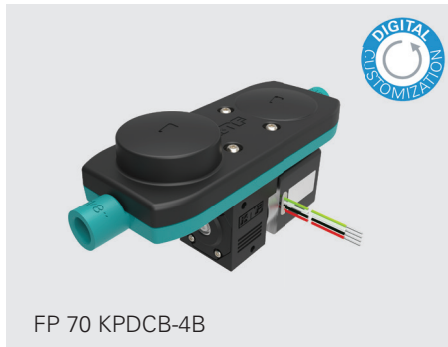


FP 70

SMOOTH FLOW DIAPHRAGM LIQUID PUMP



FP 70 KPDCB-4B



FP 70 KR51 DC *

ADVANTAGES

Integrated Damper

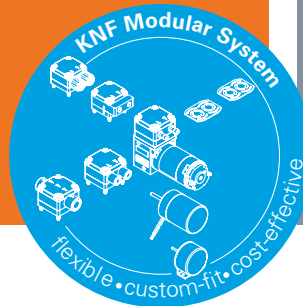
- Provides smooth flow with low pulsation
- Reduces flow resistance in tubes
- Prevents bubble formation
- No need for additional dampening elements

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

PERFORMANCE DATA

Series model	FP 70 DC		FP 70 DCB-B*1	FP 70 DCB-4B
Material options	KP	KT	KV	
Pump head	PP	PP	PP	
Diaphragm	EPDM	PTFE	PTFE	
Valves	EPDM	FFKM	FFKM	
Valve o-rings	EPDM	FKM	FKM	
Dampening diaphragm	EPDM	PTFE	FKM	
Nominal flow rate at atm. (l/min)	0.7			
Suction height (mWg/inHg)	≥ 3 / ≥ 8.7			
Nominal pressure head (mWg/psig)	20 / 29			
Permissible ambient temperature (°C/°F)	5 - 40 / 41 - 104 (DC version in continuous operation ≥15 mWg / ≥ 21 psig up to max 33 / 91)			
Permissible liquid temperature (°C/°F)	5 - 80 / 41 - 176			
IP protection factor pump	00		20	20

ELECTRICAL DATA

Operating voltage (V)	12/24		12/24	10 - 26.4
Power consumption (W)	7.3/8.2		9.5/9.6	10.1
I load max. (A)	0.69/0.34		0.79/0.4	0.92 - 0.42
IP protection factor	00		54	54
Weight (g/oz)	260/9		285/10	285/10

CUSTOMIZED PERFORMANCE ON REQUEST

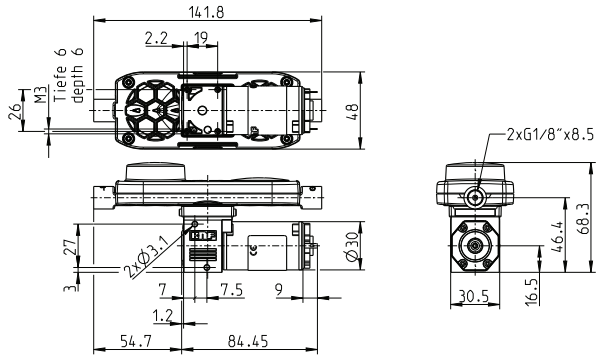
Flow rate up to (l/min)	1.2
Suction height up to (mWg/inHg)	5.5/16
Pressure head up to (mWg/psig)	40/57

FP 70 DC

PERFORMANCE DATA

Series model	Nominal flow rate at atmos (l/min)	Suction height (inHg)	Nominal pressure head (psig)
FP 70 DC	0.7	≥ 8.7	29

