



Electronic Dosing Systems Ltd

Telephone 01299 825 656 Email info@electronicdosingsystems.co.uk

www.electronicdosingsystems.co.uk



Solutions For All Metering & Measurement Processes

HK Series Dosing Pumps

Digital Interface - Manually Adjustable
Weekly Programmable Timer

Unrivalled Accuracy Meets Adaptive Intelligence

A new standard in chemical metering and fluid management where accuracy and reliability is non-negotiable.

Features proprietary power algorithm coupled with cutting-edge digital software that transforms process data feedback into precise dosing commands, regulating the output based specific operational parameters to deliver unparalleled reliability and intelligent dosing performance providing an effective solution to multiple water treatment applications.

Features

- » Flow rates: 0.4 - 110 l/Hr
- » Max backpressure: up to 20 bar
- » Power Supply: 100÷240 Vac - 50/60 Hz
- » Stroke rate: 120 - 300 strokes/minute
- » Pump Head: PVDF (Viton Seals)
- » Diaphragm: PTFE
- » External enclosure: PP reinforced with IP65-rated fibreglass
- » Manual priming bleed valve
- » Installation kit Includes:
PVDF Injection Fitting - PVDF Footfilter
PVC Hose – Polythene Delivery Hose



Key Functions & Features

The HK model pump elevates your fluid management control and chemical injection processes to another level with our Intelligent Digital Dosing Pump engineered for demanding industrial and commercial applications, by integrating a dynamic power algorithm coupled with manual or timer dosing modes offering a comprehensive solution that optimizes chemical consumption, reduces waste to delivers superior precision and exceptional reliability.

Intuitive Flow Adjustment: Manual 0÷100% frequency rate adjustment based on user-defined working parameters to maintain precise flow rate even under fluctuating operational conditions.

Integrated Weekly Timer: Schedule your dosing cycles to align perfectly with operational shift patterns and process demands throughout the week to optimize chemical efficiency in a wide range of applications.

Remote Dosing Activation: Utilise modern connectivity to initiate pump operations allows increased flexibility and control via a digital input signal to trigger start-stop commands.

Low Level Protection: Integrated input for a level sensor automatically stops the pump when the chemical storage tank reaches a critically low level protecting the dosing pump from damage.

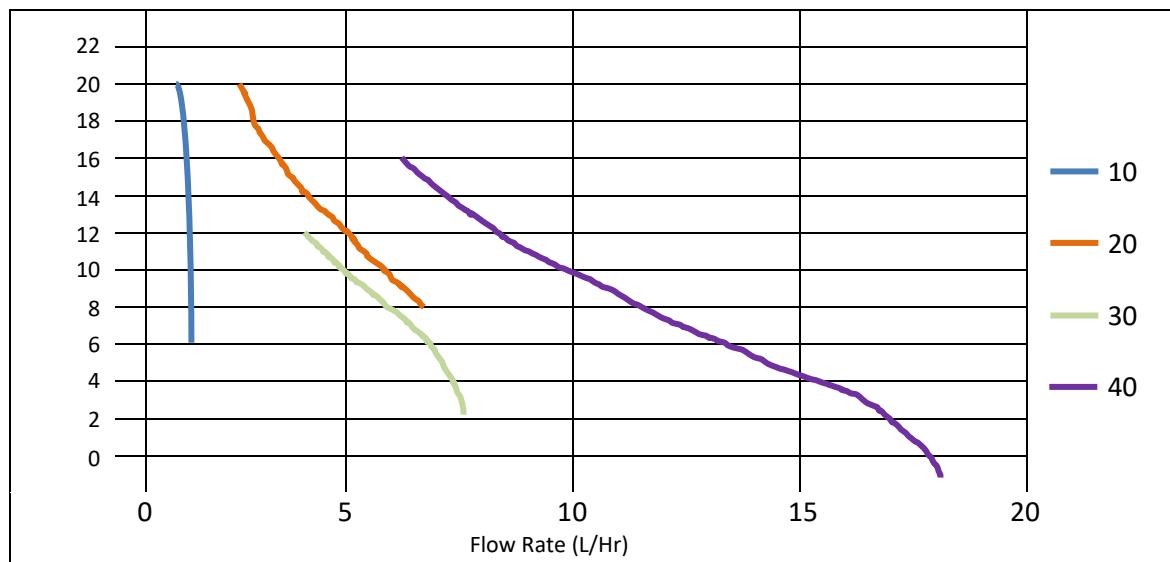
Flow Sensor Monitoring: Protects the integrity of the pump by monitoring the flow output by detecting blockages, air pockets or possible chemical line failure with automatic pump shutdown and alarm activation.

Patented Power Algorithm: Intelligent microprocessor-driven algorithm dynamically adapts the power to the pumps solenoid in real-time to the process operational conditions to maintain precise dosing and chemical efficiency.

