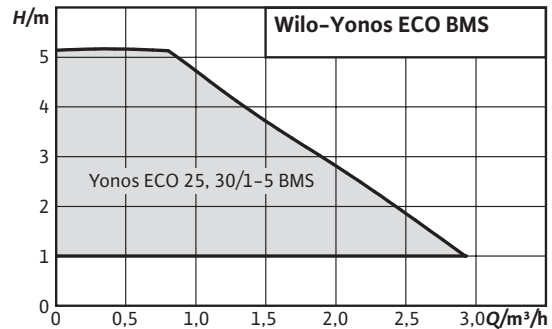


**Series description: Wilo-Yonos ECO...-BMS**



**Design**

Glandless circulation pump with threaded connection, EC motor with automatic power adjustment.

**Application**

Hot-water heating systems of all kinds, air-conditioning systems, closed cooling circuits, industrial circulation systems

**Type key**

|                  |   |
|------------------|---|
| Example:         | <b>Wilo-Yonos ECO 30/1-5-BMS</b>                                  |
| <b>Yonos ECO</b> | High-efficiency pump (screw-end pump)                             |
| <b>30/</b>       | Nominal connection diameter                                       |
| <b>1-5</b>       | Nominal delivery head range [m]                                   |
| <b>BMS</b>       | Building management system for connection to building automation. |

**Special features/product advantages**

- Potential-free collective fault signal contact (SSM) for connection to external monitoring units (e.g. building automation) and control input 0-10 V
- Control cable (4-wire, 1.5 m) for SSM connection and 0-10 V
- Wilo-Connector
- Thermal insulation as standard
- Pump housing with cataphoretic (KTL) coating protects against corrosion due to condensation formation

**Technical data**

- Energy efficiency index (EEI) ≤ 0.20
- Fluid temperature -10 °C to +110 °C (at max. ambient temperature +25 °C)
- Mains connection 1~230 V, 50/60 Hz;
- Protection class IP 44
- Threaded connection Rp 1 and Rp 1½
- Max. operating pressure 10 bar

**Equipment/function**

**Operating modes**

- Manual control mode (n=constant)
- Δ p-c for constant differential pressure
- Δ p-v for variable differential pressure

**Manual functions**

- Setting the operating mode
- Differential pressure setpoint setting

**Automatic functions**

- Infinitely variable power adjustment according to the operating mode
- Deblocking function
- Soft start
- Full motor protection with integrated trip electronics

**External control functions**

- "Analogue In 0 - 10 V" control input (remote speed adjustment)

**Signal and display functions**

- Collective fault signal (potential-free NC contact)

**Equipment**

- Wrench attachment point on pump body
- Quick electrical connection with Wilo-Connector
- Control cable (4-wire, 1.5 m) for SSM connection and 0-10 V
- Blocking-current proof motor
- Thermal insulation as standard for heating applications

**Scope of delivery**

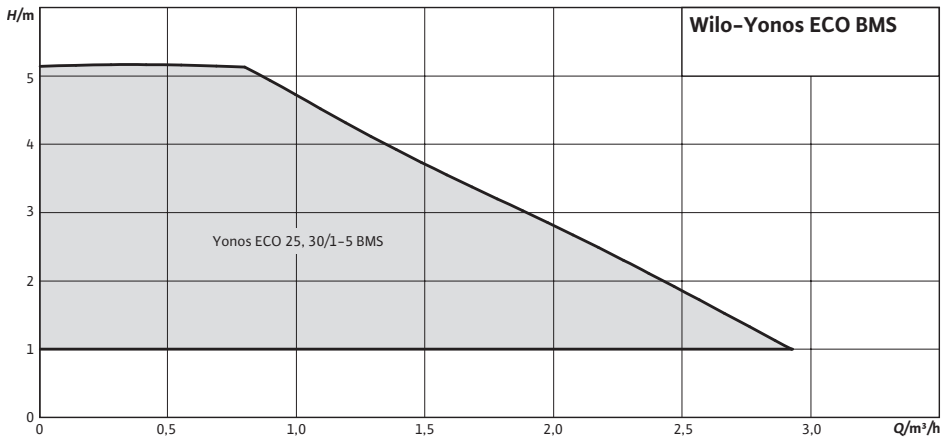
- Pump
- Thermal insulation
- Wilo-Connector
- Control cable
- Gaskets
- Installation and operating instructions

