



### Data sheet

#### Hydraulic data

Maximum operating pressure <i>PN</i>	1 bar
Impeller type	Open multi-channel impeller
Free ball passage of the hydraulics	10 mm
Max. immersion depth	12.5 m
Min. fluid temperature <i>T</i> <sub>min</sub>	3 ℃
Max. fluid temperature <i>T</i> <sub>max</sub>	40 °C
Min. ambient temperature <i>T</i> <sub>min</sub>	-15 °C
Max. ambient temperature <i>T</i> <sub>max</sub>	40 °C

#### Cable

Connection cable length <i>L</i>	10 m
Cable type	H07RN-F
Cable cross-section	4G1,5 mm <sup>2</sup>
Mains plug	SMP 10MA
Type of connection cable	Detachable

### Equipment/function

Float switch	yes
Explosion protection type	-
Motor protection	no

### Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Power factor $\cos \varphi_{100}$	0.85
Rated power <i>P</i> <sub>2</sub>	0.75 kW
Power consumption $P_{1 \max}$	1100 W
Rated current <i>I</i> <sub>N</sub>	5.7 A
Starting current I	16 A
Activation type	Direct On Line (DOL)
Rated speed <i>n</i>	2900 1/min
Max. switching frequency <i>t</i>	15 1/h
Insulation class	F
Protection class	IP68
Operating mode (immersed)	S1
Operating mode (non-immersed)	S1

#### Materials

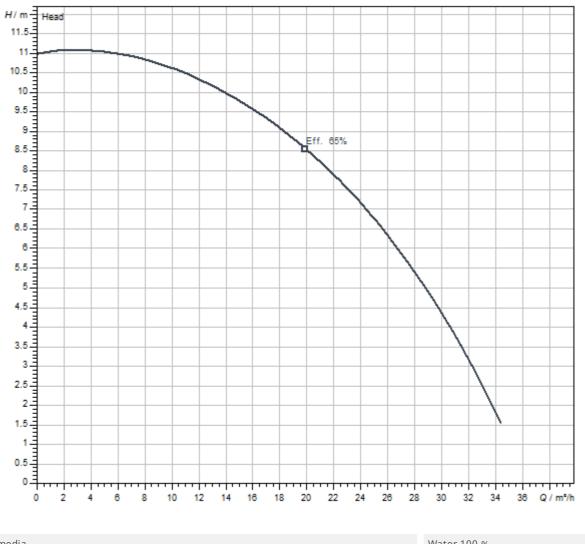
Pump housing	Grey cast iron
Impeller	Grey cast iron
Sealing on pump side	QQPGG
Sealing on motor side	BVPGG
Gasket material	FKM
Motor housing	Aluminium

#### Installation dimensions

Pipe connection on the discharge side <i>DNd</i>	Storz C
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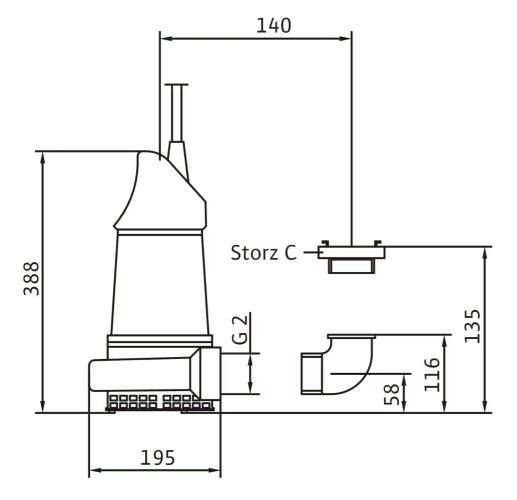
# Pump curves



Fluid media	Water 100 %
Fluid temperature <i>T</i>	20.00 °C
speed at duty point <i>n hydr. @ OP</i>	2,857 1/min
Impeller diameter <i>d imp.</i>	103 mm

Dimensions and dimensions drawings

## Wilo-EMU KS 14



wilo



## Tender text

Fully submersible drainage pump for vertical wet well installation for pumping contaminated and sandy water. Hydraulics housing and impeller made of cast iron, motor housing made of aluminium. Pressure connection with vertical pressure outlet and Storz coupling. Self-

### **Operating Data**

#### **Product data**

Impeller type	Open multi-channel impeller
Free ball passage of the hydraulics	10 mm
Maximum operating pressure PN	1 bar
Max. immersion depth	12.5 m
Fluid temperature <i>T</i>	3 ℃
Max. fluid temperature $T_{\rm max}$	40 °C

