

GD Series Mechanical Diaphragm Metering Pump

Main Performance Parameters

- Max flow rate: 135L/h
- Max discharge pressure: 10bar
- Steady-state accuracy $\pm 1\%$
- Maximum suction lift height: 2m water column
- Max inlet pressure: 2bar
- Max ambient temperature: +40°C

Major Features

Drive End

- With reliable cam structure, it is featured by lower noise, flexible disassembly, and easy maintenance, for harsh working conditions.
- With oil bath lubrication, the driving parts are coupled with long working life.
- With high-precision worm and worm gear technology, it operates smoothly.
- It can achieve flow adjustment both in the shutdown and running states.

Fluid End

- It chooses mechanical drive diaphragm, which diaphragm adopts multi-layer composite structure with PTFE and elastic rubber, with no leakage and durable characteristics.
- Material side without diaphragm is easy for passing the materials.
- Various pump head materials include PVC, PVDF, 316SS and others. They are suitable for conveying all kinds of materials.
- It adopts self-cleaning check valve structure, which is easy to maintain.

Control Mode

- Power supply: 220V/50HZ single phase, 380V/50HZ three phase.
- The motor is controlled by "on/off" mode, the flow output by flexible handle.
- Variable frequency controller receives external control signal, adjusts the stroke speed; power supply: 220V-50Hz single-phase/380V-50Hz three-phase; the input signal: 4-20mA analog signal.

Main Applications

- The product is extensively used in many fields such as environmental protection, petrochemical, chemical, oil refining, electricity, metallurgy, medicine, food, water treatment and other fields.

Annexes

- Optional accessories include filter, calibration column, safety valve, counter balance valve, pulsating damper, etc., where the safety valve is required.
- Pumps with GD030, GD050 PVC head and R interface code, should be equipped with injection valve, foot valve, counterweight and 6m hose.



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Main Components of the Fluid End

GD030-GD050

The materia of Fluid End	Valve body	Valve seat	Valve ball	Isolating Diaphragm	Seal Ring	Connections
PVC	PVC	PVDF	zirconia	PTFE composite diaphragm	Fluororubber	PVC
PVDF	PVDF	PVDF	zirconia	PTFE composite diaphragm	Fluororubber	PVDF
316SS	316SS	316SS	316SS	PTFE composite diaphragm	Fluororubber	316SS

GD055-GD130

The materia of Fluid End	Valve body	Valve seat	Valve ball	Isolating Diaphragm	Seal Ring	Connections
PVC	PVC	PVDF	zirconia	PTFE composite diaphragm	Fluororubber	PVC
PVDF	PVDF	PVDF	zirconia	PTFE composite diaphragm	Fluororubber	PVDF
316SS	316SS	316SS	316SS	PTFE composite diaphragm	Fluororubber	316SS

GD Series Mechanical Diaphragm Metering Pump Model Description

Series Flow Fluid End Interface Electric Motors Base

Series

Code	Description
GD	GD Series Mechanical Diaphragm Metering Pump

Flow

Code	Max flow (L/h)	Stroke frequency (min ⁻¹)	Max pressure (bar)	Stroke (mm)	Motor power (kW)
030	34	96	10	4	0.2
050	44	116			
055	59	96			
070	71	116			
085	91	80	8	6	
100	101	96			
130	135	116			

Fluid End

Code	Description
P	PVC fluid end
S	316 fluid end
T	PVDF fluid end
Z	As for special fluid end, please consult Nanfang Pump, and indicate in order

● Interface

Code	Description	GD030-GD050			GD055-GD130		
		PVC	PVDF	316	PVC	PVDF	316
P	NPT thread	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F	1/2"F
Q	Hard pipe fittings of inner pipe nozzle	DN15	-----	-----	DN15	-----	-----
R	Hose connector	6x12	6.35x9.52	-----	20x28	-----	-----
X	Special interface	Please consult Nanfang pump, and indicate in order					

Note: the red parameters are standard configuration.

- The product is not equipped with injection valve, foot valve, counterweight and PTFE hose by default. Please make additional inquiry to the factory.
- The product is not equipped with hose by default. Please make additional inquiry to the factory when needed. Injection valve, foot valve and counterweight are not included either.

● Electric Motor

Code	Description
1	200W, 1440rpm, 3PH-50Hz-380V, IP55/F/TEFC
2	200W, capacitor-start motor, 1440rpm, 1PH-50Hz-220V, IP55/F/TEFC
3	Consult Nanfang Pump for other motors

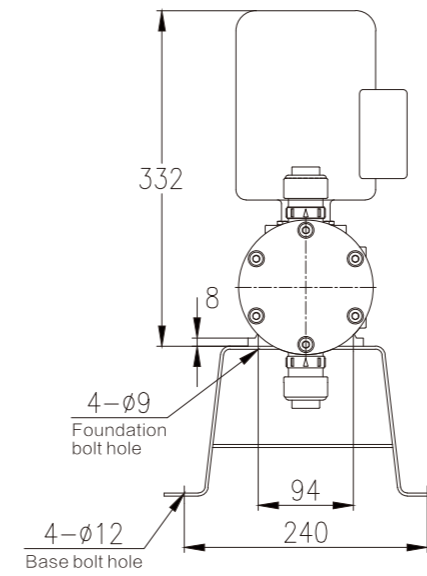
● Base

Code	Description
N	No base
Y	Base

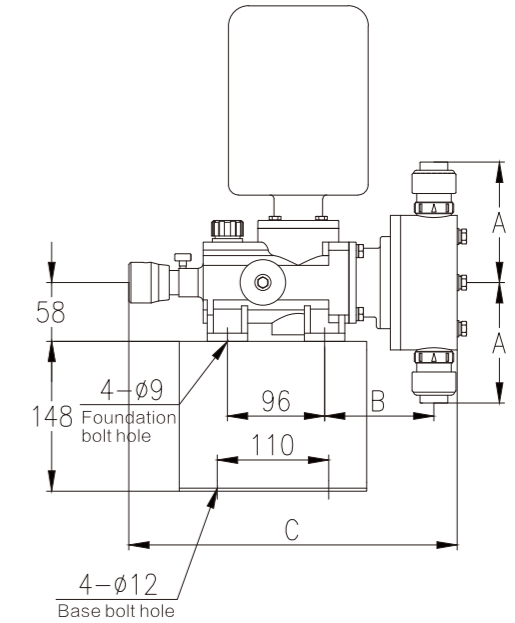
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● GD Series Dimensions



GD series front view



GD series side view

● GD Series Mounting Dimension

GD030-GD050

Pump Head Material	Interface code	A(mm)	B(mm)	C(mm)
PVC	P	101	91	301
	Q	101		
	R	108		
PVDF	P	101	91	301
	Q	101		
	R	108		
316	P	95	91	301
	Q	----		
	R	----		

GD055-GD130

Pump Head Material	Interface code	A(mm)	B(mm)	C(mm)
PVC	P	119	108	327
	Q	119		
	R	----		
PVDF	P	119	108	327
	Q	119		
	R	----		
316	P	123	108	327
	Q	----		
	R	----		