



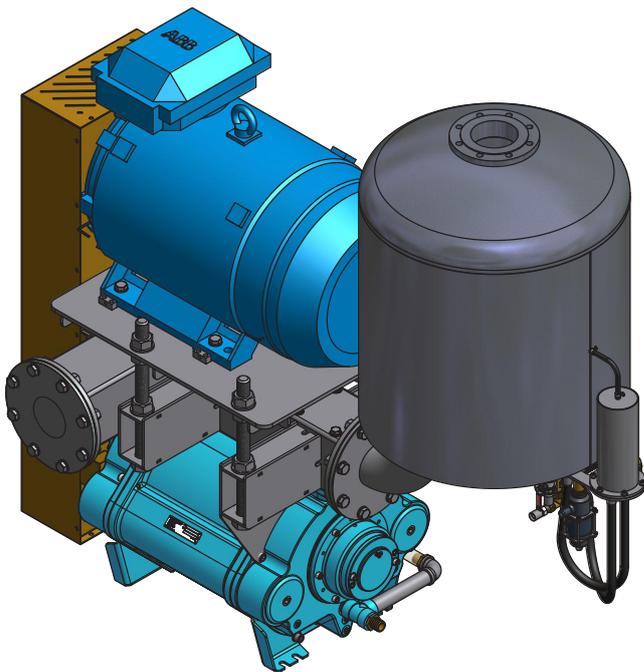
SAMSON LIQUID RING VACUUM PUMPS

GAMMA UNITS

INSTRUCTION MANUAL
GAMMA UNITS

Range:

- GAMMA 10
- GAMMA 20
- GAMMA 30
- GAMMA 40
- GAMMA 50
- GAMMA 60
- GAMMA 70
- GAMMA 90
- GAMMA 100



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PURPOSE OF USE

Gamma series are built with V-belt transmission. It provides a simple and economical possibility of adjusting the pump speed/ number of rotations so that the air flow and power consumption will be optimized.

The basic module consists of pump, electric motor and transmission ready for operation.

Additionally, the unit can be configured with the following additional modules:

- Liquid separator module
- Cooling module based on partial recirculation of sealing liquid
- Cooling module based on a heat exchanger
- Cooling unit with air cooler
- 4-Way valve for vacuum- and pressure operation

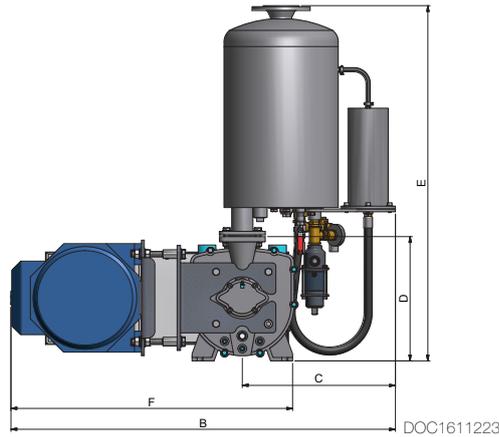
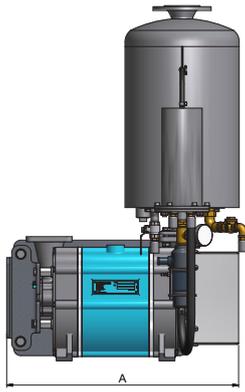
For further information regarding the additional modules please study our website www.samson-pumps.com or contact our sales department.

AVAILABLE MODELS

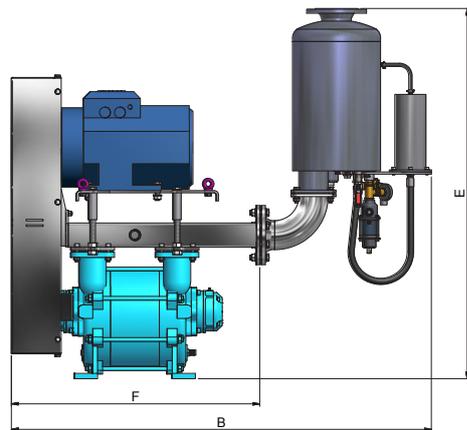
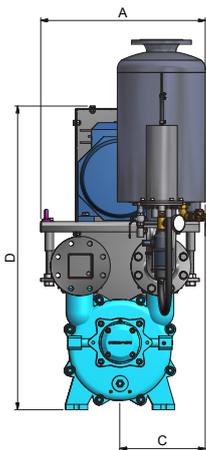
GAMMA unit models	Applicable with pump types
GAMMA 10	KE180 - KE200
GAMMA 20	KE225 - KE300
GAMMA 30	KL350 - KL400
GAMMA 40	KL430 - KL500
GAMMA 50	KS500 - KS510
GAMMA 60	KS625 - KS725
GAMMA 70	KS910 - KS1025
GAMMA 90	KM2200
GAMMA100	KM2700

