





### **CHARACTERISTICS**

- **DUAL MODULE PUMPING** ELEMENT
- **LASER MINIMUM LEVEL AS** STANDARD.
- "QUICK SWAP" MODULE: **EASY REPLACEMENT OF THE** PUMPING FLEMENTS WITHOUT INTERRUPTION OF THE CONNECTIONS IN THE MAINTENANCE PHASE.
- **COMPATIBLE WITH** 
  - **02 S**YSTEM
  - SERIAL 26
- RESERVOIR CAPACITY: 10 KG, 30 KG, 100 KG
- FLOW RATE: **55** cc/MIN (WITH 1 PUMPING **ELEMENT)** 110 cc/MIN (WITH 2 PUMPING **ELEMENTS**)
- **OPERATING TEMPERATURE:** FROM -10°C TO 50 °C
- **HEATING JACKET**

### **APPLICATIONS**

- APPLICATION IN HEAVY **INDUSTRY AND IN DIFFICULT ENVIRONMENTS**
- PAPER MILLS
- **STEEL PLANTS**

### LUBRICATION WITH OIL AND GREASE FOR HEAVY INDUSTRY

Ideal for the 02 - dual line system and for the progressive system - Serial 26, the Mini-SUMO II electric pump was designed to feed lubrication systems that use both oil and grease with NLGI 2 maximum consistency.

The version with two modules guarantees a flow capacity of 110 litres/min at a maximum pressure of 380 bar in redundancy.

Thanks to the system with DUAL PUMPING ELEMENT, the system is always efficient because it can continue to operate even if one of the two modules were to stop.

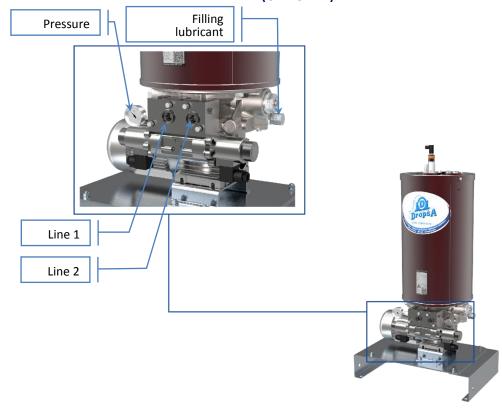
The Mini-SUMO II is generally applied to lubricate multiple points on large scale machinery in harsh operating conditions.



#### ZERO MACHINE STOPPAGE DURING MAINTENANCE

The QUICK SWAP SYSTEM allows both PUMPING ELEMENTS positioned on the right side of the pump to be replaced in just a few seconds, without touching the connection and reducing the risk of contamination. Furthermore, no operations on the piping and its connections are required.

# PUMPING ELEMENT FITTED WITH ELECTROMAGNETIC INVERTER FOR DUAL LINE (OPTIONAL)

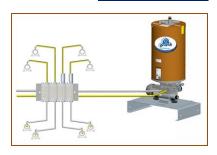






#### **EXAMPLES OF APPLICATION**

### **DUAL-LINE SYSTEMS**

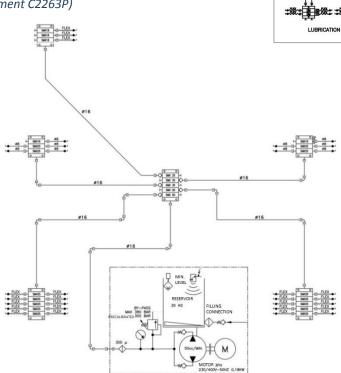


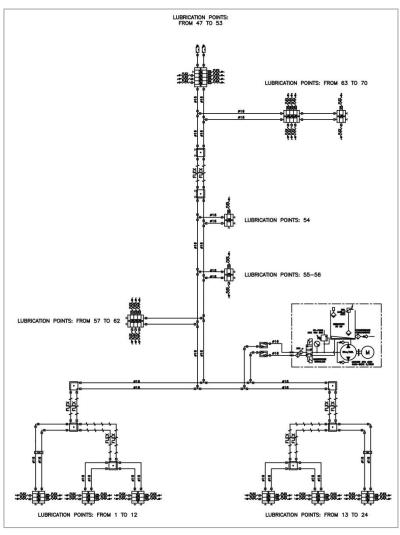
The systems executed with this system are typical of large scale machinery, and in particular, machinery that operates in harsh operating conditions and in damp or dusty environments.

