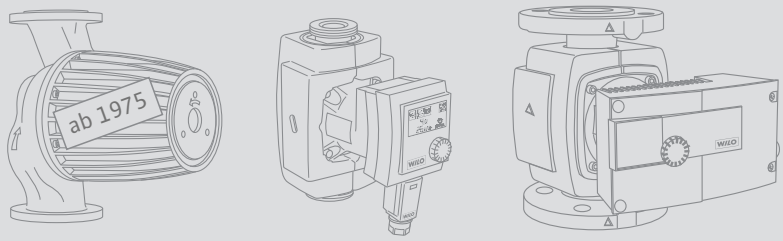
WILO

Pumpen Intelligenz.

Replacement Guide Heating

Wilo Circulators
for Heating and
Secondary Hot Water Circulation



2010

Wilo Replacement Guide Heating

Heating

Secondary hot water circulation

Notes

All three Wilo replacement guides give you quick and easy information on Wilo replacement pumps:

The printed Wilo replacement guide

- Includes the seven most important **makes** divided into
  – single or double pumps for heating or
  – secondary hot water circulation pumps
- Detailed explanations and installation notes

The Wilo online replacement guide

- Includes all available **makes** and pumps.
- Direct connection to data sheets and further product information.
- **Ideal to be used in the office** and always up-to-date at:
  www.wilo.com/replacement

The Wilo SMS replacement guide

- Includes all available **makes** and pumps.
- Response within 10 to 20 seconds.
- Including article number and adapter information.
- Easy and quick: Just send the type designation and the pumps to be replaced via text message. (e. g.: RP 25 100)
- **Ideal to be used with a standard mobile phone onsite.**
- Always up-to-date and available 24/7 at:
  +49 1511 44 44 4 66

Technical selection criteria for the replacement guides

- **The installation length/nominal width** of the Wilo pumps corresponds **if possible** to the dimensions of the pump to be replaced.
- When replacing flange-end pumps up to a nominal width of DN 65, the dimensions of the counterflanges have to be checked (different flange sizes between versions PN 6 and PN 10). Combination flanges PN 6/10 must not be connected to other combination flanges.
- In the event that the installation length of the Wilo pump is **shorter** than that of the pump to be replaced, **adapters and flange adapters** are available to compensate the length difference.
  Possibly the motor with the terminal box needs to be turned by 90°.
  The **hydraulic flow rate of the Wilo pump** (max. pump curve) is, **if possible, equal** to the flow rate in the back area of the pump curve.

High-efficiency pumps are the state of the art!

As early as in 2001, our Wilo-Stratos set the standard for the **energy efficiency class A** which defines today the "state of the art".
The Wilo-Stratos and Wilo-Stratos PICO are rated energy efficiency class A and they achieve **electricity savings of up to 90 %** compared to uncontrolled standard heating pumps!

The German Energy Saving Ordinance

Beyond the "state of the art", the EnEV (German Energy Saving Ordinance) prescribes the use of controlled pumps and demands exclusively pumps with output control in heating systems from 25 kW central heating output or higher, both in old and in new installations (EnEV §12, paragraph 3). This basically requires that all flange-end pumps are equipped with a pump capacity control.

Obligation to provide information upon pump replacement!

- The secondary obligation within order processing includes the obligation of the specialised craftsman to supply information to the operator. This is stipulated by the work contract according to BGB (German Civil Code) which is closed between the specialised craftsman and his client.
- If uncontrolled heating circulation pumps are installed without giving the information that they consume a lot more electricity, the amount of money which can be saved may be claimed as compensation.
- If the client insists on the installation of an uncontrolled pump even after information on the higher electricity consumption has been given, you should note this down in your documentation.

System optimisation results in impressive savings

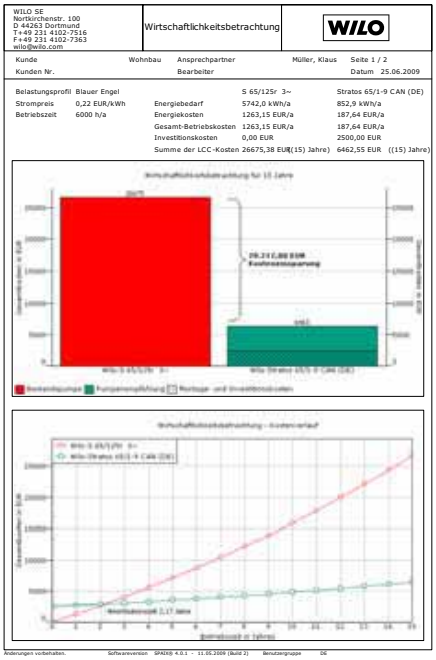
- Replacing a pump always offers the opportunity to adapt and **re-determine the pump performance** in consideration of the modifications which have been done at and in the building.
- High-efficiency pumps can avoid noise disturbances which may occur due to installed thermostatic valves and therefore increasing pump pressure when valves are closing.
- A later thermal insulation of a building reduces the heat demand. The formerly high pump performance is not needed any longer. Experience shows that smaller pumps are fully sufficient and even reduce power consumption.
  Profit from the simplified new determination of the pump performance. See chapter **System optimisation** or use our Wilo-LCC-Check at **http:/LCC-Check.Wilo.com**.

Wilo-LCC-Check and energy efficiency classes

Wilo-LCC-Check

Calculate your cost savings now.

The Wilo-LCC-Check calculates and compares the profitability of existing heating pumps and Wilo high-efficiency pumps.
3 easy steps are enough to calculate the cost savings and the pay-off period which is then documented in a convincing data sheet.
The operator receives a reliable basis to think about a pump replacement.
You can find the Wilo-LCC-Check on the Internet:
http:/LCC-Check.Wilo.com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Wirtschaftlichkeitsbetrachtung

WILO

Kunde Wohnbau Ansprechpartner Müller, Klaus Seite 1 / 2
Kunden Nr. Bearbeiter Datum 25.06.2009

Belastungsprofil	Blauer Engel		S 65/125r 3~	Stratos 65/1-9 CAN (DE)
Strompreis	0,22 EUR/kWh	Energiebedarf	5742,0 kWh/a	852,9 kWh/a
Betriebszeit	6000 h/a	Energiekosten	1263,15 EUR/a	187,64 EUR/a
		Gesamt-Betriebskosten	1263,15 EUR/a	187,64 EUR/a
		Investitionskosten	0,00 EUR	2500,00 EUR
		Summe der LCC-Kosten	26675,38 EUR (15) Jahre)	6462,55 EUR ((15) Jahre)

Energy efficiency classification

Under the auspices of the Kyoto Agreement, the European governments in particular are pursuing the goal of drastically reducing CO_2-emissions. An essential requirement is the energy labelling of particular energy-relevant household appliances like washing machines and refrigerators, in order to make it easier for the end user to decide in favour of energy-saving appliances.
Due to the fact that heating circulation pumps are among the biggest individual electricity consumers in household use because of their long running times, leading European heating pump manufacturers have voluntarily declared their intention of henceforth attaching energy labels to their heating pumps. Thus users and end consumers are able to determine by means of a known classification system whether a heating circulating pump is particular energy-efficient.
The classification of the energy efficiency of heating pumps is carried out by means of a technical measuring procedure, which provides the Energy Efficiency Index, EEI. The smaller the EEI, the less electrical energy the pump consumes and the more favourable the energy classification.

Energy Class	Energy Efficiency Index
A	EEI <0.4
B	0.4 ≤ EEI < 0.6
C	0.6 ≤ EEI < 0.8
D	0.8 ≤ EEI < 1.0
S	1.0 ≤ EEI < 1.2
F	1.2 ≤ EEI < 1.4
C	1.4 ≤ EEI

Table: Classification of the Energy Efficiency Index into 7 different energy categories.

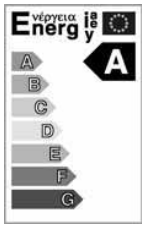

Fig.: Energy label for heating circulating pumps, Example: Energy class A

The following tables identify the associated energy class for all heating pumps to be labelled, which can be seen to be incorporated into the energy label on the packaging. Just like on household appliances, the letter A is the best and G is the worst energy class.
A comparison of hydraulically similar pumps with different energy classifications reveals that there is a difference of approximately 22 percentage points in terms of energy expenditure between two sequentially numbered energy classes. Accordingly, an energy class A pump requires on average only around 33 % of the electrical energy used by a class D pump.
Even though the energy-related requirements of a class A pump are very high, high-efficiency energy class A pumps have in the meantime become available for utilisation throughout the entire performance range that runs from single-family houses to large buildings.

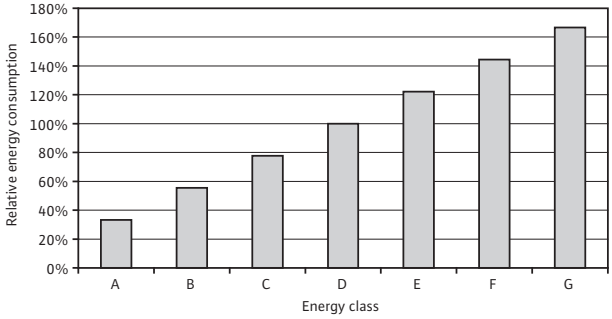

Fig.: Comparison of the energy consumption rates of pumps with the same hydraulic output

Energy efficiency classes

EEI classification – Single pumps/double pumps (field of application: one/two-family house)						
Nominal dia.	Wilo-Stratos PICO...	EEI class	Wilo-Star-RS...	EEI class	Wilo-Star-RSD...	EEI class
DN 15 (Rp ½)	15/1-4	A	15/4	B	–	–
	15/1-6	A	15/6	B	–	–
DN 25 (Rp 1)	25/1-4	A	25/2	B	–	–
	25/1-6	A	25/4	B	–	–
	–	–	25/6	B	–	–
	–	–	–	–	–	–
	–	–	–	–	–	–
DN 30 (Rp 1 ¼)	–	–	30/2	B	–	–
	30/1-4	A	30/4	B	30/4	D
	30/1-6	A	30/6	B	30/6	D
	–	–	–	–	–	–
	–	–	–	–	–	–

EEI classification – Single pumps (field of application: multi-family homes, commercial applications)				
Nominal dia.	Wilo-Stratos...	EEI class	Wilo-TOP-S...	EEI class
DN 25 (Rp 1)	25/1-4	A	25/5 1~/3~	D/D
	25/1-6	A	25/7 1~/3~	D/D
	25/1-8	A	25/10 1~/3~	D/D
	25/1-10	A	–	–
DN 30 (Rp 1 ¼)	30/1-4	A	30/4 1~/3~	D/D
	30/1-6	A	30/5 1~/3~	D/D
	30/1-8	A	30/7 1~/3~	D/D
	30/1-10	A	30/10 1~/3~	D/D
	30/1-12	A	–	–
DN 32	32/1-10	A	–	–
	32/1-12	A	–	–
DN 40	40/1-4	A	40/4 1~/3~	D/D
	40/1-8	A	40/7 1~/3~	D/C
	40/1-10	A	40/10 3~	C
	40/1-12	A	40/15 3~	D
DN 50	50/1-8	A	50/4 1~/3~	D/D
	50/1-9	A	50/7 3~	C
	50/1-10	A	50/10 3~	C
	50/1-12	A	50/15	C
DN 65	65/1-9	A	65/7 3~	C
	65/1-12	A	65/10 3~	C
	–	–	65/13	C
	–	–	65/15	C
DN 80	80/1-12	A	80/7 3~	C
	–	–	80/10	C
	–	–	80/15	C
	–	–	80/20	C
DN 100	100/1-12	A	100/10	C

Energy efficiency classes

EEI classification – Single pumps (field of application: multi-family homes, commercial applications) (continued)		
Nominal dia.	Wilo-TOP-D...	EEI class
DN 25 (Rp 1)	–	–
DN 30 (Rp 1 ¼)	30 1~/3~	G/F
	–	–
	–	–
DN 32	–	–
	–	–
DN 40	40 1~/3~	E/E
	–	–
DN 50	50 1~/3~	E/E
	–	–
DN 65	65 1~/3~	E/E
DN 80	80 1~/3~	E/E
DN 100	100 1~/3~	E/E
DN 125	125	D

EEI classification – Double pumps (field of application: multi-family homes, commercial applications)				
Nominal dia.	Wilo-Stratos-D....	EEI class	Wilo-TOP-SD...	EEI class
DN 25 (Rp 1)	–	–	–	–
DN 30 (Rp 1 ¼)	–	–	30/5 1~/3~	D/D
DN 32	32/1-8	A	32/7 1~/3~	E/D
	32/1-12	A	32/10 1~/3~	D/D
DN 40	40/1-8	A	40/3 1~/3~	E/D
	40/1-12	A	40/7 1~/3~	D/D
	–	–	40/10 3~	C
	–	–	40/15 3~	D
DN 50	50/1-8	A	50/7 3~	D
	50/1-12	A	50/10 3~	D
	–	–	50/15	D
DN 65	65/1-12	A	65/10 3~	D
	–	–	65/13	D
	–	–	65/15	D
DN 80	80/1-12	A	–	F
	–	–	80/10	D
	–	–	80/15	C
	–	–	80/20	C
DN 100	–	–	–	–
DN 125	–	–	–	–

Wilo Replacement Guide Heating

Wilo

Single pumps

Type

	PN	Motor	Overall length [mm]
Rp ½ (Pump thread G 1)			
Star-E 15/1-3	10	1~	130
Star-E 15/1-5	10	1~	130
Star-E 20/1-3	10	1~	130
Star-E 20/1-5	10	1~	130
Star-RS 15/4	10	1~	130
Star-RS 15/6	10	1~	130
Stratos-ECO 15/1-3	10	1~	130
Stratos-ECO 15/1-5	10	1~	130
Rp ¾ (Pump thread G 1¼)			
P 20-1	10	1~	140
P 20-2	10	1~	140
S 20-1	6	1~	140
S 20-2	6	1~	140
Rp 1 (Pump thread G 1½)			
E 25/1-5	10	1~	180
H 25	10	1~/3~	180
P 25	10	1~	180
P 25-1	10	1~	180
P 25-2	10	1~	180
RH 25	10	1~/3~	180
RP 25	6/10	1~/3~	180
RP 25/100 v (r)	10	1~	180
RP 25/60 r	10	1~	180
RP 25/60-2	10	1~	180
RP 25/80 v (r)	10	1~	180
RP 25-1	10	1~/3~	180
RS 25	10	1~	180
RS 25/3 E (n)	10	1~	180
RS 25/50 (r)	10	1~	180
RS 25/60 v (r)	10	1~	180
RS 25/70 v (r)	10	1~	180
RS 25/80 (v) (r)	10	1~/3~	180
RS 25-1 (v)	10	1~	180
RS 25-2	10	1~	180
RS 25 v	10	1~	180
RSE 25	10	1~	180
RSL 25/70 r ventilation pump	10	1~	180
S 25	6	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)			
Stratos PICO 15/1-4	1~	130	-
Stratos PICO 15/1-6	1~	130	-
Stratos PICO 15/1-4	1~	130	-
Stratos PICO 15/1-6	1~	130	-
Stratos PICO 15/1-6	1~	130	-
Stratos PICO 15/1-6	1~	130	-
Stratos PICO 15/1-4	1~	130	-
Stratos PICO 15/1-6	1~	130	-
Rp ¾ (Pump thread G 1¼)			
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos PICO 25/1-6	1~	180	Mod. pipe
Rp 1 (Pump thread G 1½)			
Stratos PICO 25/1-4	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
-	-	-	-
Stratos PICO 25/1-6	1~	180	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)			
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Star-RS 15/4-130	1~	130	
Star-RS 15/6-130	1~	130	-
-	-	-	-
-	-	-	-
Rp ¾ (Pump thread G 1¼)			
Star-RS 25/2	1~	180	Mod. pipe
Star-RS 25/2	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Rp 1 (Pump thread G 1½)			
-	-	-	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/2	1~	180	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4	1~	180	-
TOP-S 25/5	1~/3~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
TOP-S 25/5	1~/3~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/4	1~	180	-
-	-	-	-
Star-RSL 25/6	1~	180	-
Star-RS 25/4	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo

Single pumps

Type	PN	Motor	Overall length [mm]
Rp 1 (Pump thread G 1½)			
S 25 (R 1)	10	1~/3~	180
S 25-1	6	1~	180
S 25-1 (R 1)	10	1~/3~	180
S 30-1	6	1~/3~	180
S 30-1 (R 1)	10	1~/3~	180
Smart 25/4	10	1~	180
Smart 25/4-130	10	1~	130
Smart 25/6	10	1~	180
Smart 25/6-130	10	1~	130
Star-E 25/1-3-130	10	1~	130
Star-E 25/2	10	1~	180
Star-EL 25/1-5	10	1~	180
Star-EP 25/1-5	10	1~	180
Star-EP 25/1-5 SSM	10	1~	180
Star-RS 25/2	10	1~	180
Star-RS 25/4	10	1~	180
Star-RS 25/4-130	10	1~	130
Star-RS 25/6	10	1~	180
Star-RS 25/6-130	10	1~	130
Star-RSL 25/6	10	1~	180
Stratos 25/1-4	10	1~	180
Stratos 25/1-6	10	1~	180
Stratos 25/1-8	10	1~	180
Stratos 25/1-10	10	1~	180
Stratos ECO 25/1-3	10	1~	180
Stratos ECO 25/1-3-130	10	1~	130
Stratos ECO 25/1-5	10	1~	180
Stratos ECO 25/1-5-RG	10	1~	180
Stratos ECO 25/1-5-130	10	1~	130
TOP-E 25/1-7	10	1~	180
TOP-RS 25/7	10	1~	180
TOP-S 25/10	10	1~	180
TOP-S 25/13	10	1~	180
TOP-S 25/5	10	1~	180
TOP-S 25/7	10	1~	180
TOP-SV 25/7	10	–	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6	1~	180	–
Stratos 25/1-6	1~	180	–
Stratos 25/1-6	1~	180	–
Stratos PICO 25/1-4	1~	180	–
Stratos PICO 25/1-4-130	1~	130	–
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6-130	1~	130	–
Stratos PICO 25/1-4-130	1~	130	–
Stratos PICO 25/1-4	1~	180	–
Stratos ECO-L 25/1-5	1~	180	–
Stratos PICO 25/1-6	1~	180	–
Stratos ECO 25/1-5 BMS	1~	180	–
Stratos PICO 25/1-4	1~	180	–
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6-130	1~	130	–
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6-130	1~	130	–
–	–	–	–
Stratos 25/1-4	1~	180	–
Stratos 25/1-6	1~	180	–
Stratos 25/1-8	1~	180	–
Stratos 25/1-10	1~	180	–
Stratos PICO 25/1-4	1~	180	–
Stratos PICO 25/1-4-130	1~	130	–
Stratos PICO 25/1-6	1~	180	–
Stratos PICO 25/1-6-RG	1~	180	–
Stratos PICO 25/1-6-130	1~	130	–
Stratos 25/1-8	1~	180	–
Stratos 25/1-8	1~	180	–
Stratos 30/1-12	1~	180	Mod. pipe
–	–	–	–
Stratos 25/1-6	1~	180	–
Stratos 25/1-8	1~	180	–
Stratos 25/1-8	1~	180	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Star-RS 25/4	1~	180	–
Star-RS 25/6	1~	180	–
Star-RS 25/6	1~	180	–
TOP-S 25/7	1~/3~	180	–
TOP-S 25/7	1~/3~	180	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
Star-RS 25/2	1~	180	–
Star-RS 25/4	1~	180	–
Star-RS 25/4-130	1~	130	–
Star-RS 25/6	1~	180	–
Star-RS 25/6-130	1~	130	–
Star-RSL 25/6	1~	180	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-S 25/7	1~/3~	180	–
TOP-S 25/10	1~/3~	180	–
TOP-S 25/13	1~/3~	180	–
TOP-S 25/5	1~/3~	180	–
TOP-S 25/7	1~/3~	180	–
MOT-S 30/7	1~/3~	180	–

*) For type-dependent energy efficiency classes see pages 5–7

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Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Wilo

Single pumps

Type

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
D 30	10	1~/3~	206
E 30/1-5	10	1~	180
H 30-1	10	1~/3~	220
H 30-1 (250 mm)	10	1~/3~	250
H 30-2	10	1~/3~	220
H 30-2 (250 mm)	10	1~/3~	250
RP 30	10	1~/3~	180
RP 30 (220 mm)	10	1~/3~	220
RP 30/100 v (r)	10	1~	180
RP 30/80 v (r)	10	1~	180
RP 30-1	10	1~/3~	180
RS 30 (v)	10	1~	180
RS 30/100 v (r)	10	1~/3~	180
RS 30/50 v (r)	10	1~	180
RS 30/60 v (r)	10	1~	180
RS 30/70 v (r)	10	1~	180
RS 30/80 v (r)	10	1~/3~	180
RS 30-1 (v)	10	1~	180
RS 30-2	10	1~	180
S 25 (R 1 1/4)	10	1~/3~	180
S 25-1 (R 1 1/4)	10	1~/3~	180
S 30	6	1~/3~	220
S 30/100	6/10	1~/3~	220
S 30-1	10	1~/3~	180
Smart 30/4	10	1~	180
Smart 30/6	10	1~	180
Star-E 30/1-5	10	1~	180
Star-EP 30/1-5	10	1~	180
Star-EP 30/1-5 SSM	10	1~	180
Star-RS 30/2	10	1~	180
Star-RS 30/4	10	1~	180
Star-RS 30/6	10	1~	180
Stratos 30/1-12	10	1~	180
Stratos 30/1-4	10	1~	180
Stratos 30/1-6	10	1~	180
Stratos 30/1-8	10	1~	180
Stratos 30/1-10	10	1~	180
Stratos ECO 30/1-3	10	1~	180
Stratos ECO 30/1-5	10	1~	180
Stratos ECO 30/1-5-BMS	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 30/1-6	1~	180	R9
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-8	1~	180	R14
Stratos 30/1-8	1~	180	R11
Stratos 30/1-8	1~	180	R14
Stratos 30/1-8	1~	180	R11
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	R14
Stratos 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-12	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-8	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-6	1~	180	R14
Stratos 30/1-12	1~	180	R14
Stratos 30/1-6	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos ECO 30/1-5-BMS	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-12	1~	180	-
Stratos 30/1-4	1~	180	-
Stratos 30/1-6	1~	180	-
Stratos 30/1-8	1~	180	-
Stratos 30/1-10	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos ECO 30/1-5-BMS	1~	180	-

Type	Motor	Overall length [mm]	Adapter/ note
TOP-D 30	1~/3~	180	R9
-	-	-	-
TOP-S 30/10	1~/3~	180	R14
TOP-S 30/10	1~/3~	180	R11
TOP-S 30/7	1~/3~	180	R14
TOP-S 30/7	1~/3~	180	R11
Star-RS 30/6	1~	180	-
Star-RS 30/6	1~	180	R14
TOP-S 30/5	1~/3~	180	-
TOP-S 30/4	1~/3~	180	-
TOP-S 30/4	1~/3~	180	-
Star-RS 30/4	1~	180	-
TOP-S 30/10	1~/3~	180	-
Star-RS 30/2	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/7	1~/3~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/2	1~	180	-
Star-RS 30/6	1~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/5	1~	180	R14
TOP-S 30/10	1~	180	R14
TOP-S 30/5	1~	180	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Star-RS 30/2	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/6	1~	180	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo

Single pumps

Type

	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
TOP-D 30	10	1~/3~	180
TOP-E 30/1-10	10	1~	180
TOP-E 30/1-7	10	1~	180
TOP-RS 30/10	10	1~/3~	180
TOP-RS 30/7	10	1~/3~	180
TOP-S 30/10	10	1~/3~	180
TOP-S 30/4	10	1~/3~	180
TOP-S 30/5	10	1~/3~	180
TOP-S 30/7	10	1~/3~	180
TOP-SV 30/7	10	1~/3~	180
DN 32			
Stratos 32/1-10	10	1~	220
Stratos 32/1-12	6/10	1~	220
DN 40			
D 40	6/10	1~/3~	220
E 40/1-5	6/10	1~	220
P 40/100 v (r)	6	1~	250
P 40/140	6/10	3~	320
P 40/160 (v) (r)	6	3~	320
P 40-1	6/10	1~/3~	250
P 40-2	6/10	1~/3~	250
RS 40	6/10	1~/3~	220
S 40/80 v (r)	6/10	1~/3~	220
S 40/90 (v) (r)	6/10	1~/3~	250
Star-E 40/1-5	6/10	1~	220
Stratos 40/1-12	6/10	1~	250
Stratos 40/1-4	6/10	1~	220
Stratos 40/1-8	6/10	1~	220
Stratos 40/1-10	10	1~	220
TOP-D 40	6/10	3~	220
TOP-E 40/1-10	6/10	1~	250
TOP-E 40/1-4	6/10	1~	220
TOP-EV 40/1-4	6/10	1~	250
TOP-S 40/10	6/10	3~	250
TOP-S 40/15	6/10	3~	250
TOP-S 40/4	6/10	1~	220
TOP-S 40/7	6/10	1~	250
TOP-SV 40/4	6/10	1~/3~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Stratos PICO 30/1-6	1~	180	–
Stratos 30/1-12	1~	180	–
Stratos 30/1-8	1~	180	–
Stratos 30/1-12	1~	180	–
Stratos 30/1-8	1~	180	–
Stratos 30/1-12	1~	180	–
Stratos 30/1-6	1~	180	–
Stratos 30/1-6	1~	180	–
Stratos 30/1-8	1~	180	–
Stratos 30/1-8	1~	180	–
DN 32			
Stratos 32/1-10	1~	220	–
Stratos 32/1-12	1~	220	–
DN 40			
Stratos PICO 25/1-6	1~	180	2x RF9
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	2x F26
Stratos 40/1-8	1~	220	2x F26
Stratos 40/1-4	1~	220	F1
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	–
Stratos 40/1-12	1~	250	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-8	1~	220	–
Stratos 40/1-10	1~	220	–
Stratos PICO 25/1-6	1~	180	2x RF9
Stratos 40/1-12	1~	250	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	F1
Stratos 40/1-12	1~	250	–
–	–	–	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	F1

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
–	–	–	–
–	–	–	–
–	–	–	–
TOP-S 30/10	1~/3~	180	2x RF1
TOP-S 30/7	1~/3~	180	2x RF1
TOP-S 30/10	1~/3~	180	–
TOP-S 30/4	1~/3~	180	–
TOP-S 30/5	1~/3~	180	–
TOP-S 30/7	1~/3~	180	–
MOT-S 30/7	1~/3~	180	2x RF1
DN 32			
–	–	–	–
–	–	–	–
DN 40			
TOP-D 40	1~/3~	220	–
–	–	–	–
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	F0 + F26
TOP-S 40/7	1~/3~	250	F0 + F26
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	–
TOP-S 40/4	1~/3~	220	–
TOP-S 40/7	1~/3~	250	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-D 40	1~/3~	220	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-S 40/10	3~	250	–
TOP-S 40/15	3~	250	–
TOP-S 40/4	1~/3~	220	–
TOP-S 40/7	1~/3~	250	–
MOT-S 40/4	1~/3~	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Wilo

Single pumps

Type

	PN	Motor	Overall length [mm]
DN 50			
D 50	6/10	1~/3~	240
E 50/1-7	6/10	1~	220
H 50-2	6/10	1~/3~	280
P 50/125 v (r)	6	3~	280
P 50/140	6/10	3~	340
P 50/160 (v) (r)	6	3~	340
P 50/200	10	3~	460
P 50/224	10	3~	460
P 50/250 r	10	3~	440
P 50/250 v	6/10	1~/3~	440
P 50-1	6/10	1~/3~	280
P 50-2	6/10	1~/3~	280
RS 50	6/10	1~/3~	240
S 50/100 (v) (r)	6/10	3~	280
S 50/125 r	6/10	3~	280
S 50/140 r	6/10	3~	340
S 50/80 v (r)	6/10	1~/3~	240
Star-E 50/1-7	6/10	1~	240
Stratos 50/1-12	6/10	1~	280
Stratos 50/1-8	6/10	1~	240
Stratos 50/1-9	6/10	1~	280
Stratos 50/1-10	10	1~	240
TOP-D 50	6/10	1~	240
TOP-E 50/1-10	6/10	1~	280
TOP-E 50/1-6	6/10	1~	240
TOP-E 50/1-7	6/10	1~	280
TOP-EV 50/1-6	6/10	1~	280
TOP-S 50/10	6/10	3~	280
TOP-S 50/15	6/10	3~	340
TOP-S 50/4	6/10	1~/3~	240
TOP-S 50/7	6/10	3~	280
TOP-SV 50/6	6/10	1~/3~	280

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

	Motor	Overall length [mm]	Adapter/ note
DN 50			
–	–	–	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	2x F4
Stratos 50/1-9	1~	280	2x F4
Stratos 50/1-9	1~	280	Mod. pipe
Stratos 50/1-9	1~	280	Mod. pipe
Stratos 50/1-12	1~	280	F40
Stratos 50/1-12	1~	280	F40
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	
Stratos 50/1-9	1~	280	
Stratos 50/1-12	1~	280	
Stratos 50/1-12	1~	280	2x F4
Stratos 50/1-8	1~	240	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-10	1~	240	–
–	–	–	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2xF3
Stratos 50/1-12	1~	280	–
IP-E 50/130-2.2/2*	3~	340	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2xF3

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

	Motor	Overall length [mm]	Adapter/ note
DN 50			
TOP-D 50	1~/3~	240	–
–	–	–	–
TOP-S 50/7	3~	280	
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/7	3~	280	2x F4
TOP-S 50/7	3~	280	2x F4
TOP-S 50/10	3~	280	Mod. pipe
TOP-S 50/10	3~	280	Mod. pipe
TOP-S 50/15	3~	340	Mod. pipe
TOP-S 50/15	3~	340	Mod. pipe
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–
TOP-S 50/4	1~/3~	240	–
TOP-S 50/7	3~	280	–
TOP-S 50/10	3~	280	–
TOP-S 50/15	3~	340	–
TOP-S 50/4	1~/3~	240	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-D 50	1~/3~	240	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-S 50/10	3~	280	–
TOP-S 50/15	3~	340	–
TOP-S 50/4	1~/3~	240	–
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo

Single pumps

Type	PN	Motor	Overall length [mm]
DN 65			
D 65	6/10	1~/3~	280
P 65/125 v (r)	6/10	3~	340
P 65/140	6/10	3~	340
P 65/160 r	6/10	3~	340
P 65/200	10	3~	500
P 65/250 (v)	10	3~	500
P 65/250 r	10	3~	475
P 65-1	6/10	1~/3~	340
P 65-2	6/10	1~/3~	340
RS 65	6/10	1~/3~	280
S 65/110	6/10	3~	340
S 65/125 (v) (r)	6/10	3~	340
S 65/140 r	6/10	3~	340
S 65/80 v (r)	6/10	3~	280
Stratos 65/1-12	6/10	1~	340
Stratos 65/1-9	6/10	1~	280
TOP-D 65	6/10	1~	280
TOP-E 65/1-10	6/10	1~	340
TOP-EV 65/1-10	6/10	1~	400
TOP-S 65/10	6/10	3~	340
TOP-S 65/13	6/10	3~	340
TOP-S 65/15	6/10	3~	340
TOP-S 65/7	6/10	3~	280
DN 80			
D 80	6/10	1~/3~	330
H 80-1	6/10	3~	360
H 80-2	6/10	3~	360
P 80/125 v (r)	6	3~	360
P 80/160 (v) (r)	6	3~	360
P 80/200	10	3~	500
P 80/224	10	3~	500
P 80/250 (v) (r)	10	3~	500
P 80-1	6/10	3~	360
P 80-2	6/10	3~	360
S 80	6/10	3~	360
S 80/100 v	6/10	3~	360
S 80/110	6/10	3~	360
S 80/125 (v) (r)	6/10	3~	360
Stratos 80/1-12	6	1~	360

Wilo – new

High-efficiency pumps

infinitely variable, 1~230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 65			
-	-	-	-
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	Mod. pipe
Stratos 65/1-12	1~	340	Mod. pipe
Stratos 65/1-12	1~	340	F41
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	-
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	-
IP-E 65/115-1.5/2*	3~	340	-
Stratos 65/1-9	1~	280	-
Stratos 65/1-12	1~	340	-
Stratos 65/1-9	1~	280	-
-	-	-	-
Stratos 65/1-12	1~	340	-
Stratos 65/1-12	1~	340	2xF11
Stratos 65/1-12	1~	340	-
IP-E 65/115-1.5/2*	3~	340	-
IP-E 65/115-1.5/2*	3~	340	-
Stratos 65/1-9	1~	280	-
DN 80			
-	-	-	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	F42
Stratos 80/1-12	1~	360	F42
Stratos 80/1-12	1~	360	F42
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-

Standard pumps*)

1 or 3 speed stages
1~230 V or 3~400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 65			
TOP-D 65	1~/3~	280	-
TOP-S 65/7	3~	280	2x F11
TOP-S 65/10	3~	340	-
TOP-S 65/10	3~	340	-
TOP-S 65/15	3~	340	Mod. pipe
TOP-S 65/15	3~	340	Mod. pipe
TOP-S 65/15	3~	340	F41
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	-
TOP-S 65/7	3~	280	2x F11
TOP-S 65/13	3~	340	-
TOP-S 65/15	3~	340	-
TOP-S 65/7	3~	280	-
-	-	-	-
TOP-D 65	1~/3~	280	-
-	-	-	-
-	-	-	-
TOP-S 65/10	3~	340	-
TOP-S 65/13	3~	340	-
TOP-S 65/15	3~	340	-
TOP-S 65/7	3~	280	-
DN 80			
TOP-D 80	1~/3~	330	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	F42
TOP-S 80/10	3~	360	F42
TOP-S 80/15	3~	360	F42
TOP-S 80/7	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
-	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Wilo				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 80												
TOP-D 80	6	1~	330	**–**	–	–	–		**TOP-D 80**	1~/3~	330	–
TOP-E 80/1-10	6	1~	360	**Stratos 80/1-12**	1~	360	–		**–**	–	–	–
TOP-S 80/10	6	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/10**	3~	360	–
TOP-S 80/15	6	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/15**	3~	360	–
TOP-S 80/20	6	3~	360	**IP-E 80/140-4/2***	3~	360	–		**TOP-S 80/20**	3~	360	–
TOP-S 80/7	6	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/7**	3~	360	–
DN 100												
D 100	6/10	1~/3~	380	**–**	–	–	–		**TOP-D 100**	1~/3~	380	–
P 100/160 v (r)	6	3~	395	**Stratos 100/1-12**	1~	360	F34		**TOP-S 100/10**	3~	360	F34
P 100/180	6/10	3~	500	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe		**TOP-S 80/15**	3~	360	Mod. pipe
P 100/200 v	10	3~	500	**Stratos 100/1-12**	1~	360	Mod. pipe		**TOP-S 80/15**	3~	360	Mod. pipe
P 100/200 r	10	3~	550	**Stratos 100/1-12**	1~	360	F43		**TOP-S 80/15**	3~	360	Mod. pipe
P 100-1	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34		**TOP-S 100/10**	3~	360	F34
P 100-2	6	1~/3~	395	**Stratos 100/1-12**	1~	360	F34		**TOP-S 100/10**	3~	360	F34
S 100/125 v (r)	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34		**TOP-S 100/10**	3~	360	F34
Stratos 100/1-12	6	1~	360	**Stratos 100/1-12**	1~	360	–		**–**	–	–	–
TOP-D 100	6	1~/3~	380	**–**	–	–	–		**TOP-D 100**	1~/3~	380	–
TOP-E 100/1-10	6	1~	360	**Stratos 100/1-12**	1~	360	–		**–**	–	–	–
TOP-S 100/10	6	3~	360	**Stratos 100/1-12**	1~	360			**TOP-S 100/10**	3~	360	–
DN 125												
D 125	6/10	3~	450	**–**	–	–	–		**TOP-D 125**	3~	450	–
TOP-D 125	6/10	3~	450	**–**	–	–	–		**TOP-D 125**	3~	450	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo

Double pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (pump thread G 2)			
DORS 30/60 r	10	1~	180
DORS 30/70 r	10	1~	180
Star-RSD 30/4	10	1~	180
Star-RSD 30/6	10	1~	180
TOP-SD 30/5	10	1~/3~	180
DN 32			
DOP 32/80 v (r)	6/10	1~/3~	220
DOS 32/80 v (r)	6/10	1~/3~	220
Stratos-D 32/1-12	6/10	1~	220
Stratos-D 32/1-8	6/10	1~	220
TOP-ED 32/1-7	6/10	1~	220
TOP-SD 32/10	6/10	1~/3~	220
TOP-SD 32/7	6/10	1~/3~	220
DN 40			
DOP 40/100 v (r)	6/10	1~/3~	250
DOP 40/160 r	6/10	3~	320
DOS 40/90 v (r)	6/10	1~/3~	250
Stratos-D 40/1-12	6/10	1~	250
Stratos-D 40/1-8	6/10	1~	220
TOP-ED 40/1-10	6/10	1~	250
TOP-ED 40/1-7	6/10	1~	250
TOP-SD 40/10	6/10	3~	250
TOP-SD 40/15	6/10	3~	250
TOP-SD 40/3	6/10	1~/3~	250
TOP-SD 40/7	6/10	1~/3~	250
DN 50			
DOP 50/100 v (r)	6/10	3~	280
DOP 50/160 r	6/10	3~	340
DOS 50/100 v (r)	6/10	3~	280
DOS 50/125 (r)	6/10	3~	280
DOS 50/140 (r)	6/10	3~	340
Stratos-D 50/1-12	6/10	1~	280
Stratos-D 50/1-8	6/10	1~	240
Stratos-D 50/1-9	6/10	1~	280
TOP-ED 50/1-10	6/10	1~	280
TOP-ED 50/1-6	6/10	1~	280

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (pump thread G 2)			
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Stratos-D 32/1-8	1~	220	Mod. pipe
DN 32			
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
DN 40			
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	2x F26
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-12	1~	250	-
-	-	-	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
DN 50			
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-9	1~	280	2x F4
Stratos-D 50/1-9	1~	280	
Stratos-D 50/1-12	1~	280	
-	-	-	-
Stratos-D 50/1-12	1~	280	-
Stratos-D 50/1-8	1~	240	-
Stratos-D 50/1-9	1~	280	-
Stratos-D 50/1-12	1~	280	-
Stratos-D 50/1-8	1~	240	2x F3

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (pump thread G 2)			
Star-RSD 30/4	1~	180	-
Star-RSD 30/6	1~	180	-
Star-RSD 30/4	1~	180	-
Star-RSD 30/6	1~	180	-
TOP-SD 30/5	1~/3~	180	-
DN 32			
Star-RSD 30/4	1~	180	2x RF3
TOP-SD 32/7	1~/3~	220	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-SD 32/10	1~/3~	220	-
TOP-SD 32/7	1~/3~	220	-
DN 40			
TOP-SD 40/3	1~	250	-
TOP-SD 40/7	1~	250	F0+F26
TOP-SD 40/7	1~	250	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/15	3~	250	-
TOP-SD 40/3	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
DN 50			
TOP-SD 50/7	3~	280	-
TOP-SD 50/7	3~	280	2x F4
TOP-SD 50/7	3~	280	-
TOP-SD 50/10	3~	280	-
TOP-SD 50/15	3~	340	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Wilo				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 50											
DOP 50/100 v (r)	6/10	3~	280	**Stratos-D 50/1-8**	1~	240	2x F3	**TOP-SD 50/7**	3~	280	-
TOP-SD 50/15	6/10	3~	340	**-**	-	-	-	**TOP-SD 50/15**	3~	340	-
TOP-SD 50/7	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	-	**TOP-SD 50/7**	3~	280	-
DN 65											
DOP 65/125 v (r)	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-	**TOP-SD 50/7**	3~	280	Mod. pipe
DOP 65/160 r	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-	**TOP-SD 65/10**	3~	340	-
DOS 65/125 v (r)	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-	**TOP-SD 65/10**	3~	340	-
DOS 65/140 r	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	-	**TOP-SD 65/15**	3~	340	-
Stratos-D 65/1-12	6/10	1~	340	**Stratos-D 65/1-12**	1~	340	-	**-**	-	-	-
TOP-ED 65/1-10	6/10	1~	340	**Stratos-D 65/1-12**	1~	340	-	**-**	-	-	-
TOP-SD 65/10	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-	**TOP-SD 65/10**	3~	340	-
TOP-SD 65/13	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-	**TOP-SD 65/13**	3~	340	-
TOP-SD 65/15	6/10	3~	340	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 65/15**	3~	340	-
DN 80											
DOP 80/125 v (r)	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-	**TOP-SD 80/10**	3~	360	-
DOP 80/160 r	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-	**TOP-SD 80/10**	3~	360	-
DOS 80/125 v (r)	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-	**TOP-SD 80/10**	3~	360	-
Stratos-D 80/1-12	6/10	1~	360	**Stratos-D 80/1-12**	1~	360	-	**-**	-	-	-
TOP-ED 80/1-10	6/10	1~	360	**Stratos-D 80/1-12**	1~	360	-	**-**	-	-	-
TOP-SD 80/10	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-	**TOP-SD 80/10**	3~	360	-
TOP-SD 80/15	10	3~	360	**-**	-	-	-	**TOP-SD 80/15**	3~	360	-
TOP-SD 80/20	10	3~	360	**-**	-	-	-	**TOP-SD 80/20**	3~	360	-
DN 100											
DOP 100/160 r	6/10	3~	395	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
DOS 100/125 r	6/10	3~	395	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)											
MX 10-4	10	1~	130	**Stratos PICO 15/1-4-130**	130	1~	–	**Star-RS 15/4-130**	130	1~	–
MX 12-4	10	1~	130	**Stratos PICO 15/1-6-130**	130	1~	–	**Star-RS 15/6-130**	130	1~	–
MX 13-4	10	1~	130	**Stratos 25/1-6**	180	1~	Mod. pipe	**TOP-S 25/5**	180	1~	Mod. pipe
Rp 1 (Pump thread G 1½)											
A 12-1	10	1~	180	**Stratos 25/1-4**	180	1~	–	**-**	–	–	–
A 13-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**-**	–	–	–
A 14-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**-**	–	–	–
A 15-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**-**	–	–	–
AX 12-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**-**	–	–	–
AX 13-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**TOP-S 25/5**	180	1~	–
L 321-1	10	1~/3~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
L 322-1	10	1~/3~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
L 323-1	10	1~/3~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
LX 321-1	10	1~/3~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
LX 322-1	10	1~/3~	180	**Stratos 25/1-4**	180	1~	–	**TOP-S 25/5**	180	1~	–
LX 323-1	10	1~/3~	180	**Stratos 25/1-4**	180	1~	–	**TOP-S 25/5**	180	1~	–
M 10-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
M 10-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
M 12-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
M 12-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
M 13-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
M 13-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/6-130**	130	1~	–
M 14-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/7**	180	1~	–
M 15-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**TOP-S 25/7**	180	1~	–
MC 10-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**-**	–	–	–
MC 12-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**-**	–	–	–
ME 12-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**-**	–	–	–
ME 12-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**-**	–	–	–
ME 13-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**-**	–	–	–
ME 13-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**-**	–	–	–
ME 14-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**-**	–	–	–
ME 15-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**-**	–	–	–
MX 10-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
MX 10-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
MX 12-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
MX 12-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
MX 13-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
MX 13-3	10	1~	130	**Stratos 25/1-6**	180	1~	Mod. pipe	**Star-RS 25/6-130**	130	1~	–
MXE 12-1	10	1~	180	**Stratos 25/1-4**	180	1~	–	**-**	–	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)											
MXE 12-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**–**	–	–	–
MXE 13-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**–**	–	–	–
MXE 13-3	10	1~	130	**Stratos 25/1-6**	180	1~	Mod. pipe	**–**	–	–	–
MXE 14-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**–**	–	–	–
MXE 15-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**–**	–	–	–
NRB 10 S-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRB 10 S-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
NRB 11 S-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRB 11 S-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
NRB 11 SZ-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRB 11-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRB 11-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
NRB 12 S-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
NRB 12 S-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/6-130**	130	1~	–
NRB 12 SZ-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
NRB 12 T-1	10	1~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRB 12 T-3	10	1~	130	**Stratos PICO 25/1-4-130**	130	1~	–	**Star-RS 25/4-130**	130	1~	–
NRB 12-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
NRB 12-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/6-130**	130	1~	–
NRB 13 S-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
NRB 13 S-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/6-130**	130	1~	–
NRB 13 T-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
NRB 13 T-3	10	1~	130	**Stratos PICO 25/1-6-130**	130	1~	–	**Star-RS 25/6-130**	130	1~	–
NRB 13 TE-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**–**	–	–	–
NRB 13 TE-3	10	1~	130	**Stratos 25/1-6**	180	1~	Mod. pipe	**–**	–	–	–
NRB 14 S-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/7**	180	1~	–
NRB 14 T-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/7**	180	1~	–
NRB 15 S-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**TOP-S 25/7**	180	1~	–
NRB 15 T-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**TOP-S 25/7**	180	1~	–
NRB 15 TE-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**–**	–	–	–
NRZ 25 S-1	10	1~/3~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRZ 25-1	10	1~/3~	180	**Stratos PICO 25/1-4**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRZ 30 S-1	10	1~/3~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRZ 30-1	10	1~/3~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
NRZ 35 S-1	10	1~/3~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/5**	180	1~/3~	–
NRZ 35-1	10	1~/3~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/5**	180	1~/3~	–
RB 010-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
RB 10-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
RB 11-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/4**	180	1~	–
RB 12 S-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)											
RB 12-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
RB 13-1	10	1~	180	**Stratos PICO 25/1-6**	180	1~	–	**Star-RS 25/6**	180	1~	–
RB 14-1	10	1~	180	**Stratos 25/1-6**	180	1~	–	**TOP-S 25/5**	180	1~/3~	–
RB 15 S-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**TOP-S 25/7**	180	1~/3~	–
RB 15-1	10	1~	180	**Stratos 25/1-8**	180	1~	–	**TOP-S 25/7**	180	1~/3~	–
Z 24	10	1~	190	**Stratos PICO 25/1-4**	180	1~	Gasket	**Star-RS 25/4**	180	1~	Gasket
Z 33	10	1~	160	**Stratos PICO 25/1-4-130**	130	1~	R1	**Star-RS 25/4-130**	130	1~	R1
Rp 1¼ (Pump thread G 2)											
A 12	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**-**	-	-	-
A 12-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	–	**-**	-	-	-
A 13	10	1~	170	**Stratos 25/1-6-130**	130	1~	2x R7	**-**	-	-	-
A 13-2	10	1~	180	**Stratos 30/1-6**	180	1~	–	**-**	-	-	-
A 14	10	1~	170	**Stratos 25/1-6-130**	130	1~	2x R7	**-**	-	-	-
A 14-2	10	1~	180	**Stratos 30/1-6**	180	1~	–	**-**	-	-	-
A 16-2	10	1~	180	**Stratos 30/1-10**	180	1~	–	**-**	-	-	-
AX 12	10	1~	180	**Stratos 30/1-4**	180	1~	–	**-**	-	-	-
AX 12-2	10	1~	180	**Stratos 30/1-4**	180	1~	–	**-**	-	-	-
AX 13	10	1~	180	**Stratos 30/1-6**	180	1~	–	**-**	-	-	-
BZ 32-1	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
BZ 32-2	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
BZ 32-3	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
BZ 36-1	10	1~/3~	190	**Stratos 30/1-8**	180	1~	Gasket	**TOP-S 30/7**	180	1~/3~	Gasket
BZ 36-1	10	1~/3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~/3~	R10
BZ 36-2	10	1~/3~	190	**Stratos 30/1-8**	180	1~	Gasket	**TOP-S 30/7**	180	1~/3~	Gasket
BZ 36-2 (210)	10	1~/3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~/3~	R10
BZ 36-3	10	1~/3~	190	**Stratos 30/1-8**	180	1~	Gasket	**TOP-S 30/7**	180	1~/3~	Gasket
BZ 36-3 (210)	10	1~/3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~/3~	R10
H 321	10	1~/3~	190	**Stratos 30/1-6**	180	1~	Gasket	**TOP-S 30/7**	180	1~/3~	Gasket
H 322	10	1~/3~	190	**Stratos 30/1-12**	180	1~	Gasket	**TOP-S 30/10**	180	1~/3~	Gasket
HX 321	10	1~/3~	190	**Stratos 30/1-8**	180	1~	Gasket	**TOP-S 30/7**	180	1~/3~	Gasket
HX 321-2	10	1~/3~	180	**Stratos 30/1-8**	180	1~	–	**TOP-S 30/7**	180	1~/3~	–
HX 322	10	1~/3~	190	**Stratos 30/1-12**	180	1~	Gasket	**TOP-S 30/10**	180	1~/3~	Gasket
HX 322-2	10	1~/3~	180	**Stratos 30/1-12**	180	1~	–	**TOP-S 30/10**	180	1~/3~	–
L 321	10	1~/3~	190	**Stratos PICO 30/1-4**	180	1~	Gasket	**Star-RS 30/4**	180	1~	Gasket
L 321-2	10	1~/3~	180	**Stratos PICO 30/1-4**	180	1~	–	**Star-RS 30/4**	180	1~	–
L 322	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
L 322-2	10	1~/3~	180	**Stratos PICO 30/1-6**	180	1~	–	**Star-RS 30/6**	180	1~	–
L 323	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
L 323	10	1~/3~	210	**Stratos PICO 30/1-6**	180	1~	R10	**Star-RS 30/6**	180	1~	R10

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
L 323-2	10	1~/3~	180
L 325	10	1~/3~	190
L 325 (210)	10	1~/3~	210
L 326	10	1~/3~	190
L 326 (210)	10	1~/3~	210
LE 326	10	1~	190
LX 321	10	1~/3~	190
LX 321-2	10	1~/3~	180
LX 322	10	1~/3~	190
LX 322-2	10	1~/3~	180
LX 323	10	1~/3~	190
LX 323-2	10	1~/3~	180
LX 325	10	1~/3~	190
LX 326	10	1~/3~	190
LXE 326	10	1~	190
LXP 326	10	1~	190
M 10	10	1~	170
M 10-2	10	1~	180
M 12	10	1~	170
M 12-2	10	1~	180
M 13	10	1~	170
M 13-2	10	1~	180
M 14	10	1~	170
M 14-2	10	1~	180
M 15	10	1~	170
M 15-2	10	1~	180
MC 10	10	1~	170
MC 12	10	1~	170
ME 12	10	1~	170
ME 12-2	10	1~	180
ME 13	10	1~	170
ME 13-2	10	1~	180
ME 14	10	1~	170
ME 14-2	10	1~	180
ME 15	10	1~	170
ME 15-2	10	1~	180
MX 10	10	1~	170
MX 10-2	10	1~	180
MX 12	10	1~	170
MX 12-2	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Stratos PICO 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	Gasket
Stratos 30/1-6	180	1~	R10
Stratos 30/1-8	180	1~	Gasket
Stratos 30/1-6	180	1~	R10
Stratos 30/1-8	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 30/1-6	180	1~	Gasket
Stratos PICO 30/1-6	180	1~	-
Stratos 30/1-4	180	1~	Gasket
Stratos 30/1-4	180	1~	-
Stratos 30/1-6	180	1~	Gasket
Stratos 30/1-8	180	1~	Gasket
Stratos 30/1-8	180	1~	Gasket
Stratos 30/1-8	180	1~	Gasket
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos 30/1-6	180	1~	Mod. pipe
Stratos 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	Mod. pipe
Stratos 30/1-6	180	1~	-
Stratos 30/1-8	180	1~	Mod. pipe
Stratos 30/1-8	180	1~	-
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-6-130	130	1~	2x R7
Stratos PICO 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	Mod. pipe
Stratos 30/1-6	180	1~	-
Stratos 30/1-8	180	1~	Mod. pipe
Stratos 30/1-8	180	1~	-
Stratos PICO 25/1-6-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-6-130	130	1~	2x R7
Stratos PICO 30/1-6	180	1~	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Star-RS 30/6	180	1~	-
TOP-S 30/7	180	1~/3~	Gasket
TOP-S 30/7	180	1~/3~	R10
TOP-S 30/7	180	1~/3~	Gasket
TOP-S 30/7	180	1~/3~	R10
-	-	-	-
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	-
Star-RS 30/6	180	1~	Gasket
Star-RS 30/6	180	1~	-
TOP-S 30/5	180	1~/3~	Gasket
TOP-S 30/5	180	1~/3~	-
TOP-S 30/5	180	1~/3~	Gasket
TOP-S 30/7	180	1~/3~	Gasket
-	-		-
-	-		-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
TOP-S 30/5	180	1~/3~	Mod. pipe
TOP-S 30/5	180	1~/3~	-
TOP-S 30/5	180	1~/3~	Mod. pipe
TOP-S 30/5	180	1~/3~	-
TOP-S 30/7	180	1~/3~	Mod. pipe
TOP-S 30/7	180	1~/3~	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-S 30/7	180	1~/3~	-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-

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Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)											
MX 13	10	1~	170	**Stratos 30/1-6**	180	1~	Mod. pipe	**Star-RS 25/6-130**	130	1~	2x R7
MX 13-2	10	1~	180	**Stratos 30/1-6**	180	1~	-	**Star-RS 30/6**	180	1~	-
MXE 12	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**-**	-	-	-
MXE 12-2	10	1~	180	**Stratos PICO 30/1-6**	180	1~	-	**-**	-	-	-
MXE 13	10	1~	170	**Stratos 30/1-6**	180	1~	Mod. pipe	**-**	-	-	-
MXE 13-2	10	1~	180	**Stratos 30/1-6**	180	1~	-	**-**	-	-	-
MXE 14	10	1~	170	**Stratos 30/1-6**	180	1~	Mod. pipe	**-**	-	-	-
MXE 14-2	10	1~	180	**Stratos 30/1-6**	180	1~	-	**-**	-	-	-
MXE 15	10	1~	170	**Stratos 30/1-8**	180	1~	Mod. pipe	**-**	-	-	-
MXE 15-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**-**	-	-	-
NRB 10 S	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 10 S-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 11	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 11 S	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 11 S-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 11 SZ	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 11 SZ-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 11-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 12	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 12 S	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 12 S-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 12 SZ	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 12 SZ-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 12 T	10	1~	170	**Stratos PICO 25/1-4-130**	130	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
NRB 12 T-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 12-2	10	1~	180	**Stratos PICO 30/1-4**	180	1~	-	**Star-RS 30/4**	180	1~	-
NRB 13 S	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
NRB 13 S-2	10	1~	180	**Stratos PICO 30/1-6**	180	1~	-	**Star-RS 30/6**	180	1~	-
NRB 13 T	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
NRB 13 T-2	10	1~	180	**Stratos PICO 30/1-6**	180	1~	-	**Star-RS 30/6**	180	1~	-
NRB 13 TE	10	1~	170	**Stratos PICO 30/1-6**	180	1~	Mod. pipe	**-**	-	-	-
NRB 13 TE-2	10	1~	180	**Stratos 30/1-6**	180	1~	-	**-**	-	-	-
NRB 14 S	10	1~	170	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
NRB 14 S-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**TOP-S 30/7**	180	1~/3~	-
NRB 14 T	10	1~	170	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
NRB 14 T-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**TOP-S 30/7**	180	1~/3~	-
NRB 15 S	10	1~	170	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
NRB 15 S-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**TOP-S 30/7**	180	1~/3~	-
NRB 15 T	10	1~	170	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
NRB 15 T-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**TOP-S 30/7**	180	1~/3~	-

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Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
NRB 15 TE	10	1~	170
NRB 15 TE-2	10	1~	180
NRP 30	10	1~	190
NRP 30 S	10	3~	190
NRZ 25	10	1~/3~	190
NRZ 25 S	10	3~	190
NRZ 25 S-2	10	3~	180
NRZ 25-2	10	1~/3~	180
NRZ 30	10	1~/3~	190
NRZ 30 S	10	3~	190
NRZ 30 S-2	10	3~	180
NRZ 30-2	10	1~/3~	180
NRZ 35	10	1~/3~	210
NRZ 35 S	10	3~	210
NRZ 35 S-2	10	3~	180
NRZ 35-2	10	1~/3~	180
NRZ 39-1 S	10	3~	210
NRZ 39-2 S	10	3~	210
NRZ 39-3 S	10	3~	210
NRZ 44-1 S	10	3~	210
P 30-1	10	1~/3~	190
P 30-2	10	1~/3~	190
RB 0	10	1~	170
RB 010	10	1~	170
RB 010-2	10	1~	180
RB 1	10	1~	170
RB 10	10	1~	170
RB 10-2	10	1~	180
RB 11	10	1~	170
RB 11-2	10	1~	180
RB 12 (S)	10	1~	170
RB 12 S-2	10	1~	180
RB 12-2	10	1~	180
RB 13	10	1~	170
RB 13-2	10	1~	180
RB 14	10	1~	170
RB 14-2	10	1~	180
RB 15	10	1~	170
RB 15 S	10	1~	170
RB 15 S-2	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos 30/1-8	180	1~	Mod. pipe
Stratos 30/1-8	180	1~	-
Stratos PICO 30/1-4	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	Gasket
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 30/1-6	180	1~	Gasket
Stratos PICO 30/1-6	180	1~	Gasket
Stratos PICO 30/1-6	180	1~	-
Stratos PICO 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	R10
Stratos 30/1-6	180	1~	R10
Stratos 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	R10
Stratos 30/1-6	180	1~	R10
Stratos 30/1-6	180	1~	R10
Stratos 30/1-8	180	1~	R10
-	-	-	-
-	-	-	-
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-4-130	130	1~	2x R7
Stratos PICO 30/1-4	180	1~	-
Stratos PICO 25/1-6-130	130	1~	2x R7
Stratos PICO 30/1-6	180	1~	-
Stratos PICO 30/1-6	180	1~	-
Stratos PICO 25/1-6-130	130	1~	2x R7
Stratos PICO 30/1-6	180	1~	-
Stratos 30/1-6	180	1~	Mod. pipe
Stratos 30/1-6	180	1~	-
Stratos 30/1-8	180	1~	Mod. pipe
Stratos 30/1-8	180	1~	Mod. pipe
Stratos 30/1-8	180	1~	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
-	-	-	-
-	-	-	-
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	-
Star-RS 30/4	180	1~	-
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	Gasket
Star-RS 30/4	180	1~	-
Star-RS 30/4	180	1~	-
TOP-S 30/4	180	1~/3~	R10
TOP-S 30/4	180	1~/3~	R10
TOP-S 30/4	180	1~/3~	-
TOP-S 30/4	180	1~/3~	-
TOP-S 30/4	180	1~/3~	R10
TOP-S 30/4	180	1~/3~	R10
TOP-S 30/4	180	1~/3~	R10
TOP-S 30/7	180	1~/3~	R10
TOP-D 30	180	1~/3~	Gasket
TOP-D 30	180	1~/3~	Gasket
Star-RS 25/4-130	130	1~	2x R7
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
Star-RS 25/4-130	130	1~	2x R7
Star-RS 30/4	180	1~	-
Star-RS 25/6-130	130	1~	2x R7
Star-RS 30/6	180	1~	-
Star-RS 30/6	180	1~	-
Star-RS 25/6-130	130	1~	2x R7
Star-RS 30/6	180	1~	-
TOP-S 30/4	180	1~/3~	Mod. pipe
TOP-S 30/4	180	1~/3~	-
TOP-S 30/7	180	1~/3~	Mod. pipe
TOP-S 30/7	180	1~/3~	Mod. pipe
TOP-S 30/7	180	1~/3~	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)											
RB 15-2	10	1~	180	**Stratos 30/1-8**	180	1~	-	**TOP-S 30/7**	180	1~/3~	-
RB 2	10	1~	170	**Stratos PICO 25/1-4-130**	180	1~	2x R7	**Star-RS 25/4-130**	130	1~	2x R7
RB 3	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 0	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 04	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 1	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 2	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 3	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
Regula 4	10	1~	170	**Stratos PICO 25/1-6-130**	130	1~	2x R7	**Star-RS 25/6-130**	130	1~	2x R7
RP 30	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/4**	180	1~	Gasket
RZ 25	10	3~	190	**Stratos PICO 30/1-4**	180	1~	Gasket	**Star-RS 30/4**	180	1~	Gasket
RZ 25	10	1~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/4**	180	1~	Gasket
RZ 30	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
RZ 35	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 25-0	10	1~	190	**Stratos PICO 30/1-4**	180	1~	Gasket	**Star-RS 30/4**	180	1~	Gasket
Z 25-01	10	1~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 25-1	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 30-1	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 30-2	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 30-3	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 30-4	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 30-5	10	1~/3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 32-1	10	3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 32-2	10	3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 32-3	10	3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 32-4	10	3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 32-5	10	3~	190	**Stratos PICO 30/1-6**	180	1~	Gasket	**Star-RS 30/6**	180	1~	Gasket
Z 35-1	10	1~/3~	210	**Stratos PICO 30/1-6**	180	1~	R10	**Star-RS 30/6**	180	1~	R10
Z 35-2	10	1~/3~	210	**Stratos PICO 30/1-6**	180	1~	R10	**Star-RS 30/6**	180	1~	R10
Z 35-3	10	1~/3~	210	**Stratos PICO 30/1-6**	180	1~	R10	**Star-RS 30/6**	180	1~	R10
Z 36-1	10	3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~/3~	R10
Z 36-2	10	3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~	R10
Z 36-3	10	3~	210	**Stratos 30/1-8**	180	1~	R10	**TOP-S 30/7**	180	1~	R10

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

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Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Oval flange											
NRF 10 S	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 11 S	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 11 SZ	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 12 S	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 12 SZ	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 12 T	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
NRF 13 S	6	1~	158	**Stratos PICO 30/1-6**	180	1~	Mod. pipe	**Star-RS 30/6**	180	1~	Mod. pipe
NRF 13 T	6	1~	158	**Stratos PICO 30/1-6**	180	1~	Mod. pipe	**Star-RS 30/6**	180	1~	Mod. pipe
NRF 14 S	6	1~	158	**Stratos 30/1-6**	180	1~	Mod. pipe	**TOP-S 30/4**	180	1~/3~	Mod. pipe
NRF 14 T	6	1~	158	**Stratos 30/1-6**	180	1~	Mod. pipe	**TOP-S 30/4**	180	1~/3~	Mod. pipe
NRF 15 S	6	1~	158	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
NRF 15 T	6	1~	158	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
RF 0	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 010	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 1	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 10	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 11	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 12	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 12 S	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 13	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 14	6	1~	158	**Stratos 30/1-6**	180	1~	Mod. pipe	**Star-RS 30/6**	180	1~	Mod. pipe
RF 15	6	1~	158	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
RF 15 S	6	1~	158	**Stratos 30/1-8**	180	1~	Mod. pipe	**TOP-S 30/7**	180	1~/3~	Mod. pipe
RF 2	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe
RF 3	6	1~	158	**Stratos PICO 30/1-4**	180	1~	Mod. pipe	**Star-RS 30/4**	180	1~	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
RP 1½ (Pump thread G 2¼)											
BP 40-1	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
BP 40-2	10	1~/3~	190	**Stratos 25/1-6**	180	1~	2x R12	**–**	–	–	–
BP 40-2	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
BP 40-3	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
L 324	10	1~/3~	190	**Stratos 25/1-6**	180	1~	2x R12	**TOP-S 25/7**	180	1~/3~	2x R12
NBP 40-1	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
NBP 40-1 S	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
NBP 40-2	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
NBP 40-2 S	10	3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
NBP 40-3	10	1~/3~	190	**Stratos PICO 25/1-4**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
P 40-3	10	1~/3~	190	**Stratos PICO 25/1-6**	180	1~	2x R12	**Star-RS 25/4**	180	1~	2x R12
DN 40											
A 401	6/10	1~	220	**Stratos 40/1-10**	220	1~	–	**–**	–	–	–
A 401-1	6/10	1~	250	**Stratos 40/1-10**	220	1~	F1	**–**	–	–	–
A 402	6/16	1~	220	**Stratos 40/1-12**	250	1~	Mod. pipe	**–**	–	–	–
A 402-1	6/16	1~	250	**Stratos 40/1-12**	250	1~	–	**–**	–	–	–
BZ 40-1	6/10	1~/3~	220	**Stratos 40/1-4**	220	1~	–	**TOP-S 40/4**	220	1~/3~	–
BZ 40-2	6/10	1~/3~	220	**Stratos 40/1-4**	220	1~	–	**TOP-S 40/4**	220	1~/3~	–
BZ 40-3	6/10	1~/3~	220	**Stratos 40/1-4**	220	1~	–	**TOP-S 40/4**	220	1~/3~	–
BZ 43-1	6/10	1~/3~	220	**Stratos 30/1-12**	180	1~	2x RF0 + R14	**TOP-S 30/10**	180	1~	2x RF0 + R14
BZ 43-2	6/10	1~/3~	220	**Stratos 30/1-12**	180	1~	2x RF0 + R14	**TOP-S 30/10**	180	1~	2x RF0 + R14
BZ 43-3	6/10	1~/3~	220	**Stratos 30/1-12**	180	1~	2x RF0 + R14	**TOP-S 30/10**	180	1~	2x RF0 + R14
BZ 43-4	6/10	1~/3~	220	**Stratos 30/1-12**	180	1~	2x RF0 + R14	**TOP-S 30/10**	180	1~	2x RF0 + R14
BZ 45-1	6/10	1~/3~	250	**Stratos 40/1-4**	220	1~	F1	**TOP-S 40/4**	220	1~/3~	F1
BZ 45-2	6/10	1~/3~	250	**Stratos 40/1-4**	220	1~	F1	**TOP-S 40/4**	220	1~/3~	F1
BZ 45-3	6/10	1~/3~	250	**Stratos 40/1-4**	220	1~	F1	**TOP-S 40/4**	220	1~/3~	F1
H 402	6/16	1~/3~	220	**Stratos 40/1-8**	220	1~	–	**TOP-S 40/7**	250	1~/3~	Mod. pipe
H 402-1	6/16	1~/3~	250	**Stratos 40/1-8**	220	1~	F1	**TOP-S 40/7**	250	1~/3~	–
HX 402	6/16	1~/3~	220	**Stratos 40/1-8**	220	1~	–	**TOP-S 40/7**	250	1~/3~	Mod. pipe
HX 402-1	6/16	1~/3~	250	**Stratos 40/1-8**	220	1~	F1	**TOP-S 40/7**	250	1~/3~	–
HXE 402 (B)	6/16	1~	220	**Stratos 40/1-8**	220	1~	–	**–**	–	–	–
HXE 402-1 (B)	6/16	1~	250	**Stratos 40/1-8**	220	1~	F1	**–**	–	–	–
HXP 402	6/16	1~	220	**Stratos 40/1-12**	250	1~	Mod. pipe	**–**	–	–	–
HXP 402-1	6/16	1~	250	**Stratos 40/1-12**	250	1~	–	**–**	–	–	–
L 401	6/10	1~/3~	220	**Stratos 40/1-4**	220	1~	–	**TOP-S 40/4**	220	1~/3~	–
L 402	6/10	1~/3~	220	**Stratos 40/1-4**	220	1~	–	**TOP-S 40/4**	220	1~/3~	–
L 403	6/10	1~/3~	250	**Stratos 40/1-4**	220	1~	F1	**TOP-S 40/4**	220	1~/3~	F1
LE 403	6/10	1~	250	**Stratos 40/1-4**	220	1~	F1	**–**	–	–	–
LE 403 (B)	6/10	1~	250	**Stratos 40/1-4**	220	1~	F1	**–**	–	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Type

PN	Motor	Overall length [mm]
DN 40		
LX 401	6/16	1~/3~	220
LX 402	6/16	1~/3~	220
LX 403	6/16	1~/3~	250
LXE 403 (B)	6/16	1~	250
LXP 403	6/16	1~	250
NBZ 40-1	6/10	1~/3~	220
NBZ 40-1 S	6/10	3~	220
NBZ 40-2	6/10	1~/3~	220
NBZ 40-2 S	6/10	3~	220
NBZ 40-3	6/10	1~/3~	220
NBZ 40-3 S	6/10	3~	220
NBZ 45-1	6/10	1~/3~	250
NBZ 45-1 S	6/10	3~	250
NBZ 45-2	6/10	1~/3~	250
NBZ 45-3	6/10	1~/3~	250
Z 40-1	6/10	1~/3~	220
Z 40-2	6/10	1~/3~	220
Z 40-3	6/10	1~/3~	220
Z 40-4	6/10	1~/3~	220
Z 42-1	10	3~	220
Z 42-2	10	3~	220
Z 42-3	10	3~	220
Z 42-4	10	3~	220
Z 45-1	6/10	1~/3~	250
Z 45-2	6/10	1~/3~	250
Z 45-3	6/10	1~/3~	250
DN 50		
A 501	6/16	1~	270
A 502	6/16	1~	270
BP 50-1	6/10	1~/3~	220
BP 50-2	6/10	1~/3~	220
BP 50-3	6/10	1~/3~	220
BP 52-1	6/10	1~/3~	220
BP 52-2	6/10	1~/3~	220
BP 52-3	6/10	1~/3~	220
BZ 50-1	6/10	1~/3~	270
BZ 50-2	6/10	1~/3~	270
BZ 50-3	6/10	1~/3~	270
BZ 55-1	6/10	1~/3~	270

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Motor	Overall length [mm]	Adapter/ note
DN 40		
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	-
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
Stratos 40/1-4	220	1~	F1
DN 50		
Stratos 50/1-8	240	1~	F4
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Motor	Overall length [mm]	Adapter/ note
DN 40		
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	F1
-	-	-	-
-	-	-	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	-
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	F1
TOP-S 40/4	220	1~/3~	F1
DN 50		
-	-	-	-
-	-	-	-
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/7	280	3~	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
DN 50			
BZ 55-2	6/10	1~/3~	270
BZ 55-3	6/10	1~/3~	270
BZ 56-1	6/10	1~/3~	270
BZ 56-2	6/10	1~/3~	270
BZ 56-3	6/10	1~/3~	270
H 501	6/16	1~/3~	270
H 501-1	6/16	1~/3~	280
H 502	6/16	1~/3~	270
H 502-1	6/16	1~/3~	280
HX 501	6/16	1~/3~	270
HX 501-1	6/16	1~/3~	280
HX 502	6/16	1~/3~	270
HX 502-1	6/16	1~/3~	280
HXC 501	6/16	1~	270
HXC 501 (B)	6/16	1~	270
HXC 501-1	6/16	1~	280
HXC 501-1 (B)	6/16	1~	280
L 501	6/10	1~/3~	220
L 502	6/10	1~/3~	220
L 503	6/10	1~/3~	270
L 504	6/10	1~/3~	270
LE 504	6/16	1~	270
LX 502	6/16	1~/3~	220
LX 503	6/16	1~/3~	270
LX 504	6/16	1~/3~	270
LXE 504	6/10	1~	270
LXE 504 (B)	6/16	1~	270
LXP 504	6/16	1~	270
NBP 50-1	6/10	1~/3~	220
NBP 50-1 S	6/10	3~	220
NBP 50-2	6/10	1~/3~	220
NBP 50-2 S	6/10	3~	220
NBP 50-3	6/10	1~/3~	220
NBP 50-3 S	6/10	3~	220
NBZ 50-1	6/10	1~/3~	270
NBZ 50-1 S	6/10	3~	270
NBZ 50-2	6/10	1~/3~	270
NBZ 50-2 S	6/10	3~	270
NBZ 50-3	6/10	1~/3~	270
NBZ 55-1	6/10	1~/3~	270

