

# CHARACTERISTICS

- FOR OIL AND GREASE
   NLGI 000
- COMPATIBLE WITH 01 SYSTEM 33V SYSTEM 26 SYSTEM
- OPTILEV: THE SOLID STATE OPTICAL SENSOR LEVEL THAT WORKS BOTH OIL AND GREASE NLGI000.
- LEVEL SENSING WITH NPN AND PNP
   OUTPUT AS STANDARD
- RESERVOIR: 3 OR 6 LT
- DELIVERY:
   350 500 cc/min
   (21,35 30,5 cu.in)
   600-850 cc/min
   (36,61 51,87 cu.in)
- VENT VALVE INCLUDED
- ADJUSTABLE PRESSURE VALVE

# EASY AND AFFORDABLE SOLUTION FOR INJECTORS AND PROGRESSIVE SYSTEMS

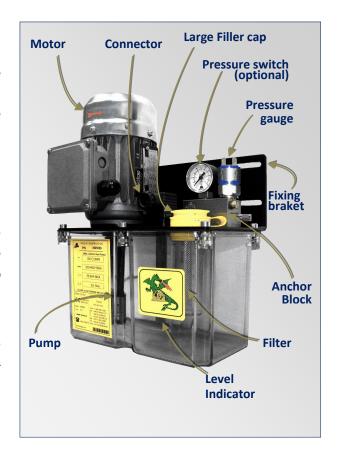
## AN EFFICIENT AND ECONOMICAL APPROACH

**DRAGON-X** is a compact and versatile pump that joins efficiency and performance in a simple all-inclusive pump package for injector and progressive systems both for oil and fluid grease NLGI 000.

## **EASE OF USE**

The external position of the pressure manifold block that houses all the functional components makes it easy to carry out any adjustments and connections.

The reservoir can be filled in a simple and quick manner thanks to the oversized filler cap.



## **AVAILABLE IN TWO VERSIONS:**

## VERSION WITH FLOATING SWITCH FOR OIL LUBRICATION

The system with floating level indicator can be used with mineral lubricating oil. The floating level indicator is equipped with voltage free contact and does not require power- allowing interchange-ability with other Dragon series pumps.

The floating level indicator can be easily replaced with the optical one without any modification on the pump.

# • VERSION WITH OPTICAL SENSOR LEVEL FOR OIL AND FLUID GREASE LUBRICATION

The **D**RAGON-**X** with optical sensor level indicator can be used both oil and fluid grease.

Low level monitoring of lubricant up to NGLI000 is achieved thanks to Dropsa's patented Optical level sensing technology: completely solid state with both NPN and PNP outputs as standard.

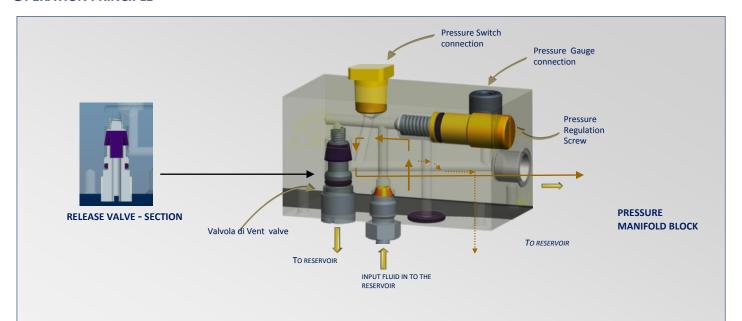
A perfect solution for many applications in a single product.

