

DWK

Installation and operating instructions



English (GB) Installation and operating instructions

Original installation and operating instructions

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1. Symbols used in this document



Warning

If these safety instructions are not observed, it may result in personal injury.



Warning

If these instructions are not observed, it may lead to electric shock with consequent risk of serious personal injury or death.



Caution

If these safety instructions are not

observed, it may result in malfunction or damage to the equipment.



Note

Notes or instructions that make the job easier and ensure safe operation.

2. General description

To ensure reliable and optimum operation, Grundfos dewatering pumps, type DWK, are designed with two types of impeller:

- 0.75 - 15 kW models have semi-open impeller
- 22 and 90 kW models have enclosed impeller.

DWK pumps are used for removal of surface and underground water in small and medium systems.

DWK pumps can be controlled via the pump controllers GU01 and GU02. For further information, see data sheet for GU01/GU02 module at www.grundfos.com.



Warning

Prior to installation, read these installation and operating instructions. Installation and operation must comply with local regulations and accepted codes of good practice.

3. Operating conditions

The DWK pump range is suitable for two operating modes:

- continuous, submerged operation, S1, with minimum liquid level above the pump
- intermittent operation, S3, with the pump partly submerged. See fig. 1.

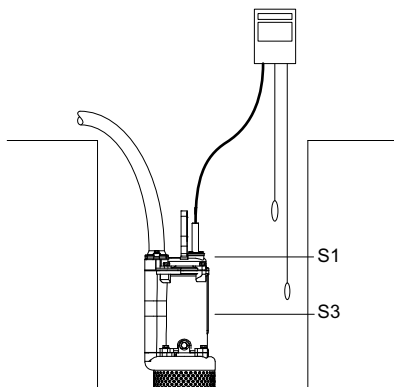


Fig. 1 Liquid level

pH value

DWK pumps in permanent installations can cope with pH values ranging from 4 to 10.

Liquid temperature

0 to 40 °C.

Density of pumped liquid

Maximum 1000 kg/m³.

In the case of higher values, contact Grundfos.

Installation depth

Maximum 25 metres below liquid level.

Operating pattern

DWK.O: Maximum 30 starts per hour.

DWK.E: Maximum 18 starts per hour.

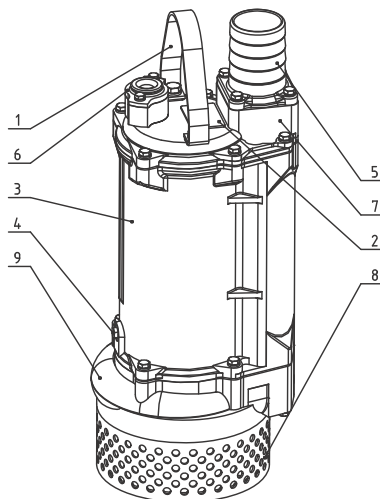


Fig. 2 DWK pump

Pos.	Description
1	Lifting bracket
2	Nameplate
3	Motor
4	Oil plug
5	Outlet flange/hose connection
6	Cable entry
7	Top cover
8	Inlet strainer
9	Pump housing

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4. Applications

DWK pumps are designed for pumping these liquids:

- underground water
- drainage water
- water containing abrasives such as sand and gravel.

The pumps are ideal for pumping the above liquids from installations in or near these places:

- construction sites
- tunnels
- quarries
- fish ponds
- basements
- drain water collecting tanks.

5. Safety



Warning

Pump installation in tanks must be carried out by specially trained persons.

Work in or near tanks must be carried out according to local regulations.

All persons involved must wear appropriate personal protective equipment and clothing, and all work on and near the pump must be carried out under strict observance of the hygiene regulations in force.

6. Transportation and storage

6.1 Transportation

The pump can be transported in a vertical or horizontal position. Make sure that it cannot roll or fall over.

Always lift the pump by its lifting bracket, never by the motor cable or the hose/pipe.

Pump type	Weight [kg]
DWK O 6.50.075.	39
DWK O.6.50.15	41
DWK O.6.80.15	41
DWK O.6.50.22	45
DWK O.6.80.22	45
DWK O.10.80.37	80.5
DWK.O.10.100.37	80.5
DWK.O.13.80.55	110
DWK.O.13.100.55	110
DWK.O.13.100.75	156
DWK.O.13.150.75	156
DWK.O.13.100.110	189.5
DWK.O.13.150.110	189.5
DWK.O.13.100.150	194.5
DWK.O.13.150.150	194.5
DWK.E.10.100.220	420
DWK.E.10.150.220	427
DWK.E.10.150.300	452
DWK.E.10.200.300	462
DWK.E.10.150.370	839
DWK.E.10.200.370	841
DWK.E.10.150.450	858
DWK.E.10.200.450	860
DWK.E.10.150.550	920
DWK.E.10.200.550	923
DWK.E.10.200.750	973
DWK.E.10.200.900	1028

6.2 Storage

6.2.1 Warehouse storage

- The warehouse must be free from excessive humidity, corrosive gases, vapours or vibrations which might damage the pumps.
- Store the pumps in a vertical position on a pallet or stand to keep the pump off the floor and facilitate easy removal.
- Coil up the cable, and seal the open end tightly with waterproof plastic and tape or a cable cap. Do this to prevent moisture from penetrating into the motor which will cause severe damage to the windings.
- Give all unpainted surfaces a light coat of oil or grease to prevent corrosion.
- If new pumps are stored for more than two months, turn the impeller by hand every two months to prevent the mechanical seal faces from seizing up. Failure to do this may result in seal damage when the pump is started up again.

