LEADING IN PRODUCTION EFFICIENCY

Filter HP
High pressure filter

Operation manual

MFT00003EN, V03

www.durr.com

N3543...

Information about the document

This document describes the correct handling of the product.

- Read the document prior to every activity.
- Prepare the document for the application.
- Pass on the product only together with the complete documentation.
- Always follow safety instructions, handling instructions and specifications of every kind.
- Illustrations can deviate from the technical construction.

Validity range of the document

This document describes the following products:

N3543.... Filter HP	

Hotline and Contact

If you have queries or would like technical information, please contact your dealer or sales partner.

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1 Product overview

1.1 Overview

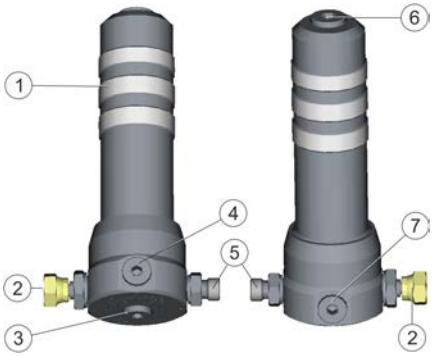

Fig. 1: Overview (example)

1 Filter sump
2 Material inlet M 16 x 1.5, internal threads
3 Material outlet G1/4"
4 Material outlet G1/4"
5 Material outlet M 16 x 1.5, external threads
6 Material outlet unfiltered G3/8"
7 Material outlet G1/4"

1.2 Short description

The high pressure filter (hereafter called “Filter”) ensures in the supply line of an application layer that no undesired particles or impurities will arise in the subsequent process flow. The filter is mounted between the outlet of a high pressure pump and a high pressure hose.

2 Safety

2.1 Presentation of Notes

The following notes can appear in this instruction:

DANGER!

High risk situation that can lead to serious injuries or death.

WARNING!

Medium risk situation that can lead to serious injuries or death.

CAUTION!

Low risk situations that can lead to minor injuries.

NOTICE!

Situations that can lead to material damage.

ENVIRONMENT!

Situations that can lead to environmental damage.

Additional information and recommendations.

2.2 Intended Use

Use

The high pressure filter serves for the fine filtration of liquids.

The high pressure filter is approved for use in Ex zones 1 and 2. The fluids used must conform to the explosion group IIB.

The high pressure filter is intended for use in industry and trade only.

The high pressure filter may only be used within the approved technical data 11 “Technical data”.

The high pressure filter for fluids does not fall in one of the categories I - IV of the pressure devices guidelines. The high pressure filter is designed and manufactured, as specified in article 4 para 3 of 2014/68/EU.

Misuse

Not using as intended entails danger to life.

Examples of wrong use are:

- Use of the high pressure filter with gases and solids
- Use of unapproved materials, see safety data sheets
- Use in explosive areas Ex zone 0
- Making conversions or changes on your own
- Use of unsuitable components
- Use of unapproved components

Ex labeling

Ⓔx II 2G Ex h IIB T6 Gb X

II	-	Device group II: all areas except mining
2G	-	Device category 2 for gaseous atmosphere
Ex h	-	Ignition protection category for non-electrical devices
IIB	-	Explosion group IIB
T6	-	Temperature class
Gb	-	Device protection level: Zone 1
X	-	Restriction: The device is configured for operation in an ambient temperature of -5°C to 50°C.

2.3 Staff qualification

WARNING!

Inadequate qualification

Wrong estimation of dangers can cause serious injury or death.

– Only sufficiently qualified persons may execute all work.
– Some work requires additional qualification. Additional qualifications of specialized personnel are marked with a “+”.

This document is intended for qualified personnel in industry and craftmanship.

Electrician

Electricians assemble, install, service and repair electrical systems in a professional manner.

Furthermore, electrical engineers have the following knowledge:

- Guidelines, Standards and Rules of Engineering
- Local conditions
- Electrical Systems and Their Loading Limits
- Technical Measures for occupational safety and health

Mechanic

The mechanic is trained specifically for the field of work in which he works.

Furthermore, he has the following knowledge:

- Guidelines, Standards and Rules of Engineering
- Local conditions
- Technical Measures for occupational safety and health

The mechanic is responsible for the following activities on equipment and components:

- Assembly
- Waiting
- Maintenance
- Disassembly

+ Additional qualification high pressure
In addition, the mechanic has knowledge of regulations and safety measures for high pressure systems > 20 bar.

