



HOMA: QUALITY PRODUCTS FOR WASTE WATER SYSTEMS

HIGH EFFICIENCY AND ECONOMIC VIABILITY

Submersible pumps from HOMA have been in use around the world for decades. Requirements for the waste water sector are constantly increasing. HOMA products go beyond state of the art – through the continual optimisation of their hydraulic components and motors, they ensure economic operation and an affordable purchase price. All of the company's expertise and creative potential have been incorporated into its products and services – for maximum customer benefit.

INDIVIDUAL POSSIBILITIES, OPTIMUM SOLUTIONS

HOMA unites safety, economic viability, high quality and robust system technology with customisation options: the product spectrum ranges from complete pump stations with pumps, valves, pipework, pre-assembled concrete or plastic sumps, through to electronic control systems. The focus is on optimum design with cost effective workflows on site for all installation types.

HIGHER FUNCTIONAL RELIABILITY, LOWER ENERGY CONSUMPTION

With HOMA you are always in good hands – our pump stations are controlled and monitored fully automatically, and faults are registered automatically, too. The pumps run with the lowest possible energy consumption, which is also ensured by optimally matched water level control devices, such as floats, pneumatics, ultrasound and hydrostatic level sensors (ENS sensors).

In many cases, both the pump and control system have to meet the relevant requirements and regulations on explosion protection. All HOMA pumps are therefore also available as explosion-proof versions.



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 A BROAD RANGE OF APPLICATIONS

MULTIPLE DEMANDS – INDIVIDUAL SOLUTIONS

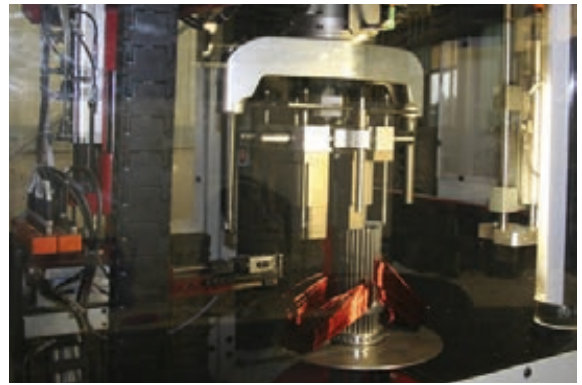
Submersible waste water pumps from HOMA convey domestic, public and industrial waste water, sewage (containing faeces), and sludge (which may contain high levels of solid and fibrous matter), as well as domestic waste water of any kind. Thanks to the use of a broad range of materials (stainless steel in different grades, bronze, Viton, etc.), HOMA submersible pumps are suitable for a wide variety of industrial applications.

- Industrial waste water
- Sewage treatment plants
- Large scale pump stations
- Industrial applications
- Oil and gas
- Power station construction
- Mining
- Chemical processes
- Shipbuilding/offshore sector

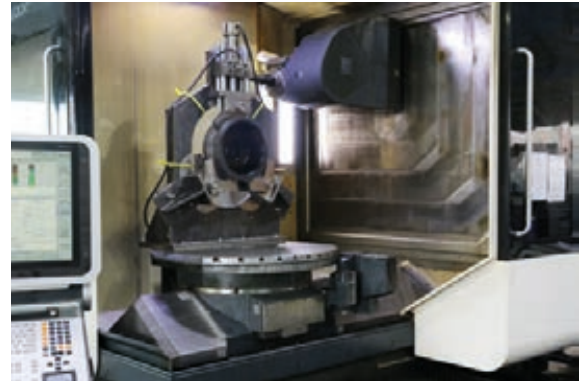
MORE POWER FOR EVERY REQUIREMENT

HOMA pumps are used in all manner of applications: to supply water to power stations, as seepage pumps in coal mines, drainage pumps in infrastructure projects, waste water pumps for industrial waste water, or as ballast pumps in the shipbuilding and marine sector. Customers benefit from proven features tried and tested in real life applications, such as:

- A range of different impellers, depending on the medium being conveyed, e.g. special symmetries, hardened materials and ceramic coatings
- Motors suitable for continuous operation, with or without cooling jackets
- High grade materials
- Robust construction



In-house motor production allows various voltages and frequencies

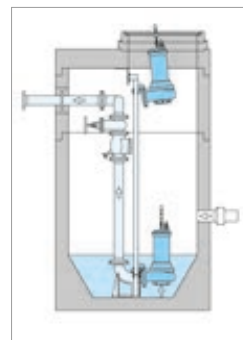


By machining all needed components in our own workshop on modern precision equipment we are able to assure efficiency and flexibility.

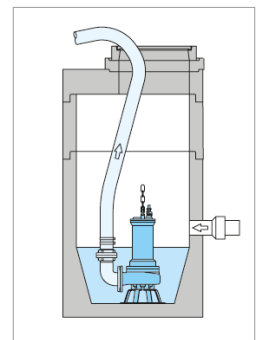
DIFFERENT INSTALLATION TYPES ALLOW GREATER EASE OF SERVICE

STATIONARY WET WELL INSTALLATION

The pump is connected to the pressure pipe and is made pressure-tight by means of a coupling base attached to the bottom of the sump. For maintenance or repair, it can be removed from its operating position from above through the sump opening via a permanently installed double pipe feed. The pump is attached and detached automatically; it is not necessary to enter the sump. With its flexible rubber gasket, the HOMA coupling system thereby ensures a secure, permanent, leak-free seal between the pump and the pressure pipe.



Permanent wet well installation



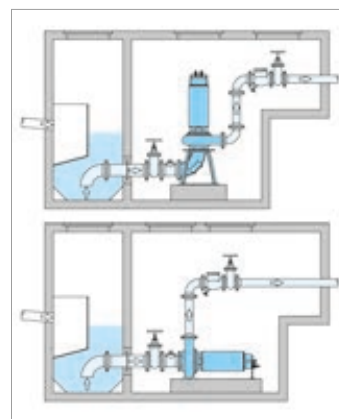
Transportable wet well installation

MOBILE WET WELL INSTALLATION

Universal installation for immersion in trenches and sumps, for use over a limited period, emergency operation or service operation. Can be used with a pressure hose or pressure pipe.

STATIONARY DRY WELL INSTALLATION – VERTICAL OR HORIZONTAL

Flood-proof installation for pump stations with a separate collection sump. Flange connection for suction pipe and pressure pipe.



Permanent dry well installation



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 start:

In the standard version, pumps are supplied for direct start and star-delta start.

All motors are available for frequency converter and soft start operation.

Explosion protection:

Depending on the assembly group, also available in explosion-proof design.

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), PTC thermistor or PT100 (on request).

Depending on version available with:

- oil chamber monitoring probe
- moisture monitoring of the cable connection chamber
- moisture monitoring of the stator chamber
- Temperature monitoring of bearings

PUMP TYPE CODE

Range	Impeller design	Discharge size	Spherical clearance	Impeller diameter	Motor frame size	Jacket cooled motor	Motor power (coded)	Motor speed	Monitoring sensors	Explosion protection
Pump					Motor					
	MXS	2	4	48-	T	(U)	6	4	(S)	(EX)
	MXS 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		2 = 2pole (2900 rpm) 4 = 4pole (1450 rpm) 6 = 6pole (960 rpm)	Only for motors without jacket cooling 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.



MXS
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

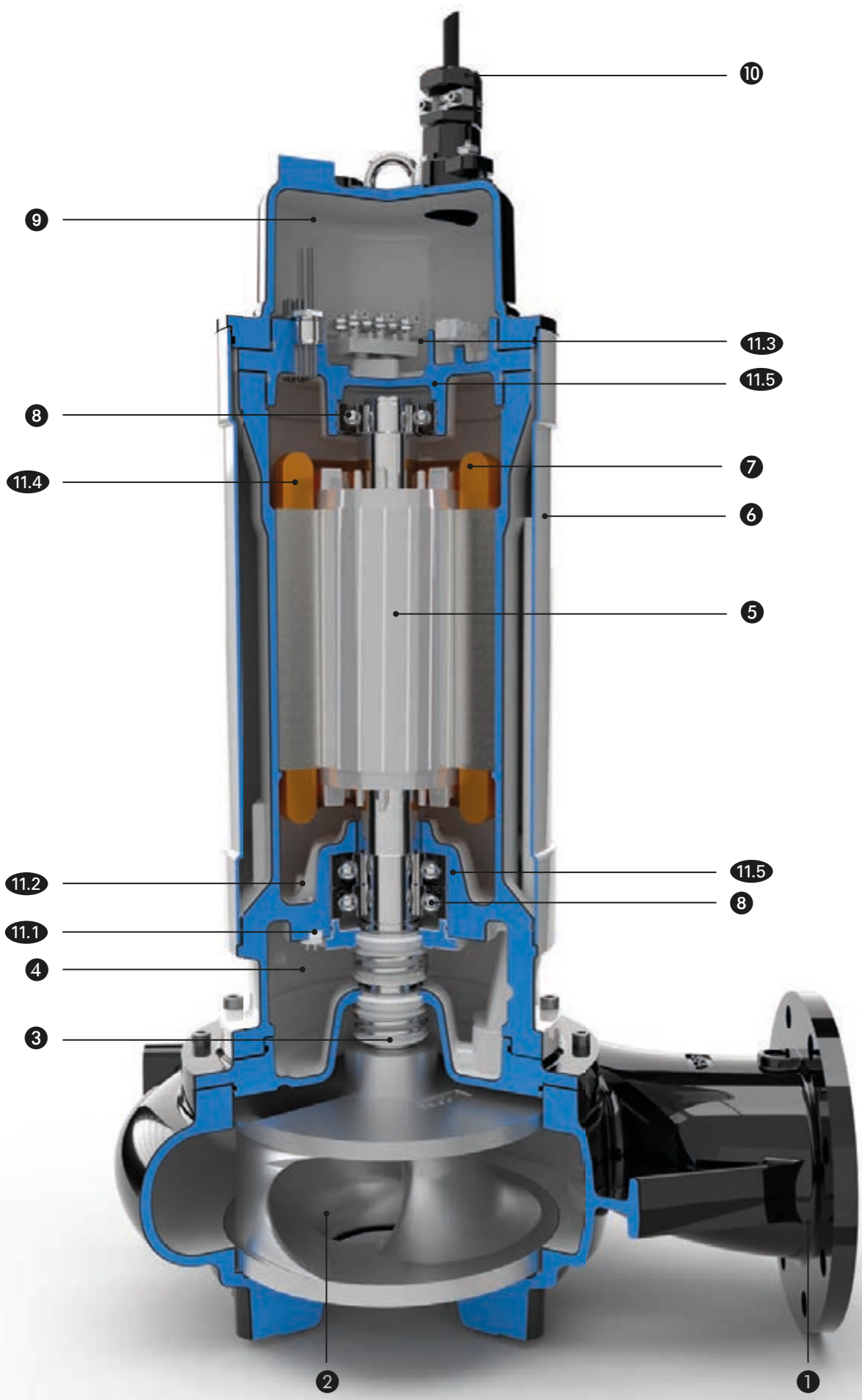
For liquids containing impurities and sludge with solid particles.



