         | 13.6 | 35                    |                  |
| J(M)G 310/6.9/11   | 310             | 6.9         | 11   | 40                    |                  |
| J(M)G 395/5/8      | 395             | 5.0         | 8.0  | 45                    |                  |
| J(M)G 486/4.2/7.1  | 486             | 4.2         | 7.1  | 50                    |                  |
| J(M)G 588/3.4/5.7  | 588             | 3.4         | 5.7  | 55                    |                  |
| J(M)G 700/2.8/4.8  | 700             | 2.8         | 4.8  | 60                    |                  |
| J(M)G 820/2.4/4.2  | 820             | 2.4         | 4.2  | 65                    |                  |
| J(M)G 950/2/3.8    | 950             | 2.0         | 3.8  | 70                    |                  |
| J(M)G 1100/1.8/3.2 | 1100            | 1.8         | 3.2  | 75                    |                  |
| J(M)G 1250/1.6/2.8 | 1250            | 1.6         | 2.8  | 80                    |                  |
| J(M)G 1400/1.4/2.5 | 1400            | 1.4         | 2.5  | 85                    |                  |
| J(M)G 1580/1.2/2.1 | 1580            | 1.2         | 2.1  | 90                    |                  |
| J(M)G 1750/1.1/1.9 | 1750            | 1.1         | 1.9  | 95                    |                  |
| J(M)G 1960/1/1.8   | 1960            | 1.0         | 1.8  | 100                   |                  |
| J(M)G 2380/0.8/1.4 | 2380            | 0.8         | 1.4  | 110                   |                  |
| J(M)G 2800/0.7/1.3 | 2800            | 0.7         | 1.3  | 120                   |                  |
| J(M)G 3300/0.6/1.1 | 3300            | 0.6         | 1.1  | 130                   |                  |

### Installation drawing



## JY series Chemical Dosing System

To meet the market demand and facilitate customers, CNP introduced advanced technology from USA, Germany and Japan, combining the actual conditions in our country, developed JY series chemical dosing system. The JY series chemical dosing system can be widely used in power plant dosing, wastewater treatment, water treatment, steel mill etc. There are many advantages: can equip as a complete set, advanced technics, high degree of automation, easy operation, easy installation, easy maintenance, it can suit for variable working condition.

There are a variety of specifications for JY Series chemical dosing pump. It contains one tank one pump, one tank two pumps, two tanks two pumps, two tanks three pumps, three tanks three pumps and many tanks many pumps. The system is chosen by dosing pump quantity and discharge. You can choose the system according to the catalogue. And also, we can design and produce special products according to your special requirement, for example, put the whole system meter and liquid-level signal into DCS control system, to control the whole system with run/stop, running control and alarm.

### Structure and work principle

#### 1. Structure

JY series chemical dosing system consists of dosing pump, solution tank, liquid indicator, impact damper, filter, valves, blender, baseplate, stair railing, control circuit, full set of pipeline and accessories.

#### 2. Work principle

According to the demanded concentration of the liquor, operators make up the liquor by blender in the agitator tank, then put it in solution tank and convey it through dosing pump to the specified place.

#### 3. Advantages:

Beautiful appearance, reliable performance, compact structure, facilitate maintenance.



### The function of the valves of JY series chemical dosing system

#### 1. Safety valve

When the pipeline is blocked or closed by mis-operation, the safe valve will automatically open and discharge the liquor to reduce pressure, so the safety of the dosing pump and the pipeline system can be ensured.

#### 2. Pulse damper

Pulse damper can smooth the effect of pulse, as a result, the liquor can be evenly conveyed.

#### 3. filter

The application of Y type filter prevents foreign particles from entering the pump head, easy cleaning  
Mesh material: PTEF

#### 4. Check valve

The check valve installed at the suction pipe, can avoid positive pressure flow. The check valve equipped at the discharge pipe can avoid negative pressure and siphon.

#### 5. Flow calibrator

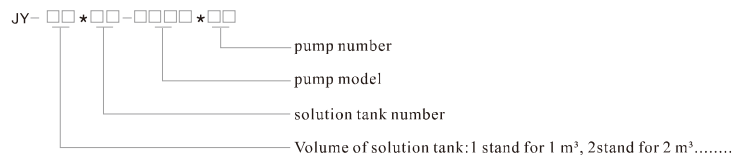
Can estimate the flow rate through the flow calibrator. Generally installed at the pump inlet end.

