

## THE ECONOMIC SOLUTION FOR OIL AND FLUID GREASE LUBRICATION

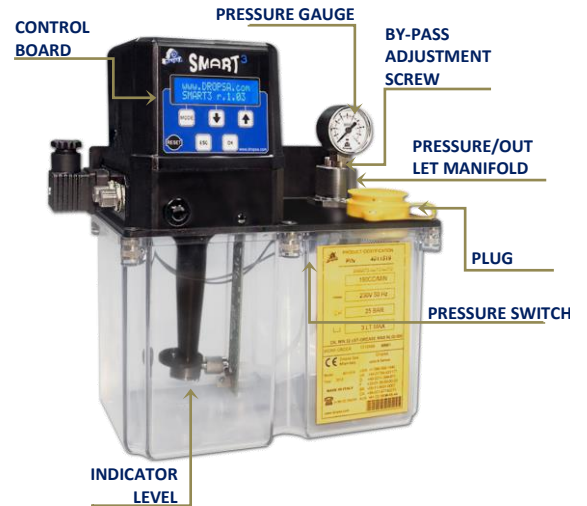
### CHARACTERISTICS

- 2 OPTIONS
- MANUAL VERSION
- AUTOMATIC VERSION
- OIL AND FLUID GREASE
- RESERVOIRS 2L- 3L
- PROGRAMMABLE ELECTRONIC BOARD
- MULTIPLE CONNECTOR OPTIONS
- LEVELS
- FLOAT TYPE
- INFRARED

**Smart3** is a compact and versatile pump, the perfect solution for oil and fluid grease lubrication

Thanks to two complementary versions, the lubrication cycle can be managed by an external PLC (**MANUAL VERSION**) or with an integrated controller board (**AUTOMATIC VERSION**).

**SMART3** is ideal for application in Single Line, typically 33V injector systems.



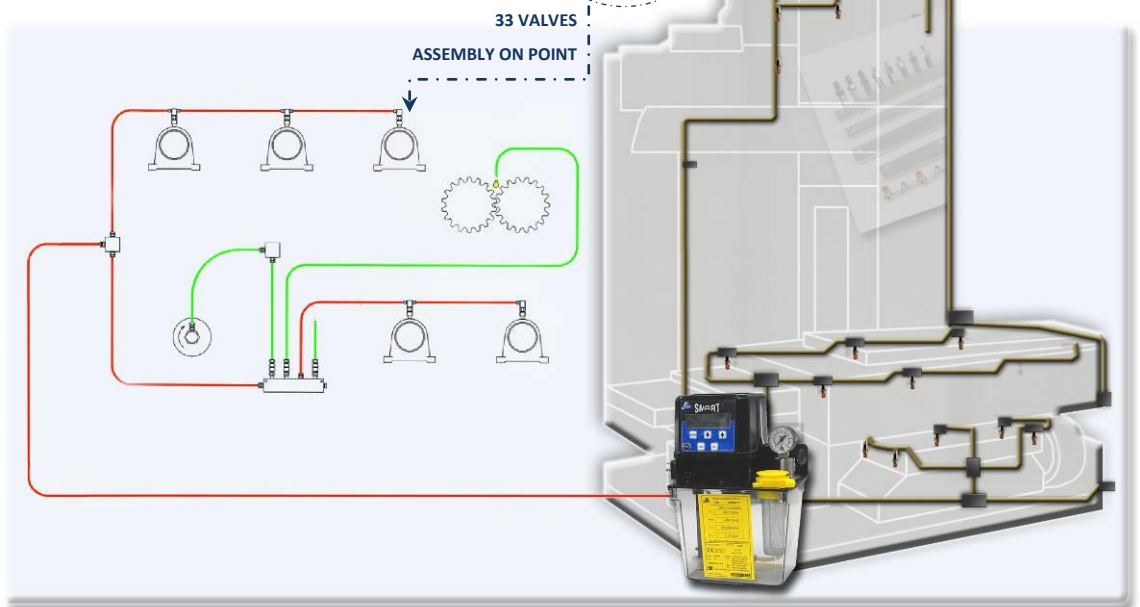
**AUTOMATIC VERSION**  
ON BOARD MANAGEMENT of cycle time, alarms and controls



**MANUAL VERSION**  
Lubrication cycles managed by host machine

### APPLICATION EXAMPLE WITH 33V VALVE

Using 33 valve with **SMART3** pump, you will get a lubrication system that provides quality with high performance.



