DMH 28X

Dosing pump

Safety instructions and other important information

DMH 28x
Installation and operating instructions
(all available languages)
http://net.grundfos.com/qr/i/99558950

GRUNDFOS

DMH 28X

English (GB)

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Original safety instructions

These safety instructions give a quick overview of the safety precautions to be taken in connection with any work on this product. Observe these safety instructions during handling, installation, operation, maintenance, service and repair of this product. These safety instructions are a supplementary document, and all safety instructions will appear again in the relevant sections of the installation and operating instructions. Keep these safety instructions at the installation site for future reference.

Target group

These installation and operating instructions are intended for professional installers and for the operators of the product.

Qualification and training

The persons responsible for the installation, operation and service must be appropriately qualified for these tasks.

Areas of responsibility, levels of authority and the supervision of the persons must be precisely defined by the operator. If necessary, the persons must be trained appropriately.

Risks of not observing the safety instructions

Non-observance of the safety instructions may have dangerous consequences for persons, the environment or the pump, and may result in the loss of any claim for damages.

The following hazards may arise:

- personal injury from exposure to electrical, mechanical or chemical influences
- damage to the environment or personal injury from leakage of harmful substances.

Safety instructions for the operator and user

WARNING
Electric shock
Death or serious personal injury
- Keep liquids away from the power supply and electrical components.

Before starting work on the pump, make sure the pump is disconnected from the power supply.

The system must be depressurised.

You must follow all safety regulations described here, as well as existing national regulations on health and environment protection, accident prevention, and any internal working, operating and safety regulations regarding the operator.

Hot or cold parts of the pump must be protected to prevent accidental contact.

Information attached to the pump must be observed.

Leakages of dangerous substances must be disposed of in a way that is not harmful to humans, animals or the environment.

Damage caused by electrical energy must be prevented. Observe the regulations of the local electricity supply company.

Only original accessories and original spare parts should be used.

Safety of the system in the event of a failure in the dosing pump

WARNING
Chemical hazard
Death or serious personal injury
- Make sure that no chemicals released from the pump or no damaged lines impair system parts and buildings.
- We recommend the installation of leak monitoring solutions and drip trays.

The dosing pump has been designed according to the latest technologies and is carefully manufactured and tested.

If it fails regardless of this, the safety of the overall system must be ensured. Use the relevant monitoring and control functions for this.

According to EN ISO 13850, the system must be connected to an external emergency stop device or emergency shutdown device.

Dosing chemicals

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working with chemicals.

When dosing chemicals, observe the following:

- Before switching on the power supply, the dosing lines must be connected in such a way that no chemical in the dosing head can spray out and put people at risk.
- The dosing medium is pressurised and can be harmful to health or the environment.
- When working with chemicals, the accident prevention regulations applicable at the installation site must be applied.
- A de-aeration hose routed into a container, such as a drip tray, must be connected to the de-aeration valve.
- The dosing medium must be in its liquid aggregate state.
- The freezing and boiling points of the dosing medium must be observed.
- The resistance of the parts that come into contact with the dosing medium, such as dosing head, valve ball, gaskets and lines, depends on the medium, media temperature and operating pressure.
- Parts in contact with the dosing media must be resistant to the dosing medium under operating conditions.

For more information, see the list of pumped liquids in the data booklet. See also *Liquids | Grundfos*.

Transport

Do not throw or drop the product.

Intended use

DMH 28X pumps are suitable for liquid, non-abrasive and non-flammable media strictly in accordance with the instructions in this manual.

Other applications or the operation of pumps in ambient and operating conditions, which are not approved, are considered improper and are not permitted. Grundfos accepts no liability for any damage resulting from incorrect use.

To operate a pump which has been identified as an explosion-proof pump for the dosing of inflammable media or for operation in potentially explosive operating sites in accordance with the EC directive 2014/34/EU, refer to the enclosed manual "ATEX-approved pumps" in addition to this manual.

Explosion-proof pumps are identified from the pump and motor nameplates. An EC declaration of conformity is provided in accordance with the EC directive 2014/34/EU, the so-called ATEX directive. This declaration of conformity replaces the declaration of conformity in this manual.

The operational safety of the supplied pump is only ensured if it is used in accordance with section Technical data. The specified limit values must not be exceeded.

Improper operating methods

The operational safety of the pump is only guaranteed if it is used in accordance with section Intended use.

To operate a pump which has been identified as an explosion-proof pump for the dosing of inflammable media or for operation in potentially explosive operating sites in accordance with the EC directive 2014/34/EU, refer to the enclosed manual "ATEX-approved pumps" in addition to this manual.

Explosion-proof pumps are identified from the pump and motor nameplates. An EC declaration of conformity is provided in accordance with the EC directive 2014/34/EU, the so-called ATEX directive. This declaration of conformity replaces the declaration of conformity in this manual.

Switch off the pump and protect it against unintentional operation in the following cases:

- if the pump has been damaged,
- if the pump no longer seems to be operational,
- if the pump has been stored for an extended period of time in poor conditions.

Changes or modifications to the pump are only permitted after consultation with the manufacturer. Original spare parts and accessories should be used. Grundfos accepts no liability for any damage resulting from incorrect use.

Pump performance

The pump can be operated in the range between 10 % and 100 % of the maximum dosing capacity.

A positive pressure difference of at least 2 bar is required between the suction valve and the discharge valve.

If the total counter-pressure (at the dosing point) and geodetic height difference between the suction valve and the dosing point is less than 2 bar (20 m WC), a pressure-loading valve must be installed immediately upstream of the dosing point.