FP 70 DC



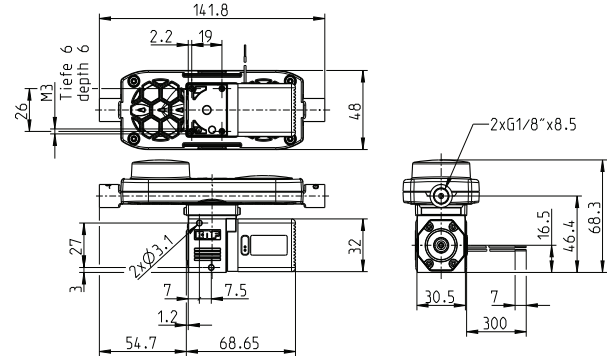
Dimensions in mm

FP 70 DCB-B

PERFORMANCE DATA

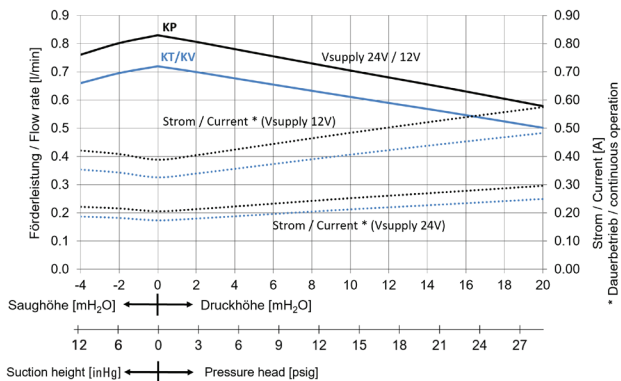
Series model	Nominal flow rate at atmos (l/min)	Suction height (inHg)	Nominal pressure head (psig)
FP 70 DCB-B	0.7	≥ 8.7	29

FP 70 DCB-B

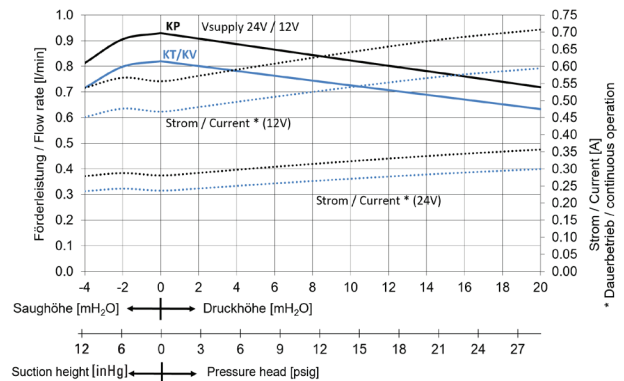


Dimensions in mm

FP 70 DC



FP 70 DCB-B



ELECTRIC SPECIFICATIONS

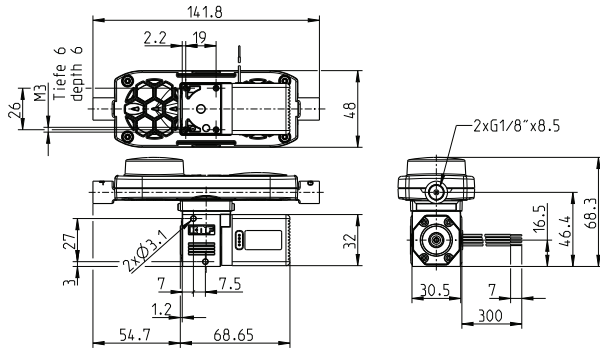
Wires	AWG 24
Wires assignment	red = +VS black = -VS/GND

FP 70 DCB-4B

PERFORMANCE DATA

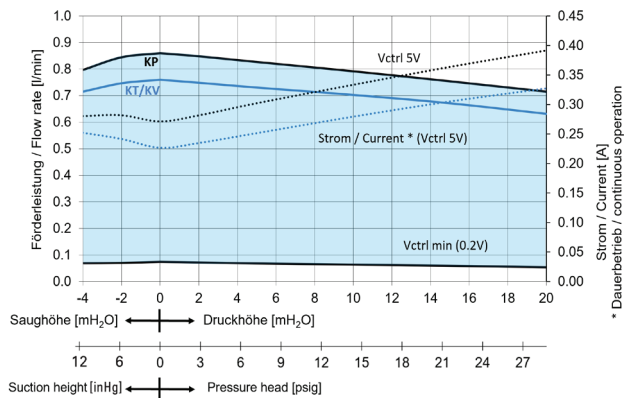
Series model	Nominal flow rate at atmos (l/min)	Suction height (inHg)	Nominal pressure head (psig)
FP 70 DCB-4B	0.7	≥ 8.7	29

FP 70 DCB-4B

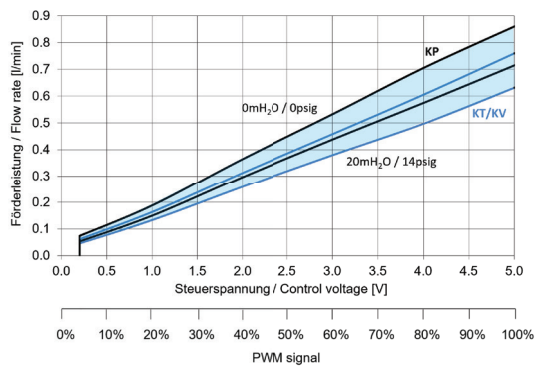


Dimensions in mm

FP 70 DCB-4B



FP 70 DCB-4B



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	Part No.	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.

ACCESSORIES

Description	Illustration	Part No.	Details
Clip for side mounting			Enabling additional mounting options
Diaphragm pressure control valve			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			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.



www.knf.com