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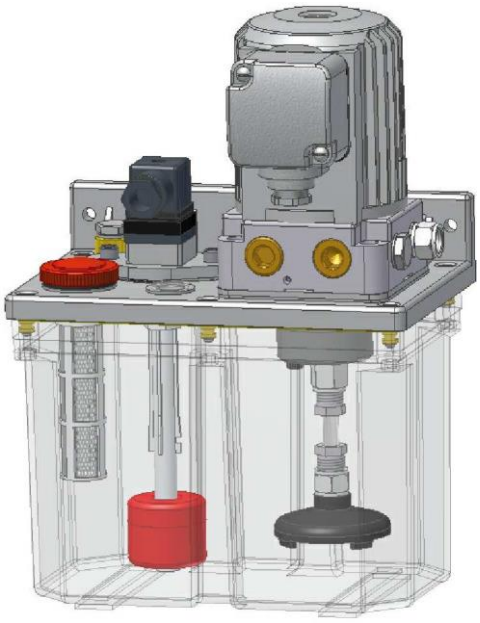
GE20-21-22-23

OIL lubrication group

Single line system

142.050.000



Application

As an intermittent operation unit to feed volumetric dosing meters in single-line systems.
The basic execution includes a motor/gear pump unit, as well as the necessary valves to control the pressure and decompression cycles in the circuit.

Operation

The working control of these units is external (without control): programming by means of the machine automatism or external control (cnc, automatic device, etc…)

It can be equipped with a electrical level for oil level control in the tank

Technical characteristics

Gear pump

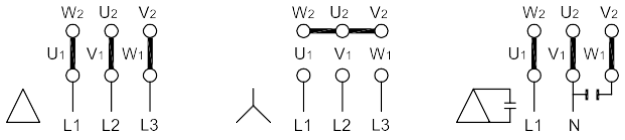
Lubricant ..... mineral or sinthetyc oils
Viscosity ..... 30 ÷ 1500 cSt
Flow ..... 0,2-0,5 l/min
Maximum pressure ..... 30 bar
Working temperature..... +10°C ÷ +40°C

Motor

Voltage.....	230/400V	24VDC
Frequency	50/60Hz	
Power.....	100W (50Hz)	55W
Consumption.....	0,5A (50Hz)	2,5A
rpm.....	2800 (50Hz)	2800

Service mode..... S3 20% *
Maximum operation time..... 5 min
Maximum cycles/hour.....20

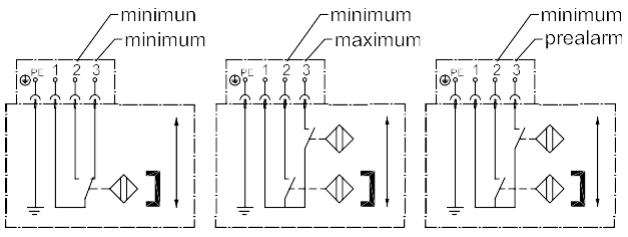
20% is the ratio between the operation time and the stop time
(1 minute of operation time corresponds to 5 minutes stop time)



CAUTION!!!
THE FOLLOWING SAFETY MEASURES MUST BE TAKEN: DISCONNECT THE MAIN SWITCH BEFORE CARRYING OUT CONNECTION COUPLING

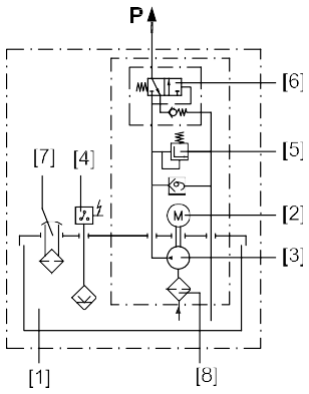
Electric level switch

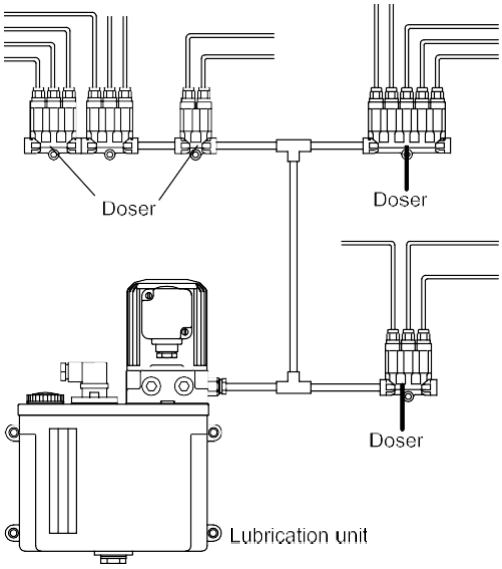
Type of contact ..... Reed
Maximun switching voltage.....230 VUC
Connection..... max. 0,5 A
Power breakdown..... max. 30 W
Connector.....DIN EN 175301-803
Function ..... see diagram



