revised on 28.09.2021

Trade name: PCPS pump v2 12V with integrated AGB threaded holes (PushIN)



# Innovatek PCPS v2 pump

501346-01/-02

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## 1. Electrical connection / pin assignment

Supply voltage: 12 V DC +-10%

Current consumption: 0.34 A (continuous operation)

0.8 A (maximum, in start-up phase)

+12 V	Ground	
(necessary)	(necessary)	



Assignment of connection terminal: 12 V DC (left, viewed from behind - pump upright)

GND (right, viewed from behind - pump upright)

Power is supplied via the 2-pin push-in terminal on the bottom of the pump.

Weidmüller OMNIMATE Signal - series LSF PUSH IN

Clamping range from 0.13 to 1.5 mm<sup>2</sup>

Clamping of rigid, flexible and conductors with ferrules possible (stripping length 8 mm).

Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, max.	1.5 mm <sup>2</sup>
Wire connection cross section AWG,		Wire connection cross section AWG,	
min.	AWG 28	max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>	Solid, max. H05(07) V-U	1.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>	Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4,		w. plastic collar ferrule, DIN 46228 pt 4,	
min.	0.25 mm <sup>2</sup>	max.	0.75 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 p	t 1, min	w. wire end ferrule, DIN 46228 p	t 1,
	0.25 mm <sup>2</sup>	max.	1.5 mm <sup>2</sup>

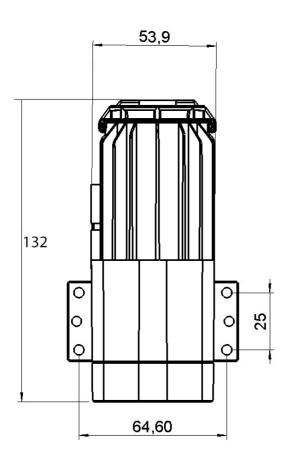
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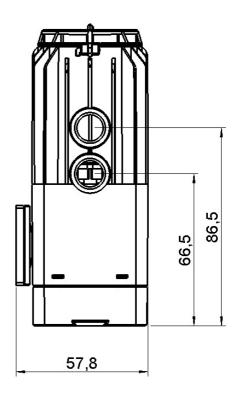
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## 2. Dimensional sketches





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#### 3. Preparation and processing

The PCPS pump is a synchronous rotor centrifugal pump. The power consumption during operation is typically 4 watts, within the first 4 seconds a higher power of approx. 8 watts (depending on the back pressure) is consumed for start-up protection. After approx. 4 seconds, the pump switches to continuous operation mode.

Current consumption: ~ 1 A (Start)

0.4 A ~ 0.5 A (Continuous operation, flow rate dependent)

Properties: • the pump is suitable for continuous operation

• Start-up resistant up to approx. 60 switch-on cycles/h

MTBF 90000 h (continuous operation)

• weight 265 g

Operating temperature 10°C...60°C

■ Test pressure 500 mbar

• Maintenance of the pump is not necessary when used as intended. Clean pump if foreign matter enters.

• The mounting foot can also be attached laterally.

• The optimum operating mode is vertical, in case of deviating operation the venting must be ensured!

• Use only the special connections with soft seal.

• Only use connections art. no.: 500179 or 500180.

Materials: ■ Pump housing: ASA/GF15 )\*1

■ Electronics cover: ABS

■ Pump chamber seal: NBR )\*1

■ Pump outlet gasket: NBR )\*1

• Potting compound: Polyurethane

■ Shaft: AL 99,7)\*1

■ Rotor: POM)\*1

Magnet: Hard ferrite )\*1

■ Impeller: PP, option: POM)\*1

Axle grommets: SBR, option: Silicone )\*1

35mm Pumpe

Einstellung
SH1 SH2 Frequenz
On On 74Hz default
OH On 65Hz
On OH 57Hz
OH OH 50Hz

)\*1 = Media contact Formassen each UL 94 HB.

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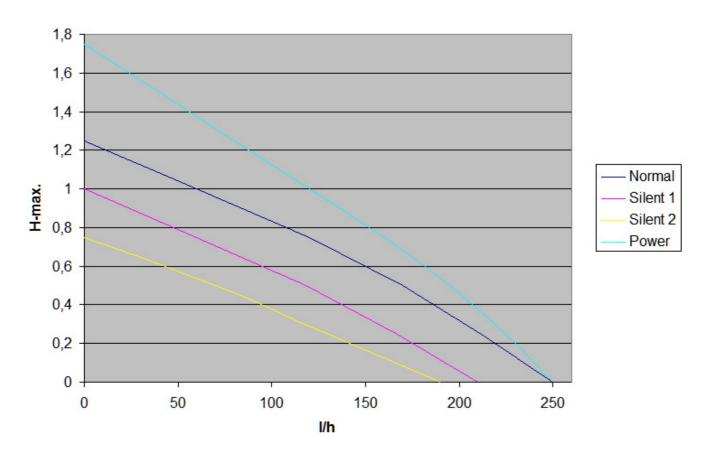
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The pump cannot be controlled via the voltage. If the voltage falls below 12 V= by more than 10 %, the electronic If the voltage exceeds 10 %, the electronics may be permanently damaged. Use only connections that are intended for use or have been manufactured according to specifications. Screw the screw in the connections only hand-tight to avoid damage. The sealing is not made via the Tightening more firmly can damage the thread and does not improve the sealing effect.

