

APPLICATION AREA



Iron and steel industries

Inner Mongolia's Electric Energy Investment Co., Ltd.

Liaoning Datang International Jinzhou Thermal Power Co., Ltd.

Petroleum and petrochemical

China National Petroleum Corporation (CNPC) Jinzhou Branch

Sinopec Group Jiangsu Petroleum Exploration Bureau

Industrial applications

Vinda Paper (Zhejiang) Co., Ltd.
China CNR Corporation Limited (CNR)
SAIC Motor Corporation Limited

Water treatment

Xiushan Township 5000 tons of Seawater Desalination Project in Daishan County
Beijing Yansan Veolia Water Co., Ltd.
Zhoushan Liheng Water Supply Limited
Beijing OriginWater Technology Co., Ltd. (BOW)

Food and pharmaceuticals

Kraft Foods (Suzhou) Co., Ltd.
Harbin Pharm. Group Sanjing Pharmaceutical Shareholding Co., Ltd.
Guangxi Coca-cola Beverage Co., Ltd.
Nongfu Spring Fusong Changbai Mountains Natural Mineral Water Co., Ltd.

HVAC

Royal Philips LCC2A
Zhongshan Station (Antarctica)
Gree Electric Appliances Inc. of Zhuhai (GREE)

Other fields

Lawrence Pump Machinery (Beijing) Co., Ltd.

GW, GS Series Mechanical Diaphragm Metering Pumps

Main Performance Parameters

- Max flow rate: 53L/h
- Max discharge pressure: 10bar
- Steady-state accuracy $\pm 1\%$
- Maximum suction lift height: 1.5m water column
- Max ambient temperature: +40°C
- Max inlet pressure: 1bar

Major Features

Fluid End

- Mechanical drive diaphragm and material side without diaphragm are easy for passing the materials
- Various pump head materials include PVC, PVDF, 316SS and others. They are suitable for conveying various materials
- Self-cleaning check valve structure

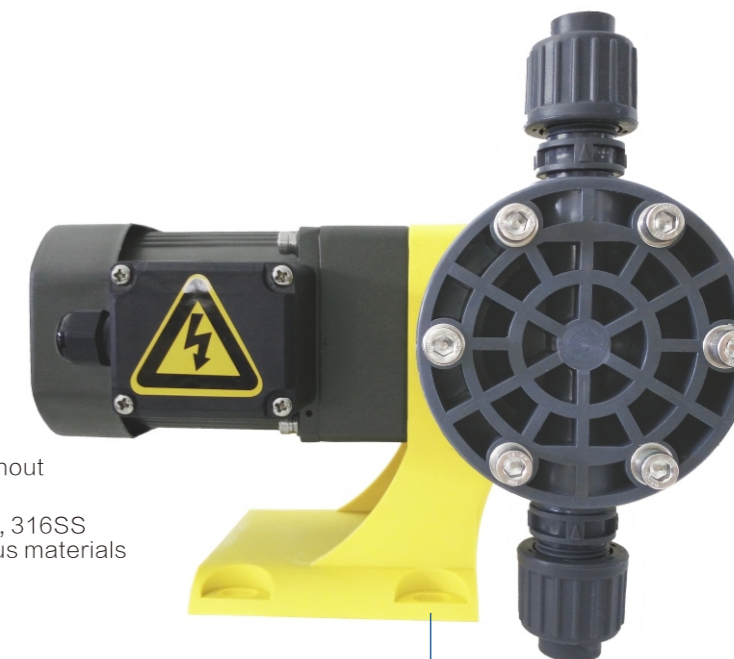
Drive End

GW Series

- Variable eccentric structural adjustment ensures smooth fluctuations in flow pulsation
- Upgraded structural for harsh operating environments

GS Series

- It adopts reliable cam structure, with lower noise, flexible disassembly, and easy maintenance features, for harsh working conditions
- It is supported by sliding bearing, which ensures smooth and reliable work states, non-noise, lower maintenance costs



GW Series Mechanical Diaphragm Metering Pump

Control Mode

- Power supply: 380V/220V-50Hz/60Hz/three-phase/single-phase.
- Motor controller determines three-phase motor by "on/off" mode, adjusts the output flow

Main Applications

- It is mainly used in following fields, such as reverse osmosis (ultrafiltration), industrial water, wastewater, swimming pools, desalination and other water treatment process.