Hydraulic diagram

1-Tank
2-Electric motor
3-Gear pump
4-Level switch
5-Pressure limiting valve
6-Relief valve
7-Filling cap-filter
8-Suction filter
P-Pressure outlet





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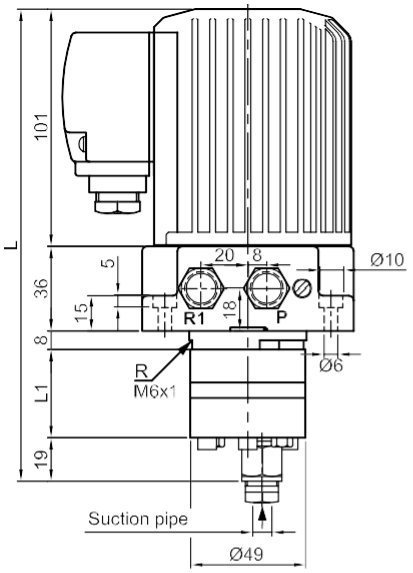
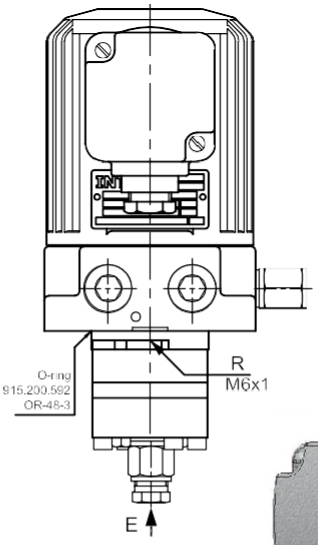
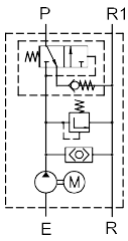
Motor-pump unit for OIL
Single line system

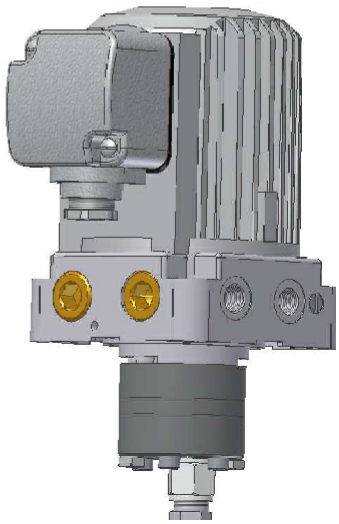
GE20/A
142.120.000

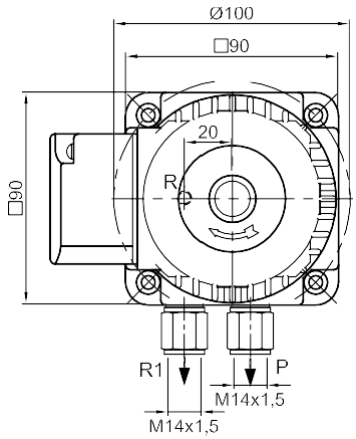






P = Pressure outlet
E = Suction
R = Return directly to the tank
R1 = Return distance to the tank





GE20/A – 1 – X X X

Mounting position	Flow l/min	Voltage
1 Upon tank	2 0,2	0 24Vdc
2 Outside the tank	5 0,5	3 230/400V 50/60Hz
	7 1,0	

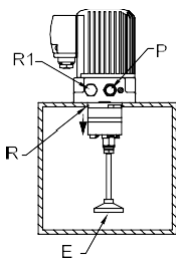
Indications about the mounting position:

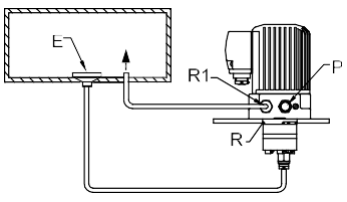
We recommend vertical mounting (pump downwards).
If is necessary horizontal mounting, verify especially its seal (try to the oil level d'ont cover the pump). ask us in this case.

