



Similar to figure

Data sheet

Hydraulic data

Maximum operating pressure $P_N$	10 bar
Min. fluid temperature $T_{min}$	-20 °C
Max. fluid temperature $T_{max}$	130 °C

Materials

Pump housing	Grey cast iron
Impeller	PP-LGF50
Shaft	Stainless steel
Bearing	Carbon-graphite

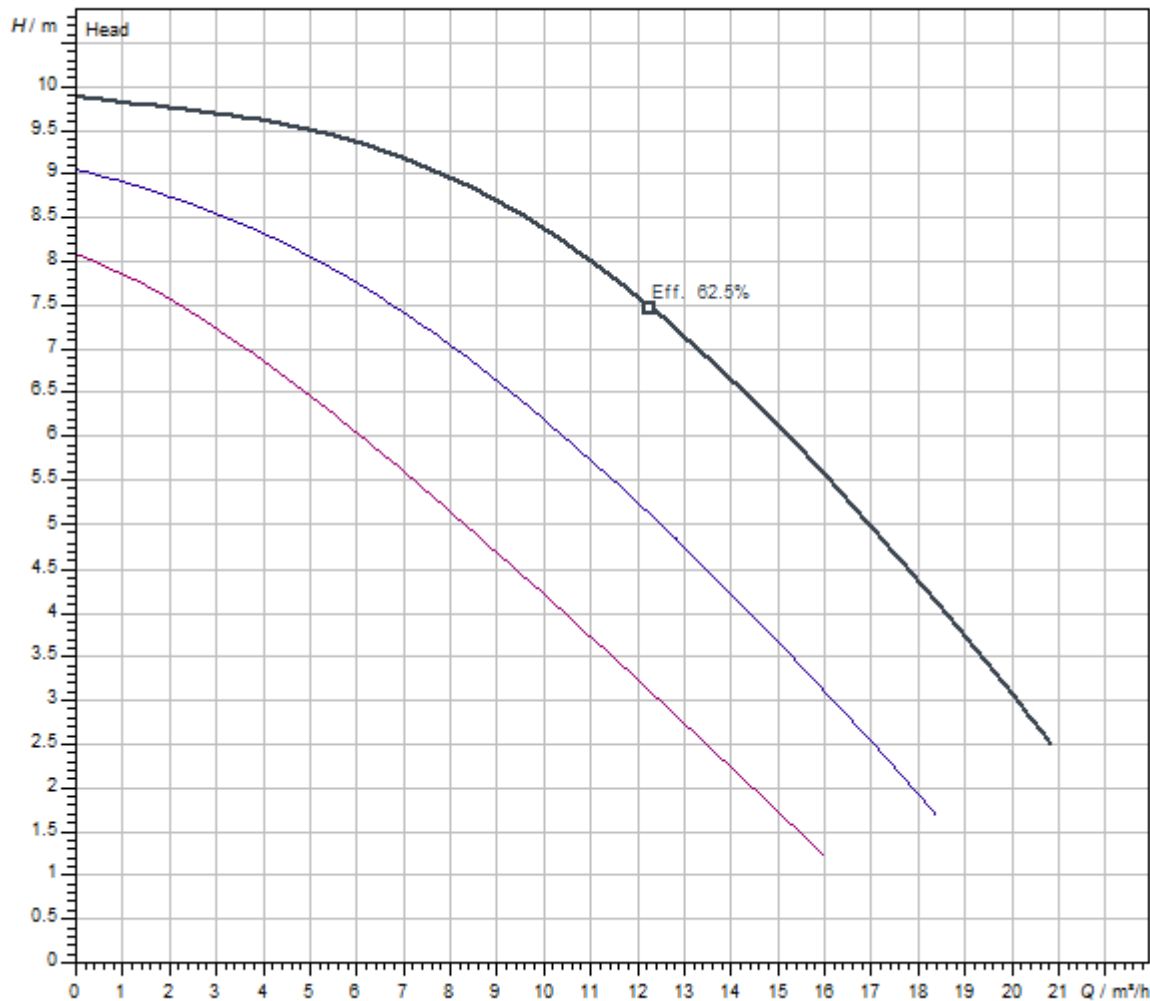
Motor data

Mains connection	3~400 V, 50 Hz
Rated current $I_N$	1.17 A
Max. speed $n_{max}$	2800 1/min
Power consumption $P_1$ (Q=max.) of selected impeller * number of pumps $P_1$	585 W
Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Protection class motor	IPX4D

