

## Lubrication unit for OIL

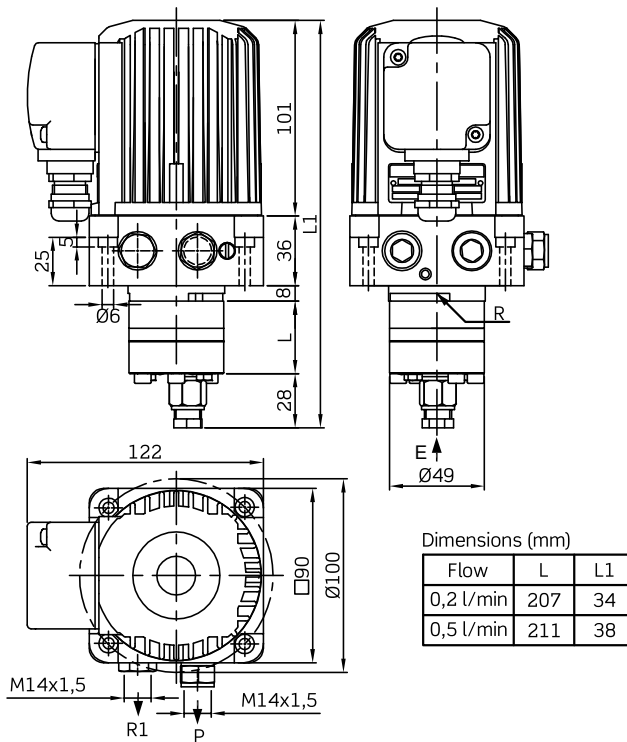
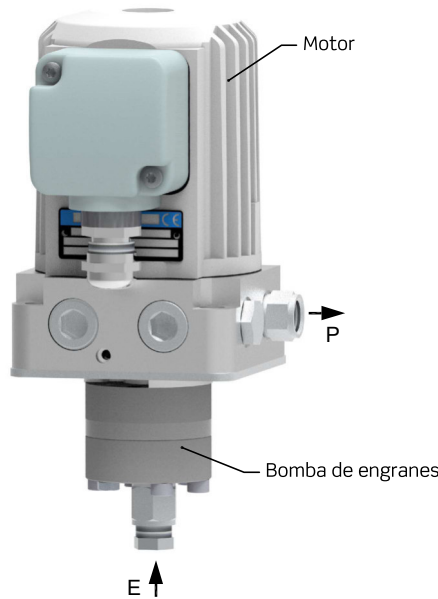
**GE20/A**  
142.120.000

### Single line system

- Pump flows: 0,2 - 0,5 l/min
- Without tank
- 230/400V electric motor

### Application

As an intermittent operation unit to feed volumetric dosers in single-line systems.

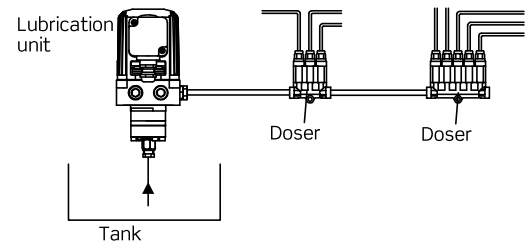


E = M14x1,5 suction inlet  
(including internal fitting and sleeve for Ø8 pipe)

P = pressure outlet (see accessories in page 3)

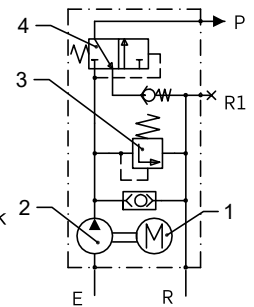
R = direct return to the tank (mounting the unit upon the tank)

R1 = distanced return  
(mounting the unit outside the tank).  
If mounting upon tank, R1 is plugged.



### Hydraulic schema

- 1-Electric motor
- 2-Gear pump
- 3-Pressure limiting valve
- 4-Relief valve
- E-Suction inlet
- P-Pressure outlet
- R-Direct return to tank
- R1-Return distance to the tank



### Technical data

#### Gear pump

Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 - 0,2 - 0,5 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

#### Electric motor

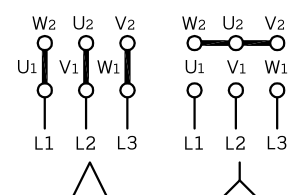
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

#### 230/400V

Frequenz ..... 50 ..... 60 ..... Hz  
Voltage..... Δ 207-254 ..... Δ 249-305 ..... V  
Y 360-440 ..... Y 432-528 ..... V  
Power..... 100 ..... 110 ..... W  
Consumption..... Δ 0,5/Y0,3 ..... Δ 0,5/Y0,3 ..... A

#### Connection:

Ø5...Ø10 mm cable  
cable gland



Lubrication unit  
 without tank

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GE20/A - X / X - X - X X

Mounting position	X	Pump flow	X	Outlet accessories	X	Voltage	X	Motor connector	X
Upon tank	1	0,2 l/min	2	Without	0	230/400V	0	Terminal box with cable gland	3
Outside the tank	2	0,5 l/min	5	Pressure gauge	1				
Horizontal under nivel	3			Pressure gauge and pressure switch	2				
				Digital pressure switch with display	3				

Indications about the mounting position

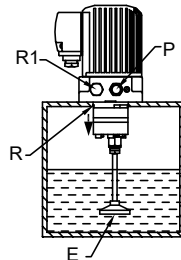
Vertical mounting (pump downwards) is recommended.

The pump can be mounted upon the tank or outside.

In both cases, the return of the remaining flow of the pressure limiting valve has to be foreseen.

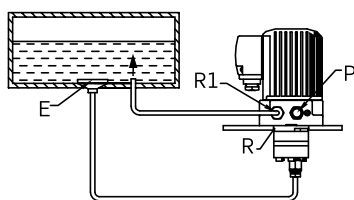
[ 1 ] Mounting upon the tank

R1 is plugged, so that the remaining oil flow returns by R directly to the tank



[ 2 ] Mounting outside the tank

- R is plugged
- Connect R1 to the tank for the oil return
- Connect E to the tank for the oil suction

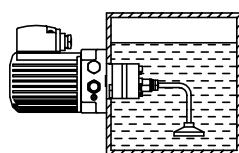


[ 3 ] Horizontal mounting

Try that the oil level doesn't cover the pump

Mounting under oil level requires a special seal to ensure the sealing of the unit

Ask us in this case.

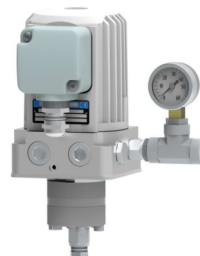


Outlet accessories

[ 0 ] Free outlet  
 M14x1,5 thread



[ 1 ] With pressure gauge  
 G1/4 thread



[ 2 ] With pressure gauge and pressure switch  
 M14x1,5 thread



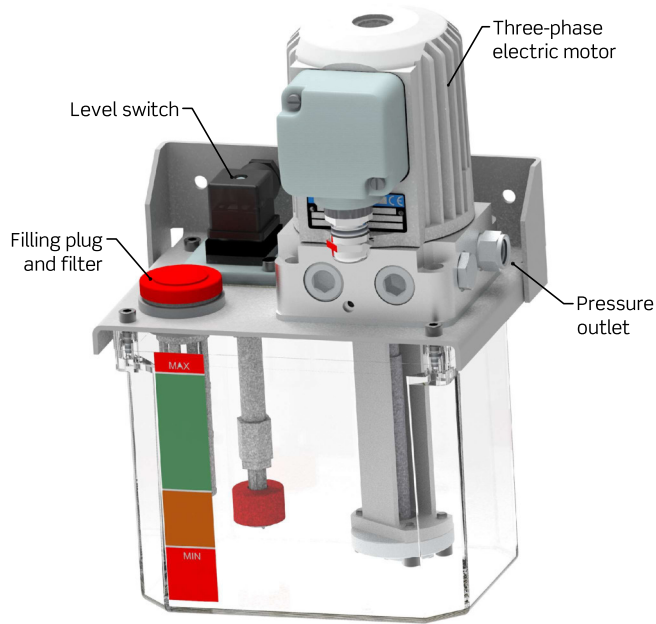
[ 3 ] Digital pressure switch with display  
 Ø8 pipe outlet



Motor connector

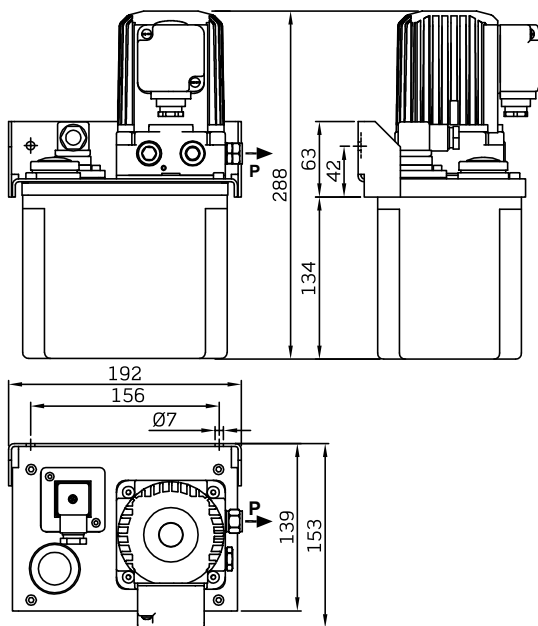
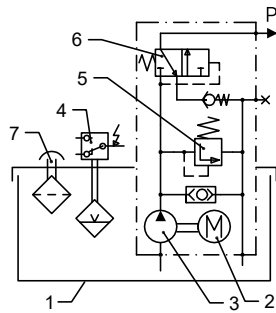
[ 3 ] 230/400V motor with terminal box and Ø5...10 mm cable gland





### Hydraulic schema

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



## Lubrication unit for OIL

**GE21/A**  
142.050.000

### Single line system

- Flow: 0,1 l/min
- 2 litres transparent or nylon tank
- 230/400V electric motor

### Application

As an intermittent operation unit to feed volumetric dosers in single-line systems.

