

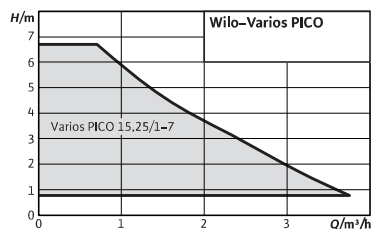
Pioneering for You

wilo

*Range leaflet - Edition 09/2017 – 50 Hz*

## Wilo-Varios PICO





**Accessories**

- Screwed connections
- Adapter fittings
- Thermal insulation shells

## Wilo-Varios PICO



**Design**

Glandless circulator with screwed connection, blocking-current proof EC motor and integrated electronic power control.

**Application**

All hot-water heating systems, air-conditioning applications, industrial circulation systems.

**Type key**

- Example: **Wilo-Varios PICO 25/1-7-130**  
**Varios PICO** High-efficiency pump (screw-end pump), electronically controlled  
**25/** Nominal connection diameter  
**1-7** Nominal delivery head range [m]  
**130** Port-to-port length

**Special features/product advantages**

- The most compatible replacement solution for all applications thanks to compact construction, new control modes (such as iPWM) and the new Sync function
- Maximum operating convenience thanks to its LED display and Green Button Technology with a button for control mode and a button for default pump curves
- Easy installation owing to a compact construction, adjustable electrical connections and maintenance functions such as venting
- Maximum operational reliability owing to proven technology

**Technical data**

Approved fluids (other fluids on request)	
Heating water (in accordance with VDI 2035)	•
Water-glycol mixtures (max. 1:1; above 20% admixture, the pumping data must be checked)	•
Permitted field of application	
Temperature range at max. ambient temperature +25 °C	-10...+110 °C
Temperature range at max. ambient temperature +40 °C	-10...+95 °C
Rated pressure PN	10 bar
Electrical connection	
Mains connection	1~230 V, 50/60 Hz

• = appropriate, - = not appropriate  
 The benchmark for the most efficient circulators is EEI ≤ 0.20.

**Technical data**

Motor/electronics	
Motor protection	Not required (blocking-current proof)
Electromagnetic compatibility	EN 61800-3
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Speed control	Frequency converter
Protection class	IP X2D
Insulation class	F

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## Equipment/function

### Operating modes

- Constant differential pressure (3 pre-defined characteristic curves)
- Variable differential pressure (3 pre-defined characteristic curves)
- Constant speed (3 speed stages)
- External control by iPWM1 or iPWM2 signal

### Manual functions

- Setting the operating mode in accordance with the application
- Setting of pump output (delivery head)
- Setting the constant speed
- Activation of sync function and LED coding
- Pump venting function
- Manual restart

### Automatic functions

- Automatic restart

### Signal and display functions

- Display of selected control mode
- Display of selected stage of control mode or iPWM type
- Display of activated sync function and LED coding
- Status display of the manual restart or pump venting function

### Equipment

- Wrench attachment point on pump body
- Electrical connection cable with 3-pole pump plug and Wilo-Connector
- iPWM connection
- Pump venting function
- Manual restart
- Blocking-current proof motor
- Particle filter

### Scope of delivery

- Pump
- Cable with 3-pole pump plug and Wilo-Connector connection
- Wilo-Connector
- Seals
- Installation and operating instructions

