



ROLLO MICROELECTRIC PUMP FOR OIL OR GREASE NLGI2 INSTRUCTION AND PRODUCT DATA SHEET

888100
888110
888120
888130
888140
888150
888170

ENGLISH

1. DESCRIPTION:

This motorised piston pump, fitted with 24V dc. motor, is particularly suitable for the distribution of oil or grease in lubrication plants with progressive distributors.

This type of lubrication system can be installed on Trucks, Buses, Gritters, Snow ploughs, Dusttrucks and other types of vehicles or machinery fitted with 12V dc. to 30V dc. power supplies.

The pump is of sturdy construction with high strength aluminium body painted with special anti-corrosive paint.

The pumping unit is of hardened and lapped steel.

The pump is supplied as standard with one pumping unit but can be fitted with up to three pumping units. (When ordering specify the number of pumping units required.)

2. SPECIFICATION:

2.1. Pumping Unit.

Delivery - 2,5 cm³/min.

Max. pressure - 25MPa (250bar) (3625psi.)

Lubricant - Oil min.15 cSt or Grease max. NLGI2.

Lubricant outlet - Rp ¼ UNI - ISO 7/1

Operating temperature - -20°C to +70°C

2.2. Motor:

Voltage - 24V dc. (the motor can operate from 12V dc. up to 30V dc.)

Standard Motor; 50 Watt (Intermittent service)

Heavy Duty Motor; 120Watt (Continuous service).

Duty type - S3 (Intermittent periodic duty 25%) Example; Lubrication time 20 seconds - Pause time 60 seconds.

2.3. Reservoir:

Metacrylate transparent cylinder, usable capacity 2kg or 4kg.

2.4. Minimum level electric control:

A permanent magnet inserted in the follower plate (Grease pump part numbers 888110 & 888170) or in a float (oil pump part number 888120) activates a 'reed switch' inside



the tube along which the follower plate or the float moves.
Maximum commutable power - Max. load 26VA - Max. voltage 120V dc. - Max. current 0,8A.

3. INSTALLATION:

3.1. To remove the reservoir cover: (Not recommended for refilling, refer to para. 3.4)

To remove the cover it is necessary to extract the top nylon tube that fastens the cover to the reservoir (see fig. 1.).

To remove the nylon tube; fit an M3 screw into the end of

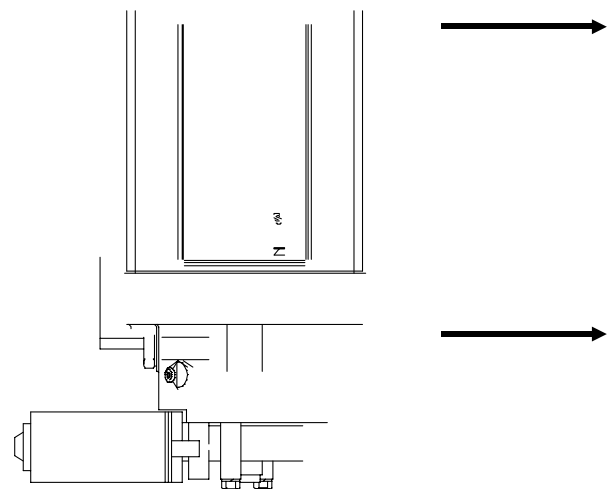


Fig.1.

the tube, grip the head of the screw with a suitable clamping device and completely extract the tube from its race.

Pump part number 888110 & 888170;

This pump is fitted with a follower plate with a rubber gasket which perfectly adheres to the inner surface of the reservoir.

When the pump is running, the follower plate follows the grease level and the air pressure on the follower plate increases. This pressure pushes the grease towards the pumping group which ensures the delivery of thick greases even at low temperatures.