+ additional qualification explosion protection
In addition to the knowledge of the various specialist fields, the mechanic has knowledge of regulations and safety measures when working in potentially explosive areas.

Dürr Systems offers special product training for ↳ “Hotline and Contact”.

2.4 Personal protective equipment

Wear the required personal protective equipment when working. Provide the following personal protective equipment:

2.5 Residual risks

Explosion

Sparks, open flames and hot surfaces can cause explosions in explosive atmospheres. It can cause serious injuries or death.

- » Before carrying out any work on the product, ensure a non-explosive atmosphere.
- » Do not use sources of ignition and open light.
- » Do not smoke.
- » Ground the product.
- » Ground the work piece.
- » Wear suitable protective equipment.

Flammable coating materials and their detergents and cleaning agents can cause a fire or an explosion.

- » Ensure that the flashpoint of the fluid is at least 15K above the ambient temperature.
- » Observe explosion group of the coating materials and their detergents and cleaning agents.
- » Follow the safety data sheet.
- » Ensure that technical ventilation and fire protection equipment are in operation.
- » Do not use sources of ignition and open light.
- » Do not smoke.
- » Ground the product.
- » Wear suitable protective equipment.

Danger from harmful or irritant substances

Serious injuries or death can result if you come into contact with dangerous fluids or steam.

- » Filter Check regularly for leakage. Observe local regulations and maintenance schedule.
- » Ensure that the forced ventilation is operational.
- » Follow the safety data sheet.
- » Wear specified protective equipment.

3 Transport, scope of supply and storage

3.1 Scope of delivery

The scope of supply includes the following components:

- » High pressure filter

1. Inspect delivery on receipt for completeness and integrity.
2. Report defects immediately ↳ “Hotline and Contact”.

3.2 Handling of packaging material

ENVIRONMENT!

Incorrect disposal

Incorrectly disposed packaging material can damage environment.

– Dispose of material no longer required in an environment-friendly manner.
– Observe local disposal specifications.

3.3 Storage

Storage provisions:

» Do not store outdoors.
» Store Filter only when dry.
» Store in a dust-free place.
» Do not expose to aggressive media.
» Protect from solar radiation.
» Avoid mechanical vibrations.
» Temperature: 10°C to 40°C
» Relative humidity: 35% to 90%

4 Assembly

4.1 Requirements for the Installation point.

» It should be possible to disconnect every power supply to the filter and secure it against reconnection.
» The air supply must be adjustable.
» Lines, seals and screw connections must be designed for the requirements of the filter.
» The filter must be accessible for maintenance work.
» Provide pressure release device to avoid excess pressure.

4.2 Installation position

Install the filter vertically. The filter sump can face up or down.

Filter sump upwards

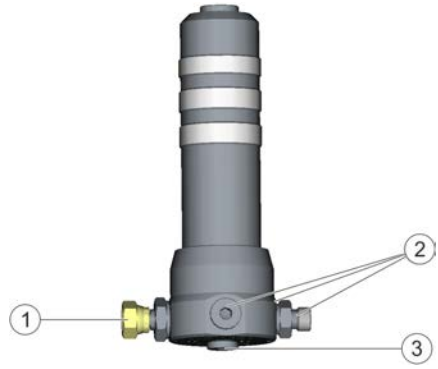

Fig. 2: Installation on top (example)

1 Material inlet

The filter is used as compressor. Air presses up in the filter and keeps the fill level constant. Prevent pressure drops in the connected product and minimize pulsations. Up to four application devices can be connected to the connections (2), (3).

If the filter sump is installed above, a pressure relief valve must be attached to a connection (2), (3).

Filter sump downwards

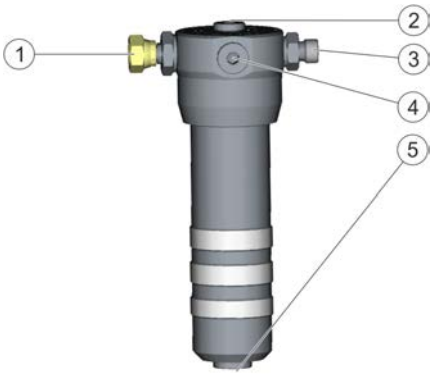

Fig. 3: Installation at bottom (example)

1 Material inlet

The filter can be used for circulation. Air presses directly through the material outlet (2) into the high pressure hose. Material running through the lateral material outlets (2), (3), (4) is filtered. Material running through the lower material outlet (5) circulates and is not filtered. A pressure gage can be connected to the filter on top (2) or on the side (4).

