

ELECTRIC SUBMERSIBLE SEWAGE PUMPS

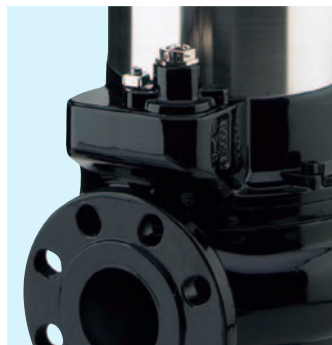


Ranges
MX, V, K

Discharge Size
DN 80 - DN 150

motralec

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HOMA
P U M P T E C H N O L O G Y

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

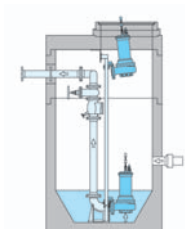
Various challenges – individual solutions: **HOMA** submersible wastewater pumps are designed for pumping sewage, sludge, effluents or surface water, including liquids containing a large proportion of solid or fibrous matter. They are installed in domestic, municipal, industrial and agricultural pumping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



The right installation for every pump station

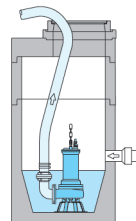
Permanent wet well installation

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.



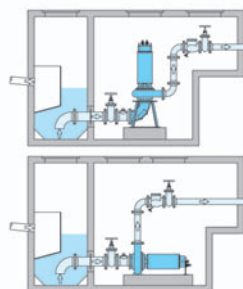
Transportable wet well installation

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.