After having extracted the nylon tube it is necessary to lift and simultaneously tilt the cover in order to eliminate the

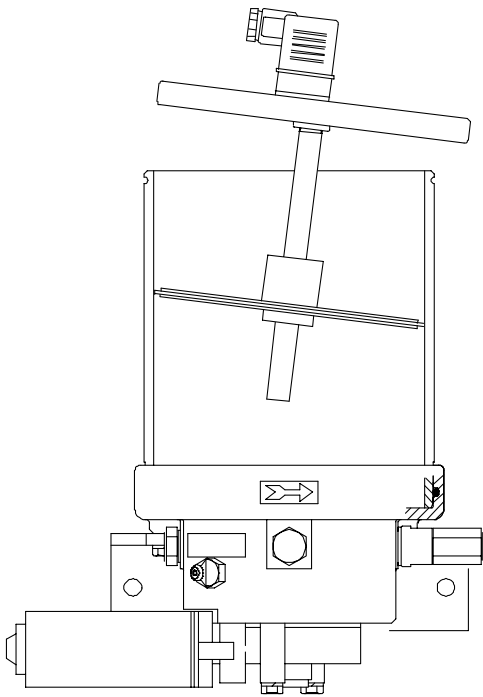


Fig. 2.

pressure differential between the top and bottom surface of the cover (see fig.2.).

3.2. How to remove the reservoir:

To remove the reservoir it is necessary to extract the bottom nylon tube that fastens the reservoir to the pump body (see fig.1.).

To remove the tube follow the same procedure as that used to extract the top nylon tube.

3.3. Maintenance:

Planned periodic maintenance is not necessary. The correct filling of the reservoir with clean lubricant is essential and will improve the life of the pump assembly and also protect the lubricated machinery.

3.4. Reservoir filling procedure:

3.4.1. Pumps for grease, part numbers 888100, 888110, 888130 to 888140 & 888150 to 888170;

Refilling with grease gun;

It is always recommended that the reservoir is filled with a grease gun, part number 1151000, when the pump is running.

For this operation the pump is fitted with a hydraulic nipple (see fig.3.). Always use clean grease which is not contaminated with metal fillings or other foreign matter. If

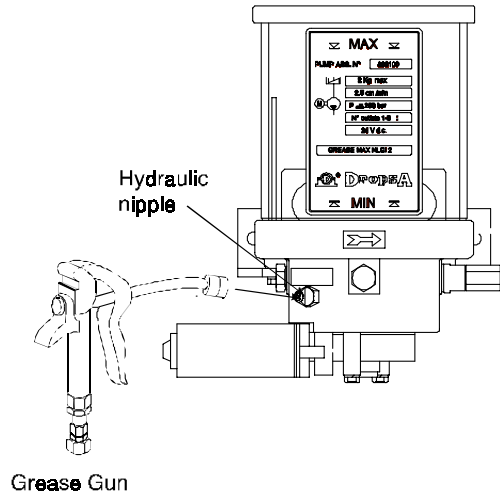


Fig. 3.

necessary use the filter, part number 1113200, available on request.

To install the filter unscrew the hydraulic nipple and replace it with the nipple, part number 3076005, available on request, then fit the filter onto the pump body (see

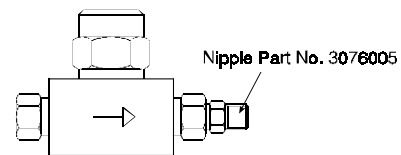


Fig. 4.

fig.4.). Screw the hydraulic nipple onto the other side of the filter and using the grease gun refill the reservoir.

NOTE: It is recommended that the pump is running when the reservoir is refilled as this ensures an even distribution of grease in the reservoir and avoids the formation of air bubbles.

Manual filling; (Not recommended).

Remove the reservoir cover, and in the case of pump ,part number 888110 & 888170, the rod and follower plate (refer to instructions in paras. 3.1. and 3.2.).

Pour clean grease into the reservoir taking care to avoid the formation of air bubbles and the contamination of the grease by foreign matter.

3.4.2. Pumps for oil part number 888120:

This pump is equipped with a refilling plug and filter. To refill the reservoir; unscrew the plug and fill with clean oil taking care to avoid contamination of the oil by foreign matter.

3.5. OPTIONAL ACCESSORIES:

The following accessories are supplied on request. When ordering specify part number.

