

# GRUNDFOS INSTRUCTIONS

## MAGNA1

Model A and B

Safety instructions and other important information



Installation and operating instructions

<http://net.grundfos.com/qr/i/98091804>

be  
think  
innovate

GRUNDFOS

## English (GB) Safety instructions

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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 is 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.

## General warning



Prior to installation, read this document and the quick guide.

Installation and operation must comply with local regulations and accepted codes of good practice.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.



Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

## Type key

Code Example	(D) 32 -40 (F) (N) 220
<b>Type range</b> MAGNA1	
D Single-head pump Twin-head pump	
N Nominal diameter (DN) of suction and discharge ports [mm]	
M Maximum head [dm]	
<b>Pipe connection</b> Threaded F Flange	
<b>Pump housing material</b> Cast iron N Stainless steel	
P Port-to-port length [mm]	

## Lifting the pump



Observe local regulations concerning limits for manual lifting or handling.

## Installing the product

### **CAUTION**

#### **Pressurised system**



Minor or moderate personal injury

- Pay special attention to any escaping vapour when loosening the clamp.

### **CAUTION**

#### **Crushing of feet**



Minor or moderate personal injury

- Do not drop the pump head when loosening the clamp.

Fit and tighten the screw holding the clamp to  $8 \text{ Nm} \pm 1 \text{ Nm}$ . Do not apply more torque than specified even though water is dripping from the clamp. The condensed water is most likely coming from the drain hole under the clamp.



Check the position of the clamp before you tighten the clamp. Incorrect position of the clamp will cause leakage from the pump and damage the hydraulic parts in the pump head.



## Electrical installation

### **WARNING**

#### **Electric shock**



Death or serious personal injury

- Lock the main switch in position 0. Type and requirements as specified in EN 60204-1, 5.3.2.

## **WARNING**

### **Electric shock**

**Death or serious personal injury**

- Connect the pump to an external main switch with a minimum contact gap of 3 mm in all poles.
- Use earthing or neutralisation for protection against indirect contact.
- If the pump is connected to an electric installation where an electrical circuit breaker (voltage sensing ELCB, residual-current device RCD or residual-current circuit device RCCB) is used as an additional protection, this circuit breaker must be marked with the first or both of the symbols shown below:





Make sure that the fuse is dimensioned according to the nameplate and local regulations.



Connect all cables in accordance with local regulations.



Make sure that all cables are heat-resistant up to 75 °C.

Install all cables in accordance with EN 60204-1 and EN 50174-2:2000.

## Product introduction



Do not pump aggressive liquids.



Do not pump flammable, combustible or explosive liquids.

# Operating the product

## **CAUTION**

### **Hot surface**



- Minor or moderate personal injury
- Only touch the control panel to avoid burns.

# Fault finding the product

## **CAUTION**

### **Pressurised system**

Minor or moderate personal injury



- Before dismantling the pump, drain the system or close the isolating valve on either side of the pump. The pumped liquid may be scalding hot and under high pressure.

## **WARNING**

### **Electric shock**

Death or serious personal injury

- Switch off the power supply for at least 3 minutes before you start any work on the product. Lock the main switch in position 0. Type and requirements as specified in EN 60204-1, 5.3.2.



## **WARNING**

### **Electric shock**

Death or serious personal injury

- Make sure that other pumps or sources do not force flow through the pump even if the pump is stopped.



If the power supply cable is damaged, it must be replaced by the manufacturer, the manufacturer's service partner or a similarly qualified person.

## Technical data

### Ambient temperature

0 to 40 °C.

### Liquid temperature

Continuously: -10 to +110 °C.

Stainless steel pumps in domestic hot-water systems:

In domestic hot-water systems, we recommend that you keep the liquid temperature below 65 °C to eliminate the risk of lime precipitation.

### Maximum system pressure



The actual inlet pressure and the pump pressure against a closed valve must be lower than the maximum permissible system pressure.

The maximum system pressure is indicated on the nameplate:

PN 6: 6 bar / 0.6 MPa

PN 10: 10 bar / 1.0 MPa

PN 16: 16 bar / 1.6 MPa.

## Disposal

This product has been designed with focus on the disposal and recycling of materials. The following average disposal values apply to all variants of Grundfos MAGNA1 pumps:

- 85 % recycling
- 10 % incineration
- 5 % depositing.

This product or parts of it must be disposed of in an environmentally sound way according to local regulations.

Subject to alterations.

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Subject to alterations.

# Declaration of conformity

## **GB: EU declaration of conformity**

We, Grundfos, declare under our sole responsibility that the product MAGNA1, 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.

