MANUALLY OPERATED "SINGLE STROKE" PUMPS
FOR USE WITH SINGLE LINE 01 SYSTEM

INSTRUCTION AND PRODUCT DATA SHEET

12100
12105
216035
216040
216055
216060

ENGLISH

1. DESCRIPTION:

This range of manually operated "push or pull type" piston pumps are specifically designed for feeding installations with metering units of the **DROPSA Single Line 01 System.**

All the pumps have two outlets. These outlets have an integral adjustable control valve on pumps **Part No's. 12100, 216035 and 216055.**

Dual outlet ports permit system extension from both sides of the pump

The pumps can be operated with a single outlet by plugging the outlet not required.

Typical Applications:

- Small machine tools.
- Wood working machines>
- Small printing machines.
- Shoe making machines.

2. SPECIFICATION:

Outlet: 1/8" BSP (An adapter Part No. 3077075 is available for 1/8" NPT).

Viscosity range: Min. 15 cSt - Max. 250 cSt (77 - 1150 SUS).

Compatible Fluids: These pumps can handle a wide range of fluids, such as: vegetable oil; mineral oil; silicon oil; ink; glycols and many synthetic oils. Please contact our Technical Office for other applications.

Part No.	Reservoir	Delivery per/stroke	Control Valve	Operating pressure
12100	400cm^3	15cm^3	yes	3 bar (45 psi.)
12105			no	
216035	200cm^3	2cm^3	yes	5 bar (75 psi.)
216040			no	
216055			yes	
216060			no	

Pump Part No.	Relative value
12100 & 12105	90
216035 & 216040	12
216055 & 216060	12

3. INSTALLATION / OPERATION:

3.1. Installation:

The mounting location for the pump should be selected to provide access for the refilling of the reservoir, ease of installation, protection from damage and freedom of operation.

After having filled the reservoir with pure mineral oil operate the pump handle several times until a steady lubricant flow appears at the discharge ports.

Note: When operating the pump for the first time, it is advisable to plug the outlet ports during the suction phase to facilitate the priming of the pumping unit.

3.2. Operation:

Pump Part No. 12100 & 12105:

Pull the 'Tee' handle up to discharge, push to reset (prime).

Pump Part No. 216035 & 216040:

Press knob to discharge, pull to reset.

Pump Part No. 216055 & 216060:

This pump is operated by an external mechanical cam driven by the machine. When depressed the pump discharges, reset is achieved by a spring return. This pump has an integral relief valve.

Pump Operation (Example Pump Part No. 12105). Refer to Fig. 1.

This pump is of the spring discharge type.
It is operated by lifting the operating handle (1) which raises the piston (2) and compresses the spring (3).
Oil flows into the metering cylinder through the suction line controlled by the check ball (4).

Upon releasing the operating handle the spring (3) pushes the piston (2) and oil is automatically discharged into the system through the outlet ports (6) and (7).

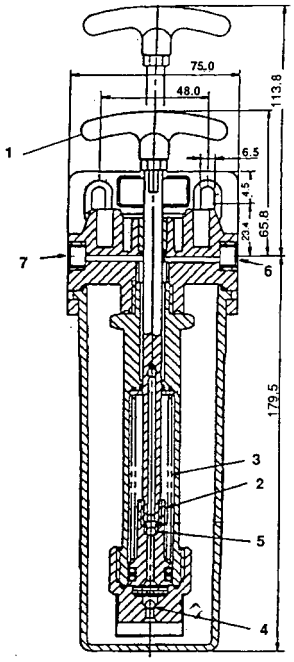


Fig. 1

During oil discharge the suction line is closed by the check ball (4) while check ball (5) opens the discharge line.

Maintenance.

Periodically check the suction filter to avoid clogging.

The filter should be cleaned at least twice a year. Remove the filter, wash in solvent and replace into the pump.

To remove the filter dismantle the reservoir by turning it in a counter clockwise direction.

Relative Value.

The 'relative value' of the pump is important for calculating the number of single line metering units that the pump can continuously feed for a minimum time of 5 minutes. The sum of the relative values of all the metering units used in the system must not exceed the relative value of the pump. Refer to the following table:

Number of metering units served.			
Metering Units Part No.	Relative value	No. of metering units	
		Pump relative value 12	Pump relative value 90
00/aa	0,75	16	120
0/a	1	12	90
1/b	2	6	45
2/c	4	3	22
3/d	8	1	11
4/e	16	-	5
5/f	32	-	2

Note: The relative value of the metering units corresponds to the number of drops of lubricant discharged per minute. (1 drop = 33 cm^3).

Dimensions.

Refer to Fig. 2.

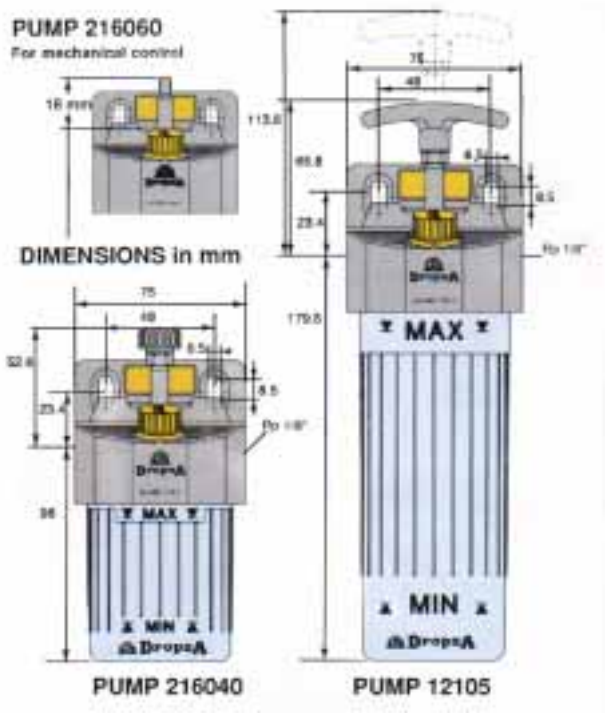


Fig. 2

4. TEST PROCEDURES:

Available on request. Also refer to Diagnostic Table.