**Accessories**

- Screwed connections
- Adapter fittings
- Angle plug with 2 m connecting cable

Duty chart: Wilo-Yonos ECO...-BMS

Pump curves

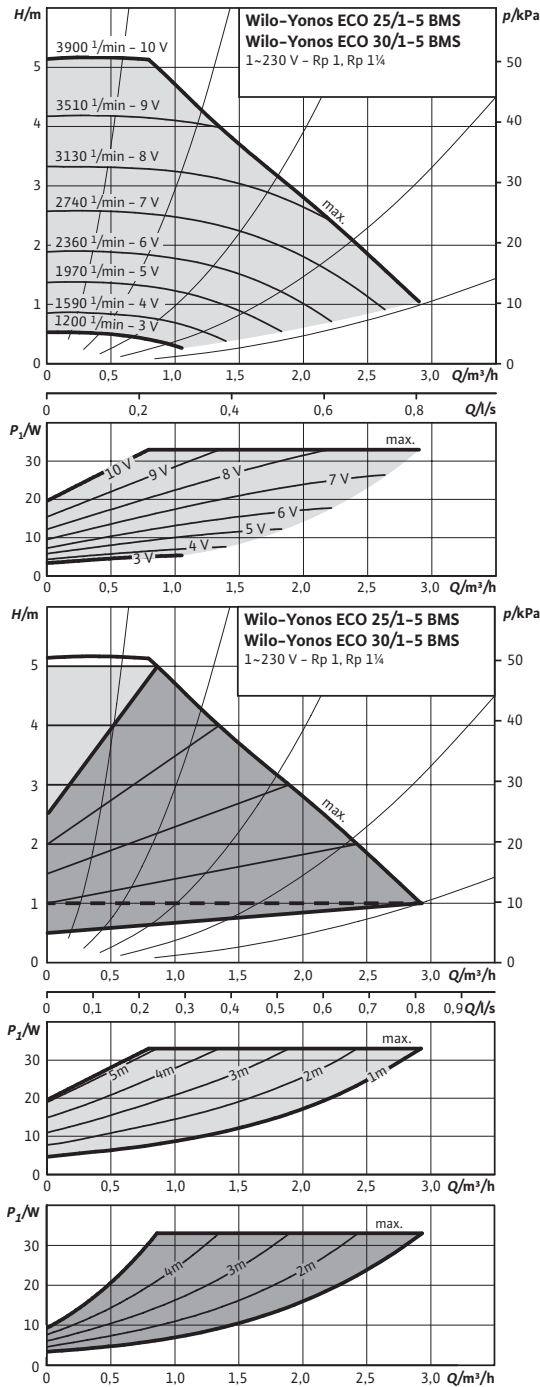


**Product list: Wilo-Yonos ECO...-BMS**

| Type                 | Max. volume flow | Max. delivery head | Energy efficiency index (EEI) | Threaded pipe union | Rated pressure | Overall length | Mains connection  | Gross weight | Pieces per pallet | Art no. |
|----------------------|------------------|--------------------|-------------------------------|---------------------|----------------|----------------|-------------------|--------------|-------------------|---------|
|                      | $Q_{max}/m^3/h$  | $H_{max}/m$        |                               |                     | $PN/bar$       | $L0/mm$        |                   | $m/kg$       |                   |         |
| Yonos ECO 25/1-5 BMS | 3.2              | 5.0                | ≤ 0.20                        | Rp 1                | 10             | 180            | 1~230 V, 50/60 Hz | 3.0          | 96                | 2150700 |
| Yonos ECO 30/1-5 BMS | 3.2              | 5.0                | ≤ 0.20                        | Rp 1¼               | 10             | 180            | 1~230 V, 50/60 Hz | 0.0          | 96                | 2150701 |

**Data sheet: Wilo-Yonos ECO 25/1-5 BMS**

**Pump curves**



**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     |
| Maximum permissible operating pressure               | $P_{max}$ 10 bar |