### Technical data

#### Gear pump

Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

#### Electric motor

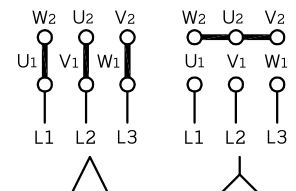
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

#### 230/400V

Frequenz ..... 50 ..... 60 ..... Hz  
Voltage..... Δ 207-254 ..... Δ 249-305 ..... V  
Y 360-440 ..... Y 432-528 ..... V  
Power..... 100 ..... 110 ..... W  
Consumption..... Δ0,5/Y0,3 ..... Δ0,5/Y0,3 ..... A

#### Connection:

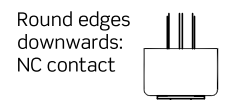
Ø5...Ø10 mm cable  
cable gland



### Electric level switch

Function.....minimum level  
Contact type ..... Reed  
Maximum switching voltage..... 230 VUC  
Maximum switching consumption..... max. 0,5 A  
Maximum power breakdown..... max. 30 W

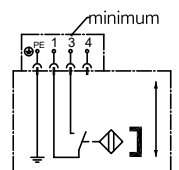
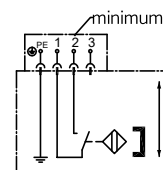
By reversing the position of the float the electric contact is modified: from open to close and viceversa



#### Electric connection:

DIN43650-A connector

M12x1 connector



### Materials

Lid..... steel with anticorrosive treatment  
Reservoir ..... optional transparent or nylon

Lubrication unit for OIL with 2 litres tank

**GE21/A**

142.050.000

GE21 / A-1 / X X X 2 - X - X - X X

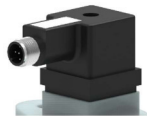
Reservoir material	X	Level switch	X	Level sw. connector	X	Pump flow	X	Outlet accessories	X	Voltage	X	Electric motor connection	X
Transparent plastic	4	Without	0	Without	0	0,1 l/min	1	Without	0	230/400V	3	Terminal box with cable gland	3
Nylon	6	Minimum level	5	DIN	1			Pressure gauge	1				
				M12x1	2			Press. gauge and press. switch	2				
								Digital press. switch with display	3				

Level switch connector

[1]  
DIN43650-A



[2]  
M12x1



Outlet accessories

[0]  
Free outlet  
M14x1,5 thread



[1]  
With pressure gauge  
G1/4 thread



[2]  
With pressure gauge and pressure switch  
M14x1,5 thread



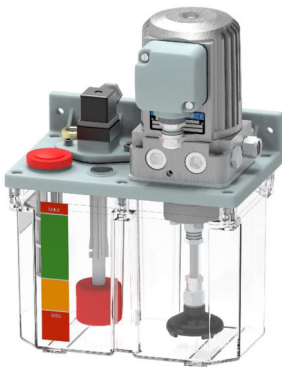
[3]  
Digital pressure switch with display  
Ø8 pipe outlet



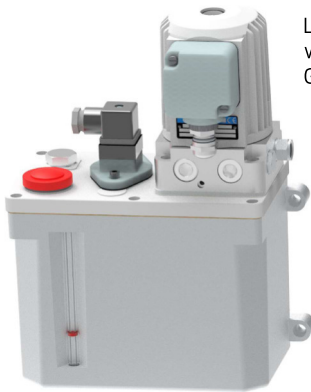
Motor connector

[3]  
230/400V motor with terminal box and Ø5...10 mm cable gland

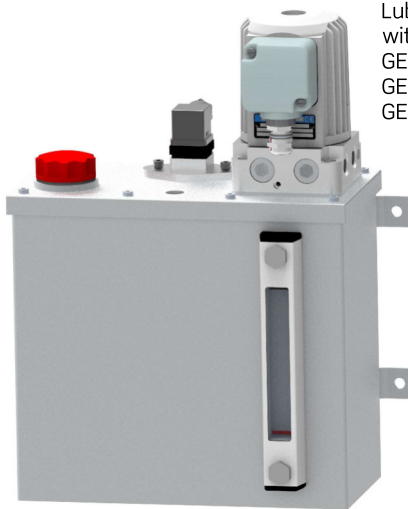




Lubrication units with plastic tanks  
GE21/B (3 litres)  
GE21/C (6 litres)  
GE21/H (4 litres)



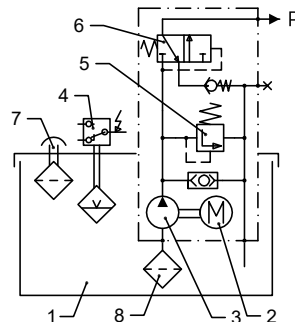
Lubrication unit with aluminum tank  
GE22/B (3 litres)



Lubrication units with metallic tanks  
GE23/C (6 litres)  
GE23/D (10 litres)  
GE23/E (16 litres)

**Hydraulic schema**

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



**Lubrication units for OIL**

**GE21**  
**GE22**  
**GE23**  
142.050.000

**Single line system**

**Application**

As an intermittent operation unit to feed volumetric dosers in single-line systems.

**Technical data**

**Gear pump**

Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 - 0,2 - 0,5 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

**Electric motor**

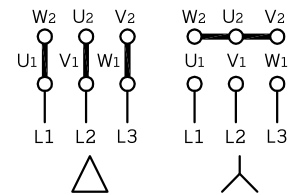
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

**230/400V**

Frequenz ..... 50 ..... 60 ..... Hz  
Voltage..... Δ 207-254 ..... Δ 249-305 ..... V  
                  Y 360-440 ..... Y 432-528 ..... V  
Power..... 100 ..... 110 ..... W  
Consumption..... Δ0,5/Y0,3 ..... Δ0,5/Y0,3 ..... A

**Connection:**

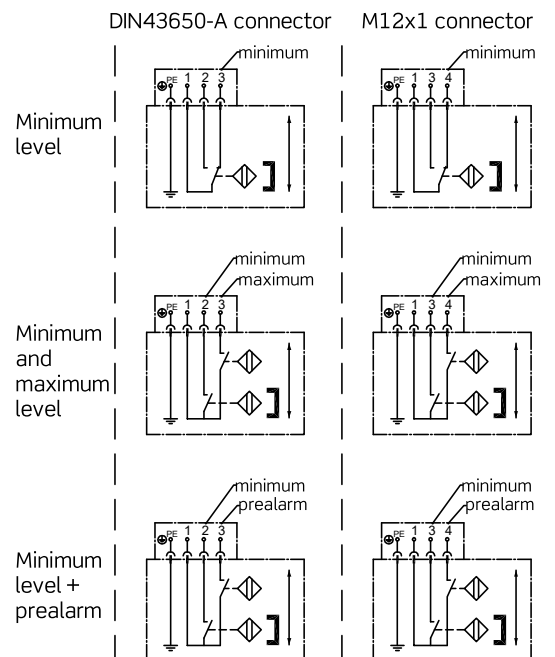
Ø5...Ø10 mm cable  
cable gland



**Level switch**

Function..... see schemas  
Contact type ..... Reed  
Maximum switching voltage..... 230 VUC  
Maximum switching consumption..... max. 0,5 A  
Maximum power breakdown..... max. 30 W

**Level switch connection:**

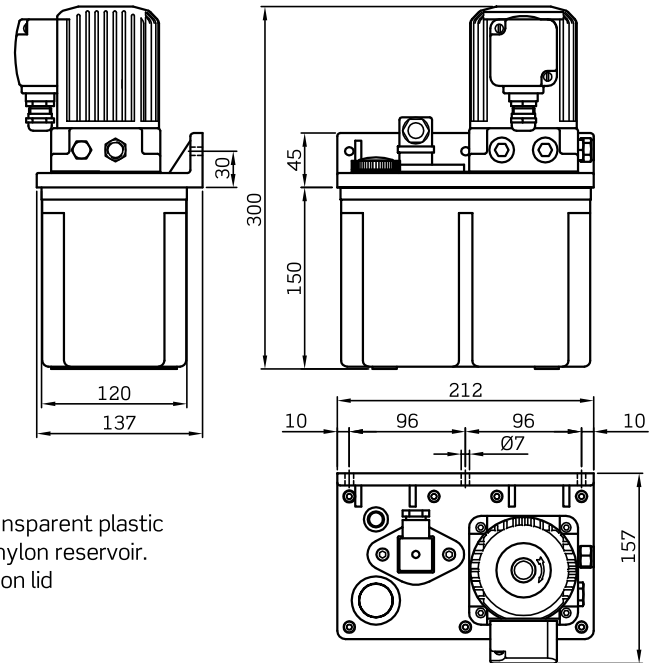
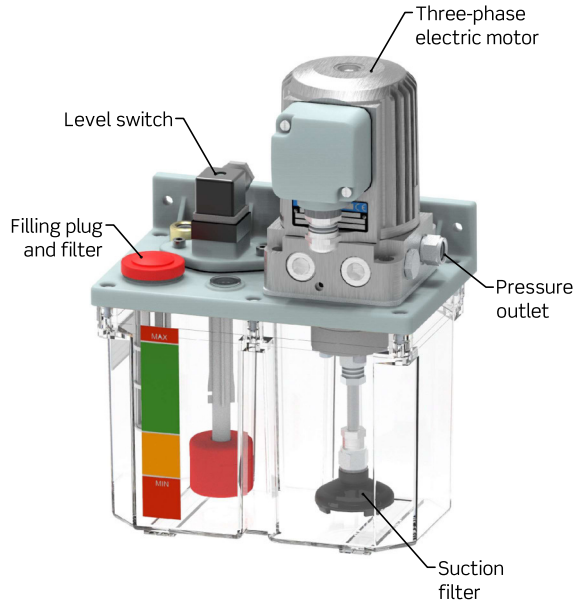


