

ELECTRIC SUBMERSIBLE SEWAGE PUMPS

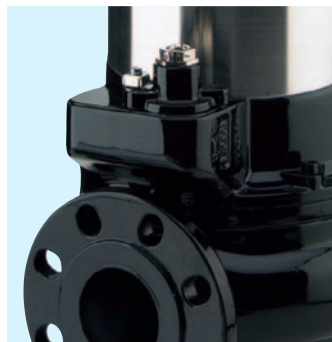


Ranges
MX, V, K

Discharge Size
DN 80 - DN 150

motralec

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The source for high efficiency

High Performance in Waste Water Pumping

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 electronic systems) 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.

Higher Performance to meet every Challenge

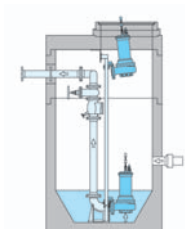
Various challenges – individual solutions: **HOMA** submersible wastewater pumps are designed for pumping sewage, sludge, effluents or surface water, including liquids containing a large proportion of solid or fibrous matter. They are installed in domestic, municipal, industrial and agricultural pumping applications.



The right installation for every pump station

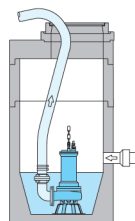
Permanent wet well installation

Submerged autocoupling 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.



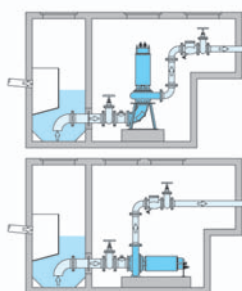
Transportable wet well installation

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.



Operating conditions

The motors are designed for continuous operating 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 operating 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, as in storm water retention tanks. Vortex or enclosed multichannel impeller pumps are also designed for unlimited continuous operation, such as industrial water supply. In this case a low motor speed should be chosen (4- or 6-pole).

Ranges and Models

Motor selection

Motor speed:

For the standard hydraulic ranges, 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 400 V/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 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, all motors are available explosion proof according to ATEX Ex II 2 G EEXd.

Dry well variant:

Besides the version for submerged operation, all pumps are also available for dry well or non-submerged operation. Motor cooling is provided by a cooling jacket, using either the pumped liquid or a closed circuit coolant circulation (model U or L).

Motor monitoring:

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

- Motors for wet well installation (without cooling jacket): Available as C-version (see pump type code) with oil chamber seal condition monitoring probe and – for motors with cable junction chamber – moisture sensor in junction chamber)
- Motors with cooling jacket: Supplied as standard with oil chamber seal condition monitoring probe. Additional monitoring devices (bearing temperature, stator room moisture) on request.

Hydraulic selection

Discharge and suction flange

- DN 80
- DN 100
- DN 150

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

Impellers:

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

Enclosed single channel impeller

For liquids containing impurities and sludge with solid particles or long fibres.



K

Enclosed multi channel impeller

For liquids containing impurities and sludge with solid particles.



V

Vortex impeller

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

Pump type code:

| Pumpe | 2 | 4 | 48 - | Motor | (U) | 6 | 4 | (C) | (EX) |
|--|---------------------------------------|--------------------------------------|----------------------------------|---------------------|---|---------------------|--|--|-----------------------|
| MX | | | | T | | | | | |
| Impeller design | Discharge size: | Spherical clearance: | Impeller diameter | Motor frame size: | Jacket cooled: | Motor power (coded) | Speed: | only for motors without jacket cooling. With: | Explosion proof motor |
| MX = Enclosed single channel V = Vortex K = Enclosed two 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 | Jacket cooled motor for non-submerged installation U= Open circuit pumped liquid cooling L= Closed circuit liquid cooling | | 2 = 2-pole (2900 rpm) 4 = 4-pole (1450 rpm) 6 = 6-pole (960 rpm) | - oil chamber seal condition monitoring probe - moisture sensor in junction chamber (if exists) | |

Design – Proven Quality in Detail

More 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.

Materials

| | |
|--------------------------------|---|
| Motor housing | Cast iron GG 25/EN-GJL-250 ¹⁾ |
| Pump housing | Cast iron GG 25/EN-GJL-250 ¹⁾ |
| Impeller | Cast iron GG 25/EN-GJL-250 ^{1) 2)} |
| Wear rings | Bronze ¹⁾ |
| Motor shaft | Stainless steel |
| Mechanical seals | Silicon-carbide / Silicon-carbide |
| Motor cooling jacket (model U) | Stainless steel |
| Seals and O-rings | NBR (Perbonane) ³⁾ |
| Cable | H07RN-F (PLUS) ⁴⁾ |

¹⁾ also available in stainless steel

²⁾ also available in bronze

³⁾ also available from FPM (vitone)

⁴⁾ screened cable on request

1 Discharge

With DIN/ANSI flange DN 80, DN 100 or DN 150 (PN 16)

2 Non-clogging, high efficiency impellers

With large spherical clearance.

Available:

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

3 Shaft seals

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

4 Oil chamber

Separate large oil chamber, lubricating and cooling the mechanical seals, forming an extra safety and inspection element. Additional electronic seal condition monitoring probe on request.

5 Motor

Three-phase electric motors, with 2-, 4- or 6-pole motor speed. Insulation class F (155 °C), degree of protection IP 68

Explosion protection

All models available with explosion proof motors according to ATEX Ex II 2 G EExd.

6 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.

7 Thermal sensor (bi-metal)

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

8 Moisture monitoring in stator chamber

Available on request

9 Shaft bearing

Maintenance-free, prelubricated ball bearings.

10 Temperature monitoring of the shaft bearings

Available on request.