DIMENSIONS, (mm)

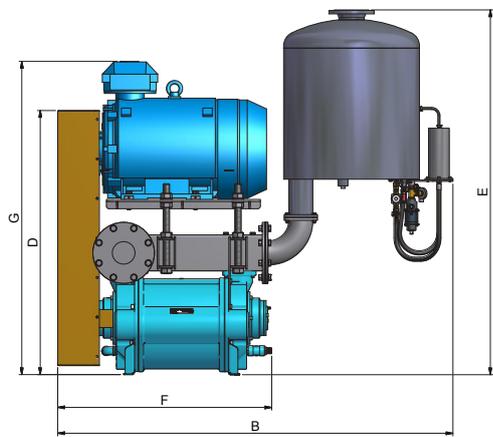
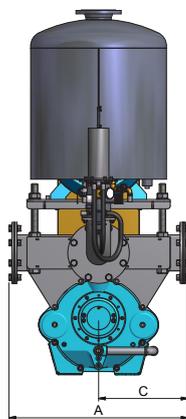
GAMMA unit series	A	B	C	D	E	F	G
GAMMA 10	585	1005	435	320	980	710	-
GAMMA 20	670	1005	435	320	980	710	-
GAMMA 30	660	1090	435	355	1015	820	-
GAMMA 40	680	1090	435	355	1015	820	-
GAMMA 50	610	1550	315	1130	1375	915	-
GAMMA 60	610	1600	315	1130	1375	965	-
GAMMA 70	610	1695	315	1125	1370	1065	-
GAMMA 90	990	2190	495	1470	2030	1185	1745
GAMMA 100	990	2325	495	1470	2030	1320	1745
GAMMA 90 Container fit	895	2190	495	1470	2030	1185	1745
GAMMA 100 Container fit	895	2325	495	1470	2030	1320	1745



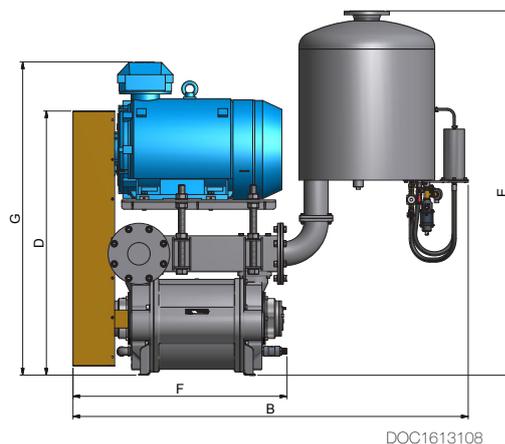
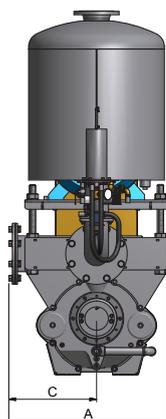
GAMMA 10 - 40



GAMMA 50 - 70



GAMMA 90 - 100



GAMMA 90 - 100 Container Fit

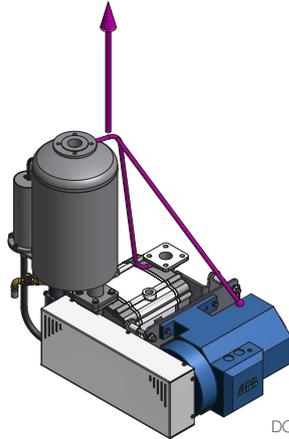
STORAGE CONDITIONS

At storage for more than 4 weeks is referred to the point "storage" in the manuals for the other additional modules at the concrete unit.

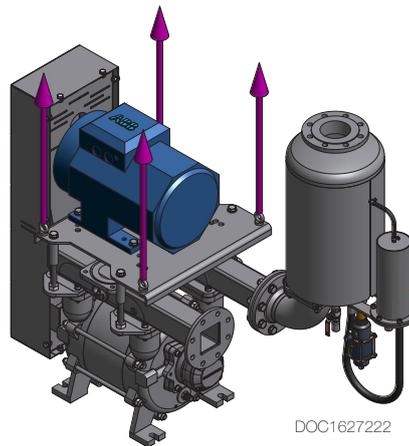
HANDLING AND TRANSPORT

By fork-lift truck handling the unit can be transported in the original container or onto an approved EUR pallet. Handling with crane must only be undertaken by hooking the unit's lifting eye loops.

