

# ZPU01/02 Pumps



Depending on the number of pump elements, these high-pressure, high-volume pumps can be used for following applications:

1. As a supply pump for small to midsize two-line systems ('F' version with filter block, safety valve and pressure gauge) in conjunction with a pressure-controlled change-over valve. The supply range lies within a radius of approximately 50 m from the pump depending on the ambient temperature and type of lubricant.
2. As a supply pump for progressive and single-line systems ('F' or 'V' version).

The principle of operation is similar to the very reliable and efficient multi-line pump 215. They are available with or without an ultrasonic level control and come with a 3-phase multi-range motor for 380 – 420 volt at 50 Hz or 440 – 480 volt at 60 Hz or with a free shaft end for use with other motors. Gear ratio is 100:1.



ZPU02 ... F

## Popular Models

| Part No.    | Description                           | Motor   | Reservoir Size |                 |      | Level Control | Pump Element   |
|-------------|---------------------------------------|---------|----------------|-----------------|------|---------------|--|
|             |                                       |         | Liters         | In <sup>3</sup> | Lbs. |               |  |
| 661-40692-3 | ZPU02-M100-010XYBU-F-380-420/440-480  | 3-phase | 10             | 610             | 20   | yes           | bracket with 2 elements, filter block, pressure gauge and safety valve |
| 661-40710-3 | ZPU02-M100-030XYBU-F-380-420/440-480  | 3-phase | 30             | 1830            | 60   | yes           |  |
| 661-40644-7 | ZPU02-M100-010XN-F-000                | none    | 10             | 610             | 20   | no            |  |
| 661-40710-7 | ZPU01-M100-010-XYBU-E-380-420/440-480 | 3-phase | 10             | 610             | 20   | yes           | 1 element only   |

## Technical Data

|  |  |
|--|--|
| <b>Number of Elements</b>  | <b>1 or 2</b>  |
| threaded connection:   |  |
| E version  | G 1/4 female (BSPP)  |
| V or F versions  | for 10 mm tube or G 3/8 female (BSPP)  |
| filling connection   | G 3/8 female (BSPP)  |
| maximum operating pressure   | 300 bars 4350 psi  |
|  | "E" version must be protected with pressure relief valve (not included)        |
| suitable lubricant   | grease up to NGLI 2 / NLGI 3 on request<br>oil with a viscosity of min. 20 cSt |
| lubricant output per pump element<br>(output increases by 20%<br>for 60 Hz applications) | 800 cm <sup>3</sup> / hour (49 in <sup>3</sup> / hour)                         |
| reservoir sizes  | 10 or 30 liter (2.6 or 8 U.S. gal)   |
| temperature range  | -20° to 70° C (-4° to 158° F)  |

## Required Pressure Relief Valve for Single Element "E" Version

| Part No.    | Description  | Tube Diameter | Pressure            |
|-------------|--------------|---------------|---------------------|
| 624-25478-1 | relief valve | 6 mm tube     | 200 bars (2900 psi) |
| 624-25479-1 | relief valve | 6 mm tube     | 350 bars (5076 psi) |
| 624-25480-1 | relief valve | 8 mm tube     | 200 bars (2900 psi) |
| 624-25481-1 | relief valve | 8 mm tube     | 350 bars (5076 psi) |
| 624-25482-1 | relief valve | 10 mm tube    | 200 bars (2900 psi) |
| 624-28483-1 | relief valve | 10 mm tube    | 350 bars (5076 psi) |

## Dimensions

| Reservoir Size                        | Height            | Width          | Depth            |
|---------------------------------------|-------------------|----------------|------------------|
| 10 liters (without low-level control) | 514 mm (20.25 in) | 379 mm (15 in) | 317 mm (12.5 in) |
| 30 liters (without low-level control) | 754 mm (29.75 in) | 431 mm (17 in) | 377 mm (15 in)   |
| low-level sensor                      | 30 mm (1.2 in)    | 125 mm (5 in)  | 65 mm (2.75 in)  |

# Identification Code Models ZPU01/02



## Description

### Type Identification Code

Examples:

ZPU02      M    100    030    XYBU    F    380-420/440-480

#### Basic Type of Central Lubrication Pump:

- ZPU01 : pump with 1 element
- ZPU02 : pump with 2 elements

#### Drive Assemblies:

- M : three-phase flanged motor motor designation with extension, e.g. for voltages frequencies, explosion-proof design is added to the pump type code.

- 100 : gear ratio = 1 : 100

#### Reservoir Assemblies:

- 010 : reservoir capacity 10 l
- 030 : reservoir capacity 30 l

- XY : reservoir for grease and oil
- N : reservoir without level monitoring
- BU : reservoir with low and high-level control (ultrasonic sensor)

Note: The ultrasonic sensor is equipped with 2 switching points. If only one low-level control is desired, the corresponding contacts must be connected. A 24VDC supply voltage is required for the sensor.

#### Pump Elements:

- E : element(s)
- V : bracket with element(s) and pressure gauge
- F : bracket with element(s), filter block, pressure gauge and safety valve

#### Extension for Motor Designation:

- 380-420/440-480 : standard multi-range motor for 380-420V/50 Hz and 440-480 V/60 Hz
- 000 : pump without motor, however with connecting flange