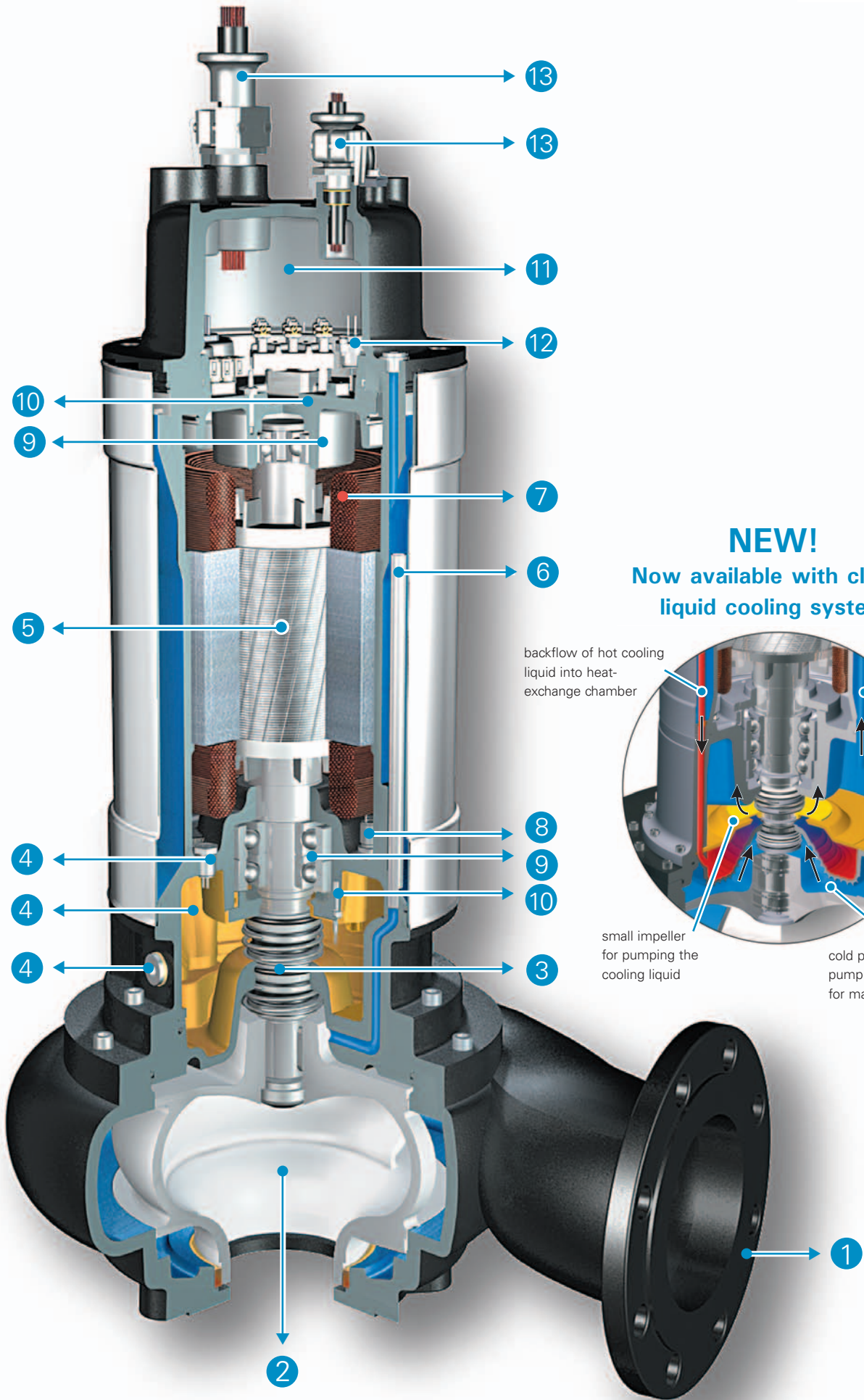
11 Cable junction chamber

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

12 Electronic moisture sensor in junction chamber

Available on request.

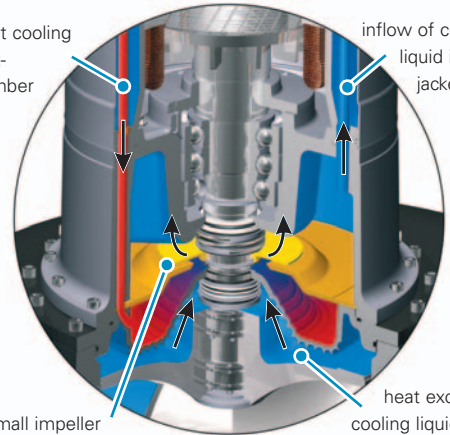
13 Pressure sealed, strain relief cable entry



NEW!
Now available with closed
liquid cooling system

backflow of hot cooling
liquid into heat-
exchange chamber

inflow of cold cooling
liquid into motor
jacket chamber



small impeller
for pumping the
cooling liquid

heat exchange of
cooling liquid with
cold pumped liquid trough
pump flange, spiral-shaped
for maximum surface

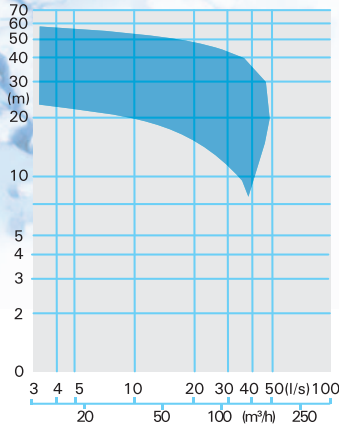
Pump ranges selection chart

DN80

MX 13...2-pole



Enclosed single channel impeller
80 mm Ø
Spherical clearance
2900 rpm
[see page 10](#)

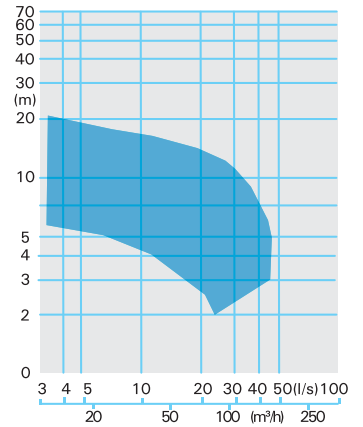


DN80

MX 13...4-pole



Enclosed single channel impeller
80 mm Ø
Spherical clearance
1450 rpm
[see page 11](#)

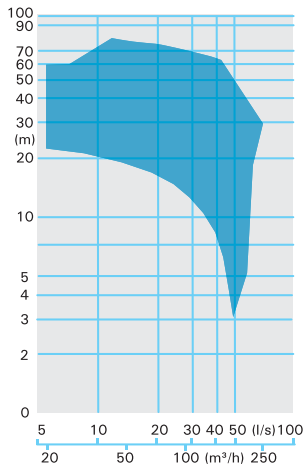


DN100

MX 23...2-pole



Enclosed single channel impeller
80 mm Ø
Spherical clearance
2900 rpm
[see page 14](#)