Installation dimensions

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

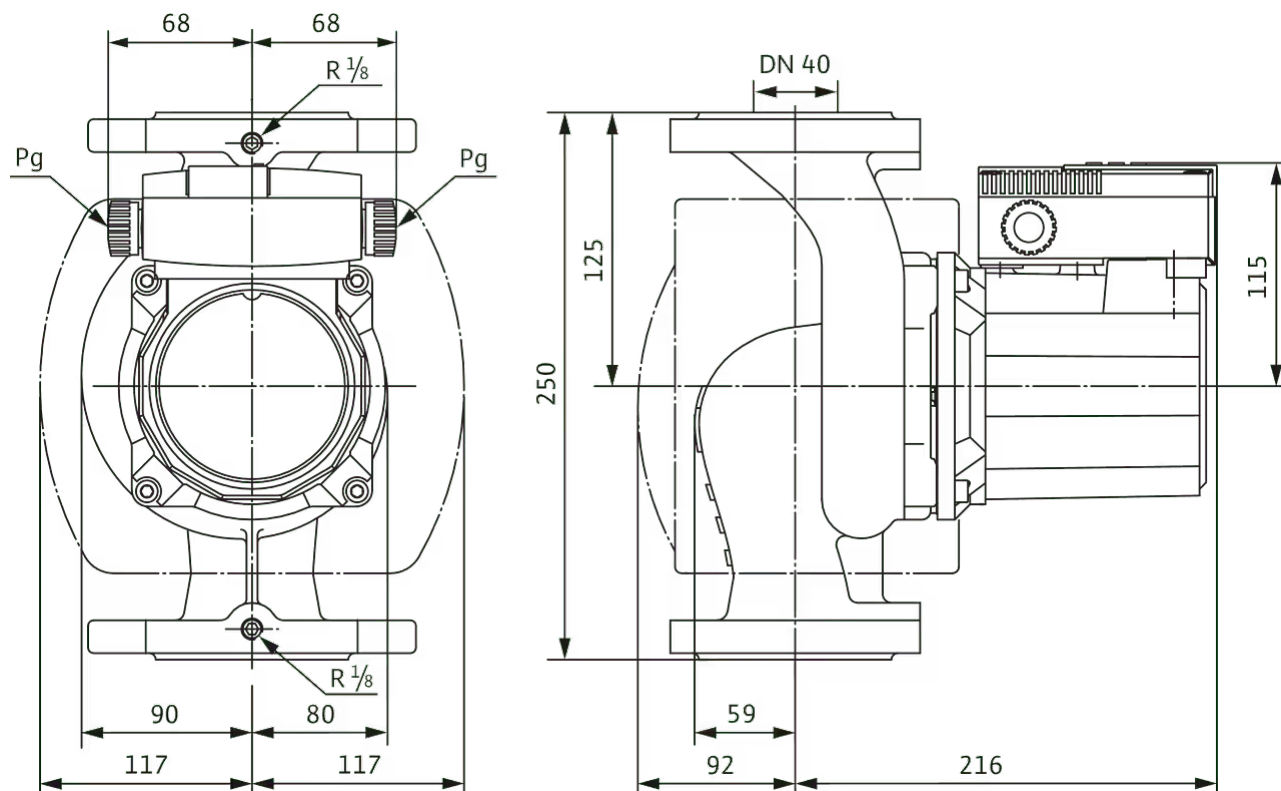
Pump curves

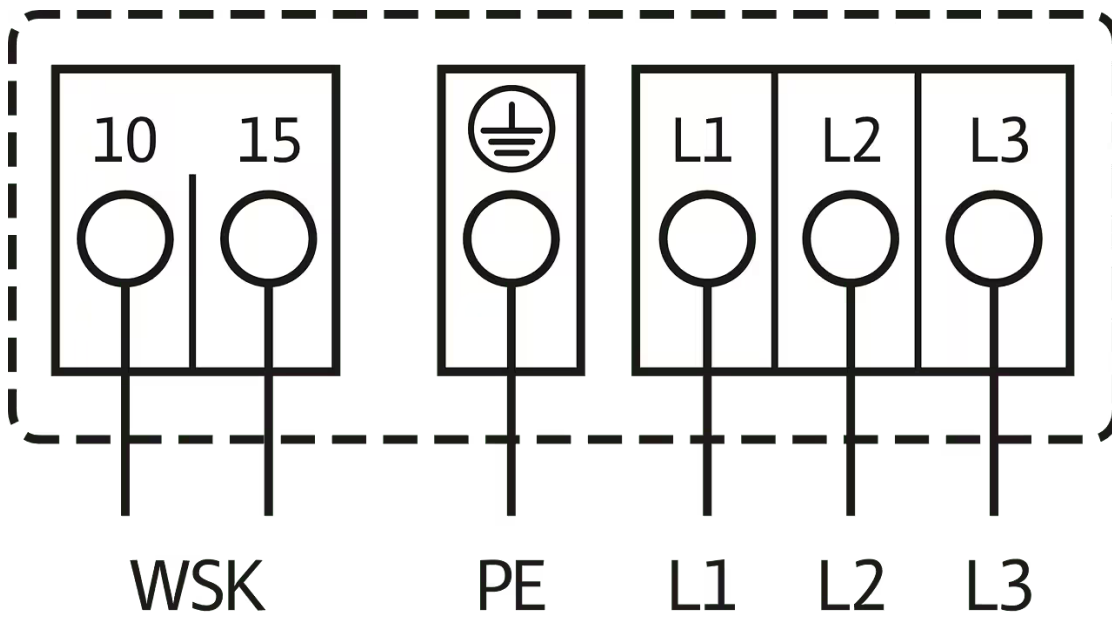


Fluid media	Water 100 %
Fluid temperature <i>T</i>	20.00 °C
speed at duty point <i>n hydr. @ OP</i>	2,800 1/min

## Dimensions and dimensions drawings

### TOP-S



**Wiring diagram**

**Mains connection, 3~400 V, 50 Hz**

3~230 V, 50 Hz (optional with switching plug 3~230 V)

WSK = thermal winding contact

Full motor protection at all speed stages with optional tripping unit

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


Triggering: External tripping at switchgear/control device

Reset: Automatic fault acknowledgement after cooling off of the motor

Automatic

## Ordering information

## Product data

Brand	Wilo
Product description	TOP-S 40/10 (3~400/230 V, PN 6/10)
Article number	<b>2165525</b> 
EAN number	4048482638133
Colour	green/black
Minimum order quantity	1
Date of sales availability	2016-03-01
Previous model article number	2080045
Previous model designation	TOP-S 40/10 (3~400/230 V, PN 6/10)

## Packaging

Packaging type	Cardboard box
Packaging property	Transport packaging
Pieces per pallet	28
Number per layer	7

## Dimension, weight

Length with packaging	430 mm
Length <i>L</i>	250 mm
Height with packaging	290 mm
Height <i>H</i>	308 mm
Width with packaging	230 mm
