

FF 12 DIAPHRAGM LIQUID PUMP







ADVANTAGES

- Great adjustability of flow rate
- Mounting plate with click-on mechanism
- Self-priming and dry-run proof
- Clean and gentle transfer of sensitive media
- Resistant materials to transfer aggressive media

Long lifetime, no maintenance



POSSIBLE AREAS OF USE

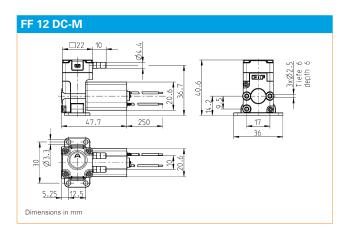
- Medical technology
- Laboratory technology
- Inkiet printing
- Fuel cells
- Semiconductor industry
- And many more

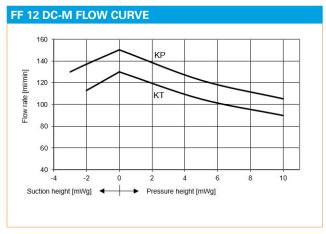
Please visit our website www.knf.com to get more information.

| Series model | FF 12 DC-M | FF 12 DCB | | FF 12 DCB-4 |
|-------------------------------------|-------------|-------------|------|-------------|
| Material options | KP | | KT | |
| Pump head | PP | | | |
| Diaphragm | EPDM | | PTFE | |
| Resonating diaphragm | EPDM | | FFKM | |
| Valves | EPDM | | FFKM | |
| Flow rate (ml/min) | 150 | | 130 | |
| Suction height (mWg) | 3 | | 2 | |
| Pressure head (mWg) | 10 | | | |
| Permissible ambient air (°C) | -5 to 60 | | | |
| Permissible liquid temperature (°C) | 5 to 80 | | | |
| Weight (g) | 60 | | | |
| IP protection factor | 40 | | | |
| ELECTRICAL DATA | | | | |
| Operating voltage (V) | 12 / 24 | 12 / 24 | | 10 - 26.4 |
| Power consumption (W) | 2.6 | 1.7 / 1.9 | | 2.1 |
| I load max. (A) | 0.22 / 0.11 | 0.14 / 0.08 | | 0.16 - 0.08 |

FF 12 DC-M

| PERFORMANCE DATA | | | |
|------------------|--|------------------------------------|-----------------------------------|
| Series model | Flow rate at atm. pressure (ml/min) | Max. suction height (mWg) | Max. pressure head (mWg) |
| FF 12 KP DC-M | 150 | 3 | 10 |
| FF 12 KT DC-M | 130 | 2 | 10 |





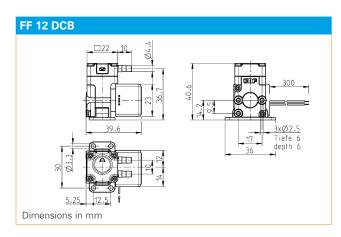
Wires AWG 26, L=250 mm Wire assignment red: + supply voltage black: - supply voltage

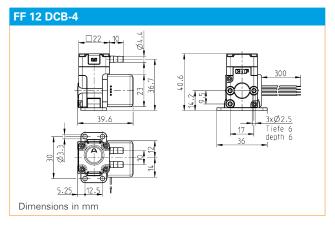
FF 12 DCB

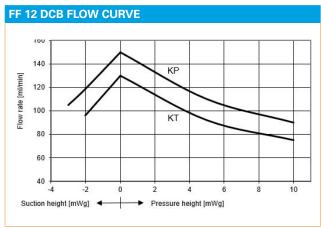
| PERFORMANCE DATA | | | |
|------------------|--|------------------------------------|-----------------------------------|
| Series model | Flow rate at atm. pressure (ml/min) | Max. suction height (mWg) | Max. pressure head (mWg) |
| FF 12 KP DCB | 150 | 3 | 10 |
| FF 12 KT DCB | 130 | 2 | 10 |

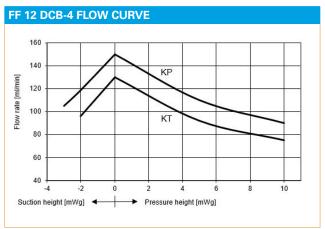
FF 12 DCB-4

| PERFORMANCE DATA | | | |
|------------------|--|------------------------------------|-----------------------------------|
| Series model | Flow rate at atm. pressure (ml/min) | Max. suction height (mWg) | Max. pressure head (mWg) |
| FF 12 KP DCB-4 | 150 | 3 | 10 |
| FF 12 KT DCB-4 | 130 | 2 | 10 |

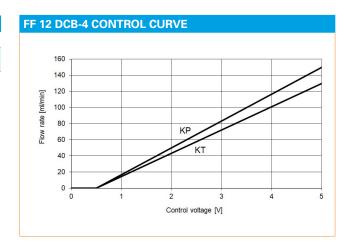








| ELECTRONIC SPECIFICATIONS FF 12 DCB | | | |
|-------------------------------------|--|--|--|
| Wires | AWG 28, L=250 mm | | |
| Wire assignment | red: + supply voltage black: - supply voltage | | |



| ELECTRONIC SPECIFICATIONS FF 12 DCB-4 | | |
|---------------------------------------|---|--|
| Wires | AWG 28, L=250 mm | |
| Wire assignment | red: + supply voltage black: - supply voltage white: control voltage green: rpm output | |
| Input signal | 0-5 V | |

| OPTIONS | | |
|------------------------|--------------|---|
| Description | Illustration | Details |
| Motors | | Various voltage options, higher and lower service life |
| Electrical connections | | Molex, AMP etc. |
| Hydraulic connections | | Internal thread, compression fittings, manifold connection 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.

| Description | Illustration | Details |
|----------------------------------|--------------|---|
| Mounting plate | | Screws included in the set |
| 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. |
| Pulsation damper | | This very versatile pulsation damper reduces the vibration in hoses and pipes and it helps to remove pulsation which is preventing the system from functioning correctly. |
| Filter | X-G- | KNF filters protect both pumps and other upstream instrumentation and hydraulic circuits against particulate, crystals and fibres which can improve optimum operation. |
| Tubing | | Various diameters and materials |

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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