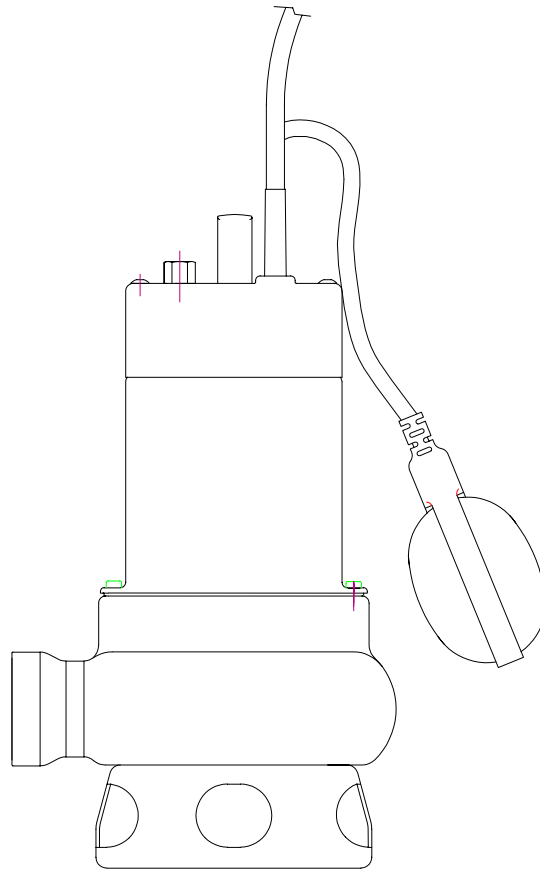


IP 900 W/KS & IP 900 D/KS



Installation and operating instructions

We reserve the right to make modifications in the interest of technical development

IP 900

Application Areas

The submersible waste-water pumps of the IP 900 series are reliable quality products designed for the following applications:

- Pumping of aggressive medium.
Pumping of clear water.
- Pumping of rain water.
- For blockage-free pumping of liquids which have a high proportion of solid or fibrous matter present.



These pumps may not be used for the pumping of flammable or explosive fluids.

ATTENTION: Before using aggressive fluids check that the materials used in the pump are resistant to the particular fluid being pumped.

In the case of any queries, the pump number, part number and serial number should always be given.

Commentary on the regulations in DIN EN 12056-4 for the use of lifting stations of the pumping of effluent containing faecal matter.

Automatically operated lifting units are prescribed if:

- The water level in the odour-lock lies below the sewer backwash level.
- Rainwater gullies from areas below the sewer backwash level are present.

The sewer backwash level is the maximum possible water level in the public sewer network, and information on this can be obtained from your Local Authority. If the backwash level has not been fixed by the Local Authority, then the surface level of the roadway at the connection point is taken to be the level.

If the effluent does not give rise to foul odours, then a water-tight connection tank fitted with a lid is acceptable.

ATTENTION: The Regulations of DIN 1986/100 EN and 12056 as well as your own local by-laws should be observed.

