PUMPS FOR WASTEWATER TREATMENT

SUBMERSIBLE SEWAGE PUMPS

Ranges M(X), MXS, V(X), K(X) | Discharge Size DN 80 - DN 150

HOMA PUMP TECHNOLOGY

HOMA: HIGHER PERFORMANCE TO MEET EVERY CHALLENGE

HIGH EFFICIENCY AND ECONOMY

HOMA submersible waste water and sewage pumps operate worldwide in numerous kinds of domestic, municipal and industrial applications. Decades of experience in the design and manufacturing of submersible pumps plus uncompromising attention to quality in every detail and strict monitoring of production quality ensure the utmost reliability and long service life of all HOMA products.

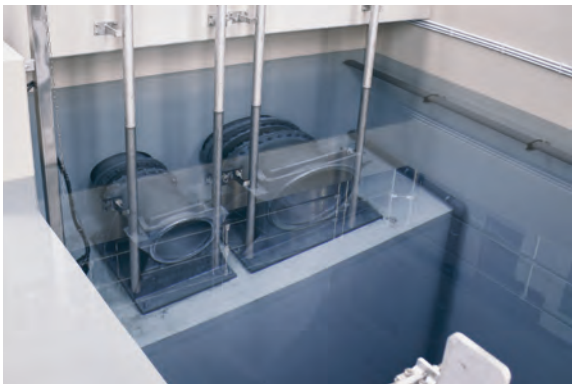
FLEXIBLE SYSTEM-COMPONENTS FOR PROBLEM-FREE INSTALLATION

HOMA combines efficiency, safety, high quality and robust design with a flexibility that allows the individual optimization of every project realization: Pumps for various types of application and installation, a complete program of installation equipment including pipes, valves, pump pits from concrete or composite materials, electric control and monitoring systems. With this range HOMA can provide a tailor-made solution for every waste water pumping application.

THE RELIABILITY OF FULLY AUTOMATIC OPERATION

HOMA waste water pumping stations feature fully automatic control and monitoring. Reliable liquid level control systems of various types (float switch, pneumatic, ultrasound or ENS probe) are available to secure reliable pump operation at minimum energy consumption.
All possible fault factors like shaft seal condition, temperatures, moisture or power supply can be automatically monitored and transferred to various alarm systems.

In many applications, pumps and control systems must meet the relevant requirements for explosion protection. Therefore all HOMA pumps are also available in explosion proof variants.



Each unit is tested in the modern test center before delivery. This is how we guarantee HOMA´s renowned quality standards.

For chemically aggressive liquids: Stainless steel submersible pumps of HOMA.

PROVEN TECHNOLOGY FOR EXTENDED APPLICATIONS

VARIOUS CHALLENGES - INDIVIDUAL SOLUTIONS

HOMA submersible wastewater pumps are designed for pumping sewage, sludge, effluents or surface water, including liquids containing a large proportion of solid or fibrous matter. They are installed in domestic, municipal, industrial and agricultural pumping applications. For chemically aggressive liquids, specific components like impellers, volutes or complete units are also available from high-resistant materials like stainless steel, duplex or bronze. HOMA submersible wastewater pumps operate in numerous industrial applications.

- Industrial Wastewater
- Treatment plants
- Large pump stations
- Industrial Applications
- Oil and Gas
- Power Plants
- Mining
- Chemical Processing
- Shipbuilding / Offshore

MORE POWER FOR EVERY APPLICATION

Whether for water supply in power plants, as leachate pumps in coal mining, as dewatering pumps for infrastructure projects, as sewage pumps for industrial wastewater or as ballast water pump in shipbuilding or naval sector, the „C“ series will find application with the proven features such as:

- Various impellers, depending on the pumped liquid
- Motors for continuous operation, with or without cooling jacket
- High-quality materials
- Robust and reliable construction

FOR MORE SAFETY AND LONGEVITY

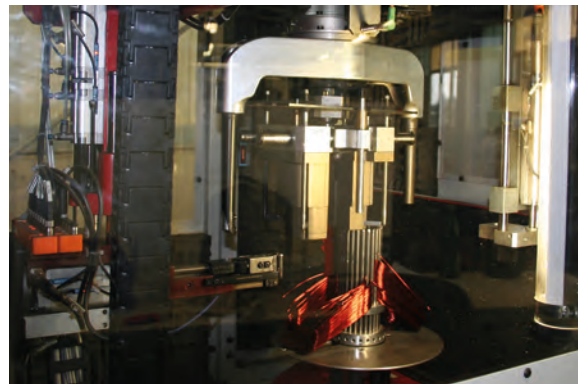
MORE ADVANTAGES IN ALL OPERATING MODES

The motors are designed for continuous operation duty (S1) at maximum 15 starts per hour. In addition to a fully submerged motor housing in wet well installation, a jacket cooled motor-variant is available for S1 operation with a non-fully submerged motor or for dry well installation.

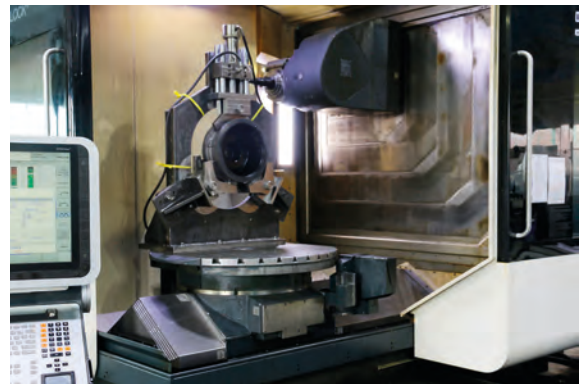
Pumps with enclosed single-channel impellers are designed for intermittent operation, normally in automatic level-controlled wet or dry well sump installations. They are also suitable for limited continuous operation. Enclosed multichannel impeller pumps are also designed for unlimited continuous operation, such as industrial water supply.

HIGH QUALITY IN DESIGN AND MATERIALS – LESS MAINTENANCE AND FAILURES

Quality can be measured – HOMA submersible waste water pumps are characterized by the robust design, generous dimensioning and high quality materials of all components.



In-house motor production allows various voltages and frequencies



By machining all needed components in our own workshop on modern precision equipment we are able to assure efficiency and flexibility.

THE RIGHT INSTALLATION FOR EVERY PUMP STATION

PERMANENT WET WELL INSTALLATION

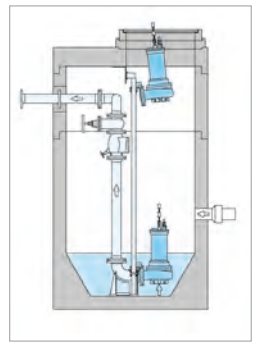
Submerged auto-coupling guide tube system for automatic connection and disconnection of the pump from the pipework from outside the sump. All maintenance or repair work can be done outside the sump. Back in operating position, the weight of the pump ensures leak-proof discharge connection.

TRANSPORTABLE WET WELL INSTALLATION

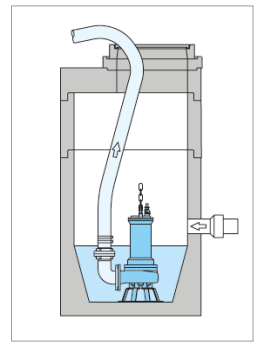
Submerged pump mounted on a ring base stand for temporary, service or emergency operation. Discharge connection with pipe or hose.

PERMANENT DRY WELL INSTALLATION, VERTICAL OR HORIZONTAL

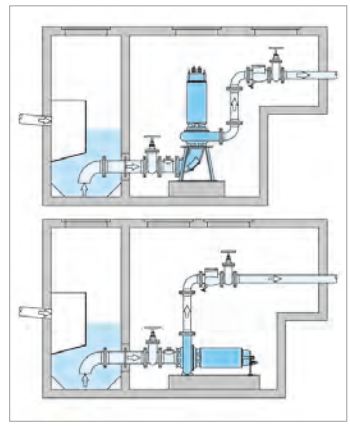
Flood-proof installation for pump stations with separate collection sump. Fixed flanged connection of suction and discharge pipe.



Permanent wet well installation



Transportable wet well installation



Permanent dry well installation

EFFTEC MOTORS AND MXS HYDRAULICS

MXS: IMMUNITY TO CLOGGING

Conveyed media have changed greatly in recent years, displaying an increasing solids content. In order to ensure reliable operation in such cases, our new MXS hydraulics rely on closed single-vane impellers with large free passages.

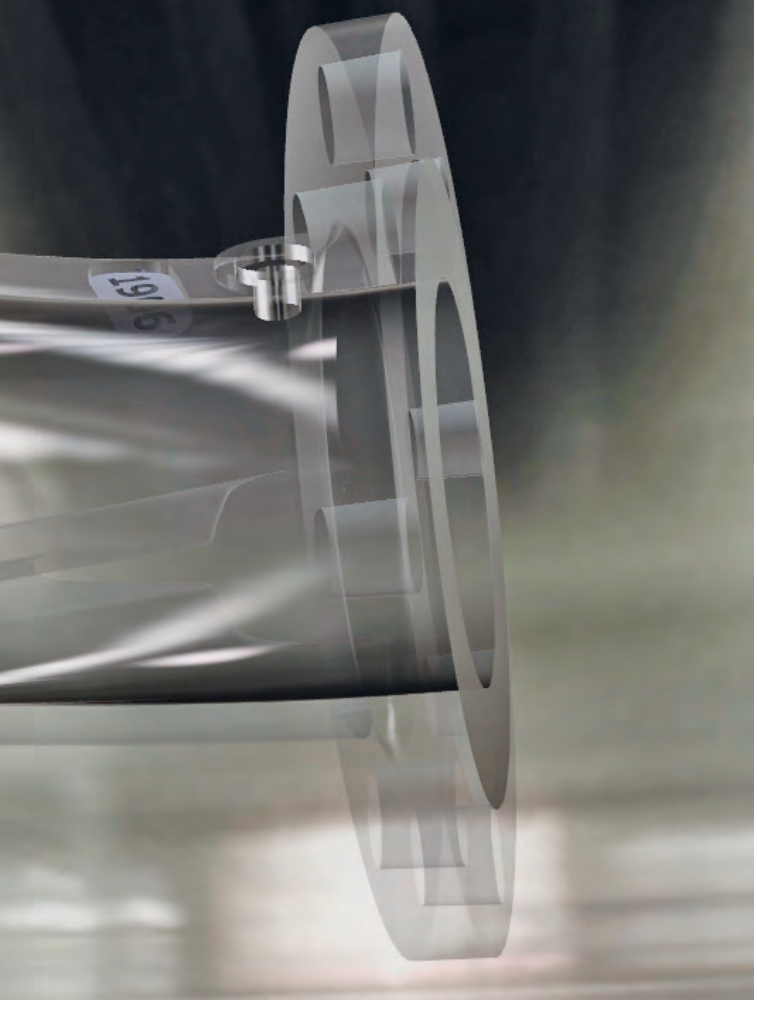
Our impellers and pump housings have been redesigned at the HOMA R&D center and optimized with the latest flow-simulation software. The result: clearly improved hydraulic efficiencies of up to 81 percent, with a simultaneously low risk of blockage and quiet running. In combination with HOMA's proven submersible-motors, the new MXS hydraulics are setting a trend in economic efficiency and operational safety.

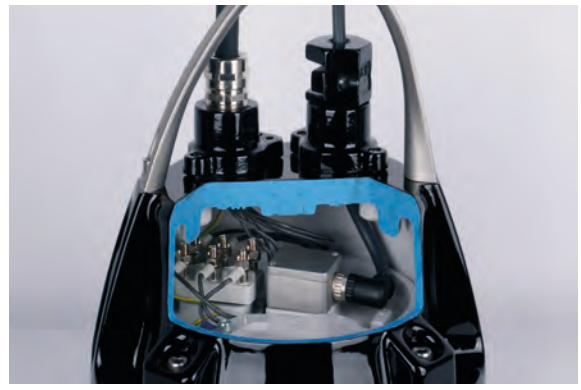
EFFTEC: INNOVATIVE TECHNOLOGY

In order to achieve the highest possible overall efficiency with consequently low energy consumption we developed the new EffTec series at our HOMA R&D center. In combination with the new MXS hydraulics, the new pump generation is setting a trend in economic efficiency and operational safety.

The newly developed PermaCool system is future-oriented. This permanent motor cooling now gives you the option of fitting the units for submerged or drywell installation. The new design - registered for a patent - simultaneously ensures that the cooling jacket cannot be clogged with solids.

Together with the low winding temperature of the EffTec motors, the PermaCool system puts a low thermal load on all components, thus ensuring their long useful lifetime.





Reliable Monitoring - the integrated pump vibration diagnostic system HOMA VICON

Connection for automatic flush valve FV (optional)

MORE SECURITY THROUGH INTELLIGENT ACCESSORIES

VICON: SAFETY FOR A LONG PUMP LIFE

The condition monitoring of electric machines is a key element where quality, reliability, energy saving and targeted repair play an important role. Submersible pumps with their field of use as machines that are submersed into the pumped medium are a special case. Often repair and maintenance can only be carried out at great expense. In addition high reliability without downtime of the pumps is required. Permanent and reliable monitoring of the pump and system and, if necessary, early detection of interferences and damage that may occur, are provided with HOMA VICON.

HOMA VICON can detect an obstruction or damage to the hydraulics, unfavorable or defective operation points, bearing damages or conduit problems, it displays these or stops the pump in the case of emergency. By optimization of the system and early detection of unfavorable operating conditions HOMA VICON contributes to energy saving and reduction of life cycle costs.

FLUSH VALVES: A CLEAN SOLUTION

Pump stations must be cleaned regularly due to sedimentation or the formation of a scum layer. The results are unpleasant odors, clogged level controllers and a reduction in operating performance, as well as high costs due to downtimes and necessary cleaning or maintenance work. HOMA provides the solution for these problems: The new HOMA flushing valves FV 25 and FV 50 reliably prevent the accumulation of solids and grease in pits.

When the pumping process starts, a portion of the pumped liquid is routed back into the pit through the opened valve. This creates a stream that disperses any solids in the medium and allows them to be pumped out without difficulty. The valve nozzle can be directed either at the bottom of the pit to prevent sedimentation or upwards to prevent the formation of a scum layer, especially on liquids with high grease content.

RANGES AND PUMP TYPES

MOTOR SELECTION

Speed:
For the standard hydraulic range, the motors are designed with the following speeds.

- 2900 rpm = 2-pole
- 1450 rpm = 4-pole
- 960 rpm = 6-pole

Voltages:
All specified data relate to an operating voltage of 400V/3 Ph,50 Hz. Different voltages are available on request.

Type of starting:
The motors are supplied as standard:

- up to 3,5 kW (P2) for DOL starting
- above 3,5 kW (P2) for DOL and star-delta starting

On request all motors are available for operating with frequency converter or soft starter device.

Explosion protection:
In addition to the standard version, selected motors are also available explosion proof according to
ATEX EX II 2 G Ex c d II B T4,(T3).

Dry well variant:
Besides the version for submerged operation, all pumps are also available with cooling jacket for dry well or non-submerged operation.

Motor monitoring:
All motors are supplied with temperature sensors in the winding, bi-metallic sensors (standard) or PTC sensors (on request).

Additional monitoring devices (bearing temperature, stator room moisture) on request.

PUMP TYPE CODE

Range	Impeller	Discharge	Spherical clearance	Impeller diameter	Motor frame size	Jacket cooled	Motor power (coded)	Speed	Monitoring	Explosion protection
Pump					Motor					
	MXS	**2**	**4**	**48-**	**T**	**(U)**	**6**	**4**	**(C)+(S)**	**(EX)**
	MX(S) Enclosed single channel impeller V(X) Vortex-Impeller K(X) Enclosed multi channel	1 = 80 mm 2 = 100 mm 3 = 150 mm	(mm : 25) 3 = 80 mm 4 = 100 mm	(mm : 5) e.g. 48 = 240 mm	C, D, T, P, F, G ET: EffTec-Motor with PermaCool-System for wet- and dry well installation	Motor with cooling jacket U= open circuit pumped liquid cooling L= closed circuit cooling		2 = 2pole (2900 rpm) 4 = 4pole (1450 rpm) 6 = 6pole (960 rpm)	C = Oil chamber seal condition monitoring probe S = moisture sensor in stator chamber	

RANGES AND HYDRAULICS

HYDRAULIC SELECTION

Discharge and suction flange

- DN 80
- DN 100
- DN 150

Reducing adapters for different auto-coupling system and valve dimensions are available.