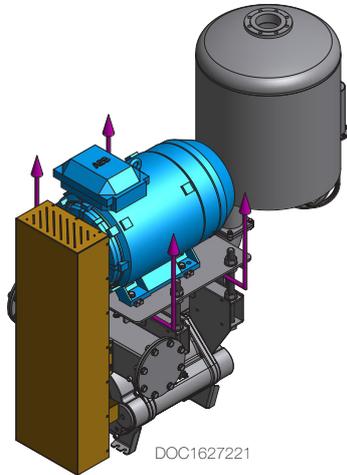
GAMMA 10 - 40



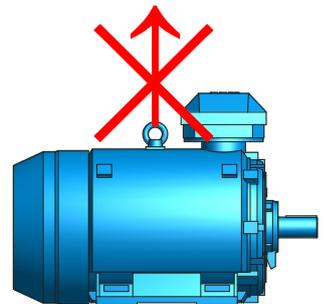
GAMMA 50 - 70



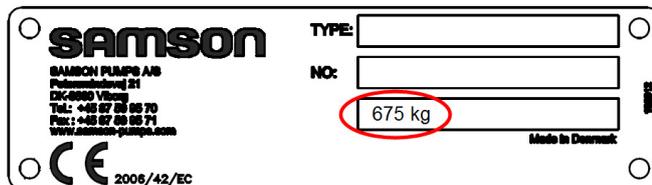
GAMMA 90 - 100



ATTENTION 
 The loop eye of the electric engine may not be used for gripping by lifting the entire unit.



The weight of the respective Gamma unit can be found on the nameplate.

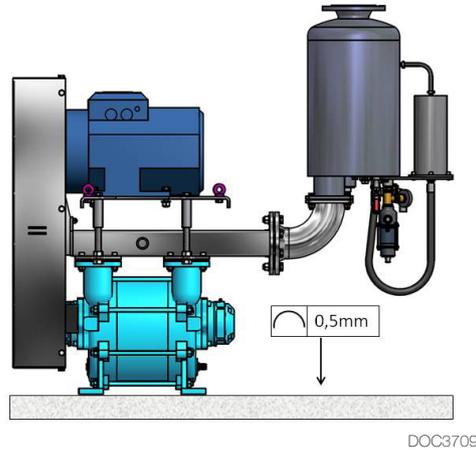


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INSTALLATION REQUIREMENTS

Anchoring

The unit must be mounted onto a stable foundation, which has to be right and torsion stable, so that the pump/unit is not exposed to torsion. The pump/unit must be anchored with foundation bolts in all four legs.



Electrical installation

Reference is made to the manual of the respective electric motor.

Service liquid supply

For units with no liquid separator - read the pump manual.

For units with liquid separator mounted - read the liquid separator manual.

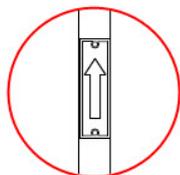
START-UP

Before starting-up the unit, it is recommended to read the chapter "Start-Up" carefully in the manuals for the other additional modules.

1. Enable the automatic lubricating cartridges by turning the pointer from 0 to 12.



2. Start the unit and control, that the direction of rotation is consistent with the pump direction arrow.



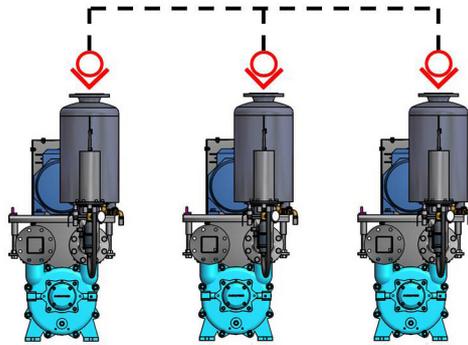
3. If the rotation direction is wrong - the problem is an improper electrical connection. Please call authorized personnel for adjustment.

4. If the unit is equipped with a Service Liquid Valve, make sure it is adjusted in accordance with the valve manual.



DOC3705

5. If the respective unit is included in an installation with multiple units in serial connection, it is important that the outlet side of the unit is equipped with a Non-Return Valve. Without this Non-Return Valve, the other units might draw intake of false air through the respective unit when this is not in operation.

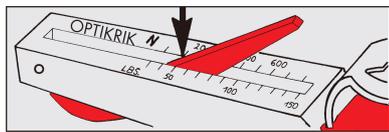


DOC3704

MAINTENANCE

Transmission

Check the pulley tension for every 5.000 hours of operation. The belt tension is controlled with the attached Belt Tester.