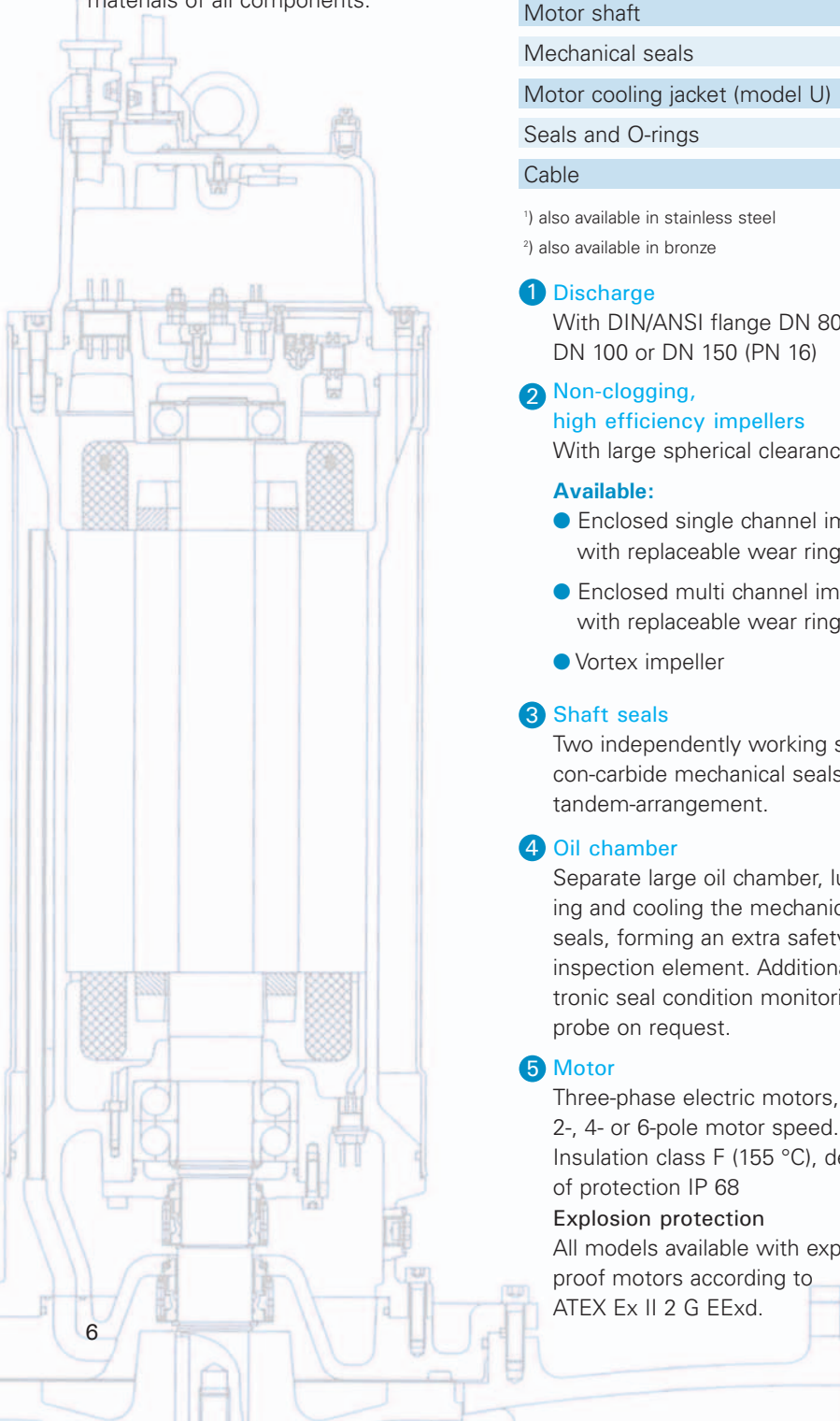
11 Cable junction chamber

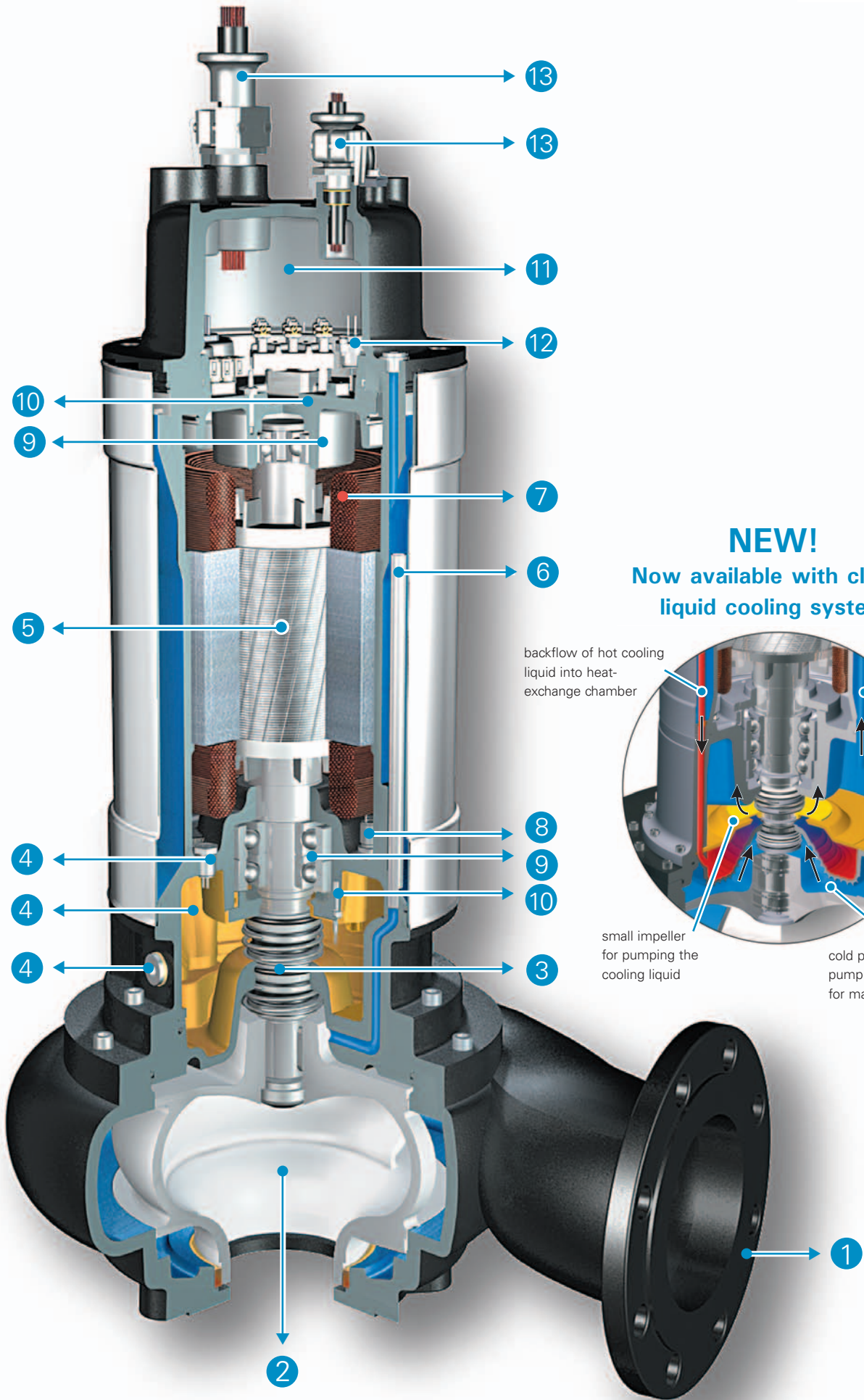
Separate junction chamber standard from 22 kW-4 pole, below on request.