# **APPLICATIONS**

- MEDIUM DIMENSION PRESS
- MACHINE TOOLS
- MACHINE FOR PACKAGING PRODUCTION
- REDUCERS
- PRESS FOR PLASTIC INJECTION



## **OPERATION PRINCIPLE**



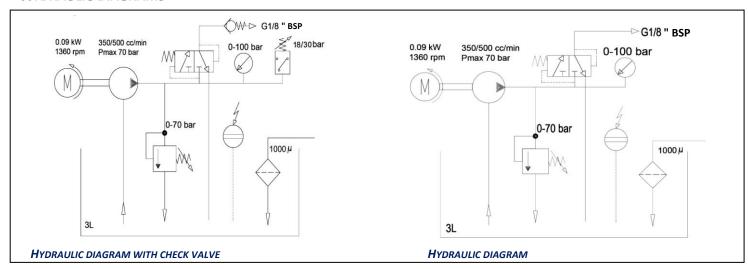
The pump works at 70 bar (1015psi) max pressure. A vent valve, incorporated in the pressure manifold allows the system to vent pressure after the lubrication cycle.

There is also a pressure regulating valve (with adjustment screw regulation) adjustable from 0 to 70 bar (1015 psi).

# **SUITABLE FOR:**

- Lubrication system with flow restrictors and re-circulating system at working pressure < 20 bar (290psi) **01 System**
- Lubrication system with injectors with working pressure < 50 bar (735 psi) 33V System
- Progressive lubrication system and re-circulating system, using progressive dividers at working pressure < 70 bar (1015 psi) 26 System. If needed a check valve can be fitted to the outlet to prevent any pressure venting when backpressure needs to be maintained.</li>

## HYDRAULIC DIAGRAMS





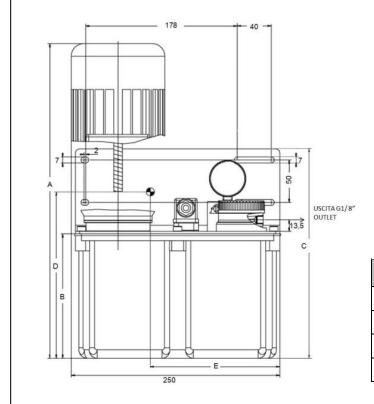


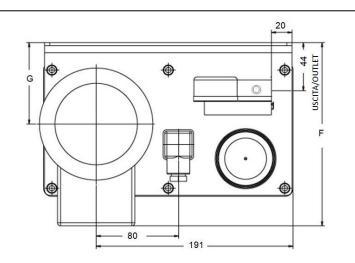


TECHNICAL CHARACTERISTICS				
Motor degree of protection	IP 55			
Minimum level	Optical (oil and fluid grease versions ) / With floating switch (only Oil version)			
Optical power supply level	8÷28 V DC inversion protected			
Optical level output signal	Type NPN/PNP short-circuit protected, off in the case of minimum level. Max 1.7A			
Level connector (optical-floating switch)	DIN 43650			
Floating level output signal	Clean contact 50V max voltage, 40 W max power. SPDT Contact.			
Pressure switch	Contact closed in the case of max calibration pressure alarm			
Pressure switch output signal	Voltage free contact max voltage 42V, max. power 100 W			
	HYDRAULIC CHARACTERISTICS			
Pumping system	Gear pump			
Maximum operating pressures	<ul> <li>- 70 bar -three-phase motor (with intermittent service max 5 min with pause ratio 1:1)</li> <li>- 40 bar (single-phase motor)</li> <li>- max 30 bar with continuous service</li> </ul>			
Outlet connection	G1/8" BSP			
Tank capacity	3L/6L			
Filter	Degree of filtering 1000 μ			
By-pass	Adjustable 0 ÷70 bar – pre-calibrated 40bar (35bar for single-phase motors)			
Temperature of use	+ 5 ÷ + 70 ℃			
Operating humidity	90 % rel. humidity			
Permitted lubricants *	Mineral lubricating oil 32 cSt; grease max NLGI000			
Storage temperature	-20 ÷ +65 ℃			
Continuous sound pressure level	< 70 dB(A)			

**N.b.** The specifications refer to the temperature of use of  $+20^{\circ}$ C ( $+68^{\circ}$ F)

# **OVERALL DIMENSIONS**





Pump Version	Α	В	С	D	Е	н	G
3L Pump	330	146	246	195	152	172	80
6L Pump	431	250	347	259	148	172	80
3L 24V Pump	312	146	246	173	150	151	75
6L 24V Pump	413	250	347	253	150	151	75





