

Wilo-Star-Z NOVA

GB Installation and operating instructions

F Notice de montage et de mise en service

E Instrucciones de instalación
y funcionamiento

I Istruzioni di montaggio, uso e
manutenzione

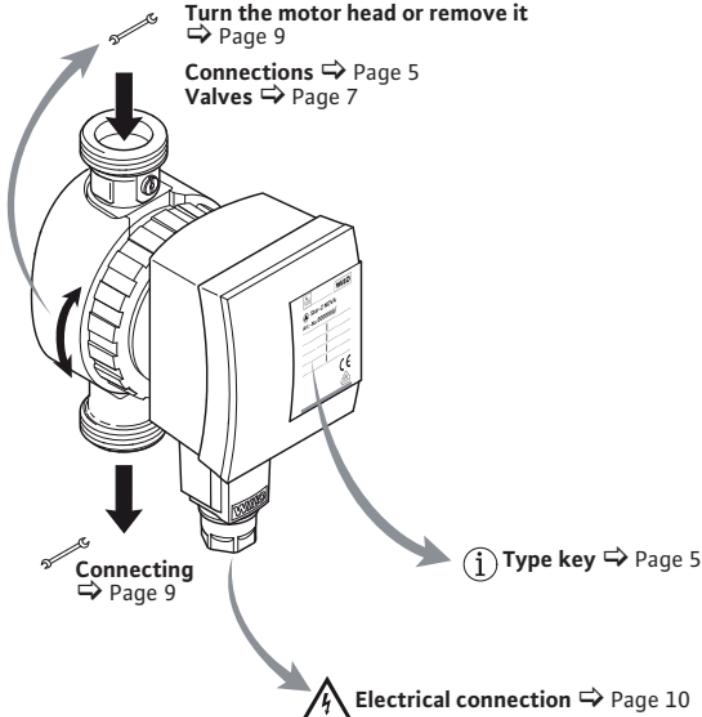
GR Οδηγίες εγκατάστασης και λειτουργίας

TR Montaj ve kullanma kılavuzu

H Beépítési és üzemeltetési utasítás

PL Instrukcja montażu i obsługi

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2 Safety

About these instructions

- Read through these instructions completely before installation. Non-observance of these instructions can result in injury to persons and damage to the pump/unit.
- Once installation work is complete, pass the instructions on to the end user.
- Keep the instructions near the pump. They can be used as a reference if problems occur later.
- We accept no liability for damages resulting from failure to follow these instructions.

Safety information

Important safety information is indicated as follows:



Danger: Indicates a danger to life due to electrical current.



Warning: Indicates a possible danger to life or injury.



Caution: Indicates possible risks to the pump or other items.



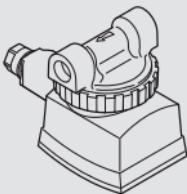
Note: Highlights tips and information.

<i>Qualification</i>	The pump may only be installed by qualified personnel. This product may not be commissioned or operated by persons with insufficient accountability (including children) or who do not possess the relevant specialist knowledge. Exceptions are only permitted on appropriate instruction from safety-responsible persons. The electrical connection may only be established by a qualified electrician.
<i>Regulations</i>	The current versions of the following regulations must be observed when installing the equipment: <ul style="list-style-type: none">• Accident prevention regulations• DVGW worksheet W551 (in Germany)• VDE 0370/Part 1• Other local regulations (e.g. IEC, VDE, etc.)
<i>Conversion, spare parts</i>	The pump must not be technically modified or converted. It is not permitted to open the pump motor by removing the plastic lid. Only use original spare parts.
<i>Transport</i>	Unpack and check the pump and all accessories upon receipt. Report any damage sustained in transit immediately. Dispatch the pump in the original packing only.
<i>Electrical current</i>	There is a danger of an electric shock when working with electrical current. Therefore: <ul style="list-style-type: none">• Switch off the power before beginning work on the pump and make sure that it cannot be switched on again accidentally.• Do not kink or nip the power cable or allow it to come into contact with heat sources.• The pump is protected against drips in accordance with protection class IP 42. Protect the pump against water spray. Do not immerse in water or other fluids.

