BEDU
POMPEN

*Multi-stage submersible clean water pumps

MPS, MXS

ORIGINAL OPERATING INSTRUCTIONS

made for your process

EN

SUMMARY

EN

1 GENERAL INFORMATION

Before using the product carefully read the information contained in this instruction manual, the manual should be kept for future reference.
Italian is the original language of this instruction manual, this language is the reference language in case of discrepancies in the translations.
This manual is part of the essential safety requirement and must be retained until the product is finally de-commissioned.
The customer, in case of loss, can request a copy of the manual by contacting Calpeda S.p.A. or their agent, specifying the type of product data shown on the label of the machine (see 2.3 Marking)
Any changes, alterations or modifications made to the product or part of it, not authorized by the manufacturer, will revoke the "CE declaration" and warranty.

This appliance should not be operated by children younger than 8 years, people with reduced physical, sensory or mental capacities, or inexperienced people who are not familiar with the product, unless they are given close supervision or instructions on how to use it safely and are made aware by a responsible person of the dangers its use might entail.
Children must not play with the appliance.
It is the user's responsibility to clean and maintain the appliance. Children should never clean or maintain it unless they are given supervision.
Do not use in ponds, tanks or swimming pools or where people may enter or come into contact with the water.
Read carefully the installation section which sets forth:
- The maximum permissible structural working pressure (chapter 3.1).
- The type and section of the power cable (chapter 6.5).
- The type of electrical protection to be installed (chapter 6.5).

1.1 Symbols

To improve the understanding of the manual, below are indicated the symbols used with the related meaning.


Information and warnings that must be observed, otherwise there is a risk that the machine could damage or compromise personnel safety.


The failure to observe electrical information and warnings, could damage the machine or compromise personnel safety.


Notes and warnings for the correct management of the machine and its parts.


Operations that could be performed by the final user. After carefully reading of the instructions, is responsible for maintenance under normal conditions. They are authorized to affect standard maintenance operations.


Operations that must be performed by a qualified electrician. Specialized technician authorised to affect all electrical operations including maintenance. They are able to operate with in the presence of high voltages.


Operations that must be done performed by a qualified technician. Specialized technician able to install the device, under normal conditions, working during "maintenance", and allowed to do electrical and mechanical interventions for maintenance. They must be capable of executing simple electrical and mechanical operations related to the maintenance of the device.


Indicates that it is mandatory to use individual protection devices.

Operations that must be done with the device switched off and disconnected from the power supply.

Operations that must be done with the device switched on.

1.2 Manufacturer name and address

Manufacturer name: Calpeda S.p.A.
Address: Via Roggia di Mezzo, 39
36050 Montorso Vicentino - Vicenza / Italia
www.calpeda.it

1.3 Authorized operators

The product is intended for use by expert operators divided into end users and specialized technicians. (see the symbols above).


It's forbidden, for the end user, carry out operations which must be done only by

specialized technicians. The manufacturer declines any liability for damage related to the non-compliance of this warning.

1.4 Warranty

Calpeda will be liable for defects due to manufacturing or incorrect specification on their part, detected within one year from delivery.
With regard to contracts entered into with consumers, defined as persons who purchase the goods for uses not connected to the professional activity they carry out, Calpeda shall be liable for the defects emerging within two years from delivery.

The warranty covers only the replacement and the repair of the defective parts of the goods (recognized by the manufacturer).

The Warranty will not be considered in the following cases:
- Whenever the use of the device does not conform to the instructions and information described in this manual.
- In case of changes or variations made without authorization of the manufacturer.
- In case of technical interventions executed by a non-authorized personnel.
- In case of failing to carry out adequate maintenance.

1.5 Technical assistance

Any further information about the documentation, technical assistance and spare parts, shall be requested from:

Calpeda S.p.A.
Via Roggia di Mezzo, 39
36050 Montorso Vicentino - Vicenza / Italia
Tel. +39 0444 476476 - Fax +39 0444 476477
E.mail: info@calpeda.it
www.calpeda.it

2 TECHNICAL DESCRIPTION

Close coupled submersible multistage pump.
MXS: All parts in contact with the fluid both internal and external are in stainless steel AISI 304.
MPS: External jacket in stainless steel AISI 304 and stages Noryl.
Hydraulics are located below the motor with the motor cooled by the pumped fluid. Safe operation is possible with the motor only partially submerged.
Double shaft seal with interposed oil chamber.
The suction strainer prevents the ingress of solids with diameter larger than 2mm.

2.1 Intended use

For water supply from wells, tanks or reservoirs.
For domestic use, for civil and industrial applications, for garden use, irrigation and rain water harvesting systems.

2.2 Improper use

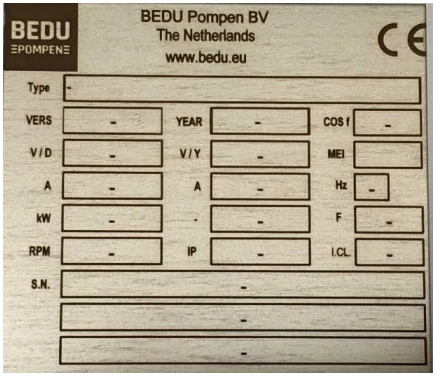
The device is designed and built only for the purpose described in paragraph 2.1.

Improper use of the device is forbidden, as is use under conditions other than those indicated in these instructions.
Improper use of the product reduces the safety and the efficiency of the device, Calpeda shall not be responsible for failure or accident due to improper use.