Ambient and operating conditions

The installation location must be protected from rain, humidity, condensation, direct sunlight and dust.

Do not install the pump outdoors.

Maximum relative humidity: 70 % at +40 °C, 90 % at +35 °C.

DMH pumps with motor labelled for coolant temperature -20 °C ≤ T_{amb} ≤ 40 °C

Observe the nameplate of the motor.

- Permissible ambient temperature: 0 °C (standard) to +40 °C (for an installation height up to 1000 m above sea level).
- Pumps with minimum T_{amb} -20 °C are available on request.
- Permissible storage temperature: -20 °C to +50 °C.

DMH pumps with motor labelled for coolant temperature -20 °C ≤ T_{amb} ≤ 55 °C and with dosing head material stainless steel or PVDF

Observe the nameplate of the motor.

- Permissible ambient temperature: 0 °C (standard) to +55 °C (for an installation height up to 1000 m above sea level).
- Pumps with minimum T_{amb} -20 °C are available on request.
- Permissible storage temperature: -20 °C to +55 °C.

Characteristics of the dosing medium

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.

The dosing medium must have the following basic characteristics for standard pumps:

- liquid,
- non-abrasive,
- non-flammable.

The dosing of abrasive media is possible with certain versions, on request.

The dosing of inflammable media is possible with certain versions of explosion-proof pumps, in accordance with ATEX.

The freezing and boiling points of the dosing medium must be observed.

Parts in contact with the dosing media must be resistant to the dosing medium under operating conditions.

Maximum permissible viscosity at operating temperature

Applies to:

- Newtonian liquids,
- non-degassing media,
- media without suspended matter,
- media with a density similar to water.

The viscosity values in the table are approximate values and apply to standard pumps.

Pump model	Stroke rate up to 63 [n/min]	Stroke rate 64-120 [n/min]	Stroke rate from 121 [n/min]
	Maximum viscosity [mPa s]		
DMH 280	5	5	5
DMH 281	100	50	5
DMH 283	100	50	5
DMH 285	100	50	5
DMH 286	100	50	5
DMH 287	100	50	5
DMH 288	100	50	5

Viscosity increases as temperature decreases.

Permissible temperature of the dosing medium

Dosing head material	Min. temperature	Max. temperature p < 200 bar
	[°C]	[°C]
Stainless steel, DIN 1.4571	-10	90
Alloy C-4, 2.4610	-10	90

For SIP/CIP applications (not with ATEX): A temperature of 145 °C at a counterpressure of max. 2 bar is permitted for a short period (15 minutes).

Materials

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Make sure that the pump is suitable for the respective dosing medium.

The resistance of the parts that come into contact with the dosing medium depends on the medium, media temperature and operating pressure.
Parts in contact with the dosing media must be resistant to the dosing medium under operating conditions.

Installation requirements

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.

CAUTION
Hot surface
Minor or moderate personal injury
- Pumps with AC motors may become hot. Allow a minimum space of 100 mm to the fan cover.

The pump must be installed in such a way that it is easily accessible during operation and maintenance work.
Observe the specifications for the installation location and applications.
The installation location must be protected from rain, humidity, condensation, direct sunlight and dust.

The pump must not be installed outdoors.
The pump must be mounted on a flat surface.

Observe the permissible ambient conditions. See section Ambient and operating conditions.
Observe the flow direction when installing the valves. The flow direction is indicated by an arrow on the valve.
Incorrect operation or faults on the pump or system might lead to excessive or insufficient dosing, or the permissible pressure might be exceeded. Consequential faults or damage must be evaluated by the operator and appropriate precautions must be taken to avoid them.

Mounting the product

The flow must run counter to gravity.

Values for suction lines when using pulsation dampers

Use pulsation dampers for large high-speed pumps.

Hydraulic connection

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Install a pressure-relief valve in the discharge line to provide protection against high pressure.

The resistance of the parts that come into contact with the dosing medium depends on the medium, media temperature and operating pressure.
Parts in contact with the dosing media must be resistant to the dosing medium under operating conditions.

A positive pressure difference of at least 2 bar is required between the suction valve and the discharge valve.
If the total counter-pressure (at the dosing point) and geodetic height difference between the suction valve and the dosing point is less than 2 bar (20 m WC), a pressure-loading valve must be installed immediately upstream of the dosing point.

Make sure you comply with the following points:
- Observe the suction lift and the line diameter.
- Cut hoses and pipes at right angles.
- Make sure there are no loops or kinks in the hoses.
- Keep the suction line as short as possible.
- Route the suction line up towards the suction valve.
- Keep hoses and pipes free from strain.

Connecting the dosing head de-aeration line

WARNING
Chemical hazard
Death or serious personal injury
- Dosing medium escapes from the hose nipple (I) of the de-aeration line. At high pressure, the medium may spray out. Turn the hose nipple (I) in the right direction, or drain the dosing medium through a suitable hose.
- Collect the dosing medium in a suitable container.

Electrical connection

WARNING
Electric shock
Death or serious personal injury
- All electrical connections must be carried out by a qualified electrician in accordance with local regulations.
- The supply voltage must correspond to the values indicated on the nameplate.
- Do not manipulate or cut the power plug or cable.
- Switch off the power supply before starting any work on the pump.
- Do not open the pump housing.
- Protect cable connections and plugs from moisture and corrosion.

Make sure that the pump is suitable for the electricity supply on which it will be used.

Diaphragm controller (optional)

WARNING
Electric shock
Death or serious personal injury
- The contact pressure gauge must be earthed.