If the filter sump is installed below, a pressure relief valve must be connected on the side (4) of the filter.

4.3 Assembly

Personnel:

- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:

- Protective gloves
- Face protection
- Protective workwear
- Safety boots

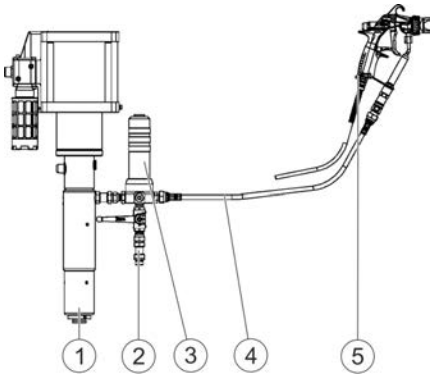

Fig. 4: Assembly drawing (example of filter above)

Observe the following at assembly:

NOTICE!

Property damage due to free-standing filter

If the free-standing filter is attached, torsional forces act on the pipelines when opening and closing the filter sump. The threads are damaged.

– Install filter through a support block or on the pump.

- Install filter (3) on support block or pump (1).
- Pay attention to the flow direction.
- Provide pressure relief valves (2) ↳ 4.2 “Installation position”.
- Provide Pressure gage if necessary.
- Provide 150mm clearance for maintenance work through the filter. Unscrew the filter sump is from the filter for maintenance work.

1. Bolt down the material inlet of the filter (3) on the material outlet of a high pressure pump (1).
2. Screw the depressurization valve (2), depending on the alignment, bottom or lateral.
3. Screw the high pressure hose (4) on the material outlet of the filter (3).
4. Connect applicator (5) to the other end of the high pressure hose (4).

Ground the filter

Personnel:
- Electrician
- + additional qualification explosion protection

Protective equipment:
- Protective workwear
- Safety boots

1. Ground filter through pump or support block.

4.4 Assemble pressure gage

Filter sump upwards

Secure pressure gage with screw locking ↳ 11.7 “Operating and auxiliary materials”.
If the filter sump is aligned downwards, only a pressure gage with connection at the back can be used.

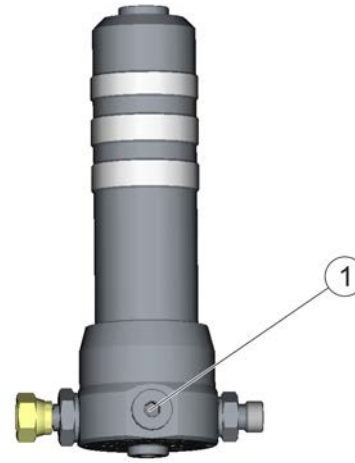

Fig. 5: Pressure gage (example)

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Protective gloves
- Face protection
- Protective workwear
- Safety boots

1. Screw pressure gage with connection at the rear on the material outlet (1).
2. Align pressure gage such that it can be read easily.
3. Test function and tightness of the pressure gage.

Filter sump downwards

Secure pressure gage with screw locking ↳ 11.7 “Operating and auxiliary materials”.

If the filter sump is aligned downwards, a pressure gage with lateral connection and a connection below can be used.

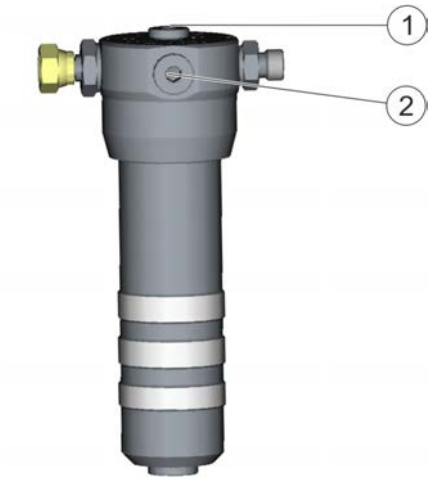

Fig. 6: Pressure gage (example)

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Protective gloves
- Face protection
- Protective workwear
- Safety boots

1. Bolt down pressure gage with connection below on the top of the filter sump (1).
2. Or screw pressure gage with connection laterally on the side of the filter sump (2).
3. Align pressure gage such that it can be read easily.
4. Test function and tightness of the pressure gage.

5 Commissioning

5.1 Safety Instructions

WARNING!

Danger due to missing filter insert

The spring stabilizes the filter insert. If the filter insert is assembled without spring, the filter insert can break. This can cause sparking, which could lead to an explosion. Death or serious injury can result.
- Ensure at the time of assembly that the spring is inserted in the filter.
- Only put mounted filters into operation.