6.2.2 Storage in the tank

- If an installed pump is not in operation for a long time, check the insulation resistance and run the pump for 30 minutes every month. If the pump cannot be run due to lack of water in the tank, inspect the pump and turn the impeller by hand each month and prior to putting the pump back into service. If the insulation resistance drops below 10 megohms, contact Grundfos.
- When the pump is not in service, disconnect the power supply from the control panel.
- If the pump is disconnected from the control panel when not in service, protect the cable end as described in section [6.2.1 Warehouse storage](#).

7. Nameplate

The nameplate is fitted to the top cover of the pump. Fix the extra nameplate supplied with the pump at the installation site or keep it in the cover of this booklet.

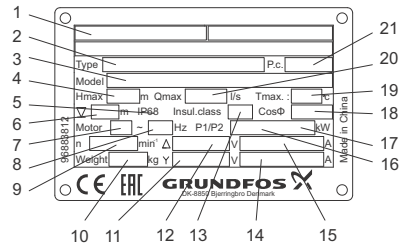


Fig. 3 Nameplate

Pos.	Description
1	Notified body
2	Type designation
3	Product number and serial number
4	Maximum head [m]
5	Enclosure class
6	Maximum installation depth [m]
7	Number of phases
8	Frequency [Hz]
9	Speed [min ⁻¹]
10	Weight
11	Rated voltage [V] Star
12	Rated voltage [V] Delta
13	Insulation class
14	Rated current [A] Star
15	Rated current [A] Delta
16	Motor input power P1 [kW]
17	Motor output power P2 [kW]
18	Power factor
19	Maximum liquid temperature [°C]
20	Maximum flow [m ³ /h]
21	Production code (year/week)

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8. Approvals

The standard version of DWK pumps has been tested by TÜV, in relation to EC Council Directive 98/37/EC Machinery, registration no. AM 5014341 3 0001 and report no. 13009106 001.

9. Type key

The pump can be identified by the type designation stated on the pump nameplate. See section

[7. Nameplate.](#)

Code	Example	DWK	.O	.6	.50	.075	.S	.5	.0D	.R
DWK	Dewatering pump									
O	Semi-open impeller									
E	Enclosed impeller									
Strainer hole size:										
6	Maximum solids size [mm]									
Pump outlet:										
50	Nominal diameter of pump outlet port [mm]									
Code for output power, P2:										
075	P2*: Code number from type designation / 10 [kW]									
Equipment:										
-	Standard									
S	Sensor									
Frequency:										
5	50 Hz									
6	60 Hz									
Voltage and starting method:										
0D	380-415 V, DOL									
1D	380-415 V, Y/D									
0E	220-240 V, DOL									
1E	220-240 V, Y/D									
Material in pump										
[]	Standard									
R	Cast iron pump with high-chrome stainless steel impeller and stainless steel inlet strainer									

* Exception: Code 075 = 0.75 kW

10. Installation

Check these points before beginning installation procedures:

- Does the pump correspond to order.
- Is the pump suitable for the supply voltage and frequency available at the installation site.
- Are accessories and other equipment undamaged during transportation.



Warning

Observe all safety regulations at the installation site.

Use blowers for fresh-air supply to the tank.



Warning

Make sure that the lifting bracket is tightened before attempting to lift the pump. Tighten if necessary. Carelessness during lifting or transportation may cause injury to persons or damage to the pump.



Warning

Before beginning the installation, switch off the power supply and lock the mains switch in position 0 with a padlock to ensure that the power supply cannot be accidentally switched on.

Switch off any external voltage connected to the pump before working on the pump.

Prior to installation, check the oil level in the oil chamber. See section [14. Maintenance, inspection and overhaul](#).

Caution

The pumps are designed for operation in vertical position only.

The DWK pumps can be installed with a hose or pipe.

10.1 Free-standing submerged installation

Pumps for free-standing submerged installation can stand freely on the bottom of the tank or the like.

Fit a flexible union or coupling to the outlet port in order to facilitate service on the pump and easy separation of pump and outlet line.

If a hose is used, make sure that the hose does not buckle and that the inside diameter of the hose matches that of the pump outlet port.

If a rigid pipe is used, fit the union or coupling, non-return valve and isolating valve in the order mentioned when viewed from the pump.

If the pump is installed in muddy conditions or on uneven ground, we recommend that you support the pump on bricks or a similar support.

Installation procedure

1. Lower the pump into the liquid by means of a chain secured to the lifting bracket of the pump. We recommend that you place the pump on a plane, solid foundation. Make sure that the pump stands securely.
2. Hang up the end of the chain on a suitable hook at the top of the tank and in such a way that the chain cannot come into contact with the pump housing.
3. Adjust the length of the motor cable by coiling it up on a relief fitting to ensure that the cable is not damaged during operation. Fasten the relief fitting to a suitable hook. Make sure that the cable is not sharply bent or pinched.
4. Connect the motor cable.