The pump can be mounted upon the tank or outside.
In both cases, the return of the remaining flow of the limit valve has to be foreseen

Mounting upon the tank
Plug "R1" so that the remaining oil returns bY "R" directly to the tank.

Mounting outside the tank
Plug "R"
Join "R1" with the tank for the return
Join "E" with the tank for the suction





Sizes

Flow	L	L1	E (Suction pipe Ø)
0,2 L/min	197	34	M14x1,5 (Ø8x1)
0,5 L/min	201	38	M14x1,5 (Ø8x1)
1,0 L/min	207	44	M16x1,5 (Ø10x1)

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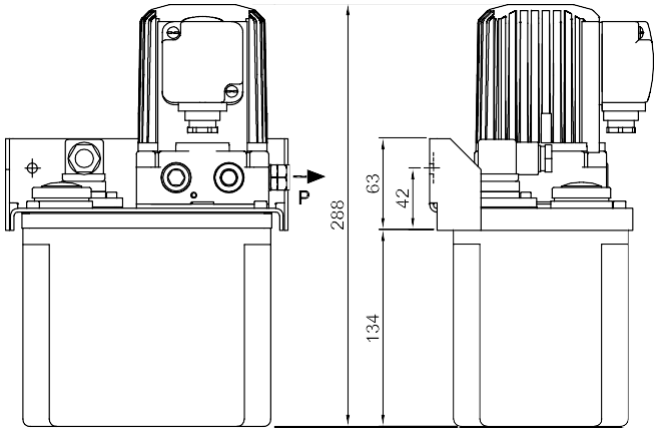
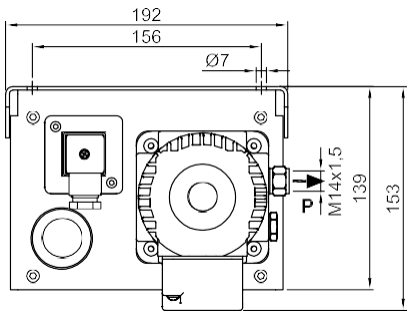
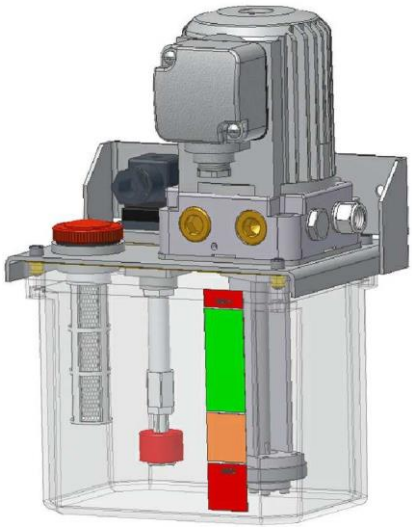
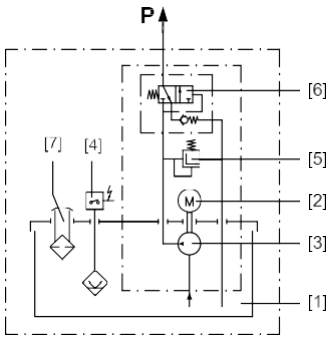






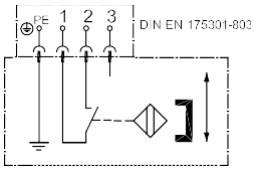
Hydraulic diagram

1-Tank
2-Electric motor
3-Gear pump
4-Level switch
5-Pressure limiting valve
6-Relief valve
7-Filling cap-filter
P-Pressure outlet

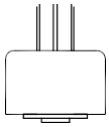


Level switch

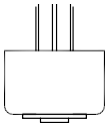
Type of contact	Reed
Maximun switching voltage	230 VUC
Connection	0,5 A
Power breakdown	20 W
Connector	DIN EN 175301-803
Function	NO contact



Reversing the position of the float on the guide tube is changed the position of contact: from open to closed and vice versa.



