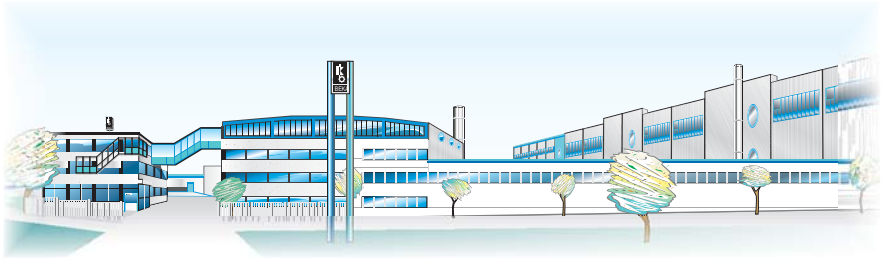
# PRODUCT OVERVIEW
## *INDUSTRIAL LUBRICATION*

revision 03/2013



1090200384

© BEKA 2013 All rights reserved!

## Table of contents

**Single Line Lubrication Systems**

- Gear pump units ..... 01-1-10-05
- Pneumatic pump units ..... 01-1-10-07
- Hydraulic pump units ..... 01-1-10-08
- Manual piston pumps
- Proportioning valves, metering valves ..... 01-1-10-09
- Metering distributor block, Metering unit ..... 01-1-10-10
- Distributor strips ..... 01-1-10-11
- Single line distributor (NV, UEN, IV)

**Progressive Central Lubrication Systems**

- Progressive distributors ..... 01-1-10-12
  (MX-F, MX-I, LX-2, LX-3, SX-1, SX-2, SX-3, SX-5, UX, SXE-2, SXE-2R, SXE-3, SXD, SXW-1, SXW-2)

**Dual Line Central Lubrication Systems**

- Dual line distributors (BV, BW, BZ, UXZ ) ..... 01-1-10-13
- Components for main line controlling
- Components for change-over monitoring

**Piston pumps**

**Oil Lubrication Pumps**

- Series **TDM** ..... 01-1-10-14
- Series **A** ..... 01-1-10-15
- Series **D**
- Series **C** ..... 01-1-10-16
- Series **OKG** - electric drive ..... 01-1-10-17
- Drive electro magnetic (K 407, K 412, K 442, K400, MP 2646)
- Drive pneumatic (P2663, P2664, P2669, P2686, PAU) ..... 01-1-10-18
- Drive mechanic single piston-tappet pump (EHS) or tappet pump (SP)
- Drive hydraulic (FAZ02142-05, FAZ02142-06)

**Grease Lubrication Pumps**

- Series **FK** (FKR, FKP, FKG, FKG-V, FKG-S, FKG-A) ..... 01-1-10-19
- Series **FK** and **FVAM** (FKGM, FKMS, FVAM) - electric drive
- Series **PICO** - electric drive ..... 01-1-10-20
- Series **FK...-OC / FK...-EP** - electric drive or rotating ..... 01-1-10-21
- Series **F** (F6, F-super, F-super 3) ..... 01-1-10-22
- Drive electro magnetic (MP-2643) ..... 01-1-10-23
- Drive mechanic (FHX-2, FH-2535, FHX, FHX-MX)
- Drive pneumatic (P-2103, PP-1)
- Drive hydraulic (HP-1, PH-2104, HKP-1, HPM-2, HPH-2) ..... 01-1-10-24

**Circulating Lubrication Systems**

- Flow control valve, Flow limiting device, Volume flow control FXE ..... 01-1-10-25
- Gear pumps ..... 01-1-10-26
- Internal gear pumps

**Special lubrication systems**

- Barrel pumps (EFP-1, EFPM-2, HFP-3U, Qmaxx) ..... 01-1-10-27
- Lubrication pinions for gears ..... 01-1-10-28



Subject to alterations!

© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Table of contents


- PU-lubrication pinion for gearings and chains ..... 01-1-10-28
- Special units ..... 01-1-10-29
- Oil-air units ..... 01-1-10-30
- Oil-air mixing distributor

**Accessories**

- Oil reservoir ..... 01-1-10-31






1090200384

© BEKA 2013 All rights reserved!

Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Table of contents





Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Gear pump units

EA 1,5

BEKA Xlube

| Model | Type | Delivery volume (l/min) | Oper. pressure max. (bar) | Reservoir content (l) | Reservoir material | Lubricant | Operating voltage |
|---|---|---|---|---|---|---|---|
| **EA 1,5** oil | 2727 | 0,4 | 40 | 3 | plastic, transparent | oil, 20 - 700 mm²/s | 400 V AC / 3~ |
| **EA 1,5** fluid grease | 2728 | | | | | fluid grease a/t release list | |
| **BEKA Xlube** | 2712 | 0,25 | 28 | 1,2 | | oil, 20 - 700 mm²/s or fluid grease a/t release list | 230 V AC |

**Super 3 EA-tronic** left

**Super 3 EA-tronic** right

**Super EA-tronic** with 4 l-reservoir

**Super EA-tronic** with 6 l-reservoir

**Mini EA-tronic** with 3 l-reservoir

**Mini 2 EA-tronic**

| Model | Type | Delivery volume (l/min) | Oper. pressure max. (bar) | Reservoir content (l) | Reservoir material | Lubricant | Operating voltage |
|---|---|---|---|---|---|---|---|
| **Super 3 EA-tronic** left | 2805 | 0,4 | 35 | 3 | plastic, transparent | oil 20 - 700 mm²/s or fluid grease acc.to release list | 115 V AC 230 V AC 24 V DC |
| **Super 3 EA-tronic** right | 2806 | | | | | | |
| **Super EA-tronic** with 4 l-reservoir | 2800 | | | 4 | aluminium | | |
| **Super EA-tronic** with 6 l-reservoir | | | | 6 | steel | | |
| **Mini EA-tronic** with 3 l-reservoir | | | | 3 | plastic, transparent | | |
| **Mini 2 EA-tronic** | 2810 | | | 1,5 | | | 115 V AC 230 V AC |





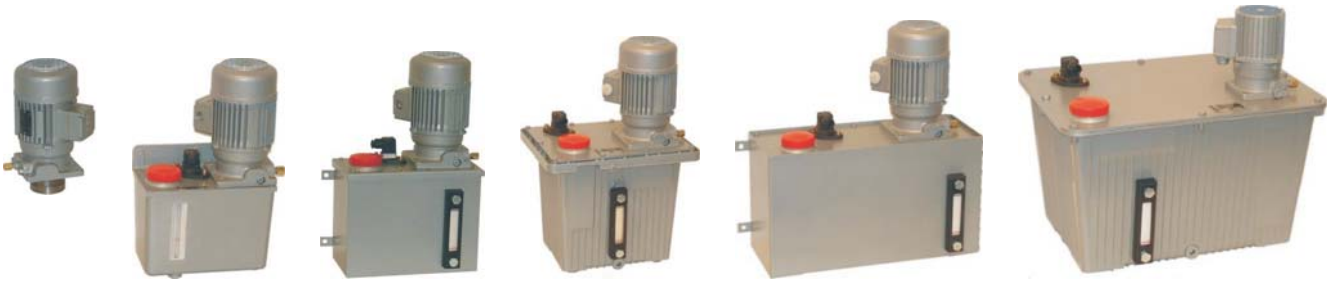
1090200384
© BEKA 2013 All rights reserved!
Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Gear pump units