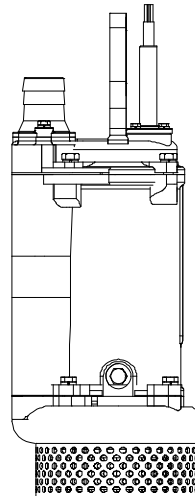


Fig. 4 Free-standing pump on strainer

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11. Electrical connection

The electrical connection must be carried out in accordance with local regulations.

Warning



Before installation and the first startup of the pump, check the condition of the cable visually and measure the cable resistance to avoid short circuits.

Warning

The pump must be connected to a mains switch with a minimum contact gap of 3 mm in all poles.



The classification of the installation site must be approved by the local fire-fighting authorities in each individual case.

Grundfos control boxes and pump controllers must not be installed in potentially explosive environments.

Make sure that all protective equipment has been connected correctly.

The supply voltage and frequency are marked on the pump nameplate. The voltage tolerance must be within - 5 %/+ 5 % of the rated voltage. Make sure that the motor is suitable for the power supply available at the installation site.

All pumps are supplied with 10 m cable and a free cable end.

Pumps with sensors must be connected to a GU01 or GU02 pump controller. See fig. 5 for DOL-connected pumps or fig. 6 for star-delta-connected pumps. For further information see the installation and operating instructions for the selected control box or pump controller at www.grundfos.com.

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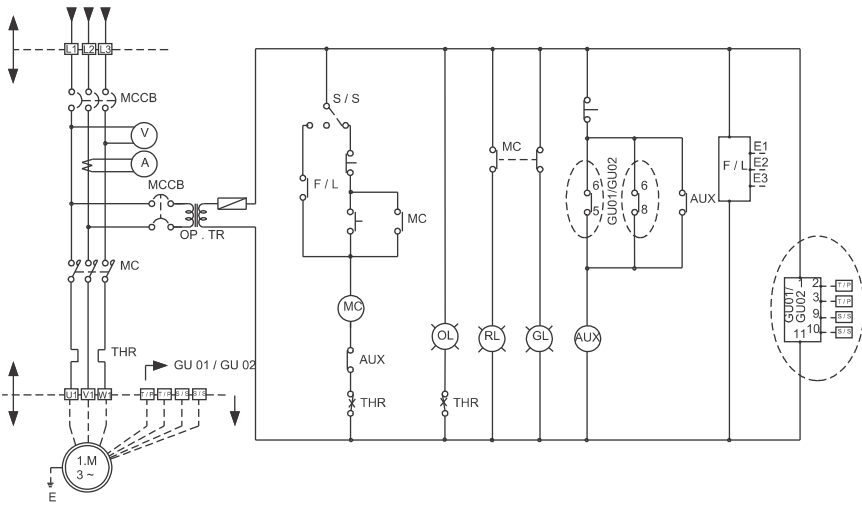


Fig. 5 Wiring diagram, DOL starting

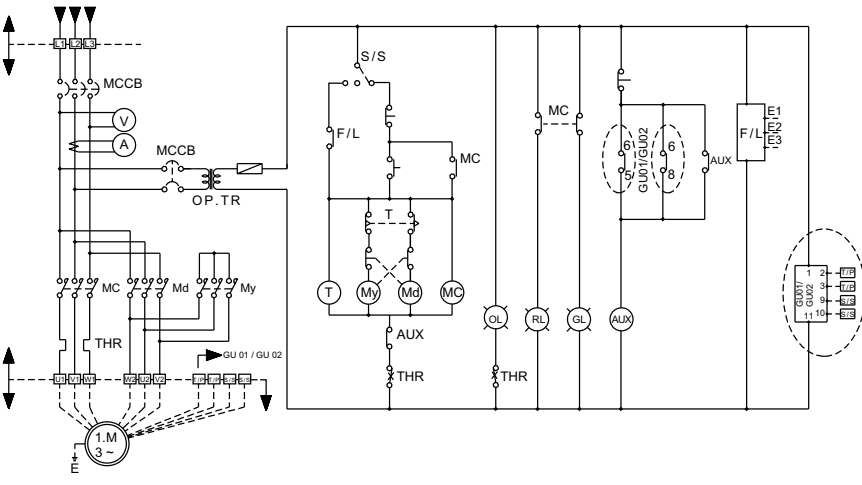


Fig. 6 Wiring diagram, star-delta starting

11.1 Pump controllers

The pumps must be connected to a control box with a motor protection relay with IEC trip class 10 or 15.

The pumps can be controlled by the following LC and LCD pump controllers:

- LC 107, LCD 107 with air bells
- LC 108, LCD 108 with float switches
- LC 110, LCD 110 with water level electrodes.

LC controllers are for single-pump installations. LCD controllers are for two-pump installations.

In the following description, "level switch" can be air bells, float switches or water level electrodes, depending on the pump controller selected.

The LC controller is fitted with two or three level switches: One for start and one for stop of pump. The third level switch, which is optional, is for high-level alarm.

The LCD controller is fitted with three or four level switches: One for common stop and two for start of the pumps. The fourth level switch, which is optional, is for high-level alarm.

For further information, see the installation and operating instructions for the pump controller selected.

