



Data sheet

Hydraulic data

| | |
|-------------------------------------|------------------------|
| Maximum operating pressure P_N | 3 bar |
| Impeller type | Multi-channel impeller |
| Free ball passage of the hydraulics | 6 mm |
| Max. immersion depth | 12.5 m |
| Min. fluid temperature T_{min} | 3 °C |
| Max. fluid temperature T_{max} | 40 °C |
| Min. ambient temperature T_{min} | -15 °C |
| Max. ambient temperature T_{max} | 40 °C |

Motor data

| | |
|-----------------------------------|----------------------|
| Mains connection | 3~400 V, 50 Hz |
| Voltage tolerance | ±10 % |
| Power factor $\cos \varphi_{100}$ | 0.88 |
| Rated power P_2 | 7.5 kW |
| Power consumption $P_{1 \max}$ | 9500 W |
| Rated current I_N | 15.6 A |
| Starting current I | 85 A |
| Activation type | Direct On Line (DOL) |
| Rated speed n | 2860 1/min |
| Max. switching frequency t | 15 1/h |
| Insulation class | F |
| Protection class | IP68 |
| Operating mode (immersed) | S1 |
| Operating mode (non-immersed) | S1 |

Cable

| | |
|-----------------------------|-------------------------|
| Connection cable length L | 20 m |
| Cable type | H07RN-F |
| Cable cross-section | 4G1,5 mm ² |
| Mains plug | CEE M32WD (3P+N+PE, 6h) |
| Type of connection cable | Non-detachable |

Equipment/function

| | |
|---------------------------|----|
| Float switch | no |
| Explosion protection type | - |
| Motor protection | no |