V(X)
Vortex impeller

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

DESIGN – WELL THOUGHT OUT AT EVERY STAGE



SUPERIOR MATERIAL QUALITY – LOWER SUSCEPTIBILITY TO FAILURE

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 large spherical clearance. 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

Oil-filled sealing chamber with screw for inspection. All motors with seal monitoring in the oil chamber as standard.

❺ MOTOR

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

EXPLOSION PROTECTION

Depending on the assembly group, also available in explosion-proof design.

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).

❼ MOTOR WINDING

Motor winding with temperature monitoring by bimetal switch. PTC thermistor and PT100 on request.

❽ SHAFT BEARINGS

Robust, maintenance-free, permanently lubricated roller bearings. Temperature monitoring of shaft bearings on request.

❾ JUNCTION CHAMBER

Water pressure-tight encapsulated cable connection compartment, standard for F(U), G(U) motor. Optional for P(U) motor.

❿ CABLE INLET

Water pressure-tight cable inlet with cable H07RN8-F. Shielded cable on request.

⓫ MOTOR MONITORING

11.1 Seal monitoring of oil chamber (standard)

11.2 Seal monitoring of motor housing (on request)

11.3 Seal monitoring junction chamber (Standard for F and G motor. P(U), FU, GU motor optional)

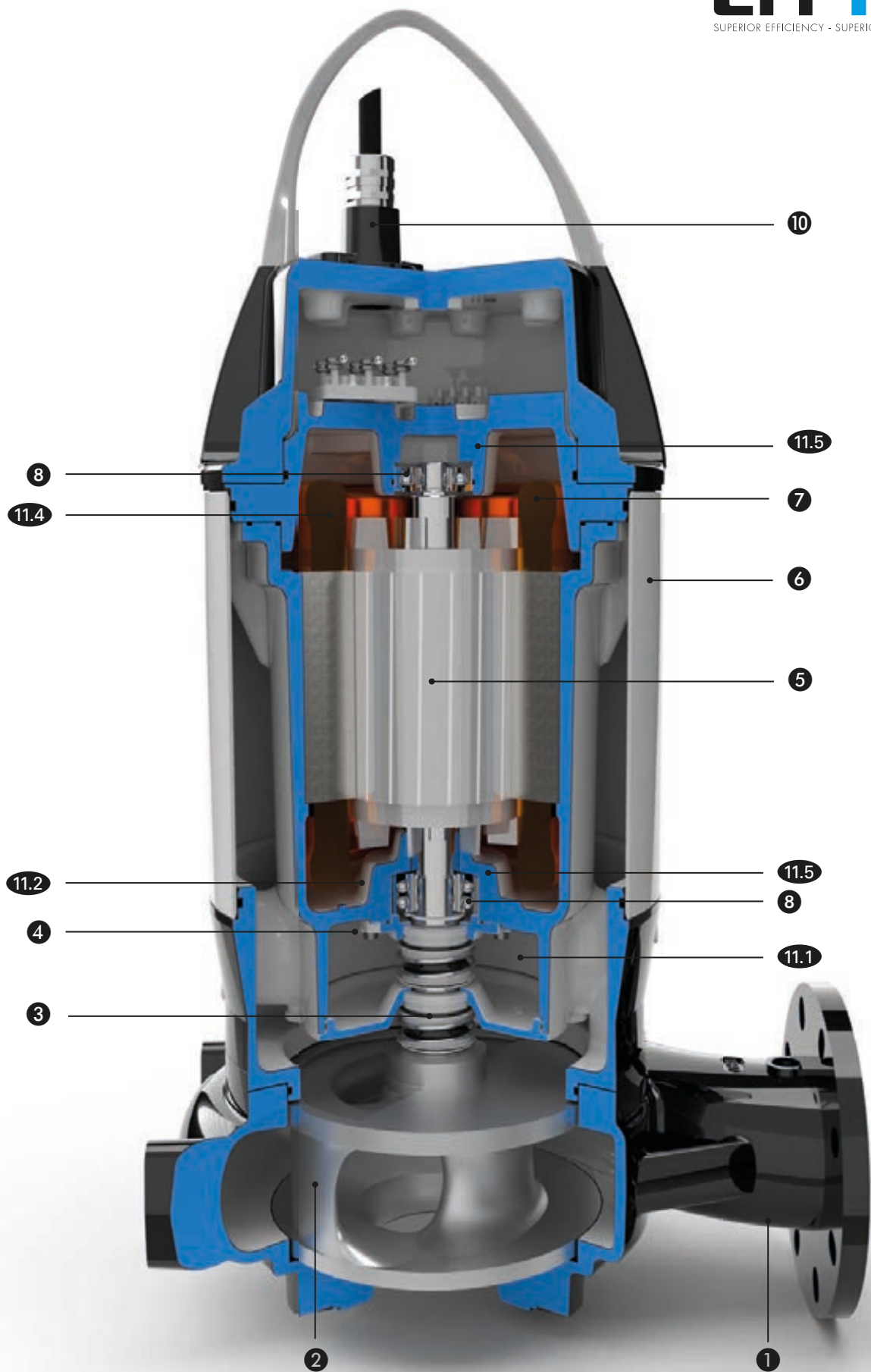
11.4 Temperature monitoring of winding by bimetal switch (standard). PTC thermistor and PT100 on request

11.5 Temperature monitoring of upper and lower bearings by PT100 (on request)

MATERIALS

Motor housing	Cast iron EN-GJL-250 (stainless steel optional)
Pump housing	Cast iron EN-GJL-250 (stainless steel optional)
Impeller	Cast iron EN-GJL-250 (stainless steel optional)
Wear rings	Bronze
Motor shaft	Stainless steel
Mechanical seals	Silicon-carbide / Silicon-carbide
Motor cooling jacket (model U)	Stainless steel
Seals and O-rings	Perbonane NBR (Viton FPN optional)
Cable	H07RN8-F

NEW EFFTEC-MOTORS: INNOVATIVE TECHNOLOGY - GREAT EFFICIENCY



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 sealing chamber with screw for inspection. All motors with seal monitoring in the oil chamber as standard.

❺ MOTOR

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

EXPLOSION PROTECTION

Depending on the assembly group, also available in explosion-proof design.

❻ MOTOR COOLING PERMACOOL

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



The new innovative PermaCool motor cooling

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 MOTOR WINDING

Motor winding with temperature monitoring by bimetal switch. PTC thermistor and PT100 on request.

❽ SHAFT BEARINGS

Robust, maintenance-free, permanently lubricated roller bearings. Temperature monitoring of shaft bearings on request.

❿ CABLE INLET

Water pressure-tight cable inlet with cable H07RN8-F. Shielded cable on request.

⓫ MOTOR MONITORING

11.1 Seal monitoring of oil chamber (standard)

11.2 Seal monitoring of motor housing (on request)

11.4 Temperature monitoring of winding by bimetal switch (standard). PTC thermistor and PT100 on request

11.5 Temperature monitoring of upper and lower bearings by PT100 (on request)

MATERIALS

Motor housing	Cast Iron EN-GJL-250
Pump housing	Cast Iron EN-GJL-250 (stainless steel optional)
Impeller	Cast Iron EN-GJL-250 (stainless steel optional)
Wear ring	Bronze
Motor shaft	Stainless Steel
Mechanical seals	Silicon Carbide / Silicon Carbide
Cooling jacket	Stainless Steel
Seals / O-Rings	Perbonane NBR (Viton FPN optional)
Cable	H07RN8-F