Power supply cable

WARNING
Electric shock
Death or serious personal injury
- The supply voltage must correspond to the values indicated on the nameplate.
- Do not manipulate or cut the power plug or cable.

WARNING
Chemical hazard
Death or serious personal injury
- Switch off the power supply before connecting the power supply cable.
- The pump can start automatically when the power supply is switched on.
- Make sure the pump has been correctly installed and is ready to be started before you switch on the power supply.

The assignment between the plug-and-socket connection and the pump must be labelled clearly.

Pumps permanently connected to the power supply

WARNING
Electric shock
Death or serious personal injury
- Pumps that are permanently connected to the power supply must be connected to a power switch or circuit breaker with a minimum contact gap of 3 mm in all poles.
- The power switch or circuit breaker must be integrated into the system upstream of the pump and marked as a disconnecting device. It must be easily accessible to the operator.

The enclosure class is only guaranteed if the power supply cable is connected with the same degree of protection.

Observe the direction of rotation.
Install a motor protecting switch or motor contactor, and set the bimetal relay to the rated motor current for the available voltage and frequency.

Startup

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Make sure the pump has been correctly installed and is ready to be started before you switch on the power supply.
- The pump housing must only be opened by persons authorized by Grundfos.
- Collect and dispose of all chemicals in a way that is not harmful to humans, animals or the environment.

Observe the flow direction.
The flow direction is indicated by an arrow on the valve.

Filling the dosing head for the initial start-up for systems without flooded suction (DMH 281-288)

WARNING
Chemical hazard
Death or serious personal injury
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.

Startup of DMH 280

WARNING
Chemical hazard
Death or serious personal injury
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.

Check the oil level at least every two weeks and add oil, if necessary.
We recommend using original Grundfos gear oil.
See the Service kit catalogue on www.grundfos.com.

Tighten the dosing head screws with a torque wrench after initial startup and every time the dosing head has been opened.
After 6-10 operating hours or after two days, cross-tighten the dosing head screws using a torque wrench.

Startup of DMH 281-288

WARNING
Chemical hazard
Death or serious personal injury
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.

WARNING
Chemical hazard
Death or serious personal injury
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Dosing medium escapes from the hose nipple (I) of the de-aeration line. If the pressure is high, the medium may spray out. Turn the hose nipple (I) in the right direction, or drain the dosing medium through a suitable hose.

Check the oil level at least every two weeks and add oil, if necessary.
We recommend the use of original gear oil.
See the Service Kit Catalogue on www.grundfos.com.

Tighten the dosing head screws with a torque wrench after initial startup and every time the dosing head has been opened.
After 6-10 operating hours or after two days, cross-tighten the dosing head screws using a torque wrench.

Adjusting the zero point

WARNING
Chemical hazard
Death or serious personal injury

- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Always adjust the zero point with the discharge line connected and with operating counterpressure.

Switching the pump on and off

WARNING
Chemical hazard
Death or serious personal injury

- Make sure the pump has been correctly installed and is ready to be started before you switch on the power supply.

To start the pump, switch on the power supply.

To stop the pump, switch off the power supply.

Manual de-aeration of the dosing head while the pump is running

WARNING
Chemical hazard
Death or serious personal injury

- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Dosing medium escapes from the hose nipple (I) of the de-aeration line. At high pressure, the medium may spray out. Turn the hose nipple (I) in the right direction, or drain the dosing medium through a suitable hose.

Service

WARNING
Chemical hazard
Death or serious personal injury

- Maintenance work must only be carried out by qualified persons.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- The pump housing must only be opened by persons authorized by Grundfos.
- Stop the pump and disconnect it from the power supply before carrying out any maintenance work.
- Collect and dispose of all chemicals in a way that is not harmful to humans, animals or the environment.

The resistance of the parts that come into contact with the dosing medium depends on the medium, media temperature and operating pressure.

Parts in contact with the dosing media must be resistant to the dosing medium under operating conditions.

Observe the flow direction.

Do not operate the pump with closed valves.

Replace the dosing diaphragm every time you change the gear oil.

The maintenance schedule must be observed. If the daily checks are not carried out, diaphragm leakage might not be recognized, which may lead to a chemical hazard.

Pumps used for media that are harmful to health must be decontaminated.

All safety and protective devices must be put back into operation or activated immediately after completion of the work.

Maintenance schedule

Daily

Check if liquid is leaking from the dosing head or valves.

Every two weeks

Check the oil level. Add oil, if necessary.

After 4,000 operating hours or every 12 months

Clean the valves.

In case of stainless-steel valves, clean the inner parts of the valves.

Clean the valves if the pump does not perform well and in the event of a fault.

After 8,000 operating hours or every 12 months

Replace the diaphragm.

Change the gear oil.

In dusty operating environments, change the gear oil every 3,000 operating hours.

After diaphragm leakage of the double diaphragm

Remove the non-return ball valve immediately and clean it.

Clean the non-return ball valve only after diaphragm leakage.

In the event of a fault or if the pump does not perform well, have the grooved ring checked and replaced by a specialist.

Torques for tightening the dosing head screws

Tighten the dosing head screws with a torque wrench every time the dosing head has been opened.

After 6-10 operating hours or after two days, cross-tighten the dosing head screws using a torque wrench.

Pump model	Torque [Nm]
DMH 280	55-60
DMH 281	17-19
DMH 283	27-30
DMH 285	50-54
DMH 286	80-85
DMH 287	50-54
DMH 288	75-80

Diaphragm leakage control for diaphragm leakage detection

WARNING
Chemical hazard
Death or serious personal injury

- If a diaphragm is leaky, replace the diaphragms and clean the non-return valve.