Lubrication units for oil  
 Single line system

-3 litres tank-

GE21/B

142.050.000

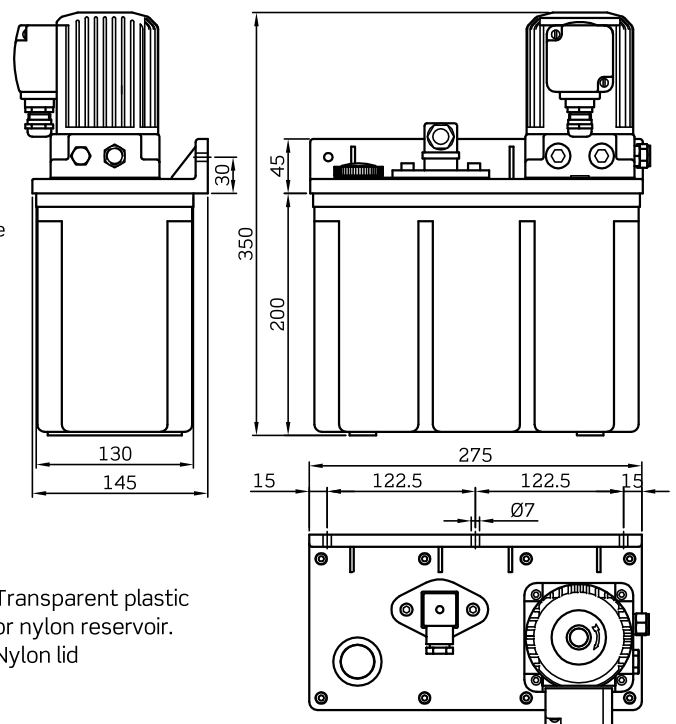
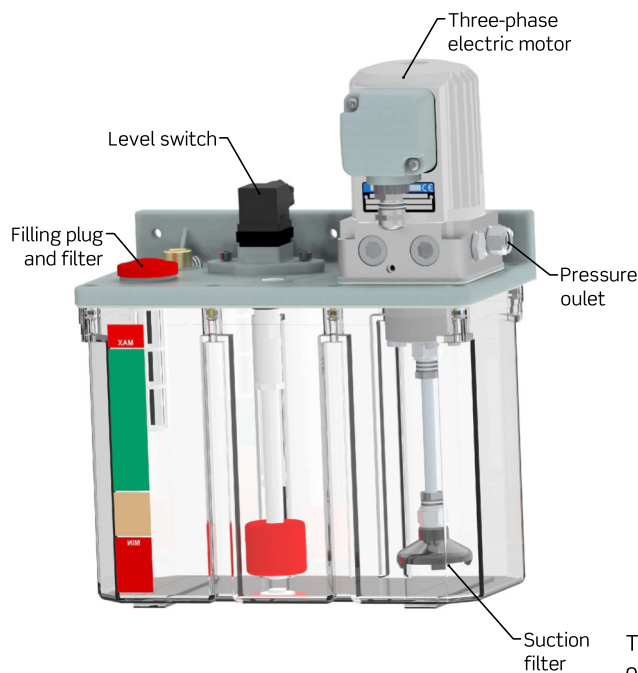


Transparent plastic  
 or nylon reservoir.  
 Nylon lid

-6 litres tank-

GE21/C

142.055.000



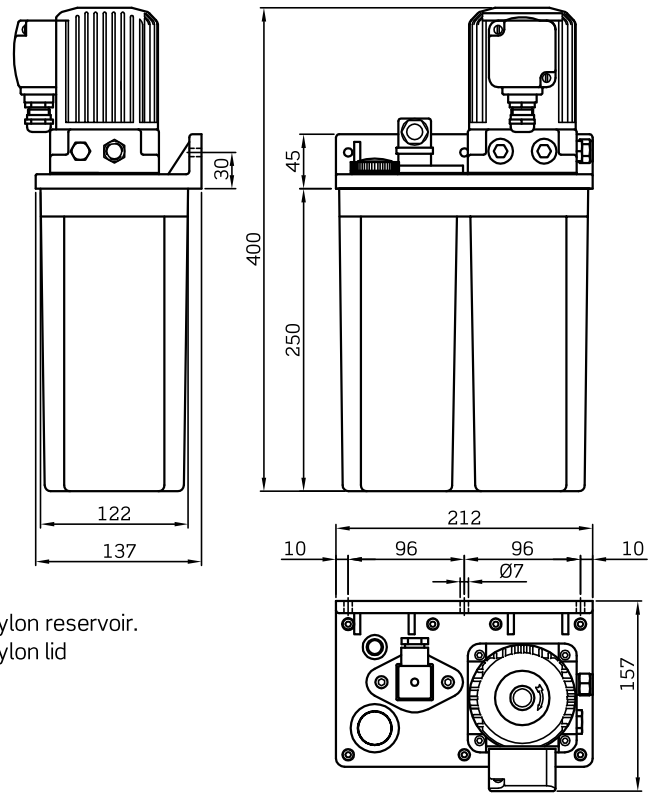
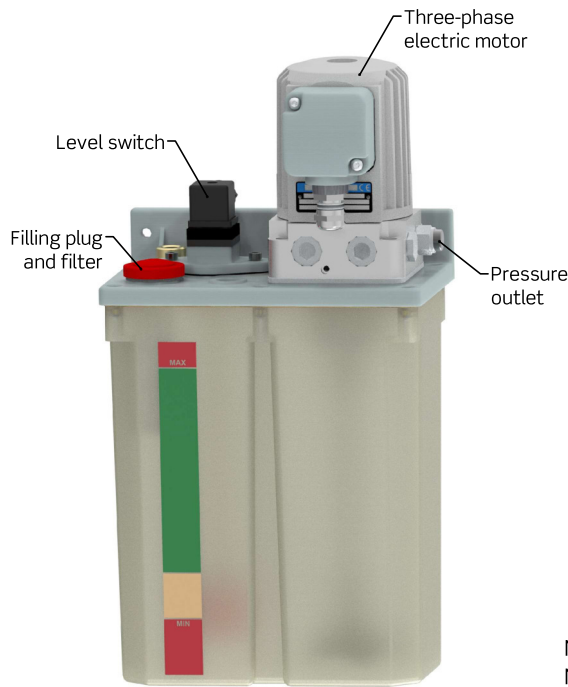
Transparent plastic  
 or nylon reservoir.  
 Nylon lid

Lubrication units for oil  
 Single line system

-4 litres tank-

GE21/H

142.055.000

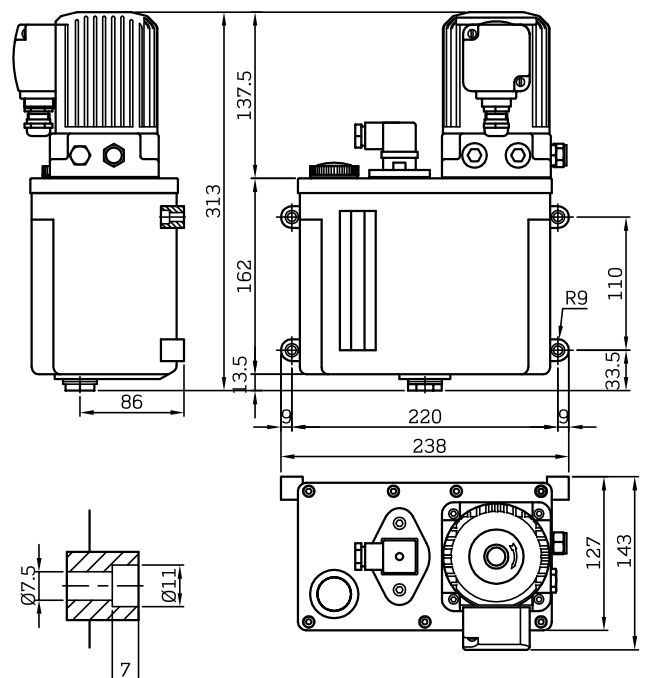
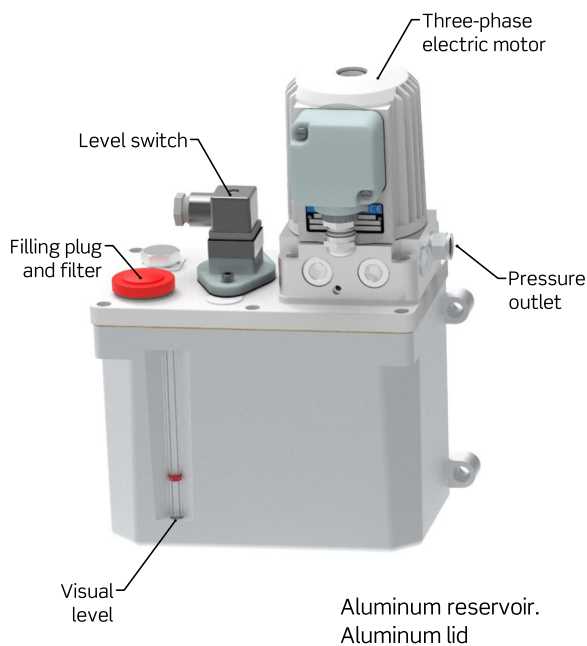