DN 80 - MXS13...-2 POLE



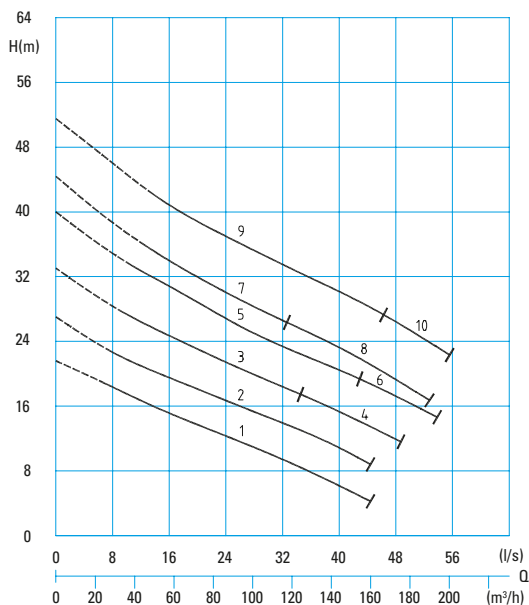
Enclosed single channel impeller

80 mm Ø Spherical clearance

2900 rpm



HYDRAULIC PERFORMANCE

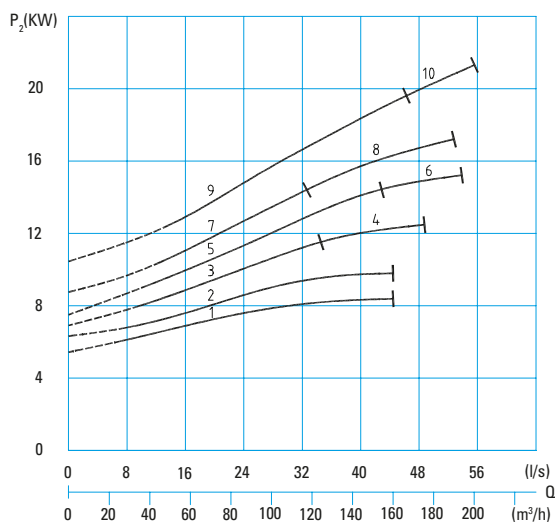


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS1328-T72 (Ex)	11,0	9,5	18,8	120	120
②	MXS1330-T82 (Ex)	13,0	11,5	22,2	123	123
③	MXS1332-T82 (Ex)	13,0	11,5	22,2	123	123
④	MXS1332-P92 (Ex)	16,0	14,4	27,0	178	190
⑤	MXS1334-P92 (Ex)	16,0	14,4	27,0	178	190
⑥	MXS1334-P102 (Ex)	22,0	19,6	36,9	178	190
⑦	MXS1336-P92 (Ex)	16,0	14,4	27,0	180	192
⑧	MXS1336-P102 (Ex)	22,0	19,6	36,9	180	192
⑨	MXS1338-P102 (Ex)	22,0	19,6	36,9	180	192
⑩	MXS1338-P122 (Ex)	28,0	25,4	46,3	198	210

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS1328-ET72 (Ex)	10,5	9,5	20,1	146	146
②	MXS1330-ET82 (Ex)	12,7	11,5	22,7	146	146
③	MXS1332-ET82 (Ex)	12,7	11,5	22,7	146	146
④	MXS1332-PU92 (Ex)	16,0	14,4	27,0	189	201
⑤	MXS1334-PU92 (Ex)	16,0	14,4	27,0	189	201
⑥	MXS1334-PU102 (Ex)	22,0	19,6	36,9	189	201
⑦	MXS1336-PU92 (Ex)	16,0	14,4	27,0	191	203
⑧	MXS1336-PU102 (Ex)	22,0	19,6	36,9	191	203
⑨	MXS1338-PU102 (Ex)	22,0	19,6	36,9	191	203
⑩	MXS1338-PU122 (Ex)	28,0	25,4	46,3	211	223

DN 80 - MXS13...-4 POLE

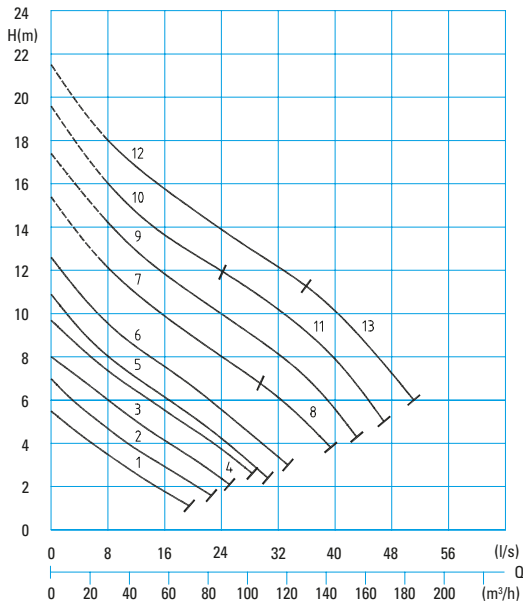


Enclosed single channel impeller

80 mm Ø Spherical clearance
1450 rpm



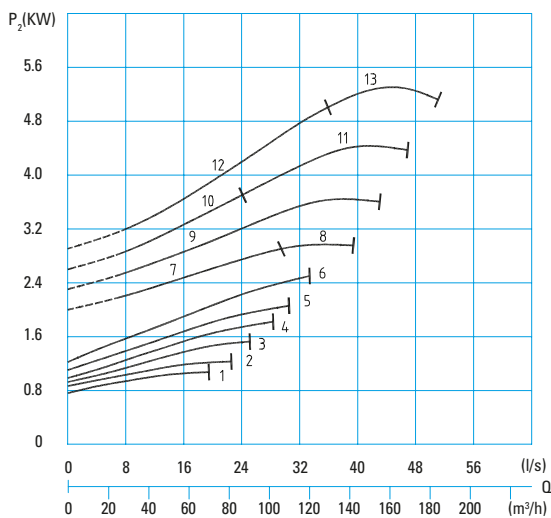
HYDRAULIC PERFORMANCE



Technical data

Curve Pump type		Motor	Rated	Weight	Weight	
No.		P ₁ (kW)	P ₂ (kW)	current (A)	normal (kg)	Ex (kg)
①	MXS1328-C24 (Ex)	1,7	1,3	3,3	74	74
②	MXS1330-C24 (Ex)	1,7	1,3	3,3	74	74
③	MXS1332-D44 (Ex)	3,4	2,6	6,2	80	80
④	MXS1334-D44 (Ex)	3,4	2,6	6,2	80	80
⑤	MXS1336-D44 (Ex)	3,4	2,6	6,2	82	82
⑥	MXS1338-D44 (Ex)	3,4	2,6	6,2	82	82
⑦	MXS1340-T34 (Ex)	3,4	2,9	5,8	117	117
⑧	MXS1340-T44 (Ex)	4,4	3,7	8,1	121	121
⑨	MXS1342-T44 (Ex)	4,4	3,7	8,1	121	121
⑩	MXS1344-T44 (Ex)	4,4	3,7	8,1	121	121
⑪	MXS1344-T54 (Ex)	5,9	5,0	9,9	131	131
⑫	MXS1346-T54 (Ex)	5,9	5,0	9,9	131	131
⑬	MXS1346-T64 (Ex)	7,7	6,5	13,1	134	134

MOTOR OUTPUT



Technical data

Curve Pump type		Motor	Rated	Weight	Weight	
No.		P ₁ (kW)	P ₂ (kW)	current (A)	normal (kg)	Ex (kg)
①	MXS1328-ET34 (Ex)	3,3	2,9	5,9	128	128
②	MXS1330-ET34 (Ex)	3,3	2,9	5,9	128	128
③	MXS1332-ET34 (Ex)	3,3	2,9	5,9	128	128
④	MXS1334-ET34 (Ex)	3,3	2,9	5,9	128	128
⑤	MXS1336-ET34 (Ex)	3,3	2,9	5,9	130	130
⑥	MXS1338-ET34 (Ex)	3,3	2,9	5,9	130	130
⑦	MXS1340-ET34 (Ex)	3,3	2,9	5,9	134	134
⑧	MXS1340-ET44 (Ex)	4,3	3,7	7,3	134	134
⑨	MXS1342-ET44 (Ex)	4,3	3,7	7,3	134	134
⑩	MXS1344-ET44 (Ex)	4,3	3,7	7,3	134	134
⑪	MXS1344-ET54 (Ex)	6,1	5,0	10,2	134	134
⑫	MXS1346-ET54 (Ex)	6,1	5,0	10,2	134	134
⑬	MXS1346-ET64 (Ex)	7,4	6,5	13,4	152	152

DN 80 - V13...-2 POLE

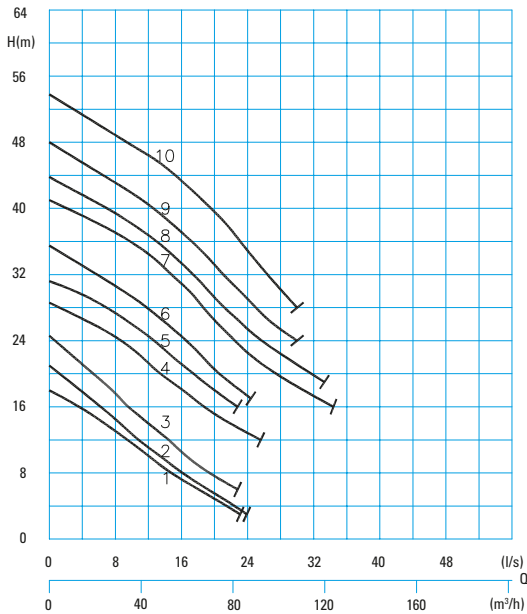


Vortex impeller

80 mm Ø Spherical clearance
2900 rpm



HYDRAULIC PERFORMANCE

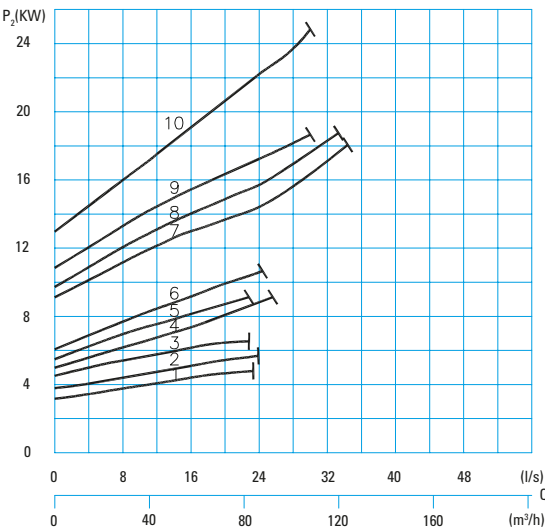


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor		Rated current (A)	Weight normal (kg)	Weight Ex (kg)
		P ₁ (kW)	P ₂ (kW)			
①	V1332-T62 (Ex)	7,5	6,4	13,0	91	91
②	V1333-T62 (Ex)	7,5	6,4	13,0	91	91
③	V1334-T62 (Ex)	7,5	6,4	13,0	91	91
④	V1335-T72 (Ex)	11,0	9,5	18,8	103	103
⑤	V1337-T72 (Ex)	11,0	9,5	18,8	103	103
⑥	V1339-T82 (Ex)	13,0	11,5	22,2	108	108
⑦	V1342-P102 (Ex)	22,0	19,6	36,9	176	188
⑧	V1343-P102 (Ex)	22,0	19,6	36,9	176	188
⑨	V1344-P122 (Ex)	28,0	25,4	46,3	196	208
⑩	V1345-P122 (Ex)	28,0	25,4	46,3	196	208