### APPLICATIONS

- TOOL MACHINES:
- ANY SMALL AND MEDIUM OIL OR FLUID GREASE SYSTEM
- WORKING CYCLE
- EXTERNAL SYSTEMS

## LUBRICATION CYCLE WITH NEW GENERATION CONTROLLER

It allows numerous ways to trigger and monitor the lubrication event in a system:

1. **CYCLE MODE:** allows pause to be determined by timer or a number of external impulses. These can be in any combination.
2. **PULSE MODE:** allows pause to be determined by timer or a number of external impulses. Additionally, during the lubrication cycles, the cycle sensor can be monitored to ensure correct operation of the system. The pump can suspend the lubrication cycle if external impulses not detected.
3. **STANDBY:** During this phase the lubrication system is inactive until the next lubrication cycle.

### OTHER FEATURES:

#### MULTICYCLE:

Thanks to MULTICYCLE function it is possible to manage lubrication thoroughly, obtaining the proper oil quantity in a single cycle.

#### SUSPEND FUNCTION:

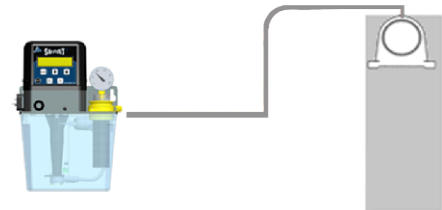
During this mode the PULSE input can be used to suspend the lubrication cycle. This is useful for example when you change a tool. This function puts the system into stand-by when the pulses are no longer received. In a time system, the stand-by function may be a remote control to suspend counters.

#### REMOTE ALARM OPTIONS, INCLUDING CODED OUTPUT

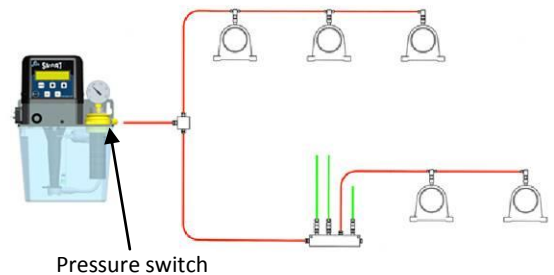
As well as having a NO and NC relay contact for a remote alarm connection and the ability to use it in a normal or inverted conditions it has the ability to send a coded signal. When coded alarm signal is selected it pulses the alarm contact with the Alarm error code that is shown on the display. The remote PLC can count the pulses and interpret what kind of alarm is being given rather than a generic alarm as on other systems.

### POSSIBLE IMPLEMENTATIONS WITH MENÙ ADVANCED "CYCLE END" E "LUBE TYPE"

#### Cycle mode

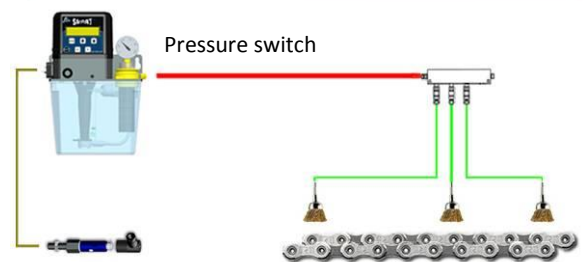


#### Pulse mode



Pressure switch

### LUBRICATION WITH EXTERNAL IMPULSES PRESSURE SWITCH CONTROLLER (INSIDE)

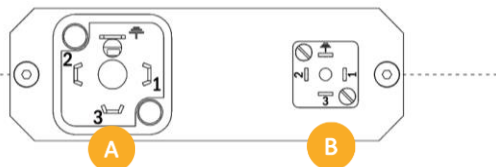


Pressure switch

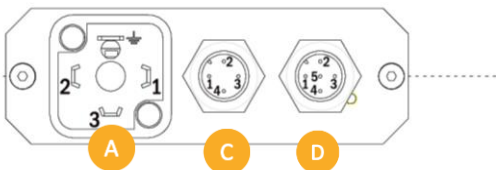
INDICATOR Pulse count.