#### Motor data

Mains connection	1~230 V, 50 Hz
Voltage tolerance	±10 %
Power factor $cos \ arphi_{100}$	0.85
Rated power $P_2$	0.75 kW
Power consumption P <sub>1 max</sub>	1.10 kW
Rated current <i>I</i> <sub>N</sub>	5.7 A
Starting current I	16 A
Activation type	Direct On Line (DOL)
Rated speed <i>n</i>	2900 1/min
Max. switching frequency <i>t</i>	15 1/h
Insulation class	F
Protection class	IP68
Operating mode (immersed)	S1
Operating mode (non-immersed)	S1

cooling motor in single-phase version and detachable connection cable with float switch, shock-proof plug and operating capacitor. Sealing on the fluid and motor side is done by mechanical seal. The unit can be used without limits in slurping operation.

#### Cable

Connection cable length L	10 m
Cable type	H07RN-F
Cable cross-section	4G1,5 mm <sup>2</sup>
Mains plug	SMP 10MA
Type of connection cable	Detachable

#### Equipment/function

Float switch	yes
Explosion protection type	-
Motor protection	no

### Materials

Pump housing	Grey cast iron
Impeller	Grey cast iron
Shaft	Stainless steel
Sealing on pump side	QQPGG
Sealing on motor side	BVPGG
Gasket material	FKM
Motor housing	Aluminium

#### Installation dimensions

Pipe connection on the suction side DNs	-
Pipe connection on the discharge side DNd	Storz C

#### **Ordering information**

Brand	Wilo
Product description	EMU KS 14ES
Net weight, approx. <i>m</i>	22 kg
Article number	6019449 🔀



## Installation type

### Level control with float switch

Level measurement using a level sensor with various measurement ranges, including high water alarm and dryrunning protection.

Wilo-Control MS-Lift	
MS-L-1x4kW-DOL	2539741
MS-L-2x4kW-DOL	2539745
Battery 9V,200mA	
NiMh rechargeable battery, 9 V/200 mAh	2522850
Float switch WA	
Float switch WA65 with 10 m cable	503211893
Float switch WA65 with 20 m cable	2004431
Float switch WA65 with 30 m cable	2004432
Float switch WA65 with 5 m cable	503211390
Intermediate float switch for 1~ units	
ZSE shock-proof with 10 m cable	6017313
ZSE shock-proof with 5 m cable	6017150
Signal horn	
Signal horn 1~230 V	501459398
Flash light	
Flash light 1~230 VAC	2551613

#### Mains-independent alarm signal

Alarm signal for detection of flooding in rooms and buildings. The alarm signal is acoustic, optical or wireless. In addition, other consumers can be controlled directly.

Float switch WA	
Float switch WA65 with 10 m cable	503211893
Float switch WA65 with 5 m cable	503211390
AlarmControl	
AlarmControl 1	2522846
AlarmControl 2	2522847
DrainAlarm	
DrainAlarm	2545133

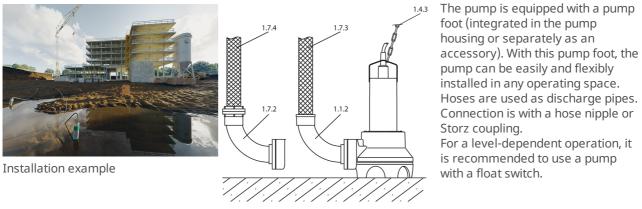
#### Signal horn

Signal horn 1~230 V

#### Flash light

Flash light 1~230 VAC

### Portable wet well installation



Installation drawing

Flat suction 1.4.11	
Flat suction KS 8/KS 9	6032495
Suction strainer extension 1.4.11	
Suction strainer extension KS 8/KS 9	6032496
Plastic spiral hose with coupling 1.7.4	
Plastic spiral hose 10 m, with Storz A	6022276
Plastic spiral hose 10 m, with Storz B	6035187
Plastic spiral hose 10 m, with Storz C	6022270
Plastic spiral hose 20 m, with Storz A	6022277
Plastic spiral hose 20 m, with Storz B	6022274
Plastic spiral hose 20 m, with Storz C	6022271
Plastic spiral hose 5 m, with Storz A	6022275
Plastic spiral hose 5 m, with Storz B	6022272
Plastic spiral hose 5 m, with Storz C	6022269
Synthetic fibre hose with coupling 1.7.4	

