

LUBRICATION SYSTEMS



MINI-MAX ELECTRIC GREASE PUMP

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ECONOMICAL

MODULAR

RELIABLE

COMPACT

The **Mini-Max** electric pump was designed to work both as a multi-outlet system and with **DPX** progressive distributors. Naturally both systems can also be combined. It is driven by a 12 V DC or 24 V DC gearmotor and is capable of pumping grease with a max consistency of NLGI 2. On demand it can be supplied with a Timer.

The pump can be equipped with a maximum of 10 pumping elements; two outlets can be connected to progressive distributors and eight outlets can be connected directly to the points to be lubricated. There is a spatulator in the lower zone to facilitate grease intake

- The version without minimum level indication has only the spatulator and scraper.
- The electrical connections specific for outdoors, together with the various sealing measures, give the pump a high protection level.

EARTH MOVING



AGRICULTURE



CONSTRUCTION MACHINERY



INDUSTRY

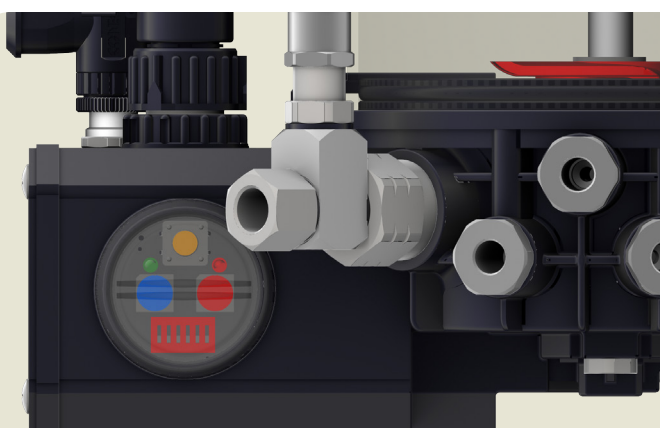


AUTOMOTIVE



GENERAL TECHNICAL FEATURES

Speed	22 RPM
Pumping system	With cam drive and return spring
Max number of outlets/pumping elements	8 single utilities – 2 progressive feed
Delivery connection (pumping outlet)	Single utility pumping elements M10x1 Metering pumping elements 1/8"
Nominal pumping discharge for single point	5 mm ³ /rev
	10 mm ³ /rev
	15 mm ³ /rev
	25 mm ³ /rev
	50 mm ³ /rev
Nominal pumping discharge progressive distributor	120 mm ³ /rev
Maximum reachable pressure	200 bar
Tank capacity	1 kg
Grease consistency	NLGI 2 at actual working temperature
Operating temperature	-10°C ÷ +60°C
Storage temperature	-20°C ÷ +80°C
Max relative humidity without operating condensation	90%
Sound pressure level	< 70 db (A)
Minimum level indication	Reed contact triggered by presser disk
	1.5 A 250 V AC – 200 V DC 50 W – NC o NA contact
Net weight	2,75kg



The **MINI-MAX** pump timer is housed inside the structure near the gearmotor and can be accessed by removing the transparent protective cap.

The transparency makes it possible to view the two LED's indicating power on and alarm level from the outside. Once the protection has been removed, the times and functions can be set in the desired mode and the manual pushbutton activated.

GENERAL TECHNICAL FEATURES OF INTERNAL TIMER

Power supply voltage	12 V DC – 24 V DC
Selectable working modes	Pause time hours minutes - Working times
	Pause time external pulses
	Pre-lubrication
	Quick grease dispensing change +/- 30%
Controls	Minimum electric level management
	Remote manual pushbutton
	Remote alarm signal
	Progressive distributor cycle control

39.

12.

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L.