### ELECTRICAL CONNECTIONS

#### TYPE 1



#### TYPE 2



#### TYPE 3



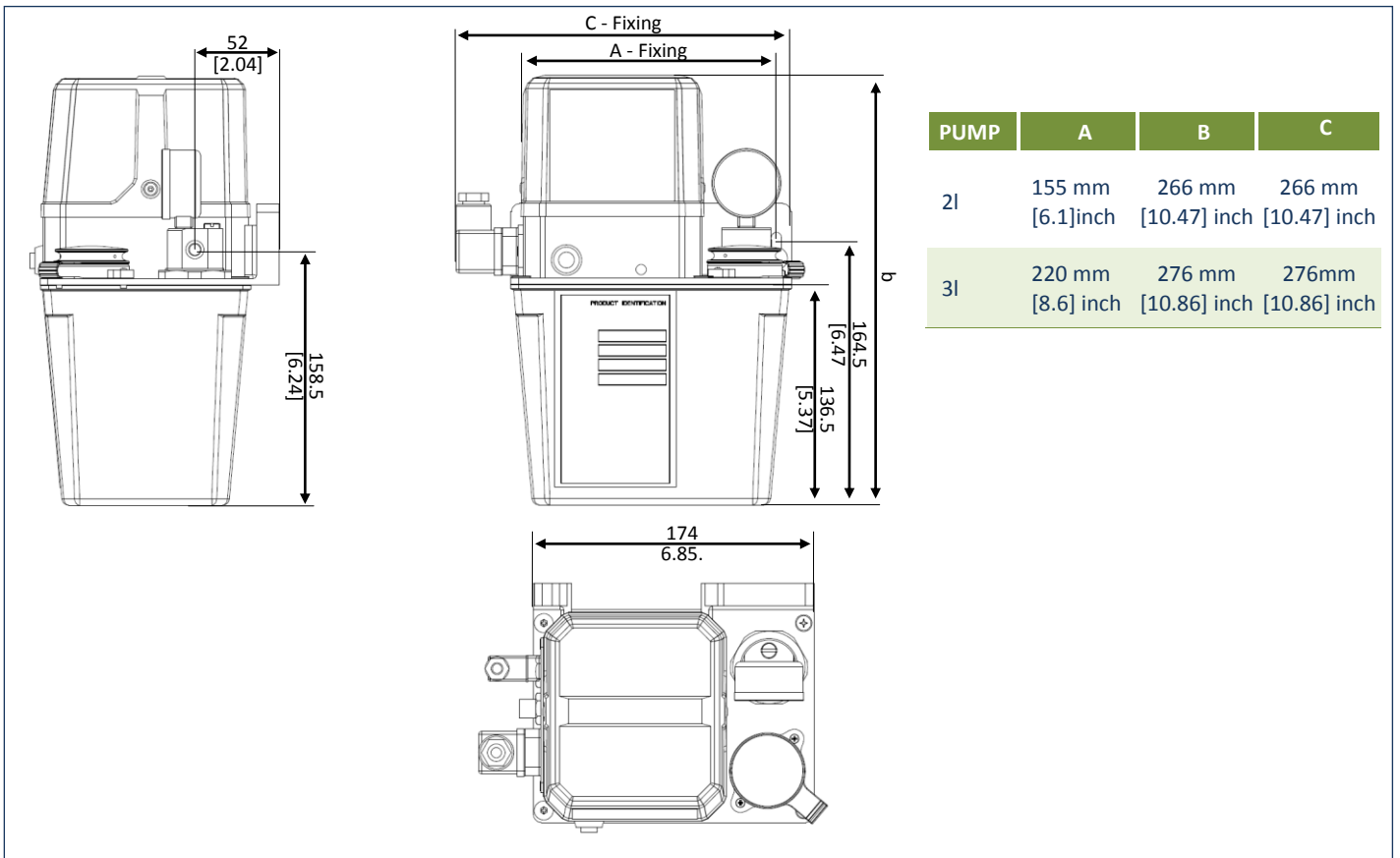
A DIN 43650

B DIN 40050

C M12X1-PIN 4

D M12X1-PIN 5

**SIMPLE  
INSTALLATION  
THANKS TO  
MANY  
CONNECTOR  
OPTIONS**



PUMP	A	B	C
2l	155 mm [6.1]inch	266 mm [10.47] inch	266 mm [10.47] inch
3l	220 mm [8.6] inch	276 mm [10.86] inch	276mm [10.86] inch