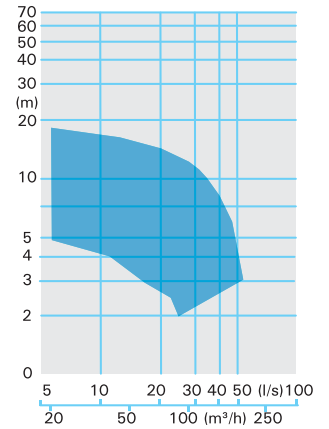


DN100

MX 23...4-pole



Enclosed single channel impeller
80 mm Ø
Spherical clearance
1450 rpm
[see page 15](#)

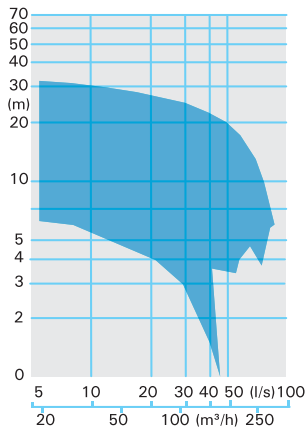


DN100

MX 24...4-pole



Enclosed single channel impeller
100 mm Ø
Spherical clearance
1450 rpm
[see page 18](#)

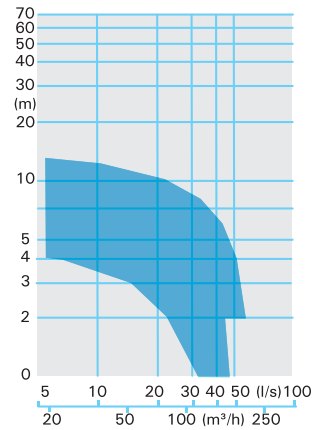


DN100

MX 24...6-pole



Enclosed single channel impeller
100 mm Ø
Spherical clearance
960 rpm
[see page 19](#)

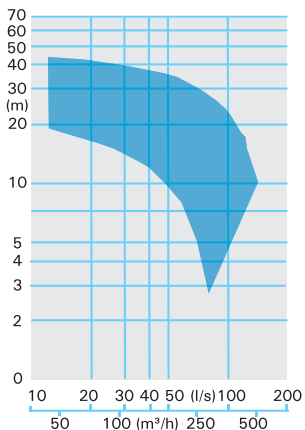


DN150

MX 34...4-pole



Enclosed single channel impeller
100 mm Ø
Spherical clearance
1450 rpm
[see page 21](#)

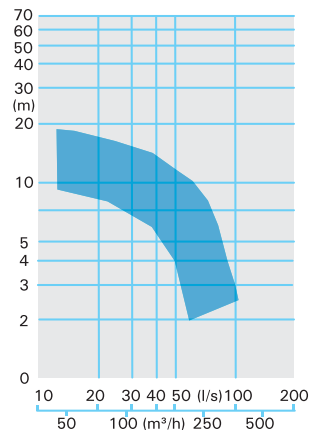


DN150

MX 34...6-pole



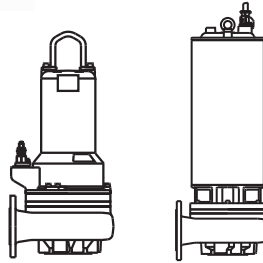
Enclosed single channel impeller
100 mm Ø
Spherical clearance
960 rpm
[see page 22](#)



DN100 - MX24...4-pole

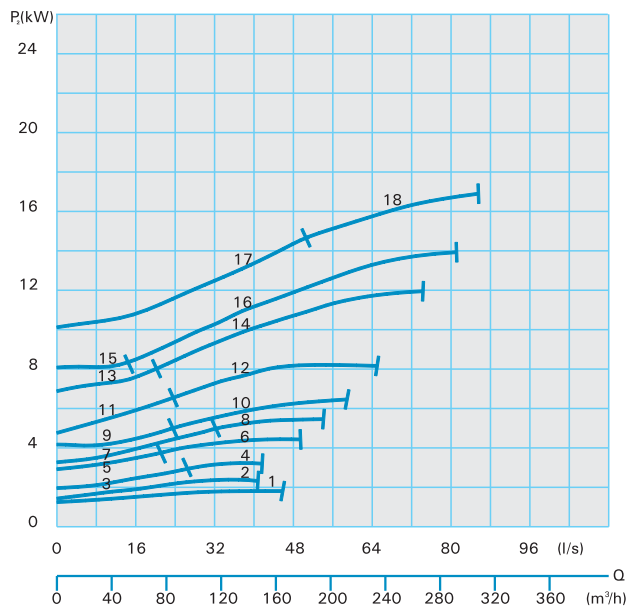
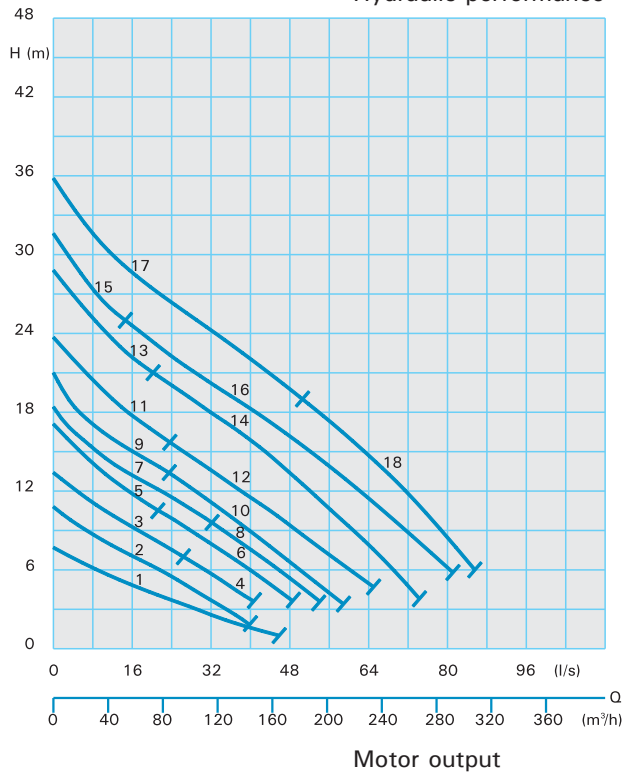