Nylon reservoir.  
 Nylon lid

-3 litres tank-

GE22/B

142.070.000



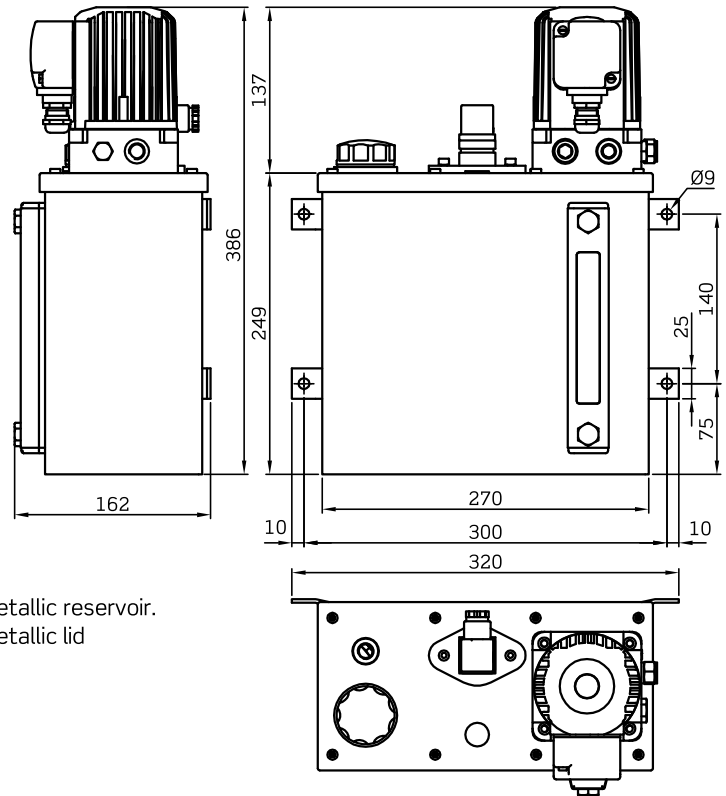
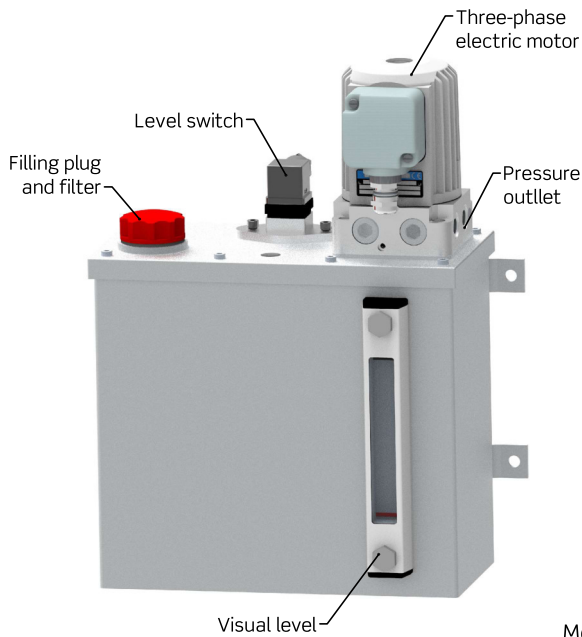
Aluminum reservoir.  
 Aluminum lid

Lubrication units for oil  
 Single line system

-6 litres tank-

GE23/C

142.080.000

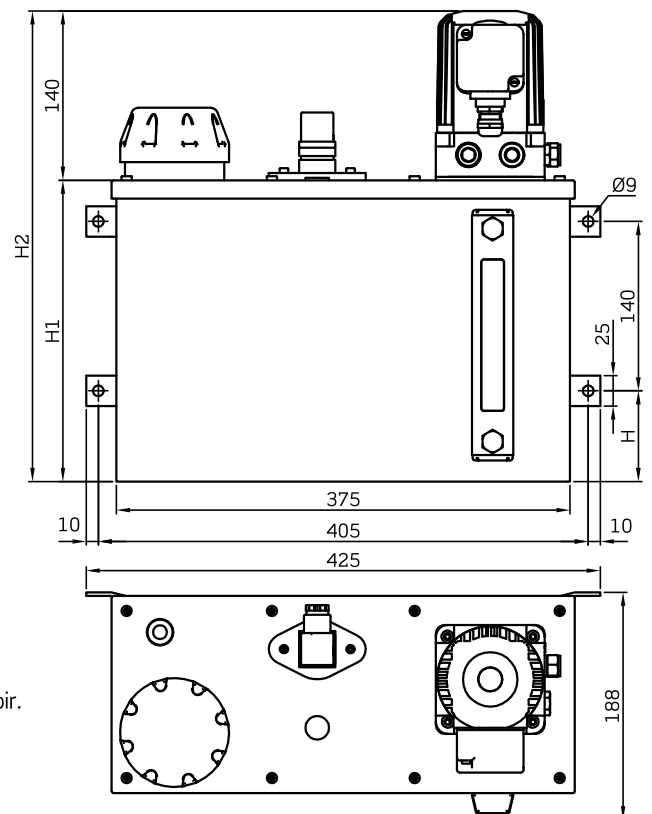
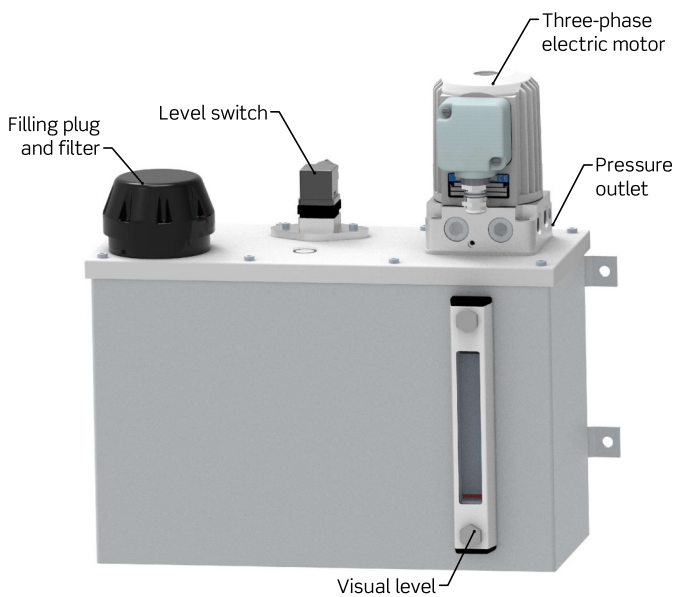


Metallic reservoir.  
 Metallic lid

-10 and 16 litres tank-

GE23/D GE23/E

10L metal 16l metal  
 142.085.000 142.090.000



Metallic reservoir.  
 Metallic lid

Dimensions (mm)

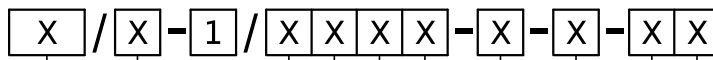
Capacity	H	H1	H2
10 litres	75	249	389
16 litres	155	329	469



Lubrication units for OIL with 3-4-6-10-16 litres tank

GE21 - GE22 - GE23

142.050.000



Model	Tank capac.	X	Reservoir material	X	Level switch	X	Level connector	X	Filling system	X	Pump flow	X	Outlet accessories	X	Voltage	X	Motor connection	X															
GE21	3L	B	Transp. plastic	4	Without	0	Without	0	Plug and filter	2	0,2 l/min	2	Without	0	230/400V	3	Terminal box with cable gland	3															
	6L	C	Nylon	6	Minimum	5	DIN	1	Ø10 straight fitting	3	0,5 l/min	5	Pressure gauge	1																			
	4L	H	Nylon	6	Maximum-minimum	6							M12x1	2					Pressure gauge and press. switch	2													
GE22	3L	B	Aluminum	3	Minimum+prealarm	7			Quick coupling	4			Digital press. switch with display	3																			
GE23	6L	C	Metal	5																													
	10L	D																	Aisi	7													
	16L	E																															

Level switch connector

[1]  
DIN43650-A



[2]  
M12x1

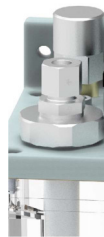


Filling system

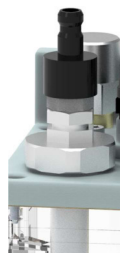
[2]  
Plug with filter



[3]  
Ø10 straight fitting  
(with down tube  
and breather)



[4]  
Quick coupling  
(with down tube  
and breather)



