GROENEVELD-BEKA
LUBRICATION SYSTEMS BY TIMKEN

Pneumatic pump

P5.2 / P8.4 / P8.8

Code 2563…

Revision 03-2026

Original operating and assembly manual

00-1004074_BAL_2563_P5-P8_R02EN

Table of contents

Order key

2563.10.2.1.7.1.1.000

Output rate	10 cm³/stroke	15 cm³/stroke	
Code number	10	15	
Outlet position	1	2	3
Code number	1	2	3
Pressure relief valve	without	with	
Code number	0	1	
Reservoir size	2 l	4,2 l	8 l
Identification no. with filling lid / without filling lid	3 / 2	7 / 6	9 / 8
Level monitoring	without	for oil	for fluid grease
Code number	0	1	2
Return	without	with	
Code number	0	1	
Special models			

Technical Data

General

Type of drive: ..... pneumatic, simple pressurized
Pressure ratio: ..... 1 : 11 at 10 cm³ per stroke
..... 1 : 8 at 15 cm³ per stroke
Drive air pressure: ..... 4 to 8 bar
Drive air volume: ..... 133 cm³ per stroke
N° of outlets: 1
Pressure relief valve: ..... optional, adjusted to 50 bar
Position of outlets: ..... Pos. 1, 2 or 3
Types of outlets: ..... threaded connection R1/4“
Discharge rate: ..... 10 cm³ per stroke, 15 cm³ per stroke
Lubricant: ..... oil, 20 – 700 mm²/s / fluid grease acc. to release list
Temperature range: ..... medium 0°C – 70°C
..... ambient 0°C – 40°C
Content: ..... 2, 4,2, 8 liter
Sound pressure level: ..... <70db(A)

Float switch (oil)

Switched voltage: ..... max. 60V
Switched current: max.0,5A
Switching capacity: ..... max. 10VA
Connection: ..... Tuchel plug M12x1
Switching function: ..... NO contact (falling level)

Capacitive proximity switch (fluid grease)

Operating voltage: ..... 10 - 32V DC
Switched current: ..... 200 mA
Currenct consumption: ..... < 20 mA
Connection: ..... angled plug DIN 43650-A
Switching type: ..... positive switching contact
..... Negative switching contact

General

All persons which are involved with the installation, start-up, maintenance and operation of the pneumatic pump have to read these instructions carefully!

Use in accordance with the regulations

Attention!

The pneumatic pump is **only** allowed for **industrial use**.
The pneumatic pump may only be put into service, if it is integrated or attached at another machine and will be operated together with it.
The pneumatic pump may only be used according to the technical data (see chapter “technical data”)
Unauthorized **structural changes** at the pneumatic pump are **not permitted**. We do not assume liability for damages of persons or machines which result from that.

This also belongs to a use in accordance with the regulations:

- Pay attention to all notes in the operator’s manual.
- Carry out all maintenance work.
- **Following** all appropriate regulations for the **work safety** and **accident prevention** during all life cycles of the pneumatic pump.
- That you have the required professional education and authorization of your company, to carry out the required works at the pneumatic pump.

Attention! **Another use or a use beyond can not be considered to be in accordance with the regulations.**

Scope of guarantee

Guarantees concerning operating safety, reliability and capacity, are only granted under the following conditions:
Assembly, installation, maintenance and repair are only carried out through authorized specialist staff.
If hot or cold machine parts lead to hazard, they have to be protected against touching.

- The pneumatic pump is used according to the exposition in the technical operating manual.
- The mentioned technical data must not be exceed in any case.
- Retrofitting and repair works at the pneumatic pump may only be done by Groeneveld-BEKA.

General safety information

Basic notes, which must be followed at assembly, operation and maintenance, are listed as follows.
This operator’s manual, absolutely must be read before assembly and start-up, by the mechanics as well as by the specialist staff / operator.
In addition to this, it must be permanently available at the site.

Emphasises

Please pay attention, not only to the safety instructions under this main point, but also to those special security advices which are inserted on the other pages.

