



# **Data sheet**

# Hydraulic data

| Maximum operating pressure <i>PN</i>     | 10 bar              |
|--|---------------------|
| Delivery head for Qmin $H_{\text{Qmin}}$ | 1.0 m               |
| Max. volume flow $Q_{\text{max}}$        | 1.6 m³/h            |
| Min. fluid temperature $T_{min}$         | 2 °C                |
| Max. fluid temperature $T_{\text{max}}$  | 65 °C               |
| Min. ambient temperature $T_{min}$       | 0 ℃                 |
| Max. ambient temperature $T_{\rm max}$   | 40 °C               |
| Max. permitted total water hardness      | 3.21 mmol/l (18°dH) |

### **Motor data**

| Mains connection                      | 1~230 V, 50 Hz |
|---------------------------------------|----------------|
| Rated current $I_{\rm N}$             | 0.14 A         |
| Power consumption $P_{1 \text{ max}}$ | 30 W           |
| Emitted interference                  | EN 61000-6-3   |
| Interference resistance               | EN 61000-6-2   |
| Protection class motor                | IP44           |
| Insulation class                      | F              |
| Threaded cable connection             | 1 x PG11       |
| Motor protection                      | no             |

### Materials

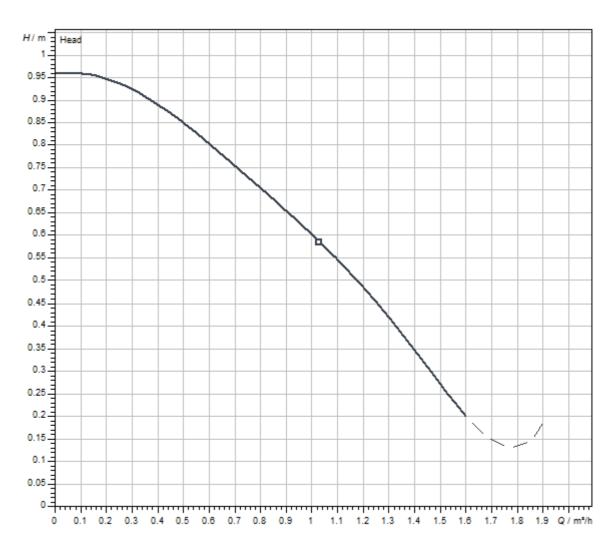
| Pump housing | Bronze, CC499K                      |
|--------------|-------------------------------------|
| Impeller     | PPE-GF30                            |
| Shaft        | Oxide ceramic                       |
| Bearing      | Carbon, synthetic resin-impregnated |

## **Installation dimensions**

| Pipe connection on the suction side <i>DNs</i>   | G 1    |
|--|--------|
| Pipe connection on the discharge side <i>DNd</i> | G 1    |
| Port-to-port length <i>L0</i>                    | 130 mm |



# **Pump curves**

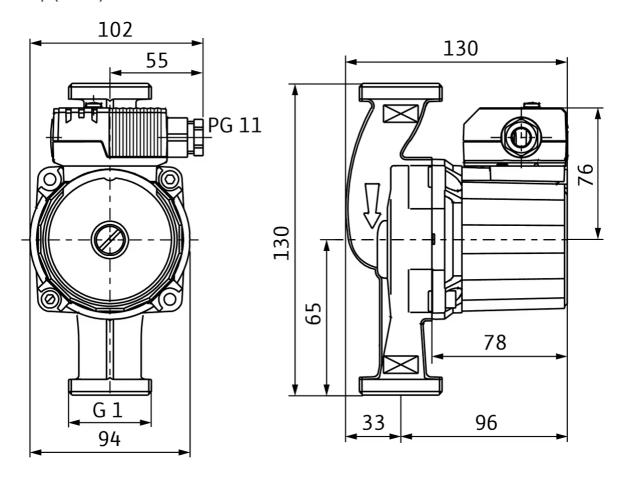


| Fluid media                             | Water 100 % |
|---|-------------|
| Fluid temperature <i>T</i>              | 20.00 °C    |
| speed at duty point <i>n hydr. @ OP</i> | 2,900 1/min |



# **Dimensions and dimensions drawings**

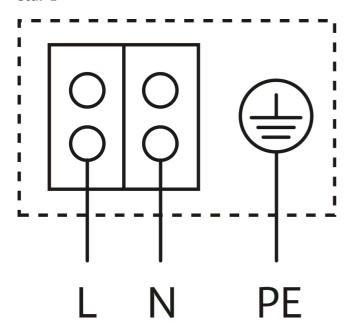
Star-Z 20/1(15-130)