# CONTACTS

# sales@dropsa.com

## ITALIA

Dropsa SpA t. +39 02-250791 f.+39 02-25079767

### U.K.

Dropsa (UK) Ltd t. +44 (0)1784-431177 f. +44 (0)1784-438598

## 1. . . . . (0)1701 1303

**GERMANY**Dropsa GmbH

t. +49 (0)211-394-011

f. +49 (0)211-394-013

### **FRANCE**

Dropsa Ame

t. +33 (0)1-3993-0033

f. +33 (0)1-3986-2636

## **CHINA**

Dropsa Lubrication Systems (Shanghai) Co., Ltd

t. +86 (021) 67740275

f. +86 (021) 67740205

## U.S.A.

Dropsa USA Incorporated t. +1 586-566-1540

f. +1 586-566-1541

# AUSTRALIA

Dropsa Australia Pty t. +61 (02)-9938-6644

f. +61 (0)2-9938-6611

## **BRAZIL**

Dropsa Do Brasil Ind.e Com.Ltda

t. +55 (0)11-563-10007

f. +55 (0)11-563-19408

# **ORDERING INFORMATION**

STANDARD VERSIONS					
ELECTRIC MOTOR	FLOW RATE	TANK CAPACITY	PART NUMBER (with optical level to use oil and fluid grease)	PART NUMBER (with float level to use only oil)	
230-400 V 50 Hz 3-phase- 0.09 KW 4P 265-460 V 60 Hz 3-phase- 0.11 KW 4P	350 CC	3 L	3905000	3905040	
		6 L	3905001	3905041	
	500 CC	3 L	3905004	3905044	
		6 L	3905009	3905049	
	350 CC	3 L	3905007	3905047	
110 V FO Uz single phase O O KW 4D		6 L	3905012	3905052	
110 V 50 Hz single phase – 0,.9 KW 4P	500 CC	3 L	3905008	3905048	
		6 L	3905013	3905053	
230 V 50 Hz single phase – 0.09 KW 4P	350 CC	3 L	3905005	3905045	
		6 L	3905010	3905050	
	500 CC	3 L	3905006	3905046	
		6 L	3905011	3905051	
24V CC	600 CC	3 L	3905002	3905042	
		6 L	3905003	3905043	
	850 CC	3 L	3905014	3905054	
		6 L	3905015	3905055	

**N.B.** The specifications refer to the temperature of use of  $+20^{\circ}$ C ( $+68^{\circ}$ F)

SPARE PARTS				
ITEM	DESCRIPTION	PART NUMBER		
PUMP	Flow rate 350 CC*	3099186		
	Flow rate 500 CC*	3099187		
	230-400 V 50 Hz three-phase- 0.09 KW 4P 265-460 V 60 Hz three-phase- 0.11 KW 4P	3301544		
MOTOR	230 V 50 Hz single phase – 0.09 KW 4P	3301545		
	110 V 50 Hz single phase – 0.09 KW 4P	3301546		
	24V CC rpm	3301283		
OPTICAL SENSOR LEVEL	For the 3L tank	1639201		
	For the 6L tank	1639202		
FLOAT ING LEVEL INDICATOR	For the 3L tank	3133627		
	For the 6L tank	3133628		
DISTRIBUTOR BLOCK		1525370		
TANK	3 L	6770033		
	6 L	6770006		
PRESSURE GAUGE	0 -100 bar	0020564		

<sup>\*</sup> Flowrate is referred to 1500 rpm

ACCESSORIES				
ITEM	DESCRIPTION	PART NUMBER		
PRESSURE SWITCH	Calibration pressure 3 Bar	3291028		
	Calibration pressure 18 Bar	3291048		
	Calibration pressure 30 Bar	3291022		
PRESSURE SWITCH CAP		3042098		
PRESSURE GAUGE	0 -16 bar	0020566		
NON-RETURN VALVE		0092335		

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