Do not use in ponds, tanks or swimming pools or where people may enter or come into contact with the water.

2.3 Marking

The following picture is a copy of the name-plate (see Pic.) that is on the external case of the pump.



3 TECHNICAL FEATURES

3.1 Technical data

Performance, dimensions and weight (paragraph 13.1).
Nominal speed 2900/3450 rpm
Protection IP X8
Supply voltage / Frequency:
- up to 240V 1~ 50/60 Hz
- up to 480V 3~ 50/60 Hz

Check that the mains frequency and voltage correspond to the electrical characteristics shown on the indicator plate.
Sound pressure at minimum immersion depth: < 70 dB(A)

The noise is suppressed when the pump is submersed.
Maximum starts/hour: 30 at regular intervals.
Maximum final pressure in the pump casing: 120 m (12 bar) for MXS, 80 m (8 bar) for MPS.
Maximum suction pressure: PN (Pa) - Hmax (Pa).

3.2 Operating conditions

For clean water with a maximum temperature of 35 °C and maximum sand content of 60 g/m^3.
Minimum internal diameter of well: 140 mm.
- Minimum immersion depth: 100 mm.
- Maximum submersion depth: 20 m (with suitable cable length).

4 SAFETY

4.1 General provisions

Before using the product it is necessary to know all the safety indications.
Carefully read all operating instructions and the indications defined for the different steps: from transportation to disposal.
The specialized technicians must carefully comply with all applicable standards and laws, including local regulations of the country where the pump is sold.
The device has been built in conformity with the current safety laws.
The improper use could damage people, animals and objects.
The manufacturer declines any liability in the event of damage due to improper use or use under conditions other than those indicated on the name-plate and in these instructions.

Follow the routine maintenance schedules and the promptly replace damaged parts, this will allows the device to work in the best conditions.
Use only original spare parts provided from Calpeda S.p.A or from an authorized distributor.

Don't remove or change the labels placed on the device.
Do not start the device in case of defects or damaged parts.

Maintenance operations, requiring full or partial disassembly of the device, must be done only after disconnection from the supply.

Pollution of the liquid could occur due to leakage of lubricants.

4.2 Safety devices

The device has an external case made in chrome-nickel stainless steel that prevents any contact with internal parts.

4.2.1 Protection devices

The device is provided with a double shaft seal with interposed oil chamber, ensuring motor is separated from water, eliminating potential electrical risks, and ensuring protection from accidental dry running.
The product is provided with a screen that avoids the accidental contact with dangerous parts of the impeller.

4.3 Residual risks

The appliance, designed for use, when used in-line with the design and safety rules, doesn't have residual risks.

4.4 Information and Safety signals

For this kind of product there will not be any signals on the product.

4.5 Individual protection devices

During installation, starting and maintenance it is suggested to the authorized operators to consider the use of individual protection devices suitable for described activities.
During ordinary and extraordinary maintenance interventions, where it is required to remove the filter, safety gloves are required.

Signal	individual protection device
	HAND PROTECTION (gloves for protection against chemical, thermal and mechanical risks).

5. TRANSPORTATION AND HANDLING

The product is packed to maintain the content intact.
During transportation avoid to stack excessive weights. Ensure that during the transportation the box cannot move. Ensure that the vehicle for the transportation is adapted for the dimensions of the packaged device.
It is not necessary to use any special vehicle to transport the packaged device.
The transport vehicles must comply, for the weight and dimensions, with the chosen product (see cap. 13.1 dimensions and weights).

5.1 Handling

The handling is facilitated by the lift handles placed on the box.
Handle with care, the packages must not receive impacts.
Avoid to impact onto the package materials that could damage the external case of the pump.
The manufacturer declines any liability in the event that the above described provisions are not respected.
If the weight exceeds 25 Kg the package must be handled by two person at the same time (see cap. 13.1 dimensions and weights).

6 INSTALLATION

6.1 Dimensions

For the dimensions of the device refer to the annex "Dimensions" (cap. 13.1 Annexes).

6.2 Ambient requirements and installation site dimensions

The customer has to prepare the installation site in order to guarantee the right installation and in order to fulfill the device requirements (electrical supply, etc...).
The place where the device will be installed must fulfill the requirements in the paragraph 3.2.
It's Absolutely forbidden to install the machine in an environment with potentially explosive atmosphere.

6.3 Unpacking

Inspect the device in order to check any damages which may have occurred during transportation.

Package material, once removed, must be discarded/recycled according to local laws of the destination country.

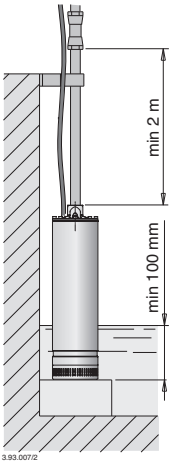
It's absolutely forbidden to handle the product by means of the electric power cable. It is recommended to lift the pump from the motor end and place it vertically on the filter, then lower it down in the place chosen.

6.4. Installation

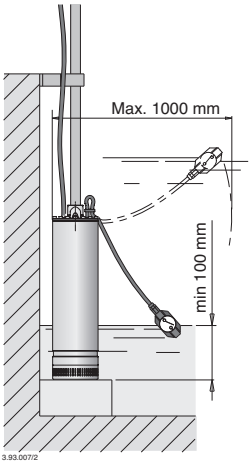
The internal diameter of the delivery pipe must never be smaller than the diameter of the pump connection port: G 11/4 (DN 32) and with a free vertical segment of at least 2 m before the non-return valve.
The pump must be installed in the vertical position with the delivery connection facing upwards.
The pump can be installed immersed (min 100 mm) or submersed (max 20 m) either standing on a bottom surface or suspended.

