BOSCH

PRO

GTP18V-28

1 609 92A C4C

en Original instructions

B

C

Standard

ECO

H [m]

25

20

15

10

5

0

0   10   20   30   40   50

Q [l/min]

D

(15) **(18)** **(19)** **(20)** **(21)**
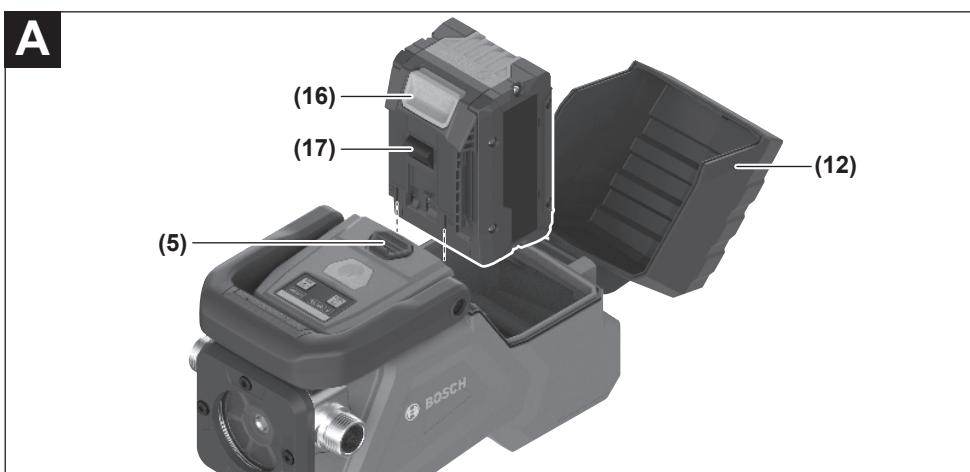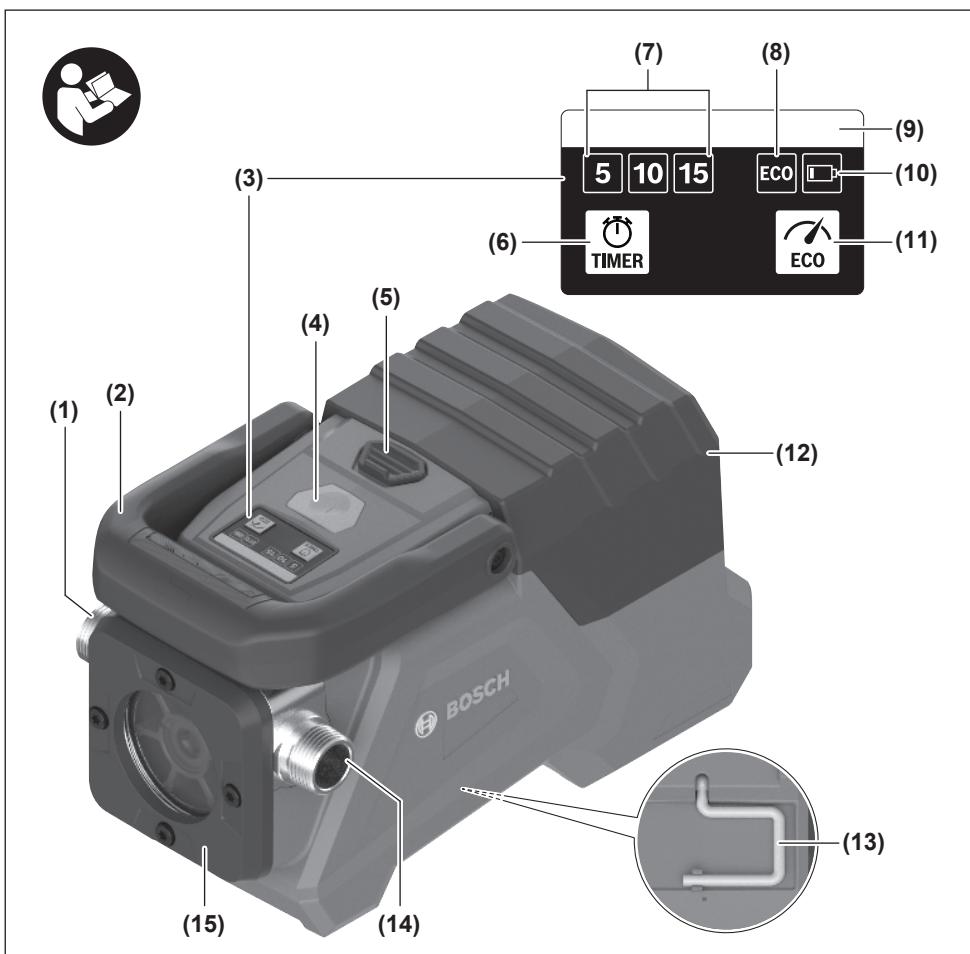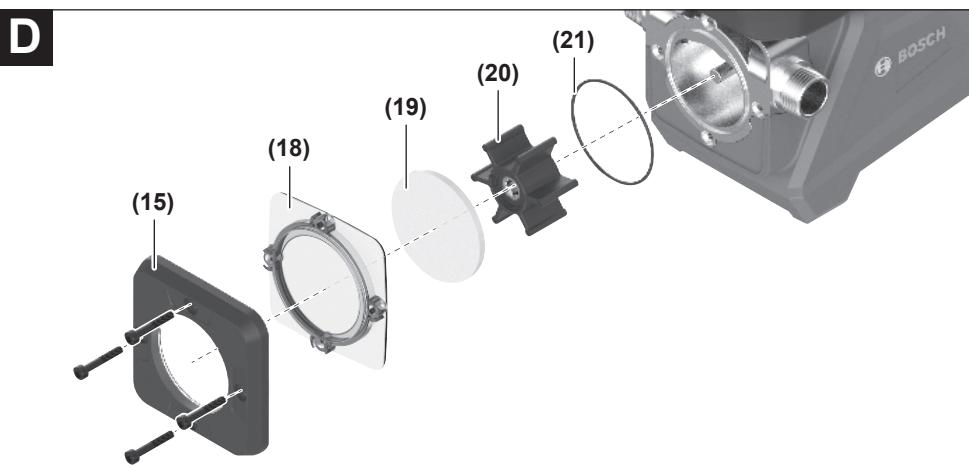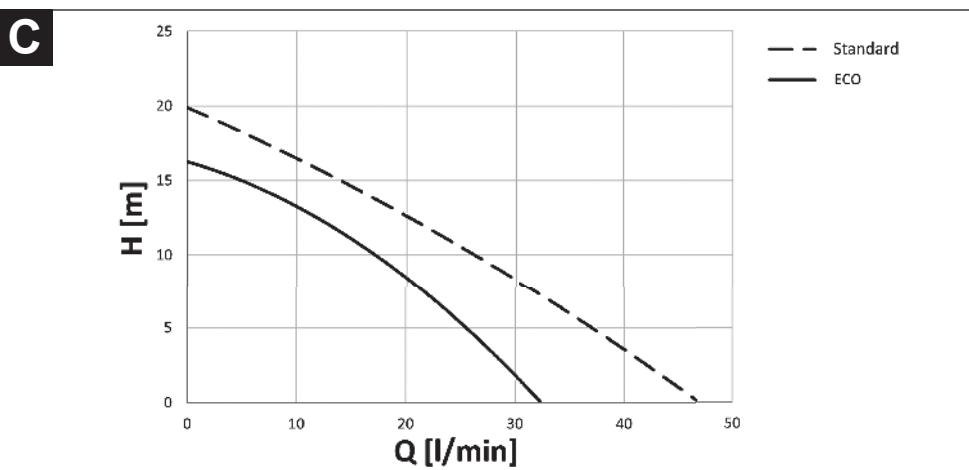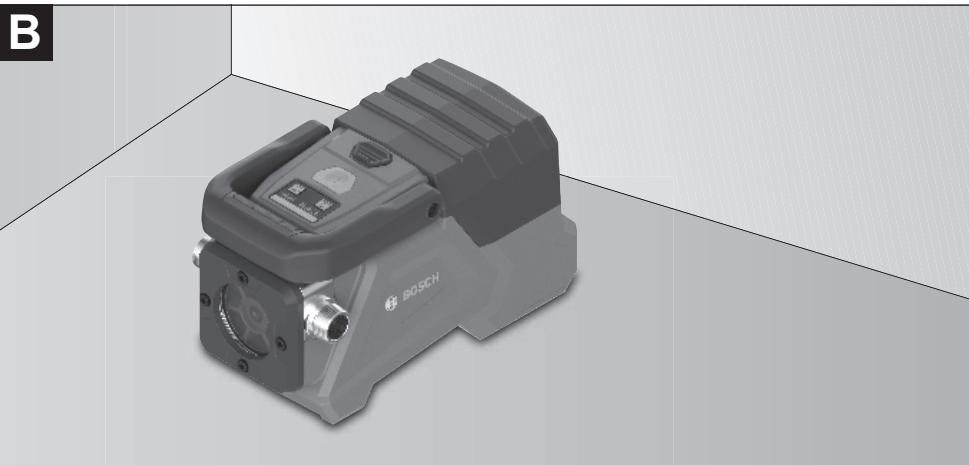
English