5. ORDERING INFORMATION:

Ordering is by description and Part No. Example:

Manual Pump **Part No. 12100.**

6. SPARES

Refer to Fig. 3.

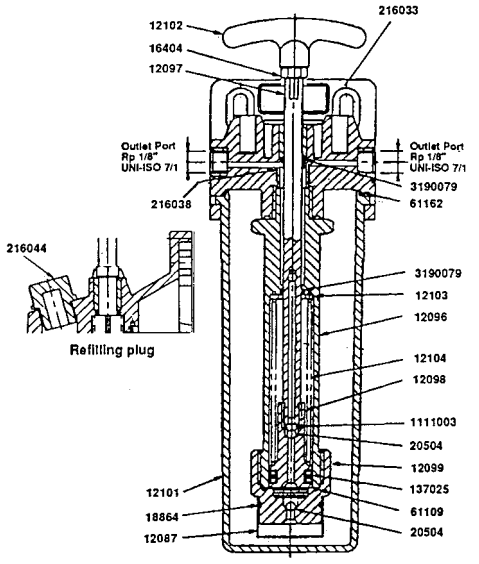


Fig. 3

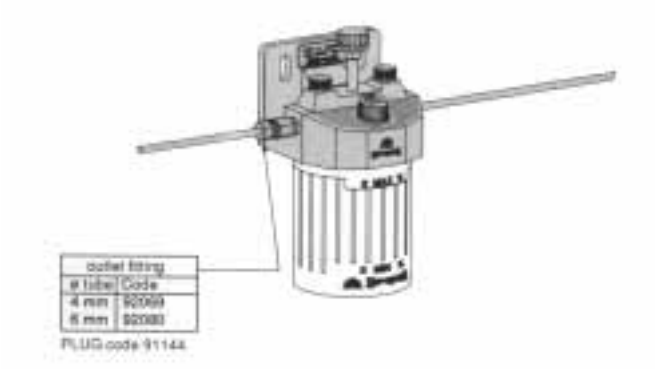
7. SAFETY REQUIREMENTS

DROPSA Manually Operated "Single Stroke" Pumps must be installed and operated in accordance with the requirements of this Instruction Sheet and should not be used for any purpose other than that specified without the agreement of the suppliers.

Apart from the need to observe general safety precautions there are no specific hazards associated with the use of DROPSA Manually Operated "Single Stroke" Pumps

8. OPERATING ENVIRONMENT

DROPSA Manually Operated "Single Stroke" Pumps should not be operated fully submersed in fluid or in excessively corrosive or aggressive environments. If in doubt please contact our Technical Office.



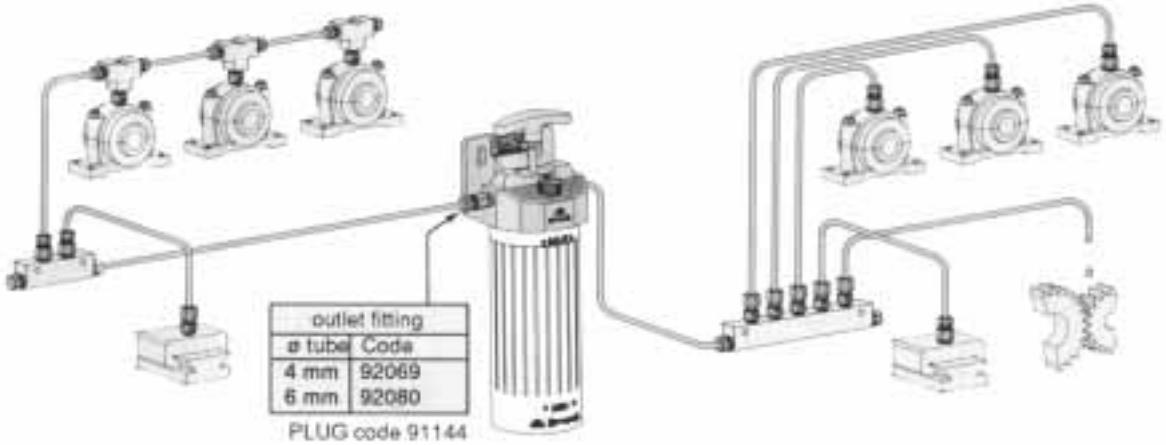
9. DIAGNOSTIC TABLE

FAILURE	POSSIBLE CAUSE	REMEDY
Instant return of the operating handle.	Reservoir empty.	Refill reservoir.
	Leaking or loose fittings in the system	Inspect system for leaks or loose fittings and replace faulty fittings and tighten all others

10. RELATED PRODUCTS

DROPSA 01 Single line system meter units.

APPLICATION EXAMPLES:



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