**ES** | **ES 2711** with 3 l-reservoir | **ES 2711** with 6 l-reservoir | **ES 2711** with 13 l-reservoir | **ES 2711** with 16 l-reservoir | **ES 2711** with 30 l-reservoir

| Model | Type | Delivery volume (l/min) | Oper. pressure **max.** (bar) | Reservoir **content** (l) | Reservoir material | Lubricant | Operating voltage |
|---|---|---|---|---|---|---|---|
| **ES** (w/o reservoir) | 2710 | 0,4 | 35 | - | - | oil 20 - 700 mm²/s or fluid grease acc.to release list | 400 V AC / 3~ |
| **ES 2711** with 3 l-reservoir | 2711 | | | 3 | aluminium | | |
| **ES 2711** with 6 l-reservoir | | | | 6 | steel | | |
| **ES 2711** with 13 l-reservoir | | | | 13 | aluminium | | |
| **ES 2711** with 16 l-reservoir | | | | 16 | steel | | |
| **ES 2711** with 30 l-reservoir | | | | 30 | aluminium | | |



**EA 3** **EA 6** | **EA 3 / EA 6** with 3 l-reservoir | **EA 3 / EA 6** with 6 l-reservoir | **EA 3 / EA 6** with 13 l-reservoir | **EA 3 / EA 6** with 16 l-reservoir | **EA 3 / EA 6** with 30 l-reservoir

| Model | Type | Delivery volume (l/min) | Oper. pressure **max.** (bar) | Reservoir **content** (l) | Reservoir material | Lubricant | Operating voltage |
|---|---|---|---|---|---|---|---|
| **EA 3 / EA 6** (without reservoir) | 2700 | 1 or 2 | 35 | - | - | oil 20 - 700 mm²/s | 400 V AC / 3~ |
| **EA 3 / EA 6** with 3 l-reservoir | 2705 | | | 3 | aluminium | | |
| **EA 3 / EA 6** with 6 l-reservoir | | | | 6 | steel | | |
| **EA 3 / EA 6** with 13 l-reservoir | | | | 13 | aluminium | | |
| **EA 3 / EA 6** with 16 l-reservoir | | | | 16 | steel | | |
| **EA 3 / EA 6** with 30 l-reservoir | | | | 30 | aluminium | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Pneumatic pump units

**P30.2** to **P50.8**
with reservoir

**2564**
with 2,7 l-reservoir

**P30-6**
with 6 l-reservoir

**P5.2 / P8.4 / P8.8**
with reservoir

**P5.6 / P8.6**
with 6 l-reservoir

| Model | Type | Delivery volume (cm³/stroke) | Pressure reduction | Drive press. (bar) | Reservoir content (l) | Reservoir material | Lubricant |
|---|---|---|---|---|---|---|---|
| **P30.2 to P50.8** | 2564 | 30 or 50 | 1:9 | 5 - 10 | 2,5 / 4,2 / 8 | plastic, transparent | oil 20 - 700 mm²/s or fluid grease acc.to release list |
| **2564** with 2,7 l-reservoir | | | | | 2,7 | | |
| **P30-6** with 6 l-reservoir | | | | | 6 | steel | |
| **P5.2 / P8.4 / P8.8** | 2563 | 10 | 1:11 | 4 - 8 | 2,5 / 4,2 / 8 | plastic, tr. | |
| **P5.6 / P8.6** with 6 l-reservoir | 2565 | 15 | 1:8 | | 6 | steel | |

**P30** and **P50**
without reservoir

**P605**
without reservoir

**P5.1,2** and **P8.1,2**
with 1,2 l-reservoir

**PPF-1**
with 4 l reservoir

| Model | Type | Delivery volume (cm³/stroke) | Pressure reduction | Drive press. (bar) | Reservoir content (l) | Reservoir material | Lubricant |
|---|---|---|---|---|---|---|---|
| **P30 and P50** (without reservoir) | 2564 | 30 or 50 | 1:9 | 5 - 10 | - | - | Oil 20 - 700 mm²/s or fluid grease acc.to release list |
| **P605** (without reservoir) | 2566 | 3<br>9,5<br>15 | 1:32<br>1:12<br>1:8 | 3 - 8 | | | |
| **P5.1,2 and P8.1,2** with 1,2 l-reservoir | 2562 | 10<br>15 | 1:11<br>1:8 | 4 - 8 | 1,2 | plastic, transparent | |
| **PPF-1** | 2161 | 50 | 1:5 | 6 - 10 | 4 | | |





1090200384

© BEKA 2013 All rights reserved!

Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Hydraulic pump units

**PH1/ PH6/ PH10**
without reservoir

**PH1-6 / PH6-6 / PH10-6**
with 6 l-reservoir

| Model | Type | Delivery volume (cm³/stroke) | Pressure reduction | Operating press. (bar) | Relief press. (bar) | Reservoir content (l) | Reservoir material | Lubric. |
|---|---|---|---|---|---|---|---|---|
| **PH1** | 2577 | 1 | 1:2 | max. 55 | 1 - 2 | - | - | oil 20 - 700 mm²/s or fluid gre. acc.to release list |
| **PH6** | | 6 | | | | | | |
| **PH10** without reservoir | | 10 | 1:1 | | | | | |
| **PH1-6** | 2578 | 1 | 1:2 | | | 6 | steel | |
| **PH6-6** | | 6 | | | | | | |
| **PH10-6** with 6 l-reservoir | | 10 | 1:1 | | | | | |

## Manual piston pumps

**Manual pump 2532**

**Manual pump 2533**

| Model | Type | Delivery volume (cm³/stroke) | Operating press. (bar) | Reservoir content (l) | Reservoir material | Lubricant |
|---|---|---|---|---|---|---|
| **Manual pump 2532** | 2532 | 6 / 10 / 15 | 30 | 1,2 | plastic, transparent | oil, 20 - 700 mm²/s or fluid grease acc.to release list |
| **Manual pump 2533** | 2533 | 6 / 10 | | | | |



Subject to alterations!

© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## **Metering valves** (dynamic system)

**Size 1**
with bolted connection
for pipe Ø 4

**Size 1**
with bolted connection
for pipe Ø 6

**Size 1**
with plug connection
for PA pipes

**Size 1**
with plug connection
for PA-pipes with chamfer

| Model | Meter. volume (mm³/stroke) | Size | Type / Connection type | | | Relief press. (bar) | Operating press. (bar) | Metering medium |
|---|---|---|---|---|---|---|---|---|
| **Z31ZV1** | 10 | | | | | | | |
| **Z31ZV2** | 20 | | | | | | | |
| **Z31ZV3** | 30 | **1** | | 4036 / plug-type connection for PA-pipes | 4036 / plug-type connection for PA pipes and chamfers | | | |
| **Z31ZV5** | 50 | | | | | | | oil 50 - 700 mm²/s or fluid grease acc.to Freigabe-liste |
| **Z31ZV10** | 100 | | 4030 / bolted connection | | | max. 1 | 15 - 40 | |
| **Z31ZV15** | 150 | | | | | | | |
| **Z31ZV20** | 200 | **2** | | | | | | |
| **Z31ZV40** | 400 | | | | | | | |
| **Z31ZV50** | 500 | **3** | | | | | | |
| **Z31ZV60** | 600 | | | | | | | |
| **Z31ZV100** | 1000 | | | | | | | |

## **Metering valves** (static system)

**Z31DV.. / Z31DDV..**
with bolted connection

**Z31DV.. / Z31DDV..**
with plug connection

**Z31DV..**
with elbow plug connection

| Model | Metering volume (mm³/stroke) | Type | Connection type | Relief press. max. (bar) | Operating press. (bar) | Material | Metering medium |
|---|---|---|---|---|---|---|---|
| **Z31DV3** | 30 | | | | | | |
| **Z31DV5** | 50 | | | | | | |
| **Z31DV10** | 100 | 4031 | - Bolted connection<br>- Plug-type conn. for polyamide pipes<br>- elbow plug-type conn. for polyamide pipes | 4 | 15 - 40 | steel or V2A (1.4305) | oil 20 - 700 mm²/s or fluid grease acc.to release list |
| **Z31DV15** | 150 | | | | | | |
| **Z31DV20** | 200 | | | | | | |
| **Z31DDV3** | 30 | | | | | | |
| **Z31DDV6** | 60 | 4032 | - Bolted connection<br>- Plug-type conn. | 1 | 12 - 40 | steel | oil 20 - 700 mm²/s |
| **Z31DDV10** | 100 | | | | | | |
| **Z31DDV16** | 160 | | | | | | |



© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Metering distributor blocks

**Size 1**

**4018**
Bolted connection

**40181**
Plug connection

**Size 2**

**4180**
Bolted connection

**4181**
Plug connection

**Size 3**

**41823**
Bolted connection

**41841**
Plug connection

| Size | Meter.-volume (mm³/stroke) | Type Connection type | Number of lube points | Connections main line | Connections lube line | Relief press. max. (bar) | Operating press. (bar) | Metering medium |
|---|---|---|---|---|---|---|---|---|
| 1 | 10<br>30<br>60<br>100<br>160 | **4018**<br>Bolted connection<br>**40181**<br>Plug-type connection | 1 to 10 | M10x1 | M8x1 pipe Ø 4 mm | 3 | 12 - 50 | oil 10 - 1000 mm²/s or fluid grease acc.to release list |
| 2 | 100<br>200<br>300<br>400<br>600 | **4180**<br>Bolted connection<br>**4181**<br>Plug-type connection | | M12x1 | | 4 | 16 - 50 | |
| 3 | 200<br>400<br>600<br>1000<br>1500 | **41820/ 41823/ 41824**<br>Bolted connection<br>**41840/ 41841/ 41842**<br>Plug-type connection | 1 to 3 | M12x1 or G 1/8 | | | | |

## **Metering units** for direct lubrication point connection (static system)

**Design A** **Design B** **Design C** **Design D**

| Design | Version | Meter. volume (mm³/stroke) | Type | Connection type | Relief press. (bar) | Operating press. (bar) | Metering medium |
|---|---|---|---|---|---|---|---|
| **A** | G | 30<br>60<br>100 | 4176 | Bolted connection | max. 1 | max. 35 | oil 40 - 250 mm²/s fluid grease n. release list |
| **B** | L | | | | | | |
| **C** | T | | | | | | |
| **D** | W | | | | | | |
| **E** (pivotable) | LS | | 4174 | Plug-type conn. Ø 4 mm for polyamide pipes | | | oil 40 - 250 mm²/s |
| **F** (pivotable) | TS | | | | | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Distributor blocks

Size 1
**Z32VL3** or **Z33VL6**

Size 1
**Z32VL4** or **Z33VL8**

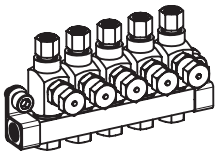
Size 1
**Z32VL5** or **Z33VL10**

| Size | Model | Outlets | Number of outlets | Type | Connection inlets | Connection outlets | Material |
|---|---|---|---|---|---|---|---|
| 1 | **Z32VL1 - Z32VL12** | one-sided | 1 to 12 | 4020 | with or without union nut (M10x1, pipe-Ø 6, with olive | M8x1 M10x1 | steel, galv. or 1.4305 |
| | **Z33VL2 - Z33VL24** | two-sided | 2x1 to 2x12 | | | | steel, galvanized |
| 2 | **Z32VL1/2 - Z32VL10/2** | one-sided | 1 to 10 | | | M10x1 | |
| | **Z33VL2/2 - Z33VL20/2** | two-sided | 2x1 to 2x10 | | | | |

## Single line distributor

**NV-6**

**UEN**



**GVO-1**

**IV-11 / IV-1** 2-outlets

| Model | Type | Operating pressure max. (bar) | Number of outlets | Inlet connection | Outlet connections | Material | Metering vol. optional (mm³ / stroke and outlet) | Metering medium |
|---|---|---|---|---|---|---|---|---|
| **NV** | 4020 | 45 | 1 to 6* | M16x1,5 | M8x1 | Housing: GD-Zn additional part: brass | 100 - 1000 | oils; fluid grease NLGI 000, 00 |
| **UEN** | 4124 | 300 | 1 to 12** | G 1/4 | M10x1 | steel, ZnNi-coating acc. to DIN 50979 | 25 - 400 | fluid grease; grease up to NLGI 2 |
| **GVO-1** | 4126 | 120 | 1 to 15 | M10x1 | M8x1 | | 16 - 50 | oil; fluid grease NLGI 000, 00 |
| **IV-1** | 4125 | 240 | 1 to 6 | G 3/8 | G 1/8 | steel, galvanized | 200 - 1200 adjustable | fluid grease, grease up to NLGI |
| | | | | NPT 3/8" | NPT 1/8" | | | |
| **IV-11** | | | | G 3/4 | G 1/4 | | 1000 - 11000 adjustable | |
| | | | | NPT 3/4" | NPT 1/4" | | | |

* *no. of outlets can be enlarged when combining*

** *no. of outlet can be enlarged by a connection element*

© BEKA 2013 All rights reserved!

Subject to alterations!

## Disk construction

MX-F

MX-I

LX-2

LX-3

SX-1

SX-2

SX-3

SX-5

UX

| Model | Type | Number of rev. max. (revol./min) | Operat. press. max. (bar) | No. of outlets max. | Inlet connection | Outlet connection | Material | Metering vol. optional (mm³ /stroke and outlet) | Meter-medium |
|---|---|---|---|---|---|---|---|---|---|
| **MX-F** | 4010 | 180 | 300 | 24 | M10x1 | M10x1 | steel, galv. | 25 - 105 | oils and greases up to NLGI-cl. 2 |
| **MX-I** | 3979 | 60 | | 16 | | | 1.4404 | 45 - 105 | |
| **LX-2** | 3972 | 180 | | 20 | | | steel, ZnNi | 200 | |
| **LX-3** | 3973 | 60 | | | | | 1.4404 1.4401 | | |
| **SX-1** | 4000 | 180 | | | G 1/8 | G 1/8 | steel, galv. | 68 - 430 | |
| **SX-2** | 3989 | | | | | | | 75 - 470 | |
| **SX-3** | 4008 | 60 | | | | | 1.4301 | | |
| **SX-5** | 3983 | 180 | | | G 3/8 | G 1/4 | steel, galv. | | |
| **UX** | 4005 | | 250 | | G 1/2 | G 3/8 | | 1130 - 2000 | |

## Segment construction

## Sandwich construction

**SXE-2 / SXE-2R** (with return)

**SXE-3**

**SXD**

**SXW-1**

**SXW-2**

| Model | Type | No. of revol. max. (revol./min) | Oper. press. max. (bar) | No. of outlets max. | Inlet connection | Outlet connection | Material | Meterin vol. optional (mm³ / stroke and outlet) | Metering medium |
|---|---|---|---|---|---|---|---|---|---|
| **SXE-2** | 4003 | 180 | 300 | 20 | G 1/4 | G 1/8 | steel, galvanized | 100 - 760 | oils and greases up to NLGI 2 |
| **SXE-2R** | 3971 | | | | | M11x1 | | | |
| **SXE-3** | 3985 | | | | G 3/8 | G 1/4 | | | |
| **SXD** | 3998 | | 200 | | | G 3/8 | | | |
| **SXW-1** | 3977 | | 150 | | G 1/4 | G 1/4 | steel, galv., connec. plate aluminium | 100 - 900 | |
| **SXW-2** | 3978 | | | | G 1/2 | G 3/8 | | 900 - 3700 | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Dual line distributors

BV

BW

BZ

UXZ

| Model | Type | Operating pressure max. (bar) | No. of outlets max. | Connection inlet | Connection outlet | Material | Metering volume optional (mm³ / stroke and outlet) | Metering medium |
|---|---|---|---|---|---|---|---|---|
| **BV** | 3981 | 300 | 8 | G 1/4 | G 1/4 | steel, galvanized | 70 - 300 | Oils and greases up to NLGI-cl. 2 |
| **BW** | 3980 | (min. 35) | | | | | 300 - 1500 | |
| **BZ** | 4001 | 400 | | G 3/8 | | steel, galvaniz. or 1.4305 | 250 - 3000 (regelbar) | |
| **UXZ** | 4006 | 150 | 20 | | G 3/8 | steel, galvaniz. | 1130 - 2000 | |

