

## Data sheet: TOP-Z 40/7 (1~230 V, PN 16, GG)

### Hydraulic data

Maximum operating pressure $P_N$	16 bar
Delivery head for $Q_{min}$ $H_{Q_{min}}$	6.0 m
Max. volume flow $Q_{max}$	16.2 m <sup>3</sup> /h
Min. fluid temperature for HVAC applications $T_{min}$	-20 °C
Max. fluid temperature for HVAC applications $T_{max}$	110 °C
Min. fluid temperature for drinking water applications $T_{min}$	0
Max. fluid temperature for drinking water applications $T_{max}$	80
Max. fluid temperature for drinking water applications in short-time duty (2 hours) $T_{max}$	110 °C
Min. ambient temperature $T_{min}$	0 °C
Max. ambient temperature $T_{max}$	40 °C
Max. permitted total water hardness	3.57 mmol/l (20°dH) (3.21 mmol/l (18°dH) for 20/4 + 25/6)

### Materials

Pump housing	Cast iron
Impeller	PPE-GF30
Shaft	Stainless steel
Bearing	Carbon, synthetic resin-impregnated

### Information for order placements

Brand	Wilo
Product description	TOP-Z 40/7 (1~230 V, PN 16, GG)
EAN number	4016322469254
Article number	2071094
Net weight, approx. $m$	12 kg
Gross weight, approx. $m$	12.4 kg
Length with packaging	350 mm
Height with packaging	260 mm
Width with packaging	225 mm
Packaging property	Transport packaging
Packaging type	Cardboard box
Minimum order quantity	1

### Motor data

Mains connection	1~230 V, 50 Hz
Rated power $P_2$	180.0 W
Rated current $I_N$	1.62 A
Max. speed $n_{max}$	2700 1/min
Power consumption $P_{1 min}$	175.0 W
Power consumption $P_{1 max}$	340.0 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Protection class motor	IPX4D
Insulation class	H
Threaded cable connection	2 x PG13.5
Motor protection	External protection WSK

### Installation dimensions

Pipe connection on the suction side $D_Ns$	DN 40
Pipe connection on the pressure side $D_Nd$	DN 40
Port-to-port length $L_0$	250 mm

## Tender text: TOP-Z 40/7 (1~230 V, PN 16, GG)

This circulator is suitable only for drinking water.

Can be used for domestic hot water circulation systems in the industry and building services.

Maintenance-free glandless circulator with threaded or flange connection, pre-selectable speed stages for power adjustment.

### Equipment and function

- Manual power adjustment with 3 speed stages
- Pumps with 1- motor:
  - P2 up to 90 W: internal protection against unacceptably high winding temperatures
  - P2 = 180 W: Full motor protection with thermal winding contacts in conjunction with tripping unit
- Pumps with 3- motor:
  - P2 up to 90 W: internal protection against unacceptably high winding temperatures
  - P2 ≥ 180 W: Full motor protection with integrated trip electronics
- Fault signal light
- Contact for collective fault signal
- Direction of rotation signal lamp
- Mains connection 3~, 230 V with optional switching plug
- Pump housing in red brass or grey cast iron (stainless steel depending on type)
- PN 6/PN 10 combination flange (for DN 40 to DN 65)
- Thermal insulation shells
- Additional functions by retrofittable Protect Module C:
  - SSM fault signal as potential-free NC contact
  - SBM run signal as potential-free NO contact
  - "Overriding Off" control input via external potential-free contact (NC contact)
  - Blocking detection
  - Full motor protection with tripping unit
  - Fault acknowledgement
- Dual pump management (two single pumps installed in parallel) Main/standby operation (automatic fault-actuated switchover/time-sensitive pump alteration)

### Operating data

Fluid media	Water
Fluid temperature $T$	-20 °C
Ambient temperature $T$	0 °C
Maximum operating pressure $P_N$	16 bar
Max. permitted total water hardness	3.57 mmol/l (20°dH) (3.21 mmol/l (18°dH) for 20/4 + 25/6)