**Pipe connections**

|                     |              |
|---------------------|--------------|
| Threaded pipe union | Rp 1         |
| Thread              | G 1½         |
| Overall length      | $L_0$ 180 mm |

**Motor/electronics**

|                                    |                     |
|------------------------------------|---------------------|
| Energy efficiency index (EEI)      | ≤ 0.20              |
| Electromagnetic compatibility      | EN 61800-3          |
| Emitted interference               | EN 61000-6-3        |
| Interference resistance            | EN 61000-6-2        |
| Speed control                      | Frequency converter |
| Protection class                   | IP X4D              |
| Insulation class                   | F                   |
| Mains connection                   | 1~230 V, 50/60 Hz   |
| Speed                              | $n$ 1200 - 3900 rpm |
| Rated power                        | $P_2$ 30 W          |
| Power consumption                  | $P_1$ 5 - 33 W      |
| Current consumption                | $I$ 0.06 - 0.29 A   |
| Motor protection                   | integrated          |
| Screwed cable connection connector | 11 PG               |

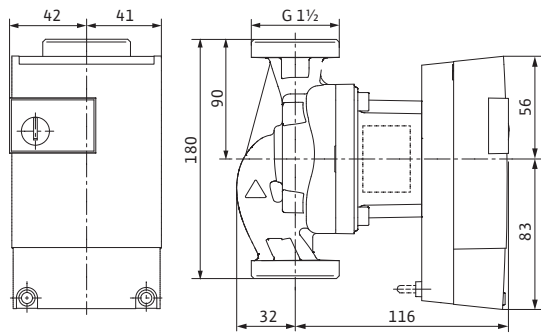
**Materials**

|              |                             |
|--------------|-----------------------------|
| Pump housing | Grey cast iron (EN-GJL-200) |
| Impeller     | Plastic (PP - 40% GF)       |
| Pump shaft   | Stainless steel (X30CR13)   |
| Bearing      | Carbon, metal impregnated   |

**Minimum suction head at suction port for avoiding cavitation at water pumping temperature**

**Data sheet: Wilo-Yonos ECO 25/1-5 BMS**

**Yonos ECO...-BMS 25/1-5 BMS**



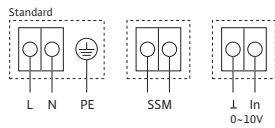
|  |                  |
|--|------------------|
| Minimum suction head at 50 / 95 / 110 °C | 0.5 / 4.5 / 11 m |
|--|------------------|

**Information for order placements**

|                |                      |
|----------------|----------------------|
| Make           | Wilo                 |
| Type           | Yonos ECO 25/1-5 BMS |
| Art no.        | 2150700              |
| Weight approx. | <i>m</i> 2.5 kg      |