Synthetic fibre pressure hose 10 m, with Storz A	6022392
Synthetic fibre pressure hose 10 m, with Storz B	6003051
Synthetic fibre pressure hose 10 m, with Storz C	6003650
Synthetic fibre pressure hose 20 m, with Storz A	6022393
Synthetic fibre pressure hose 20 m, with Storz B	6003050



501459398

2551613

## **EMU KS 14ES**



6022280

Synthetic fibre pressure hose 20 m, with Storz C	6003649
Synthetic fibre pressure hose 5 m, with Storz A	6022391
Synthetic fibre pressure hose 5 m, with Storz B	6003052
Synthetic fibre pressure hose 5 m, with Storz C	6003651

Coupling key 1.7.7

Coupling key for Storz A, B, C



### **Mechanical accessories**

### Adapter

Storz adapter	
Storz B/C transition coupling	6000748
Hoses / hose joints	
Coupling key	
Coupling key for Storz A, B, C	6022280
Coupling key for Storz F	6022281
Plastic spiral hose with coupling	
Plastic spiral hose 5 m, with Storz C	6022269
Plastic spiral hose 10 m, with Storz C	6022270
Plastic spiral hose 20 m, with Storz C	6022271
Plastic spiral hose 5 m, with Storz B	6022272
Plastic spiral hose 20 m, with Storz B	6022274
Plastic spiral hose 5 m, with Storz A	6022275
Plastic spiral hose 10 m, with Storz A	6022276
Plastic spiral hose 20 m, with Storz A	6022277
Plastic spiral hose 5 m, with Storz F	6022278
Plastic spiral hose 10 m, with Storz B	6035187
Plastic spiral hose 5 m, with Storz F	6044660
Synthetic fibre hose with coupling	
Synthetic fibre pressure hose 20 m, with Storz B	6003050
Synthetic fibre pressure hose 10 m, with Storz B	6003051
Synthetic fibre pressure hose 5 m, with Storz B	6003052
Synthetic fibre pressure hose 20 m, with Storz F	6003647
Synthetic fibre pressure hose 10 m, with Storz F	6003648
Synthetic fibre pressure hose 20 m, with Storz C	6003649