Outlet accessories

[0]  
Free outlet  
M14x1,5 thread



[1]  
With pressure  
gauge  
G1/4 thread



[2]  
With pressure  
gauge and  
pressure switch  
M14x1,5 thread



[3]  
Digital pressure  
switch with  
display  
Ø8 pipe outlet



Motor connector

[3]  
230/400V motor  
with terminal box  
and Ø5...10 mm cable  
cable gland



## Lubrication unit for OIL

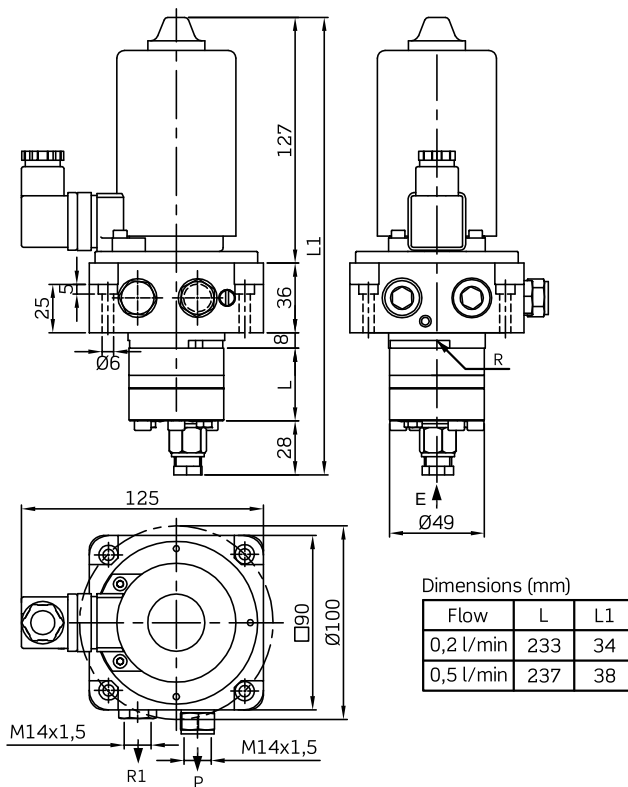
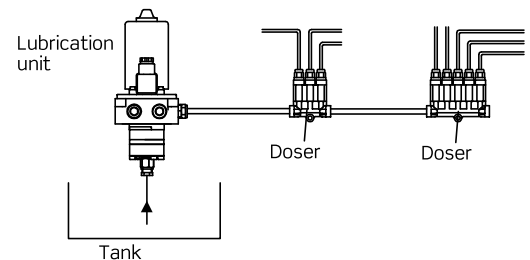
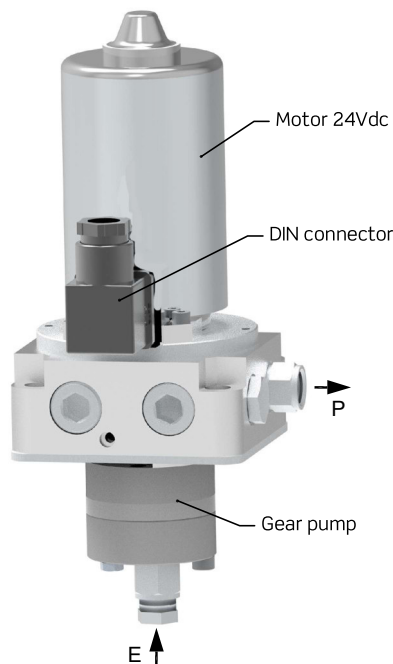
**GE20/A**  
142.120.000

### Single line system

- Pump flows: 0,2 - 0,5 l/min
- Without tank
- 24VDC electric motor
- Motor connector optional DIN / M12x1

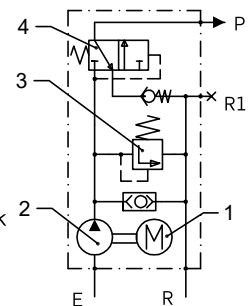
### Application

As an intermittent operation unit to feed volumetric dosers in single-line systems.



### Hydraulic schema

- 1-Electric motor
- 2-Gear pump
- 3-Pressure limiting valve
- 4-Relief valve
- E-Suction inlet
- P-Pressure outlet
- R-Direct return to tank
- R1-Return distance to the tank



### Technical data

#### Gear pump

Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 - 0,2 - 0,5 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

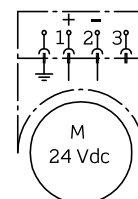
#### Electric motor

Voltage..... 24VDC  
Power..... 55W  
Consumption..... 2,5A (±20%)  
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

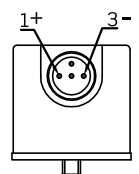
Connection:

DIN 43650 connector

Form A



M12x1 connector



- E = M14x1,5 suction inlet (including internal fitting and sleeve for Ø8 pipe)
- P = pressure outlet (see accessories in page 3)
- R = direct return to the tank (mounting the unit upon the tank)
- R1 = distanced return (mounting the unit outside the tank). If mounting upon tank, R1 is plugged.

Lubrication unit  
without tank

GE20/A  
142.120.000

GE20/A - X / X - X - X X

Mounting position	X	Pump flow	X	Outlet accessories	X	Voltage	X	Motor connector	X
Upon tank	1	0,2 l/min	2	Without	0	24VDC	0	DIN connector	1
Outside the tank	2	0,5 l/min	5	Pressure gauge	1			M12x1 connector	2
Horizontal under nivel	3			Pressure gauge and pressure switch	2			Digital pressure switch with display	3

Indications about the mounting position

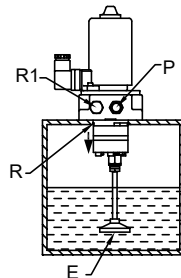
Vertical mounting (pump downwards) is recommended.

The pump can be mounted upon the tank or outside.

In both cases, the return of the remaining flow of the pressure limiting valve has to be foreseen.

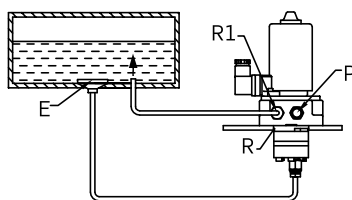
[ 1 ] Mounting upon the tank

R1 is plugged, so that the remaining oil flow returns by R directly to the tank



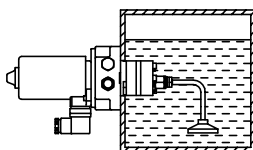
[ 2 ] Mounting outside the tank

- R is plugged
- Connect R1 to the tank for the oil return
- Connect E to the tank for the oil suction



[ 3 ] Horizontal mounting

Try that the oil level doesn't cover the pump  
Mounting under oil level requires a special seal to ensure the sealing of the unit



Ask us in this case.

Outlet accessories

[ 0 ]  
Free outlet  
M14x1,5 thread



[ 1 ]  
With pressure gauge  
G1/4 thread



[ 2 ]  
With pressure gauge and pressure switch  
M14x1,5 thread



[ 3 ]  
Digital pressure switch with display  
Ø8 pipe outlet



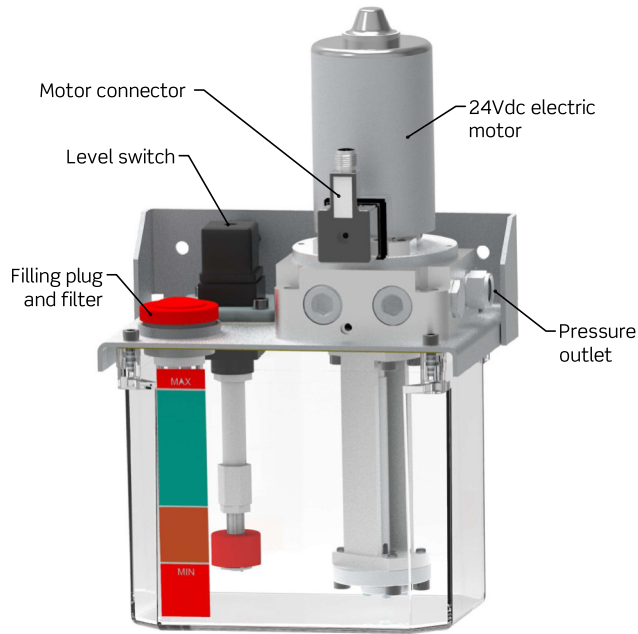
Motor connector

[ 1 ]  
DIN43650-A  
connector



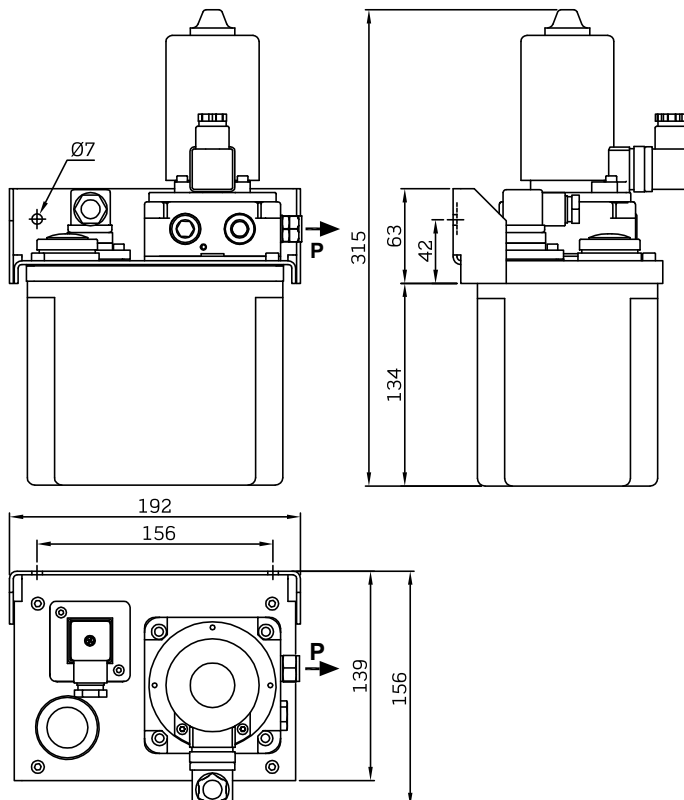
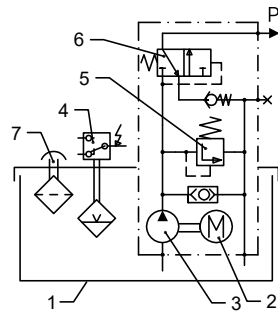
[ 2 ]  
M12x1  
connector





### Hydraulic schema

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



## Lubrication unit for OIL

**GE21/A**  
142.050.000

### Single line system

- Flow: 0,1 l/min
- 2 litres transparent or nylon tank
- 24VDC electric motor
- Motor connector optional DIN / M12x1

### Application

As an intermittent operation unit to feed volumetric dosers in single-line systems.