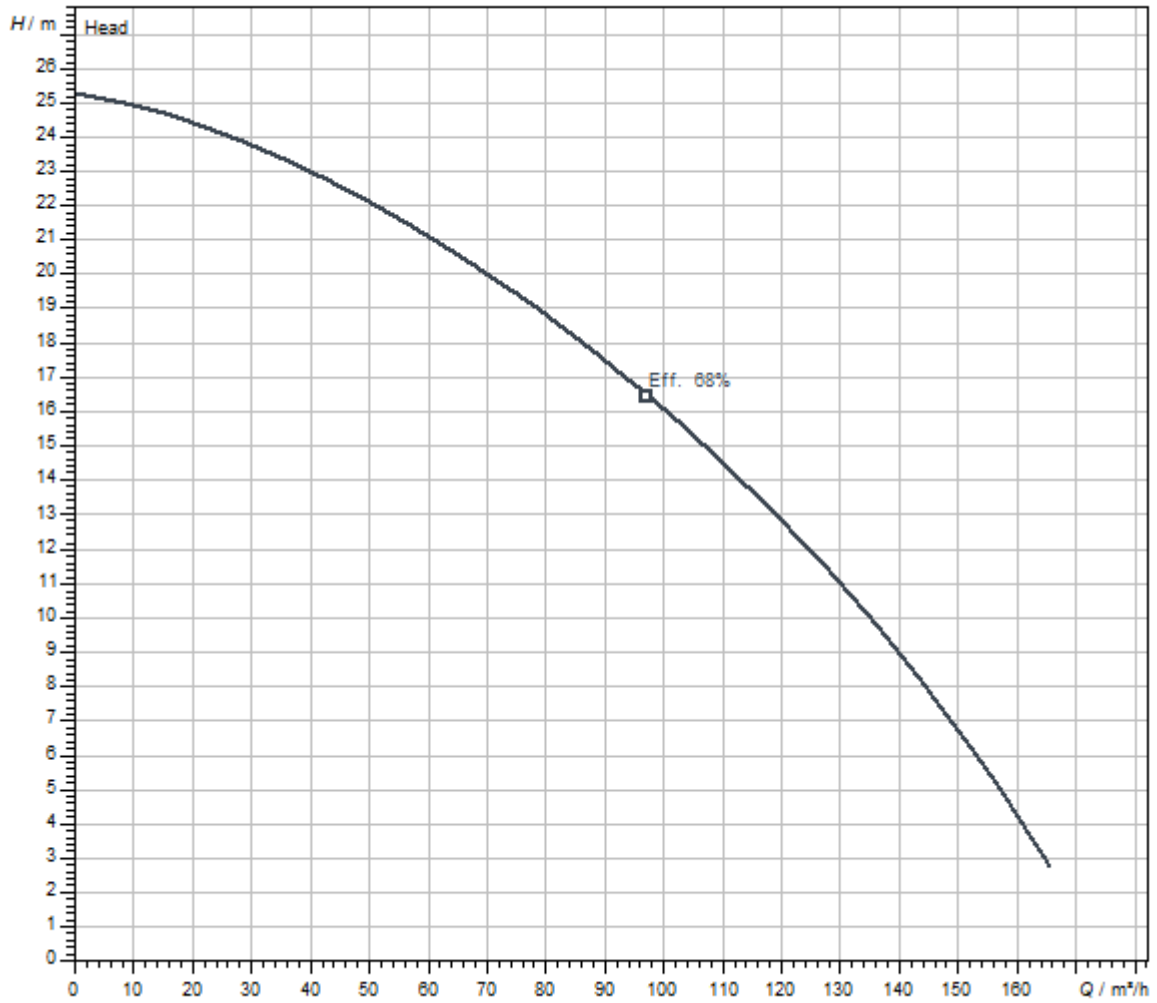
Materials

| | |
|-----------------------|-------------------|
| Pump housing | Grey cast iron |
| Impeller | Ductile 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 DN_d | Storz A |
|----------------------------------------------|---------|

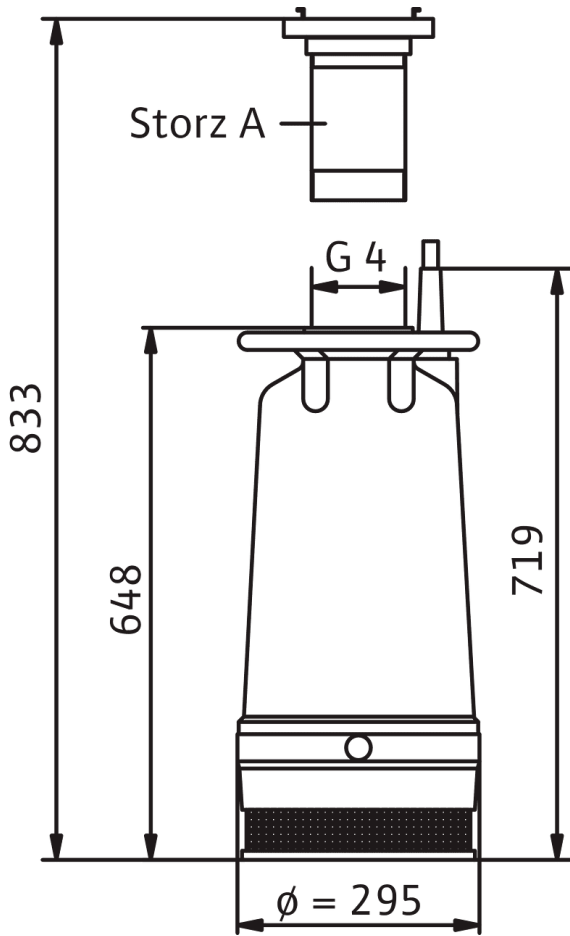
Pump curves



| | |
|--------------------------------------|-------------|
| Fluid media | Water 100 % |
| Fluid temperature T | 20.00 °C |
| speed at duty point $n_{hydr. @ OP}$ | 2,880 1/min |
| Impeller diameter $d_{imp.}$ | 154 mm |

Dimensions and dimensions drawings

Wilo-EMU KS 70Z



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 centric and vertical pressure outlet and Storz

coupling. Surface-cooled motor in three-phase current version with sheath flow cooling and sealing chamber. Detachable connection cable with CEE plug. The seal employs two bidirectional mechanical seals. The unit can be used without limits in slurping operation.

Operating Data

Product data

| | |
|-------------------------------------|------------------------|
| Impeller type | Multi-channel impeller |
| Free ball passage of the hydraulics | 6 mm |
| Maximum operating pressure P_N | 3 bar |
| Max. immersion depth | 12.5 m |
| Fluid temperature T | 3 °C |
| Max. fluid temperature T_{max} | 40 °C |

Motor data

| | |
|-----------------------------------|----------------------|
| Mains connection | 3~400 V, 50 Hz |
| Voltage tolerance | ±10 % |
| Power factor $\cos \varphi_{100}$ | 0.88 |
| Rated power P_2 | 7.5 kW |
| Power consumption $P_{1\ max}$ | 9.50 kW |
| Rated current I_N | 15.6 A |
| Starting current I | 85 A |
| Activation type | Direct On Line (DOL) |
| Rated speed n | 2860 1/min |
| Max. switching frequency t | 15 1/h |
| Insulation class | F |
| Protection class | IP68 |
| Operating mode (immersed) | S1 |
| Operating mode (non-immersed) | S1 |

Cable

| | |
|-----------------------------|-------------------------|
| Connection cable length L | 20 m |
| Cable type | H07RN-F |
| Cable cross-section | 4G1,5 mm ² |
| Mains plug | CEE M32WD (3P+N+PE, 6h) |
| Type of connection cable | Non-detachable |

