

### CHARACTERISTICS

- DUAL MODULE PUMPING ELEMENT
- LASER MINIMUM LEVEL AS STANDARD.
- "QUICK SWAP" MODULE:
  EASY REPLACEMENT OF THE
  PUMPING ELEMENTS
  WITHOUT INTERRUPTION OF
  THE CONNECTIONS IN THE
  MAINTENANCE PHASE.
- COMPATIBLE WITH - 02 System - 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 cc/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:

- <u>MODULAR BASE</u>, 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					
	280-480V - ±5% 60Hz					
Motor power supply	110V – 50Hz (single phase) – 10A					
	230V – 50Hz (single phase) – 4.5A					
	115V – 60Hz (single phase) – 11A					
	2.07					
	24V cc					
Motor power rating	<sup>(2)</sup> 0.37 Kw – <sup>(3)</sup> 0.55Kw					
Motor protection degree	IP 55					
Insulation class	F					
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) - <sup>(4)</sup> 250 bar (3625 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					
	<i>(4350 psi)</i> - <sup>(1)</sup> 250 bar <i>(3625 psi)</i> – <sup>(4)</sup> 220 bar (3190 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)					

Note: The specifications refer to an operating temperature of + +20°C (+ +68°F)

- $^{\mbox{(1)}}$  With 24V cc motor
- <sup>(2)</sup> Tri-phase motor
- <sup>(3)</sup> Single-phase motor
- <sup>(4)</sup> Single-phase motor 115V 60Hz

<sup>(5)</sup> If a different product is used, you must ask DropsA S.p.A. if it is suitable for use

### **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



## **ORDERING INFORMATION**

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

	Standard										
			Base data	4t h	5°/6°	7th	-	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								
Reservoir	30kg	0295080	2								
	100kg	0295090	3								
	Motor not present	-	00		-						
	STANDARD 230/400V 50Hz - 280/480V 60Hz	3301791	01								
	110V 50Hz – 1Ph	3301803	02								
-	230V 50Hz – 1Ph	3301804	03								
Three-phase electric motor	115V 60Hz – 1Ph	3301809	04								
	525V 50Hz – 3Ph	3301817	05								
	440V 60Hz - 3Ph	3301791-440V-60H	z 06								
	380V/550V 50Hz - 3Ph	3301822	07								
	460V 60Hz 3Ph - NEMA	3301838	08								
	24V DC	3301802	10	-							
	Inverter not present	-	0			1					
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								
	Option										
Minimum level	The pump is supplied with 24Vdc threshold) standard laser level se		0295131	0							
	Laser 2 configurable digital outpu	ts and 4~20mA	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 100k	g	0295160+3130138	4							
Maximum Level	The pump is supplied with the sta switch visual level	andard floating	0295100	0							
	Laser 24V cc Out NO and NC (1 th	reshold)	0295131 (for 10kg, 30kg and 100kg)	1							
Heating jacket	Heating jacket NOT PRESENT		-	0							
	pump heating jacket 10/30kg 110	W-150W	0295066	1							
	Stainless steel pump heating jack 150W	et 10/30kg 230V-	0295103	2							
	pump heating jacket 100 Kg 110V		0295065	3							
Pumping elements	the pump comes with a fixed flow element	v rate pumping	0298000	0							-
	Two fixed flow rate pumping elen	nents	0298000+0298000	1							

\* The floating switch levels for oil signal both the minimum and the maximum level.

Distributor Info:

C2280PE WK 14/25

DropsA products can be purchased at Dropsa branches and authorised distributors. Go to www.dropsa.com/contact or write to dropsa@sales.com