12 Electronic moisture sensor in junction chamber

Available on request.

13 Pressure sealed, strain relief cable entry

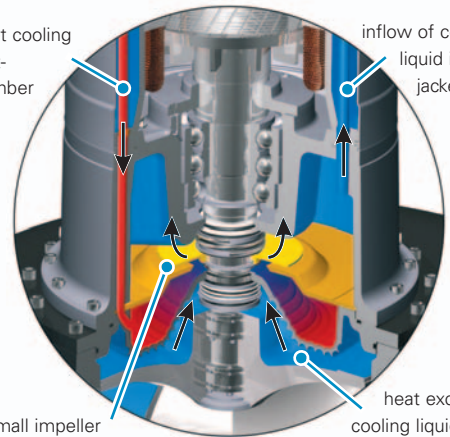




NEW!
Now available with closed liquid cooling system

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

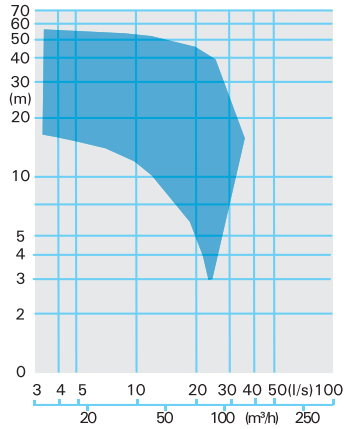
heat exchange of cooling liquid with cold pumped liquid through pump flange, spiral-shaped for maximum surface

DN80

V 13... 2-pole



Vortex impeller
80 mm Ø
Spherical clearance
2900 rpm
[see page 12](#)

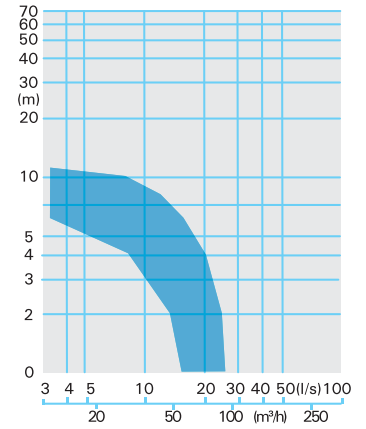


DN80

V 13...4-pole



Vortex impeller
80 mm Ø
Spherical clearance
1450 rpm
[see page 13](#)

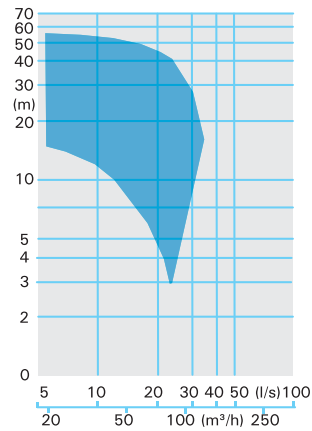


DN100

V 23...2-pole



Vortex impeller
80 mm Ø
Spherical clearance
2900 rpm
[see page 16](#)

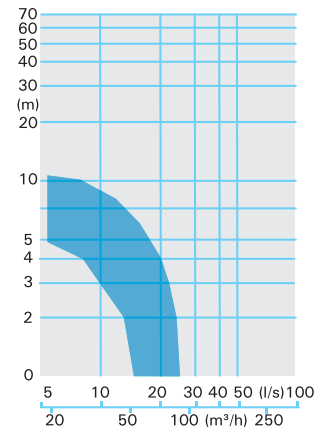


DN100

V 23...4-pole



Vortex impeller
80 mm Ø
Spherical clearance
1450 rpm
[see page 17](#)

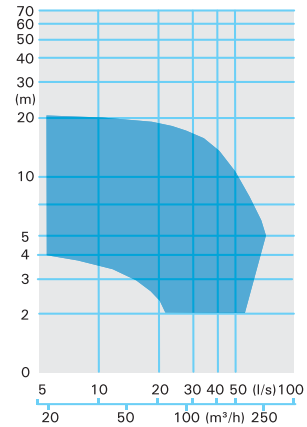


DN100

V 24...4-pole



Vortex impeller
100 mm Ø
Spherical clearance
1450 rpm
[see page 20](#)

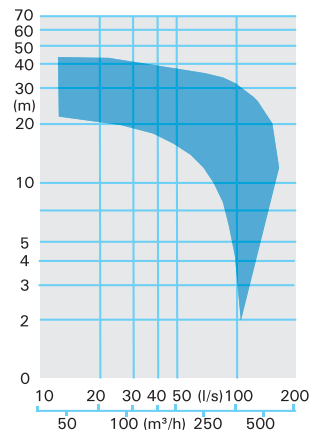


DN150

K 33...4-pole



Enclosed two channel impeller
80 mm Ø
Spherical clearance
1450 rpm
[see page 23](#)