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-9	280	1~	Mod. pipe
Stratos 50/1-9	280	1~	Mod. pipe
Stratos 50/1-9	280	1~	Mod. pipe
Stratos 50/1-9	280	1~	–
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-12	280	1~	–
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-12	280	1~	–
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-12	280	1~	–
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-12	280	1~	Mod. pipe
Stratos 50/1-12	280	1~	–
Stratos 50/1-12	280	1~	–
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/10	280	3~	Mod. pipe
TOP-S 50/7	280	3~	Mod. pipe
TOP-S 50/7	280	3~	Mod. pipe
TOP-S 50/7	280	3~	Mod. pipe
TOP-S 50/7	280	3~	–
TOP-S 50/10	280	3~	Mod. pipe
TOP-S 50/10	280	3~	–
TOP-S 50/10	280	3~	Mod. pipe
TOP-S 50/10	280	3~	–
TOP-S 50/10	280	3~	Mod. pipe
TOP-S 50/10	280	3~	–
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
-	–	–	–
-	–	–	–
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
-	–	–	–
-	–	–	–
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
DN 50			
NBZ 55-1 S	6/10	3~	270
NBZ 55-2	6/10	1~/3~	270
NBZ 55-3	6/10	1~/3~	270
P 50-3	6/10	1~/3~	220
P 52-1	6/10	3~	220
P 52-2	6/10	3~	220
P 52-3	6/10	3~	220
Z 50-1	6/10	1~/3~	270
Z 50-2	6/10	1~/3~	270
Z 50-3	6/10	1~/3~	270
Z 50-4	6/10	1~/3~	270
Z 55-1	6/10	3~	300
Z 55-2	6/10	3~	300
Z 55-3	6/10	3~	300
DN 65			
A 651	6/16	1~	340
A 652	6/16	1~	340
BP 65-1	6/10	1~/3~	270
BP 65-2	6/10	1~/3~	270
BP 65-3	6/10	1~/3~	270
BZ 58-1	6/10	1~/3~	300
BZ 58-2	6/10	1~/3~	300
BZ 58-3	6/10	1~/3~	300
BZ 60-1	6/10	1~/3~	340
BZ 60-2	6/10	1~/3~	340
BZ 60-3	6/10	1~/3~	340
BZ 65-1	6/10	1~/3~	340
BZ 65-2	6/10	1~/3~	340
BZ 65-3	6/10	1~/3~	340
H 652	6/16	1~/3~	340
HX 652	6/16	1~/3~	340
L 651	6/10	1~/3~	270
L 652	6/10	1~/3~	270
L 653	6/10	1~/3~	300
L 654	6/10	1~/3~	340
L 655	6/10	1~/3~	340
LC 650	6/16	1~	340
LX 652	6/16	1~/3~	270
LX 653	6/16	1~/3~	300

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 50			
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
Stratos 50/1-8	240	1~	F4
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
Stratos 50/1-8	240	1~	Mod. pipe
DN 65			
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-12	340	1~	-
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	Mod. pipe
-	-	-	-
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-12	340	1~	-
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-12	340	1~	-
Stratos 65/1-12	340	1~	-
Stratos 65/1-12	340	1~	-
Stratos 65/1-12	340	1~	-
Stratos 65/1-12	340	1~	-
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	F10
Stratos 65/1-12	340	1~	-
Stratos 65/1-12	340	1~	-
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	F10

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 50			
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-S 50/4	240	1~	F4
TOP-D 50	240	1~	Mod. pipe
TOP-D 50	240	1~	Mod. pipe
TOP-D 50	240	1~	Mod. pipe
TOP-D 50	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
TOP-S 50/4	240	1~	Mod. pipe
DN 65			
-	-	-	-
-	-	-	-
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	Mod. pipe
TOP-D 65	280	3~	Mod. pipe
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/10	340	3~	-
TOP-S 65/7	280	3~	2x F11
TOP-S 65/7	280	3~	2x F11
TOP-S 65/10	340	3~	-
TOP-S 65/10	340	3~	-
TOP-S 65/10	340	3~	-
TOP-S 65/13	340	3~	-
TOP-S 65/13	340	3~	-
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	F10
TOP-S 65/10	340	3~	-
TOP-S 65/10	340	3~	-
-	-	-	-
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	F10

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
DN 65			
LX 654	6/16	1~/3~	340
LX 655	6/16	1~/3~	340
LXC 655	6/16	1~/3~	340
LXC 655 (B)	6/10	1~	340
LXP 654	6/10	1~	340
NBP 65-1	6/10	1~/3~	270
NBP 65-1 S	6/10	3~	270
NBP 65-2	6/10	1~/3~	270
NBP 65-2 S	6/10	3~	270
NBP 65-3	6/10	1~/3~	270
NBP 65-3 S	6/10	3~	270
NBZ 58-1	6/10	1~/3~	300
NBZ 58-1 S	6/10	3~	300
NBZ 58-2	6/10	1~/3~	300
NBZ 58-2 S	6/10	3~	300
NBZ 58-3	6/10	1~/3~	300
NBZ 60-1	6/10	1~/3~	340
NBZ 60-1 S	6/10	3~	340
NBZ 60-2	6/10	1~/3~	340
NBZ 60-2 S	6/10	3~	340
NBZ 60-3	6/10	1~/3~	340
NBZ 65-1	6/10	1~/3~	340
NBZ 65-1 S	6/10	3~	340
NBZ 65-2	6/10	1~/3~	340
NBZ 65-3	6/10	1~/3~	340
P 65-3	6/10	1~/3~	270
P 65-4	6/10	1~/3~	270
Z 58-1	6/10	3~	300
Z 58-2	6/10	3~	300
Z 58-3	6/10	3~	300
Z 60-1	6/10	3~	340
Z 60-2	6/10	3~	340
Z 60-3	6/10	3~	340
Z 65-1	6/10	3~	370
Z 65-2	6/10	3~	370
Z 65-3	6/10	3~	370
Z 65-4	6/10	3~	370

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-12	340	1~	–
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	Mod. pipe
Stratos 65/1-9	280	1~	Mod. pipe
-	–	–	–
-	–	–	–
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-9	280	1~	2x F11
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
Stratos 65/1-12	340	1~	–
-	–	–	–
-	–	–	–
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-9	280	1~	F10
Stratos 65/1-12	340	1~	F11
Stratos 65/1-12	340	1~	F11
Stratos 65/1-12	340	1~	F11
Stratos 65/1-12	340	1~	F11

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
-	–	–	–
-	–	–	–
-	–	–	–
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	Mod. pipe
TOP-S 65/7	280	3~	Mod. pipe
TOP-D 65	280	3~	Mod. pipe
TOP-D 65	280	3~	Mod. pipe
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-S 65/7	280	3~	2x F11
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-S 65/10	340	3~	–
TOP-D 65	280	3~	Mod. pipe
TOP-D 65	280	3~	Mod. pipe
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	F10
TOP-S 65/7	280	3~	2x F11
TOP-S 65/7	280	3~	2x F11
TOP-S 65/7	280	3~	2x F11
TOP-S 65/10	340	3~	F11
TOP-S 65/10	340	3~	F11
TOP-S 65/10	340	3~	F11
TOP-S 65/10	340	3~	F11

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Single pumps

Type

PN	Motor	Overall length [mm]

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Motor	Overall length [mm]	Adapter/ note

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Motor	Overall length [mm]	Adapter/ note

Biral Type	PN	Motor	Overall length [mm]	Wilo – new High-efficiency pumps Type	Motor	Overall length [mm]	Adapter/ note	Wilo – new Standard pumps*) Type	Motor	Overall length [mm]	Adapter/ note
DN 80											
BP 80-1	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BP 80-2	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BP 80-3	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BZ 78-1	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BZ 78-2	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BZ 78-3	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
BZ 80-1	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
BZ 80-2	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
BZ 80-3	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
BZ 85-1	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
BZ 85-2	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
BZ 85-3	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
H 802	6/16	1~/3~	360	**Stratos 80/1-12**	360	1~	–	**TOP-S 80/10**	360	3~	–
HX 802	6/16	1~/3~	360	**Stratos 80/1-12**	360	1~	–	**TOP-S 80/10**	360	3~	–
L 801	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
L 802	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
L 803	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/10**	360	3~	F16
L 804	6/10	1~/3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
L 805	6/10	1~/3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
LC 800	6	3~	400	**Stratos 80/1-12**	360	1~	F18	**–**	–	–	–
LC 805	6	3~	400	**Stratos 80/1-12**	360	1~	F18	**–**	–	–	–
LX 802	6/16	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
LX 803	6/16	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/10**	360	3~	F16
NBP 80-1	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBP 80-1 S	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBP 80-2	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBP 80-2 S	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBP 80-3	6/10	1~/3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBP 80-3 S	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBZ 78-1	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/10**	360	3~	F16
NBZ 78-1 S	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/10**	360	3~	F16
NBZ 78-2	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBZ 78-3	6/10	3~	370	**Stratos 80/1-12**	360	1~	F16	**TOP-S 80/7**	360	3~	F16
NBZ 80-1	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 80-1 S	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 80-2	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 80-3	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 85-1	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 85-1 S	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18
NBZ 85-2	6/10	3~	400	**Stratos 80/1-12**	360	1~	F18	**TOP-S 80/10**	360	3~	F18

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Single pumps

Type	PN	Motor	Overall length [mm]
DN 80			
NBZ 85-2 S	6/10	3~	400
NBZ 85-3	6/10	3~	400
P 80-3	6/10	3~	370
Z 78-1	6/10	3~	370
Z 78-2	6/10	3~	370
Z 78-3	6/10	3~	370
Z 80-1	6/10	3~	400
Z 80-2	6/10	3~	400
Z 80-3	6/10	3~	400
Z 85-1	6/10	3~	410
Z 85-2	6/10	3~	410
Z 85-3	6/10	3~	410
DN 100			
BP 100-1	6/10	3~	450
BP 100-2	6/10	3~	450
BP 100-3	6/10	3~	450
BZ 100-1	6/10	3~	450
BZ 100-2	6/10	3~	450
BZ 100-3	6/10	3~	450
BZ 100-4	6/10	3~	450
L 1001	6/10	3~	450
L 1002	6/10	3~	450
L 1003	6/10	3~	450
L 1004	6/10	3~	450
LC 1000	6/16	3~	450
LC 1003	6/16	3~	450
NBP 100-1	6/10	3~	450
NBP 100-1 S	6/10	3~	450
NBP 100-2	6/10	3~	450
NBP 100-2 S	6/10	3~	450
NBP 100-3	6/10	3~	450
NBP 100-3 S	6/10	3~	450
NBZ 100-1	6/10	3~	450
NBZ 100-1 S	6/10	3~	450
NBZ 100-2	6/10	3~	450
NBZ 100-2 S	6/10	3~	450
NBZ 100-3	6/10	3~	450
NBZ 100-3 S	6/10	3~	450
NBZ 100-4	6/10	3~	450
NBZ 100-4 S	6/10	3~	450

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos 80/1-12	360	1~	F18
Stratos 80/1-12	360	1~	F18
-	-	-	-
Stratos 80/1-12	360	1~	F16
Stratos 80/1-12	360	1~	F16
Stratos 80/1-12	360	1~	F16
Stratos 80/1-12	360	1~	F18
Stratos 80/1-12	360	1~	F18
Stratos 80/1-12	360	1~	F18
Stratos 80/1-12	360	1~	2x F30
Stratos 80/1-12	360	1~	2x F30
Stratos 80/1-12	360	1~	2x F30
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
IP-E 80/115-2.2/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35
IP-E 80/130-3/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
IP-E 80/130-3/2*	360	3~	Mod. pipe
Stratos 100/1-12	360	1~	F34 + F35
Stratos 100/1-12	360	1~	F34 + F35

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-S 80/10	360	3~	F18
TOP-S 80/10	360	3~	F18
TOP-D 80	330	1~	F18
TOP-S 80/7	360	3~	F16
TOP-S 80/7	360	3~	F16
TOP-S 80/7	360	3~	F16
TOP-S 80/7	360	3~	F18
TOP-S 80/7	360	3~	F18
TOP-S 80/7	360	3~	F18
TOP-S 80/10	360	3~	2x F30
TOP-S 80/10	360	3~	2x F30
TOP-S 80/10	360	3~	2x F30
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
-	-	-	-
-	-	-	-
-	-	-	-
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 80/15	360	3~	Mod. pipe
TOP-S 100/10	360	3~	F34 + F35
TOP-S 100/10	360	3~	F34 + F35

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~230 V, 50 Hz Stratos T_{min}: −10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~230 V or 3~400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)											
HD 321	10	1~/3~	190	**Stratos-D 32/1-12**	1~	220	Mod. pipe	–	–	–	–
HD 322	10	1~/3~	190	**Stratos-D 32/1-12**	1~	220	Mod. pipe	**Star-RSD 30/6**	1~	180	Mod. pipe
HXD 321	10	1~/3~	190	**Stratos-D 32/1-12**	1~	220	Mod. pipe	–	–	–	–
HXD 321-2	10	1~/3~	180	**Stratos-D 32/1-12**	1~	220	Mod. pipe	–	–	–	–
HXD 322	10	1~/3~	190	**Stratos-D 32/1-12**	1~	220	Mod. pipe	–	–	–	–
HXD 322-2	10	1~/3~	180	**Stratos-D 32/1-12**	1~	220	Mod. pipe	–	–	–	–
LD 321	10	1~/3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
LD 322	10	1~/3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
LD 323	10	1~/3~	210	–	–	–	–	**TOP-SD 30/5**	1~	180	R10
LXD 321	10	1~/3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
LXD 322	10	1~/3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
LXD 323	10	1~/3~	190	–	–	–	–	**TOP-SD 30/5**	1~	180	Mod. pipe
NZRZ 25 (S)	10	1~/3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
NZRZ 30 (S)	10	1~/3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
NZRZ 35 (S)	10	1~/3~	210	–	–	–	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
ZRZ 25	10	3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
ZRZ 30	10	3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
ZRZ 35	10	3~	210	–	–	–	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
DN 32											
LD 321 PN 16	16	1~/3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
LD 322 PN 16	16	1~/3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
LD 323 PN 16	16	1~/3~	210	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
NZRZ 25	10	1~/3~	190	–	–	–	–	**Star-RSD 30/4**	1~	180	Mod. pipe
NZRZ 30	10	1~/3~	190	–	–	–	–	**Star-RSD 30/6**	1~	180	Mod. pipe
NZRZ 35	10	1~/3~	210	**Stratos-D 32/1-8**	1~	220	Mod. pipe	**TOP-SD 32/7**	1~/3~	220	Mod. pipe
DN 40											
HD 402-1	6/16	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	–
HXD 402-1	6/16	1~/3~	250	**Stratos-D 40/1-12**	1~	250	–	**TOP-SD 40/10**	3~	250	–
HXED 402-1	6/16	1~	220	**Stratos-D 40/1-8**	1~	220	–	–	–	–	–
LD 401	6/16	1~/3~	220	**Stratos-D 40/1-8**	1~	220	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
LD 402	6/16	1~/3~	220	**Stratos-D 40/1-8**	1~	220	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
LD 403	6/16	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	
LED 403	6/16	1~	250	**Stratos-D 40/1-8**	1~	220	F1	–	–	–	–
LXD 401	6/16	1~/3~	220	**Stratos-D 40/1-8**	1~	220	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
LXD 402	6/16	1~/3~	220	**Stratos-D 40/1-8**	1~	220	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
LXD 403	6/16	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	
LXED 403	6/16	1~	250	**Stratos-D 40/1-8**	1~	220	F1	–	–	–	–
NZBZ 40-1	6/10	1~/3~	220	**Stratos-D 40/1-8**	1~	220	–	**TOP-SD 40/3**	1~/3~	250	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Double pumps

Type

PN	Motor	Overall length [mm]

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Motor	Overall length [mm]	Adapter/ note

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Motor	Overall length [mm]	Adapter/ note

Biral: Type	PN	Biral: Motor	Biral: Overall length [mm]	Wilo – new: High-efficiency pumps: Type	Motor	Overall length [mm]	Adapter/ note	Wilo – new: Standard pumps*): Type	Motor	Overall length [mm]	Adapter/ note
DN 40											
NZBZ 40-1 S	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
NZBZ 40-2	6/10	1~/3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
NZBZ 40-2 S	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
NZBZ 40-3	6/10	1~/3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
NZBZ 40-3 S	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
NZBZ 45-1	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
NZBZ 45-1 S	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
NZBZ 45-2	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
NZBZ 45-3	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
ZBZ 40-1	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
ZBZ 40-2	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
ZBZ 40-3	6/10	3~	220	**Stratos-D 40/1-8**	1~	220	-	**TOP-SD 40/3**	1~/3~	250	Mod. pipe
ZBZ 45-1	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
ZBZ 45-2	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
ZBZ 45-3	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1	**TOP-SD 40/7**	1~/3~	250	-
DN 50											
HD 501-1	6/16	1~/3~	280	**Stratos-D 50/1-9**	1~	280	-	**TOP-SD 50/7**	3~	280	-
HD 502-1	6/16	1~/3~	280	**Stratos-D 50/1-12**	1~	280	-	**TOP-SD 50/10**	3~	280	-
HXCD 501-1	6/16	1~/3~	280	**Stratos-D 50/1-12**	1~	280	-	**-**	-	-	-
HXD 501-1	6/16	1~/3~	280	**Stratos-D 50/1-9**	1~	280	-	**TOP-SD 50/7**	3~	280	-
HXD 502-1	6/16	1~/3~	280	**Stratos-D 50/1-12**	1~	280	-	**TOP-SD 50/10**	3~	280	-
LD 503	6/10	1~/3~	270	**Stratos-D 50/1-8**	1~	240	F4	**TOP-SD 50/7**	3~	280	Mod. pipe
LD 504	6/10	1~/3~	270	**Stratos-D 50/1-8**	1~	240	F4	**TOP-SD 50/7**	3~	280	Mod. pipe
LED 504	6/16	1~	270	**Stratos-D 50/1-8**	1~	240	F4	**-**	-	-	-
LXD 503	6/16	1~/3~	270	**Stratos-D 50/1-8**	1~	240	F4	**TOP-SD 50/7**	3~	280	Mod. pipe
LXD 504	6/16	1~/3~	270	**Stratos-D 50/1-8**	1~	240	F4	**TOP-SD 50/7**	3~	280	Mod. pipe
LXED 504	6/16	1~	270	**Stratos-D 50/1-8**	1~	240	F4	**-**	-	-	-
NZBZ 50-1	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 50-1 S	6/10	3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 50-2	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 50-2 S	6/10	3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 50-3	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 55-1	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 55-1 S	6/10	3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 55-2	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
NZBZ 55-3	6/10	1~/3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
ZBZ 50-1	6/10	3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe
ZBZ 50-2	6/10	3~	270	**Stratos-D 50/1-9**	1~	280	Mod. pipe	**TOP-SD 50/7**	3~	280	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Double pumps

Type	PN	Motor	Overall length [mm]
DN 50			
ZBZ 50-3	6/10	3~	270
ZBZ 55-1	6/10	3~	270
ZBZ 55-2	6/10	3~	270
ZBZ 55-3	6/10	3~	270
DN 65			
HD 652	6/16	1~/3~	340
HXD 652	6/16	1~/3~	340
LCD 650	6/16	1~	340
LD 653	6/10	1~/3~	300
LD 654	6/10	1~/3~	340
LD 655	6/10	1~/3~	340
LXCD 655	6/10	1~	340
LXD 653	6/16	1~/3~	300
LXD 654	6/16	1~/3~	340
LXD 655	6/16	1~/3~	340
NZBZ 58-1	6/10	1~/3~	300
NZBZ 58-1 S	6/10	3~	300
NZBZ 58-2	6/10	1~/3~	300
NZBZ 58-2 S	6/10	3~	300
NZBZ 58-3	6/10	1~/3~	300
NZBZ 60-1	6/10	1~/3~	340
NZBZ 60-1 S	6/10	3~	340
NZBZ 60-2	6/10	1~/3~	340
NZBZ 60-2 S	6/10	3~	340
NZBZ 60-3	6/10	1~/3~	340
NZBZ 65-1	6/10	1~/3~	340
NZBZ 65-1 S	6/10	3~	340
NZBZ 65-2	6/10	1~/3~	340
NZBZ 65-3	6/10	1~/3~	340
ZBZ 58-1	6/10	3~	300
ZBZ 58-2	6/10	3~	300
ZBZ 58-3	6/10	3~	300
ZBZ 60-1	6/10	3~	340
ZBZ 60-2	6/10	3~	340
ZBZ 60-3	6/10	3~	340
ZBZ 65-1	6/10	3~	340
ZBZ 65-2	6/10	3~	340
ZBZ 65-3	6/10	3~	340

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: −10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 50/1-9	1~	280	Mod. pipe
Stratos-D 50/1-9	1~	280	Mod. pipe
Stratos-D 50/1-9	1~	280	Mod. pipe
Stratos-D 50/1-9	1~	280	Mod. pipe
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	Mod. pipe
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 65/13	3~	340	–
TOP-SD 65/13	3~	340	–
-	–	–	–
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 50/7	3~	280	Mod. pipe
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–
TOP-SD 65/10	3~	340	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Double pumps

Type

PN	Motor	Overall length [mm]

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Motor	Overall length [mm]	Adapter/ note

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Motor	Overall length [mm]	Adapter/ note

Biral				Wilo – new					Wilo – new			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 80												
HD 802	6/16	1~/3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 80/10**	3~	360	-
HXD 802	6/16	1~/3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 80/10**	3~	360	-
LCD 805	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
LD 801	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
LD 802	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
LD 803	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
LD 804	6/10	1~/3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
LD 805	6/10	1~/3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
LXD 802	6/16	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
LXD 803	6/16	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-1	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-1 S	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-2	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-2 S	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-3	6/10	1~/3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBP 80-3 S	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBZ 78-1	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBZ 78-1 S	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBZ 78-2	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBZ 78-3	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
NZBZ 80-1	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
NZBZ 80-1 S	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
NZBZ 80-2	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
NZBZ 80-3	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
NZBZ 85-1	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
NZBZ 85-1 S	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
NZBZ 85-2	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
NZBZ 85-2 S	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
NZBZ 85-3	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**-**	-	-	-
ZBP 80-1	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBP 80-2	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBP 80-3	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBZ 78-1	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBZ 78-2	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBZ 78-3	6/10	3~	370	**Stratos-D 80/1-12**	1~	360	F16		**TOP-SD 80/10**	3~	360	F16
ZBZ 80-1	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
ZBZ 80-2	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
ZBZ 80-3	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
ZBZ 85-1	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18
ZBZ 85-2	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18		**TOP-SD 80/10**	3~	360	F18

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Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Biral

Double pumps

Type

PN	Motor	Overall length [mm]

Wilo – new

High-efficiency pumps
infinitely variable, 1~230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Motor	Overall length [mm]	Adapter/ note

Standard pumps*)
1 or 3 speed stages
1~230 V or 3~400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Motor	Overall length [mm]	Adapter/ note

Biral Type	PN	Motor	Overall length [mm]	Wilo – new High-efficiency pumps Type	Motor	Overall length [mm]	Adapter/ note	Wilo – new Standard pumps*) Type	Motor	Overall length [mm]	Adapter/ note
DN 100											
ZBZ 85-3	6/10	3~	400	**Stratos-D 80/1-12**	1~	360	F18	**TOP-SD 80/10**	3~	360	F18
LCD 1003	6/10	3~	450	**DP-E 80/115-2.2/2***	3~	360	Mod. pipe	**–**	–	–	–
LD 1001	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
LD 1002	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
LD 1003	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
LD 1004	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBP 100-1	6/10	1~/3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBP 100-1 S	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBP 100-2	6/10	1~/3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBP 100-2 S	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBP 100-3	6/10	1~/3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBP 100-3 S	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
NZBZ 100-1	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-1 S	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-2	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-2 S	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-3	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-3 S	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-4	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
NZBZ 100-4 S	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
ZBP 100-1	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
ZBP 100-2	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
ZBP 100-3	6/10	3~	450	**Stratos-D 80/1-12**	1~	360	Mod. pipe	**TOP-SD 80/10**	3~	360	Mod. pipe
ZBZ 100-1	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
ZBZ 100-2	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
ZBZ 100-3	6/10	3~	450	**–**	–	–	–	**–**	–	–	–
ZBZ 100-4	6/10	3~	450	**–**	–	–	–	**–**	–	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)												
Alpha 15-40 130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**-**	-	-	-
Alpha 15-60 130	10	1~	130	**Stratos PICO 15/1-6**	1~	130	-		**-**	-	-	-
Alpha Pro 15-40 130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**-**	-	-	-
Alpha Pro 15-60 130	10	1~	130	**Stratos PICO 15/1-6**	1~	130	-		**-**	-	-	-
Alpha+ 15-40 130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**-**	-	-	-
Alpha+ 15-60 130	10	1~	130	**Stratos PICO 15/1-6**	1~	130	-		**-**	-	-	-
Alpha2 15-40 130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**-**	-	-	-
Alpha2 15-60 130	10	1~	130	**Stratos PICO 15/1-6**	1~	130	-		**-**	-	-	-
UPE 15-40-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**-**	-	-	-
UPE 15-60-130	10	1~	130	**Stratos PICO 15/1-6**	1~	130	-		**-**	-	-	-
UPS 15-20-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/2**	-	130	-
UPS 15-30-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/2**	-	130	-
UPS 15-40-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/4**	1~	130	-
UPS 15-45-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/4**	1~	130	-
UPS 15-45x16	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/4**	1~	130	-
UPS 15-50-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/6**	1~	130	-
UPS 15-60-130	10	1~	130	**Stratos PICO 15/1-4**	1~	130	-		**Star-RS 15/6**	1~	130	-
Rp ¾ (Pump thread G 1¼)												
UM 17-20	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 15/4-130**	1~	130	Mod. pipe
UMS 17-20	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 15/4-130**	1~	130	Mod. pipe
UP 15-12	10	1~/3~	180	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UP 15-12x17	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 15/4-130**	1~	130	Mod. pipe
UP 17-35	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UP 17-50	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 15-20 x17	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 15/4-130**	1~	130	Mod. pipe
UPS 15-35x17	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 15-45x17	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 17-35	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 17-45	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 17-60	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/6-130**	1~	130	Mod. pipe
UPS 20-20 XD	10	1~	180	**Stratos PICO 25/1-4**	1~	180	Mod. pipe		**Star-RS 25/2**	1~	180	Mod. pipe
UPS 20-40 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/4-130**	1~	130	Mod. pipe
UPS 20-40 XD	10	1~	180	**Stratos PICO 25/1-6**	1~	180	Mod. pipe		**Star-RS 25/4**	1~	180	Mod. pipe
UPS 20-50 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/6-130**	1~	130	Mod. pipe
UPS 20-60 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe		**Star-RS 25/6-130**	1~	130	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: −10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)											
Alpha 25-40	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
Alpha 25-40 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Alpha 25-60	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
Alpha 25-60 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Alpha Pro 25-40	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
Alpha Pro 25-40 130	10	1~	130	**Stratos PICO 25/1-4-130**	1~	130	-	**-**	-	-	-
Alpha Pro 25-60	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
Alpha Pro 25-60 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Alpha+ 25-40	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
Alpha+ 25-40 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Alpha+ 25-60	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
Alpha+ 25-60 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Alpha2 25-40	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
Alpha2 25-40 130	10	1~	130	**Stratos PICO 25/1-4-130**	1~	130	-	**-**	-	-	-
Alpha2 25-60	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
Alpha2 25-60 130	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
Magna 25-100	10	1~	180	**Stratos 25/1-10**	1~	180	-	**-**	-	-	-
Magna 25-40	10	1~	180	**Stratos 25/1-4**	1~	180	-	**-**	-	-	-
Magna 25-60	10	1~	180	**Stratos 25/1-6**	1~	180	-	**-**	-	-	-
UM 18-20	10	3~	130	**Stratos PICO 25/1-4-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	R1
UM 19-20	10	1~/3~	160	**Stratos PICO 25/1-4-130**	1~	130	R1	**Star-RS 25/4-130**	1~	130	R1
UM 20-13	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UM 20-15	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UM 20-20	10	1~/3~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UM 25-20	10	1~/3~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
UM 25-20 (Th)	10	3~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
UM 26-20	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UMS 18-20	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
UMS 19-20	10	1~	160	**Stratos PICO 25/1-6-130**	1~	130	R1	**Star-RS 25/4-130**	1~	130	R1
UMS 20-20	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UMS 25-20	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
UNIVERSEL	10	1~	170	**Stratos PICO 25/1-6-130**	1~	130	R2	**Star-RS 25/4-130**	1~	130	R2
UP 18-35	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
UP 18-50	10	1~/3~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
UP 18-65	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/6-130**	1~	130	-
UP 19-35	10	1~/3~	160	**Stratos PICO 25/1-6-130**	1~	130	R1	**Star-RS 25/4-130**	1~	130	R1
UP 19-50	10	1~/3~	160	**Stratos PICO 25/1-6-130**	1~	130	R1	**Star-RS 25/4-130**	1~	130	R1
UP 20-20	10	1~/3~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
UP 20-35	10	1~/3~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos

Single pumps

Type

Type	PN	Motor	Overall length [mm]
Rp 1 (Pump thread G 1½)			
UP 20-50	10	1~/3~	180
UP 25-25	10	3~	180
UP 25-30 n	6/10	1~/3~	150
UP 25-55	10	1~/3~	180
UP 25-55 Th	10	3~	180
UP 25-80	10	1~/3~	180
UP 25-80 (Th)	10	3~	180
UP 26	10	1~	180
UP 26-35	10	1~	180
UP 26-50	10	1~	180
UP 26-65	10	1~/3~	180
UP 26-80	10	3~	180
UPE 25-25	10	1~	180
UPE 25-40	10	1~	180
UPE 25-40 130	10	1~	130
UPE 25-45	10	1~	180
UPE 25-60	10	1~	180
UPE 25-60 130	10	1~	130
UPE 25-80	10	1~	180
UPI 15-35x20	10	1~	180
UPI 15-45x20	10	1~/3~	180
UPM 20-35	10	1~	180
UPS 15-20x20	10	1~	180
UPS 15-35x18	10	1~	130
UPS 15-35x20	10	1~	180
UPS 15-40	10	1~	130
UPS 15-45x18	10	1~	130
UPS 15-45x20	10	1~	180
UPS 15-50 x18	10	1~	130
UPS 18-35	10	1~	130
UPS 18-38	10	1~	130
UPS 18-45	10	1~	130
UPS 18-60	10	1~	130
UPS 19-35	10	1~	160
UPS 19-45	10	1~	160
UPS 19-60	10	1~	160
UPS 20-35	10	1~	180
UPS 20-45	10	1~	180
UPS 20-60	10	1~	180
UPS 20-60 K	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6-RG	1~	180	Mod. pipe
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos 25/1-8	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4-130	1~	130	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos 25/1-8	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4-130	1~	130	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	R1
Stratos PICO 25/1-6-130	1~	130	R1
Stratos PICO 25/1-6-130	1~	130	R1
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Star-RS 25/6	1~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/4-RG	1~	180	Mod. pipe
TOP-S 25/5	1~/3~	180	-
TOP-S 25/5	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-
TOP-S 25/7	1~/3~	180	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/2	1~	180	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/4	1~	180	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/6	1~	180	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/4-130	1~	130	R1
Star-RS 25/4-130	1~	130	R1
Star-RS 25/6-130	1~	130	R1
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos

Single pumps

Type

Type	PN	Motor	Overall length [mm]
Rp 1 (Pump thread G 1½)			
UPS 25-120	10	1~	180
UPS 25-20	10	1~	180
UPS 25-20x18	10	1~	130
UPS 25-25	10	1~	180
UPS 25-30	10	1~	180
UPS 25-40	10	1~/3~	180
UPS 25-40 130	10	1~	130
UPS 25-50	10	1~/3~	180
UPS 25-50 130	10	1~	130
UPS 25-50/120	10	1~	120
UPS 25-50/160	10	1~	160
UPS 25-55	10	1~	180
UPS 25-60	10	1~/3~	180
UPS 25-60 130	10	1~	130
UPS 25-60 K	10	1~	180
UPS 25-60 T	10	1~	180
UPS 25-60/120	10	1~	120
UPS 25-80	10	1~	180
UPS 26-80	10	1~	180
Rp 1 (Pump thread G 1½) Pumps with connection for quick bleeder			
Alpha Pro 25-40 A	10	1~	180
Alpha Pro 25-60 A	10	1~	180
Alpha+ 25-40 A	10	1~	180
Alpha+ 25-60 A	10	1~	180
UPE 25-40 A	10	1~	180
UPE 25-60 A	10	1~	180
UPS 22-35	10	1~	180
UPS 22-45	10	1~	180
UPS 22-60	10	1~	180
UPS 23-35	10	1~	180
UPS 23-45	10	1~	180
UPS 23-60	10	1~	180
UPS 25-20 A/V	10	1~	180
UPS 25-30 A	10	1~	180
UPS 25-40 A/V	10	1~	180
UPS 25-60 A/V	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)			
Stratos 30/1-12	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos PICO 25/1-6-130	1~	130	R1
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6-RG	1~	180	-
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos 25/1-8	1~	180	-
Stratos 25/1-8	1~	180	-
Rp 1 (Pump thread G 1½) Pumps with connection for quick bleeder			
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)			
TOP-S 30/10	1~/3~	180	Mod. pipe
Star-RS 25/2	1~	180	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/6	1~	180	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/6	1~	180	Mod. pipe
Star-RS 25/6-130	1~	130	R1
TOP-S 25/5	1~/3~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/6	1~	180	-
Star-RS 25/6-RG	1~	180	-
Star-RS 25/6	1~	180	Mod. pipe
TOP-S 25/7	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
Rp 1 (Pump thread G 1½) Pumps with connection for quick bleeder			
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-
Star-RSL 25/6	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G2)												
Alpha 32-40	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-		**-**	-	-	-
Alpha 32-60	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-		**-**	-	-	-
Alpha Pro 32-40	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-		**-**	-	-	-
Alpha Pro 32-60	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-		**-**	-	-	-
Alpha+ 32-40	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-		**-**	-	-	-
Alpha+ 32-60	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-		**-**	-	-	-
Alpha2 32-40	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-		**-**	-	-	-
Alpha2 32-60	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-		**-**	-	-	-
GD 30	10	1~/3~	206	**Stratos PICO 30/1-6**	1~	180	R9		**TOP-D 30**	1~/3~	180	R9
Magna 32-100	10	1~	180	**Stratos 30/1-10**	1~	180	-		**-**	-	-	-
Magna 32-100 N	10	1~	180	**Stratos-Z 30/1-8**	1~	180	-		**-**	-	-	-
Magna 32-40	10	1~	180	**Stratos 30/1-4**	1~	180	-		**-**	-	-	-
Magna 32-60	10	1~	180	**Stratos 30/1-6**	1~	180	-		**TOP-S 30/5**	1~/3~	180	-
UM 32-20 (180)	10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	-		**Star-RS 30/4**	1~	180	-
UM 32-20 (200)	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UM 36-20	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UM 36-20 R	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UMS 32-20 (180)	10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	-		**Star-RS 30/4**	1~	180	-
UMS 32-20 (200)	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UMS 36-20 R	10	1~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UMS 40-20	10	1~/3~	180	**Stratos PICO 30/1-4**	1~	180	-		**Star-RS 30/4**	1~	180	-
UP 32-25	10	3~	180	**Stratos PICO 30/1-4**	1~	180	-		**Star-RS 30/4**	1~	180	-
UP 32-50	10	1~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/6**	1~	180	R8
UP 32-50 G	10	3~	200	**Stratos 30/1-6**	1~	180	R8		**TOP-S 30/4**	1~/3~	180	R8
UP 32-55	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-		**Star-RS 30/6**	1~	180	-
UP 32-55 (G)	10	3~	180	**Stratos 30/1-6**	1~	180	-		**TOP-S 30/4**	1~	180	-
UP 32-80	10	3~	180	**Stratos 30/1-12**	1~	180	-		**TOP-S 30/10**	1~/3~	180	-
UP 35 (Rp 1 1/4)	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UP 40-37	10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	-		**Star-RS 30/6**	1~	180	-
UP 40-75	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-		**TOP-S 30/10**	1~/3~	180	-
UP 40-75 R	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-		**TOP-S 30/10**	1~/3~	180	-
UP 40-80	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-		**TOP-S 30/10**	1~/3~	180	-
UP 40-80 R	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-		**TOP-S 30/10**	1~/3~	180	-
UP 42-42	10	1~/3~	200	**Stratos 30/1-8**	1~	180	R8		**TOP-S 30/7**	1~/3~	180	R8
UP 42-42 R	10	1~/3~	200	**Stratos 30/1-8**	1~	180	R8		**TOP-S 30/7**	1~/3~	180	R8
UP 42-50	10	1~/3~	200	**Stratos 30/1-12**	1~	180	R8		**TOP-S 30/10**	1~/3~	180	R8
UP 42-50 R	10	1~/3~	200	**Stratos 30/1-8**	1~	180	R8		**TOP-S 30/7**	1~/3~	180	R8
UP 45 R	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	R8		**Star-RS 30/4**	1~	180	R8
UPE 32-25	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-		**-**	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos

Single pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G2)			
UPE 32-40	10	1~	180
UPE 32-45	10	1~	180
UPE 32-60	10	1~	180
UPE 32-80	10	1~	180
UPS 15-20x40	10	1~	180
UPS 15-35x40	10	1~	180
UPS 15-45x40	10	1~	180
UPS 32-20	10	1~	180
UPS 32-25	10	1~	180
UPS 32-30	10	1~	180
UPS 32-40	10	1~	180
UPS 32-50	10	1~/3~	180
UPS 32-50 G	10	1~	200
UPS 32-55	10	1~/3~	180
UPS 32-55 (G)	10	1~	180
UPS 32-60	10	1~	180
UPS 32-80	10	1~	180
UPS 40-35	10	1~	180
UPS 40-45	10	1~	180
UPS 40-62	10	1~/3~	180
UPS 40-80	10	1~/3~	180
UPS 40-80 R	10	1~	180
UPS 42-50	10	1~/3~	200
UPS 42-50 R	10	1~	200
DN 25 oval flange			
UP 21-20	10	1~	120
UP 21-50	10	1~	120
UP 21-65	10	1~	120
UP 21-20 (V)	10	1~	120
UP 21-35 (V)	10	1~/3~	120
UPS 15-35x21	10	1~	120
UPS 15-45x21	10	1~	120
UPS 21-35	10	1~	120
UPS 21-40	10	1~	120
UPS 21-45	10	1~	120
UPS 21-60 F	10	1~	120

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: −10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G2)			
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-8	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-8	1~	180	R8
Stratos 30/1-8	1~	180	-
Stratos 30/1-8	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-10	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-12	1~	180	-
Stratos 30/1-12	1~	180	-
Stratos 30/1-12	1~	180	-
Stratos 30/1-8	1~	180	R8
DN 25 oval flange			
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos PICO 25/1-6	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-4	1~	180	Mod. pipe
Stratos PICO 25/1-6	1~	180	Mod. pipe

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G2)			
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
Star-RS 30/2	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/2	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/7	1~/3~	180	R8
TOP-S 30/7	1~/3~	180	-
TOP-S 30/7	1~/3~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/10	1~/3~	180	-
Star-RS 30/6	1~	180	-
Star-RS 30/6	1~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/10	1~/3~	180	-
TOP-S 30/10	1~/3~	180	-
TOP-S 30/10	1~/3~	180	R8
TOP-S 30/7	1~/3~	180	R8
DN 25 oval flange			
Star-RS 25/6	1~	180	Mod. pipe
Star-RS 25/6	1~	180	Mod. pipe
Star-RS 25/6	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/4	1~	180	Mod. pipe
Star-RS 25/6	1~	180	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 32 square flange												
UM 36-20 F	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	Mod. pipe		**Star-RS 30/4**	1~	180	Mod. pipe
UM 40-12 F	10	1~/3~	200	**Stratos PICO 30/1-4**	1~	180	Mod. pipe		**Star-RS 30/2**	1~	180	Mod. pipe
UP 40-37 F	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	Mod. pipe		**Star-RS 30/6**	1~	180	Mod. pipe
UP 40-75 F	10	1~	200	**Stratos 30/1-8**	1~	180	Mod. pipe		**TOP-S 30/7**	1~/3~	180	Mod. pipe
DN 32												
Magna 32-100 F	6/10	1~	220	**Stratos 32/1-10**	1~	220	-		**-**	-	-	-
Magna 32-120 F	6/10	1~	220	**Stratos 32/1-12**	1~	220	-		**-**	-	-	-
Magna 32-120 FN	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3		**-**	-	-	-
Magna UPE 32-120 F	6/10	1~	220	**Stratos 32/1-12**	1~	220	-		**-**	-	-	-
Magna UPE 32-120 FB	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3		**-**	-	-	-
Magna UPE 32-120 FN	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3		**-**	-	-	-
UMC 32-30	6/10	1~/3~	220	**Stratos 30/1-6**	1~	180	2x RF3		**TOP-S 30/5**	1~/3~	180	2x RF3
UMK 32-30	6/10	1~/3~	220	**Stratos 30/1-6**	1~	180	2x RF3		**TOP-S 30/5**	1~/3~	180	2x RF3
UMS 36-20 F	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/6**	1~	180	RF1 + RF3
UP 32-0	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/4**	1~	180	RF1 + RF3
UP 32-1	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/4**	1~	180	RF1 + RF3
UP 32-2	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/4**	1~	180	RF1 + RF3
UP 32-3	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/4**	1~	180	RF1 + RF3
UP 35 (DN 32)	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/4**	1~	180	RF1 + RF3
UP 45 (DN 32)	10	1~/3~	200	**Stratos PICO 30/1-6**	1~	180	RF1 + RF3		**Star-RS 30/6**	1~	180	RF1 + RF3
UPC 32-120	6/10	1~/3~	220	**Stratos 32/1-12**	1~	220	-		**TOP-S 30/10**	1~/3~	180	2x RF3
UPC 32-60	6/10	1~/3~	220	**Stratos 30/1-8**	1~	180	2x RF3		**TOP-S 30/7**	1~/3~	180	2x RF3
UPE 32-120 (F)	6/10	1~	220	**Stratos 32/1-12**	1~	220	-		**-**	-	-	-
UPE 32-120 FB	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3		**-**	-	-	-
UPE 32-80 F	6/10	1~	220	**Stratos 32/1-12**	1~	220	-		**-**	-	-	-
UPK 32-120	6/10	1~/3~	220	**Stratos 32/1-12**	1~	220	-		**TOP-S 30/10**	1~/3~	180	2x RF3
UPK 32-60	6/10	1~/3~	220	**Stratos 32/1-12**	1~	220	-		**TOP-S 30/10**	1~/3~	180	2x RF3
UPS 32-120 F	6/10	1~/3~	220	**Stratos 32/1-12**	1~	220	-		**TOP-S 40/10**	3~	250	Mod. pipe
UPS 32-30 F	6/10	1~/3~	220	**Stratos 30/1-6**	1~	180	2x RF3		**TOP-S 30/5**	1~	180	2x RF3
UPS 32-35		-	180	**Stratos PICO 30/1-4**	1~	180	2x RF1		**Star-RS 30/4**	1~/3~	180	2x RF1
UPS 32-60 F	6/10	1~/3~	220	**Stratos 32/1-12**	1~	220	-		**TOP-S 30/10**	1~/3~	180	2x RF3
UPS 32-80 F	6/10	1~	220	**Stratos 32/1-10**	1~	220	-		**TOP-S 30/10**	1~/3~	180	2x RF3

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos

Single pumps

Type	PN	Motor	Overall length [mm]
DN 40			
GD 40	6/10	1~/3~	220
Magna 40-100 F	6/10	1~	220
Magna 40-120 F	6/10	1~	250
Magna 40-120 FN	6/10	1~	250
Magna UPE 40-120 F	6/10	1~	250
Magna UPE 40-120 FB	6/10	1~	250
Magna UPE 40-120 FN	6/10	1~	250
Magna-D 40-100 F	6/10	1~	250
UMC 40-30	6/10	1~/3~	250
UMC 40-60	6/10	1~/3~	250
UMK 40-30	6/10	1~/3~	250
UMK 40-60	6/10	1~/3~	250
UMS 40-30	6/10	1~/3~	250
UP 40-50 F	6/10	3~	250
UP 40-80 F	6/10	3~	250
UP 42-42 F	6/10	1~/3~	250
UP 42-50 F	6/10	1~/3~	250
UP 42-70	6	1~/3~	250
UP 42-80	6	3~	250
UPC 40-120	6/10	1~/3~	250
UPC 40-60	6/10	1~/3~	250
UPE 40-120 (F)	6/10	1~	250
UPE 40-120 (F)B	6/10	1~	250
UPE 40-80 (F)	6/10	1~	250
UPK 40-120	6/10	1~/3~	250
UPK 40-180	6/10	1~/3~	250
UPK 40-60	6/10	1~/3~	250
UPS 40-120	6/10	1~/3~	250
UPS 40-120 F	6/10	1~/3~	250
UPS 40-120 FB	6/10	1~/3~	250
UPS 40-180 F	6/10	1~/3~	250
UPS 40-185 F	6/10	1~/3~	250
UPS 40-30 F	6/10	1~/3~	250
UPS 40-50 F	6/10	1~	250
UPS 40-60	6/10	1~/3~	250
UPS 40-60/2 F	6/10	1~/3~	250
UPS 40-60/4 F	6/10	1~/3~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 25/1-6	1~	180	2x RF9
Stratos 40/1-10	1~	220	-
Stratos 40/1-12	1~	250	-
Stratos-Z 40/1-12	1~	250	-
Stratos 40/1-12	1~	250	-
Stratos-Z 40/1-12	1~	250	-
Stratos-Z 40/1-12	1~	250	-
Stratos 40/1-12	1~	250	-
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-12	1~	250	-
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos-Z 40/1-8	1~	220	F1
Stratos 40/1-10	1~	220	F1
Stratos 40/1-12	1~	250	-
IP-E 40/115-55/2*	3~	250	-
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos-Z 40/1-8	1~	220	F1
Stratos 50/1-12	1~	280	Mod. pipe
IP-E 40/115-0.55/2*	3~	250	-
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-D 40	1~/3~	220	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	-
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	-
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	-
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/10	3~	250	-
TOP-S 40/7	1~/3~	250	-
-	-	-	-
-	-	-	-
-	-	-	-
TOP-S 40/7	1~/3~	250	-
-	-	-	-
TOP-S 40/7	1~/3~	250	-
TOP-S 40/10	3~	250	-
TOP-S 40/10	3~	250	-
-	-	-	-
TOP-S 40/15	3~	250	-
TOP-S 40/15	3~	250	-
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	-
TOP-S 40/7	1~/3~	250	-
TOP-S 40/7	1~/3~	250	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 40												
UPS 40-80 F	6/10	1~/3~	250	**Stratos 40/1-10**	1~	220	F1		**TOP-S 40/7**	1~/3~	250	-
UPS 42-50 F	6/10	1~	250	**Stratos 40/1-4**	1~	220	F1		**TOP-S 40/4**	1~/3~	220	F1
UPS 42-80 F	6/10	1~	250	**Stratos 40/1-8**	1~	220	F1		**TOP-S 40/7**	1~/3~	250	-
DN 50												
GD 50	6/10	1~/3~	240	**-**	-	-	-		**TOP-D 50**	1~/3~	240	-
Magna 50-100 F	6/10	1~	240	**Stratos 50/1-10**	1~	240	-		**-**	-	-	-
Magna 50-120 F	6/10	1~	280	**Stratos 50/1-9**	1~	280	-		**-**	-	-	-
Magna 50-120 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
Magna 50-60 F	6/10	1~	280	**Stratos 50/1-8**	1~	240	2x F3		**-**	-	-	-
Magna 50-60 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
Magna UPE 50-120 F	6/10	1~	280	**Stratos 50/1-9**	1~	280	-		**-**	-	-	-
Magna UPE 50-120 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
Magna UPE 50-60 F	6/10	1~	280	**Stratos 50/1-8**	1~	240	2x F3		**-**	-	-	-
Magna UPE 50-60 FB	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
Magna UPE 50-60 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
UMC 50-30	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UMC 50-60	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UMK 50-30	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UMK 50-60	6/10	1~/3~	280	**Stratos 50/1-9**	1~	280	-		**TOP-S 50/4**	1~/3~	240	2x F3
UMS 50-30	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UMS 50-60	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UP 50-60	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UPC 50-120	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	-		**TOP-S 50/10**	3~	280	-
UPC 50-180	6/10	3~	280	**Stratos 50/1-12**	1~	280	-		**TOP-S 50/10**	3~	280	-
UPC 50-60	6/10	1~/3~	280	**Stratos 50/1-9**	1~	280	-		**TOP-S 50/7**	3~	280	-
UPE 50-120 (F)	6/10	3~	280	**Stratos 50/1-12**	1~	280	-		**-**	-	-	-
UPE 50-120 FB	6/10	3~	280	**Stratos-Z 50/1-9**	1~	280	-		**-**	-	-	-
UPE 50-60 (F)	6/10	1~	280	**Stratos 50/1-8**	1~	240	2x F3		**-**	-	-	-
UPE 50-60 FB	6/10	1~	250	**Stratos-Z 50/1-9**	1~	280	Mod. pipe		**-**	-	-	-
UPE 50-80	6/10	1~	280	**Stratos 50/1-10**	1~	240	2x F3		**-**	-	-	-
UPE 50-80 (F)	6/10	1~	280	**Stratos 50/1-9**	1~	280	-		**-**	-	-	-
UPK 50-120	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	-		**TOP-S 50/10**	3~	280	-
UPK 50-180	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	-		**TOP-S 50/15**	3~	340	Mod. pipe
UPK 50-60	6/10	1~/3~	280	**Stratos 50/1-9**	1~	280	-		**TOP-S 50/4**	1~/3~	240	2x F3
UPS 50-120	6/10	1~/3~	280	**-**	-	-	-		**TOP-S 50/10**	3~	280	-
UPS 50-120 (F)	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	-		**TOP-S 50/10**	3~	280	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: −10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 50												
UPS 50-180 F	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	–		**TOP-S 50/10**	3~	280	–
UPS 50-185 F	6/10	1~/3~	280	**Stratos 50/1-12**	1~	280	–		**TOP-S 50/15**	3~	340	Mod. pipe
UPS 50-30 F	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/4**	1~/3~	240	2x F3
UPS 50-60	6/10	3~	280	**Stratos 50/1-9**	1~	280	–		**TOP-S 50/4**	1~/3~	240	2x F3
UPS 50-60/2 F	6/10	1~/3~	280	**Stratos 50/1-9**	1~	280	–		**TOP-S 50/7**	1~/3~	280	–
UPS 50-60/4 F	6/10	1~/3~	280	**Stratos 50/1-8**	1~	240	2x F3		**TOP-S 50/7**	1~/3~	280	–
DN 65												
GD 65	6/10	1~/3~	280	**–**	–	–	–		**TOP-D 65**	1~/3~	280	–
Magna 65-120 F	6/10	1~	340	**Stratos 65/1-12**	1~	340	–		**–**	–	–	–
Magna 65-120 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
Magna 65-60 F	6/10	1~	340	**Stratos 65/1-9**	1~	280	2x F11		**–**	–	–	–
Magna 65-60 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
Magna UPE 65-120 F	6/10	1~	340	**Stratos 65/1-12**	1~	340	–		**–**	–	–	–
Magna UPE 65-120 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
Magna UPE 65-60 F	6/10	1~	340	**Stratos 65/1-9**	1~	280	2x F11		**–**	–	–	–
Magna UPE 65-60 FB	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
Magna UPE 65-60 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
UM 65-26	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMC 65-30	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMC 65-60	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMK 65-30	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMK 65-60	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMS 65-30	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UMS 65-60	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UP 65-75	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UP 65-79	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/10**	3~	340	–
UP 65-90	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/10**	3~	340	–
UPC 65-120	6/10	1~/3~	340	**Stratos 65/1-12**	1~	340	–		**TOP-S 65/13**	3~	340	–
UPC 65-180	6/10	1~/3~	340	**IP-E 65/115-1.5/2**	3~	340	–		**TOP-S 65/15**	3~	340	–
UPC 65-60	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UPE 65-120 (F)	6/10	3~	340	**Stratos 65/1-12**	1~	340	–		**–**	–	–	–
UPE 65-120 FB	6/10	3~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
UPE 65-60 (F)	6/10	1~	340	**Stratos 65/1-9**	1~	280	2x F11		**–**	–	–	–
UPE 65-60 FB	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–
UPK 65-120	6/10	1~/3~	340	**Stratos 65/1-12**	1~	340	–		**TOP-S 65/13**	3~	340	–
UPK 65-180	6/10	3~	340	**IP-E 65/115-1.5/2**	3~	340	–		**TOP-S 65/15**	3~	340	–
UPK 65-60	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
UPS 65-120	6/10	1~/3~	340	**Stratos 65/1-12**	1~	340	–		**TOP-S 65/13**	3~	340	–
UPS 65-120 (F)	6/10	1~/3~	340	**Stratos 65/1-12**	1~	340	–		**TOP-S 65/13**	3~	340	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos

Single pumps

Type	PN	Motor	Overall length [mm]
DN 65			
UPS 65-180	6/10	1~/3~	340
UPS 65-180 F	6/10	1~/3~	340
UPS 65-185	6/10	1~/3~	340
UPS 65-185 F	6/10	3~	340
UPS 65-30	6/10	1~/3~	340
UPS 65-30 F	6/10	1~/3~	340
UPS 65-60	6/10	3~	340
UPS 65-60/2	6/10	1~/3~	340
UPS 65-60/2 F	6/10	3~	340
UPS 65-60/4	6/10	1~/3~	340
UPS 65-60/4 F	6/10	1~/3~	340
DN 80			
GD 80	6/10	1~/3~	330
UM 80-50	6/10	3~	360
UMC 80-30	6/10	3~	360
UMC 80-60	6/10	3~	360
UMK 80-30	6/10	3~	360
UMK 80-60	6/10	3~	360
UMS 80-30	6/10	3~	360
UMS 80-60	6/10	3~	360
UP 80-113	6/10	3~	360
UP 80-96	6/10	3~	360
UPC 80-120	6/10	3~	360
UPE 80-120	6	1~	360
UPE 80-120 (F)	6/10	3~	360
UPK 80-120	6/10	3~	360
UPS 80-120 F	6/10	3~	360
UPS 80-30 F	6/10	3~	360
UPS 80-60 F	6/10	3~	360

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
IP-E 65/115-1.5/2	3~	340	-
IP-E 65/115-1.5/2	3~	340	-
IP-E 65/115-1.5/2	3~	340	-
IP-E 65/115-1.5/2	3~	340	-
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
-	-	-	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-
Stratos 80/1-12	1~	360	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-S 65/15	3~	340	-
TOP-S 65/15	3~	340	-
TOP-S 65/15	3~	340	-
TOP-S 65/15	3~	340	-
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-D 80	1~/3~	330	-
TOP-S 80/7	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
-	-	-	-
-	-	-	-
TOP-S 80/10	3~	360	-
TOP-S 80/10	3~	360	-
TOP-S 80/7	3~	360	-
TOP-S 80/10	3~	360	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: −10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 100											
GD 100	6/10	1~/3~	380	**-**	-	-	-	**TOP-D 100**	3~	380	-
UMC 100-30	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 80/7**	3~	360	Mod. pipe
UMC 100-60	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 100/10**	3~	360	F34+F35
UMK 100-30	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 80/7**	3~	360	Mod. pipe
UMK 100-60	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 100/10**	3~	360	F34+F35
UMS 100-30	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 80/7**	3~	360	Mod. pipe
UMS 100-60	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 100/10**	3~	360	F34+F35
UPE 100-60 F	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**-**	-	-	-
UPS 100-30 F	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 80/7**	3~	360	Mod. pipe
DN 125											
GD 125	6/10	3~	450	**-**	-	-	-	**TOP-D 125**	3~	450	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos

Double pumps

Type

Type	PN	Motor	Overall length [mm]
DN 32			
Magna UPED 32-120 F	6/10	1~	220
Magna-D 32-120 F	6/10	1~	220
UMCD 32-30	6/10	1~/3~	220
UMKD 32-30	6/10	1~/3~	220
UPCD 32-120	6/10	1~/3~	220
UPCD 32-60	6/10	1~/3~	220
UPD 32-35	6/10	3~	220
UPD 32-50 F	6/10	3~	220
UPD 32-80 F	6/10	3~	220
UPED 32-120 F	6/10	1~	220
UPKD 32-120	6/10	1~/3~	220
UPKD 32-60	6/10	1~/3~	220
UPSD 32-120 F	6/10	1~/3~	220
UPSD 32-30 F	6/10	1~/3~	220
UPSD 32-35	6/10	1~	220
UPSD 32-45	6/10	1~	220
UPSD 32-50 F	6/10	1~	220
UPSD 32-60 F	6/10	1~/3~	220
UPSD 32-80 F	6/10	1~	220
DN 40			
Magna UPED 40-120 F	6/10	1~	250
Magna-D 40-120 F	6/10	1~	250
UMCD 40-30	6/10	1~/3~	250
UMKD 40-30	6/10	1~/3~	250
UMSD 40-30	6/10	1~/3~	250
UPCD 40-120	6/10	1~/3~	250
UPCD 40-60	6/10	1~/3~	250
UPD 40-50 F	6/10	3~	250
UPD 40-80 F	6	3~	250
UPD 42-42	6/10	1~/3~	250
UPD 42-50	6/10	3~	250
UPD 42-80 F	6	3~	250
UPED 40-120 F	6/10	1~	250
UPKD 40-120	6/10	1~/3~	250
UPKD 40-60	6/10	1~/3~	250
UPSD 40-120 F	6/10	1~/3~	250
UPSD 40-30 F	6/10	1~/3~	250
UPSD 40-50 F	6/10	1~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1

Standard pumps*)

1 or 3 speed stages
1~230 V or 3~400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
-	-	-	-
-	-	-	-
TOP-SD 40/3	1~/3~	250	Mod. pipe
TOP-SD 40/3	1~/3~	250	Mod. pipe
TOP-SD 40/10	3~	250	Mod. pipe
TOP-SD 40/7	1~/3~	250	Mod. pipe
Star-RSD 30/4	1~	180	2x RF3
TOP-SD 32/7	1~/3~	220	
TOP-SD 32/7	1~/3~	220	
-	-	-	-
TOP-SD 40/10	3~	250	Mod. pipe
TOP-SD 40/7	1~/3~	250	Mod. pipe
TOP-SD 40/10	3~	250	Mod. pipe
-	-	-	-
Star-RSD 30/4	1~	180	2x RF3
Star-RSD 30/6	1~	180	2x RF3
TOP-SD 32/7	1~/3~	220	
TOP-SD 40/7	1~/3~	250	Mod. pipe
TOP-SD 32/7	1~/3~	220	
-	-	-	-
-	-	-	-
TOP-SD 40/3	1~/3~	250	-
TOP-SD 40/3	1~/3~	250	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/3	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
-	-	-	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/3	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos

Double pumps

Type	PN	Motor	Overall length [mm]
DN 40			
UPSD 40-60 F	6/10	1~/3~	250
UPSD 40-60/2 F	6/10	1~/3~	250
UPSD 40-80 F	6	1~	250
UPSD 42-50	6/10	1~	250
DN 50			
Magna UPED 50-60 F	6/10	1~	280
Magna-D 50-120 F	6/10	1~	280
Magna-D 50-60 F	6/10	1~	280
UMCD 50-30	6/10	1~/3~	280
UMCD 50-60	6/10	1~/3~	280
UMKD 50-30	6/10	1~/3~	280
UMKD 50-60	6/10	1~/3~	280
UMSD 50-30	6/10	1~/3~	280
UMSD 50-60	6/10	1~/3~	280
UPCD 50-120	6/10	1~/3~	280
UPCD 50-60	6/10	1~/3~	280
UPD 50-60	6/10	1~/3~	280
UPED 50-120 F	6/10	3~	280
UPED 50-60 F	6/10	1~	280
UPKD 50-120	6/10	1~/3~	280
UPKD 50-180	6/10	1~/3~	280
UPKD 50-60	6/10	1~/3~	280
UPSD 50-120 F	6/10	1~/3~	280
UPSD 50-180 F	6/10	1~/3~	280
UPSD 50-60	6/10	3~	280
UPSD 50-60/2 F	6/10	1~/3~	280
UPSD 50-60/4 F	6/10	1~/3~	280
DN 65			
Magna UPED 65-60 F	6/10	1~	340
Magna-D 65-120 F	6/10	1~	340
Magna-D 65-60 F	6/10	1~	340
UMCD 65-30	6/10	1~/3~	340
UMCD 65-60	6/10	1~/3~	340
UMD 65-26	6/10	1~/3~	340
UMKD 65-30	6/10	1~/3~	340
UMKD 65-60	6/10	1~/3~	340
UMSD 65-30	6/10	1~/3~	340
UMSD 65-60	6/10	1~/3~	340

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-12	1~	280	–
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-12	1~	280	–
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-12	1~	280	–
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-12	1~	280	–
DP-E 50/115-0.75/2*	3~	280	–
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-12	1~	280	–
DP-E 50/115-0.75/2*	3~	280	–
Stratos-D 50/1-8	1~	240	2x F3
Stratos-D 50/1-9	1~	280	–
Stratos-D 50/1-9	1~	280	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–
Stratos-D 65/1-12	1~	340	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-SD 40/7	1~/3~	250	–
TOP-SD 40/7	1~/3~	250	–
TOP-SD 40/7	1~/3~	250	–
TOP-SD 40/7	1~/3~	250	–
-	–	–	–
-	–	–	–
-	–	–	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/10	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
-	–	–	–
-	–	–	–
TOP-SD 50/10	3~	280	–
TOP-SD 50/15	3~	340	Mod. pipe
TOP-SD 50/7	3~	280	–
TOP-SD 50/10	3~	280	–
TOP-SD 50/15	3~	340	Mod. pipe
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
TOP-SD 50/7	3~	280	–
-	–	–	–
-	–	–	–
-	–	–	–
-	–	–	–
TOP-SD 65/10	3~	340	–
-	–	–	–
-	–	–	–
TOP-SD 65/10	3~	340	–
-	–	–	–
TOP-SD 65/10	3~	340	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~230 V or 3~400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 65											
UPCD 65-120	6/10	1~/3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/13**	3~	340	–
UPCD 65-180	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/15**	3~	340	–
UPCD 65-60	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPD 65-75	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPD 65-79	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPD 65-90	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPED 65-120 F	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**–**	–	–	–
UPED 65-60 F	6/10	1~	340	**Stratos-D 65/1-12**	1~	340	–	**–**	–	–	–
UPKD 65-120	6/10	1~/3~	340	**DP-E 65/115-1.5/2**	3~	340	–	**TOP-SD 65/13**	3~	340	–
UPKD 65-180	6/10	3~	340	**DP-E 65/115-1.5/2**	3~	340	–	**TOP-SD 65/15**	3~	340	–
UPKD 65-60	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPSD 65-120 F	6/10	1~/3~	340	**DP-E 65/115-1.5/2**	3~	340	–	**TOP-SD 65/13**	3~	340	–
UPSD 65-180 F	6/10	3~	340	**DP-E 65/115-1.5/2**	3~	340	–	**TOP-SD 65/15**	3~	340	–
UPSD 65-30 F	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	–	**–**	–	–	–
UPSD 65-60	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPSD 65-60/2 F	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
UPSD 65-60/4 F	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
DN 80											
UMCD 80-30	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UMCD 80-60	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UMD 80-50	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UMKD 80-30	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UMKD 80-60	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UMSD 80-30	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UMSD 80-60	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPCD 80-120	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPD 80-113	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPD 80-96	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPED 80-120 F	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UPKD 80-120	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPSD 80-120 F	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–
UPSD 80-30 F	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**–**	–	–	–
UPSD 80-60 F	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	–	**TOP-SD 80/10**	3~	360	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Grundfos

Double pumps

Type	PN	Motor	Overall length [mm]
DN 100			
UMCD 100-30	6/10	3~	450
UMCD 100-60	6/10	3~	450
UMKD 100-30	6/10	3~	450
UMKD 100-60	6/10	3~	450
UMSD 100-30	6/10	3~	450
UMSD 100-60	6/10	3~	450
UPED 100-60 F	6/10	3~	450
UPSD 100-30 F	6/10	3~	450

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
-	-	-	-
TOP-SD 80/10	3~	360	Mod. pipe
-	-	-	-
TOP-SD 80/10	3~	360	Mod. pipe
-	-	-	-
TOP-SD 80/10	3~	360	Mod. pipe
TOP-SD 80/10	3~	360	Mod. pipe
-	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

KSB				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)											
C 02/40 Rio	10	1~	130	**Stratos PICO 15/1-4**	1~	130	–	**Star-RS 15/4-130**	1~	130	–
C 02/60 Rio	10	1~	130	**Stratos PICO 15/1-4**	1~	130	–	**Star-RS 15/6-130**	1~	130	–
C 15-15 130 Rio	10	1~	130	**Stratos PICO 15/1-4**	1~	130	–	**Star-RS 15/4-130**	1~	130	–
C 15-40 130 Rio	10	1~	130	**Stratos PICO 15/1-4**	1~	130	–	**Star-RS 15/4-130**	1~	130	–
C 15-60 130 Rio	10	1~	130	**Stratos PICO 15/1-4**	1~	130	–	**Star-RS 15/6-130**	1~	130	–
Rp ¾ (Pump thread G 1¼)											
C 12/40 Rio	10	1~	130	**Stratos PICO 25/1-4-130**	1~	130	Mod. pipe	**Star-RS 25/4-130**	1~	130	Mod. pipe
C 12/60 Rio	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe	**Star-RS 25/6-130**	1~	130	Mod. pipe
Rp 1 (Pump thread G 1½)											
22-2 E 13 Riovar	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	–	**Star-RS 25/4-130**	1~	130	–
22-2 E 16 Riovar	10	1~	160	**Stratos PICO 25/1-6-130**	1~	130	R1	**Star-RS 25/4-130**	1~	130	R1
22-2 E Riovar	10	1~	180	**Stratos PICO 25/1-4**	1~	180	–	**Star-RS 25/4**	1~	180	–
22-3 E 13 Riovar	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	–	**Star-RS 25/4-130**	1~	130	–
22-3 E Riovar	10	1~	180	**Stratos PICO 25/1-4**	1~	180	–	**Star-RS 25/4**	1~	180	–
22-4 E 13 Riovar	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	–	**Star-RS 25/6-130**	1~	130	–
22-4 E 16 Riovar	10	1~	160	**Stratos PICO 25/1-6-130**	1~	130	R1	**Star-RS 25/6-130**	1~	130	R1
22-4 E Riovar	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 25/6**	1~	180	–
22-5 E 13 Riovar	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	–	**Star-RS 25/6-130**	1~	130	–
22-5 E Riovar	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 25/6**	1~	180	–
22-6 E/D Riovar	10	1~/3~	180	**Stratos 25/1-6**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
22-7 E/D Riovar	10	1~/3~	180	**Stratos 25/1-8**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
24-2 D Riovar	10	3~	180	**Stratos PICO 25/1-4**	1~	180	–	**Star-RS 25/4**	1~	180	–
24-2 E Riovar	10	1~	180	**Stratos PICO 25/1-4**	1~	180	–	**Star-RS 25/4**	1~	180	–
24-8 D Riovar	10	3~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 25/6**	1~	180	–
24-8 E Riovar	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 25/6**	1~	180	–
25-40 Riotronic	10	1~	180	**Stratos PICO 25/1-4**	1~	180	–	**–**	–	–	–
25-50 Rio	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 30/6**	1~	180	Mod. pipe
25-60 B Riotronic	10	1~	180	**Stratos PICO 25/1-6-RG**	1~	180	–	**–**	–	–	–
25-60 Rio-Eco	10	1~	180	**Stratos 25/1-6**	1~	180	–	**–**	–	–	–
25-60 Riotronic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**–**	–	–	–
25-60 Riotronic SSM	10	1~	180	**Stratos ECO 25/1-5 BMS**	1~	180	–	**–**	–	–	–
25-7 E/D Rio	10	1~/3~	180	**Stratos 25/1-8**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
25-70 E/D Rio	10	1~/3~	180	**Stratos 25/1-8**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
25-80 Rio-Eco	10	1~	180	**Stratos 25/1-8**	1~	180	–	**–**	–	–	–
25-100 E/D Rio	10	1~/3~	180	**Stratos 30/1-12**	1~	180	Mod. pipe	**TOP-S 25/10**	1~/3~	180	–
A 2 V Riomatic	10	1~/3~	180	**Stratos 25/1-8**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
A 2 R Riomatic	10	1~/3~	180	**Stratos 25/1-8**	1~	180	–	**TOP-S 25/7**	1~/3~	180	–
B 2 V Riomatic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	–	**Star-RS 25/6**	1~	180	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

KSB

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)											
B 2R Riomatic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
C 2 V Riomatic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
C 22/20 Riomatic	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
C 22/25 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
C 22/35 Riomatic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
C 22/40 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
C 22/40-130 Rio	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
C 22/50 Rio	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
C 22/60 Rio	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
C 25-15 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
C 25-25 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/2**	1~	180	-
C 25-40 130 Rio	10	1~	130	**Stratos PICO 25/1-4-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
C 25-40 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
C 25-50-130 Rio	10	1~	130	**Stratos PICO 25/1-4-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
C 25-50 Rio	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
C 25-60 130 Rio	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/6-130**	1~	130	-
C 25-60 Rio	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
C 2 R Riomatic	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
E 25/1-5 Riotron	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
S 25-40 Riotronic	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
S 25-60 Riotronic	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
Rp 1¼ (Pump thread G 2)											
30-10 E/D Rio	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-	**TOP-S 30/10**	1~/3~	180	-
30-100 Rio	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-	**TOP-S 30/10**	1~/3~	180	-
30-100 Riotec	10	1~	180	**Stratos 30/1-12**	1~	180	-	**-**	-	-	-
30-120 Rio-Eco	10	1~	180	**Stratos 30/1-12**	1~	180	-	**-**	-	-	-
30-40 Rio	10	1~	180	**Stratos 30/1-6**	1~	180	-	**TOP-S 30/5**	1~/3~	180	-
30-40 Riotronic	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**-**	-	-	-
30-50 Rio	10	1~	180	**Stratos 30/1-6**	1~	180	-	**TOP-S 30/5**	1~/3~	180	-
30-60 Rio-Eco	10	1~	180	**Stratos 30/1-6**	1~	180	-	**-**	-	-	-
30-60 Riotronic	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**-**	-	-	-
30-60 Riotronic SSM	10	1~	180	**Stratos ECO 30/1-5-BMS**	1~	180	-	**-**	-	-	-
30-7 E/D Rio	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
30-70 E/D Rio	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
30-70 Riotec	10	1~	180	**Stratos 30/1-8**	1~	180	-	**-**	-	-	-
30-80 Rio-Eco	10	1~	180	**Stratos 30/1-8**	1~	180	-	**-**	-	-	-
31-4 E Riovar	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/4**	1~	180	-
32-1 E Riovar	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
32-12 E/D Riovar	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