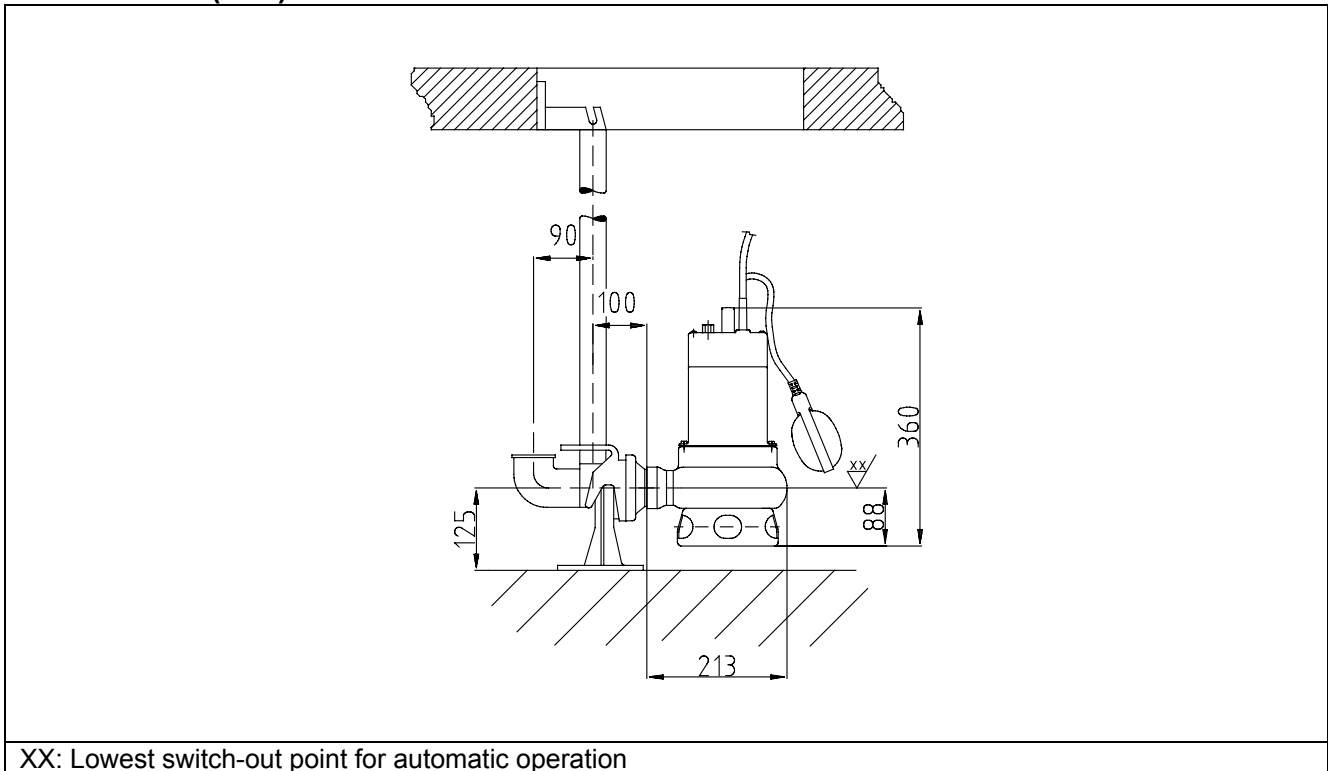
IP 900

Technical Data IP 900

Pump Type	Discharge connection Internal thread	Motor-power*		Speed at 50Hz min^{-1}	Rated voltage V	Rated current A	Cable Type m	Max head m	Max flow l/s	Weight kg
		P ₁ kW	P ₂ kW							
IP 900 W/KS	G 2"	1,48	1,1	2900	230	6,7	10 H05VV	11,7	5	12
IP 900 D/KS	G 2"	1,41	1,1	2900	400	2,4	10 H05VV	11,7	5	12

P₁ = Power taken from mains; P₂ = Power at motor shaft; W = Single phase; D = Three phase

Dimensions (mm)



XX: Lowest switch-out point for automatic operation

ATTENTION Maximum medium temperature for continuous operation with fully submerged unit = 40°C, intermittent 60°C.
Noise level 70 dB.

Transport

During transport the submersible pump should not be dropped or thrown.



The submersible pump should never be raised by the power cable.

A handle is provided for transport. If necessary, it is possible to suspend the pump by attaching a rope or chain to the handle.

Electrical connection



Before operating the pump, have an expert check that one of the electrical safety devices is present. Earthing, neutral connection, earth leakage circuit breakers, etc., must conform to the regulations of your local Electricity Supply Board, and must be in perfect working order.

ATTENTION: Cross-section and voltage drop of the main supply must comply with VDE-Regulations.

The mains voltage should be the same as the voltage given on the name-plate of the pump. In the case of pumps fitted with a plug, a socket with earth connections should be provided above possible flood level. In the case of pumps supplied without a plug, the connection of the supply and pump cable to the terminals of the control panel should be carried out by a qualified person in accordance with the lead identifications given and complying with all relevant regulations.

The unit should be protected by a correctly dimensioned slow blow fuse (suitable for the rated power of the pump). We recommend the use of an overload relay.

Maintenance



Before commencing any maintenance work, ensure that all leads to the mains are unconnected and that the pump cannot be inadvertently switched on.

ATTENTION: The maintenance hints given here are not suitable for DIY repair work, as special technical knowledge is required.

The ABS guarantee is only valid if all repair work has been carried out by an ABS authorised workshop and where original ABS spare parts have been used.

General Maintenance Hints

ABS pumps are reliable products of proven quality, each being subjected to careful final inspection. Lubricated-for-life ball-bearings together with monitoring devices ensure optimum reliability of the pump. It is essential that the pump is installed and operated in accordance with the operating instructions.

Should, however, a fault occur, do not attempt to improvise but call on your ABS Service Centre. This applies particularly in the case where the unit is continually switched off by the current overload in the control panel, or by the thermal sensors of the thermo-control-system.