Enclosed single channel impeller
100 mm Ø
Spherical clearance
1450 rpm



Performance curves

Hydraulic performance



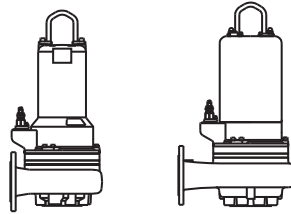
Technical data

| Standard- and Explosion-proof model – Wet well installation | | | | | | |
|---|--------------------|---------------------------------|----------------------------------|----------------------------------|----------------------|----------------|
| Curve No. | Pump type | Motor input P ₁ (kW) | Motor output P ₂ (kW) | Rated current I _n (A) | Weight standard (kg) | Weight Ex (kg) |
| 1 | M2432-T34(C)(Ex) | 3.4 | 2.9 | 5.8 | 102 | 102 |
| 2 | MX2436-T34(C)(Ex) | 3.4 | 2.9 | 5.8 | 104 | 104 |
| 3 | MX2438-T34(C)(Ex) | 3.4 | 2.9 | 5.8 | 104 | 104 |
| 4 | MX2438-T44(C)(Ex) | 4.4 | 3.7 | 7.5 | 108 | 108 |
| 5 | MX2444-T44(C)(Ex) | 4.4 | 3.7 | 7.5 | 109 | 109 |
| 6 | MX2444-T54(C)(Ex) | 5.9 | 5.0 | 9.9 | 111 | 111 |
| 7 | MX2446-T54(C)(Ex) | 5.9 | 5.0 | 9.9 | 111 | 111 |
| 8 | MX2446-T64(C)(Ex) | 7.7 | 6.5 | 13.1 | 114 | 114 |
| 9 | MX2448-T54(C)(Ex) | 5.9 | 5.0 | 9.9 | 111 | 111 |
| 10 | MX2448-T64(C)(Ex) | 7.7 | 6.5 | 13.1 | 114 | 114 |
| 11 | MX2452-T64(C)(Ex) | 7.7 | 6.5 | 13.1 | 136 | 136 |
| 12 | MX2452-P74(C)(Ex) | 10.0 | 8.5 | 16.8 | 184 | 196 |
| 13 | MX2456-P74(C)(Ex) | 10.0 | 8.5 | 16.8 | 186 | 198 |
| 14 | MX2456-P94(C)(Ex) | 17.0 | 14.6 | 28.8 | 211 | 223 |
| 15 | MX2460-P74(C)(Ex) | 10.0 | 8.5 | 16.8 | 187 | 199 |
| 16 | MX2460-P94(C)(Ex) | 17.0 | 14.6 | 28.8 | 212 | 224 |
| 17 | MX2462-P94(C)(Ex) | 17.0 | 14.6 | 28.8 | 213 | 225 |
| 18 | MX2462-P104(C)(Ex) | 22.0 | 19.3 | 39.1 | 231 | 243 |

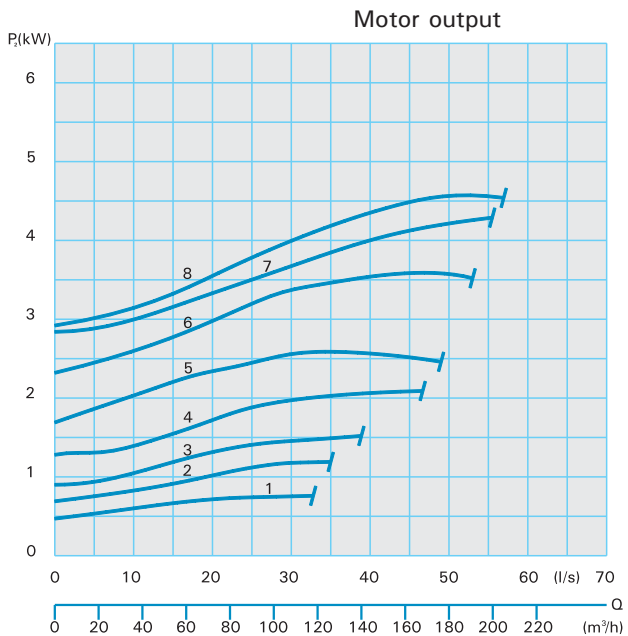
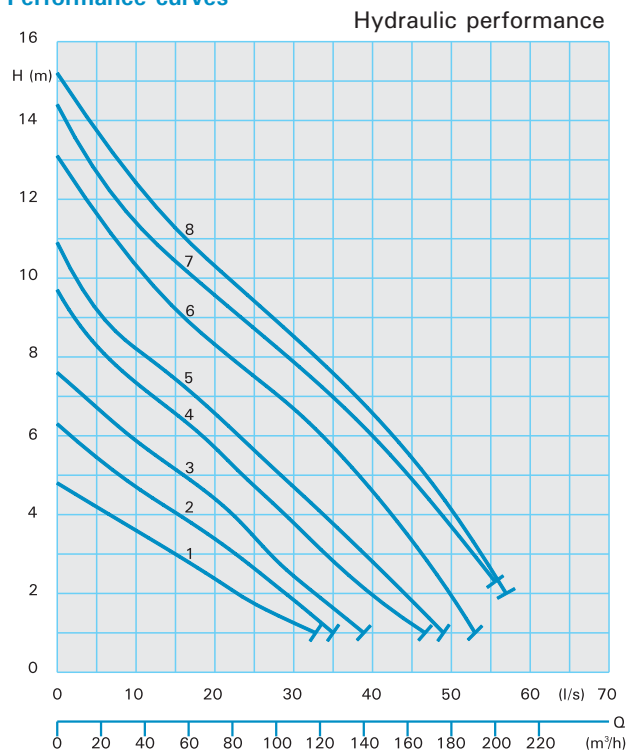
| Standard- and Explosion-proof model – Dry well installation | | | | | | |
|---|------------------|---------------------------------|----------------------------------|----------------------------------|----------------------|----------------|
| Curve No. | Pump type | Motor input P ₁ (kW) | Motor output P ₂ (kW) | Rated current I _n (A) | Weight standard (kg) | Weight Ex (kg) |
| 1 | M2432-TU34(Ex) | 3.4 | 2.9 | 5.8 | 105 | 105 |
| 2 | MX2436-TU34(Ex) | 3.4 | 2.9 | 5.8 | 107 | 107 |
| 3 | MX2438-TU34(Ex) | 3.4 | 2.9 | 5.8 | 107 | 107 |
| 4 | MX2438-TU44(Ex) | 4.4 | 3.7 | 7.5 | 111 | 111 |
| 5 | MX2444-TU44(Ex) | 4.4 | 3.7 | 7.5 | 112 | 112 |
| 6 | MX2444-TU54(Ex) | 5.9 | 5.0 | 9.9 | 115 | 115 |
| 7 | MX2446-TU54(Ex) | 5.9 | 5.0 | 9.9 | 115 | 115 |
| 8 | MX2446-TU64(Ex) | 7.7 | 6.5 | 13.1 | 118 | 118 |
| 9 | MX2448-TU54(Ex) | 5.9 | 5.0 | 9.9 | 115 | 115 |
| 10 | MX2448-TU64(Ex) | 7.7 | 6.5 | 13.1 | 118 | 118 |
| 11 | MX2452-TU64(Ex) | 7.7 | 6.5 | 13.1 | 140 | 140 |
| 12 | MX2452-PU74(Ex) | 10.0 | 8.5 | 16.8 | 191 | 203 |
| 13 | MX2456-PU74(Ex) | 10.0 | 8.5 | 16.8 | 193 | 205 |
| 14 | MX2456-PU94(Ex) | 17.0 | 14.6 | 28.8 | 216 | 231 |
| 15 | MX2460-PU74(Ex) | 10.0 | 8.5 | 16.8 | 194 | 206 |
| 16 | MX2460-PU94(Ex) | 17.0 | 14.6 | 28.8 | 220 | 232 |
| 17 | MX2462-PU94(Ex) | 17.0 | 14.6 | 28.8 | 221 | 233 |
| 18 | MX2462-PU104(Ex) | 22.0 | 19.3 | 39.1 | 241 | 253 |



