

FK 1.1100 DIAPHRAGM LIQUID PUMP



FK 1.1100 KPDCB-4



FK 1.1100 KP .51 DCB-4



FK 1.1100 AC

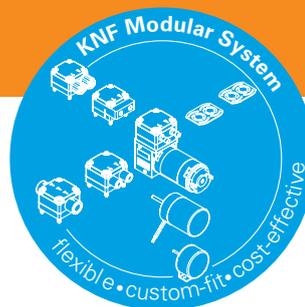
ADVANTAGES

- Low pulsation
- Excellent linearity
- High chemical resistance
- Self-priming
- Dry-run proof

POSSIBLE AREAS OF USE

- Inkjet printing
- Food & beverage industry
- Cleaning and disinfection
- Pharmaceutical processes
- Chemical industry
- Agriculture

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



| PERFORMANCE DATA | | | |
|---|-------------------------|--------------------|--------------------|
| Series model | FK 1.1100 DCB-4* | FK 1.1100 AC 50 Hz | FK 1.1100 AC 60 Hz |
| Material options | KP/KP .51*1 | KT | |
| Pump head: connection plate | PP | | |
| Pump head: intermediate plate | PPS | | |
| Diaphragm | PTFE | | |
| Valves | EPDM | FFKM | |
| Valve o-rings | EPDM | FKM | |
| Resonating diaphragm | EPDM | FKM | |
| Flow rate at atm. pressure (l/min) | 12.4 | 11.5 | |
| Suction height (mH ₂ O/inHg) | 4.5/13 | 4/11.6 | |
| Pressure head (mH ₂ O/psig) | 60/85 | | |
| Permissible ambient temp. (°C/°F) | +5 ... +60/+41 ... +140 | | |
| Permissible liquid temperature (°C/°F) | +5 ... +80/+41 ... +176 | | |
| Weight (kg/lbs) | 7.0/15.4 | 11/24.3 | 11/24.3 |
| IP protection factor pump | 54 | 54 | 54 |
| ELECTRICAL DATA | | | |
| Operating voltage (V) | 24 | 200-240 | 100-120 |
| Power consumption (W) | 192 | 246-337 | 246-313 |
| I max. Start @ 25 °C (A) | 8.0 | 1.4-1.7 | 2.7-2.6 |
| IP protection factor motor | 54 | 54 | 54 |

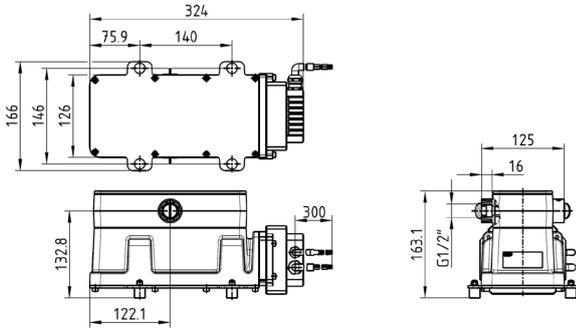
* DCB = Stands for brushless DC motor
*1 food grade conformity according to the standard NSF/ANSI 169

FK 1.1100 DCB-4

PERFORMANCE DATA

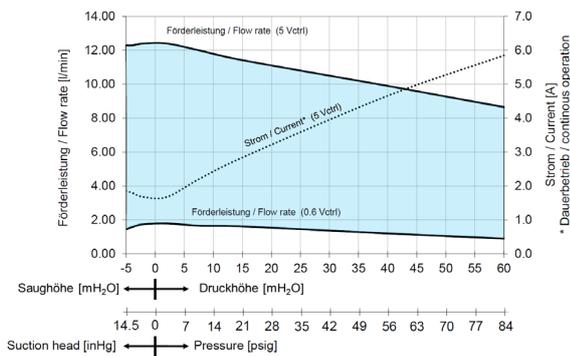
| Series model | Flow rate at atm. pressure (l/min) | Suction height (mH ₂ O/ inHg) | pressure head (mH ₂ O/ psig) |
|-----------------|------------------------------------|--|---|
| FK 1.1100 DCB-4 | 12.4 | 4.5/13 | 60/8.5 |