For a long running life, we recommend regular checks and cleaning. The ABS Service Organisation would be glad to advise you on any special applications and to solve your pumping problems.

Cleaning

If the pump is taken out of service in order to prevent deposition of soil or other materials, the pump should be cleaned by pumping clear water.

Clean the float switch of any deposits and check its functioning.

Commissioning

Before commencing operations, the pump/pump station should be examined and a function check carried out. Particular attention should be paid to the following:

- Check that the power cable and plug are undamaged.
- Does the electrical connection comply with regulations?
- Is the motor overload correctly set?
- Is the direction of the pump correct?
- Is the level control system operating correctly?
- Are the switch On switch Off levels correctly set?



Submersible pumps for use in swimming pools, garden ponds, and similar areas, must comply with Europa Standard 60335 Part 2 in Protection Class III (low voltage protection).

The regulations in Austria prescribe that a pump used in swimming pools or garden ponds with a fixed connection lead, may only be supplied with power by means of a separating transformer, the rated voltage of the secondary output of which does not exceed 220V.

If you have any doubts consult an electrician.

2. Safety

(extracted from VDMA-Standard Sheet 24292)

These operating instructions contain basic information on the erection, operating and maintenance and should be followed carefully. For this reason it is essential that these instructions are carefully read before erection or commissioning by both the installation crew as well as those responsible for operation or maintenance. The operating instructions should always be readily available at the location of the unit.

In addition to following the safety regulations of a general nature listed under these main headings, it is also essential that the special safety instructions given under other headings be observed.

2.1 Identification of Hints in the Operating instructions



Safety instructions given in this Operating Manual, the non-observance of which could cause danger to life have been specifically high-lighted with the general danger symbol, safety signs in accordance with DIN 4844-W 9.



The presence of a dangerous voltage is identified with the safety symbol in accordance with DIN 4844-W 8.

ATTENTION

Applies to safety instructions, the non-observance of which could damage the unit or affect its functioning.

Symbols directly on the unit itself, e.g.

— direction of rotation arrow

— nameplate

must be carefully observed and must be maintained in a legible condition.

2.2 Qualifications of Personnel

The personnel for maintenance, inspection and erection must possess the required qualifications for the work.

2.3 Dangers which could arise due to non-observance of the safety instructions

The non-observance of the safety instructions can lead to both danger to personnel and also to possible harm to the environment or the unit itself. Non-observance of the safety instructions can invalidate the rights of the user to any compensation or regress.

In detail, non-observance can **for example** result in the following dangers:

- Failure of important functions of the unit/installation
- Danger to personnel by electrical, mechanical or chemical influences
- Danger to the environment by leakage of dangerous substances.

2.4 Carrying out work in a safety conscious manner

The safety instructions listed in this Operating Manual, the existing National Regulations for Safety, as well as any internal operating or safety regulations which apply in the user's own premises must be observed.

2.5 Safety Regulations for the Owner/Operator

All dangers due to electricity must be avoided (for details consult the Regulations of your local Electricity Supply Company).

2.6 Safety Regulations for maintenance, inspection and installation work

The user of the unit should ensure that all maintenance, inspection or installation work is carried out by

authorised and qualified skilled

personnel. The user must also make certain that they have carefully studied the operating instructions.

In principle all work on the unit should only be carried out while it is stationary.

Pumps or units, used for pumping of fluids which could be injurious to health must be decontaminated.

After completion of the work all safety and protective devices must be refitted and a check should be made that they are fully functional.

Before starting up again, the points listed under the section Commissioning should be complied with.

2.7 Unilateral modification and spare parts manufacturing

Modifications or changes to the unit/installation should only be carried out after consultations with the manufacturer. Original spare parts and accessories authorised by the manufacturer are essential for compliance with safety requirements. The use of other parts can invalidate any claims for warranty or compensation.

2.8 Unproved usage

The operating safety of the unit is only guaranteed provided that the unit is used in accordance with the conditions listed in Section 1. The limit values given in the data sheet should under no circumstances be exceeded.

These installation and operation instructions do not supersede or exclude the following of generally valid regulations and standards.

VDMA = Verband Deutscher Maschinen- und Anlagenbau e.V
(German Machinery Manufacturers Association)



We reserve the right to make alterations in the furtherance of technical development.

Installation, Maintenance and Service by



We know how water works

ABS Pumps Ltd. . Clonard Road . Wexford , Ireland . Telephone (053) 63200 . Fax (053) 42335
www.absgroup.com