Width <i>W</i>	234 mm
Gross weight, approx. <i>m</i>	16 kg
Net weight, approx. <i>m</i>	14.7 kg

## Tender text

Can be used for hot-water heating systems of all kinds, industrial circulation systems, air-conditioning systems and closed cooling circuits.

Glandless circulator with screwed or flange connection, preselectable speed stages for power adjustment.

## Equipment and function

- > Manual power adjustment with 3 speed stages
- > Pumps with 1~ motor:
  - > P2 up to 90 W: internal protection against unacceptably high winding temperatures
  - > P2 ≥ 180 W: Full motor protection with thermal winding contacts in conjunction with tripping unit (optional: SK 602N/SK 622N)
- > Pumps with 3~ motor:
  - > P2 up to 90 W: internal protection against unacceptably high winding temperatures
  - > P2 ≥ 180 W: Full motor protection with thermal winding contacts in conjunction with tripping unit (optional: SK 602N/SK 622N)
  - > Mains connection 3~, 230 V with optional switching plug
- > Cathaphoretic-coated pump housing for optimal corrosion protection
- > PN 6/PN 10 combination flange (for DN 40 to DN 65)
- > Thermal insulation shell for heating applications

## Operating Data

Min. fluid temperature $T_{\min}$	-20 °C
Max. fluid temperature $T_{\max}$	130 °C
Min. ambient temperature $T_{\min}$	-20 °C
Max. ambient temperature $T_{\max}$	40 °C
Maximum operating pressure $PN$	10 bar