This symbol warns of electrical voltage.

Safety instructions which, if not complied with, may endanger persons, are marked specifically with the general hazard symbol.

Attention!

This heading is used if inaccurate compliance or non-compliance with the operating Instructions or specified work procedures etc. may result in damage.

Note! Points out special information.

Notes attached directly at the machine, must strictly be followed and held into completely readable condition!

Qualification and training of the personnel

The operating, maintenance, inspection and assembly personnel must have appropriate qualifications for this work. The operator must precisely regulate the personnel's areas of responsibility and monitor them. If the personnel do not have the necessary knowledge, they must be trained and instructed. The operator must ensure that the personnel have completely understood the contents of the user information.

Danger due to non-observance of the safety information

Not observing the safety information can lead to danger for people, environment and machines.
Not observing the safety information can lead to the loss of any and all claims for damages. In individual cases, non-observance can, for example, lead to the following dangers:

- Failure of important plant functions.
- Failure of prescribed methods of maintenance and preventive maintenance.
- Endangering people due to electrical, mechanical and chemical effects.
- Endangering the environment due to leakages of dangerous materials.

Safety information for operators/operating staff

- If hot or cold machine parts lead to danger, the customer must secure them from being touched. The guards on "moving or rotating parts" must not be removed.
- Drain leakages of dangerous materials in a way, that people or the environment are not endangered.
- Comply with legal regulations.
- Eliminate any danger due to electrical energy.

Safety information for maintenance, inspection and assembly work

All **maintenance, inspection and assembly work** may only be carried out **by trained specialists** who have been informed appropriately by studying the user information closely.
All work must only be carried out when the **plant is at a standstill** and while wearing appropriate **protective clothing**. Always comply with the procedures for bringing the plant to a standstill that are described in the operating manual.

All the safety and protective equipment must be replaced immediately after completing work.
Media that endangers the environment must be disposed in accordance with pertinent official specifications.
Secure the system during maintenance and repair works, against intentional or unintentional reoperation.
Dispose of process materials in accordance with the safety data sheets of the lubricant manufacturer.

Alterations and manufacture of spare parts without authority

Rebuilding and alterations to the plant are only allowed after consultation with the manufacturer. **Original spare parts** and accessories authorized by the manufacturer are for **safety** purposes. Using other parts results in liability exclusion. For components, retrofitted by the operator, Groeneveld-BEKA does not assume guarantee nor claims for damages.

Inadmissible methods of operation

Operational security of the plant is only guaranteed if it **is operated in accordance with the operating instructions**. The limit values stated in the technical data must not be exceeded under any circumstances.

General risk reference

All components of the system are lent, according to the prevailing regulations of the constructions of technical machines, in regards to the operational safety and accident prevention. Independently of this, the use can lead to dangers for the user respectively third persons or other technical facilities. The pneumatic pump therefore may fulfil only in **technically fault-free condition** its intended use. This may only be carried out under compliance of the safety regulations and the attention of the operator's manual.
Therefore please **observe regularly** the pump and its attachments on possible **damages** or **leakages**.

Transport and storage

Use a suitable hoist for transport.
Do not throw or shock the.
When storing the pneumatic pump, take care of a cool and dray storage place to avoid corrosion of the system's individual parts.

Pay attention to the current safety- and accident prevention instructions during the transport. Wear suitable protection equipment if necessary!

Functional description

The Groeneveld-BEKA pneumatic pump is principal used in progressive lubrication system which needs large grease quantities to provide progressive distributors.

When pressurizing the operating piston with compressed air the lubricating process is started. The operating piston is pressed through against the piston spring until the stop. The sucking connection is locked by the pump piston, the relief valve opens and the exact defined supply medium will be supplied to the pressure connection.

The piston spring pushes the operating piston back into his initial position when the air supply will be interrupted and the operating piston relieved. The pressure relief valve closes and the dosage space will be filled again with lubricant through the suction drain.