KSB				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: −10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)											
32-15 E/D Riovar	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
32-17 E/D Riovar	10	1~/3~	180	**Stratos 30/1-12**	1~	180	-	**TOP-S 30/10**	1~/3~	180	-
32-2 E Riovar	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
32-3 E Riovar	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
32-4 E Riovar	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
32-5 E Riovar	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
32-6 E/D Riovar	10	1~/3~	180	**Stratos 30/1-6**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
32-60 Rio-Eco	10	1~	180	**Stratos 30/1-6**	1~	180	-	**-**	-	-	-
32-7 E/D Riovar	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
34-2 E/D Riovar	10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/4**	1~	180	-
34-8 E/D Riovar	10	1~/3~	180	**Stratos 30/1-6**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
A 3 V Riomatic	10	1~/3~	180	**Stratos 30/1-8**	1~	180	-	**TOP-S 30/7**	1~/3~	180	-
B 3 V Riomatic	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
C 3 V Riomatic	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
C 30-25 Rio	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/2**	1~	180	-
C 30-40 Rio	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
C 30-50 Rio	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
C 30-60 Rio	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
C 32/20 Riomatic	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**-**	-	-	-
C 32/25 Rio	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/2**	1~	180	-
C 32/35 Riomatic	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**-**	-	-	-
C 32/40 Rio	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**Star-RS 30/4**	1~	180	-
C 32/50 Rio	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
C 32/60 Rio	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**Star-RS 30/6**	1~	180	-
D 30 D	10	3~	206	**-**	-	-	-	**TOP-D 30**	1~/3~	180	Mod. pipe
E 30/1-5 Riotron	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**-**	-	-	-
S 30-40 Riotronic	10	1~	180	**Stratos PICO 30/1-4**	1~	180	-	**-**	-	-	-
S 30-60 Riotronic	10	1~	180	**Stratos PICO 30/1-6**	1~	180	-	**-**	-	-	-
DN 32											
Rio-Eco 32-120	6/10	1~	220	**Stratos 32/1-12**	1~	220	-	**-**	-	-	-
DN 40											
40-1/10 Riotec	6/10	1~	250	**Stratos 40/1-12**	1~	250	-	**-**	-	-	-
40-10 D Rio	6/10	3~	250	**Stratos 40/1-12**	1~	250	-	**TOP-S 40/10**	3~	250	-
40-100 D Rio	6/10	3~	250	**Stratos 40/1-12**	1~	250	-	**TOP-S 40/10**	3~	250	-
40-150 D Rio	6/10	3~	250	**-**	-	-	-	**TOP-S 40/15**	3~	250	-
40-100 Riotec	6/10	1~	250	**Stratos 40/1-12**	1~	250	-	**-**	-	-	-
40-120 Rio-Eco	6/10	1~	250	**Stratos 40/1-12**	1~	250	-	**-**	-	-	-
40-4 E/D Rio	6/10	1~/3~	220	**Stratos 40/1-4**	1~	220	-	**TOP-S 40/4**	1~/3~	220	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

KSB

Single pumps

Type	PN	Motor	Overall length [mm]
DN 40			
40-40 E/D Rio	6/10	1~/3~	220
40-40 Rio-Eco	6/10	1~	220
40-40 Riotec	6/10	1~	220
40-7 E/D Rio	6/10	1~/3~	250
40-70 E/D Rio	6/10	1~/3~	250
40-80 Rio-Eco	6/10	1~	220
42-12 E/D Riovar	6/10	1~/3~	250
42-17 E/D Riovar	6/10	1~/3~	250
42-25 E/D Riovar	6/10	1~/3~	250
42-6 E/D Riovar	6/10	1~/3~	250
42-7 E/D Riovar	6/10	1~/3~	220
44-18 D Riovar	6/10	3~	320
44-30 D Riovar	6/10	3~	320
44-8 E/D Riovar	6/10	1~/3~	250
A 4 V Riomatic	6/10	1~/3~	250
C 4 V Riomatic	6/10	1~	200
D 40 D	6/10	3~	220
E 40/1-5 Riotron	6/10	1~	220
K 48	6/10	1~/3~	250
L 4	6/10	1~/3~	250
M 4	6/10	1~/3~	250
DN 50			
50-1/10 Riotec	6/10	1~	280
50-1/7 Riotec	6/10	1~	280
50-10 D Rio	6/10	3~	280
50-100 D Rio	6/10	3~	280
50-100 Riotec	6/10	1~	280
50-150 D Rio	6/10	3~	340
50-120 Rio-Eco	6/10	1~	280
50-4 E/D Rio	6/10	1~/3~	240
50-40 E/D Rio	6/10	1~/3~	240
50-60 Riotec	6/10	1~	240
50-7 D Rio	6/10	3~	280
50-70 D Rio	6/10	3~	280
50-70 Riotec	6/10	1~	280
50-80 Rio-Eco	6/10	1~	240
50-90 Rio-Eco	6/10	1~	280
52-12 E/D Riovar	6/10	1~/3~	280
52-15 E/D Riovar	6/10	1~/3~	240

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 40			
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	–
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	–
Stratos 40/1-8	1~	220	2x F26
Stratos 40/1-8	1~	220	2x F26
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	Mod. pipe
Stratos PICO 25/1-6	1~	180	2x RF9
Stratos 40/1-4	1~	220	–
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-12	1~	250	–
DN 50			
Stratos 50/1-12	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-12	1~	280	–
–	–	–	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 40			
TOP-S 40/4	1~/3~	220	–
–	–	–	–
–	–	–	–
TOP-S 40/7	1~/3~	250	–
TOP-S 40/7	1~/3~	250	–
–	–	–	–
TOP-S 40/7	1~/3~	250	–
TOP-S 40/7	1~/3~	250	–
TOP-S 40/10	3~	250	–
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	–
TOP-S 40/7	1~/3~	250	F0+F26+Di
TOP-S 40/7	1~/3~	250	F0+F26+Di
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
–	–	–	–
TOP-D 40	1~	220	–
–	–	–	–
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	–
TOP-S 40/10	3~	250	–
DN 50			
–	–	–	–
–	–	–	–
TOP-S 50/10	3~	280	–
TOP-S 50/10	3~	280	–
–	–	–	–
TOP-S 50/15	3~	340	–
–	–	–	–
TOP-S 50/4	1~/3~	240	–
TOP-S 50/4	1~/3~	240	–
–	–	–	–
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–
–	–	–	–
–	–	–	–
–	–	–	–
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

KSB

Single pumps

Type	PN	Motor	Overall length [mm]
DN 50			
52-17 E/D Riovar	6/10	1~/3~	240
52-25 E/D Riovar	6/10	1~/3~	280
52-32 D Riovar	6/10	3~	280
52-40 D Riovar	6/10	3~	280
52-45 D Riovar	6/10	3~	280
52-85 D Riovar	6/10	3~	340
54-100 D Riovar	10	3~	440
54-150 D Riovar	10	3~	460
54-18 D Riovar	6/10	3~	280
54-30 D Riovar	6/10	3~	340
54-48 D Riovar	6/10	3~	340
D 50 D	6/10	3~	240
E 50/1-7 Riotron	6	1~	240
K 56	6	1~/3~	280
K 57	6	1~/3~	280
K 58	6	1~/3~	280
K 59	6	1~/3~	280
L 5	6/10	1~/3~	280
L 51	6/10	1~/3~	280
L 58	6	1~/3~	280
L 59	6	1~/3~	280
M 5	6/10	3~	280
DN 65			
62-130 D Riovar	6/10	3~	340
62-32 D Riovar	6/10	3~	280
62-40 D Riovar	6/10	3~	340
62-60 D Riovar	6/10	3~	340
62-65 D Riovar	6/10	3~	340
62-70 D Riovar	6/10	3~	340
64-160 D Riovar	10	3~	475
64-250 D Riovar	10	3~	500
64-30 D Riovar	6/10	3~	340
64-48 D Riovar	6/10	3~	340
64-75 D Riovar	6/10	3~	340
65-1/10 Riotec	6/10	1~	340
65-10 D Rio	6/10	3~	340
65-100 D Rio	6/10	3~	340
65-100 Riotec	6/10	1~	340
65-120 Rio-Eco	6/10	1~	340

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos 50/1-8	1~	240	-
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	-
Stratos 50/1-9	1~	280	-
Stratos 50/1-12	1~	280	-
Stratos 50/1-12	1~	280	2x F4
Stratos 50/1-12	1~	280	F40
Stratos 50/1-12	1~	280	F40+F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	2x F4
Stratos 50/1-9	1~	280	2x F4
-	-	-	-
Stratos 50/1-8	1~	240	-
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	-
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	-
Stratos 50/1-9	1~	280	-
Stratos 50/1-9	1~	280	-
Stratos 50/1-12	1~	280	-
IP-E 65/115-1.5/2*	3~	340	-
Stratos 65/1-9	1~	280	-
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
IP-E 65/115-1.5/2*	3~	340	-
Stratos 65/1-12	1~	340	F41
IP-E 65/115-1.5/2*	3~	340	Mod. pipe
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-S 50/4	1~/3~	240	-
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/7	3~	280	-
TOP-S 50/7	3~	280	-
TOP-S 50/10	3~	280	-
TOP-S 50/15	3~	340	-
TOP-S 50/15	3~	340	Mod. pipe
TOP-S 50/15	3~	340	Mod. pipe
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/7	3~	280	2x F4
TOP-S 50/7	3~	280	2x F4
TOP-D 50	1~/3~	240	-
-	-	-	-
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/7	3~	280	-
TOP-S 65/15	3~	340	-
TOP-S 65/7	3~	280	-
TOP-S 65/7	3~	280	2x F11
TOP-S 65/10	3~	340	-
TOP-S 65/10	3~	340	-
TOP-S 65/13	3~	340	-
TOP-S 65/15	3~	340	F41
TOP-S 65/13	3~	340	Mod. pipe
TOP-S 65/7	3~	280	2x F11
TOP-S 65/10	3~	340	-
TOP-S 65/10	3~	340	-
-	-	-	-
TOP-S 65/10	3~	340	-
TOP-S 65/10	3~	340	-
-	-	-	-
-	-	-	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

KSB				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 65											
65-13 D Rio	6/10	3~	340	**IP-E 65/115-1.5/2***	3~	340	-	**TOP-S 65/13**	3~	340	-
65-130 D Rio	6/10	3~	340	**IP-E 65/115-1.5/2***	3~	340	-	**TOP-S 65/13**	3~	340	-
65-7 D Rio	6/10	3~	280	**Stratos 65/1-9**	1~	280	-	**TOP-S 65/7**	3~	280	-
65-70 D Rio	6/10	3~	280	**Stratos 65/1-9**	1~	280	-	**TOP-S 65/7**	3~	280	-
65-150 D Rio	6/10	3~	340	**-**	-	-	-	**TOP-S 65/15**	3~	340	-
65-90 Rio-Eco	6/10	1~	280	**Stratos 65/1-9**	1~	280	-	**-**	-	-	-
D 65 D	6/10	1~/3~	280	**-**	-	-	-	**TOP-D 65**	1~/3~	280	-
L 66	6	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/7**	3~	280	2x F11
L 67	6	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/7**	3~	280	2x F11
L 68	6	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/7**	3~	280	2x F11
L 69	6	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/7**	3~	280	2x F11
M 6	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/10**	3~	340	-
M 61	6/10	3~	340	**Stratos 65/1-9**	1~	280	2x F11	**TOP-S 65/7**	3~	280	2x F11
R 6	6/10	3~	340	**IP-E 65/115-1.5/2***	3~	340	-	**TOP-S 65/13**	3~	340	-
DN 80											
80-1/10 Riotec	6/10	1~	360	**Stratos 80/1-12**	1~	360	-	**-**	-	-	-
80-10 D Rio	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
80-100 D Rio	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
80-100 Riotec	6/10	1~	360	**Stratos 80/1-12**	1~	360	-	**-**	-	-	-
80-120 Rio-Eco	6/10	1~	360	**Stratos 80/1-12**	1~	360	-	**-**	-	-	-
80-150 D Rio	6/10	3~	360	**-**	-	-	-	**TOP-S 80/15**	3~	360	-
DN 80											
80-200 D Rio	6/10	3~	360	**-**	-	-	-	**TOP-S 80/20**	3~	360	-
80-7 D Rio	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/7**	3~	360	-
80-70 D Rio	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/7**	3~	360	-
82-100 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
82-130 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
82-60 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
82-65 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
82-85 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
84-250 D Riovar	10	3~	500	**Stratos 80/1-12**	1~	360	F42	**TOP-S 80/15**	3~	360	F42
84-48 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/7**	3~	360	-
84-75 D Riovar	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
D 80 D	6/10	3~	330	**-**	-	-	-	**TOP-D 80**	1~/3~	330	-
M 8	6	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/7**	3~	360	-
M 86	6	3~	400	**Stratos 80/1-12**	1~	360	F18	**TOP-S 80/7**	3~	360	F18
M 87	6	3~	400	**Stratos 80/1-12**	1~	360	F18	**TOP-S 80/7**	3~	360	F18
M 88	6	3~	400	**Stratos 80/1-12**	1~	360	F18	**TOP-S 80/7**	3~	360	F18

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

KSB				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 80											
M 89	6	3~	400	**Stratos 80/1-12**	1~	360	F18	**TOP-S 80/7**	3~	360	F18
R 8	6/10	3~	360	**Stratos 80/1-12**	1~	360	-	**TOP-S 80/10**	3~	360	-
S 8	6/10	3~	360	**IP-E 80/115-2.2/2***	3~	360	-	**TOP-S 80/10**	3~	360	-
DN 100											
100-100 D Rio	6/10	3~	360	**Stratos 100/1-12**	1~	360	-	**TOP-S 100/10**	3~	360	-
100-100 Riotec	6/10	1~	360	**Stratos 100/1-12**	1~	360	-	**-**	-	-	-
100-120 Rio-Eco	6/10	1~	360	**Stratos 100/1-12**	1~	360	-	**-**	-	-	-
102-130 D Riovar	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34	**TOP-S 100/10**	3~	360	F34
104-110 D Riovar	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34	**-**	-	-	-
104-250 D Riovar	10	3~	500	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe	**-**	-	-	-
104-250 D Riovar	10	3~	550	**Stratos 100/1-12**	1~	360	F43	**-**	-	-	-
108 Rio		-	450	**-**	-	-	-	**TOP-S 65/13**	3~	340	Mod. pipe
109 Rio		-	460	**-**	-	-	-	**TOP-S 65/13**	3~	340	Mod. pipe
D 100 D	6/10	3~	380	**-**	-	-	-	**TOP-D 100**	3~	380	-
M 108	6	3~	450	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe	**TOP-S 100/10**	3~	360	F34 + F35
M 109	6	3~	450	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe	**TOP-S 100/10**	3~	360	F34 + F35
R 10	6/10	3~	450	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe	**TOP-S 100/10**	3~	360	F34 + F35
R 101	6/10	3~	450	**Stratos 100/1-12**	1~	360	F34 + F35	**TOP-S 100/10**	3~	360	F34 + F35
R 101 Rio		-	450	**-**	-	-	-	**TOP-S 100/10**	3~	360	-
S 10	6/10	3~	450	**IP-E 80/115-2.2/2***	3~	360	Mod. pipe	**TOP-S 100/10**	3~	360	F34 + F35
DN 125											
D 125 D	6/10	3~	450	**-**	-	-	-	**TOP-D 125**	3~	450	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

KSB

Double pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
A 3 VZ E/D	10	1~/3~	180
B 3 VZ E/D	10	1~/3~	180
Z 31-4 E Riovar	10	1~	180
Z 32-2 E Riovar	10	1~	180
Z 32-3 E Riovar	10	1~	180
Z 32-4 E Riovar	10	1~	180
Z 32-5 E Riovar	10	1~	180
Z 32-6 E/D Riovar	10	1~/3~	180
DN 32			
Z 30-70 E/D Rio	6/10	1~/3~	220
Z 32-100 E/D	6/10	1~/3~	220
Z 32-120 Rio-Eco	6/10	1~	220
Z 30-7 E/D Rio	6/10	1~/3~	220
Z 32-7 E/D Riovar	6/10	1~/3~	220
Z 32-70 Riotec	6/10	1~/3~	220
Z 32-80 Rio-Eco	6/10	1~	220
Z 34-2 E/D Riovar	6/10	1~/3~	220
DN 40			
A 4 VZ E/D	6/10	1~/3~	280
L 4 Z E/D	6/10	1~/3~	280
M 4 Z D	6/10	3~	280
Z 40-1/10 Riotec	6/10	1~	250
Z 40-10 D Rio	6/10	3~	250
Z 40-100 D Rio	6/10	3~	250
Z 40-100 Riotec	6/10	1~	250
Z 40-150 D Rio	6/10	3~	250
Z 40-120 Rio-Eco	6/10	1~	250
Z 40-7 E/D Rio	6/10	1~/3~	250
Z 40-70 E/D Rio	6/10	1~/3~	250
Z 40-70 Riotec	6/10	1~	250
Z 40-80 Rio-Eco	6/10	1~	220
Z 42-12 E/D Riovar	6/10	1~/3~	250
Z 42-17 E/D Riovar	6/10	1~/3~	250
Z 42-25 E/D Riovar	6/10	1~/3~	250
Z 42-6 E/D Riovar	6/10	1~/3~	250
Z 44-18 D Riovar	6/10	3~	320
Z 44-8 E/D Riovar	6/10	1~/3~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Stratos-D 32/1-8	1~	220	Mod. pipe
Stratos-D 32/1-8	1~	220	Mod. pipe
Stratos-D 32/1-8	1~	220	Mod. pipe
-	-	-	-
-	-	-	-
Stratos-D 32/1-8	1~	220	Mod. pipe
Stratos-D 32/1-8	1~	220	Mod. pipe
Stratos-D 32/1-8	1~	220	Mod. pipe
DN 32			
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-12	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
Stratos-D 32/1-8	1~	220	-
DN 40			
Stratos-D 40/1-8	1~	220	2x F1 + 2x F1-MS
Stratos-D 40/1-8	1~	220	2x F1 + 2x F1-MS
-	-	-	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-12	1~	250	-
-	-	-	-
Stratos-D 40/1-12	1~	250	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	-
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	F1
Stratos-D 40/1-8	1~	220	2x F26
Stratos-D 40/1-8	1~	220	F1

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Star-RSD 30/6	1~	180	-
Star-RSD 30/6	1~	180	-
Star-RSD 30/6	1~	180	-
Star-RSD 30/4	1~	180	-
Star-RSD 30/4	1~	180	-
Star-RSD 30/6	1~	180	-
Star-RSD 30/6	1~	180	-
Star-RSD 30/6	1~	180	-
DN 32			
TOP-SD 32/7	1~/3~	220	-
TOP-SD 32/10	1~/3~	220	-
-	-	-	-
TOP-SD 32/7	1~/3~	220	-
TOP-SD 32/7	1~/3~	220	-
TOP-SD 30/5	1~/3~	180	2x RF3
-	-	-	-
-	-	-	-
DN 40			
TOP-SD 40/7	1~/3~	250	F1
TOP-SD 40/7	1~/3~	250	F1
TOP-SD 50/10	3~	280	Mod. pipe
-	-	-	-
TOP-SD 40/10	3~	250	-
TOP-SD 40/10	3~	250	-
-	-	-	-
TOP-SD 40/15	3~	250	-
-	-	-	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
-	-	-	-
-	-	-	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
TOP-SD 40/7	1~/3~	250	-
-	-	-	-
TOP-SD 40/7	1~/3~	250	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

KSB				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 50											
L 5 Z E/D	6/10	1~/3~	340	**Stratos-D 50/1-9**	1~	280	2x F4	**TOP-SD 50/7**	3~	280	2x F4
L 51 Z E/D	6/10	1~/3~	340	**Stratos-D 50/1-9**	1~	280	2x F4	**TOP-SD 50/7**	3~	280	2x F4
M 5 Z D	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
Z 50-1/10 Riotec	6/10	1~	280	**Stratos-D 50/1-12**	1~	280	–	**–**	–	–	–
Z 50-1/7 Riotec	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**–**	–	–	–
Z 50-10 D Rio	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
Z 50-100 D Rio	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
Z 50-150 D Rio	6/10	3~	340	**–**	–	–	–	**TOP-SD 50/15**	3~	340	–
Z 50-100 Riotec	6/10	1~	280	**Stratos-D 50/1-12**	1~	280	–	**–**	–	–	–
Z 50-120 Rio-Eco	6/10	1~	280	**Stratos-D 50/1-12**	1~	280	–	**–**	–	–	–
Z 50-60 Riotec	6/10	1~	280	**Stratos-D 50/1-8**	1~	240	2x F3	**–**	–	–	–
Z 50-7 D Rio	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
Z 50-70 D Rio	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
Z 50-70 Riotec	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
Z 50-80 Rio-Eco	6/10	1~	240	**Stratos-D 50/1-8**	1~	240	–	**–**	–	–	–
Z 50-90 Rio-Eco	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**–**	–	–	–
Z 52-25 E/D Riovar	6/10	1~/3~	280	**Stratos-D 50/1-8**	1~	240	2x F3	**TOP-SD 50/7**	3~	280	–
Z 52-32 D Riovar	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
Z 52-45 D Riovar	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
Z 52-85 D Riovar	6/10	3~	340	**–**	–	–	–	**TOP-SD 50/15**	3~	340	–
Z 54-18 D Riovar	6/10	3~	280	**Stratos-D 50/1-8**	1~	240	2x F3	**TOP-SD 50/7**	3~	280	–
Z 54-30 D Riovar	6/10	3~	340	**Stratos-D 50/1-9**	1~	280	2x F4	**TOP-SD 50/7**	3~	280	2x F4
DN 65											
M 6 Z D	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
M 61 Z D	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
R 6 Z D	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/13**	3~	340	–
Z 62-130 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/15**	3~	340	–
Z 62-40 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 62-60 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 62-70 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 64-30 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 50/7**	3~	280	Mod. pipe
Z 64-48 D Riovar	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 65-1/10 Riotec	6/10	1~	340	**Stratos-D 65/1-12**	1~	340	–	**–**	–	–	–
Z 65-10 D Rio	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 65-100 D Rio	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
Z 65-150 D Rio	6/10	3~	340	**–**	–	–	–	**TOP-SD 65/15**	3~	340	–
Z 65-100 Riotec	6/10	1~	340	**Stratos-D 65/1-12**	1~	340	–	**–**	–	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

KSB

Double pumps

Type	PN	Motor	Overall length [mm]
DN 65			
Z 65-120 Rio-Eco	6/10	1~	340
Z 65-13 D Rio	6/10	3~	340
Z 65-130 D Rio	6/10	3~	340
DN 80			
Z 80-1/10 Riotec	6/10	1~	360
Z 80-10 D Rio	6/10	3~	360
Z 80-100 D Rio	6/10	3~	360
Z 80-100 Riotec	6/10	1~	360
Z 80-120 Rio-Eco	6/10	1~	360
Z 80-150 D Rio	6/10	3~	360
Z 80-200 D Rio	6/10	3~	360
Z 82-100 D Riovar	6/10	3~	360
Z 82-130 D Riovar	6/10	3~	360
Z 82-65 D Riovar	6/10	3~	360
Z 82-85 D Riovar	6/10	3~	360
Z 84-48 D Riovar	6/10	3~	360
Z 84-75 D Riovar	6/10	3~	360
DN 100			
Z 102-130 D Riovar	6/10	3~	395
Z 104-110 D Riovar	6/10	3~	395

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 65/1-12	1~	340	-
DP-E 65/115-1.5/2*	3~	340	-
DP-E 65/115-1.5/2*	3~	340	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
-	-	-	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	-
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
-	-	-	-
TOP-SD 65/13	3~	340	-
TOP-SD 65/13	3~	340	-
-	-	-	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	-
-	-	-	-
-	-	-	-
TOP-SD 80/15	3~	360	-
TOP-SD 80/20	3~	360	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	-
TOP-SD 80/10	3~	360	Mod. pipe
TOP-SD 80/10	3~	360	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe

Single pumps

Type	PN	Motor	Overall length [mm]
Rp 1 (Pump thread G 1½)			
P 233 RD	10	1~/3~	180
P 233 RY	10	1~/3~	180
P 235 RD	10	1~/3~	180
P 235 RY	10	1~/3~	180
P 246 RD	10	1~	180
P 247 RD	10	1~	180
P 247 RD	10	1~	180
P 249 RD	10	1~	180
P 293 RD	10	1~	130
P 295 RD	10	1~	130
SHR 251 DS	10	1~	180
SHR 251 WS	10	1~	180
V 231 RD	10	1~	180
V 231 RS	10	1~	180
V 231 RY	10	3~	180
V 233 RD	10	1~	180
V 233 RS	10	1~	180
V 233 RY	10	3~	180
V 235 R	10	1~	180
V 235 RD	10	1~	180
V 235 RY	10	3~	180
V 241 R	10	1~/3~	180
V 244 R	10	1~/3~	180
V 245 R	10	1~/3~	180
V 247 R	10	1~/3~	180
V 263 R	10	1~	180
V 361 R	10	1~	180
Rp 1½ (Pump thread G 2¼)			
P 433 RD	10	1~	180
P 433 RY	10	3~	180
Rp 1¼ (Pump thread G 2)			
P 333 RD	10	1~	180
P 333 RY	10	3~	180
P 335 RD	10	1~	180
P 335 RY	10	3~	180
P 347 RD	10	1~	180
P 347 RYD	10	3~	180
V 331 RD	10	1~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-6-130	1~	130	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-6	1~	180	-
Stratos 25/1-8	1~	180	-
Stratos 25/1-8	1~	180	-
Stratos PICO 25/1-4	1~	180	-
Stratos PICO 25/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	Mod. pipe
Stratos PICO 30/1-6	1~	180	Mod. pipe
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-4	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-
Stratos 30/1-6	1~	180	-
Stratos 30/1-6	1~	180	-
Stratos PICO 30/1-6	1~	180	-

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-
TOP-S 25/7	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4-130	1~	130	-
Star-RS 25/6-130	1~	130	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 25/6	1~	180	-
TOP-S 25/5	1~/3~	180	-
TOP-S 25/5	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
TOP-S 25/7	1~/3~	180	-
Star-RS 25/4	1~	180	-
Star-RS 25/6	1~	180	-
Star-RS 30/4	1~	180	Mod. pipe
Star-RS 30/4	1~	180	Mod. pipe
Star-RS 30/4	1~	180	-
Star-RS 30/4	1~	180	-
Star-RS 30/6	1~	180	-
Star-RS 30/6	1~	180	-
TOP-S 30/7	1~/3~	180	-
TOP-S 30/7	1~/3~	180	-
Star-RS 30/4	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)											
V 331 RS	10	1~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
V 331 RY	10	3~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
V 333 RD	10	1~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
V 333 RS	10	1~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
V 333 RY	10	3~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
V 335 R	6/10	1~/3~	180	**Stratos 30/1-8**	1~	180	–	**TOP-S 30/7**	1~/3~	180	–
V 341 R	6/10	1~/3~	180	**Stratos 30/1-6**	1~	180	–	**TOP-S 30/4**	1~/3~	180	–
V 344 R	6/10	1~/3~	180	**Stratos 30/1-6**	1~	180	–	**TOP-S 30/5**	1~/3~	180	–
V 363 R	10	1~	180	**Stratos PICO 30/1-6**	1~	180	–	**Star-RS 30/4**	1~	180	–
Rp 1½ (Pump thread G 2¼)											
P 433 R	6/10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	Mod. pipe	**Star-RS 30/4**	1~	180	Mod. pipe
DN 32											
P 333 F	6/10	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
P 333 FD	6/10	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
P 333 FHD	6/10	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
P 333 FHY	6/10	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
P 333 FY	6/10	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
P 335 FD	6/10	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
P 335 FHD	6/10	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
P 335 FHY	6/10	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
P 335 FY	6/10	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
SH 323	6/10	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
SHR 321	6/10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	2x RF1	**Star-RS 30/6**	1~	180	2x RF1
SHR 322	6/10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	2x RF1	**Star-RS 30/6**	1~	180	2x RF1
SHR 323	6/10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	2x RF1	**Star-RS 30/6**	1~	180	2x RF1
SO 32	6/10	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
SOR 32	6/10	1~/3~	250	**Stratos PICO 30/1-6**	1~	180	2x RF4	**Star-RS 30/6**	1~	180	2x RF4
SOR 33	6/10	1~/3~	250	**Stratos PICO 30/1-6**	1~	180	2x RF4	**Star-RS 30/6**	1~	180	2x RF4
SP 32	6/10	1~/3~	180	**Stratos PICO 30/1-6**	1~	180	2x RF1	**Star-RS 30/6**	1~	180	2x RF1
SPR 32	6/10	1~/3~	250	**Stratos PICO 30/1-6**	1~	180	2x RF4	**Star-RS 30/6**	1~	180	2x RF4
V 331 F	6	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
V 331 FY	6	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
V 333 F	6	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
V 333 FD	6	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
V 333 FY	6	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/4**	1~	180	2x RF3
V 335 F	6/10	1~/3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
V 335 FD	6/10	1~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3
V 335 FHY	6/10	3~	220	**Stratos PICO 30/1-6**	1~	180	2x RF3	**Star-RS 30/6**	1~	180	2x RF3

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe

Single pumps

Type	PN	Motor	Overall length [mm]
DN 32			
V 335 FY	6/10	3~	220
V 341 F	6/10	1~/3~	220
V 344 F	6/10	1~/3~	220
V 345 F	6/10	1~/3~	220
V 345 FHY	6/10	3~	220
V 345 FY	6/10	3~	220
DN 40			
P 402 F	6	1~/3~	250
P 403 F	6	1~/3~	250
P 405 FD	6/10	1~/3~	250
P 405 FHD	6/10	1~/3~	250
P 405 FHY	6/10	1~/3~	250
P 405 FY	6/10	1~/3~	250
P 409 F	6/10	1~	250
P 409 FHYD	6/10	3~	250
P 409 FYD	6/10	3~	250
P 433 F	6/10	1~	220
P 433 FD	6/10	1~	220
P 433 FHD	6/10	1~	220
P 433 FHY	6/10	3~	220
P 433 FY	6/10	3~	220
SH 401	6/10	1~/3~	250
SH 402	6/10	1~/3~	250
V 401 F	6/10	1~/3~	250
V 403 F	6/10	1~/3~	250
V 403 FH	6/10	1~/3~	250
V 403 FHY	6/10	3~	250
V 403 FY	6/10	3~	250
V 431 F	6	1~/3~	220
V 431 FY	6	3~	220
V 433 F	6	1~/3~	220
V 433 FD	6	1~	220
V 433 FY	6	3~	220
V 441 F	6	1~/3~	220

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos PICO 30/1-6	1~	180	2x RF3
Stratos 30/1-6	1~	180	2x RF3
Stratos 30/1-6	1~	180	2x RF3
Stratos PICO 30/1-6	1~	180	2x RF3
Stratos PICO 30/1-6	1~	180	2x RF3
Stratos PICO 30/1-6	1~	180	2x RF3
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	Mod. pipe
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos PICO 30/1-6	1~	180	2x RF12 + F26
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
-	-	-	-
-	-	-	-
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos PICO 30/1-6	1~	180	2x RF0 + R14
Stratos 30/1-6	1~	180	2x RF0 + R14

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
Star-RS 30/6	1~	180	2x RF3
TOP-S 30/4	1~/3~	180	2x RF3
TOP-S 30/5	1~/3~	180	2x RF3
Star-RS 30/6	1~	180	2x RF3
Star-RS 30/6	1~	180	2x RF3
Star-RS 30/6	1~	180	2x RF3
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/7	1~/3~	250	-
TOP-S 40/7	1~/3~	250	-
TOP-S 40/7	1~/3~	250	-
TOP-S 30/5	1~/3~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
Star-RS 30/6	1~	180	2x RF12 + F26
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-S 40/4	1~/3~	220	F1
TOP-D 40	1~/3~	220	F1
TOP-D 40	1~/3~	220	F1
Star-RS 30/4	1~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
Star-RS 30/4	1~	180	2x RF0 + R14
TOP-S 30/4	1~/3~	180	2x RF0 + R14

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Loewe

Single pumps

Type	PN	Motor	Overall length [mm]
DN 50			
P 5012 F	6/10	1~/3~	280
P 5012 FHYD	6/10	3~	280
P 5012 FYD	6/10	3~	280
P 503 F	6	1~/3~	280
P 504 F	6	1~/3~	280
P 505 F	6/10	1~/3~	280
P 505 FD	6/10	1~	280
P 505 FHD	6/10	1~	280
P 505 FYD	6/10	1~/3~	280
P 508 F	6/10	1~/3~	280
P 508 FD	6/10	1~/3~	280
P 508 FHD	6/10	1~	280
P 508 FYD	6/10	3~	280
P 531 FD	6/10	1~	220
P 531 FHD	6/10	1~	220
P 531 FHY	6/10	3~	220
P 531 FY	6/10	3~	220
SH 501	6/10	1~/3~	280
SO 50	6/10	1~/3~	240
SP 50	6/10	1~/3~	240
V 505 F	6/10	1~/3~	280
V 505 FHY	6/10	3~	280
V 505 FY	6/10	3~	280
V 531 F	6/10	1~/3~	220
V 531 FD	6/10	1~	220
V 531 FHY	6/10	3~	220
V 531 FY	6/10	3~	220
V 541 F	6	1~/3~	220
V 541 FHY	6	3~	220
V 541 FY	6	3~	220

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 50			
Stratos 50/1-9	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos PICO 30/1-6	1~	180	2x RF5
Stratos PICO 30/1-6	1~	180	2x RF5
Stratos PICO 30/1-6	1~	180	2x RF5
Stratos PICO 30/1-6	1~	180	2x RF5
Stratos 50/1-8	1~	240	2x F3
–	–	–	–
–	–	–	–
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos PICO 30/1-4	1~	180	2x RF5
Stratos PICO 30/1-4	1~	180	2x RF5
Stratos PICO 30/1-4	1~	180	2x RF5
Stratos PICO 30/1-4	1~	180	2x RF5
–	–	–	–
–	–	–	–
–	–	–	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 50			
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
TOP-S 50/4	1~/3~	240	2x F3
TOP-D 50	1~/3~	240	–
TOP-D 30	1~/3~	180	Mod. pipe
TOP-S 50/7	3~	280	–
TOP-S 50/4	1~/3~	240	2x F3
TOP-S 50/4	1~/3~	240	2x F3
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
Star-RS 30/4	1~	180	2x RF5
TOP-D 40	1~/3~	220	Mod. pipe
TOP-D 40	1~/3~	220	Mod. pipe
TOP-D 40	1~/3~	220	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe

Single pumps

Type	PN	Motor	Overall length [mm]
DN 65			
P 641 F	6/10	1~/3~	220
P 641 FD	6/10	1~	220
P 641 FHY	6/10	3~	220
P 641 FY	6/10	3~	220
P 641 FYD	6/10	3~	220
P 643 F	6/10	1~/3~	250
P 655 FY	6	3~	340
P 656 FY	6	3~	340
P 657 F	6	3~	340
P 657 FY	6	3~	340
P 658 F	6	3~	340
P 659 F	6	3~	340
P 665 F	6	3~	340
P 665 FHY	6/10	3~	340
P 665 FY	6/10	3~	340
P 666 F	6/10	3~	340
P 666 FHY	6/10	3~	340
P 666 FY	6/10	3~	340
P 667 F	6/10	3~	340
P 667 FHY	6/10	3~	340
P 667 FY	6/10	3~	340
P 668 F	6/10	3~	340
P 668 FHY	6/10	3~	340
P 668 FY	6/10	3~	340
P 669 F	6/10	3~	340
P 669 FHY	6/10	3~	340
P 669 FY	6/10	3~	340
P 6712 F	6/10	3~	340
P 6712 FHYD	6/10	3~	340
P 6712 FYD	6/10	3~	340
P 677 F	6/10	3~	340
P 677 FHYD	6/10	3~	340
P 677 FYD	6/10	3~	340
SO 65	6/10	1~/3~	280