Impeller:
A range of different impeller designs are available to provide optimum performance and reliability with various liquids and operating conditions.

Impeller spherical clearance:
The pumps are available with impeller spherical clearances from 80 mm to 100 mm according to pump range.

MX(S)
Enclosed single channel impeller

For liquids containing impurities and sludge with solid particles or long fibers. New generation of non clogging impellers with hydraulic efficiency over 80%.

K(X)
Enclosed Multi Channel Impeller

For liquids containing impurities and sludge with solid particles.

V(X)
Vortex impeller

For liquids containing a high level of impurities or fibrous matter and containing gas.

DESIGN - PROVEN QUALITY IN DETAIL

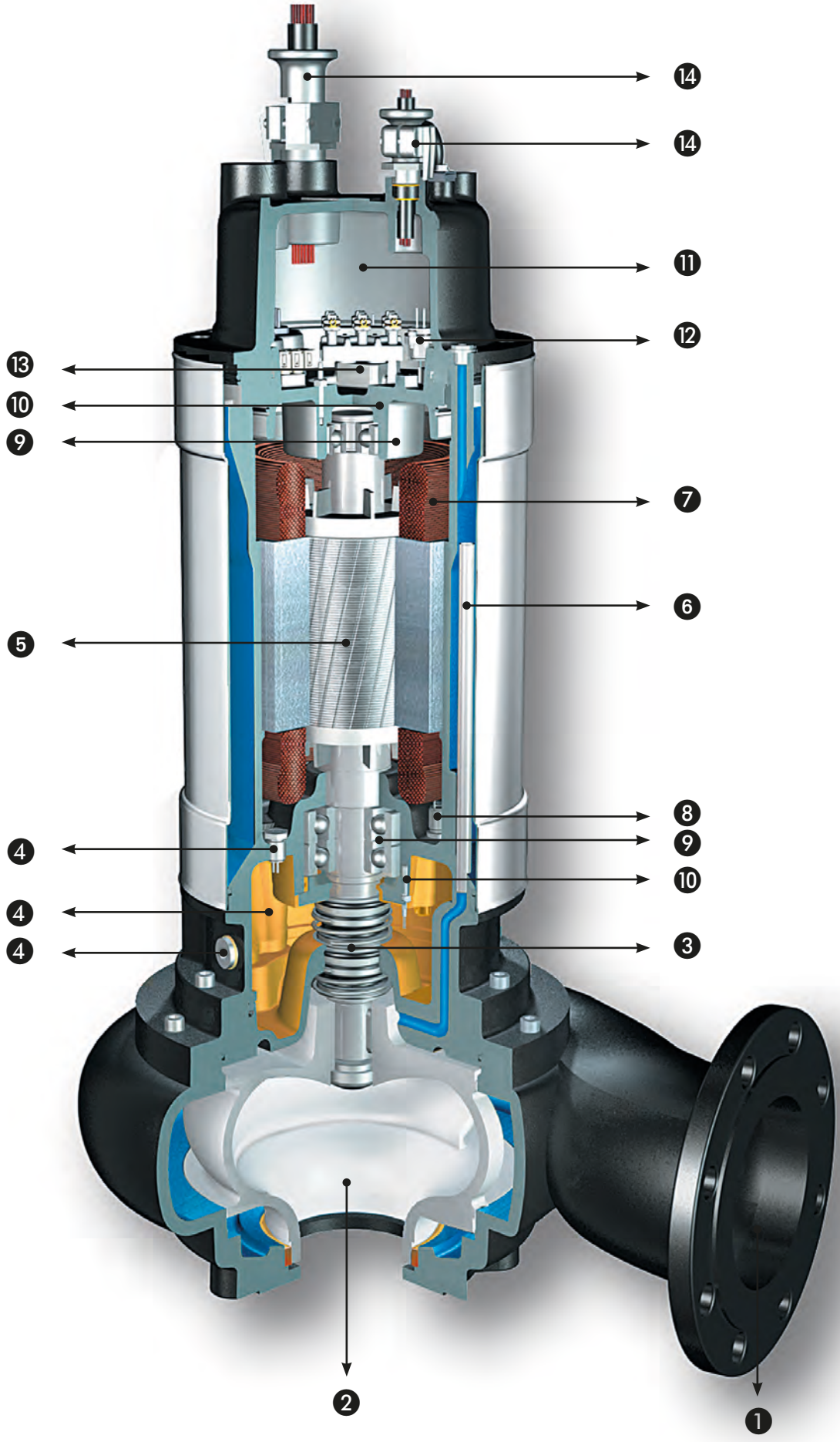


Illustration: PU-Motor with MX hydraulics

HIGH QUALITY MATERIALS - HIGH IMMUNITY

Quality can be measured – HOMA submersible waste water pumps are characterized by the robust design, generous dimensioning and high quality materials of all components.

❶ DISCHARGE

With DIN/ANSI flange DN 80, DN 100 or DN 150 (PN 10)

❷ NON-CLOGGING IMPELLERS

- Enclosed single channel impeller with replaceable wear ring
- Enclosed multi channel impeller with replaceable wear ring
- Vortex impeller

❸ SHAFT SEALS

Two independently working silicon-carbide mechanical seals in tandem-arrangement.

❹ OIL CHAMBER (MODEL „C“)

Separate large oil chamber, lubricating and cooling the-mechanical seals, forming an extra safety and inspection element.

❺ MOTOR

Three phase electric motor with 2-, 4- or 6-pole winding. Insulation class H (180° C), Protection IP 68.

EXPLOSION PROTECTION

In addition to the standard version, selected motors are also available explosion proof according to ATEX EX II 2 G Ex c d II B T4,(T3).

❻ MOTOR COOLING

Motors for submerged operation are cooled by the surrounding liquid. For dry well or non-submerged operation, motors are available with a cooling jacket, providing a cooling circulation of water from the pump volute (model U).

Alternatively, a closed circuit liquid cooling system is available without directly using the pumped liquid for the cooling circuit, providing the heat exchange through a contact surface between heat exchange chamber and pump chamber.

❼ THERMAL SENSOR (BI-METAL)

Embedded in the motor winding. PTC sensors available on request.

❽ MOISTURE MONITORING IN STATOR CHAMBER (MODEL „S“)

Available on request.

❾ SHAFT BEARING

Maintenance-free, pre-lubricated ball bearings.

❿ TEMPERATURE MONITORING OF THE SHAFT BEARINGS

On request.

⓫ CABLE JUNCTION CHAMBER

Separate junction chamber standard from 22 kW 4-pole, below on request.

⓬ ELECTRONIC MOISTURE SENSOR IN JUNCTION CHAMBER

Available on request.

⓭ HOMA VICON - PUMP VIBRATION DIAGNOSTIC SYSTEMS

HOMA VICON can detect an obstruction or damage to the hydraulics, unfavorable or defective operation points, bearing damages or conduit problems, it displays these or stops the pump in the case of emergency.

⓮ PRESSURE SEALED, STRAIN RELIEF CABLE ENTRY

MATERIALS

Motor housing	Cast iron EN-GJL-250 1)
Pump housing	Cast iron EN-GJL-250 1)
Impeller	Cast iron EN-GJL-250 1) 2)
Wear rings	Bronze 1)
Motor shaft	Stainless steel
Mechanical seals	Silicon-carbide / Silicon-carbide
Motor cooling jacket (model U and L)	Stainless steel
Seals and O-rings	NBR (Perbonane) 3)
Cable	H07RN-F (Plus) 4)

1) also available in stanless steel

2) also available in bronze

3) also available from FPM (vitone)

4) screened cable on request

NEW EFFTEC-MOTORS: INNOVATIVE TECHNOLOGY - GREAT EFFICIENCY

EFFTEC
SUPERIOR EFFICIENCY - SUPERIOR PERFORMANCE

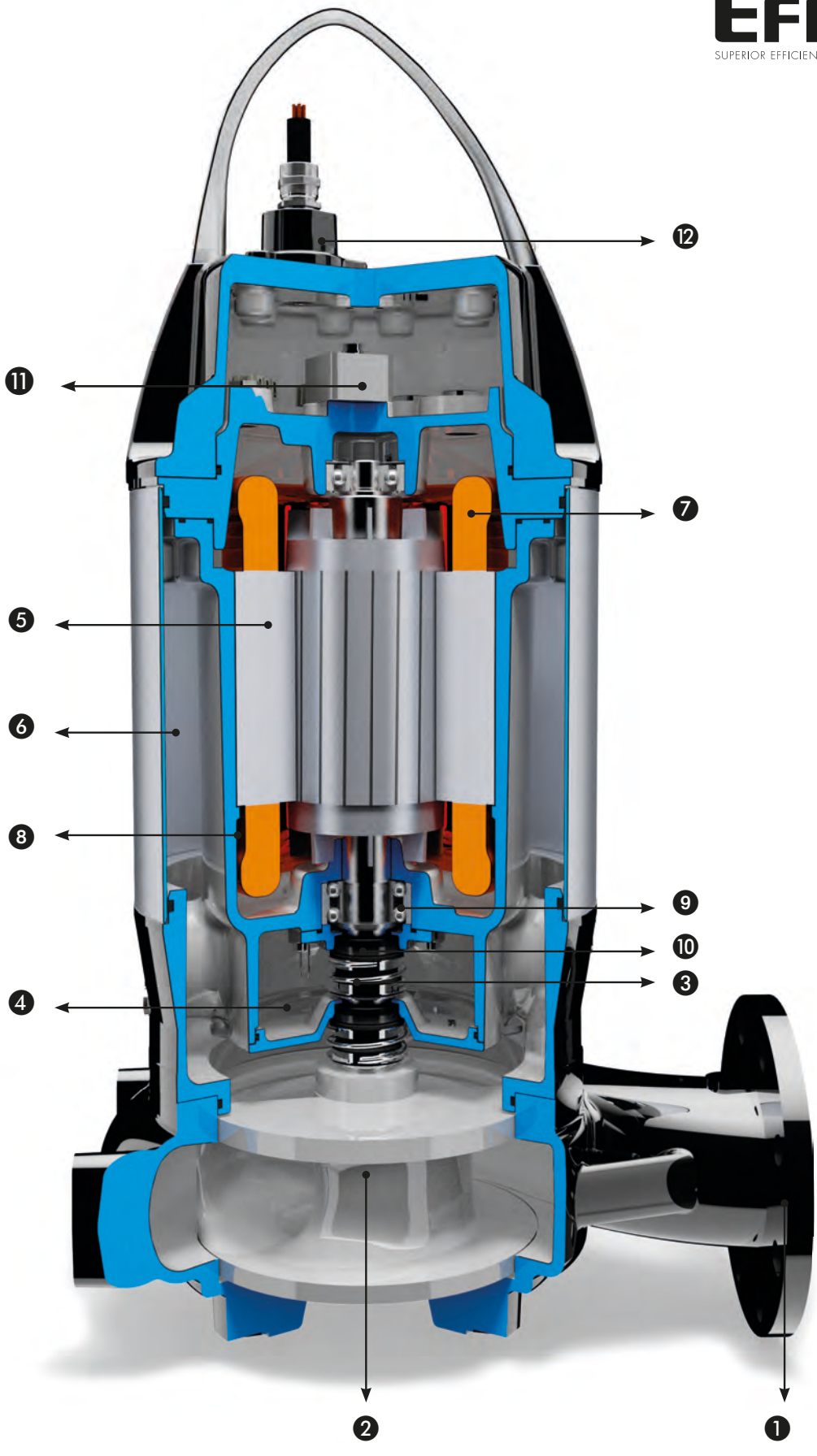


Illustration: ET-Motor with MXS-Hydraulics

PERMANENT MOTOR COOLING: PERMACOOL®

All models in the EffTec series are equipped with the newly developed PermaCool system. This permanent motor cooling now gives you the option of fitting the units for submerged or drywell installation. The new design - registered for a patent - simultaneously ensures that the cooling jacket cannot be clogged with solids. In combination with our new MXS-hydraulics, the new EffTec series of pumps sets a trend for economic efficiency and reliability.

❶ DISCHARGE

With DIN/ANSI flange DN 80, DN 100 or DN 150 (PN 10).

❷ NON-CLOGGING IMPELLERS

- Enclosed single channel impeller with large spherical clearance. Replaceable wear ring.
- Vortex impeller.

❸ SHAFT SEALS

Two independently working silicon-carbide mechanical seals in tandem-arrangement.

❹ OIL CHAMBER

Oil-filled seal chamber with possibility of control by the inspection screw.

❺ MOTOR

Three phase electric motor with 2-, 4-, or 6-pole winding. Insulation class H (180 C), Protection IP 68.

EXPLOSION PROTECTION

In addition to the standard version, selected motors are also available explosion proof according to ATEX EX II 2 G Ex c d II B T4,(T3).

❻ MOTOR COOLING PERMACOOL

This permanent motor cooling now gives you the option of fitting the units for submerged or drywell installation.

Together with the low winding temperature of the EffTec motors, the PermaCool system puts a low thermal load on all components, thus ensuring their long useful lifetime.

❼ THERMAL SENSOR (BI-METAL)

Embedded in the motor winding.
PTC sensors available on request.

❽ MOISTURE MONITORING IN STATOR CHAMBER

On request.

❾ SHAFT BEARING

Maintenance-free, prelubricated ball bearings.

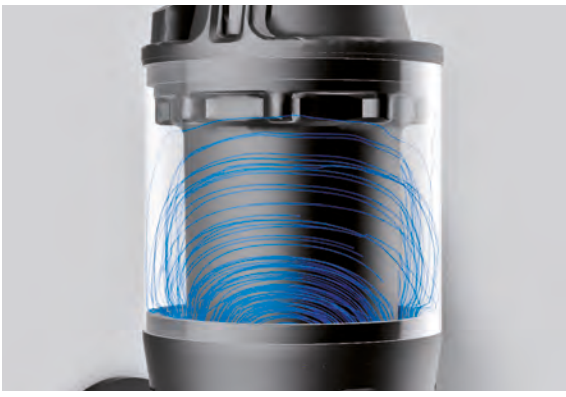
❿ TEMPERATURE MONITORING OF THE SHAFT BEARINGS

On request.

⓫ HOMA VICON - PUMP VIBRATION DIAGNOSTIC SYSTEMS

HOMA VICON can detect an obstruction or damage to the hydraulics, unfavorable or defective operation points, bearing damages or conduit problems, it displays these or stops the pump in the case of emergecy.