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor		Rated current (A)	Weight normal (kg)	Weight Ex (kg)
		P ₁ (kW)	P ₂ (kW)			
①	V1332-ET62 (Ex)	7,3	6,4	12,4	119	119
②	V1333-ET62 (Ex)	7,3	6,4	12,4	119	119
③	V1334-ET62 (Ex)	7,3	6,4	12,4	119	119
④	V1335-ET72 (Ex)	10,5	9,5	20,1	139	139
⑤	V1337-ET72 (Ex)	10,5	9,5	20,1	139	139
⑥	V1339-ET82 (Ex)	12,7	11,5	22,7	139	139
⑦	V1342-PU102 (Ex)	22,0	19,6	36,9	188	200
⑧	V1343-PU102 (Ex)	22,0	19,6	36,9	188	200
⑨	V1344-PU122 (Ex)	28,0	25,4	46,3	196	208
⑩	V1345-PU122 (Ex)	28,0	25,4	46,3	208	220

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

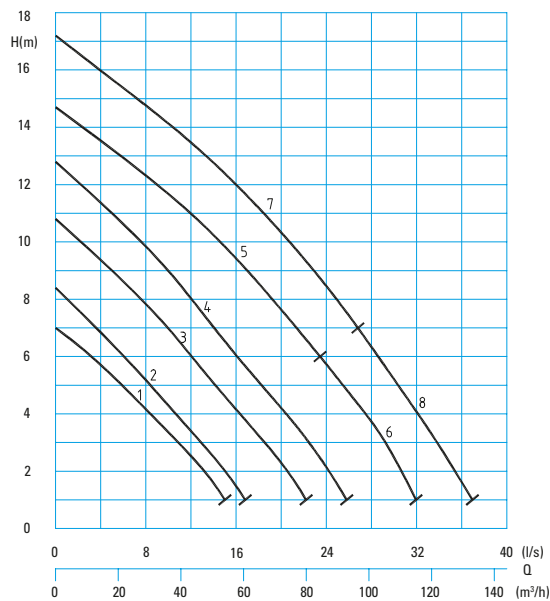


Vortex impeller

80 mm Ø Spherical clearance
1450 rpm



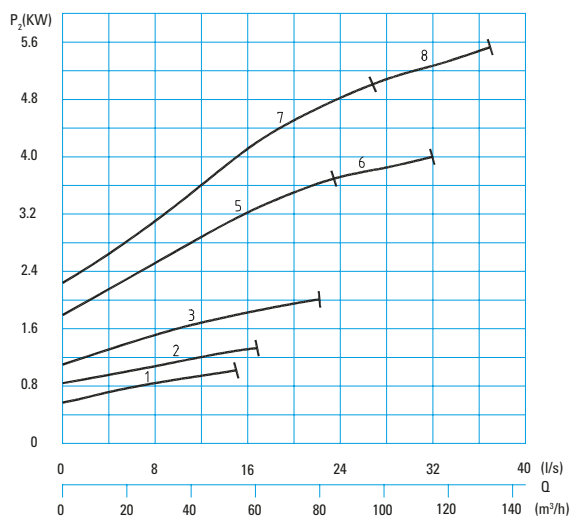
HYDRAULIC PERFORMANCE



Technical data

Curve No.	Pump type	WET WELL INSTALLATION				
		P ₁ (kW)	P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V1334-C24 (Ex)	1,7	1,3	3,3	63	64
②	V1336-C24 (Ex)	1,7	1,3	3,3	63	64
③	V1344-D44 (Ex)	3,4	2,6	6,2	66	67
④	V1346-D44 (Ex)	3,4	2,6	6,2	66	67
⑤	VX1345-T44 (Ex)	4,4	3,7	7,5	105	105
⑥	VX1345-T54 (Ex)	5,9	5,0	9,9	118	118
⑦	VX1346-T54 (Ex)	5,9	5,0	9,9	118	118
⑧	VX1346-T64 (Ex)	7,7	6,5	13,1	121	121

MOTOR OUTPUT



Technical data

Curve No.	Pump type	DRY WELL INSTALLATION				
		P ₁ (kW)	P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	V1334-ET34 (Ex)	3,3	2,9	5,9	121	121
②	V1336-ET34 (Ex)	3,3	2,9	5,9	121	121
③	V1344-ET34 (Ex)	3,3	2,9	5,9	122	122
⑤	VX1345-ET44 (Ex)	4,3	3,7	7,3	122	122
⑥	VX1345-ET54 (Ex)	6,1	5,0	10,2	122	122
⑦	VX1346-ET54 (Ex)	6,1	5,0	10,2	122	122
⑧	VX1346-ET64 (Ex)	7,4	6,5	13,4	139	139

DN 100 - MXS23...-2 POLE



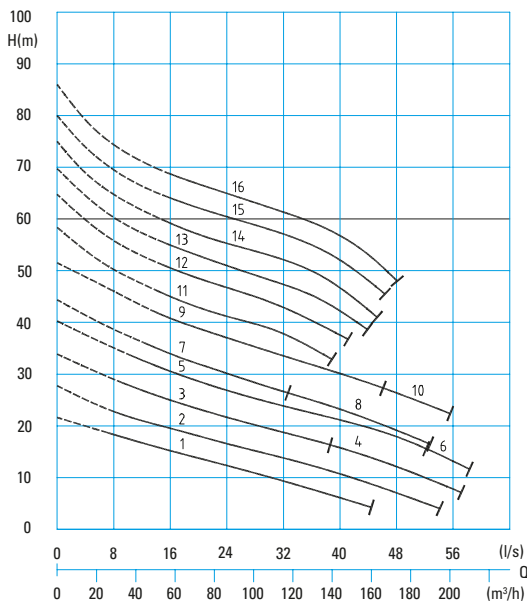
Enclosed single channel impeller

80 mm Ø Spherical clearance

2900 rpm



HYDRAULIC PERFORMANCE

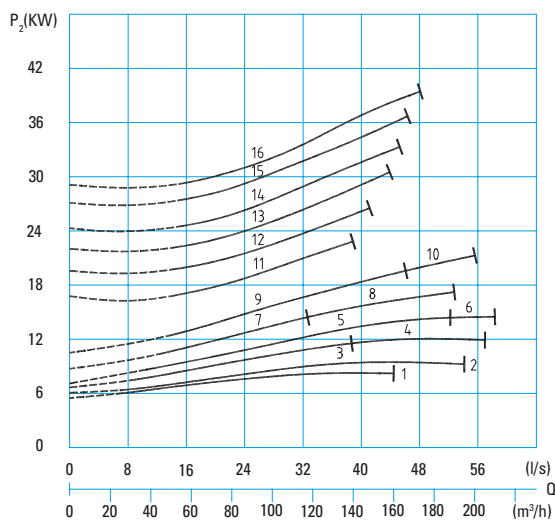


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2328-T72 (Ex)	11,0	9,5	18,8	120	120
②	MXS2330-T82 (Ex)	13,0	11,5	22,2	123	123
③	MXS2332-T82 (Ex)	13,0	11,5	22,2	123	123
④	MXS2332-P92 (Ex)	16,0	14,4	27,0	178	190
⑤	MXS2334-P92 (Ex)	16,0	14,4	27,0	178	190
⑥	MXS2334-P102 (Ex)	22,0	19,6	36,9	178	190
⑦	MXS2336-P92 (Ex)	16,0	14,4	27,0	180	192
⑧	MXS2336-P102 (Ex)	22,0	19,6	36,9	180	192
⑨	MXS2338-P102 (Ex)	22,0	19,6	36,9	180	192
⑩	MXS2338-P122 (Ex)	28,0	25,4	46,3	198	210
⑪	MXS2340-F152	38,0	35,0	59,4	383	383
⑫	MXS2341-F152	38,0	35,0	59,4	383	383
⑬	MXS2342-F152	38,0	35,0	59,4	383	383
⑭	MXS2344-F152	38,0	35,0	59,4	383	383
⑮	MXS2345-F162	43,0	40,0	67,5	390	390
⑯	MXS2346-F162	43,0	40,0	67,5	390	390

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2328-ET72 (Ex)	10,5	9,5	20,1	146	146
②	MXS2330-ET82 (Ex)	12,7	11,5	22,7	146	146
③	MXS2332-ET82 (Ex)	12,7	11,5	22,7	146	146
④	MXS2332-PU92 (Ex)	16,0	14,4	27,0	189	201
⑤	MXS2334-PU92 (Ex)	16,0	14,4	27,0	189	201
⑥	MXS2334-PU102 (Ex)	22,0	19,6	36,9	189	201
⑦	MXS2336-PU92 (Ex)	16,0	14,4	27,0	191	203
⑧	MXS2336-PU102 (Ex)	22,0	19,6	36,9	191	203
⑨	MXS2338-PU102 (Ex)	22,0	19,6	36,9	191	203
⑩	MXS2338-PU122 (Ex)	28,0	25,4	46,3	211	223
⑪	MXS2340-FU152	38,0	35,0	59,4	409	409
⑫	MXS2341-FU152	38,0	35,0	59,4	409	409
⑬	MXS2342-FU152	38,0	35,0	59,4	409	409
⑭	MXS2344-FU152	38,0	35,0	59,4	409	409
⑮	MXS2345-FU162	43,0	40,0	67,5	416	416
⑯	MXS2346-FU162	43,0	40,0	67,5	416	416