Assembly manual

The following conditions have to be satisfied during the assembly of this pneumatic pump, thus it can be assembled, with other parts, to a complete machine without affect the safety and health of human:

Set up the pneumatic pump horizontally on both sides at the place where it has to be installed! Pay also attention to the mentioned data regarding the fastening bore in the dimensioned drawing.
Special measures for the noise prevention and for the vibration reduction of the pneumatic pump during the installation don't have to be taken.

Connect compressed air supply line to the pneumatics connection of the pump, professionally.

- Pay attention to the permitted drive air pressure!
- Pay attention to the required drive air volume!
- Use air maintenance unit (04430024)!

Pipe assembly

Professional laying!

- Use only cleaned pipe!
- Assemble pipe free from distorsion!
- Pay attention to the fitting's pressure density!

Connect control level monitoring

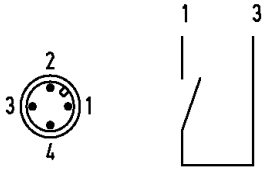
- Unscrew cylinder head cap screw with slot from the plugs top side and pull off the plug
- Press out the internal part, marked with „lift“ by means of a screwdriver
- Connect the cable at the internal part according to the terminal diagramm by a professional
- Put the internal part again in the plug, when the required plug position is received
- Attach the plug again, and tight the cylinder head cap screw

Terminal diagram level monitoring

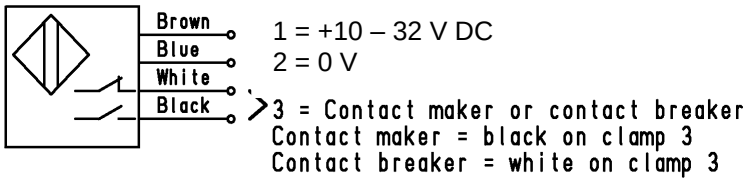
Terminal diagram for oil version:

View reservoir empty

- Clamp 1 = contact maker (falling level)
- Clamp 2 = no assignment
- Clamp 3 =
- Clamp 4 = no assignment



Terminal diagram for fluid grease version:



Attention! **Insulate the non-used connection wire**

Putting into operation

Fill up the reservoir with clean pump media

Carry out the filling only via the hydraulic type lubricating nipple or the filling cover!

- Use only permitted pump media (also see technical data)!
- Notice lubrication substance information from the machine manufacturer!
- Notice information from the lubrication substance manufacturer!

Ventilate pump

Press the pneumatic pump until the pump media at the pressure connection flew out air bubble free!

Ventilate system

Press the pneumatic pump in 15 seconds intervals, until air bubble free pump media flow out at the end of the pressure hose.

Level monitoring

The level monitoring serves for the supervision of the filling level in the reservoir.
A signal, send by the level monitoring can be used for switching off of the pump, for the visual or acoustic warning or for the individual use by the customer at a too low filling level.

The level monitoring (level switch), consists of a skid pipe, in which a relay has been installed. Via this skid pipe, the follower piston, which contains a magnet, is moving. If this magnet comes near the relay, the magnetic field is switched on as a result.

The relay is a hermetic melted down contact, which is not affected by dust, dirt and oxidation and has hence a long life time.

Maintenance

Stop the voltage feed, before starting with **maintenance or repair.**
Maintenance and repair work may only be done at system's **standstill**.
Check the surface temperature of xxx, due to danger of burning by radiant heat. Always wear heat-resistance gloves!
Protect the system from activation during maintenance and repair work!

Check the level in regular intervals. If necessary fill with clean supply medium.

- Check the pump for function after a longer period out of work. Clean the pump with a suitable cleaning agent if necessary.
- Observe the machine manufacturer's information on lubricant!
- Observe the lubricant manufacturer's safety data sheet!