⓬ PRESSURE SEALED, STRAIN RELIEF CABLE ENTRY



The new innovative PermaCool motor cooling

MATERIALS

Motor housing	Cast Iron EN-GJL-250 [1]
Pump housing	Cast Iron EN-GJL-250 [1]
Impeller	Cast Iron EN-GJL-250 [1] [2]
Wear ring	Bronze [1]
Motor shaft	Stainless Steel
Mechanical seals	Siliziumkarbide / Siliziumkarbide
Cooling jacket	Stainless Steel
Seals / O-Rings	NBR (Perbunan) [3]
Cable	H07RN-F PLUS [4]

[1] also available in stainless steel [2] also available in bronze
[3] also from FPM (vitone) [4] screened cable on request

DN 80 - PUMP RANGES SELECTION CHART

DN 80

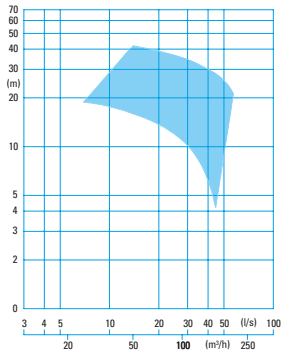
Enclosed single channel impeller

80 mm Ø
Spherical clearance

2900 rpm

PAGE 18

MXS13... -2 pole



DN 80

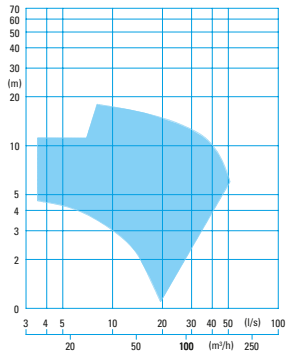
Enclosed single channel impeller

80 mm Ø
Spherical clearance

1450 rpm

PAGE 19

MXS13.. -4 pole



DN 80

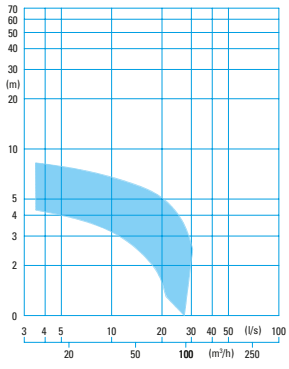
Enclosed single channel impeller

80 mm Ø
Spherical clearance

960 rpm

PAGE 20

MXS13... -6 pole



DN 80

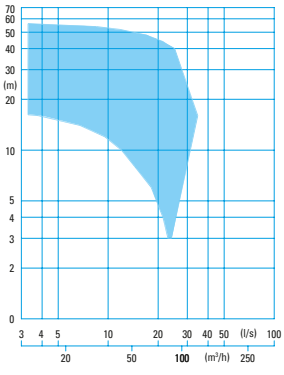
Vortex impeller

80 mm Ø
Spherical clearance

2900 rpm

PAGE 21

V13... -2 pole



DN 80

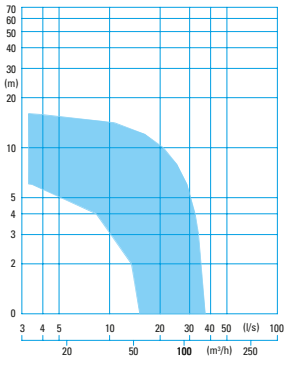
Vortex impeller

80 mm Ø
Spherical clearance

1450 rpm

PAGE 22

V(X) 13... -4 pole



DN 100 - PUMP RANGES SELECTION CHART

DN 100

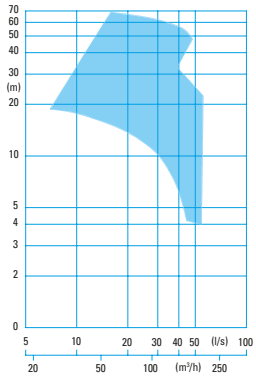
Enclosed single channel impeller

80 mm Ø
Spherical clearance

2900 rpm

PAGE 23

MXS 23... -2 pole



DN 100

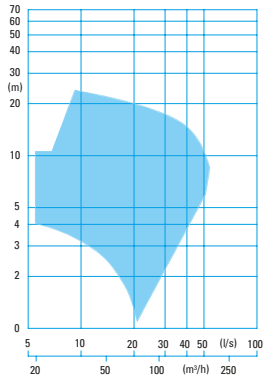
Enclosed single channel impeller

80 mm Ø
Spherical clearance

1450 rpm

PAGE 24

MXS 23... -4 pole



DN 100

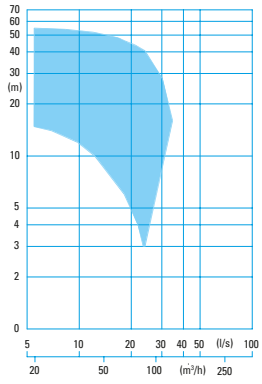
Vortex impeller

80 mm Ø
Spherical clearance

2900 rpm

PAGE 25

V 23... -2 pole



DN 100

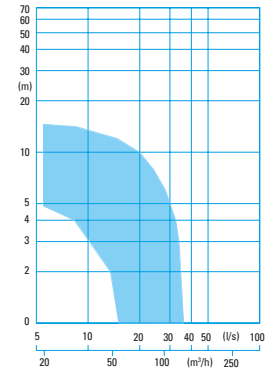
Vortex impeller

80 mm Ø
Spherical clearance

1450 rpm

PAGE 26

V(X) 23... -4 pole



DN 100

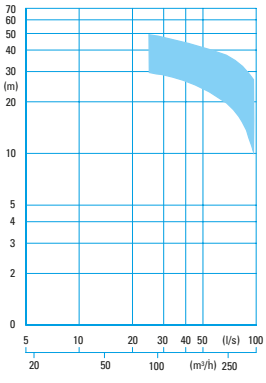
Enclosed two channel impeller

80 mm Ø
Spherical clearance

1450 rpm

PAGE 27

KX 23... -4 polig



DN 100

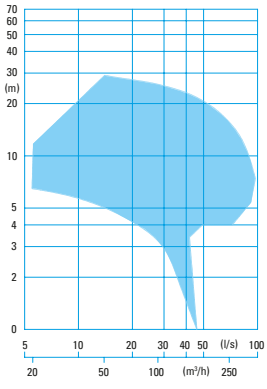
Enclosed single channel impeller

100 mm Ø
Spherical clearance

1450 rpm

PAGE 28

MX(S) 24... -4 pole



DN 100

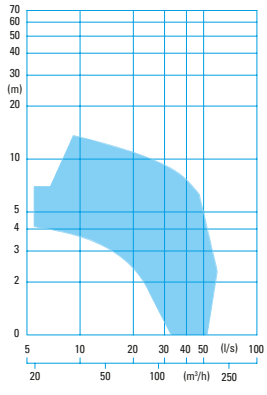
Enclosed single channel impeller

100 mm Ø
Spherical clearance

960 rpm

PAGE 29

MX(S) 24... -6 pole



DN 100

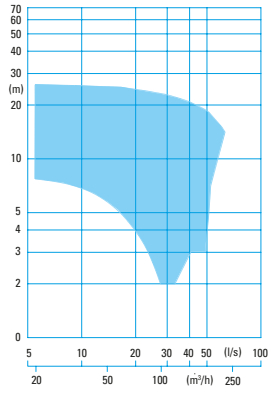
Vortex impeller

100 mm Ø
Spherical clearance

1450 rpm

PAGE 30

VX 24... -4 pole



DN 150 - PUMP RANGES SELECTION CHART

DN 150

Enclosed single channel impeller

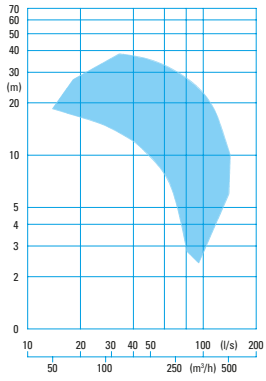
100 mm Ø

Spherical clearance

1450 rpm

PAGE 31

MX34... -4 pole



DN 150

Enclosed single channel impeller

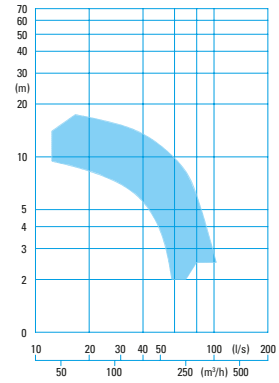
100 mm Ø

Spherical clearance

960 rpm

PAGE 32

MX34... -6 pole



DN 150

Enclosed two channel impeller

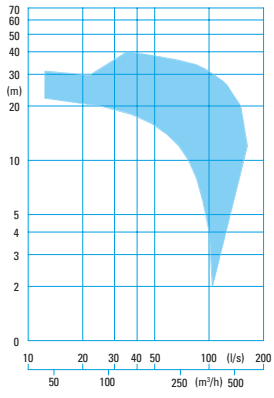
80 mm Ø

Spherical clearance

1450 rpm

PAGE 33

K33... -4 pole



DN 150

Enclosed two channel impeller

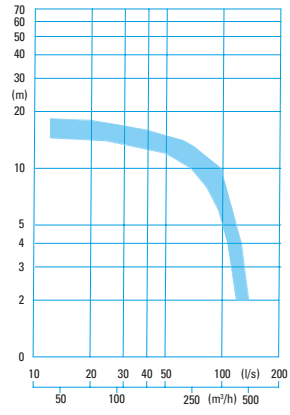
80 mm Ø

Spherical clearance

960 rpm

PAGE 34

K33... -6 pole



DN 150

Vortex impeller

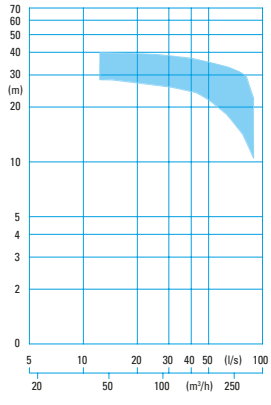
100 mm Ø

Spherical clearance

1450 rpm

PAGE 35

VX 34... -4 pole



DN 150

Vortex impeller

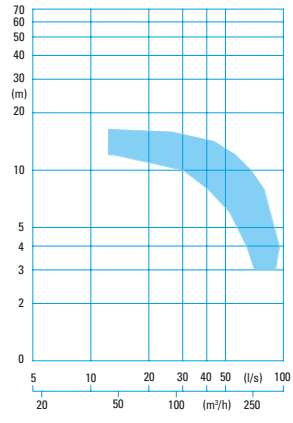
100 mm Ø

Spherical clearance

960 rpm

PAGE 36

VX 34... -6 pole



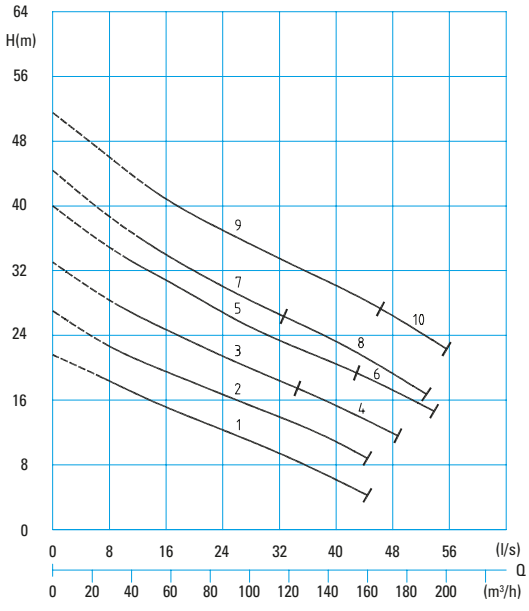
Unlimited applications: Stanless steel submersible pumps for chemically aggressive liquids (please see separate brochure)

DN 80 - MXS 13...-2 POLE

Enclosed single channel impeller

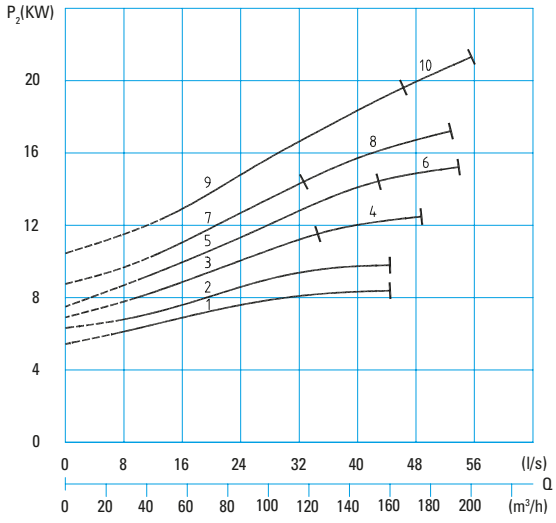
80 mm Ø Spherical clearance
2900 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1328-T72 (C)(Ex)	11,0	9,5	18,8	120	120
②	MXS 1330-T82 (C)(Ex)	13,0	11,5	22,2	123	123
③	MXS 1332-T82 (C)(Ex)	13,0	11,5	22,2	123	123
④	MXS 1332-P92 (C)(Ex)	16,0	14,4	27,0	178	190
⑤	MXS 1334-P92 (C)(Ex)	16,0	14,4	27,0	178	190
⑥	MXS 1334-P102 (C)(Ex)	22,0	19,6	36,9	178	190
⑦	MXS 1336-P92 (C)(Ex)	16,0	14,4	27,0	180	192
⑧	MXS 1336-P102 (C)(Ex)	22,0	19,6	36,9	180	192
⑨	MXS 1338-P102 (C)(Ex)	22,0	19,6	36,9	180	192
⑩	MXS 1338-P122 (C)(Ex)	28,0	25,4	46,3	198	210

MOTOR OUTPUT



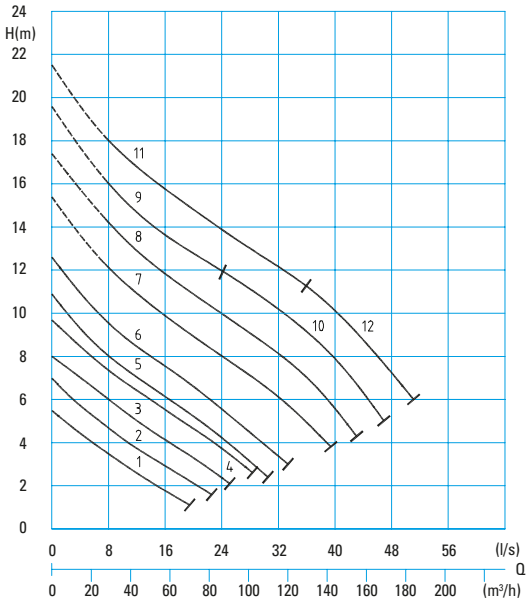
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1328-ET72 (Ex)	10,5	9,5	20,1	146	146
②	MXS 1330-ET82 (Ex)	12,7	11,5	22,7	146	146
③	MXS 1332-ET82 (Ex)	12,7	11,5	22,7	146	146
④	MXS 1332-PU92 (Ex)	16,0	14,4	27,0	189	201
⑤	MXS 1334-PU92 (Ex)	16,0	14,4	27,0	189	201
⑥	MXS 1334-PU102 (Ex)	22,0	19,6	36,9	189	201
⑦	MXS 1336-PU92 (Ex)	16,0	14,4	27,0	191	203
⑧	MXS 1336-PU102 (Ex)	22,0	19,6	36,9	191	203
⑨	MXS 1338-PU102 (Ex)	22,0	19,6	36,9	191	203
⑩	MXS 1338-PU122 (Ex)	28,0	25,4	46,3	211	223

DN 80 - MXS13...-4 POLE

Enclosed single channel impeller

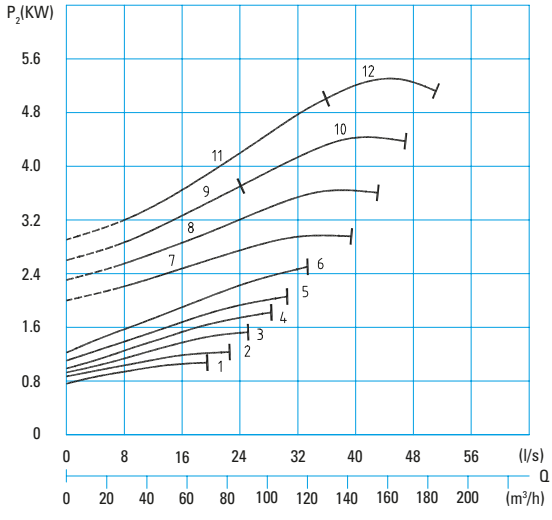
80 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1328-C24 (C)(Ex)	1,7	1,3	3,3	74	74
②	MXS 1330-C24 (C)(Ex)	1,7	1,3	3,3	74	74
③	MXS 1332-D44 (C)(Ex)	3,4	2,6	6,2	80	80
④	MXS 1334-D44 (C)(Ex)	3,4	2,6	6,2	80	80
⑤	MXS 1336-D44 (C)(Ex)	3,4	2,6	6,2	82	82
⑥	MXS 1338-D44 (C)(Ex)	3,4	2,6	6,2	82	82
⑦	MXS 1340-T34 (C)(Ex)	3,4	2,9	5,8	117	117
⑧	MXS 1342-T44 (C)(Ex)	4,4	3,7	7,5	121	121
⑨	MXS 1344-T44 (C)(Ex)	4,4	3,7	7,5	121	121
⑩	MXS 1344-T54 (C)(Ex)	5,9	5,0	9,9	131	131
⑪	MXS 1346-T54 (C)(Ex)	5,9	5,0	9,9	131	131
⑫	MXS 1346-T64 (C)(Ex)	7,7	6,5	13,1	134	134

