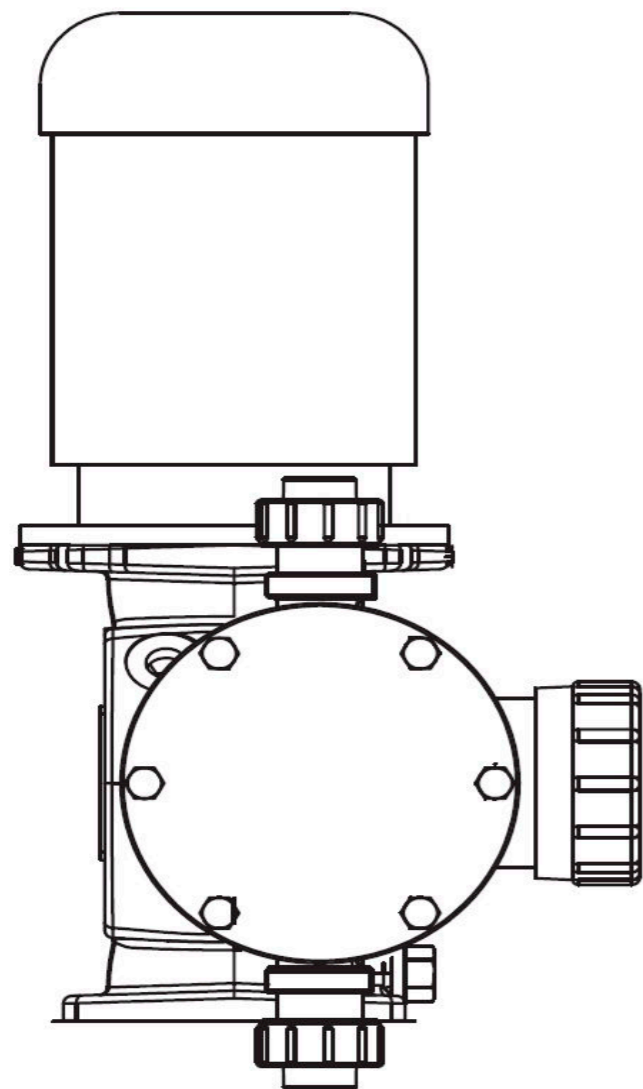


# METERING PUMP



WUHAN GIENS INDUSTRY CO., LTD

## Table of Contents

About Metering

01

Product Structure

03

Product Model

05

Mechanical Metering Pump

07

Plunger Metering Pump

13

Hydraulic Diaphragm Metering Pump

19

Solenoid Metering Pump

25

Accessories

28

## COMPANY PROFILE

GIENS is an entity with over 10 years of experience in engineered flow solutions. Our core products are AODD (Air Operated Double Diaphragm) pumps and metering pumps.

GIENS has always been striving to pursue high standards and has successively obtained ISO9001, CE and ATEX certifications. When you partner with us, you get superior craftsmanship and quality, backed by our premier factory warranty.

GIENS pumps are widely used in various fields such as ceramics, coatings, chemicals, optoelectronics, medicine, oil, gas and paper making, etc. And GIENS pumps have won wide recognition from customers.

GIENS pumps are designed to meet the harshest uses and operating environments through rigorous validation and the application of advanced engineering methods to enhance their performance.

GIENS pumps are also advancing with the times and are able to meet the ever-changing market demands.

GIENS is willing to work with you to create a better future together and provide you with a safety & guarantee for your industrial fluid transportation in the near future .

## About Metering Pump



Metering pump is a kind of machine with stepless flow adjustment in the range of 0-100%, which is used to transport liquid (especially corrosive liquid) and can be measured. Also known as quantitative pump or proportional pump. The metering pump is a reciprocating positive displacement pump, which is used for accurate metering. The stability accuracy of the metering pump is not more than  $\pm 1\%$ . With the continuous development of automation, intelligence and remote automatic control, metering pumps are widely used in petrochemical, pharmaceutical, food, oil refining, thermal power plant, industrial and mining, printing and dyeing, paper making, environmental protection and water treatment due to their strong matching and wide adaptability to medium (liquid).

### Metering Pump Features

**Excellent performance:** No leakage, high safety performance, accurate measurement and delivery, flow can be adjusted from zero to the maximum rating range, pressure can be selected from the normal pressure to the maximum allowable range,

**Easy to use:** the adjustment is intuitive and clear, it can adjust the flow by hand and frequency conversion, also can realize remote control and computer automatic control, work smoothly, no noise, small size, light weight, easy to maintain and use in

**Full range:** suitable for conveying-30 to 450 degrees, viscosity 0-800mmls, maximum discharge pressure up to 50Mpa, flow range 1-18000L/H, measurement accuracy within  $\pm 1\%$  .

### Metering Pump Selection Requirements

**Definite pressure.** The rated pressure of the selected metering pump should be higher than the actual maximum pressure needed, usually 10 ~ 20% higher. Do not choose too high, too high pressure will waste energy, increase equipment investment and operating costs;

**Determine flow.** The selected metering pump flow should be equal to or slightly greater than the flow required by the process. Metering pump flow range in the metering pump rated flow range of 30 ~ 100% is better, when the metering pump repeated high precision. Considering the economy and practicality, it is suggested that the actual flow rate of metering pump should be 70 ~ 90% of the rated flow rate of metering pump

**Determine the pump head (hydraulic end) material.** It is very important to select the material of the over-current part according to the property of the over-current medium after the model specification is determined. In severe cases, it can lead to major accidents.



### Installation Precautions

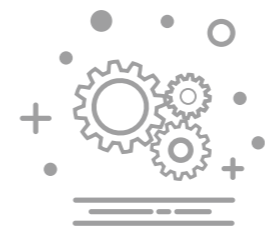
- Export higher than imports, to avoid Siphon Phenomenon.
- Pump head and injection valve require vertical installation.
- The attached plastic pipe can be screwed tightly by hand, do not use tools, do not use raw material thread belt.
- The power supply voltage is stable and grounded.
- The installation environment is clean and spacious with good ventilation.

## Control At Source, At Every Stage



### Good Raw Material

The quality of raw materials is the primary factor to determine the quality of metering pump. The raw material supplier of LIGO metering pump is a well-known international and domestic raw material manufacturer. After entering the company, the raw materials must go through a series of rigorous scientific tests to ensure the superior performance, high quality and pure special raw materials, which has genetically established the excellent performance and environmental protection quality of metering pump.



### Advanced Manufacturing Process

The introduction of world-class CNC horizontal machining center, vertical machining center, drilling center and other equipment 150 sets, high degree of automation, accurate quality control, to ensure the excellent quality of products. With the comprehensive implementation of 5S management, more than 200 skilled technical workers have forged high-grade metering pumps through more than 100 precision processes and the spirit of improving craftsmanship.



### Strict Quality Control

The company purchased 20 sets of international advanced precision testing equipment such as CMM, spectrometer and gear measuring center, established a perfect quality management system, and strictly controlled the quality through "self inspection, mutual inspection and special inspection". Each batch of products are tested by professional quality inspectors according to the internal control standards before leaving the factory, so as to ensure the reliable product quality, safe and efficient operation from the aspects of product appearance, size, physical and chemical properties, packaging, etc. Perfect quality assurance system, advanced testing means and strict testing system ensure the extraordinary quality of the company's products.

# Product Structure

## Necessary Conditions for Selection of Metering Pumps

In order to get the most suitable metering pump, please advise the following technical parameters in as much detail as possible when ordering.

### Specification for pumps

Pump type: mechanical diaphragm, hydraulic diaphragm, plunger, single cylinder, multi cylinder parallel, maximum flow: L/h

Maximum actual discharge pressure: Mpa

Material of overflow part: 304, 316, PVC, PTFE, ha C, etc

Adjustment mode: manual, electric, pneumatic, frequency conversion

Equipped with ordinary or explosion-proof motor; equipped with explosion-proof motor, indicating explosion-proof grade and altitude

Power supply: three phase, single phase, voltage, frequency

Inlet pressure: Mpa

### Description of liquid delivered by pump

Liquid Name:

Concentration: %

Temperature: °C

Density: kg / m<sup>3</sup>

Viscosity: Pa.s

Corrosivity: pH

Particle content and size: μm



#### A / motor

Ordinary motor

Explosion proof motor

Variable frequency motor

#### B / integrated "Oude" worm gear pair

Low noise, high transmission efficiency, low energy consumption, large torque, low maintenance cost and long service life.

#### C / regulation mode

Manual, electric, pneumatic

Frequency conversion adjustment.

#### D / regulating mechanism

The patent design of the integral sleeve adjustable eccentric mechanism with patent for invention has the advantages of simple structure, high transmission efficiency, strong bearing capacity, stable and reliable operation, long service cycle and convenient maintenance; adjustment range: 0-100% stepless adjustment.

#### E / built in safety valve

There is no outflow channel to reduce leakage points, prevent the pressure in the hydraulic chamber from being too high, and protect the metering pump from safe operation.

#### F / check valve

The metering accuracy of the group metering pump depends on the quality of the check valve, and the design of the check valve can meet the requirements of various working conditions. Ball valve, flat valve and cone valve can be selected; aviation corundum ball and hydrofluoric acid special ball can be selected.

#### I / alarm device

#### T / limit valve

The purpose of the limit valve is to prevent the hydraulic chamber from excessive oil supplement, avoid the excessive deformation of the diaphragm, and extend the service life of the diaphragm.