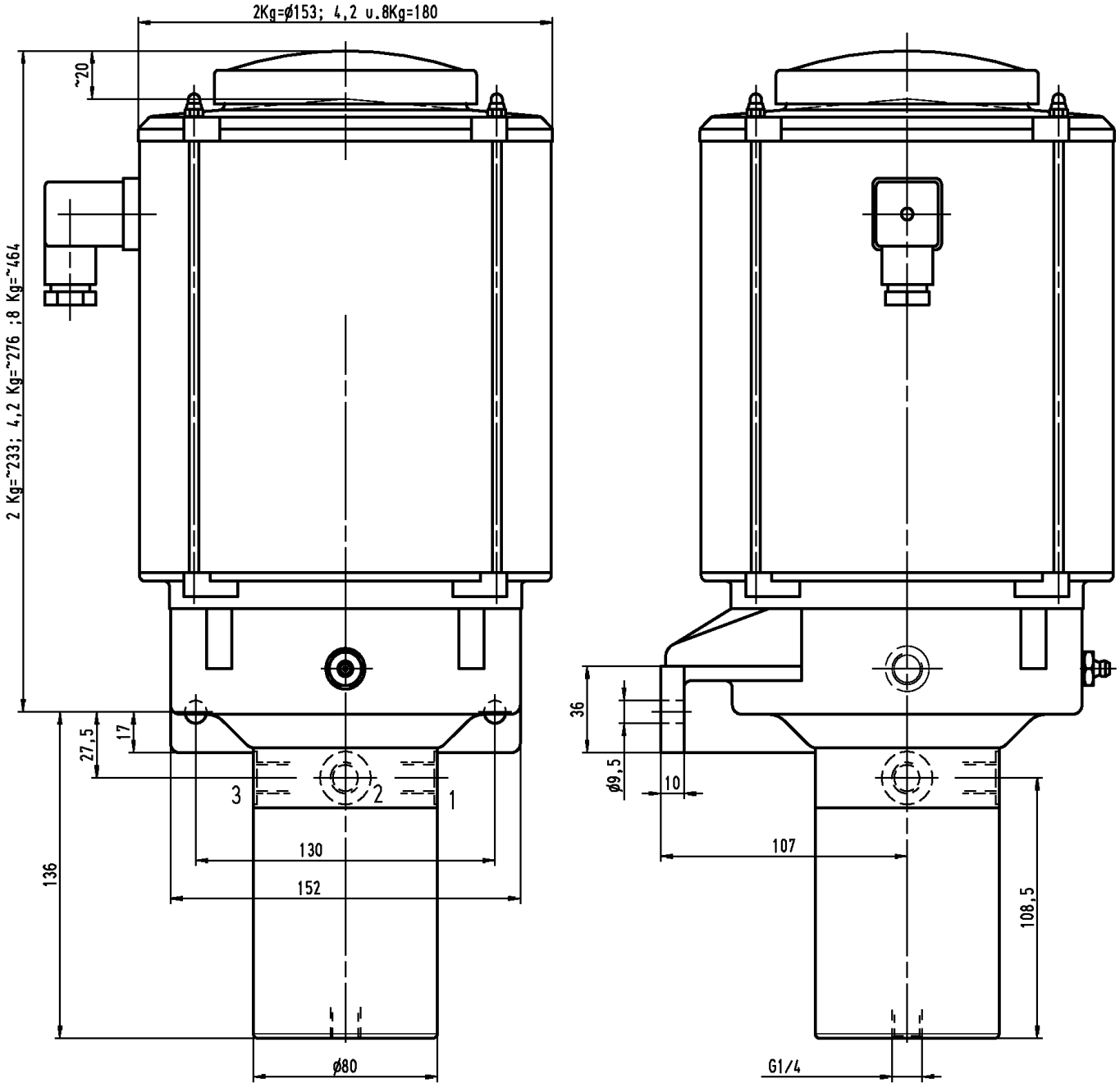
Disposal

Notice!

Observe the disposal instructions of the lubricant manufacturer when lubricant is changed! Lubricants or cloths contaminated with lubricant, etc. must be collected in specially marked reservoirs and disposed of accordingly.
Disposal of the device must be done properly and professionally and according to the national and international laws and regulations.

Moreover, Groeneveld-BEKA devices could contain batteries. Professionally and properly disposed batteries will be recycled. They contain important raw materials.

Dimensional drawing



Details on the manufacturer.

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