

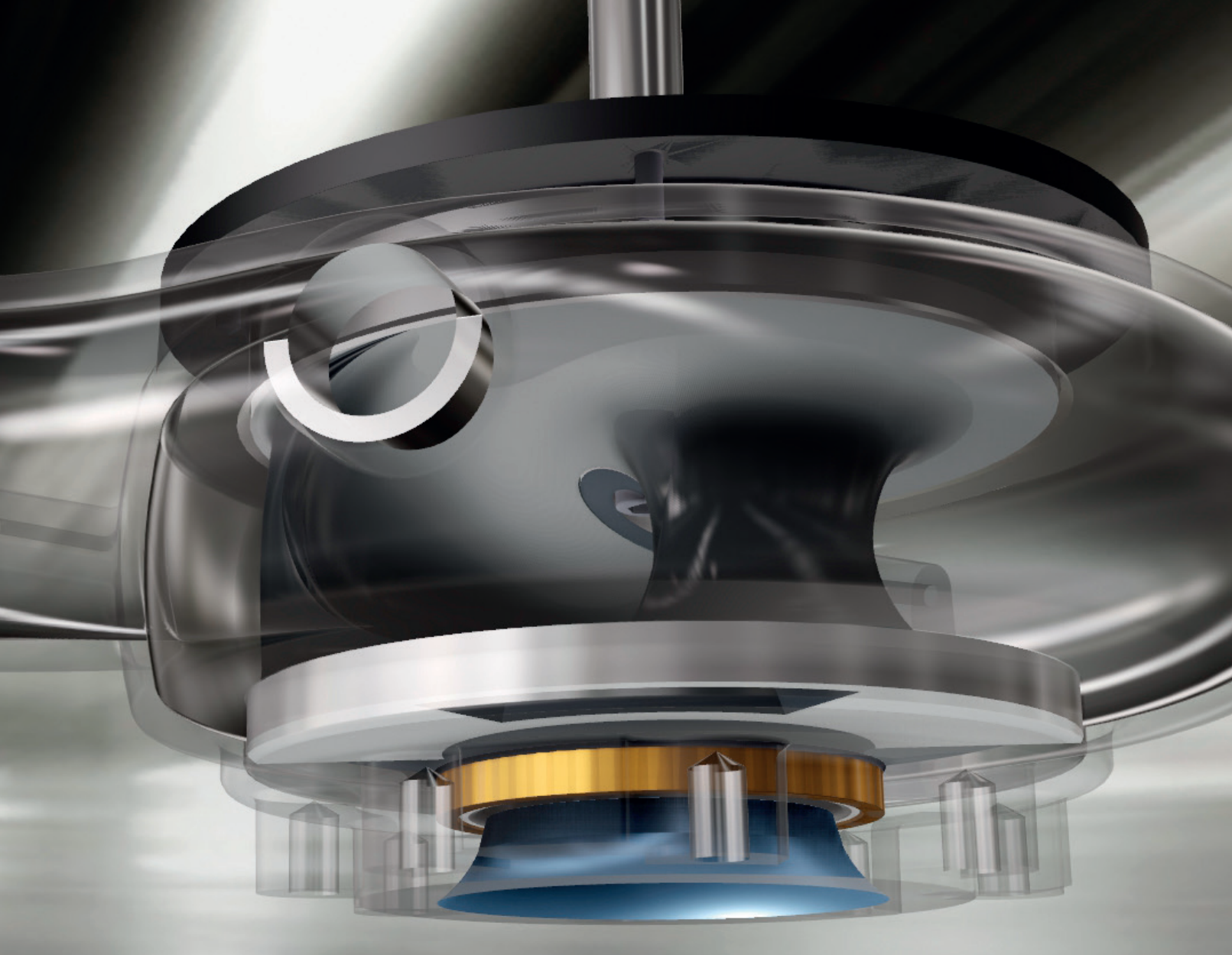
» COMPETENCE MEETS EFFICIENCY

New EffTec series of submersible wastewater pumps

- › optimized hydraulics
- › efficient motor technology
- › highest overall efficiency



HOMA
PUMP TECHNOLOGY



» INNOVATIVE TECHNOLOGY - GREAT EFFICIENCY

Not only efficiency in the motors - pump hydraulics are key as well in getting the highest possible overall efficiency with consequently low energy consumption. So we developed the new EffTec series at our HOMA R&D center: the efficiency of this new generation of motors has been markedly increased to match the IE3 premium efficiency standard. The hydrodynamically optimized pump hydraulics have also been newly designed. Along with the promise of quality "Made in Germany", the new EffTec series sets new standards for economic efficiency.