## **BG: Декларация за съответствие на ЕО**

Ние, фирма Grundfos, заявяваме с пълна отговорност, че продуктът MAGNA1, за който се отнася настоящата декларация, отговаря на следните директиви на Съвета за уеднаквяване на правните разпоредби на държавите-членки на ЕО.

## **CZ: Prohlášení o shodě EU**

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobek MAGNA1, na který se toto prohlášení vztahuje, je v souladu s níže uvedenými ustanoveními směrnice Rady pro sbližení právních předpisů členských států Evropského společenství.

## **DE: EU-Konformitätserklärung**

Wir, Grundfos, erklären in alleiniger Verantwortung, dass das Produkt MAGNA1, auf das sich diese Erklärung bezieht, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten übereinstimmt.

## **DK: EU-overensstemmelseserklæring**

Vi, Grundfos, erklærer under ansvar at produktet MAGNA1 som erklæringen nedenfor omhandler, er i overensstemmelse med Rådets direktiver der er nævnt nedenfor, om indbyrdes tilnærmelse til EU-medlemsstaternes lovgivning.

## **EE: ÜVastavusdeklaratsioon**

Meie, Grundfos, kinnitame ja kanname ainuisikulist vastutust selle eest, et toode MAGNA1, mille kohta all olev deklaratsioon käib, on kooskõlas Nõukogu Direktiividega, mis on nimetatud all pool vastavalt vastuvõtetud õigusaktide ühtlustamise kohta EÜ liikmesriikides.

## **ES: Declaración de conformidad de la UE**

Grundfos declara, bajo su exclusiva responsabilidad, que el producto MAGNA1 al que hace referencia la siguiente declaración cumple lo establecido por las siguientes Directivas del Consejo sobre la aproximación de las legislaciones de los Estados miembros de la UE.

## **FI: EU-vaatimustenmukaisuusvakuutus**

Grundfos vakuuttaa omalla vastuullaan, että tuote MAGNA1, jota tämä vakuutus koskee, on EU:n jäsenvaltioiden lainsäädännön lähetämisseen tähdistävien Euroopan neuvoston direktiivien vaatimusten mukainen seuraavasti.

## **FR: Déclaration de conformité UE**

Nous, Grundfos, déclarons sous notre seule responsabilité, que le produit MAGNA1, auquel se réfère cette déclaration, est conforme aux Directives du Conseil concernant le rapprochement des législations des États membres UE relatives aux normes énoncées ci-dessous.

## **GR: Δήλωση συμμόρφωσης ΕΕ**

Εμείς, η Grundfos, δηλώνουμε με αποκλειστικά δική μας ευθύνη ότι το προϊόν MAGNA1, στο οποίο αναφέρεται η παρακάτω δήλωση, συμμορφώνεται με τις παρακάτω Οδηγίες του Συμβουλίου περί προσέγγισης των νομοθεσιών των κρατών μελών της ΕΕ.

## **HR: EU deklaracija sukladnosti**

Mi, Grundfos, izjavljujemo s punom odgovornošću da je proizvod MAGNA1, na koja se izjava odnosi u nastavku, u skladu s direktivama Vijeća dolje navedenih o uskladivanju zakona država članica EU-a.

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## **HU: EU megfelelőségi nyilatkozat**

Mi, a Grundfos vállalat, teljes felelősséggel kijelentjük, hogy a(z) MAGNA1 termék, amelyre az alábbi nyilatkozat vonatkozik, megfelel az Európai Unió tagállamainak jogi irányelveit összehangoló tanács alábbi előírásainak.

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## **IT: Dichiarazone di conformità UE**

Grundfos dichiara sotto la sua esclusiva responsabilità che il prodotto MAGNA1, al quale si riferisce questa dichiarazione, è conforme alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri UE.

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## **LT: ES atitikties deklaracija**

Mes, Grundfos, su visa atsakomybe pareiskame, kad produktas MAGNA1, kuriam skirta ši deklaracija, atitinka žemiu nurodytas Tarybos Direktyvas dėl ES šalių narių įstatymų suderinimo.

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## **LV: ES atbilstības deklarācija**

Sabiedrība Grundfos ar pilnu atbildību pazīsto, ka produkts MAGNA1, uz kuru attiecas tālāk redzamā deklarācija, atbilst tālāk norādītajām Padomes direktīvām par ES dalībvalstu normatīvo aktu tuvināšanu.

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## **NL: EU-conformiteitsverklaring**

Wij, Grundfos, verklaren gehele onder eigen verantwoordelijkheid dat product MAGNA1, 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.

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## **PL: Deklaracja zgodności UE**

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasz produkt MAGNA1, którego deklaracja niniejsza dotyczy, jest zgodny z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich.

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## **PT: Declaração de conformidade UE**

A Grundfos declara sob sua única responsabilidade que o produto MAGNA1, ao qual diz respeito a declaração abaixo, está em conformidade com as Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da UE.