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

**Terminal diagram**

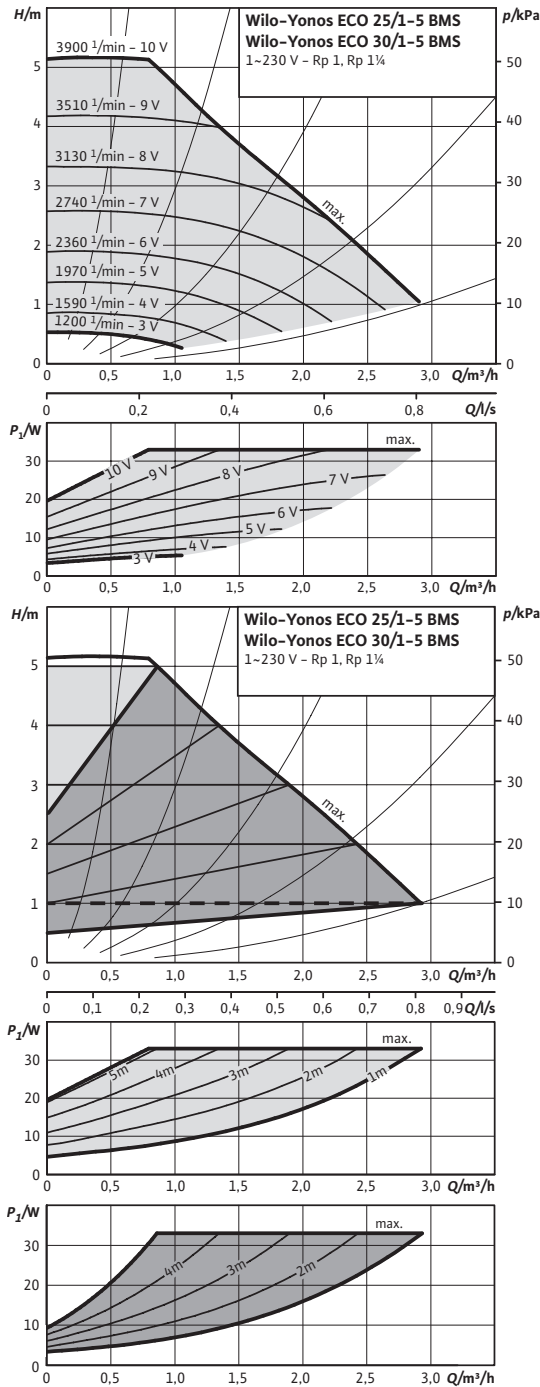


1~ 230 V, 50/60 Hz



**Data sheet: Wilo-Yonos ECO 30/1-5 BMS**

**Pump curves**



**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     |
| Maximum permissible operating pressure               | $P_{max}$ 10 bar |

**Pipe connections**

|                     |              |
|---------------------|--------------|
| Threaded pipe union | Rp 1¼        |
| Thread              | G 2          |
| Overall length      | $L_0$ 180 mm |

**Motor/electronics**

|                                    |                     |
|------------------------------------|---------------------|
| Energy efficiency index (EEI)      | ≤ 0.20              |
| Electromagnetic compatibility      | EN 61800-3          |
| Emitted interference               | EN 61000-6-3        |
| Interference resistance            | EN 61000-6-2        |
| Speed control                      | Frequency converter |
| Protection class                   | IP X4D              |
| Insulation class                   | F                   |
| Mains connection                   | 1~230 V, 50/60 Hz   |
| Speed                              | $n$ 1200 - 3900 rpm |
| Rated power                        | $P_2$ 30 W          |
| Power consumption                  | $P_1$ 5 - 33 W      |
| Current consumption                | $I$ 0.06 - 0.29 A   |
| Motor protection                   | integrated          |
| Screwed cable connection connector | 11 PG               |

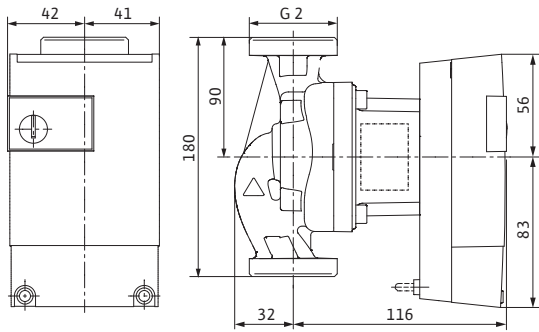
**Materials**

|              |                             |
|--------------|-----------------------------|
| Pump housing | Grey cast iron (EN-GJL-200) |
| Impeller     | Plastic (PP - 40% GF)       |
| Pump shaft   | Stainless steel (X30CR13)   |
| Bearing      | Carbon, metal impregnated   |

**Minimum suction head at suction port for avoiding cavitation at water pumping temperature**

**Data sheet: Wilo-Yonos ECO 30/1-5 BMS**

**Yonos ECO...-BMS 30/1-5 BMS**



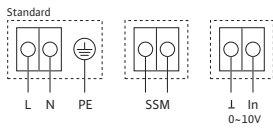
|  |                  |
|--|------------------|
| Minimum suction head at 50 / 95 / 110 °C | 0.5 / 4.5 / 11 m |
|--|------------------|

**Information for order placements**

|                |                      |
|----------------|----------------------|
| Make           | Wilo                 |
| Type           | Yonos ECO 30/1-5 BMS |
| Art no.        | 2150701              |
| Weight approx. | <i>m</i> 2.5 kg      |

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

**Terminal diagram**



1~ 230 V, 50/60 Hz