Enclosed single channel impeller
100 mm Ø
Spherical clearance
960 rpm



Performance curves



Technical data

| Standard- and Explosion-proof model – Wet well installation | | | | | | |
|---|-------------------|---------------------------------|----------------------------------|----------------------------------|----------------------|----------------|
| Curve No. | Pump type | Motor input P ₁ (kW) | Motor output P ₂ (kW) | Rated current I _N (A) | Weight standard (kg) | Weight Ex (kg) |
| 1 | MX2436-T36(C)(Ex) | 3.0 | 2.3 | 5.4 | 104 | 104 |
| 2 | MX2438-T36(C)(Ex) | 3.0 | 2.3 | 5.4 | 104 | 104 |
| 3 | MX2446-T36(C)(Ex) | 3.0 | 2.3 | 5.4 | 109 | 109 |
| 4 | MX2448-T36(C)(Ex) | 3.0 | 2.3 | 5.4 | 109 | 109 |
| 5 | MX2452-T46(C)(Ex) | 4.0 | 3.1 | 7.3 | 148 | 148 |
| 6 | MX2456-T56(C)(Ex) | 5.0 | 4.0 | 9.6 | 154 | 154 |
| 7 | MX2460-T66(C)(Ex) | 6.0 | 4.9 | 11.5 | 155 | 155 |
| 8 | MX2462-T66(C)(Ex) | 6.0 | 4.9 | 11.5 | 156 | 156 |

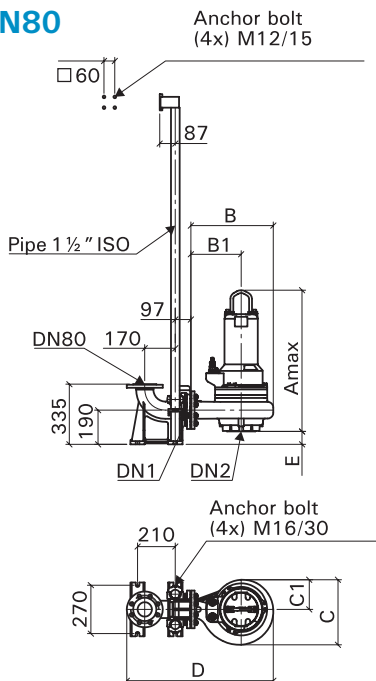
| Standard- and Explosion-proof model – Dry well installation | | | | | | |
|---|-----------------|---------------------------------|----------------------------------|----------------------------------|----------------------|----------------|
| Curve No. | Pump type | Motor input P ₁ (kW) | Motor output P ₂ (kW) | Rated current I _N (A) | Weight standard (kg) | Weight Ex (kg) |
| 1 | MX2436-TU36(Ex) | 3.0 | 2.3 | 5.4 | 107 | 107 |
| 2 | MX2438-TU36(Ex) | 3.0 | 2.3 | 5.4 | 107 | 107 |
| 3 | MX2446-TU36(Ex) | 3.0 | 2.3 | 5.4 | 112 | 112 |
| 4 | MX2448-TU36(Ex) | 3.0 | 2.3 | 5.4 | 112 | 112 |
| 5 | MX2452-TU46(Ex) | 4.0 | 3.1 | 7.3 | 154 | 154 |
| 6 | MX2456-TU56(Ex) | 5.0 | 4.0 | 9.6 | 160 | 160 |
| 7 | MX2460-TU66(Ex) | 6.0 | 4.9 | 11.5 | 161 | 161 |
| 8 | MX2462-TU66(Ex) | 6.0 | 4.9 | 11.5 | 162 | 162 |