WARNING!

Danger due to electrostatic charge

If loose parts remain in the filter, sparks can ignite the explosive atmosphere. Serious injuries or death can result.
- Ensure before commissioning that there are no loose parts in the filter.

WARNING!

Danger from material under pressure

The filter is designed such that it cannot be opened by hand when under pressure. Opening the filter under pressure using a tool can cause material to squirt out. This may cause injuries.

– Open the filter only by hand after having ensured that the filter is depressurized.
– Do not use a tool to force the filter open.
– If the filter cannot be opened by hand, depressurize the filter.

5.2 Check safety devices

The filter does not need separate safety devices. The filter is designed such that it cannot be opened by hand when under pressure.

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Protective gloves
- Face protection
- Protective workwear
- Safety boots

1. Integrate the filter into the safety devices of the total system.

5.3 Commissioning

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Face protection
- Protective workwear
- Protective gloves
- Safety boots

Requirements:
- All material outlets are closed.

1. Close all material outlets.
2. Open material inlet.
   ⇨ Filter fills up with material and is under pressure.
3. Open the applicator.
   ⇨ Surplus air flows out from the filter.
4. If material flows out from the applicator, close the applicator.
   ⇨ System is filled with material and ready for operation.

6 Operation

6.1 Rinsing

The filter is rinsed by using the rinsing program of the total system.

7 Cleaning

7.1 Safety recommendations

WARNING!

Risk of injury due to escaping material and compressed air

Escaping compressed material can cause serious injury.

Before carrying out any work:
– Disconnect the system, in which the filter is installed, from compressed air and material supply.
– Secure the system against being switched on again.
– Depressurize the lines.

WARNING!

Danger from material under pressure

The filter is designed such that it cannot be opened by hand when under pressure. Opening the filter under pressure using a tool can cause material to squirt out. This may cause injuries.

– Open the filter only by hand after having ensured that the filter is depressurized.
– Do not use a tool to force the filter open.
– If the filter cannot be opened by hand, depressurize the filter.

NOTICE!

Unsuitable cleaning agents

Unsuitable detergents can cause material damage.

– Only use cleaning agents approved by the material manufacturer.
– Follow safety data sheets.

NOTICE!

Property damage due to improper cleaning

Dried up paint residues in the filter sieve can cause material damage.

– Rinse filter before every operational break.
– Wash filter sieve thoroughly in a solvent.

7.2 Cleaning

Personnel:

» Mechanic
» + additional qualification explosion protection
» + Additional qualification high pressure

Protective equipment:

» Protective workwear
» Protective gloves
» Eye protection
» Safety boots

Requirements:

» System is switched off and secured against restart.
» There is no explosive atmosphere in potentially explosive zones.
» System has been purged.
» Lines are discharged and secured against being switched on again.
» Technical ventilation is switched on.

1. Disassemble the filter ↳ 8.3 “Dismantling”.
2. Clean the outer side of the filter by using a piece of cloth moistened with a solvent.
3. Check the inside of the filter for corrosion and wear.
4. If heavily soiled, place individual parts in a cleaning bath.

8 Maintenance

8.1 Safety recommendations

WARNING!

Risk of injury due to escaping material and compressed air

Escaping compressed material can cause serious injury.

Before carrying out any work:

– Disconnect the system, in which the filter is installed, from compressed air and material supply.
– Secure the system against being switched on again.
– Depressurize the lines.

WARNING!

Danger due to missing filter insert

The spring stabilizes the filter insert. If the filter insert is assembled without spring, the filter insert can break. This can cause sparking, which could lead to an explosion. Death or serious injury can result.

– Ensure at the time of assembly that the spring is inserted in the filter.
– Only put mounted filters into operation.

WARNING!

Unsuitable replacement parts in explosive areas

Replacement parts not compliant with the specifications of the ATEX guidelines can cause explosions in an explosive atmosphere. Serious injury and death could be the consequence.

– Use exclusively original replacement parts.

WARNING!

Danger from material under pressure

The filter is designed such that it cannot be opened by hand when under pressure. Opening the filter under pressure using a tool can cause material to squirt out. This may cause injuries.

– Open the filter only by hand after having ensured that the filter is depressurized.
– Do not use a tool to force the filter open.
– If the filter cannot be opened by hand, depressurize the filter.

8.2 Maintenance schedule

If a maintenance assistant is used in the system visualizer, the maintenance intervals of the maintenance assistant are valid.