3.1 Type key

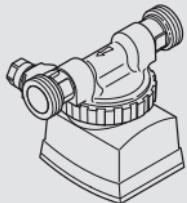
Star-Z	Series: Standard secondary hot water circulation pump, glandless pump
NOVA	Type designation A = with check valves C = with check valves and ready for connection with plug clock timer

3.2 Connections



Star-Z NOVA

Screwed connection: 15 (Rp 1/2")



Star-Z NOVA A and Star-Z NOVA C

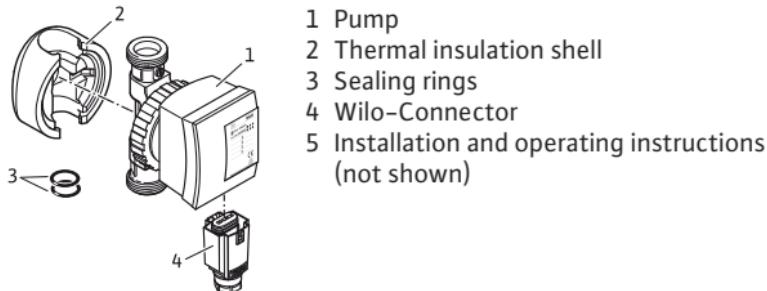
Screwed connection: 15 (Rp 1/2") and check
valves

3.3 Data

Star-Z NOVA, Star-Z NOVA A, Star-Z NOVA C	
Mains voltage	1 ~ 230 V / 50 Hz
Protection class	42
Nominal diameter of connecting pipes	R 1/2
Installation length	84 mm (Type A: 138 mm)
Maximum permissible operating pressure	10 bar
Permitted fluid temperature range	2 °C to 65 °C, in short-term operation up to 2 hours 70 °C
Max. ambient temperature	+ 40 °C
Max. permitted total hardness in secondary hot water circulation systems	20 °dH

See name plate or Wilo catalogue for further information.

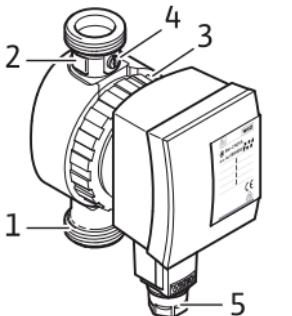
3.4 Scope of delivery



4.1 Application

The pump is intended for pumping potable or process water in a circulation system.

4.2 Functions



Valves The Star-Z NOVA A and Star-Z NOVA C versions are equipped with a non-return valve (1) on the pressure side and with a stop valve (2) on the suction side.

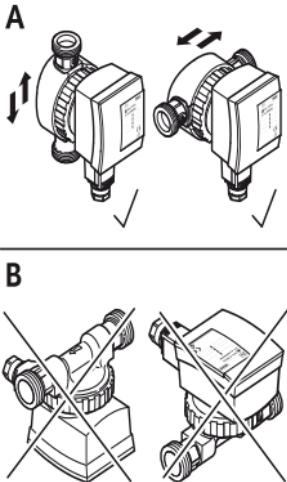
When exchanging the motor head (3), it is sufficient to cut the power by unplugging the connector (5) and to close the stop valve at the rotating slot (4). The motor head can then be simply unscrewed ⇒ Page 9.

5.1 Mechanical installation



Danger: Before starting work, make sure that the pump has been disconnected from the power supply.

Installation site



Provide a weatherproof, frost-free, dust-free and well-ventilated room for the installation. Choose an installation site that is easily accessible.



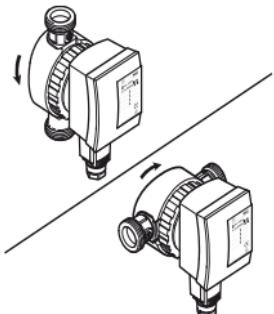
Caution: Dirt can cause the pump to fail. Flush the pipe system before installation.