FK 1.1100 DCB-4

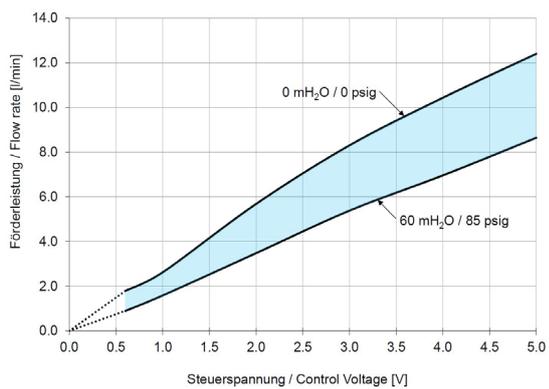


Dimensions in mm

FK 1.1100 FLOW CURVE



FK 1.1100 CONTROL CURVE



ELECTRIC SPECIFICATIONS

| | |
|--------------------------|--|
| Connection type | Cables with open wires |
| Wires | 0.14/1.5 mm ² |
| Wires assignment | black, L1 = +VS black, L2 = -VS/GND green - yellow = PE white = Vctrl-input green = FG-output brown = GND |
| Input signal | Vctrl / PWM |
| Supply voltage (VS) | 24 VDC |
| Input signal range Vctrl | 0 - 5 V |
| Input signal range PWM | 0 - 100% |

FK 1.1100 AC 50Hz

PERFORMANCE DATA

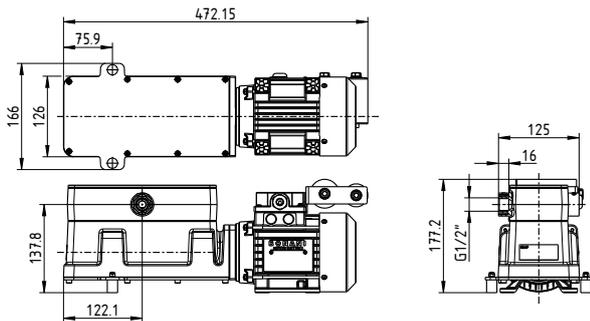
| Series model | Flow rate at atm. pressure (l/min) | Suction height (mH ₂ O/inHg) | pressure head (mH ₂ O/psig) |
|--------------|------------------------------------|---|--|
| FK 1.1100 AC | 12.4 | 4.5/13 | 60/85 |

FK 1.1100 AC 60Hz

PERFORMANCE DATA

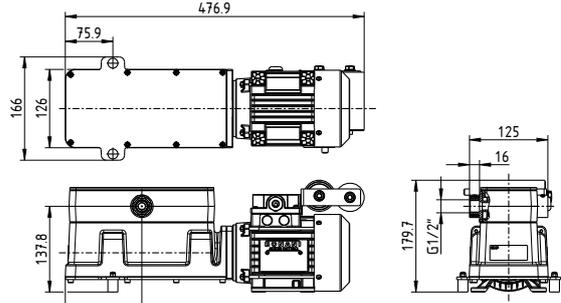
| Series model | Flow rate at atm. pressure (l/min) | Suction height (mH ₂ O/inHg) | pressure head (mH ₂ O/psig) |
|--------------|------------------------------------|---|--|
| FK 1.1100 AC | 11.5 | 4/11.6 | 60/85 |