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## **RO: Declarația de conformitate UE**

Noi Grundfos declarăm pe propria răspundere că produsul MAGNA1, la care se referă această declarație, este în conformitate cu Directivele de Consiliu specificate mai jos privind armonizarea legilor statelor membre UE.

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## **RS: Deklaracija o usklađenosti EU**

Mi, kompanija Grundfos, izjavljujemo pod punom vlastitom odgovornošću da je proizvod MAGNA1, na koji se odnosi deklaracija ispod, u skladu sa dole prikazanim direktivama Saveta za usklađivanje zakona država članica EU.

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## **RU: Декларация о соответствии нормам ЕС**

Мы, компания Grundfos, со всей ответственностью заявляем, что изделие MAGNA1, к которому относится нижеприведённая декларация, соответствует нижеприведённым Директивам Совета Европоюза о тождественности законов стран-членов ЕС.

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## **SE: EU-försäkrar om överensstämmelse**

Vi, Grundfos, försäkrar under ansvar att produkten MAGNA1, som omfattas av nedanstående försäkran, är i överensstämmelse med de rådsdirektiv om inbördes närmande till EU-medlemsstaternas lagstiftning som listas nedan.

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## **SI: Izjava o skladnosti EU**

V Grundfosu s polno odgovornostjo izjavljamo, da je izdelek MAGNA1,na katerega se spodnja izjava nanaša, v skladu s spodnjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic EU.

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## **SK: ES vyhlásenie o zhode**

My, spoločnosť Grundfos, vyhlasujeme na svoju plnú zodpovednosť, že produkt MAGNA1, na ktorý sa výhlásenie uvedené nižšie vzťahuje, je v súlade s ustanoveniami nižšie uvedených smerníc Rady pre zblíženie právnych predpisov členských štátov EÚ.

## **TR: AB uygunluk bildirgesi**

Grundfos olarak, aşağıdaki bildirim konusunun MAGNA1 ürünlerinin, AB üye ülkelerinin direktiflerinin yaklaştırılmasıyla ilgili durumun aşağıdaki Konsey Direktifleriyle uyumlu olduğunu ve bununla ilgili olarak tüm sorumluluğunu bize ait olduğunu beyan ederiz.

UA: Декларація відповідності директивам EU

Ми, компанія Grundfos, під нашу однозначну відповідальність заявляємо, що виріб MAGNA1, до якого відноситься нижче наведена декларація, відповідає директивам EU, переліченим нижче, щодо поточності законів країн-членів ЄС.

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MAGNA1系列，其制造和性能完全符合以下所列欧盟委员会指令：

JP·EU適合宣言

Grundfos は、その責任の下に、MAGNA1 製品が EU 加盟諸国の法規に関連する、以下の評議会指令に適合していることを宣言します。

KO: EU 적합성 선언

Grundfos는 아래의 선언과 관련된 MAGNA1 제품이 EU 회원국 법률에 기반하여 아래의 이사회 지침을 준수함을 단독 책임 하에 선언합니다.

## МК: Декларација за сообразност на Еу

Ние, Grundfos, изјавуваме под целосна одговорност дека производот MAGNA1, на кого се однесува долнаведената декларација, е во согласност со овие директиви на Советот за приближување на законите на земјите-членки на ЕУ.

AR: اقرار مطابقة الاتحاد الأوروبي (EU)

ص به الإقرار أدنى، يكون نقر نحن، جروندقوس، ممتحن مسؤوليتنا الفردية بـMAGNA1، الذي يختضن عضاء الاتحاد الأوروبي (EU) مطابقاً لاتجاهات المجلس المذكورة أدنى بشأن التغريب بين قوانين الدول

- 
- Machinery Directive (2006/42/EC).  
Standard used: EN 809:1998 + A1:2009.
  - Low Voltage Directive (2014/35/EU).  
Standards used: EN 60335-1:2012/AC:2014 + A11:2014,  
EN 60335-2-51:2003/A1:2008/A2:2012.
  - EMC Directive (2014/30/EU).  
Standards used: EN 55014-1:2006+A1:2009+A2:2011, EN 55014-2:1997+A1:2001+A2:2008,  
EN 61000-3-3:2013, EN 61000-3-2:2014.
  - Ecodesign Directive (2009/125/EC).  
Circulators:  
Commission Regulation Nos 641/2009 and 622/2012.  
Applies only to circulators marked with the energy efficiency index EEI.  
See the pump nameplate. Standards used: EN 16297-1:2012 and EN 16297-2:2012.

This EC declaration of conformity is only valid when published as part of the Grundfos safety instructions (publication number 99233377).

Bjerringbro, 13th June 2017



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