

BIJUR DELIMON

INTERNATIONAL



Artikelnummer / Code no.

FZB01A13AB21



Typ / Type

Pumpe FZ-B

Seriennummer / Serial no.

186901-3



Fördervolumen / Feed volume

1,2 ccm/U

Betriebsdruck max. / Operating pressure

180 bar

Übersetzung / Ratio

345:1

Baujahr / Year of manufacture

10 / 2014

Hersteller / Manufacturer

DELIMON GmbH

186901



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BLIJUR DELIMON

www.blijurdelimon.com

Gebruik
niet voor
andere
doeleinden
gebruik
niet voor
andere
doeleinden
gebruik
niet voor
andere
doeleinden

Motor
1.5 kW
1500 RPM
380V
50Hz
IP54
IE3
Klasse
A
CE
Klasse
A
Klasse
A

Product description Pump FZ-B

APPLICATION

The FZ-B type lubricator is an central plunger grease pump, which is operating without valves and springs.

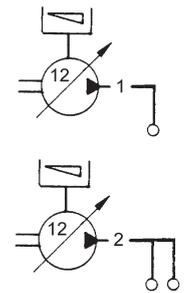
The numerous ratios available within the range 3 : 1 to 2880 : 1 which are between the speed of the drive shaft on machine to be lubricated and the number of strokes of the delivery plunger, ensure universal application of the lubricator so that it can be adapted to any system having a small to medium number of lubrication points:

The FZ-B pump comes with 1 outlet or 2 outlets and is preferably used to feed progressive systems.

Connected to each outlet is one progressive distributor, including a sub-distributor if necessary, to distribute the lubricant to several consumers or grease points.

ADVANTAGES

- Best adaptation possibility to different driving speeds and to the machine to be lubricated.
- Additional control can be omitted.
- Use for anticlockwise and clockwise rotation is possible without modifications.
- Forced control without any valves and springs.
- Rugged, consequently minimal expenditure of maintenance and repair works.
- Explosion protection according to ATEX guideline 94/9/EG



Grease lubrication pump FZ - B with reduction gear and flange motor

PRINCIPLE OF OPERATION

The alternate integral operating circuit between suction stroke and compression stroke operates enforced.

The grease lubrication pump FZ-B has either a single outlet with a maximum delivery of $12 \times 0.1 = 1.2$ ccm, or two outlets with a maximum delivery of $6 \times 0.1 = 0.6$ ccm per rotation of the plunger. The lubricator generates the necessary lubricant pressure and meters the quantity of grease, which is adjustable.

If metered quantities of grease have to be delivered to more lubrication points than the lubricator has outlets, then progressive distributors must be connected to one or more of the outlets (distributors, type E 4, ZP-A, ZP-B or PVB).

Due to the good adaptability of the pump to different available driving speeds of the machine to be lubricated, one can do without an additional control.

Because of the positive mechanical connection or electrical interlocking between the lubricator and the machine being lubricated, grease is delivered only when the machine is switched on.

All pumps are suitable for clockwise or anticlockwise rotation as required, without modification and giving the same delivery. The drive can be effected in different ways, please refer to the possibilities illustrated "KINDS OF DRIVE".

On lubricators with mounted electric motor the coupling is located in the housing flange between the lubricator and the electric motor, so that it is dust, dirt and splash-proof and guarded, eliminating the risk of accidents.

The rotating parts of the drive are supported by roller- bearings.

All lubricators are attached to the machine with which they are to be used, or to a foundation, by means of two bolts only.