Oil change

WARNING
Chemical hazard
Death or serious personal injury

- Wear personal protective equipment when working on the dosing head, connections or lines.
- Replace the dosing diaphragm every time you change the oil.

Cleaning the suction and discharge valves

WARNING
Chemical hazard
Death or serious personal injury

- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Collect and dispose of all chemicals in a way that is not harmful to humans, animals or the environment.

Insert the O-rings correctly into the appropriate groove.

Observe the flow direction.

Draining the oil

Install a new flat gasket (1b) every time you change the oil.

Draining the oil

Install a new flat gasket (1b) every time you change the oil.

Replacing a double diaphragm

The paraffin oil between the diaphragms (Q1 and Q2) is connected via the clamping sleeves (6q) to the contact pressure gauge (S) in order to fill and activate the diaphragm leakage detection. The oil can pass between the diaphragms through the slits in the clamping sleeves and the slits in the intermediate disk.

The clamping sleeves (6q) must be installed in such a way that the slits in the clamping sleeve face the slits in the intermediate disk (3q).

Filling the double diaphragm with separating agent

In case of diaphragm leakage, clean the non-return ball valve before filling the diaphragm with separating agent.

Clean the non-return ball valve only in case of diaphragm leakage.

Replacing the power cable

The power cable must be replaced by an authorized Grundfos Service partner.

Preparations for shutdown

WARNING
Chemical hazard
Death or serious personal injury

- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- The pump housing must only be opened by persons authorized by Grundfos.
- Collect and dispose of all chemicals in a way that is not harmful to humans, animals or the environment.

Rinse the dosing head with water, if your dosing medium is compatible with water.

Repairs and return

WARNING
Chemical hazard
Death or serious personal injury

- The pump housing must only be opened by persons authorized by Grundfos.
- Repairs must only be carried out by authorised and qualified persons.
- Switch off the power supply before carrying out maintenance work and repairs.

Consult your Grundfos service partner. If required, send the pump to Grundfos, together with the safety declaration.

Find the safety declaration at the end of this manual. Print out the safety declaration, fill it in and attach it to the pump.

Prior to dispatch, the pump must be cleaned and the oil must be drained.

If dosing liquid has possibly entered the pump housing, state that explicitly in the safety declaration.

If the pump has been used for a hazardous or toxic dosing medium, it is classified as contaminated.

If the above requirements are not met, Grundfos may refuse to accept delivery of the pump. The shipping costs will be charged to the sender.

Fault finding

WARNING
Chemical hazard
Death or serious personal injury

- Troubleshooting work must only be carried out by qualified persons.
- Wear personal protective equipment when working on the dosing head, connections or lines.
- Observe the safety data sheets and safety instructions of the chemical manufacturer when handling chemicals.
- The pump housing must only be opened by persons authorized by Grundfos.

Disposing of the product

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.

	The crossed-out wheelie bin symbol on a product means that it must be disposed of separately from household waste. When a product marked with this symbol reaches its end of life, take it to a collection point designated by the local waste disposal authorities. The separate collection and recycling of such products will help protect the environment and human health.

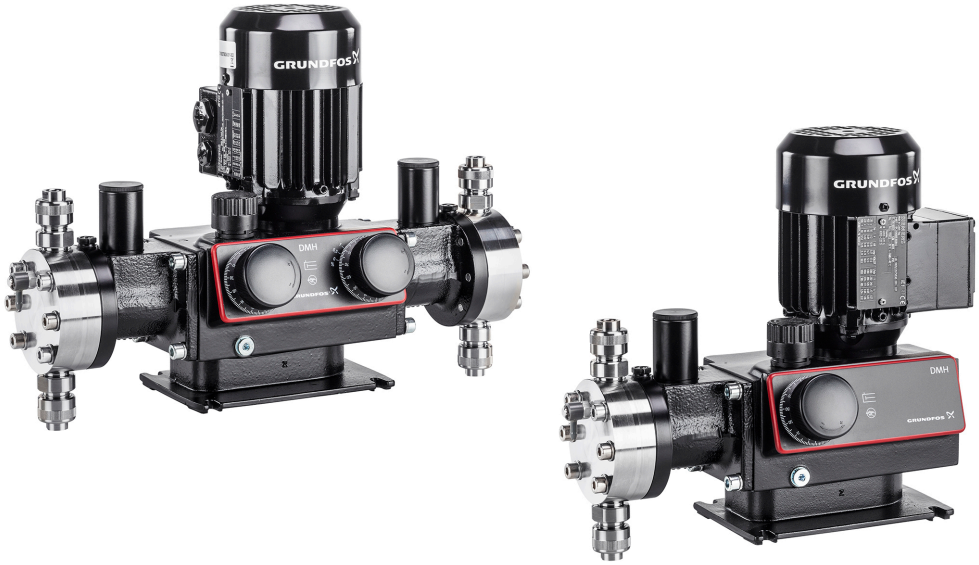
See also end-of-life information at *www.grundfos.com/product-recycling*.

1. Safety declaration

- Please copy, fill in and sign this sheet and attach it to the product returned for service.
- Fill in this document using English or German language.