VOLTAGE

12 V DC12

24 V DC24

TIMER

WITH TIMERT

WITHOUT TIMERX

ELECTRICAL LEVEL

WITH LEVELL

WITHOUT LEVELX

MINI PUMPS ORDERING CODES

ASSEMBLY POSITION

1	7	2	3	4	5	6	8	9	10
F	R.	A	A	B	C	X	X	A	B

SINGLE PUMPING ELEMENTS

METERING 5 mm³A

METERING 10 mm³B

METERING 15 mm³C

METERING 25 mm³D

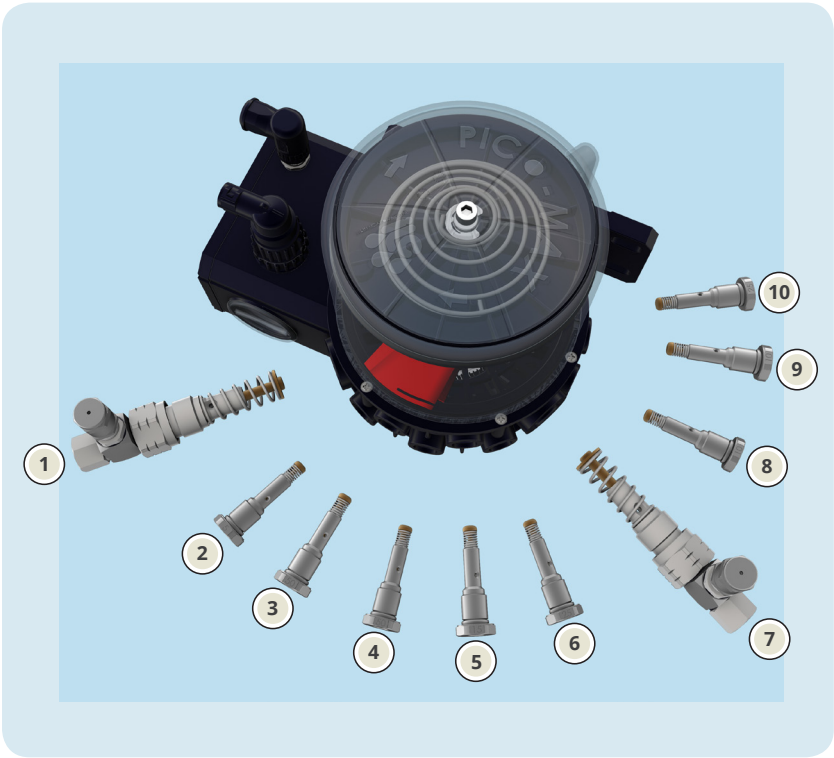
METERING 50 mm³E

METERING PUMPING ELEMENT

FIXEDF

ADJUSTABLER

NONOX

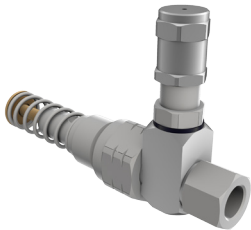


ASSEMBLY POSITION	PUMPING MODEL
1	FOR METERING DEVICES
7	FOR METERING DEVICES
2	SINGLE POINT
3	SINGLE POINT
4	SINGLE POINT
5	SINGLE POINT
6	SINGLE POINT
8	SINGLE POINT
9	SINGLE POINT
10	SINGLE POINT

IMPORTANT
If the model, quantity and position of the pumping elements are not specified, the control unit will have the standard supply of just one pumping element for the progressive distributors installed at position N°7.
Additional pumping elements can be ordered separately using the codes provided in the table below