Rounded corners downwards: opened contact



Rounded corners upwards: closed contact

GE21 / (X) – 1 – (X) (X) (X)

Tank capacity	Flow l/min	Level switch	Voltage
(A) 2 Litres	(1) 0,1	(5) Nivel mínimo	(3) 230/400V

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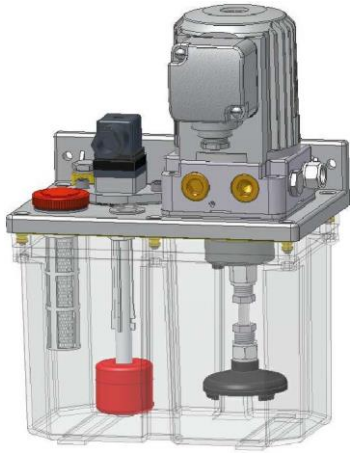
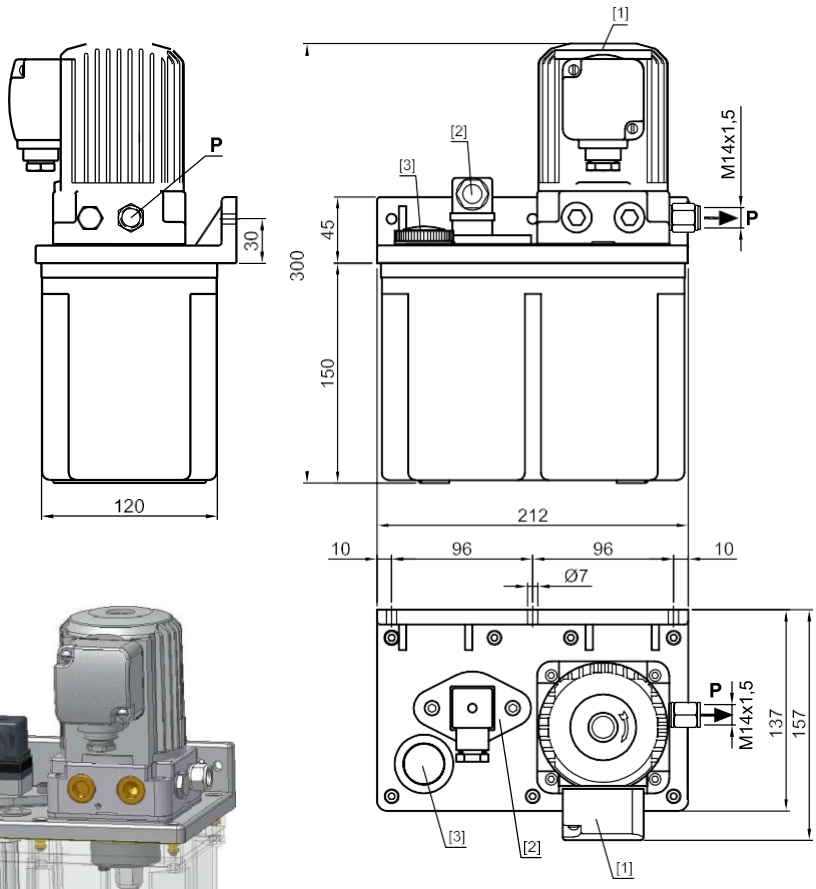
Lubrication group for **OIL**
Single line system

GE21/B
3L plastic

142.050.000

[1] Electric motor
[2] Level switch
[3] Filling cap-filter





GE21/(X)−1−(X)(X)(X)

Tank capacity	FLow l/min	Level switch		Voltage
(B) 3 litres	(2) 0,2	(0)	Without	(0) 24Vdc
	(5) 0,5	(5)	Minimum level	(3) 230/400V 50/60Hz
		(6)	Maximum-minimum level	
		(7)	Prealarm+minimum level	