Fault description

- Please make a circle around the damaged part.
- In the case of an electrical or functional fault, please mark the cabinet.
- Please give a short description of the fault and indicate if the diaphragm is damaged:



TM074680

Declaration

We hereby declare that this product is free from hazardous chemicals, biological and radioactive substances:

Type designation (see nameplate):
Product number:

The product was used with the following dosing medium:

No dosing medium or water:
A chemical solution, name:

Date and signature:

Company stamp:

1. 中国 RoHS

产品中有害物质的名称及含有信息表

部件名称	有害物质									
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBBs)	多溴二苯醚 (PBDEs)	邻苯二甲酸二正丁酯（DBP）	邻苯二甲酸二异丁酯 (DIBP)	邻苯二甲酸丁基苄酯（BBP）	邻苯二甲酸二（2-乙基）己酯（DEHP）
泵壳	X	O	O	O	O	O	O	O	O	O
紧固件	X	O	O	O	O	O	O	O	O	O
管件	X	O	O	O	O	O	O	O	O	O
定子	X	O	O	O	O	O	O	O	O	O
转子	X	O	O	O	O	O	O	O	O	O

注 1： O：表示该有害物质在该部件所有均质材料中的含量均不超出电器电子产品有害物质限制使用国家标准要求。
X：表示该有害物质至少在该部件的某一均质材料中含量超出电器电子产品有害物质限制使用国家标准要求。
注 2：以上未列出的部件，表明其有害物质含量均不超出电器电子产品有害物质限制使用国家标准要求。

Declaration of conformity

GB: EU declaration of conformity

We, Grundfos, declare under our sole responsibility that the product DMH 28X, to which the declaration below relates, is 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 das Produkt DMH 28X, auf das sich diese Erklärung bezieht, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EG-/EU-Mitgliedsstaaten übereinstimmt.

ES: Declaración de conformidad UE

Grundfos declara, bajo su exclusiva responsabilidad, que el producto al que concierne la presente declaración, marcado con la denominación DMH 28X, es conforme con las Directivas del Consejo que figuran a continuación, basadas en la aproximación de las legislaciones correspondientes de los Estados miembros de la UE.

FR : Déclaration de conformité UE

Nous, Grundfos, déclarons sous notre entière responsabilité que le produit DMH 28X, auquel la déclaration ci-dessous fait référence, est conforme aux directives du Conseil répertoriées ci-dessous, concernant le rapprochement des législations des États membres de l'UE.

IT: Dichiarazione di conformità UE

Grundfos dichiara sotto la sua esclusiva responsabilità che il prodotto DMH 28X, al quale si riferisce questa dichiarazione, è conforme alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri UE.

LT: ES atitikties deklaracija

Mes, „Grundfos“, su visa atsakomybe pareiškiame, kad produktas DMH 28X, kuriam skirta ši deklaracija, atitinka toliau nurodytas Tarybos Direktyvas dėl ES šalių įstatymų suderinimo.

NL: EC Conformiteitsverklaring

Wij, Grundfos, verklaren geheel onder eigen verantwoordelijkheid dat product DMH 28X, waarop de onderstaande verklaring betrekking heeft, in overeenstemming is met de onderstaande Richtlijnen van de Raad inzake de onderlinge aanpassing van de wetgeving van de EU-lidstaten.

PL: Deklaracja zgodności WE

Firma Grundfos oświadcza z pełną odpowiedzialnością, że jej produkt DMH 28X, którego dotyczy niniejsza deklaracja, jest zgodny z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich UE.

PT: Declaração de conformidade UE

A Grundfos declara sob sua única responsabilidade que o produto DMH 28X, ao qual diz respeito a declaração abaixo, está em conformidade com as Diretivas do Conselho sobre a aproximação das legislações dos Estados Membros da UE.

RO: Declarație de conformitate UE

Subscrisa, Grundfos, declară pe propria răspundere că produsul DMH 28X, la care se referă declarația de mai jos, este în conformitate cu Directivele Consiliului enumerate mai jos privind apropierea legislațiilor statelor membre UE.

SR: EU deklaracija o usklađenosti

Mi, Grundfos, izjavljujemo na našu isključivu odgovornost da je proizvod DMH 28X, na koji se dole navedena deklaracija odnosi, u skladu sa dole navedenim Direktivama Saveta o usklađivanju zakona zemalja članica EU.

SE: EU-försäkran om överensstämmelse

Vi, Grundfos, försäkrar under ansvar att produkten DMH 28X, som omfattas av nedanstående försäkran, är i överensstämmelse med de rådsdirektiv om inbördes närmande till EU-medlemsstaternas lagstiftning som listas nedan.

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 DMH 28X，即本声明所指之产品，符合欧盟使其成员国法律趋于一致的以下理事会指令。

- Machinery Directive (2006/42/EC).
  Standards used:
  EN 809:1998+A1:2009,
  EN ISO 12100:2010.
- Low Voltage Directive (2014/35/EU).
  Standard used:
  EN 61010-1:2010.
- EMC Directive (2014/30/EU) - only products with control variant AR or AT.
  EN 61326-1:2013,
  EN 61000-3-2:2019,
  EN 61000-3-3:2013 + A1:2019.
- RoHS Directives (2011/65/EU and 2015/863/EU).
  Standard used:
  EN IEC 63000:2018

This EU declaration of conformity is only valid when published as part of the Grundfos safety instructions (publication number 99659695).

Bjerringbro, 01.March 2022

Jimm Feldborg
Head of PD IND
Grundfos Holding A/S
Poul Due Jensens Vej 7
8850 Bjerringbro, Denmark
www.grundfos.com

Person authorised to compile technical file and empowered to sign the EU declaration of conformity.

