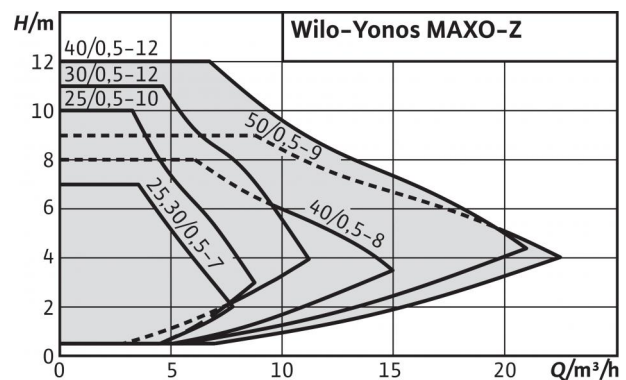


## Series description: Wilo-Yonos MAXO-Z



Similar to figure



### Design

Glandless circulator with threaded connection or flange connection, EC motor with automatic power adjustment.

### Application

Domestic hot water circulation systems in industry and building services.

### Type key

Example:  
Yonos MAXO

Z

30/  
0.5-12

**Wilo-Yonos MAXO-Z 30/0.5-12**  
High-efficiency pump (screw-end or flange-end pump), electronically controlled  
Single pump for domestic hot water circulation  
Nominal connection diameter  
Nominal delivery head range [m]

### Special features/product advantages

- Energy-saving due to high-efficiency hydraulics and synchronous motor
- Complete transparency of the delivery head, speed stage and possible faults thanks to its LED display
- Simple adjustment over three speed stages when replacing an uncontrolled standard pump
- Easier electrical connection thanks to the Wilo plug
- System availability ensured via collective fault signal
- Compact design and proven user-friendliness

### Equipment/function

#### Operating modes

- $\Delta p$ -c for constant differential pressure
- $\Delta p$ -v for variable differential pressure
- n = constant (3 speed stages)

#### Manual functions

- Setting the operating mode
- Setting of pump output (delivery head)
- Setting the speed stages

#### Automatic functions

- Infinitely variable power adjustment according to the operating mode
- Deblocking function
- Soft start
- Integrated full motor protection

#### Signal and display functions

- Collective fault signal (potential-free NC contact)
- Fault signal light
- LED segment display for displaying the delivery head and error codes
- Display of the configured speed stage (C1, C2 or C3)

#### Equipment

- Wrench attachment point on pump body (for threaded pipe union pumps)
- Quick electrical connection with Wilo plug. For the connection of the mains and SSM lines, with integrated strain relief
- For flange-end pumps: Flange versions
  - Standard version for DN 40 to DN 65 pumps: Combination flange PN 6/10 for counter flanges PN 6 and PN 10

#### Materials

## Series description: Wilo-Yonos MAXO-Z

### Materials

- Pump housing made of red brass
- Shaft: Stainless steel
- Bearing: Carbon, synthetic resin-impregnated
- Impeller: Plastic

### Scope of delivery

- Pump
- Including gaskets for threaded connection
- Incl. washers for flange screws (for nominal connection diameters DN 40 - DN 65)
- Including installation and operating instructions

### Accessories

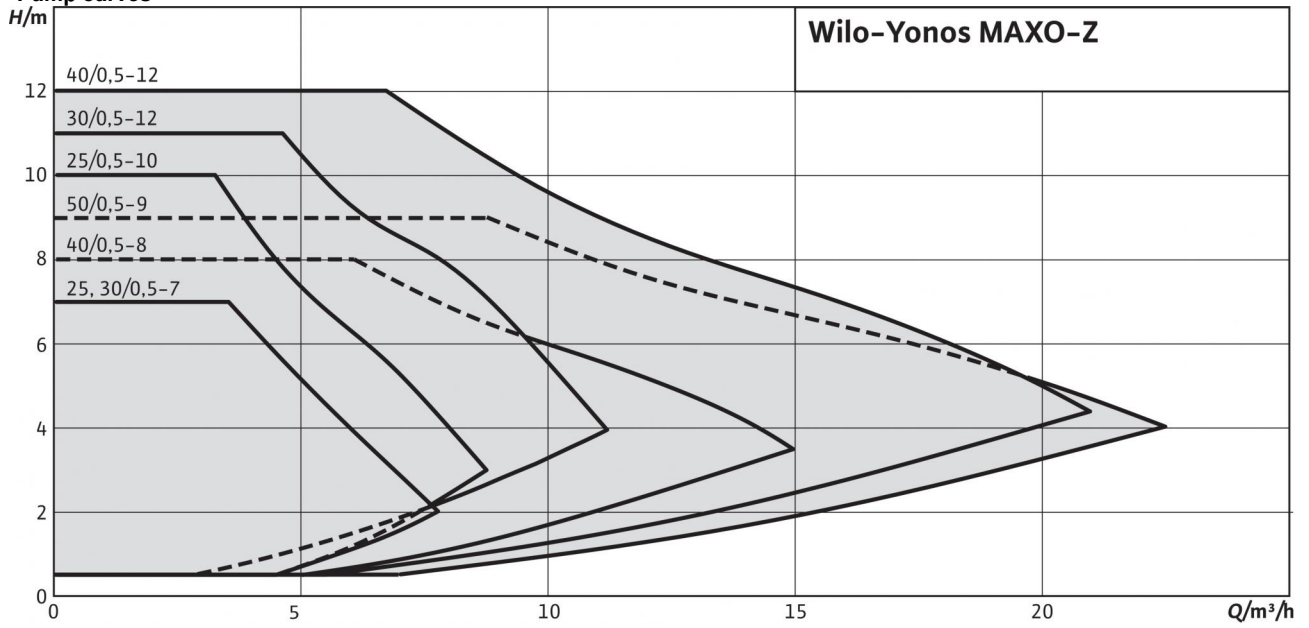
- Screwed connections for threaded connection
- Thermal insulation

### Special versions

Observe local information and instructions for the drinking water directive!