DN 100 - MXS23...-4 POLE



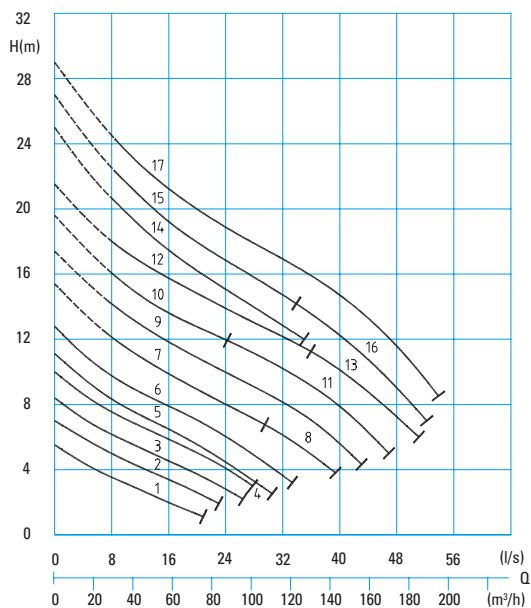
Enclosed single channel impeller

80 mm Ø Spherical clearance

1450 rpm



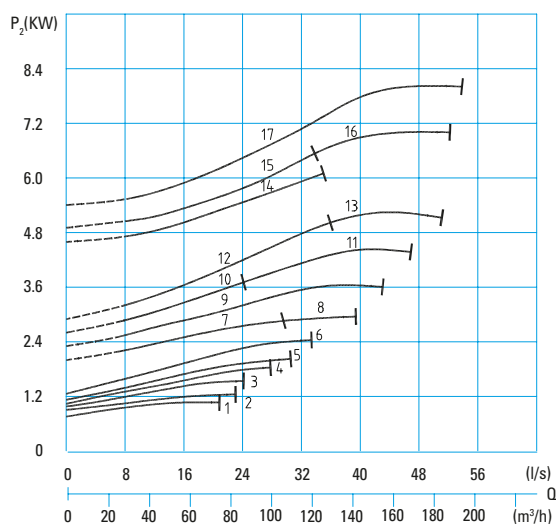
HYDRAULIC PERFORMANCE



Technical data

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2328-C24 (Ex)	1,7	1,3	3,3	74	74
②	MXS2330-C24(Ex)	1,7	1,3	3,3	74	74
③	MXS2332-D44 (Ex)	3,4	2,6	6,2	80	80
④	MXS2334-D44 (Ex)	3,4	2,6	6,2	80	80
⑤	MXS2336-D44 (Ex)	3,4	2,6	6,2	82	82
⑥	MXS2338-D44 (Ex)	3,4	2,6	6,2	82	82
⑦	MXS2340-T34 (Ex)	3,4	2,9	5,8	118	118
⑧	MXS2340-T44 (Ex)	4,4	3,7	8,1	122	122
⑨	MXS2342-T44 (Ex)	4,4	3,7	8,1	122	122
⑩	MXS2344-T44 (Ex)	4,4	3,7	8,1	122	122
⑪	MXS2344-T54 (Ex)	5,9	5,0	9,9	132	132
⑫	MXS2346-T54 (Ex)	5,9	5,0	9,9	132	132
⑬	MXS2346-T64 (Ex)	7,7	6,5	13,1	135	135
⑭	MXS2350-T64 (Ex)	7,7	6,5	13,1	142	142
⑮	MXS2351-T64 (Ex)	7,7	6,5	13,1	142	142
⑯	MXS2351-ET74 (Ex)	9,8	8,5	16,8	168	168
⑰	MXS2352-ET74 (Ex)	9,8	8,5	16,8	168	168

MOTOR OUTPUT



Technical data

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2328-ET34 (Ex)	3,3	2,9	5,9	128	128
②	MXS2330-ET34 (Ex)	3,3	2,9	5,9	128	128
③	MXS2332-ET34 (Ex)	3,3	2,9	5,9	128	128
④	MXS2334-ET34 (Ex)	3,3	2,9	5,9	128	128
⑤	MXS2336-ET34 (Ex)	3,3	2,9	5,9	130	130
⑥	MXS2338-ET34 (Ex)	3,3	2,9	5,9	130	130
⑦	MXS2340-ET34 (Ex)	3,3	2,9	5,9	135	135
⑧	MXS2340-ET44 (Ex)	4,3	3,7	7,3	135	135
⑨	MXS2342-ET44 (Ex)	4,3	3,7	7,3	135	135
⑩	MXS2344-ET44 (Ex)	4,3	3,7	7,3	135	135
⑪	MXS2344-ET54 (Ex)	6,1	5,0	10,2	135	135
⑫	MXS2346-ET54 (Ex)	6,1	5,0	10,2	135	135
⑬	MXS2346-ET64 (Ex)	7,4	6,5	13,4	153	153
⑭	MXS2350-ET64 (Ex)	7,4	6,5	13,4	168	168
⑮	MXS2351-ET64 (Ex)	7,4	6,5	13,4	168	168
⑯	MXS2351-ET74 (Ex)	9,8	8,5	16,8	168	168
⑰	MXS2352-ET74 (Ex)	9,8	8,5	16,8	168	168

DN 100 - KX23...-4 POLE



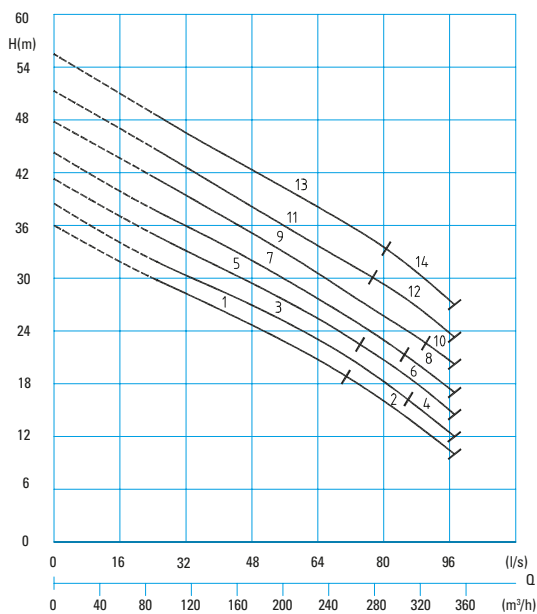
Enclosed two channel impeller

80 mm Ø Spherical clearance

1450 rpm



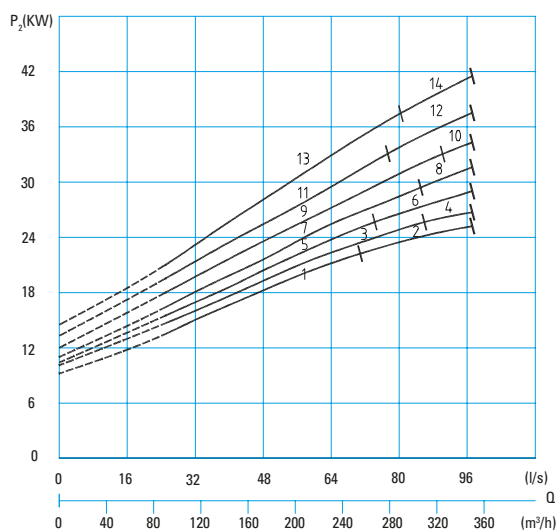
HYDRAULIC PERFORMANCE



Technical data

Curve No.	Pump type	WET WELL INSTALLATION				
		P ₁ (kW)	P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	KX2360-F114 (Ex)	25,0	22,0	44,0	429	429
②	KX2360-F124 (Ex)	29,1	25,6	51,4	451	451
③	KX2362-F124 (Ex)	29,1	25,6	51,4	452	452
④	KX2362-F134 (Ex)	32,8	29,2	59,0	467	467
⑤	KX2364-F124 (Ex)	29,1	25,6	51,4	453	453
⑥	KX2364-F134 (Ex)	32,8	29,2	59,0	468	468
⑦	KX2366-F134 (Ex)	32,8	29,2	59,0	469	469
⑧	KX2366-F144 (Ex)	37,1	33,0	67,1	484	484
⑨	KX2368-F144 (Ex)	37,1	33,0	67,1	485	485
⑩	KX2368-G154 (Ex)	41,1	37,4	70,4	502	502
⑪	KX2370-G144 (Ex)	37,1	33,0	67,1	486	486
⑫	KX2370-G154 (Ex)	41,1	37,4	70,4	503	503
⑬	KX2372-G154 (Ex)	41,1	37,4	70,4	504	504
⑭	KX2372-G174 (Ex)	50,1	46,1	84,3	532	532