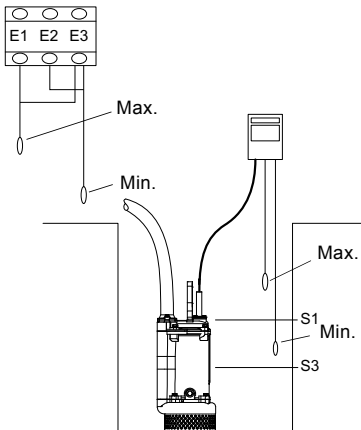


Fig. 7 Pump controllers

11.2 GU01 and GU02

GU01 is a monitoring device for monitoring the stator temperature and water penetration into the motor. It receives a digital signal.

GU02 is a monitoring device for monitoring stator and bearing temperature as well as water penetration into the motor. It receives an analog signal.

Both monitoring devices must be connected to the control panel via a relay.

GU01 and GU02 are manufactured for Grundfos. For further information, please contact your local Grundfos company.

11.3 Frequency converter operation

11.3.1 Recommendations

Before installing a frequency converter, calculate the lowest allowable frequency in the installation in order to avoid zero flow.

- Do not reduce the motor speed to less than 30 % of rated speed.
- Keep the flow velocity above 1 m/sec.
- Let the pump run at rated speed at least once a day in order to prevent sedimentation in the piping system.
- Do not exceed the frequency indicated on the nameplate. In this case there is risk of motor overload.
- Keep the motor cable as short as possible. The peak voltage will increase with the length of the motor cable. See data sheet for the frequency converter used.
- Use input and output filters on the frequency converter. See data sheet for the frequency converter used.

11.3.2 Possible consequences

When operating the pump via a frequency converter, please be aware of these possible consequences:

- The locked-rotor torque will be lower. How much lower will depend on the frequency converter type. See the installation and operating instructions for the frequency converter used for information on the locked-rotor torque available.
- The working condition of bearings and shaft seal may be affected. The possible effect will depend on the application. The actual effect cannot be predicted.
- The acoustic noise level may increase. See the installation and operating instructions for the frequency converter used for advice as to how to reduce the acoustic noise.

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12. Startup

Warning



Before starting work on the pump, make sure that the fuses have been removed or the mains switch has been switched to off. Make sure that the power supply cannot be accidentally switched on.

Make sure that all protective equipment has been connected correctly.

The pump must not run dry.

Procedure

1. Remove the pump from the system.
2. Check that the impeller can rotate freely. Turn the impeller by hand.
3. Check the condition of the oil in the oil chamber. See section [14.2.2 Inspection of seal sensor](#).
4. Check whether the monitoring units, if used, are operating satisfactorily.
5. Check the setting of the level pickups, float switches or electrodes.
6. Check the direction of rotation, see section [12.1 Direction of rotation](#).
7. Reinstall the pump in the system.
8. Switch on the power supply.
9. Open the isolating valves, if fitted.
10. Check that the motor is 2/3 covered with liquid. If the liquid level is below that, add liquid to the tank until the minimum level is reached.
11. Vent the pump by tilting it by means of the lifting chain and let trapped air escape.
12. Let the pump run briefly, and check if the liquid level is falling. A correctly vented pump will quickly lower the liquid level.
13. Start the pump.

In case of abnormal noise or vibrations from the pump or power/water supply failure, stop the pump immediately. Do not attempt to restart the pump until the cause of the fault has been found and the fault corrected.

Caution

12.1 Direction of rotation

Note

The pump may be started for a very short period without being submerged for checking of the direction of rotation.

Check the direction of rotation in the following way every time the pump is connected to a new installation.

Procedure

1. Let the pump hang from a lifting device, e.g. the hoist used for lowering the pump into the tank.
2. Start and stop the pump while observing the movement (jerk) of the pump. If connected correctly, the impeller will rotate clockwise when viewed from above. Consequently, when started, the pump will jerk counter-clockwise. See fig. 8. If the direction of rotation is wrong, interchange any two phases in the power supply.

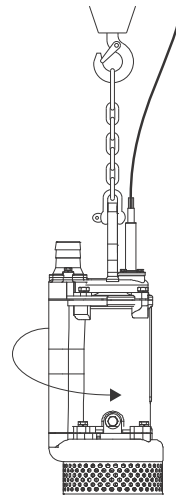


Fig. 8 Checking the direction of rotation

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13. Operation

S1, continuous operation

In this operating mode, the pump can operate continuously without being stopped for cooling. See fig. 9. Being completely submerged, the pump is sufficiently cooled by the surrounding liquid. See also fig. 1.

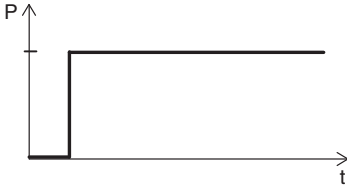


Fig. 9 S1 continuous operation

S3, intermittent operation

Operating mode S3 means that within 10 minutes the pump must be in operation for 4 minutes and stopped for 6 minutes. See fig. 10.

For this operating mode, the pump must be partly submerged in the pumped liquid, i.e. the liquid level must reach at least up to the middle of the motor housing. See fig. 1.

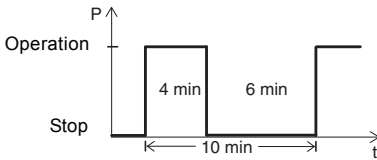


Fig. 10 S3 intermittent operation

14. Maintenance, inspection and overhaul

14.1 Maintenance

The life of the pump depends largely on the operating conditions, so we strongly recommend daily inspection and periodic servicing in order to guarantee maximum product lifetime.