Main Components of the Fluid End

Fluid End	Pump head	Valve body	Valve seat	Valve ball	Isolating Diaphragm	Seal Ring	Connections
PVC	PVC	PVC	PVDF	Zirconia	PTFE composite diaphragm	Fluororubber	PVC
PVDF	PVDF	PVDF	PVDF	Zirconia	PTFE composite diaphragm	Fluororubber	PVDF
316SS	316SS	316SS	316SS	316SS	PTFE composite diaphragm	Fluororubber	316SS

Annexes

- The necessary annexes should be provided, such as: filter, calibrator, pulsation damper, safety valve and counter balance valve.
- The pump with PVC head, its range of GW003-055, GS003-055, should be equipped with injection valve, foot valve, counterweight and 6m hose, except for 316 pump head, PVDF pump head.

Standard Motor Performance Parameters

- Power supply: 380V/220V-50Hz/60Hz/three-phase/single-phase
- IP grade: IP54
- Insulation class: Class F
- All motors shall comply with IEC or NEC standards

GW, GS Series Mechanical Diaphragm Metering Pumps Model Description

Series Flow/Pressure Fluid End Interface Electric Motor

Series

Code	Description	Code	Description
GW	GW Series Mechanical Diaphragm Metering Pump	GS	GS Series Mechanical Diaphragm Metering Pump

Flow/Pressure

Code	Max flow rate (L/h)	Stroke frequency (min ⁻¹)	Max Bar (bar)	Stroke (mm)	Diaphragm (mm)	Motor power (W)
GW003	4.5	20	10	4	60	25
GW005	6	30				
GW010	13	50				
GW025	24	83				
GW030	30	100				
GW035	36	120	7			
GW045	46	150				
GW055	53	166				
GS003	4.5	20				
GS005	6	30				
GS010	13	50	10			
GS025	24	83				
GS030	30	100				
GS035	36	120				
GS045	46	150				
GS055	53	166	7			

Fluid End

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

Interface

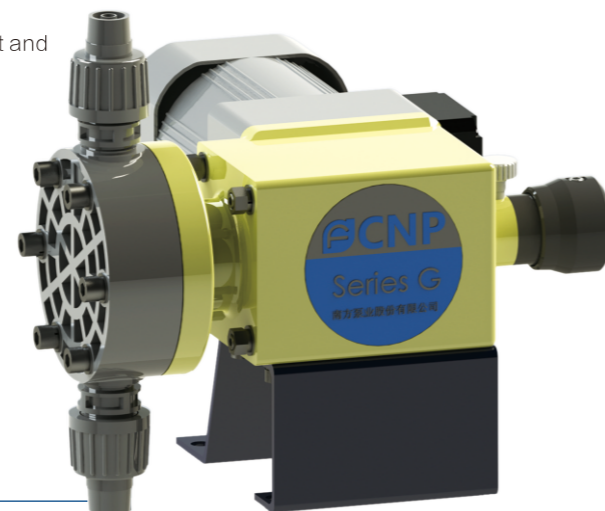
Code	Description	GW003~055, GS003~055		
		PVC	PVDF	316
P	NPT thread	1/2"F	1/2"F	1/2"F
Q	Hard pipe fittings of inner pipe nozzle	DN15	-----	-----
R	Hose connector	6×12	6.35×9.52	-----
X	Special interface	Please consult Nanfang pump, and indicate in order		

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.

