## Compact Units for Fluid Grease, NLGI Grade 000, 00; Group MKF – 0.1 or 0.2 l/min

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Delivery rate [l/min]</th>
<th>Reservoir capacity [l]</th>
<th>Control/DIagram</th>
<th>Components</th>
<th>Hydraulic layout</th>
<th>Wiring diagram</th>
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</table>

**Reservoir material:** plastic  

- **components contained in the unit.**  
- **DK** = pushbutton  
- **DS** = pressure switch  
- **WS** = level indicator  
- **MA** = pressure gauge

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**Notice!**  
All products from VOGEL may be used only for their intended purpose. If operating instructions are supplied together with the products, the provisions and information therein of specific relevance to the equipment must be observed as well.  
In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Par. 2, may only be filled into VOGEL centralized lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from VOGEL.  
All products manufactured by VOGEL are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

See operating instruction 951-130-172.
Compact Units for Fluid Grease, NLGI Grade 000, 00; Group MKF – 0.1 or 0.2 l/min

**Technical data**

**Gear pump unit**

- Flow rate at 50 Hz . . . . . . . . . . . . . . 0.1 or 0.2 l/min
  at 60 Hz . . . . . . . . . . . . . . 0.12 or 0.24 l/min
  at a back pressure of $p = 5$ bars
- Operating pressure . . . . . . . . . . . . . . . . . . . . . . 30 $^{1/2}$ bars
  corresponds to actual value of built-in safety valve
- Operating temperature . . . . . . . . . . . . . . . . . . . +10 to +40 °C
- Reservoir capacity . . . . . . . . . . . . . . nominal 1.8, 3 or 6 l
- Reservoir material . . . . . . . . . . . . . . plastic
- Type of enclosure . . . . . . . . . . . . . . IP 54
- Frequency/voltage . . . . . . . . . . . . . 50/60 Hz, 115 V AC or
  50/60 Hz, 230 V AC
- Medium . . . . . . . . . . . . . . . . . . . . . . grease, NLGI grade 000, 00
  compatible with . . . . . . . . . . . . . . . plastics, NBR elastomers,
  copper, copper alloys

Please note: Only use grease that has been approved by Willy Vogel AG.
Approved lubricants list see "www.vogelag.com" or
please request from "info@vogel-berlin.de".

**Motor** with built-in thermostatic switch

- Mode of operation . . . . . . . . . . . . . S3, 20% (1.25 to 25 min)
  duty cycle $^1$)
- Power consumption approx. . . . . . 50 Hz: 115 W; 60 Hz: 140 W
- Speed . . . . . . . . . . . . . . . . . . . . . . 50 Hz: 2700 rpm;
  60 Hz: 3300 rpm

**Level indicator**

- Function . . . . . . . . . . . . . . . . . . opens in event of
  low lubricant (PNP)
- Voltage range . . . . . . . . . . . . . . . . . . 10...65 V DC
- Continuous current . . . . . . . . . . . . . . . . . ≤ 200 mA
- Natural current consumption . . . . . . 6...12 mA

**Pressure switch**

- Type of contacts . . . . . . . . . . . . . NO-contact
- Max. switching voltage . . . . . . . . . . . . . . . . . 42 V AC
- Max. switching current . . . . . . . . . . . . . . . . . 2.5 A
  (ohmic load)
- Max. contact rating . . . . . . . . . . . . . . . . . . . 30 VA $^2$)
- Switching pressure . . . . . . . . . . . . . . . . . . . . . . 20 bars

$^1$) The 20% duty cycle is the ratio of the pump running time to the
subsequent idle time

Example:
1 minute of pump running time requires at least 5 minutes of idle time.
The maximum permissible pump running time amounts to 3 minutes.
That results in a necessary idle time of 15 minutes.

$^2$) Take appropriate measures to protect contacts when switching
inductive loads.

MKF1-K(W)2-10...

**Level indicator**

Function . . . . . . . . . . . . . . . . . . opens in event of
low lubricant (PNP)
Voltage range . . . . . . . . . . . . . . . . . . 10...65 V DC
Continuous current . . . . . . . . . . . . . . . . . ≤ 200 mA
Natural current consumption . . . . . . 6...12 mA

**Pressure switch**

Type of contacts . . . . . . . . . . . . . NO-contact
Max. switching voltage . . . . . . . . . . . . . . . . . 42 V AC
Max. switching current . . . . . . . . . . . . . . . . . 2.5 A
(ohmic load)
Max. contact rating . . . . . . . . . . . . . . . . . . . 30 VA $^2$)
Switching pressure . . . . . . . . . . . . . . . . . . . . . . 20 bars

1) The 20% duty cycle is the ratio of the pump running time to the
subsequent idle time

Example:
1 minute of pump running time requires at least 5 minutes of idle time.
The maximum permissible pump running time amounts to 3 minutes.
That results in a necessary idle time of 15 minutes.

2) Take appropriate measures to protect contacts when switching
inductive loads.

**Dimensions in mm**

1) Ports tapped for solderless tube
connection for 8 mm diam. tube
2) Diameter for power lead 6 ... 8 mm