14.1.1 Current and voltage

Check the pump current and voltage. If the ammeter reading exceeds the rated value, or is far lower than the rated value, there is a problem. The voltage must be stable within $-5\%/+5\%$ of the rated value throughout the operational period.

14.1.2 Vibration

Check that the pump is operating smoothly and without vibrations.

14.1.3 Outlet pressure and flow rate

Check the outlet pressure and flow rate (if a flowmeter is available) at least once a month. Declining performance can indicate the need for an overhaul. Regardless of performance, the pressure and flow rate must be stable, and rapidly changing pressure or flow rate indicate system problems on the inlet or outlet side.

14.1.4 Insulation resistance

Check the insulation resistance of the motor at least once a month.

If the insulation resistance has declined sharply since the previous reading, this is an indication of impending insulation failure, and the pump must be scheduled for service even though the insulation resistance may still be over 10 megohms.

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14.2 Inspection

Under normal operating conditions, remove the pump from the tank and inspect it once every year.

Under severe operating conditions where sand, fibrous material and solids are involved, do this once a month.

The standard inspection procedure is summarized below.

14.2.1 How to remove the pump

1. Hook the lifting chain through the pump lifting bracket and lift so that the chain just carries the load of the pump.
2. Loosen the bolts/nuts of the outlet pipe to drain away possible water in the pipe.
3. Remove the bolts/nuts of the outlet pipe, and lift the pump out of the tank.

14.2.2 Inspection of seal sensor

Check the resistance of the seal sensor with a multimeter as shown in fig. 11.

Caution Do not use a megger as this will damage the control circuit.

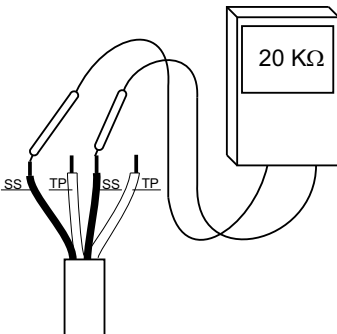


Fig. 11 Resistance check

Oil replacement

After checking the resistance of the seal sensor, replace the oil in the oil chamber.

Warning



When loosening the screws of the oil chamber, note that pressure may have built up in the chamber. Do not remove the screws until the pressure has been fully relieved.

1. Unscrew the oil plug. See fig. 12.
2. Tilt the pump with the oil filling hole pointing downwards in order to drain the pump of oil. If the drained oil is contaminated or opaque, this is an indication of an impending mechanical shaft seal failure. Replace the mechanical seal.

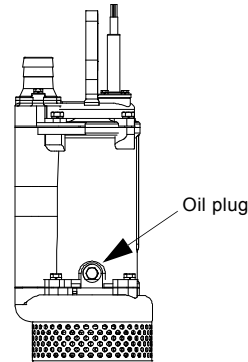


Fig. 12 Position of oil screw

3. Fill fresh oil into the oil chamber through the oil filling hole. Use lubrication oil ISO VG 32 Mobil DTE 24 turbine oil 90 or equivalent.

14.2.3 Inspection of impeller and wear plate

Check the clearance between impeller and wear plate. Recommended clearance is 0.3 - 0.5 mm. Replace or repair as necessary.

14.3 Overhaul

Overhaul of pumps should be carried out by an authorized Grundfos service centre.

A normal overhaul includes these points:

1. Disassemble and clean the pump.
2. Inspect and replace, if necessary, each component.
3. Carry out electrical test of the motor.
4. Replace worn-out or damaged components.
5. Reassemble the pump.
6. Carry out performance and functional test of the pump.
7. Repaint and pack the pump.

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15. Fault finding



Warning

Before starting work on the pump, make sure that the fuses have been removed or the mains switch has been switched to off. Make sure that the power supply cannot be accidentally switched on.

All rotating parts must have stopped moving.

Note

For pumps with sensor, start fault finding by checking the status on the GU01 or GU02 front panel. See installation and operating instructions for GU01 or GU02.

Fault	Cause	Remedy
Motor does not start, fuses blow or motor protector trips immediately. Caution: Do not try to start again.	1. Supply failure; short-circuit; earth-leakage fault in cable or motor winding.	Have the cable and motor checked and repaired by a qualified electrician.
	2. Fuses blow due to use of wrong type of fuse.	Fit fuses of the correct type.
	3. Impeller blocked by impurities.	Clean the impeller.
	4. Level pickup, float switch or electrode out of adjustment or defective.	Check the level pickups, float switches or electrodes.
	5. Motor phase malfunction	Inspect motor and connections.
Pump operates, but motor protector trips after a short while.	1. Low setting of thermal relay in motor protector.	Set the relay in accordance with the specifications on the pump nameplate.
	2. Increased current consumption due to large voltage drop.	Measure the voltage between two motor phases. Tolerance: - 5 %/+ 5 %.
	3. Impeller blocked by impurities.	Clean the impeller.
	4. Wrong direction of rotation.	Check the direction of rotation and possibly interchange any two phases in the power supply. See section 12.1 Direction of rotation .
The thermal switch of the pump trips after a short while.	1. Too high liquid temperature. Inadequate cooling.	Improve cooling or lower the liquid temperature.
	2. Too high viscosity of the pumped liquid.	Dilute the pumped liquid.
	3. Fault in the electrical connection. (Y-connection of pump to D-connection results in considerable undervoltage).	Check and correct the electrical connection.
Pump operates at below-standard performance and power consumption.	1. Impeller blocked by impurities.	Clean the impeller.
	2. Wrong direction of rotation.	Check the direction of rotation and possibly interchange any two phases in the power supply. See section 12.1 Direction of rotation .
Pump operates, but gives no liquid.	1. Air in pump.	Vent the pump twice.
	2. Outlet valve closed or blocked.	Check the outlet valve and possibly open and/or clean.
	3. Non-return valve blocked.	Clean the non-return valve.
Pump clogged.	1. The liquid contains large particles.	Select a pump with a larger size of passage.
	2. A float layer has formed on the surface.	Install a mixer in the tank.