Pumping Unit, part number 888050:

The ROLLO pump is supplied equipped with one pumping unit but it is possible to order the pump fitted with two or three pumping units.

This makes it possible to feed two or three separate lines or to join together the delivery of the pumping units in order to increase the output of lubricant from the same line.

Pressure Adjusting Valve (By-pass) part number 3294032

This adjustable valve can be installed in the outlet line. It protects the system from excessive pressure.

Pressure range: 0 to 25Mpa (0 to 250 bar) (0 to 3625psi.)

3.5.1. Devices for 24V ac. Power Supply:

Connector, part number 3172102;

The pump must be supplied at 24V dc. but it is possible to mount on the pump a connector fitted with a bridge rectifier in order to supply the pump with 24V ac.

The connector is fitted by screwing the base of the connector to the pump support and connecting the two wires coming out of the base (24V dc.) to the motor and the two

wires entering the connector to a 24V ac. power supply.(see Fig.5.)

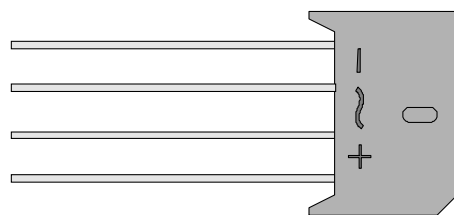


Fig.6.

Bridge Rectifier, part number 3172101;

This rectifier can be mounted in the pumps control board instead of the above described connector. (see Fig.6.)

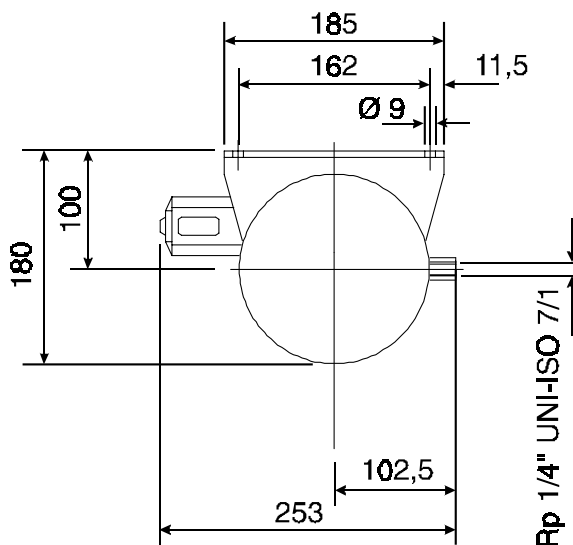
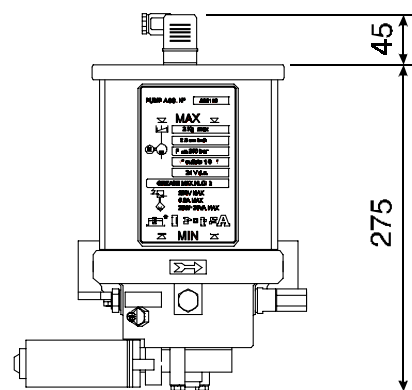


Fig.7.

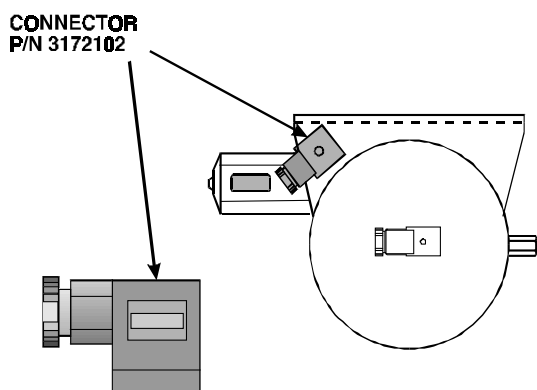


Fig.5.

3.6. Dimensions:

See Fig.7.

4. TEST PROCEDURES:

Available on request.

5. ORDERING INFORMATION:

The following types of pump for grease or oil are available.