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 65			
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-12	1~	340	–
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
–	–	–	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 65			
TOP-D 65	1~/3~	280	Mod. pipe
TOP-D 65	1~/3~	280	Mod. pipe
TOP-D 65	1~/3~	280	Mod. pipe
TOP-D 65	1~/3~	280	Mod. pipe
TOP-D 65	1~/3~	280	Mod. pipe
TOP-D 65	1~/3~	280	Mod. pipe
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/10	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/13	3~	340	–
TOP-S 65/13	3~	340	–
TOP-S 65/13	3~	340	–
TOP-S 65/13	3~	340	–
TOP-S 65/13	3~	340	–
TOP-S 65/13	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-D 65	1~/3~	280	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Loewe				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~230 V or 3~400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 80											
P 801 F	6	1~/3~	280	–	–	–	–	**TOP-D 80**	1~/3~	330	Mod. pipe
P 8010 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 809 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8110 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8110 FHY	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8110 FY	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8113 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8113 FHYD	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 8113 FYD	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/10**	3~	360	–
P 818 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 818 FHYD	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 818 FYD	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 819 F	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 819 FHY	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 819 FY	6/10	3~	360	**Stratos 80/1-12**	1~	360	–	**TOP-S 80/7**	3~	360	–
P 841 F	6/10	1~/3~	280	–	–	–	–	**TOP-D 80**	1~	330	Mod. pipe
P 841 FD	6/10	1~/3~	280	–	–	–	–	**TOP-D 80**	1~	330	Mod. pipe
P 841 FHYD	6/10	1~/3~	280	–	–	–	–	**TOP-D 80**	1~	330	Mod. pipe
P 841 FY	6/10	1~/3~	280	–	–	–	–	**TOP-D 80**	1~	330	Mod. pipe
P 841 FYD	6/10	1~/3~	280	–	–	–	–	**TOP-D 80**	1~	330	Mod. pipe
DN 100											
P 10013 F	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34	**TOP-S 100/10**	3~	360	F34
P 10013 FHYD	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34	**TOP-S 100/10**	3~	360	F34
P 10013 FYD	6/10	3~	395	**Stratos 100/1-12**	1~	360	F34	**TOP-S 100/10**	3~	360	F34

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe

Double pumps

Type	PN	Motor	Overall length [mm]
DN 32			
ZP 323 D	6/10	1~	220
ZP 323 HD	6/10	1~	220
ZP 323 HY	6/10	3~	220
ZP 323 Y	6/10	3~	220
ZP 325 D	6/10	1~	220
ZP 325 HD	6/10	1~	220
ZP 325 HY	6/10	3~	220
ZP 325 Y	6/10	3~	220
ZP 347 D	6/10	1~	220
ZP 347 HD	6/10	1~	220
ZP 347 HYD	6/10	3~	220
ZP 347 YD	6/10	3~	220
ZV 323 D	6	1~/3~	220
ZV 323 Y	6	1~/3~	220
ZV 325 D	6	1~	220
ZV 325 Y	6	3~	220
ZV 335	6	–	220
ZV 335 Y	6	3~	220
ZV 344	6	1~	220
ZV 344 Y	6	3~	220
ZV 345	6	1~	220
ZV 345 Y	6	3~	220
DN 40			
ZP 402 Y	6	1~/3~	250
ZP 403 Y	6	1~/3~	250
ZP 405 D	6/10	1~	250
ZP 405 HD	6/10	1~	250
ZP 405 HYD	6/10	3~	250
ZP 405 Y	6/10	3~	250
ZP 405 YD	6/10	3~	250
ZP 409 HYD	6/10	3~	250
ZP 409 Y	6/10	3~	250
ZP 409 YD	6/10	3~	250
ZV 403 Y	6	1~/3~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 32/1-8	1~	220	–
Stratos-D 40/1-8	1~	220	F1

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-SD 32/7	1~/3~	220	–
Star-RSD 30/6	1~	180	2x RF3
TOP-SD 40/3	1~	250	–
TOP-SD 40/7	1~	250	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Loewe				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note	**Type**	Motor	Overall length [mm]	Adapter/ note
DN 50											
ZP 5012 HYD	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
ZP 5012 Y	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
ZP 5012 YD	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–	**TOP-SD 50/10**	3~	280	–
ZP 503	6	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 504	6	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505	6	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505 D	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505 HD	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505 HYD	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505 Y	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 505 YD	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 508 D	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 508 HD	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 508 HYD	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 508 Y	6/10	1~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZP 508 YD	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZV 505 HY	6/10	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
ZV 505 Y	6/10	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–	**TOP-SD 50/7**	3~	280	–
DN 65											
ZP 655 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 656 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 657 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 658 Y	6	3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 659 Y	6	3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 665 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 666 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 667 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 668 Y	6	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 669 Y	6	3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 6712 HYD	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 6712 Y	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 6712 YD	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/13**	3~	340	–
ZP 677 HYD	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 677 Y	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–
ZP 677 YD	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	–	**TOP-SD 65/10**	3~	340	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Loewe

Double pumps

Type	PN	Motor	Overall length [mm]
DN 80			
ZP 8010 Y	6/10	3~	360
ZP 809 Y	6	3~	360
ZP 8110 Y	6	3~	360
ZP 8113 HYD	6/10	3~	360
ZP 8113 YD	6/10	3~	360
ZP 818 HYD	6/10	3~	360
ZP 818 Y	6	3~	360
ZP 818 YD	6/10	3~	360
ZP 819 Y	6	3~	360
DN 100			
ZP 10013 HYD	6/10	3~	395
ZP 10013 YD	6/10	3~	395

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: -10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	–
Stratos-D 80/1-12	1~	360	Mod. pipe
Stratos-D 80/1-12	1~	360	Mod. pipe

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	–
TOP-SD 80/10	3~	360	Mod. pipe
TOP-SD 80/10	3~	360	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Speck

Single pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	PN	Motor	Overall length [mm]	Type	Motor	Overall length [mm]	Adapter/ note	Type	Motor	Overall length [mm]	Adapter/ note
Rp ¾ (Pump thread G 1¼)											
AU 20/16	10	1~	180	**Stratos 25/1-6**	1~	180	Mod. pipe	**TOP-S 25/7**	1~	180	Mod. pipe
AU 20/161	10	1~	180	**Stratos PICO 25/1-6**	1~	180	Mod. pipe	**Star-RS 25/6**	1~	180	Mod. pipe
AU 20/43	10	1~	180	**Stratos PICO 25/1-4**	1~	180	Mod. pipe	**Star-RS 25/4**	1~	180	Mod. pipe
AU 20/64	10	1~	180	**Stratos PICO 25/1-6**	1~	180	Mod. pipe	**Star-RS 25/6**	1~	180	Mod. pipe
N 20/33	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe	**Star-RS 25/4-130**	1~	130	Mod. pipe
N 20/43	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe	**Star-RS 25/4-130**	1~	130	Mod. pipe
N 20/43 E	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	Mod. pipe	**-**	-	-	-
Rp 1 (Pump thread G 1½)											
AU 25/16	10	1~	180	**Stratos 25/1-6**	1~	180	-	**TOP-S 25/7**	1~	180	-
AU 25/161	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
AU 25/43	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
AU 25/64	10	1~	180	**Stratos 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
N 25/16	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
N 25/33	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
N 25/43	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
N 25/43 (130)	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
N 25/43 E	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
N 25/43 E (130)	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
N 25/52	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
N 25/52 (130)	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/4-130**	1~	130	-
N 25/53	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/4**	1~	180	-
N 25/64	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-
N 25/64 (130)	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**Star-RS 25/6-130**	1~	130	-
N 25/64 E	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
N 25/64 E (130)	10	1~	130	**Stratos PICO 25/1-6-130**	1~	130	-	**-**	-	-	-
N 25/75	10	1~	180	**Stratos 25/1-6**	1~	180	-	**TOP-S 25/7**	1~	180	-
NE 25/30	10	1~	180	**Stratos PICO 25/1-6**	1~	180	-	**-**	-	-	-
NE 25/33	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**-**	-	-	-
NE 25/70	10	1~	180	**Stratos 25/1-8**	1~	180	-	**-**	-	-	-
VA 25/15	10	1~/3~	180	**Stratos 25/1-6**	1~	180	-	**TOP-S 25/7**	1~	180	-
VA 25/16	10	1~/3~	180	**Stratos 25/1-6**	1~	180	-	**TOP-S 25/7**	1~	180	-
VA 25/43	10	1~/3~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
VA 25/43 U	10	1~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
VA 25/52	10	1~/3~	180	**Stratos PICO 25/1-4**	1~	180	-	**Star-RS 25/4**	1~	180	-
VA 25/64	10	1~/3~	180	**Stratos PICO 25/1-6**	1~	180	-	**Star-RS 25/6**	1~	180	-

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Speck

Single pumps

Type

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
AU 32/16	10	1~	180
AU 32/161	10	1~	180
AU 32/43	10	1~	180
AU 32/64	10	1~	180
AU 32/86	10	1~/3~	250
N 32/16	10	1~	180
N 32/20	10	1~	180
N 32/33	10	1~	180
N 32/43	10	1~	180
N 32/43 E	10	1~	180
N 32/50	10	1~/3~	180
N 32/52	10	1~	180
N 32/53	10	1~	180
N 32/60	10	1~	180
N 32/64	10	1~	180
N 32/64 E	10	1~	180
N 32/75	10	1~	180
N 32/80	10	1~/3~	180
NE 32/30	10	1~	180
NE 32/33	10	1~	180
NE 32/70	10	1~	180
VA 32/43	10	1~/3~	180
VA 32/43 U	10	1~	180
VA 32/52	10	1~/3~	180
VA 32/64	10	1~/3~	180
VA 32/82	10	1~/3~	250
VA 32/86	10	1~/3~	250
DN 40			
A 40/4	6/10	1~/3~	250
AU 40/4	6/10	3~	250
AU 40/86	6/10	1~/3~	250
AU 40/94	6/10	1~/3~	250
LN 40/30	6/10	3~	250
N 40/50	6/10	1~/3~	250
N 40/60	6/10	1~/3~	250
N 40/80	6/10	1~/3~	250
NE 40/100	6/10	1~	250
NE 40/40	6/10	1~	220
SN 40/120	6/10	3~	250

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
Stratos 30/1-6	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos 30/1-6	1~	180	–
Stratos 30/1-8	1~	180	R11
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos 30/1-8	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos 30/1-12	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos 30/1-6	1~	180	–
Stratos 30/1-12	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos 30/1-8	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos PICO 30/1-4	1~	180	–
Stratos PICO 30/1-6	1~	180	–
Stratos 30/1-6	1~	180	R11
Stratos 30/1-8	1~	180	R11
DN 40			
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 40/1-12	1~	250	–
Stratos 40/1-4	1~	220	–
Stratos 40/1-12	1~	250	–

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type

Type	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)			
TOP-S 30/7	1~	180	–
Star-RS 30/6	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
TOP-S 30/7	1~	180	R11
Star-RS 30/6	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
–	–	–	–
TOP-S 30/7	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
TOP-S 30/10	1~	180	–
Star-RS 30/6	1~	180	–
–	–	–	–
TOP-S 30/7	1~	180	–
TOP-S 30/7	1~	180	–
–	–	–	–
–	–	–	–
–	–	–	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/4	1~	180	–
Star-RS 30/6	1~	180	–
TOP-S 30/5	1~	180	R11
TOP-S 30/7	1~	180	R11
DN 40			
TOP-S 40/4	1~	220	F1
TOP-S 40/4	1~	220	F1
TOP-S 30/7	1~	180	2x RF12 + F26
TOP-S 30/7	1~	180	2x RF12 + F26
TOP-S 40/4	1~	220	F1
TOP-S 40/4	1~	220	F1
TOP-S 40/7	1~	250	–
TOP-S 40/7	1~	250	–
–	–	–	–
–	–	–	–
TOP-S 40/10	3~	250	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Speck

Single pumps

Type	PN	Motor	Overall length [mm]
DN 40			
SN 40/60	6/10	3~	250
SN 40/70	6/10	1~/3~	250
U 40/2	6/10	1~/3~	220
U 40/4	6/10	1~/3~	220
VA 40/82	6/10	1~/3~	250
VA 40/86	6/10	1~/3~	250
VA 40/94	6/10	1~/3~	250
DN 50			
A 50/4	6/10	1~/3~	280
A 50/41	6	1~/3~	280
AU 50/4	6/10	3~	280
G 50/2	6/10	3~	280
G 50/21	6/10	3~	280
G 50/22	6/10	3~	280
G 50/23	6/10	3~	280
GU 50/2	6/10	3~	280
LN 50/30	6/10	3~	280
LN 50/60	6/10	3~	280
NE 50/100	6/10	1~	280
NE 50/70	6/10	1~	280
SN 50/120	6/10	3~	280
SN 50/70	6/10	1~/3~	280
U 50	6	1~/3~	240
U 50/2	6	1~/3~	240
U 50/4	6/10	1~/3~	240
VA 50/177	6/10	3~	280
DN 65			
A 65/4	6/10	1~/3~	340
AU 65/4	6/10	3~	340
G 65/2	6/10	3~	340
G 65/21	6/10	3~	340
G 65/22	6/10	3~	340
GU 65/2	6/10	3~	340
GU 65/21	6/10	3~	340
LN 65/30	6/10	3~	340
LN 65/60	6/10	3~	340
NE 65/100	6/10	1~	340

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos T_{min}: –10 °C/T_{max}: 110 °C
Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C
Stratos ECO T_{min}: +15°C/T_{max}: 110 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 40			
Stratos 40/1-8	1~	220	F1
Stratos 40/1-8	1~	220	F1
Stratos 30/1-6	1~	180	2x RF0 + R14
–	–	–	–
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
Stratos 40/1-4	1~	220	F1
DN 50			
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	–
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-8	1~	240	2x F3
Stratos 50/1-9	1~	280	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-9	1~	280	–
Stratos 50/1-12	1~	280	–
Stratos 50/1-9	1~	280	–
–	–	–	–
Stratos 50/1-9	1~	280	Mod. pipe
–	–	–	–
Stratos 50/1-9	1~	280	–
DN 65			
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	–
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-12	1~	340	–
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11
Stratos 65/1-9	1~	280	2x F11

Standard pumps*)

1 or 3 speed stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = 110 °C or 130 °C/140 °C

Type	Motor	Overall length [mm]	Adapter/ note
DN 40			
TOP-S 40/7	1~	250	–
TOP-S 40/7	1~	250	–
TOP-S 30/5	1~	180	2x RF0 + R14
TOP-D 40	1~	220	–
TOP-S 40/4	1~	220	F1
TOP-S 40/4	1~	220	F1
TOP-S 40/4	1~	220	F1
DN 50			
TOP-S 50/4	1~	240	2x F3
TOP-S 50/4	1~	240	2x F3
TOP-S 50/4	1~	240	2x F3
TOP-S 50/7	3~	280	–
TOP-S 50/7	3~	280	–
TOP-S 50/4	1~	240	2x F3
TOP-S 50/4	1~	240	2x F3
TOP-S 50/7	3~	280	–
TOP-S 50/4	1~	240	2x F3
TOP-S 50/4	1~	240	2x F3
–	–	–	–
–	–	–	–
TOP-S 50/10	3~	280	–
TOP-S 50/7	3~	280	–
TOP-D 50	1~	240	–
TOP-S 50/4	1~	240	–
TOP-D 50	1~	240	–
TOP-S 50/4	1~	240	2x F3
DN 65			
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
TOP-S 65/13	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/7	3~	280	2x F11
TOP-S 65/13	3~	340	–
TOP-S 65/10	3~	340	–
TOP-S 65/7	3~	280	2x F11
TOP-S 65/7	3~	280	2x F11
–	–	–	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Speck				Wilo – new							
Single pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 65												
SN 65/120	6/10	3~	340	**Stratos 65/1-12**	1~	340	–		**TOP-S 65/13**	3~	340	–
SN 65/70	6/10	1~/3~	340	**Stratos 65/1-9**	1~	280	2x F11		**TOP-S 65/7**	3~	280	2x F11
U 70/4	6/10	1~/3~	280	**–**	–	–	–		**TOP-D 65**	3~	280	–
DN 80												
A 80/4	6/10	1~/3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/7**	3~	360	–
AU 80/4	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/7**	3~	360	–
G 80/2	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/10**	3~	360	–
G 80/21	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/10**	3~	360	–
G 80/22	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/7**	3~	360	–
GU 80/2	6	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/10**	3~	360	–
LN 80/30	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**–**	–	–	–
LN 80/60	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/7**	3~	360	–
NE 80/100	6/10	1~	360	**Stratos 80/1-12**	1~	360	–		**–**	–	–	–
SN 80/120	6/10	3~	360	**Stratos 80/1-12**	1~	360	–		**TOP-S 80/10**	3~	360	–
U 80/4	6/10	1~/3~	330	**–**	–	–	–		**TOP-D 80**	1~	330	–
DN 100												
U 100/4	6/10	1~/3~	380	**–**	–	–	–		**TOP-D 100**	3~	380	–

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Heating

Speck				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: –10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 32												
ZAU 32/43	6/10	1~	220	**Stratos-D 32/1-8**	1~	220	–		**Star-RSD 30/4**	1~	180	2x RF3
ZAU 32/52	6/10	1~	220	**Stratos-D 32/1-8**	1~	220	–		**TOP-SD 32/7**	1~/3~	220	–
ZAU 32/64	6/10	1~	220	**Stratos-D 32/1-8**	1~	220	–		**TOP-SD 32/7**	1~/3~	220	–
ZN 32/50	6/10	1~	220	**Stratos-D 32/1-8**	1~	220	–		**TOP-SD 32/7**	1~/3~	220	–
ZN 32/60	6/10	1~	220	**Stratos-D 32/1-8**	1~	220	–		**TOP-SD 32/7**	1~/3~	220	–
ZVA 32/43	6/10	1~/3~	220	**Stratos-D 32/1-8**	1~	220	–		**Star-RSD 30/4**	1~	180	2x RF3
ZVA 32/52	6/10	1~/3~	220	**–**	–	–	–		**–**	–	–	–
ZVA 32/62	6/10	1~/3~	220	**–**	–	–	–		**Star-RSD 30/4**	1~/3~	180	2x RF3
ZVA 32/64	6/10	1~/3~	220	**Stratos-D 32/1-8**	1~	220	–		**TOP-SD 32/7**	1~	220	–
DN 40												
ZAU 40/4	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
ZAU 40/86	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/7**	1~/3~	250	–
ZAU 40/94	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
ZLN 40/30	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
ZN 40/50	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
ZN 40/60	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/7**	1~/3~	250	–
ZN 40/80	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/7**	1~/3~	250	–
ZSN 40/120	6/10	3~	250	**Stratos-D 40/1-12**	1~	250	–		**TOP-SD 40/10**	3~	250	–
ZSN 40/60	6/10	3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/7**	1~/3~	250	–
ZSN 40/70	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/7**	1~/3~	250	–
ZVA 40/62	6	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
ZVA 40/94	6/10	1~/3~	250	**Stratos-D 40/1-8**	1~	220	F1		**TOP-SD 40/3**	1~/3~	250	–
DN 50												
ZAU 50/4	6/10	3~	280	**Stratos-D 50/1-8**	1~	240	2x F3		**TOP-SD 50/7**	3~	280	–
ZGU 50/2	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–		**TOP-SD 50/7**	3~	280	–
ZLN 50/30	6/10	3~	280	**Stratos-D 50/1-8**	1~	240	2x F3		**TOP-SD 50/7**	3~	280	–
ZLN 50/60	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–		**TOP-SD 50/7**	3~	280	–
ZSN 50/120	6/10	3~	280	**Stratos-D 50/1-12**	1~	280	–		**TOP-SD 50/10**	3~	280	–
ZSN 50/70	6/10	1~/3~	280	**Stratos-D 50/1-9**	1~	280	–		**TOP-SD 50/7**	3~	280	–
ZVA 50/177	6/10	3~	280	**Stratos-D 50/1-9**	1~	280	–		**TOP-SD 40/7**	1~/3~	250	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Speck				Wilo – new							
Double pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos T_{min}: -10 °C/T_{max}: 110 °C Stratos PICO T_{min}: + 2 °C/T_{max}: 110 °C Stratos ECO T_{min}: +15°C/T_{max}: 110 °C				**Standard pumps*)** 1 or 3 speed stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = 110 °C or 130 °C/140 °C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
DN 65												
ZA 65/4	6	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZA 65/41	6	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZA 65/42	6	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZAU 65/4	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZG 65/2	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	-		**TOP-SD 65/13**	3~	340	-
ZG 65/21	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 65/10**	3~	340	-
ZG 65/22	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZGU 65/2	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	-		**TOP-SD 65/13**	3~	340	-
ZGU 65/21	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 65/10**	3~	340	-
ZLN 65/30	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZLN 65/60	6/10	3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 50/7**	3~	280	Mod. pipe
ZSN 65/120	6/10	3~	340	**DP-E 65/115-1.5/2***	3~	340	-		**TOP-SD 65/13**	3~	340	-
ZSN 65/70	6/10	1~/3~	340	**Stratos-D 65/1-12**	1~	340	-		**TOP-SD 65/10**	3~	340	-
DN 80												
ZAU 80/4	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 65/10**	3~	340	Mod. pipe
ZG 80/2	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 80/10**	3~	360	-
ZG 80/21	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 80/10**	3~	360	-
ZG 80/22	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 65/10**	3~	340	Mod. pipe
ZGU 80/2	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 80/10**	3~	360	-
ZLN 80/30	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 65/10**	3~	340	Mod. pipe
ZLN 80/60	6/10	3~	360	**Stratos-D 80/1-12**	1~	360	-		**TOP-SD 65/10**	3~	340	Mod. pipe
ZSN 80/120	6/10	3~	360	**DP-E 80/115-2.2/2***	3~	360	-		**TOP-SD 65/15**	3~	340	Mod. pipe

*) For type-dependent energy efficiency classes see pages 5–7

= Replacement pumps in accordance with EnEV (German Energy Saving Ordinance)
Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Wilo

Secondary hot water circulation pumps

Wilo – new

High-efficiency pumps
infinitely variable, 1~ 230V, 50Hz
Stratos-Z T_{min}: 0°C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Standard pumps
1 or 3 stages
1~ 230V or 3~ 400V, 50Hz
T_{max} = Star-Z and TOP-Z 65°C or 80°C
IP-Z = 110°C

Type	PN	Motor	Overall length [mm]	Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
R ½											
Star-Z 15	10	1~	84	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
Star-Z 15 A	10	1~	138	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
Star-Z 15 A (APress)	10	1~	138	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
Star-Z 15 C (CPress)	10	1~	138	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
Star-Z 15 TT (TTPress)	10	1~	138	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
Z 15	10	1~	84	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
Rp ½ (Pump thread G 1)											
Star-Z 20/1	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	–
Z 20	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	–
Z 20/40	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	–
Rp ¾ (Pump thread G 1 ¼)											
TOP-Z 20/4	10	1~/3~	150	**–**	–	–	–	**TOP-Z 20/4**	1~/3~	150	–
ZP 20-1	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
ZP 20-2	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
ZS 20-1	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
ZS 20-2	10	1~	140	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
Rp 1 (Pump thread G 1 ½)											
IL-Z 25/2	10	1~/3~	180	**–**	–	–	–	**IP-Z 25/2**	1~/3~	180	–
IL-Z 25/6	10	1~/3~	180	**–**	–	–	–	**IP-Z 25/6**	1~/3~	180	–
IP-Z 25/2	10	1~/3~	180	**–**	–	–	–	**IP-Z 25/2**	1~/3~	180	–
IP-Z 25/6	10	1~/3~	180	**–**	–	–	–	**IP-Z 25/6**	1~/3~	180	–
Star-Z 25/2	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
Star-Z 25/6	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/6**	1~/3~	180	–
Star-ZE 25/1-5	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**–**	–	–	–
Star-ZE 25/1-5 SSM	10	1~	180	**Stratos ECO-Z 25/1-5-BMS**	1~	180	–	**–**	–	–	–
Stratos ECO-Z 25/1-5	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**–**	–	–	–
Stratos-Z 25/1-8	10	1~	180	**Stratos-Z 25/1-8**	1~	180	–	**–**	–	–	–
TOP-Z 25/10	10	1~/3~	180	**Stratos-Z 30/1-12**	1~	180	Mod. pipe	**TOP-Z 25/10**	1~/3~	180	–
TOP-Z 25/6	10	1~/3~	180	**Stratos-Z 25/1-8**	1~	180	–	**TOP-Z 25/6**	1~/3~	180	–
TOP-ZV 25/7	10	1~/3~	180	**Stratos-Z 25/1-8**	1~	180	–	**MOT-Z 25/6**	1~/3~	–	–
Z 25	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
Z 25/2	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
Z 25/6	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/6**	1~/3~	180	–
ZP 25	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
ZP 25-1	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
ZP 25-2	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
ZS 25	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/6**	1~/3~	180	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Wilo

Secondary hot water circulation pumps

Type	PN	Motor	Overall length [mm]
Rp 1¼ (Pump thread G 2)			
Stratos-Z 30/1-12	10	1~	180
Stratos-Z 30/1-8	10	1~	180
TOP-Z 30/10	10	1~/3~	180
TOP-Z 30/7	10	1~/3~	180
TOP-ZV 30/7	10	1~/3~	180
TOP-Z 30	10	1~/3~	180
Z 30 (220mm)	10	1~/3~	220
Z 30 (180mm)	10	1~/3~	180
ZP 30	10	1~/3~	220
ZS 30	10	1~/3~	220
DN 40			
Stratos-Z 40/1-12	6/10	1~	250
Stratos-Z 40/1-8	6/10	1~	220
TOP-Z 40/7	6/10	1~/3~	250
TOP-Z 40	6/10	1~/3~	250
TOP-ZV 40/4	6/10	1~/3~	250
Z 40 v, Z 40 r	6/10	1~/3~	250
ZP 40	6/10	1~/3~	250
DN 50			
Stratos-Z 50/1-9	6/10	1~	280
TOP-Z 50/7	6/10	3~	280
TOP-Z 50	6/10	3~	280
TOP-ZV 50/6	6/10	1~/3~	280
Z 50 v, Z 50 r	6/10	3~	280
ZP 50	6/10	3~	280
ZS 50	6/10	3~	280
DN 65			
Stratos-Z 65/1-12	6/10	1~	340
TOP-Z 65/10	6/10	3~	340
TOP-Z 65	6/10	3~	340
TOP-ZV 65/10	6/10	3~	400
Z 65 v, Z 65 r	6/10	3~	340
ZP 65	6/10	3~	340
ZS 65	6/10	3~	340

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos-Z T_{min}: 0 °C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15 °C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note
Stratos-Z 30/1-12	1~	180	–
Stratos-Z 30/1-8	1~	180	–
Stratos-Z 30/1-12	1~	180	–
Stratos-Z 30/1-8	1~	180	–
Stratos-Z 30/1-8	1~	180	–
Stratos-Z 30/1-8	1~	180	–
Stratos-Z 30/1-8	1~	180	R22
Stratos-Z 30/1-8	1~	180	–
Stratos-Z 30/1-8	1~	180	R22
Stratos-Z 30/1-8	1~	180	R22
Stratos-Z 40/1-12	1~	250	–
Stratos-Z 40/1-8	1~	220	–
Stratos-Z 40/1-8	1~	220	F1-MS
Stratos-Z 40/1-8	1~	220	F1-MS
Stratos-Z 40/1-8	1~	220	F1-MS
Stratos-Z 40/1-8	1~	220	F1-MS
Stratos-Z 40/1-8	1~	220	F1-MS
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 50/1-9	1~	280	–
Stratos-Z 65/1-12	1~	340	–
Stratos-Z 65/1-12	1~	340	–
Stratos-Z 65/1-12	1~	340	–
Stratos-Z 65/1-12	1~	340	2xF11
Stratos-Z 65/1-12	1~	340	–
Stratos-Z 65/1-12	1~	340	–
Stratos-Z 65/1-12	1~	340	–

Standard pumps

1 or 3 stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = Star-Z and TOP-Z 65 °C or 80 °C
IP-Z = 110 °C

Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
–	–	–	–
–	–	–	–
TOP-Z 30/10	1~/3~	180	–
TOP-Z 30/7	1~/3~	180	–
MOT-Z 30/7	1~/3~	–	–
TOP-Z 30/7	1~/3~	180	–
TOP-Z 30/7	1~/3~	180	R22
TOP-Z 30/7	1~/3~	180	–
TOP-Z 30/7	1~/3~	180	R22
TOP-Z 30/7	1~/3~	180	R22
–	–	–	–
–	–	–	–
TOP-Z 40/7	1~/3~	250	–
TOP-Z 40/7	1~/3~	250	–
MOT-Z 40/4	1~/3~	–	–
TOP-Z 40/7	1~/3~	250	–
TOP-Z 40/7	1~/3~	250	–
–	–	–	–
TOP-Z 50/7	3~	280	–
TOP-Z 50/7	3~	280	–
MOT-Z 50/6	1~/3~	–	–
TOP-Z 50/7	3~	280	–
TOP-Z 50/7	3~	280	–
TOP-Z 50/7	3~	280	–
–	–	–	–
TOP-Z 65/10	3~	340	–
TOP-Z 65/10	3~	340	–
MOT-Z 65/10	3~	–	–
TOP-Z 65/10	3~	340	–
TOP-Z 65/10	3~	340	–
TOP-Z 65/10	3~	340	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Wilo				Wilo – new							
Secondary hot water circulation pumps 				**High-efficiency pumps** infinitely variable, 1~ 230V, 50Hz Stratos-Z T_{min}: 0°C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~ 230V or 3~ 400V, 50Hz T_{max} = Star-Z and TOP-Z 65°C or 80°C IP-Z = 110°C			
Type	PN	Motor	Overall length [mm]	**Type** * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note		**Type** ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
DN 80												
TOP-Z 80/10	6/10	3~	360	–	–	–	–		**TOP-Z 80/10**	3~	360	–
TOP-Z 80	6/10	3~	360	–	–	–	–		**TOP-Z 80/10**	3~	360	–
Z 80 v, Z 80 r	6/10	3~	360	–	–	–	–		**TOP-Z 80/10**	3~	360	–
ZP 80	6/10	3~	360	–	–	–	–		**TOP-Z 80/10**	3~	360	–
ZS 80	6/10	3~	360	–	–	–	–		**TOP-Z 80/10**	3~	360	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Biral

Secondary hot water circulation pumps

Type	PN	Motor	Overall length [mm]
Rp ¾ (Pump thread G 1¼)			
NBW 10	10	1~	120
NBW 12	10	1~	120
NBW 13	10	1~	150
NBW 313	10	3~	150
W 10	10	1~	120
W 12	10	1~	120
W 13	10	1~	150
W 14	10	1~	150
W 313	10	3~	150
W 314	10	3~	150
WX 10	10	1~	120
WX 12	10	1~	120
WX 14	10	1~	150
Rp 1¼ (Pump thread G 2)			
G 301	10	3~	190
G 302	10	3~	190
G 303	10	3~	190
G 304	10	3~	190
G 305	10	3~	190
G 351	10	3~	210
G 352	10	3~	210
NRW 30	10	1~/3~	190
NRW 35	10	1~/3~	210
RBW 30	10	1~/3~	190
RBW 35	10	1~/3~	210
RW 1	10	1~	170
RW 2	10	1~	170
RW 30	6	1~/3~	190
RW 31	10	3~	170
RW 32	10	3~	170
RW 35	6	1~/3~	210
W 301	10	3~	190
W 302	10	3~	190
W 303	10	3~	190
W 304	10	3~	190
W 305	10	3~	190
W 315	10	3~	180

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230V, 50Hz
Stratos-Z T_{min}: 0°C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Type	Motor	Overall length [mm]	Adapter/ note
Rp ¾ (Pump thread G 1¼)			
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
-	-	-	-
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
-	-	-	-
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Rp 1¼ (Pump thread G 2)			
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos-Z 30/1-8	1~	180	R10
Stratos-Z 30/1-8	1~	180	R10
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R6
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R6
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	Mod. pipe
Stratos ECO-Z 25/1-5	1~	180	2x R6
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos ECO-Z 25/1-5	1~	180	2x R5
Stratos-Z 30/1-8	1~	180	

Standard pumps

1 or 3 stages
1~ 230V or 3~ 400V, 50Hz
T_{max} = Star-Z and TOP-Z 65°C or 80°C
IP-Z = 110°C

Type	Motor	Overall length [mm]	Adapter/ note
Rp ¾ (Pump thread G 1¼)			
Star-Z 20/1	1~	140	Mod. pipe
Star-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 20/1	1~	140	Mod. pipe
IP-Z 25/2	1~/3~	180	Mod. pipe
TOP-Z 20/4	1~/3~	150	
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/2	1~/3~	180	Mod. pipe
TOP-Z 20/4	1~/3~	150	
Star-Z 20/1	1~	140	Mod. pipe
IP-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Rp 1¼ (Pump thread G 2)			
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
TOP-Z 30/7	1~/3~	180	R10
TOP-Z 30/7	1~/3~	180	R10
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/6	1~/3~	180	2x R6
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/6	1~/3~	180	2x R6
Star-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	2x R6
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
Star-Z 25/2	1~/3~	180	2x R5
TOP-Z 30/7	1~/3~	180	-

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Biral				Wilo – new							
Secondary hot water circulation pumps				**High-efficiency pumps** infinitely variable, 1~230V, 50Hz Stratos-Z T_{min}: 0°C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~230V or 3~400V, 50Hz T_{max} = Star-Z and TOP-Z 65°C or 80°C IP-Z = 110°C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)												
W 351	10	3~	210	**Stratos-Z 30/1-8**	1~	180	R10		**TOP-Z 30/7**	1~/3~	180	R10
W 352	10	3~	210	**Stratos-Z 30/1-8**	1~	180	R10		**TOP-Z 30/7**	1~/3~	180	R10
W 353	10	3~	210	**Stratos-Z 30/1-8**	1~	180	R10		**TOP-Z 30/7**	1~/3~	180	R10
DN 32												
NRW 30 PN16	16	1~/3~	190	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
NRW 35 PN16	16	1~/3~	210	**Stratos-Z 30/1-8**	1~	180	Mod. pipe		**Star-Z 25/6**	1~/3~	180	Mod. pipe
DN 40												
BW 45	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
BW 45-1	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
BW 45-2	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
NBW 45	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
NBW 45-1	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
NBW 45-2	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 401	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 402	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 403	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 451	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 452	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-
W 453	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	-

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Grundfos

Secondary hot water circulation pumps

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230V, 50Hz
Stratos-Z T_{min}: 0°C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Standard pumps

1 or 3 stages
1~ 230V bzw. 3~ 400V, 50Hz
T_{max} = Star-Z and TOP-Z 65°C or 80°C
IP-Z = 110°C