Installations and Dimensions

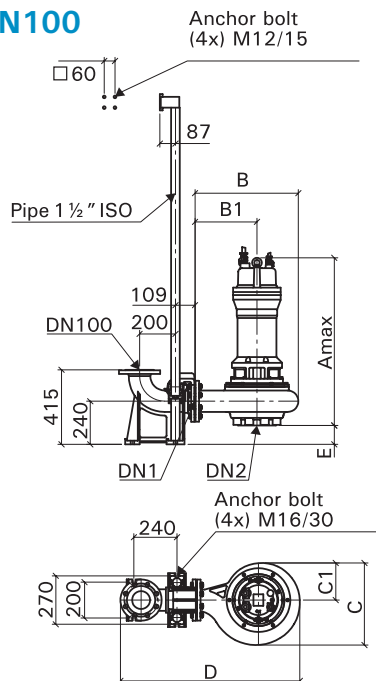
| Pump type | DN1 | DN2 | DN3 | Amax | B | B1 | C | C1 | D | E | F1 | F2 | F3 | øG | H | J1 | J2 |
|-----------------------------|-----|-------|------|------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|-----|----|
| MX1330 bis 38-T(U)... 2(Ex) | 100 | R3"AG | 766 | 355 | 200 | 307 | 147 | 722 | 97 | 125 | 218 | 316 | 395 | 578 | 137 | 167 | |
| MX1336 bis 41-P(U)... 2(Ex) | 100 | R3"AG | 1026 | 355 | 200 | 307 | 147 | 722 | 97 | 125 | 218 | 316 | 395 | 579 | 137 | 167 | |
| MX1344-P(U)122(Ex) | 100 | R3"AG | 1051 | 459 | 280 | 363 | 165 | 826 | 71 | 125 | 243 | 341 | 395 | 659 | 137 | 167 | |
| MX1331 bis 36-C24(Ex) | 100 | R3"AG | 517 | 355 | 200 | 307 | 147 | 722 | 97 | 125 | 218 | 316 | 395 | 578 | 137 | | |
| MX1337 bis 41-D44(Ex) | 100 | R3"AG | 554 | 355 | 200 | 307 | 147 | 722 | 97 | 125 | 218 | 316 | 395 | 578 | 137 | | |
| MX1331 bis 41-TU34(Ex) | 100 | R3"AG | 693 | 355 | 200 | 307 | 147 | | | | | | | | | 167 | |
| MX1344 bis 50-T(U)... 4(Ex) | 100 | R3"AG | 791 | 459 | 280 | 363 | 165 | 826 | 71 | 125 | 244 | 342 | 395 | 658 | 137 | 167 | |
| V1332 bis 39-T(U)... 2(Ex) | 100 | R3"AG | 775 | 365 | 220 | 290 | 145 | 732 | 112 | 125 | 203 | 301 | 395 | 598 | 137 | 167 | |
| V1342 bis 46-P(U)... 2(Ex) | 100 | R3"AG | 1035 | 410 | 252 | 316 | 158 | 775 | 112 | 125 | 203 | 301 | 395 | 631 | 137 | 167 | |
| V1334 bis 36-C24(Ex) | 100 | R3"AG | 526 | 365 | 220 | 290 | 145 | 732 | 112 | 125 | 203 | 301 | 395 | 598 | 137 | | |
| V1344 bis 46-D44(Ex) | 100 | R3"AG | 563 | 408 | 250 | 316 | 158 | 775 | 112 | 125 | 203 | 301 | 395 | 628 | 137 | | |
| V1334 bis 36-TU34(Ex) | 100 | R3"AG | 702 | 365 | 220 | 290 | 145 | | | | | | | | | 167 | |
| V1344 bis 46-TU34(Ex) | 100 | R3"AG | 702 | 408 | 250 | 316 | 158 | | | | | | | | | 167 | |
| MX2330 bis 37-T(U)... 2(Ex) | 100 | R4"AG | 764 | 355 | 200 | 307 | 147 | 779 | 147 | 125 | 218 | 403 | 395 | 577 | 122 | 197 | |
| MX2336 bis 41-P(U)... 2(Ex) | 100 | R4"AG | 1023 | 355 | 200 | 307 | 147 | 779 | 147 | 125 | 218 | 403 | 395 | 577 | 122 | 197 | |
| MX2344-P(U)122(Ex) | 100 | R4"AG | 1051 | 459 | 280 | 363 | 165 | 883 | 122 | 125 | 244 | 429 | 395 | 657 | 122 | 197 | |
| MX2346 bis 50-F(U)...2(Ex) | 100 | R4"AG | 1270 | 459 | 280 | 382 | 184 | 889 | 121 | 174 | 293 | 478 | 600 | 759 | 122 | 197 | |
| MX2331 bis 36-C24(Ex) | 100 | R4"AG | 517 | 355 | 200 | 307 | 147 | 779 | 147 | 125 | 218 | 403 | 395 | 577 | 122 | | |
| MX2337 bis 41-D44(Ex) | 100 | R4"AG | 554 | 355 | 200 | 307 | 147 | 779 | 147 | 125 | 218 | 403 | 395 | 577 | 122 | | |
| MX2331 bis 41-TU34(Ex) | 100 | R4"AG | 691 | 355 | 200 | 307 | 147 | | | | | | | | | 197 | |
| MX2344 bis 50-T(U)... 4(Ex) | 100 | R4"AG | 791 | 459 | 280 | 363 | 165 | 883 | 121 | 125 | 244 | 429 | 395 | 656 | 122 | 197 | |
| MX2432 bis 38-T(U)... 4(Ex) | 100 | R4"AG | 745 | 422 | 265 | 323 | 147 | 846 | 117 | 125 | 248 | 433 | 395 | 642 | 122 | 197 | |