## Duty chart: Wilo-Yonos MAXO-Z

Pump curves

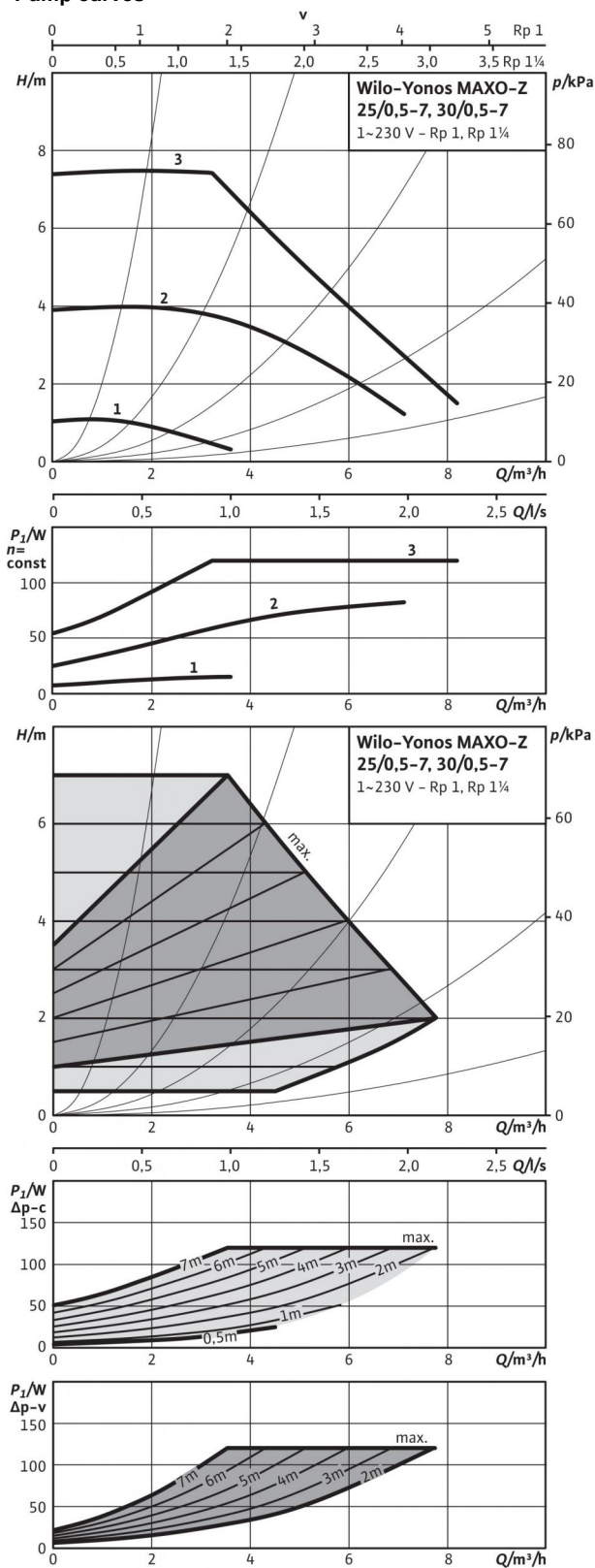


## Product list: Wilo-Yonos MAXO-Z

Type	Max. volume flow $Q_{max}$	Max. delivery head $H_{max}$	Pipe connection	Nominal flange diameter	Rated pressure $PN$	Overall length $l_0$	Mains connection	Gross weight $m$	Art no.
Yonos MAXO-Z 25/0,5-7	8 m <sup>3</sup> /h	7 m	Rp 1	-	10 bar	180 mm	1~230 V, 50/60 Hz	5.0 kg	2175538
Yonos MAXO-Z 25/0,5-10	10 m <sup>3</sup> /h	11 m	Rp 1	-	10 bar	180 mm	1~230 V, 50/60 Hz	5.0 kg	2175539
Yonos MAXO-Z 30/0,5-7	8 m <sup>3</sup> /h	7 m	Rp 1¼	-	10 bar	180 mm	1~230 V, 50/60 Hz	5.3 kg	2175540
Yonos MAXO-Z 30/0,5-12	12 m <sup>3</sup> /h	12 m	Rp 1¼	-	10 bar	180 mm	1~230 V, 50/60 Hz	5.3 kg	2175541
Yonos MAXO-Z 40/0,5-8	18 m <sup>3</sup> /h	8 m	-	DN 40	6/10 bar	220 mm	1~230 V, 50/60 Hz	13.0 kg	2175542
Yonos MAXO-Z 40/0,5-12	25 m <sup>3</sup> /h	13 m	-	DN 40	6/10 bar	250 mm	1~230 V, 50/60 Hz	18.4 kg	2175543
Yonos MAXO-Z 50/0,5-9	29 m <sup>3</sup> /h	10 m	-	DN 50	6/10 bar	280 mm	1~230 V, 50/60 Hz	18.9 kg	2175544

# Data sheet: Yonos MAXO-Z 25/0,5-7

## Pump curves



### Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

### Permitted field of application

Temperature range at max. ambient temperature +40 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

Max. permitted total hardness in domestic hot water circulation systems

Maximum permissible operating pressure  $P_{max}$

-20-10...+110 °C

0°C...+80°C

3.57 mmol/l (20 °dH)

10 bar

### Pipe connections

Threaded pipe union

Thread

Overall length  $l_0$

Rp 1

G 1½

180 mm

### Motor/electronics

Energy efficiency index (EEI)

Emitted interference

Interference resistance

Speed control

Protection class

Insulation class

Mains connection

Rated power  $P_2$

Speed  $n$

Power consumption  $P_1$

Current consumption  $I$

Motor protection

Threaded cable connection  $PG$

≤ 0.20

EN 61800-3;2004+A1;2012 /residential area (C1)

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Frequency converter

IP X4D

F

1~230 V, 50/60 Hz

90 W

1000 - 3700 rpm

5 - 120 W

0.08 - 1.00 A

integrated

M20x1.5

### Materials

Pump housing

Impeller

Pump shaft

Bearing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Plastic (PPS - 40% GF)

Stainless steel (X39CrMo17-1)

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

### Information for order placements

Make

Type

Art no.

