



DOSING SYSTEMS
Solenoid Driven Dosing Pumps

HC100 mA

Technical Data Sheet
HC1 series



KEY FEATURES

- Electronic Frequency adjustment 0-100%
- Microprocessor technology
- Proportional Control via a 4-20 milliamp input
- PTFE Diaphragm
- Touch Sensitive controls
- LED Display of setting
- Double ball valves as standard
- Lip valves on request
- Dosing Head with integral priming valve
- Wall Mount with bracket & fixing kit
- Reinforced PP Plastic housing
- Optional Low level control with level switch
- Supplied complete with hose accessory kit

The **HC100 mA** is a proportional solenoid driven dosing pump, diaphragm actuated microprocessor based with digital controls. The HC100 mA external milliamp signal from a process controller or analytical instrument. The dosing pump is capable of dosing in direct proportion to that signal. The stroking frequency of the pump can be adjusted from zero to maximum via touch sensitive controls on the front facia. A manual setting is also available for priming purposes. This model also features low level protection operated by an optional level switch.

PUMP FUNCTIONS, DOSING MODES AND CONTROLS

Digital controls: allow easy programming for both proportional and manual mode.

Programming modes:

- **Manual mode:** (F1) enables you to select the exact number of strokes, between 1-105 strokes per minute, mainly used to prime the pump.
- **4mA mode:** (F2) The pump will stroke in response to a milliamp signal. The pump control panel enables you to set the number of strokes (0-100) the pump will run at 4 mA.
- **Division mode:** (F3) The pump will stroke in response to a milliamp signal. The pump control panel enables you to set the number of strokes(0-100) the pump will run at 20 mA.

Optional Level control: If fitted a level switch stops the pump when the chemical level runs low.

LIQUID END MATERIAL HC100 SERIES

	Standard Version	Upon request
Pump head	PP	PVDF
Diaphragm	PTFE	-----
Valve balls	Glass Pyrex	AISI 316 – PTFE - CERAMIC
Valve cartridge	PP	PVDF
Spring loaded injection valve:	Hastelloy/Pyrex	Hastelloy/AISI316 - PTFE
Seals/O-rings	Viton®	Dutral® - NBR
Spring Loaded Injection Fitting	Hastelloy/Pyrex	Hastelloy (AISI 316 – PTFE - CERAMIC)
Injection Fitting	PP	PVDF
Foot Valve Strainer	PP	PVDF
Suction Hose /Air Bleed hose	PVC	PVDF
Discharge Hose	PE	PVDF
Upon request: Lip type valve	Viton®	Dutral® - NBR
Injection Sleeve-Non return Valve	Viton®	Dutral® - NBR

Viton®: FPM / Dutral®: EPDM, are registered trademarks of Dupont Elastomers

TECHNICAL CHARACTERISTICS HC1 SERIES

Model	Max Flow at		Stroke frequency per min.	Stroke volume ml / l	Stroke length mm	Power cons. watt	Hose size mm	Pump head (connections) model	Max suction lift m
	l/h	bar							
HC 100 MA 01-08	1	8	105	0.16		20	4x6	PP 3/8"	1.5
HC 100 MA 02-07	2	7	105	0.32	1.2	20	4x6	PP 3/8"	1.5
HC 100 MA 04-05	4	5	105	0.64	1.1	20	4x6	PP 3/8"	1.5
HC 100 MA 05-08	5	8	105	0.79	2.0	20	4x6	PP 3/8"	1.5

TYPICAL OUTPUT HC1 Model	Flow at max pressure		Flow at medium pressure		Flow at 1 bar	
	l/h	bar	l/h	bar	l/h	bar
01-08	1	8	4.5	4	7.5	1
02-07	2	7	5	3.5	8	1
04-05	5	5	6	2.5	9	1
05-08	5	8	7	4	10	1

NOTE: The flow rates opposite have been obtained by testing the pump with medium hardness water at a 1.5m suction lift at room temperature

Power supply: **230 Vac - 1 phase - 50/60 Hz / ± 10%**

Available upon request: **110 Vac - 1 phase - 60 Hz**

Recommended frequency adjustment: **10 - 100%**

Reproducibility under standard conditions: **± 5%**

Plastic housing: **PP reinforced**

Power cable: **3 m grounded without plug**

Ambient working temperature: **45°C**

Voltage working range: **min 207v - Max 253v**

Voltage Peak: **Max 270v**

Wall mounting bracket: **Polypropylene**

HC100 mA is provided with a Standard Hose Accessory Kit:

1 No - PP Non return Injection valve (ball type)

2 m - Discharge Hose (PE)

2 m - PVC clear suction hose

1.5 m - PVC clear priming hose

Upon Request: Low Level facility & Low Level switch

1 No - PP Foot valve strainer with lip valve

Screws and plugs for pump mounting bracket

For Lip valve version:

1 No - Injection Valve - Viton

HC1 series

Dimension & Packing Details

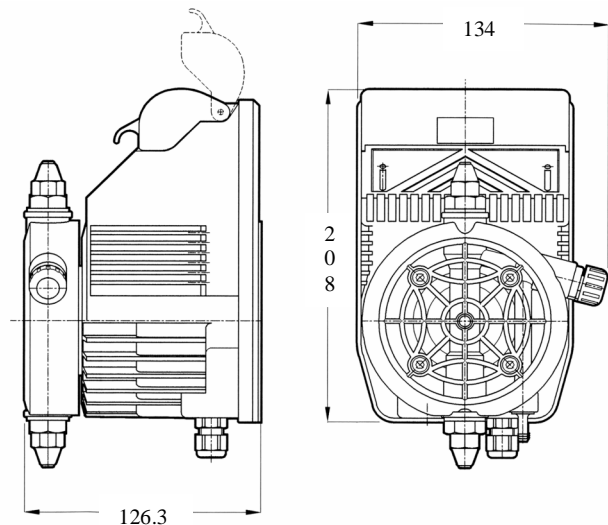
Packing weight: **2.5 - 3 kg**

Packing size (mm): **220 x 170 x 210**

Packing volume: **0.008 m³**

Now Available;

Horizontal Mount for HC100 series pumps



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