EffTEC
SUPERIOR EFFICIENCY - SUPERIOR PERFORMANCE

» OUR KNOW-HOW = YOUR BENEFIT

Convincingly reliable:

Pumped media have changed greatly in recent years, with ever increasing solids content. In order to guarantee reliable operation, the EffTec series uses closed single-vane impellers with large free passages. The pump hydraulics were redesigned in the process, and optimized using the latest flow simulation software. The result: markedly improved efficiency, with reduced clogging hazard. In combination with our energy-efficient motors, the new EffTec series of pumps sets a trend for economic efficiency and reliability.

Innovative cooling:

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. 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.

Intelligent technology:

At your option, all the usual monitoring systems can be implemented, starting at the smallest motor size - including the HOMA VICON pump diagnosis system, which, like the EffTec series itself, represents trendsetting innovations "Made by HOMA".

PERFORMANCE THAT PERSUADES

- » high overall efficiency, low energy consumption
- » efficient motors match the IE3 premium efficiency standard
- » hydrodynamically optimized pump hydraulics with large free passages up to 100 mm Ø.
- » the PermaCool constant motor cooling gives the option of submerged operation or drywell installation in continuous operation (S1)
- » robust, reliable construction: Made in Germany



The new innovative PermaCool motor cooling

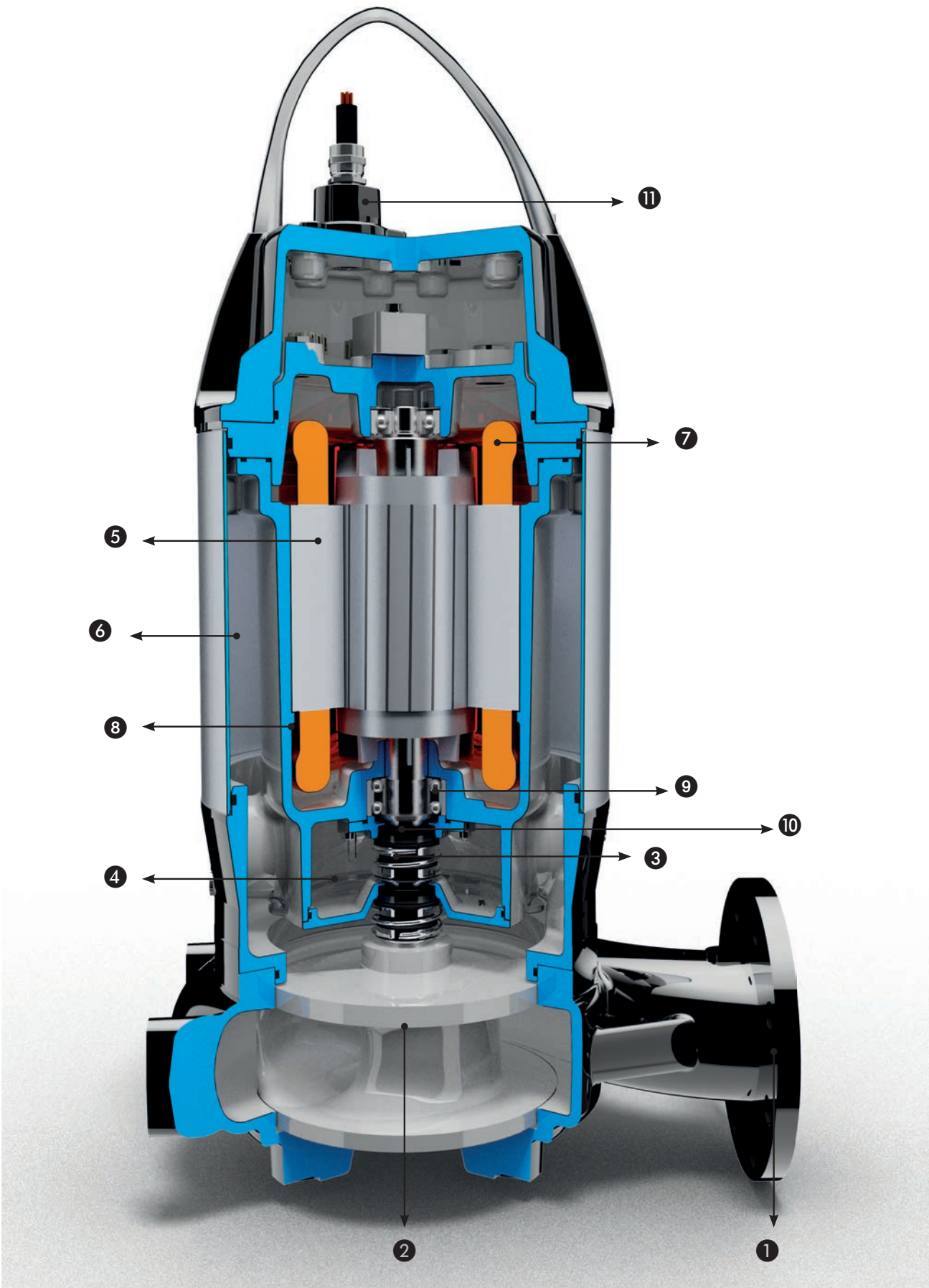


Connection for automatic flush valve FV (optional)



The highest standards of quality - from development to production

DESIGN - PROVEN QUALITY IN DETAIL



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 large spherical clearance. Replaceable wear ring.

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.

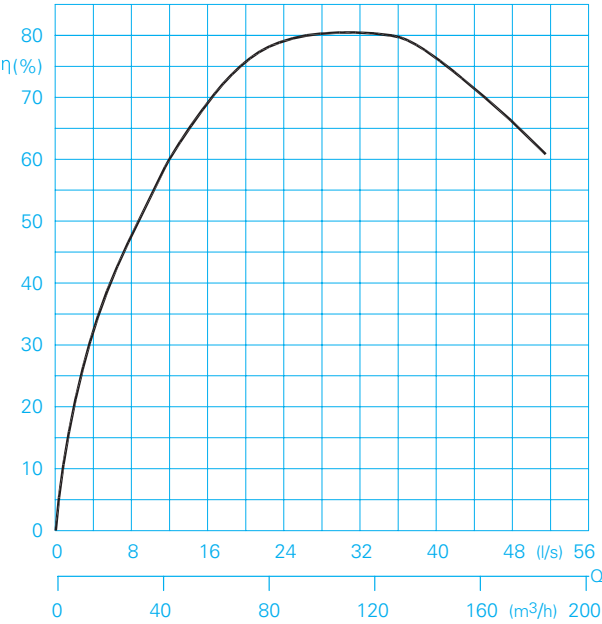
❾ SHAFT BEARING

Maintenance-free, prelubricated ball bearings.

❿ TEMPERATURE MONITORING OF THE SHAFT BEARINGS

On request.

⓫ PRESSURE SEALED, STRAIN RELIEF CABLE ENTRY



High efficient: The new MXS-hydraulics

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⁾

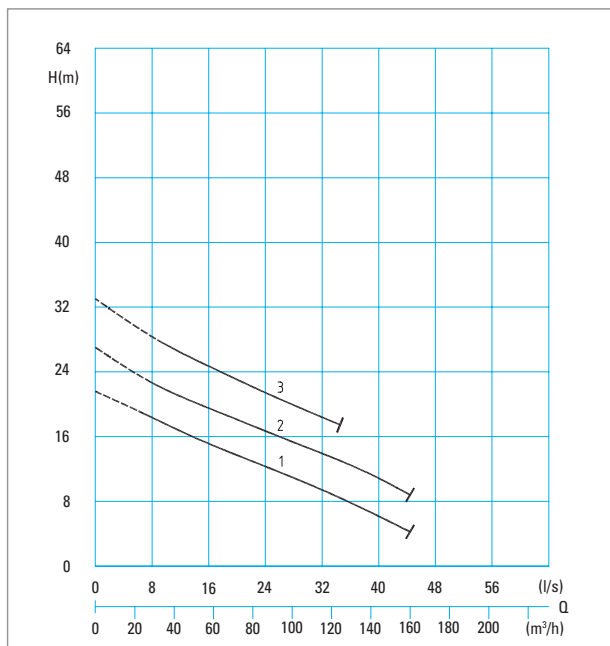
¹⁾ also available in stainless steel ²⁾ also available in bronze
³⁾ also from FPM (vitone) ⁴⁾ screened cable on request