Weight approx.  $m$

Wilo

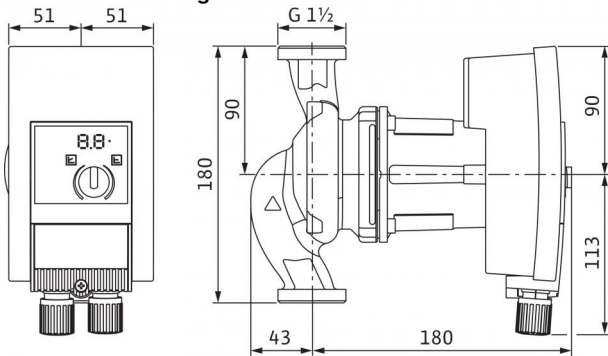
Yonos MAXO-Z 25/0,5-7

2175538

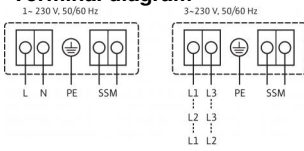
4 kg

## Data sheet: Yonos MAXO-Z 25/0,5-7

### Dimension drawing



### Terminal diagram



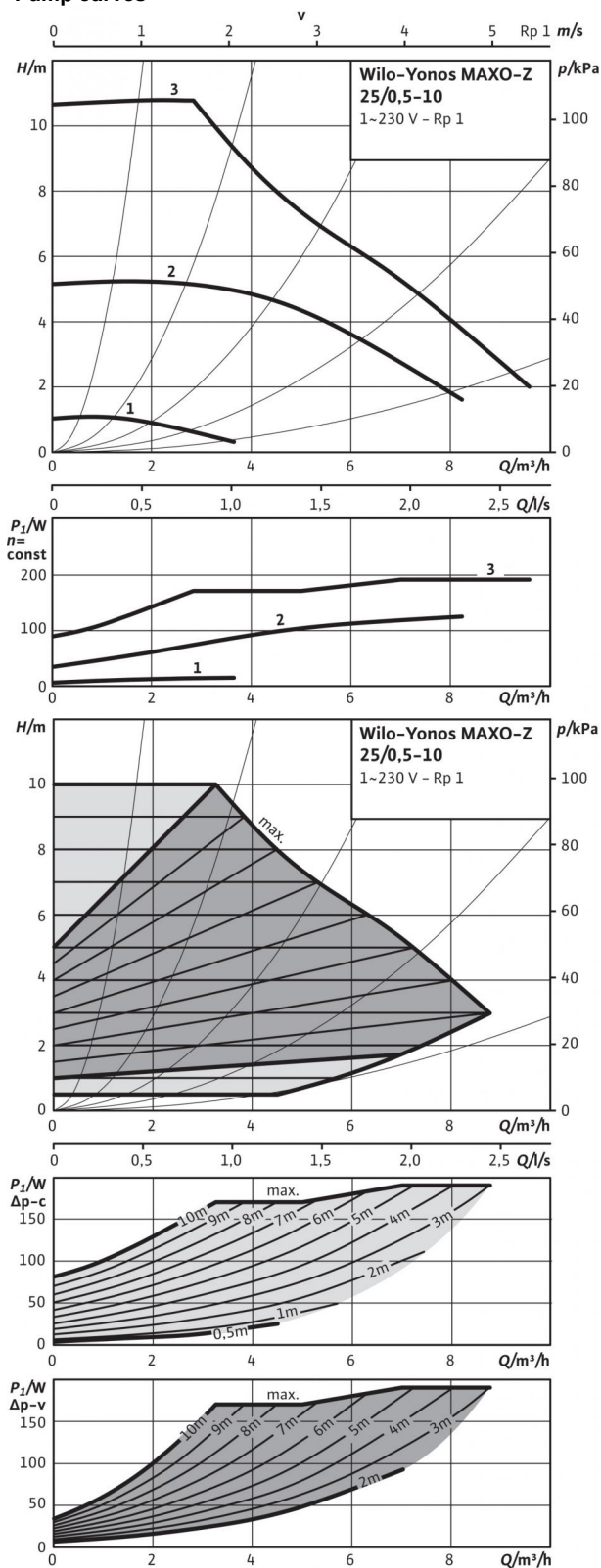
SSM:

Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)

# Data sheet: Yonos MAXO-Z 25/0,5-10

## Pump curves



### Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

### Permitted field of application

Temperature range at max. ambient temperature +40 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

Max. permitted total hardness in domestic hot water circulation systems

Maximum permissible operating pressure  $P_{max}$

•

-20-10...+110 °C

0°C...+80°C

3.57 mmol/l (20 °dH)

10 bar

### Pipe connections

Threaded pipe union

Thread

Overall length  $l_0$

Rp 1

G 1½

180 mm

### Motor/electronics

Energy efficiency index (EEI)

Emitted interference

Interference resistance

Speed control

Protection class

Insulation class

Mains connection

Rated power  $P_2$

Speed  $n$

Power consumption  $P_1$

Current consumption  $I$

Motor protection

Threaded cable connection  $PG$

≤ 0.20

EN 61800-3;2004+A1;2012 /residential area (C1)

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Frequency converter

IP X4D

F

1~230 V, 50/60 Hz

140 W

1000 - 4450 rpm

5 - 190 W

0.08 - 1.30 A

integrated

M20x1.5

### Materials

Pump housing

Impeller

Pump shaft

Bearing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Plastic (PPS - 40% GF)

Stainless steel (X39CrMo17-1)

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

### Information for order placements

Make

Type

Art no.