Part numbers.	Description.
888100	Type of lubricant: Grease max. NLGI2. The pump is fitted with grease impeller and stirrer device. The impeller keeps the grease continuously in motion to facilitate delivery by the pump. The stirrer device is a rotary blade which rotates very close to the inner surface of the reservoir keeping it always clear.
888110	Type of lubricant: Grease max. NLGI2. The pump is fitted with grease impeller, follower plate and minimum level electric control. The impeller keeps the grease continuously in motion to facilitate delivery by the pump, while the follower plate compresses the grease to ensure delivery even at low temperatures.
888120	Type of lubricant: Oil min. 15 cSt. Fitted with minimum level electric control.
888130	Type of lubricant: Grease max. NLGI2. The pump is fitted with a grease impeller and stirrer device. Reservoir; 4kg.
888140	Type of lubricant: Grease max. NLGI2. The pump is fitted with a grease impeller and stirrer device. Reservoir; 4kg. Motor; 120Watts (Continuous service).
888150	Type of lubricant: Grease NLGI2. The pump is fitted with a grease impeller and stirrer device. Reservoir; 2kg. Motor; 120Watts (Continuous service).
888170	Type of lubricant: Grease NLGI2. The pump is fitted with a grease impeller, follower plate and minimum level electric control. Reservoir; 2kg. Motor; 120Watts (Continuous service)

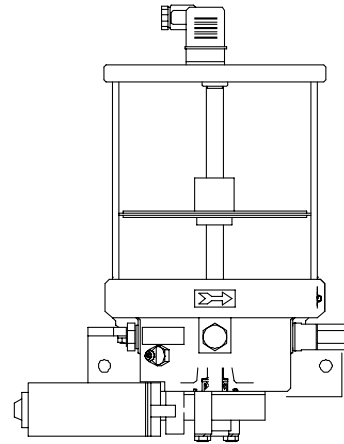


Fig.8.

6. SPARES:

Item No.	Description.	Part number
1	Connector(Pumps 888110, 888120 & 888170)	39979
2	Base for connector (Pumps 888110 & 888120)	39978
3	Rod with reed contact (Pumps 888110 & 888170)	888062
3	Low level switch - oil (Pump 888120)	1655570
4	Reservoir. (Pumps 888100, 888120 & 888150)	888008
4	Reservoir. (Pumps 888110 & 888170)	888035
4	Reservoir. (Pump 888140)	888087
5*	'O' Ring gasket.	--
6	Pumping unit.	888050
7*	Copper gasket.	--
8*	'O' Ring gasket.	--
9*	Rubber ring.	--
10	Motor. (Pumps. 888100, 888110, 888120 & 888130)	888002
10	Motor. (Pumps. 888140, 888150 & 888170)	888015

* NOTE: Gaskets items 5, 7, 8 and 9 are not available as separate items. If necessary order the Spare Part Kit, part number 888041 which includes all the gaskets.

7. SAFETY REQUIREMENTS:

ROLLO Microelectric Pumps must be installed and operated in accordance with the requirements of this Instruction Sheet. These pumps should not be used for any purpose other than as specified without the agreement of the supplier.

Disconnect the power supply before making any adjustments to the system or changing pump settings.

Apart from the need for general safety precautions there are no specific hazards associated with the operation of these pumps.

8. OPERATING ENVIRONMENT:

ROLLO Microelectric Pumps must not be operated submerged in fluid or in excessively corrosive or aggressive environments. If in doubt please contact our technical office.

9. DIAGNOSTIC TABLE:

FAILURES	PROBABLE CAUSE	REMEDY
Pump discharges little or no lubricant	Lubricant in the reservoir below the minimum level.	Re-fill the reservoir.
	Loose fittings inside the system.	Check fittings for leakages.
	Pump damaged	Replace the pump.
Pump not running.	Power failure.	Check power supply.

10. RELATED PRODUCTS:

Dropsa Intelligent Controller Part number 1639060

Lubewatch: Miniature Distributor.

Dropsa system 26.



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