### Technical data

#### Gear pump

Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

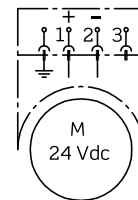
#### Electric motor

Voltage..... 24VDC  
Power..... 55W  
Consumption..... 2,5A (±20%)  
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

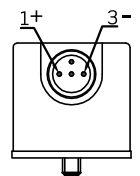
Connection:

DIN 43650 connector

Form A



M12x1 connector



### Electric level switch

Function.....minimum level  
Contact type ..... Reed  
Maximum switching voltage..... 230 VUC  
Maximum switching consumption..... max..0,5 A  
Maximum power breakdown..... max. 30 W

By reversing the position of the float the electric contact is modified: from open to close and viceversa

Round edges  
upwards:  
NO contact

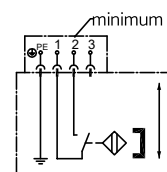


Round edges  
downwards:  
NC contact

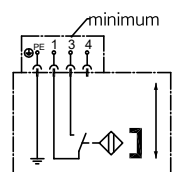


Electric connection:

DIN43650-A connector



M12x1 connector



### Materials

Lid.....steel with anticorrosive treatment  
Reservoir .....optional transparent or nylon

Lubrication unit for OIL with 2 litres tank

**GE21/A**

142.050.000

GE21 / A-1 / X X X 2 - X - X - X X

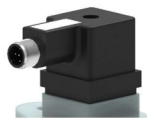
Reservoir material	X	Level switch	X	Level switch connector	X	Pump flow	X	Outlet accessories	X	Voltage	X	Motor connection	X
Transparent plastic	4	Without	0	Without	0	0,1 l/min	1	Without	0	24VDC	0	DIN connector	1
Nylon	6	Minimum level	5	DIN	1			Pressure gauge	1			M12x1 connector	2
				M12x1	2			Pressure gauge and press. switch	2				
								Digital press. switch with display	3				

Level switch connector

[1]  
DIN43650-A



[2]  
M12x1



Outlet accessories

[0]  
Free outlet  
M14x1,5 thread



[1]  
With pressure gauge  
G1/4 thread



[2]  
With pressure gauge and pressure switch  
M14x1,5 thread



[3]  
Digital pressure switch with display  
Ø8 pipe outlet

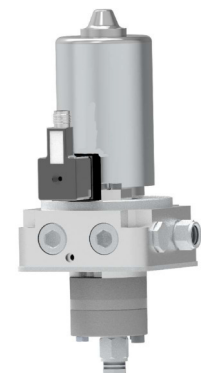


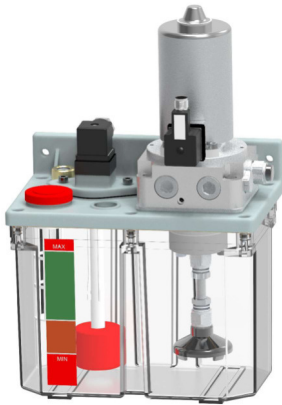
Motor connector

[1]  
DIN43650-A connector

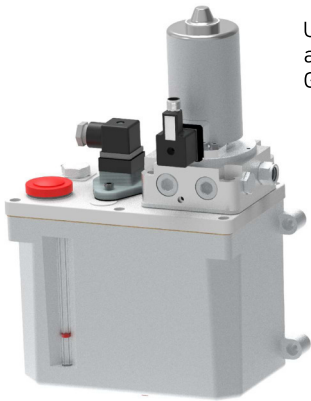


[2]  
M12x1 connector

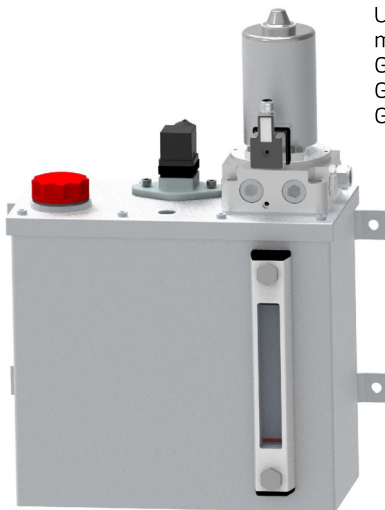




Units with plastic tanks  
GE21/B (3 litres)  
GE21/C (6 litres)  
GE21/H (4 litres)



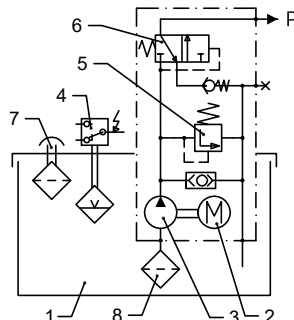
Unit with aluminum tank  
GE22/B (3 litres)



Units with metallic tanks  
GE23/C (6 litres)  
GE23/D (10 litres)  
GE23/E (16 litres)

**Hydraulic schema**

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



**Lubrication unit for OIL**

**GE21**  
**GE22**  
**GE23**

Single line system

142.050.000

**Application**

As an intermittent operation unit to feed volumetric dosers in single-line systems.

**Technical data**

**Gear pump**

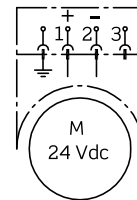
Lubricant..... mineral or synthetic oils  
Viscosity ..... 30 ÷ 1500 cSt  
Flow ..... 0,1 - 0,2 - 0,5 l/min  
Working pressure ..... 30 bar  
Working temperature..... +10°C ÷ +40°C

**Electric motor**

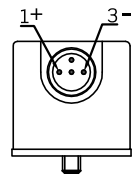
Voltage..... 24VDC  
Power..... 55W  
Consumption..... 2,5A (±20%)  
Service mode..... S3 20%  
maximum working time..... 5 min  
Maximum cycles/hour..... 20

Connection:

DIN 43650 connector  
Form A



M12x1 connector



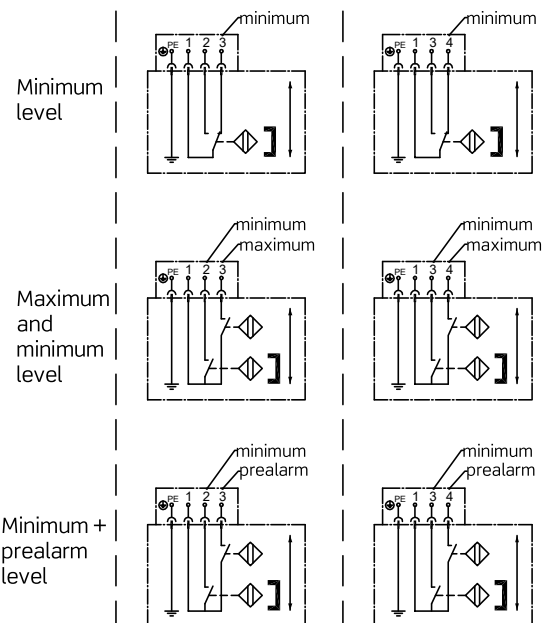
**Electric level switch**

Function..... See diagrams  
Contact type ..... Reed  
Maximum switching voltage..... 230 VUC  
Maximum switching consumption..... 0,5 A  
Maximum power breakdown..... 30 W

Level connection:

DIN43650-A connector

M12x1 connector

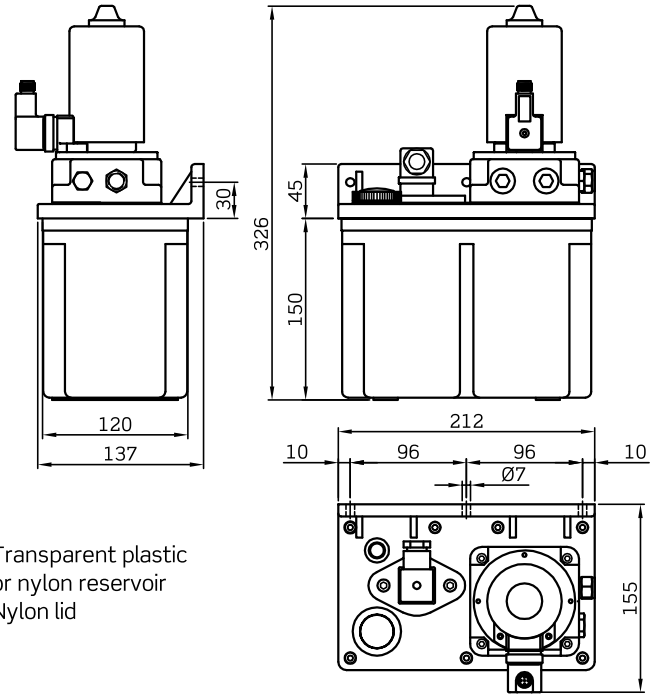
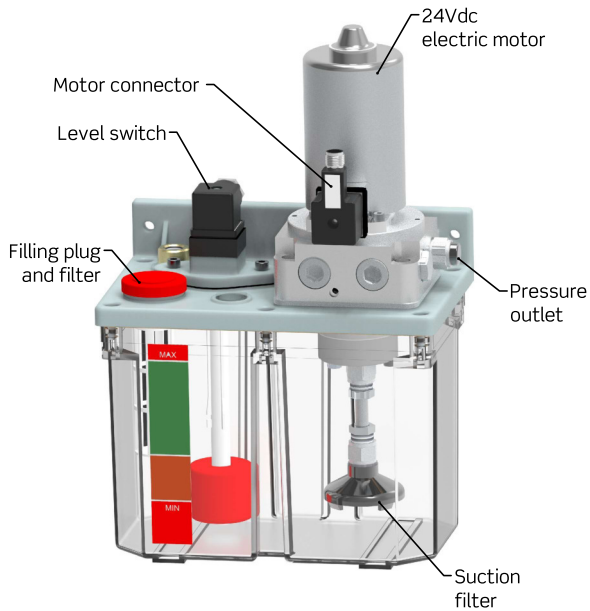


