



Wilo Para 25/8 iPWM1

Installation and Operation Manual  
**Wilo Para 25/8 iPWM1 130mm Circulation Pump,  
6/4", Molex, 3m cable**

**EN**

# Wilo-Para iPWM1 Circulation Pump

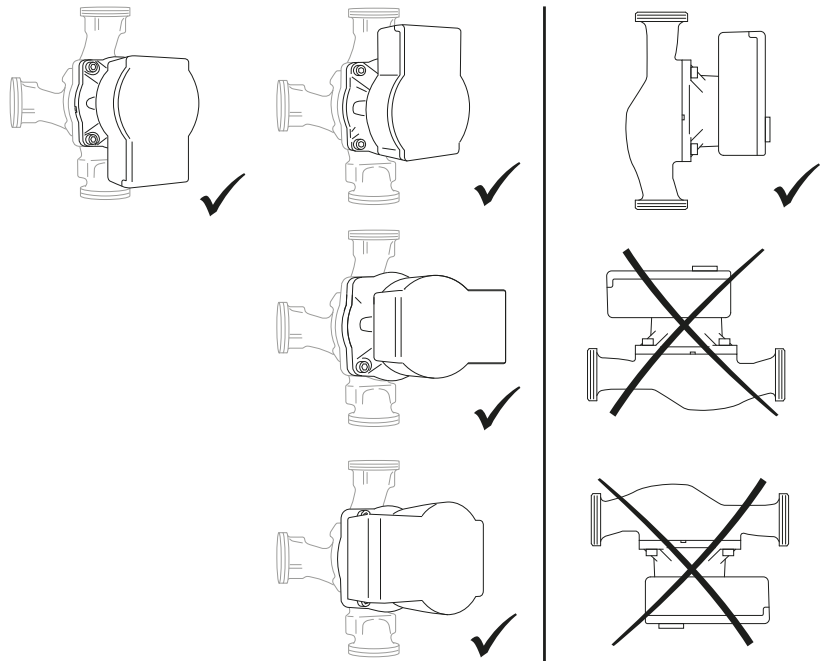
## 1. General Information



The Wilo Para 25/8 iPWM1 is a wet running circulation pump. The pump speed is controlled by the PWM signal. When the PWM signal is disconnected, the pump runs at its maximum speed. The operating status and possible faults of the pump are indicated by LEDs directly on the pump. The pump is able to send the current flowrate electronically to an external controller. The controller must be equipped with an iPWM read input and a flow calculation function.

The high efficiency circulation pumps of the PARA iPWM1 series are used exclusively for the circulation of liquids in hot water heating systems. Operating the pump in other systems or in systems containing too little water, air bubbles or not pressurized can lead to its rapid destruction.

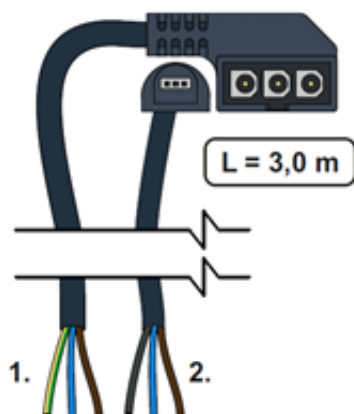
## 2. Permitted and Prohibited Pump Positions



## 3. Pump Wiring

The pump must be wired / disconnected by a qualified person in compliance with EN 50110-1!

Wilo PARA 25/8 iPWM1 pump wiring



1. POWER SUPPLY (230 V, 50 Hz) 2. CONTROL (PWM)



L (brown)

N (blue)

PE (yellow-green)



PWM in (brown)


PWM GND (blue)





iPWM out (black)

## 4. Technical Data

Wilo PARA 25/8 iPWM1	
Electric Data	
Power supply	230 V, 50 Hz
Power input (min./max.)	2 / 75 W
Current (min./max.)	0.03 / 0.66 A
Max. speed	4800 rpm
Energy Efficiency Index	frequency converter
IP rating	≤ 0,21 by EN 16 297/3
Motor protection	IPX4D
Ochrana motoru	integrated
Min. pressure at the suction port to avoid cavitation	
Min. pressure at the suction port	0.5 mH <sub>2</sub> O at 50 °C
	4.5 mH <sub>2</sub> O at 95 °C
Operating Parameters	
Fluid working temperature	0 - 95 °C
Max. static pressure	10 bar
Max. head	8.4 m

## 5. FAULTS AND THEIR REASONS

 The LED light signals a defect. The pump will switch off (depending on the defect type) and try to restart.

LED Signals	State Description and Possible Fault Reasons	
 GREEN IS LIT	1 - pump is running in trouble-free operation	
 RED IS LIT	1 - rotor is blocked	
 BLINKING RED	2 - electric motor winding defect	
	1 - power supply lower/higher than 230 V	
	2 - electric short circuit in pump	
 BLINKING RED AND GREEN	3 - pump overheated	
	1 - unforced fluid circulation through the pump	
	2 - pump speed lower than desired	
	3 - air in pump	

If the fault cannot be rectified, contact a qualified technician.

## 6. Performance Curves

