



Technical Catalogue



GSS Series

Mechanical Diaphragm Metering Pump

GSS series

mechanical diaphragm metering pump



Main performance parameters

Maximum flow rate: 58L/h	The suction lifting height can reach up to 1.5m water column
Maximum discharge pressure: 10bar	Maximum ambient temperature: +40°C
Steady-state accuracy $\pm 1\%$	Maximum inlet pressure: 1bar

Main features

Hydraulic end

The diaphragm is mechanically driven, and there is no diaphragm guard plate on the material side to facilitate the passage of the material.
Self-cleaning check valve structure.

GSS series driver terminal

It adopts a reliable cam structure, which is suitable for a variety of harsh working conditions, low noise, simple disassembly and easy maintenance.
It is supported by sliding bearings, which work smoothly, reliably, without noise, and have low maintenance costs.

Control mode

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

The switch controller controls the three-phase motor in an "on/off" manner and adjusts the output flow.

Main application

Reverse osmosis (ultrafiltration), industrial water and wastewater, swimming pools, seawater desalination and other water treatment processes.

Material of main components of liquid end

GSS001-GSS002

Hydraulic end	Pump head	Valve body	Seat	Valve ball	Diaphragm	Sealing Ring	Connect
PVC	PVC	PVDF	EPDM/FPM*/4F*	Oxidation Error	PTFE	EPDM/FPM*	PVC
PVDF	PVDF	PVDF	EPDM/FPM*/4F*	Oxidation Error	PTFE	EPDM/FPM*	PVDF

* : Optional Item

GSS003-GSS060

Hydraulic end	Pump head	Valve body	Seat	Valve ball	Diaphragm	Sealing Ring	Connect
PVC	PVC	PVC	PVDF	Oxidation Error	PTFE composite diaphragm	FPM/EPDM*/ Oxygen coated	PVC
PVDF	PVDF	PVDF	PVDF	Oxidation Error	PTFE composite diaphragm	FPM/EPDM*/ Oxygen coated	PVDF
316SS	316SS	316SS	316SS	316SS	PTFE composite diaphragm	FPM/EPDM*/ Oxygen coated	316SS

* : Optional Item

Annex

Optional accessories such as filters, correction columns, pulsation dampers, safety valves and back pressure valves.

Pumps with PVC and PVDF hydraulic terminals in the GSS001-GSS002 range and the interface code is R, injection valves, bottom valves, and counterweights are provided with the metering pump, and each inlet and outlet is equipped with 1 hose (see the "Interface" table for details).

Pumps with PVC hydraulic terminals in the GSS003-GSS060 range and interface code R are provided with injection valves, bottom valves, counterweights and 6-meter hoses with metering pumps (see the "Interface" table for details).

Motor performance parameters

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

Insulation grade: F grade

Protection class: IP54

All motors comply with IEC or NEC standards

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Model definition of GSS series mechanical diaphragm metering pump

Series Flow Hydraulic end Interface Motor

Series

Encoding	Description
GSS	GSS Series mechanical diaphragm metering pump

Flow

Encoding	Maximum flow rate (L/h)	Number of stroke (min-1)	Maximum pressure (bar)	Stroke (mm)	Diaphragm (mm)	Motor power (W)			
GSS001	1.1	50	10	1.2	45	25			
GSS002	2.2	100		4	60				
GSS003	4.5	20							
GSS005	6	30							
GSS010	13	50							
GSS025	24	83	7						
GSS030	30	100							
GSS035	36	120	5						
GSS045	46	150	4						
GSS055	53	166	2						
GSS060	58								

Liquid end

Encoding	Description
P	PVC Hydraulic end -----
S	316 Hydraulic end -----
T	PVDF Hydraulic end -----
Z	For special material hydraulic ends, please consult the factory and specify when ordering -----