## **Kennlinie PCPS**



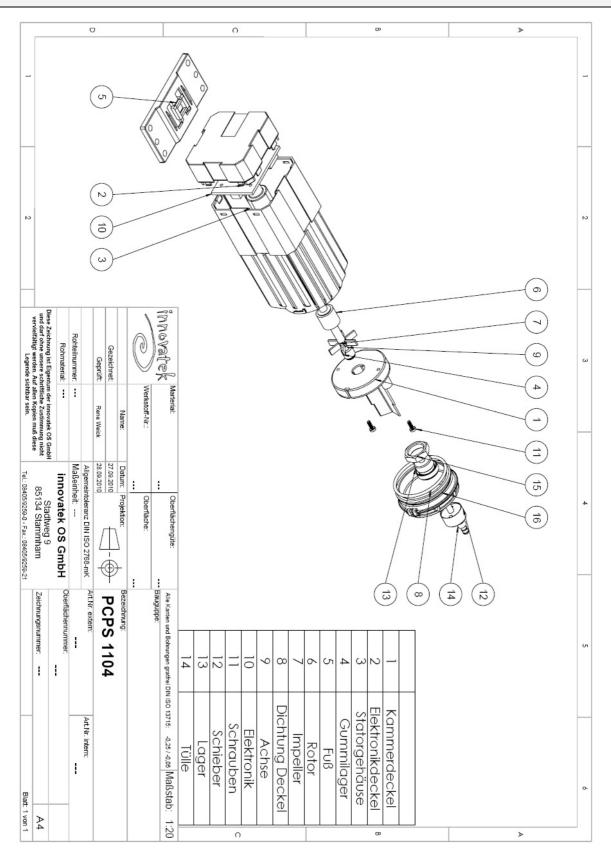
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### 4. Structure



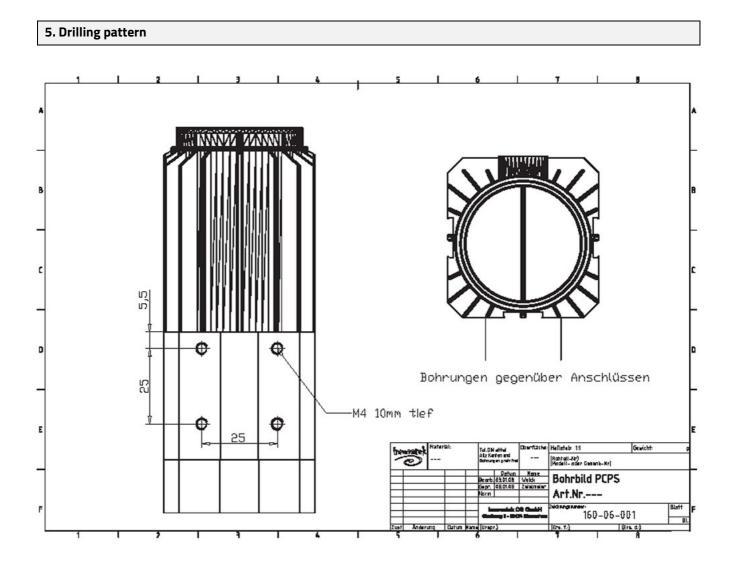
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6. Support

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Do you have a question or a problem? If you have any questions, just send an email to **info@innovatek.de** 

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#### 7. Warnings

Please observe the following instructions for proper use:

- Do not (sub)merge the pump, protect it from moisture and humidity.
- Do not let the pump run dry. Permanent damage to the bearings, pump impeller or electronics is possible. The coolant also serves to lubricate the bearings and to dampen the pump wheel vibrations.
- Only use the pump to pump water or innovatek Protect water mixtures; the use of other, unapproved chemicals can cause permanent damage to the seals or bearings!
- Keep a minimum distance of 2 meters to tube monitors to avoid disturbing the image. Due to their design, CRT monitors are always extremely sensitive to even weak magnetic fields. Hard disks or other hardware will not be affected.
- Screw in connections only hand-tight! Thread DIN ISO 228-1 7.5mm length with chambered soft seal.

### 8. CE Declaration of Conformity

The device fully complies with the requirements for emitted interference and immunity to interference as specified in the above test principles listed above in their entirety. The designated product is intended for installation and operation in enclosures only. intended.





#### innovatek OS GmbH, Stadtweg 9, 85134 Stammham

# CE Konformitätserklärung DECLARATION OF CONFORMITY

Diese Erklärung gilt für folgendes Erzeugnis: PCPS v2 Pumpe

Geräteart: Pumpe Type of Device: pump

Typenbezeichnung: PCPS Product Name: PCPS

Hiermit wird bestätigt, dass das Erzeugnis den Schutzanforderungen entspricht.

This is to confirm that this product meets all essential protection requirements relating to the requirements.

Zur Beurteilung der Konformität wurden folgende Normen herangezogen: The assessment of this product has been based on the following standards:

Störaussendung: EN55022 / EN55011
Störfestigkeit: EN55024 / EN61000-6-1
EN55022 B leitungsgebunden
EN55022 B abgestrahlt
EN61000-4-2 8kV Klasse B
EN61000-4-3 HF-Einstrahlung 3V/m
EN61000-4-4 Burst 2kV /1kV
EN61000-4-5 Surge 2kV /1kV
EN61000-4-6 HF-Einströmung 3V eff.
EN61000-4-11 Dips 70%-10ms / 40%-100ms / 40%-1s / 0% -5s

Das Gerät entspricht den Anforderungen der Störaussendung und Störfestigkeit nach oben aufgeführten Prüfgrundlagen in vollem Umfang.

Das bezeichnete Produkt ist nur zum Einbau und Betrieb in Gehäusen bestimmt.

Aussteller, issued: innovatek OS GmbH, Ort: Stammham, Datum: 13.07.2020

Rechtsverbindliche Unterschrift: Signature of authorized person:

Markus Husterer Geschäftsführer