Safety instructions

Read all the safety information and instructions. Failure to observe the safety information and follow instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

▶ **Supervise children.** This will ensure that children do not play with the pump.

▶ **Children must not be allowed to clean and perform maintenance on the pump or the charger without supervision.**

▶ **This pump can be used by children aged 8 or older and by persons who have physical, sensory or mental limitations or a lack of experience or knowledge if a person responsible for their safety supervises them or has instructed them in the safe operation of the pump and they understand the associated dangers.** Otherwise, there is a risk of operating errors and injuries.

▶ **Do not allow persons unfamiliar with the pump or these instructions to operate it.**

▶ **Ensure that the battery compartment cover is closed when operating the pump.** Moisture inside the pump can lead to a short circuit.

▶ **Do not use the pump to pump combustible or explosive liquids, such as petrol, oil, alcohol or solvents. Do not operate the pump in areas subject to explosion hazards.** The liquids can easily ignite or explode.

▶ **Do not use the pump to pump food or drink, such as drinking water.** Lubricants can contaminate the fluids.

▶ **Do not pump liquids from areas where people are present. If there are animals or foreign bodies in the areas, use a filter.** This will prevent harm to people or animals.

▶ **Remove the battery before you install the pump or perform any maintenance on it.** This prevents accidental start-up of the pump.

The pump housing can become very hot when pumping hot liquids or if accidentally allowed to run dry. You could injure yourself.

Only use the pump in enclosed spaces and do not expose it to wet conditions.

▶ **Do not modify or open the battery.** There is a risk of short-circuiting.

▶ **In case of damage and improper use of the battery, vapours may be emitted. The battery can set alight or explode.** Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The vapours may irritate the respiratory system.

▶ **If used incorrectly or if the battery is damaged, flammable liquid may be ejected from the battery. Contact with this liquid should be avoided. If contact accidentally occurs, rinse off with water. If the liquid comes into contact with your eyes, seek additional medical attention.** Liquid ejected from the battery may cause irritation or burns.

▶ **The battery can be damaged by pointed objects such as nails or screwdrivers or by force applied externally.** An internal short circuit may occur, causing the battery to burn, smoke, explode or overheat.

▶ **When the battery is not in use, keep it away from paper clips, coins, keys, nails, screws or other small metal objects that could make a connection from one terminal to another.** A short circuit between the battery terminals may cause burns or a fire.

▶ **Only use the battery with products from the manufacturer.** This is the only way in which you can protect the battery against dangerous overload.

▶ **Only charge the batteries using chargers recommended by the manufacturer.** A charger that is suitable for one type of battery may pose a fire risk when used with a different battery.

Protect the rechargeable battery against heat, e.g. including prolonged sun exposure, fire, water, and moisture. There is a risk of explosion and short circuit.

Product Description and Specifications

Please observe the illustrations at the beginning of this operating manual.

Intended Use

The pump is only intended for conveying clean water. It is dry self-priming.

The pump is not suitable for conveying abrasive, corrosive or caustic liquids, nor for salt water, alkaline solutions or waste water. It may not be used to convey foodstuffs nor may it be used in bodies of water containing aquatic life.

Product Features

The numbering of the product features refers to the diagram of the pump on the graphics page.