Type	PN	Motor	Overall length [mm]	Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
R ½											
UP 15-13 B	10	1~	86	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
UP 15-13 BU	10	1~	86	**Star-Z Nova C**	1~	140	Mod. pipe	**Star-Z 15 TT service motor**	1~	–	–
UP 15-13 BX	10	1~	130	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
UP 15-13 BXU	10	1~	130	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
UP 15-14 B Comfort	10	1~	80	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
UP 15-14 BT Comfort	10	1~	80	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
UP 15-14 BU Comfort	10	1~	80	**Star-Z Nova C**	1~	140	Mod. pipe	**Star-Z 15 TT service motor**	1~	–	–
UP 15-14 BUT Comfort	10	1~	80	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
Rp ¾ (Pump thread G 1¼)											
UM 20-07 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UM 24-08 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UM 25-08 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UM 25-12 N	10	1~/3~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 15-15 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 15-25 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 20-07 N	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 20-07 NX	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 20-14 BX Comfort	10	1~	110	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
UP 20-14 BXT Comfort	10	1~	110	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
UP 20-14 BXU Comfort	10	1~	110	**Star-Z Nova C**	1~	140	Mod. pipe	**Star-Z 15 TT service motor**	1~	–	–
UP 20-14 BXUT Comfort	10	1~	110	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
UP 20-15 N	10	1~/3~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 20-15 NX	10	1~	150	**–**	–	–	–	**Star-Z 20/1**	1~	140	Mod. pipe
UP 20-30 N	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
UP 20-45 N	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**TOP-Z 20/4**	1~/3~	150	–
UP 25-30 N	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**TOP-Z 20/4**	1~/3~	150	–
UP 25-45 N	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**TOP-Z 20/4**	1~/3~	150	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Grundfos

Secondary hot water circulation pumps

Wilo – new

High-efficiency pumps
infinitely variable, 1~ 230 V, 50 Hz
Stratos-Z T_{min}: 0°C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Standard pumps
1 or 3 stages
1~ 230 V bzw. 3~ 400 V, 50 Hz
T_{max} = Star-Z and TOP-Z 65°C or 80°C
IP-Z = 110°C

Type	PN	Motor	Overall length [mm]	Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
Rp 1 (Pump thread G 1½)											
Alpha+ 25-40 B	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**-**	-	-	-
Alpha+ 25-60 B	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**-**	-	-	-
UM 26-20 Z	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-
UP 25-55 B	10	1~/3~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 25/6**	1~/3~	180	-
UP 25-60 B	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 25/6**	1~/3~	180	-
UP 25-80 B	10	3~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 30/7**	1~/3~	180	Mod. pipe
UP 26-35 Z	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-
UP 26-50 Z	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/6**	1~/3~	180	-
UPE 25-40 B	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**-**	-	-	-
UPE 25-60 B	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**-**	-	-	-
UPS 20-60 B	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 25/6**	1~/3~	180	-
UPS 25-40 B	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-
UPS 25-55 N	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-	**-**	-	-	-
UPS 25-60 B	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 25/6**	1~/3~	180	-
UPS 25-80 B	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-	**TOP-Z 25/10**	1~/3~	180	-
Rp 1 ¼ (Pump thread G 1½)											
Magna 32-100 N	10	1~	180	**Stratos-Z 30/1-12**	1~	180	-	**-**	-	-	-
UP 32-80 B	10	3~	180	**Stratos-Z 30/1-8**	1~	180	-	**TOP-Z 30/10**	1~/3~	180	-
UP 35 RZ	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
UP 40-75 RB	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-	**TOP-Z 30/7**	1~/3~	180	-
UP 45 RZ	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
UPE 32-80 B	10	1~	180	**Stratos-Z 30/1-8**	1~	180	-	**-**	-	-	-
UPS 32-80 B	10	1~	180	**Stratos-Z 30/1-8**	1~	180	-	**TOP-Z 30/10**	1~/3~	180	-
UPS 40-80 RB	10	1~/3~	180	**Stratos-Z 30/1-12**	1~	180	-	**TOP-Z 30/10**	1~/3~	180	-
DN 32 (square)											
UP 35 Z	10	1~/3~	200	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
UP 45 Z	10	1~/3~	200	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
DN 32											
Magna 32-120 FN	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3	**-**	-	-	-
Magna UPE 32-120 FB	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3	**-**	-	-	-
Magna UPE 32-120 FN	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3	**-**	-	-	-
UPE 32-120 FB	6/10	1~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3	**-**	-	-	-
UPE 32-80 FB	6/10	1~	220	**Stratos-Z 30/1-8**	1~	180	2x RF3	**-**	-	-	-
UPS 32-120 FB	6/10	1~/3~	220	**Stratos-Z 30/1-12**	1~	180	2x RF3	**TOP-Z 30/10**	1~/3~	180	2x RF3
UPS 32-30 FB	6/10	1~/3~	220	**Stratos-Z 30/1-8**	1~	180	2x RF3	**TOP-Z 30/7**	1~/3~	180	2x RF3
UPS 32-60 FB	6/10	1~/3~	220	**Stratos-Z 30/1-8**	1~	180	2x RF3	**TOP-Z 30/7**	1~/3~	180	2x RF3

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Grundfos				Wilo – new								
Secondary hot water circulation pumps 				**High-efficiency pumps** infinitely variable, 1~ 230V, 50Hz Stratos-Z T_{min}: 0°C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~ 230V bzw. 3~ 400V, 50Hz T_{max} = Star-Z and TOP-Z 65°C or 80°C IP-Z = 110°C			
Type	PN	Motor	Overall length [mm]	**Type** * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	**Type** ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
DN 40											
Magna 40-120 FN	6/10	1~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
Magna UPE 40-120 FB	6/10	1~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
Magna UPE 40-120 FN	6/10	1~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
UMC 40-30 B	10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UMS 40-30 B	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 40-50 FB	6/10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 40-80 FB	6	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 42-42 FB	10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 42-50 FB	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 42-70 FB	6	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UP 42-80 FB	6	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPC 40-120 B	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**-**	-	-	-
UPC 40-180 B	10	3~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
UPC 40-60 B	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPE 40-120 FB	6/10	1~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
UPE 40-80 FB	6/10	1~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**-**	-	-	-
UPS 40-120 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**-**	-	-	-
UPS 40-180 FB	6/10	1~/3~	250	**Stratos-Z 40/1-12**	1~	250	-	**-**	-	-	-
UPS 40-30 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 40-50 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 40-52 FB	10	1~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 40-60 B	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 40-60/2 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 40-60/4 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
UPS 42-50 FB	6/10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS	**TOP-Z 40/7**	1~/3~	250	-
DN 50											
Magna 50-120 FN	6/10	1~	280	**-**	-	-	-	**-**	-	-	-
Magna 50-60 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-	**-**	-	-	-
Magna UPE 50-120 FN	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-	**-**	-	-	-
Magna UPE 50-60 FB	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-	**-**	-	-	-
Magna UPE 50-60 FN	6/10	1~	250	**Stratos-Z 50/1-9**	1~	280	Mod. pipe	**-**	-	-	-
UMC 50-30 B	10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**TOP-Z 50/7**	3~	280	-
UMC 50-60 B	10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**TOP-Z 50/7**	3~	280	-
UMS 50-30 B	10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**TOP-Z 50/7**	3~	280	-
UMS 50-60 B	10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**TOP-Z 50/7**	3~	280	-
UPC 50-120 B	10	3~	280	**-**	-	-	-	**-**	-	-	-
UPC 50-60 B	10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**TOP-Z 50/7**	3~	280	-
UPE 50-120 FB	6/10	3~	280	**Stratos-Z 50/1-9**	1~	280	-	**-**	-	-	-
UPE 50-60 FB	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	-	**-**	-	-	-

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Grundfos

Secondary hot water circulation pumps

Wilo – new

High-efficiency pumps
infinitely variable, 1~ 230 V, 50 Hz
Stratos-Z T_{min}: 0 °C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15 °C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Standard pumps
1 or 3 stages
1~ 230 V bzw. 3~ 400 V, 50 Hz
T_{max} = Star-Z and TOP-Z 65 °C or 80 °C
IP-Z = 110 °C

Type	PN	Motor	Overall length [mm]	Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
DN 50											
UPE 50-80 FB	6/10	1~	280	**Stratos-Z 50/1-9**	1~	280	–	**–**	–	–	–
UPS 50-120 FB	6/10	1~/3~	280	**Stratos-Z 50/1-9**	1~	280	–	**–**	–	–	–
UPS 50-180 FB	6/10	1~/3~	280	**–**	–	–	–	**–**	–	–	–
UPS 50-30 FB	6/10	1~/3~	280	**Stratos-Z 50/1-9**	1~	280	–	**TOP-Z 50/7**	3~	280	–
UPS 50-60/2 FB	6/10	1~/3~	280	**Stratos-Z 50/1-9**	1~	280	–	**TOP-Z 50/7**	3~	280	–
UPS 50-60/4 FB	6/10	1~/3~	280	**Stratos-Z 50/1-9**	1~	280	–	**TOP-Z 50/7**	3~	280	–
DN 65											
Magna 65-120 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
Magna 65-60 FN	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
Magna UPE 65-120 FB	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
Magna UPE 65-60 FB	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
UMC 65-30 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UMC 65-60 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UMS 65-30 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UMS 65-60 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPC 65-120 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPC 65-60 B	10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPE 65-120 FB	6/10	3~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
UPE 65-60 FB	6/10	1~	340	**Stratos-Z 65/1-12**	1~	340	–	**–**	–	–	–
UPS 65-120 FB	6/10	1~/3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPS 65-180 FB	6/10	3~	340	**–**	–	–	–	**–**	–	–	–
UPS 65-30 FB	6/10	1~/3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPS 65-60/2 FB	6/10	1~/3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
UPS 65-60/4 FB	6/10	1~/3~	340	**Stratos-Z 65/1-12**	1~	340	–	**TOP-Z 65/10**	3~	340	–
DN 80											
UMC 80-30 B	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UMC 80-60 B	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UMS 80-30 B	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UMS 80-60 B	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UPC 80-120 B	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UPE 80-120 FB	6	3~	360	**–**	–	–	–	**–**	–	–	–
UPS 80-120 FB	6/10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UPS 80-30 FB	6/10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
UPS 80-60 FB	10	3~	360	**–**	–	–	–	**TOP-Z 80/10**	3~	360	–
DN 100											
UPE 100-160 FB	6	3~	450	**–**	–	–	–	**–**	–	–	–
UPS 100-30 FB	10	3~	450	**–**	–	–	–	**–**	–	–	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

KSB				Wilo – new							
Secondary hot water circulation pumps				**High-efficiency pumps** infinitely variable, 1~230V, 50Hz Stratos-Z T_{min}: 0°C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~230V or 3~400V, 50Hz T_{max} = Star-Z and TOP-Z 65°C or 80°C IP-Z = 110°C			
Type	PN	Motor	Overall length [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
Rp ½ (Pump thread G 1)												
C 20-10	10	1~	140	**-**	-	-	-		**Star-Z 20/1**	1~	140	-
R 12-1 E	10	1~	140	**-**	-	-	-		**Star-Z 20/1**	1~	140	-
Rp ¾ (Pump thread G 1¼)												
C 12/15	10	1~	150	**-**	-	-	-		**Star-Z 20/1**	1~	140	Mod. pipe
C 12/15 T	10	1~	150	**-**	-	-	-		**Star-Z 20/1**	1~	140	Mod. pipe
C 12/30	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
C 12/30 T	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
C 20-15	10	1~	150	**-**	-	-	-		**Star-Z 20/1**	1~	140	Mod. pipe
C 20-30	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
Rp 1 (Pump thread G 1½)												
C 22/40	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
C 22/40 T	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
C 22/55	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
C 22/55 T	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
C 25-40	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
C 25-60	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/6**	1~/3~	180	-
R 22-2 E	10	1~	180	**Stratos ECO-Z 25/1-5**	1~	180	-		**Star-Z 25/2**	1~/3~	180	-
25-80 (B) Rio-Eco	10	1~	180	**Stratos-Z 25/1-8**	1~	180	-		**-**	-	-	-
Rp 1¼ (Pump thread G 2)												
BZ 1 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
BZ 2 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
C 30-70 E Riotherm	10	1~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~	180	-
G 22-5 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
G 22-8 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
G 24-3 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
G 32-12 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
GG 1 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
GG 2 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
R 22-5 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
R 22-8 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
R 24-3 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
R 32-12 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
R 32-4 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~/3~	180	-
30-80 (B) Rio-Eco	10	1~	180	**Stratos-Z 30/1-8**	1~	180	-		**TOP-Z 30/7**	1~	180	-
30-120 (B) Rio-Eco	10	1~	180	**Stratos-Z 30/1-12**	1~	180	-		**TOP-Z 30/10**	1~	180	-

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

KSB				Wilo – new							
Secondary hot water circulation pumps				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos-Z T_{min}: 0 °C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15 °C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = Star-Z and TOP-Z 65 °C or 80 °C IP-Z = 110 °C			
Type	PN	Motor	Overall llength [mm]	**Type**	Motor	Overall length [mm]	Adapter/ note		**Type**	Motor	Overall length [mm]	Adapter/ note
Rp 1¼ (Pump thread G 2)												
RG 1 E/D	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe		**Star-Z 25/2**	1~/3~	180	Mod. pipe
RG 2 E/D	10	1~/3~	180	**Stratos-Z 30/1-8**	1~	180	–		**TOP-Z 30/7**	1~/3~	180	–
DN 40												
G 40-17 E/D	10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	–
G 42-17 E/D	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	–
R 40-17 E/D	10	1~/3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	–
R 42-17 E/D	10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	1~/3~	250	–
C 40/70 D Riotherm	6/10	3~	250	**Stratos-Z 40/1-8**	1~	220	F1-MS		**TOP-Z 40/7**	3~	250	–
40-120 (B) Rio-Eco	10	1~	250	**Stratos-Z 40/1-12**	1~	250	–		**–**	–	–	–
DN 50												
C 50/70 D Riotherm	6/10	3~	280	**Stratos-Z 50/1-9**	1~	280	–		**TOP-Z 50/7**	3~	280	–
50-90 (B) Rio-Eco	10	1~	280	**Stratos-Z 50/1-9**	1~	280	–		**–**	–	–	–
DN 65												
65-120 (B) Rio-Eco	10	1~	340	**Stratos-Z 65/1-12**	1~	340	–		**–**	–	–	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Loewe				Wilo – new								
Secondary hot water circulation pumps 				**High-efficiency pumps** infinitely variable, 1~ 230 V, 50 Hz Stratos-Z T_{min}: 0 °C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15 °C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard pumps** 1 or 3 stages 1~ 230 V or 3~ 400 V, 50 Hz T_{max} = Star-Z and TOP-Z 65 °C or 80 °C IP-Z = 110 °C			
Type	PN	Motor	Overall length [mm]	**Type** * Star-Z NOVA available from 2010	Motor	Overall length [mm]	Adapter/ note	**Type** ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overal llength [mm]	Adapter/ note
R ½ inner											
C 151	10	1~	86	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
C 151 X	10	1~	130	**Star-Z NOVA service motor***	1~	–	–	**Star-Z 15 service motor****	1~	–	–
C 151 U	10	1~	86	**Star-Z NOVA C**	1~	140	Mod. pipe	**Star-Z 15 TT service motor**	1~	–	–
C 151 XU	10	1~	130	**–**	–	–	–	**Star-Z 15 TT service motor**	1~	–	–
Rp ¾ (Pump thread G 1¼)											
VC 222	10	1~/3~	130	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
VC 223 Y	10	1~/3~	130	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
VC 225 Y	10	1~/3~	130	**Stratos-Z 30/1-8**	1~	180	Mod. pipe	**TOP-Z 30/7**	1~/3~	180	Mod. pipe
Rp 1 (Pump thread G 1½)											
C 241 Y	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
C 243 Y	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/6**	1~/3~	180	–
K 241 Y	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/2**	1~/3~	180	–
K 243 Y	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	–	**Star-Z 25/6**	1~/3~	180	–

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo Replacement Guide Secondary Hot Water Circulation

Speck				Wilo – new							
Secondary hot water circulation pumps 				**High-efficiency pumps** infinitely variable, 1~230V, 50Hz Stratos-Z T_{min}: 0°C/T_{max}: 80 °C Stratos ECO-Z T_{min}: +15°C/T_{max}: 65 °C Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C				**Standard-Pumpen** 1 or 3 stages 1~230V or 3~400V, 50Hz T_{max} = Star-Z and TOP-Z 65°C or 80°C IP-Z = 110°C			
Type	PN	Motor	Overall length [mm]	**Type** *Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note	**Type** ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
R ½ inner											
BN 15	10	1~	130	**Star-Z NOVA***	1~	84	Mod. pipe	**Star-Z 15****	1~	84	Mod. pipe
Rp ¾ (Pump thread G 1¼)											
BA 25/41	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 20/1**	1~	140	Mod. pipe
BA 25/43	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
BA 25/64	10	1~/3~	150	**Stratos-Z 25/1-8**	1~	180	Mod. pipe	**TOP-Z 30/7**	1~/3~	180	Mod. pipe
BN 20/11	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 20/1**	1~	140	Mod. pipe
BN 20/22	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 20/1**	1~	140	Mod. pipe
BN 20/43	10	1~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
MBA 25/41	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 20/1**	1~	140	Mod. pipe
MBA 25/43	10	1~/3~	150	**Stratos ECO-Z 25/1-5**	1~	180	Mod. pipe	**Star-Z 25/2**	1~/3~	180	Mod. pipe
MBA 25/64	10	1~/3~	150	**Stratos-Z 25/1-8**	1~	180	Mod. pipe	**TOP-Z 30/7**	1~/3~	180	Mod. pipe
Rp 1 (Pump thread G 1½)											
BVA 25/33	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-
BVA 25/41	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-
BVA 25/43	10	1~/3~	180	**Stratos ECO-Z 25/1-5**	1~	180	-	**Star-Z 25/2**	1~/3~	180	-

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Vortex

Secondary hot water circulation pumps

Type	PN	Motor	Overall length [mm]
R ½ inner			
100	10	1~	84
BW 150	10	1~	80
BW 150 (90)	10	1~	90
BW 151	10	1~	80
BW 152	10	1~	80
BW 153 R	10	1~	80
BWZ 150	10	1~	80
BWZ 150	10	1~	90
BWZ 151	10	1~	80
BWZ 152	10	1~	80
BWZ 153 R	10	1~	80
R ¾ inner			
100 V	10	1~	120
100 VK	10	1~	120
BW 150	10	1~	120
BWZ 150	10	1~	120
BWZ 153 V	10	1~	110
Rp ¾ (Pump thread G 1¼)			
BW 150 (120)	10	1~	120
BW 150 V	10	1~	110
BW 151 V	10	1~	110
BW 152 V	10	1~	110
BW 400	10	1~	150
BW 400 V	10	1~	110
BWV 150	10	1~	120
BWZ 150 (120)	10	1~	120
BWZ 150 V	10	1~	150
BWZ 150 V	10	1~	110
BWZ 151 V	10	1~	110
BWZ 153 V	10	1~	110
BWZ 400	10	1~	150
BWZ 400 V	10	1~	110
Rp 1 (Pump thread G 1½)			
BW 352	10	1~	150
BW 401 V	10	1~	150
BWZ 401 V	10	1~	150
M 551 BW BZ	10	1~	130
M 551 BW GG	10	1~	130

Wilo – new

High-efficiency pumps

infinitely variable, 1~ 230 V, 50 Hz
Stratos-Z T_{min}: 0 °C/T_{max}: 80 °C
Stratos ECO-Z T_{min}: +15 °C/T_{max}: 65 °C
Star-Z NOVA T_{min}: + 2 °C/T_{max}: 65 °C

Type * Star-Z NOVA available from January 2010	Motor	Overall length [mm]	Adapter/ note
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA C	1~	140	Mod. pipe
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA C	1~	140	Mod. pipe
Star-Z NOVA C	1~	140	Mod. pipe
–	–	–	–
–	–	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA C	1~	140	Mod. pipe
Star-Z NOVA service motor*	1~	–	–
–	–	–	–
–	–	–	–
Star-Z NOVA A	1~	140	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	–
Stratos-ECO Z 25/1-5	1~	180	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA service motor*	1~	–	–
Star-Z NOVA C	1~	140	Mod. pipe
Star-Z NOVA C	1~	140	Mod. pipe
Star-Z NOVA C	1~	140	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe
Stratos-ECO Z 25/1-5	1~	180	Mod. pipe

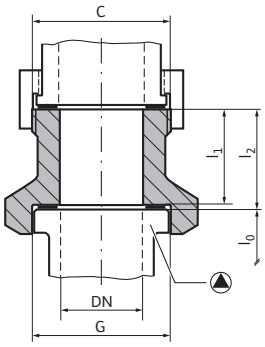
Standard pumps

1 or 3 stages
1~ 230 V or 3~ 400 V, 50 Hz
T_{max} = Star-Z and TOP-Z 65 °C or 80 °C
IP-Z = 110 °C

Type ** Star-Z 15 will be replaced by Star-Z NOVA from 2010	Motor	Overall length [mm]	Adapter/ note
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 C	1~	140	Mod. pipe
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 C	1~	140	Mod. pipe
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 C (CPress)	1~	140	Mod. pipe
Star-Z 15 service motor**	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 service motor**	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 15 TT service motor	1~	–	–
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe
Star-Z 25/6	1~/3~	180	Mod. pipe

Observe current type (three-phase/single-phase) and nominal pressure of pump (PN 6/PN 10)! — 1~ = 1 ~ 230 V, 50 Hz single-phase, 3~ = 3 ~ 400 V, 50 Hz three-phase
Check separately whether existing switchgears can be used.

Wilo-R

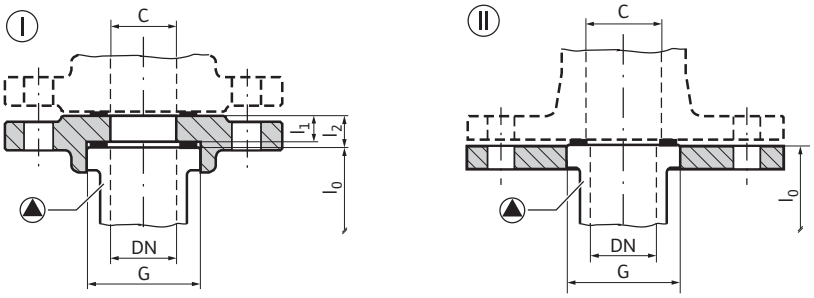


Wilo-R adapters for length compensation

	New pump		Pipe		Dimensions		Material	Weight approx.	Art no.
	DN	G	C	DN	l_1	l_2	–		
	–				[mm]		–	[kg]	
R 24	25	G 1½	R 1½	25	18	20	C.I.	0.2	110880596
R 1	25	G 1½	R 1½	25	28	30	C.I.	0.3	110786891
R 2	25	G 1½	R 1½	25	38	40	C.I.	0.5	110626790
R 5 (MS)	25	G 1½	R 2	32	3	5	MS	0.1	110678298
R 6	25	G 1½	R 2	32	13	15	C.I.	0.3	110678493
R 7	25	G 1½	R 2	32	18	20	C.I.	0.4	110787094
R 12 (MS)	25	G 1½	2¼	40	3	5	MS	0.1	110788294
R 8	32	G 2	R 2	32	18	20	C.I.	0.3	110627199
R 9	32	G 2	R 2	32	23	25	C.I.	0.4	110627291
R 10	32	G 2	R 2	32	28	30	C.I.	0.5	110627394
R 14	32	G 2	R 2	32	38	40	C.I.	0.6	110627497
R 22 (RG)	32	G 2	R 2	32	38	40	RG	0.8	110680092
R 11	32	G 2	R 2	32	68	70	C.I.	1.0	110627590

Note: The scope of delivery includes: 1 adapter and 2 gaskets

Wilo-RF



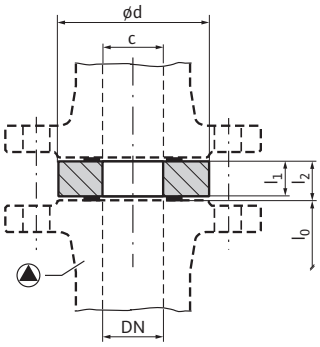
Wilo-RF flanged rings
The Wilo-RF flanged rings are – with some exceptions – for compensating the length with PN 6 flanges (RF 4, RF 5 and RF 6 also for PN 16). Length compensation with PN 10/16 flanges requires onsite pipe modifications.

Wilo-RF flanged rings

	New pump		Pipe	Design	Dimensions		Material	Weight approx.	Art no.	
	DN	G	C	–	l_1	l_2	–	–	PN 6	PN 10/16
	–				[mm]		–	[kg]		
RF 7	25	G 1½	DN 25	II	–	–	C.I.	0.4	110628790	–
RF 10	25	G 1½	DN 25	I	25.5	30	C.I.	1.0	110851499	–
RF 9	25	G 1½	DN 40	I	15.5	20	C.I.	1.4	110679395	–
RF 13	25	G 1½	DN 50	I	25.5	30	C.I.	1.9	110679498	–
RF 1	32	G 2	DN 32	II	–	–	C.I.	1.0	110627990	–
RF 2	32	G 2	DN 32	I	2.5	7	C.I.	1.4	110680298	–
RF 3	32	G 2	DN 32	I	15.5	20	C.I.	1.4	110680596	–
RF 4	32	G 2	DN 32	I	30.5	35	C.I.	2.5	110680699	110680791
RF 0	32	G 2	DN 40	II	–	–	C.I.	1.3	110679796	–
RF 8	32	G 2	DN 40 (square flange, hole circle D.90)	I	5.5	10	C.I.	0.9	110680997	–
RF 12	32	G 2	DN 40	I	5.5	10	C.I.	1.6	110851797	–
RF 11	32	G 2	DN 50	II	–	–	C.I.	1.7	110679899	–
RF 5	32	G 2	DN 50	I	15.5	20	C.I.	2.8	110787197	110791299
RF 6	32	G 2	DN 50	I	30.5	35	C.I.	3.0	110787290	110791391

Note: The scope of delivery includes: 1 flanged ring, 2 gaskets and screws

Wilo-F



Wilo-F intermediate flange connecting pieces

The Wilo-F intermediate flange connecting pieces are - with some exceptions - for compensating the length with PN 6 or PN 10/16 flanges. Onsite pipe modification is required if adapters are not available.

The washers included in the scope of delivery must be used for pumps that have combination flanges.

F1-MS flange pieces in bronze brass CW 612 N are approved for potable water circulation systems.

Wilo-F intermediate flange connecting pieces for length compensation

	New pump	Pipe	Dimensions			Material	Weight approx.	Art no.	
	DN	C	l_1	l_2	Ø D	–	PN6 / PN16	PN 6	PN 10/16
	–		[mm]			–	[kg]		
F 0	40	DN 40	13	15	91	C.I.	0.8/1.1	110842497	110842590
F 1	40	DN 40	28	30	91	C.I.	1.4/1.7	110586593	110586696
F 1-MS	40	DN 40	28	30	91	MS	1.3/1.9	2060865	2060920
F 26	40	DN 40	48	50	91	C.I.	2.2/2.4	110851098	110851190
F 2	50	DN 50	8	10	106	C.I.	0.7/1.0	110787690	110791494
F 3	50	DN 50	18	20	106	C.I.	1.3/1.6	110623098	110623190
F 4	50	DN 50	28	30	106	C.I.	1.7/2.0	110681292	110681395
F 5	50	DN 50	33	35	106	C.I.	2.0/2.4	110623293	110623396
F 40	50	DN 50	158	160	106	C.I.	7.4	–	2101156
F 9	65	DN 65	8	10	126	C.I.	0.9/1.3	110787896	110791690
F 10	65	DN 65	18	20	126	C.I.	1.5/1.9	110624092	110624195
F 11	65	DN 65	28	30	126	C.I.	2.2/2.5	110624298	110624390
F 28	65	DN 65	38	40	126	C.I.	2.8/3.1	110681498	110681590
F 29	65	DN 65	43	45	126	C.I.	3.1/3.4	110681693	110681796
F 41	65	DN 65	133	135	126	C.I.	8.3	–	2101157
F 16	80	DN 80	8	10	141	C.I.	1.3	110788099	–
F 17	80	DN 80	18	20	141	C.I.	2.2	110625097	–
F 30	80	DN 80	23	25	141	C.I.	2.5/2.8	110681899	110681991
F 18	80	DN 80	38	40	141	C.I.	3.7	110625292	–
F 42	80	DN 80	138	140	141	C.I.	11.6	–	2101158
F 34	100	DN 100	33	35	161	C.I.	3.9/3.8	110851293	110851396
F 35	100	DN 100	53	55	161	C.I.	5.7/6.8	110862592	110862695
F 43	100	DN 100	188	190	161	C.I.	13.3	–	2101159

Note: The scope of delivery includes: 2 gaskets and screws

Wilo-R, Wilo-RF, Wilo-F

Same pipe connection of old and new pump

Connection of old pump	Connection of new Wilo pump	New **Wilo replacement pump** is **shorter** by the following overall length difference ΔL_0 [mm]																				
		0	5	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100	135	140	160	190
		[mm]																				
G 1½	G 1½			Gasket		R24		R1		R2		R1+ R24										
G 2	G 2			Gasket		R8	R9	R10		R14 or R22 (RG)	R8+ R9	2xR9	R9 + R10	2x R10	R11	2x R14	R8 + R11	R10 + R11				
DN 40	DN 40				F0			F1 F1-MS				F26		2xF1 2xF1-MS	F0 + F26 + Gasket			2x F26				
DN 50	DN 50			F2		F3		F4	F5	2xF3	F2 + F5	F3 + F4	F3+ F5	2xF4	2xF5						F40	
DN 65	DN 65			F9		F10		F11		F28	F29	F10 + F11		2x F11	F11 + F28	2xF28	F28 + F29		F41			
DN 80	DN 80			F16		F17	F30	F16 + F17		F18		2x F30		F17 + F18	F18 + F30	2x F18				F42		
DN 100	DN 100								F34				F35		2x F34		F34 + F35					F43

Wilo-F intermediate flange connecting pieces are available in 2 versions, PN6 or PN10/16. (Exceptions: F 16, F 17 and F 18 only in PN 6).

Smaller pipe connection for new Wilo pump

Connection of old pump	Connection of new Wilo pump	New **Wilo replacement pump** is **shorter** by the following overall length difference ΔL_0 [mm]																
		0	5	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100
		[mm]																
G 2	G 1½			2xR5 (MS)				2xR6		2xR7								
G 2¼	G 1½			2x R12 (MS)														
DN 25 oval flange	G 1½	2x RF7				2x RF7 + R24		2x RF7 + R1		2x RF7 + R2								
DN 25	G 1½													2x RF10		2x RF10 +R24		2x RF10 +R2
DN 32	G 2	2x RF1			2x RF2	RF1+ RF3			RF1+ RF4	2x RF3			RF3+ RF4		2x RF4			
DN 40 square end flange	G 2					2x RF8				2x RF8 + R8	2x RF8 + R9	2x RF8 + R10		2x RF8 + R14				
DN 40	G 1½									2x RF9								
DN 40	G 2	2x RF0		RF0+ RF12		2x RF12		2x RF0 + R10		2x RF0 + R14				2x RF12 +R14	2x RF12 +F26			
DN 50	G 1½													2x RF13		2x RF13 + R24	2x RF13 + R1	2x RF13 + R2
DN 50	G 2	2x RF11				RF11 + RF5		2x RF11 + R10		2x RF5		RF11 + RF5 +R10	RF5+ RF6		2x RF6			

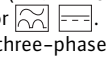
Wilo-RF and Wilo-F adapters are – with some exceptions, see previous page – for compensating the length with PN 6 or PN 10/16 flanges.
Onsite pipe modification is required if adapters are not available.

Technical notes for replacement

Installation position
The Wilo pump is to be installed free of any stress (at all operating conditions) with horizontal shaft in the pipe while the terminal box is on the top or on the side.

Exception:
- TOP-SD pumps have terminal boxes turned by 10° and must therefore only be installed with the flow direction to the top.
  Up to a nominal width of DN 65, all pumps of the Stratos/Stratos-D/Stratos-Z series as well as the TOP-S/-SD/-D/-Z series are equipped with combination flanges PN 6/10. The washers included in the delivery have to be used. It is not allowed to install a combination flange to another combination flange.

Residual current protection
Wilo pumps can be used without restriction in existing installations **with and without RCD circuit breakers**.

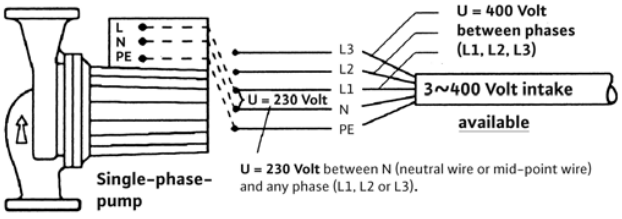
Note:
For **high-efficiency pumps with single-phase connection** (Stratos PICO, Stratos ECO-Z, Stratos, Stratos-D, Stratos-Z), the operation on RCD circuit breakers according to DIN EN 61008-1 is permitted without any impairment of the RCD function (DIN VDE 0160). Suitable RCD circuit-breakers are identified by  or  .
For energy-saving pumps with three-phase connection (IP-E/DP-E, IL-E/DL-E series), the RCD circuit breaker must be selectively universal-current-sensitive (breaking current 300 mA).

Stratos modules
Stratos single pumps
IF-Module for Stratos single pumps.
With digital interface for data exchange of control commands and messages.

Stratos-D double pumps
Stratos-D pump with 2 IF-Modules
For connection and data exchange between the two IF-Modules (accessories), the connection cable (approx. 0.7 m, 2-core) which is included in the scope of delivery of the IF-Module (only for IF-Module Stratos PLR) must be connected in the terminal boxes of the pumps.

Electrical connection
Connection of a single-phase pump 1 ~ 230 V to a three-phase mains 3 ~ 400 V
The tension between any phase (L1, L2 or L3) and the neutral conductor N is U = 230 V.
If there is no neutral conductor N, a new line with a neutral conductor has to be laid.

Connecting a single-phase pump to a three-phase mains



Pump operation
Pump control
- Electrical operating conditions according to VDE 0160 are to be maintained during the operation of Wilo pumps with control devices or module accessories.
- When operating pumps in conjunction with **frequency converter makes not supplied by Wilo**, it is necessary to use **output filters** to reduce motor noise and prevent harmful voltage peaks and to adhere to the following limit values:

Glandless pumps $P_2 \leq 2.2$ kW and Glanded pumps $P_2 \leq 1.1$ kW

- **Voltage peaks $\hat{u} < 650$ V**
- **Rate of voltage rise $du/dt < 500$ V/µs**
  For noise suppression on glandless pumps, it is recommended to use sine filters (LC filters) rather than du/dt filters (RC filters).

Glanded pumps $P_2 > 1.1$ kW

- **Voltage peaks $\hat{u} < 850$ V**
- **Rate of voltage rise $du/dt < 500$ V/µs**
  Installations with great cable lengths (> 10 m) between converter and motor may cause increases of the du/dt and û levels (resonance). The same may happen for operations with more than 4 motor units at one voltage source.
  The output filters must be selected as recommended by the converter manufacturer or filter supplier.
  The pumps must be operated at max. 95 % of their rated speed if the frequency converter causes motor losses.
  When operating standard pumps of the TOP-S/-SD/-D/-Z series with a frequency converter, the following limit values at the connection clamps must not be under-run:
  $U_{min} = 150$ V, $f_{min} = 30$ Hz.