Interval	Maintenance work
Daily	Clean
	Also check condition and tightness of the connections and lines.
	Check leakage of liquids.
Weekly	Check filter insert. If necessary, replace.
Annually	Check filter housing for tightness and damage.

8.3 Dismantling

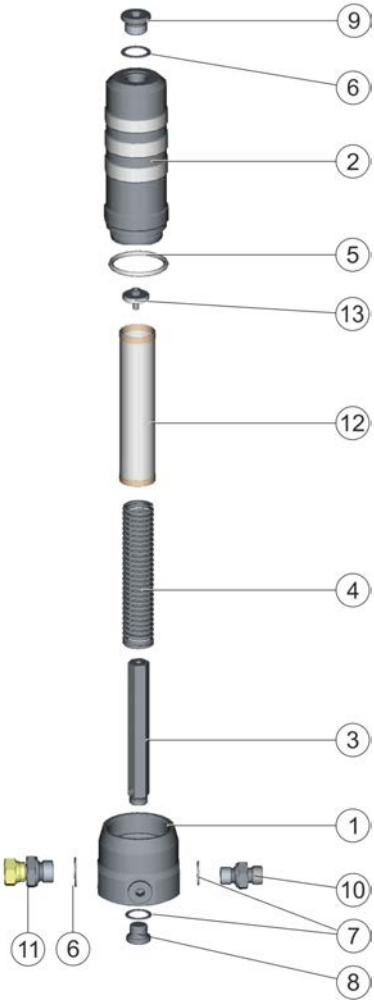

Fig. 7: Exploded view (example)

In normal operation, the screw connections (9), (8), (11) and the sealing rings (6), (7) on the top and bottom of the filter do not wear out. Screw connections and sealing rings need only be replaced, if components are connected to it.

Personnel:

- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:

- Protective gloves
- Eye protection
- Protective workwear
- Safety boots

Requirements:

- Filter has been purged 6.1 “Rinsing”.
- Filter has been disassembled 10.2 “Disassembly”.

1. Unscrew filter sump (2) with sealing ring (5) from the filter housing (1).

   Sealing ring (5) is firmly connected with the filter sump (2) and need only be replaced if damaged 9.2.1 “Replacing sealing ring”.

2. Thread off jack nut (13) from the pin (3).
3. Remove filter insert (12) and spring (4) from the pin (3).
4. Unscrew screwed joints (10) with sealing ring (7) and sealing screw (11) with sealing ring (6) from the filter housing (1).

   Only if damaged.

5. Unscrew the sealing screw (9) with sealing ring (6) from the filter sump (2).

   Only if damaged.

   ⇨ Filter is disassembled.

6. Clean individual parts and let them dry ↳ 7.2 “Cleaning”.

8.4 Assembly

NOTICE!

Leakage due to used sealing rings

Use new sealing rings exclusively.

Lubricate threads and seals before assembly ↳ 11.7 “Operating and auxiliary materials”.

Personnel:

- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:

- Protective gloves
- Safety boots
- Protective workwear

Perform working steps 1-4 only if the filter is completely dismantled.

1. Grease sealing ring (7) and insert into the filter housing (1).
2. Screw the screw connection (10) into the material outlet opposite the material inlet.
3. Grease sealing ring (6) and insert into the filter housing (1).
4. Screw sealing screw (11) into material inlet of the filter housing (1).
5. Slide spring (4) onto the pin (3).
6. Slide filter insert (12) onto the spring (4).
7. Screw jack nut (13) onto the pin (3).
8. If applicable, lubricate threads on the filter housing (1).
9. Screw filter sump (2) on to the filter housing (1).
10. Check filter for tightness.

9 Faults

9.1 Defects table

Fault description	Cause	Remedy
Separation bad, flow rate too low	Filter insert (12) soiled.	Clean filter insert. If necessary, replace ↳ 7 “Cleaning”.
Material leaking at filter housing.	Sealing ring (5) is damaged.	Replace sealing ring ↳ 9.2.1 “Replacing sealing ring”.

9.2 Troubleshooting

9.2.1 Replacing sealing ring

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Protective workwear
- Protective gloves
- Eye protection
- Safety boots

Requirements:
- System is switched off and secured against restart.
- There is no explosive atmosphere in potentially explosive zones.
- Filter has been purged and depressurized.

1. Unscrew filter sump (2) from the filter housing (1).
2. Pull out sealing ring (5) from the filter sump (2).
3. Grease new sealing ring (5) and insert into the filter sump (2).
4. Screw filter sump (2) carefully onto the filter housing (1).