(1) Water outlet (pressure side)

(2) Carrying handle

(3) User interface

(4) On/off button

(5) Battery compartment cover release button

(6) Timer button (user interface)

(7) Timer indicator (user interface)

(8) Eco mode indicator (user interface)

(9) Status bar (user interface)

(10) Low battery indicator (user interface)

(11) Eco mode button (user interface)

(12) Battery compartment cover

(13) Utility hook

(14) Water inlet (suction side)

(15) Pump housing cover

(16) Battery release button[a]

(17) Rechargeable battery[a]

(18) Intermediate cover

(19) Sight glass

(20) Impeller

(21) Pump housing sealing ring

a) **This accessory is not part of the standard scope of delivery.**

Technical Data

Transfer pump		GTP18V-28
Article number		**3 601 JR6 0..**
Rated voltage	V=	18
Delivery capacity[A]		
– Standard mode	l/h	2800
– ECO mode	l/h	1800
Delivery head (standard mode)	m	20
Suction head (standard mode)	m	5
Max. water temperature	°C	60
Hose connection thread	"	G 3/4
Weight[B]	kg	2.2
Protection rating[C]		IP54
Recommended ambient temperature during charging	°C	0 to +35
Permitted ambient temperature during operation and during storage	°C	0 to +50
Compatible rechargeable batteries		GBA18V... GBA 18V... ProCORE18V... EXPERT18V... EXBA18V... CORE18V...
Recommended chargers		GAL18... GAL 18... GAL 36... GAL12V/18... GAL 12V/18...

Transfer pump	GTP18V-28
	GAX 18... EXAL18...

A) measured at 20–25 °C

B) Without rechargeable battery (you can find the battery weight at www.bosch-professional.com.)

C) With the battery compartment cover closed **(12)** and with the user interface **(3)** set up facing upwards (as shown in figure **B**)

Values can vary depending on the product, scope of application and environmental conditions. To find out more, visit www.bosch-professional.com/wac.

Noise Information

Noise emission values determined according to **EN ISO 20361**.

Typically, the A-weighted noise level of the power tool is: Sound pressure level **73** dB(A) (uncertainty K = **3** dB); sound power level **82** dB(A) (uncertainty K = **5.6** dB).

Wear hearing protection!

The noise emission value given in these instructions has been measured in accordance with a standardised measuring procedure and may be used to compare power tools. It may also be used for a preliminary estimation of noise emissions.

The noise emission value given represents the main applications of the power tool. However, if the power tool is used for other applications, with different application tools or is poorly maintained, the noise emission value may differ. This may significantly increase noise emissions over the total working period.

To estimate noise emissions accurately, the times when the tool is switched off, or when it is running but not actually being used, should also be taken into account. This may significantly reduce noise emissions over the total working period.

Rechargeable battery

Bosch sells some cordless pumps without a rechargeable battery. Check the packaging to see whether a rechargeable battery is included with the pump.

Charging the battery

▶ **Use only the chargers listed in the technical data.** Only these chargers are matched to the lithium-ion battery of your pump.

Note: Lithium-ion rechargeable batteries are supplied partially charged according to international transport regulations. To ensure full rechargeable battery capacity, fully charge the rechargeable battery before using your tool for the first time.

Inserting and removing the battery (see figure A)

Slide the release button **(5)** away from the battery compartment and open the battery compartment cover **(12)**.

Push the charged battery into the battery holder until it clicks into place.

To remove the rechargeable battery, press the battery release button and pull the battery out. **Do not use force to do this.**

Close the battery compartment cover **(12)** so that you hear it click into place.

▶ **Make sure that the battery compartment cover is fully closed and that the seal of the battery compartment cover is intact.** Ingress of moisture can damage the battery and pump.

Battery charge indicator

When the rechargeable battery is inserted, the battery's state of charge (see "Status indicators", page 8) can be seen on the user interface **(3)**; when the rechargeable battery is removed, this can be viewed on the battery itself.

Battery Charge Indicator on the Rechargeable Battery

If the rechargeable battery is removed from the pump, its state of charge may be indicated by the green LEDs of the battery charge indicator on the battery.

Press the button for the battery charge indicator ⊛ or ▭ to show the state of charge.

