



# MODULAR MOTOR DRIVEN PUMPS 999000 SERIES

For Oil or Grease.

999000

ENGLISH

## PRODUCT DATA SHEET

### DESCRIPTION:

Modular pumps particularly suitable for the lubrication of small or medium size machinery. They are used for different types of oil and grease lubrication systems and in a very large range of applications because of their high quality, high performance and low cost.

The modular construction of 999 series pumps enables easy dismantling for maintenance, guarantees very high reliability and allows very fast adjustment of the units for different operating conditions.

#### Basic modules:

Electric Motor.

Reduction Unit.

Single or Double Pumping Unit.

Reservoir.

Steel sheet reservoirs are equipped with low level indicator and electric contact. Reservoirs for oil are equipped with re-filling filter.



### ORDERING INFORMATION:

| Type of motor and R.P.M.* | Adjustable delivery  |      |             |            | Max. Press. bar (psi.) | Part No. of Motor Driven Pump 999000 Series Metal Reservoirs Capacity |            |             |             |                           |        |        |        | Transparent Res. Capacity Grease Max NLGI 0 |            |
|---------------------------|----------------------|------|-------------|------------|------------------------|---|------------|-------------|-------------|---------------------------|--------|--------|--------|---|------------|
|                           | Cm <sup>3</sup> /min |      | Cu.in./min. |            |                        | Grease Max. NLGI 3.   |            |             |             | Oil Viscosity Min. 15 cSt |        |        |        |   |            |
|                           | Min.                 | Max. | Min.        | Max.       |                        | 3Kg. 6.6lbs.  | 5Kg. 11lb. | 10Kg. 22lb. | 30Kg. 66lb. | 3 Lt.                     | 5 Lt.  | 10 Lt. | 30 Lt. | 3Kg. 6.6lb.                                 | 5Kg. 11lb. |
| A.C. 1500 R.P.M.          | 1,4                  | 8,5  | ,08         | ,6         | 750 (11000)            | 999234  | 999214     | 999224      | 999204      | 999244                    | 999264 | 999274 | 999254 | 999414                                      | 999424     |
|                           | 2,5                  | 17   | ,15         | 1          | 400 (5800)             | 999236  | 999216     | 999226      | 999206      | 999246                    | 999266 | 999276 | 999256 | 999416                                      | 999426     |
|                           | 5                    | 33   | ,30         | 2          | 200 (2900)             | 999232  | 999212     | 999222      | 999202      | 999242                    | 999262 | 999272 | 999252 | 999412                                      | 999428     |
| D.C. 24V 2200 R.P.M.      | 2                    | 14,5 | ,12         | ,9         | 750 (11000)            | 999634  | 999614     | 999624      | 999604      | 999644                    | 999664 | 999674 | 999654 | 999684                                      | 999694     |
|                           | 3,6                  | 25,5 | ,22         | 1,5        | 400 (5800)             | 999636  | 999616     | 999626      | 999606      | 999646                    | 999666 | 999676 | 999656 | 999686                                      | 999696     |
|                           | 7,2                  | 51   | ,44         | 3          | 200 (2900)             | 999632  | 999612     | 999622      | 999602      | 999642                    | 999662 | 999672 | 999652 | 999682                                      | 999698     |
| A.C. 1500 R.P.M.          | Fixed delivery       |      |             |            |                        |   |            |             |             |                           |        |        |        |   |            |
|                           | 8,5                  |      | ,6          |            | 750 (11000)            | 999334  | 999314     | 999324      | 999304      | 999344                    | 999376 | 999374 | 999354 | 999514                                      | 999524     |
|                           | 17                   |      | 1           |            | 400 (5800)             | 999336  | 999336     | 999326      | 999306      | 999346                    | 999366 | 999364 | 999356 | 999516                                      | 999526     |
| 33                        |                      | 2    |             | 200 (2900) | 999332                 | 999312  | 999322     | 999302      | 999342      | 999362                    | 999372 | 999352 | 999512 | 999522                                      |            |
| D.C. 24V 2200 R.P.M.      | 14,5                 |      | ,9          |            | 750 (11000)            | 999734  | 999395     | 999724      | 999704      | 999744                    | 999764 | 999774 | 999754 | 999784                                      | 999794     |
|                           | 25,5                 |      | 1,5         |            | 400 (5800)             | 999736  | 999712     | 999726      | 999706      | 999746                    | 999776 | 999776 | 999756 | 999786                                      | 999796     |
|                           | 51                   |      | 3           |            | 200 (2900)             | 999732  | 999716     | 999722      | 999702      | 999742                    | 999762 | 999772 | 999782 | 999782                                      | 999792     |
|                           |                      |      |             |            |                        | Grease Max. NLGI 0  |            |             |             | Oil Viscosity Min.        |        |        |        | Grease Max NLGI 0                           |            |
| D.C. 12V 2200 R.P.M.      | 14,5                 |      | ,9          |            | 350 (5075)             | 999380  | -          | -           | -           | 999390                    | -      | -      | -      | 999385                                      | -          |

R.P.M.\* and lubricant deliveries indicated in the table refer to 50Hz. motors. With 60Hz. motors speeds and deliveries are increased by 20%.

**SPECIFICATION:**

**Operating pressure:** up 75Mpa  
(750 bar) (11000 psi.)

**Delivery:**  
**Fixed.** up to 33 cm<sup>3</sup>/min- 1500 r.p.m.  
**Adjustable.** up to 51cm<sup>3</sup>/min. - 2200 r.p.m.