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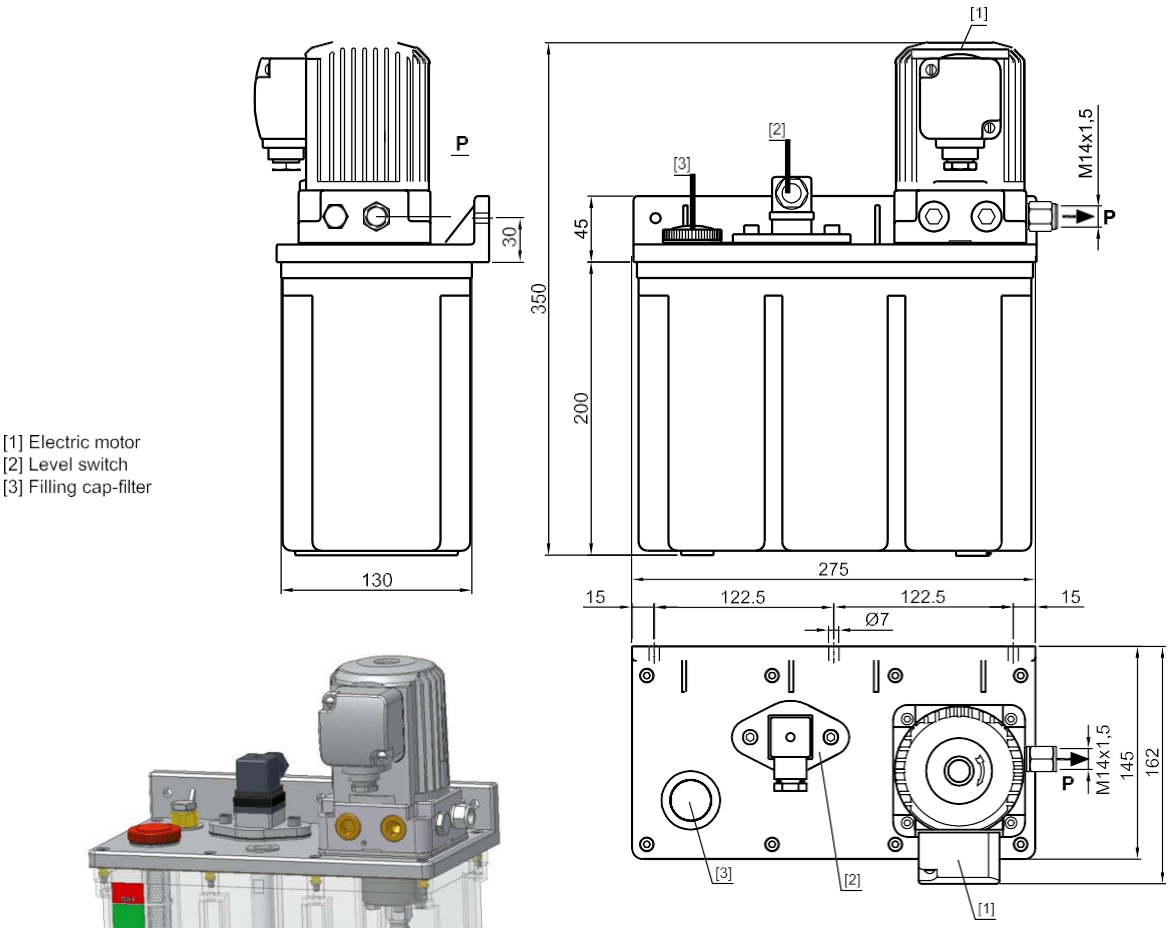
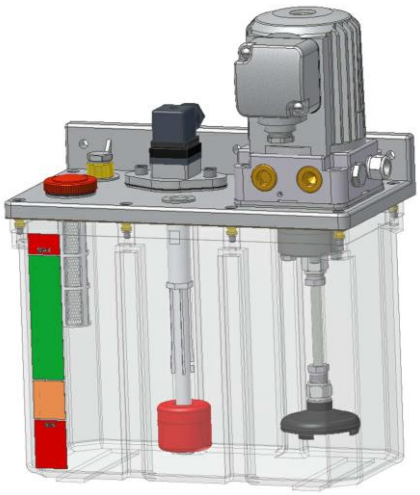
[1] Electric motor
[2] Level switch
[3] Filling cap-filter





GE21 / (X) – 1 – (X) (X) (X)

Tank capacity	FLow l/min	Level switch		Voltage
(C) 6 litres	(2) 0,2	(0)	Without	(0) 24Vdc
	(5) 0,5	(5)	Minimum level	(3) 230/400V 50/60Hz
		(6)	Maximum-minimum level	
		(7)	Prealarm+minimum level	