Lubrication units for oil  
 Single line system

-3 litres tank-

GE21/B

142.050.000

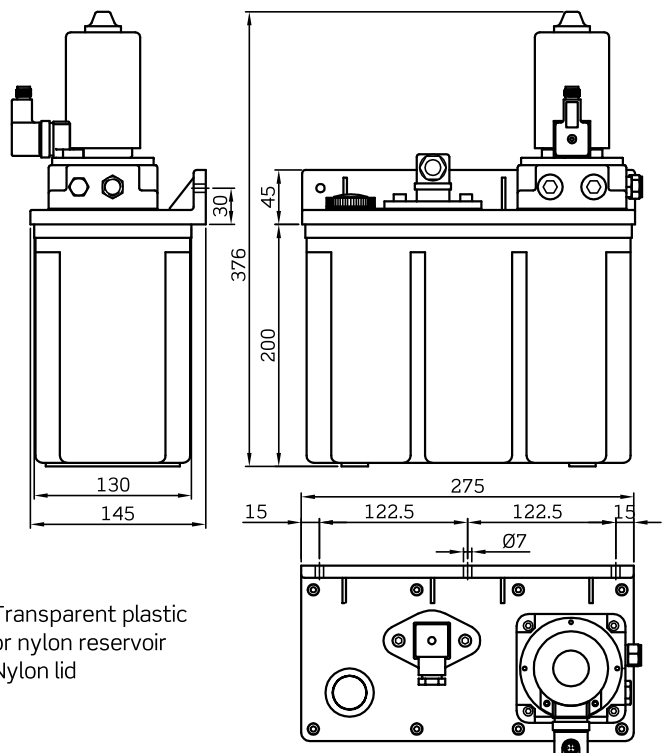
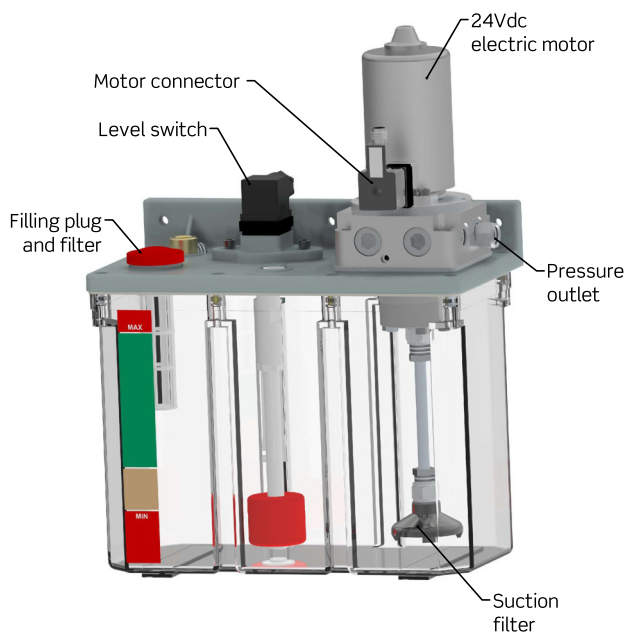


Transparent plastic  
 or nylon reservoir  
 Nylon lid

-6 litres tank-

GE21/C

142.055.000



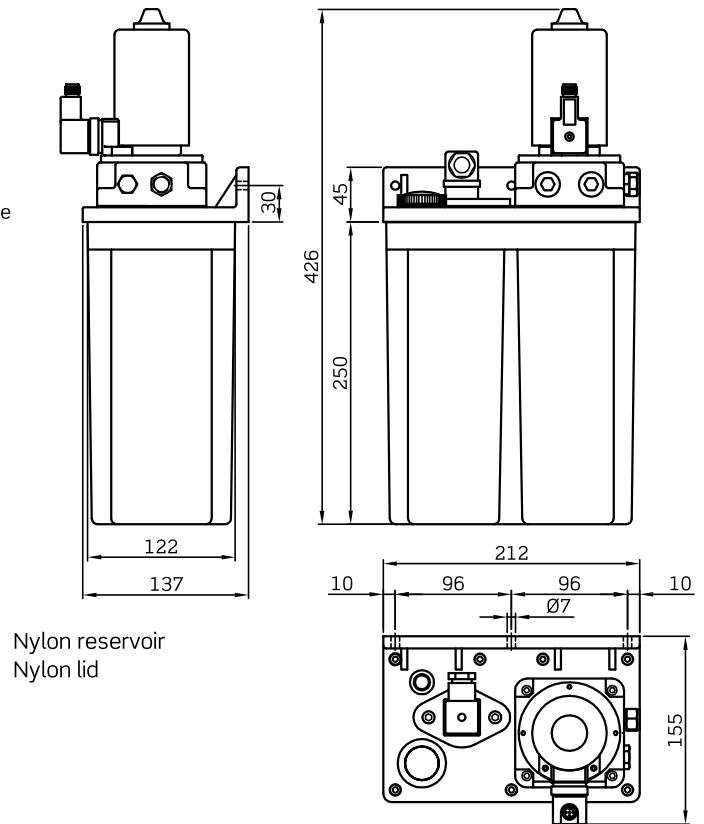
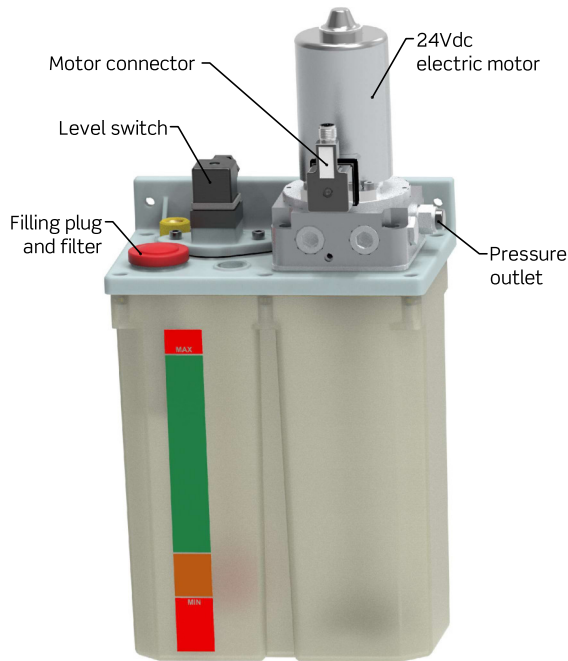
Transparent plastic  
 or nylon reservoir  
 Nylon lid

Lubrication units for oil  
 Single line system

-4 litres tank-

GE21/H

142.055.000

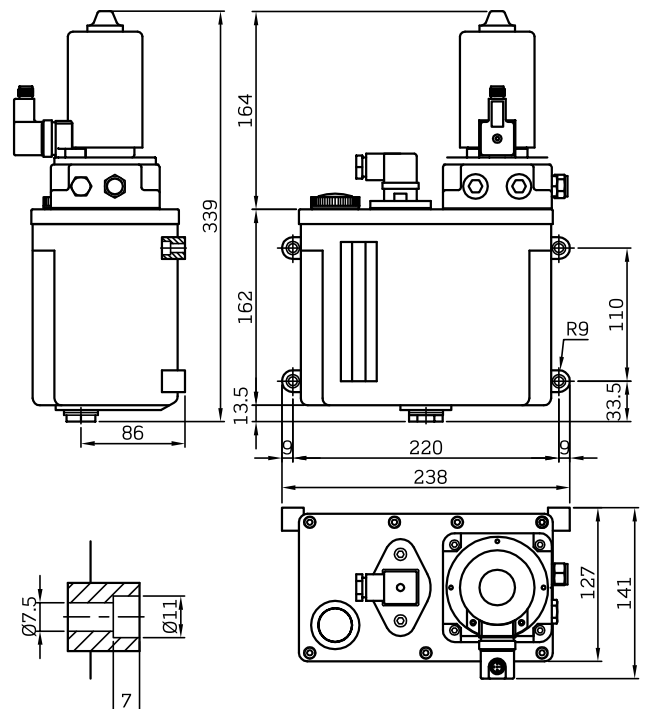
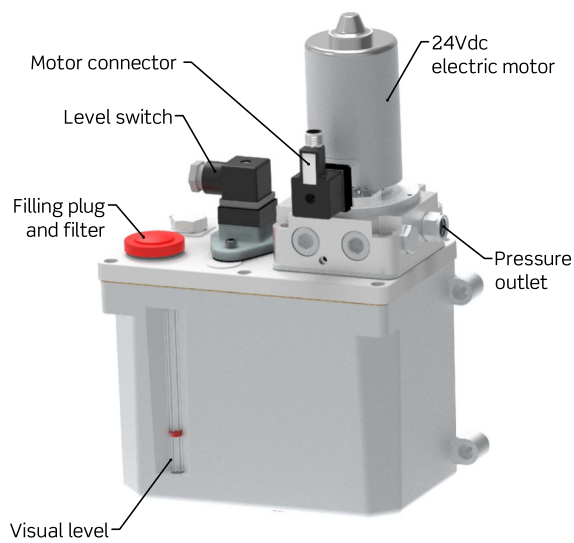