16. Service

Warning



Before starting work on the pump, make sure that the fuses have been removed or the mains switch has been switched to off. Make sure that the power supply cannot be accidentally switched on.

All rotating parts must have stopped moving.

16.1 Service documentation

Service documentation is available on www.grundfos.com > International website > Grundfos Product Center > Service & support.

If you have any questions, please contact the nearest Grundfos company or service centre.

16.2 Contaminated pumps

Warning



If a pump has been used for a liquid which is injurious to health or toxic, the pump will be classified as contaminated.

If Grundfos is requested to service the pump, Grundfos must be contacted with details about the pumped liquid, etc. before the pump is returned for service. Otherwise Grundfos can refuse to accept the pump for service.

Possible costs of returning the pump are paid by the customer.

However, any application for service (no matter to whom it may be made) must include details about the pumped liquid if the pump has been used for liquids which are injurious to health or toxic.

Before a pump is returned, it must be cleaned in the best possible way.

17. Disposal

This product or parts of it must be disposed of in an environmentally sound way:

1. Use the public or private waste collection service.
2. If this is not possible, contact the nearest Grundfos company or service workshop.

Subject to alterations.

Appendix

Dimensions

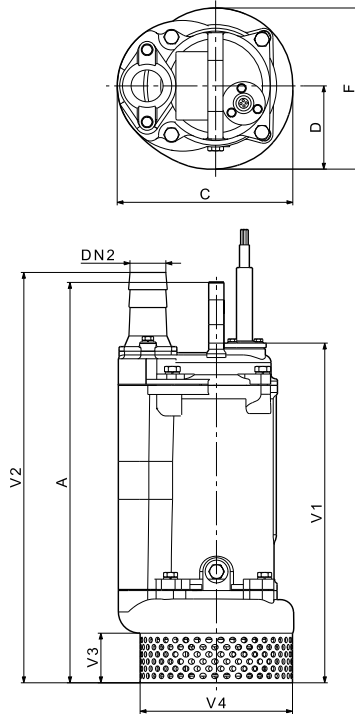


Fig. 1 Dimensions of pump with hose connection

Pump type	Y1	Y2	Y3	Y4	Y5	Y6	Y7	D	F
DWK O.6.50.075	398	50	65	231	202	459	448	110	213
DWK O.6.50.15	428	50	65	231	202	489	478	110	213
DWK O.6.80.15	428	80	65	231	202	557	478	110	213
DWK O.6.50.22	448	50	65	231	202	509	498	110	213
DWK O.6.80.22	448	80	65	231	202	577	498	110	213
DWK O.10.80.37	591	80	90	286	234	686	680	134	253
DWK.O.10.100.37	591	100	90	286	234	706	680	134	253
DWK.O.13.80.55	734	80	116	353	302	829	-	177	323
DWK.O.13.100.55	734	100	116	353	302	849	-	177	323
DWK.O.13.100.75	734	100	116	353	302	849	-	177	323
DWK.O.13.150.75	734	150	116	353	302	900	-	177	323
DWK.O.13.100.110	779	100	116	353	302	894	-	177	323
DWK.O.13.150.110	779	150	116	353	302	945	-	177	323
DWK.O.13.100.150	779	100	116	353	302	894	-	177	323
DWK.O.13.150.150	779	100	116	353	302	945	-	177	323

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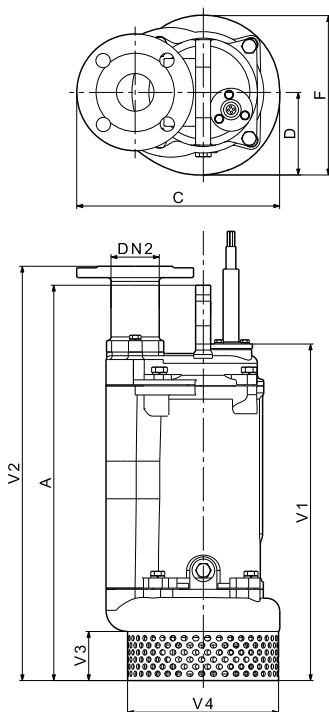


