



Data sheet

Hydraulic data

Maximum operating pressure P_N	10 bar
Delivery head for Q_{min} $H_{Q_{min}}$	1.0 m
Max. volume flow Q_{max}	1.6 m ³ /h
Min. fluid temperature T_{min}	2 °C
Max. fluid temperature T_{max}	65 °C
Min. ambient temperature T_{min}	0 °C
Max. ambient temperature T_{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_N	0.14 A
Power consumption $P_{1 max}$	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

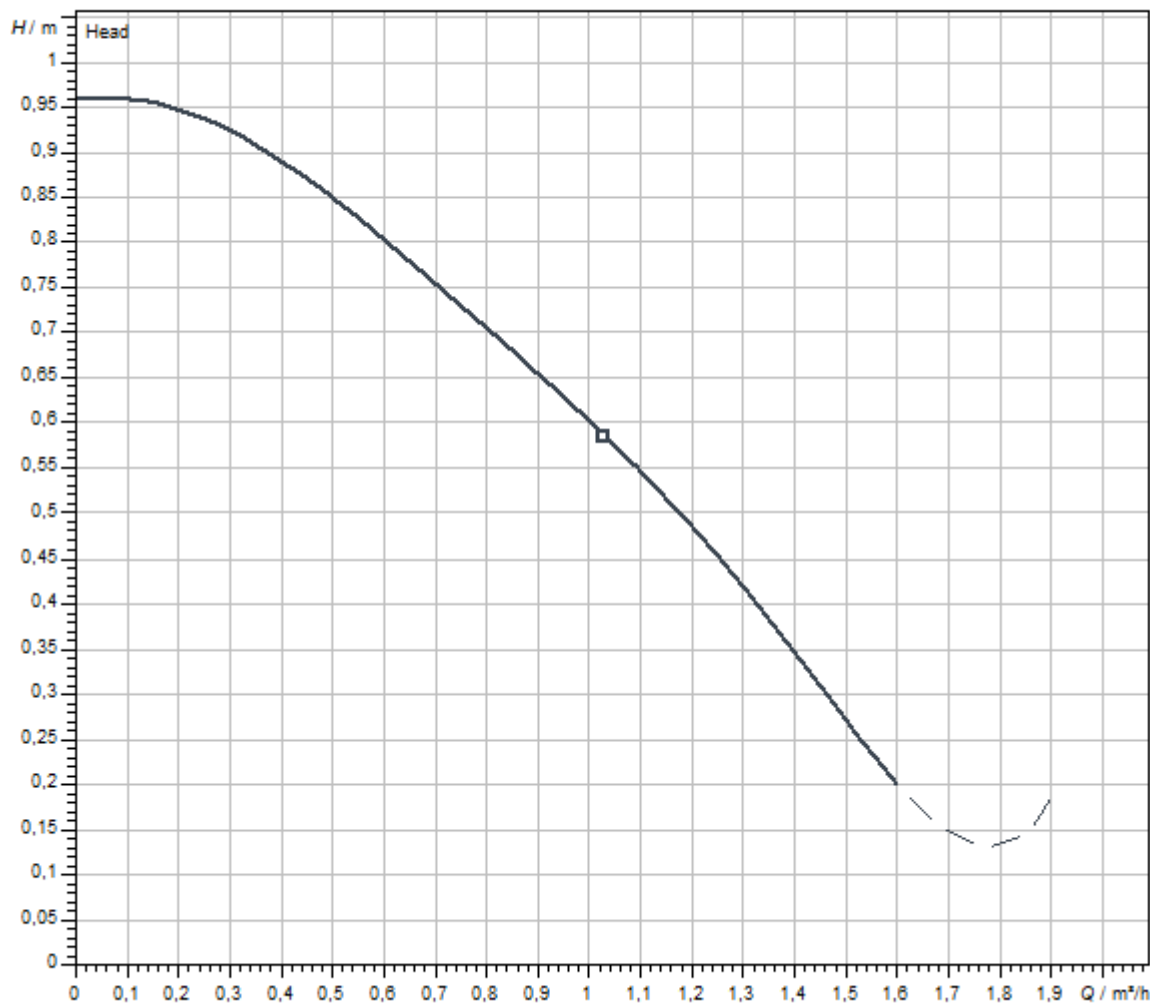
Materials

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

Installation dimensions

Pipe connection on the suction side DN_s	G 1
Pipe connection on the discharge side DN_d	G 1
Port-to-port length L_0	140 mm

