

### FP 1.25 SMOOTH FLOW DIAPHRAGM LIQUID PUMP



### **ADVANTAGES**

### **Integrated Damper**

- provides smooth flow with low pulsation
- reduces flow resistance in tubes
- prevents bubble formation
- no need for additional dampening elements

#### **Innovative 4-point valves**

 for reliable self-priming even at low motor speeds

# Digitally customizable BLDC Motor

 for precise flow control and pinpoint adjustments to your electronics



# POSSIBLE AREAS OF USE

- Inkjet Printing
- Medical Equipment
- 3D Printing
- Fuel Cells
- Handling of solvents
- And many more

Please visit our website www.knf.com to get more information.

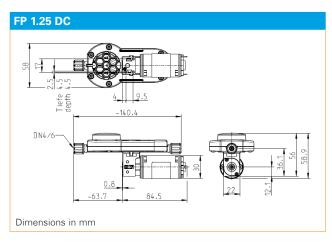
Series model	FP 1.25 DC		FP 1.25 DCB*1	FP 1.25 DCB-4*1
Material options	RP	RT	11 1.20 000	11 1.20 000 4
Pump head	PPS	PPS		
Diaphragm	EPDM	PTFE		
Valves	EPDM	FFKM		
Valve o-rings	EPDM	FKM		
Dampening diaphragm	EPDM	PTFE		
Nominal flow rate at atm. (ml/min)	250			
Suction height (mH <sub>2</sub> O)	≥ 3			
Nominal pressure head (mH <sub>2</sub> O)	60			
Permissible ambient temperature (°C)	+5 to +40			
Permissible liquid temperature (°C)	+5 to +80			
IP protection factor pump	00		50	50
ELECTRICAL DATA				
Operating voltage (V)	12 / 24		12 / 24	10 – 26.4
Power consumption (W)	3.6 / 4.1		4.9 / 5.3	5.5
I load max. (A)	0.3 / 0.17		0.41 / 0.22	0.57 - 0.21
IP protection factor motor	00		54	54
Weight (g)	240		265	265

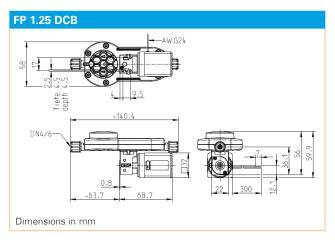
### FP 1.25 DC

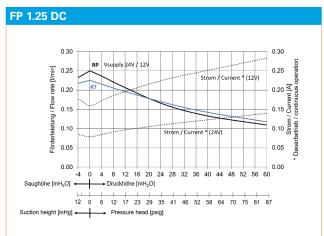
PERFORMANCE DATA			
Series model	Nominal flow rate at atmos (I/min)	Suction height (mH <sub>2</sub> O)	Nominal pressure head (mH2O)
FP 1.25 DC	0.25	≥ 3 mW/s	60

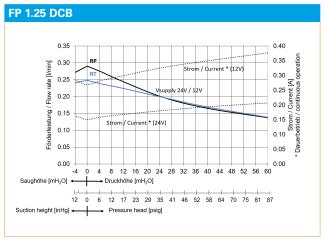
### FP 1.25 DCB

PERFORMANCE DATA			
Series model	Nominal flow rate at atmos (I/min)	Suction height (mH <sub>2</sub> O)	Nominal pressure head (mH <sub>2</sub> O)
FP 1.25 DCB-B	0.25	≥ 3 mW/s	60





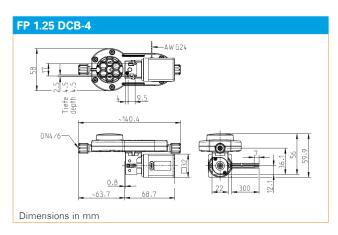


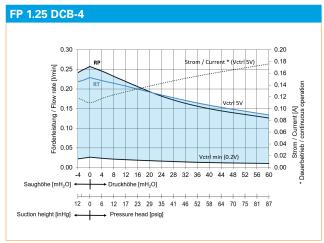


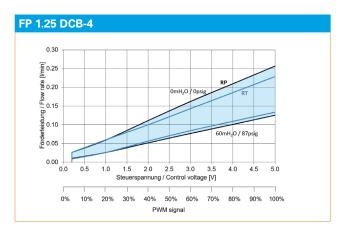
ELECTRIC SPECIFICATIONS		
Wires	AWG 24	
Wires assignment	red = +VS black = - VS/GND	

## FP 1.25 DCB-4

PERFORMANCE DATA			
Series model	Nominal flow rate at atmos (I/min)	Suction height (mH <sub>2</sub> O)	Nominal pressure head (mH2O)
FP 1.25 DCB-4	0.25	≥ 3 mW/s	60







ELECTRIC SPECIFICATIONS			
Wires	AWG 24		
Wires assignment	red = +VS black = -VS/GND white = Vctrl-input green = FG-output		
Input signal	0-5 V		

OPTIONS		
Description	Illustration	Details
Motors with special voltages or frequencies		Various voltage options, higher and lower service life
Electrical connectors		Specific customers requirements such as special connections (Molex, AMP, etc.)
Different hydraulic connection types		Compression fittings, hose connector, push-in connector etc.



#### **NSF National Sanitary Foundation**

This certification will confirm that all of the pumps with the code .51 are certified for the use with foods/consumables.



#### **DIGITAL CUSTOMIZATION**

Thanks to digital technology, this pump can be quickly adapted to the customer's system. This is done by parametrizing the firmware of the motor at KNF.

<b>ACCESSORIES</b>			
Description	Illustration	Part No.	Details
Diaphragm pressure control valve		Auf Anfrage	The pressure control valve can be used for a more accurate control of flow against a fluctuating back pressure, metering into a vacuum and from a pressurised system.
Filter	<b>\( \lambda</b>	165210	KNF filters protect both pumps and other upstream instrumentation and hydraulic circuits against particulate, crystals and fibres which can improve optimum operation.

The performance values for the series models shown on this data sheet were determined under test conditions. The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply

Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted.

KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.



KNF reserves the right to make technical changes without notice.

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