## Motor data

Emitted interference	EN 61000-6-3
Interference resistance	EN 61000-6-2
Mains connection	3~400 V, 50 Hz
Power consumption $P_{1\max}$	585 W
Max. speed $n_{\max}$	2800 1/min
Rated current $I_N$	1.17 A
Protection class motor	IPX4D


## Materials

Pump housing	Grey cast iron
Impeller	PP-LGF50
Shaft	Stainless steel
Bearing	Carbon-graphite

## Installation dimensions

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

## Ordering information

Brand	Wilo
Product description	TOP-S 40/10 (3~400/230 V, PN 6/10)
Net weight, approx. $m$	14.7 kg
Article number	<b>2165525</b> 

## Installation type

### Continuous, infinitely variable control, differential pressure-sensitive SC-HVAC system

#### SC/SC-FC-HVAC system

SC-FC-HVAC system 1x1,6A-FC-WM (direct starting)	2545426
SC-FC-HVAC system 2x1,6A-FC-WM (direct starting)	2545427
SC-FC-HVAC system 3x1,6A-FC-WM (direct starting)	2545428
SC-FC-HVAC system 4x1,6A-FC-WM (direct starting)	2545429
SC-HVAC system 1x1,6A-WM (direct starting)	2545310
SC-HVAC system 2x1,6A-WM (direct starting)	2545311
SC-HVAC system 3x1,6A-WM (direct starting)	2545312
SC-HVAC system 4x1,6A-WM (direct starting)	2545313

#### Antenna GSM/GPRS

D-network dual-band antenna with 3 m cable	2533862
D-network tri-band antenna 10 m cable	2533863
D-network tri-band antenna 15 m cable	2533864

#### Outdoor temperature sensor Pt 100

Outdoor temperature sensor Pt 100	2533772
-----------------------------------	---------

#### DDG impulse selector

DDG impulse selector	2533770
----------------------	---------

#### Communication module LON (SC)

Communication module LON (SC)	2538243
-------------------------------	---------

#### SC communication module BACnet

SC-communication module BACnet MS/TP (slave)	2538242
--	---------

#### Communication module GSM (SC)

Communication module GSM (SC)	2542216
-------------------------------	---------

#### Pump signalling module

Signalling module pump 1-2	2533812
Signalling module pump 3-6	2533836

#### SC-HVAC signal board

SC-HVAC signal board	2119646
----------------------	---------

#### DDG (4-20mA)

Wilo-DDG 10 Signal Trans.(4-20mA)2G VP.	2136454
Wilo-DDG 100 Signal Trans.(4-20mA)	2211740
Wilo-DDG 20 Signal Trans.(4-20mA)2G VP.	2136456
Wilo-DDG 40 Signal Trans.(4-20mA)2G VP.	2136458
Wilo-DDG 60 Signal Trans.(4-20mA)2G VP.	2136460

#### DDG transducer

DDG transducer	501771990
----------------	-----------

#### DDG power supply unit

DDG power supply unit	501865293
-----------------------	-----------

#### PTC thermistor tripping unit

PTC thermistor tripping unit	509275993
------------------------------	-----------

### Continuous, infinitely variable control, temperature-dependent SC-HVAC system

#### SC/SC-FC-HVAC system

SC-FC-HVAC system 1x1,6A-FC-WM (direct starting)	2545426
SC-FC-HVAC system 2x1,6A-FC-WM (direct starting)	2545427
SC-FC-HVAC system 3x1,6A-FC-WM (direct starting)	2545428
SC-FC-HVAC system 4x1,6A-FC-WM (direct starting)	2545429
SC-HVAC system 1x1,6A-WM (direct starting)	2545310
SC-HVAC system 2x1,6A-WM (direct starting)	2545311
SC-HVAC system 3x1,6A-WM (direct starting)	2545312
SC-HVAC system 4x1,6A-WM (direct starting)	2545313

#### Antenna GSM/GPRS

D-network dual-band antenna with 3 m cable	2533862
D-network tri-band antenna 10 m cable	2533863
D-network tri-band antenna 15 m cable	2533864

#### Outdoor temperature sensor Pt 100

Outdoor temperature sensor Pt 100	2533772
-----------------------------------	---------

#### Communication module LON (SC)

Communication module LON (SC)	2538243
-------------------------------	---------

#### SC communication module BACnet

SC-communication module BACnet MS/TP (slave)	2538242
--	---------



**Communication module GSM (SC)**

Communication module GSM (SC)	2542216
-------------------------------	---------

**Pump signalling module**

Signalling module pump 1-2	2533812
Signalling module pump 3-6	2533836

**SC-HVAC signal board**

SC-HVAC signal board	2119646
----------------------	---------

**PTC thermistor tripping unit**

PTC thermistor tripping unit	509275993
------------------------------	-----------