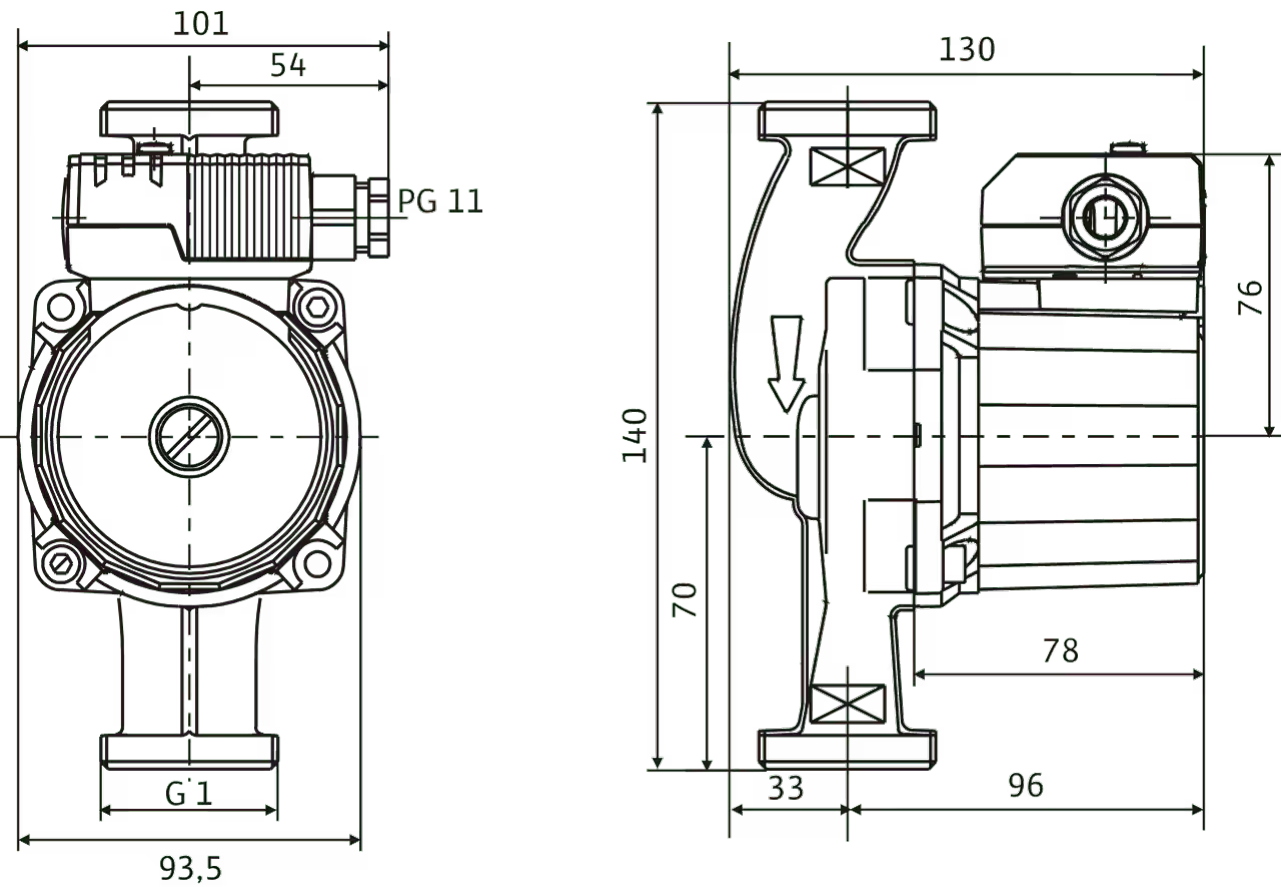
Pump curves



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

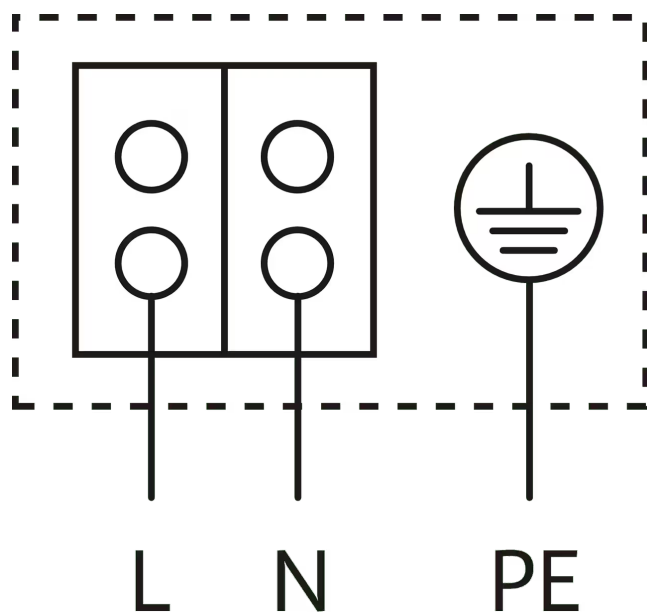
Dimensions and dimensions drawings

Star Z



Wiring diagram

Star-E



Blocking current-proof motor

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

With built-in capacitor

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 resin-impregnated carbon friction bearings.

Operating Data

Max. fluid temperature $T_{\max}$	65 °C
Min. fluid temperature $T_{\min}$	2 °C
Min. ambient temperature $T_{\min}$	0 °C
Max. ambient temperature $T_{\max}$	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 (18°dH)

Motor data

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

Materials

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

Installation dimensions

Pipe connection on the suction side DNs	G 1
Pipe connection on the discharge side DNd	G 1
Port-to-port length $L0$	140 mm

Ordering information

Brand	Wilo
Product description	Star-Z 20/1
Net weight, approx. m	2.2 kg
Article number	4028111 

Mechanical accessories

Pipe installation

Screwed connections/adapters

Screwed connection R ½ / Ø 15 i x G 1, 96 Set	112047493	EUR 1,239.-
Screwed connection R ½ / Ø 15 i x G 1, 1 Set	4092743	EUR 12.-

Thermal insulation

Size 14 thermal insulation shell

Thermal insulation shell (Size 14)	4046444	EUR 12.-
------------------------------------	---------	----------

Electrical accessories

Pump control

Timer switch SK 601N

Switchgear SK 601N	2120443	EUR 331,-
--------------------	---------	-----------