Fig. 2 Dimensions of pump with flange connection

Pump type	Y1	Y2	Y3	Y4	Y5	Y6	Y7	D	F
DWK O.6.50.075	398	50	65	270	202	487	448	110	213
DWK O.6.50.15	428	50	65	370	202	517	478	110	213
DWK O.6.80.15	428	80	65	285	202	517	478	110	213
DWK O.6.50.22	448	50	65	370	202	537	498	110	213
DWK O.6.80.22	448	80	65	285	202	537	498	110	213
DWK O.10.80.37	591	80	90	314	234	726	680	134	253
DWK.O.10.100.37	591	100	90	326	234	726	680	134	253
DWK.O.13.80.55	734	80	116	381	302	869	-	177	323
DWK.O.13.100.55	734	100	116	393	302	869	-	177	323
DWK.O.13.100.75	734	100	116	393	302	869	-	177	323
DWK.O.13.150.75	734	150	116	429	302	861	-	177	323
DWK.O.13.100.110	779	100	116	393	302	914	-	177	323
DWK.O.13.150.110	779	150	116	429	302	906	-	177	323
DWK.O.13.100.150	779	100	116	393	302	914	-	177	323
DWK.O.13.150.150	779	150	116	429	302	906	-	177	323

TM04 4147 4410

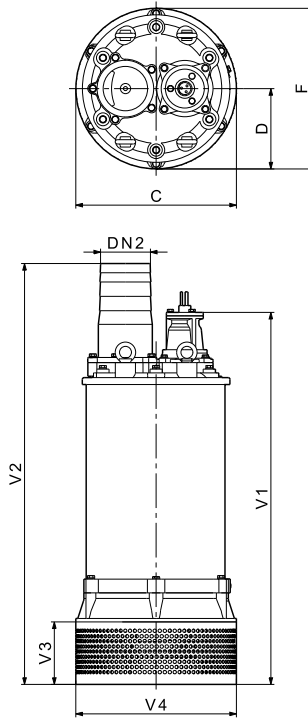
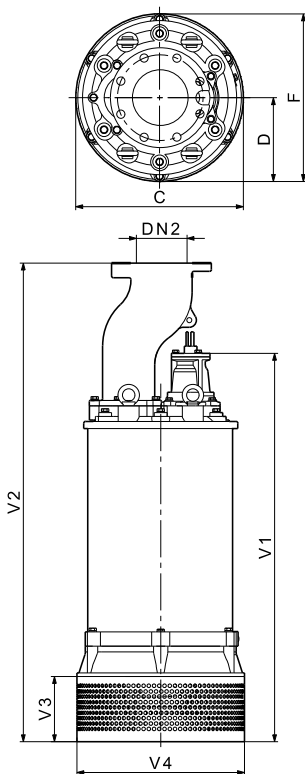


Fig. 3 Dimensions of pump with hose connection

Pump type	Y1	Y2	Y3	Y4	Y5	Y6	D	F
DWK.E.10.100.220	1099	100	183	470	470	1117	235	470
DWK.E.10.150.220	1099	150	183	470	470	1232	235	470
DWK.E.10.150.300	1099	150	183	470	470	1232	235	470
DWK.E.10.200.300	1099	150	183	470	470	1192	235	470
DWK.E.10.150.370	1318	150	220	612	557	1411	306	612
DWK.E.10.200.370	1318	200	220	612	557	1411	306	612
DWK.E.10.150.450	1318	150	220	612	557	1411	306	612
DWK.E.10.200.450	1318	200	220	612	557	1411	306	612
DWK.E.10.150.550	1418	150	220	612	557	1511	306	612
DWK.E.10.200.550	1418	200	220	612	557	1511	306	612
DWK.E.10.200.750	1418	200	220	612	557	1511	306	612
DWK.E.10.200.900	1418	200	220	612	557	1511	306	612

TM04 4148 0808



TM04 4150 0808

Fig. 4 Dimensions of pump with flange connection

Pump type	Y1	Y2	Y3	Y4	Y5	Y6	D	F
DWK.E.10.100.220	1099	100	183	470	470	1342	235	470
DWK.E.10.150.220	1099	150	183	470	470	1342	235	470
DWK.E.10.150.300	1099	150	183	470	470	1342	235	470
DWK.E.10.200.300	1099	200	183	470	470	1342	235	470
DWK.E.10.150.370	1318	150	220	612	557	1561	306	612
DWK.E.10.200.370	1318	200	220	612	557	1561	306	612
DWK.E.10.150.450	1318	150	220	612	557	1561	306	612
DWK.E.10.200.450	1318	200	220	612	557	1561	306	612
DWK.E.10.150.550	1418	150	220	612	557	1661	306	612
DWK.E.10.200.550	1418	200	220	612	557	1661	306	612
DWK.E.10.200.750	1418	200	220	612	557	1661	306	612
DWK.E.10.200.900	1418	200	220	612	557	1661	306	612

Declaration of conformity

GB: EU declaration of conformity

We, Grundfos, declare under our sole responsibility that the products DPK, DWK, to which the declaration below relates, are in conformity with the Council Directives listed below on the approximation of the laws of the EU member states.

DE: EU-Konformitätserklärung

Wir, Grundfos, erklären in alleiniger Verantwortung, dass die Produkte DPK, DWK, auf die sich diese Erklärung beziehen, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten übereinstimmen.

FR: Déclaration de conformité UE

Nous, Grundfos, déclarons sous notre seule responsabilité, que les produits DPK, DWK, auxquels se réfère cette déclaration, sont conformes aux Directives du Conseil concernant le rapprochement des législations des États membres UE relatives aux normes énoncées ci-dessous.

HU: EU megfelelésségi nyilatkozat

Mi, a Grundfos vállalalat, teljes felelősséggel kijelentjük, hogy a(z) DPK, DWK termékek, amelyre az alábbi nyilatkozat vonatkozik, megfelelnek az Európai Unió tagállamainak jogi irányelveit összehangoló tanács alábbi előírásainak.