TECHNICAL DETAILS MXS 13/23...2

PERFORMANCE MXS 13...2

DN 80

Enclosed single channel impeller
80 mm Ø
Spherical clearance
2900 rpm



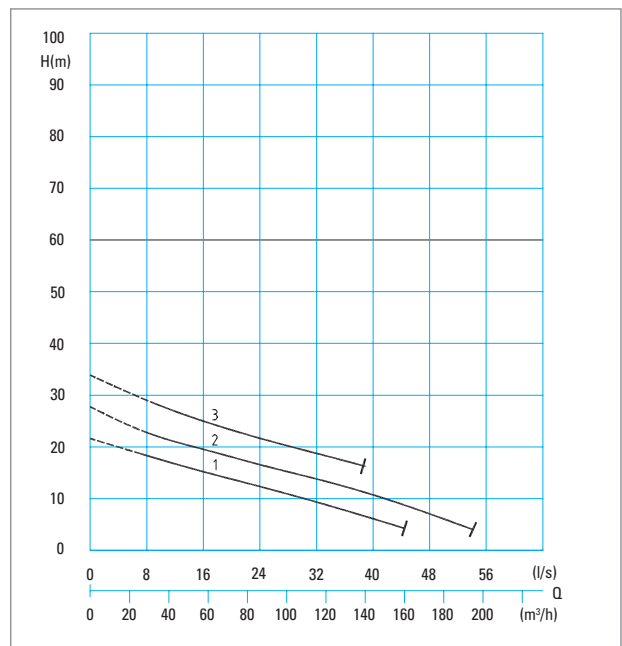
Technical Data

Curve No.	Pump-Type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight standard (kg)
①	MXS 1328-ET72 (Ex)	10,5	9,5	20,1	146
②	MXS 1330-ET82 (Ex)	12,7	11,5	22,7	146
③	MXS 1332-ET82 (Ex)	12,7	11,5	22,7	146

PERFORMANCE MXS 23...2

DN 100

Enclosed single channel impeller
80 mm Ø
Spherical clearance
2900 rpm



Technical Data

Curve No.	Pump-Type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight standard (kg)
①	MXS 2328-ET72 (Ex)	10,5	9,5	20,1	146
②	MXS 2330-ET82 (Ex)	12,7	11,5	22,7	146
③	MXS 2332-ET82 (Ex)	12,7	11,5	22,7	146