#### 6. Back pressure valve

Back pressure valve installed at pressure pipe, bring constant back pressure, it can remain measurement accurately. Avoid liquor flow by gravity or siphoning.



## JY series Chemical Dosing System product code



## JY series Chemical Dosing System Technical Parameters

| System                                     | Type                  | Dissolving drug tank size (M) | Dosing pump                                                           |           |               | Dosing method |     |
|--------------------------------------------|-----------------------|-------------------------------|-----------------------------------------------------------------------|-----------|---------------|---------------|-----|
|                                            |                       |                               | Type                                                                  | Flow(L/h) | Pressure(Mpa) |               |     |
| Hydrazine chemical dosing system           | two tanks two pumps   | 1.0                           | Plunger type<br>Mechanical diaphragm type<br>Hydraulic diaphragm type | 30        | 1.6           | Manual        |     |
|                                            | two tanks three pumps |                               |                                                                       | 40        | 2.4           |               |     |
| PH adjustment ammonification dosing system | two tanks two pumps   |                               |                                                                       | 50        | 4.0           |               |     |
|                                            | two tanks three pumps |                               |                                                                       | 60        | 6.3           |               |     |
| Phosphates dosing system                   | two tanks two pumps   | 2.0                           | Hydraulic diaphragm type                                              | 80        | 16            | Automatic     |     |
|                                            |                       |                               |                                                                       | 100       | 20            |               |     |
|                                            |                       | two tanks three pumps         |                                                                       | 200       | 24            |               |     |
| Coagulants feeding equipment               | two tanks two pumps   | 1.0                           | Plunger type<br>Mechanical diaphragm type<br>Hydraulic diaphragm type | 40        | 0.6           | Manual        |     |
|                                            | two tanks three pumps |                               |                                                                       | 60        |               |               |     |
| Inhibitor feeding equipmen                 | two tanks two pumps   |                               |                                                                       | 90        |               |               | 1.0 |
|                                            | two tanks three pumps |                               |                                                                       | 160       |               |               | 1.4 |
| PH adjustment Alkali feeding equipment     | two tanks two pumps   | 2.0                           | Hydraulic diaphragm type                                              | 330       |               | Automatic     |     |
|                                            | two tanks three pumps | 3.0                           |                                                                       |           |               |               |     |
| Ferrous sulfate coating dosing system      | one tank one pump     | 3.0                           | Centrifugal                                                           | 2-4m³/h   | 0.4           | Manual        |     |
|                                            | two tanks two pumps   |                               |                                                                       |           |               |               |     |

## JY series Chemical Dosing System Parameter Selection Table

| User's name                   |                                                                                                                                                                                                 |                                     |       |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------|
| Application                   |                                                                                                                                                                                                 | Quantity                            | set   |
| Operation parameter           |                                                                                                                                                                                                 |                                     |       |
| Medium                        |                                                                                                                                                                                                 | Medium temperature                  | ℃     |
| Concentration                 | %                                                                                                                                                                                               | Liquor density                      | kg/m³ |
| Dosing point                  |                                                                                                                                                                                                 | Flow rate of Dosing point           | 1/h   |
| Back Pressure of Dosing point | Mpa                                                                                                                                                                                             | Dosing distance                     | m     |
| Status                        | <input type="checkbox"/> discontinuous                                                                                                                                                          | <input type="checkbox"/> continuous |       |
| Structural parameters         |                                                                                                                                                                                                 |                                     |       |
| Dissolving drug tank size     | m³                                                                                                                                                                                              |                                     |       |
| Material                      | <input type="checkbox"/> stainless steel <input type="checkbox"/> carbon steel <input type="checkbox"/> carbon steel foil <input type="checkbox"/> non-metallic <input type="checkbox"/> others |                                     |       |
| Type                          | <input type="checkbox"/> Mechanical diaphragm <input type="checkbox"/> hydraulic diaphragm <input type="checkbox"/> plunger pump   quantity   set                                               |                                     |       |
| Flow rate                     | 1/h                                                                                                                                                                                             | pressure                            | Mpa   |
| Control mode                  | <input type="checkbox"/> Manual adjustment <input type="checkbox"/> automatic adjustment                                                                                                        |                                     |       |
| Pipeline material             | <input type="checkbox"/> stainless steel <input type="checkbox"/> carbon steel <input type="checkbox"/> U P V C <input type="checkbox"/> others                                                 |                                     |       |
| Other requirement             |                                                                                                                                                                                                 |                                     |       |

Remarks: 1. Buyers fill the form in detail when purchasing.