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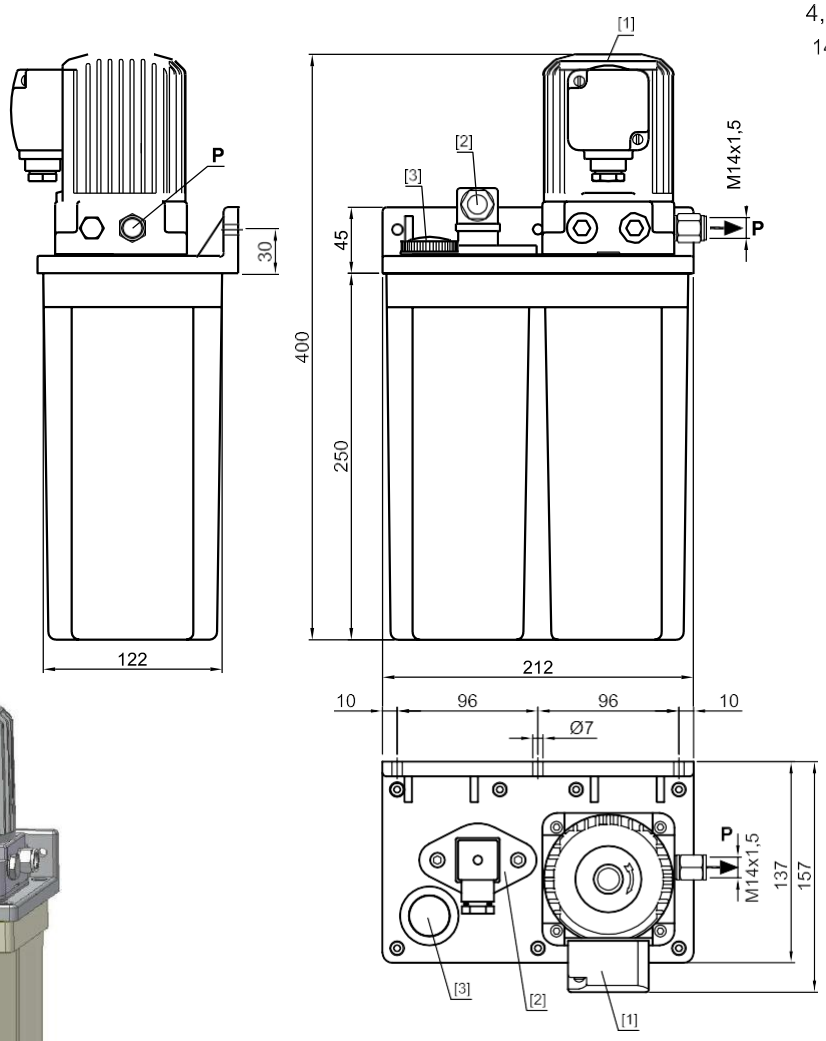
Lubrication group for **OIL**

Single line system

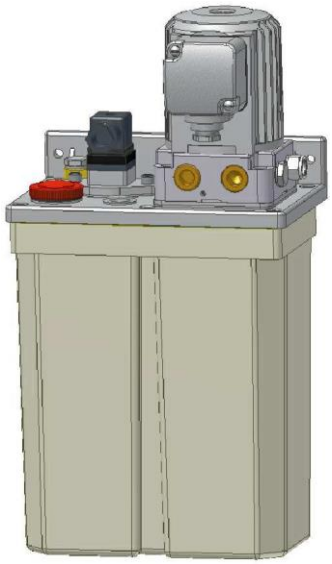
GE21/H

4,5L plastic

142.060.000



[1] Electric motor
[2] Level switch
[3] Filling cap-filter



GE21 / (X) – 1 – (X) (X) (X)

Tank capacity	FLow l/min	Level switch	Voltage
(H) 4,5 litres	(2) 0,2 (5) 0,5	(0) Without (5) Minimum level (6) Maximum-minimum level (7) Prealarm+minimum level	(0) 24Vdc (3) 230/400V 50/60Hz

