

TANK CLEANING SYSTEMS



BR

Ejector Venturi
Systems with
Submersible
Pumps



Tank Cleaning Systems

Application

Storm water tanks are becoming more and more important in advanced flood management.

To ensure an efficient operation, dirt, sludge or solids contained in the water must not deposit at the bottom of the tank, affecting its function in the long run.

HOMA Tank Cleaning Systems guarantee the optimal function in multiple ways:

● Stream generation:

The **HOMA** Ejector System generates a strong horizontal stream in the tank to keep the solids floating.

● Delay of stagnation:

By enriching the water with oxygen, stagnation and odour will be prevented, especially important when water remains in the basin for longer periods.

● Cleaning:

By setting up the ejector pipe at a low position, the water-air stream will flush and clean the tank bottom of mud and sand, shortly before the emptying is finished.



Function

The **HOMA BR** system consists of a robust submersible sewage pump with non-clogging impeller, which primes the water from the deepest part of the tank.

Through the ejector, which is flanged on the pump discharge, the jet water will accelerate and cause air to be primed through a vertical pipe. The air-water mixture is pressed with high speed through the ejector pipe parallel to the tank bottom. The combination of jet water and air ensures an effective water movement with high jet intensity and turbulence.

For the enlargement of the jet angle, **HOMA** supplies an optional self swinging ejector pipe on request.



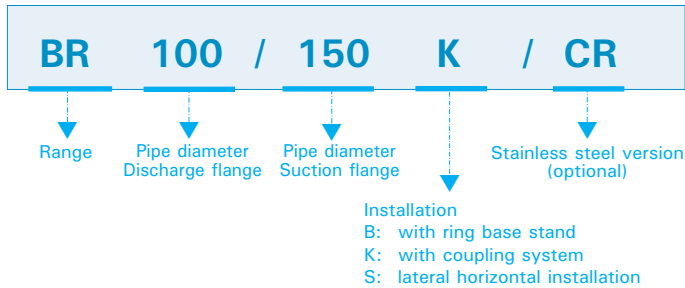
Tank Cleaning with HOMA Submersible Mixers

In special cases a **HOMA** Submersible Mixer (also available in stainless steel) may be a cost-efficient alternative for storm water tank cleaning, also available with horizontally and vertically moveable nozzle to enlarge the jet angle. Please ask for detailed information about our mixer range.



Technical Data and Selection

Type code:



Type Range Cleaning Unit

Type	Discharge flange / Suction flange	Ejector pipe diameter	Installation
BR100 B (/CR)	DN100/100	DN100	B
BR100/150 B (/CR)	DN100/150	DN100	B
BR150 B (/CR)	DN150/150	DN125	B
BR100 K (/CR)	DN100/100	DN100	K
BR100/150 K (/CR)	DN100/150	DN100	K
BR150 K (/CR)	DN150/150	DN125	K
BR100 S (/CR)	DN100/100	DN100	S
BR100/150 S (/CR)	DN100/150	DN100	S
BR150 S (/CR)	DN150/150	DN125	S

Type Range Pumps

Range	Discharge flange / Suction flange	Hydraulic / Impeller	Motor output P2 (kW)	max. Head (m)	max. Flow (l/s)
VX24(40-46)	DN100/100	Vortex	5.0 to 12.2	13 to 19	40 to 53
VX24(54-58)	DN100/150	Vortex	14.6 to 19.3	23 to 27	58 to 63
MX24(44-48)	DN100/100	Single channel	5.0 to 6.5	17 to 20	49 to 59
MX24(52-56)	DN100/150	Single channel	8.5 to 12.2	24 to 29	65 to 74
MX34(56-62)	DN150/150	Single channel	12.2 to 19.3	28 to 34	94 to 107

Speed: 1450 rpm

Standard model and model Ex are available.

Pumps with jacket cooling for operation with not submerged motor, as well as other pump types on request.

Technical information of individual pump types see appropriate sales documentations.