### TECHNICAL SPECIFICATIONS

#### Motors

110V AC – 2p– 50/60 Hz 140/175W- (2800/3500 rpm)  
 230V AC – 2p– 50 Hz 135 W - (2800 rpm)  
 230V AC – 2p– 60 Hz 170 W - (3500 rpm)  
 24 V DC – 55 W - (2800 rpm)

Motor grade of protection	IP 55
Pumping system	Gear pump
Flow rate	180 cc/min @ 2800 rpm
Maximum operating pressures	3~30 bar
Outlet connection	G1/8" BSP
Min Level Floating Switch Indicator	With NC contact in case of liquid
Min Level Optical Sensor Indicator	NPN/PNP protect for short circuit, off in case of low level
Filter	1000 μ
By-Pass	Adjustable 0÷30 bar – preset to 25 bar
Pressure switch	10÷20bar - Preset to 18 bar
Operating temperature	+ 5 ÷ + 60 °C
Permitted lubricants*	Oil 32 cSt-320 cSt ; max Grease NLGI000;
Conservation Temperature	-20 ÷ +80 °C
Continuous sound pressure level	< 70 dB(A)
Max Working Time Continuous Of The Pump	1 min
Minimum Stand-By Time	5 times T-on

### ORDER INFORMATION

#### SMART3 - - MANUAL VERSION - NO CONTROLLER

LEVEL	ALARM	CONNECTOR PLATES	PART NO CONNECTOR PLATES	VOLTAGE	PART NUMBER	
					RESERVOIR 2L	RESERVOIR 3L
Magnetic	Contact NO/NC	Type 3	3133807	24Vcc	4011018	4011318
				110Vca-50/ 60Hz	4011118	4011418
				230Vca-50/	4011218	4011518
				230Vca-60Hz	4011618	4011718
Optical	Contact NO/NC	Type 2	3133806	24Vcc	4011019	4011319
				110Vca-50/ 60Hz	4011119	4011419
				230Vca-50/	4011219	4011519
				230Vca-60Hz	4011619	4011719