#### G / pump head

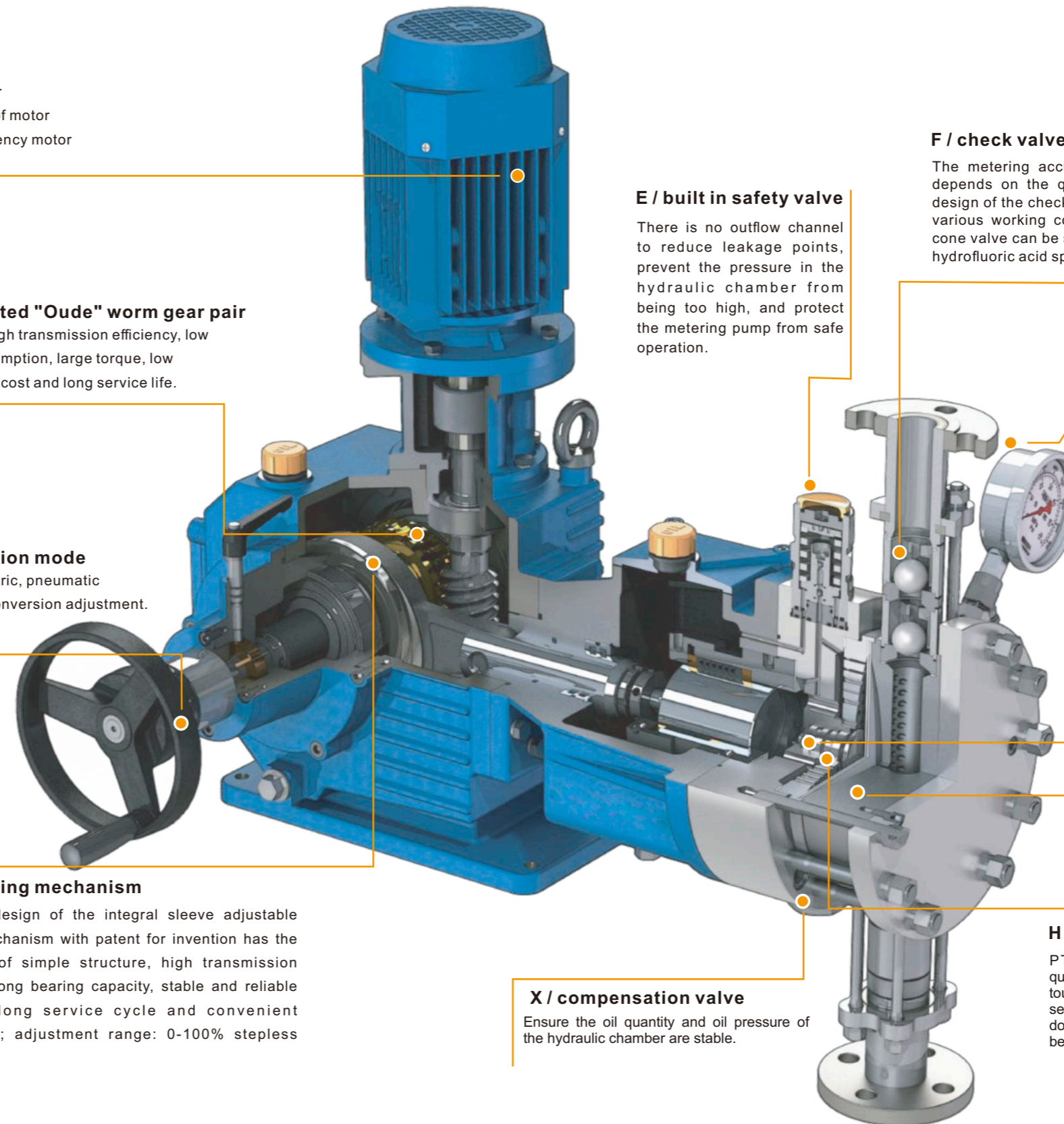
Superior cavity design, effective protection of diaphragm, ensure smooth passage of medium.

#### H / diaphragm

PTFE adopts multi-directional roller quenching treatment, which improves the toughness of diaphragm and prolongs the service life of diaphragm. Single diaphragm, double diaphragm and three diaphragm can be used.

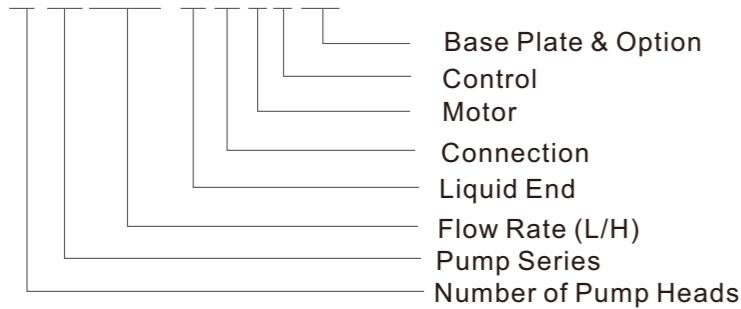
#### X / compensation valve

Ensure the oil quantity and oil pressure of the hydraulic chamber are stable.



# Product Model

2 GBXXXX X X 1 X XX



## Number of Pump Heads

Single head not marked    2 two heads    3 three heads    .....

## Pump Series



**Flow Rate (L/H)** Refer to the parameters of each series.

## Liquid End

P PVC    S Stainless Steel    T PVDF/PTFE

## Connection

P NPT    Q Pipe (Hard tube)    R Hose pipe (Soft tube)    F Flange    X Special request

**Motor** Refer to the parameters of each series.

## Control

M Manual adjustment    N Electric control    F Inverter control

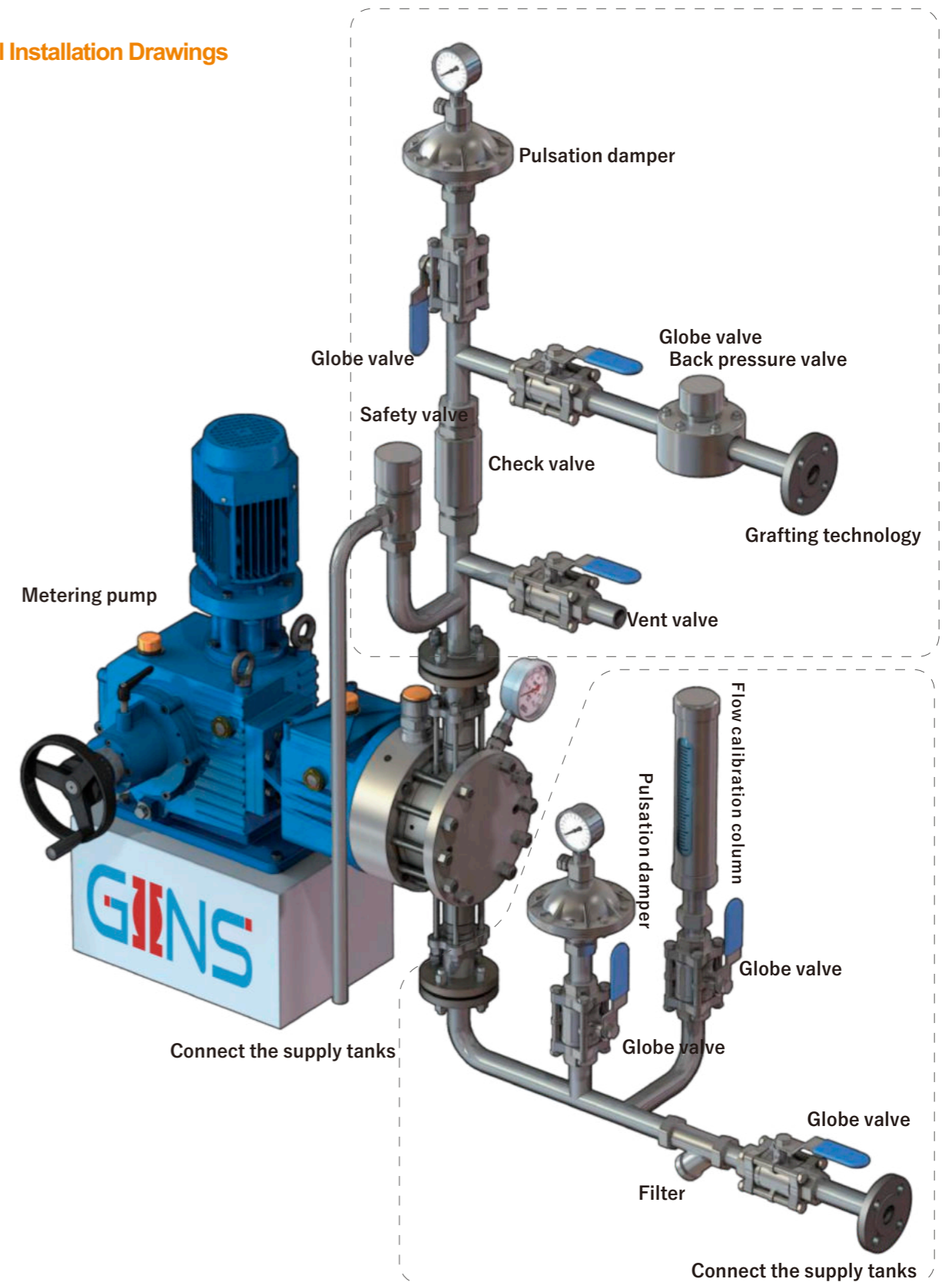
## Base Plate

N N/A (Standard Configuration)    Y YES

## Option

N N/A (Standard Configuration)    A Stroke Counter transducer  
 B Double Diaphragm With Pressure Gauge    C Double Diaphragm With Pressure Switch (With Baseplate)  
 D Double Diaphragm With Pressure Gauge & Switch(With baseplate)    X Others,Consult with factory.

## Typical Installation Drawings



Note: This drawing is a typical installation drawing of metering pump. The dotted line part is an accessory of metering pump. Customers can purchase another one according to the working condition

# GW Series

Mechanical Metering Pump



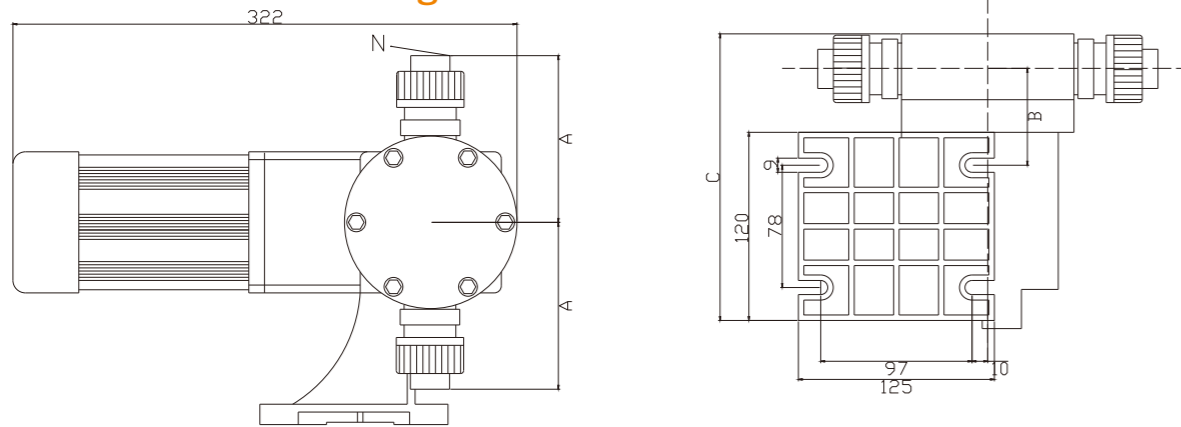
## Main Performance Parameters

- Flow Range: 6.5-180L/H
- Pressure Range: 3-10Bar
- Pump Head: PVC/PVDF/SS304
- Valve Body: PVC/PVDF/SS304
- Diaphragm: PTFE
- Ball Valve: Oxidizing picks/SS304
- Seals: FPM/EPDM
- Valve Seat: PTFE/SS304
- Valve Spring: Hastelloy C-276

## Main Features

The housing is made of precision aluminium die-casting, with a durable and anti-corrosive sprayed surface. The product is beautiful and durable, easy to use, low maintenance costs and high safety performance.

## Dimensional Drawing



Pump Head Material	GW6.5-GW40					GW6.5-GW180				
	Porting	A	B	C	N	Porting	A	B	C	N
PVC	R	98	61	183	12.7*9.5	Q	106	62	183	DN15
PVDF	R	107	61	183	12*6	P	108	62	183	1/2"
316	P	109	61	183	1/2"	P	109	62	183	1/2"

## Performance

Model No.	Flow Rate(L/H)	Max Pressure(BAR)	Pump Speed	Head	Diaphragm Dia.	Motor(W)
GW6.5/1	6.5	10	27	4	65	40
GW12/1	12	10	54	4	65	40
GW24/1	24	10	93	4	65	40
GW32/0.8	32	8	108	4	65	40
GW40/0.6	40	8	135	4	65	60
GW60/0.6	60	8	108	4	84	60
GW100/0.5	100	5	135	5	84	90
GW120/0/4	120	4	180	4	84	90
GW150/0.4	150	4	180	5	84	90
GW180/0.3	180	3	180	6	84	120

# GM GB Series

Mechanical Metering Pump



## Main Performance Parameters

- Flowrate up to 2000L/H
- Pressure up to 12 bar
- Suction lift: up to 3 m water
- Maximum suction pressure: 2 bar
- Accuracy:  $\pm 2\%$  of rated flow from 10% to 100% stroke
- Maximum temperature of pumped liquid: 40°C

## Main Features

### Liquid End

- Mechanical actuated diaphragm design
- Eliminate contour plates, easy for material pass
- PVC, PVDF & 316SS liquid end material
- High viscosity, slurry application
- Self-cleaning suction/discharge check valve

### Drive End

- Variable eccentric drive mechanism for smooth sinusoidal flow
- Rugged construction designed to withstand tough environments
- Hard-wearing ball bearings to make pump work more stably
- Oil bath lubrication for all of drive components
- Lockable micrometer stroke, adjustment can be adjusted while pump is running or stopped

### Automatic Capacity Control Options

#### Electrical capacity controller: Accept external control signal to adjust the stroke length-

- Power supply: 220V-50Hz, single phase
- Input signal: 4-20mA analog signal
- Output signal: 4-20mA/1-5V analog signal for record display and control system

#### Variable frequency controller: Accept external control signal to adjust the stroke speed

- Power supply: 220V-50Hz, single phase / 380V-50Hz, three phase
- Input signal: 4-20mA analog signal

#### ON/OFF control the three phase motor to adjust the flowrate

- Power supply: 200-240V/50/60Hz, single phase
- Input signal: 4-20mA analog signal / pulse signal / manual

## Applications

Municipal, industrial water and wastewater, swimming pools and other water treatment process

## Accessories

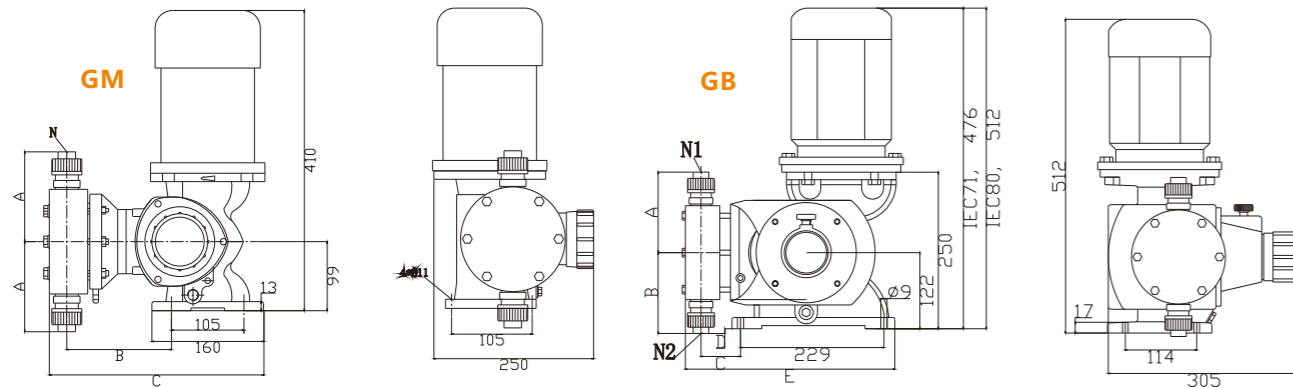
- System accessories: filter, calibration column, pulsation dampener, safety valve and back pressure valve
- Safety valve is the necessary option.
- GM002~GM0050 PVC/PVDF liquid end, pumps supplied with injection nozzle, foot valve, 6m hose, except for viscosity liquid end)

## Standard Motor Characteristics

- Power supply: 380V-50Hz, three phase/220V-50Hz, single phase
- Enclosure of protection: Ip55
- Insulation: class F
- Other motor options: Explosion proof motor, 60Hz motor
- All motors comply with the International Electrotechnical Association IEC standard

# GM GB Parameters

## Dimensional Drawing



### GM

Dimension	GM0002-GM0050					GM0090-GM0500				
	Connection	A	B	C	N	Connection	A	B	C	N
PVC	L	90	102	250	12.7*9.5	Q	129	150	307	DN15
PVDF	R	99	102	250	12*7	P	131	150	307	1/2"
316	P	101	102	250	1/2"	P	127	150	307	1/2"

### GB

Model Dimension	GB80-GB450		GB50-GB600		GB700-GB1200		GB1500		GB1800	
	Plastic	Metallic	Plastic	Metallic	Plastic	Metallic	Plastic	Metallic	Plastic	Metallic
A	129	127	174	174	185	185	192	203	215	221
B	129	127	174	174	192	192	192	203	215	221
C	63	63	77	77	94	94	94	91	94	94
D	8	6	25	25	70	70	70	81	94	87
E	334	334	358	358	375	375	375	380	375	380
N1	1/2"	1/2"	1"	1"	1"	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"
N2	1/2"	1/2"	1"	1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"

## Material of Liquid End

### GM0002-GM0600

Liquid End	Valve Body	Valve Seat	Ball	Diaphragm	Seal	Connection
PVC	PVC	PTFE/PVDF	Ceramis	PTFE	EPM/EPDM/Viton	PVC
PTFE/PVDF	PVDF	PTFE/PVDF	Ceramis	PTFE	EPM/EPDM/Viton	PVDF
316SS	316SS	316SS	316SS	PTFE	EPM/EPDM/Viton	316SS

### GB0080-GB1200

Liquid End	Valve Body	Valve Seat	Ball	Diaphragm	Seal	Connection
PVC	PVC	PTFE/PVDF	Ceramis	PTFE	EPM/EPDM/Viton	PVC
PTFE/PVDF	PVDF	PTFE/PVDF	Ceramis	PTFE	EPM/EPDM/Viton	PVDF
316SS	316SS	316SS	316SS	PTFE	EPM/EPDM/Viton	316SS

### GB1500-GB2000

Liquid End	Valve Body	Valve Cover	Valve Seat	Valve Plate	Spring	Diaphragm	Seal	Connection
PVC	PVC	PVC	PTFE/PVDF	PVC	Hastelloy C-276	PTFE	EPM/EPDM/Viton	PVC
PTFE	PVDF	PVDF	PTFE/PVDF	PVDF	Hastelloy C-276	PTFE	EPM/EPDM/Viton	PVDF
316SS	316SS	316SS	316SS	316SS	Hastelloy C-276	PTFE	EPM/EPDM/Viton	316SS

## Performance

Model	Max Flow Rate(L/H)	Max Pressure(bar)	SPM(min-1)	Motor
GM0005	4.5	12	36	0.25 ■ 0.37 ■
GM0010	9		36	
GM0025	25		72	
GM0050	50	10	114	0.37
GM0090	85	7	72	
GM0120	115		72	
GM0170	170		144	
GM0240	234	5	144	0.37
GM0330	315		144	
GM0400	400		144	
GM0500	500	4	180	0.37 ■ 0.55 ■
GM0600	600	4	180	
GB0080	80	10	36	0.25 ● 0.37 ●
GB0180	167		72	
GB0250	237		102	
GB0350	334	7	144	0.37 ●
GB0450	416		180	
GB0500	464		144	
GB0600	583	4	180	0.75 ● 1.1 ●
GB0700	656		102	
GB0800	800		102	
GB1000	946	3.5	144	0.75 ● 1.1 ●
GB1200	1200		180	
GB1500	1500		180	
GB1800	1800	3	206	1.1
GB2000	2000		206	

- This power is used for three-phase constant speed motors.
- This power is used for single-phase, Ex, inverter motors.
- This power is used for three-phase constant speed, Ex motors.
- This power is used for single-phase, inverter motors.

## Motor

Code	Description(GM)	Description(GB)
1	0.25KW,IEC71,3-phase,380V,50HZ,1440rpm,IP55/F	0.55KW,IEC71,3-phase,380V,50HZ,1440rpm,IP55/F
2	0.37kw,IEC71,3-phase,inverter,Ex,380V,50HZ,1440rpm,IP55/F,dIIIBT4	0.75kw,IEC80,3-phase,inverter,Ex,380V,50HZ,1440rpm,IP55/F,dIIIBT4
3	0.37kw,IEC71,3-phase,Ex,380V,50HZ,1440rpm,IP55/F,dIIIBT4	0.55kw,IEC71,3-phase,Ex,380V,50HZ,1440rpm,IP55/F,dIIIBT4
4	0.37KW,IEC71,3-phase,380V,50HZ,1440rpm,IP55/F	0.75KW,IEC80,3-phase,380V,50HZ,1440rpm,IP55/F
5	0.37KW,IEC71,single-phase,220V,50HZ,1440rpm,IP55/F	0.75kw,IEC80,3-phase,Ex,380V,50HZ,1440rpm,IP55/F,dIIIBT4
6	0.25KW,IEC71,3-phase,inverter,380V,50HZ,1440rpm,IP55/F, IC416	0.55KW,IEC71,single-phase,220V,50HZ,1440rpm,IP55/F
7	0.37KW,IEC71,3-phase,inverter,380V,50HZ,1440rpm,IP55/F, IC416	0.75KW,IEC80,single-phase,220V,50HZ,1440rpm,IP55/F
8	0.25KW,IEC71,single-phase,220V,50HZ,1440rpm,IP55/F	0.55KW,IEC80,3-phase,380V,50HZ,1440rpm,IP55/F
9 (5)	Without motor,but with IEC71 connection and standard test	Without motor,but with IEC71 connection and standard test
9 (8)		Without motor,but with IEC80 connection and standard test
9	Others, Consult with Factory	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description(GM)	GM0005-GM0050			GM0090-GM0500			GM0600		
		PVC	PTFE/PVDF	316SS	PVC	PTFE/PVDF	316SS	PVC	PTFE/PVDF	316SS
P	NPT	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F	1"F	1"F	1"F
Q	Pipe (Hard tube)	DN15	□	□	DN15	□	□	Dn25	□	□
L	Hose pipe (Soft tube)	3/8*1/2	□	□	9*15	□	□	□	□	□
F	Flange	DN15	DN15	DN15	DN15	DN15	DN15	DN25	DN25	DN25