Motor protection Stratos/TOP series
Motor overload protection of Stratos and TOP pumps can be ensured as follows.
- **Blocking current-proof motors: no motor protection required**
  The motors are designed in such a way that the windings are not damaged in the event of an overload. This holds true for TOP-S/-SD/TOP-Z pumps both in single-phase and in three-phase versions with a max. rated motor power $P_2 = 90$ watt. For TOP-D with $P_2 \leq 20$ W.
- **Pumps with full motor protection (WSK) and Wilo tripping unit SK 602/622**
  Realisation of full motor protection by means of thermal winding contacts (WSK) placed within the stator windings.
  This holds true for TOP-S/-SD/-Z single-phase pumps with a rated motor power of $P_2 \geq 180$ watt. For TOP-D with $P_2 \geq 60$ W.
- **Pumps with integrated full motor protection including trip electronics**
  Patented motor protection with integrated trip mechanics in the terminal box as standard in all TOP-S/-SD/-Z three-phase pumps from $P_2 < 180$ watt onwards as well as in all Stratos pumps.
  Permanent full motor protection thanks to motor temperature monitoring in the winding.
  In the event of fault, e.g. if there is impermissible motor heating caused by blocking, 2-phase operation etc.: With TOP-S/-SD/-Z pumps there is a three-pole deactivation in the terminal box of the pump motor.
  A release must be effected by pushing the confirmation button at the terminal box on all TOP pumps.

Connection of Wilo-TOP.. and Stratos ... to Wilo switchgears existing onsite

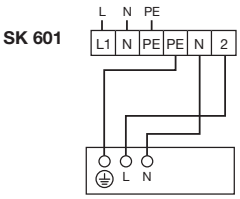
Connection of Wilo-TOP... and Stratos ... to Wilo switchgears existing onsite

	New pump type															
	Connection of switchgear possible according to circuit diagram														Accessories: Modules	
															Wilo-IF-Modul Single-phase current	
	Wilo-TOP-S Wilo-TOP-Z				Wilo-TOP-SD or 2 x Wilo-TOP-S 2 x Wilo-TOP-Z				Wilo-TOP-D				Wilo-Stratos Stratos-Z	Wilo-Stratos-D or 2 x Stratos 2 x Stratos-Z	Wilo-Stratos Stratos-Z	Stratos-D or 2 x Stratos 2 x Stratos-Z
Existing Wilo-switchgear	1~		3~		1~		3~		1~		3~		1~	1~	1~	1~
	IS	WSK SSM	IS	SSM	IS	WSK SSM	IS	SSM	IS	WSK	IS	WSK				
SK 601	A	B	C[1)]	D[1)]	A	B	C[1)]	D[1)]	T	V	X[1)]	Y	S	S	Yes	Yes
SK 602/622	F	C	H	I	F	C	H	I	U	W	X1	Y1	J	J	Yes	Yes
SK 632	–	–	K	L	–	–	K	L	–	–	K	L	–	–	Yes	Yes
S2R 3D	–	–	–	–	M	N	O	P	–	–	–	–	–	Q or R	Yes	Yes
AR/DR/CR	–	–	–	S	–	–	–	S	–	–	–	–	–	–	–	–

IS: Internal protection against unacceptably high winding temperatures, WSK: Thermal winding contacts SSM: Collective fault signal

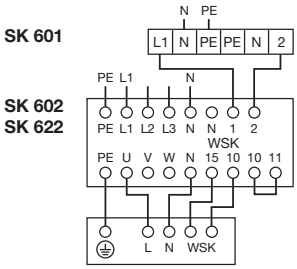
– = connection not possible,
[1)] Only in conjunction with contactor or Wilo-SK 602/622; SK602/622 can also be used as on/off switch or contactor

Circuit diagram A
Mains 1~230 V/N/50 Hz



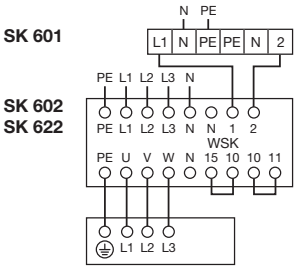
1) Wilo-TOP-S/-Z/-SD

Circuit diagram B
Mains 1~230 V/N/50 Hz



1) 3) Wilo-TOP-S/-Z/-SD

Circuit diagram C
Mains 3~400 V/N/50 Hz



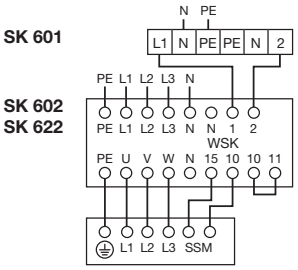
1) 3) Wilo-TOP-S/-Z/-SD

1) Automatic restart after power failure
3) SK 622 with additional terminals for collective run and fault signals

Ensure correct grounding when replacing a three-phase pump (3~400 V) with a single-phase pump (1~230 V)
Consult your Wilo representative before using Wilo pumps in conjunction with non-listed Wilo switchgears or switchgears not supplied by Wilo.

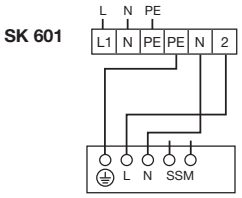
Connection of Wilo-TOP.. and Stratos ... to Wilo switchgears existing onsite

Circuit diagram D
Mains 3~400 V/N/50 Hz



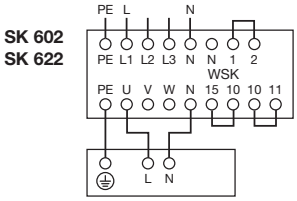
1) 2) 3) Wilo-TOP-S/-Z/-SD

Circuit diagram E
Mains 1~230 V/N/50 Hz



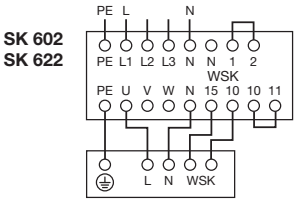
1) Wilo-Stratos/-Z/-D

Circuit diagram F
Mains 1~230 V/N/50 Hz



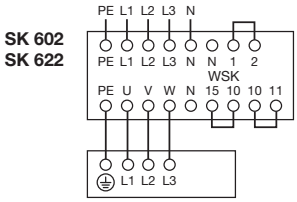
1) Wilo-TOP-S/-Z/-SD

Circuit diagram G
Mains 3~400 V/N/50 Hz



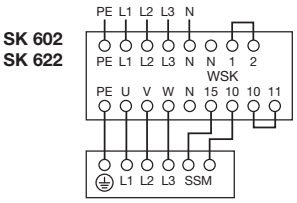
1) 3) Wilo-TOP-S/-Z/-SD

Circuit diagram H
Mains 3~400 V/N/50 Hz



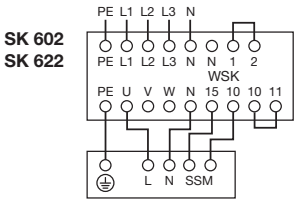
1) Wilo-TOP-S/-Z/-SD

Circuit diagram I
Mains 3~400 V/N/50 Hz



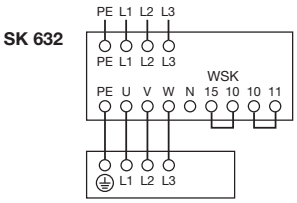
1) 2) 3) Wilo-TOP-S/-Z/-SD

Circuit diagram J
Mains 3~400 V/N/50 Hz
or 1~230 V/N/50 Hz



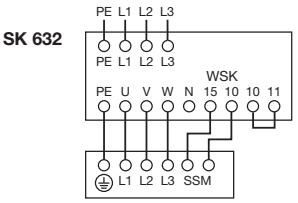
1) 2) 3) Wilo-Stratos/-Z/-D

Circuit diagram K
Mains 3~400 V/N/50 Hz



1) Wilo-TOP-S/-Z/-SD

Circuit diagram L
Mains 3~400 V/N/50 Hz



1) 2) Wilo-TOP-S/-Z/-SD

1) Automatic restart after power failure
2) After an overload fault trip of the pump (TOP or Stratos), reset first at the pump, then at the switchgear
3) SK 622 with additional terminals for collective run and fault signals

Ensure correct grounding when replacing a three-phase pump (3~400 V) with a single-phase pump (1~230 V).
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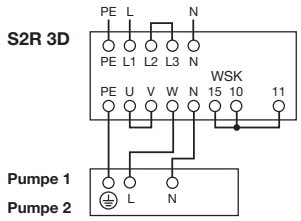
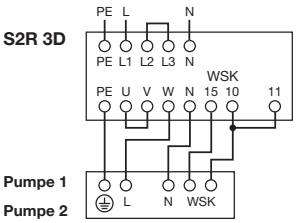
Connection of Wilo-TOP.. and Stratos ... to Wilo switchgears existing onsite

Circuit diagram M
Mains 1~230 V/N/50 Hz



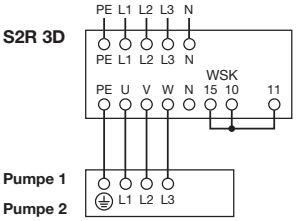
1) 3)Wilo-TOP-S/-Z/-SD

Circuit diagram N
Mains 1~230 V/N/50 Hz



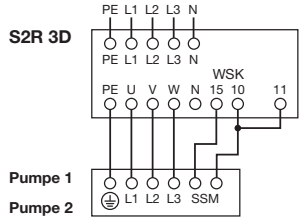
1) Wilo-TOP-S/-Z/-SD

Circuit diagram O
Mains 3~400 V/N/50 Hz



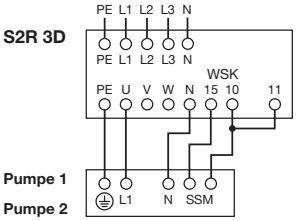
1) Wilo-TOP-S/-Z/-SD

Circuit diagram P
Mains 3~400 V/N/50 Hz



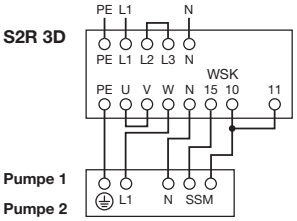
1) 2) Wilo-TOP-S/-Z/-SD

Circuit diagram Q
Mains 3~400 V/N/50 Hz



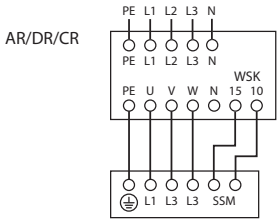
1) 2) Wilo-Stratos/-Z/-D

Circuit diagram R
Mains 1~230 V/N/50 Hz



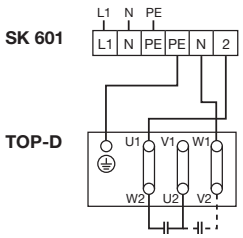
1) 2) Wilo-Stratos/-Z/-D

Circuit diagram S
Mains 3~400 V/N/50 Hz



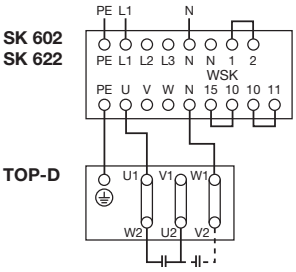
1) Wilo-TOP-S/-Z/-SD

Circuit diagram T
Mains 1~230 V/N/50 Hz



1)

Circuit diagram U
Mains 1~230 V/N/50 Hz



1)

1) Automatic restart after power failure
2) After an overload fault trip of the pump (TOP or Stratos), reset first at the pump, then at the switchgear

Ensure correct grounding when replacing a three-phase pump (3~400 V) with a single-phase pump (1~230 V).
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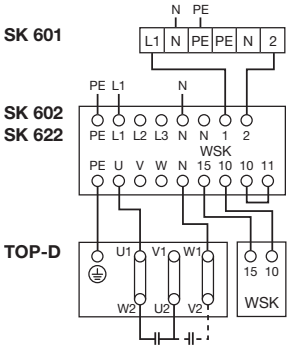
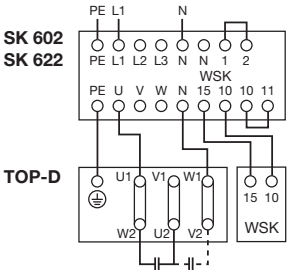
Connection of Wilo-TOP.. and Stratos ... to Wilo switchgears existing onsite

Circuit diagram V
Mains 1~230 V/N/50 Hz



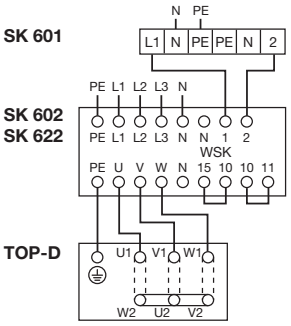
1)

Circuit diagram W
Mains 1~230 V/N/50 Hz



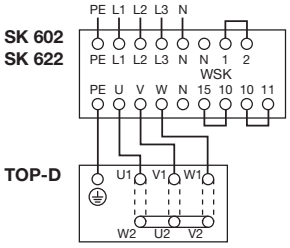
1)

Circuit diagram X
Mains 3~400 V/N/50 Hz



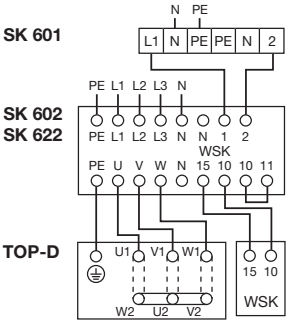
1) 3)

Circuit diagram X1
Mains 3~400 V/N/50 Hz



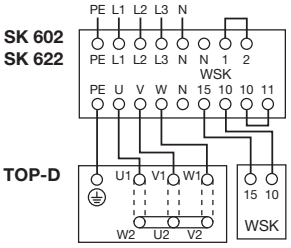
1)

Circuit diagram Y
Mains 3~400 V/N/50 Hz



1) 3)

Circuit diagram Y1
Mains 3~400 V/N/50 Hz



1) 3)

1) Automatic restart after power failure
3) SK 622 with additional terminals for collective run and fault signals

Ensure correct grounding when replacing a three-phase pump (3~400 V) with a single-phase pump (1~230 V).
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Pump check

And in the event of faults?
High operational safety, maintenance-free operation over years, energy-saving operation and the requested low noise level are the main requirements on heating circulating pumps in technical building equipment.

Modern pumps fulfill these requirements. If however a fault occurs, it may take a long time until the cause is identified.

Pump check

Pump runs				
Fault	**Description**	**Possible cause**	**Repair**	**Support**
Mechanical noise	grinding, bevelling, rattling	wear of bearing, non-return flap, valve cone	change pump, avoid wobbling by changing the operating state (throttling); renew non-return flap or valve or choose different size	pump replacement list, check of the installation dimensions, the hydraulic and electrical values
	clicking	foreign matter in the pump housing or impeller	separate motor housing and pump and clean them	exchange gaskets, scrapers
Flow noise	gurgling	air in the installation, gas formation	venting, check pressure maintenance	automatic ventilation valves with air shut-off valve
	rushing, also in pipes	pump performance too high	check hydraulic output, measure Δp again, change flow volume by adjusting the gate valves, define correct pump performance / setpoint	differential pressure gauge, flow and return, installation thermometer
Cavitation noise	crackling	cavitation	increase static system pressure, choose pump with low inlet pressure (from pump catalogue)	increase nitrogen pressure and filling pressure in the diaphragm expansion tank-
Resonance noise	humming, droning, resonating	duty point at the end of the pump curve, amplitudes too high, factor of speed multiplied with the blade number corresponds with the system components	dress impeller to size, modify immanent oscillation of the installation, choose pump with different speed	Contact the Wilo customer service if nothing helped
Leakages	dropping between motor and pump housing	motor or can gaskets are faulty	change pump	heating fitter's tools
	flange or screwed gaskets are faulty	deformed installation, gaskets are too old	renew gaskets, attention: close gate valves of pump	scraper

Pump check

Pump runs

Fault	Description	Possible cause	Repair	Support
Pump performance too weak	wrong direction of rotation	electrical connection wrong	wire according to installation instructions, change two phases, if it is three-phase current	insulated screwdriver
	wrong delivery direction	pressure and suction port mistaken	install pumps turned by 180° in pipework	normal fitter's tools
	suction port of the impeller is blocked	foreign matter or system dirt has been taken in	separate motor and pump housing – clean impeller, remove foreign matter, wash thoroughly	screwdriver, scriber, attention: winding must not be wet
	air in the system	water or nitrogen loss	look for cause of loss, re-fill, check diaphragm expansion vessel	filling hose with hose nozzle
Pump performance too weak (continued)	motor or hand mixer closed	wrong control command	check control equipment, start mixer manually, if necessary	voltage tester, voltmeter, amperemeter, if necessary, contact control cabinet manufacturer or electrician
	speed stage too low	wrong speed stage	speed stage switch in max. position	manually or with screwdriver
	delivery head too low	wrong settings	choose higher setpoint	manually

Pump stops

Fault	Description	Possible cause	Repair	Support
Voltage at the terminal board	pump blocked	foreign matter in the impeller	separate motor and housing – remove foreign matter	screwdriver, scriber Note: winding must not be wet
		deposit in the can	deblock at the rotor shaft end-	let pump run with open shaft end and flush
	rotor can be turned easily	defect capacitor	replace	insulated screwdriver
		defect winding	measure through, check passage at the terminal board, replace pump	voltage tester, voltmeter, amperemeter, normal fitter's tools
No voltage at the terminal board	protective switch or tripping unit for full motor protection has triggered	has been set too weakly	set higher, to the specified value (operating instructions)	screwdriver 2 mm and screwdriver 10 mm, for smaller and medium pump performances block rotor, switch pump on: safety switch must trigger after max. 60 s
		speed stage of pump has been modified, but no corrections at the protective switch	different protective switch installation of tripping unit for full motor protection	
		because pump is blocked	de-block	screwdriver 10 mm
		2-phase run defect MSS	check safety fuses or automat	visual check
		winding damage	change pump	normal fitter's tools
	safety fuse has triggered	short circuit, loose connection, fuses too weak, RCD, caused by control devices, control voltage at the contactor	thorough check of all possibilities	get electrical test devices or electrician

Dimensioning – heating pumps

Demand-oriented pump dimensioning in compliance with EnEV

The definition of the pump performance according to the actual demand is necessary if

- there have been modifications at the building, the heating system/ equipment or if the utilisation has changed.
- the old pump is replaced or has been designed too big.

In order keep the determination of the pump performance as simple as possible, we recommend the following calculation for the rough determination of flow volume Q and delivery head H or the use of tools (PC software, pump slide rule).

This rough calculation does not replace the heat demand calculation or piping calculation for new installations.

The correct dimensioning of heating circulating pumps and the checking of the performance is compulsory even for controlled energy-saving pumps.

The following values have to be determined:

1. Heat demand $\dot{Q}_N$ of the building
2. Flow rate $\dot{V}$ (or Q) of the pump
3.. Delivery head H of the pump

1. Heat demand $\dot{Q}_N$ of the building

An exact calculation in accordance with DIN DIN 4701 for residential buildings is not necessary if the specific heat demand does not exceed

70 W/m² useful area of the building **or**
100 W/m² for detached houses with max. 2 flats.

$$\dot{Q}_N = \frac{\text{Useful area x spec. heat demand}}{1000} \quad \text{[kW]}$$

Note:
If a detailed heat demand calculation is done or if exact values are available from the past, these should be used.

2. Flow rate $\dot{V}$ (Q) according to specific heat demand

Rough determination of flow volumes for pump dimensioning and presetting of thermostatic valves in heating installations

Spec. heat demand per m² useful area		Spec. flow rate per m² Useful area at Δϑ			
Residential buildings with ...	$\dot{Q}_{spec}$	$\dot{V}_{spec}$ at 20 K	$\dot{V}_{spec}$ at 15 K	$\dot{V}_{spec}$ at 10 K	$\dot{V}_{spec}$ at 5 K
max. 2 flats	100 W/m²	4.3l/h	5.7l/h	8.6l/h	17.2l/h
more than 2 flats	70 W/m²	3.0l/h	4.0l/h	6.0l/h	12.0l/h
Low-energy house-standard	≤ 40 W/m²	≤ 1.7 l/h	≤ 2.3 l/h	≤ 3.4 l/h	≤ 6.8 l/h

$\mathbf{Q_{Pu}}$ = $\dot{V}_{Pu}$ or $_{TV}$
$\mathbf{Q_{Pu}} = A_N \cdot \dot{V}_{spec}$ [l/h]
$\mathbf{A_N}$ The heatable useful area which is covered by the pump or the thermostatic valve [m²]
$\dot{V}_{spec}$ Specific flow rate per m² useful area at Δϑ
$\dot{Q}_{spec}$ Specific heat demand per m² useful area according to HeizAnlV

3. Delivery head H of the pump

(Differential pressure at flow volume)

–As the calculation of the delivery head H is very complex for existing heating systems, the following simplified methods are usually sufficient when replacing pumps:

a) Global method

Reduce delivery head of the old pump generally by approx. 25 %. The resulting reduction of the pump performance is uncritical. Experience shows that these influences are compensated in the heating system by performances reserves in the radiator and wide open thermostatic valves.

b) Simplified calculation method

Simplification is permitted (e.g. negligence of branch pipes, etc.), as the influences on the total value are only minor.

$$\text{Pump delivery head: } H_{PU} = \frac{R \cdot l \cdot ZF}{10.000} \quad [m]$$

R = 50 to 150 [Pa/m] (old building 50 ... new building 150)
l = Length of the most unfavourable branch [m] (feed + return)
ZF= Allowance factor:
Adapters/fittings/thermostatic valves = 2.2
as above, plus mixer/return flow inhibitor = 2.6
$\mathbf{H_{Pu}}$=set delivery head of the pump as low as it needs for a trouble-free supply.

Only these loss values are crucial in circulation systems for the delivery head of the pump.

With the determined values for:
Flow rate $\dot{V}$ (or Q) = ... m³/h and
delivery head H = ... m
the pump selection can be done with regard to the pump curve and recommendations for the dimensioning:

> Wilo catalogues
> Wilo-Select (PC software)

Dimensioning – heating pumps

Wilo tips

Flow rate $\dot{V}$ (Q) of the pump

- Select the pump type so that the determined volume flow rate is **in the right half of the pump curve**.

Delivery head H of the pump

- Set the delivery head at the pump or at a local differential pressure controller (hydraulic balancing) to max. 2 m or 20 kPa.
- Set the lowest delivery head which is sufficient for a safe heat supply, possibly determine by trial and error.
- If there are problems with the heat supply, check first the hydraulic balancing.

Use of high-efficiency and energy-saving pumps

Minimum differential pressure of pump

Must be available any time in order to guarantee the heat supply to the most unfavourably connected consumer. If there is no calculation of the piping, the differential pressure is determined by trial and error.

Maximum differential pressure of pump

The max. differential pressure in the secondary heating and control cycle shall not exceed 2 m or 20 kPa. If necessary, carry out the hydraulic balancing.

Control Δp-constant/Δp-variabel/Δp-constant-variabel

These control modes compensate best calculation tolerances and ensure the heat supply to all consumers at lowest power consumption.

Dimensioning – secondary hot water circulating pumps

Secondary hot water circulation pumps

Simplified calculation for selecting the right secondary hot water circulating pump in one-family homes.

For a correct dimensioning of pumps in larger secondary hot water systems, the piping system has to be calculated according to DIN DIN 1988 and W 551 to W 553. The necessary flow rate should be based on the figures recommended in the standard and the DVGW guideline.

Determination of flow rate according to spec. heat demand

Rough determination of flow volumes for pump dimensioning and presetting of line shut-off valves in secondary hot water circulation systems

Volume flow rate of pumps:

$Q_{PU} = \dot{V}_{PU}$ or $_{SV}$
$Q_{PU} = l \cdot \dot{V}_{spec}$

l The length of the supply pipes of the secondary hot water system with circulation pipe
$\dot{V}_{spec}$ Specific flow rate per m pipe length at ϑ
$\dot{Q}_{spec}$ Specific heat demand per m pipe length according to W 553/Table 3
PU = Pump
SV = Line shut-off valve

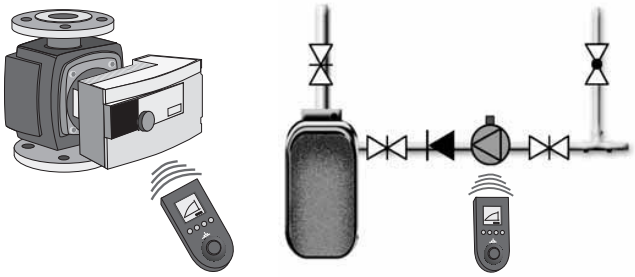
Spec. heat demand per m hot water pipe		Spec. flow rate per m hot water pipe at ϑ permitted temperature decrease			
Pipe	$\dot{Q}_{spec}$	$\dot{V}_{spec}$ at 2 K	$\dot{V}_{spec}$ at 3 K	$\dot{V}_{spec}$ at 4 K	$\dot{V}_{spec}$ at 5 K
Freely run in the basement/ non-heated rooms	11 W/m	4.6l/h	3.1l/h	2.3l/h	1.8l/h
Run in a shaft or in the wall	7 W/m	2.9l/h	1.9l/h	1.5l/h	1.2l/h

Setting of the delivery head

Pump delivery head: $H_{PU} = \frac{R \times l \times ZF}{10.000}$ **[m]**

R = 50 to 500 [Pa/m]
l = Length of the most unfavourable line of the hot water supply [m]
ZF = Allowance factor: Adapters/fittings/ line shut-off valves = 2.0
H_{Pu}= Set delivery head of the pump as low as it needs for a trouble-free supply.

High-efficiency circulation pump Wilo-Stratos-Z



Function:

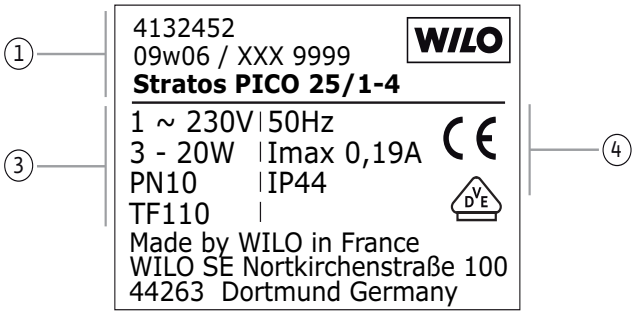
Adaptation of the pump performance to the actual demand in order to
- Avoid valve noise
- Reduce power consumption
- Avoid flow erosions.

Note:
- If the delivery head of the pump is chosen too high $H_{PU} > 2$ m this will lead up to noise and higher power consumption.
- Two differential pressure control modes Δp-c (constant) or Δp-v (variable) are possible.

Name plates

Wilo-Stratos PICO and Wilo-Star-Z NOVA

Name plate designation of Wilo-Stratos PICO range

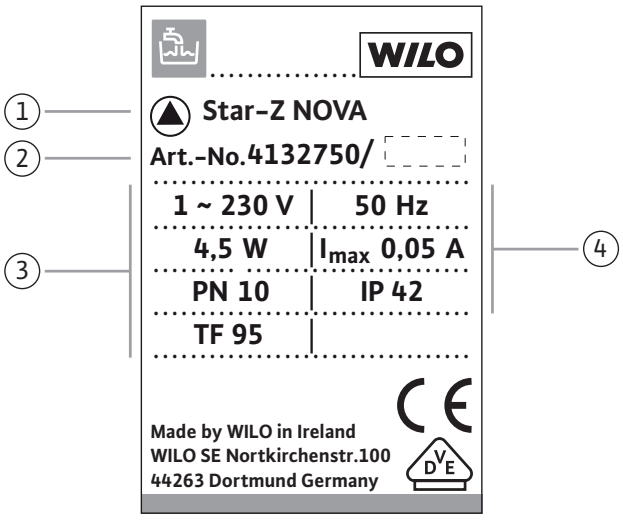


1 Art.-No./manufacturing date, series/ pump type

3 Voltage, power consumption, nominal pressure of pump, max. fluid temperature

4 Frequency, max. power consumption, protection class IP

Name plate designation Wilo-Star-Z NOVA



1 Series/pump type

2 Art.-No./manufacturing date

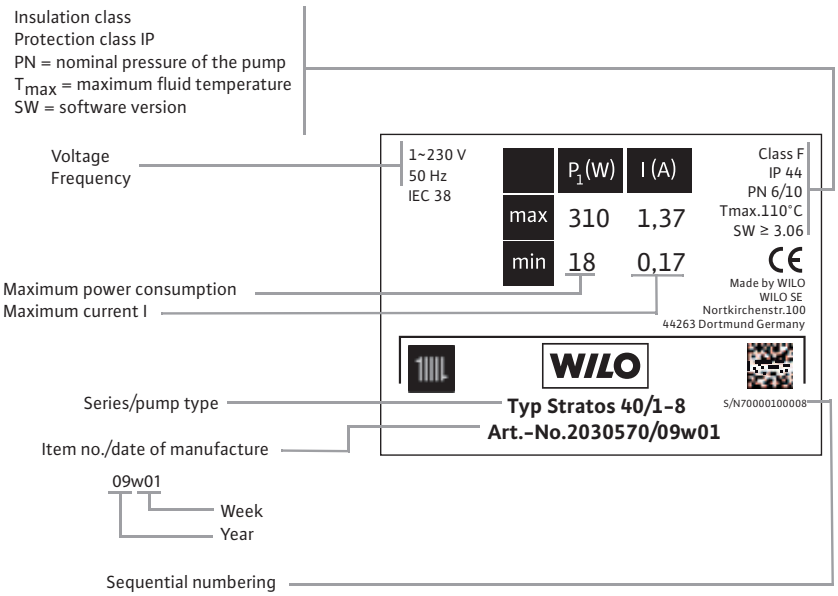
3 Voltage, power consumption, nominal pressure of pump, max. fluid temperature

4 Frequency, max. power consumption, protection class IP

Name plates

Wilo-Stratos and Wilo-TOP

Name plate designation of Wilo-Stratos range

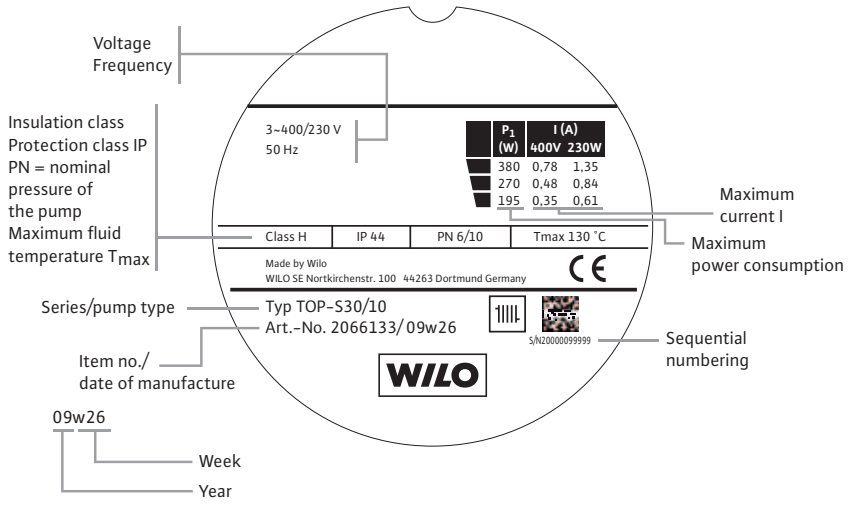


Standard version

Series short mark for the Wilo-Stratos range

Type Wilo-...	Design
	High-efficiency pumps, infinitely variable speed
Stratos	Single pump
Stratos-D	Double pump
Stratos-Z	Single pump for secondary hot water circulation systems

Name plate designation Wilo-TOP range



Standard version

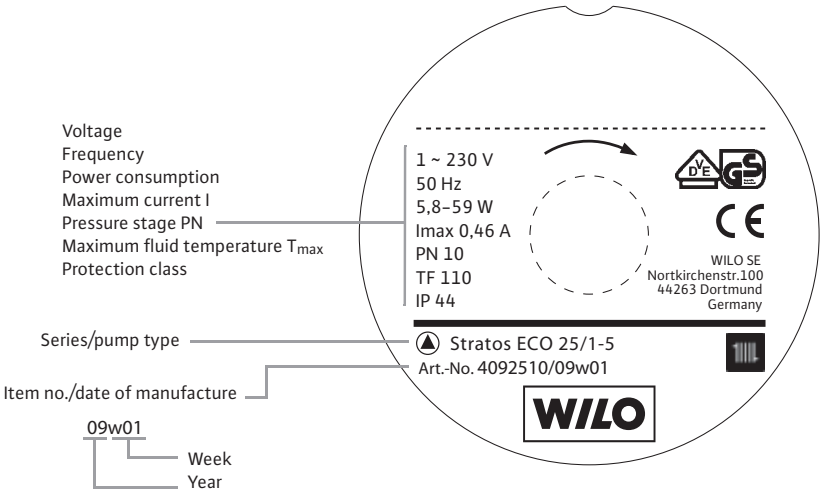
Series short mark for the Wilo-TOP range

Type Wilo-...	Design
	Standard pumps, 2 or 3 speed stages
TOP-S	Single pump
TOP-SD	Double pump
	Standard pumps, 1 speed stage
TOP-D	Single pump
	Circulation pumps for secondary hot water circulation systems, 3 speed stages
TOP-S	Single pump

Name plates

Wilo-Star and Wilo-Stratos ECO

Name plate designation Wilo-Star, Wilo-Stratos ECO



Standard version

Series short mark for the Wilo-Star and Wilo-Stratos ECO ranges

	Standard pumps, 3 speed stages
Star-RS	Single pump
Star-RSD	Double pump
Star-RSL	Venting pump
	Secondary hot water circulating pumps
Star-Z	Single pumps, 1 or 3 speed stages
Stratos ECO-Z	High-efficiency pump for potable water

Name plate designation of special versions

On request, some pumps can be supplied in the following special versions at additional charge (the type of the special version is indicated on the name plate):

- **130** Pump with short overall length
- **RG** Red brass version

Example

Type Wilo-...	Special version
Star-RS 25/4 RG	Star-RS 24/4 with red brass housing

Wilo-Star-E, Wilo-TOP-E, TOP-ED

Type key

High-efficiency pumps
Example: Wilo-Stratos 30/1-12

Stratos	Screw-end or flange-end pump	infinitely variable electronic control
Stratos-D	Flange double pump	infinitely variable electronic control
Stratos-Z	Screw-end or flange-end pump for secondary hot water circulation systems	infinitely variable electronic control
Stratos-PICO/Stratos-ECO	Screw-end pump, high-efficiency version, specially designed for 1-6-family houses	infinitely variable electronic control
Stratos ECO-Z	Screw-end pump, high-efficiency version for secondary hot water circulation systems	infinitely variable electronic control
30/	Nominal connection diameter	
1-12	Nominal delivery head range (m)	
BMS	Version with the option of connection to a building management system	
ST	Version with special hydraulics for the use in solar thermal systems	
L	Pump with connection for quick ventilation	

Standard pumps, max. 2800 1/min
Example: Wilo-Star-RS 25/6, Wilo-TOP-S 50/4

Star-RS	Screw-end pump	3 speed stages, can be set manually
Star-RSD	Double screw-end pump	3 speed stages, can be set manually
Star-Z	Screw-end pump for secondary hot water circulation systems	1/3 speed stages, can be set manually
Star ST	Screw-end pump for solar thermal systems-	3 speed stages, can be set manually
Star-RSG	Version with special hydraulics for use in geothermal systems	3 speed stages, can be set manually
TOP-S	Screw-end or flange-end pump	2 or 3 speed stages, can be set manually
TOP-S	Screw-end or flange-end pump for secondary hot water circulation systems	3 speed stages, can be set manually
TOP-SD	Screw-end or flange-end double pump	2 or 3 speed stages, can be set manually
25/	Nominal connection diameter	
6	Nominal delivery head (m) at Q = 0 m^3/h	
EM	Version with single-phase motor	
DM	Version with three-phase motor	
L	Pump with connection for quick ventilation	

Standard pumps, max. 1400 1/min
Example: Wilo-TOP-D 40

TOP-D	Screw-end or flange-end pump	1 speed stage
40	Nominal connection diameter	