TECHNICAL DETAILS MXS 13/23...4

PERFORMANCE MXS 13...4

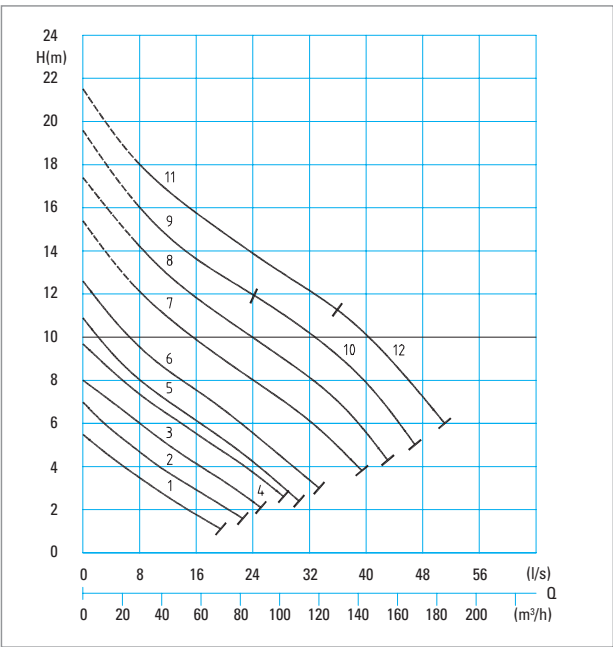
DN 80

Enclosed single channel impeller

80 mm Ø

Spherical clearance

1450 rpm



Technical Data

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

PERFORMANCE MXS 23..4

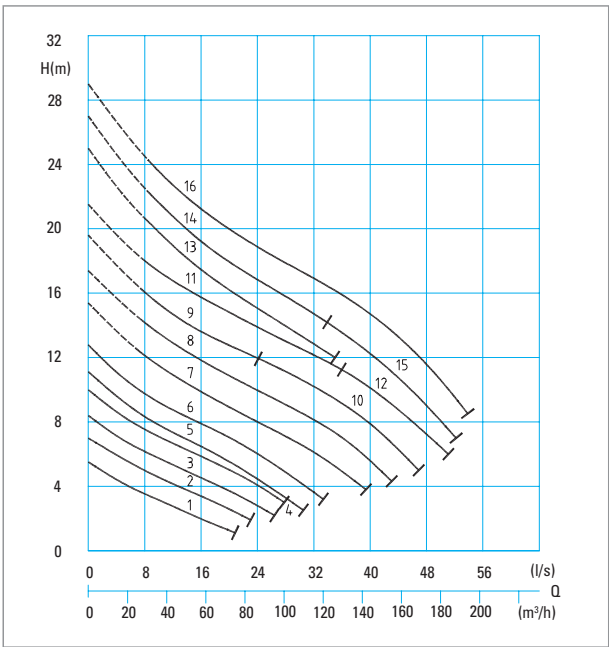
DN 100

Enclosed single channel impeller

80 mm Ø

Spherical clearance

1450 rpm



Technical Data

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

TECHNICAL DETAILS MX(S) 24/34...4

PERFORMANCE MXS 24...4

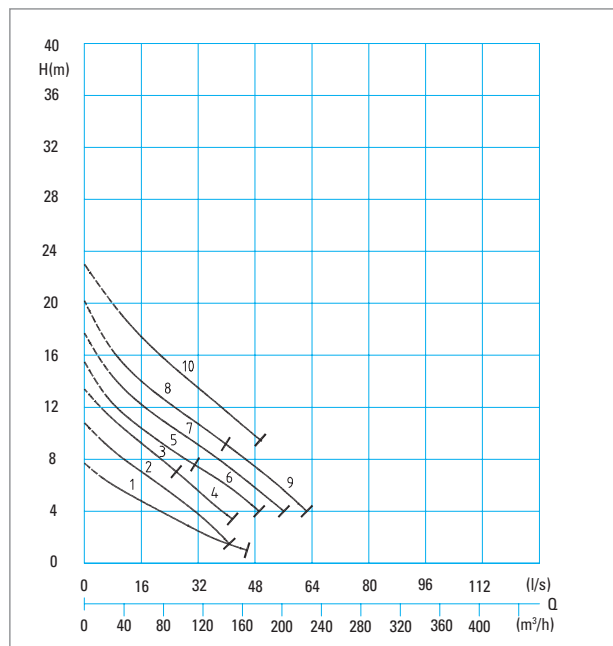
DN 100

Enclosed single channel impeller

100 mm Ø

Spherical clearance

1450 rpm



Technical Data

Curve No.	Pump-Type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight standard (kg)
①	M 2432-ET34	3,3	2,9	5,9	105
②	MX 2436-ET34	3,3	2,9	5,9	107
③	MX 2438-ET34	3,3	2,9	5,9	107
④	MX 2438-ET44	4,3	3,7	7,3	111
⑤	MXS 2442-ET44 (Ex)	4,3	3,7	7,3	142
⑥	MXS 2442-ET54 (Ex)	6,1	5,0	10,2	142
⑦	MXS 2444-ET54 (Ex)	6,1	5,0	10,2	142
⑧	MXS 2446-ET54 (Ex)	6,1	5,0	10,2	142
⑨	MXS 2446-ET64 (Ex)	7,4	6,5	13,4	160
⑩	MXS 2450-ET74 (Ex)	9,8	8,5	16,8	184