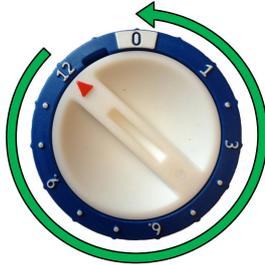
DOC3706

Please read carefully the attached manual for the Belt Tester before the test is carried out.

Diameter of the smallest pulley, mm	Setting of the Belt Tester, when installing new belts	Setting of the Belt Tester adjusted after an hour of operation
Less than 160	650 N	500 N
Between 160 and 224	700 N	550 N
Between 224 and 355	900 N	700 N
More than 355	Contact SAMSON PUMPS	Contact SAMSON PUMPS

Automatic lubrication of the pump bearings

Check the automatic lubrication cartridges every 3 months.
Cartridges are factory-set to emptying over 12 months.
If the pointer reaches zero the cartridge must be replaced.



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Lubrication of the bearings of the engines

Please read the enclosed manual for the actual motor

REMOVAL AND DISPOSAL

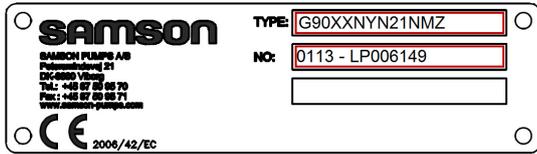
The most parts of the Samson GAMMA units can be recycled.
SAMSON PUMPS therefore offers the user of Samson GAMMA units opportunity to return worn units for renovation or scrapping. For those, who do not wish to make use of the offer of the factory, the GAMMA units after separation have to be separated into components.
Worn GAMMA units can be separated into following components:

- Service liquid
- Gaskets
- Hoses
- Plastic Parts

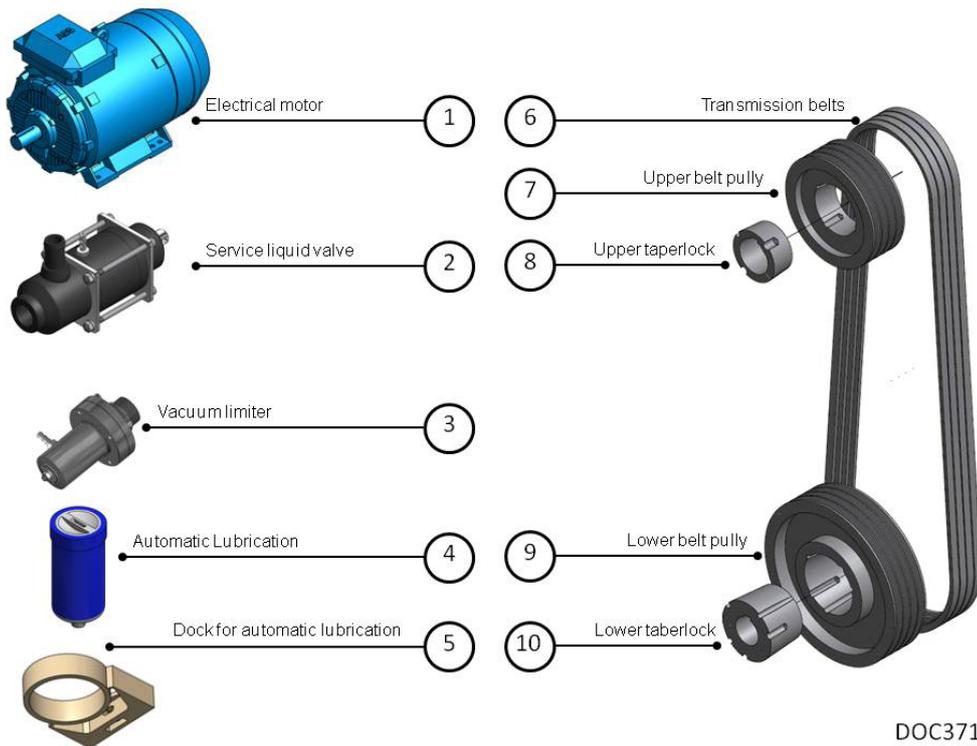
These parts are to be disposed according to national rules.
The residue, consisting of metal components can be sent for re-melting.

ORDERING SPARE PARTS

When ordering spare parts, please indicate the desired position, as well as the type and number, which are indicated on the nameplate of the unit.



DOC3711



DOC3710

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