Code	Description(GB)	GB0080-GB0450			GB0500-GB1200			GB1500-GB2000		
		PVC	PTFE/PVDF	316SS	PVC	PTFE/PVDF	316SS	PVC	PTFE/PVDF	316SS
P	NPT	1/2"F	1/2"F	1/2"F	1"F	1"F	1"M	1-1/2"F	1-1/2"F	1-1/2"M
Q	Pipe (Hard tube)	DN15	□	□	DN25	□	□	DN40	□	□
F	Flange	DN15	DN15	DN15	DN25	DN25	DN25	DN40	DN40	DN40

# GX 2GX Series

Mechanical Metering Pump

## Main Performance Parameters

**Flow Rate:** GX up to 3000L/H; 2GX up to 6000L/H

**Pressure:** up to 8Bar

**Adjustment Range:** 30%-100%.

**Accuracy:** ±1%

**Suction Lift:** up to 2.5M water

**Maximum Environmental Temperature:** 40 °C

## Main Features

### Drive End

Variable eccentric mechanism adjustment.

Ensures smooth flow pulsation with enhanced structural design.

Wear-resistant ball bearings for harsh operating environments.

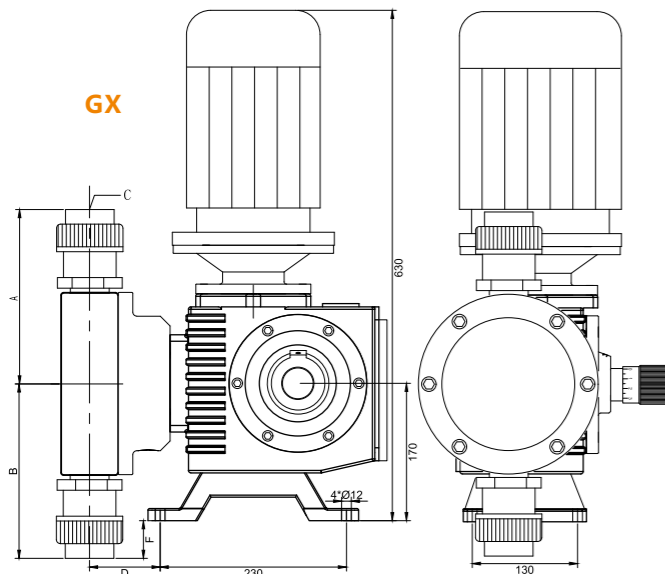
Oil bath lubrication for more stable operation.

Long operating life of drive components.

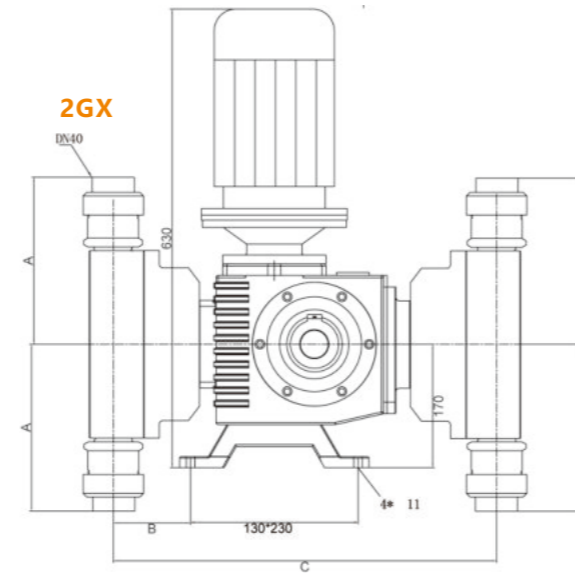
Flow rate adjustment in both shutdown and operating conditions.

Adjustment can be manual, electric or variable frequency.

## Dimensional Drawing



Model	A	B	C	D	F
GX0900	185	192	DN25	90	25
GX1350	192	192	DN40	90	25
GX1800	215	215	DN40	90	48
GX3000	227	227	DN40	100	60



Model	A	B	C
2GX4000-6000P	215	91	526
2GX3500 below	227	106	496



## Material of Liquid End

Liquid End	Valve Body	Valve Cover	Valve Seat	Valve Plate	Spring	Diaphragm	Seal	Connection
PVC	PVC	PVC	PTFE/PVDF	PVC	Hastelloy C-276	PTFE	EPM/EPDM/Viton	PVC
PTFE	PVDF	PVDF	PTFE/PVDF	PVDF	Hastelloy C-276	PTFE	EPM/EPDM/Viton	PVDF
316SS	316SS	316SS	316SS	316SS	Hastelloy C-276	PTFE	EPM/EPDM/Viton	316SS

## Performance

Model	Max Flow Rate(L/H)	Max Pressure(Mpa)	SPM(min-1)	Motor(KW)	Weight(KG)
GX0900	900	0.6(PVC/PTFE) 0.8(316SS)	88	1.5	75±15
GX1350	1350	0.6(PVC/PTFE) 0.8(316SS)	131		
GX1800	1800	0.6	176		
GX2300	2250	0.5	131		
GX3000	3000	0.3	176		
2GX2700	2700	0.6(PVC/PTFE) 0.8(316SS)	131		120±20
2GX3600	3600	0.6	176		
2GX4600	4600	0.5	131		
2GX6000	6000	0.3	176		

## Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	Single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F □ IC416
5	Without motor,but with IEC90 connection and standard test
6	Others, Consult with Factory

## Connection

Code	Description	GX900			GX1350/1800/2100/2400		
		PVC	PTFE	316SS	PVC	PTFE	316SS
P	NPT	1"F	1"F	1"M	1-1/2"F	1-1/2"F	1-1/2"F
Q	Pipe (Hard tube)	DN25	~	~	~	~	~
F	Flange	DN25	DN25	DN25	DN40	DN40	DN40



# D-JW Series

Plunger Metering Pump

## Main Performance Parameters

**Flow Rate:** up to 200L/H

**Pressure:** up to 40Mpa

**Accuracy:** ±1%

**Suction Lift:** up to 1.5M water

**Overflow Liquid Temperature Range:** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

## Main Features

Small pump head size and compact design.

High volumetric efficiency for high pressure environments.

Suitable for conveying fluid without solid particles.

Can convey high viscosity fluid and general corrosive fluid.

Not recommended when conveying corrosive slurry and flammable and explosive dangerous chemicals.

Adopt reliable double cam structure.

Suitable for a variety of harsh working conditions, low noise, simple disassembly, easy maintenance.

Easy to maintain with graphite tetrafluorocarbon brazed packing group structure so that the plunger pump has superior sealing and corrosion resistance.



## Control

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

External control signal can be received to adjust the stroke speed, by installing frequency controller.

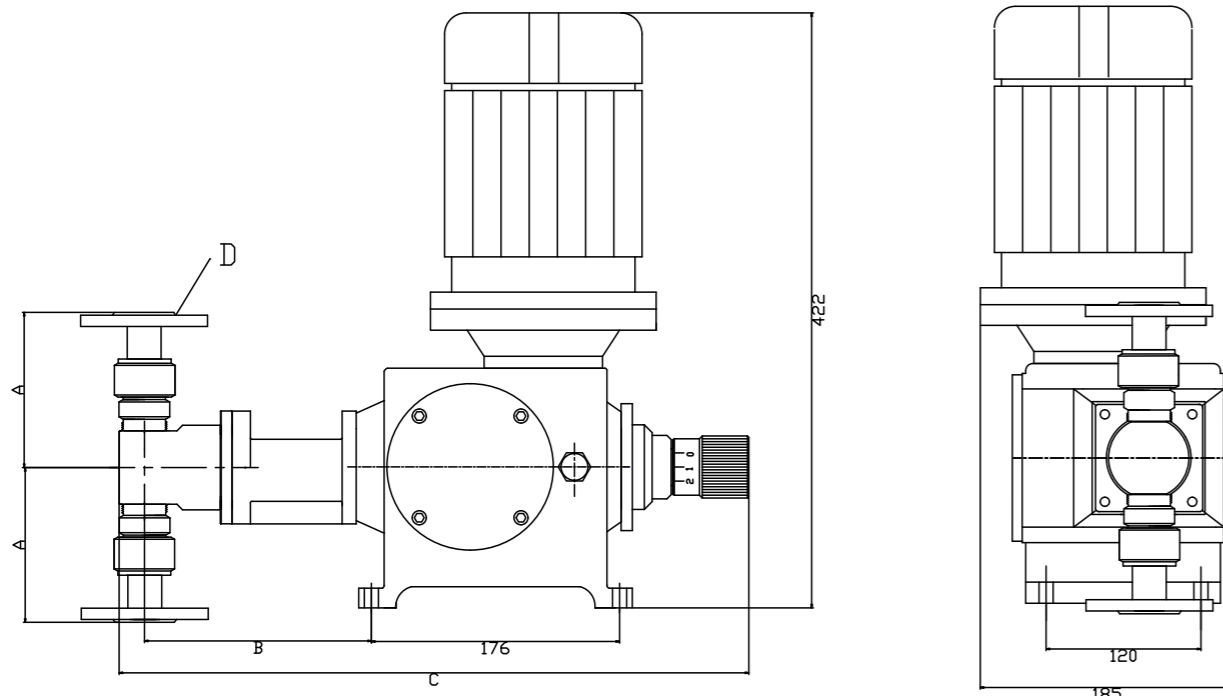
Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

## Application

Petroleum and chemical industry, electric power, metallurgy and other fields. Especially in the field of high precision, high pressure, high temperature outstanding performance.