The Mini-SUMO II pump combined with **Dual Line dosing units** make up the famous **02** system. Thanks to the two lubricant feed lines, the system can cover lengths up to 60 metres, therefore ideal for extremely large scale machinery.

The DropsA DM units combined with the Mini-SUMO pump are available in two versions:

- MODULAR BASE, made up of MODULAR BASES, in other words, separate from one another, plus the DOSING VALVES (*Ref. document C1081P*)
- <u>SOLID BASES</u>, are made up of a MONOBLOC base on which to mount the DM/DMM valves. (*Ref.* document C2263P)





### **PROGRESSIVE SYSTEM**

The systems created with this system use only one line to distribute the lubricant, allowing total control of the system via monitoring devices.

In the progressive system, the pump is combined with the wide range of "progressive" dosing units. Generally, a system is made up of a master dosing unit that feeds the connected dosing units.

The available dosing units in the range are:

- SMX, SMX inox, SMO
- nP- nano Progressive, Np in aluminium
- nPr+ nano Progressive replaceable
- SMP and SMPM

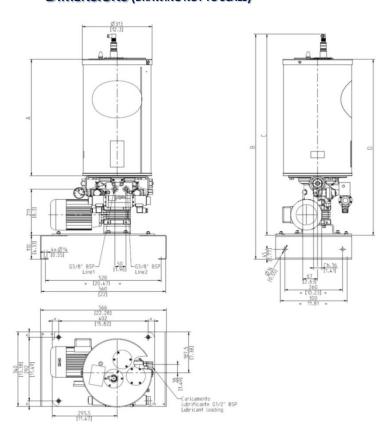
(Ref. documents progressive system DropsA SMX C2104PI - nP C2213PI - nPr+ C2220PI - SMP C2071PI)





| ELECTRICAL SPECIFICATIONS           |  |  |  |  |  |  |
|-------------------------------------|--|--|--|--|--|--|
|                                     | 230-400V - 5% 50Hz   |  |  |  |  |  |
| Motor nouver supply                 | 280-480V - 5% 60Hz   |  |  |  |  |  |
| Motor power supply                  | 24V cc   |  |  |  |  |  |
|                                     | Insulation class F   |  |  |  |  |  |
| Motor power rating                  | 0.37 Kw  |  |  |  |  |  |
| Motor protection degree             | IP 54  |  |  |  |  |  |
| Minimum level electric              | Laser (grease) – Float (oil)   |  |  |  |  |  |
| Maximum level visual                | Float (grease/oil)   |  |  |  |  |  |
| HYDRAULIC SPECIFICATIONS            |  |  |  |  |  |  |
| Pumping system                      | Piston   |  |  |  |  |  |
| Flow rate (2 pumping elements)      | 110 cc/min   |  |  |  |  |  |
| Maximum operating pressures         | 380 bar (5511 psi) - <sup>(1)</sup> 300 bar (4351 psi)   |  |  |  |  |  |
| Outlet connection                   | G3/8" BSP  |  |  |  |  |  |
| Reservoir capacity                  | 10-30-100 Kg (22-66-220 lbs)   |  |  |  |  |  |
| Filling filter                      | Filtering grade 300 μ  |  |  |  |  |  |
| Bypass valve                        | Adjustable 0~380 bar $(0~5511 psi)$ – precalibrated 300 bar $(4350 psi)$ - $^{(1)}$ 250 bar $(3625 psi)$ |  |  |  |  |  |
| Operating temperature               | - 10 ÷ + 50 °C (+14~122F)  |  |  |  |  |  |
| Permitted lubricants <sup>(1)</sup> | Mineral oil lubricant, min. 32 cSt; max. grease NLGI2  |  |  |  |  |  |
| Storage temperature                 | -40 ÷ +65 °C (-40~149F)  |  |  |  |  |  |

## **DIMENSIONS** (DRAWING NOT TO SCALE)



|   | 10 Kg      | 30 Kg | 100 Kg |
|---|------------|-------|--------|
| Α | 344 [13.5] | 533   | 983    |
| В | 841 [33.1] | 1030  | 1480   |
| С | 731 [27.7] | 920   | 1370   |
| D | 616 [24.2] | 805   | 1255   |

Note: The specifications refer to an operating temperature of  $+ +20^{\circ}\text{C}$  ( $+ +68^{\circ}\text{F}$ ) With 24V cc motor (2) If a different product is used, you must ask DropsA S.p.A. if it is suitable for use







## **ORDERING INFORMATION**

Note: The pump's ordering part number is made up of 11 digits.