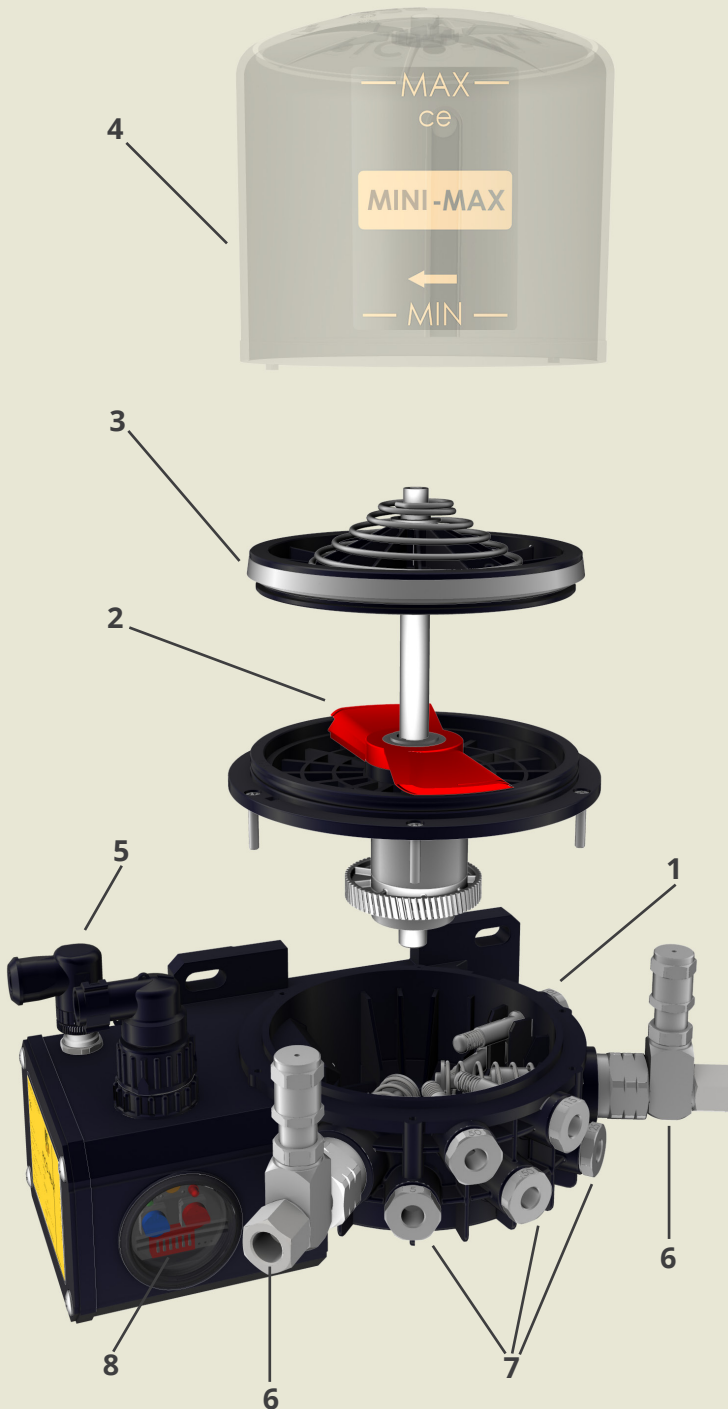
CODE OF PUMPING ELEMENTS FOR SINGLE POINT	DISCHARGE MM³/CYCLE	CODE OF PUMPING ELEMENTS FOR PROGRESSIVE DISTRIBUTORS	DISCHARGE MM³/CYCLE
90.940.0.05	5	00.900.0 Fixed discharge model	120
90.940.0.10	10	00.900.3 Adjustable discharge model	0-120
90.940.0.15	15		
90.940.0.25	25		
90.940.0.50	50		



The appearance of the products may be subject to change without notice

MAIN COMPONENTS

- | | |
|---|--------------------------------------|
| 1 | PUMP BODY |
| 2 | SPATULATOR |
| 3 | PRESSER DISK |
| 4 | TANK |
| 5 | ELECTRIC CONNECTION |
| 6 | PUMPING ELEMENT FOR METERING DEVICES |
| 7 | PUMP FOR SINGLE POINT |
| 8 | PROGRAMMING TIMER |



ACCESSORIES



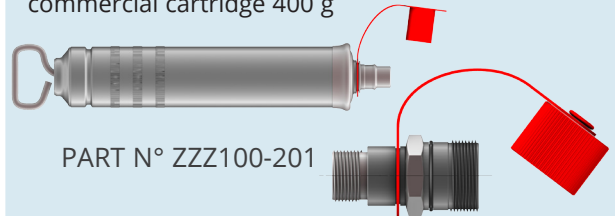
BLOCK WITH PRESSURE GAUGE AND GREASE NIPPLE