6.4.1 Pump in the standing position

OFF



Construction without float switch

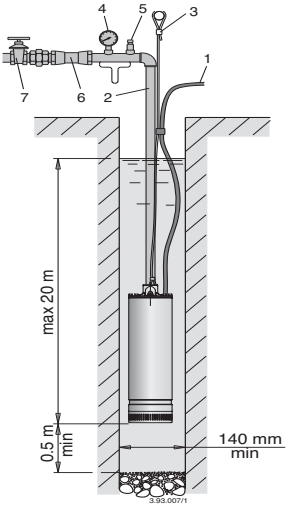


Construction with float switch

The pump can be rested on the flat bottom surface of a tank.
When sand or slime deposits are expected to form, mount the pump on a surface raised from the bottom level so that abrasive matter is not lifted.

6.4.2 Pump in the suspended position

OFF



1. Electric power cable
2. Delivery pipe
3. Safety rope
4. Pressure gauge
5. Air vent valve
6. Check valve
7. Gate valve

The pump can be held in a suspended position by the metal delivery pipe. Tighten the threaded pipe joints firmly to avoid loosening during operation.
Position the pump at a distance of at least 0.5 m

from the bottom of a well so that sand is not lifted. A safety rope or chain of non-perishable material should always be used to secure a suspended pump. When a plastic or flexible delivery pipe is used, the safety rope or chain should be utilized for lowering, securing and raising the pump.

Never use the electric power cable to suspend the pump.

Attach the power supply cable to the delivery pipe and to the safety rope with cable clamps at intervals of about 3 m. The power cable should not be taut: allow for a certain degree of slackness between the clamps to avoid the risk of strain caused by expansion of the pipe during operation.

6.5 Electrical connection

OFF

Electrical connection must be carried out only by a qualified electrician in accordance with local regulations.

Follow all safety standards.

he unit must be always earthed, also with a non-metallic delivery pipework.

ATTENTION: in the case of water containing chloride (or salt water), the earthing (grounding) conductor is useful also to reduce the risk of galvanic corrosion due to electrolytic action, especially with non-metallic delivery pipe and safety rope.

Make sure the frequency and mains voltage correspond with the name plate data.

For use in swimming pools (not when people are in the pool), garden ponds and similar places, **a residual current device** with IΔN not exceeding 30 mA must be installed in the supply circuit.

Install **a device for disconnection from the mains (switch)** with a contact separation of at least 3 mm on all poles. When the water level is not under direct visible control, install a float switch or electrodes to protect the pump against dry running and to set the water levels to stop and automatically start the pump.

The pumps are supplied with power cable type H07-RN8-F type with section of cable not less than 11 TAB IEC 60335-1.

When extension cables are used, make sure the cable wires are of adequate size to avoid voltage drops. For connection of cables in a well, use thermo-shrinking sheathes or other methods for submersed cables.

ATTENTION:

When the pump is fed by a frequency converter, the minimum frequency should not fall below 25 Hz and in any case the total head of the pump should never be lower than 2 m.

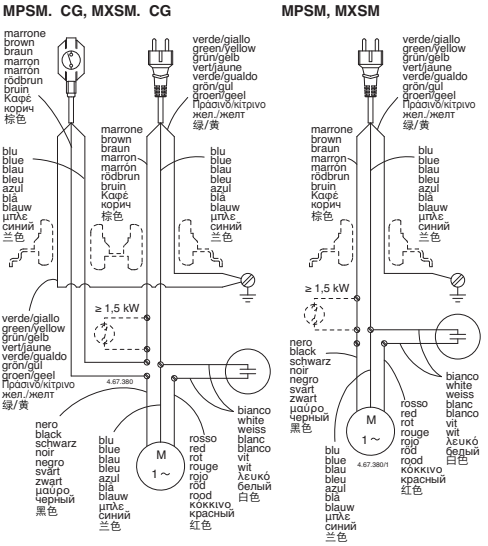
6.5.1 Single-phase pumps MXSM

OFF

Supplied with incorporated capacitor and thermal protector, with plug.

Connect the plug to a socket with an earth lead. The motor will stop if overheating is detected. When the windings cool down (after 2 to 4 minutes), the thermal protector enables re-starting.

Electrical diagram



6.5.2 Three-phase pumps MXS

OFF

Install in the control box an overload-protective device in accordance curve type D with the name-plate current.

7 STARTUP AND OPERATION

7.1 Preliminary checks before start-up of the pump

Do not start-up the device in case of damaged parts.

7.2 First starting

OFF

With a three-phase power supply make sure the direction of rotation is correct.

To check this close the discharge valve and measure the closed valve pressure with a pressure gauge mounted between the valve and the pump discharge, or visually check the flow-rate.

Switch off power, invert the connections of two phases on the control panel, re-start and check the pressure or flow rate capacity again.

The correct direction of rotation will provide a considerably greater and easily distinguishable pressure and delivery capacity.

Make sure the pump is operating within its range of rated performance and that the absorbed current indicated on the name-plate is not exceeded.

Otherwise, adjust the delivery gate valve or the setting of pressure switches if installed.

ATTENTION: never allow the pump to run for more than five minutes with a closed discharge valve.