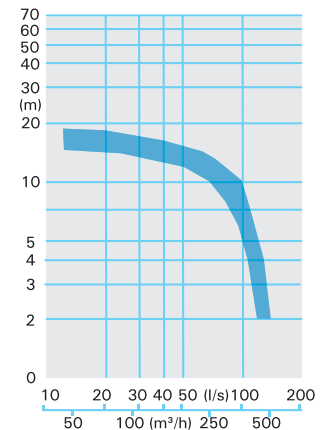


DN150

K 33...6-pole



Enclosed two channel impeller
80 mm Ø
Spherical clearance
960 rpm
[see page 24](#)



DN80 - V13...-2 polig

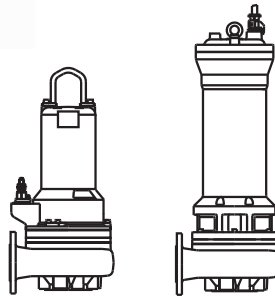


Vortex impeller

80 mm Ø

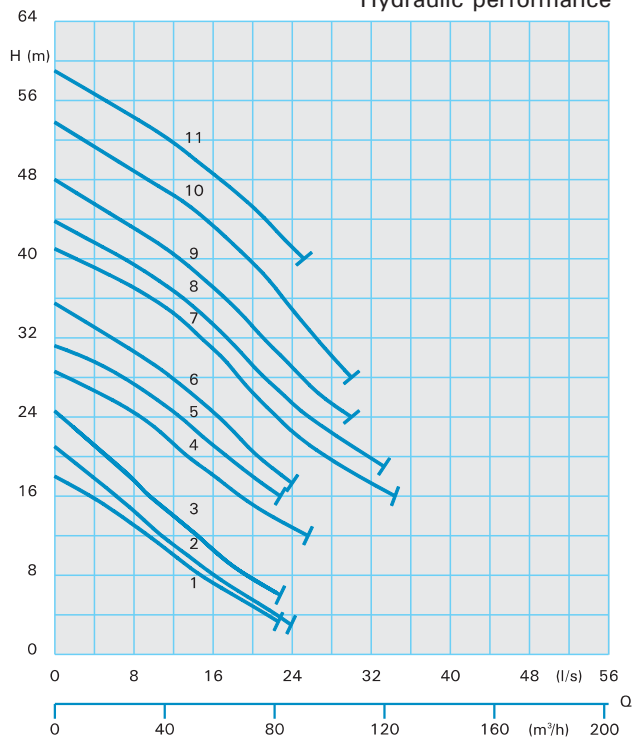
Spherical clearance

2900 rpm

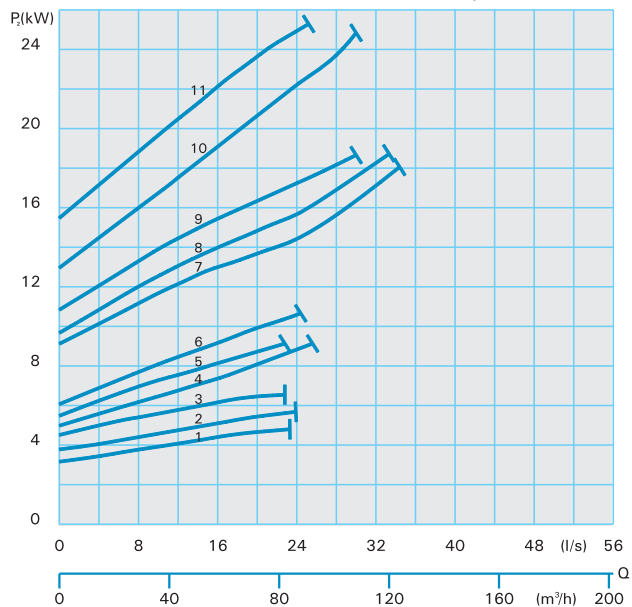


Performance curves

Hydraulic performance



Motor output



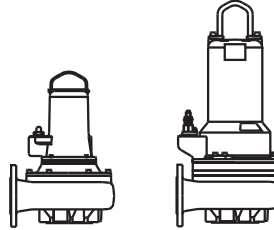
Technical data

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	V1332-T62(C)(Ex)	7.5	6.4	13.0	91	91
2	V1333-T62(C)(Ex)	7.5	6.4	13.0	91	91
3	V1334-T62(C)(Ex)	7.5	6.4	13.0	91	91
4	V1335-T72(C)(Ex)	11.0	9.5	18.8	103	103
5	V1337-T72(C)(Ex)	11.0	9.5	18.8	103	103
6	V1339-T82(C)(Ex)	13.0	11.5	22.2	108	108
7	V1342-P102(C)(Ex)	22.0	19.6	36.9	176	188
