

Compact sewage disposal unit with plastic – or steel tank.

Sanimaster PE, FE, VA

Application

HOMA Sanimaster PE, FE, VA compact sewage disposal units are suitable for pumping sewage and waste water from areas below the sewer level (see DIN 1986). With their large tank volumes and high performance submersible waste water pumps they are the ideal solution for the disposal from large private, commercial or public buildings, hospitals, schools etc.

The compact design allows a packed installation with minimum space requirement.

The horizontal pump position with the straight-thru tank-pump discharge connection avoids unnecessary elbows. With flanged gate valves fitted between the tank and the pumps, the twin pump unit operates even with one pump disassembled for maintenance or repair. The tanks are available in different materials with volumes from 180 up to 1000 litres.

DIN EN 12050-1: Conformity and design approved and controlled by LGA, certificate No. 0220119.

Pumped medium: Clear water or drainage water, waste water or sewage containing soft solids. Max. medium temperature: 35°C, short term up to 60°C.

Operation: Intermittent.

Design

Flood protected single or twin pump lifting station consisting of:

Collecting tank: Odour and gas tight tank.

Plastic tank:

Total volume 400 l, tandem installation with two tanks up to 800 l.

Inlets: DN 150 horizontal (3x), DN 100 vertical.

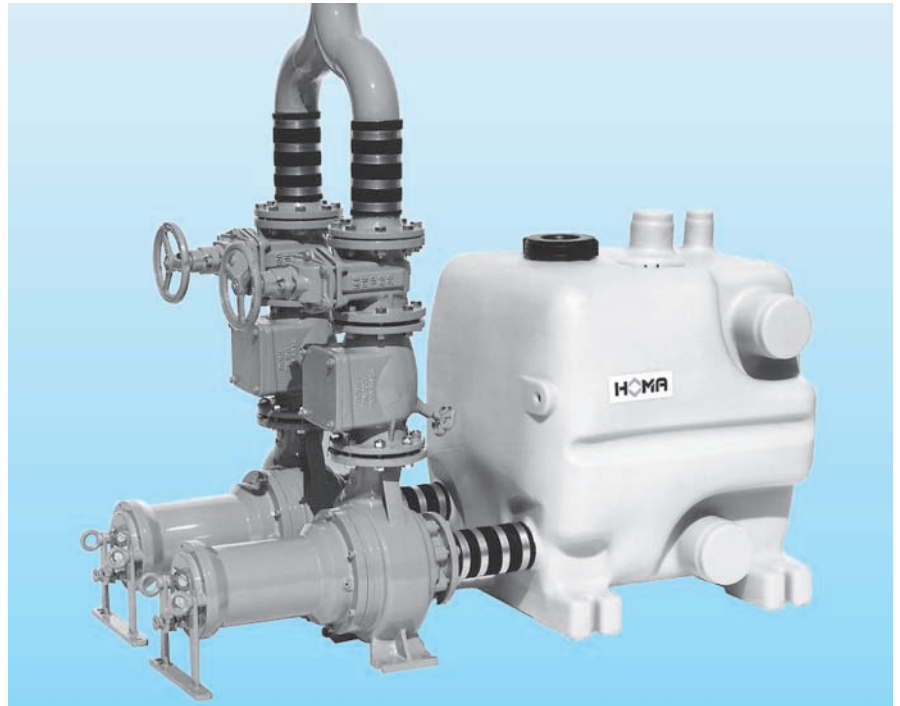
Air vent DN 70.

Connection for diaphragm pump DN 50. Cleaning cover with screw cap. Connections for pneumatic level control and float switch.

Steel tank, galvanized or stainless steel:

Total volume 180 l up to 1000 l (larger volumes on request).

Inlet: DN 150 horizontal. Air vent DN 70. Connection for diaphragm pump BSP 1 1/2" F. Cleaning cover with screw cap. Connections for pneumatic level control



and float switch.

Pumps: Single stage sewage pumps. Horizontal installation, discharge vertical.

Impellers: Enclosed single-vane impeller (M) or vortex impeller (V).

Motors: Fully submersible, pressure tight electric motors 400-415 V / 3 Ph. Thermal sensors embedded in the winding. Insulation class F. Degree of protection IP 68. Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of two mechanical seals (silicon-carbide) in a separate oil chamber. Oil inspection from outside. Electronical seal probe fitted into the oil chamber on request.

Explosion protection: All models are available with explosion proof motors according to $\text{Ex II 2 G EEx de [ib] IIBT4}$.

Materials:	
Collecting tank	see tank types
Motor housing, pump housing, impeller	Cast iron GG25
Rotor shaft, screws	Stainless steel
Seal kit	Perbonane

Equipment supplied

Tank with 1 pump or 2 pumps. Elastic hose connections with bands for tank inlet, connection tank-pump, air vent and diaphragm pump. 1 Elastic union piece DN 100 per pump for discharge connection (with flange DN 80 or DN 100 depending on the pump type). Pneumatic level control. Electronic control panel.