MOTOR OUTPUT



Technical data

Curve No.	Pump type	DRY WELL INSTALLATION				
		P ₁ (kW)	P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	KX2360-FU114 (Ex)	25,0	22,0	44,0	450	450
②	KX2360-FU124 (Ex)	29,1	25,6	51,4	477	477
③	KX2362-FU124 (Ex)	29,1	25,6	51,4	478	478
④	KX2362-FU134 (Ex)	32,8	29,2	59,0	493	493
⑤	KX2364-FU124 (Ex)	29,1	25,6	51,4	479	479
⑥	KX2364-FU134 (Ex)	32,8	29,2	59,0	494	494
⑦	KX2366-FU134 (Ex)	32,8	29,2	59,0	495	495
⑧	KX2366-FU144 (Ex)	37,1	33,0	67,1	510	510
⑨	KX2368-FU144 (Ex)	37,1	33,0	67,1	511	511
⑩	KX2368-GU154 (Ex)	41,1	37,4	70,4	528	528
⑪	KX2370-GU144 (Ex)	37,1	33,0	67,1	512	512
⑫	KX2370-GU154 (Ex)	41,1	37,4	70,4	529	529
⑬	KX2372-GU154 (Ex)	41,1	37,4	70,4	530	530
⑭	KX2372-GU174 (Ex)	50,1	46,1	84,3	561	561

DN 100 - MXS24...-4 POLE



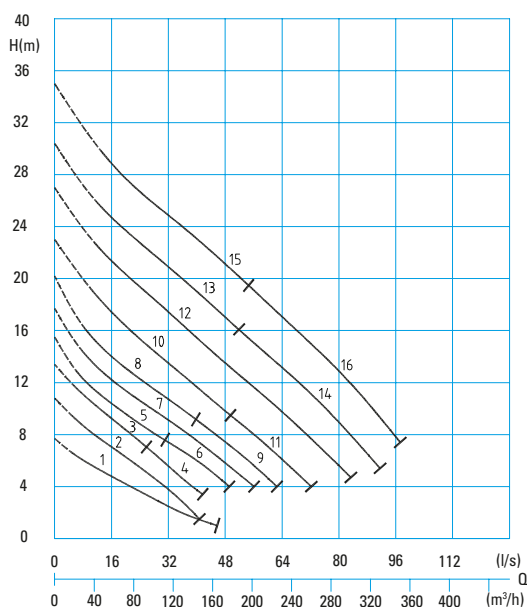
Enclosed single channel impeller

100 mm Ø Spherical clearance

1450 rpm



HYDRAULIC PERFORMANCE

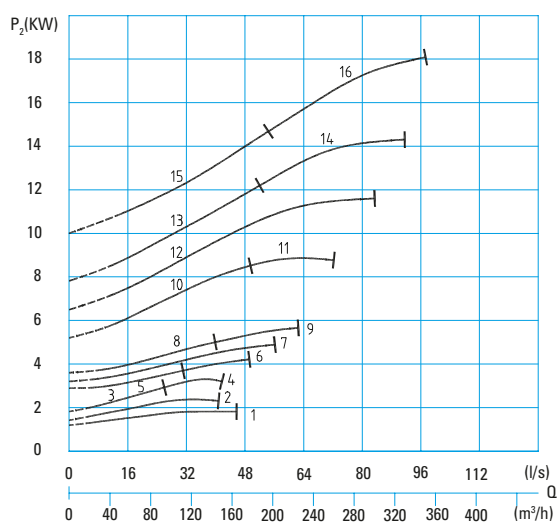


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2432-T34 (Ex)	3,4	2,9	5,8	102	102
②	MXS2436-T34 (Ex)	3,4	2,9	5,8	104	104
③	MXS2438-T34 (Ex)	3,4	2,9	5,8	104	104
④	MXS2438-T44 (Ex)	4,4	3,7	7,5	108	108
⑤	MXS2442-T44 (Ex)	4,4	3,7	7,5	129	129
⑥	MXS2442-T54 (Ex)	5,9	5,0	9,9	139	139
⑦	MXS2444-T54 (Ex)	5,9	5,0	9,9	139	139
⑧	MXS2446-T54 (Ex)	5,9	5,0	9,9	139	139
⑨	MXS2446-T64 (Ex)	7,7	6,5	13,1	142	142
⑩	MXS2450-ET74 (Ex)	9,8	8,5	16,8	184	184
⑪	MXS2450-P84 (Ex)	14,0	12,2	23,0	209	221
⑫	MXS2454-P84 (Ex)	14,0	12,2	23,0	209	221
⑬	MXS2457-P84 (Ex)	14,0	12,2	23,0	209	221
⑭	MXS2457-P94 (Ex)	17,0	14,6	28,8	209	221
⑮	MXS2460-P94 (Ex)	17,0	14,6	28,8	209	221
⑯	MXS2460-P104 (Ex)	22,0	19,3	36,5	231	243

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P_1 (kW)	Motor P_2 (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2432-ET34 (Ex)	3,3	2,9	5,9	138	138
②	MXS2436-ET34 (Ex)	3,3	2,9	5,9	138	138
③	MXS2438-ET34 (Ex)	3,3	2,9	5,9	138	138
④	MXS2438-ET44 (Ex)	4,3	3,7	7,3	138	138
⑤	MXS2442-ET44 (Ex)	4,3	3,7	7,3	142	142
⑥	MXS2442-ET54 (Ex)	6,1	5,0	10,2	142	142
⑦	MXS2444-ET54 (Ex)	6,1	5,0	10,2	142	142
⑧	MXS2446-ET54 (Ex)	6,1	5,0	10,2	142	142
⑨	MXS2446-ET64 (Ex)	7,4	6,5	13,4	160	160
⑩	MXS2450-ET74 (Ex)	9,8	8,5	16,8	184	184
⑪	MXS2450-PU84 (Ex)	14,0	12,2	23,0	219	231
⑫	MXS2454-PU84 (Ex)	14,0	12,2	23,0	219	231
⑬	MXS2457-PU84 (Ex)	14,0	12,2	23,0	219	231
⑭	MXS2457-PU94 (Ex)	17,0	14,6	28,8	219	231
⑮	MXS2460-PU94 (Ex)	17,0	14,6	28,8	219	231
⑯	MXS2460-PU104 (Ex)	22,0	19,3	36,5	244	256

DN 100 - MXS24...-6 POLE



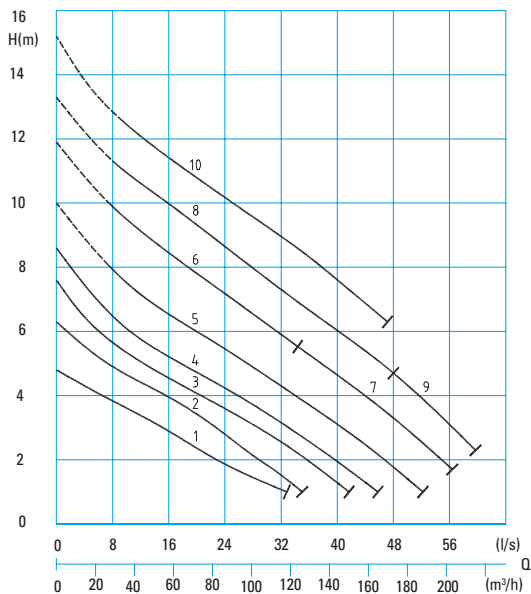
Enclosed single channel impeller

100 mm Ø Spherical clearance

960 rpm



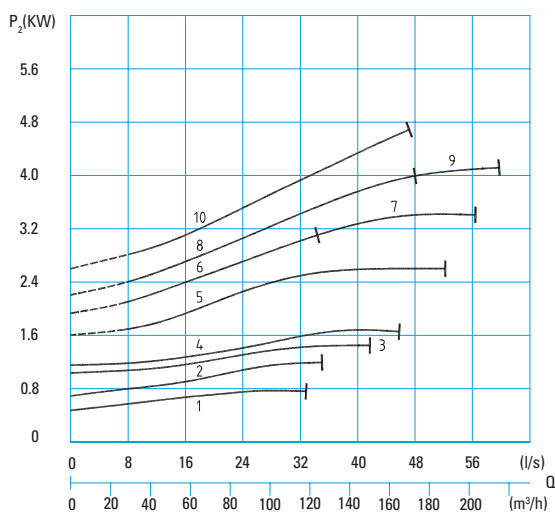
HYDRAULIC PERFORMANCE



Technical data

Curve Pump type		WET WELL INSTALLATION				
No.		P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2436-T36 (Ex)	3,0	2,3	5,4	104	104
②	MXS2438-T36 (Ex)	3,0	2,3	5,4	104	104
③	MXS2444-T26 (Ex)	2,1	1,6	4,0	125	125
④	MXS2446-T36 (Ex)	3,0	2,3	5,4	125	125
⑤	MXS2450-T46 (Ex)	4,0	3,1	7,3	145	145
⑥	MXS2454-T46 (Ex)	4,0	3,1	7,3	145	145
⑦	MXS2454-T56 (Ex)	5,0	4,0	9,6	155	155
⑧	MXS2457-T56 (Ex)	5,0	4,0	9,6	155	155
⑨	MXS2457-T66 (Ex)	6,0	4,9	11,5	158	158
⑩	MXS2460-T66 (Ex)	6,0	4,9	11,5	158	158

MOTOR OUTPUT



Technical data

Curve Pump type		DRY WELL INSTALLATION				
No.		P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS2436-ET36 (Ex)	2,7	2,3	4,9	156	156
②	MXS2438-ET36 (Ex)	2,7	2,3	4,9	156	156
③	MXS2444-ET26 (Ex)	1,8	1,6	3,8	160	160
④	MXS2446-ET36 (Ex)	2,7	2,3	4,9	160	160
⑤	MXS2450-ET46 (Ex)	3,6	3,1	6,6	184	184
⑥	MXS2454-ET46 (Ex)	3,6	3,1	6,6	184	184
⑦	MXS2454-ET56 (Ex)	4,7	4,0	8,3	184	184
⑧	MXS2457-ET56 (Ex)	4,7	4,0	8,3	184	184
⑨	MXS2457-ET66 (Ex)	5,9	4,9	10,3	184	184
⑩	MXS2460-ET66 (Ex)	5,9	4,9	10,3	184	184