### Materials

Pump housing	Cast iron
Impeller	PPE-GF30
Shaft	Stainless steel
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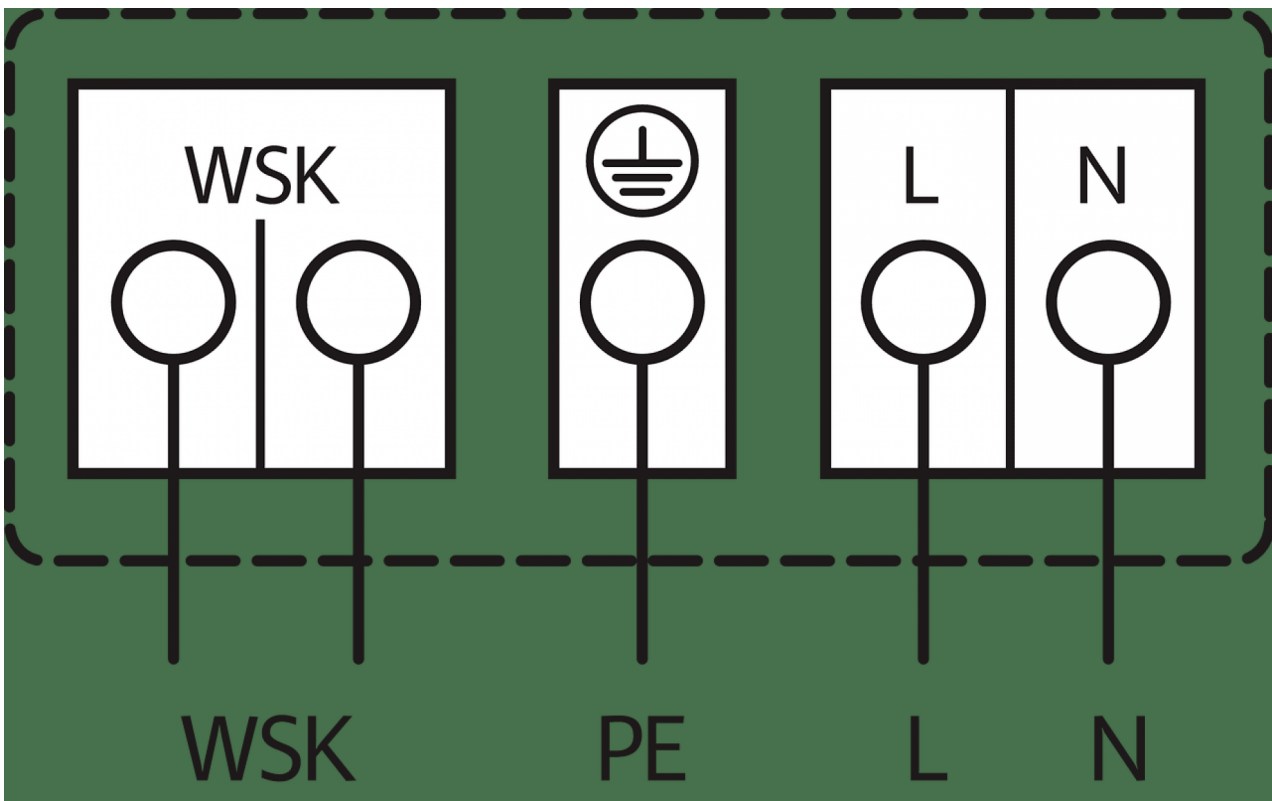
### Motor data

Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Mains connection	1~230 V, 50 Hz
Power consumption $P_{1\max}$	340.0 W
Max. speed $n_{\max}$	2700 1/min
Rated current $I_N$	1.62 A
Protection class motor	IPX4D
Threaded cable connection	2 x PG13.5

### Installation dimensions

Pipe connection on the suction side $DN_s$	DN 40
Pipe connection on the pressure side $DN_d$	DN 40
Port-to-port length $L_0$	250 mm

**Wiring diagram: TOP-Z 40/7 (1~230 V, PN 16, GG)**



**Mains connection, 1~230 V, 50 Hz**

WSK = thermal winding contact

Full motor protection at all speed stages with optional tripping unit

SK 602N/SK 622N or other switchgear/control devices with WSK connection option

Triggering: External tripping at switchgear/control device

Reset: Automatic fault acknowledgement after cooling off of the motor

Automatic