## For controlling the main line

4/3-way control valve

4/2-way control valve

## For controlling the changeover

Pressure changeover switch

Differentiall press. control device

electronic press. sensor

| Component | Type | Actuation | Operating pressure (bar) | Flow volume (l/min) | Connection main line | Material | Lubricant |
|---|---|---|---|---|---|---|---|
| **4/3-waycontrol valve** | 4340 | electrical | 400 | 8 | G 1/2 G 3/4 | GG-25 | oils and greases up to NLGI-Cl. 2 |
| **4/2-waycontrol valve** | 4065 | electro-pneumatic | 350 | 20 | G 3/8 | steel, galvanized | |
| **Pressure changeover switch** | 0421 | hydraulical | 150 / 300 | 8 | G 1/4 | | |
| **Differential pressure control device** | 4305 | electrical | 400 | - | G 3/8 | | |
| **electron. press. sensor** | 0421 | | | | | - | |





1090200384
© BEKA 2013 All rights reserved!
Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Series TDM

TDM-FSU

TDM-FS 4

| Model | Type | No. of outlets | Delivery volume adjustable, max. (cm³ / stroke and outlet) | Ratio | Input speed max. (rev / min) | Operating pressure max. (bar) | Suction height max. (mm) |
|---|---|---|---|---|---|---|---|
| **TDM-FSU** | 2200 | 1 - 2 | 0,1 | 33:1 | 300 - 1800 | 3 | 300 |
| **TDM-FSU-M** | 2201 | | | | | | |
| **TDM-FS 4** | 2204 | 3 - 4 | | | | | |
| **TDM-FS 4-M** | 2205 | | | | | | |

TDM 2

TDM 4

TDM 8

TDM 4-M
230/400 V AC / 3~

| Model | Type | No. of outlets | Delivery volume adjustable, max. (cm³ / stroke and outlet) | Ratio | Input speed max. (rev / min) | Operating pressure max. (bar) | Suction height max. (mm) |
|---|---|---|---|---|---|---|---|
| **TDM 2** rotating | 2210 | 1 - 2 | 0,039 - 0,088 | 71,5:1 - 428:1 | 500 - 3000 | 3 / 5 | 300 |
| **TDM 2-M** electric | 2211 | | | | | | |
| **TDM 4** rotating | 2212 | 3 - 4 | | | | | |
| **TDM 4-M** electric | 2213 | | | | | | |
| **TDM 8** rotating | 2214 | 5 - 8 | | 92:1 - 1050:1 | | | |
| **TDM 8-M** electric | 2215 | | | | | | |
| **TDM-M** with motor | Power requirement: 0,09 / 0,11 kW; available for all pumps of series TDM, see TDM-FSU-M, TDM-FS 4-M, TDM 2-M, TDM 4-M, TDM 8-M | | | | | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

**Series A** - drive see table

AZU

AZP

AF

AFG

AFG-M
400 V AC / 3~

APG-M
DC

| Model | Type | Outlets max. | Delivery volume adjustable, max. (cm³ / stroke and outlet) | Reduction | Input speed max. (rev / min) | Operating pressure max. (bar) | Suction height max. (mm) |
|---|---|---|---|---|---|---|---|
| **AZU** rotating | 2240 | 12 | 0,06 | 8:1 / 16:1 25:1 / 50:1 | 200 / 400 600 / 1300 | 10 | 500 |
| **AZP** oscillating | 2242 | | | 1:1 | 40 | | |
| **AF** rotating | 2244 | | | 18:1 / 25:1 / 36:1 | 500 / 600 / 1400 | | |
| **AFG** rotating | 2248 | | | 80:1 / 160:1 / 320:1 / 640:1 | 2400 2800 | | |
| **AFG-M** elektrisch | 2250 | | | 50:1 / 80:1 / 160:1 / 320:1 / 640:1 | 1500 / 1800 | | |
| **APG-M** electric | 2243 | | | 400:1 / 288:1 | 2900 / 3000 | | |

**Series D** - drive see table

DU

DP

DG

DFG

DFG-M
400 V AC / 3~

| Model | Type | Outlets max. | Delivery volume adjustable, max. (cm³ / stroke and outlet) | Reduction | Input speed max. (U / min) | Operating pressure max. (bar) | Suction height max. (mm) |
|---|---|---|---|---|---|---|---|
| **DU** rotating | 2260 | 12 | 0,15 | 12:1 / 18:1 / 36:1 | 500 - 750 | 50 | 1000 |
| **DP** oscillating | 2262 | | | 2:1 | 80 | | |
| **DG** rotating | 2266 | | | 80:1 / 160:1 / 320:1 / 640:1 | 2500 | | |
| **DFG** rotating | 2268 | | | 160:1 / 320:1 / 640:1 | 2500 | | |
| **DFG-M** electric | 2270 | | | 80:1 / 160:1 / 320:1 / 640:1 | Power demand 0,25 kW | | |

01-1-10-15 state: 03.13EN

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

**Series C** - drive see table

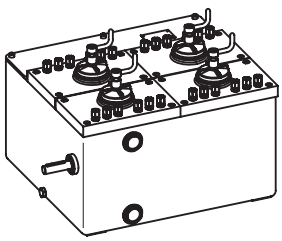
**C 1,5**
oscillating

**CS 3**
rotating

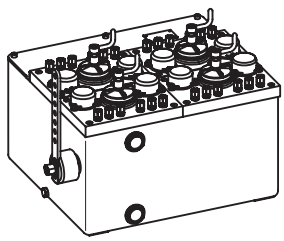
**CS 3**
oscillating

**CCS 3**
rotating

**CCS 6**
oscillating



**CC 30**
rotating



**CCS 30**
oscillating

| Model | Drive | Type | Out-lets max. | Deliv. volume adjustable, max. (cm³ / stroke and outlet) | Res. capa-city (l) | Reduction | Input speed max. (rev / min) | Operating pressure max. (bar) |
|---|---|---|---|---|---|---|---|---|
| **C 1,5** | rotating | 2300 | 12 | 0,15 | 1,8<br>3 | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | 50 |
| | oscillating | 2301 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CS 1,5** | rotating | 2302 | 6 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2303 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **C 3** | rotating | 2310 | 12 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2311 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CS 3** | rotating | 2312 | 6 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2313 | | | | 1:1 / 3,15:1 | 40 /125 | |
| **CC 3** | rotating | 2320 | 24 | | 3<br>6 | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2321 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CCS 3** | rotating | 2322 | 12 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2323 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CC 6** | rotating | 2340 | 24 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2341 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CCS 6** | rotating | 2342 | 12 | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2343 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CC 30** | rotating | 2360 | 48 | | 30 | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| | oscillating | 2361 | | | | 1:1 / 3,15:1 | 40 / 125 | |
| **CCS 30** | oscillating | 2362 | 24 | | | 1:1 / 3,15:1 | 40 / 125 | |
| | rotating | 2363 | | | | 12/18/36 or 72:1 | 500/ 750/ 1400/ 2600 | |
| **CC 30 M** | w. motor | 2364 | 48 | | | 80/120/180/240/ 360 oder 720:1 | 1500/ 1800 | |
| **CCS 30 M** | w. motor | 2368 | 24 | | | | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Series OKG - electric drive