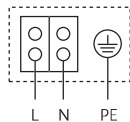
### Options

- Varios PICO ...-130 versions with short port-to-port length of 130 mm

### Accessories

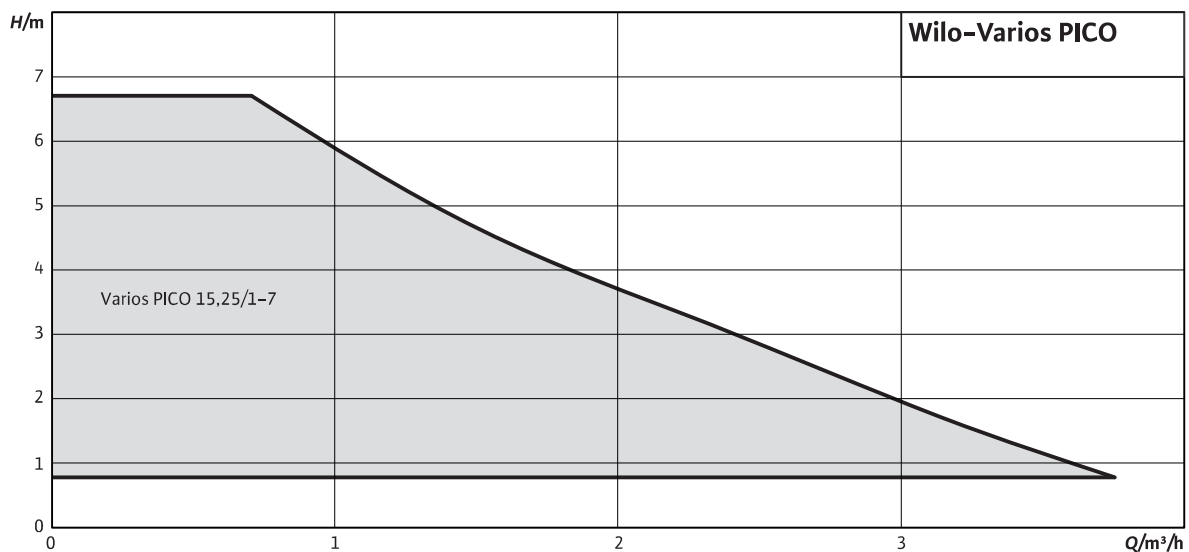
- Screwed connections
- Adapter fittings
- PWM signal cable