DN 100 - VX24...-4 POLE



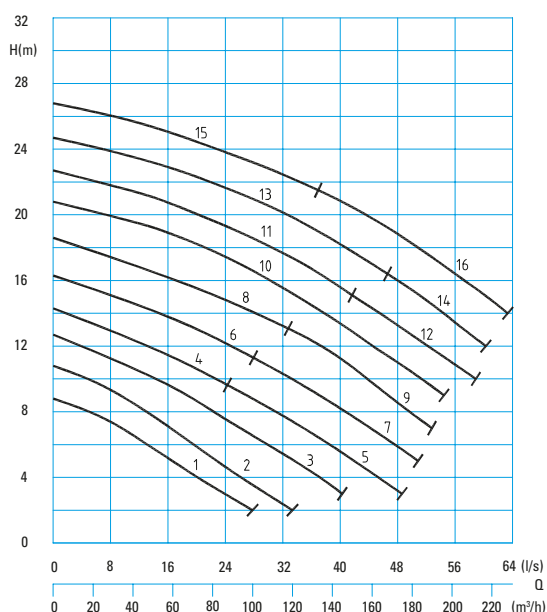
Vortex impeller

100 mm Ø Spherical clearance

1450 rpm



HYDRAULIC PERFORMANCE

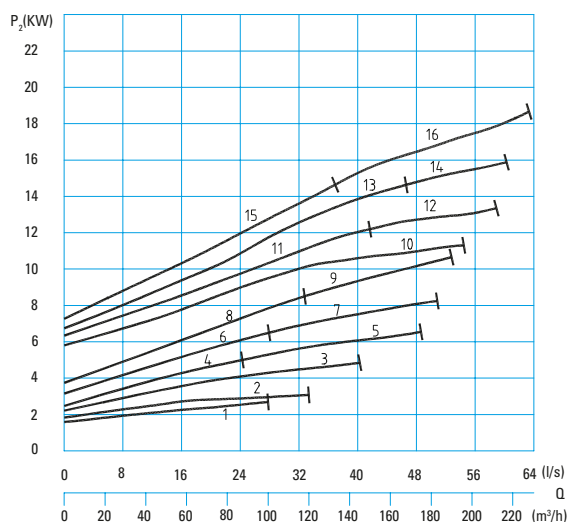


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX2436-D54 (Ex)	4,0	3,2	7,3	78	78
②	VX2439-D54 (Ex)	4,0	3,2	7,3	78	78
③	VX2440-T54 (Ex)	5,9	5,0	9,9	123	123
④	VX2442-T54 (Ex)	5,9	5,0	9,9	123	123
⑤	VX2442-T64 (Ex)	7,7	6,5	13,1	126	126
⑥	VX2444-T64 (Ex)	7,7	6,5	13,1	126	126
⑦	VX2444-ET74 (Ex)	9,8	8,5	16,8	144	144
⑧	VX2446-ET74 (Ex)	9,8	8,5	16,8	144	144
⑨	VX2446-P84 (Ex)	14,0	12,2	23,0	177	189
⑩	VX2452-P84 (Ex)	14,0	12,2	23,0	205	217
⑪	VX2454-P84 (Ex)	14,0	12,2	23,0	205	217
⑫	VX2454-P94 (Ex)	17,0	14,6	28,8	205	217
⑬	VX2456-P94 (Ex)	17,0	14,6	28,8	205	217
⑭	VX2456-P104 (Ex)	22,0	19,3	36,5	227	239
⑮	VX2458-P94 (Ex)	17,0	14,6	28,8	205	217
⑯	VX2458-P104 (Ex)	22,0	19,3	36,5	227	239

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	VX2436-ET44 (Ex)	4,3	3,7	7,3	123	123
②	VX2439-ET44 (Ex)	4,3	3,7	7,3	123	123
③	VX2440-ET54 (Ex)	6,1	5,0	10,2	126	126
④	VX2442-ET54 (Ex)	6,1	5,0	10,2	126	126
⑤	VX2442-ET64 (Ex)	7,4	6,5	13,4	144	144
⑥	VX2444-ET64 (Ex)	7,4	6,5	13,4	144	144
⑦	VX2444-ET74 (Ex)	9,8	8,5	16,8	144	144
⑧	VX2446-ET74 (Ex)	9,8	8,5	16,8	144	144
⑨	VX2446-PU84 (Ex)	14,0	12,2	23,0	187	199
⑩	VX2452-PU84 (Ex)	14,0	12,2	23,0	215	227
⑪	VX2454-PU84 (Ex)	14,0	12,2	23,0	215	227
⑫	VX2454-PU94 (Ex)	17,0	14,6	28,8	215	227
⑬	VX2456-PU94 (Ex)	17,0	14,6	28,8	215	227
⑭	VX2456-PU104 (Ex)	22,0	19,3	36,5	240	252
⑮	VX2458-PU94 (Ex)	17,0	14,6	28,8	215	227
⑯	VX2458-PU104 (Ex)	22,0	19,3	36,5	240	252

DN 150 - MX(S)34...-4 POLE



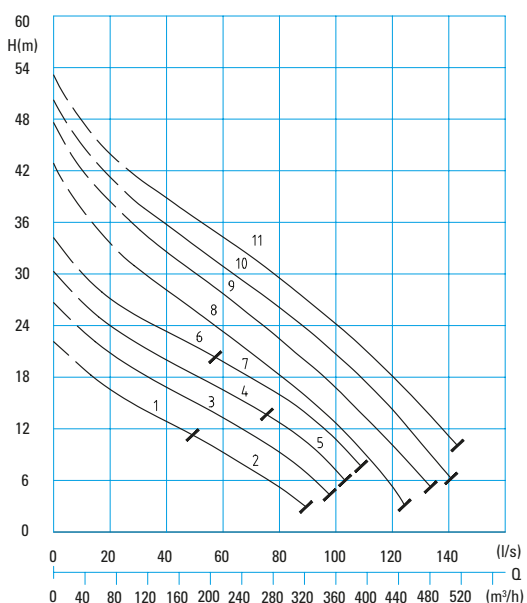
Enclosed single channel impeller

100 mm Ø Spherical clearance

1450 rpm



HYDRAULIC PERFORMANCE

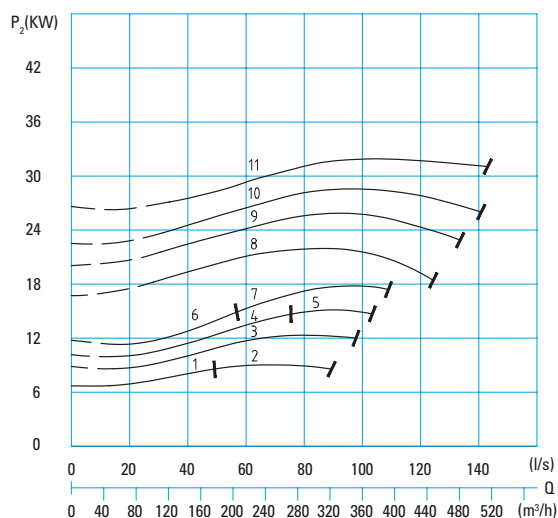


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS3450-ET74 (Ex)	9,8	8,5	16,8	202	202
②	MXS3450-P84 (Ex)	14,0	12,2	23,0	227	239
③	MXS3454-P84 (Ex)	14,0	12,2	23,0	227	239
④	MXS3457-P94 (Ex)	17,0	14,6	28,8	227	239
⑤	MXS3457-P104 (Ex)	22,0	19,3	36,5	249	261
⑥	MXS3460-P94 (Ex)	17,0	14,6	28,8	227	239
⑦	MXS3460-P104 (Ex)	22,0	19,3	36,5	249	261
⑧	MXS3468-F114 (Ex)	25,0	22,0	44,0	388	388
⑨	MXS3470-F124 (Ex)	29,1	25,6	51,4	410	410
⑩	MXS3472-F134 (Ex)	32,8	29,2	59,0	420	420
⑪	MXS3474-F144 (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	MXS3450-ET74 (Ex)	9,8	8,5	16,8	202	202
②	MXS3450-PU84 (Ex)	14,0	12,2	23,0	237	249
③	MXS3454-PU84 (Ex)	14,0	12,2	23,0	237	249
④	MXS3457-PU94 (Ex)	17,0	14,6	28,8	237	249
⑤	MXS3457-PU104 (Ex)	22,0	19,3	36,5	262	274
⑥	MXS3460-PU94 (Ex)	17,0	14,6	28,8	237	249
⑦	MXS3460-PU104 (Ex)	22,0	19,3	36,5	262	274
⑧	MXS3468-FU114 (Ex)	25,0	22,0	44,0	409	409
⑨	MXS3470-FU124 (Ex)	29,1	25,6	51,4	436	436
⑩	MXS3472-FU134 (Ex)	32,8	29,2	59,0	436	436
⑪	MXS3474-FU144 (Ex)	37,1	33,0	67,1	456	456