FK 1.1100 AC 50 HZ



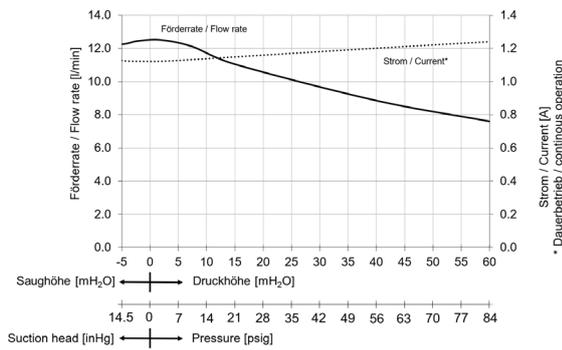
Dimensions in mm

FK 1.1100 AC 60 HZ

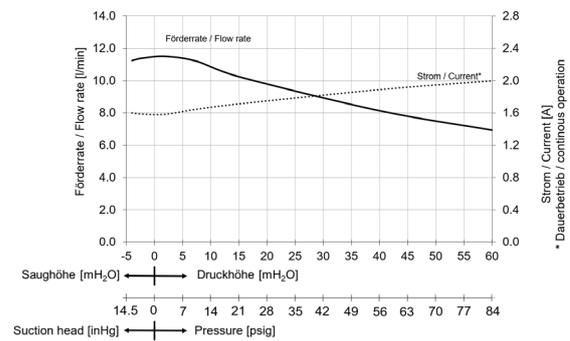


Dimensions in mm

FK 1.1100 AC 50 HZ FLOW CURVE @ 230V

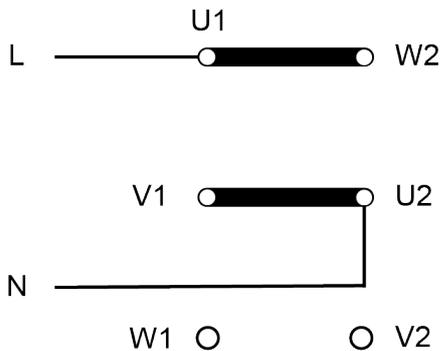


FK 1.1100 AC 60 HZ FLOW CURVE @ 115V



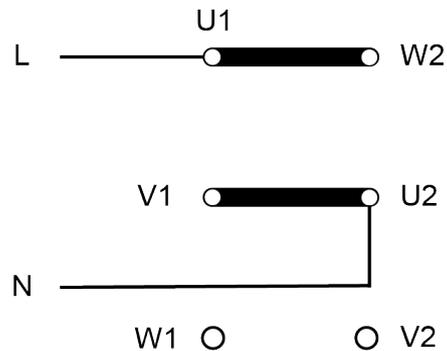
ELECTRIC SPECIFICATIONS

| | |
|-----------------|----------------|
| Connection type | Connection box |
|-----------------|----------------|



ELECTRIC SPECIFICATIONS

| | |
|-----------------|----------------|
| Connection type | Connection box |
|-----------------|----------------|

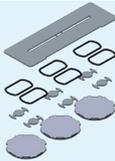


| OPTIONS | | |
|---------------------------|---|--|
| Description | Illustration | Details |
| Three-phase AC motor |  | Best for controlled operation with a frequency converter. Supply voltage: 230/400 VAC |
| Pressure relief valve |  | Passive diaphragm valve to protect the pump from pressure peaks on the outlet. The required pressure can be set by a spindle/spring combination. |
| Other diaphragm materials |  | Following additional material is available: EPDM |



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.

| ACCESSORIES | | | |
|------------------------------|---|-------------------------|--|
| Description | Illustration | Part No. | Details |
| Compression fitting |  | 176189 | Connection for flexible tubes suitable for higher pressures. Connection: DN16/22 Material: PP O-Ring: FKM |
| Spare Parts Set "small" |  | KP:177998 KT: 177999 | Contains following elastomer parts: 1 pc. Diaphragm 2 pcs. Anchor valves 2 pcs. O-rings 1 pc. Resonating Diaphragm |
| Spare Parts Set "large" |  | KP:178000 KT: 178001 | Contains following elastomer parts: 3 pcs. Diaphragms 6 pcs. Anchor valves 6 pcs. O-rings 1 pc. Resonating Diaphragm |
| Spare Parts Set "large" EPDM |  | 345890 | Contains following elastomer parts: 3 pcs. Diaphragms 6 pcs. Anchor valves 6 pcs. O-rings 1 pc. Resonating Diaphragm |

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.



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KNF reserves the right to make technical changes without notice.
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