### Standard

|                               |  |  | Base data       | 4° | 5°/6° | 7° | - | 8° | 9° | 10° | 11° |
|-------------------------------|--|--|-----------------|----|-------|----|---|----|----|-----|-----|
|                               | MINISUMO II PUMP   | 250                                      | 0               | 00 | 0     |    | 0 | 0  | 0  | 0   |     |
|                               | Description  | DROPSA Code                              | PART NUMBER     |    |       |    |   |    |    |     |     |
|                               | -  | -  | 0               |    |       |    |   |    |    |     |     |
| Reservoir                     | 10kg   | 0297100                                  | 1               |    |       |    |   |    |    |     |     |
|                               | 30kg   | 0295080                                  | 2               |    |       |    |   |    |    |     |     |
|                               | 100kg  | 0295090                                  | 3               |    |       |    |   |    |    |     |     |
|                               | Motor not present  | -  | 00              |    | •     |    |   |    |    |     |     |
| Three-phase electric motor    | STANDARD<br>230/400V 50Hz - 280/480V 60Hz                                | 3301791                                  | 01              |    |       |    |   |    |    |     |     |
|                               |  |  | 02              |    |       |    |   |    |    |     |     |
|                               |  |  | 03              |    |       |    |   |    |    |     |     |
|                               | 24 V DC  | 3301518                                  | 10              |    |       |    |   |    |    |     |     |
|                               | Inverter not present   | -  | 0               |    |       | =  |   |    |    |     |     |
| 4/3 Electromagnetic valve     | 24 V DC  | 0083550                                  | 1               |    |       |    |   |    |    |     |     |
| 4/2 Electromagnetic valve     | 24 V DC  | 0083560                                  | 2               |    |       |    |   |    |    |     |     |
| 4/2 Electropneumatic inverter | 24 V DC  | 0083580                                  | 3               |    |       |    |   |    |    |     |     |
| Hydraulic inverter            |  | 0086450                                  | 4               |    |       |    |   |    |    |     | l   |
|                               |  |  |                 |    |       |    |   |    |    |     |     |
|                               | Option   |  |                 | •  |       |    |   |    |    |     |     |
|                               | The pump is supplied with 24Vdc Ou threshold) standard laser level senso | 0295131                                  | 0               |    |       |    |   |    |    |     |     |
| Minimum level                 | Laser 2 configurable digital outputs a                                   | 0295130                                  | 1               |    |       |    |   |    |    |     |     |
|                               | *Reed floating switch for oil 10kg                                       | 0295151+3130138                          | 2               |    |       |    |   |    |    |     |     |
|                               | *Reed floating switch for oil 30kg                                       | 0295150+3130138                          | 3               |    |       |    |   |    |    |     |     |
|                               | *Reed floating switch for oil 100kg                                      | 0295160+3130138                          | 4               |    |       |    |   |    |    |     |     |
| Maximum Level                 | The pump is supplied with the stand visual level                         | 0295100                                  | 0               |    |       |    |   | 1  |    |     |     |
|                               | Laser 24V cc Out NO and NC (1 thres                                      | 0295131<br>(for 10kg, 30kg and<br>100kg) | 1               |    |       |    |   |    |    |     |     |
| Heating jacket                | Heating jacket NOT PRESENT   | -  | 0               |    |       |    |   |    | •  |     |     |
|                               | pump heating jacket 10/30kg 110V-  | 0295066                                  | 1               |    |       |    |   |    |    |     |     |
|                               | Stainless steel pump heating jacket 2<br>150W                            | 0295103                                  | 2               |    |       |    |   |    |    |     |     |
| Pumping elements              | the pump comes with a fixed flow ra<br>element                           | ate pumping                              | 0298000         | 0  |       |    |   |    |    |     |     |
|                               | Two fixed flow rate pumping elemen                                       | nts                                      | 0298000+0298000 | 1  |       |    |   |    |    |     |     |

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