PERFORMANCE MXS 34...4

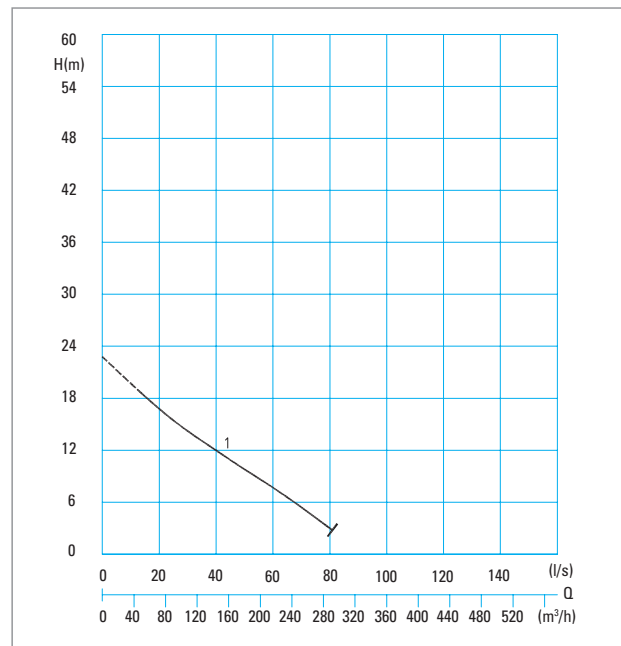
DN 150

Enclosed single channel impeller

100 mm Ø

Spherical clearance

1450 rpm



Technical Data

Curve No.	Pump-Type	Motor P ₁ (kW)	Motor P ₂ (kW)	Rated current (A)	Weight standard (kg)
①	MX 3452-ET74 (Ex)	9,8	8,5	16,8	189

TECHNICAL DETAILS MX(S) 13/24...6

PERFORMANCE MXS 13...6

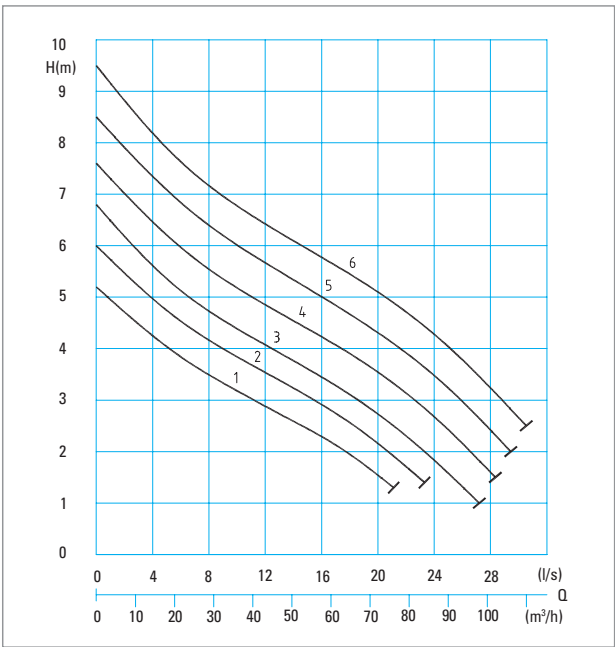
DN 80

Enclosed single channel impeller

80 mm Ø

Spherical clearance

960 rpm



Technical Data

Curve No.	Pump-Type	Motor		Rated current (A)	Weight standard (kg)
		P ₁ (kW)	P ₂ (kW)		
①	MXS 1336-ET26 (Ex)	1,8	1,6	3,8	148
②	MXS 1338-ET26 (Ex)	1,8	1,6	3,8	148
③	MXS 1340-ET26 (Ex)	1,8	1,6	3,8	152
④	MXS 1342-ET26 (Ex)	1,8	1,6	3,8	152
⑤	MXS 1344-ET26 (Ex)	1,8	1,6	3,8	152
⑥	MXS 1346-ET26 (Ex)	1,8	1,6	3,8	152