Synthetic fibre	pressure hos	e 10 m, with	Storz C

Synthetic fibre pressure hose 5 m, with Storz C

Synthetic fibre pressure hose 5 m, with Storz A

Synthetic fibre pressure hose 10 m, with Storz A

Synthetic fibre pressure hose 20 m, with Storz A

6003650

6003651 6022391

6022392

6022393



6032495

6032496

### Installation/setup

#### Flat suction

Flat suction KS 8/KS 9

#### Suction strainer extension

Suction strainer extension KS 8/KS 9

12/06/2024 - \_international/en



## **Electrical accessories**

M51-1x8W POL     253741       M51-2x8W POL     253745       Pump control/accessories     25280       Battery 9V,200mA     25280       Alarm signal     25280       Alarm control     25280       Alarm Control     25280       Alarm Control     25280       DrainAlarm     25280       DrainAlarm     25280       Flash light 1/220 VAC     25280       Rash light 1-220 VAC     25192       Signal horn     25192       Signal horn 1/2 CONC     25192	Pump control	
Mil- 2xkkw rool     2337/6       Purp control/accessories     22286       Battery 9V,200mA     22286       Alarm signal     22286       Alarm Control     22286       Alarm Control     22286       Alarm Control     22287       DrainAlarm     22286       DrainAlarm     25032       Brash light     25032       Rash light     25032       Rash light     25032       Signal horn     250323	Wilo-Control MS-Lift	
Pump control/accessories           Battery 9V,200mA           NMh rechargeable battery, 9V/200 mAh           Alarm signal           Alarm Control           Alarm Control           Atarm Control           Atarm Control           Atarm Control           Atarm Signal           Atarm Control           Atarm Control           Atarm Control           Atarm Control           Atarm Control           Atarm Control           Atarm Signal           Stignal North           SpeinAlarm           PrainAlarm           SpeinAlarm RIBST           Mounted Rush light 1-200 VaC           Spinal North           Signal horn           Signal horn           Signal horn           Signal horn 1-230 V           Signal alarm switchgear           Signal alarm switchgear Kas           Signal alarm switchgear Kas           Signal alarm switchgear Kas           Signal syntch MS1           Reat switch MS1 Wath 10 m cable     <	MS-L-1x4kW-DOL	2539741
Battery 9V,200mA NMth rechargeable battery, 9 V/200 mAh 252280 Alarm signal Alarm Control Alarm Control Alarm Control Alarm Control Co	MS-L-2x4kW-DOL	2539745
NM hr rechargeable battery, 9 V/200 mAh         252280           Alarm signal	Pump control/accessories	
Alarm Signal Alarm Control Alarm Control 1 Alarm Control 1 Alarm Control 2 252846 Alarm Control 2 252847 DrainAlarm DrainAlarm DrainAlarm DrainAlarm DrainAlarm DrainAlarm EBST DrainAlarm EBST Flash light Flash light - 230 VAC 251042 Flash light - 230 VAC 251042 Signal horn Signal horn 12-24 VDC Signal horn	Battery 9V,200mA	
AlarmControl AirmControl 202846 AlarmControl 202847 DrainAlarm 2020 DrainAlarm 2020 DrainAlarm EIRST 2000 Elash light - 200 VAC 2000 Elash light - 200 VAC 2010 Elash light - 200 VAC 2010 Elast switch gear 2010 Elast switch MS1 2010 Elast switch MS1 2010 Elast switch MS1 2010 Elast switch WA Elast switch WA 2010 Elast switch WA 2	NiMh rechargeable battery, 9 V/200 mAh	2522850
Alarméentrol 1252846Alarméentrol 2252847DrainAlarm255133DrainAlarm FUST255036Flash light 1255036Flash light 24 VDC2551612Rash light 1-230 VAC2551612Signal horn2551613Signal horn251613Signal horn 1-220 V2017208Signal alarm switchgear2017208Signal alarm switchgear2017208Float switch MS12017208Roat switch MS12017208Float switch WA2017208Signa switch WA2017208Float switch WA Sim cable2017208Signal Signal MORA2017208Signal Alarm Signal Alarm	Alarm signal	
Alarm Control 2252847Drain Alarm252847Drain Alarm256133Drain Alarm FIRST256133Flash light251612Flash light 24 VDC251612Rish light 24 VDC251612Signal horn251612Signal horn 12:24 VDC2017208Signal horn 12:24 VDC2017208Signa	AlarmControl	
DrainAlarm     25433       DrainAlarm FIRST     250526       Flash light 1-230 VAC     251629       Rash light 1-230 VAC     251612       Flash light 1-230 VAC     251613       Signal horn     251728       Signal horn 12-24 VDC     2017208       Signal horn 12-23 V     2	AlarmControl 1	2522846
DrainAlarm2545133DrainAlarm FIRST250526Flash light250526Flash light 1-230 VAC250629Rish light 1-230 VAC250629Rish light 1-230 VAC250629Signal horn250629Signal horn 1-230 VAC2017208Signal horn 1-230 VAC2017208 </td <td>AlarmControl 2</td> <td>2522847</td>	AlarmControl 2	2522847
DrainAlarm FIRST       259326         Flash light       259326         Mounted Flash light 1-230 VAC       2591612         Flash light 24 VDC       2591612         Flash light 1-230 VAC       2591612         Signal horn       2591612         Signal horn 1-230 V       207208         Signal horn 1-230 V       201208         Signal larm switchgear KAS       201208         Flast switch MS1       201208         Float switch MS1       201208         Float switch WA       201301         Float switch WA       201301	DrainAlarm	
Flash light       2510429         Flash light 1-230 VAC       2551612         Flash light 1-230 VAC       2551613         Flash light 1-230 VAC       2551613         Signal horn       2551613         Signal horn 12-24 VDC       2017208         Signal horn 1-230 V       2015938         Signal horn 1-230 V       50145938         Signal laarm switchgear       50154094         Evel Control       50154094         Float switch MS1       2004593         Float switch MS1 with 10 m cable       2004593         Float switch WA       2004593	DrainAlarm	2545133
Mounted Flash light 1-230 VAC2510429Flash light 24 VDC2551612Flash light 1-230 VAC2551613Signal horn2017208Signal horn 12:24 VDC2017208Signal horn 1-230 V501459388Small alarm switchgear50154094Evel control50154094Float switch MS12004593Float switch MS1 with 10 m cable2004593Float switch WA65 with 5 m cable503211390	DrainAlarm FIRST	2550526
Flash light 24 VDC     2551612       Flash light 1-230 VAC     2551613       Signal horn     2017008       Signal horn 1-230 V     2017008       Small alarm switchgear     501459398       Small alarm switchgear     50153004       Level control     201708       Float switch MS1     2004593       Float switch MS1     2004593       Float switch WA65 with 5 m cable     503211390	Flash light	
Flash light 1–230 VAC     255163       Signal horn     2017208       Signal horn 1–230 V     2017208       Small alarm switchgear     50145938       Small alarm switchgear KAS     501534094       Level control     501534094       Float switch MS1     2004993       Float switch WA65 with 5 m cable     2004931	Mounted Flash light 1~230 VAC	2510429
Signal horn       2017208         Signal horn 1-230 V       501459398         Small alarm switchgear       501534094         Level control       501534094         Float switch MS1       2004593         Float switch MS1 with 10 m cable       2004593         Float switch WA65 with 5 m cable       503211390	Flash light 24 VDC	2551612
Signal horn 12-24 VDC       2017208         Signal horn 1-230 V       501459398         Small alarm switchgear       501534094         Evel control       501534094         Float switch MS1       2004593         Float switch WA       2004593         Float switch WA65 with 5 m cable       503211390	Flash light 1~230 VAC	2551613
Signal horn 12-24 VDC     2017208       Signal horn 1-230 V     501459398       Small alarm switchgear     501534094       Evel control     501534094       Float switch MS1     2007503       Float switch MS1 with 10 m cable     2004593       Float switch WA65 with 5 m cable     503211390	Signal horn	
Small alarm switchgear       501534094         Small alarm switchgear KAS       501534094         Level control       501534094         Float switch MS1       2004593         Float switch WA       2004593         Float switch WA       503211390	Signal horn 12-24 VDC	
Small alarm switchgear KAS       501534094         Level control       Float switch MS1         Float switch MS1 with 10 m cable       2004593         Float switch WA       2004593         Float switch WA 65 with 5 m cable       503211390	Signal horn 1~230 V	501459398
Level control         Float switch MS1         Float switch MS1 with 10 m cable         2004593         Float switch WA         Float switch WA 65 with 5 m cable	Small alarm switchgear	
Float switch MS1         Float switch MS1 with 10 m cable         2004593         Float switch WA         Float switch WA65 with 5 m cable	Small alarm switchgear KAS	501534094
Float switch MS1 with 10 m cable     2004593       Float switch WA     503211390	Level control	
Float switch WA       Float switch WA65 with 5 m cable	Float switch MS1	
Float switch WA65 with 5 m cable     503211390	Float switch MS1 with 10 m cable	2004593
	Float switch WA	
Float switch WA65 with 10 m cable 503211893	Float switch WA65 with 5 m cable	503211390
	Float switch WA65 with 10 m cable	503211893