Note: In the case of the Star-Z NOVA A and Star-Z NOVA C versions, the stop valve and non-return valve are pre-installed. In the case of the Star-Z NOVA version, these valves have to be installed additionally.

1. Prepare the installation site so that the pump can be installed without being exposed to mechanical stresses.
2. Choose the right installation position – only as shown in (Fig. A).
The arrow on the back of the housing indicates the direction of flow.

Turn the motor head or remove it



- Release the union nut – unscrew it completely if necessary.

Caution: Do not damage the housing seal. Replace damaged seals.

- Turn the motor head so that the Wilo-Connector points downwards.

Caution: If the position is wrong, water can penetrate and destroy the pump.

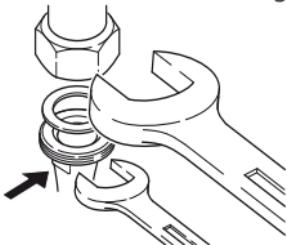
- Tighten the union nut again.
- Turn slot (1) with a screwdriver so that it is parallel to the direction of flow (only in the case of the Star-Z NOVA A, and Star-Z NOVA C versions).

Note: To close, turn the slot so that it is across the direction of flow.

- Fit the thermal insulation shell.

Caution: The plastic parts of the motor may not be heat-insulated in order to protect the pump from overheating.

Connecting



- Connect the pipework.

Caution: For the versions with stop and non-return valves, these are already pre-installed and sealed with a tightening torque of 15 Nm (hand-tight). Screwing with excessive tightening torque destroys the valve screw connection and the O ring. When installing the valve, use a fixed spanner to prevent twisting.

5.2 Electrical connection

Danger: Only a qualified electrician is allowed to work on the electrical connection. Before establishing the connection, make sure that the connecting cable is dead.

Establish the electrical connection as follows:

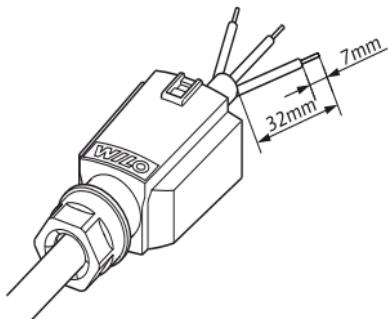


Fig. 1

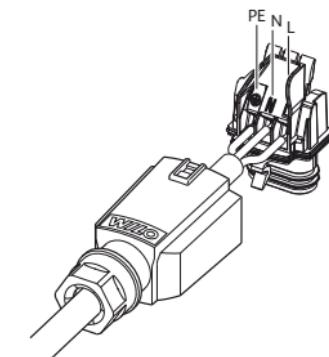


Fig. 2

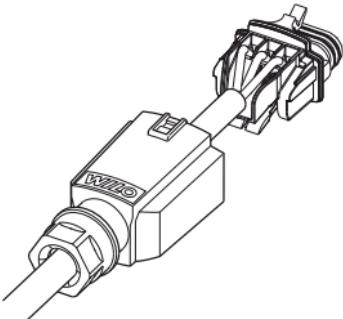


Fig. 3

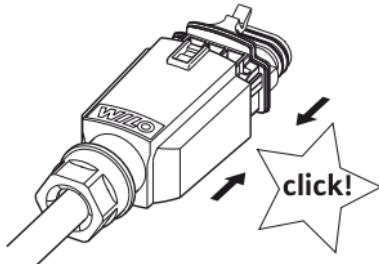


Fig. 4

Open the WILO- Connector as follows:

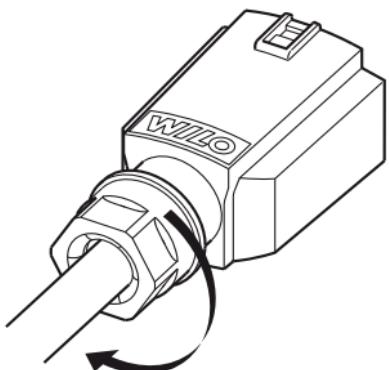
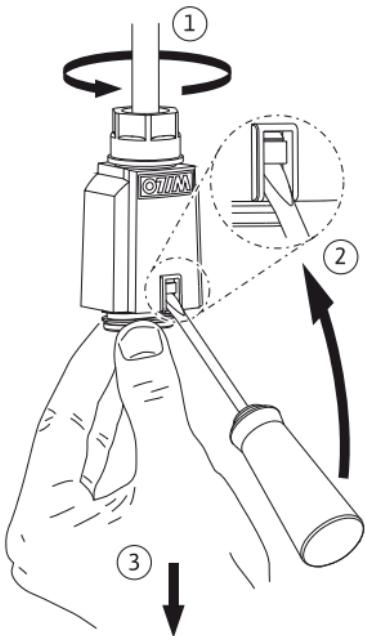


Fig. 5



5.3 Filling and bleeding

1. Fill the system.
2. The pump rotor space bleeds automatically after a short time in operation. This may cause noises. If necessary, switch off and on repeatedly to accelerate the bleeding. Dry running for short periods will not harm the pump.

Cleaning Clean the outside of the pump with a slightly damp cloth only. Do not use detergents.

Replacing the motor head

 **Warning:** When removing the motor head or pump, hot fluid may spurt out under high pressure. Allow the pump to cool down beforehand.

Close the stop valves before removing the pump
⇒ Page 9.



Note: When the motor is removed and running, noises and a change in rotation may occur. This is normal for this situation. Faultless operation can only be guaranteed when the pump is operated in fluid.

Replacing the motor head ⇒ Page 9.

Order the service motor from a specialist retailer.

Faults	Causes	Remedies
Pump does not start.	Interruption in the power supply, short- circuit or defective fuses.	Have the power supply checked by a qualified electrician.
	Time switching function has switched off automatically (Star-Z NOVAC version only).	Check the plug clock timer setting.
	Motor is blocked, e.g. by deposits from the water mains.	Have the pump removed by a qualified technician ⇒ Page 9.
Pump is making noises.	Motor scraping, e.g. through deposits from the water mains	Check that the impeller can move by turning it and rinse out the dirt that has accumulated.
	Running dry, too little water.	Check the check valves, they must be fully open.
	Air in the pump.	Switch the pump on/off 5 times for 30 s in each case.



Note: If you cannot remedy the fault, contact a specialist retailer.

D EG – Konformitätserklärung
GB *EC – Declaration of conformity*
F *Déclaration de conformité CE*

Hiermit erklären wir, dass die Bauarten der Baureihe : **Star Z Nova**
Herewith, we declare that this product:
Par le présent, nous déclarons que cet agrégat :

in der gelieferten Ausführung folgenden einschlägigen Bestimmungen entspricht:
in its delivered state complies with the following relevant provisions:
est conforme aux dispositions suivants dont il relève:

Elektromagnetische Verträglichkeit – Richtlinie 2004 / 108 / EG
Electromagnetic compatibility – directive
Compatibilité électromagnétique- directive

Niederspannungsrichtlinie 2006 / 95 / EG
Low voltage directive
Directive basse-tension

und entsprechender nationaler Gesetzgebung.
and with the relevant national legislation.
et aux législations nationales les transposant.

Angewendete harmonisierte Normen, insbesondere: **EN 60335-2-51**
Applied harmonized standards, in particular: **EN 61000-3-2**
Normes harmonisées, notamment: **EN 61000-3-3**
 EN 55014-1&2

Bei einer mit uns nicht abgestimmten technischen Änderung der oben genannten Bauarten, verliert diese Erklärung ihre Gültigkeit.
If the above mentioned series are technically modified without our approval, this declaration shall no longer be applicable.
Si les gammes mentionnées ci-dessus sont modifiées sans notre approbation, cette déclaration perdra sa validité.