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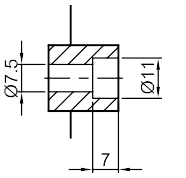
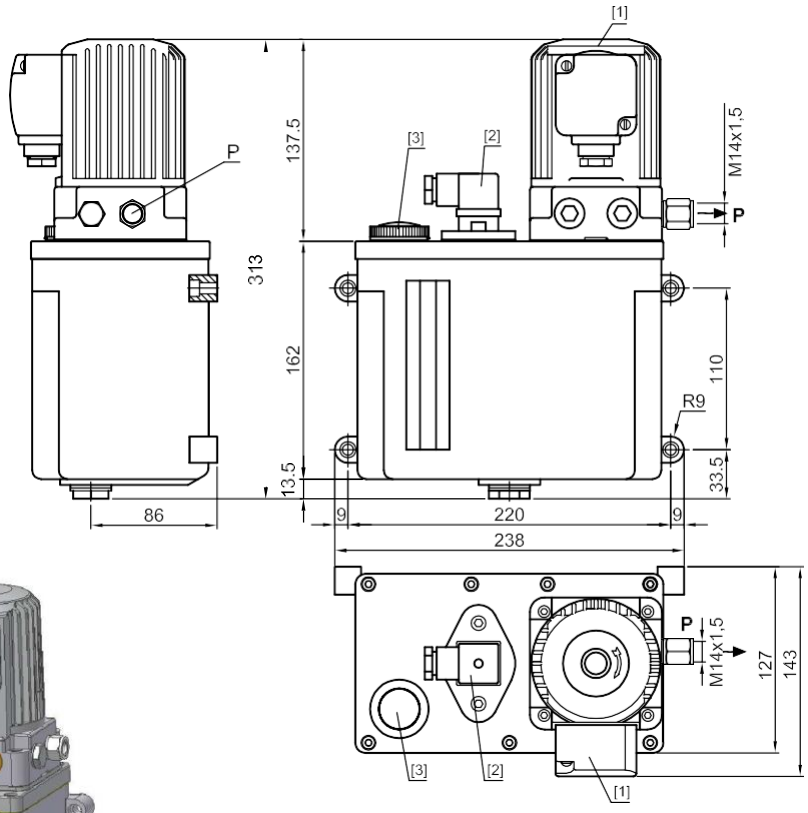
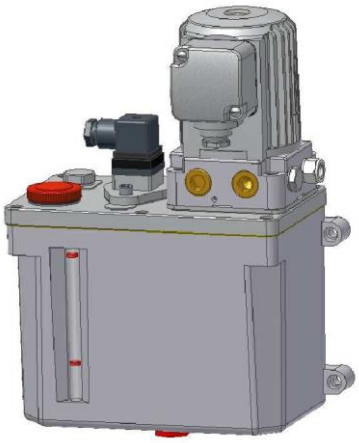
3L aluminium
142.070.000



[1] Electric motor
[2] Level switch
[3] Filling cap-filter





GE22 / (X) – 1 – (X) (X) (X)

Tank capacity	FLow l/min	Level switch	Voltage
(B) 3 litres	(2) 0,2 (5) 0,5	(0) Without (5) Minimum level (6) Maximum-minimum level (7) Prealarm+minimum level	(0) 24Vdc (3) 230/400V 50/60Hz