MOTOR OUTPUT



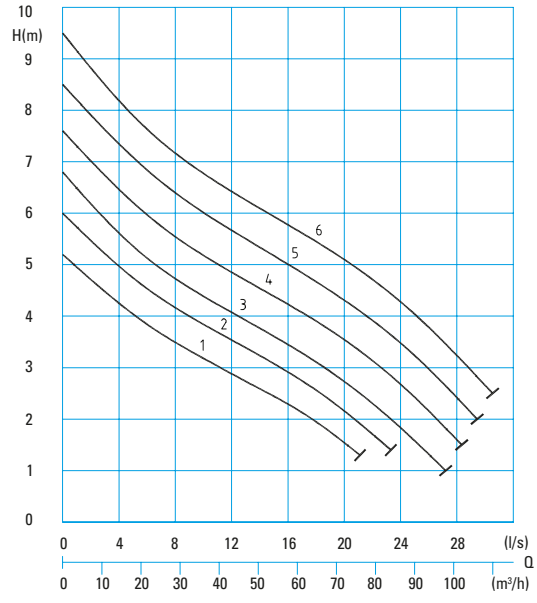
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1328-ET34 (Ex)	3,3	2,9	5,9	128	128
②	MXS 1330-ET34 (Ex)	3,3	2,9	5,9	128	128
③	MXS 1332-ET34 (Ex)	3,3	2,9	5,9	128	128
④	MXS 1334-ET34 (Ex)	3,3	2,9	5,9	128	128
⑤	MXS 1336-ET34 (Ex)	3,3	2,9	5,9	130	130
⑥	MXS 1338-ET34 (Ex)	3,3	2,9	5,9	130	130
⑦	MXS 1340-ET34 (Ex)	3,3	2,9	5,9	134	134
⑧	MXS 1342-ET44 (Ex)	4,3	3,7	7,3	134	134
⑨	MXS 1344-ET44 (Ex)	4,3	3,7	7,3	134	134
⑩	MXS 1344-ET54 (Ex)	6,1	5,0	10,2	134	134
⑪	MXS 1346-ET54 (Ex)	6,1	5,0	10,2	134	134
⑫	MXS 1346-ET64 (Ex)	7,4	6,5	13,4	152	152

DN 80 - MXS 13...-6 POLE

Enclosed single channel impeller

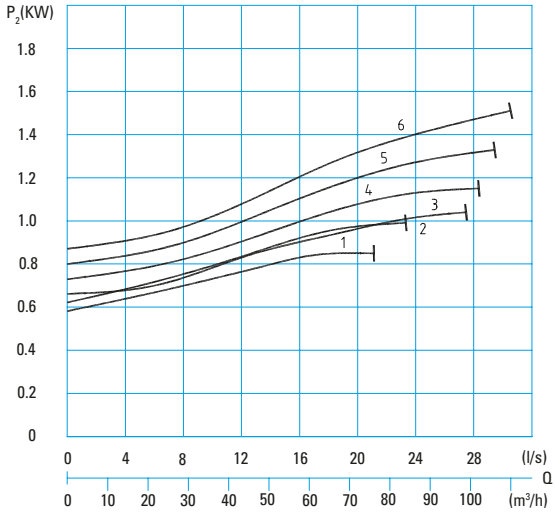
80 mm Ø Spherical clearance
960 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1336-T26 (C)(Ex)	2,1	1,6	4,0	116	116
②	MXS 1338-T26 (C)(Ex)	2,1	1,6	4,0	116	116
③	MXS 1340-T26 (C)(Ex)	2,1	1,6	4,0	120	120
④	MXS 1342-T26 (C)(Ex)	2,1	1,6	4,0	120	120
⑤	MXS 1344-T26 (C)(Ex)	2,1	1,6	4,0	120	120
⑥	MXS 1346-T26 (C)(Ex)	2,1	1,6	4,0	120	120

MOTOR OUTPUT



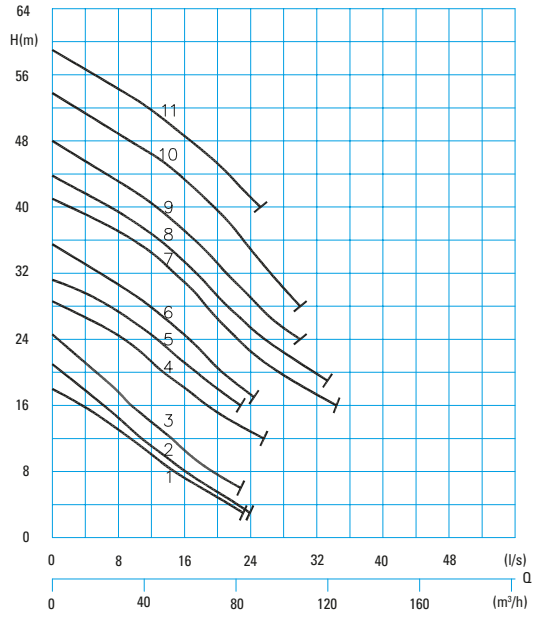
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 1336-ET26 (Ex)	1,8	1,6	3,8	148	148
②	MXS 1338-ET26 (Ex)	1,8	1,6	3,8	148	148
③	MXS 1340-ET26 (Ex)	1,8	1,6	3,8	152	152
④	MXS 1342-ET26 (Ex)	1,8	1,6	3,8	152	152
⑤	MXS 1344-ET26 (Ex)	1,8	1,6	3,8	152	152
⑥	MXS 1346-ET26 (Ex)	1,8	1,6	3,8	152	152

DN 80 - V13...-2 POLE

Vortex impeller

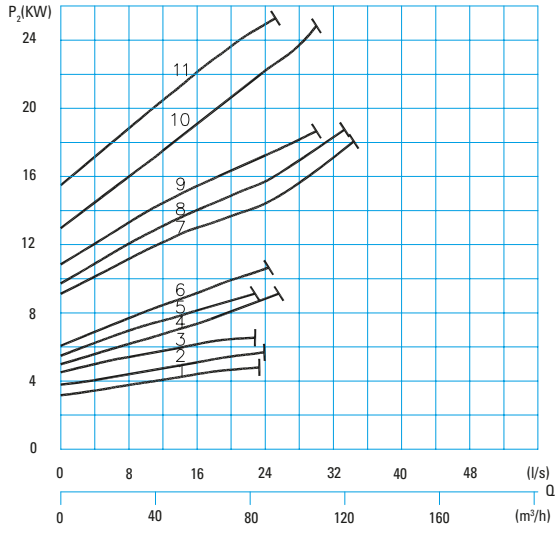
80 mm Ø Spherical clearance
2900 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 1332-T62 (C)(Ex)	7,5	6,4	13,0	91	91
②	V 1333-T62 (C)(Ex)	7,5	6,4	13,0	91	91
③	V 1334-T62 (C)(Ex)	7,5	6,4	13,0	91	91
④	V 1335-T72 (C)(Ex)	11,0	9,5	18,8	103	103
⑤	V 1337-T72 (C)(Ex)	11,0	9,5	18,8	103	103
⑥	V 1339-T82 (C)(Ex)	13,0	11,5	22,2	108	108
⑦	V 1342-P102 (C)(Ex)	22,0	19,6	36,9	176	188
⑧	V 1343-P102 (C)(Ex)	22,0	19,6	36,9	176	188
⑨	V 1344-P102 (C)(Ex)	22,0	19,6	36,9	176	188
⑩	V 1345-P122 (C)(Ex)	28,0	25,4	46,3	196	208
⑪	V 1346-P122 (C)(Ex)	28,0	25,4	46,3	196	208

MOTOR OUTPUT



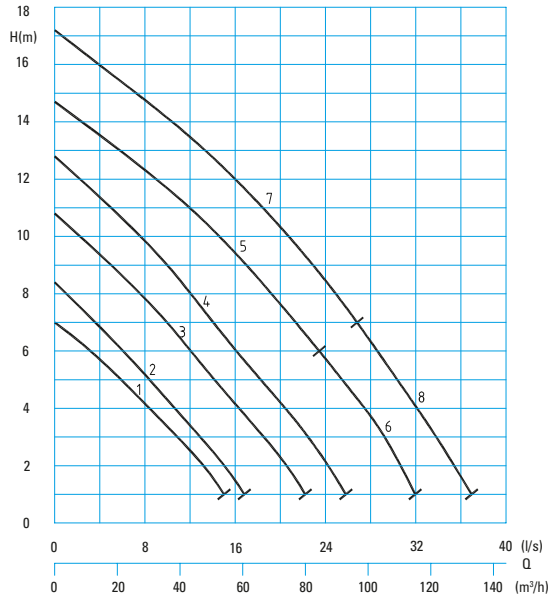
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 1332-ET62 (Ex)	7,3	6,4	12,4	119	119
②	V 1333-ET62 (Ex)	7,3	6,4	12,4	119	119
③	V 1334-ET62 (Ex)	7,3	6,4	12,4	119	119
④	V 1335-ET72 (Ex)	10,5	9,5	20,1	139	139
⑤	V 1337-ET72 (Ex)	10,5	9,5	20,1	139	139
⑥	V 1339-ET82 (Ex)	12,7	11,5	22,7	139	139
⑦	V 1342-PU102 (Ex)	22,0	19,6	36,9	188	200
⑧	V 1343-PU102 (Ex)	22,0	19,6	36,9	188	200
⑨	V 1344-PU102 (Ex)	22,0	19,6	36,9	188	200
⑩	V 1345-PU122 (Ex)	28,0	25,4	46,3	208	220
⑪	V 1346-PU122 (Ex)	28,0	25,4	46,3	208	220

DN 80 - V(X)13...-4 POLE

Vortex impeller

80 mm Ø Spherical clearance
1450 rpm

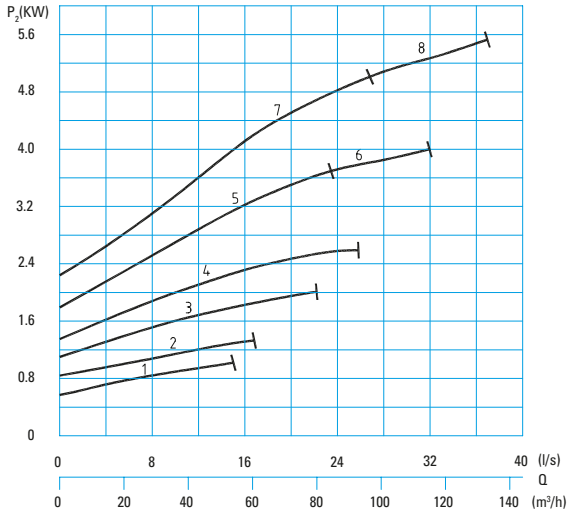
HYDRAULIC PERFORMANCE



Technical data — WET WELL INSTALLATION

Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 1334-C24 (C)(Ex)	1,7	1,3	3,3	63	64
②	V 1336-C24 (C)(Ex)	1,7	1,3	3,3	63	64
③	V 1344-D44 (C)(Ex)	3,4	2,6	6,2	66	67
④	V 1346-D44 (C)(Ex)	3,4	2,6	6,2	66	67
⑤	VX 1345-T44 (C)(Ex)	4,4	3,7	7,5	105	105
⑥	VX 1345-T54 (C)(Ex)	5,9	5,0	9,9	118	118
⑦	VX 1346-T54 (C)(Ex)	5,9	5,0	9,9	118	118
⑧	VX 1346-T64 (C)(Ex)	7,7	6,5	13,1	121	121

MOTOR OUTPUT



Technical data — DRY WELL INSTALLATION

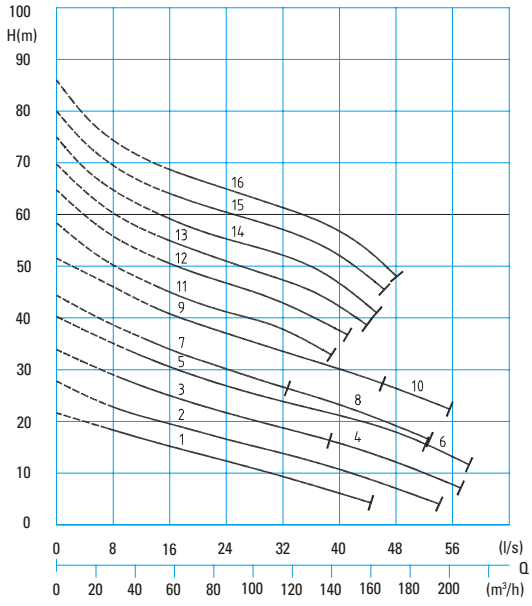
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 1334-ET34 (Ex)	3,3	2,9	5,9	121	121
②	V 1336-ET34 (Ex)	3,3	2,9	5,9	121	121
③	V 1344-ET34 (Ex)	3,3	2,9	5,9	122	122
④	V 1346-ET34 (Ex)	3,3	2,9	5,9	122	122
⑤	VX 1345-ET44 (Ex)	4,3	3,7	7,3	122	122
⑥	VX 1345-ET54 (Ex)	6,1	5,0	10,2	122	122
⑦	VX 1346-ET54 (Ex)	6,1	5,0	10,2	122	122
⑧	VX 1346-ET64 (Ex)	7,4	6,5	13,4	139	139

DN 100 - MXS 23...-2 POLE

Enclosed single channel impeller

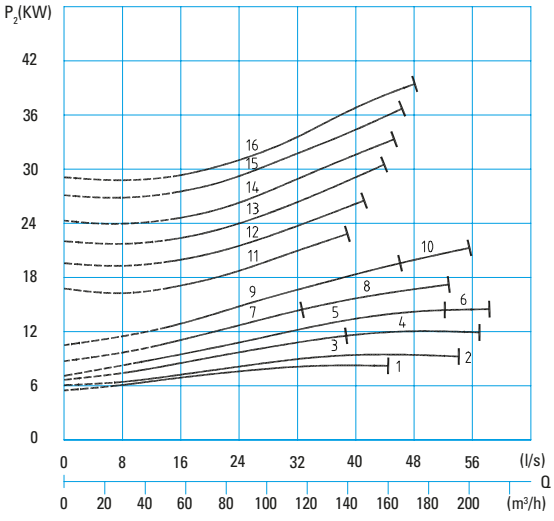
80 mm Ø Spherical clearance
2900 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 2328-T72 (C)(Ex)	11,0	9,5	18,8	120	120
②	MXS 2330-T82 (C)(Ex)	13,0	11,5	22,2	123	123
③	MXS 2332-T82 (C)(Ex)	13,0	11,5	22,2	123	123
④	MXS 2332-P92 (C)(Ex)	16,0	14,4	27,0	178	190
⑤	MXS 2334-P92 (C)(Ex)	16,0	14,4	27,0	178	190
⑥	MXS 2334-P102 (C)(Ex)	22,0	19,6	36,9	178	190
⑦	MXS 2336-P92 (C)(Ex)	16,0	14,4	27,0	180	192
⑧	MXS 2336-P102 (C)(Ex)	22,0	19,6	36,9	180	192
⑨	MXS 2338-P102 (C)(Ex)	22,0	19,6	36,9	180	192
⑩	MXS 2338-P122 (C)(Ex)	28,0	25,4	46,3	198	210
⑪	MXS 2340-F152 (C)(Ex)	38,0	35,0	59,4	383	383
⑫	MXS 2341-F152 (C)(Ex)	38,0	35,0	59,4	383	383
⑬	MXS 2342-F152 (C)(Ex)	38,0	35,0	59,4	383	383
⑭	MXS 2344-F152 (C)(Ex)	38,0	35,0	59,4	383	383
⑮	MXS 2345-F162 (C)(Ex)	43,0	40,0	67,5	390	390
⑯	MXS 2346-F162 (C)(Ex)	43,0	40,0	67,5	390	390