If no LED lights up after pressing the button for the battery charge indicator, then the battery is defective and must be replaced.

Note: Not all battery types have a battery charge indicator.

Rechargeable battery type GBA 18V… | GBA18V…

LED	Capacity
3× continuous green light	60–100 %
2× continuous green light	30–60 %
1× continuous green light	5–30 %
1× flashing green light	0–5 %

Battery model ProCORE18V… | EXPERT18V… | EXBA18V… | CORE18V…

LED	Capacity
5 × continuous green light	80–100 %
4 × continuous green light	60–80 %
3 × continuous green light	40–60 %
2 × continuous green light	20–40 %
1 × continuous green light	5–20 %
1 × flashing green light	0–5 %

Battery defect risk detection

EXPERT18V… | EXBA18V…

In addition to the state of charge of the rechargeable battery, the LEDs on the battery charge indicator can also indicate the risk of a battery defect.

To activate the function, press and hold the button for the battery charge indicator ▭ for 3 seconds. The analysis of the battery is signalled by a moving light on the battery charge indicator. The result of is shown on the battery charge indicator.

1 LED: The rechargeable battery has a high defect risk. Performance and runtime may already be reduced. Replacing the rechargeable battery is recommended.

5 LEDs: The rechargeable battery is in good condition and has a low defect risk.

Please note: The rechargeable battery defect risk assessment works in a binary manner and offers a simplified status assessment, indicating either that the rechargeable battery is in good condition or that the rechargeable battery has an increased defect risk. A percentage of the battery status is not shown.

Recommendations for Optimal Handling of the Battery

Protect the battery against moisture and water.

Only store the battery within a temperature range of −20 to 50 °C. Do not leave the battery in your car in the summer, for example.

Occasionally clean the ventilation slots on the battery using a soft brush that is clean and dry.

A significantly reduced operating time after charging indicates that the battery has deteriorated and must be replaced.

Follow the instructions on correct disposal.

Assembly

▶ **Remove the battery before cleaning or performing maintenance work on the pump, before making tool adjustments, changing accessories or storing the pump.** This safety measure prevents the pump from being started accidentally.

Connecting hoses

Note: The direction of the water flow through the pump housing can be identified from the arrow on the housing and on the carrying handle **(2)**.

For the pump, you will need two commercially available hoses with a G 3/4" threaded nut and a minimum diameter of 19 mm.

To ensure that the pump works correctly, a reinforced hose is required for the suction side (hose connection on the inlet **(14)**). For optimum pump performance, this hose should be as short as possible.

Note: Always place a flat gasket between the hose connection on the pump and the hose itself. The threads on the

pump are not self-sealing; without a flat gasket, water can escape at high pressure.

Only use seals with a suitable diameter in order to prevent a reduction in the flow rate.

Screw a hose into both the hose connection on the inlet **(14)** and on the outlet **(1)** until hand-tight.

If a hose will not screw on easily, check the hose has the correct connection thread and that the hose is screwed on straight. Unsuitable hoses or misthreaded screwing can cause damage to the threads on the pump.

To ensure the pump can operate at full delivery capacity, the diameter of the hoses must not be reduced. Therefore, do not use any thinner hoses or quick-release couplings. Make sure there are no kinks or pinch points in the hoses.

Operation

▶ **Make sure that the pump is not exposed to frost.**

▶ **Do not allow the pump to run dry.** The pump may be damaged.

Starting Operation

Setting up/hanging up the pump (see figures B–C)

When setting up with the user interface **(3)** facing upwards (as shown in the figure **B**), the pump is protected against splashing water from all sides (IP54).

If required, you can alternatively suspend the pump by the utility hook **(13)**, but then this protection can no longer be guaranteed.

If possible, position the pump so that the height difference between the pump, the water discharge point and the

highest point of the outlet hose is as small as possible. The greater this height difference *H*, the lower the possible flow rate *Q* (see characteristic curve in the figure **C**).

Switching on and off

Make sure that the opening of the vacuum hose hangs freely in the water: If the hose is suctioned to the bottom or the edge of the water tank, the water inlet will be blocked.

Press the on/off button **(4)** to **switch on** the pump and to start pumping.

Press the on/off button **(4)** again to stop pumping and **switch off** the pump.