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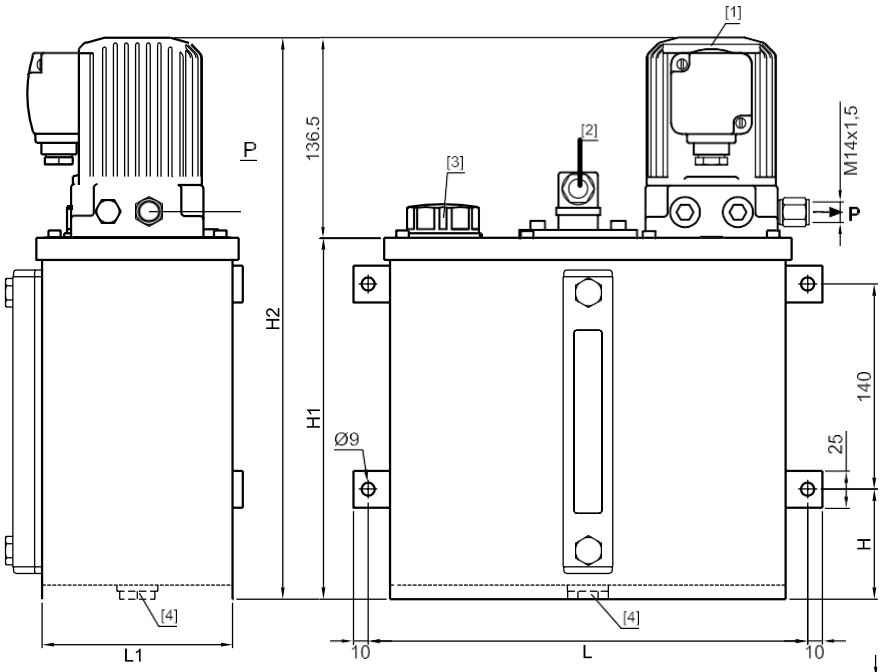
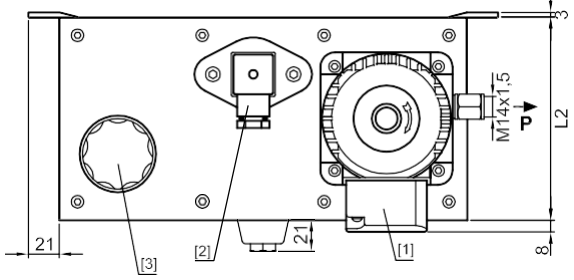
GE23/C 6L metal 142.080.000
GE23/D 10L metal 142.085.000
GE23/E 16L metal 142.090.000

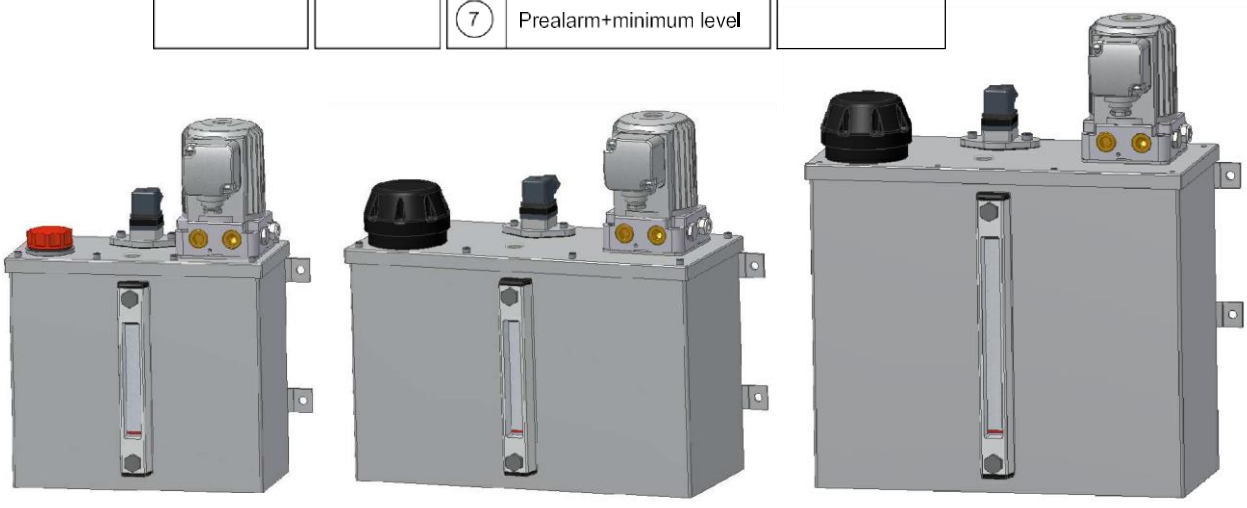


[1] Electric motor
[2] Level switch
[3] Filling cap-filter
[4] Drain plug



Sizes

Capacity	L	L1	L2	H	H1	H2
6 litres	300	130	138	75	247	385
10 litres	405	155	163	75	247	385
16 litres	405	155	163	155	327	465

GE23/(X)-1-(X)(X)(X)

Tank capacity	FLow l/min	Level switch	Voltage
(C) 6 litres	(2) 0,2	(0) Without	(0) 24Vdc
(D) 10 litres	(5) 0,5	(5) Minimum level	(3) 230/400V 50/60Hz
(E) 16 litres		(6) Maximum-minimum level	
		(7) Prealarm+minimum level