Nylon reservoir  
 Nylon lid

-3 litres tank-

GE22/B

142.070.000



Aluminum reservoir  
 Aluminum lid

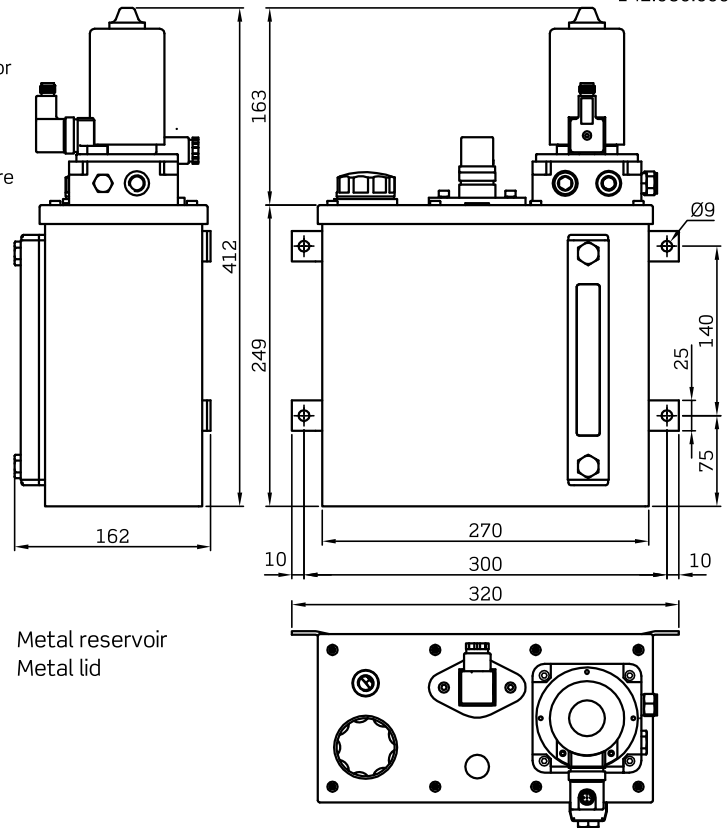
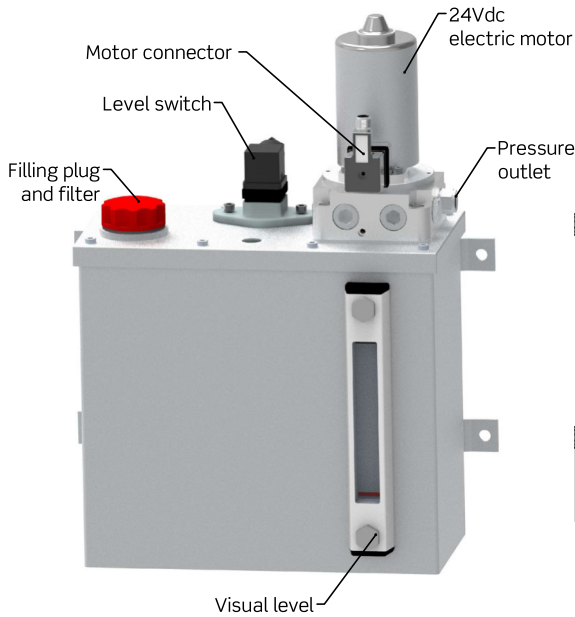


Lubrication units for oil  
 Single line system

-6 Litres tank-

GE23/C

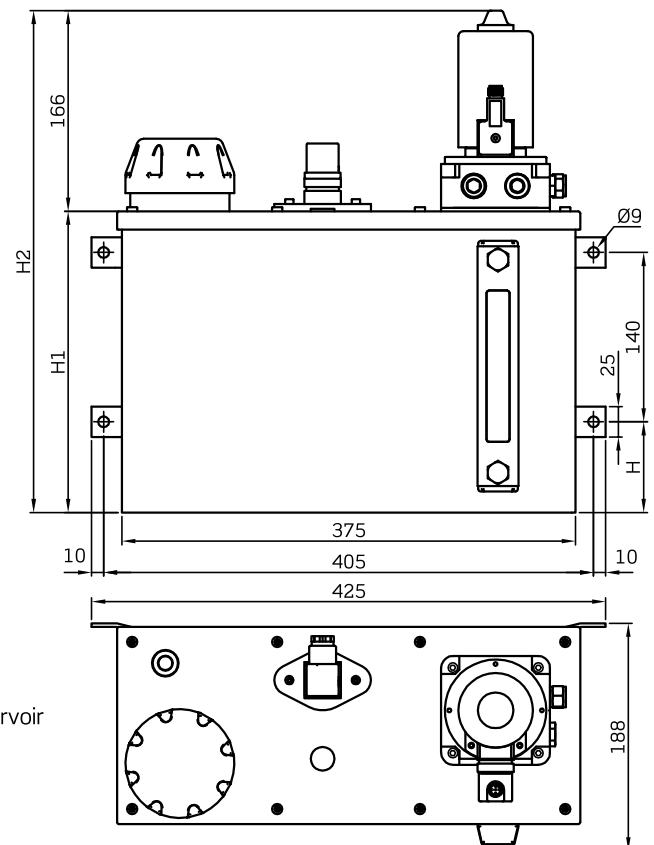
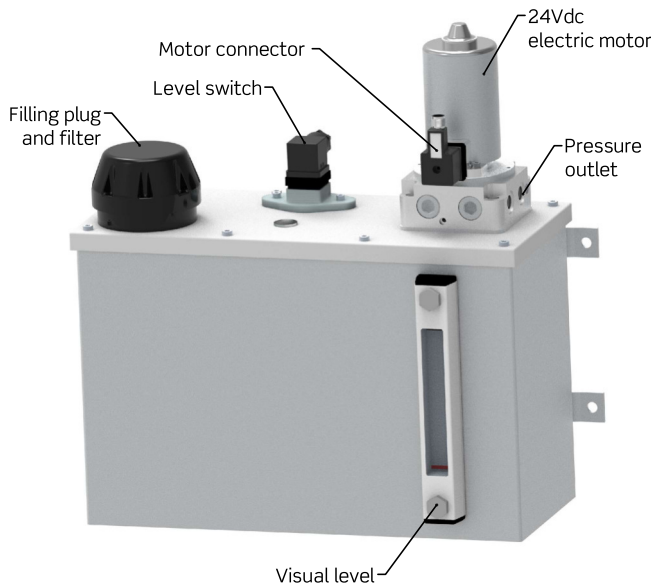
142.080.000



-10 and 16 litres tank-

GE23/D GE23/E

10L metal 16l metal  
 142.085.000 142.090.000



Dimensions (mm)

Capacity	H	H1	H2
10 litres	75	249	415
16 litres	155	329	495

Metal reservoir  
 Metal lid

Lubrication units for OIL with 3-4-6-10-16 litres tank

GE21 - GE22 - GE23

142.050.000



Model	Tank capac.	X	Reservoir material	X	Level switch	X	Level connector	X	Filling system	X	Pump flow	X	Outlet accessories	X	Voltage	X	Motor connection	X
GE21	3L	B	Transp. plastic	4	Without	0	Without	0	Plug and filter	2	0,2 l/min	2	Without	0	24VDC	0	DIN connector	1
	6L	C	Nylon	6	Minimum	5	DIN	1	Ø10 straight fitting	3	0,5 l/min	5	Pressure gauge	1			M12x1 connector	2
	4L	H	Nylon	6	Maximum -minimum	6							M12x1	2			Quick coupling	4
GE22	3L	B	Aluminum	3	Minimum +prealarm	7							Digital press. switch with display	3				
GE23	6L	C	Metal	5														
	10L	D			Aisi	7												
	16L	E																

Level switch connector

[1]  
DIN43650-A



[2]  
M12x1

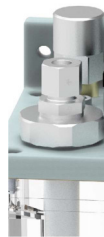


Filling system

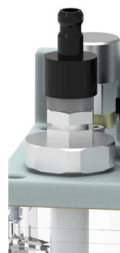
[2]  
Plug with filter



[3]  
Ø10 straight fitting  
(with down tube  
and breather)



[4]  
Quick coupling  
(with down tube  
and breather)



Outlet accessories

[0]  
Free outlet  
M14x1,5 thread



[1]  
With pressure  
gauge  
G1/4 thread



[2]  
With pressure  
gauge and  
pressure switch  
M14x1,5 thread



[3]  
Digital pressure  
switch with  
display  
Ø8 pipe outlet



Motor connector

[1]  
DIN43650-A  
connector



[2]  
M12x1 connector