8	V1343-P102(C)(Ex)	22.0	19.6	36.9	176	188
9	V1344-P102(C)(Ex)	22.0	19.6	36.9	176	188
10	V1345-P122(C)(Ex)	28.0	25.4	46.3	196	208
11	V1346-P122(C)(Ex)	28.0	25.4	46.3	196	208

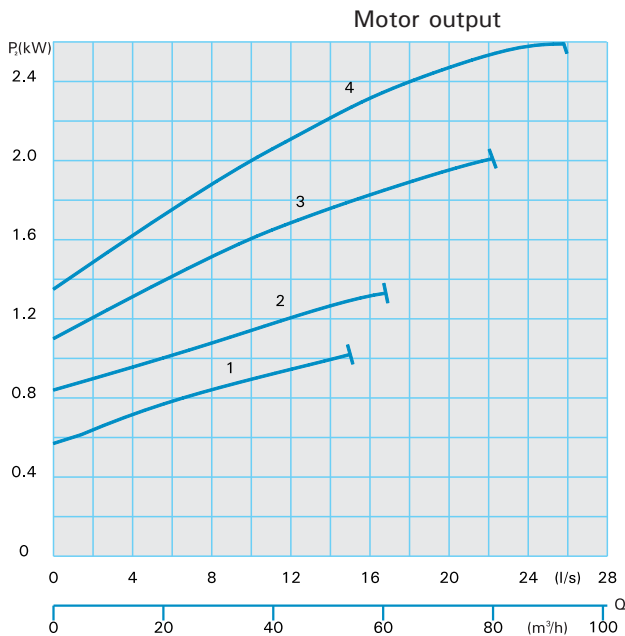
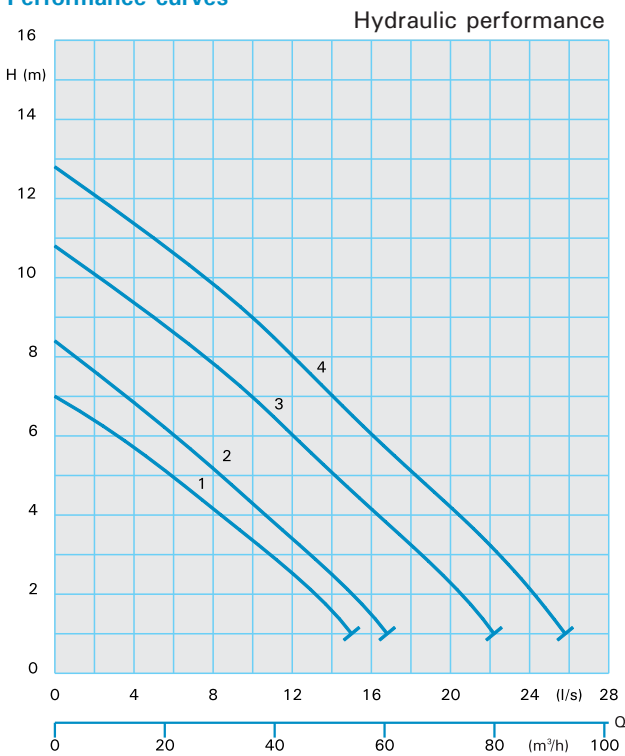
Standard- and Explosion-proof model – Dry well installation						
Curve No.	Pump type	Motor input P ₁ (kW)	Motor output P ₂ (kW)	Rated current I _n (A)	Weight standard (kg)	Weight Ex (kg)
1	V1332-TU62(Ex)	7.5	6.4	13.0	94	94
2	V1333-TU62(Ex)	7.5	6.4	13.0	94	94
3	V1334-TU62(Ex)	7.5	6.4	13.0	94	94
4	V1335-TU72(Ex)	11.0	9.5	18.8	108	108
5	V1337-TU72(Ex)	11.0	9.5	18.8	108	108
6	V1339-TU82(Ex)	13.0	11.5	22.2	113	113
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-PU102(Ex)	22.0	19.6	36.9	188	200
10	V1345-PU122(Ex)	28.0	25.4	46.3	208	220
11	V1346-PU122(Ex)	28.0	25.4	46.3	208	220