LT: ES atitikties deklaracija

Mes, Grundfos, su visa atsakomybe pareiškiame, kad produktai DPK, DWK, kuriems skirta ši deklaracija, atitinka žemiau nurodytas Tarybos Direktyvas dėl ES šalių narių įstatymų suderinimo.

PT: Declaração de conformidade UE

Mes, Grundfos declara sob sua única responsabilidade que os produtos DPK, DWK, aos quais diz respeito a declaração abaixo, estão em conformidade com as Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da UE.

RS: Deklaracija o usklađenosti EU

Mi, kompanija Grundfos, izjavljujemo pod punom vlastitom odgovornošću da je proizvod DPK, DWK, na koji se odnosi deklaracija ispod, u skladu sa dole prikazanim direktivama Saveta za usklađivanje zakona država članica EU.

SI: Izjava o skladnosti EU

V Grundfosu s polno odgovornostjo izjavljamo, da je izdelek DPK, DWK, na katerega se spodnja izjava nanaša, v skladu s spodnjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic EU.

TR: AB uygunluk bildiřgesi

Grundfos olarak, ařađırdaki bildirim konusunu olan DPK, DWK ürünlerinin, AB Üye ülkelerinin direktiflerinin yakınlılařtırılmasıyla ilgili durumun ařađırdaki Konsey Direktifleriyle uyumlu olduđunu ve bununla ilgili olarak tüm sorumluluđunu bize ait olduđunu beyan ederiz.

KO: EU

Grundfos DPK, DWK EU

CZ: Prohlášení o shodě EU

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobky DPK, DWK, na které se toto prohlášení vztahuje, jsou v souladu s níže uvedenými ustanoveními směrnice Rady pro sblížení právních předpisů členských států Evropského společenství.

ES: Declaración de conformidad de la UE

Grundfos declara, bajo su exclusiva responsabilidad, que los productos DPK, DWK a los que hace referencia la siguiente declaración cumplen lo establecido por las siguientes Directivas del Consejo sobre la aproximación de las legislaciones de los Estados miembros de la UE.

HR: EU deklaracija sukladnosti

Mi, Grundfos, izjavljujemo s punom odgovornošću da su proizvodi DPK, DWK, na koja se izjava odnosi u nastavku, u skladu s direktivama Vijeća dolje navedene o usklađivanju zakona država članica EU-a.

IT: Dichiarazione di conformità UE

Grundfos dichiara sotto la sua esclusiva responsabilità che i prodotti DPK, DWK, ai quale si riferisce questa dichiarazione, sono conformi alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri UE.

PL: Deklaracja zgodności UE

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasze produkty DPK, DWK, których deklaracja niniejsza dotyczy, są zgodne z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich.

RO: Declarația de conformitate UE

Noi Grundfos declarăm pe propria răspundere că produsele DPK, DWK, la care se referă această declarație, sunt în conformitate cu Directivele de Consiliu specificate mai jos privind armonizarea legilor statelor membre UE.

RU: Декларация о соответствии нормам ЕС

Мы, компания Grundfos, со всей ответственностью заявляем, что изделия DPK, DWK, к которым относится нижеприведенная декларация, соответствуют нижеприведенным Директивам Совета Евросоюза о тождественности законов стран-членов ЕС.

SK: ES vyhlášení o zhode

My, spoločnosť Grundfos, vyhlasujeme na svoju plnú zodpovednosť, že produkty DPK, DWK na ktoré sa vyhlásenie uvedené nižšie vzťahuje, sú v súlade s ustanoveniami nižšie uvedených smerníc Rady pre zblíženie právnych predpisov členských štátov EÚ.

CN: 欧盟符合性声明

我们，格兰富，在我们的全权责任下声明，产品 DPK、DWK，即该合格证所指之产品，欧盟使其成员国法律趋于一致的以下理事会指令。

ID: Deklarasi kesesuaian Uni Eropa

Kami, Grundfos, menyatakan dengan tanggung jawab kami sendiri bahwa produk DPK, DWK, yang berkaitan dengan pernyataan ini, sesuai dengan Petunjuk Dewan berikut ini serta sedapat mungkin sesuai dengan hukum negara-negara anggota Uni Eropa.

AR: إقرار مطابقة EU

نقدر نحن، جرونډفوس، بعقده مسؤوليتنا الفردية بأن المنتجين DPK، DWK، اللذين يتخضع بهما الإقرار أدناه، يكونان مطابقتين لتوجيهات المجلس المذكورة أدناه بشأن الترتيب بين قوانين الدول أعضاء المجموعة الأوروبية/الاتحاد الأوروبي (EU).

- Machinery Directive (2006/42/EC),
Standard used: EN 809:1998 + A1:2009.

Suzhou, 16th March 2015



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Declaration of conformity EAC



Насосы серий DPK, DWK сертифицированы на соответствие требованиям Технических регламентов Таможенного союза: ТР ТС 004/2011 "О безопасности низковольтного оборудования"; ТР ТС 010/2011 "О безопасности машин и оборудования"; ТР ТС 020/2011 "Электромагнитная совместимость технических средств".

Сертификат соответствия:

№ ТС RU С-DK.АИ30.В.01357, срок действия до 18.02.2020 г.

Истра, 19 февраля 2015 г.

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