| MX2444 bis 48-T(U)... 4(Ex) | 100 | R4"AG | 814 | 459 | 280 | 363 | 165 | 883 | 110 | 125 | 255 | 440 | 395 | 656 | 122 | 197 | |
| MX2452-T(U)64(Ex) | 150 | R4"AG | 831 | 576 | 345 | 457 | 207 | 1000 | 105 | 125 | 260 | 445 | 450 | 755 | 122 | 196 | |
| MX2452 bis 62-P(U)... 4(Ex) | 150 | R4"AG | 1084 | 576 | 345 | 457 | 207 | 1000 | 105 | 125 | 260 | 445 | 450 | 755 | 122 | 197 | |
| MX2436 bis 38-T(U)36(Ex) | 100 | R4"AG | 745 | 422 | 265 | 323 | 147 | 846 | 117 | 125 | 248 | 433 | 395 | 642 | 122 | 197 | |
| MX2446 bis 48-T(U)36(Ex) | 100 | R4"AG | 814 | 459 | 280 | 363 | 165 | 883 | 110 | 125 | 255 | 440 | 395 | 656 | 122 | 197 | |
| MX2452 bis 62-T(U)... 6(Ex) | 150 | R4"AG | 831 | 576 | 345 | 457 | 207 | 1000 | 105 | 125 | 260 | 445 | 450 | 755 | 122 | 196 | |
| V2332 bis 39-T(U)... 2(Ex) | 100 | R4"AG | 702 | 385 | 240 | 290 | 145 | 799 | 152 | 125 | 213 | 398 | 395 | 617 | 122 | 197 | |
| V2342 bis 46-P(U)... 2(Ex) | 100 | R4"AG | 1035 | 440 | 282 | 316 | 158 | 852 | 152 | 125 | 213 | 398 | 395 | 659 | 122 | 197 | |
| V2334 bis 36-C24(Ex) | 100 | R4"AG | 526 | 385 | 240 | 290 | 145 | 799 | 152 | 125 | 213 | 398 | 395 | 617 | 122 | | |
| V2344 bis 46-D44(Ex) | 100 | R4"AG | 563 | 438 | 280 | 316 | 158 | 852 | 152 | 125 | 213 | 398 | 395 | 657 | 122 | | |
| V2334 bis 36-TU34(Ex) | 100 | R4"AG | 702 | 385 | 240 | 290 | 145 | | | | | | | | | 197 | |
| V2344 bis 46-TU34(Ex) | 100 | R4"AG | 702 | 438 | 280 | 316 | 158 | | | | | | | | | 197 | |
| V2436-T(U)34(Ex) | 100 | R4"AG | 745 | 422 | 265 | 323 | 147 | 846 | 117 | 125 | 248 | 433 | 395 | 642 | 122 | 197 | |
| V2437 bis 45-T(U)... 4(Ex) | 100 | R4"AG | 814 | 459 | 280 | 363 | 165 | 883 | 110 | 125 | 255 | 440 | 395 | 656 | 122 | 197 | |
| V2442 bis 46-P(U)... 4(Ex) | 100 | R4"AG | 984 | 459 | 280 | 363 | 165 | 883 | 110 | 125 | 255 | 440 | 395 | 657 | 122 | 197 | |
| V2452 bis 56-P(U)94(Ex) | 150 | R4"AG | 994 | 576 | 345 | 457 | 207 | 1000 | 105 | 125 | 260 | 445 | 450 | 755 | 122 | 197 | |
| K3352 bis 58-P(U)... 4(Ex) | 150 | R6"AG | 1084 | 608 | 370 | 468 | 209 | 1156 | 140 | 125 | 260 | 546 | 450 | 965 | 273 | 273 | |
| K3360 bis 68-F(U)... 4(Ex) | 150 | R6"AG | 1308 | 752 | 450 | 600 | 269 | 1300 | 136 | 174 | 313 | 599 | 600 | 1109 | 273 | 273 | |
| K3366 bis 70-G(U)... 4(Ex) | 150 | R6"AG | 1364 | 752 | 450 | 600 | 269 | 1300 | 136 | 174 | 312 | 598 | 600 | 1109 | 273 | 273 | |
| K3366 bis 70-P(U)96(Ex) | 150 | R6"AG | 1088 | 752 | 450 | 600 | 269 | 1300 | 137 | 125 | 264 | 550 | 450 | 1109 | 273 | 273 | |
| MX3452 bis 62-P(U)... 4(Ex) | 150 | R6"AG | 1084 | 608 | 370 | 468 | 209 | 1156 | 140 | 125 | 260 | 546 | 450 | 965 | 273 | 273 | |
| MX3468 bis 74-F(U)114(Ex) | 150 | R6"AG | 1326 | 690 | 420 | 548 | 241 | 1237 | 137 | 174 | 312 | 598 | 600 | 1077 | 273 | 273 | |
| MX3456 bis 62-T(U)... 6(Ex) | 150 | R6"AG | 831 | 608 | 370 | 468 | 209 | 1158 | 140 | 125 | 260 | 546 | 450 | 966 | 273 | 273 | |
| MX3468 bis 74-P(U)... 6(Ex) | 150 | R6"AG | 1016 | 690 | 420 | 548 | 241 | 1237 | 137 | 125 | 263 | 549 | 450 | 1047 | 273 | 273 | |