Note: After conveying hot water, allow the pump to cool down for at least 10 minutes before you switch it on again.

User interface

The user interface **(3)** is used as follows:
– To display the status of the pump
– To control the timer function
– To switch ECO mode on/off

When the pump is switched off, you can activate the user interface **(3)** by pressing the timer button **(6)** or the ECO mode button **(11)**. This does not start the pumping process. You can now adjust settings on the user interface.

30 seconds after the last button is pressed or after the pump is switched off, the user interface **(3)** switches off and the settings (e.g. ECO mode) are saved.

The saved settings are deleted five minutes after the last button is pressed or after the pump is switched off. When the battery is removed, all settings are immediately deleted.

Status indicators

Status bar (9)	Low battery indicator (10)	Meaning
Green	–	Pump is switched on, battery capacity > 20%.
Orange	Orange	Battery low (1–20% capacity)
Orange	–	Battery or pump is too warm.
Red	Red	Battery empty (0–1% capacity), pump will switch off shortly.
Red	–	Battery or pump overheated; impeller blocked; motor or battery faulty

Automatic switch-off (timer)

The pump can be switched off automatically using the timer function.

Press the timer button **(6)** repeatedly until the required remaining operating time (in minutes) is shown on the timer indicator **(7)**. If the pumping process has started, the timer indicator **(7)** flashes and shows the remaining operating time.

To stop the timer function early, press the timer button **(6)** repeatedly until the field in the timer indicator **(7)** no longer lights up.

Eco mode

You can reduce the power and flow rate of the pump to extend the battery runtime. To do this, press the Eco mode button **(11)** so that the Eco mode indicator **(8)** lights up.

To exit the Eco mode, press the Eco mode button **(11)** again so that the Eco mode indicator **(8)** goes out.

Rectifying errors

Cause	Corrective action
The pump will not switch on or switches off automatically (status bar red).	

Cause	Corrective action
The battery is empty or damaged.	Charge or replace the battery.
Pump or battery are overheated.	Allow the pump and battery to cool down before you switch the pump back on.
	Check if the pump is being overloaded: The hose at the outlet **(1)** must be clear and passable, the suction head and delivery head must not be too high.
The impeller is jammed.	If necessary, clean the impeller **(20)** and the pump housing. If the impeller is faulty, replace it.
The motor has a fault.	Have the pump checked by a **Bosch** after-sales service centre.
Not enough water is being conveyed.	
One of the hoses is blocked or damaged.	Check that both hoses are intact and freely passable. Remove any blockages or replace any damaged hoses.
Suction head or delivery head is too high.	Set the pump up so that the height difference between the pump, the water discharge point and the highest point of the outlet hose is as small as possible.
The hose is not suitable (e.g. diameter too small, hose fabric too unstable).	Use a sturdy hose with a diameter of at least 19 mm.
A hose connection is leaking.	Only use hoses with a G 3/4" thread.
	Make sure that an undamaged and tightly fitting flat gasket is placed between the hose and the hose connection of the pump and that the hoses are correctly screwed on.
The impeller is worn.	Replace the impeller **(20)** and the sealing ring **(21)**.
The cover of the pump housing is not tightly sealed.	Make sure that the sealing ring **(21)** is installed, undamaged and correctly fitted. Tighten the four screws on the cover **(15)** until hand-tight.

Maintenance and Service

Maintenance and Cleaning

▶ **Remove the battery before cleaning or performing maintenance work on the pump, before making tool adjustments, changing accessories or storing the pump.** This safety measure prevents the pump from being started accidentally.

▶ **Keep the pump clean to ensure effective, safe operation.**

Replacing the impeller (see figure D)

Before commencing work, check the condition of the impeller **(20)** through the sight glass in the cover **(15)** of the pump housing. If there are visible cracks or melted surfaces on the impeller, the impeller is worn and must be replaced:
– Undo the four screws on the pump housing cover **(15)** using a size T20 Torx screwdriver.
– Remove the cover **(15)**, the intermediate cover **(18)** and the sight glass **(19)**.
– Remove the impeller **(20)** and the sealing ring **(21)**.
– Clean the pump housing if necessary.
– Insert a new impeller **(20)** and a new sealing ring **(21)**. Only use parts intended by **Bosch** for this pump.
– Pay particular attention to ensuring the sealing ring **(21)** is sitting correctly in the sealing groove.