ATTENTION: never run the pump dry, not even for a short trial run.

Never start the pump before it has been immersed to a depth of at least 100 mm.

7.2.1 Construction with float switch:

The float switch, connected directly to the pump, controls starting and stopping.

Check that the float switch is free from any obstacle. If necessary, adjust the float-switch cable.

Execessive cable length may cause the motor to overheat and the pump to run dry.

7.2.2 Construction without float switch:

If there is no air vent valve in systems with a check valve, the minimum immersion depth at first start-up must be 300 mm.

An air vent valve must be used in systems with an immersed delivery outlet.

Do not start the pump with a completely closed shutoff gate valve.

Never take the pump out of the water while the pump is still operating.

7.3 Switch off of the pump

The appliance must be switch off every time there are faults. (see troubleshooting).

The product is designed for a continuous duty, the switch off is performed by disconnecting the power supply by means the expected disconnecting devices. (see paragraph "6.5 Electrical connection").

8 MAINTENANCE

Before any operations it's necessary to disconnect the power supply.

If required ask to an electrician or to an expert technician.

Every maintenance operations, cleaning or reparation executed with the electrical system under voltage, it could cause serious injuries to people.

A possible replacement of the cable or the level switch must be carried out by an authorised Calpeda service workshop.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

In case of extraordinary maintenance, or maintenance operations that require part-removing, the operator must be a qualified technician able to read schemes and drawings.

It is suggest to register all maintenance operation executed.

During maintenance keep particular attention in order to avoid the introduction of small external parts, that could compromise the device safety.

It is forbidden to execute any operations with the direct use of hands. Use water-resistant, anti-cut gloves to disassemble and clean the filter or in other particular cases.

During maintenance operations external personnel is not allowed.

Maintenance operations that are not described in this manual must be made only by special personnel authorized by Calpeda S.p.A.

For further technical information regarding the use or the maintenance of the device, contact Calpeda S.p.A.

8.1 Routine maintenance

Before every maintenance operations disconnect the power supply and make sure that the device could not accidentally operate.

8.1.1 Summary table

Frequency	Description	Paragraph
Monthly	Cleaning	8.1.2
Routine maintenance table 4		

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8.1.2 Cleaning

Check externally that the pump is not encrusted with debris, particularly in the filter area (ref. 1 picture 6). The cleaning consists of ther removal of the obstructing material. In case of mud incrustations, use a sharp tool that allows the removal of the material.

Clean the external part of the pump with a cloth and clean water to remove the remaining traces .

Fig. 6

9. DISPOSAL

European Directive 2012/19/EU (WEEE)

The final disposal of the device must be done by specialized company.

Make sure the specialized company follows the classification of the material parts for the separation.

Separate the components using water resistant anti-cut gloves.

Reuse or a differential dismantling is preferred .

The device must be disposed in a different way from urban disposals.

Observe the local regulations and dispose the device accordingly with the international rules for environment protection.

10 SPARE PARTS

10.1 Spare-parts request

When ordering spare parts, please quote their designation, position number in the cross section drawing and rated data from the pump name plate (type, date and serial number).

Any pumps that require inspection/repair must be sent back complete with cable.

The spare parts request shall be sent to CALPEDA S.p.A. by phone, fax, e-mail.

11 DESIGNATION OF PARTS

Nr.	Designation
12.01	Delivery casing
12.20	Screw
14.02	External jacket
14.20	O-ring
15.50	Suction strainer
15.60	Spacer screw
15.70	Screw
25.01	First stage casing
25.02	Stage casing
25.03	Stage casing with bearing
25.05	Last stage casing
25.20	Preload ring stages
25.22	O-ring
25.23	Spacer
25.24	Support ring preload
25.26	Washer
25.28	Screw
25.30	Circlip
25.32	Screw - Washer
28.00	Impeller
28.04	Impeller nut
28.08	Washer
34.03	Oil chamber cover
34.08	Plug
34.09	O-ring
34.12	Screw
34.13	O-ring
36.00	Mechanical seal
36.51	Retaining ring, split
36.52	Shoulder ring
64.10	Bearing sleeve
64.15	Spacer sleeve
64.19	Spacer sleeve
70.00	Motor cover, pump side
70.05	O-ring
70.08	O-ring
70.09	O-ring
70.10	O-ring
70.11	Cable gland ring (float switch)
70.12	Cable gland rubber ring
70.13	Washer
70.16	Cable gland
70.17	Lock ring
70.20	Screw
70.23	O-ring
70.32	Washer (float switch)
70.33	Cable gland (float switch)
70.34	Lock ring (float switch)
72.00	Upper mechanical seal
72.02	Circlip
73.00	Pump side bearing
76.01	Motor jacket with winding
76.12	Overload protection
76.15	Plug
76.60	Float switch
76.62	Jacket cover
78.00	Shaft with rotor packet
81.00	Bearing
82.02	Screw
82.03	O-ring
82.04	Compensating spring
82.05	Screw
82.07	Screw
82.11	Screw
82.12	O-ring
82.30	Plug
94.00	Capacitor
96.00	Cable
96.09	Screw
96.13	Gland for floating switch cable

(1) Oil

Changes reserved.