Selection

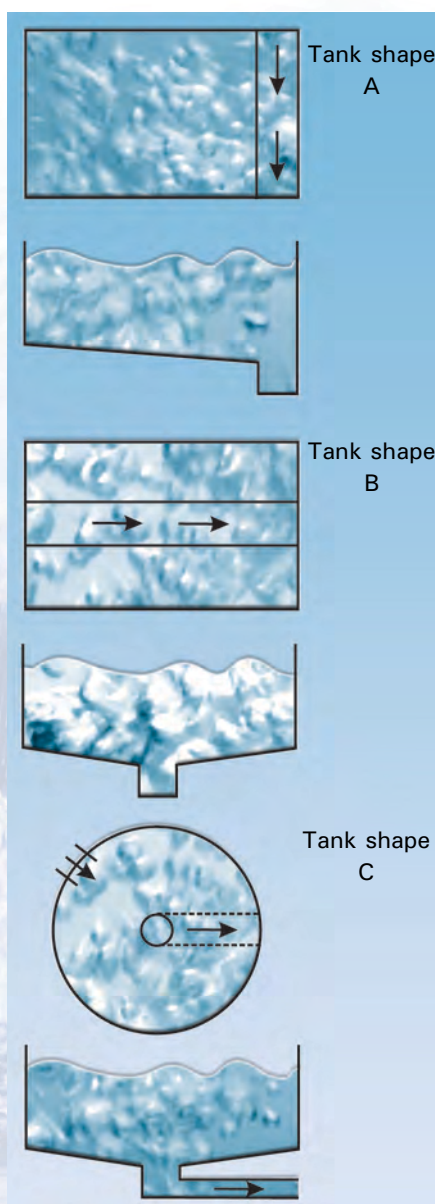
For selecting the complete cleaning system, each cleaning unit and pump type with similar discharge / pipe size may be combined. Please specify the required combination.

The optimal system and its positioning depends on the tank size and form.

In general there are 3 shapes of tanks:

- **Tank shape A:**
Rectangle tank with lateral outlet trough
- **Tank shape B:**
Rectangle tank with middle outlet trough
- **Tank shape C:**
Round tank with central outlet trough

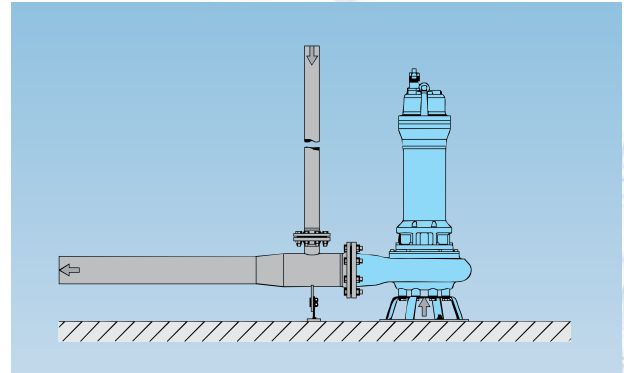
For an optimal selection and positioning of the cleaning system, please contact our sales service. Please ask for information about our control panels for pump operation and water level monitoring.



Installation

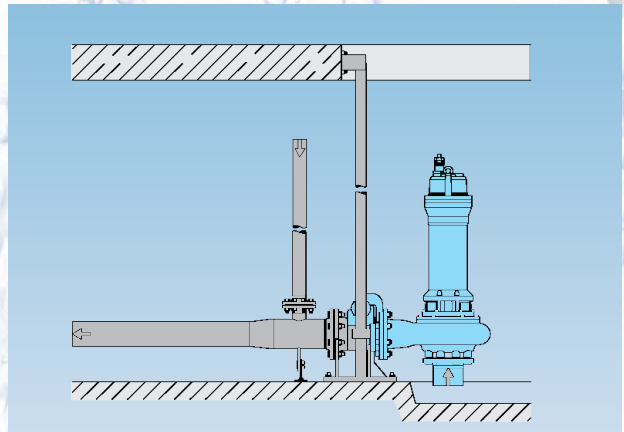
Installation with ring base stand (type B)

The simplest form of installation. Can be installed anywhere in the tank. The pump primes from the tank bottom.