A. PUMP TYPE

Code

FZB

B. NUMBER OF OUTLETS

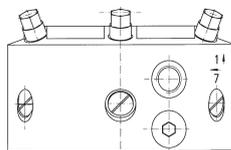
Code

1 outlet

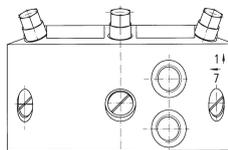
01

2 outlets

02



Pump body with 1 outlet,



with 2 outlets

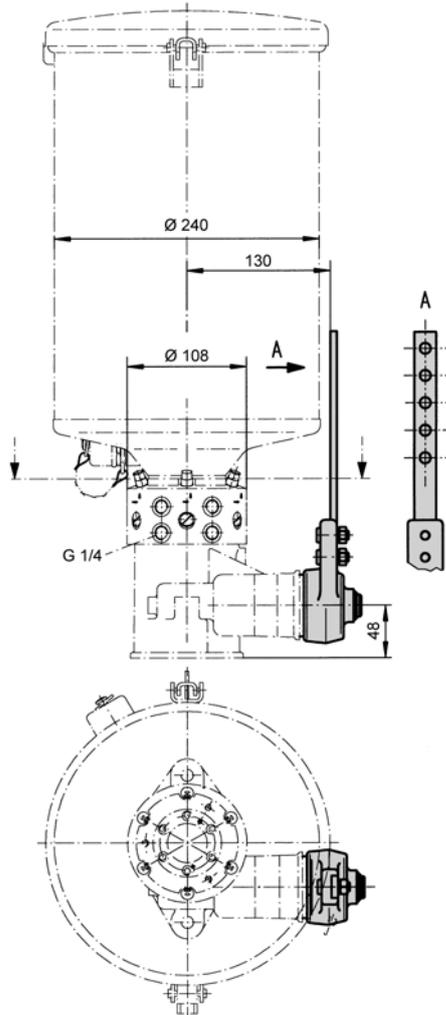
C. REVISION

Code

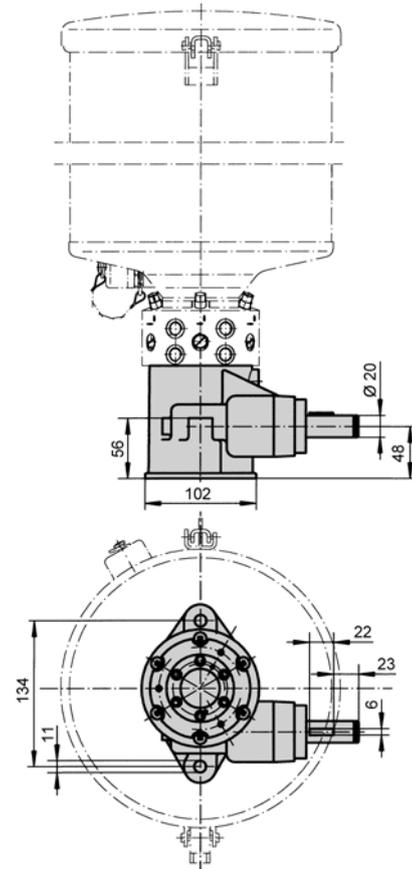
Status A

A

D. KINDS OF DRIVE	Code
Pendulum lever, gear ratio 3 : 1	01
Pendulum lever, gear ratio 12 : 1	02
Pendulum lever, gear ratio 25 : 1	03
Pendulum lever, gear ratio 50 : 1	04
Shaft end free, gear ratio 3 : 1	05
Shaft end free, gear ratio 12 : 1	06
Shaft end free, gear ratio 25 : 1	07
Shaft end free, gear ratio 50 : 1	08



