

**Piston pump with reservoir
Models KFA1 and KFA10**



The pump can be outfitted with a maximum of two pump elements.
Versions for various operating voltages are available.

| With lubricant-level switch | | |
|-----------------------------|-----------|--|
| Order No. | Order No. | Operating voltage |
| KFA1-M | KFA1-M-W | 24 V DC |
| KFA10 | KFA10-W | 115 V AC, 50 or 60 Hz 230 V AC, 50 or 60 Hz |

Pump elements

| Order No. | Delivery rate ¹⁾ [ccm/min] | Connection thread |
|-----------|--|----------------------|
| KFA1.U1 | 2.0 | M14x1.5 |
| KFA1.U2 | 1.5 | |
| KFA1.U3 | 1.0 | |

¹⁾ The indicated delivery rates refer to the delivery of NLGI grade 2 grease at a temperature of +20 °C and a back pressure of 50 bars. Temperatures and pressures that deviate therefrom will change the delivery rate.
Take the indicated values as a basis when configuring a central lubrication system.

Safety valves

| Order No. | Opening pressure [bars] | Connection thread | Connection for tube diam. |
|-------------|----------------------------|----------------------|------------------------------|
| 161-210-012 | 300 ± 20 | M14x1.5 | 6 |
| 161-210-016 | | | 10 |

Please indicate in addition to the order No.:
operating voltage,
quantity and order No. of pump elements with safety valve.

Order example

KFA1-M-W, 24 V DC
outfitted with pump element
outlet 1 – KFA1.U1
outlet 2 – KFA1.U3 and
2 safety valves 161-210-012

Technical data

Unit

Model KFA1

Operating voltage 24 V DC
Typ. power consumption 0.5 A at 24 V
at max. operating pressure and 20° C
Max. back pressure. 300 bars
Mode/ON time. S3 – 20% – 50 minutes
Perm. operating temperature . . . –25 °C to +75 °C

Model KFA10

Operating voltage 115 V AC, 50 or 60 Hz
230 V AC, 50 or 60 Hz
Typ. power consumption 1 A at 115 V / 50 Hz
at max. operating pressure and 20° C 1.3 A at 115 V / 60 Hz
. 0.45 A at 230 V / 50 Hz
. 0.66 A at 230 V / 60 Hz
Max. back pressure. 300 bars
Mode/ON time. S3 – 10% – 50 minutes
Perm. operating temperature . . . 0 °C to +40 °C

Models KFA 1 and KFA10

Type of enclosure, DIN EN 60529. IP 55
Reservoir capacity 1 kg
Number of outlet ports max. 2
Meets EC Directives: 89/336/EEC (EMC)

Lubricant grease up to NLGI grade 2
with EP additives,
max. flow pressure 700 mbars

Please note: only use grease that has been approved by Willy Vogel AG.