   Screw filter sump (2) onto the filter housing (1) forcefully until it reaches the mechanical stopper so that the sealing ring presses down in the mold.

   ⇨ The pressure exerted by the filter housing (1) on the filter sump (2) deforms the sealing ring (5). The filter housing is sealed.
5. Check filter for tightness.

10 Disassembly and Disposal

10.1 Safety recommendations

WARNING!

Risk of injury due to escaping material and compressed air

Escaping compressed material can cause serious injury.

Before carrying out any work:
- Disconnect the system, in which the filter is installed, from compressed air and material supply.
- Secure the system against being switched on again.
- Depressurize the lines.

10.2 Disassembly

Personnel:
- Mechanic
- + additional qualification explosion protection
- + Additional qualification high pressure

Protective equipment:
- Face protection
- Protective gloves
- Safety boots
- Protective workwear

Requirements:
- Filter has been purged and depressurized ↳ 6.1 “Rinsing”.
- Material supply system of the plant is discharged and secured against reconnection.
- Compressed air supply of the plant is discharged and secured against reconnection.

1. Open screw connection on the material outlet.
2. Pull out high pressure hose from filter.
3. Open screw connection on the material inlet.
4. Pull out filter from the high pressure pump.
5. If necessary, unscrew pressure gage from the pressure gage connection.
6. If necessary, unscrew depressurization valve from the material outlet.
7. Clean filter ↳ 7.2 “Cleaning”.

10.3 Disposal

ENVIRONMENT!

Improper waste disposal

Improper waste disposal threatens the environment and prevents re-use and recycling.
- Clean components before their disposal.
- Always dispose of components in accordance with their characteristics. ↳ 11.8 “Materials used”
- Collect leaked out utilities and auxiliaries completely.
- Dispose of work equipment soaked in coating materials or operating substances according to the disposal provisions in force.
- Dispose of utilities and auxiliaries according to the disposal provisions in force.
- In case of doubt, refer to the local disposal authorities.

11 Technical data

11.1 Dimensions and weight

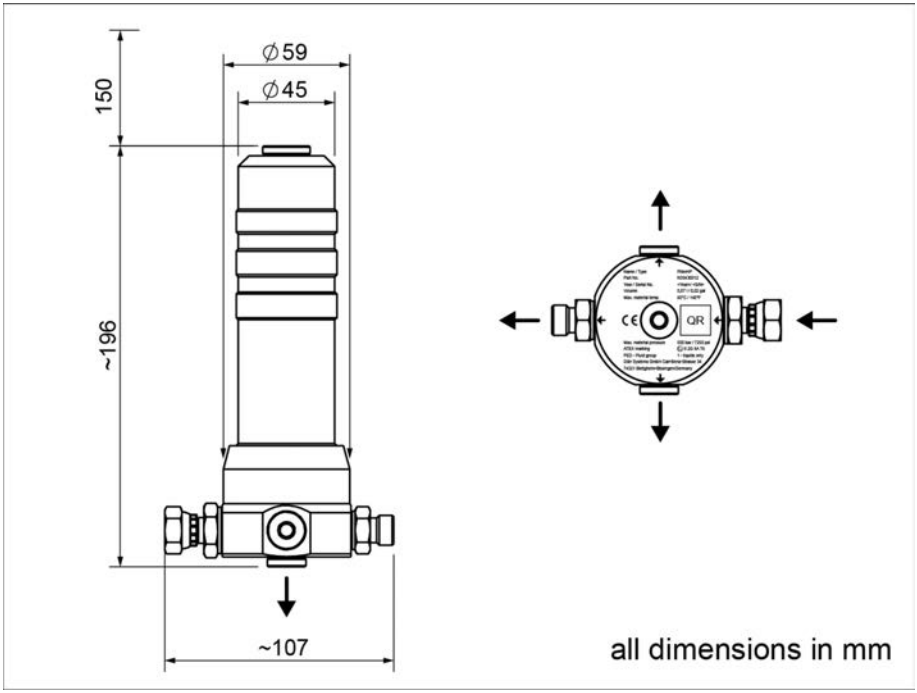

Fig. 8: Dimensions

Detail	Value
Diameter without screw connections	59 mm
Diameter with screw connections	107 mm
Height	196 mm
Additional height for filter disassembly	150 mm
Weight	2.3 kg

11.2 Connections

Detail	Value
Material inlet, internal threads	G3/8"
Material outlet, underside	G1/4"
Material outlet, top side	G3/8"

11.3 Operating conditions

Detail	Value
Ambient temperature, min.	-5°C
Ambient temperature, max.	50 °C
Material temperature, max.	60°C
Temperature of the cleaning agent, max.	60°C

11.4 Operating values

Detail	Value
Max. material pressure	500 bar

11.5 Material specification

Material

Suitable Material:

- Flammable fluid coating materials of the explosion group IIB and their approved cleaning agents
- Non-flammable fluid coating materials and their approved detergents
- Substances containing PVC

Material specifications:

- Ignition temperature >60°C
- Max. temperature 60°C, always 15K below flashpoint

Detail	Value
Material viscosity	3 to 300 mPas

11.6 Type plate

The type plate is attached to the underside of the filter and features the following details:

- Product name
- Material number
- Year of manufacture
- Serial number
- Filter volume
- CE mark
- QR code
- Maximum material temperature
- Maximum material pressure
- ATEX identification
- DGRL Fluid group
- Manufacturer

11.7 Operating and auxiliary materials

Denomination	Type
Seal lubricant	Klüber Syntheso GLEP1
Thread lubricant during assembly	Klüber Syntheso GLEP1
Screw locking for pressure gage	Loctite 542

11.8 Materials used

Component	Material
Filter HP	Stainless steel 1.4305

12 Replacement parts and accessories

12.1 Replacement parts

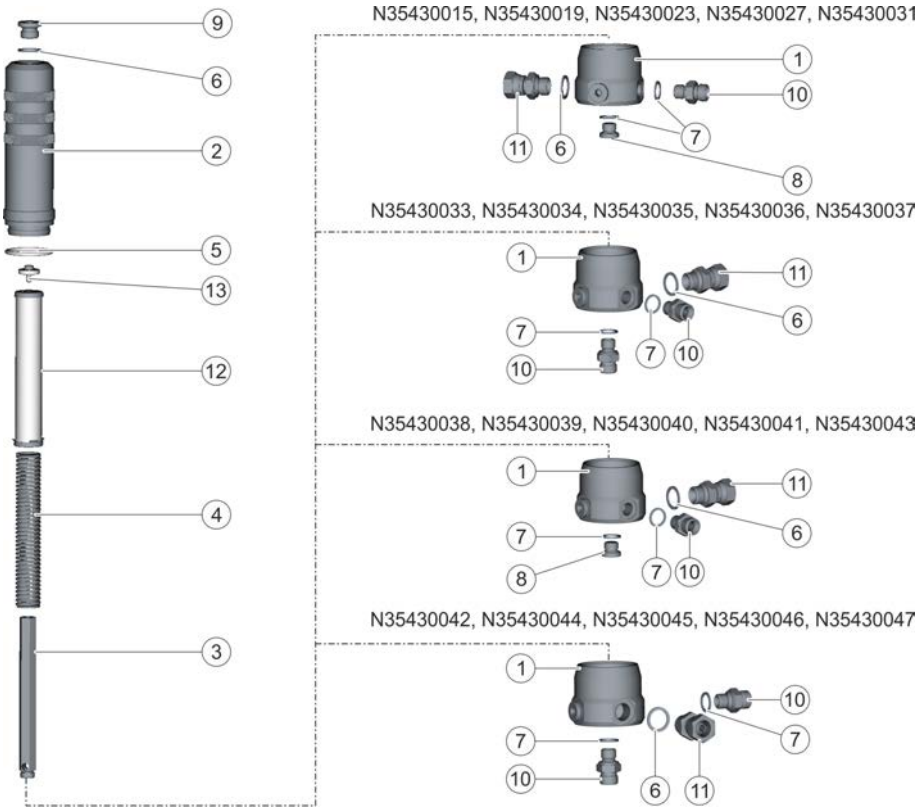

Fig. 9: Exploded view

Delivery times for spare and wear parts are included in the price list. Ordering as well as information on components that are not marked as spare parts or wearing parts in the parts list ↳ “Hotline and Contact”.

- E: Spare part
- V: Wear part (recommended spare part)
- N: No spare part or wearing part

N35430015

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 30msh 500µm 500bar SST	1	M13020061	E
13	Knurled nut with screw M5	1	M30090041	N

N35430019

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E

Item	Description	Quantity	Order number	Spare part/ Wear part
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 60msh 250µm 500bar SST	1	M13020062	E
13	Knurled nut with screw M5	1	M30090041	N

N35430023

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 100msh 149µm 500bar SST	1	M13020063	E
13	Knurled nut with screw M5	1	M30090041	N

N35430027

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E

Item	Description	Quantity	Order number	Spare part/ Wear part
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 200msh 74µm 500bar SST	1	M13020064	E
13	Knurled nut with screw M5	1	M30090041	N

N35430031

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 150msh/105µm 500bar SST	1	M13020073	E
13	Knurled nut with screw M5	1	M30090041	N

N35430033

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 30msh 500µm 500bar SST	1	M13020061	E
13	Knurled nut with screw M5	1	M30090041	N

N35430034

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E

Item	Description	Quantity	Order number	Spare part/ Wear part
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 60msh 250µm 500bar SST	1	M13020062	E
13	Knurled nut with screw M5	1	M30090041	N

N35430035

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 100msh 149µm 500bar SST	1	M13020063	E
13	Knurled nut with screw M5	1	M30090041	N

N35430036

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E

Item	Description	Quantity	Order number	Spare part/ Wear part
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 200msh 74µm 500bar SST	1	M13020064	E
13	Knurled nut with screw M5	1	M30090041	N

N35430037

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 150msh/105µm 500bar SST	1	M13020073	E
13	Knurled nut with screw M5	1	M30090041	N

N35430038

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 30msh 500µm 500bar SST	1	M13020061	E
13	Knurled nut with screw M5	1	M30090041	N

N35430039

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E

Item	Description	Quantity	Order number	Spare part/ Wear part
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 60msh 250µm 500bar SST	1	M13020062	E
13	Knurled nut with screw M5	1	M30090041	N

N35430040

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 100msh 149µm 500bar SST	1	M13020063	E
13	Knurled nut with screw M5	1	M30090041	N

N35430041

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E

Item	Description	Quantity	Order number	Spare part/ Wear part
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 200msh 74µm 500bar SST	1	M13020064	E
13	Knurled nut with screw M5	1	M30090041	N

N35430042

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 200msh 74µm 500bar SST	1	M13020064	E
13	Knurled nut with screw M5	1	M30090041	N

N35430043

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	3	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	1	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 150msh/105µm 500bar SST	1	M13020073	E
13	Knurled nut with screw M5	1	M30090041	N

N35430044

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E

Item	Description	Quantity	Order number	Spare part/ Wear part
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 150msh/105µm 500bar SST	1	M13020073	E
13	Knurled nut with screw M5	1	M30090041	N

N35430045

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 100msh 149µm 500bar SST	1	M13020063	E
13	Knurled nut with screw M5	1	M30090041	N

N35430046

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E

Item	Description	Quantity	Order number	Spare part/ Wear part
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 60msh 250µm 500bar SST	1	M13020062	E
13	Knurled nut with screw M5	1	M30090041	N

N35430047

Item	Description	Quantity	Order number	Spare part/ Wear part
1	Housing f.N35430023	1	M16010510	N
2	Sleeve cylinder	1	M20010430	N
3	Bolt M5 G1/4" SW14	1	M06010250	N
4	Pressure spring d2,8 Dm23,3 Lo145 1.4310	1	M68010262	N
5	O-ring 37,7x3,53 PTFE	1	M08030820	E
6	Ring d17 D22 Al	2	M35010259	E
7	Ring 14x18x1,5 DIN 7603 A Al	4	M35010257	E
8	Locking screw G1/4" hexagon socket	2	M41090181	E
9	Locking screw G3/8" hexagon socket	1	M41090182	E
10	Screw-in fitting WJ	2	M55070363	E
11	Screw-in fitting WT	1	M55070368	E
12	Strainer 30msh 500µm 500bar SST	1	M13020061	E
13	Knurled nut with screw M5	1	M30090041	N

12.2 Accessories

Denomination	Quantity	Order number
Ball valve depressurization module OMK VA	1	M54300607
Ball valve, pressure relieve part DOK VA	1	M54300608

12.3 Order

WARNING!

Unsuitable replacement parts in explosive areas

Replacement parts not compliant with the specifications of the ATEX guidelines can cause explosions in an explosive atmosphere. Serious injury and death could be the consequence.

– Use exclusively original replacement parts.

WARNING!

Unsuitable replacement parts

Replacement parts of third-party suppliers may possibly not be able to hold the loads. Serious injury and death could be the consequence.

– Use exclusively original replacement parts.

Ordering replacement parts, tools and accessories as well as information on products that are listed without order number ↳ “Hotline and Contact”.

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Translation of the original operation manual