## Dimensional Drawing



Diameter of plunger	Ø6-Ø14	Ø16-Ø22	Ø25-Ø30	Ø35-Ø40
A	91	114	114	
B	159	162	167	
C	450	450	455	
D	DN10	DN15	DN15	DN20

## Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	316+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton

## Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JW2.5/40	2.4	40	6	93	15	0.55
D-JW3.2/32	3.2	32	6	93	20	0.55
D-JW5/25	5	25	8	93	20	0.55
D-JW6.3/20	6.5	20	8	144	15	0.55
D-JW8/20	8.7	20	10	93	20	0.55
D-JW10/20	10	20	10	144	15	0.55
D-JW13/16	13	16	10	144	20	0.55
D-JW15/12	15	12	12	144	15	0.55
D-JW20/12	19.5	12	12	144	20	0.55
D-JW26/10	26	10	13	144	20	0.55
D-JW32/6	30.5	6	15	144	20	0.55
D-JW40/4	40	4	20	144	15	0.55
D-JW50/3.2	49	3.2	22	144	15	0.55
D-JW63/2	65	2	22	144	20	0.55
D-JW84/1.6	84	1.6	25	144	20	0.55
D-JW100/1.2	105	1.2	28	144	20	0.55
D-JW125/1	125	1	30	144	20	0.55
D-JW160/0.8	166	0.8	35	144	20	0.55
D-JW200/0.6	217	0.6	40	144	20	0.55

## Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC71 connection and standard test
6	Without motor,but with IEC80 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description	D-JW2.5/D-JW200
P	NPT	1/2" F
F	Flange	DN15 Flange
K	Clamp Band	DN15

# D-JB Series

## Plunger Metering Pump



### Main Performance Parameters

**Flow Rate:** up to 1000L/H

**Pressure:** up to 36Mpa

**Adjustment Range:** 10%-100%.

**Accuracy:** ±1%

**Suction Lift:** up to 2.5M water

**Overflow Liquid Temperature Range:** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

### Main Features

Small pump head size and compact design.

Small pump head size with optimizable connections and plunger acting directly on the compressed fluid.

High volumetric efficiency, low transmission losses at high pressures.

Suitable for conveying fluid without solid particles.

Can convey high viscosity fluid and general corrosive fluid.

Not recommended when conveying corrosive slurry and flammable and explosive dangerous chemicals.

Variable eccentric mechanism adjustment, to ensure the flow adjustment accuracy and the flow of gentle change.

### Control

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

External control signal can be received to adjust the stroke speed, by installing frequency controller.

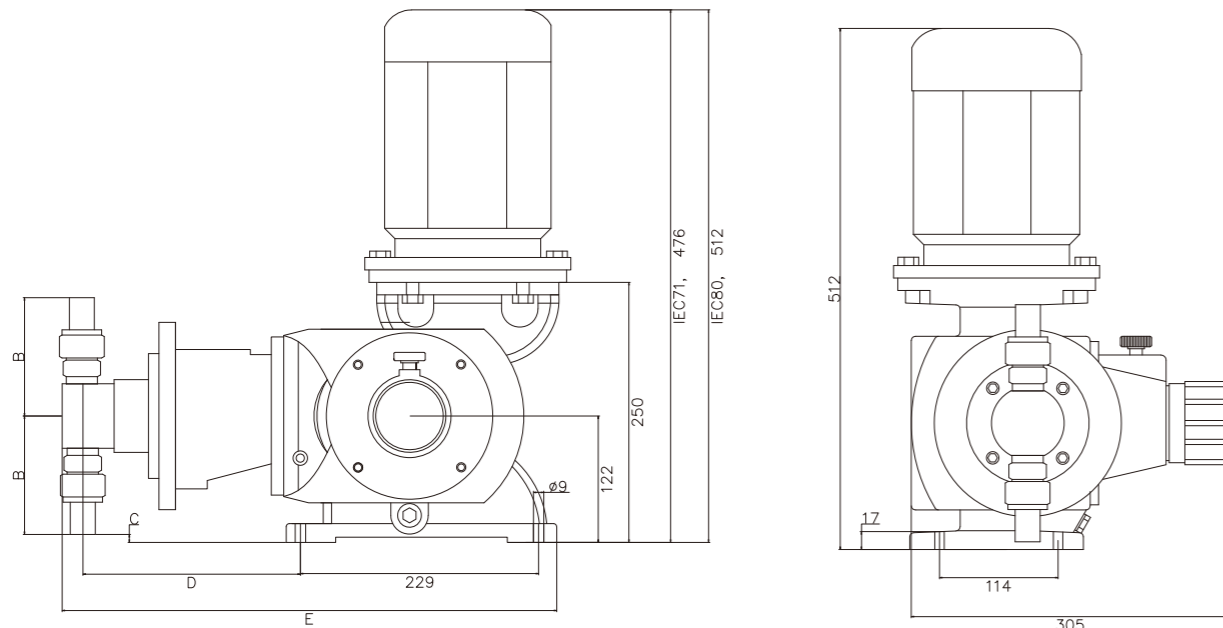
Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

### Application

Petroleum and chemical industry, electric power, metallurgy and other fields. Especially in the field of high precision, high pressure, high temperature outstanding performance.

### Dimensional Drawing



304	PVC	DJB10-32	DJB40-120	DJB160-300	DJB350-360			
B		91	78	115	88	146	150	127
C		28	44	7	34	-24	-28	-5
D		209		209		220		240
E		209		209		220		240
		DN10		DN15		DN20		DN25

### Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	316+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton

### Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JB10/25/36	10	25/36	10	144	16	0.55/0.75
D-JB15/17/25	15	17/25	12	144	16	0.55/0.75
D-JB25/11/16	25	11/16	16	144	16	0.55/0.75
D-JB32/7.8/11.3	32	7.8/11.3	18	144	16	0.55/0.75
D-JB40/6.3/9.2	39	6.3/9.2	20	144	16	0.55/0.75
D-JB60/4/5.9	60	4/5.9	25	144	16	0.55/0.75
D-JB90/2.8/4.1	90	2.8/4.1	30	144	16	0.55/0.75
D-JB120/2/3	120	2.2/3.1	35	144	16	0.55/0.75
D-JB160/1.6/2.3	160	1.6/2.3	40	144	16	0.55/0.75
D-JB200/1.2/1.8	200	1.2/1.8	45	144	16	0.55/0.75
D-JB250/1.5	250	1.5	50	144	16	0.75
D-JB300/1.2	300	1.2	55	144	16	0.75
D-JB350/1	350	1	60	144	16	0.75
D-JB420/0.9	420	0.9	65	144	16	0.75
D-JB500/0.8	500	0.8	70	144	16	0.75
D-JB580/0.6	580	0.6	75	144	16	0.75
D-JB660/0.5	660	0.5	80	144	16	0.75
D-JB750/0.4	750	0.4	85	144	16	0.75
D-JB820/0.4	820	0.4	90	144	16	0.75
D-JB1000/0.3	1000	0.3	90	180	16	1.1

Note: Single phase, inverter motor option 0.75KW

### Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC71 connection and standard test
6	Without motor,but with IEC80 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

### Connection

Code	Description	D-JB10-420	D-JB500-1000
P	NPT	1/2" F	1" M
F	Flange	DN15 Flange	DN25 Flange
K	Clamp Band	DN15	DN25

# D-JX Series

Plunger Metering Pump

## Main Performance Parameters

**Flow Rate:** up to 1200L/H

**Pressure :** up to 50Mpa

**Adjustment Range:** 10%-100%.

**Accuracy:** ±1%

**Suction Lift:** up to 2.5M water

**Overflow Liquid Temperature Range :** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

## Main Features

Small pump head size and compact design.

Small pump head size with optimizable connections and plunger acting directly on the compressed fluid.

High volumetric efficiency, low transmission losses at high pressures.

Suitable for conveying fluid without solid particles.

Can convey high viscosity fluid and general corrosive fluid.

Not recommended when conveying corrosive slurry and flammable and explosive dangerous chemicals.

Variable eccentric mechanism adjustment, to ensure the flow adjustment accuracy and the flow of gentle change.

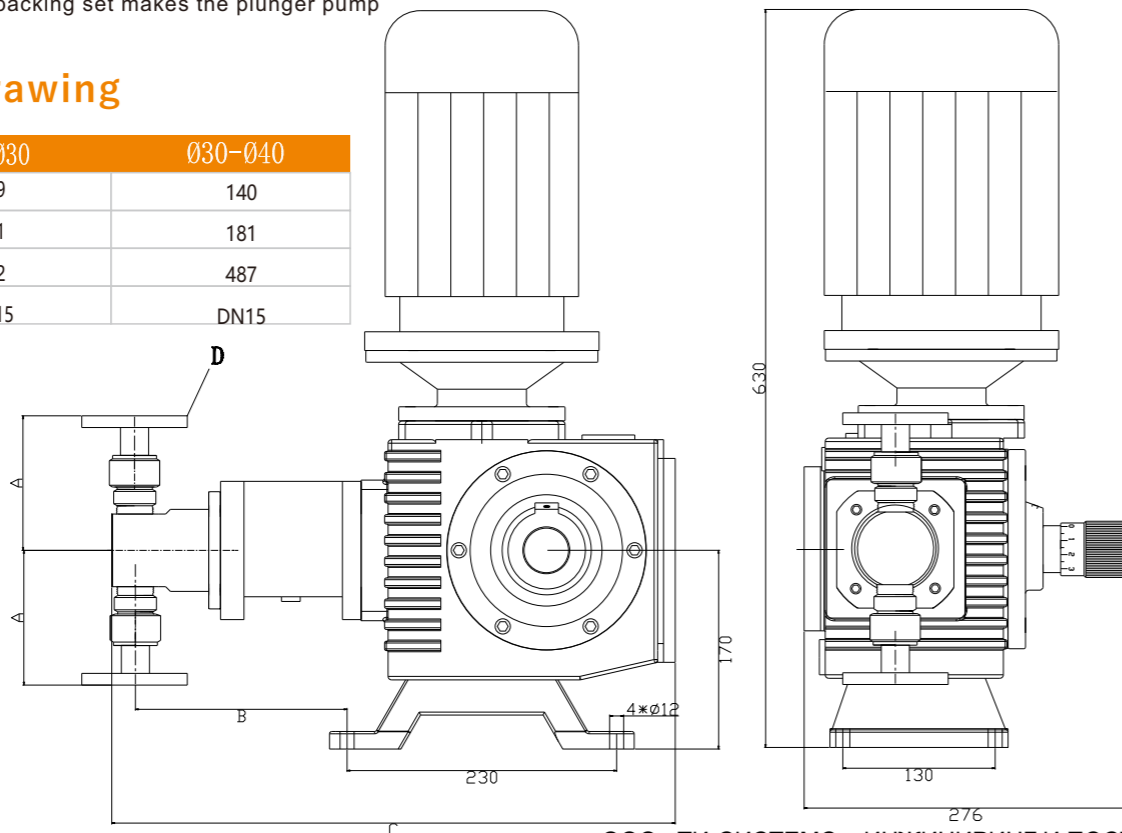
The "graphite fibre+styphon" multi-channel sealing structure is a combination of wear and corrosion resistance.