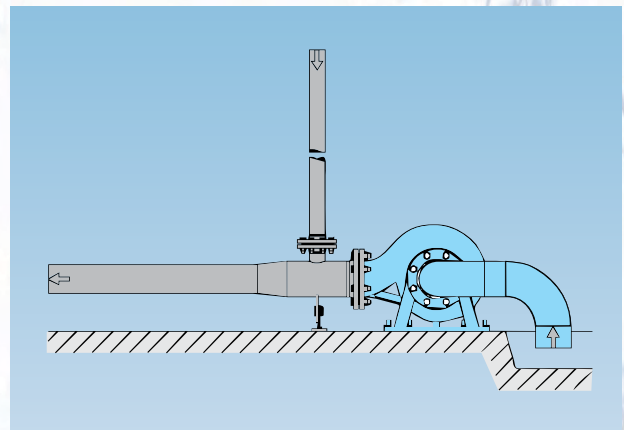
Installation with coupling system (type K)

The bolt-free connection between pump and jet-pipe allows for easy removal of the pump. Available for priming from the ground or with suction pipe for priming from a recessed trough.



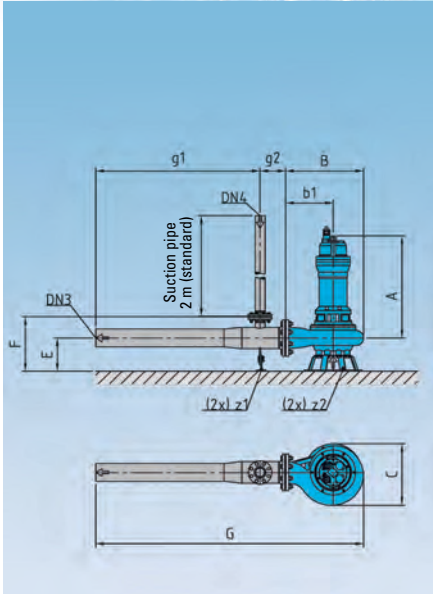
Lateral horizontal installation (type S)

Space-saving horizontal installation. Available for priming from the ground or with suction pipe for priming from a recessed trough.