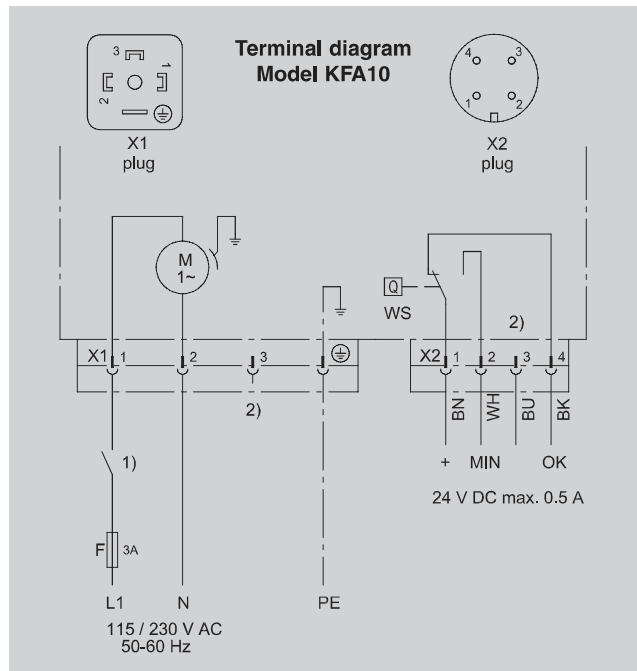
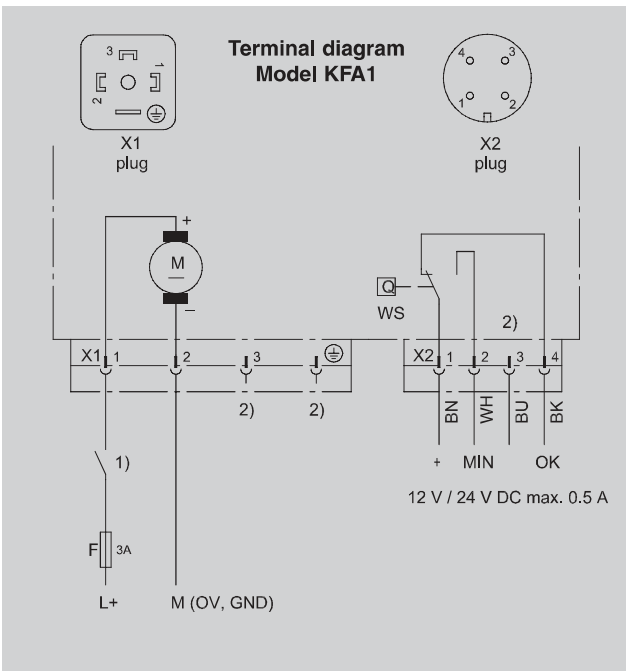
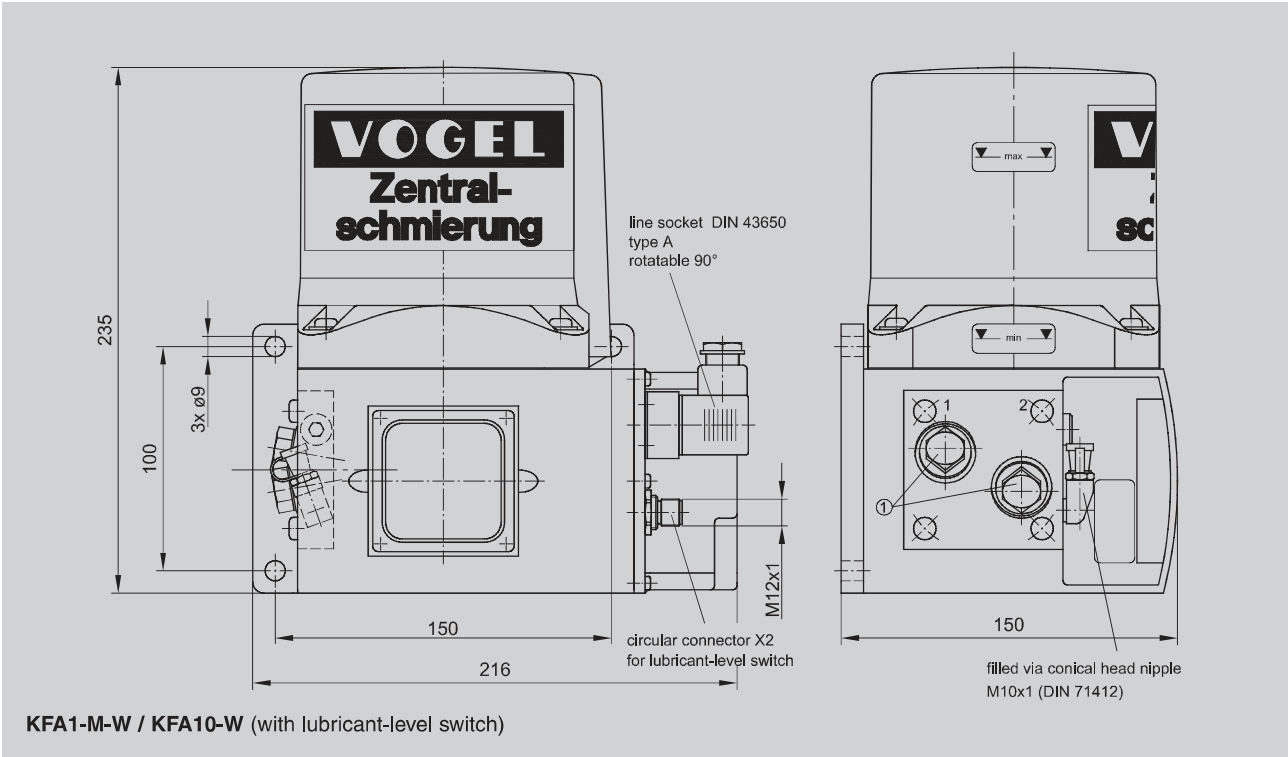
Approved lubricants list “Lubricants for Progressive systems, NLGI grade 2” see “www.vogelag.com” or please request from “info@vogel-berlin.de”.

Lubricant-level switch

Type of contact 1 changeover
Max. rated voltage. 24 V DC
Max. switching current 0.5 A
Socket box M12x1 (4-PIN)

Please note:

The installation's ambient surroundings and cable connections have a decisive influence on the unit's electromagnetic compatibility. During the installation it is therefore necessary to assure the EMC of the entire system.



Legend, model KFA1

- L+** +potential, supply voltage (main machine switch ON)
- M** –potential, supply voltage (OV, GND)
- X1** plug-in connection, supply voltage
- X2** plug-in connection, lubricant-level switch
- WS** lubricant-level switch contact illustration: full reservoir
- F** fuse (line protection)
- 1)** external control system: relay contact “pump ON”
- 2)** PIN without internal connection

Protective measures to be taken for proper operation:

“Functional extra-low voltage with safety separation” (FELV)
 Standards: EN 60204 Part 1: 1992 / IEC 204-1: 1992, modified DIN VDE 0100 T 410 A2 / IEC 364-4-41: 1992

| X2 PIN | Color code abbreviations | Core color |
|--------|--------------------------|------------|
| 1 | BN | brown |
| 2 | WH | white |
| 3 | BU | blue |
| 4 | BK | black |

Legend, model KFA10

- L1/N** supply voltage (main machine switch ON)
- PE** protective earth conductor
- X1** plug-in connection, supply voltage
- X2** plug-in connection, lubricant-level switch
- WS** lubricant-level switch contact illustration: full reservoir
- F** fuse (line protection)
- 1)** external control system: relay contact “pump ON”
- 2)** PIN without internal connection