MOTOR OUTPUT



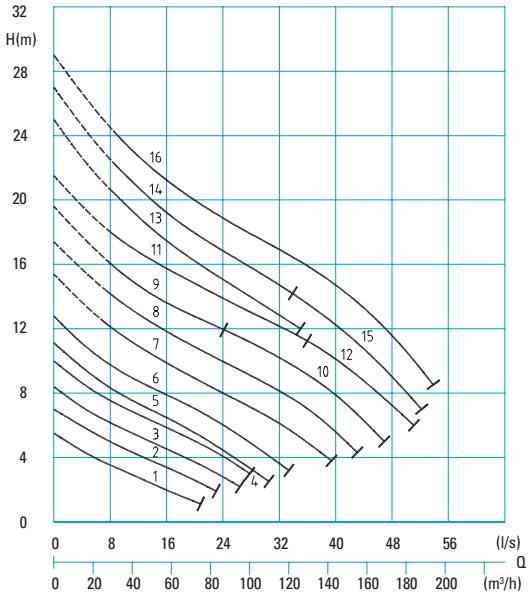
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 2328-ET72 (Ex)	10,5	9,5	20,1	146	146
②	MXS 2330-ET82 (Ex)	12,7	11,5	22,7	146	146
③	MXS 2332-ET82 (Ex)	12,7	11,5	22,7	146	146
④	MXS 2332-PU92 (Ex)	16,0	14,4	27,0	189	201
⑤	MXS 2334-PU92 (Ex)	16,0	14,4	27,0	189	201
⑥	MXS 2334-PU102 (Ex)	22,0	19,6	36,9	189	201
⑦	MXS 2336-PU92 (Ex)	16,0	14,4	27,0	191	203
⑧	MXS 2336-PU102 (Ex)	22,0	19,6	36,9	191	203
⑨	MXS 2338-PU102 (Ex)	22,0	19,6	36,9	191	203
⑩	MXS 2338-PU122 (Ex)	28,0	25,4	46,3	211	223
⑪	MXS 2340-FU152 (Ex)	38,0	35,0	59,4	409	409
⑫	MXS 2341-FU152 (Ex)	38,0	35,0	59,4	409	409
⑬	MXS 2342-FU152 (Ex)	38,0	35,0	59,4	409	409
⑭	MXS 2344-FU152 (Ex)	38,0	35,0	59,4	409	409
⑮	MXS 2345-FU162 (Ex)	43,0	40,0	67,5	416	416
⑯	MXS 2346-FU162 (Ex)	43,0	40,0	67,5	416	416

DN 100 - MXS 23...-4 POLE

Enclosed single channel impeller

80 mm Ø Spherical clearance
1450 rpm

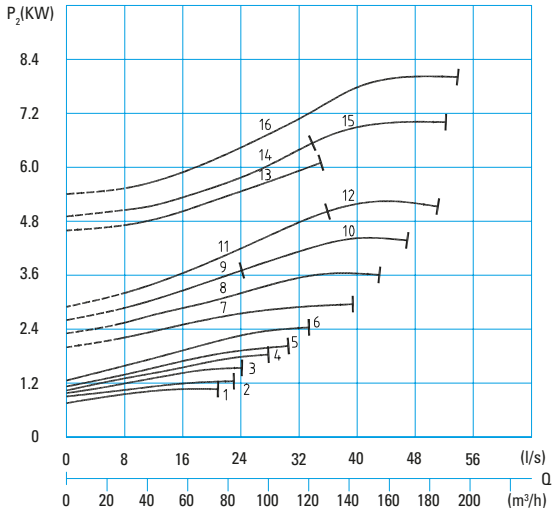
HYDRAULIC PERFORMANCE



Technical data — WET WELL INSTALLATION

Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 2328-C24 (C)(Ex)	1,7	1,3	3,3	74	74
②	MXS 2330-C24 (C)(Ex)	1,7	1,3	3,3	74	74
③	MXS 2332-D44 (C)(Ex)	3,4	2,6	6,2	80	80
④	MXS 2334-D44 (C)(Ex)	3,4	2,6	6,2	80	80
⑤	MXS 2336-D44 (C)(Ex)	3,4	2,6	6,2	82	82
⑥	MXS 2338-D44 (C)(Ex)	3,4	2,6	6,2	82	82
⑦	MXS 2340-T34 (C)(Ex)	3,4	2,9	5,8	118	118
⑧	MXS 2342-T44 (C)(Ex)	4,4	3,7	7,5	122	122
⑨	MXS 2344-T44 (C)(Ex)	4,4	3,7	7,5	122	122
⑩	MXS 2344-T54 (C)(Ex)	5,9	5,0	9,9	132	132
⑪	MXS 2346-T54 (C)(Ex)	5,9	5,0	9,9	132	132
⑫	MXS 2346-T64 (C)(Ex)	7,7	6,5	13,1	135	135
⑬	MXS 2350-T64 (C)(Ex)	7,7	6,5	13,1	142	142
⑭	MXS 2351-T64 (C)(Ex)	7,7	6,5	13,1	142	142
⑮	MXS 2351-ET74 (Ex)	9,8	8,5	16,8	168	168
⑯	MXS 2352-ET74 (Ex)	9,8	8,5	16,8	168	168

MOTOR OUTPUT



Technical data — DRY WELL INSTALLATION

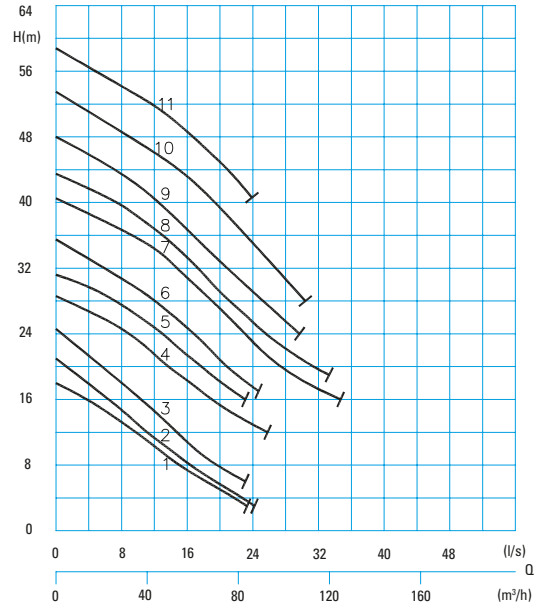
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS 2328-ET34 (Ex)	3,3	2,9	5,9	128	128
②	MXS 2330-ET34 (Ex)	3,3	2,9	5,9	128	128
③	MXS 2332-ET34 (Ex)	3,3	2,9	5,9	128	128
④	MXS 2334-ET34 (Ex)	3,3	2,9	5,9	128	128
⑤	MXS 2336-ET34 (Ex)	3,3	2,9	5,9	130	130
⑥	MXS 2338-ET34 (Ex)	3,3	2,9	5,9	130	130
⑦	MXS 2340-ET34 (Ex)	3,3	2,9	5,9	135	135
⑧	MXS 2342-ET44 (Ex)	4,3	3,7	7,3	135	135
⑨	MXS 2344-ET44 (Ex)	4,3	3,7	7,3	135	135
⑩	MXS 2344-ET54 (Ex)	6,1	5,0	10,2	135	135
⑪	MXS 2346-ET54 (Ex)	6,1	5,0	10,2	135	135
⑫	MXS 2346-ET64 (Ex)	7,4	6,5	13,4	153	153
⑬	MXS 2350-ET64 (Ex)	7,4	6,5	13,4	168	168
⑭	MXS 2351-ET64 (Ex)	7,4	6,5	13,4	168	168
⑮	MXS 2351-ET74 (Ex)	9,8	8,5	16,8	168	168
⑯	MXS 2352-ET74 (Ex)	9,8	8,5	16,8	168	168

DN 100 - V23...-2 POLE

Vortex impeller

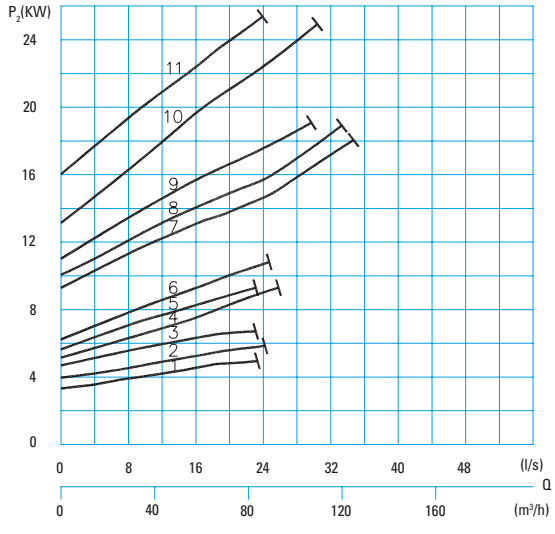
80 mm Ø Spherical clearance
2900 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 2332-T62 (C)(Ex)	7,5	6,4	13,0	93	93
②	V 2333-T62 (C)(Ex)	7,5	6,4	13,0	93	93
③	V 2334-T62 (C)(Ex)	7,5	6,4	13,0	93	93
④	V 2335-T72 (C)(Ex)	11,0	9,5	18,8	105	105
⑤	V 2337-T72 (C)(Ex)	11,0	9,5	18,8	105	105
⑥	V 2339-T82 (C)(Ex)	13,0	11,5	22,2	110	110
⑦	V 2342-P102 (C)(Ex)	22,0	19,6	36,9	178	190
⑧	V 2343-P102 (C)(Ex)	22,0	19,6	36,9	178	190
⑨	V 2344-P102 (C)(Ex)	22,0	19,6	36,9	178	190
⑩	V 2345-P122 (C)(Ex)	28,0	25,4	46,3	198	210
⑪	V 2346-P122 (C)(Ex)	28,0	25,4	46,3	198	210

MOTOR OUTPUT



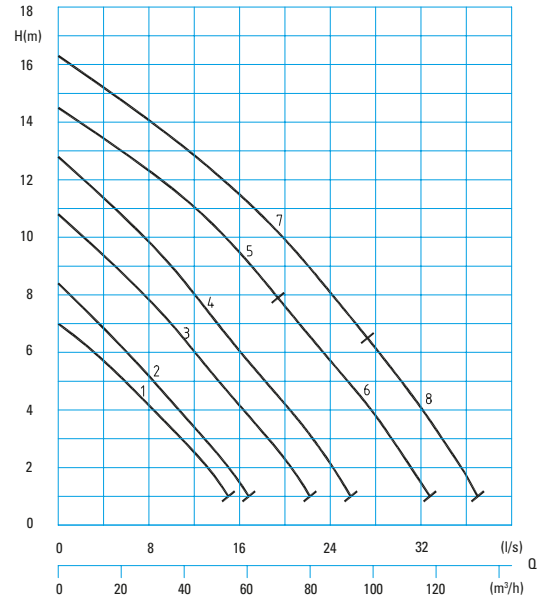
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 2332-ET62 (Ex)	7,3	6,4	12,4	121	121
②	V 2333-ET62 (Ex)	7,3	6,4	12,4	121	121
③	V 2334-ET62 (Ex)	7,3	6,4	12,4	121	121
④	V 2335-ET72 (Ex)	10,5	9,5	20,1	141	141
⑤	V 2337-ET72 (Ex)	10,5	9,5	20,1	141	141
⑥	V 2339-ET82 (Ex)	12,7	11,5	22,7	141	141
⑦	V 2342-PU102 (Ex)	22,0	19,6	36,9	190	202
⑧	V 2343-PU102 (Ex)	22,0	19,6	36,9	190	202
⑨	V 2344-PU102 (Ex)	22,0	19,6	36,9	190	202
⑩	V 2345-PU122 (Ex)	28,0	25,4	46,3	210	222
⑪	V 2346-PU122 (Ex)	28,0	25,4	46,3	210	222

DN 100 - V(X) 23...-4 POLE

Vortex impeller

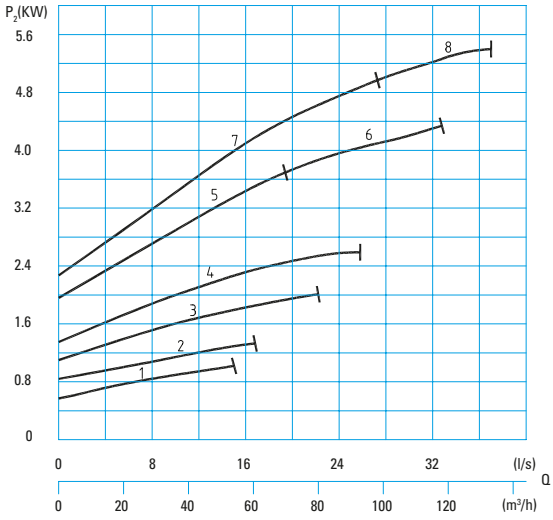
80 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 2334-C24 (C)(Ex)	1,7	1,3	3,3	65	65
②	V 2336-C24 (C)(Ex)	1,7	1,3	3,3	65	65
③	V 2344-D44 (C)(Ex)	3,4	2,6	6,2	68	68
④	V 2346-D44 (C)(Ex)	3,4	2,6	6,2	68	68
⑤	VX 2345-T44 (C)(Ex)	4,4	3,7	7,5	107	107
⑥	VX 2345-T54 (C)(Ex)	5,9	5,0	9,9	120	120
⑦	VX 2346-T54 (C)(Ex)	5,9	5,0	9,9	120	120
⑧	VX 2346-T64 (C)(Ex)	7,7	6,5	13,1	123	123

MOTOR OUTPUT



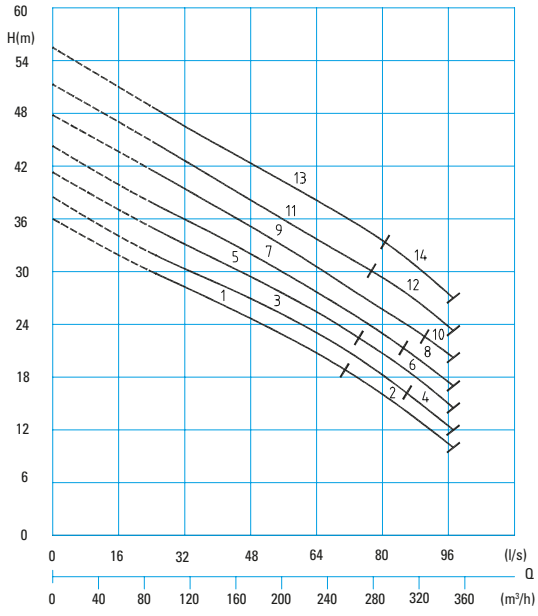
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V 2334-ET34 (Ex)	3,3	2,9	5,9	123	123
②	V 2336-ET34 (Ex)	3,3	2,9	5,9	123	123
③	V 2344-ET34 (Ex)	3,3	2,9	5,9	124	124
④	V 2346-ET34 (Ex)	3,3	2,9	5,9	124	124
⑤	VX 2345-ET44 (Ex)	4,3	3,7	7,3	124	124
⑥	VX 2345-ET54 (Ex)	6,1	5,0	10,2	124	124
⑦	VX 2346-ET54 (Ex)	6,1	5,0	10,2	124	124
⑧	VX 2346-ET64 (Ex)	7,4	6,5	13,4	141	141

DN 100 - KX 23...-4 POLIG

Enclosed two channel impeller

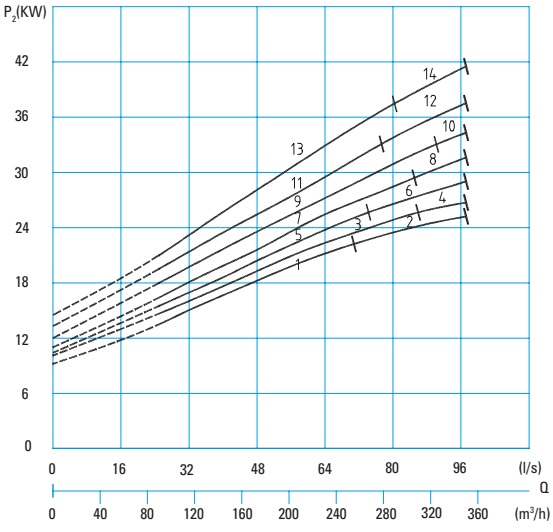
80 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	KX 2360-F114 (C)(Ex)	25,0	22,0	44,0	429	429
②	KX 2360-F124 (C)(Ex)	29,1	25,6	51,4	451	451
③	KX 2362-F124 (C)(Ex)	29,1	25,6	51,4	452	452
④	KX 2362-F134 (C)(Ex)	32,8	29,2	59,0	467	467
⑤	KX 2364-F124 (C)(Ex)	29,1	25,6	51,4	453	453
⑥	KX 2364-F134 (C)(Ex)	32,8	29,2	59,0	468	468
⑦	KX 2366-F134 (C)(Ex)	32,8	29,2	59,0	469	469
⑧	KX 2366-F144 (C)(Ex)	37,1	33,0	67,1	484	484
⑨	KX 2368-F144 (C)(Ex)	37,1	33,0	67,1	485	485
⑩	KX 2368-G154 (C)(Ex)	41,1	37,4	70,4	502	502
⑪	KX 2370-G144 (C)(Ex)	37,1	33,0	67,1	486	486
⑫	KX 2370-G154 (C)(Ex)	41,1	37,4	70,4	503	503
⑬	KX 2372-G154 (C)(Ex)	41,1	37,4	70,4	504	504
⑭	KX 2372-G174 (C)(Ex)	50,1	46,1	84,3	532	532