12. Troubleshooting

WARNING: Turn off the power supply before performing any operations.
Do not allow the pump or motor to run when dry even for a short period
Strictly follow the user instructions and if necessary contact an authorised service centre

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PROBLEM	PROBABLE CAUSES	POSSIBLE REMEDIES
1) The motor does not start	1a) Unsuitable power supply 1b) Incorrect electrical connections 1c) Engine overload protective device cuts in. 1d) Blown or defective fuses 1e) Shaft blocked 1f) If the above causes have already been checked, the motor may be malfunctioning	1a) Check that the mains frequency and voltage correspond to the electrical characteristics shown on the indicator plate. Make sure that the cross section of the cable is compatible with the length of cable and with the motor power. 1b) Connect the power supply cable to the terminal board correctly. Check that the thermal overload protection is set correctly (see data on the motor name-plate) and make sure that the fuseboard upline of the motor has been properly connected 1c) Check the power supply and make sure that the pump shaft is turning freely. Check that the thermal overload protection has been set correctly (see the motor name-plate) 1d) Replace the fuses, check the electric power supply and points a) and c) 1e) Remove the cause of blockage as indicated in the “Blocked pump” instruction booklet 1f) Repair or replace the motor by contacting an authorised service centre
2) Pump blocked	2a) Presence of solid bodies in the pump rotor 2b) Bearings blocked	2a) If possible, dismantle the pump casing and remove any solid foreign bodies inside the rotor, if necessary contact an authorised service centre 2b) If the bearings are damaged replace them or if necessary contact an authorised service centre
3)The pump functions but no water comes out	3a) Check that the valves are open and not blocked 3b) Suction valve closed 3c) Pump suction filter obstructed 3d) Pump installed above the surface of the liquid (dry functioning) 3e) Direction of rotation incorrect	3a) Dismantle the check valve on the delivery pipe and release the valve, if necessary replace it. 3b) Open the suction valve 3c) Extract the pump, remove and clean the suction filter and if necessary replace it. 3d) Increase the depth of installation of the pump as far as compatible with pump performance. Do the same if the problem is due to a lowering of the water table 3e) Invert the electrical connections from the motor to the power supply terminal
4) Insufficient flow	4a) Pipes and accessories with diameter too small causing excessive loss of head 4b) Presence of deposits or solid bodies in the internal passages of the rotor and/or in the diffusers 4c) Rotors deteriorated 4d) Worn rotors and diffusers 4e) Excessive lowering of the dynamic level of the well 4f) Incorrect direction of rotation 4g) Leaking from delivery pipe 4h) Presence of dissolved gases in the water	4a)Use pipes and accessories suitable for the specific application 4b) Extract the pump and contact an authorised service centre. 4c) To replace the rotors contact an authorised service centre 4d) Contact an authorised service centre to replace the rotors and the sealing rings of the diffusers, or diffusers themselves if worn 4e) Increase the depth of immersion of the pump as far as compatible with pump characteristics, reduce the flow requested by narrowing the suction valve. Pump too big for the dynamic level of the well 4f) See 2e) 4g) Locate the points in which the delivery pipe is leaking, if located in the vertical section of the well, extract the pump and repair the pipe as needed. 4h) Contact an authorised service centre.
5) Noise and vibrations from the pump	5a) Rotating part unbalanced 5b) Worn bearings 5c) Pump and pipes not firmly attached 5d) Flow too strong for the diameter of the delivery pipe 5e) Unbalanced power supply	5a) Check that no solid bodies are obstructing the rotor 5b) Replace the bearings 5c) Anchor the delivery and suction piping as needed 5d) Use bigger diameters or reduce the pump flow 5e) Check that the mains voltage is correct
6) Leakage from the mechanical seal	6a) The mechanical seal has functioned when dry or has stuck 6b) Mechanical seal scored by presence of abrasive parts in the liquid pumped	In cases 6a), 6b), replace the seal, if necessary contact an authorised service centre 6a) Make sure that the pump casing is full of liquid and that all the air has been expelled. 6b) Use a seal suited to the characteristics of the liquid being pumped.

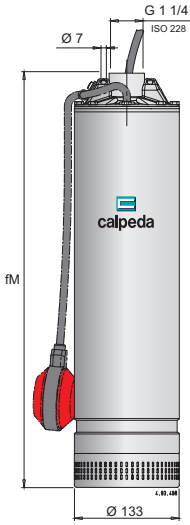
13.1. Prestazioni n ≈ 2900 1/min, dimensioni e pesi
Performance n ≈ 2900 rpm, dimensions and weights
Kenndaten n ≈ 2900 1/min, Abmessung und Gewicht
Performances n ≈ 2900 1/min, dimensions et poids
Prestaciones n ≈ 2900 1/min, dimensiones y pesos
性能表 N=2900rpm,尺寸和重量