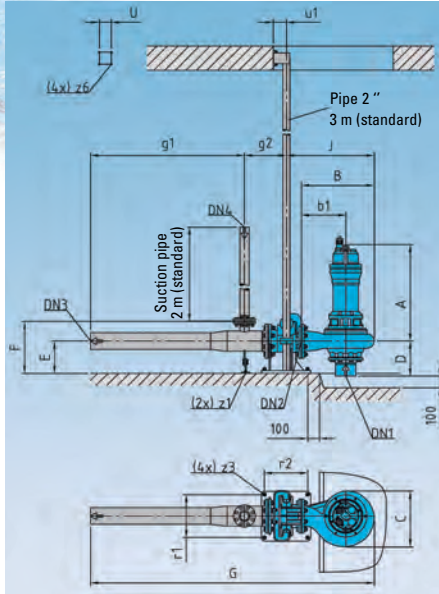


Dimensions

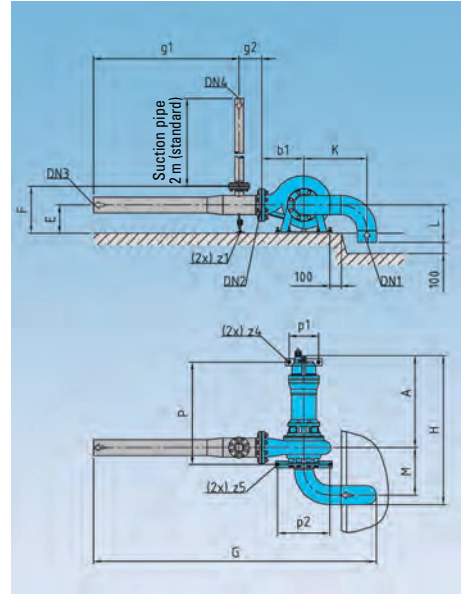
Type B



Type K



Type S



Type	Pump Range	A max. (U)	B	b1	C	D	E	F	G	g1	g2	H max. (U)	J	K	L	M	P max. (U)
BR100 K (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)	699 (704)	460		336	254	225	365	1926	1105	254						567
BR100 K (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)	874 (874)	460		336	254	225	365	1926	1105	254						567
BR100 K (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)	679 (683)	459		363	284	225	365	1925	1105	254						566
BR100/150 K (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)	988 (988)	555		410	267	225	365	2021	1105	254						662
BR100/150 K (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)	861 (861)	576		457	292	225	365	2042	1105	254						683
BR150 K (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)	951 (951)	608		468	292	270	436	2365	1283	350						732
BR100 B (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)	699 (704)	460		395		225	365	1741	1105	159						
BR100 B (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)	874 (874)	460		395		225	365	1741	1105	159						
BR100 B (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)	679 (683)	460		395		225	365	1741	1105	159						
BR100/150 B (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)	988 (988)	555		450		235	375	1834	1105	159						
BR100/150 B (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)	861 (861)	576		476		260	400	1840	1105	159						
BR150 B (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)	951 (951)	608		484		260	426	2091	1283	200						
BR100 S (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)	631 (639)		280			200	340	2006	1105	159	995 (1003)		405	253	307	686 (693)
BR100 S (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)	886 (886)		280			200	340	2006	1105	159	1250 (1250)		405	253	307	941 (941)
BR100 S (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)	611 (618)		280			200	340	2006	1105	159	1005 (1012)		405	253	337	696 (702)
BR100/150 S (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)	1000 (1000)		345			250	390	2250	1105	159	1480 (1480)		557	329	396	1066 (1066)
BR100/150 S (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)	873 (873)		345			250	390	2250	1105	159	1378 (1378)		557	329	396	964 (964)
BR150 S (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)	963 (963)		370			250	416	2494	1283	200	1468 (1468)		557	329	420	1468 (1468)

Type	Pump Range	p1	p2	r1	r2	U	u1	DN1	DN2	DN3	DN4	z1	z2	z3	z4	z5	z6
BR100 K (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)			200	210	60x60	87	100	100	100	65	M10	M16	M16			
BR100 K (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)			200	210	60x60	87	100	100	100	65	M10	M16	M16			
BR100 K (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)			200	210	60x60	87	100	100	100	65	M10	M16	M16			
BR100/150 K (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)			200	210	60x60	87	150	100	100	65	M10	M16	M16			
BR100/150 K (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)			200	210	60x60	87	150	100	100	65	M10	M16	M16			
BR150 K (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)			360	360	100x100	110	150	150	125	65	M10	M16	M16			
BR100 B (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)							100	100	100	65	M10	M12				M12
BR100 B (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)							100	100	100	65	M10	M12				M12
BR100 B (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)							100	100	100	65	M10	M12				M12
BR100/150 B (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)							150	100	100	65	M10	M12				M12
BR100/150 B (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)							150	100	100	65	M10	M12				M12
BR150 B (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)							150	150	125	65	M10	M12				M12
BR100 S (/CR)	VX24(40-46)-T(U)5(6)4 (Ex)	260	320					100	100	100	65	M10				M16	M16
BR100 S (/CR)	VX24(40-46)-P(U)7(8)4 (Ex)	260	320					100	100	100	65	M10				M16	M16
BR100 S (/CR)	MX24(44-48)-T(U)5(6)4 (Ex)	260	320					100	100	100	65	M10				M16	M16
BR100/150 S (/CR)	VX24(54-58)-P(U)9(10)4 (Ex)	260	460					150	100	100	65	M10				M16	M16
BR100/150 S (/CR)	MX24(52-56)-P(U)7(8)4 (Ex)	260	460					150	100	100	65	M10				M16	M16
BR150 S (/CR)	MX34(56-62)-P(U)8(9)(10)4 (Ex)	260	460					150	150	125	65	M10				M16	M16



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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