**OKGGM-OC**
DC

**OKGGM-OC**
with PSU,
115 or 230 V AC

**OKGM-OC**
400 V AC / 3~

**OKGGM-EP**
DC

**OKGGM-EP**
with PSU,
115 or 230 V AC

**OKGM-EP**
400 V AC / 3~

| Model | Type | Out-lets max. | Delivery volume max. (cm³ / stroke and outlet) | Reser. content (kg) | Reduction | Input speed motor / shaft (rev. / min) | Pump speed 1 rev. = 1 stroke (rev. / min) | Press. max. (bar) | Operating voltage |
|---|---|---|---|---|---|---|---|---|---|
| **OKGGM-OC** | 2035 | 21 | 0,005<br>0,010<br>0,015<br>0,025<br>0,050 | 2,5<br>4,2<br>8,0 | - | - | 15 | 200 | 12 V DC<br>24 V DC |
| **OKGGM-OC** with PSU | 2029 | | | | | | | | 115 V AC<br>230 V AC |
| **OKGM-OC** | 2017 | | | | 80:1 / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 1350 at 50 Hz<br>1600 at 60 Hz | - | | 400 V AC / 3~ |
| **OKGGM-EP** | 2040 | 3 | 0,06<br>0,12<br>0,17 | | - | - | 15 | 350** | 12 V DC<br>24 V DC |
| **OKGGM-EP** with PSU | 2038 | | | | | | | | 115 V AC<br>230 V AC |
| **OKGM-EP** | 2011 | 6 | | | (80:1)* / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 1350 at 50 Hz<br>1600 at 60 Hz | - | | 400 V AC / 3~ |

* *Special request after consultation*
** *Pressure limiting valve adjusted to 280 bar,*
*= power supply unit*

## Electro magnetic drive

**K-407**

**K-412**

**K-442**

**K-400** or **MP-2646**

| Model | Type | Outlets | Delivery volume max. (cm³ / stroke and outlet) | Reservoir capacity (l) | Reservoir material | Duty ratio | Operating voltage |
|---|---|---|---|---|---|---|---|
| **K-407** | 2652 | 1 - 6 | 0,040<br>0,100 | 0,75 | plastic | 40 % | 24 V DC |
| **K-412** | 2653 | | | 1,2 | | | |
| **K-442** | 2640 | | | 4,2 | plastic, transparent | | |
| **K-400** | 2654 | | | without reservoir | - | | |
| | 2641 | | | | | | 230 V AC |
| **MP-2646** | 2646 | | | | | 25 % | 24 V DC<br>180 V DC |

© BEKA 2013 All rights reserved!
Subject to alterations!

## Pneumatic drive

P2663

P2669

| Model | Type | Outlets max. | Delivery volume max. (cm³ / stroke and outlet) | Reservoir content (l) | Reservoir material | Pressure ratio | Drive press. (bar) |
|---|---|---|---|---|---|---|---|
| **P-2663** | 2663 | 5 | 0,025 | 0,5 | plastic | 1:20 | 6 - 10 |
| **P-2664** | 2664 | | | 1,2 | | | |
| **P-2669** | 2669 | | 0,010 | 0,5 | | | |
| **P-2686** | 2686 | 4 | 0,005 - 0,015 | - | - | 1:84 | |
| | | | 0,025 - 0,050 | | | 1:47 | |
| **PAU** | 2685 | 1 | 10 | | | 1:20 | |

## Mechanic drive

EHS 0,6 / EHS 0,15 S55

| Model | Type | Outlets max. | Delivery volume max. (cm³ / stroke and outlet) | Operating press. max. (bar) | Suct. height max. (mm) |
|---|---|---|---|---|---|
| **EHS 0,6** | 2140 | 4 | 0,15 | 12 | 300 |
| **EHS 0,15 S55** | 2141 | 1 | | | |
| **SP 0,56** | 2605 | | 0,56 | 80 | - |
| **SP 1,12** | | | 1,12 | | |

## Hydraulic drive

FAZ02142-05

FAZ02142-06

| Model | Type | Outlets max. | Delivery volume max. (cm³/stroke and outlet) | Operating pressure max. (bar) | Drive pressure (bar) |
|---|---|---|---|---|---|
| **FAZ02142-05** | 2122 | 10 | 2 / 3 / 4,5 / 6 / 7,5 | 200 | 60 - 200 |
| **FAZ02142-06** | | 1 | 6 | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Series FK - drive see table

**FKR**
rotating

**FKP**
oscillating

**FKG**
rotating
vertical

**FKG-V**
rotating
pivotable by 90°

**FKG-S**
rotating
vertical

**FKG-A**
rotating
vertical

| Model | type | Outlets max. | Delivery volume adjustable, max. (cm³ / stroke and outlet) | Reser. capacity (kg) | Reduction | Input speed (rev / min) | Press. max. (bar) |
|---|---|---|---|---|---|---|---|
| **FKR** rotating | 2000 | 12 | 0,1 | 1<br>1,5<br>2<br>4 | 14:1 / 19:1 / 28:1 / 57:1 | min.: 28/38/56/114<br>max.: 210/300/430/850 | 50 |
| **FKP** oscillating | 2001 | | | | 3,5:1 | 35 | |
| **FKG** rotating vertical | 2002 | | | | 84:1 / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 300 - 2800 | |
| **FKG-V** rotating pivotable by 90° | 2004 | | | | 84:1 / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | | |
| **FKG-S** rotating vertical | 2005 | | | | | | |
| **FKG-A** rotating vertical | 2006 | 8 | | | 300:1 / 450:1 / 900:1 | | |

## Series FK and FVAM - electric drive

**FKGM**
with motor

**FKMS**
with motor

**FVAM**
with motor

| Model | Type | Out-lets max. | Delivery volume adjustable, max. (cm³/h and outlet) | Reservoir capacity (kg) | Reduction | Input speed (rev / min) | Operating press. max. (bar) | Operating voltage |
|---|---|---|---|---|---|---|---|---|
| **FKGM** with motor | 2007 | 12 | 0,1 | 1<br>1,5<br>2<br>4 | 84:1 / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 1420 at 50 Hz<br>1700 at 60 Hz | 50 | 230 / 400 V AC / 3~ |
| **FKMS** with motor | 2008 | | | | | | | 400 V AC / 3~ |
| **FVAM** with motor | 2030 | 8 | 0,15 | 1 / 1,5 / 2 / 4 / 10 | 420:1 / 560:1 / 750:1 | | 100 | 230 / 400 V AC / 3~ |

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

1090200384

## PICO - electric drive

| Model | Type | Out-lets max. | Deliv. volume max. (cm³ / stroke and outlet) | Reservoir content (kg) | System type | Pump speed 1 rev. = 1 stroke (rev. / min) | Operating press. max. (bar) | Operating voltage |
|---|---|---|---|---|---|---|---|---|
| PICO | 2185 | 8 | 0,005 / 0,010 / 0,015 / 0,025 / 0,05 | 1,2 | multi line | 15 | 200 | 12 V DC 24 V DC |
| | | 2 | 0,12 | | progressive | | 280 | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