**Lubricant:** Oil viscosity 15 cSt min.  
Grease NLGI 2\*

\* at the operating lubricant temperature between -20°C to +100°C

**MOTORS:**

**A.C. Motors:**

Code 3301137 Three phase 220/380V - 50Hz - 0.12kW  
Code 3301269 Single phase 220V - 50Hz - 0.12kW

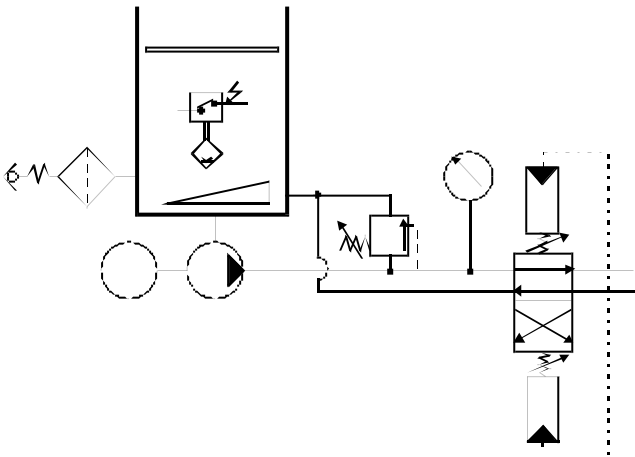
**D.C. Motors:**

Code 3301283 24V 120W  
Code 3301274 12V - 100W

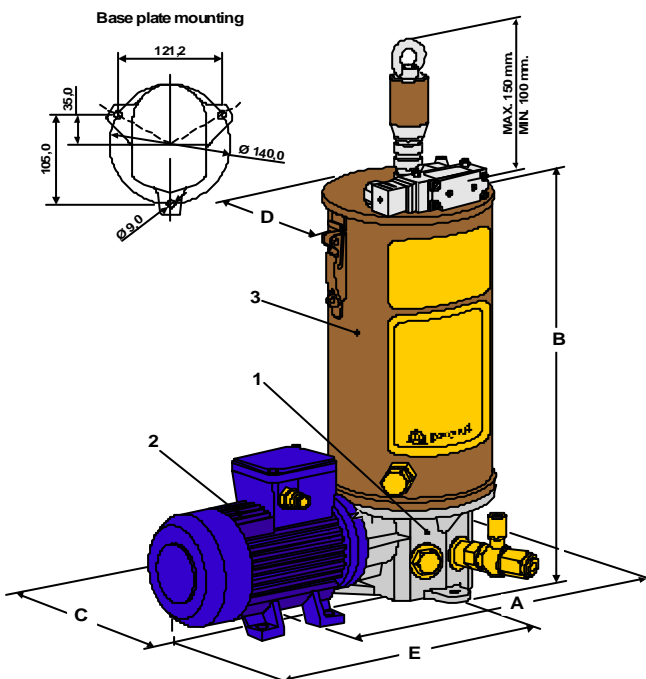
Specify voltage frequency and phase when ordering.

**INSTALLATION/OPERATION:**

Hydraulic diagram.



**Dimensions.**



| Pump | Dimensions mm. |       |     |      |     |
|------|----------------|-------|-----|------|-----|
|      | A              | B     | C   | D    | E   |
| 3    | 390            | 340,5 | 220 | Ø160 | 292 |
| 5    | 390            | 400,5 | 220 | Ø160 | 292 |
| 10   | 442            | 505   | 220 | Ø262 | 292 |
| 30   | 472            | 673   | 220 | Ø262 | 292 |

**ACCESSORIES:**

**Auxiliary Pumping Unit.**

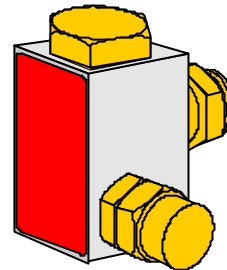
Pumps are supplied with one pumping unit but are designed for the mounting of two pumping units. This allows a feed to two separate lines or the outlets of the pumping units may be combined to provided double the delivery to a single line.

Part numbers of second pumping units are given in the table below.

| Last digit of | Features of 999 pump           |       |          | Second pumping unit |               |
|---------------|--------------------------------|-------|----------|---------------------|---------------|
|               | Delivery cm <sup>3</sup> /min. |       | Pressure | Part No./delivery   |               |
|               | Adjust                         | Fixed |          | Adjust              | Fixed         |
| 4             | 1,4-9,5                        | 9,5   | 750      | <b>299041</b>       | <b>299039</b> |
| 6             | 2,5-17                         | 17    | 400      | <b>299042</b>       | <b>299040</b> |
| 2             | 5-33                           | 33    | 200      | <b>299042</b>       | <b>299040</b> |

**Re-filling Filter. (for grease reservoir)**

Removable filter cartridge, to prevent contaminates and foreign bodies from entering the reservoir and to prevent air bubbles forming in the grease..



**Part No. 299352** for metal reservoirs.

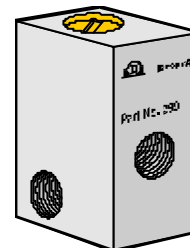
**Part No. 299353** for transparent reservoirs.

Thread G ½ A UNI-ISO 228/1. Cartridge (150 micron)

**Part No. 1113006.** The filter is provided with thread Rp ¼ UNI-ISO 7/1 for the return line into the reservoir.

**Safety By-pass Valve.**

Available for different pressure ranges this adjustable valve can be fitted on the outlet line. It protects the system from over pressure.



| Part No.      | Pressure range.                     |
|---------------|-------------------------------------|
| <b>299450</b> | 0 to 250 bar (0 to 3600 psi.).      |
| <b>299451</b> | 0 to 450 bar (0 to 6500 psi.).      |
| <b>299452</b> | 50 to 1000 bar (725 to 14500 psi.). |