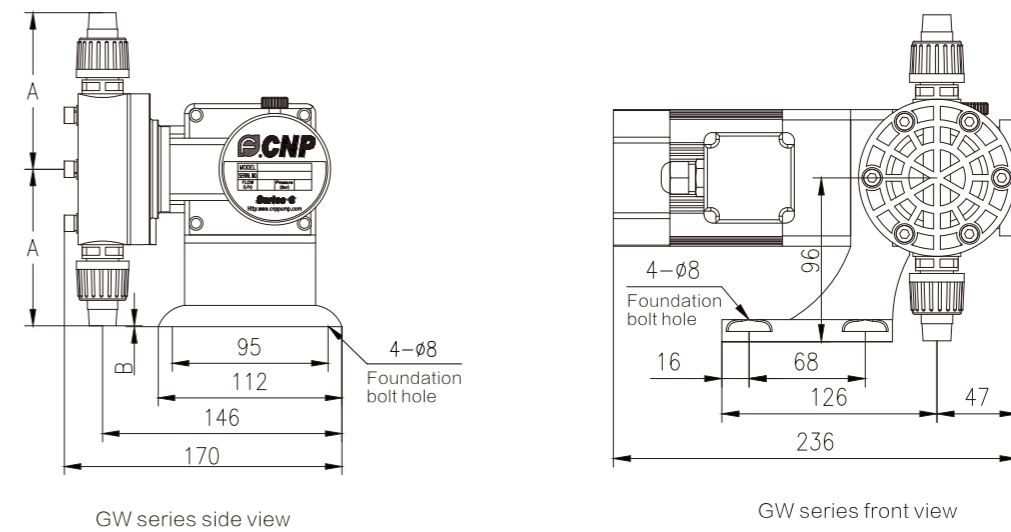
Electric Motor

Code	Description
1	25W, 1440rpm, 3PH-50Hz-380V, IP54/F/TEFC
2	25W, 1440rpm, 1PH-50Hz-220V, IP54/F/TEFC
3	Consult Nanfang Pump for additional information



GS Series Mechanical Diaphragm Metering Pump

GW Series Dimensions

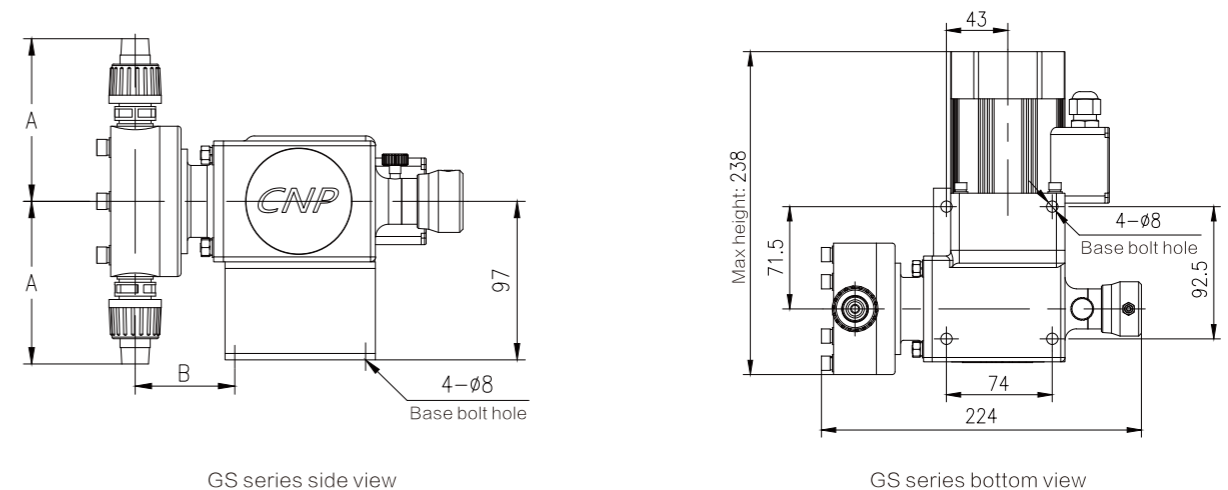


GW Series Mounting Dimensions

GW003-055

Pump Head Material	Interface code	A(mm)	B(mm)
PVC	P	125	27
	Q	125	
	R	99	
PVDF	P	94	-4
	R	99	
	P	99	
316	P	99	3

GS Series Dimensions



GS Series Dimensions

GS003-055

Pump Head Material	Interface code	A(mm)	B(mm)
PVC	P	125	61
	Q	125	
	R	99	
PVDF	P	94	61
	R	99	
	P	99	
316	P	99	62