The styphon protects the graphite fibres while producing its own seal, greatly extending the packing life.

The patented graphite fibre packing set makes the plunger pump seal even better.

## Dimensional Drawing

Diameter of plunger	Ø16-Ø30	Ø30-Ø40
A	119	140
B	181	181
C	482	487
D	DN15	DN15



## Control

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

External control signal can be received to adjust the stroke speed, by installing frequency controller.

Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

## Application

Petroleum and chemical industry, electric power, metallurgy and other fields. Especially in the field of high precision, high pressure, high temperature outstanding performance.

## Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	316+Ceramis	Graphite fiber	EPM/PVDF/EPDM/Viton

## Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JX8/50	7	50	8	135	20	0.75
D-JX10/50	9	50	8	135	25	0.75
D-JX12/50	12	40	10	135	20	0.75
D-JX14/40	14	40	10	135	25	0.75
D-JX16/40	16	40	12	135	20	0.75
D-JX20/32	20	32	12	135	25	0.75
D-JX30/25	30	25	16	135	20	0.75
D-JX40/20	40	20	16	135	25	0.75
D-JX50/16	50	16	20	135	20	1.1
D-JX63/12.5	63	12.5	20	135	25	1.1
D-JX80/10	75	10	25	135	20	1.1
D-JX100/8.5	90	8.5	25	135	25	1.1
D-JX125/6.3	125	6.3	28	135	25	1.1
D-JX160/4.5	156	4.5	35	135	20	1.5
D-JX200/3.5	195	3.5	35	135	25	1.5
D-JX250/3	254	3	40	135	25	1.5
D-JX320/2.4	320	2.4	45	135	25	1.5
D-JX400/2.1	400	2.1	50	135	25	1.5
D-JX450/1.8	450	1.8	55	135	25	1.5
D-JX550/1.6	545	1.6	60	135	25	1.5
D-JX650/1.4	640	1.4	65	135	25	1.5
D-JX750/1.2	740	1.2	70	135	25	1.5
D-JX850/1.1	850	1.1	75	135	25	1.5
D-JX950/1	960	1	80	135	25	1.5
D-JX1100/0.7	1100	0.7	85	135	25	1.5
D-JX1200/0.5	1220	0.5	90	135	25	1.5
D-JX1400/0.5	1360	0.5	95	135	25	1.5
D-JX1500/0.5	1500	0.5	100	135	25	1.5

## Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC80 connection and standard test
6	Without motor,but with IEC90 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description	D-JX8-250	D-JX320-450	D-JX550-850	D-JX950-1500
P	NPT	1/2" F	1/2" F	1" M	1-1/2" M
F	Flange	DN15 Flange	DN20 Flange	DN25 Flange	DN40 Flange
K	Clamp Band	DN15	DN20	DN25	DN40

# D-JWM Series

Hydraulic Diaphragm Metering Pump

## Main Performance Parameters

**Flow Rate:** up to 200L/H

**Pressure :** up to 25Mpa

**Adjustment Range:** 10%-100%.

**Suction Lift:** up to 1.5M water

**Overflow Liquid Temperature Range :** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

**Altitude:** up to 1000m

## Main Features

The worm gear structure is used to reduce speed, ensuring continuous and stable operation of the mechanical drive parts.

The use of oil bath lubrication makes for a long working life of the drive components.

The worm gear and offset are integrated to ensure precise stroke distances and also facilitate disassembly for maintenance.

Robust and compact design is better sealing than plunger pumps. The built-in limit fill valve is to ensure balanced replenishment of the hydraulic oil.

The built-in adjustable safety valve protects the liquid end components from diaphragm rupture and other component damage caused by excessive pressure in the hydraulic chamber.

When conveying corrosive slurries and flammable and explosive hazardous chemicals, a double diaphragm rupture alarm device is available.



## Control

Power supply: 380V/three-phase, 220V/single-phase, 220V/three phase, 50HZ/60HZ

External control signal can be received to adjust the stroke speed, by installing frequency controller.

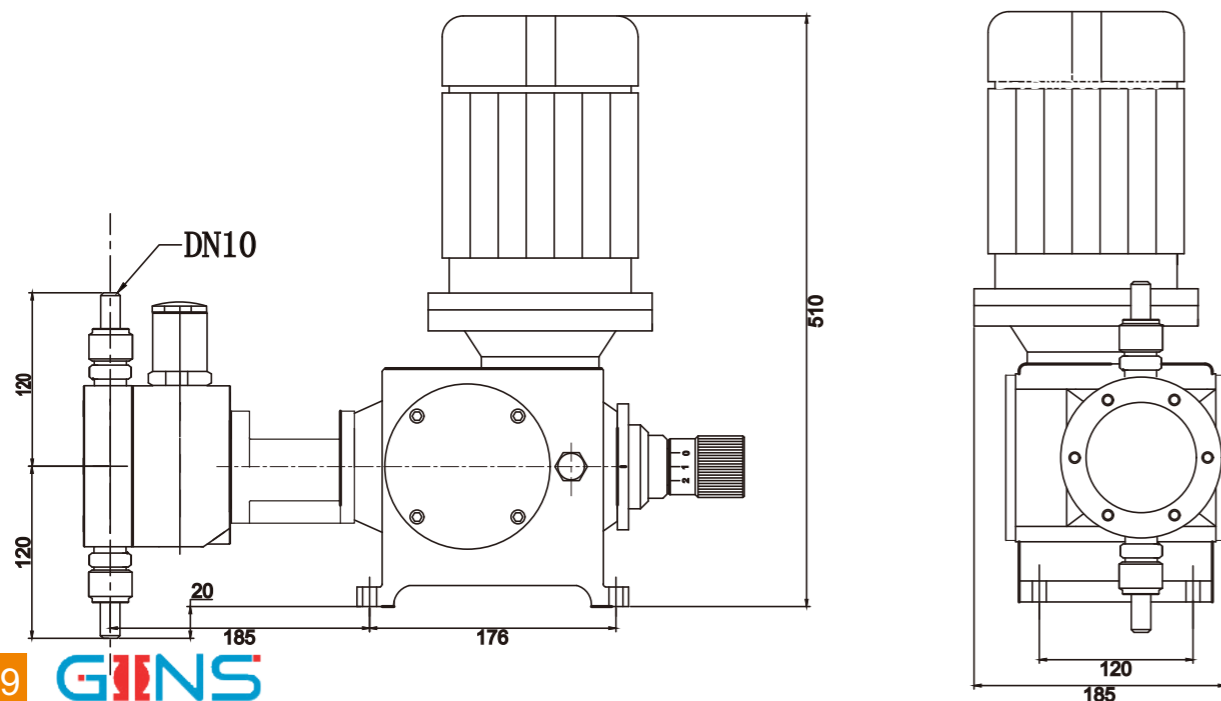
Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

## Application

Environmental protection, petrochemical, oil refining, power, metallurgy, medicine, food, water treatment, etc. Especially in the field of high precision, high pressure, high temperature, etc.

## Dimensional Drawing



## Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
PVC	PVC	PVC	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton
PVDF	PVDF	PVDF	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton

## Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JWM5/25	5	25	8	93	20	0.55
D-JWM8/20	8	20	10	93	20	0.55
D-JWM10/20	10	20	10	144	15	0.55
D-JWM12/16	12	16	10	144	20	0.55
D-JWM15/12.5	15	12.5	12	144	15	0.55
D-JWM20/12.5	20	12.5	12	144	20	0.55
D-JWM26/10	26	10	14	144	20	0.55
D-JWM32/6.3	32	6.3	15	144	20	0.55
D-JWM40/4	40	4	20	144	15	0.55
D-JWM50/3.2	50	3.2	22	144	15	0.55
D-JWM63/2	63	2	22	144	20	0.55
D-JWM84/1.6	84	1.6	25	144	20	0.55
D-JWM100/1.2	105	1.2	28	144	20	0.55
D-JWM125/1	122	1	30	144	20	0.55
D-JWM160/0.8	166	0.8	35	144	20	0.55
D-JWM200/0.63	217	0.63	40	144	20	0.55

## Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC70 connection and standard test
6	Without motor,but with IEC80 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description	D-JWM5/D-JWM200
P	NPT	1/2" F
F	Flange	DN15 Flange

# D-JBM Series

Hydraulic Diaphragm Metering Pump

## Main Performance Parameters

**Flow Rate:** up to 1000L/H

**Pressure:** up to 25Mpa

**Adjustment Range:** 10%-100%.

**Accuracy:** ±1%

**Suction Lift:** up to 1.5M water

**Overflow Liquid Temperature Range:** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

## Main Features

The worm gear structure is used to reduce speed, ensuring continuous and stable operation of the mechanical drive parts.

The use of oil bath lubrication makes for a long working life of the drive components.

The worm gear and offset are integrated to ensure precise stroke distances and also facilitate disassembly for maintenance.

Robust and compact design is better sealing than plunger pumps. The built-in limit fill valve is to ensure balanced replenishment of the hydraulic oil.

The built-in adjustable safety valve protects the liquid end components from diaphragm rupture and other component damage caused by excessive pressure in the hydraulic chamber.

When conveying corrosive slurries and flammable and explosive hazardous chemicals, a double diaphragm rupture alarm device is available.

## Control

Power supply: 380V/three-phase, 220V/single-phase, 220V/three phase, 50HZ/60HZ

External control signal can be received to adjust the stroke speed, by installing frequency controller.

Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

## Application

Environmental protection, petrochemical, oil refining, power, metallurgy, medicine, food, water treatment, etc. Especially in the field of high precision, high pressure, high temperature, etc.



## Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
PVC	PVC	PVC	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton
PVDF	PVDF	PVDF	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton

## Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JBM15/17/25	14	17/25	12	144	16	0.55/0.75
D-JBM25/11/16	25	11/16	16	144	16	0.55/0.75
D-JBM32/7.8/11.3	32	7.8/11.3	18	144	16	0.55/0.75
D-JBM40/6.3/9.2	39	6.3/9.2	20	144	16	0.55/0.75
D-JBM60/4/5.9	60	4/5.9	25	144	16	0.55/0.75
D-JBM90/2.8/4.1	90	2.8/4.1	30	144	16	0.55/0.75
D-JBM120/2/3	120	2.1/3.1	35	144	16	0.55/0.75
D-JBM160/1.6/2.3	155	1.6/2.3	40	144	16	0.55/0.75
D-JBM200/1.2/1.8	200	1.2/1.8	45	144	16	0.55/0.75
D-JBM250/1/1.5	250	1/1.5	50	144	16	0.55/0.75
D-JBM300/0.8/1.2	300	0.8/1.2	55	144	16	0.55/0.75
D-JBM350/0.7/1	350	0.7/1	60	144	16	0.55/0.75
D-JBM420/0.6/0.9	410	0.6/0.9	65	144	16	0.55/0.75
D-JBM500/0.8	500	0.8	70	144	16	0.75
D-JBM580/0.6	580	0.6	75	144	16	0.75
D-JBM660/0.5	660	0.5	80	144	16	0.75
D-JBM750/0.4	740	0.4	85	144	16	0.75
D-JBM850/0.35	830	0.35	90	144	16	0.75
D-JBM1000/0.35	1000	0.35	90	180	16	0.75

## Motor

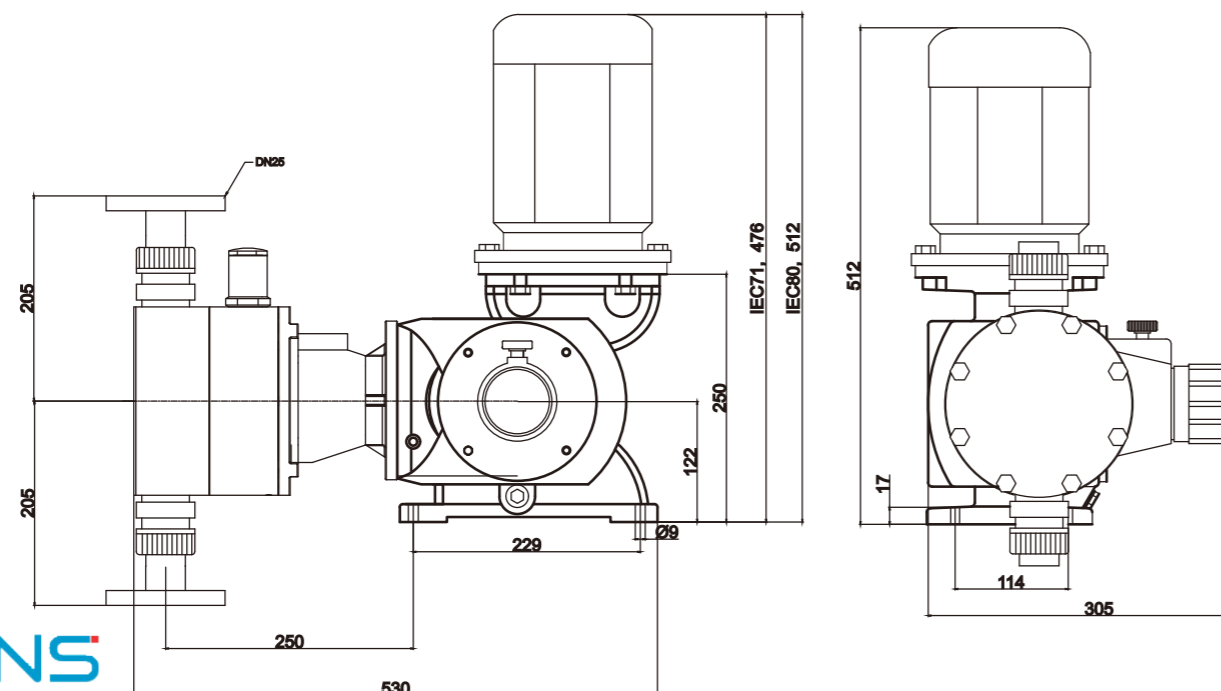
Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC70 connection and standard test
6	Without motor,but with IEC80 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description	D-JBM10-420	D-JBM500-1000
P	NPT	1/2"F	1"M
F	Flange	DN15 Flange	DN25 Flange

## Dimensional Drawing



# D-JXM Series

Hydraulic Diaphragm Metering Pump

## Main Performance Parameters

**Flow Rate:** up to 1500L/H

**Pressure:** up to 25Mpa

**Adjustment Range:** 10%-100%.

**Accuracy:** ±1%

**Suction Lift:** up to 1.5M water

**Overflow Liquid Temperature Range:** -10 °C ~ 100 °C

**Maximum Environmental Temperature:** 40 °C

## Main Features

The worm gear structure is used to reduce speed, ensuring continuous and stable operation of the mechanical drive parts.

The use of oil bath lubrication makes for a long working life of the drive components.

The worm gear and offset are integrated to ensure precise stroke distances and also facilitate disassembly for maintenance.

Robust and compact design is better sealing than plunger pumps. The built-in limit fill valve is to ensure balanced replenishment of the hydraulic oil.

The built-in adjustable safety valve protects the liquid end components from diaphragm rupture and other component damage caused by excessive pressure in the hydraulic chamber.

When conveying corrosive slurries and flammable and explosive hazardous chemicals, a double diaphragm rupture alarm device is available.

## Material of Liquid End

Liquid End	Pump Head	Valve Body&Seat	Ball	Plunger	Filler	Seal
304SS	304SS	304SS	304SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
316SS	316SS	316SS	316SS	304+Ceramis	Graphite fiber	EPM/4F/PVDF/EPDM/Viton
PVC	PVC	PVC	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton
PVDF	PVDF	PVDF	Oxidation picks	304+Ceramis	Graphite fiber	EPM/EPDM/Viton



## Control

Power supply: 380V/three-phase, 220V/single-phase, 220V/three phase, 50HZ/60HZ

External control signal can be received to adjust the stroke speed, by installing frequency controller.

Input signal: 4-20mA analog signal switch controller.

"On/Stop" button control the three-phase motor and adjust the output flow.

## Application

Environmental protection, petrochemical, oil refining, power, metallurgy, medicine, food, water treatment, etc. Especially in the field of high precision, high pressure, high temperature, etc.

## Performance

Model	Max Flow rate(L/H)	Max Pressure(Mpa)	Diameter of plunger	SPM (min-1)	Stroke Length	Motor(KW)
D-JXM30/25	28	25	16	135	20	0.75
D-JXM40/20	36	20	16	135	25	0.75
D-JXM50/16	50	16	20	135	20	1.1
D-JXM63/12.5	63	12.5	20	135	25	1.1
D-JXM80/10	72	10	25	135	20	1.1
D-JXM100/8.5	90	8.5	25	135	25	1.1
D-JXM125/6.3	125	6.3	28	135	25	1.1
D-JXM160/4.5	156	4.5	35	135	20	1.5
D-JXM200/3.5	195	4.5	35	135	25	1.5
D-JXM250/3	254	3	40	135	25	1.5
D-JXM320/2.4	320	2.4	45	135	25	1.5
D-JXM400/2.1	400	2.1	50	135	25	1.5
D-JXM450/1.8	456	1.8	55	135	25	1.5
D-JXM550/1.6	545	1.6	60	135	25	1.5
D-JXM650/1.4	638	1.4	65	135	25	1.5
D-JXM750/1.2	739	1.2	70	135	25	1.5
D-JXM850/1.1	850	1.1	75	135	25	1.5
D-JXM950/0.9	960	0.9	80	135	25	1.5
D-JXM1100/0.7	1091	0.7	85	135	25	1.5
D-JXM1200/0.5	1220	0.5	90	135	25	1.5
D-JXM1400/0.5	1360	0.5	95	135	25	1.5
D-JXM1500/0.5	1500	0.5	100	135	25	1.5

## Motor

Code	Description
1	3-phase,380V,50HZ,1440rpm,IP55/F
2	single-phase,220V,50HZ,1440rpm,IP55/F
3	3-phase,Ex,380V,50HZ,1440rpm,IP55/F
4	3-phase,inverter,380V,50HZ,1440rpm,IP55/F,IC416
5	Without motor,but with IEC70 connection and standard test
6	Without motor,but with IEC80 connection and standard test
7	Others, Consult with Factory

Note: Single phase motor can't be used with Varipulse® controller.

## Connection

Code	Description	D-JXM30-250	D-JXM320-850	D-JXM950-1500
P	NPT	1/2" F	1" M	1-1/2" M
F	Flange	DN15 Flange	DN25 Flange	DN40 Flange

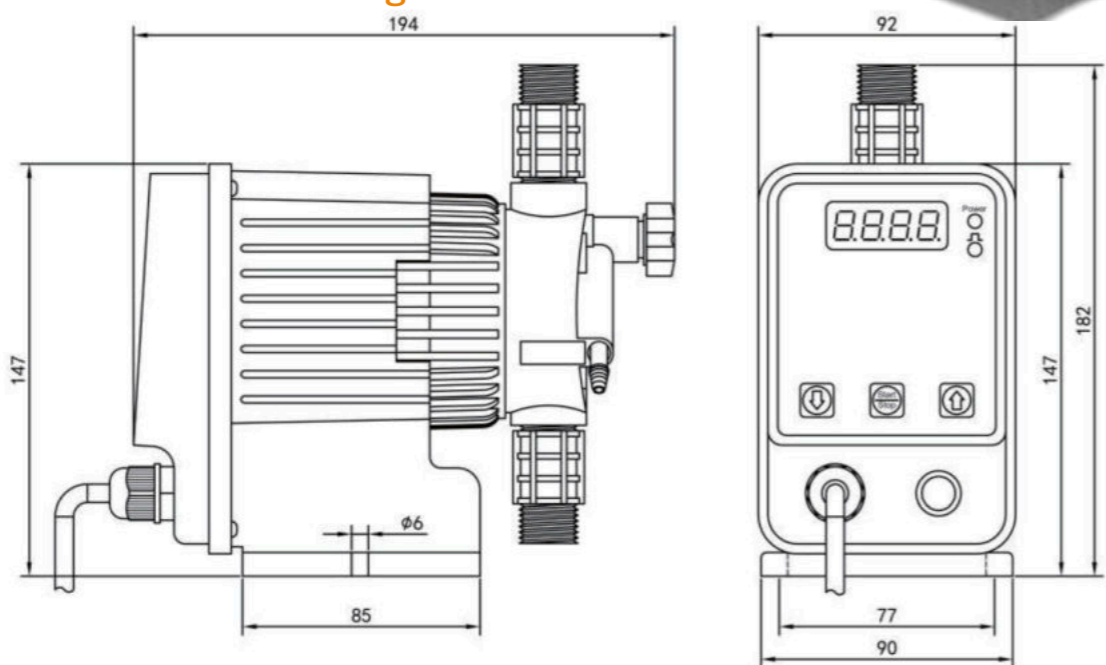
# D Series

Solenoid Metering Pump

## Main Features

Dedicated housing plastic material, high strength and corrosion resistant.  
LED digital display, intuitive and convenient to use.  
Valve seat made of PTFE precision machining, corrosion resistant.  
Simple structure design, economic price.