Vortex impeller
80 mm Ø
Spherical clearance
1450 rpm



Performance curves

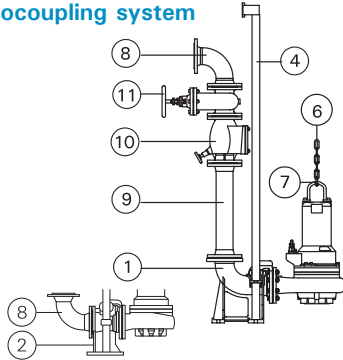


Technical data

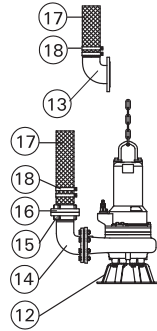
Standard- and Explosion-proof model – Wet well installation						
Curve No.	Pump type	Motor input P ₁ (kW)	Motor output P ₂ (kW)	Rated current I _n (A)	Weight standard (kg)	Weight Ex (kg)
1	V1334-C24(C)(Ex)	1.7	1.3	3.3	63	64
2	V1336-C24(C)(Ex)	1.7	1.3	3.3	63	64
3	V1344-D44(C)(Ex)	3.4	2.6	6.2	66	67
4	V1346-D44(C)(Ex)	3.4	2.6	6.2	66	67

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	V1334-TU34(Ex)	3.4	2.9	5.8	86	86
2	V1336-TU34(Ex)	3.4	2.9	5.8	86	86
3	V1344-TU34(Ex)	3.4	2.9	5.8	90	90
4	V1346-TU34(Ex)	3.4	2.9	5.8	90	90

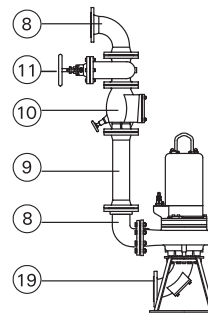
Permanent wet well installation with autocoupling system