## EMU KS 14ES



Float switch WA65 with 20 m cable	2004431
Float switch WA65 with 30 m cable	2004432
Float switch WA KR1 S with 5 m cable	6082806
Float switch WA KR1 S with 10 m cable	6082807
Float switch WA65 (PSN-X) with 20 m cable	6088843
Float switch WA65 (PSN-X) with 10 m cable	6088844
Float switch WA65 (PSN-X) with 5 m cable	6088845

#### Float switch WAO

Float switch WAO 65, 5 m cable	503211595
Float switch WAO 65, 10 m cable	2006027
Float switch WAO 65, 20 m cable	2004429
Float switch WAO 65, 30 m cable	2004430

#### Intermediate float switch for 1~ units

ZSE shock-proof with 5 m cable	6017150
ZSE shock-proof with 10 m cable	6017313



### 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**

Commissioning Drainage pumps	2219491
Wilo-Live Assistant Service	2216415
Maintenance BASIC Drainage pumps	2219540
Maintenance COMFORT Drainage pumps	2219514
Maintenance PREMIUM Drainage pumps	2219567

### More suitable services

Service Package L Drainage pumps	2219719
Service Package M Drainage pumps	2219690
Extended Warranty Drainage pumps	2219465
Supervision Drainage pumps	2219348
Installation Drainage pumps	2219383
System Optimisation Drainage pumps	2219278
Energy Solutions Drainage pumps	2219313
Repair Drainage pumps	2219632