3 ~	230 V	400 V	1 ~	230 V			P1	P2		Q m³/h	0	1	1,5	2	2,5	3	3,5	4	4,5
	A	A		A	µF	V	kW	kW	HP	l/min	0	16,6	25	33,3	41,6	50	58,3	66,6	75
MXS 303 - MPS 303	2,4	1,4	**MXSM 303 - MPSM 303**	3,5	14	450	0,8	0,45	0,6		32,5	29,5	27,5	25,5	23	19,5	17	13	10
MXS 304 - MPS 304	2,8	1,6	**MXSM 304 - MPSM 304**	4,1	20	450	0,9	0,55	0,75		44	41,5	39,5	36,5	33,5	29,5	25,5	21	16
MXS 305 - MPS 305	3,3	1,9	**MXSM 305 - MPSM 305**	5	20	450	1,1	0,75	1		53	49,5	47	44	40	35	30	25	19
MXS 306 - MPS 306	3,8	2,2	**MXSM 306 - MPSM 306**	6	25	450	1,3	0,9	1,2	**H** m	65	61	58	54	49	43	37	30,5	23
MXS 307 - MPS 307	4,5	2,6	**MXSM 307 - MPSM 307**	6,6	25	450	1,5	0,9	1,2		77,5	71	66,5	61	55	49	42	35	27
MXS 308	4,8	2,8	**MXSM 308**	8,3	30	450	1,7	1,1	1,5		88,5	81,5	76	70,5	64	56,5	49,5	41	32
MXS 309	6,6	3,8	**MXSM 309**	9	30	450	1,9	1,5	2		100	91	85	78,5	70,5	62,5	54,4	45	35
MXS 310	7,5	4,3	**MXSM 310**	12	35	450	2,2	1,5	2		111	101,5	95	88,5	80	71	62	52,5	41,5

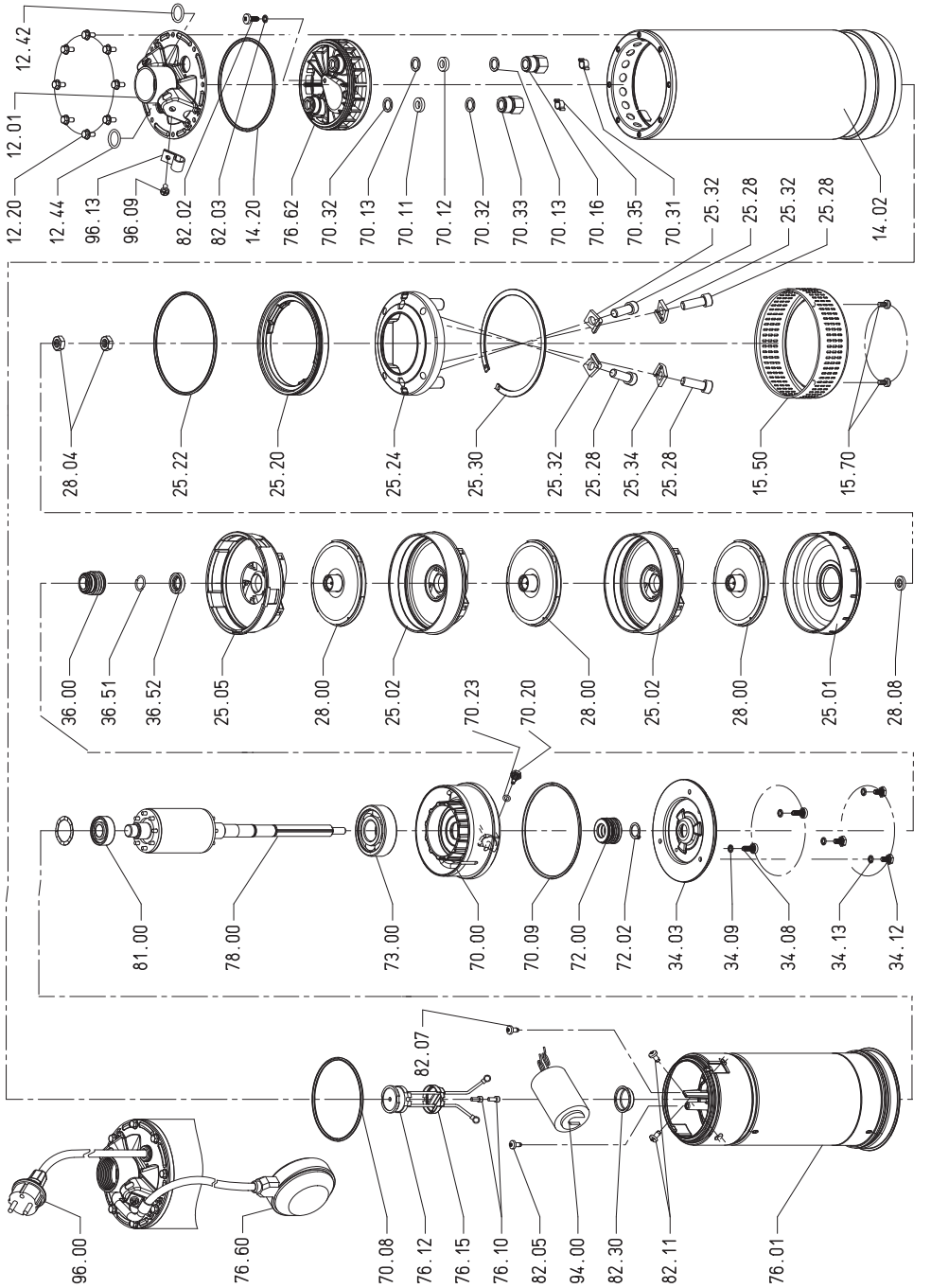
3 ~	230 V	400 V	1 ~	230 V			P1	P2		Q m³/h	0	2,5	3	3,5	4	4,5	5	6	7	8
	A	A		A	µF	V	kW	kW	HP	l/min	0	41,6	50	58,3	66,6	75	83,3	100	116	133
MXS 503 - MPS 503	2,8	1,6	**MXSM 503 - MPSM 503**	4,1	20	450	0,9	0,55	0,75		32,2	28,5	27,5	26	24,5	22,5	21,5	18	13,5	8
MXS 504 - MPS 504	3,8	2,2	**MXSM 504 - MPSM 504**	6	25	450	1,2	0,9	1,2		43	39	38	36,5	34,5	33	30,5	25,5	19,5	13
MXS 505 - MPS 505	4,5	2,6	**MXSM 505 - MPSM 505**	7	25	450	1,5	1,1	1,5		53	47,5	45,5	43,5	41	38,5	35,5	29,5	22	13,5
MXS 506 - MPS 506	4,8	2,8	**MXSM 506 - MPSM 506**	8,3	30	450	1,7	1,1	1,5	**H** m	66,5	58	55,6	53,5	51	48	45	36,5	27,5	16
MXS 507 - MPS 507	6,8	3,9	**MXSM 507 - MPSM 507**	12	35	450	2,2	1,5	2		78,5	69,5	66,5	64	61,5	58	54,5	45,5	36	22
MXS 508	7,5	4,3	**MXSM 508**	13	35	450	2,4	1,5	2		88,5	78	75	72	68	64	60	50	38	25
MXS 509	9,7	5,6	**MXSM 509**	14,3	40	450	2,9	2,2	3		101	91	87,5	84	80,5	75,5	71	60	46,5	28,5
MXS 510	9,7	5,6						2,2	3		113	101	98,5	95	92	87,5	83	71,5	56	35