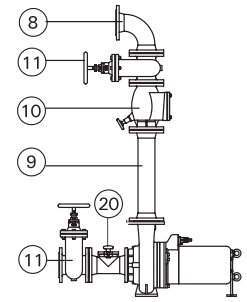
Transportable wet well installation



Permanent dry well installation vertical



Permanent dry well installation horizontal



No.	Description	Type	Dimension	Part No.	No.	Description	Type	Dimension	Part No.			
1	Auto-coupling system, cast iron, consisting of auto-coupling with flanged elbow, flanged pump coupling and upper slide rail bracket - Cast iron, upper slide-rail bracket - complete Stainless Steel	KK 80/ 80	DN 80	8604025	10	Flanged swing check valve, cast iron, with gasket and fixing bolts		DN 80	2212807			
		KK 80/100	DN 80/DN100	8604030				DN100	2212809			
		KK 100/100	DN100	8604055				DN125	2212810			
		KK 100/ 80	DN100/DN 80	8604060				DN150	2212811			
		KK 150/150	DN150	8604070				DN200	2212816			
		KK 150/100	DN150/DN100	8603632		11	Flanged gate valve, cast iron, with gasket and fixing bolts		DN 80	2216080		
		KK 200/150	DN200/DN150	8604105					DN100	2216100		
		KKR 80/ 80	DN 80	8604026					DN100	2216125		
		KKR 80/100	DN 80/DN100	8604031					DN125	2216150		
		KKR 100/100	DN100	8604056					DN150	2216150		
KKR 100/ 80	DN100/100	8604061	DN200	2216200								
KKR 150/150	DN150	8604071	12	Ring base stand up to 16,9 kW (P2) from 17,0 kW (P2)	NB 100 A NB 150 A NB 150	DN100	7321215					
KKR 150/100	DN150/100	8604073				DN150	7321285					
KKR 150/150	DN150	8604072				DN150	7321275					
KKR 200/150	DN200/150	8604106				13	Flanged spigot elbow with gasket and fixing bolts		DN100/110mm	6001141		
KKC 80/ 80	DN 80	8604027							14	90° Flanged elbow Double nipple Threaded flange Flanged to thread elbow with gasket and fixing bolts		R3"IG/AG
KKC 100/100	DN100	8604057	R3" AG	2128030								
KKC 150/150	DN150	8604072	DN80/R3"IG	2215080								
2	Auto-coupling system consisting of auto-coupling with horizontal discharge flange, flanged pump coupling and upper slide rail bracket	KS 80/ 100	DN 80/DN100	8604045	15							STORZ-fixed coupling
		KS 100/100	DN 100	8604065		B-R3"IG	2010602					
		KS 150/ 150	DN 150	8604075		A-R4"IG	2010701					
KS 200/ 150	DN 200/DN150	8604083	DN150xR6"AG	2010961								
4	Guide rails, pair, per meter - Galvanized steel		1 1/2" for DN 80/DN100	2190155	16	STORZ-hose coupling with spigot		B-75 mm	2013502			
			2" for DN150	2190205				A-110 mm	2013801			
			2 1/2" for DN200	2190225				F-150 mm	2013901			
- Stainless steel			1 1/2" for DN 80/DN100	2190254	STORZ-reducer		A - B	2015612				
			2" for DN150	2190256			F - A	2015622				
			2 1/2" for DN200	2190258			17	Reinforced hose, per m (inner dia. in mm)		75 mm	2632075	
Upper slide rail bracket, stainless steel	on request		110 mm	2632110								
			6	Lifting chain, Galvanized steel, per meter						150 mm	2632150	
							8 mm Ø	2800384	18	Hose bands		S 85/20
10 mm Ø	2800386	S100/20					2310020					
8 mm Ø	2800384	S115/20	2311520									
10 mm Ø	2800386	75 mm	2642075	S118/20	2311820							
10 mm Ø	2800386	110 mm	2642110	S172/20	2317520							
7	Galvanized steel shackle		f. 5 mm Ø	2801450	19	Flanged pump stand with gasket and fixing bolts		TVS 100 A (up to 28kW)	DN100	7321705		
			f. 8 mm Ø	2801380				TVS 150 A	DN150	7321725		
f. 10 mm Ø	2801410	Rubber hose (inner dia. in mm)		on request	Pump stand with suction elbow, cleaning hole, gasket and fixing bolts		TVS 100 A-R (up to 28kW)	DN100	8604220			
f. 8 mm Ø	2801384						TVS 100 A-R	DN100	8604221			
f. 10 mm Ø	2801386	Hose with pre-attached couplings			TVS 150 A-R	DN150	8604225					
8	90° flanged elbow		DN 80	2153302	20	Flanged pipe with cleaning hole, gasket and fixing bolts		DN150	8604230			
			DN 100	2153303				TVS 150/200 A-R	DN150/DN200	8604232		
DN 150	2153353	or flanged y-piece for twin pump arrangement, horizontal discharge (optional with vertical discharge) available with different dimensions according to sump dimension (see dimensions) with gasket and fixing bolts	on request	DN 80/ 80/ 80	DN 80/ 80/100	DN 100/100/100	DN150/DN200	8604235				
DN 200	2153363								DN 100/100/125	DN150/DN200	8604235	
9	Flanged discharge pipe, 1 m, with gasket and fixing bolts Discharge pipe, per additional meter Flanged reducer		DN 80	2152081	Kit of gaskets and fixing bolts		various	various	various			
			DN 100	2152201								
			DN 125	2152221								
			DN 150	2152251								
			DN 200	2152271								
			DN 80	2150180								
			DN 100	2150100								
			DN 125	2150125								
			DN 150	2150150								
			DN 200	2150200								

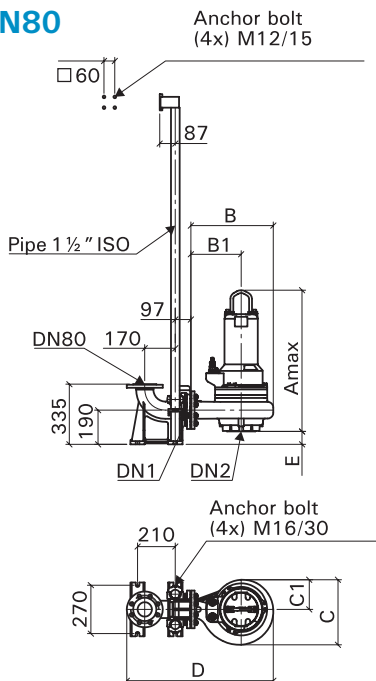
Stainless steel coupling systems, elbows, pipes, fittings (valves, flaps etc.) on request. Electrical or electronic control panels for pumps and pump stations with accessories on request. Sumps of concrete or synthetic material for complete pump stations please see special leaflet.