PERFORMANCE MX(S) 24..6

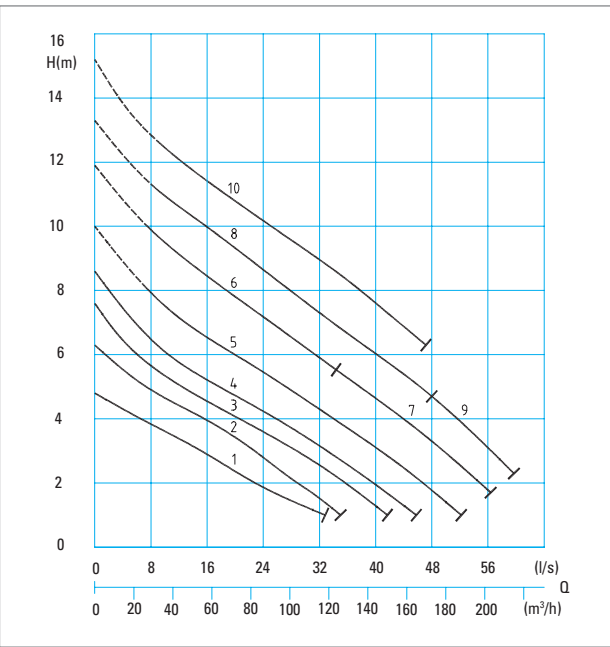
DN 100

Enclosed single channel impeller

100 mm Ø

Spherical clearance

960 rpm



Technical Data

Curve No.	Pump-Type	Motor		Rated current (A)	Weight standard (kg)
		P ₁ (kW)	P ₂ (kW)		
①	MX 2436-ET36 (Ex)	2,7	2,3	4,9	107
②	MX 2438-ET36 (Ex)	2,7	2,3	4,9	107
③	MXS 2444-ET26 (Ex)	1,8	1,6	3,8	160
④	MXS 2446-ET36 (Ex)	2,7	2,3	4,9	160
⑤	MXS 2450-ET46 (Ex)	3,6	3,1	6,6	184
⑥	MXS 2454-ET46 (Ex)	3,6	3,1	6,6	184
⑦	MXS 2454-ET56 (Ex)	4,7	4,0	8,3	184
⑧	MXS 2457-ET56 (Ex)	4,7	4,0	8,3	184
⑨	MXS 2457-ET66 (Ex)	5,9	4,9	10,3	184
⑩	MXS 2460-ET66 (Ex)	5,9	4,9	10,3	184

TECHNICAL DETAILS MX 34...6

PERFORMANCE MX 34...6

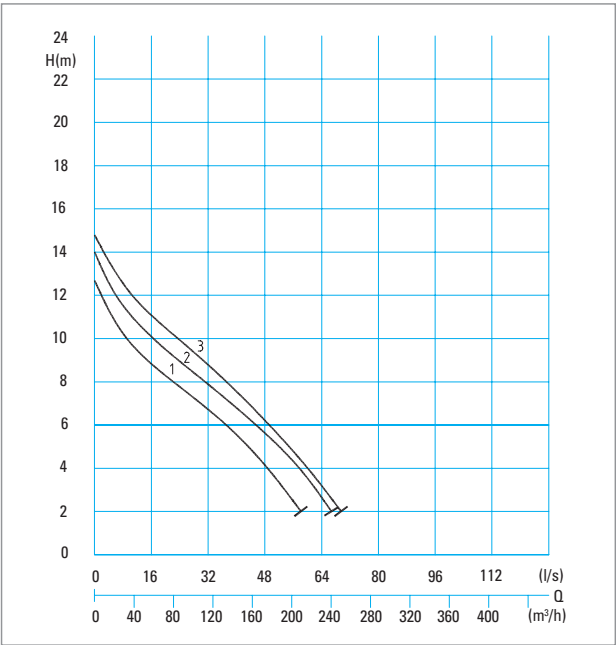
DN 150

Enclosed single channel impeller

100 mm Ø

Spherical clearance

960 rpm



Technical Data

Curve No.	Pump-Type	Motor		Rated current (A)	Weight standard (kg)
		P ₁ (kW)	P ₂ (kW)		
①	MX 3456-ET56 (Ex)	4,7	4,0	8,3	189
②	MX 3460-ET66 (Ex)	5,9	4,9	10,3	189
③	MX 3462-ET66 (Ex)	5,9	4,9	10,3	189





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
- Propeller pumps
- Control boxes



Worldwide Presence

HOMA pumps are installed in more than 100 countries around the world – in countless projects of various kinds. They comply to all international safety and quality standards and are certified by many institutions and organisations 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 WorldWide-Web.

HOMA Pumpenfabrik GmbH

Industriestraße 1 ➤ 53819 Neunkirchen-Seelscheid

Telefon: +49(0)2247/702-0 ➤ Fax: +49(0)2247/702-44

e-Mail: info@homa-pumpen.de ➤ Internet: www.homa-pumpen.de

