

DATA SHEET

SWING PISTON COMPRESSORS AND VACUUM PUMPS FOR AIR



NPK 03 KV DC-M

Concept

The Swing Piston Pumps from KNF are based on a simple principal: As it rises and falls the piston tilts first to one side, then the other. The compression forces act along the axis of the connecting rod, so that there is no component of force acting against the cylinder wall to cause wear. Thanks to the sealing lip on the piston seal the swing pump runs dry and 100 % oilfree. They will evacuate, transfer and compress air without contamination.

For customers with unusual requirements the KNF Project Team produces specially tailored solutions. Use our experience to your advantage and talk to our applications engineers.



NPK 03 KV DC-B4

Features

No contamination of the air due to oil-free operation

High end pressure up to 6 bar g on request

Excellent size performance ratio

Very quiet and little vibration

High level of flow-rate

Ready for installation

Can operate in any installed position

Areas of use

The low vibration and noise level at high operating pressure points makes the NPK 03 ideal for applications such as medical point of care machines, DNA/RNA extraction machines and nebulizers for the medical industry, coffee machines and milk foamers in the food industry, pulsation dampers in the print industry as well as for other applications with demand on high pressure and limited installations space.

| PERFORMANCE DATA | | | | | | |
|------------------|-------------------------|----------------------|------------------------------------|-------|---------------------------------|---------------|
| Тур | | Flow rate (I/min) | Ultimate vacuum (mbar absolute) | _ | Ultimate pressure (bar rel.) | Weight (g) |
| NPK 03 KV DC-M | Standard DC motor | 3 | 250 | . pre | 5.5 | 480 |
| NPK 03 KV DC-B4 | Brushless motor, 4-wire | 2.7 | 250 | atm | 5.5 | 380 |

NPK 03 KV DC-M

PERFORMANCE DATA

| Туре | Voltage (V) | Flow rate (I/min) | Ultimate pressure (bar rel.) | Ultimate vacuum (mbar abs.) |
|----------------|-------------|----------------------|------------------------------------|-----------------------------------|
| NPK 03 KV DC-M | 12 | 3 | 5.5 | 250 |
| NPK 03 KV DC-M | 24 | 3 | 5.5 | 250 |

PUMP MATERIAL

| | Туре | Pump head | Piston sealing | Valve |
|----------|------|-----------|----------------|-------|
| Standard | KV | PPS | PTFE | FPM |

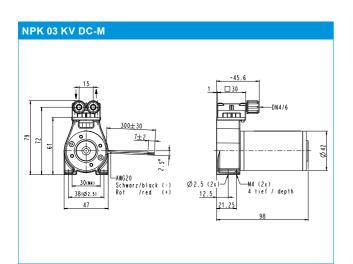
NPK 03 KV DC-B4

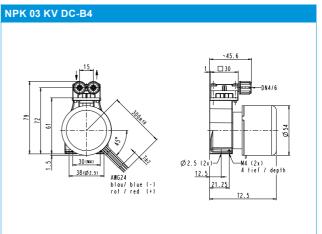
PERFORMANCE DATA

| Туре | Voltage (V) | Flow rate (I/min) | pressure | Ultimate vacuum (mbar abs.) |
|-----------------|-------------|----------------------|----------|-----------------------------------|
| NPK 03 KV DC-B4 | 12 | 2.7 | 5.5 | 250 |
| NPK 03 KV DC-B4 | 24 | 2.7 | 5.5 | 250 |

PUMP MATERIAL

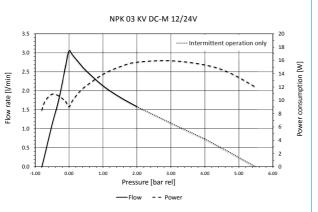
| | Туре | Pump head | Piston sealing | Valve |
|----------|------|-----------|----------------|-------|
| Standard | KV | PPS | PTFE | FPM |





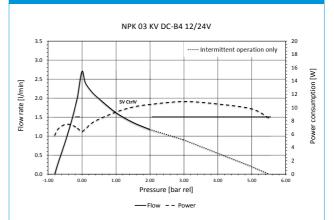
NPK 03 KV DC-M 12/24V 3.5 3.0 2.5

NPK 03 KV DC-M 12/24 V



More detailed information according controll voltage, duty cycles and service interval is available in the operating instruction.

NPK 03 KV DC-B4 12/24 V



| ACCESSORIES | | | | |
|--------------------------------------|------------|--|--|--|
| Service-Kit (sealing, valve, O-ring) | ID 314 101 | | | |
| Silencer/Filter | ID 314 005 | | | |
| Mounting plate | ID 312 554 | | | |