**Mechanical accessories****Pipe installation****Counter flange kit**

DN 40, PN 6 counter flange kit	2105578
DN 40, PN 10 counter flange kit	2105579

**Pipe installation, adapter fitting****Adapter set glanded pumps**

Adapter A40-60 Set, DN 40x60mm, PN 16	2085210
Adapter A40-100 Set, DN 40x100mm, PN 16	2085211
Adapter A40-40 kit, DN 40x40mm, PN 16	2117416
Adapter A40-160 kit, DN 40x160mm, PN 16	2119558

**Intermediate flange connecting piece F**

Intermediate flange pieces F 1, DN 40x30mm, PN 6	110586593
Intermediate flange pieces F 1, DN 40x30mm, PN 10/16	110586696
Intermediate flange pieces F 0, DN 40x15mm, PN 6	110842497
Intermediate flange pieces F 0, DN 40x15mm, PN 10/16	110842590
Intermediate flange pieces F 26, DN 40x50mm, PN 6	110851098
Intermediate flange pieces F 26, DN 40x50mm, PN 10/16	110851190

## Electrical accessories

### Pump control/accessories

#### Antenna GSM/GPRS

D-network dual-band antenna with 3 m cable	2533862
D-network tri-band antenna 10 m cable	2533863
D-network tri-band antenna 15 m cable	2533864
SMA/FME adapter	2545548

#### BMS base module

BMS base module	2533800
-----------------	---------

#### CC communication module BACnet

CC-communication module BACnet MS/TP (slave)	2537050
CC-communication module BACnet IP (slave)	2537051

#### Communication module CC

CC communication module	2533850
-------------------------	---------

#### Communication module GSM

GSM module	2533861
------------	---------

#### Communication module GSM (SC)

Communication module GSM (SC)	2542216
-------------------------------	---------

#### Communication module LON

Communication module LON	2533868
--------------------------	---------

#### Communication module LON (SC)

Communication module LON (SC)	2538243
-------------------------------	---------

#### Communication module ModBus

Communication module Modbus RTU	2533869
---------------------------------	---------

#### Communication module Profibus

Communication module Profibus DP	2533866
----------------------------------	---------

#### Connection cable control modules/signalling modules

Control modules connecting cable	2533790
Signalling modules connecting cable	2533890

#### DDG impulse selector

DDG impulse selector	2533770
----------------------	---------

#### Outdoor temperature sensor Pt 100

Outdoor temperature sensor Pt 100	2533772
-----------------------------------	---------

#### Pump signalling module

Signalling module pump 1-2	2533812
Signalling module pump 3-6	2533836

#### SC communication module BACnet

SC-communication module BACnet MS/TP (slave)	2538242
--	---------

#### SC-HVAC signal board

SC-HVAC signal board	2119646
----------------------	---------

#### Signal converter retrofit kit

Signal converter 0-10 V / 0-20 mA	2534992
-----------------------------------	---------

#### Temperature module

Temperature module for systems with 4-6 pumps	2533771
Temperature module for systems with 1-3 pumps	2534991

### Pump control/Smart control system

#### SC/SC-FC-HVAC system

SC-HVAC system 1x1,6A-WM (direct starting)	2545310
SC-HVAC system 2x1,6A-WM (direct starting)	2545311
SC-HVAC system 3x1,6A-WM (direct starting)	2545312
SC-HVAC system 4x1,6A-WM (direct starting)	2545313
SC-FC-HVAC system 1x1,6A-FC-WM (direct starting)	2545426
SC-FC-HVAC system 2x1,6A-FC-WM (direct starting)	2545427
SC-FC-HVAC system 3x1,6A-FC-WM (direct starting)	2545428
SC-FC-HVAC system 4x1,6A-FC-WM (direct starting)	2545429

### Differential pressure detection

#### DDA

Display unit for diff. pressure DDA 16	502856499
Display unit for diff. pressure DDA 6	503003598
Display unit for diff. pressure DDA 40	503217592