Installations and Dimensions

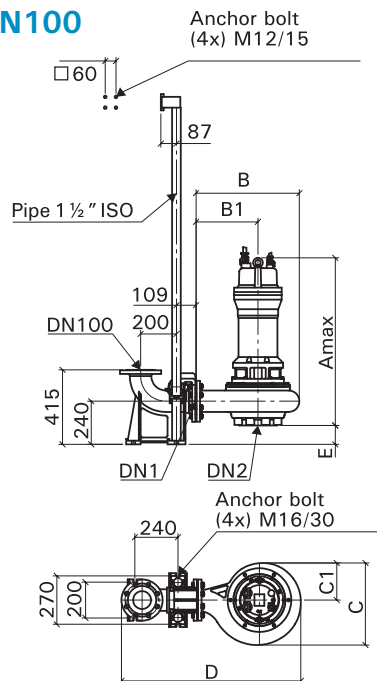
Pump type	DN1	DN2	DN3	Amax	B	B1	C	C1	D	E	F1	F2	F3	øG	H	J1	J2
MX1330 bis 38-T(U)... 2(Ex)	100	R3"AG	766	355	200	307	147	722	97	125	218	316	395	578	137	167	
MX1336 bis 41-P(U)... 2(Ex)	100	R3"AG	1026	355	200	307	147	722	97	125	218	316	395	579	137	167	
MX1344-P(U)122(Ex)	100	R3"AG	1051	459	280	363	165	826	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

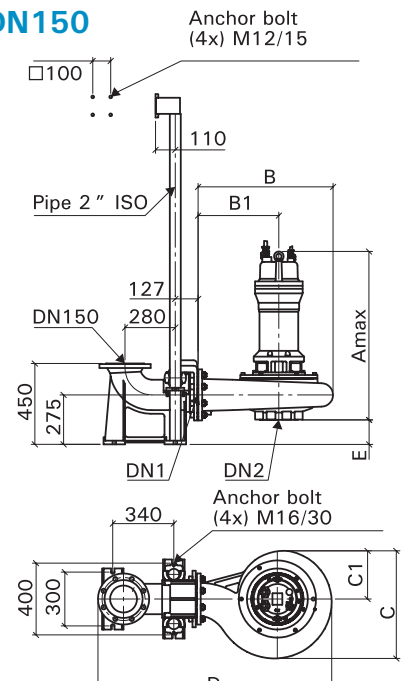
DN80



DN100

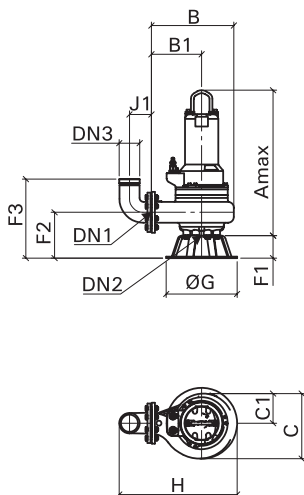


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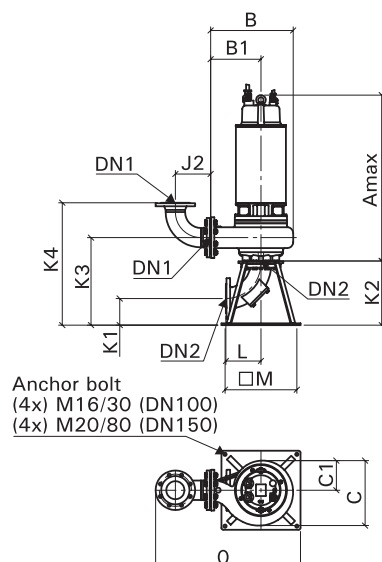


K1	K2	K3	K4	L	□M	O	P1	P2	Q	Rmax	S1	S3	Tmax	Umax	V1
148	357	450	614	195	400	687	200	400	93	700	280	95	548	648	260
148	357	450	615	195	400	687	200	400	93	948	280	95	796	896	310
148	357	476	641	195	400	767	200	480	119	1063	280	95	886	986	310
148	357	450	614	195	400	687	200	400	93	627	280	95	475	575	260
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
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Wet well installation with base stand

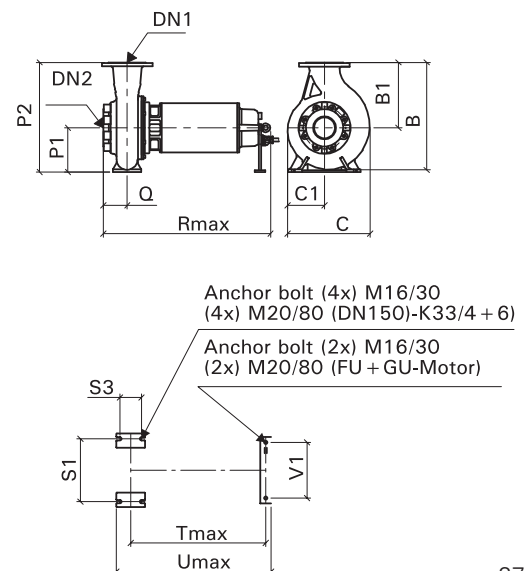


Dry well installation vertical



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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