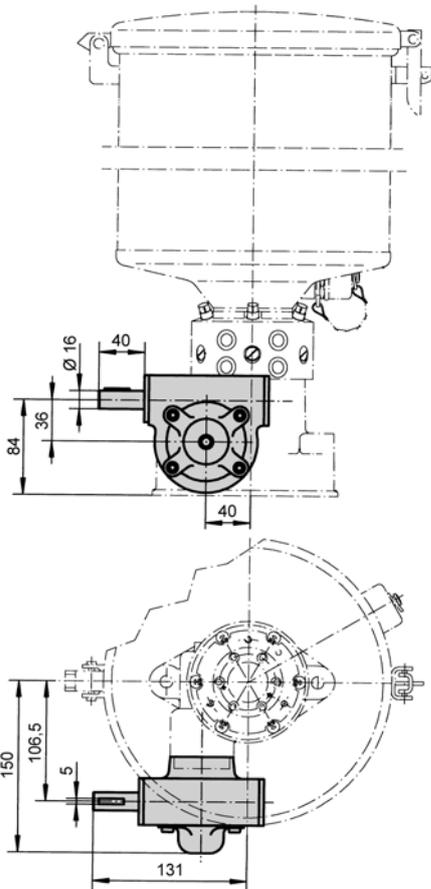
Drive with pendulum lever



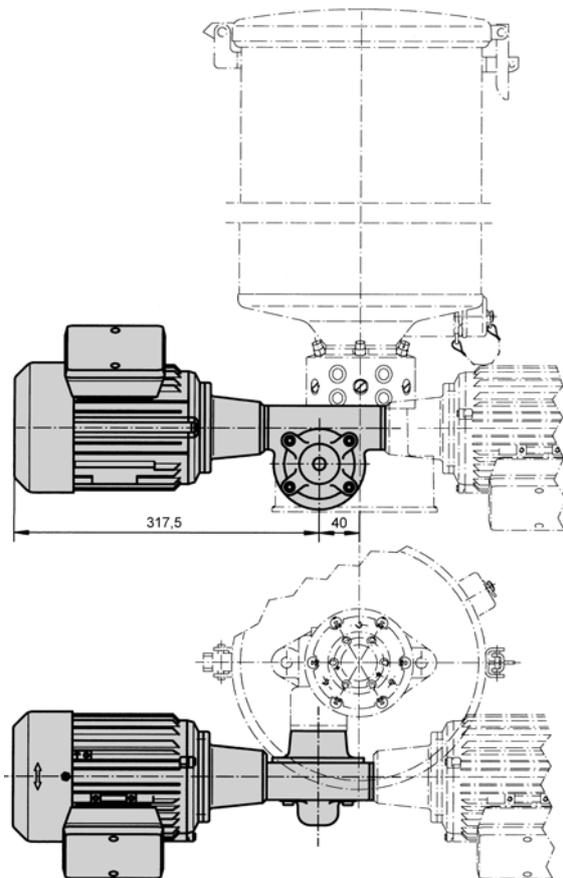
Drive with shaft end free

Step-down gear, gear ratio 95 : 1	09
Step-down gear, gear ratio 215 : 1	10
Step-down gear, gear ratio 345 : 1	11
Step-down gear, gear ratio 710 : 1	31
Step-down gear & motor 230-260V / 400-460V / 50/60Hz, gear ratio 215 : 1	12
Step-down gear & motor 230-260V / 400-460V / 50/60Hz, gear ratio 345 : 1	13
Step-down gear & motor 230-260V / 400-460V / 50/60Hz, gear ratio 710 : 1	14
Step-down gear & motor 230-260V / 400-460V / 50/60Hz, gear ratio 1420 : 1	15
Step-down gear & motor 230-260V / 400-460V / 50/60Hz, gear ratio 2880 : 1	16