Weight approx.  $m$

Wilo

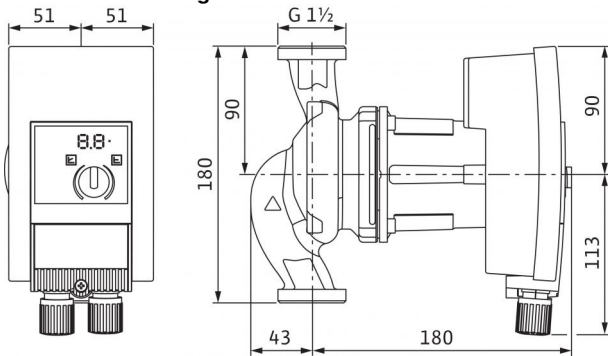
Yonos MAXO-Z 25/0,5-10

2175539

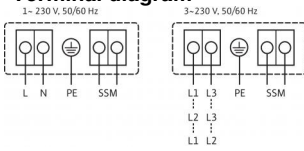
4 kg

## Data sheet: Yonos MAXO-Z 25/0,5-10

### Dimension drawing



### Terminal diagram



SSM:

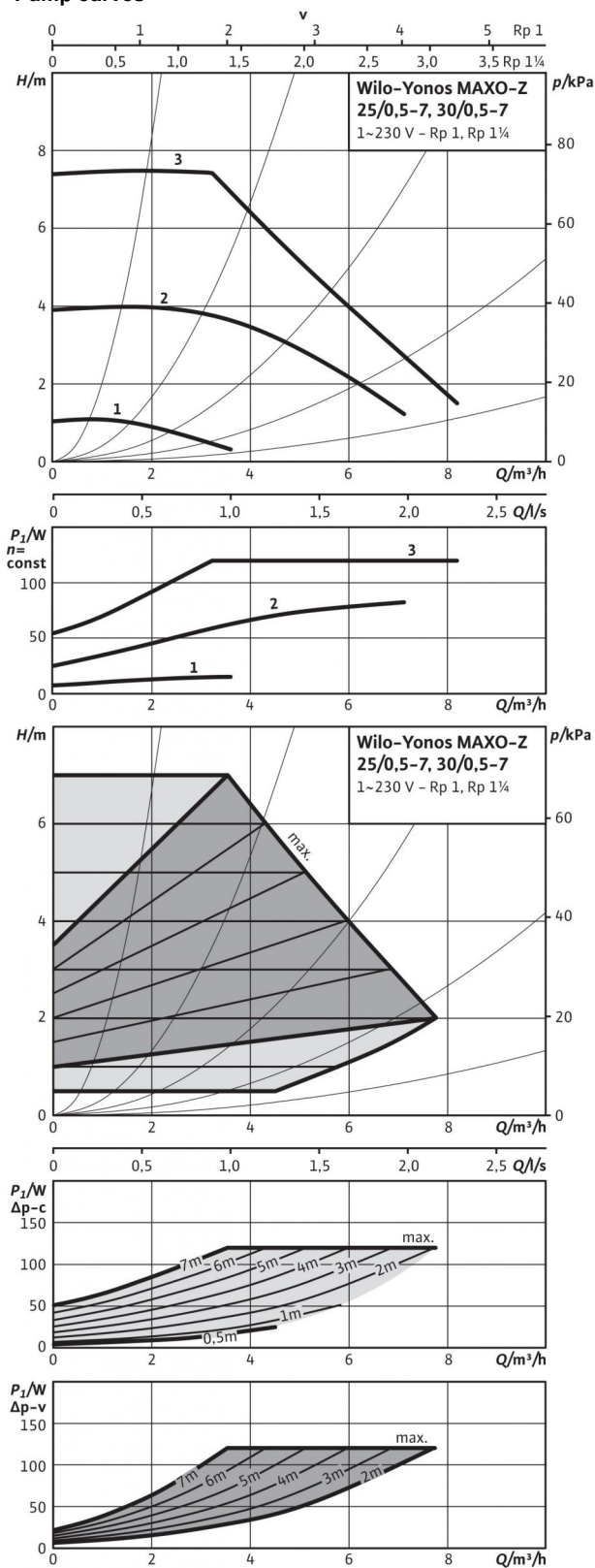
Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)



## Data sheet: Yonos MAXO-Z 30/0,5-7

### Pump curves



### Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

### Permitted field of application

Temperature range at max. ambient temperature +40 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

Max. permitted total hardness in domestic hot water circulation systems

Maximum permissible operating pressure  $P_{max}$

-20-10...+110 °C

0°C...+80°C

3.57 mmol/l (20 °dH)

10 bar

### Pipe connections

Threaded pipe union

Thread

Overall length  $l_0$

Rp 1¼

G 2

180 mm

### Motor/electronics

Energy efficiency index (EEI)

Emitted interference

Interference resistance

Speed control

Protection class

Insulation class

Mains connection

Rated power  $P_2$

Speed  $n$

Power consumption  $P_1$

Current consumption  $I$

Motor protection

Threaded cable connection  $PG$

≤ 0.20

EN 61800-3;2004+A1;2012 /residential area (C1)

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Frequency converter

IP X4D

F

1~230 V, 50/60 Hz

90 W

1000 - 3700 rpm

5 - 120 W

0.08 - 1.00 A

integrated

M20x1.5

### Materials

Pump housing

Impeller

Pump shaft

Bearing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Plastic (PPS - 40% GF)

Stainless steel (X39CrMo17-1)

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

### Information for order placements

Make

Type

Art no.