### Terminal diagram



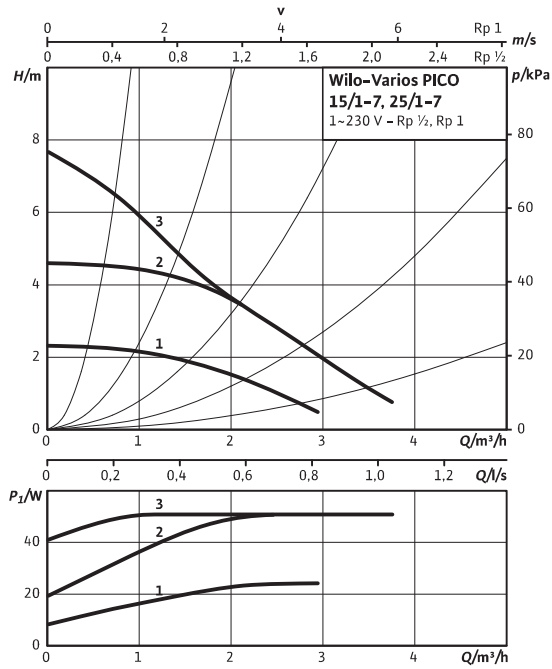
Blocking current-proof motor

Single-phase motor (EM) 2-pole - 1~230 V, 50 Hz



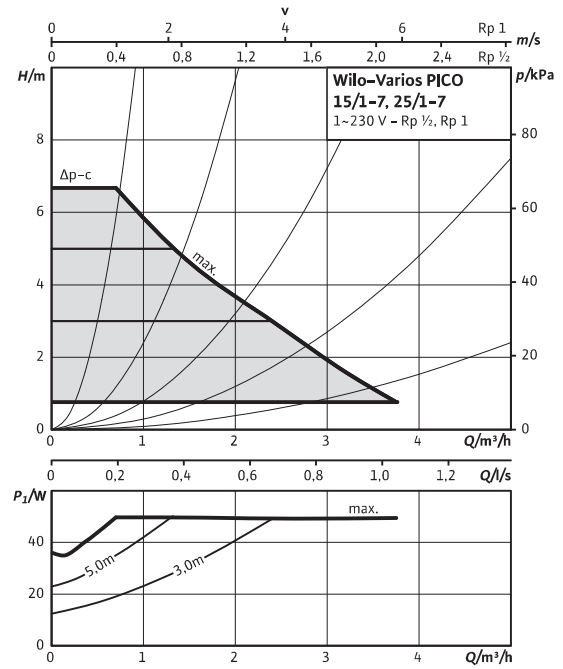
Pump curves

n-constant



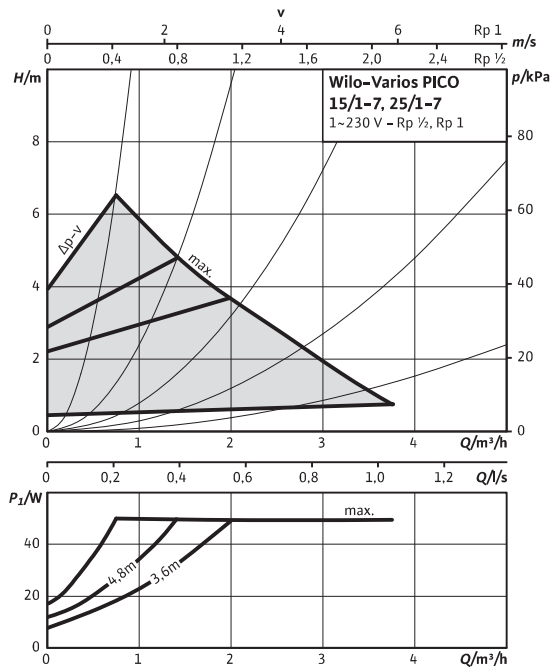
Pump curves

$\Delta p$ -c (constant) individual operation



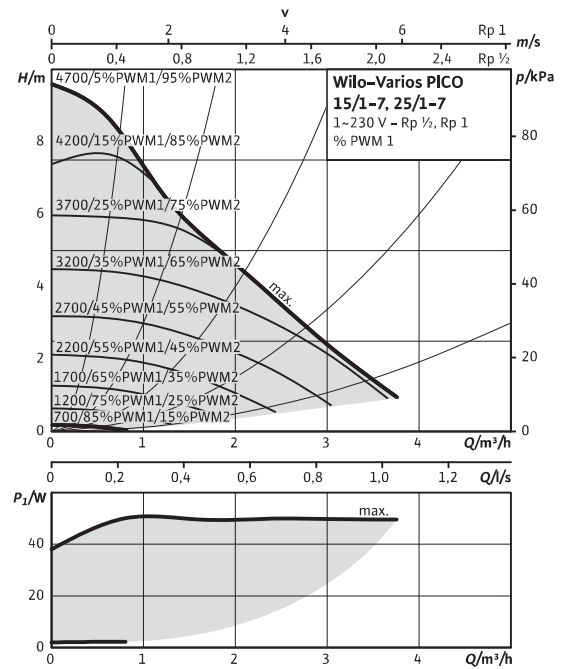
Pump curves

$\Delta p$ -v (variable) individual operation

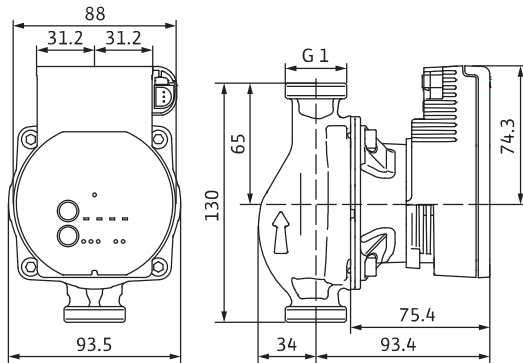


Pump curves

PWM1 / PWM2 (external signal)



Dimension drawing



Technical data

Rated pressure	PN 10
Mains connection	1~230 V, 50/60 Hz
Speed $n$	700 – 4700 rpm
Power consumption $P_2$	4 – 50 W
Current consumption $I$	max. 0.49 A
Minimum suction head at 50 / 95 / 110 °C	0.5 / 3 / 10 m

Materials

Pump housing	Grey cast iron (EN-GJL-200)
Impeller	Plastic (PP – 40% GF)
Pump shaft	Stainless steel
Bearing	Carbon, metal impregnated

Information for order placements

Wilo-Varios PICO...	Threaded pipe union	Thread	Energy efficiency index (EEI)	Overall length <i>L</i> mm	Weight approx. <i>m</i> kg	Art no.
Varios PICO 15/1-7	Rp 1/2	G 1	≤ 0.20	130	1.5	4215540
Varios PICO 25/1-7	Rp 1	G 1 1/2	≤ 0.20	180	1.8	4215542
Varios PICO 25/1-7-130	Rp 1	G 1 1/2	≤ 0.20	130	1.6	4215541