DN 150 - MXS34...-6 POLE



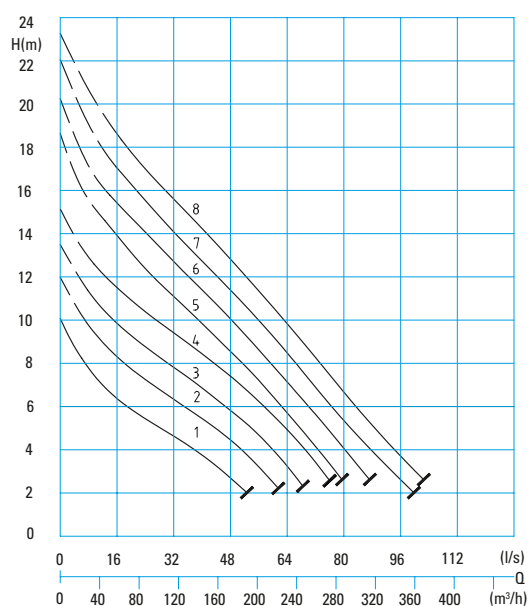
Enclosed single channel impeller

100 mm Ø Spherical clearance

960 rpm



HYDRAULIC PERFORMANCE

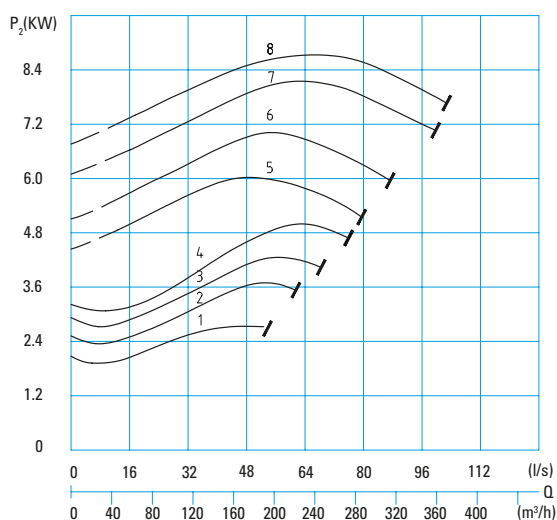


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS3450-P76 (Ex)	9,0	7,3	16,3	222	234
②	MXS3454-P76 (Ex)	9,0	7,3	16,3	222	234
③	MXS3457-P76 (Ex)	9,0	7,3	16,3	222	234
④	MXS3460-P76 (Ex)	9,0	7,3	16,3	222	234
⑤	MXS3468-P76 (Ex)	9,0	7,3	16,3	267	279
⑥	MXS3470-P76 (Ex)	9,0	7,3	16,3	267	279
⑦	MXS3472-P86 (Ex)	12,0	10,0	22,4	284	297
⑧	MXS3474-P86 (Ex)	12,0	10,0	22,4	284	297

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	MXS3450-PU76 (Ex)	9,0	7,3	16,3	222	234
②	MXS3454-PU76 (Ex)	9,0	7,3	16,3	222	234
③	MXS3457-PU76 (Ex)	9,0	7,3	16,3	222	234
④	MXS3460-PU76 (Ex)	9,0	7,3	16,3	222	234
⑤	MXS3468-PU76 (Ex)	9,0	7,3	16,3	267	279
⑥	MXS3470-PU76 (Ex)	9,0	7,3	16,3	267	279
⑦	MXS3472-PU86 (Ex)	12,0	10,0	22,4	284	297
⑧	MXS3474-PU86 (Ex)	12,0	10,0	22,4	284	297

DN 150 - K33...-4 POLE



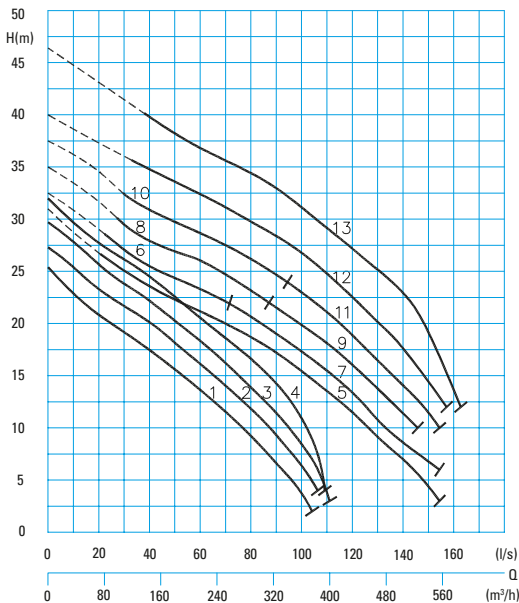
Enclosed two channel impeller

80 mm Ø Spherical clearance

1450 rpm



HYDRAULIC PERFORMANCE

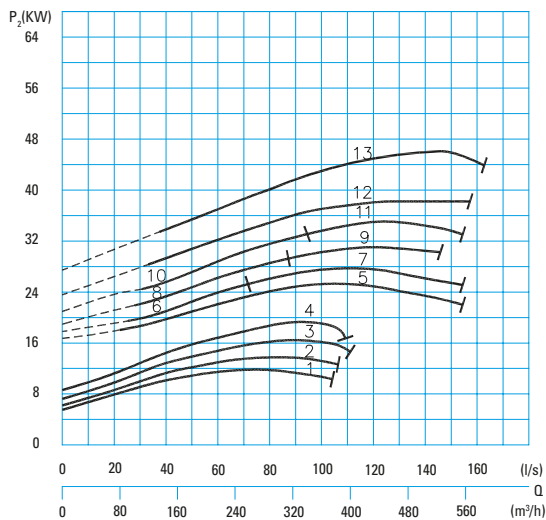


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K3352-P94 (Ex)	17,0	14,6	28,8	216	228
②	K3354-P94 (Ex)	17,0	14,6	28,8	216	228
③	K3356-P104 (Ex)	22,0	19,3	36,5	234	246
④	K3358-P104 (Ex)	22,0	19,3	36,5	234	246
⑤	K3360-F124 (Ex)	29,1	25,6	51,4	418	418
⑥	K3362-F124 (Ex)	29,1	25,6	51,4	418	418
⑦	K3362-F134 (Ex)	32,8	29,2	59,0	428	428
⑧	K3364-F134 (Ex)	32,8	29,2	59,0	428	428
⑨	K3364-F144 (Ex)	37,1	33,0	67,1	449	449
⑩	K3366-F144 (Ex)	37,1	33,0	67,1	449	449
⑪	K3366-G154 (Ex)	41,1	37,4	70,4	486	486
⑫	K3368-G154 (Ex)	41,1	37,4	70,4	486	486
⑬	K3370-G174 (Ex)	50,1	46,1	84,3	528	528

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K3352-PU94 (Ex)	17,0	14,6	28,8	224	236
②	K3354-PU94 (Ex)	17,0	14,6	28,8	224	236
③	K3356-PU104 (Ex)	22,0	19,3	36,5	244	256
④	K3358-PU104 (Ex)	22,0	19,3	36,5	244	256
⑤	K3360-FU124 (Ex)	29,1	25,6	51,4	444	493
⑥	K3362-FU124 (Ex)	29,1	25,6	51,4	444	493
⑦	K3362-FU134 (Ex)	32,8	29,2	59,0	454	503
⑧	K3364-FU134 (Ex)	32,8	29,2	59,0	454	503
⑨	K3364-FU144 (Ex)	37,1	33,0	67,1	475	524
⑩	K3366-FU144 (Ex)	37,1	33,0	67,1	475	524
⑪	K3366-GU154 (Ex)	41,1	37,4	70,4	512	555
⑫	K3368-GU154 (Ex)	41,1	37,4	70,4	512	555
⑬	K3370-GU174 (Ex)	50,1	46,1	84,3	557	610

DN 150 - K33...-6 POLE



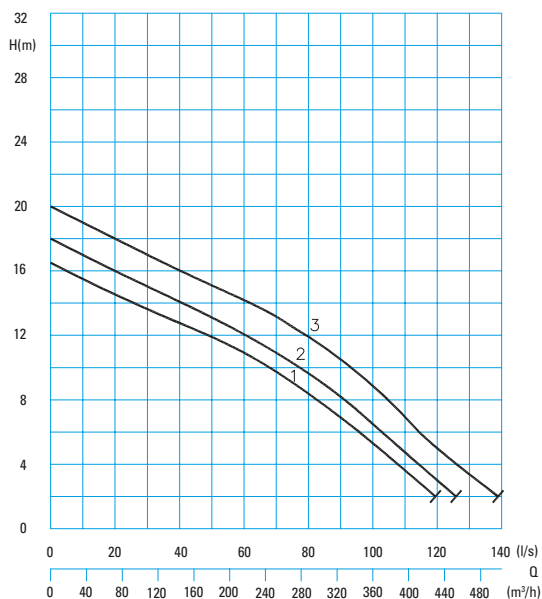
Enclosed two channel impeller

80 mm Ø Spherical clearance

960 rpm



HYDRAULIC PERFORMANCE

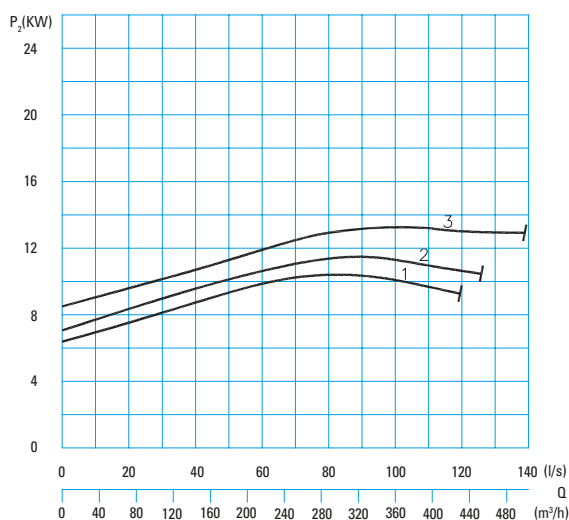


Technical data

WET WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K3366-P96 (Ex)	16,0	13,6	29,4	280	292
②	K3368-P96 (Ex)	16,0	13,6	29,4	280	292
③	K3370-P96 (Ex)	16,0	13,6	29,4	280	292

MOTOR OUTPUT



Technical data

DRY WELL INSTALLATION

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight normal (kg)	Weight Ex (kg)
①	K3366-PU96 (Ex)	16,0	13,6	29,4	288	300
②	K3368-PU96 (Ex)	16,0	13,6	29,4	288	300
③	K3370-PU96 (Ex)	16,0	13,6	29,4	288	300

Unlimited applications: Stainless steel submersible pumps for chemically aggressive media (see separate brochure).