MOTOR OUTPUT



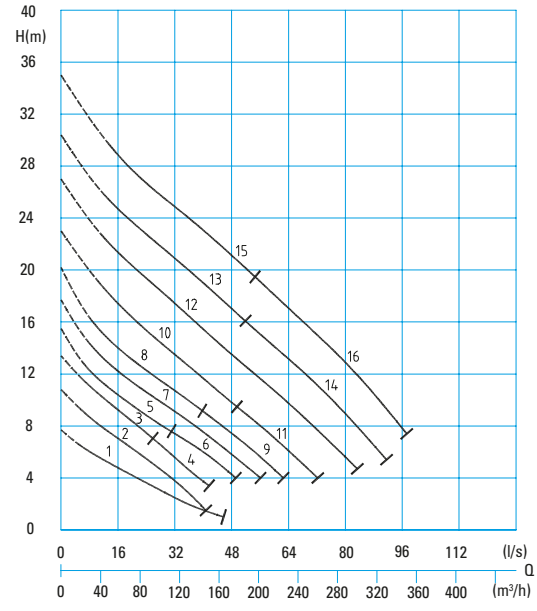
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	KX 2360-FU114 (Ex)	25,0	22,0	44,0	450	450
②	KX 2360-FU124 (Ex)	29,1	25,6	51,4	477	477
③	KX 2362-FU124 (Ex)	29,1	25,6	51,4	478	478
④	KX 2362-FU134 (Ex)	32,8	29,2	59,0	493	493
⑤	KX 2364-FU124 (Ex)	29,1	25,6	51,4	479	479
⑥	KX 2364-FU134 (Ex)	32,8	29,2	59,0	494	494
⑦	KX 2366-FU134 (Ex)	32,8	29,2	59,0	495	495
⑧	KX 2366-FU144 (Ex)	37,1	33,0	67,1	510	510
⑨	KX 2368-FU144 (Ex)	37,1	33,0	67,1	511	511
⑩	KX 2368-GU154 (Ex)	41,1	37,4	70,4	528	528
⑪	KX 2370-GU144 (Ex)	37,1	33,0	67,1	512	512
⑫	KX 2370-GU154 (Ex)	41,1	37,4	70,4	529	529
⑬	KX 2372-GU154 (Ex)	41,1	37,4	70,4	530	530
⑭	KX 2372-GU174 (Ex)	50,1	46,1	84,3	561	561

DN 100 - MX(S) 24...-4 POLE

Enclosed single channel impeller

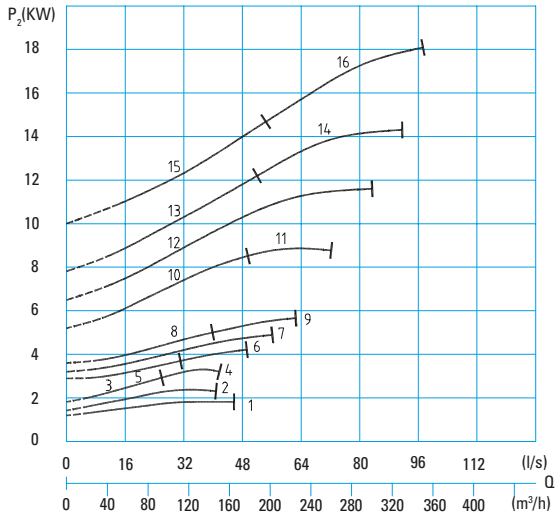
100 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	M 2432-T34 (C)(Ex)	3,4	2,9	5,8	102	102
②	MX 2436-T34 (C)(Ex)	3,4	2,9	5,8	104	104
③	MX 2438-T34 (C)(Ex)	3,4	2,9	5,8	104	104
④	MX 2438-T44 (C)(Ex)	4,4	3,7	7,5	108	108
⑤	MXS 2442-T44 (C)(Ex)	4,4	3,7	7,5	129	129
⑥	MXS 2442-T54 (C)(Ex)	5,9	5,0	9,9	139	139
⑦	MXS 2444-T54 (C)(Ex)	5,9	5,0	9,9	139	139
⑧	MXS 2446-T54 (C)(Ex)	5,9	5,0	9,9	139	139
⑨	MXS 2446-T64 (C)(Ex)	7,7	6,5	13,1	142	142
⑩	MXS 2450-ET74 (Ex)	9,8	8,5	16,8	184	184
⑪	MXS 2450-P84 (C)(Ex)	14,0	12,2	23,0	209	221
⑫	MXS 2454-P84 (C)(Ex)	14,0	12,2	23,0	209	221
⑬	MXS 2457-P84 (C)(Ex)	14,0	12,2	23,0	209	221
⑭	MXS 2457-P94 (C)(Ex)	17,0	14,6	28,8	209	221
⑮	MXS 2460-P94 (C)(Ex)	17,0	14,6	28,8	209	221
⑯	MXS 2460-P104 (C)(Ex)	22,0	19,3	36,5	231	243

MOTOR OUTPUT



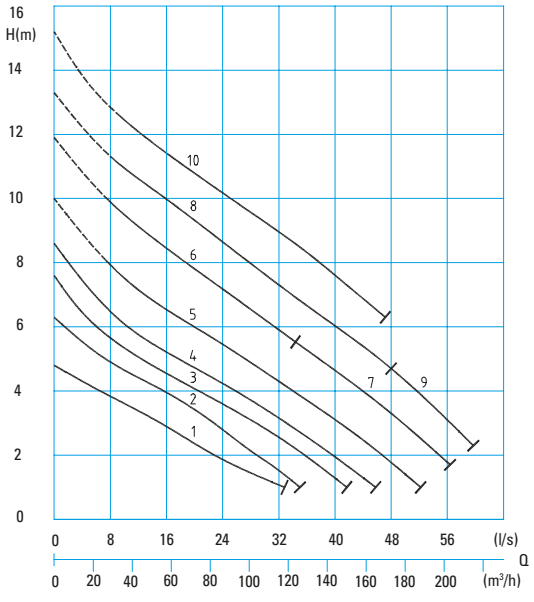
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	M 2432-ET34 (Ex)	3,3	2,9	5,9	138	138
②	MX 2436-ET34 (Ex)	3,3	2,9	5,9	138	138
③	MX 2438-ET34 (Ex)	3,3	2,9	5,9	138	138
④	MX 2438-ET44 (Ex)	4,3	3,7	7,3	138	138
⑤	MXS 2442-ET44 (Ex)	4,3	3,7	7,3	142	142
⑥	MXS 2442-ET54 (Ex)	6,1	5,0	10,2	142	142
⑦	MXS 2444-ET54 (Ex)	6,1	5,0	10,2	142	142
⑧	MXS 2446-ET54 (Ex)	6,1	5,0	10,2	142	142
⑨	MXS 2446-ET64 (Ex)	7,4	6,5	13,4	160	160
⑩	MXS 2450-ET74 (Ex)	9,8	8,5	16,8	184	184
⑪	MXS 2450-PU84 (Ex)	14,0	12,2	23,0	219	231
⑫	MXS 2454-PU84 (Ex)	14,0	12,2	23,0	219	231
⑬	MXS 2457-PU84 (Ex)	14,0	12,2	23,0	219	231
⑭	MXS 2457-PU94 (Ex)	17,0	14,6	28,8	219	231
⑮	MXS 2460-PU94 (Ex)	17,0	14,6	28,8	219	231
⑯	MXS 2460-PU104 (Ex)	22,0	19,3	36,5	244	256

DN 100 - MX(S) 24...-6 POLE

Enclosed single channel impeller

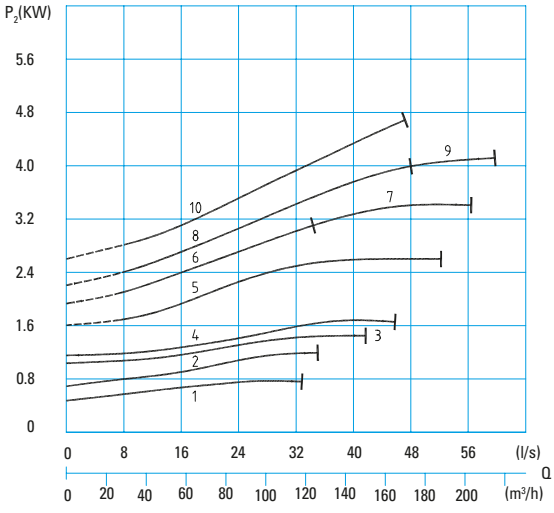
100 mm Ø Spherical clearance
960 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 2436-T36 (C)(Ex)	3,0	2,3	5,4	104	104
②	MX 2438-T36 (C)(Ex)	3,0	2,3	5,4	104	104
③	MXS 2444-T26 (C)(Ex)	2,1	1,6	4,0	125	125
④	MXS 2446-T36 (C)(Ex)	3,0	2,3	5,4	125	125
⑤	MXS 2450-T46 (C)(Ex)	4,0	3,1	7,3	145	145
⑥	MXS 2454-T46 (C)(Ex)	4,0	3,1	7,3	145	145
⑦	MXS 2454-T56 (C)(Ex)	5,0	4,0	9,6	155	155
⑧	MXS 2457-T56 (C)(Ex)	5,0	4,0	9,6	155	155
⑨	MXS 2457-T66 (C)(Ex)	6,0	4,9	11,5	158	158
⑩	MXS 2460-T66 (C)(Ex)	6,0	4,9	11,5	158	158

MOTOR OUTPUT



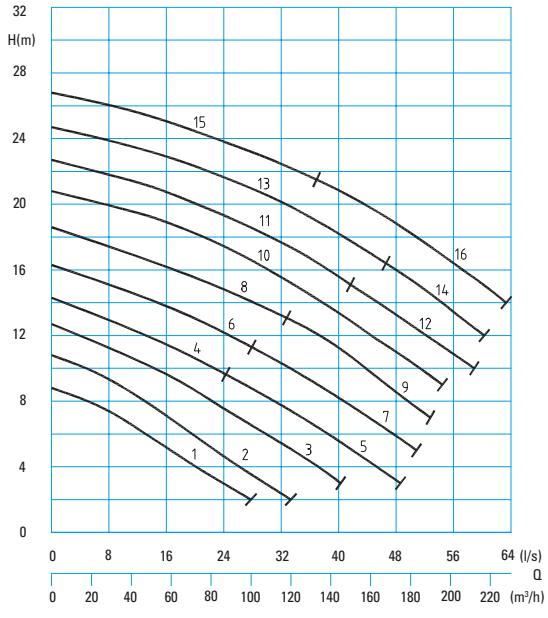
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 2436-ET36 (Ex)	2,7	2,3	4,9	156	156
②	MX 2438-ET36 (Ex)	2,7	2,3	4,9	156	156
③	MXS 2444-ET26 (Ex)	1,8	1,6	3,8	160	160
④	MXS 2446-ET36 (Ex)	2,7	2,3	4,9	160	160
⑤	MXS 2450-ET46 (Ex)	3,6	3,1	6,6	184	184
⑥	MXS 2454-ET46 (Ex)	3,6	3,1	6,6	184	184
⑦	MXS 2454-ET56 (Ex)	4,7	4,0	8,3	184	184
⑧	MXS 2457-ET56 (Ex)	4,7	4,0	8,3	184	184
⑨	MXS 2457-ET66 (Ex)	5,9	4,9	10,3	184	184
⑩	MXS 2460-ET66 (Ex)	5,9	4,9	10,3	184	184

DN 100 - VX 24...-4 POLE

Vortex impeller

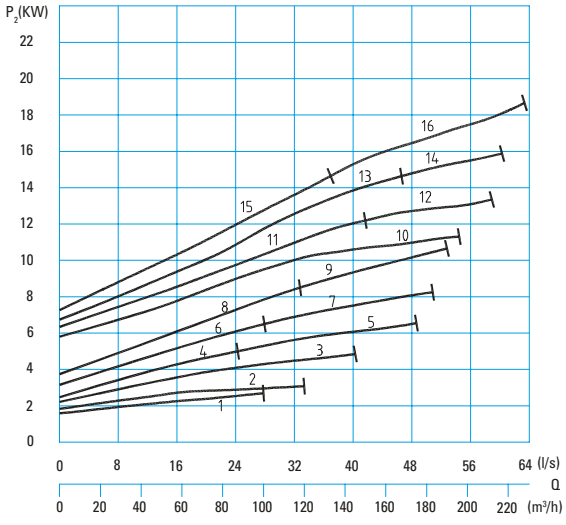
100 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 2436-D54 (C)(Ex)	4,0	3,2	7,3	78	78
②	VX 2439-D54 (C)(Ex)	4,0	3,2	7,3	78	78
③	VX 2440-T54 (C)(Ex)	5,9	5,0	9,9	123	123
④	VX 2442-T54 (C)(Ex)	5,9	5,0	9,9	123	123
⑤	VX 2442-T64 (C)(Ex)	7,7	6,5	13,1	126	126
⑥	VX 2444-T64 (C)(Ex)	7,7	6,5	13,1	126	126
⑦	VX 2444-ET74 (Ex)	9,8	8,5	16,8	144	144
⑧	VX 2446-ET74 (Ex)	9,8	8,5	16,8	144	144
⑨	VX 2446-P84 (C)(Ex)	14,0	12,2	23,0	177	189
⑩	VX 2452-P84 (C)(Ex)	14,0	12,2	23,0	205	217
⑪	VX 2454-P84 (C)(Ex)	14,0	12,2	23,0	205	217
⑫	VX 2454-P94 (C)(Ex)	17,0	14,6	28,8	205	217
⑬	VX 2456-P94 (C)(Ex)	17,0	14,6	28,8	205	217
⑭	VX 2456-P104 (C)(Ex)	22,0	19,3	36,5	227	239
⑮	VX 2458-P94 (C)(Ex)	17,0	14,6	28,8	205	217
⑯	VX 2458-P104 (C)(Ex)	22,0	19,3	36,5	227	239

MOTOR OUTPUT



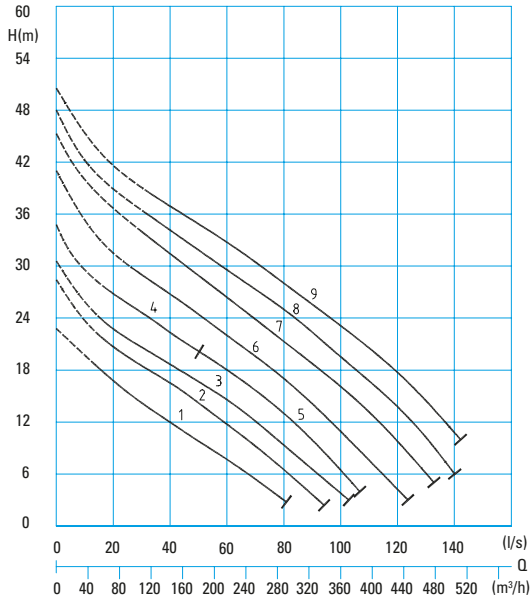
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 2436-ET44 (Ex)	4,3	3,7	7,3	123	123
②	VX 2439-ET44 (Ex)	4,3	3,7	7,3	123	123
③	VX 2440-ET54 (Ex)	6,1	5,0	10,2	126	126
④	VX 2442-ET54 (Ex)	6,1	5,0	10,2	126	126
⑤	VX 2442-ET64 (Ex)	7,4	6,5	13,4	144	144
⑥	VX 2444-ET64 (Ex)	7,4	6,5	13,4	144	144
⑦	VX 2444-ET74 (Ex)	9,8	8,5	16,8	144	144
⑧	VX 2446-ET74 (Ex)	9,8	8,5	16,8	144	144
⑨	VX 2446-PU84 (Ex)	14,0	12,2	23,0	187	199
⑩	VX 2452-PU84 (Ex)	14,0	12,2	23,0	215	227
⑪	VX 2454-PU84 (Ex)	14,0	12,2	23,0	215	227
⑫	VX 2454-PU94 (Ex)	17,0	14,6	28,8	215	227
⑬	VX 2456-PU94 (Ex)	17,0	14,6	28,8	215	227
⑭	VX 2456-PU104 (Ex)	22,0	19,3	36,5	240	252
⑮	VX 2458-PU94 (Ex)	17,0	14,6	28,8	215	227
⑯	VX 2458-PU104 (Ex)	22,0	19,3	36,5	240	252