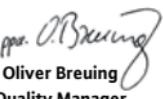
Dortmund, 15.04.2009


ppr. O.Breuing
Oliver Breuing
Quality Manager



WILO SE
Nortkirchenstraße 100
44263 Dortmund
Germany

NL EG-verklaring van overeenstemming Hiermed verklaren wij dat dit aggregaat in de geleverde uitvoering voldoet aan de volgende bepalingen: Elektromagnetische compatibiliteit 2004/108/EG EG-laagspanningsrichtlijn 2006/95/EG Gebruikte geharmoniseerde normen, in het bijzonder: 1)	I Dichiaraione di conformità CE Con la presente si dichiara che i presenti prodotti sono conformi alle seguenti disposizioni e direttive rilevanti: Compatibilità elettromagnetica 2004/108/EG Direttiva bassa tensione 2006/95/EG Norme armonizzate applicate, in particolare: 1)	E Declaración de conformidad CE Por la presente declaramos la conformidad del producto en su estado de suministro con las disposiciones pertinentes siguientes: Directiva sobre compatibilidad electromagnética 2004/108/EG Directiva sobre equipos de baja tensión 2006/95/EG Normas armonizadas adoptadas, especialmente: 1)
P Declaração de Conformidade CE Pela presente, declaramos que esta unidade no seu estado original, está conforme os seguintes requisitos: Compatibilidade electromagnética 2004/108/EG Directiva de baixa voltagem 2006/95/EG Normas harmonizadas aplicadas, especialmente: 1)	S CE - försäkran Härmed förklarar vi att denna maskin i levererat utförande motsvarar följande tillämpliga bestämmelser: EG-Elektrromagnetisk kompatibilitet – riktlinje 2004/108/EG EG-Lågspänningssdirektiv 2006/95/EG Tillämpade harmoniseraade normer, i synnerhet: 1)	N EU-Overensstemmelseserklæring Vi erklærer hermed at denne enheten i utførelse som leveres er i overensstemmelse med følgende relevante bestemmelser: EG-EMV-Elektrromagnetisk kompatibilitet 2004/108/EG EG-Lavspenningsdirektiv 2006/95/EG Anvendte harmoniserte standarder, særlig: 1)
FIN CE-standardinmukaisusseloste Ilmoitamme täten, että tämä laite vastaa seuraavia asiaankuuluvia määritöksiä: Sähkömagneettinen soveltuvuus 2004/108/EG Matalajännite direktiivi: 2006/95/EG Käytetyt yhteensovitetut standardit, erityisesti: 1)	DK EF-overensstemmelseserklæring Vi erklærer hermed, at denne enhed ved levering overholder følgende relevante bestemmelser: Elektromagnetisk kompatibilitet: 2004/108/EG Lavvolts-direktiv 2006/95/EG Anvendte harmoniserede standarder, særligt: 1)	H EK. Azonosságú nyilatkozat Ezenel kijelentjük, hogy az berendezés az alábbiaknak megfelel: Elektromágneses zavarás/türés: 2004/108/EG Kifeszültségű berendezések irány-Elve: 2006/95/EG Felhasznált harmonizált szabványok, különösen: 1)
CZ Prohlášení o shodě EU Prohlašujeme tímto, že tento agregát v dodaném provedení odpovídá následujícím příslušným ustanovením: Směrnici EU-EMV 2004/108/EG Směrnici EU-nízké napětí 2006/95/EG Použité harmonizační normy, zejména: 1)	PL Deklaracja Zgodności CE Niniejszym deklarujemy z pełną odpowiedzialnością że dostarczony wyrób jest zgodny z następującymi dokumentami: Odpowiedniość elektromagnetyczna 2004/108/EG Normie niskich napięć 2006/95/EG Wyroby są zgodne ze szczegółowymi normami zharmonizowanymi: 1)	RUS Декларация о соответствии Европейским нормам Настоящим документом заявляем, что данный агрегат в его объеме поставки соответствует следующим нормативным документам: Электромагнитная устойчивость 2004/108/EG Директивы по низковольтному напряжению 2006/95/EG Используемые согласованные стандарты и нормы, в частности: 1)
GR Δήλωση προσαρμογής της Ε.Ε. Δηλώνουμε ότι τα προϊόντα αυτά ο αυτή την κατάσταση παρέδοσης ικανοποιεί τις ακόλουθες διατάξεις: Ηλεκτρομαγνητική συμβατότητα EG-2004/108/EG Οδηγία χαμηλής τάσης EG-2006/95/EG Εναρμονισμένα χρησιμοποιούμενα πρότυπα, υιοθετε: 1)	TR EC Uygunluk Teyid Belgesi Bu cihazın teslim edildiği şekilde aşağıdaki standartlara uygun olduğunu teyid ederiz: Elektromanyetik Uyumluluk 2004/108/EG Alçak gerilim direktifi 2006/95/EG Kismen kullanılan standartlar: 1)	1) EN 60335-2-51, EN 61000-3-2, EN 61000-3-3, EN 55014-1&2.