## Dimensional Drawing



## Material of Liquid End

Liquid Ends Material		
Component	Standard	Optional
Pump Head	PP	/
Diaphragm	PTFE	/
Valve Body	PP	/
Valve Ball	Ceramics	PTFE
Valve Seat	PTFE	/
Valve Spring	Hastelloy	/

## Performance

Techical Data				
Model	Pressure (Bar)	Flow (L/H)	Power (W)	Connection Size
D0701	7	1	24	6 * 4 mm
D0702	7	2	24	6 * 4 mm
D0703	7	3	24	6 * 4 mm
D0704	7	4	24	6 * 4 mm
D0506	5	6	24	6 * 4 mm
D0309	3	9	24	6 * 4 mm
D0211	1.5	11	24	6 * 4 mm

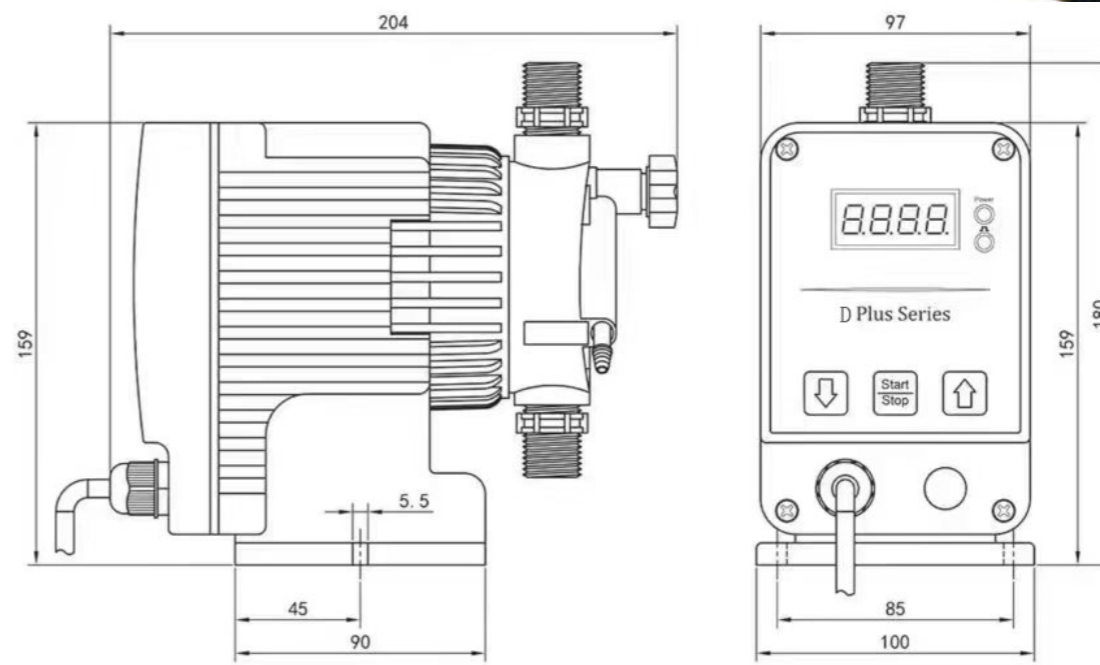
# D Plus Series

Solenoid Metering Pump

## Main Features

Dedicated housing plastic material, high strength and corrosion resistant.  
LED digital display, intuitive and convenient to use.  
Valve seat made of PTFE precision machining, corrosion resistant.  
Simple structure design, economic price.  
The valve spring is made of Hastelloy C276.

## Dimensional Drawing



## Material of Liquid End

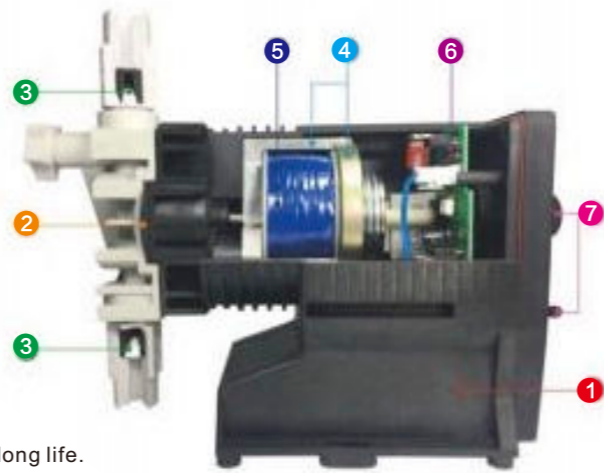
Liquid Ends Material		
Component	Standard	Optional
Pump Head	PP	/
Diaphragm	PTFE	/
Valve Body	PP	/
Valve Ball	Ceramics	PTFE
Valve Seat	PTFE	/
Valve Spring	Hastelloy	/
Seals	FPM	EPDM

## Performance

Techical Data				
Model	Pressure (Bar)	Flow (L/H)	Power (W)	Connection Size
D Plus 0408	3.5	8	40	6 * 4 mm
D Plus 0412	3.5	12	40	6 * 4 mm
D Plus 0315	2.5	15	40	6 * 4 mm
D Plus 0220	1.5	20	40	6 * 4 mm
D Plus 0709	7	9	50	6 * 4 mm
D Plus 0712	7	12	50	3/8 * 1/4* mm
D Plus 0515	5	15	50	3/8 * 1/4* mm
D Plus 0320	3	20	50	3/8 * 1/4* mm

# T Series

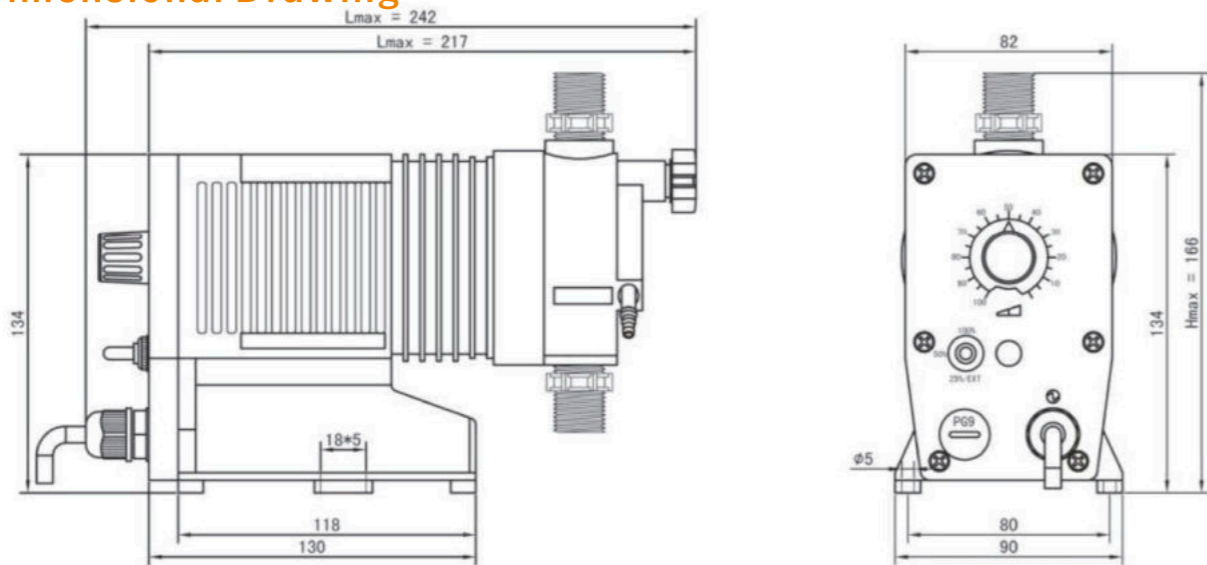
Solenoid Metering Pump



## Main Features

- The housing is made of PPO, high strength, ageing resistant and long life.
- One-way valve adopts double ball structure, the valve seat is made of PTFE precision machining, more corrosion-resistant.
- The solenoid is made of pure electrical iron, which is difficult to process and has a greater service force.
- The junction is made of high temperature resistant enamelled wire from the well-known crystal brand, with a long life span.
- All components on the PCB board are made of well-known brand, which guarantees higher quality.
- Dual adjustment design of stroke stiffness and frequency, with diversified flow adjustment options.

## Dimensional Drawing



## Material of Liquid End

Liquid Ends Material		
Component	Standard	Optional
Pump Head	PP	/
Diaphragm	PTFE	/
Valve Body	PP	/
Valve Ball	Ceramics	PTFE
Valve Seat	PTFE	/
Valve Spring	Hastelloy	/
Seals	FPM	EPDM

## Performance

Techical Data				
Model	Pressure ( Bar )	Flow ( L/H )	Power ( W )	Connection Size
T1600	16	0.4	12	6 * 4 mm
T1601	16	0.6	12	6 * 4 mm
T1602	16	0.8	16	6 * 4 mm
T1200	12	0.6	12	6 * 4 mm
T1201	12	0.8	16	6 * 4 mm
T1202	12	1.2	24	6 * 4 mm
T0803	8	3	12	3/8 * 1/4* mm
T0804	8	4	16	3/8 * 1/4* mm
T0806	8	6	24	3/8 * 1/4* mm
T0306	3	5.5	12	3/8 * 1/4* mm
T0308	3	7.3	16	3/8 * 1/4* mm
T0311	3	11	24	3/8 * 1/4* mm
T0211	1.5	11	12	3/8 * 1/4* mm
T0215	1.5	14.5	16	3/8 * 1/4* mm
T0222	1.5	22	24	3/8 * 1/4* mm

# Accessories

Metering Pump



**Safety valve:** When the pressure of system and pipeline is too high, it can release pressure in time, protect pump and recover liquid. It is also used as pressure relief valve.

**Common materials:** PVC, 304, 316, PTFE  
**Common bore:** DN10 DN15 DN25 DN32 DN40

**Back pressure valve:** It can maintain the required pressure of the pipeline in the condition of reducing or unstable pressure of the equipment vessel, so that the pump can normally output flow.

**Common materials:** PVC, 304, 316, PTFE  
**Common bore:** DN10 DN15 DN25 DN32 DN40



**Pulse dampers:** reduce pulsations generated by the operation of the metering pump by 95% and are generally installed on the outlet line and close to the metering pump.

**Common materials:** PVC, 304, 316, PTFE  
**Common bore:** DN10 DN15 DN25 DN32 DN40

**Y filter:** It can filter impurities in the medium and protect the metering pump. It is usually installed on the inlet pipeline near the metering pump.

**Common materials:** PVC, 304, 316, PTFE  
**Common bore:** DN10 DN15 DN25 DN32 Dn40



**Check valve:** Prevents backflow of fluid in pipes.

**Common materials:** PVC, 304, 316, PTFE  
**Common bore:** DN10 DN15 DN25 DN32 Dn40

**Pump Head**

**Diaphragm**