Wet well installation with auto-coupling system

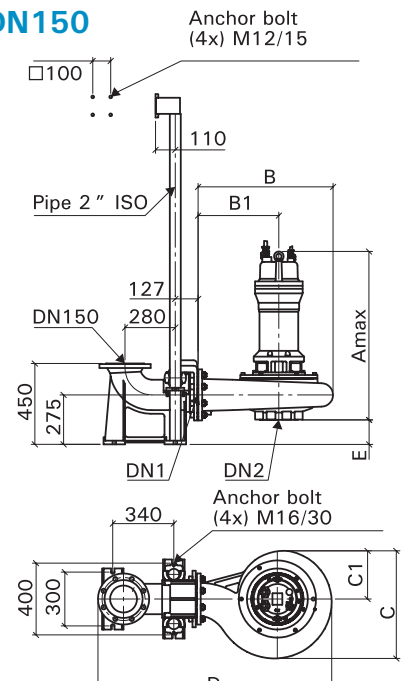
DN80



DN100

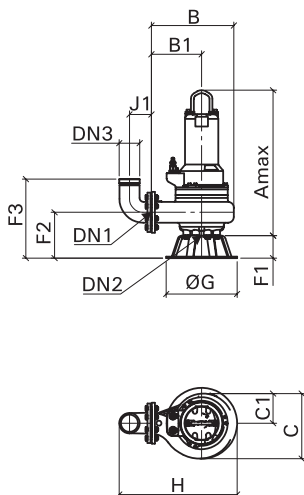


DN150

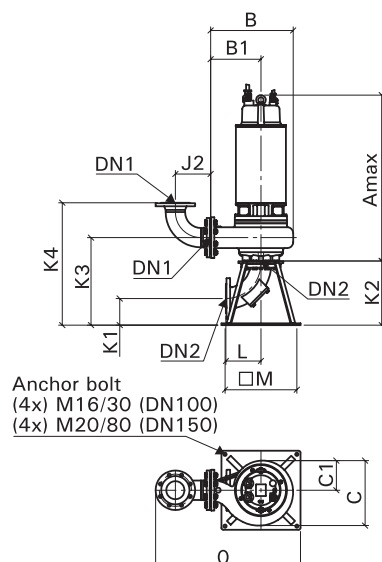


| K1 | K2 | K3 | K4 | L | □M | O | P1 | P2 | Q | Rmax | S1 | S3 | Tmax | Umax | V1 |
|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|------|-----|-----|------|------|-----|
| 148 | 357 | 450 | 614 | 195 | 400 | 687 | 200 | 400 | 93 | 700 | 280 | 95 | 548 | 648 | 260 |
| 148 | 357 | 450 | 615 | 195 | 400 | 687 | 200 | 400 | 93 | 948 | 280 | 95 | 796 | 896 | 310 |
| 148 | 357 | 476 | 641 | 195 | 400 | 767 | 200 | 480 | 119 | 1063 | 280 | 95 | 886 | 986 | 310 |
| 148 | 357 | 450 | 614 | 195 | 400 | 687 | 200 | 400 | 93 | 627 | 280 | 95 | 475 | 575 | 260 |
| 148 | 357 | 476 | 640 | 195 | 400 | 767 | 200 | 480 | 121 | 726 | 280 | 95 | 548 | 648 | 260 |
| 148 | 357 | 435 | 599 | 195 | 400 | 707 | 200 | 420 | 250 | 882 | 360 | 110 | 738 | 843 | 260 |
| 148 | 357 | 435 | 600 | 195 | 400 | 897 | 200 | 450 | 250 | 1219 | 360 | 110 | 1075 | 1180 | 310 |
| 148 | 357 | 435 | 599 | 195 | 400 | 707 | 200 | 420 | 250 | 809 | 360 | 110 | 665 | 770 | 260 |
| 148 | 357 | 435 | 599 | 195 | 400 | 737 | 200 | 450 | 250 | 809 | 360 | 110 | 665 | 770 | 260 |
| 148 | 357 | 450 | 645 | 195 | 400 | 727 | 200 | 400 | 93 | 698 | 280 | 95 | 542 | 642 | 260 |
| 148 | 357 | 450 | 645 | 195 | 400 | 727 | 200 | 400 | 93 | 1035 | 280 | 95 | 883 | 983 | 310 |
| 148 | 357 | 475 | 670 | 195 | 400 | 807 | 200 | 480 | 119 | 1063 | 280 | 95 | 886 | 986 | 310 |
| 148 | 357 | 475 | 670 | 195 | 400 | 807 | 200 | 480 | 119 | 1282 | 280 | 95 | 1087 | 1187 | 360 |
| 148 | 357 | 450 | 645 | 195 | 400 | 727 | 200 | 400 | 93 | 625 | 280 | 95 | 469 | 569 | 260 |
| 148 | 357 | 475 | 670 | 195 | 400 | 807 | 200 | 480 | 118 | 726 | 280 | 95 | 548 | 648 | 260 |
| 148 | 357 | 480 | 674 | 195 | 400 | 792 | 200 | 465 | 123 | 680 | 280 | 95 | 498 | 598 | 260 |
| 148 | 357 | 487 | 681 | 195 | 400 | 807 | 200 | 480 | 130 | 749 | 280 | 95 | 560 | 660 | 260 |
| 205 | 502 | 637 | 831 | 283 | 520 | 941 | 250 | 595 | 135 | 766 | 350 | 120 | 572 | 682 | 260 |
| 207 | 500 | 635 | 830 | 283 | 520 | 883 | 250 | 595 | 135 | 1096 | 350 | 120 | 902 | 1012 | 310 |
| 148 | 357 | 480 | 674 | 195 | 400 | 792 | 200 | 465 | 123 | 680 | 280 | 95 | 498 | 598 | 260 |
| 148 | 357 | 487 | 681 | 195 | 400 | 807 | 200 | 480 | 130 | 749 | 280 | 95 | 560 | 660 | 260 |
| 205 | 502 | 637 | 831 | 283 | 520 | 941 | 250 | 595 | 135 | 766 | 350 | 120 | 572 | 682 | 260 |
| 148 | 357 | 445 | 639 | 195 | 400 | 767 | 200 | 440 | 260 | 882 | 360 | 110 | 665 | 770 | 260 |
| 148 | 357 | 445 | 640 | 195 | 400 | 809 | 200 | 480 | 260 | 1219 | 360 | 110 | 1075 | 1180 | 310 |
| 148 | 357 | 445 | 639 | 195 | 400 | 767 | 200 | 440 | 260 | 809 | 360 | 110 | 664 | 770 | 260 |
| 148 | 357 | 445 | 639 | 195 | 400 | 807 | 200 | 480 | 260 | 809 | 360 | 110 | 665 | 770 | 260 |
| 148 | 357 | 480 | 674 | 195 | 400 | 792 | 200 | 465 | 123 | 680 | 280 | 95 | 498 | 598 | 260 |
| 148 | 357 | 487 | 681 | 195 | 400 | 807 | 200 | 480 | 130 | 749 | 280 | 95 | 560 | 660 | 260 |
| 150 | 357 | 487 | 681 | 195 | 400 | 807 | 200 | 480 | 130 | 996 | 280 | 95 | 807 | 907 | 310 |
| 207 | 500 | 635 | 830 | 283 | 520 | 883 | 250 | 595 | 135 | 1006 | 350 | 120 | 842 | 952 | 310 |
| 207 | 500 | 635 | 906 | 283 | 520 | 1076 | 315 | 765 | 139 | 1096 | 450 | 120 | 902 | 1012 | 310 |
| 202 | 500 | 639 | 925 | 283 | 560 | 1132 | 315 | 765 | 139 | 1323 | 450 | 120 | 1106 | 1216 | 360 |
| 202 | 500 | 639 | 910 | 283 | 560 | 1168 | 315 | 765 | 139 | 1382 | 450 | 120 | 1144 | 1254 | 410 |
| 207 | 500 | 638 | 909 | 283 | 520 | 1168 | 315 | 765 | 138 | 1100 | 450 | 120 | 902 | 1012 | 310 |
| 207 | 500 | 635 | 906 | 283 | 520 | 1076 | 250 | 620 | 135 | 1096 | 350 | 120 | 902 | 1012 | 310 |
| 202 | 500 | 638 | 924 | 283 | 560 | 1102 | 310 | 730 | 138 | 1206 | 350 | 90 | 1000 | 1100 | 360 |
| 205 | 502 | 637 | 908 | 283 | 520 | 1076 | 250 | 620 | 135 | 766 | 350 | 120 | 572 | 682 | 260 |
| 207 | 500 | 638 | 909 | 283 | 520 | 1126 | 310 | 730 | 138 | 1028 | 350 | 90 | 831 | 931 | 310 |

Wet well installation with base stand

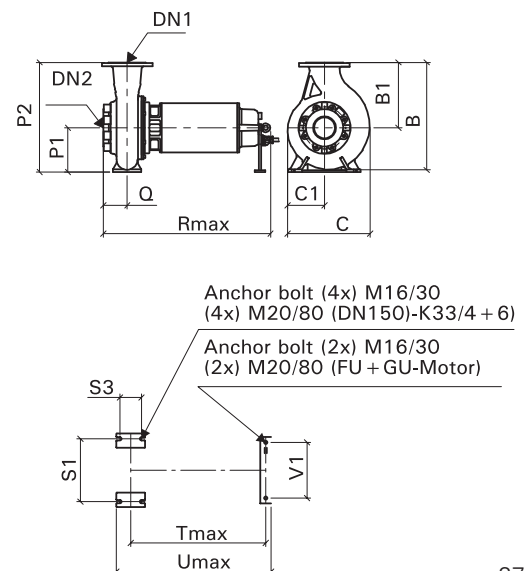


Dry well installation vertical



Dry well installation horizontal

Range V13 + 23/2 + 4
Separate support flanged to pump housing





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 60 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.



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