# Wiring diagram

## Star-E



Blocking current-proof motor

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

With built-in capacitor

# **Ordering information**

# **Product data**

| Brand                      | Wilo                |
|----------------------------|---------------------|
| Product description        | Star-Z 20/1(15-130) |
| Article number             | 4232172             |
| EAN number                 | 4048482895918       |
| Colour                     | Green               |
| Minimum order quantity     | 1                   |
| Date of sales availability | 2019-02-13          |

# **Packaging**

| Packaging type     | Cardboard box   |
|--------------------|-----------------|
| Packaging property | Sales packaging |
| Pieces per pallet  | 256             |
| Number per layer   | 32              |

# Dimension, weight

| Length with packaging          | 147 mm |
|--------------------------------|--------|
| Length L                       | 129 mm |
| Height with packaging          | 100 mm |
| Height <i>H</i>                | 101 mm |
| Width with packaging           | 187 mm |
| Width W                        | 141 mm |
| Gross weight, approx. <i>m</i> | 2.3 kg |
| Net weight, approx. <i>m</i>   | 2.2 kg |



### **Tender text**

This circulator is suitable only for drinking water.

Domestic hot water circulator, constant-speed glandless pump for pipe installation. Blocking-current proof motor.

Pump housing made of bronze, impeller made of fibreglass-reinforced plastic, ceramic shaft with resinimpregnated carbon friction bearings.

### **Operating Data**

| Max. fluid temperature $T_{\rm max}$                     | 65 °C                  |
|--|------------------------|
| Min. fluid temperature $T_{\min}$                        | 2 °C                   |
| Min. ambient temperature $T_{\min}$                      | 0 °C                   |
| Max. ambient temperature $T_{\rm max}$                   | 40 °C                  |
| Temperature range at max. ambient temperature +40 °C $T$ | +2+65                  |
| Maximum operating pressure PN                            | 10 bar                 |
| Max. permitted total water hardness                      | 3.21 mmol/l<br>(18°dH) |

# Materials

| Pump housing | Bronze, CC499K                      |
|--------------|-------------------------------------|
| Impeller     | PPE-GF30                            |
| Shaft        | Oxide ceramic                       |
| Bearing      | Carbon, synthetic resin-impregnated |

# Motor data

| Emitted interference                  | EN 61000-6-3   |
|---------------------------------------|----------------|
| Interference resistance               | EN 61000-6-2   |
| Mains connection                      | 1~230 V, 50 Hz |
| Power consumption $P_{1 \text{ max}}$ | 30 W           |
| Rated current $I_{N}$                 | 0.14 A         |
| Protection class motor                | IP44           |
| Threaded cable connection             | 1 x PG11       |

#### **Installation dimensions**

| Pipe connection on the suction side <i>DNs</i>   | G 1    |
|--|--------|
| Pipe connection on the discharge side <i>DNd</i> | G 1    |
| Port-to-port length <i>L0</i>                    | 130 mm |

### **Ordering information**

| Brand                 | Wilo                |
|-----------------------|---------------------|
| Product description   | Star-Z 20/1(15-130) |
| Net weight, approx. m | 2.2 kg              |
| Article number        | 4232172             |

# **Mechanical accessories**

## **Pipe installation**

### Screwed connections/adapters

| Screwed connection R ½ /⊘ 15 i x G 1, 96 Set | 112047493 |
|--|-----------|
| Screwed connection R ½ /⊘ 15 i x G 1, 1 Set  | 4092743   |

### Thermal insulation

### Size 14 thermal insulation shell

| Thermal insulation shell (Size 14) | 4046444 |
|------------------------------------|---------|



### **Electrical accessories**

## **Pump control**

| Timer switch SK 601N |         |
|----------------------|---------|
| Switchgear SK 601N   | 2120443 |

### **Services**

With Wilo as your partner, you can not only be sure of choosing high-quality product solutions, but also of benefiting from a comprehensive, worry-free package of well thought-out services. We collaborate to develop a service concept tailored to your individual needs; with our expertise and personal consultancy, we make sure that the operation of your systems is as energy-efficient, reliable and economical as possible. All the while our competent Wilo service technicians are ready to assist you with fast, reliable and on-time support.

### **Recommended services**

| Wilo-Live Assistant Service         | 2216415 |
|-------------------------------------|---------|
| System Optimisation Glandless pumps | 2219250 |
| Energy Solutions Glandless pumps    | 2219285 |

#### More suitable services

| Extended Warranty Glandless pumps   | 2219589 |
|-------------------------------------|---------|
|                                     |         |
| Supervision Glandless pumps         | 2219320 |
|                                     |         |
| Installation Glandless pumps        | 2219355 |
|                                     |         |
| Commissioning Glandless pumps       | 2219390 |
|                                     |         |
| Maintenance BASIC Glandless pumps   | 2219530 |
| Maintenance COMFORT Glandless pumps | 2219416 |
| Maintenance PREMIUM Glandless pumps | 2219545 |
|                                     |         |
| Repair Glandless pumps              | 2219609 |