### Series FK...-OC / FK...-EP - electric or rotating drive

**FKGGM-OC**
DC

**FKGGM-OC**
with PSU,
115 or 230 V AC

**FKGM-OC**
400 V AC / 3~

**FKGGM-EP**
DC

**FKGGM-EP**
with PSU,
115 or 230 V AC

**FKGGM-EPC**
with control,
100 to 250 V AC

**FKGM-EP**
400 V AC / 3~

**FKGM-EP**
with norm motor,
400 V AC / 3~

**FKG-EP**
rotating, with flange 56 C
acc. to NEMA (USA)

**FKR-EP**
rotating

| Model | Type | Outlets max. | Delivering volume max. (cm³ / stroke and outlet) | Reser. capa-city (kg) | Reduction | Input speed motor / shaft (rev / min) | No. of pump rev. 1 rev. = 1 stroke (rev / min) | Press. max. (bar) | Operating voltage |
|---|---|---|---|---|---|---|---|---|---|
| **FKGGM-OC** | 2154 | 21 | 0,005<br>0,010<br>0,015<br>0,025<br>0,050 | 1,9<br>2,5<br>4,2<br>8,0 | - | - | 15 | 200 | 12 V DC<br>24 V DC |
| **FKGGM-OC** with PSU | 2024 | | | | | | | | 115 V AC<br>230 V AC |
| **FKGM-OC** | 2016 | | | | 80:1 / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 1350 at 50 Hz<br>1600 at 60 Hz | - | | 400 V AC / 3~ |
| **FKGGM-EP** | 2018 | 3 | 0,06<br>0,12<br>0,17 | | - | - | 15 | 350** | 12 V DC<br>24 V DC |
| **FKGGM-EP** with PSU | 2037 | | | | | | | | 115 V AC<br>230 V AC |
| **FKGGM-EPC** with control | 2036 | | | | | | | | 100 V bis 250 V AC |
| **FKGM-EP** | 2013 | 6 | | | (80:1)* / 150:1 / 300:1 / 400:1 / 600:1 / 1200:1 | 1350 at 50 Hz<br>1600 at 60 Hz | - | | 400 V AC / 3~ |
| **FKGM-EP** with norm motor | 2014 | 8 | | 1,9<br>2,5<br>4,2<br>8,0<br>(2 / 4 steel) | | 1500 at 50 Hz<br>1800 at 60 Hz | | | |
| **FKG-EP** with flange 56 C acc. to NEMA rotating | | | | | | - | min. 1<br>max. 25 | | - |
| **FKR-EP** rotating | 2015 | 7 | | | 14:1 / 19:1 / 28:1 / 57:1 | | | | |

* *special requests after consultation*

** *Pressure limiting valve adjusted to max. 280 bar*

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

1090200384

**Series F -** drive see table

**F6**
rotating

**F6**
with geared motor

**F-super**
with geared motor

**F-super**
rotating

**F-super 3**
with geared motor

**F-super 3**
oscillating

| Model | Type | Out-lets max. | Delivery volume max. (cm³ / stroke and outlet) | Reserv. content (kg) | Reduction | Input speed motor / shaft (rev. / min) | Pump speed 1 rev. = 1 stroke (rev. / min) | Press. max. (bar) | Operating voltage |
|---|---|---|---|---|---|---|---|---|---|
| **F6** rotating | 2032 | 20 | 0,06<br>0,12<br>0,17 | 5<br>7,5<br>10 | 9:1 / 18:1 / 25:1 / 36:1 / 50:1 | - | min. 1<br>max. 25 | 250 | - |
| **F6** w. geared motor | 2034 | | | | 135:1 / 270:1 / 375:1 / 450:1 / 540:1 / 600:1 / 750:1 / 900:1 / 1250:1/1800:1/ 2500:1 | 2800 at 50 Hz<br>3300 at 60 Hz | - | | 230 / 400 V AC / 3~ |
| **F-super** w. geared motor | 2050 | 21 | | 5<br>10<br>20 | 88:1 / 165:1 / 280:1 / 410:1 / 600:1 / 800:1 / 1000:1 | 1420 at 50 Hz<br>1700 at 60 Hz | | | |
| **F-super** rotating | 2051 | | | | 15:1 / 22,5:1 / 45:1 | - | min. 1<br>max. 25 | | - |
| oscillating | 2052 | | | | 2,5:1 | | | | |
| **F-super 3** w. geared motor | 2053 | 3 (4= Special version | 0,56 | 48<br>100 | 46:1 | 1420 at 50 Hz<br>1700 at 60 Hz | - | 400 | 230 / 400 V AC / 3~ |
| **F-super 3** rotating | 2054 | | | | 15:1 / 22,5:1 / 45:1 | - | min. 1<br>max. 25 | | - |
| oscillating | 2055 | | | | 2,5:1 | | | | |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

### Electro-magnetic

| Model | Type | Outlets max. | Delivery volume max. (cm³ / stroke and outlet) | Reservoir content (l) | Reservoir material | Duty ratio | Operating voltage |
|---|---|---|---|---|---|---|---|
| **MP-2643** | 2643 | 1 - 6 | 0,015 / 0,025 / 0,035 | 0,4 | plastic, transparent | 25 % | 24 V DC |

### Mechanic drive

**FHX-2**

**FH-2535**

**FHX**

**FHX-MX** with MX

| Model | Type | Outlets | Delivery volume max. (cm³ / stroke) | Reserv. content (l) | Reservoir material | Pressure max. (bar) |
|---|---|---|---|---|---|---|
| **FHX-2** | 2534 | 1 | 1,5 | 1,2 | plastic, transparent | 300 |
| | | | 3 | | | 150 |
| **FH-2535** | 2535 | 1 | 1,5 | 1 / 1,5 / 2 / 3 / 4 (kg) | steel | 300 |
| | | | 3 | | | 150 |
| **FHX** | 2081 | 1 | 2 | 0,4 (kg) | cartridge | 400 |
| **FHX-MX** (w. progre. distributor MX-F) | | | | | | 300 |

### Pneumatic pumps

**P2103**

**PP-1**

* *pressure limiting valve adjusted to 280 bar*
** *at drive pressure 8 bar*

| Model | Type | Out-lets max. | Delivery volume max. (cm³ / stroke and outlet) | Reservoir content (kg) | Reservoir material | Drive | Pressure ratio | Drive pressure (bar) |
|---|---|---|---|---|---|---|---|---|
| **P-2103** | 2103 | 1 | 2 | 1,2 | plastic, transparent | 1:32 | 250** | 4 - 8 |
| | | | 4 | | | 1:18 | 140** | |
| | | | 6 | 1 / 1,5 / 2 / 3 / 4 | steel | 1:10 | 80** | |
| **PP-1** | 2153 | 3 | 0,06 - 0,17 | 1,9 / 2,5 / 4,2 / 8 | plastic, transparent | - | 350* | 6 - 10 |
| | | | | 2 / 4 | steel | | | |

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

1090200384

## Hydraulic drive

HP-1

PH-2104

HKP-1

HPM-2

HPH-2

| Model | Type | Out-lets | Delivery vol. (cm³/stroke and outlet) | Reservoir content (kg) | Reservoir material | Operating press. max. (bar) | Drive pressure (bar) |
|---|---|---|---|---|---|---|---|
| **HP-1** | 2163 | 1 - 6 | 0,06 - 0,17 | 1,9 / 2,5 / 4 / 8 | plastic, transparent | 350* | 30** - 250 |
| | | | | 2 / 4 | steel | | |
| **PH-2104** | 2104 | 1 | 1 / 2 / 3 / 4 / 6 | 1,2 | plastic, transparent | 280* | 25 - 160 |
| | | | | 1 / 1,5 / 2 / 3 / 4 | steel | | |
| **HKP-1** | 2120 | 2 | 1 | 2,5 | plastic, transparent | (min. 60) - 250 | 85 - 275 |
| **HPM-2** | 2574 | 1 | 0,2 - 2,0 | 0,4 | cartridge | 100 - 220 | 130 - 250 |
| **HPH-2** | 2574 | | 0,1 - 1,0 | | | 250 - 350 | ab 100 |

* *pressure limiting valve adjusted to 280 bar*

** *min. drive pressure depends on counterpressure of lubrication system*



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Flow control valve

| Type | Operating pressure (bar) | Pressure drop (bar) | Volume flow (l/min) | Material | Weight (kg) | Lubricant |
|---|---|---|---|---|---|---|
| 4060 | 10 - 250 | 7 | 0,1 - 8 | steel | 1,65 | oils<br>10 - 1000 mm²/s |

## Flow limiting device

| Type | Operating pressure (bar) | Pressure drop (bar) | Volume flow (l/min) | Material | Weight (kg) | Lubricant |
|---|---|---|---|---|---|---|
| 4365 | 5 - 200<br>(without add-ons) | ≥ 5 | 1,15 - 3,00<br>(dep. on oriffice disc-Ø) | steel | 0,39 | oils ON synt. a. mineral. basis<br>20 - 600 mm²/s |