The block is installed on the delivery line to check pressure of the system and/or to fill it through a grease nipple
It can only be installed in pumping elements for progressive distributors

PART N° 40.BMI.01
PART N° 40.BMI.01 W/SAFETY VALVE

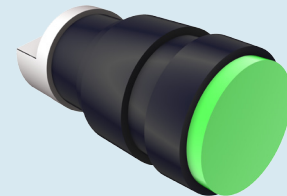
HAND PUMP AND ADAPTOR FOR FILLING TANK

They can be used by removing the yellow cap of the pumping element for the metering device not used and inserting the filling connection. Couple to commercial cartridge 400 g



PART N° ZZZ100-208

LUMINOUS BUTTON



VOLTS	COLOUR	MATERIAL	PART NUMBER
12	GREEN	PLASTIC	40.PBG.12
24	GREEN	PLASTIC	40.PBG.24

RESET BUTTON WITH LAMP



VOLTS	COLOUR	PART NUMBER
12	GREEN	40.PSG.12
24	GREEN	40.PSG.24
12	RED	40.PSR.12
24	RED	40.PSR.24

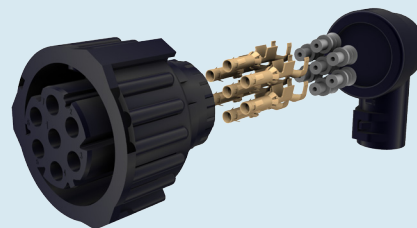
ELECTRIC CONNECTIONS

The **MINI-MAX** pump is supplied complete with 7 pole electric connector A91.111327. The supply includes 3 types of rubbers for different diameters and for unused contacts:

n. 7 part n° A91.111315 1.2 to 2.1 mm² cables

n. 7 part n° A91.111314 2.2 to 3 mm² cables

n. 7 part n° A91.111310 cap



On demand, the connector can be ordered complete with 3-wire or 7-wire cable (1 mm²) in 3 different lengths

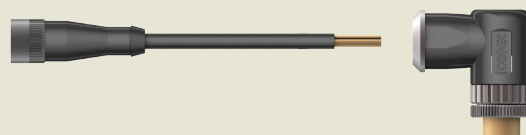
3-WIRE MODEL	PART N°	7-WIRE MODEL	PART N°
L. 5MT	40.CBL.3.05 5 M	L. 5MT	40.CBL.7.05 5 M
L. 10MT	40.CBL.3.10 10 M	L. 10MT	40.CBL.7.10 10 M
L. 15MT	40.CBL.3.15 15 M	L. 15MT	40.CBL.7.15 15 M



OPTIONAL ELECTRIC CONNECTIONS

In the version with internal timer, it is possible to manage a cycle controller of the metering device (if foreseen in the system). In this configuration, a second connector is inserted for the cable coming from the 3-wire cycle control

This configuration also comes with the connections complete with different sizes of cables