3 ~	230 V	400 V	1 ~	230 V			P1	P2		Q m³/h	0	5	6	7	8	9	10	11
	A	A		A	µF	V	kW	kW	HP	l/min	0	83,3	100	116	133	150	166,6	183,3
MXS 903	4,5	2,6	**MXSM 903**	7	25	450	1,5	1,1	1,5		34,5	29,5	28	26,5	24,5	22,5	20	16,5
MXS 904	6,6	3,8	**MXSM 904**	9	30	450	1,9	1,5	2		45,5	39	37	35	32,5	30	26,5	22,5
MXS 905	7,5	4,3	**MXSM 905**	13	35	450	2,4	2,2	3		58	49	46,5	45	42,5	38,5	34	30
MXS 906	9,7	5,6	**MXSM 906**	14,3	40	450	2,9	2,2	3	**H** m	70	59,5	56,5	54	50,5	46,5	42	37
MXS 907	11,4	6,6						3	4		81	71	68,5	66	62	58	53	47
MXS 908	14,7	8,5						3	4		93	81	78	75	71	66	60,5	53
MXS 909	14,7	8,5						3	4		105	92	88	84	79	73,5	67,5	57,5
MXS 910	14,7	8,5						3	4		117	101,2	96,5	93	87,5	81,5	73,5	63,5

Pesi con lunghezza cavo: 15 m - Gewicht mit Kabellänge: 15 m
Weights with cable length: 15 m - Poids avec longueur du cable: 15 m



