



**DOSING SYSTEMS**  
Solenoid Driven Dosing Pumps

# HC 301

Technical Data Sheet  
HC3 series

**KEY FEATURES**



- Programmable Microprocessor with several control options
- PTFE Diaphragm
- Electronic Frequency control
- PTFE Diaphragm
- Touch Sensitive controls
- Multifunction dosing modes
- Digital keypad controls
- Dosing Head with integral priming valve
- Glass (Pyrex) Ball valves as standard
- Double Ball valves on request
- Wall mount or foot mount with bracket
- Reinforced Plastic PP housing IP65
- Low Level facility
- Level probe on request

The **HC301** is a multifunctional electronic solenoid driven dosing pump that has several electronic control options and incorporates an electronic frequency control. The pump features level control and switch. Available plastic support for horizontal mounting.

**PUMP CONTROL MODE**

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

**Programming modes:**

- **Manual mode:** enables you to select the exact number of strokes, which can be used to prime the pump.
- **Pulse Multiplication mode:** The pump will stroke in response to an external pulse. The pump control panel enables you to set the number of pulses the pump will stroke from a single pulse.
- **Pulse Division mode:** The pump will stroke in response to external pulses. The impulse counter enables you to set the number of pulses received before the pump does 1 stroke.
- **Milliamp mode:** The pump will stroke in response to an external Milliamp signal. The pump control panel enables you to spread the dosing pumps output across all or some of the milliamp signal. There are also 2 set points for creating your own dosing bandwidth.

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

**LIQUID ENDS MATERIAL HC3**

	Standard Version	Upon request
Pump head	<b>PP</b>	PVC -AISI 316 - PTFE
Diaphragm	<b>PTFE</b>	-----
Double Ball check valve:	<b>Glass Pyrex</b>	AISI 316
Valve cartridge	<b>PP</b>	AISI 316
Seals/O-rings	<b>Viton ®</b>	Dutral® - NBR
Injection Fitting	<b>PP</b>	Dutral® - NBR
Foot Valve/Filter Fitting	<b>PP</b>	AISI 316 - PTFE
Suction Hose /Air Bleed hose	<b>PVC</b>	-----
Discharge Hose	<b>PE</b>	-----
Spring loaded injection valve	<b>Hastelloy/Pyrex</b>	Hastelloy/AISI 316
<b>Upon request:</b>		
Lip Valve	<b>Viton ®</b>	Dutral® - NBR
Injection Sleeve-No return Valve	<b>Viton ®</b>	Dutral® - NBR

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

## TECHNICAL CHARACTERISTICS HC3 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							
• HC300 PI 02-09	2	9	120	0.27	0.8	30	4x6	PP 3/8"	1.5
• HC300 PI 05-09	5	9	120	0.69	1	50	4x6	PP 3/8"	1.5
• HC300 PI 10-04	10	4	120	1.38	1.2	50	4x6	PP 3/8"	1.5
HC300 PI 18-04	18	4	120	2.50	1.5	65	4x6	PP 3/8"	1.5
HC300 PI 30-02	30	2	120	4.17	1.5	70	10x14	PVC 1/2"	1.5
HC300 PI 50-0.05	50	0.5	120	6.94	1.5	70	10x14	PVC 1/2"	1.5

- Available to special order only



HC3 pump mounted on horizontal support available on request

HC3 CURVES	Flow at max pressure		Flow average pressure		Flow at 1 bar	
	l/h	bar	l/h	bar	l/h	bar
Model						
02-09	2	9	3.2	4.5	10.8	1
05-09	5	9	8.4	4.5	9.8	1
10-04	10	4	11	2	14	1
18-04	18	4	22	2	24	1
30-02	30	2			35	1
50-0.5	0.5	50				

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%**

Connector: **4 pole IP66 / Level switch 2 m cable**

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

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

Ambient working temperature: **45°C**

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

Voltage Peak: **Max 270 v**

Plastic housing and support: **PP reinforced; IP65**

### HC301 is provided with Standard Hose Accessory Kit:

**1 No - PP Non return Injection fitting (sleeve type)**

**2 m - Discharge Hose (PE)**

**2 m - PVC clear suction hose**

**1.5 m - PVC clear priming hose**

*HC301 is provided with Low Level facility as standard which requires a low level switch (available on request)*

**1 No - PP Foot valve strainer with lip valve**

**Screws and plugs for pump mounting bracket**

*For Ball valve version:*

**1 No - Injection Valve- hastelloy spring -ball Pyrex**

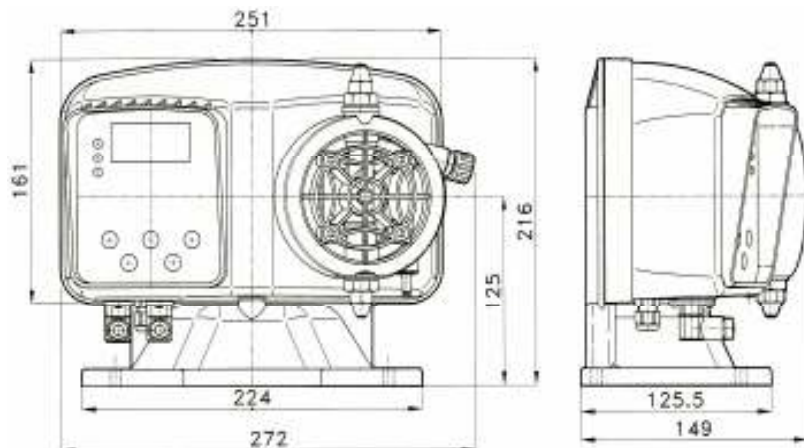


### HC3 series dimensions and packing

Packing weight: **4 - 6 kg**

Packing size (mm): **330 x 250 x 375**

Packing volume: **0.01 m3**



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