#### DDG (4-20mA)

Wilo-DDG 10 Signal Trans.(4-20mA)2G VP.	2136454
Wilo-DDG 20 Signal Trans.(4-20mA)2G VP.	2136456
Wilo-DDG 40 Signal Trans.(4-20mA)2G VP.	2136458
Wilo-DDG 60 Signal Trans.(4-20mA)2G VP.	2136460
Wilo-DDG 100 Signal Trans.(4-20mA)	2211740

#### DDG power supply unit

DDG power supply unit	501865293
-----------------------	-----------

#### DDG transducer

DDG transducer	501771990
----------------	-----------

### Motor protection

#### PTC thermistor tripping unit

PTC thermistor tripping unit	509275993
------------------------------	-----------

#### SK 602N

Switchgear SK 602N	2120444
--------------------	---------

#### SK 622N

Switchgear SK 622N	2120445
--------------------	---------

### Plug

#### Switching plug N

Switching plug "N"	2040655
--------------------	---------

### Maintenance/replacement

#### Rmot Top-S

Spare motor TOP-S/-SD 30/10 EM RMOT.	2046663
Spare motor TOP-S/-SD 40/7 EM RMOT.	2046665
Spare motor TOP-S 50/4 EM RMOT.	2046668
Spare motor TOP-S/-SV 25/7 EM RMOT.	2048334
Spare motor TOP-S/-SV 25/7 DM RMOT.	2048335
Spare motor TOP-S/-SD/-SV 30/7 EM RMOT.	2048336
Spare motor TOP-S/-SD/-SV 30/7 DM RMOT.	2048337
Spare motor TOP-S/-SV 40/4 EM RMOT.	2048338
Spare motor TOP-S/-SV 40/4 DM RMOT.	2048339
Spare motor TOP-SD 40/3 DM RMOT.	2063749

Spare motor TOP-S/-SD 30/5 DM RMOT.	2084786
Spare motor TOP-S 30/4 EM RMOT.	2085573
Spare motor TOP-S 30/4 DM RMOT.	2085574
Spare motor TOP-SD 40/3 EM RMOT.	2086903
Spare motor TOP-S/-SD 30/5 EM RMOT.	2110033
Spare motor TOP-S 25/10 EM RMOT.	2117529
Spare motor TOP-S 25/5 EM RMOT.	2122048
Spare motor TOP-S 25/5 DM RMOT.	2122049
Spare motor TOP-S25/10 DM RMOT.	2165575
Spare motor TOP-S/SD30/10 DM RMOT.	2165576
Spare motor TOP-S/SD40/7 DM RMOT.	2165577
Spare motor TOP-S/SD40/10 EM RMOT.	2165578
Spare motor TOP-S/SD40/10 DM RMOT.	2165579
Spare motor TOP-S/SD40/15 EM 2-SPEEDS RMOT.	2165580
Spare motor TOP-S/SD40/15 DM PN6/10 RMOT.	2165581
Spare motor TOP-S50/4 DM RMOT.	2165582
Spare motor TOP-S/SD50/7 EM RMOT.	2165584
Spare motor TOP-S/SD50/7 DM RMOT.	2165585
Spare motor TOP-S/SD50/10 EM 2-SPEEDS RMOT.	2165586
Spare motor TOP-S/SD50/10 DM RMOT.	2165587
Spare motor TOP-S/SD50/15 DM RMOT.	2165588
Spare motor TOP-S65/7 EM RMOT.	2165590
Spare motor TOP-S65/7 DM RMOT.	2165592
Spare motor TOP-S/SD65/10 EM RMOT.(450W)	2165594
Spare motor TOP-S/SD65/10 DM RMOT.(450W)	2165595
Spare motor TOP-S/SD65/13 DM RMOT.	2165597
Spare motor TOP-S/SD65/15 DM RMOT.	2165598
Spare motor TOP-S/SD80/7 EM RMOT.(450W)	2165599
Spare motor TOP-S80/7 DM RMOT.(450W)	2165601
Spare motor TOP-S/SD80/10 DM RMOT.	2165603
Spare motor TOP-S/SD80/15 DM RMOT.	2165604
Spare motor TOP-S/SD80/20 DM RMOT.	2165605
Spare motor TOP-S100/10 DM RMOT.	2165606
Spare motor TOP-S/SD/SV65/10 DM RMOT.	2165596
Spare motor TOP-S/SD80/7 EM 2-SPEED RMOT	2165600
Spare motor TOP-S80/7 DM RMOT.	2165602

## Services

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

### Recommended services

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

### More suitable services

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