## SMART3 - MANUAL VERSION - NO CONTROLLER

LEVEL	ALARM	CONNECTOR PLATES	PART NO CONNECTOR PLATES	POWER SUPPLY	CODE	
					RESERVOIR 2L	RESERVOIR 3L
Magnetic	Contacts Contact pressure switch contact open under pressure	Type 1	3133800	24Vcc	4010000	4010300
				110Vca-50/ 60Hz	4010100	4010400
				230Vca-50/	4010200	4010500
				230Vca-60Hz	4010600	4010700
	Contacts Contact level open without oil in parallel pressure switch contact open under pressure	Type 3	3133801	24Vcc	4010001	4010301
				110Vca-50/ 60Hz	4010101	4010401
				230Vca-50/	4010201	4010501
	230Vca-60Hz			24Vcc	4010020	4010320
				110Vca-50/ 60Hz	4010120	4010420
				230Vca-50/	4010220	4010520
	230Vca-60Hz			24Vcc	4010021	4010321
				110Vca-50/ 60Hz	4010121	4010421
230Vca-50/				4010221	4010521	
230Vca-60Hz			24Vcc	4010021	4010321	
			110Vca-50/ 60Hz	4010121	4010421	
			230Vca-50/	4010221	4010521	
230Vca-60Hz			24Vcc	4010021	4010321	
			110Vca-50/ 60Hz	4010121	4010421	
			230Vca-50/	4010221	4010521	
Level N signal in seriespressure switch contact open under pressure	Type 3	3133802	24Vcc	4010012	4010312	
			110Vca-50/ 60Hz	4010112	4010412	
			230Vca-50/	4010212	4010512	
230Vca-60Hz			24Vcc	4010012	4010312	
			110Vca-50/ 60Hz	4010112	4010412	
			230Vca-50/	4010212	4010512	
230Vca-60Hz			24Vcc	4010013	4010313	
			110Vca-50/ 60Hz	4010113	4010413	
			230Vca-50/	4010213	4010513	
230Vca-60Hz			24Vcc	4010013	4010313	
			110Vca-50/ 60Hz	4010113	4010413	
			230Vca-50/	4010213	4010513	
Level N signal and pressure switch contact open under pressure	Type 2	3133803	24Vcc	4010013	4010313	
			110Vca-50/ 60Hz	4010113	4010413	
			230Vca-50/	4010213	4010513	
230Vca-60Hz			24Vcc	4010013	4010313	
			110Vca-50/ 60Hz	4010113	4010413	
			230Vca-50/	4010213	4010513	
230Vca-60Hz			24Vcc	4010014	4010314	
			110Vca-50/ 60Hz	4010114	4010414	
			230Vca-50/	4010214	4010514	
230Vca-60Hz			24Vcc	4010014	4010314	
			110Vca-50/ 60Hz	4010114	4010414	
			230Vca-50/	4010214	4010514	
P Level signal in seriespressure switch contact open under pressure	Type 3	3133804	24Vcc	4010014	4010314	
			110Vca-50/ 60Hz	4010114	4010414	
			230Vca-50/	4010214	4010514	
230Vca-60Hz			24Vcc	4010014	4010314	
			110Vca-50/ 60Hz	4010114	4010414	
			230Vca-50/	4010214	4010514	
230Vca-60Hz			24Vcc	4010015	4010315	
			110Vca-50/ 60Hz	4010115	4010415	
			230Vca-50/	4010215	4010515	
230Vca-60Hz			24Vcc	4010015	4010315	
			110Vca-50/ 60Hz	4010115	4010415	
			230Vca-50/	4010215	4010515	
P Level signal and parallelpressure switch contact open under pressure	Type 2	3133805	24Vcc	4010015	4010315	
			110Vca-50/ 60Hz	4010115	4010415	
			230Vca-50/	4010215	4010515	
230Vca-60Hz			24Vcc	4010015	4010315	
			110Vca-50/ 60Hz	4010115	4010415	
			230Vca-50/	4010215	4010515	
230Vca-60Hz			24Vcc	4010015	4010315	
			110Vca-50/ 60Hz	4010115	4010415	
			230Vca-50/	4010215	4010515	
P Level signal and parallelpressure switch contact close	Type 2	3133805	230Vca-60Hz	-	4010525	

## ACCESSORIES

ITEM	DESCRIPTION	PART NUMBER
<b>C</b> M12 X 1 CONNECTOR	4 poles plug connector -female	0039169
<b>D</b> MPM 193-07 CONNECTOR	5 poles plug connector -female	0039170
<b>A</b> DIN 43650 CONNECTOR	3 poles / heart connector –PG9 output cables	0039976
<b>B</b> DIN 40050 CONNECTOR	3 poles / heart -female- miniaturized connector	0039841

## SPARE PARTS

ITEM	DESCRIPTION	PART
PUMP	180 DC flow rate	3099166
	110Vac 50/60Hz single-phase - 140/175W 2	3301565
MOTOR	230Vac 50Hz single-phase - 135W 2P	3301567
	230Vac 60Hz single-phase - 170W 2P	3301600
	24Vcc	3301582
SENSOR	Magnetic	1655763
LEVEL	Optical	1639201
FILTER	1000µ grade	3130466

## SPARE PARTS

ITEM	DESCRIPTION	PART
RESERVOIR	2 l	6770102
	3 l	6770033
PRESSURE GAUGE	0-100 bar	0020564
PRESSURE SWITCH	NA 10~20 bar set.18bar	3291048
	NC 10~20 bar set.18bar	3291035
CONTROL PCB	110Vca	1639225
	230Vca	1639224
	24Vcc	1639226

Distributor Info: