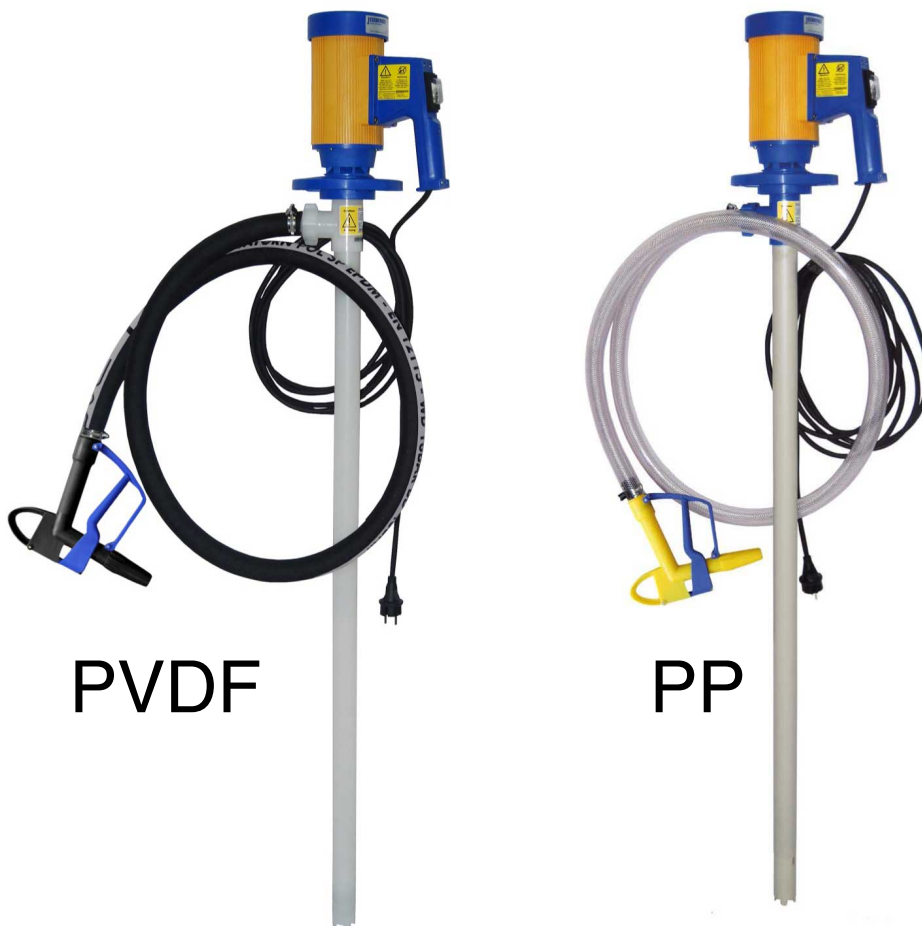


Assembly and operating instructions

Barrel pump

DULCO®Trans 41/1000 PVDF or PP

EN



PVDF

PP

A2670

Please carefully read these operating instructions before use. · Do not discard.
The operator shall be liable for any damage caused by installation or operating errors.
The latest version of the operating instructions are available on our homepage.

General non-discriminatory approach

In order to make it easier to read, this document uses the male form in grammatical structures but with an implied neutral sense. It is aimed equally at both men and women. We kindly ask female readers for their understanding in this simplification of the text.

Supplementary information

➔ Please read the supplementary information in its entirety.

Information



This provides important information relating to the correct operation of the unit or is intended to make your work easier.

Warning information

Warning information includes detailed descriptions of the hazardous situation, see ➔ *Chapter 2.1 'Labelling of Warning Information' on page 7.*

The following symbols are used to highlight instructions, links, lists, results and other elements in this document:

Tab. 1: More symbols

Symbol	Description
1. ➔	Action, step by step.
⇒	Outcome of an action.
➔	Links to elements or sections of these instructions or other applicable documents.
■	List without set order.
[Button]	Display element (e.g. indicators). Operating element (e.g. button, switch).
'Display /GUI'	Screen elements (e.g. buttons, assignment of function keys).
CODE	Presentation of software elements and/or texts.

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1 Function, resistance and scope of delivery

Function

Barrel pumps are the ideal solution when liquids have to be moved. The unit is used for bottling, draining and transferring non-flammable and non-explosive liquids from canisters, hobbicks, drums, storage tanks and containers.

Device	Max. pump capacity	Max. delivery height	Order number
DULCO®Trans 41/1000 PP	93 l/min*	11.0 m	1098491
DULCO®Trans 41/1000 PVDF	93 l/ min*	11.0 m	1098493

* The pump capacity is also measured with water at 20 °C, a 1" pressure pipe and an oval wheel meter.

Chemical resistance



The field of application of the unit depends on the chemical resistance of the materials used.

Tab. 2: Wetted materials of the unit, PP version:

Component	Material
External and internal pipe, pump nozzle	PP
Drive shaft	Hastelloy® C
Rotor	PP
Metering hose	PVC with woven inner layer

The resistance list, which is continually updated, can be found on the manufacturer's homepage www.prominent.com

Tab. 3: Wetted materials of the unit, PVDF version:

Component	Material
External and internal pipe, pump nozzle	PVDF
Drive shaft	Hastelloy® C
Rotor	PVDF
Metering hose	Cross-linked PE

The resistance list, which is continually updated, can be found on the manufacturer's homepage www.prominent.com

Nameplate

DULCO® Trans 41/1000 PP
Mat. - Nr.: 1098491
Ser.- Nr.: E 180 XXX XX
230V 50/60Hz 640 W 2,82A, IP24
Bedienungsanleitung beachten !
Observe Operating Instructions !
Mode d'emploi est à observer !
ProMinent GmbH
Heidelberg - Germany

CE □

A2678

Fig. 1: Nameplate on the pump housing, PP version.

Scope of delivery

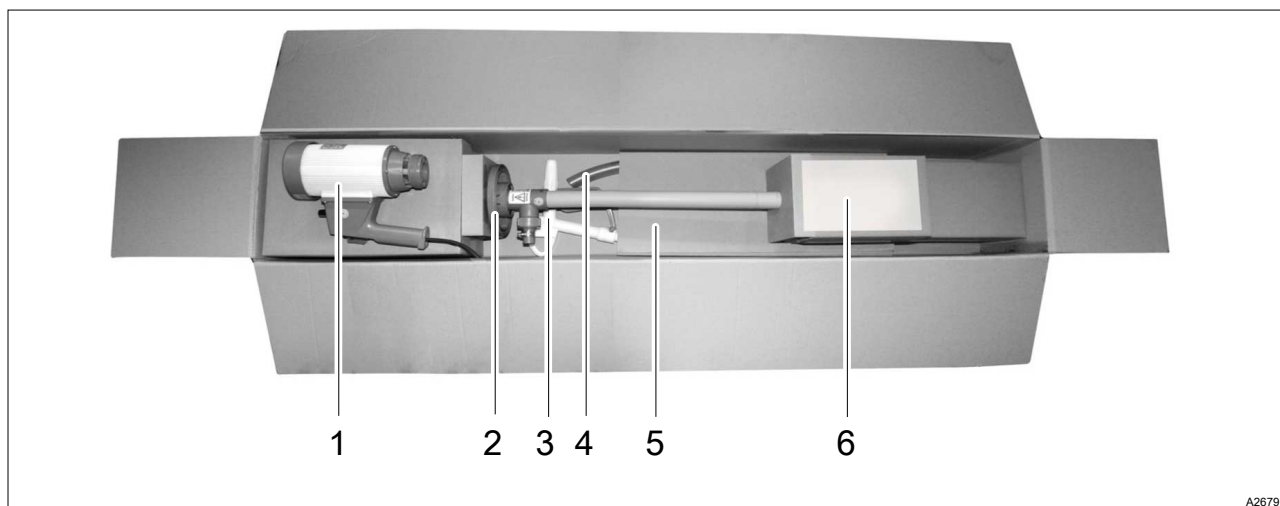


Fig. 2: A2679

- | | | | |
|---|--------------------------------------------|---|-------------------------------------|
| 1 | Barrel pump motor | 4 | Metering hose |
| 2 | Pump | 5 | Packaging |
| 3 | Pump nozzle assembled on the metering hose | 6 | Assembly and operating instructions |

Overview of the key components

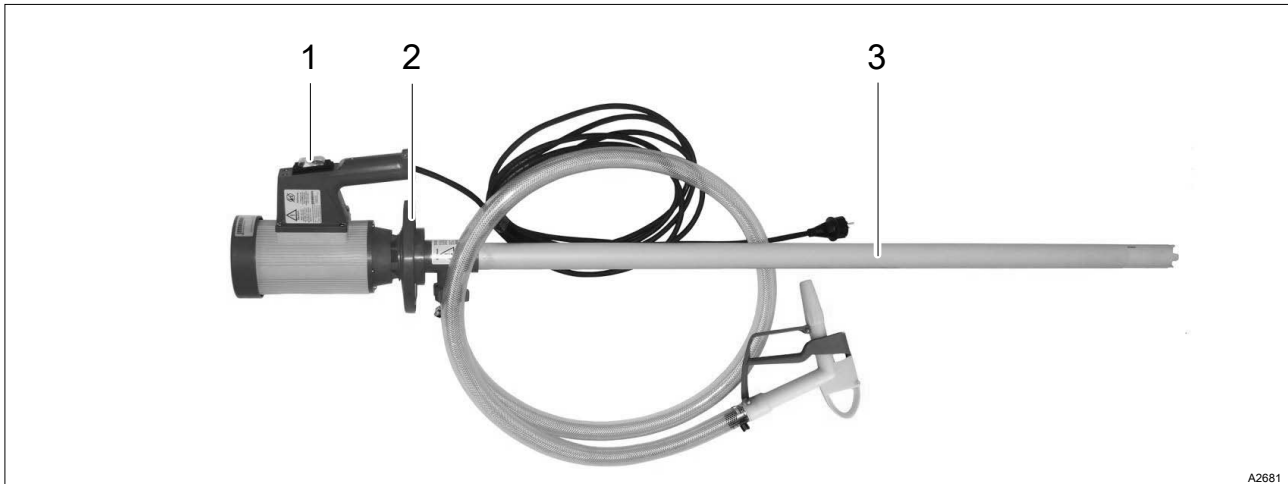


Fig. 3: Overview of the key components, PP version.

- 1 On/off switch.
- 2 Connecting nut.
- 3 Suction tube.

2 Safety chapter

2.1 Labelling of Warning Information

Introduction

These operating instructions provide information on the technical data and functions of the product. These operating instructions provide detailed warning information and are provided as clear step-by-step instructions.

The warning information and notes are categorised according to the following scheme. A number of different symbols are used to denote different situations. The symbols shown here serve only as examples.



DANGER!

Nature and source of the danger

Consequence: Fatal or very serious injuries.

Measure to be taken to avoid this danger.

Description of hazard

- Denotes an immediate threatening danger. If the situation is disregarded, it will result in fatal or very serious injuries.



WARNING!

Nature and source of the danger

Possible consequence: Fatal or very serious injuries.

Measure to be taken to avoid this danger.

- Denotes a possibly hazardous situation. If the situation is disregarded, it could result in fatal or very serious injuries.



CAUTION!

Nature and source of the danger

Possible consequence: Slight or minor injuries. Material damage.

Measure to be taken to avoid this danger.

- Denotes a possibly hazardous situation. If the situation is disregarded, it could result in slight or minor injuries. May also be used as a warning about material damage.



NOTICE!

Nature and source of the danger

Damage to the product or its surroundings.

Measure to be taken to avoid this danger.

- Denotes a possibly damaging situation. If the situation is disregarded, the product or an object in its vicinity could be damaged.



Type of information

Hints on use and additional information.

Source of the information. Additional measures.

- *Denotes hints on use and other useful information. It does not indicate a hazardous or damaging situation.*

2.2 User qualification



WARNING!

Danger of injury with inadequately qualified personnel

The operator of the system / equipment is responsible for ensuring that the qualifications are fulfilled.

If inadequately qualified personnel work on the unit or loiter in the hazard zone of the unit, this could result in dangers that could cause serious injuries and material damage.

- All work on the unit should therefore only be conducted by qualified personnel.
- Unqualified personnel should be kept away from the hazard zone.

The pertinent accident prevention regulations, as well as all other generally acknowledged safety regulations, must be adhered to.

Training	Definition
Instructed personnel	An instructed person is deemed to be a person who has been instructed and, if required, trained in the tasks assigned to him and possible dangers that could result from improper behaviour, as well as having been instructed in the required protective equipment and protective measures.
Trained user	A trained user is a person who fulfils the requirements made of an instructed person and who has also received additional training specific to the system from the manufacturer or another authorised distribution partner.
Trained, qualified personnel	A trained, qualified employee is deemed to be a person who is able to assess the tasks assigned to him and recognize possible hazards based on his training, knowledge and experience, as well as knowledge of pertinent regulations. A trained, qualified employee must be able to perform the tasks assigned to him independently with the assistance of drawing documentation and parts lists. The assessment of a person's technical training can also be based on several years of work in the relevant field.
Electrical technician	An electrical technician is able to complete work on electrical systems and recognise and avoid possible dangers independently based on his technical training and experience as well as knowledge of pertinent standards and regulations. An electrical technician must be able to perform the tasks assigned to him independently with the assistance of drawing documentation, parts lists, terminal and circuit diagrams. The electrical technician must be specifically trained for the working environment in which the electrical technician is employed and be conversant with the relevant standards and regulations.
Service	The Service department refers to service technicians, who have received proven training and have been authorised by the manufacturer to work on the system.

2.3 Intended Use

- The barrel pump is used for the fast and safe drainage or transfer of storage tanks, drums and container.
- Depending on its design, the barrel pump can pump non-flammable liquids of all kinds.

- The collector motor is used to drive the barrel pump in areas not at risk of explosion and is used for non-flammable liquids.
- The pump nozzle is used for the bottling of liquids.
- Barrel pump, motor and pump nozzle are suitable for protected use indoors and may not be exposed to weathering.
- The barrel pump, motor and pump nozzle are intended for commercial use.

2.4 Foreseeable Misuse

- The barrel pump and its accessories are not intended to be used by untrained people and by people with restricted physical, sensory or mental capabilities.
- Children should be supervised to ensure that they do not play with the unit.
- The use of the pump nozzle is not permitted in petrol filling stations (TRBF40).
- The pumping of flammable liquids is not permitted.
- Operation in areas at risk of explosion is not permitted.

2.5 Safety

This chapter gives an overview of all the important safety aspects for the protection of individuals as well as for safe and fault-free operation of the product. Other task-specific warning information can be found in the individual action sequences.

The following chapters describe the residual risks that use of this unit presents even when used as intended. Please refer to the safety information listed here and comply with the warning information in the later chapters of these instructions to reduce these risks of personal injury and material damage and avoid hazardous situations.

2.5.1 Safety information for pump and motor



WARNING!

Danger from hazardous substances!

Possible consequence: Fatal or very serious injuries.


Please ensure when handling hazardous substances that you have read the latest safety data sheets provided by the manufacture of the hazardous substance. The actions required are described in the safety data sheet. Check the safety data sheet regularly and replace, if necessary, as the hazard potential of a substance can be re-evaluated at any time based on new findings.

The system operator is responsible for ensuring that these safety data sheets are available and that they are kept up to date, as well as for producing an associated hazard assessment for the workstations affected.



Non-observance of the safety information

Non-observance of the safety information can lead to damage to people and the environment and also result in damage to the motor and pump.

- In the event of an emergency, disconnect from the mains power supply.
- The motor is not explosion-protected.
- Do not leave the pump operating unsupervised.
- Do not use the pump in areas at risk from explosion.
- Never pump flammable liquids.
- Only use the pump for its intended purpose, see  *Chapter 2.3 'Intended Use' on page 9*
- The pump is operated vertically.
- Set up the pump so that it cannot fall into the storage tank.
- Regularly check the pump and hose for operational safety.
- Regularly check the motor in accordance with statutory/ country-specific regulations and accident prevention regulations, in Germany such as in accordance with BGV A3.
- Secure the motor against accidental start-up. The pump can start up as soon as the mains plug has been inserted.
- Before plugging in the mains plug, turn the On/Off switch to "0".
- The motor does not restart automatically following power failure.
- Only immerse the pump in the liquid as far as the pressure nozzle.
- Only allow the pump to stand in the liquid while it is pumping.
- Use the pump up to a maximum liquid temperature of 50 °C (PP version) or a maximum liquid temperature of 90 °C (PVDF version).
- Ambient temperature: + 1 °C ... + 40 °C.
- Note any escaping air and displace volume when immersing the pump in the water. Immerse the pump carefully and slowly.
- Use a spray guard with open drums or storage tanks.
- Remove any spilled liquid and dispose of it in an environmentally-friendly manner, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Note any internal instructions.
- Wear protective clothing, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Do not expose the pump to weathering.
- Clean the pump after each use, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Do not store the pump in aggressive fumes.

2.5.2 Safety information for the pump nozzle



WARNING!

Danger from hazardous substances!

Possible consequence: Fatal or very serious injuries.

Please ensure when handling hazardous substances that you have read the latest safety data sheets provided by the manufacture of the hazardous substance. The actions required are described in the safety data sheet. Check the safety data sheet regularly and replace, if necessary, as the hazard potential of a substance can be re-evaluated at any time based on new findings.

The system operator is responsible for ensuring that these safety data sheets are available and that they are kept up to date, as well as for producing an associated hazard assessment for the workstations affected.



Non-observance of the safety information


Non-observance of the safety information can lead to damage to people and the environment and also result in damage to the pump nozzle.

- Only pump clean liquids.
- When using, note the maximum operating pressure of 2 bar at 50 °C (PP design) or 2 bar at 60 °C (PVDF design). The pump nozzle can bounce back.
- When filling into a storage tank, make sure that no overpressure can build up in this storage tank. Danger from spraying liquids.
- Do not fill up too quickly to prevent the liquids from splashing out of the storage tank.
- Only bend the hose slightly to prevent too high mechanical stresses being exerted on the pump nozzle
- Only fill up using the pump nozzle under supervision, as the nozzle does not automatically shut off.
- Check during commissioning whether the manual lever returns automatically into its starting position.
- Use visual controls to regularly monitor the external condition of the pump nozzle.
- Allow the pump nozzle to drain at the end of the filling process.
- Regularly check to make sure that the hose clips are fixed securely.
- Remove any spilled liquid and dispose of it in an environmentally-friendly manner, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Note any internal instructions.
- Wear protective clothing, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Do not expose the pump nozzle to weathering.
- Clean the pump nozzle after each use, referring to the material safety data sheets issued by the manufacturer of the hazardous material.
- Do not store the pump nozzle in aggressive fumes.

2.6 Sound pressure level

The sound pressure level is < 70 dB (A). This value was measured on the manufacturer's test stand.

3 Storage and Transport

- **User qualification:** instructed user, see  *Chapter 2.2 'User qualification' on page 9*

Environmental conditions for storage and transport:

- Permissible ambient temperature: +1 °C ... +40 °C.
- Humidity: maximum 90 % relative air humidity, non-condensing.
- Other: No dust, no direct sunlight.


3.1 Transport

The sensor should be transported in its original packaging and in compliance with the permissible environmental conditions. No further special conditions have to be observed in relation to transport.

3.2 Disposal of Packaging



Packaging material

Dispose of packaging material in an environmentally responsible way. All packaging components carry the corresponding recycling code .

4 Assembly and commissioning

- **User qualification:** instructed user, ↪ Chapter 2.2 'User qualification' on page 9

4.1 Assembly of the pump

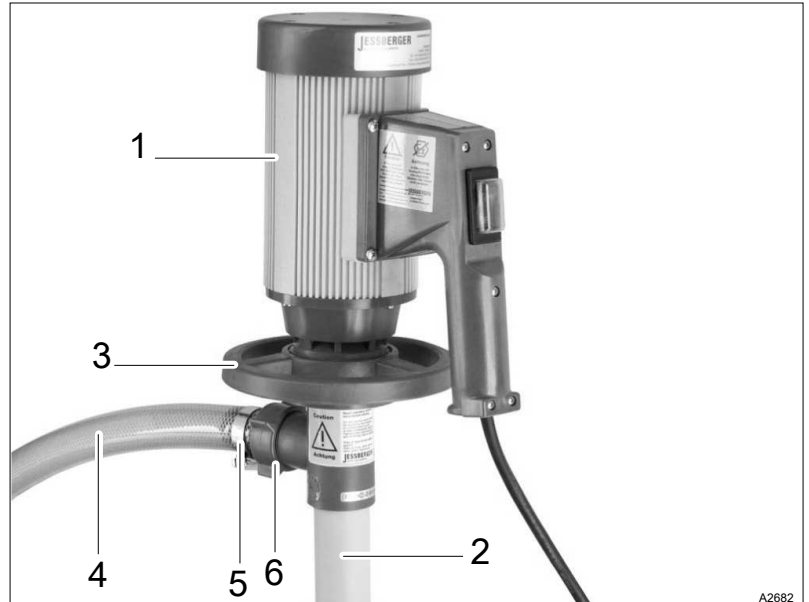


Fig. 4: Assembly.

1. ➔ Use the connecting nut (3) to connect the pump (2) and the motor (1).
2. ➔ Place the hose (4) (PVC = transparent, PE = black) on the hose plug (6) of the pump and use the hose clamp (5) to fix the hose in place.

4.2 Motor description and overcurrent tripping

Inner-ventilated universal motor with overcurrent switch and zero voltage trigger.

Repeated overloading can damage the motor. Overloading can be caused by high-viscosity liquids or liquids with a higher density than water.

- ➔ If the motor switches off due to overloading, reduce the viscosity and/or the density of the liquid.

Overcurrent trip:

- The motor switches off if the maximum current is exceeded.
- ➔ You can immediately switch on the motor again by actuating the On/Off switch.

5 Operation

- **User qualification:** instructed user, ↗ *Chapter 2.2 'User qualification' on page 9*



WARNING!

Electrical voltage

Possible consequence: Fatal or very serious injuries.

- Before using, check the mains connection cable for damage.
- Keep the mains connection cable away from solvents.



WARNING!

Danger from hazardous substances!

Possible consequence: Fatal or very serious injuries.

Please ensure when handling hazardous substances that you have read the latest safety data sheets provided by the manufacture of the hazardous substance. The actions required are described in the safety data sheet. Check the safety data sheet regularly and replace, if necessary, as the hazard potential of a substance can be re-evaluated at any time based on new findings.

The system operator is responsible for ensuring that these safety data sheets are available and that they are kept up to date, as well as for producing an associated hazard assessment for the workstations affected.



Threaded connector (union nut)

- *Only operate the pump when the threaded connector (union nut) between the hose and pump is manually tightened, see ↗ Chapter 4 'Assembly and commissioning' on page 15.*
- *Only switch on the motor if the pump's suction pipe is in the liquid.*

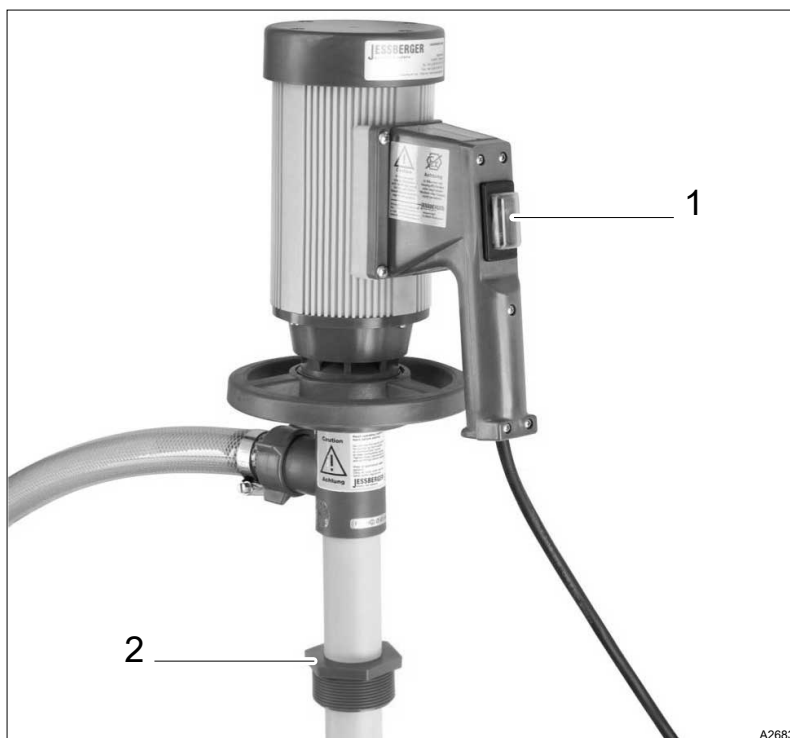


Fig. 5: Operating the pump

1. ➤ Fix the barrel threaded connector (2) to the barrel. Insert the pump into the liquid.
2. ➤ Check whether the manual lever of the pump nozzle returns automatically to its starting position.
 - ⇒ Never switch the pump on should this not be the case, as the pumping process could not therefore be regulated.
3. ➤ Compare the operating voltage observed with the data on the nameplate.
4. ➤ Before plugging in the mains plug, turn the On/Off switch (1) to "0".
5. ➤ Insert the mains plug.
 - ⇒ The pump is now ready for operation.
6. ➤ Use the On/Off switch to switch on the pump.
7. ➤ Press the pump nozzle's manual lever to pump the medium.



Measures after use

Drain the pump, hose and fittings after each use.

Allow the pump nozzle to drain in a controlled manner after filling, as there can still be liquid in the outlet tube, which would otherwise flow out in an uncontrolled manner.

6 Cleaning after each use

- **User qualification:** instructed user, see [Chapter 2.2 'User qualification'](#) on page 9



WARNING!

Change of medium = Clean the pump

Hazard from the chemical incompatibility of the media.

Possible consequence: Health risk and/or damage to the pump and/or medium.

Remedy: Always thoroughly clean the pump when the medium is changed. If you do not clean the pump, it can lead to incompatibility between the medium and pump or old medium and new medium. Refer to the material safety data sheet on the feed chemical.

Cleaning using a suitable cleaning agent

Regular cleaning of the pump increases its service life and maintains the performance of the pump.

1. ➤ Note the resistance of the pump and the hose to the cleaning agent, referring to the reference list.
2. ➤ Use a suitable cleaning agent to rinse the pump, referring to the material safety data sheet for the medium. Never use flammable or explosive liquids.



Fig. 6: Lip (arrow) of the outlet nozzle.

3. ➤ Only immerse the pump in the cleaning agent as far as the lip (arrow) of the outlet nozzle and never immerse the pump fully.
4. ➤ Rinse the pump until the pump is clean.
 - ⇒ The pump is now ready for further use, also with a different medium.

7 Repair, faults and spare parts

7.1 Checks/repairs

Replacing the hose connection or seal:

- **User qualification:** trained user, ↪ Chapter 2.2 'User qualification' on page 9



- Regularly check the pump in accordance with statutory/country-specific regulations and accident prevention regulations (in Germany such as in accordance with BGV A3).

It is essential that all faulty parts are replaced. Preferably use genuine spare parts.

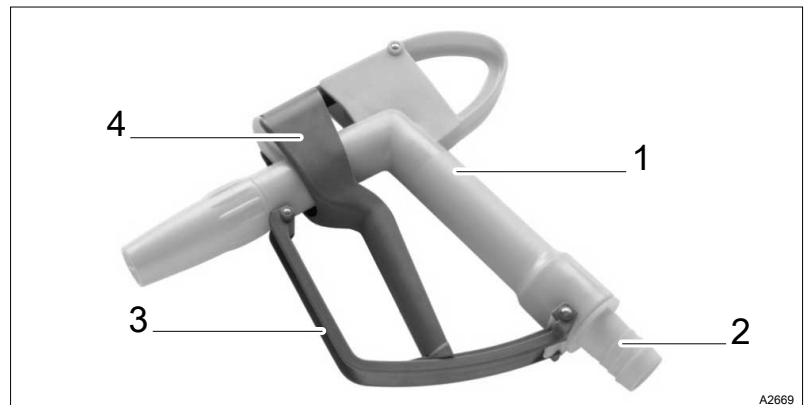
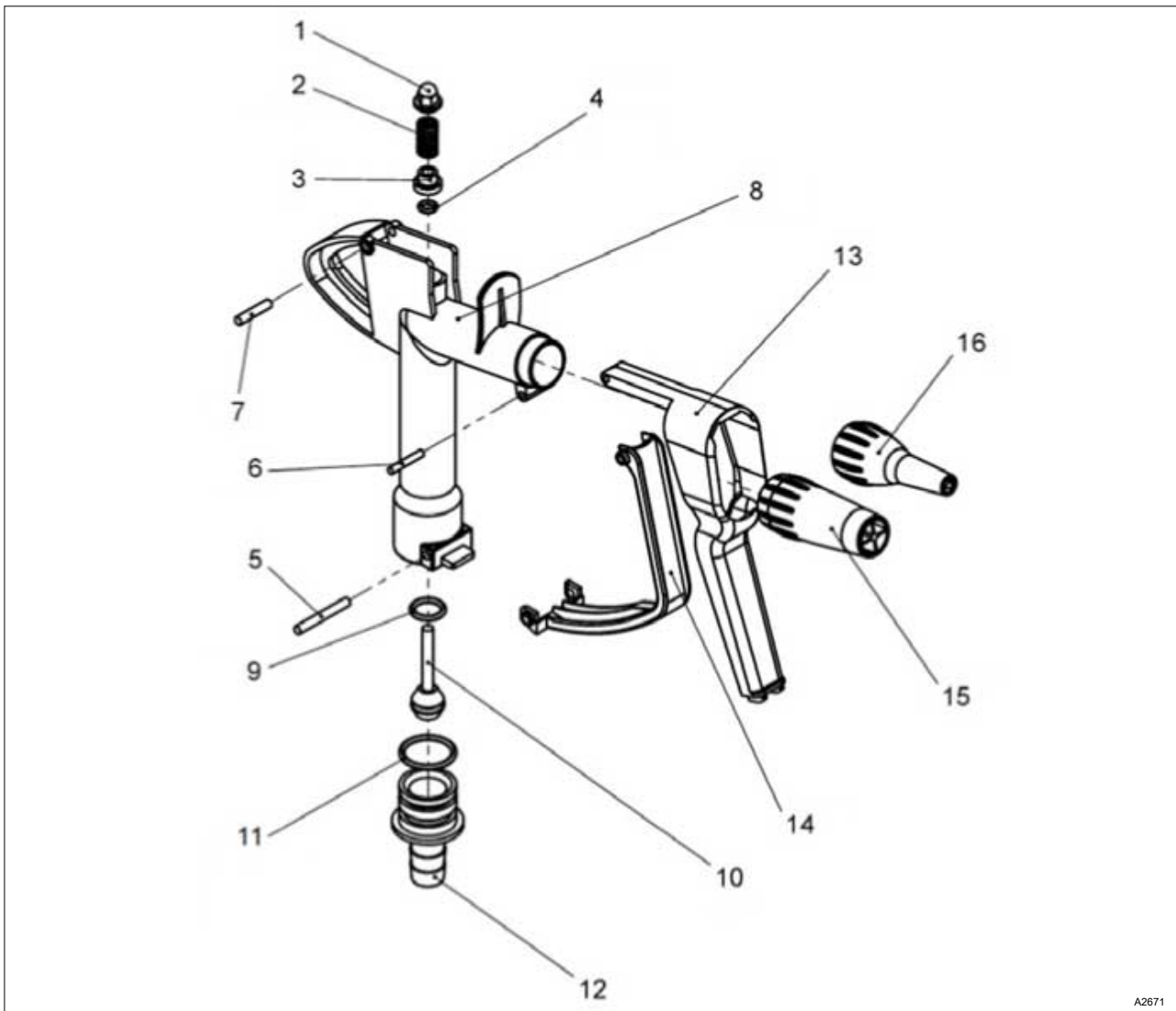


Fig. 7: Components of the pump nozzle (PP = yellow and Blue, PVDF = Black).

1. Housing.
2. Hose connection.
3. Protective mounting bracket.
4. Manual lever.



A2671

Fig. 8: Components of the pump nozzle (PP = yellow and Blue, PVDF = Black).

Please proceed as follows to replace the seals of the pump nozzle.

1. ➤ Disconnect the pump from the mains power supply.
2. ➤ Allow the hose and pump nozzle to run empty.
3. ➤ Clean the pump.
4. ➤ Remove the three grooved pins (5, 6 and 7) by pushing them out using a small pin. The stainless steel pin is wider at one side and can therefore only be removed in the direction of the wider end
5. ➤ Then first remove the bracket (14), the manual lever (13) and then the hose plug (12) on which the first (11) of a total of three seals is located.
6. ➤ Then block the hexagonal opening at the rear end of the valve rod (10) by inserting a long Allen key (size 8) into the nozzle body from the rear side of the pump nozzle on which you have removed the hose plug and blocking the hexagonal opening.
7. ➤



A compression spring (2) sits behind the domed nut. When removing the domed nut, make sure that you are not injured by the spring when removing it as it is pressurised.

Whilst holding the Allen key firmly with one hand, remove the domed nut (1) from the other side with a size 10 socket.

8. ➤ A seal mount (3) is located behind the spring at the rear end of which is located the second seal (4).
9. ➤ After removing the domed nut, the spring and the seal mount with the second seal, you can push out the valve rod (10) from this side towards the hose connection already removed and replace the third seal (9).
10. ➤ Clean and check all components.
11. ➤ Replace all faulty or defective parts.
12. ➤ Finally fit the pump nozzle in the reverse order to that already described and test the leak-tightness of the pump nozzle at the end of a water line with 3 ... 4 bar pressure.
 - ⇒ The pump nozzle is ready for use again.

7.2 Troubleshooting

- **User qualification:** trained user, see ↗ *Chapter 2.2 'User qualification' on page 9*

Fault	Cause	Solution
Manual lever on pump nozzle sticking.	Joint stuck.	Dismantle the pump nozzle, clean it and replace any faulty components if necessary.
Pump starts but does not pump.	Maximum delivery height and/or viscosity/density exceeded.	Adjust the delivery height and/or viscosity.
	Inner tube blocked.	Check and possibly clean inner tube.
	Couplings, rotor faulty.	Check the couplings and rotor and replace if necessary.

Please contact Service with all other faults. For contact data see the Legal Notices.

Check on the manufacturer's website www.prominent.com whether a more recent version of the operating instructions is available, as further remedies may have been developed in the meantime.

7.3 Spare parts for the DULCO®Trans

- **User qualification:** Service, see ↗ *Chapter 2.2 'User qualification' on page 9*.

Spare parts should only be ordered and fitted through Service.

7.3.1 Spare parts kit for DULCO®Trans 41/1000 PP

Tab. 4: Spare parts kit (order number 1098500) for DULCO®Trans 41/1000 PP, parts list

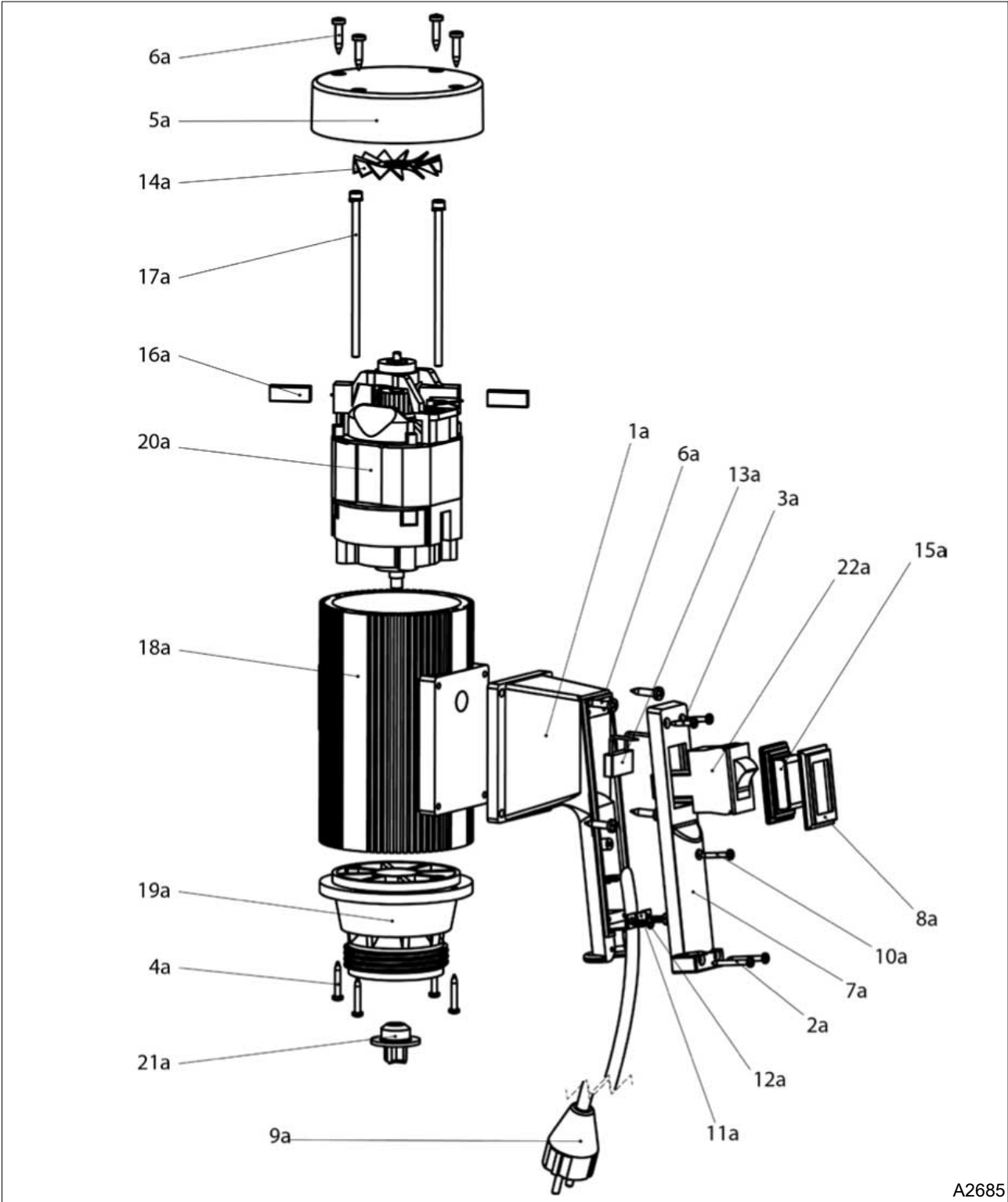
Pos.	Description	Material	Quantity	Order no.
16 a	Carbon brushes	Carbon	2	8080
21 a	Motor coupling	PA	1	8333
1 b	V-seal	PTFE	1	4000
2 b	Pump factory coupling	PA	1	1004
5 b	Bearing unit	Steel	1	1038
10 b	Pump housing with PTFE bearing	PP/PTFE	1	1524
12 b	Rotor	PP	1	1608
13 b	Pump foot	PP	1	1609

7.3.2 Spare parts kit for DULCO®Trans 41/1000 PVDF

Tab. 5: Spare parts kit (order number 1098498) for DULCO®Trans 41/1000 PVDF, parts list

Pos.	Description	Material	Quantity	Order no.
16 a	Carbon brushes	Carbon	2	8080
21 a	Motor coupling	PA	1	8333
1 b	V-seal	PTFE	1	4000
2 b	Pump factory coupling	PA	1	1004
5 b	Bearing unit	Steel	1	1038
10 b	Pump housing with PTFE bearing	PVDF/PTFE	1	4607
12 b	Rotor	PVDF	1	4608
13 b	Pump foot	PVDF	1	4609

7.3.3 Spare parts for the motor



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Fig. 9: Spare parts drawing for the motor.

Tab. 6: Spare parts list for the motor

Position	Description	Quantity	Order number
1a	Lower part of handle	1	8001
2a	Screw	2	8015
3a	Screw	2	8016
4a	Screw	4	8017
5a	Motor cover	1	8026
6a	Screw	8	8035
7a	Handle cover	1	8037
8a	Switch frame	1	8038
9a	5 m cable with earthed plug	1	8039
10a	Screw	1	8045
11a	Tension relief clamp	1	8046
12a	Screw	2	8047
13a	Spark interference filter	1	8056
14a	Impeller	1	8070
15a	Switch cover, transparent	1	8073
16a	Carbon brush	2	8080
17a	M5x110 screw	2	8081
18a	Motor housing	1	8082
19a	Lower bearing label	1	8083
20a	Motor package 230 V, 50 Hz	1	8180
21a	Motor coupling	1	8333
22a	Switch 230 V, 3.5 A, 50 Hz with USP	1	8708

Tab. 7: Spare parts list for the pump (PP design)

Position	Description	Quantity	Order number	Materials
1b	V-seal	1	4000	PTFE
2b	Coupling	1	1004	PA
3b	Drive shaft, Hastelloy®	1	1006	Hastelloy®
4b	Outlet piece	1	1028	PP
5b	Bearing unit (assembled)	1	1038	Steel
6b	Hose plug DN 19	1	1051	PP
7b	Wing nut	1	1106	PP
8b	Retainer	1	1508	Spring steel
9b	Teflon hose	1	1514	PTFE
10b	Pump housing with PTFE bearing	1	1524	PP, PTFE
11b	Inner tube	1	1601	PP
12b	Rotor	1	1608	PP
13b	Pump foot	1	1609	PP
14b	Outer tube	1	1611	PP
15b	Manual adjustment wheel	1	1842	PP

Tab. 8: Spare parts list for the pump (PVDF version)

Position	Description	Quantity	Order number	Materials
1b	V-seal	1	4000	PTFE
2b	Coupling	1	1004	PA
3b	Drive shaft, Hastelloy®	1	1006	Hastelloy®
4b	Outlet piece	1	4028	PVDF
5b	Bearing unit (assembled)	1	1038	Steel
6b	Hose plug DN 19	1	4051	PVDF
7b	Wing nut	1	4106	PVDF
8b	Retainer	1	1508	Spring steel
9b	Teflon hose	1	1514	PTFE
10b	Pump housing with PTFE bearing	1	4607	PVDF, PTFE
11b	Inner tube	1	4601	PVDF
12b	Rotor	1	4608	PVDF
13b	Pump foot	1	4609	PVDF
14b	Outer tube	1	4591	PVDF
15b	Manual adjustment wheel	1	1842	PP

7.3.5 Spare parts for the pump nozzle

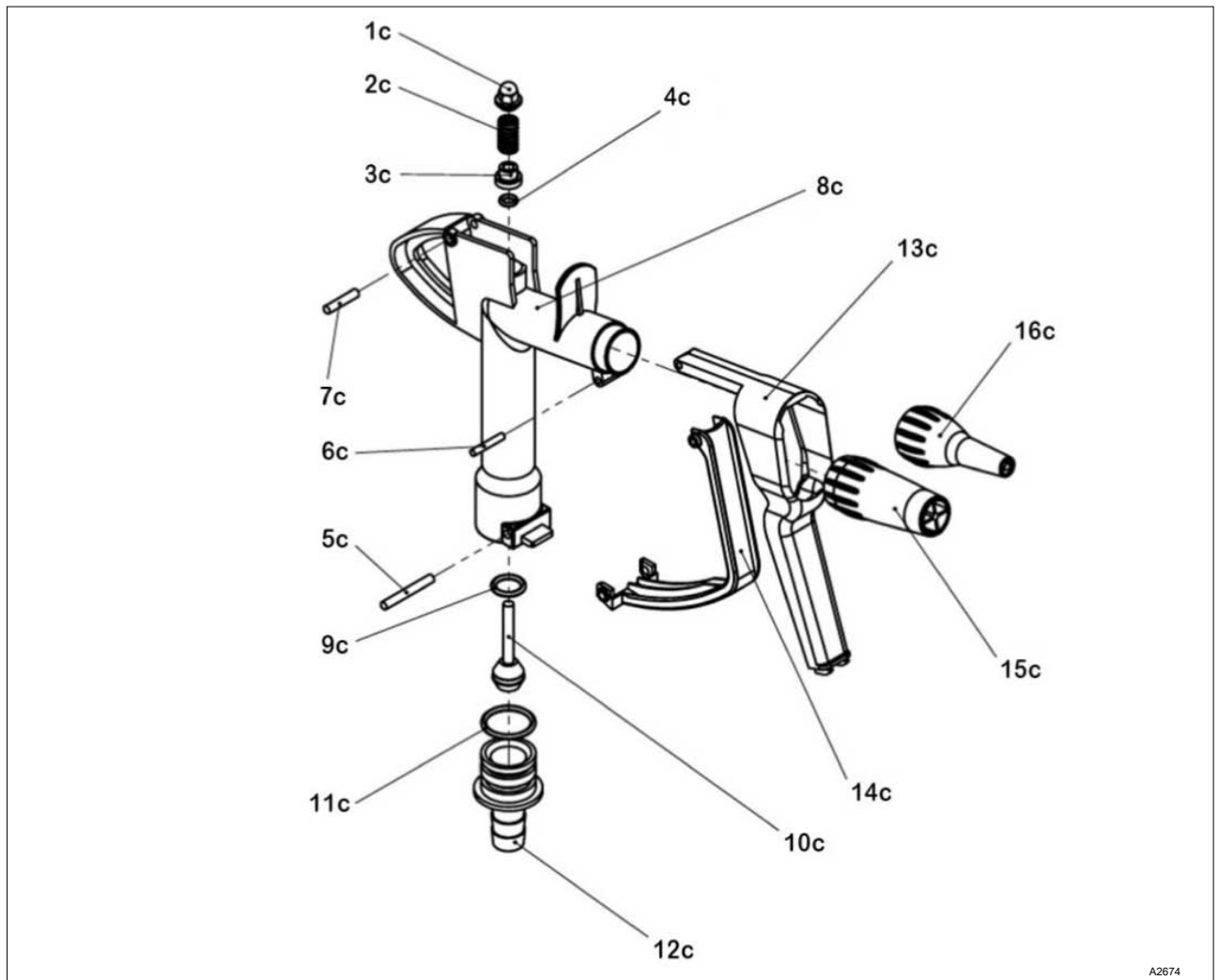


Fig. 11: Spare parts drawing for the pump nozzle.

Tab. 9: Spare parts list for the pump nozzle (PP design)

Position	Description	Quantity	Order number	Materials
1c	Domed nut	1	1135	PP
2c	Compression spring	1	1136	Stainless steel
3c	Seal mount	1	1137	PP
4c	O-ring	1	1138	FKM
5c	Distance pin Ø 5x40	1	1141	Stainless steel
6c	Distance pin Ø 5x25	1	1142	Stainless steel
7c	Distance pin Ø 4x25	1	1143	Stainless steel
8c	Housing	1	1144	PP
9c	O-ring	1	1145	FKM
10c	Valve rod	1	1148	PP
11c	O-ring	1	1149	FKM
12c	Hose plug DN19	1	1153	PP
13c	Manual lever	1	1155	PP

Position	Description	Quantity	Order number	Materials
14c	Bracket	1	1156	PP
15c	Nozzle Ø 20	1	1157	PP
16c	Nozzle Ø 9	1	1158	PP

Tab. 10: Spare parts list for the pump nozzle (PVDF version)

Position	Description	Quantity	Order number	Materials
1c	Domed nut	1	1159	PVDF
2c	Compression spring	1	1136	Stainless steel
3c	Seal mount	1	1160	PVDF
4c	O-ring	1	1138	FKM
5c	Distance pin Ø 5x40	1	1141	Stainless steel
6c	Distance pin Ø 5x25	1	1142	Stainless steel
7c	Distance pin Ø 4x25	1	1143	Stainless steel
8c	Housing	1	1161	PVDF
9c	O-ring	1	1145	FKM
10c	Valve rod	1	1162	PVDF
11c	O-ring	1	1149	FKM
12c	Hose plug DN19	1	1164	PVDF
13c	Manual lever	1	1155	PP
14c	Bracket	1	1156	PP
15c	Nozzle Ø 20	1	1166	PVDF
16c	Nozzle Ø 9	1	1167	PVDF

7.3.6 Accessories

Tab. 11: Accessories

Description	Quantity	Order number
Barrel threaded connector (PP) Ø 41, with thread G 2	1	9001

8 Disposal of used parts

- **User qualification:** instructed user, see [Chapter 2.2 'User qualification'](#) on page 9



NOTICE!

Regulations governing the disposal of used parts

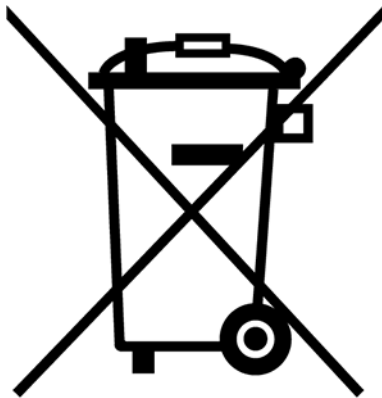
- Note the national regulations and legal standards that currently apply in your country

The manufacturer will take back decontaminated used devices providing they are covered by adequate postage.

Decontaminate the device before returning it for repair. To do so, remove all traces of hazardous substances. Refer to the Material Safety Data Sheet for your feed chemical.

A current Declaration of Decontamination is available to download on the ProMinent website.

Sign indicating EU collection system



In accordance with the European Directive 2012/19/EU on waste electrical and electronic equipment, this device features the symbol showing a waste bin with a line through it. The device must not be disposed of along with domestic waste. To return the device, use the return and collection systems available and observe the local legal requirements.

9 Technical data at a glance

9.1 Technical data, PP version

Tab. 12: Part no. 1098491. PP version

Parameter	Value/Design
Pump type	DULCO®Trans 41/1000 PP
Feed rate*)	93 l/min
Max. delivery height	11 m
Max. viscosity	600 mPas
Max. medium temperature	< 50 °C
Max. medium density	1.5 kg/dm³
Immersion tube length, measured from the end of the pump foot to the middle of the pressure nozzle	1000 mm
Suction tube outer diameter	41 mm
Wetted materials	PP, Hastelloy®, PTFE, FKM, PVC
Pump housing	PP
Shaft	Hastelloy®
Rotor	PP
Axial face seal	none
Seals	PTFE (pump), FKM (pump nozzle)
Hose	PVC 2 m, DN 19
Pump nozzle	PP, DN 19
Hose connection	DN 19
Hose clamps	2 no., stainless steel 1.4301
Drum adapter	Ø 41, with G 2 thread
Motor performance	640 W
Motor IP protection	IP 24
Voltage	230 VAC; 1~; 50 Hz / 60 Hz
Nominal current	2.82 A
Undervoltage trigger	with
Overcurrent protection switch	with
speed control	none
Connecting cable	5 m, with standard European plug
Motor colour	yellow
Colour of top part of housing	blue
Weight	7.6 kg
Dimensions HxWxD	1315 x 270 x 170 mm
*) Measured values ± 5 %, test medium: water 20 °C, 1" pressure pipe, oval wheel meter	

9.2 Technical data, PVDF version

Tab. 13: Part no. 1098493. PVDF version

Parameter	Value/Design
Pump type	DULCO Trans 41/1000 PVDF
Feed rate*)	93 l/min
Max. delivery height	11 m
Max. viscosity	600 mPas
Max. medium temperature	< 90 °C max.
Medium density	1.5 kg/dm ³
Immersion tube length, measured from the end of the pump foot to the middle of the pressure nozzle	1000 mm
Suction tube outer diameter	41 mm
Wetted materials	PVDF, PTFE, Hastelloy®, PE, FKM, PVC
Pump housing	PVDF
Shaft	Hastelloy®
Rotor	PVDF
Axial face seal	none
Seals	PTFE (pump), FKM (pump nozzle)
Hose	PE 2 m, DN19
Pump nozzle	PVDF, DN19
Hose connection	DN19
Hose clamps	2 no., stainless steel 1.4301
Drum adapter	Ø 41, with G 2 thread
Motor performance	640 W
Motor IP protection	IP 24
Voltage	230 VAC; 1~; 50 Hz / 60 Hz
Nominal current	2.82 A
Undervoltage trigger	with
Overcurrent protection switch	with
speed control	none
Connecting cable	5 m with earthed plug
Motor colour	yellow
Colour of top part of housing	blue
Weight	9.2 kg
Dimensions HxWxD	1315 x 270 x 170 mm
*) Measured values ± 5 %, test medium: water 20 °C, 1" pressure pipe, oval wheel meter	

9.3 Performance diagram

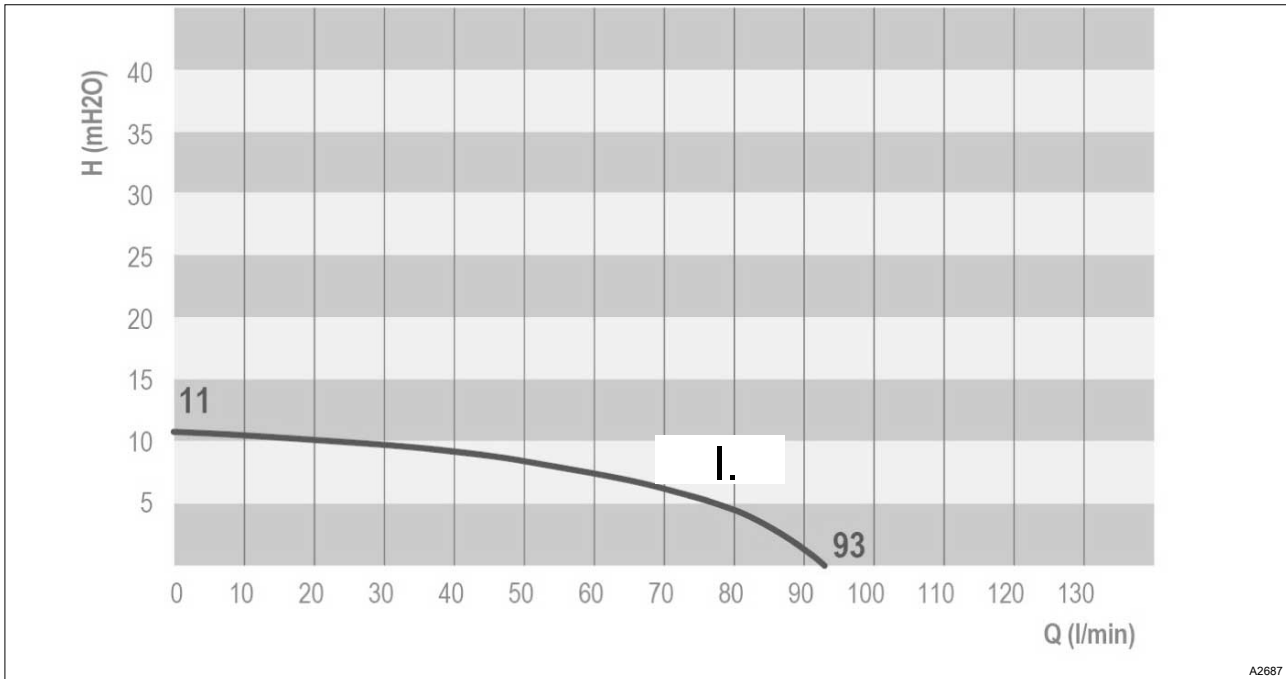


Fig. 12: Performance diagram. Measured values $\pm 5\%$, test medium: water 20 °C, 1" pressure pipe, oval wheel meter.

I. For version: Rotor

9.4 Dimensional drawing with main dimensions

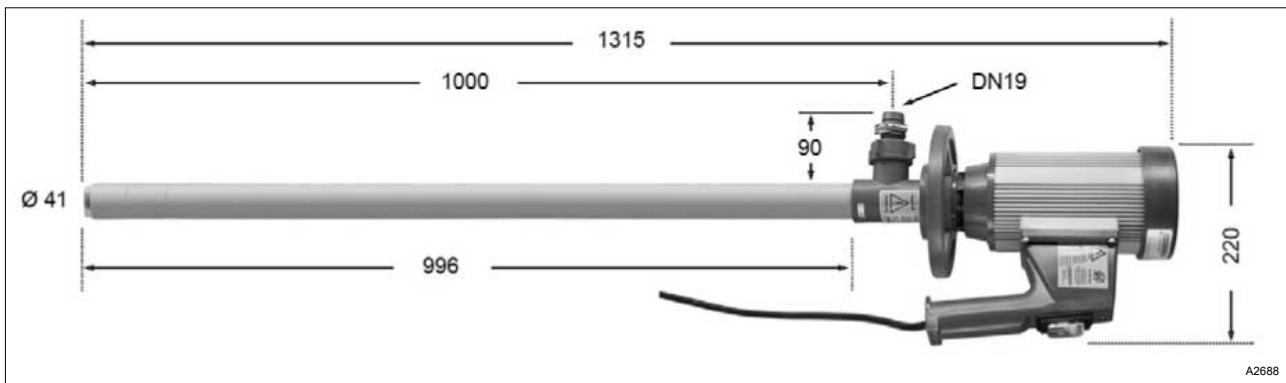


Fig. 13: PP version: Dimensional drawing with main dimensions, all measurements in mm.

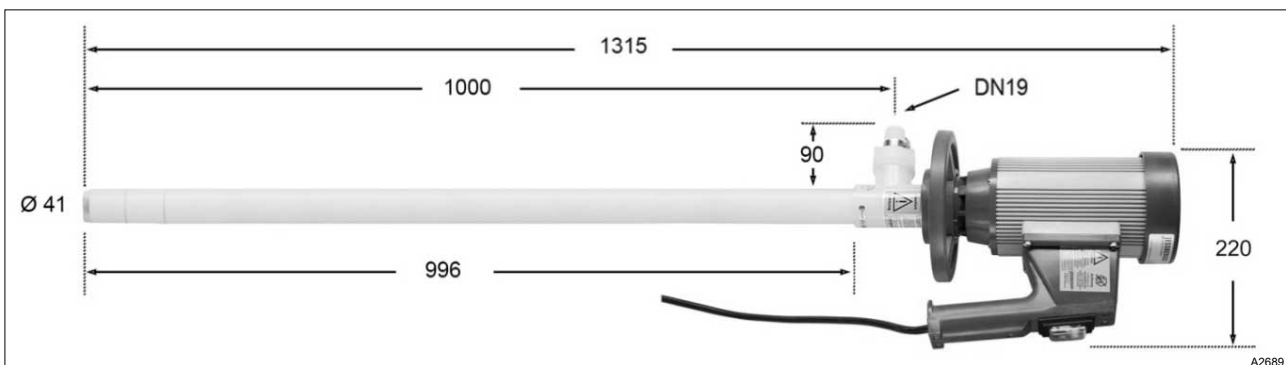


Fig. 14: PVDF version: Dimensional drawing with main dimensions, all measurements in mm.

10 EC / EU Declaration of Conformity for Machinery

In accordance with DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, Appendix I, BASIC HEALTH AND SAFETY REQUIREMENTS, section 1.7.4.2. C.

We,

- ProMinent GmbH
- Im Schuhmachergewann 5 - 11
- D - 69123 Heidelberg, Germany,

hereby declare that the product specified in the following, complies with the relevant basic health and safety requirements of the Directive, on the basis of its functional concept and design and in the version distributed by us.

Any modification to the product not approved by us invalidates this declaration.

Tab. 14: Extract from the EC/EU Declaration of Conformity

Designation of the product:	Barrel pump
Product type:	DULCO®trans
Serial number:	see nameplate on the device
Relevant EC Directives:	EC Machinery Directive (2006/42/EC) Compliance with the protection targets of the Low Voltage Directive 2014/35/EU according to Appendix I, No. 1.5.1 of the Machinery Directive 2006/42/EC. EMC Directive (2014/30/EU) RoHS Directive (2011/65/EU)
Harmonised standards applied, in particular:	EN ISO 12100:2010 EN 809:1998 + A1:2009 + AC:2010 EN 60335-2-41:2003 + A1:2004 + A2:2010 EN 55014-1:2006 + A1:2009 + A2:2011 EN 55014-2:1997 + A1:2001 + A2:2008 EN 50581:2012
Place, Date:	Heidelberg, 1.02.2019

The EC Declaration of Conformity is available to download on our website www.prominent.com.

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