Equipment/function

| | |
|---------------------------|----|
| Float switch | no |
| Explosion protection type | - |
| Motor protection | no |

Materials

| | |
|-----------------------|-------------------|
| Pump housing | Grey cast iron |
| Impeller | Ductile 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 D_Ns | - |
| Pipe connection on the discharge side D_Nd | Storz A |

Ordering information

| | |
|-------------------------|---------------|
| Brand | Wilo |
| Product description | EMU KS 70ZN D |
| Net weight, approx. m | 79 kg |
| Article number | 6021369 |

Installation type

Level control with float switch

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

Wilo-Control SC-Lift

| | |
|-----------------------|---------|
| SC-L-2x16A-T34-DOL-WM | 2538933 |
|-----------------------|---------|

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 3~ units

| | |
|--------------------------------|---------|
| ZSD CEE16 with 10 m cable, 10m | 6021206 |
| ZSD CEE16 with 5 m cable, 5m | 6023412 |

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 | 501459398 |
|---------------------|-----------|

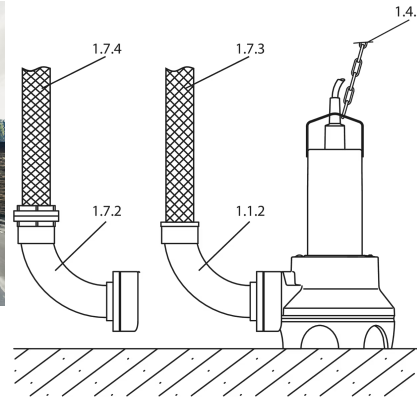
Flash light

| | |
|-----------------------|---------|
| Flash light 1~230 VAC | 2551613 |
|-----------------------|---------|

Portable wet well installation



Installation example



Installation drawing

The pump is equipped with a pump foot (integrated in the pump housing or separately as an accessory). With this pump foot, the pump can be easily and flexibly installed in any operating space. Hoses are used as discharge pipes. Connection is with a hose nipple or Storz coupling. For a level-dependent operation, it is recommended to use a pump with a float switch.

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 |
| 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 | 6022280 |
|--------------------------------|---------|

Mechanical accessories

Adapter

Storz adapter

| | |
|-------------------------------|---------|
| Storz A/B transition coupling | 6003026 |
| Storz F/A transition coupling | 6022279 |

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 hose 10 m, with Storz C | 6003650 |
| Synthetic fibre pressure hose 5 m, with Storz C | 6003651 |
| Synthetic fibre pressure hose 5 m, with Storz A | 6022391 |
| Synthetic fibre pressure hose 10 m, with Storz A | 6022392 |
| Synthetic fibre pressure hose 20 m, with Storz A | 6022393 |

Installation/setup

Flat suction

Flat suction KS 8/KS 9

6032495

Suction strainer extension

Suction strainer extension KS 8/KS 9

6032496

Electrical accessories

Pump control

Wilo-Control SC-Lift

| | |
|---------------------------|---------|
| SC-L-2x16A-T34-DOL-WM | 2538933 |
| SC-L-2x16A-T34-DOL-WM-FTS | 2543246 |

Pump control/accessories

Battery 9V,200mA

| | |
|----------------------------------------|---------|
| NiMh rechargeable battery, 9 V/200 mAh | 2522850 |
|----------------------------------------|---------|

Alarm signal

AlarmControl

| | |
|----------------|---------|
| AlarmControl 1 | 2522846 |
| AlarmControl 2 | 2522847 |

DrainAlarm

| | |
|------------------|---------|
| DrainAlarm | 2545133 |
| DrainAlarm FIRST | 2550526 |

Flash light

| | |
|-------------------------------|---------|
| Mounted Flash light 1~230 VAC | 2510429 |
| Flash light 24 VDC | 2551612 |
| Flash light 1~230 VAC | 2551613 |

Signal horn

| | |
|-----------------------|-----------|
| Signal horn 12-24 VDC | 2017208 |
| Signal horn 1~230 V | 501459398 |

Small alarm switchgear

| | |
|----------------------------|-----------|
| Small alarm switchgear KAS | 501534094 |
|----------------------------|-----------|

Level control

Float switch MS1

| | |
|----------------------------------|---------|
| Float switch MS1 with 10 m cable | 2004593 |
|----------------------------------|---------|

Float switch WA

| | |
|-----------------------------------|-----------|
| Float switch WA65 with 5 m cable | 503211390 |
| 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 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 3~ units

| | |
|--------------------------------|---------|
| ZSD CEE16 with 10 m cable, 10m | 6021206 |
| ZSD CEE16 with 5 m cable, 5m | 6023412 |
| ZSD CEE32 with 10 m cable, 10m | 6027184 |

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 |