Weight approx.  $m$

Wilo

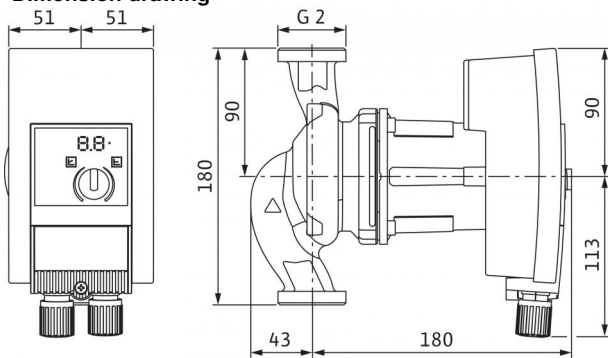
Yonos MAXO-Z 30/0,5-7

2175540

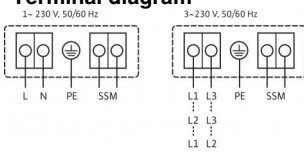
4.3 kg

## Data sheet: Yonos MAXO-Z 30/0,5-7

### Dimension drawing



### Terminal diagram



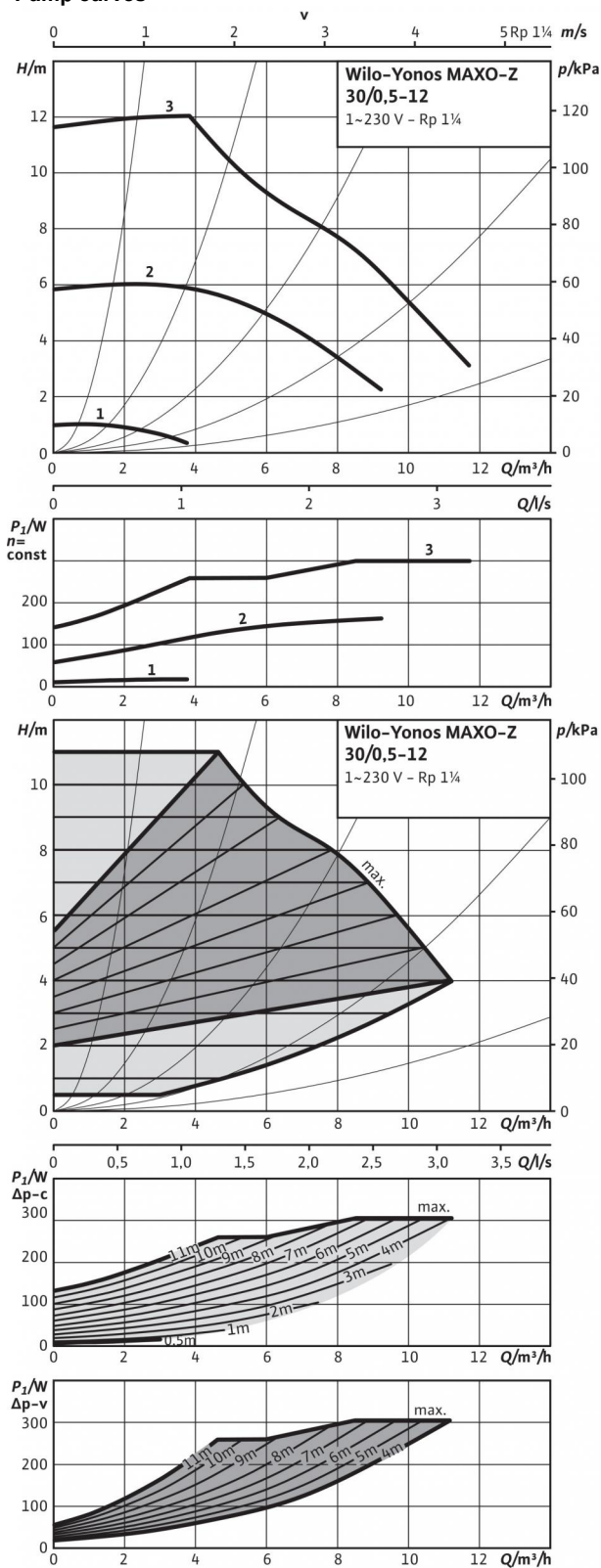
SSM:

Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)

## Data sheet: Yonos MAXO-Z 30/0,5-12

### Pump curves



### Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

### Permitted field of application

Temperature range at max. ambient temperature +40 °C

-20-10...+110 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

0°C...+80°C

Max. permitted total hardness in domestic hot water circulation systems

3.57 mmol/l (20 °dH)

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

Emitted interference

EN 61800-3;2004+A1;2012 /residential area (C1)

Interference resistance

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Speed control

Frequency converter

Protection class

IP X4D

Insulation class

F

Mains connection

1~230 V, 50/60 Hz

Rated power  $P_2$

200 W

Speed  $n$

1000 - 4800 rpm

Power consumption  $P_1$

10 - 305 W

Current consumption  $I$

0.15 - 1.33 A

Motor protection

integrated

Threaded cable connection  $PG$

M20x1.5

### Materials

Pump housing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Impeller

Plastic (PPS - 40% GF)

Pump shaft

Stainless steel (X39CrMo17-1)

Bearing

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

### Information for order placements

Make

Wilo

Type

Yonos MAXO-Z 30/0,5-12

Art no.