DN 150 - MX 34...-4 POLE

Enclosed single channel impeller

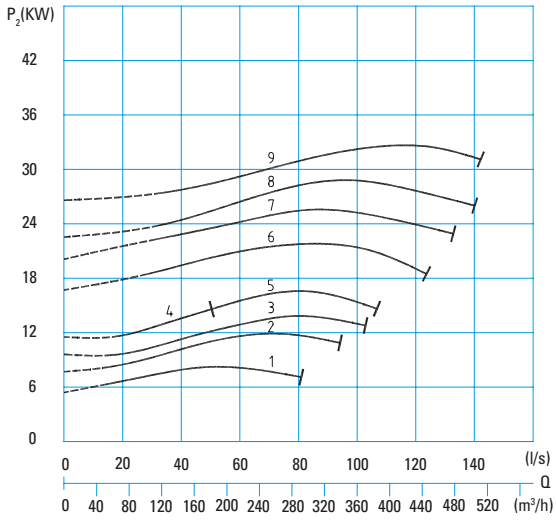
100 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 3452-ET74 (Ex)	9,8	8,5	16,8	189	189
②	MX 3456-P84 (C)(Ex)	14,0	12,2	23,0	216	228
③	MX 3460-P94 (C)(Ex)	17,0	14,6	28,8	217	229
④	MX 3462-P94 (C)(Ex)	17,0	14,6	28,8	218	230
⑤	MX 3462-P104 (C)(Ex)	22,0	19,3	36,5	236	248
⑥	MX 3468-F114 (C)(Ex)	25,0	22,0	44,0	388	388
⑦	MX 3470-F124 (C)(Ex)	29,1	25,6	51,4	410	410
⑧	MX 3472-F134 (C)(Ex)	32,8	29,2	59,0	420	420
⑨	MX 3474-F144 (C)(Ex)	37,1	33,0	67,1	430	430

MOTOR OUTPUT



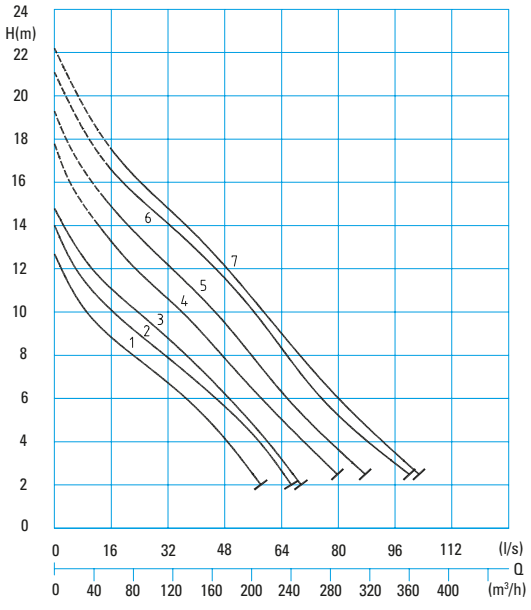
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 3452-ET74 (Ex)	9,8	8,5	16,8	189	189
②	MX 3456-PU84 (Ex)	14,0	12,2	23,0	224	236
③	MX 3460-PU94 (Ex)	17,0	14,6	28,8	225	237
④	MX 3462-PU94 (Ex)	17,0	14,6	28,8	226	238
⑤	MX 3462-PU104 (Ex)	22,0	19,3	36,5	246	258
⑥	MX 3468-FU114 (Ex)	25,0	22,0	44,0	409	409
⑦	MX 3470-FU124 (Ex)	29,1	25,6	51,4	436	436
⑧	MX 3472-FU134 (Ex)	32,8	29,2	59,0	436	436
⑨	MX 3474-FU144 (Ex)	37,1	33,0	67,1	456	456

DN 150 - MX 34...-6 POLE

Enclosed single channel impeller

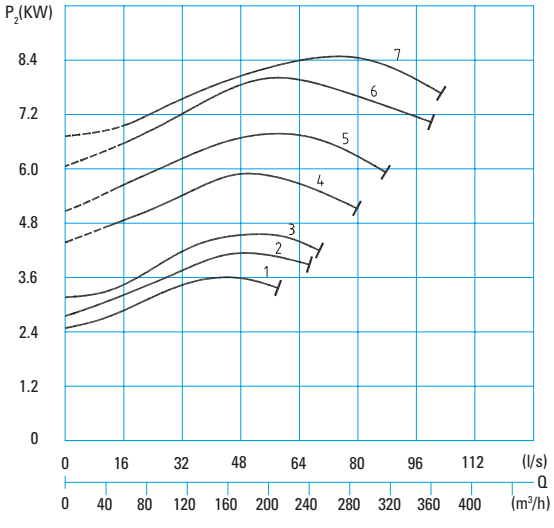
100 mm Ø Spherical clearance
960 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 3456-T56 (C)(Ex)	5,0	4,0	9,6	158	158
②	MX 3460-T66 (C)(Ex)	6,0	4,9	11,5	159	159
③	MX 3462-T66 (C)(Ex)	6,0	4,9	11,5	160	160
④	MX 3468-P76 (C)(Ex)	9,0	7,3	16,3	260	272
⑤	MX 3470-P76 (C)(Ex)	9,0	7,3	16,3	260	272
⑥	MX 3472-P86 (C)(Ex)	12,0	10,0	22,4	285	297
⑦	MX 3474-P86 (C)(Ex)	12,0	10,0	22,4	285	297

MOTOR OUTPUT



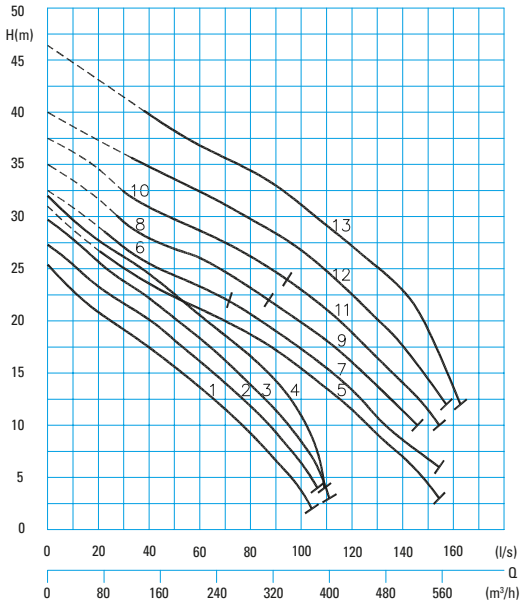
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MX 3456-ET56 (Ex)	4,7	4,0	8,3	189	189
②	MX 3460-ET66 (Ex)	5,9	4,9	10,3	189	189
③	MX 3462-ET66 (Ex)	5,9	4,9	10,3	189	189
④	MX 3468-PU76 (Ex)	9,0	7,3	16,3	267	279
⑤	MX 3470-PU76 (Ex)	9,0	7,3	16,3	267	279
⑥	MX 3472-PU86 (Ex)	12,0	10,0	22,4	292	304
⑦	MX 3474-PU86 (Ex)	12,0	10,0	22,4	292	304

DN 150 - K33...-4 POLE

Enclosed two channel impeller

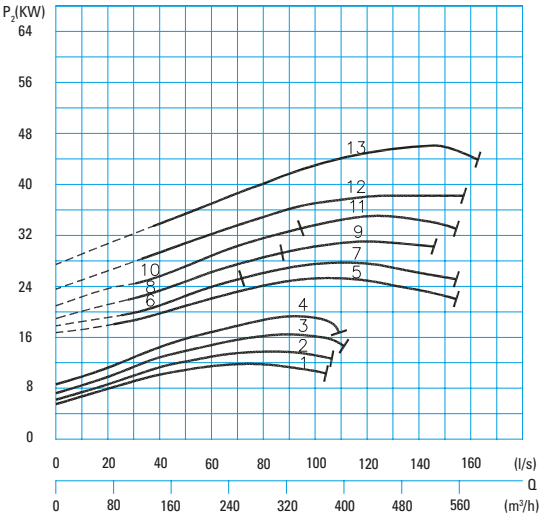
80 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K 3352-P94 (C)(Ex)	17,0	14,6	28,8	216	228
②	K 3354-P94 (C)(Ex)	17,0	14,6	28,8	216	228
③	K 3356-P104 (C)(Ex)	22,0	19,3	36,5	234	246
④	K 3358-P104 (C)(Ex)	22,0	19,3	36,5	234	246
⑤	K 3360-F124 (C)(Ex)	29,1	25,6	51,4	418	418
⑥	K 3362-F124 (C)(Ex)	29,1	25,6	51,4	418	418
⑦	K 3362-F134 (C)(Ex)	32,8	29,2	59,0	428	428
⑧	K 3364-F134 (C)(Ex)	32,8	29,2	59,0	428	428
⑨	K 3364-F144 (C)(Ex)	37,1	33,0	67,1	449	449
⑩	K 3366-F144 (C)(Ex)	37,1	33,0	67,1	449	449
⑪	K 3366-G154 (C)(Ex)	41,1	37,4	70,4	486	486
⑫	K 3368-G154 (C)(Ex)	41,1	37,4	70,4	486	486
⑬	K 3370-G174 (C)(Ex)	50,1	46,1	84,3	528	528

MOTOR OUTPUT



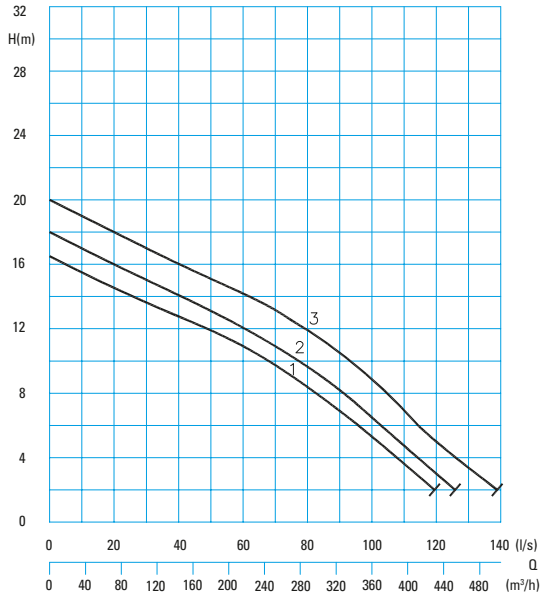
Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K 3352-PU94 (Ex)	17,0	14,6	28,8	224	236
②	K 3354-PU94 (Ex)	17,0	14,6	28,8	224	236
③	K 3356-PU104 (Ex)	22,0	19,3	36,5	244	256
④	K 3358-PU104 (Ex)	22,0	19,3	36,5	244	256
⑤	K 3360-FU124 (Ex)	29,1	25,6	51,4	444	493
⑥	K 3362-FU124 (Ex)	29,1	25,6	51,4	444	493
⑦	K 3362-FU134 (Ex)	32,8	29,2	59,0	454	503
⑧	K 3364-FU134 (Ex)	32,8	29,2	59,0	454	503
⑨	K 3364-FU144 (Ex)	37,1	33,0	67,1	475	524
⑩	K 3366-FU144 (Ex)	37,1	33,0	67,1	475	524
⑪	K 3366-GU154 (Ex)	41,1	37,4	70,4	512	555
⑫	K 3368-GU154 (Ex)	41,1	37,4	70,4	512	555
⑬	K 3370-GU174 (Ex)	50,1	46,1	84,3	557	610

DN 150 - K33...-6 POLE

Enclosed two channel impeller

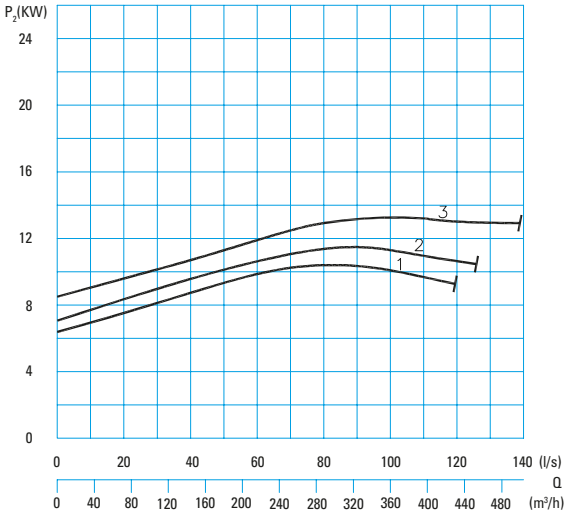
80 mm Ø Spherical clearance
960 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K 3366-P96 (C)(Ex)	16,0	13,6	29,4	280	292
②	K 3368-P96 (C)(Ex)	16,0	13,6	29,4	280	292
③	K 3370-P96 (C)(Ex)	16,0	13,6	29,4	280	292

MOTOR OUTPUT



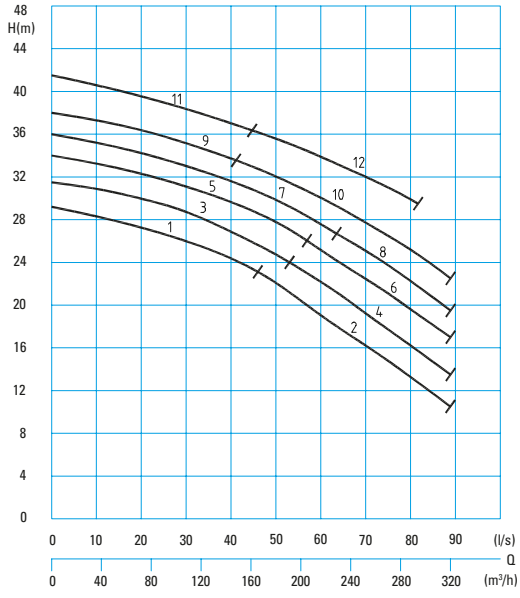
Technical data					DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K 3366-PU96 (Ex)	16,0	13,6	29,4	288	300
②	K 3368-PU96 (Ex)	16,0	13,6	29,4	288	300
③	K 3370-PU96 (Ex)	16,0	13,6	29,4	288	300

DN 150 - VX 34...-4 POLE

Vortex impeller

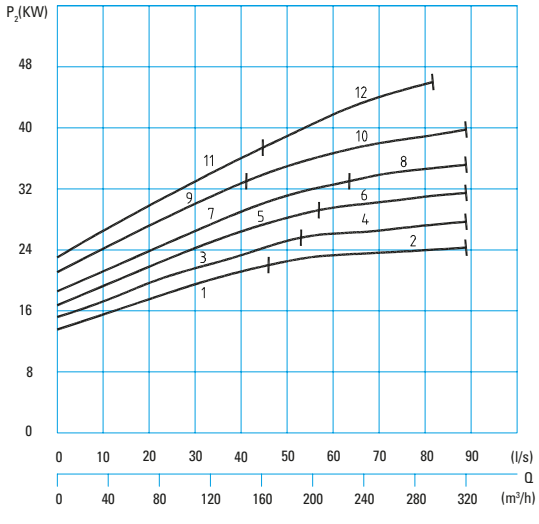
100 mm Ø Spherical clearance
1450 rpm

HYDRAULIC PERFORMANCE



Technical data					WET WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 3460-F114 (C)(Ex)	25,0	22,0	44,0	426	426
②	VX 3460-F124 (C)(Ex)	29,1	25,6	51,4	448	448
③	VX 3463-F124 (C)(Ex)	29,1	25,6	51,4	448	448
④	VX 3463-F134 (C)(Ex)	32,8	29,2	59,0	463	463
⑤	VX 3466-F134 (C)(Ex)	32,8	29,2	59,0	463	463
⑥	VX 3466-F144 (C)(Ex)	37,1	33,0	67,1	478	478
⑦	VX 3468-F144 (C)(Ex)	37,1	33,0	67,1	478	478
⑧	VX 3468-G154 (C)(Ex)	41,1	37,4	70,4	495	495
⑨	VX 3470-F144 (C)(Ex)	37,1	33,0	67,1	478	478
⑩	VX 3470-G174 (C)(Ex)	50,1	46,1	84,3	523	523
⑪	VX 3471-G154 (C)(Ex)	41,1	37,4	70,4	495	495
⑫	VX 3471-G174 (C)(Ex)	50,1	46,1	84,3	523	523