## Volume flow control

| Model | Type | Oper. pressure max. (bar) | Volume flow (l/min) | Meßvolume (cm³) | Material | Weight (kg) | Lubricant |
|---|---|---|---|---|---|---|---|
| **FXE 250**<br>with conn. plate<br>without conn. plate | <br>4063<br>4064 | 250 | 0,05 - 12 | 1,2 | steel<br>(cover<br>Al) | 0,7<br>+ 0,85 | Oils<br>20 - 1000 mm²/s |



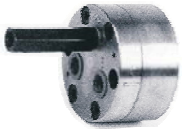
1090200384
© BEKA 2013 All rights reserved!
Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

## Overview

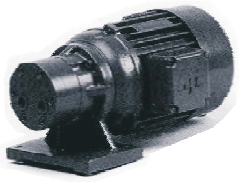


### Gear pumps



Flange pumps

Foot pump



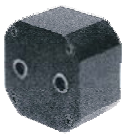
Motor pumps horizontal

Motor pumps vertical

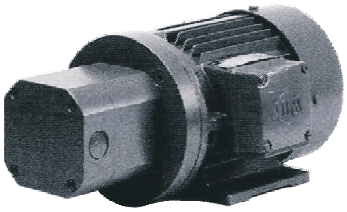
| Series | Pump type | Delivery volume (l/min) | Operating pressure **max.** (bar) |
|---|---|---|---|
| **FL 0,5** | flange pumps | 0,06 - 3,00 | 35 |
| **MZ 0,5** | motor pumps, horizontal | | |
| **MZE 0,5** | motor pumps, vertical | | |
| **FL 0** | flange pumps | 0,25 - 2,40 | 50 |
| **MZ 0** | motor pumps, vertical | | |
| **FL 1 to 5** | flange pumps | 1 - 65 | 30 |
| **U 1 to 5** | foot pumps | | |
| **MZN 1 to 5** | motor pumps, horizontal | | |
| **MZE 1 to 5** | motor pumps, vertical | | |

### Internal gear pumps

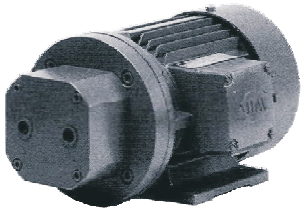
**FLI** and **UI**



**FLIS** and **UIS**



**MZIR**



**MZI**

| Series | Pump type | Delivery volume (l/min) | Operating pressure **max.** (bar) |
|---|---|---|---|
| **FLI** and **UI** Connections radial | Flange and foot pumps | 4 - 32 | 100 |
| **FLIS** and **UIS** Connections at front | | | |
| **MZIR** Connections radial | Motor pumps | | |
| **MZI** Connections at front | | | |



Subject to alterations!

© BEKA 2013 All rights reserved!

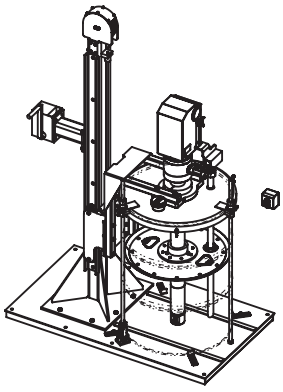
BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

EFP-1

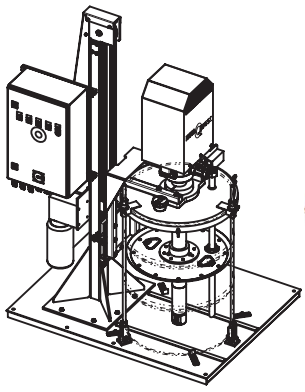
EFPM-2

HFP-3U (complete)

HFP-3U (w/o pump cover, w/o follower piston, w/o visual level sensor)



Qmaxx 2 with hoist with hand crank



Qmaxx with electric hoist

PFP-...-U

| Model | Type | Drive | Delivery vol. max. (cm³ / stroke) | Barrel size (kg) | Operating voltage | Drive pressure (bar) / -volume (l/min) | Operat. press. max. (bar) |
|---|---|---|---|---|---|---|---|
| **EFP-1** | 2196 | electric | 0,33 | 20 / 25 / 50 / 200 | 24 V DC | - | 300* |
| **EFPM-2** | 2197 | | | | 115 V AC | - | |
| | | | | | 230/400 V AC/3~ | | |
| **HFP-3U** with or without pump cover, follower piston, level sensor | 2198 | hydraulic | 26 | | - | 35 bis 60 / max. 4,5 | 350** |
| **Qmaxx 2** | 2179 | hydraulic | 9000 (cm³/min) | 200 | - | max. 100 / max. 40 | 100 |
| **Qmaxx** | 2187 | electric | 3000 / 9000 (cm³/min) | | 400/500 V AC/3~ | - | |
| **PFP-...-U** | 2690 | pneumatic | 26 | 20 / 25 / 50 / 200 | - | 4 - 6 / max. 134 | 300* |

* *pressure limiting valve adjusted to max. 280 bar*

** *pressure limiting valve adjusted to max. 300 bar*






1090200384

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK BEETHOVENSTR. 14 D-91257 PEGNITZ TEL.: +49 9241 729-0 FAX: +49 9241 729-50 WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

| Segmented lubrication pin. for gears | Lubrication pinion for gears | PU-lube pinion for gears | PU-lube pinion for chains |
|---|---|---|---|
| | | | |

| | Segmented lubrication pinion for gears | Lubrication pinion for gears | PU-lube pinion for gears | PU-lube pinion for chains |
|---|---|---|---|---|
| **Material lubrication pinion** | Aluminium, plastic<br><br>retainer, shaft: steel | Aluminium<br><br>Halter, Welle: Stahl | Polyurethane-foam open celled<br><br>axis: steel galvanized or stainless steel | Polyurethane-foam open celled<br><br>axis: steel galvanized or stainless steel |
| **Lubricant** | grease up to NLGI 2 | grease up to NLGI 2 | oils and greases up to NLGI 2 | oils and greases up to NLGI 2 |
| **Operating temperature** | -20 to +70 °C | -20 to +70 °C | -30 to +150 °C | -30 to +150 °C |
| **Version** | segmented | one part<br>two parts<br>three parts<br>four parts | gears: straight<br>sloping right<br>sloping left | Simplex<br>Duplex<br>Triplex |



Subject to alterations!

© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

BEKA manufactures lubrication- and hydraulic units according to customer's request. Planning and construction are done according to the customer's specifications.

Pictures are exemplary

© BEKA 2013 All rights reserved!

Subject to alterations!



BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

1090200384

## Oil - air units

Pictures are in process

| Drawing | Type | No. of lubrication points | Metering volume (mm³ / stroke) | Operating voltage |
|---|---|---|---|---|
| FAZ03512_00 | 4086 | 1 - 6 | 30 / 60 / 100 / 160 | 115 V AC |
| FAZ03519_00 | | | | 230 V AC |
| FAZ03692_00 | | | | |

## Oil - air mixing distributor

FAZ01822_02

FAZ02751_01

| Drawing | Type | No. of lubrication points | Metering volume (mm³ / stroke) | Operating press. (bar) Metering medium | Operating press. (bar) Sprayed air | Connection Metering medium | Connection Sprayed air | Press. connection oil - air mixture |
|---|---|---|---|---|---|---|---|---|
| FAZ04057_01 | 4299 | 2 / 4 / 6 / 8 | 10 / 20 / 30 / 50 | 10 - 50 | 3 - 6 | M10x1 | M10x1 | pipe Ø 4 (plug-type conn.) |
| FAZ01822_02 | 4089 | 1 - 6 | 30 / 60 / 100 / 160 | 10 - 50 | 1 - 10 | G 1/8 | G 1/4 | pipe Ø 4 or Ø 6 |
| FAZ04185_01 | 4092 | 2 - 5 | 30 / 60 / 100 | 12 - 50 | 4 - 8 | M10x1 | G 1/4 | M10x1 |
| FAZ02751_01 | 4283 | 2 - 10 | 50 | max. 50 | 1 - 5 | M10x1 | M10x1 | pipe Ø 2,5 or Ø 4 |
| FAZ03088_00 | 4089 | 1 - 6 | 30 / 60 / 100 / 160 | 10 - 50 | 1 - 10 | G 1/8 | G 1/4 | pipe Ø 4 or Ø 6 (plug-type conn.) |



Subject to alterations!
© BEKA 2013 All rights reserved!