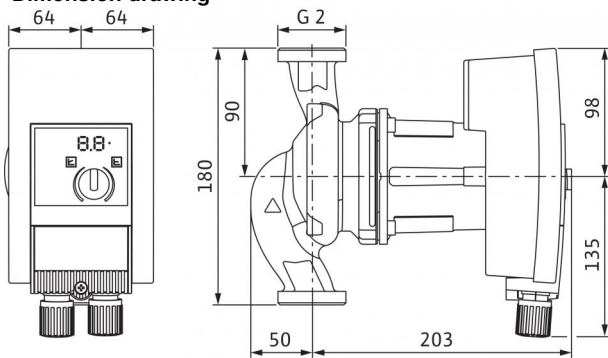
2175541

Weight approx.  $m$

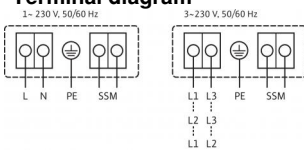
4.3 kg

## Data sheet: Yonos MAXO-Z 30/0,5-12

### Dimension drawing



### Terminal diagram



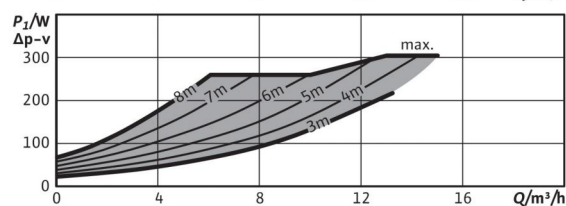
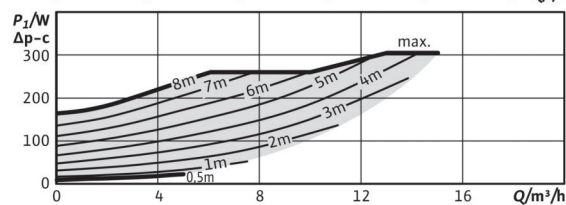
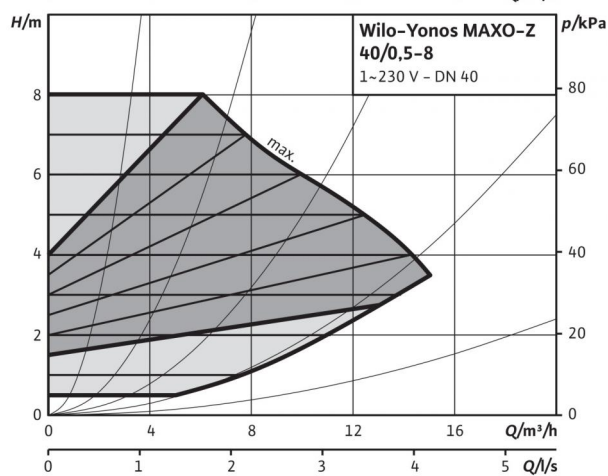
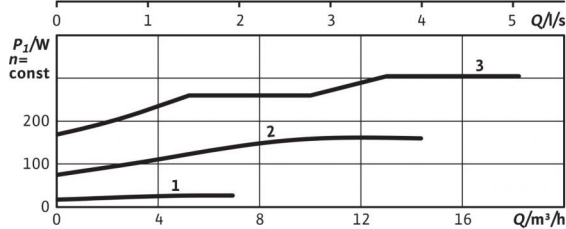
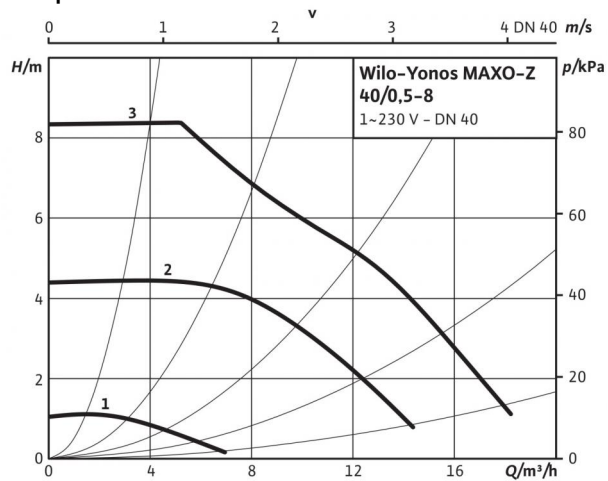
SSM:

Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)

# Data sheet: Yonos MAXO-Z 40/0,5-8

## Pump curves



## Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

## Permitted field of application

Temperature range at max. ambient temperature +40 °C

-20-10...+110 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

0°C...+80 °C

Max. permitted total hardness in domestic hot water circulation systems

3.57 mmol/l (20 °dH)

Maximum permissible operating pressure  $P_{max}$

6/10 bar

## Pipe connections

Flange

Combination flange PN6/10 (PN 16 flange according to EN 1092-2)

Nominal flange diameter

DN 40

Overall length  $l_0$

220 mm

## Motor/electronics

Energy efficiency index (EEI)

≤ 0.20

Emitted interference

EN 61800-3;2004+A1;2012 /residential area (C1)

Interference resistance

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Speed control

Frequency converter

Protection class

IP X4D

Insulation class

F

Mains connection

1~230 V, 50/60 Hz

Rated power  $P_2$

200 W

Speed  $n$

1200 - 4800 rpm

Power consumption  $P_1$

10 - 305 W

Current consumption  $I$

0.15 - 1.33 A

Motor protection

integrated

Threaded cable connection  $PG$

M20x1.5

## Materials

Pump housing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Impeller

Plastic (PPS - 40% GF)

Pump shaft

Stainless steel (X39CrMo17-1)

Bearing

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

## Information for order placements

Make

Wilo

Type

Yonos MAXO-Z 40/0,5-8

Art no.