2. If users have any other specific requirement, please note at the "other requirement" line or contract CNP for more information.

## Corrosivity parallel table

| Corrosive medium       | concentration | stainless steel |     |      | FRPP |     |      | PVDF |     |      | Phenolic glass fiber reinforced plastics |     |      |
|------------------------|---------------|-----------------|-----|------|------|-----|------|------|-----|------|------------------------------------------|-----|------|
|                        |               | 25℃             | 50℃ | 100℃ | 25℃  | 50℃ | 100℃ | 25℃  | 50℃ | 100℃ | 25℃                                      | 50℃ | 100℃ |
| Sulfuric acid          | 0-50          | ×               | ×   | ×    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Sulfuric acid          | 50-98         | ×               | ×   | ×    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ○    |
| Nitric Acid            | 10-70         | ✓               | ✓   | ✓    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Nitric Acid            | 70-100        | ✓               | ✓   | ✓    | ×    | ×   | ×    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Hydrochloric acid      | arbitrarily   | ×               | ×   | ×    | ○    | ○   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Phosphoric acid        | 0-90          | ×               | ×   | ×    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Hydrofluoric Acid      | 0-50          | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Hydrobromic acid       | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Hydrocyanic acid       | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Lactic acid            | 0-50          | ×               | ×   | ×    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Hypofluorous acid      | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ✓                                        | ○   | ×    |
| Hexafluorosilicic acid | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Aqua regia             |               | ×               | ×   | ×    | ×    | ×   | ×    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Formic acid            | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Acetic acid            | arbitrarily   | ○               | ○   | ○    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ○    |
| Butyric acid           | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Lactic acid            | arbitrarily   | ✓               | ✓   | ×    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ○    |
| Oxalic acid            | arbitrarily   | ○               | ○   | ×    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Fatty Acid             | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Benzoic acid           | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ×   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Citric acid            | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Benzene sulfonic acid  | arbitrarily   | ✓               | ✓   | ○    | ○    | ×   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Chloroacetic acid      | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ○                                        | ○   | ○    |
| Potassium hydroxide    | arbitrarily   | ✓               | ✓   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Sodium hydroxide       | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Ammonium sulfate       | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Ammonium carbonate     | arbitrarily   | ✓               | ✓   | ×    | ✓    | ○   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Ammonium chloride      | arbitrarily   | ×               | ×   | ✓    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Sodium fluosulfate     | arbitrarily   | ○               | ○   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Ammonium fluoride      | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Sodium hypochlorite    | 0-25          | ×               | ×   | ×    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ×                                        | ×   | ×    |
| Aluminium Sulfate      | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Lead Acetate           | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ○    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Calcium hypochlorite   | 0-25          | ×               | ×   | ×    | ✓    | ○   | ○    | ✓    | ✓   | ✓    | ○                                        | ○   | ×    |
| Methanol               | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ○   | ○    | ✓    | ✓   | ✓    | ○                                        | ×   | ×    |
| Ethanol                | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ○   | ○    | ✓    | ✓   | ✓    | ○                                        | ○   | ×    |
| Toluene                | arbitrarily   | ✓               | ✓   | ✓    | ×    | ×   | ×    | ✓    | ✓   | ✓    | ○                                        | ○   | ○    |
| Dichloroethane         | arbitrarily   | ✓               | ✓   | ✓    | ×    | ×   | ×    | ✓    | ✓   | ✓    | ✓                                        | ○   | ○    |
| Chloric acid           | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ✓                                        | ○   | ○    |
| Potassium chlorate     | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Boric acid             | arbitrarily   | ✓               | ✓   | ○    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Sodium phosphate       | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ○   | ×    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Borax                  | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Potassium permanganate | arbitrarily   | ✓               | ✓   | ✓    | ✓    | ✓   | ×    | ✓    | ✓   | ✓    | ○                                        | ○   | ○    |
| Sulfurous acid         | arbitrarily   | ✓               | ✓   | ○    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Silicic acid           | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Hypochlorous acid      | arbitrarily   | ×               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ○    |
| Nickel sulfate         | arbitrarily   | ✓               | ✓   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |
| Aluminium chloride     | arbitrarily   | ○               | ×   | ×    | ✓    | ✓   | ✓    | ✓    | ✓   | ✓    | ✓                                        | ✓   | ✓    |

Remarks : ✓ stands for work well, ○ stands for able to use, × stands for forbidden.  
Medium data beyond the above table, please consult CNP.

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