D. KINDS OF DRIVE (continuation)	Code
Step-down gear & motor 500V / 50Hz, gear ratio 215 : 1	17
Step-down gear & motor 500V / 50Hz, gear ratio 345 : 1	18
Step-down gear & motor 500V / 50Hz, gear ratio 710 : 1	19
Step-down gear & motor 500V / 50Hz, gear ratio 1420 : 1	20
Step-down gear & motor 500V / 50Hz, gear ratio 2880 : 1	21
Step-down gear & motor flange, gear ratio 710 : 1	27
Step-down gear & motor flange, gear ratio 345 : 1	28
Step-down gear & motor UL / 3 / PE 115V / 60Hz / 0.21kW, gear ratio 215 : 1	45
Step-down gear & motor UL / 3 / PE 115V / 60Hz / 0.21kW, gear ratio 345 : 1	46
Step-down gear & motor UL / 3 / PE 115V / 60Hz / 0.21kW, gear ratio 710 : 1	47
Step-down gear & motor UL / 3 / PE 115V / 60Hz / 0.21kW, gear ratio 420 : 1	48
Step-down gear & motor UL / 3 / PE 115V / 60Hz / 0.21kW, gear ratio 2880 : 1	49
Step-down gear & motor UL / 440-480V / 60Hz / 0.21kW, gear ratio 215 : 1	50
Step-down gear & motor UL / 440-480V / 60Hz / 0.21kW, gear ratio 345 : 1	51
Step-down gear & motor UL / 440-480V / 60Hz / 0.21kW, gear ratio 710 : 1	52
Step-down gear & motor UL / 440-480V / 60Hz / 0.21kW, gear ratio 1420 : 1	53
Step-down gear & motor UL / 440-480V / 60Hz / 0.21kW, gear ratio 2880 : 1	54
Step-down gear & motor UL / 1/PE 115V / 60Hz / 0.21kW, gear ratio 215 : 1	55
Step-down gear & motor UL / 1/PE 115V / 60Hz / 0.21kW, gear ratio 345 : 1	56
Step-down gear & motor UL / 1/PE 115V / 60Hz / 0.21kW, gear ratio 710 : 1	57
Step-down gear & motor UL / 1/PE 115V / 60Hz / 0.21kW, gear ratio 420 : 1	58
Step-down gear & motor UL / 1/PE 115V / 60Hz / 0.21kW, gear ratio 2880 : 1	59



Drive with step-down gear



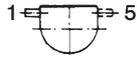
Drive with step-down gear and flange motor

E. POSITION OF DRIVE	Code
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without

Position 1 on the left

Position 5 on the right



O

A

E

F. RESERVOIR	Code
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2.5 litres, rotational direction clockwise/anticlockwise

8.0 litres, rotational direction clockwise/anticlockwise

15.0 litres, rotational direction clockwise/anticlockwise (without support)

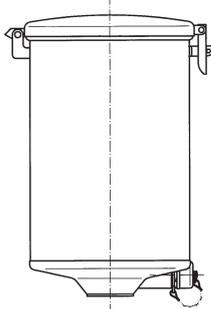
30.0 litres, rotational direction clockwise/anticlockwise (without support)

D

A

B

C



G. ACCESSORIES	Code
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without

Level switch

Filling valve

Level switch and filling valve

1 x pressure control 160 bar, diam. = 10mm

2 x pressure control 160 bar, diam. = 10mm

1 x pressure control 160 bar, diam. = 10mm, level switch and filling valve

2 x pressure control 160 bar, diam. = 10mm, level switch and filling valve

1 x pressure control 200 bar, diam. = 10mm

2 x pressure control 200 bar, diam. = 10mm

1 x pressure control 200 bar, diam. = 10mm, level switch and filling valve

2 x pressure control 200 bar, diam. = 10mm, level switch and filling valve

00

01

02

03

20

04

21

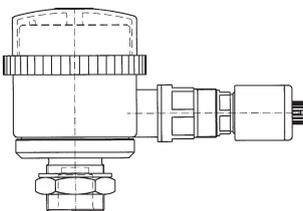
05

22

06

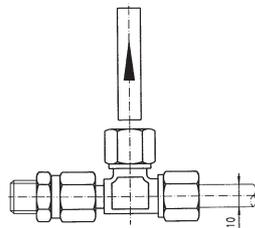
23

07



Level switch

data sheet BA_2005_1_GB_76951_6011



Pressure control

data sheet PB_2005_1_GB_38132

EXAMPLE OF ORDER

		Code											
		F	Z	B	0	2	A	1	2	A	A	0	1
Pump type FZ-B	Code: FZB												
Number of outlet 2 outlets with delivery volume 6 x 0.1	Code: 02												
Revision Status A	Code: A												
Kinds of drive Step-down gear & motor 230 - 260 V / 400 - 460 V / 50/60 Hz, gear ratio 215 : 1	Code: 12												
Position of drive Position 1 on the left	Code: A												
Reservoir 8,0 litres, rotational direction clockwise/anticlockwise	Code: A												
Accessories Level switch for reservoir 8 litres	Code: 01												