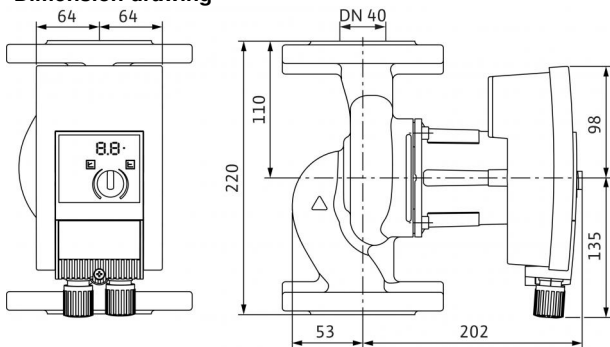
2175542

Weight approx.  $m$

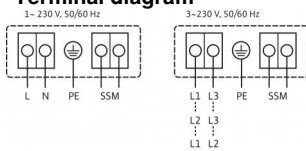
11.4 kg

## Data sheet: Yonos MAXO-Z 40/0,5-8

### Dimension drawing



### Terminal diagram



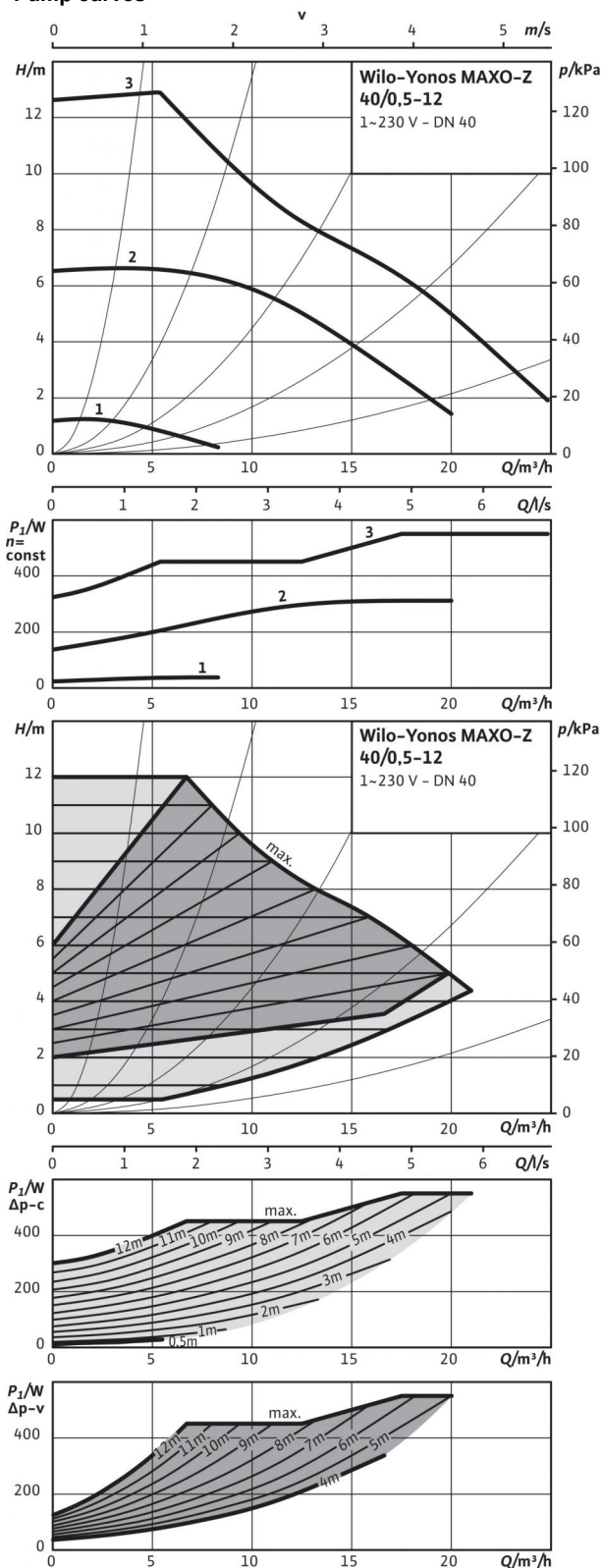
SSM:

Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)

# Data sheet: Yonos MAXO-Z 40/0,5-12

## Pump curves



## Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

## Permitted field of application

Temperature range at max. ambient temperature +40 °C

-20-10...+110 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

0 °C...+80 °C

Max. permitted total hardness in domestic hot water circulation systems

3.57 mmol/l (20 °dH)

Maximum permissible operating pressure P<sub>max</sub>

6/10 bar

## Pipe connections

Flange

Combination flange PN6/10 (PN 16 flange according to EN 1092-2)

Nominal flange diameter

DN 40

Overall length l<sub>0</sub>

250 mm

## Motor/electronics

Energy efficiency index (EEI)

≤ 0.20

Emitted interference

EN 61800-3;2004+A1;2012 /residential area (C1)

Interference resistance

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Speed control

Frequency converter

Protection class

IP X4D

Insulation class

F

Mains connection

1~230 V, 50/60 Hz

Rated power P<sub>2</sub>

450 W

Speed n

950 - 4600 rpm

Power consumption P<sub>1</sub>

15 - 550 W

Current consumption I

0.17 - 2.40 A

Motor protection

integrated

Threaded cable connection PG

M20x1.5

## Materials

Pump housing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Impeller

Plastic (PPS - 40% GF)

Pump shaft

Stainless steel (X39CrMo17-1)

Bearing

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

## Information for order placements

Make

Wilo

Type

Yonos MAXO-Z 40/0,5-12

Art no.

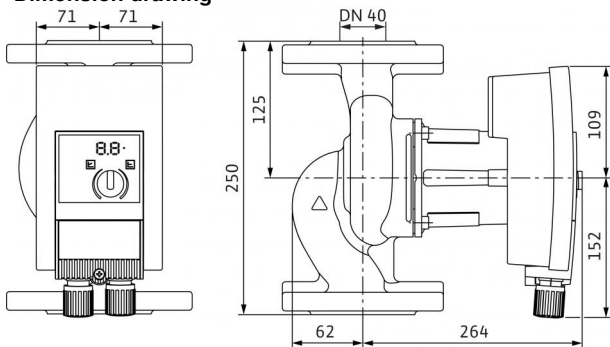
2175543

Weight approx. m

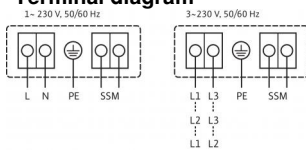
16.8 kg

## Data sheet: Yonos MAXO-Z 40/0,5-12

### Dimension drawing



### Terminal diagram



SSM:

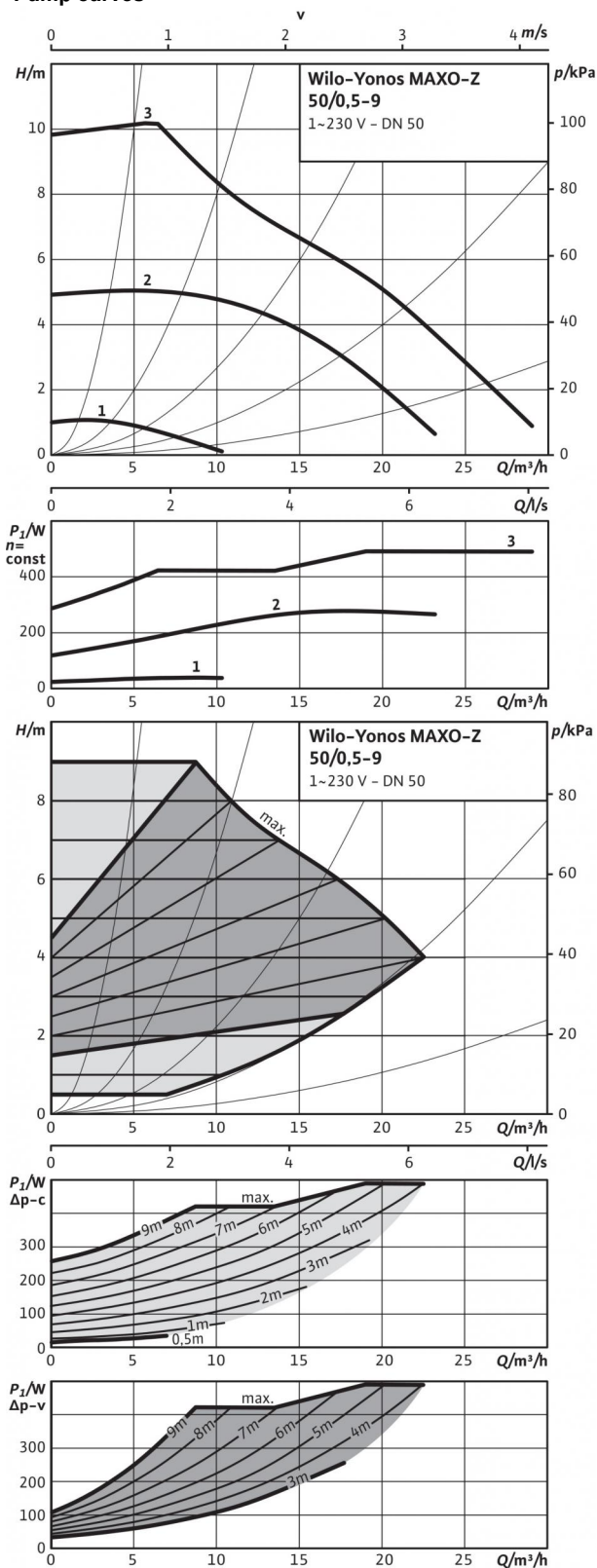
Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)



## Data sheet: Yonos MAXO-Z 50/0,5-9

### Pump curves



### Approved fluids (other fluids on request)

Drinking water and water for food-processing companies in accordance with TrinkwV 2001 (drinking water ordinance)

### Permitted field of application

Temperature range at max. ambient temperature +40 °C

-20-10...+110 °C

Temperature range for applications in domestic hot water circulation systems at maximum ambient temperature of +40 °C

0°C...+80 °C

Max. permitted total hardness in domestic hot water circulation systems

3.57 mmol/l (20 °dH)

Maximum permissible operating pressure  $P_{max}$

6/10 bar

### Pipe connections

Flange

Combination flange PN6/10 (PN 16 flange according to EN 1092-2)

Nominal flange diameter

DN 50

Overall length  $l_0$

280 mm

### Motor/electronics

Energy efficiency index (EEI)

≤ 0.20

Emitted interference

EN 61800-3;2004+A1;2012 /residential area (C1)

Interference resistance

EN 61800-3;2004+A1;2012 /industrial environment (C2)

Speed control

Frequency converter

Protection class

IP X4D

Insulation class

F

Mains connection

1~230 V, 50/60 Hz

Rated power  $P_2$

400 W

Speed  $n$

950 - 4100 rpm

Power consumption  $P_1$

15 - 490 W

Current consumption  $I$

0.17 - 2.15 A

Motor protection

integrated

Threaded cable connection PG

M20x1.5

### Materials

Pump housing

Red brass (CC 499K) according to DIN 50930-6 in accordance with Drinking Water Ordinance

Impeller

Plastic (PPS - 40% GF)

Pump shaft

Stainless steel (X39CrMo17-1)

Bearing

Carbon, synthetic resin impregnated

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

Minimum suction head at 50 / 95 / 110 °C

3 / 10 / 16 m

### Information for order placements

Make

Wilo

Type

Yonos MAXO-Z 50/0,5-9

Art no.

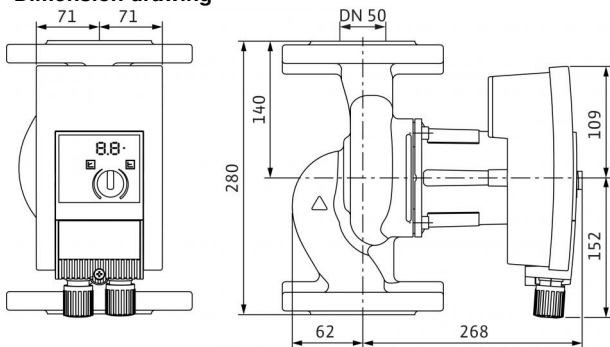
2175544

Weight approx.  $m$

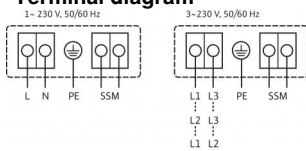
17.9 kg

## Data sheet: Yonos MAXO-Z 50/0,5-9

### Dimension drawing



### Terminal diagram



SSM:

Collective fault signal

(NC contact in accordance with VDI 3814, load capacity 1 A, 250 V ~)