		fM	kg		Cavo H07RN8-F		
		mm	MXS MPS	MXSM MPSM	230V 1 ~	230V 3 ~	400V 3 ~
MXS 303 - MXSM 303	**MPS 303 - MPSM 303**	465	12,5	13,5	3G1 mm²	4G1 mm²	4G1 mm²
MXS 304 - MXSM 304	**MPS 304 - MPSM 304**	504	14,5	15,5	3G1 mm²	4G1 mm²	4G1 mm²
MXS 305 - MXSM 305	**MPS 305 - MPSM 305**	553	15	16,5	3G1 mm²	4G1 mm²	4G1 mm²
MXS 306 - MXSM 306	**MPS 306 - MPSM 306**	577	15,5	17	3G1 mm²	4G1 mm²	4G1 mm²
MXS 307 - MXSM 307	**MPS 307 - MPSM 307**	601	16	17,5	3G1 mm²	4G1 mm²	4G1 mm²
MXS 308 - MXSM 308		671	18,5	19,5	3G1,5 mm²	4G1 mm²	4G1 mm²
MXS 309 - MXSM 309		695	20,6	21,6	3G1,5 mm²	4G1,5 mm²	4G1 mm²
MXS 310 - MXSM 310		744	23	25,1	3G2,5 mm²	4G1,5 mm²	4G1 mm²
MXS 503 - MXSM 503	**MPS 503 - MPSM 503**	480	14,5	15,5	3G1 mm²	4G1 mm²	4G1 mm²
MXS 504 - MXSM 504	**MPS 504 - MPSM 504**	529	15	16	3G1 mm²	4G1 mm²	4G1 mm²
MXS 505 - MXSM 505	**MPS 505 - MPSM 505**	553	16,1	17,6	3G1 mm²	4G1 mm²	4G1 mm²
MXS 506 - MXSM 506	**MPS 506 - MPSM 506**	622	17,5	19	3G1,5 mm²	4G1 mm²	4G1 mm²
MXS 507 - MXSM 507	**MPS 507 - MPSM 507**	671	20	21,5	3G2,5 mm²	4G1 mm²	4G1 mm²
MXS 508 - MXSM 508		695	20,5	22	3G2,5 mm²	4G1,5 mm²	4G1 mm²
MXS 509 - MXSM 509		744	23	24,5	3G2,5 mm²	4G1,5 mm²	4G1 mm²
MXS 510		768	27			4G1,5 mm²	4G1 mm²
MXS 903 - MXSM 903		523	16,1	17,6	3G1,5 mm²	4G1 mm²	4G1 mm²
MXS 904 - MXSM 904		573	18,2	19,7	3G1,5 mm²	4G1 mm²	4G1 mm²
MXS 905 - MXSM 905		653	19	22	3G2,5 mm²	4G1,5 mm²	4G1 mm²
MXS 906 - MXSM 906		708	23	26	3G2,5 mm²	4G1,5 mm²	4G1 mm²
MXS 907		738	26,3			4G2,5 mm²	4G1 mm²
MXS 908		793	27			4G2,5 mm²	4G1 mm²
MXS 909		823	28,1			4G2,5 mm²	4G1,5 mm²
MXS 910		853	29,5			4G2,5 mm²	4G1,5 mm²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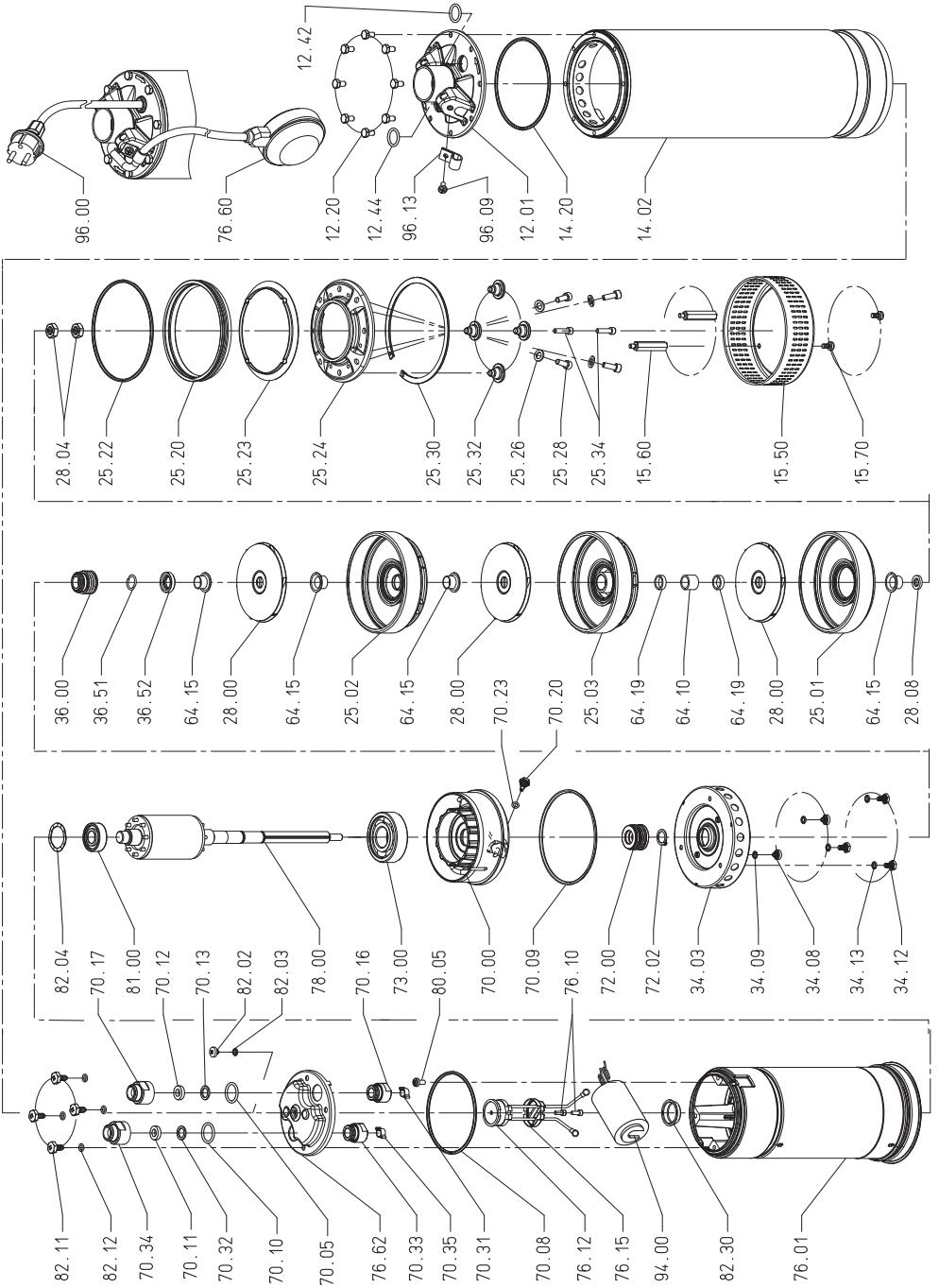
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EC - Declaration of Conformity

Manufacturer Details
Tradename
Bedu Pompen BV

Address
Poort van Midden Gelderland Rood 10, 6666 LT, Heteren, Netherlands

Product Details
Product Name
Deepwell pumps

Model (+series) Name
MXS/MPS

Applicable Standards Details

Directives	Standards
2006/42/EC (Machinery Directive)	EN-ISO 12100:2010
2014/35/EU (Low Voltage Directive)	EN-IEC 60204-1:2006
2014/30/EU (Electromagnetic compatibility)	EN 809+A1/C1

Additional information
No further details.

Declaration

We hereby declare under our sole responsibility that the product(s) mentioned above to which this declaration relates complies with the above mentioned standards and Directives.

Business Unit Manager: Issued Date:

01/**10**/ 2024

Marco van Damme

Signature of representative(s)

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Fax : +31 (0)88 - 4802 901
E-mail : info@bedu.nl
Website : www.bedu.eu

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