– Place the sight glass **(19)**, intermediate cover **(18)** and cover **(15)** on the pump housing.
– Screw the cover **(15)** back on using the four screws. Tighten the screws until hand-tight.

Storing the pump

When the pump is to be stored for a longer period of time, it is advisable to clean the impeller and the pump housing beforehand.

To remove and install the impeller, proceed as described for replacing the impeller.

After-Sales Service and Application Service

Great Britain
Tel. Service: (0344) 7360109

Malaysia
Tel.: (03) 79663194

In all correspondence and spare parts orders, please always include the 10-digit article number given on the nameplate of the product.

Disposal

Pumps, batteries, accessories and packaging should be recycled in an environmentally friendly manner.

Do not dispose of pumps and rechargeable batteries/batteries in the household waste.

Only for EU countries and United Kingdom:

Electrical and electronic equipment or used batteries that are no longer suitable for use must be collected separately and disposed of in an environmentally friendly manner. Use the designated collection systems. Incorrect disposal may cause harmful effects on the environment and human health, due to the potential presence of hazardous substances.

Legal Information and Licenses

1 – Open Source Components

1.1 – BSD-3-Clause
Copyright © 2015–2017, Infineon Technologies AG.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.2 – CMSIS_5 – Apache-2.0
Copyright 2009-2020 Arm Limited.
All rights reserved.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.
You may obtain a copy of the License at
http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.3 – Libfixmath – MIT
Copyright © 2011–2021 Flatmush <Flatmush@gmail.com>, Petteri Aimonen <Petteri.Aimonen@gmail.com>, & libfixmath AUTHORS libfixmath is Copyright © 2011–2021 Flatmush <Flatmush@gmail.com>, Petteri Aimonen <Petteri.Aimonen@gmail.com>, & libfixmath AUTHORS

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the Software), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED AS IS, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF

CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.4 – MFixedPoint – MIT
Copyright 2018 Geoffrey Hunter

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.5 – NanoPb 0.3.9.9 – Zlib
Copyright © 2011 Petteri Aimonen <jpa at nanopb.mail.kapsi.fi>

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

1.6 – GCE-Math – Apache-2.0
Copyright 2016–2023 Keith O'Hara

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the Software), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED AS IS, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.7 - picolibc 1.8.8

**(1) Copyright © 2001 Mike Barcroft <mike@FreeBSD.org>
All rights reserved.**

(2) Copyright 2002 Jeff Johnston <jjohnstn@redhat.com>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(3) Copyright 2019, 2020, 2021, 2024 Keith Packard Stephen Street

(4) Copyright 1997 Nick Clifton, Cygnus Solutions

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(5) Copyright 2024, Synopsys, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the Synopsys, Inc., nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(6) Copyright © 1983, 1993 The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(7) Copyright 2009–2015 ARM Ltd

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the company may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY ARM LTD "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ARM LTD BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN

CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(8) Copyright 2009–2015 Linaro Limited

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

– Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

– Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

– Neither the name of Linaro Limited nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS AS IS AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(9) Copyright 1994 Cygnus Support

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, and/or other materials related to such distribution and use acknowledge that the software was developed at Cygnus Support, Inc. Cygnus Support, Inc. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

2. Common Licenses

2.1 Apache License 2.0 (Apache-2.0)
Apache-2.0
Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, **"control"** means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or **"Your"**) shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, **"submitted"** means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as **"Not a Contribution."**

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a **"NOTICE"** text file as part of its distribution, then any Derivative Works that You distribute must include a readable

copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

3 – WARRANTY DISCLAIMER

This product contains Open Source Software components which underlie Open Source Software Licenses. Please note that Open Source Licenses contain disclaimer clauses. The text of the Open Source Licenses that apply are included in this manual under "Legal Information and Licenses".

Servicekontakte
Service Contacts
Contacts de Service
Contactos de Servicio

https://www.bosch-pt.com/serviceaddresses

Garantiebedingungen
Guarantee Conditions
Conditions de Garantie
Condiciones de Garantía

https://www.bosch-pt.com/guarantee/202507