RUS

DMH 28X

Руководство по эксплуатации

Руководство по эксплуатации на данное изделие является составным и включает в себя несколько частей:
Часть 1: настоящее «Руководство по эксплуатации».
Часть 2: электронная часть «Паспорт. Руководство по монтажу и эксплуатации» размещенная на сайте компании Грундфос. Перейдите по ссылке, указанной в конце документа.
Часть 3: информация о сроке изготовления, размещенная на фирменной табличке изделия.

Сведения о сертификации:

Насосы типа DMH 28X 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».

KAZ

DMH 28X

Пайдалану бойынша нұсқаулық

Атаулы өнімге арналған пайдалану бойынша нұсқаулық құрамалы болып келеді және келесі бөлімдерден тұрады:
1 бөлім: атаулы «Пайдалану бойынша нұсқаулық»
2 бөлім: Грундфос компаниясының сайтында орналасқан электронды бөлім «Төлқұжат, Құрастыру және пайдалану бойынша нұсқаулық». Құжат соңында көрсетілген сілтеме арқылы өтіңіз.
3 бөлім: өнімнің фирмалық тақташасында орналасқан шығарылған уақыты жөніндегі мәлімет

Сертификаттау туралы ақпарат:

DMH 28X типті сорғылары «Төмен вольтты жабдықтардың қауіпсіздігі туралы» (ТР ТС 004/2011), «Машиналар және жабдықтар қауіпсіздігі туралы» (ТР ТС 010/2011) «Техникалық заттардың электрлі магниттік сәйкестілігі» (ТР ТС 020/2011) Кеден Одағының техникалық регламенттерінің талаптарына сәйкес сертификатталды.

KG

DMH 28X

Пайдалануу боюнча колдонмо

Аталган жабдууну пайдалануу боюнча колдонмо курамдык жана өзүнө бир нече бөлүкчөнү камтыйт:
1-Бөлүк: «Пайдалануу боюнча колдонмо»
2-Бөлүк: «Паспорт. Пайдалануу жана монтаж боюнча колдонмо» электрондук бөлүгү Грундфос компаниянын сайтында жайгашкан. Документтин аягында көрсөтүлгөн шилтемеге кайрылыңыз.
3-Бөлүк: жабдуунун фирмалык тактасында жайгашкан даярдоо мөөнөтү тууралуу маалымат.

Шайкештик жөнүндө декларация

DMH 28X түрүндөгү соргучтар Бажы Биримдиктин Техникалык регламенттин талаптарына ылайыктуу тастыкталган: ТР ТБ 004/2011 «Төмөн вольттук жабдуунун коопсуздугу жөнүндө»; ТР ТБ 010/2011 «Жабдуу жана машиналардын коопсуздугу жөнүндө»; ТР ТБ 020/2011 «Техникалык каражаттардын электрмагниттик шайкештиги».

ARM

DMH 28X

Շահագործման ձեռնարկ
Տվյալ սարքավորման շահագործման ձեռնարկը բաղկացած է մի քանի մասերից.
Մաս 1. սույն «Շահագործման ձեռնարկ»:
Մաս 2. էլեկտրոնային մաս. այն է՝ «Անձնագիր: Մոնտաժման և շահագործման ձեռնարկ» տեղադրված «Գրունդֆոս». Անցեք փաստաթղթի վերջում նշված հղումով.
Մաս 3. տեղեկություն արտադրման ամսաթվի վերաբերյալ՝ նշված սարքավորման պիտակի վրա:

Տեղեկություններ հավաստագրման մասին՝
DMH 28X տիպի պոմպերը սերտիֆիկացված են համաձայն Մաքսային Միության տեխնիկական կանոնակարգի պահանջների՝ TP TC 004/2011 «Ցածրավոլտ սարքավորումների վերաբերյալ», TP TC 010/2011«Մեքենաների և սարքավորումների անվտանգության վերաբերյալ» ; TP TC 020/2011 «Տեխնիկական միջոցների էլեկտրամագնիսական համատեղելիության վերաբերյալ»:

http://net.grundfos.com/qr/i/98741605

10000113841	1016
ECM: 1194357	

Argentina
Bombas GRUNDFOS de Argentina S.A.
Ruta Panamericana km. 37.500industin
1619 - Garín Pcia. de B.A.
Tel.: +54-3327 414 444
Fax: +54-3327 45 3190

Australia
GRUNDFOS Pumps Pty. Ltd.
P.O. Box 2040
Regency Park
South Australia 5942
Tel.: +61-8-8461-4611
Fax: +61-8-8340-0155

Austria
GRUNDFOS Pumpen Vertrieb Ges.m.b.H.
Grundfosstraße 2
A-5082 Grödig/Salzburg
Tel.: +43-6246-883-0
Fax: +43-6246-883-30

Belgium
N.V. GRUNDFOS Bellux S.A.
Boomsesteenweg 81-83
B-2630 Aartselaar
Tel.: +32-3-870 7300
Fax: +32-3-870 7301

Bosnia and Herzegovina
GRUNDFOS Sarajevo
Zmaja od Bosne 7-7A
BiH-71000 Sarajevo
Tel.: +387 33 592 480
Fax: +387 33 590 465
www.ba.grundfos.com
E-mail: grundfos@bih.net.ba

Brazil
BOMBAS GRUNDFOS DO BRASIL
Av. Humberto de Alencar Castelo Branco, 630
CEP 09850 - 300
São Bernardo do Campo - SP
Tel.: +55-11 4393 5533
Fax: +55-11 4343 5015