MOTOR OUTPUT



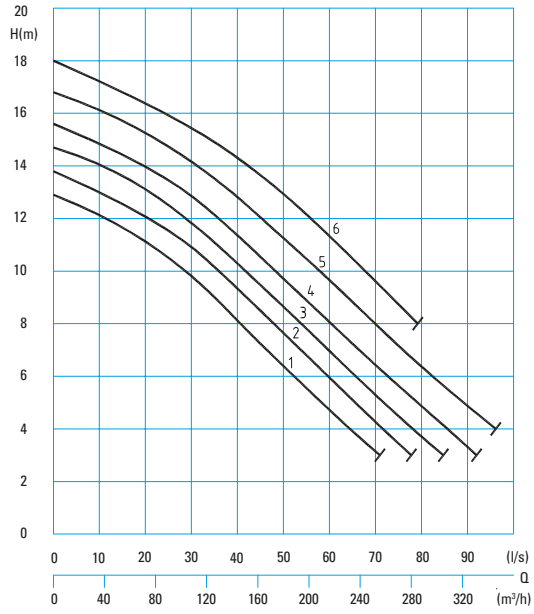
Technical data					DRY WELL INSTALLATION	
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 3460-FU114 (Ex)	25,0	22,0	44,0	447	447
②	VX 3460-FU124 (Ex)	29,1	25,6	51,4	474	474
③	VX 3463-FU124 (Ex)	29,1	25,6	51,4	474	474
④	VX 3463-FU134 (Ex)	32,8	29,2	59,0	489	489
⑤	VX 3466-FU134 (Ex)	32,8	29,2	59,0	489	489
⑥	VX 3466-FU144 (Ex)	37,1	33,0	67,1	504	504
⑦	VX 3468-FU144 (Ex)	37,1	33,0	67,1	504	504
⑧	VX 3468-GU154 (Ex)	41,1	37,4	70,4	521	521
⑨	VX 3470-FU144 (Ex)	37,1	33,0	67,1	504	504
⑩	VX 3470-GU174 (Ex)	50,1	46,1	84,3	552	552
⑪	VX 3471-GU154 (Ex)	41,1	37,4	70,4	521	521
⑫	VX 3471-GU174 (Ex)	50,1	46,1	84,3	552	552

DN 150 - VX 34...-6 POLE

Vortex impeller

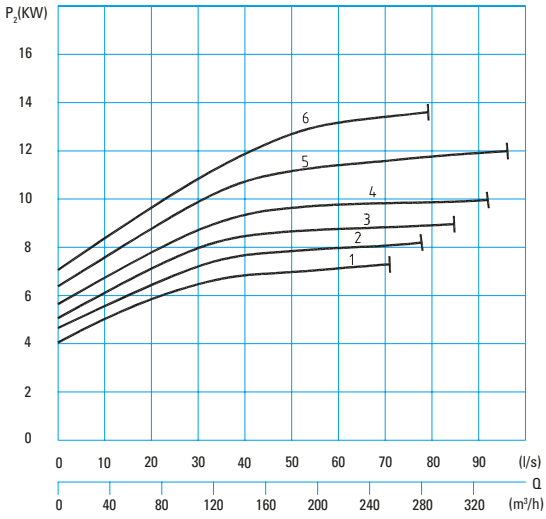
100 mm Ø Spherical clearance
960 rpm

HYDRAULIC PERFORMANCE



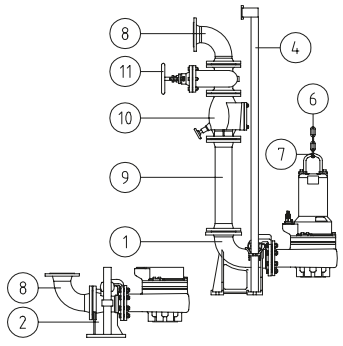
Technical data						WET WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 3460-P76 (C)(Ex)	9,0	7,3	16,3	239	251
②	VX 3463-P86 (C)(Ex)	12,0	10,0	22,4	264	276
③	VX 3466-P86 (C)(Ex)	12,0	10,0	22,4	264	276
④	VX 3468-P86 (C)(Ex)	12,0	10,0	22,4	264	276
⑤	VX 3470-P96 (C)(Ex)	16,0	13,6	29,4	278	290
⑥	VX 3471-P96 (C)(Ex)	16,0	13,6	29,4	278	290

MOTOR OUTPUT

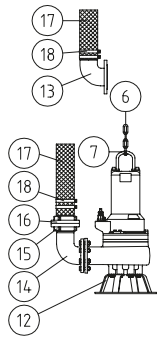


Technical data						DRY WELL INSTALLATION
Curve No.	Pump type	P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX 3460-PU76 (Ex)	9,0	7,3	16,3	245	257
②	VX 3463-PU86 (Ex)	12,0	10,0	22,4	274	286
③	VX 3466-PU86 (Ex)	12,0	10,0	22,4	274	286
④	VX 3468-PU86 (Ex)	12,0	10,0	22,4	274	286
⑤	VX 3470-PU96 (Ex)	16,0	13,6	29,4	291	293
⑥	VX 3471-PU96 (Ex)	16,0	13,6	29,4	291	293

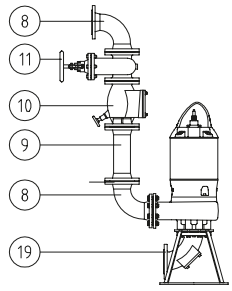
ACCESSORIES



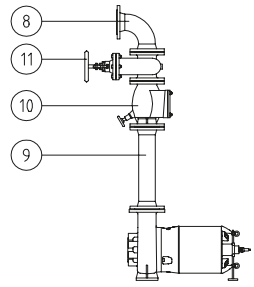
Permanent wet well installation with auto-coupling system



Transportable wet well installation



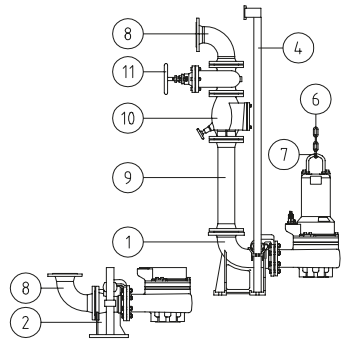
Permanent dry well installation vertical



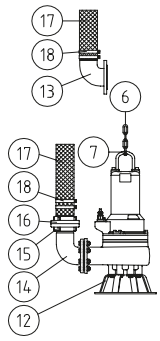
Permanent dry well installation horizontal

No.	Description	Type	Dimension	Part No.
❶	**Auto-coupling system, cast iron, consisting of auto-coupling with flanged elbow, flanged pump coupling and upper slide rail bracket** Execution (Material): - Cast iron	KK 80/80 KK 80/100 KK 100/100 KK 100/80 KK 150/150 KK 150/100 KK 200/150	DN 80 DN 80/DN 100 DN 100 DN 100 / DN 80 DN 150 DN 150 / DN 100 DN 200 / DN 150	8604025 8604030 8604055 8604060 8604070 8603632 8604105
	- Cast iron, upper slide-rail bracket - stainless steel	KKR 80/80 KKR 80/100 KKR 100/100 KKR 100/80 KKR 150/150 KKR 150/100 KKR 200/150	DN 80 DN 80/DN 100 DN 100 DN 100 / DN 80 DN 150 DN 150 / DN 100 DN 200 / DN 150	8604026 8604031 8604056 8604061 8604071 8604073 8604106
	- Complete stainless steel	KKC 80/80 KKC 100/100 KKC 150/150	DN 80 DN 100 DN 150	8604027 8604057 8604072
❷	**Auto-coupling system consisting of auto-coupling with horizontal discharge flange, flanged pump coupling and upper slide rail bracket.**	KS 80/100 KS 100/100 KS 150/150 KS 200/150	DN 80 / DN 100 DN 100 DN 150 DN 200 / DN 150	8604045 8604065 8604075 8604083
	Intermittend slide rail - Cast iron		1½" for DN 100 2" for DN 150 2½" for DN 200	7322931 7320121A 7322911
	- Stainless steel		1½" for DN 80 1½" for DN 100 2" for DN 150	7323854A 7320355B 7323974B
❹	**Guide rails** - pair, per meter Execution (Material): - Galvanized steel		1½" for DN 80/100 2" for DN 150 2½" for DN 200	2190155 2190205 2190225
	- Stainless steel		1½" for DN 80/100 2" for DN 150 2½" for DN 200	2190254 2190256 2190258
❻	**Lifting chain** - Pump chain, tested, load capacity up to 200 kg pitch 984mm, 4x12 eyes		length 2m special length	2800371 2800362
	- Pump chain, tested, load capacity up to 560 kg pitch 943mm, 5x15 eyes		special length	2800365
❼	**Shackle** - Stainless steel AISI316 (A4) 0,4 T-S Width 21mm, with cotter pin load capacity 400 kg, tested			2801360

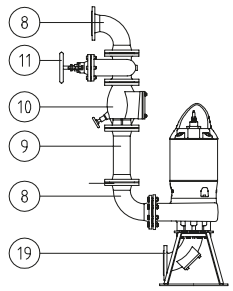
ACCESSORIES



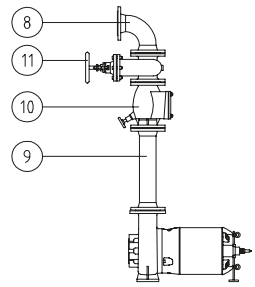
Permanent wet well installation with auto-coupling system



Transportable wet well installation



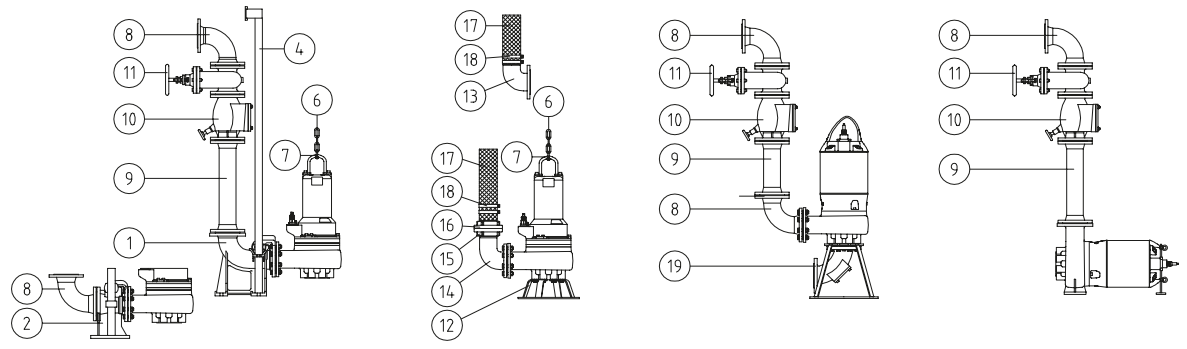
Permanent dry well installation vertical



Permanent dry well installation horizontal

No.	Description	Type	Dimension	Part No.
	Shackle - Stainless steel AISI316 (A4) 1,25 T-S Width 25mm, with cotter pin load capacity 1250 kg, tested			2801362
❽	90° flanged elbow - with 2 flanges (Q-piece)		DN 80 DN 100 DN 150 DN 200	2153302 2153303 2153353 2153363
	- or flanged y-piece for twin pump arrangement, horizontal discharge (optional with vertical discharge) with gasket and fixing bolts		DN 80 / 80 / 80 DN 80 / 80 / 100 DN 100 / 100 / 100 DN 100 / 100 / 125 DN 100 / 100 / 150 DN 150 / 150 / 150 DN 200 / 200 / 200	on request
❾	Discharge pipe - with 2 flanged (FF-piece) 1m, gasket and fixing bolts		DN 80 DN 100 DN 125 DN 150 DN 200	2152081 2152201 2152221 2152251 2152271
	Discharge pipe - per additional meter		DN 80 DN 100 DN 125 DN 150 DN 200	2150080 2150100 2150125 2150150 2150200
	- Flanged reducer (FFR-piece)		on request	
❿	Flanged swing check valve - cast iron		DN 80 DN 100 DN 125 DN 150 DN 200	2212807 2212809 2212810 2212811 2212816
⓫	Flanged gate valve - cast iron		DN 80 DN 100 DN 125 DN 150 DN 200	2216080 2216100 2216125 2216150 2216200
⓬	Ring base stand - up to 16,9 kW (P2) - from 17,0 kW (P2)	NB 100 A NB 100 B NB 150 A NB 150	DN 100 DN 100 DN 150 DN 150	7321215 7321705 7321285 7321275
⓭	Flanged spigot elbow with gasket and fixing bolts		DN 100 / 100 mm	6001141
⓮	90° Flanged elbow		R3“ IG/AG	2111805
	Double nipple		R3“ AG	2128030
	Threaded flange		DN80 / R3“ IG	2215080
	Flanged to thread elbow with gasket and fixing bolts		DN100 x R4“ AG DN150 x R6“ AG	6001121 6001205

ACCESSORIES



Permanent wet well installation with auto-coupling system | Transportable wet well installation | Permanent dry well installation vertical | Permanent dry well installation horizontal

No.	Description	Type	Dimension	Part No.
⓯	STORZ-fixed coupling		B-R3“ IG A-R4“ IG F-R6“ IG	2010602 2010701 2010961
⓰	STORZ-hose coupling with spigot		B - 75 mm A - 110 mm F - 150 mm	2013502 2013801 2013901
	STORZ-reducer		A-B F-A	2015612 2015622
⓱	Reinforced hose (inner dia. in mm)		75 mm 110 mm 150 mm	2632075 2632110 2632150
	Hose with pre-attached couplings		on request	
⓲	Hose bands		T 70-90-13 S100 / 20 GBS 112-121/25 GBS 168-174/30	2309013 2310020 2311520 2317520
⓳	Flanged pump stand with gasket and fixing bolts	TVS 100 A (up to 18 kW) TVS 150 A	DN 100 DN 150	7321705 7321725
	Pump stand with suction elbow, cleaning hole, gasket and fixing bolts	TVS 100 A-R (up to 18 kW) TVS 100 A-R TVS 150 A-R TVS 150-R TVS 150/200 A-R TVS 150/200-R	DN 100 DN 100 DN 150 DN 150 DN 150 / DN 200 DN 150 / DN 200	8604220 8604221 8604225 8604230 8604232 8604235
	Screw kit with gaskets - galvanized steel		DN 80 DN 100 DN 150	2214080 2214100 2214150
	- Stainless steel		DN 80 DN 100 DN 150	2214082 2214102 2214152

Stainless steel pipes, fittings on request. Electrical or electronic control panels for pumps and pump stations with accessories on request. Sumps of concrete or synthetic material for complete pump stations please see special leaflet.

HOMA Product Range

- Submersible waste water pumps
- Deep-well submersible pumps
- Submersible sewage pumps
- Submersible grinder pumps with cutter system
- Waste water disposal units
- Sewage disposal units
- Packaged pump stations
- Mixers and flow generators
- Injector systems for tank cleaning
- Garden pumps and domestic booster units
- Control boxes

Worldwide Presence

HOMA pumps are installed in more than 100 countries around the world – in countless projects of various kinds. They comply with international safety and quality standards and are certified by many institutions and organizations responsible for national waste water treatment standards. To maintain and further develop this high quality level is our main target.

Network of Sales and Service Partners

HOMA provides a worldwide network of agents and distributors supporting our customer with excellent sales and service assistance in planning, specification and selection, including a computer software program available on CD-ROM or from the WorldWideWeb.

HOMA Pumpenfabrik GmbH

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