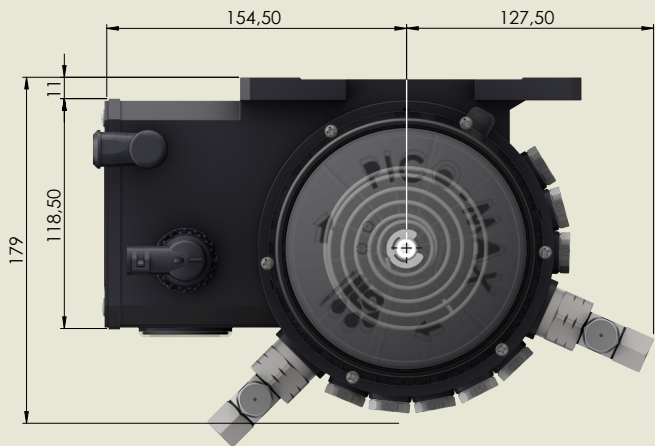
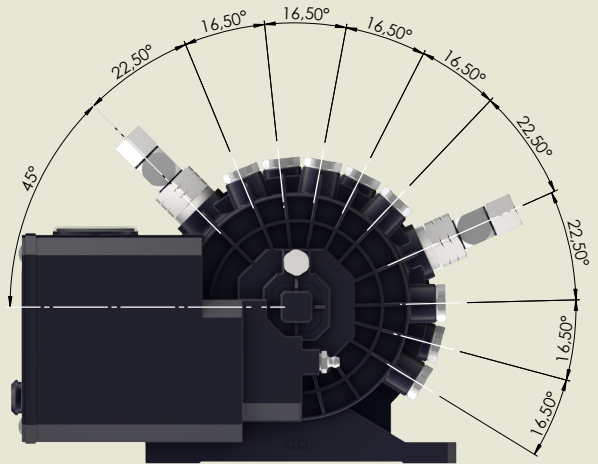
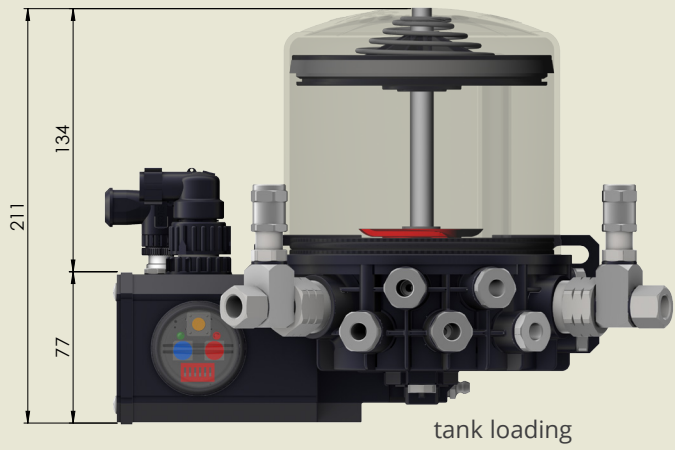
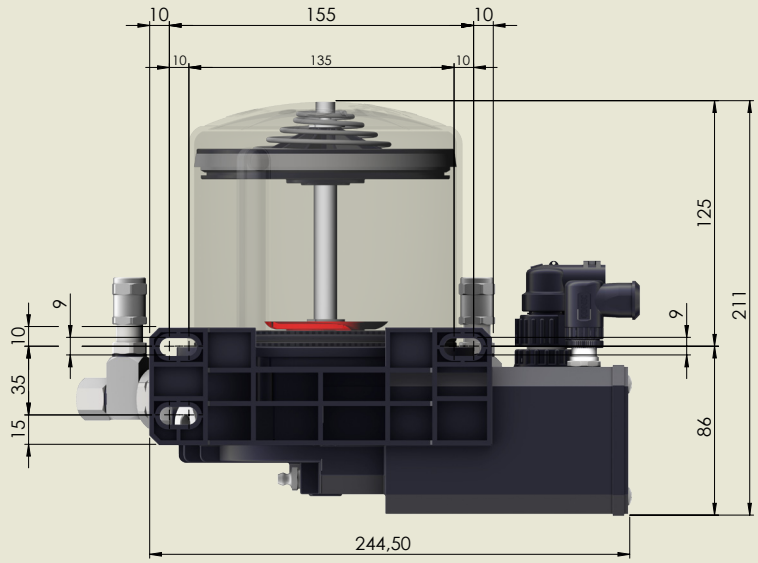
Both connections are positioned on the left-hand side of the pump as indicated in the figure to the side.

CONNECTION TO
INDUCTIVE
CONTROL
SENSOR OF THE
SYSTEM

POWER
CONNECTION
OF CYCLE ALARM
AND MINIMUM
LEVEL SIGNALS



OVERALL DIMENSIONS



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