BAIER + KÖPPEL GmbH + Co. KG
PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14
D-91257 PEGNITZ
TEL.: +49 9241 729-0
FAX: +49 9241 729-50
WEB: www.beka-lube.de
E-MAIL: beka@beka-lube.de

## Oil reservoir

FAZ03455_00

FAZ01918_03

FAZ03433_02

FAZ03433_00

FAZ03532_00

| Model | Type | Reservoir content (l) | Reservoir material |
|---|---|---|---|
| FAZ03455_00 | 0457 | 2,5 | PA |
| FAZ01918_03 | | 1,2 | |
| FAZ03433_02 | | 4,2 | PE |
| FAZ03433_00 | | 2 | |
| FAZ03532_00 | | 4 | PA |





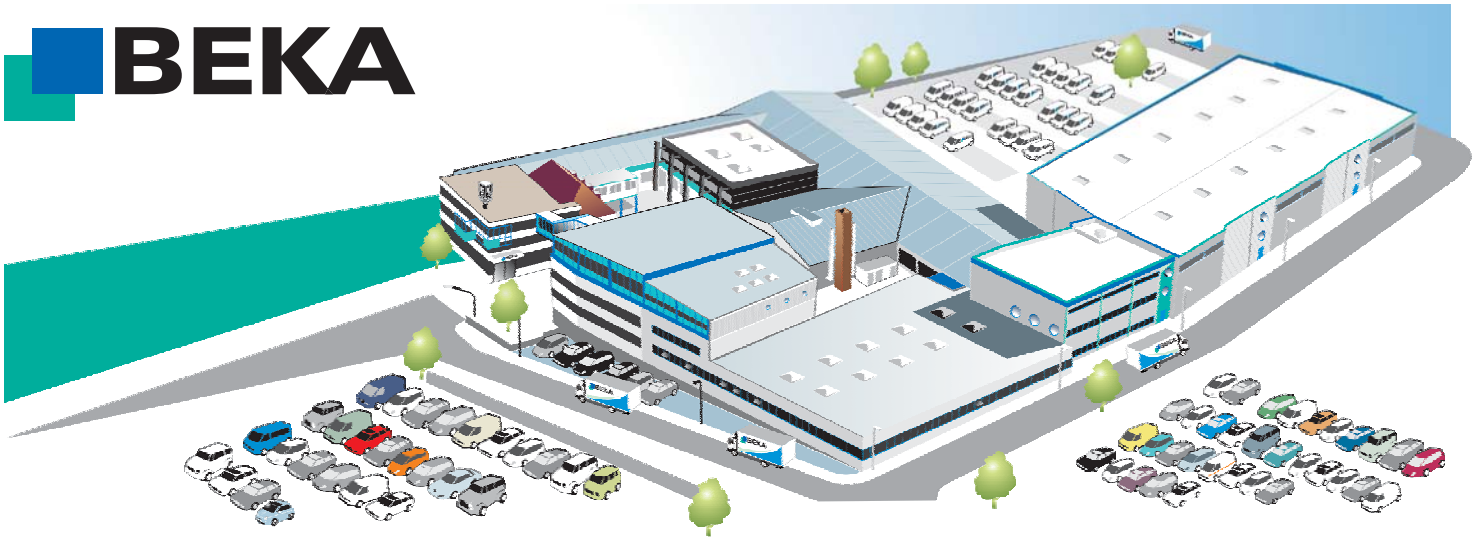
1090200384

© BEKA 2013 All rights reserved!

Subject to alterations!

BAIER + KÖPPEL GmbH + Co. KG PRÄZISIONSAPPARATEFABRIK BEETHOVENSTR. 14 D-91257 PEGNITZ TEL.: +49 9241 729-0 FAX: +49 9241 729-50 WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

BEKA




BAIER+KÖPPEL GMBH+CO KG
PRÄZISIONSAPPARATEFABRIK

BEETHOVENSTRASSE 14
91257 PEGNITZ/BAVARIA

PO BOX 13 20
91253 PEGNITZ/BAVARIA

GERMANY

fon +49 9241 729-0
fax +49 9241 729-50

e-mail beka@beka-lube.de
web www.beka-lube.de


## Partners

**AUSTRIA**
BEKA-Lube GmbH
Carola-Blome-Str. 7
5020 Salzburg
fon +43 / 662 / 43 84 40
fax +43 / 662 / 43 84 403
e-mail office@beka-lube.at

**BELGIUM**
BEKA LUBE N.V.S.A.
Demerstraat 32
BE 3200 Aarschot
fon +32 / 16 / 64 09 26
fax +32 / 16 / 64 05 48
e-mail bekalube@skynet.be

**CANADA**
BEKA-LUBE Products Inc.
2830 Argentia Road, Unit 9
Mississauga ON L5N 8G4
fon +1 / 905 / 821 / 1050
fax +1 / 905 / 858 / 0597
e-mail info@beka-lube.com

**CHINA**
EAST TSANHAIR COMPANY LTD.
7A Building, Medicine Valley No.1,
No.9 Tianfu Street, Bio-Medicine Park,
Zhongguancun Science Park,
Daxing District, Beijing, China 102600
fon +86 / 10 / 83 681 526
fax +86 / 10 / 83 681 520
e-mail beka-lube@bekachina.com

**FRANCE**
BEKALUBE FRANCE
4, bis Rue de l'Artisanat
89100 Paron
fon +33 / 386 / 83 39 06
fax +33 / 386 / 65 52 24
e-mail contacts@bekalube.fr

**ITALY**
BEKALUBE s.r.l.
Via Rossi 152
20043 Arcore
fon +39 / 039 / 618 00 88
fax +39 / 039 / 61 75 23
e-mail bekalube@bekalube.it

**KOREA**
BEKA AHWON
326-1 Danggung Dong
Gunpo Si Kyungki Do Korea
fon +82 / 31 / 451 / 0628
fax +82 / 31 / 451 / 0974
e-mail jhleeahwon@gmail.com

**NETHERLANDS**
BEKA NEDERLAND B.V.
Wagenmakerij 11
4762 AV Zevenbergen
fon +31 / 168 / 37 15 38
fax +31 / 168 / 33 83 29
e-mail info@beka.nl

**SPAIN**
BEKA-LUBE IBERICA S.L.
Avda. de Suiza, 3 P.A.L. Coslada
28820 Coslada (Madrid)
fon +34 / 91 / 670 7800
fax +34 / 91 / 670 78413
e-mail beka@beka-lube.es

**TURKEY**
BEKAMAKS MAKINA SANAYI ve TICARET
LTD. STI. Kucukyali Ticaret Merkezi
B Blok No. 7 Girne Mah.
34852 Maltepe / Istanbul
fon +90 / 216 / 367 34 00
fax +90 / 216 / 367 33 85
e-mail info@bekamaks.com

**USA**
BEKA-MAX of America
2600 North America Drive Suite 8
P.O. Box 615 West Seneca, NY 14224
fon +1 / 905 / 821 / 1050
fax +1 / 905 / 858 / 05 97
e-mail info@beka-lube.com

## Subsidiaries

Argentinia
Australia
Belarus
Bosnia
Brazil
Croatia
Czechia
Denmark
Estonia
Finland
Great Britain
Greece
Hong Kong
Hungaria
India
Indonesia
Iceland
Ireland
Japan
Latvia
Lithuania
Luxemburg
Malaysia
New Zealand
Norway
Poland
Portugal
Russia
Serbia
Slovakia
Slovenia
South Africa
Sweden
Switzerland
and others

© BEKA 2013 All rights reserved!

Subject to alterations!