Bulgaria
Grundfos Bulgaria EOOD
Slatina District
Iztochna Tangenta street no. 100
BG - 1592 Sofia
Tel.: +359 2 49 22 200
Fax: +359 2 49 22 201
E-mail: bulgaria@grundfos.bg

Canada
GRUNDFOS Canada inc.
2941 Brighton Road
Oakville, Ontario
L6H 6C9
Tel.: +1-905 829 9533
Fax: +1-905 829 9512

China
GRUNDFOS Pumps (Shanghai) Co. Ltd.
10F The Hub, No. 33 Suhong Road
Minhang District
Shanghai 201106 PRC
Tel.: +86 21 612 252 22
Fax: +86 21 612 253 33

Colombia
GRUNDFOS Colombia S.A.S.
Km 1.5 vía Siberia-Cota Conj. Potrero Chico,
Parque Empresarial Arcos de Cota Bod. 1A.
Cota, Cundinamarca
Tel.: +57(1)-2913444
Fax: +57(1)-8764586

Croatia
GRUNDFOS CROATIA d.o.o.
Buzinski prilaz 38, Buzin
HR-10010 Zagreb
Tel.: +385 1 6595 400
Fax: +385 1 6595 499
www.hr.grundfos.com

Czech Republic
GRUNDFOS Sales Czechia and Slovakia s.r.o.
Čajkovského 21
779 00 Olomouc
Tel.: +420-585-716 111

Denmark
GRUNDFOS DK A/S
Martin Bachs Vej 3
DK-8850 Bjerringbro
Tel.: +45-87 50 50 50
Fax: +45-87 50 51 51
E-mail: info_GDK@grundfos.com
www.grundfos.com/DK

Estonia
GRUNDFOS Pumps Eesti OÜ
Peterburi tee 92G
11415 Tallinn
Tel.: + 372 606 1690
Fax: + 372 606 1691

Finland
OY GRUNDFOS Pumput AB
Trukkikuja 1
FI-01360 Vantaa
Tel.: +358-(0) 207 889 500

France
Pompes GRUNDFOS Distribution S.A.
Parc d'Activités de Chesnes
57, rue de Malacombe
F-38290 St. Quentin Fallavier (Lyon)
Tel.: +33-4 74 82 15 15
Fax: +33-4 74 94 10 51

Germany
GRUNDFOS GMBH
Schlüterstr. 33
40699 Erkrath
Tel.: +49-(0) 211 929 69-0
Fax: +49-(0) 211 929 69-3799
E-mail: infoservice@grundfos.de
Service in Deutschland:
kundendienst@grundfos.de

Greece
GRUNDFOS Hellas A.E.B.E.
20th km. Athinon-Markopoulou Av.
P.O. Box 71
GR-19002 Peania
Tel.: +0030-210-66 83 400
Fax: +0030-210-66 46 273

Hong Kong
GRUNDFOS Pumps (Hong Kong) Ltd.
Unit 1, Ground floor, Siu Wai industrial Centre
29-33 Wing Hong Street & 68 King Lam Street, Cheung Sha Wan
Kowloon
Tel.: +852-27861706 / 27861741
Fax: +852-27858664

Hungary
GRUNDFOS South East Europe Kft.
Tópark u. 8
H-2045 Törökbálint
Tel.: +36-23 511 110
Fax: +36-23 511 111

India
GRUNDFOS Pumps India Private Limited
118 Old Mahabalipuram Road
Thoraipakkam
Chennai 600 097
Tel.: +91-44 2496 6800

Indonesia
PT GRUNDFOS Pompa
Graha intirub Lt. 2 & 3
Jln. Cililitan Besar No.454. Makasar, Jakarta Timur
ID-Jakarta 13650
Tel.: +62 21-469-51900
Fax: +62 21-460 6910 / 460 6901

Ireland
GRUNDFOS (Ireland) Ltd.
Unit A, Merrywell Business Park
Ballymount Road Lower
Dublin 12
Tel.: +353-1-4089 800
Fax: +353-1-4089 830

Italy
GRUNDFOS Pompe Italia S.r.l.
Via Gran Sasso 4
I-20060 Truccazzano (Milano)
Tel.: +39-02-95838112
Fax: +39-02-95309290 / 95838461

Japan
GRUNDFOS Pumps K.K.
1-2-3, Shin-Miyakoda, Kita-ku
Hamamatsu
431-2103 Japan
Tel.: +81 53 428 4760
Fax: +81 53 428 5005

Kazakhstan
Grundfos Kazakhstan LLP
7' Kyz-Zhibek Str., Kok-Tobe micr.
KZ-050020 Almaty Kazakhstan
Tel.: +7 (727) 227-98-55/56

Korea
GRUNDFOS Pumps Korea Ltd.
6th Floor, Aju Building 679-5
Yeoksam-dong, Kangnam-ku, 135-916
Seoul, Korea
Tel.: +82-2-5317 600
Fax: +82-2-5633 725

Latvia
SIA GRUNDFOS Pumps Latvia
Deglava biznesa centrs
Augusta Deglava ielā 60
LV-1035, Rīga,
Tel.: + 371 714 9640, 7 149 641
Fax: + 371 914 9646

Lithuania
GRUNDFOS Pumps UAB
Smolensko g. 6
LT-03201 Vilnius
Tel.: + 370 52 395 430
Fax: + 370 52 395 431

Malaysia
GRUNDFOS Pumps Sdn. Bhd.
7 Jalan Peguam U1/25
Glenmarie industrial Park
40150 Shah Alam, Selangor
Tel.: +60-3-5569 2922
Fax: +60-3-5569 2866