Pump Models					
	HS	Analogue Interface: - Constant operation flow rate manually adjustable	HL	Analogue Interface: - Constant operation flow rate manually adjustable / Level control input	HK
		Digital Interface: - Flow rate manually adjustable. Timed dosing through weekly programmable timer. Programmable timed relay by activating a dry contact input			
	HG	Multifunction: - Constant Operation - Proportional flow rate according to external (4-20 mA) current signal - water meter: - (1:n or n:1). Timed dosing with a weekly programmable timer; Dosage in ppm; Dosage batch; Statistics; Password; - Input ON-OFF (remote switch)			
	HR	Digital interface - Flow rate manually adjustable. Proportional dosing according the measured pH or Redox value. Temperature compensation input: - PT100 probe - Repetition alarm relay. Remote control On-Off input signal Current 4÷20 mA output for measure transmission. Available with remote communication via ModBus protocol.			
Pressure (Bar)		Flow Rate (l/hr)	Capacity (cc/stroke)	Frequency Stroke/min	Ø Hydraulic Connections IN / EXT.[mm]
12		4	0.42	160	4x6
10		3	0.52	160	4x6
8		6	0.63	160	4x6
2		8	0.83	160	4x6
16		7	0.38	300	4x6
10		10	0.55	300	4x6
5		15	0.83	300	4x6
1		18	1.00	300	4x6
5		20	1.11	300	8x12
4		32	1.78	300	8x12
2		62	3.44	300	8x12
0.1		110	6.11	300	8x12
Power Supply					
All Models		Stabilised Power Supply 110÷240 Vac 50/60Hz	Ambient Temperature: 40° Max	Humidity: 90° Max	
Only HS & HG			12 Vdc 50/60Hz		
Pump Body					
PVDF		PVDF – Stainless Steel (316L) – PVDF (automatic degassing)			
Installation Kit					
PVDF			Standard		
Pump Seals					
FKM-B (Viton)	PTFE	EPDM (Ethylene Propylene Diene Monomer)	FFKM (Perfluoroelastomer)		
Note: - Guidance purposes only manufacturer reserves right to amend specifications					

- In order satisfy various chemical demands four models are available each offer three different dosing flow rates according to the process working conditions allows the operator to maximise chemical accuracy .
- Delivers reduced energy consumption courtesy of the patented stabilised multi-range power supply algorithm.

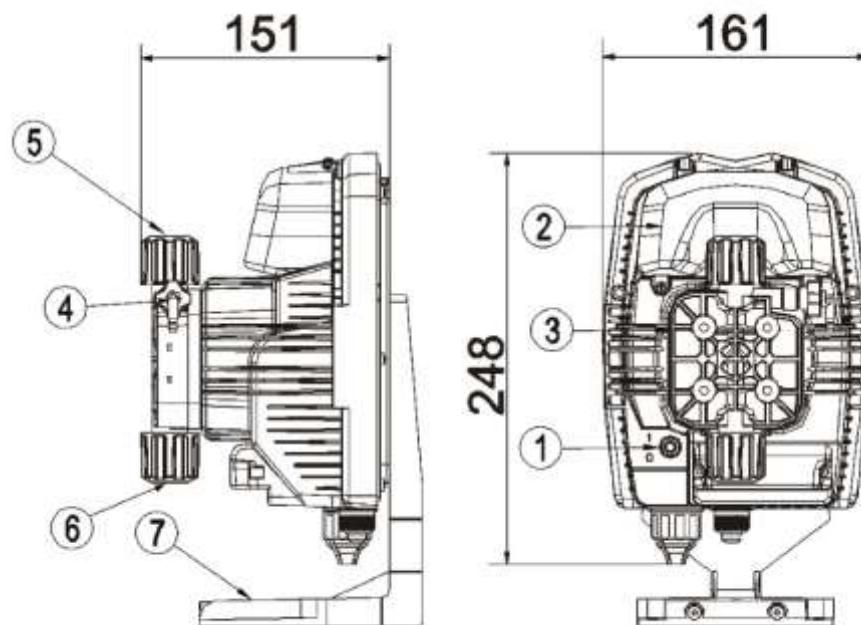
HK Series Performance Curves



N.B. Flow rates are guild only and subject to manufacturer changes

Dosing Pump Overall Dimensional Drawing

- 1 Power Switch*
- 2 Control Panel
- 3 Dosing Head
- 4 Priming Valve
- 5 Delivery Connector
- 6 Suction Connector
- 7 Base Support (optional)



N.B. Wall and tank brackets mounted firmly rear of housing

Dosing heads and seals are manufactured from premium grade materials to meet today's constantly evolving demands providing years of service, chosen to guarantee perfect compatibility with most chemical agents used in domestic, commercial and industrial water treatment markets.

N.B Some pump models aren't equipped with on/off power switch by pressing the SEL key for at least 5 seconds the pump will stop functioning pressing again the SEL key the pump returns to its working state.

H Series

WALL-MOUNTED SOLENOID DOSING PUMPS

The multi-model H Series metering pumps delivers accurate consistent chemical dosing for a wide range of commercial & industrial applications including complex high-end processes. Built with premium-grade mechanical & electronic components the H series pumps are the solution of choice for discerning professional responsible for maintaining chemical efficiency. Commitment to continuous refinement of these systems meaning they always meet up-to-date legislation.



APPLICATIONS

- Commercial swimming pools
- Industrial water treatment
- Cooling water treatment
- Potable water treatment
- Wastewater treatment
- Power generation
- Food & beverage

PUMP MODELS

- HS Model: - Manually Adjustable - Selectable Frequency Ranges
- HL Model: - Manual Adjustment - Low Level Interface
- HP Model: - 4-20mA input signal - Low Level Interface
- HG Model: - Multifunction Software Programs
| 4-20mA | water meter | n:1 & 1:n | PPM |
Timed: - Day-Weekly batch program
- HR Model: - Integrated pH-redox instruments
N.B. (pH-redox mode selectable in menu)

Remote Wi-Fi interface available
With full programming authority

Electronic Dosing Systems Ltd
Ryelands Business Centre
Droitwich
Worcestershire WR9 0PT
Tel 01299 825 656
info@electronicdosingsystems.co.uk