Connector

Encoding	Description	GSS001-GSS002				GSS003-GSS060		
		PVC Hydraulic end		PVDV Hydraulic end		PVC hydraulic end	PVDF hydraulic end	316 hydraulic end
		Import	Export	Import	Export			
	NPT Threaded interface	-----	-----	-----	-----	1/2"F	1/2"F	1/2"F
	Inner nozzle hard tube intubation interface	-----	-----	-----	-----	DN15	-----	-----
	Hose interface	PVC hose 4x6 •	PE hose 4x6 •	4F hose 4x6 •		6x12 ■	6.35x9.52 ■	-----
	Special interface	Please consult the factory and explain when ordering						

Note: The red text parameter part is the standard configuration.

- PVC hose length is 3 meters/root, PE hose length is 5 meters/root; the default configuration for import and export from the factory is 1 hose.
- The length of the 4F hose is 3 meters/root, and the length of the 4F hose is 5 meters/root; the default configuration for the import and export of the factory is 1 hose.
- PVC hose is 6 meters long/root; 1 hose is configured by default at the factory.
- Injection valves, bottom valves, counterweights and tetraoxygen hoses are not configured at the factory. Please order additional and inquire with the factory.

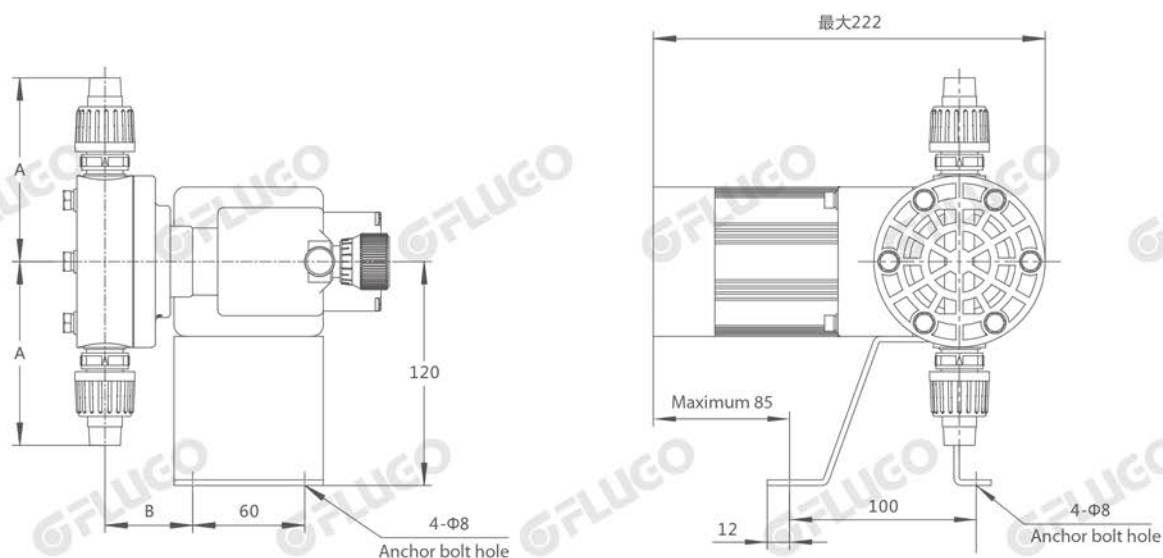
Motor

Encoding	Description
1	25W, three-phase 380V, 50Hz, 1440rpm, IP54/F
2	25W, single-phase 220V, 50Hz, 1440rpm, IP54/F
3	For other motors, please consult the factory

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GSS series dimensions



GSS series installation dimensions

GSS001-GSS002			
Pump Head Material	Interface Code	A(mm)	B(mm)
PVC	R	83.5	2
PVDF	R	83.5	2

GSS003-GSS060			
Pump Head Material	Interface Code	A(mm)	B(mm)
PVC	P	125	47
	Q	125	
	R	99	
PVDF	P	94	47
	R	99	
316	P	99	48



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