Mexico
Bombas GRUNDFOS de México S.A. de C.V.
Boulevard TLC No. 15
Parque industrial Stiva Aeropuerto
Apodaca, N.L. 66600
Tel.: +52-81-8144 4000
Fax: +52-81-8144 4010

Netherlands
GRUNDFOS Netherlands
Veluwezoom 35
1326 AE Almere
Postbus 22015
1302 CA ALMERE
Tel.: +31-88-478 6336
Fax: +31-88-478 6332
E-mail: info_gnl@grundfos.com

New Zealand
GRUNDFOS Pumps NZ Ltd.
17 Beatrice Tinsley Crescent
North Harbour Industrial Estate
Albany, Auckland
Tel.: +64-9-415 3240
Fax: +64-9-415 3250

Norway
GRUNDFOS Pumper A/S
Strømsveien 344
Postboks 235, Leirdal
N-1011 Oslo
Tel.: +47-22 90 47 00
Fax: +47-22 32 21 50

Poland
GRUNDFOS Pompy Sp. z o.o.
ul. Klonowa 23
Baranowo k. Poznania
PL-62-081 Przeźmierowo
Tel.: (+48-61) 650 13 00
Fax: (+48-61) 650 13 50

Portugal
Bombas GRUNDFOS Portugal, S.A.
Rua Calvet de Magalhães, 241
Apartado 1079
P-2770-153 Paço de Arcos
Tel.: +351-21-440 76 00
Fax: +351-21-440 76 90

Romania
GRUNDFOS Pompe România SRL
S-PARK BUSINESS CENTER, Clădirea A2, etaj 2
Str. Tipografilor, Nr. 11-15, Sector 1, Cod 013714
Bucuresti, Romania
Tel.: 004 021 2004 100
E-mail: romania@grundfos.ro

Serbia
Grundfos Srbija d.o.o.
Omladinskih brigada 90b
11070 Novi Beograd
Tel.: +381 11 2258 740
Fax: +381 11 2281 769
www.rs.grundfos.com

Singapore
GRUNDFOS (Singapore) Pte. Ltd.
25 Jalan Tukang
Singapore 619264
Tel.: +65-6681 9688
Faxax: +65-6681 9689

Slovakia
GRUNDFOS s.r.o.
Prievozská 4D 821 09 BRATISLAVA
Tel.: +421 2 5020 1426
sk.grundfos.com

Slovenia
GRUNDFOS LJUBLJANA, d.o.o.
Leskoškova 9e, 1122 Ljubljana
Tel.: +386 (0) 1 568 06 10
Fax: +386 (0)1 568 06 19
E-mail: tehnika-si@grundfos.com

South Africa
GRUNDFOS (PTY) LTD
16 Lascelles Drive, Meadowbrook Estate
1609 Germiston, Johannesburg
Tel.: (+27) 10 248 6000
Fax: (+27) 10 248 6002
E-mail: lgradidge@grundfos.com

Spain
Bombas GRUNDFOS España S.A.
Camino de la Fuentecilla, s/n
E-28110 Algete (Madrid)
Tel.: +34-91-848 8800
Fax: +34-91-628 0465

Sweden
GRUNDFOS AB
Box 333 (Lunnagårdsgatan 6)
431 24 Mölndal
Tel.: +46 31 332 23 000
Fax: +46 31 331 94 60

Switzerland
GRUNDFOS Pumpen AG
Bruggacherstrasse 10
CH-8117 Fällanden/ZH
Tel.: +41-44-806 8111
Fax: +41-44-806 8115

Taiwan
GRUNDFOS Pumps (Taiwan) Ltd.
7 Floor, 219 Min-Chuan Road
Taichung, Taiwan, R.O.C.
Tel.: +886-4-2305 0868
Fax: +886-4-2305 0878

Thailand
GRUNDFOS (Thailand) Ltd.
92 Chaloem Phrakiat Rama 9 Road
Dokmai, Pravej, Bangkok 10250
Tel.: +66-2-725 8999
Fax: +66-2-725 8998

Turkey
GRUNDFOS POMPA San. ve Tic. Ltd. Sti.
Gebze Organize Sanayi Bölgesi
Ihsan dede Caddesi
2. yol 200. Sokak No. 204
41490 Gebze/ Kocaeli
Tel.: +90 - 262-679 7979
Fax: +90 - 262-679 7905
E-mail: satis@grundfos.com

Ukraine
ТОВ "ГРУНДФОС УКРАЇНА"
Бізнес Центр Європа
Столичне шосе, 103
м. Київ, 03131, Україна
Tel.: (+38 044) 237 04 00
Fax: (+38 044) 237 04 01
E-mail: ukraine@grundfos.com

United Arab Emirates
GRUNDFOS Gulf Distribution
P.O. Box 16768
Jebel Ali Free Zone, Dubai
Tel.: +971 4 8815 166
Fax: +971 4 8815 136

United Kingdom
GRUNDFOS Pumps Ltd.
Grovebury Road
Leighton Buzzard/Beds. LU7 4TL
Tel.: +44-1525-850000
Fax: +44-1525-850011

U.S.A.
Global Headquarters for WU
856 Koomey Road
Brookshire, Texas 77423 USA
Phone: +1-630-236-5500

Uzbekistan
Grundfos Tashkent, Uzbekistan
The Representative Office of Grundfos Kazakhstan in Uzbekistan
38a, Oybek street, Tashkent
Tel.: (+998) 71 150 3290 / 71 150 3291
Fax: (+998) 71 150 3292

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99659695 **11.2025**

ECM: 1439010