Oliver Breuing
Quality Manager



WILO SE
Nortkirchenstraße 100
44263 Dortmund
Germany



WILO SE
Nortkirchenstraße 100
44263 Dortmund
Germany
T +49 231 4102-0
F +49 231 4102-7363
wilo@wilo.com
www.wilo.com

Wilo – International (Subsidiaries)

Argentina

WILO SALMSON
Argentina S.A.
C1295AB1 Ciudad Autónoma de Buenos Aires
T +54 11 4361 5929
info@salmson.com.ar

Austria

WILO Pumpen
Österreich GmbH
2351 Wiener Neudorf
T +43 507 507-0
office@wilo.at

Azerbaijan

WILO Caspian LLC
1014 Bakú
T +994 12 5962372
info@wilo.az

Belarus

WILO Bel OOO
220035 Minsk
T +375 17 2535363
wilo@wilo.by

Belgium

WILO SA/NV
1083 Ganshoren
T +32 2 4823333
info@wilo.be

Bulgaria

WILO Bulgaria Ltd.
1125 Sofia
T +359 2 9701970
info@wilo.bg

Canada

WILO Canada Inc.
Calgary, Alberta T2A 5L4
T +1 403 2769456
bill.willo@wilo-na.com

China

WILO China Ltd.
101300 Beijing
T +86 10 58041888
willo@wilo.com.cn

Croatia

WILO Hrvatska d.o.o.
10900 Zagreb
T +38 51 3430914
wilo-hrvatska@wilo.hr

Czech Republic

WILO Praha s.r.o.
25101 Čestlice
T +420 234 098711
info@wilo.cz

Denmark

WILO Danmark A/S
2690 Karlslunde
T +45 70 253312
wilo@wilo.dk

Estonia

WILO Eesti OÜ
12618 Tallinn
T +372 6 509780
info@wilo.ee

Finland

WILO Finland OY
02330 Espoo
T +358 207401540
wilo@wilo.fi

France

WILO S.A.S.
78390 Bois d'Arcy
T +33 1 30050930
info@wilo.fr

Great Britain

WILO (U.K.) Ltd.
DE14 2WJ Burton-on-Trent
T +44 1283 523000
sales@wilo.co.uk

Greece

WILO Hellas AG
14569 Anixi (Attika)
T +30 2 10 6248300
wilo.info@wilo.gr

Hungary

WILO Magyarország Kft
2045 Törökállomán
(Budapest)
T +36 23 889500
wilo@wilo.hu

India

WILO India Mather and Platt Pumps Ltd.
Pune 411019
T +91 20 27442100
service@pun.matherplatt.co.in

Indonesia

WILO Pumps Indonesia
Jakarta Selatan 12140
T +62 21 7247676
citravilo@cbln.net.id

Ireland

WILO Engineering Ltd.
Limerick
T +353 61 227566
sales@wilo.ie

Italy

WILO Italia s.r.l.
20068 Peschiera Borromeo
(Milano)
T +39 25538351
wilo.italia@wilo.it

Kazakhstan

WILO Central Asia
050002 Almaty
T +7 727 2785961
info@wilo.kz

Korea

WILO Pumps Ltd.
621-807 Gimhae
Gyeongnam
T +82 55 3405890
wilo@wilo.co.kr

Latvia

WILO Baltic SIA
1019 Riga
T +371 7 145229
mail@wilo.lv

Lebanon

WILO SALMSON
Lebanon
1202030 El Metn
T +961 4 722280
ws1@cyberya.net.lb

Lithuania

WILO Lietuva UAB
03202 Vilnius
T +370 5 2136495
mail@wilo.lt

The Netherlands

WILO Nederland b.v.
1551 NA Westzaan
T +31 88 946 0000
info@wilo.nl

Norway

WILO Norge AS
0075 Oslo
T +47 22 804570
wilo@wilo.no

Poland

WILO Polska Sp. z.o.o.
05-090 Raszyn
T +48 22 7026161
wilo@wilo.pl

Portugal

Bombas WILO-Salmson
Portugal Lda.
4050-040 Porto
T +351 22 2080350
bombas@wilo.pt

Romania

WILO Romania s.r.l.
077040 Com. Chiajna Jud.
Ilfov
T +40 21 3170164
wilo@wilo.ro

Russia

WILO RUSSO
123592 Moscow
T +7 495 7810690
wilo@wilo.ru

Saudi Arabia

WILO ME – Riyad
Riyadh 11465
T +966 1 4624430
wshoula@wtanai.com.ind

Serbia and Montenegro

WILO Beograd d.o.o.
11000 Beograd
T +381 11 2851278
office@wilo.yu

Slovakia

WILO Slovakia s.r.o.
83106 Bratislava
T +421 2 33014511
wilo@wilo.sk

Slovenia

WILO Adriatic d.o.o.
1000 Ljubljana
T +386 1 5838130
wilo.adriatic@wilo.si

South Africa

Salmson South Africa
1610 Edenvale
T +27 11 6082780
errol.cornelius@salmon.co.za

Spain

WILO Ibérica S.A.
28806 Alcalá de Henares
(Madrid)
T +34 91 8797100
wilo.iberica@wilo.es

Sweden

WILO Sverige AB
35246 Växjö
T +46 470 727600
wilo@wilo.se

Switzerland

EMB Pumpen AG
4310 Rheinfelden
T +41 61 83680-20
info@emb-pumpen.ch

Taiwan

WILO-EMU Taiwan Co. Ltd.
110 Taipei
T +886 227 391655
nelson.wu@wiolometatwan.com.tw

Turkey

WILO Pompa Sistemleri San. ve Tic. A.Ş.
34888 İstanbul
T +90 216 6610211
wilo@wilo.com.tr

Ukraine

WILO Ukraine t.o.w.
01033 Kiev
T +38 044 2011870
wilo@wilo.ua

United Arab Emirates

WILO Middle East FZE
Jebel Ali Free Zone - South
– Dubai
T +971 4 880 91 77
info@wilo.ae

USA

WILO USA LLC
1290 N 25th Ave
Melrose Park, Illinois 60160
T +1 866 945 6872
info@wilo-usa.com

Vietnam

WILO Vietnam Co Ltd.
Ho Chi Minh City, Vietnam
T +84 8 38109975
nkmminh@wilo.vn

Wilo – International (Representation offices)

Algeria

Bad Ezzouar, Dar El Beida
T +213 21 247979

Georgia

0179 Tbilisi
T +995 32 306375

Moldova

2012 Chișinău
T +373 22 223501

Armenia

0001 Yerevan
T +374 10 544336

Macedonia

1000 Skopje
T +389 2 3122058

Rep. Mongolia

Ulaanbaatar
T +976 11 314843

Bosnia and Herzegovina

71000 Sarajevo
T +387 33 714510

Mexico

07300 Mexico
T +52 55 55863209

Tajikistan

734025 Dushanbe
T +992 37 2312354

Turkmenistan

744000 Ashgabad
T +993 22 345838

Uzbekistan

100015 Tashkent
T +998 71 1206774

March 2011



WILO SE
Nortkirchenstraße 100
44263 Dortmund
Germany
T 0231 4102-0
F 0231 4102-7363
wilo@wilo.com
www.wilo.de

Wilo-Vertriebsbüros in Deutschland

Nord	Ost	Süd-West	West
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