SPECIFICATION

Permissible feed pressure	_____	200 bars, until 250 bars for short period only																					
Delivery volume per outlet and pump plunger rotation	_____	max. 1.2 ccm at FZ-B with 1 outlet (12 outlets combined) max. 0.6 ccm at FZ-B with 2 outlets (every 6 outlets combined)																					
Delivery volume per outlet and hours	_____	max. 60 ccm, pendulum lever drive max. 36 ccm. Delivery volume from all outlets can be reduced by selecting a lower driving speed or higher gear ration, so that the pump plunger rotatest at less than 10 min ⁻¹ resp. 6 min ⁻¹ .																					
Permissible pump plunger speed	_____	max. 10 min ⁻¹ , with pendulum lever drive max. 6 min ⁻¹ In case higher speed or less then 1 and less then < 1 is requested and also when distributors ZP-A, ZP-B, PVB or E 4 are installed downflow, ask producer.																					
Adjustment of volume rate	_____	The figures 0 - 4 are stamped on the hexagons on the adjusting spindles. The maximum delivery (0.1 ccm) is obtained in position 4. The quantity delivered is reduced by turning the adjusting spindles clockwise. To ensure reliable operation of the lubricator, delivery should not be less than 1/4 of the maximum rating.																					
Number of outlet	_____	FZ-B 1 or 2 outlets																					
Outlet bore	_____	G 1/4 female pipe thread, cylindric																					
Kinds of drive and gear ratio	_____	<table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">Pendulum lever :</td> <td rowspan="2" style="font-size: 2em; vertical-align: middle;">}</td> <td rowspan="2" style="vertical-align: middle;">3 : 1, 12 : 1, 25 : 1, 50 : 1</td> </tr> <tr> <td>Shaft end free :</td> </tr> <tr> <td>Step-down gear :</td> <td></td> <td>95 : 1, 215 : 1, 345 : 1, 710 : 1</td> </tr> <tr> <td>Step-down gear & motor</td> <td rowspan="5" style="font-size: 2em; vertical-align: middle;">}</td> <td>215 : 1</td> </tr> <tr> <td>Motor according to DIN 42677</td> <td>345 : 1</td> </tr> <tr> <td>Speed n = 1500 min⁻¹</td> <td>710 : 1</td> </tr> <tr> <td>Design B 14, small flange size 63</td> <td>1420 : 1</td> </tr> <tr> <td>Rated output 0.18 kW</td> <td>2880 : 1</td> </tr> <tr> <td></td> <td></td> <td>Voltage and frequency to be specified at time of ordering</td> </tr> </table>	Pendulum lever :	}	3 : 1, 12 : 1, 25 : 1, 50 : 1	Shaft end free :	Step-down gear :		95 : 1, 215 : 1, 345 : 1, 710 : 1	Step-down gear & motor	}	215 : 1	Motor according to DIN 42677	345 : 1	Speed n = 1500 min ⁻¹	710 : 1	Design B 14, small flange size 63	1420 : 1	Rated output 0.18 kW	2880 : 1			Voltage and frequency to be specified at time of ordering
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Rated output 0.18 kW		2880 : 1																					
		Voltage and frequency to be specified at time of ordering																					
Rotational direction of drive shaft	_____	optional																					
Oscillating rate	_____	max. 300 min ⁻¹ In case of using the pendulum lever drive, the lever rod should be installed that way, that the amplitude of the oscillating lever is the same in both direction. $\alpha 1 = \alpha 2 = \max. 50^\circ$ lever amplitude max. 100° lever amplitude min. 10°																					
Reservoir volume	_____	2.5, 8, 15 and 30 litres																					
Usable lubricants	_____	greases based of mineral oils to NLGI-class 2, DIN 51818. Oils : on request Synthetic greases : on request																					
Operating temperature	_____	- 20 °C up to + 80 °C Depending on the lubricant used, restrictions to the service temperature are possible.																					

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For smooth motion*