Pump types – Technical data

Curve no.	Pump type	Motor output P ₂ (kW)	Speed (rpm)	Nominal current (A)	Weight (kg)
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Discharge DN 80
Spherical clearance 70 mm

①	TP 70 M 13/4 D	0,9	1450	2,6	40
②	TP 70 M 16/4 D	1,3	1450	3,4	40
③	TP 70 M 26/4 D	1,9	1450	5,5	66
④	TP 70 M 31/4 D	2,4	1450	6,3	66
⑤	TP 70 V 36/2 D	2,9	2900	6,3	56

Discharge DN 100
Spherical clearance 100 mm

⑥	MX 2339-D44	2,6	1450	6,2	71
⑦	MX 2341-D44	2,6	1450	6,2	71
⑧	MX 2444-T54	5,0	1450	9,9	113
⑨	MX 2446-T64	6,5	1450	13,1	118
⑩	MX 2448-T64	6,5	1450	13,1	118
⑪	MX 2330-T72	9,5	2900	18,8	105
⑫	MX 2331-T82	11,5	2900	22,2	110
⑬	MX 2335-T82	11,5	2900	22,2	110

Voltage 400V/3Ph (other voltages are available upon request)
Direct start (DOL) up to 4 kW, above 4 kW star-delta start

Tank types

Type	Material	Total volume ¹⁾	Operating volume ¹⁾
PE 40	Polyethylene	400 l	220 l
PE 80	Polyethylene	800 l ²⁾	440 l
FE 18	Steel, galvanized	180 l	80 l
FE 30	Steel, galvanized	300 l	135 l
FE 50	Steel, galvanized	500 l	225 l
FE 100	Steel, galvanized	1000 l	600 l
VA 18	Stainless steel 304 ³⁾	180 l	80 l
VA 30	Stainless steel 304 ³⁾	300 l	135 l
VA 50	Stainless steel 304 ³⁾	500 l	225 l
VA 100	Stainless steel 304 ³⁾	1000 l	600 l

¹⁾ Special design with larger total volume on request

²⁾ Two tanks in tandem installation

³⁾ Standard version, tanks in stainless steel 316 on request

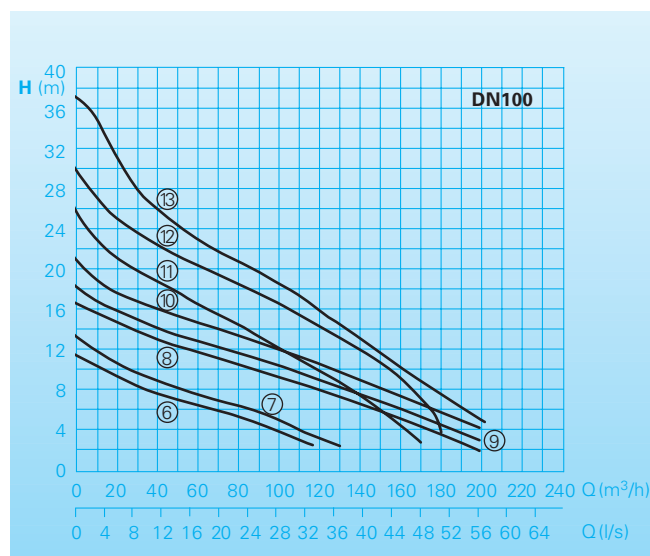
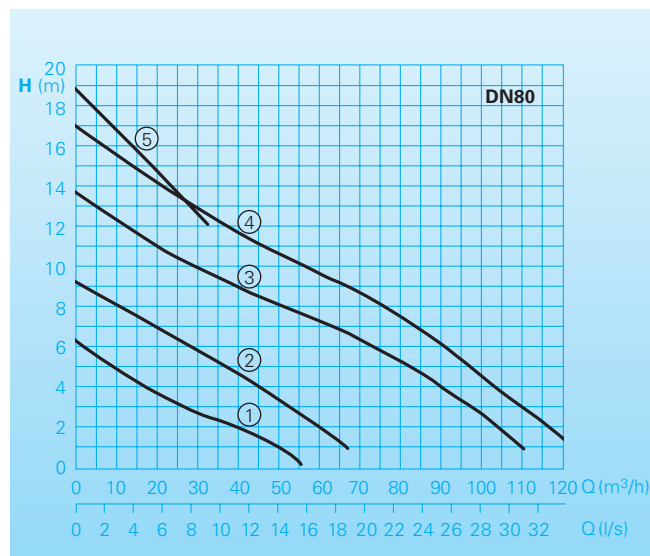
Combinations of tanks and pumps:

Pump types	available in combination with tank types:					
	PE40	PE80	FE18 VA18	FE30 VA30	FE50 VA50	FE100 VA100
TP 70 M 13/4 D	S+T	-	S+T	S+T	S+T	-
TP 70 M 16/4 D	S+T	-	S+T	S+T	S+T	-
TP 70 M 26/4 D	S+T	-	S+T	S+T	S+T	-
TP 70 M 31/4 D	S+T	-	S+T	S+T	S+T	-
TP 70 V 36/2 D	S+T	-	S+T	S+T	S+T	-
MX 2339-D44	S+T	T	-	S+T	S+T	T
MX 2341-D44	S+T	T	-	S+T	S+T	T
MX 2444-T54	S+T	T	-	S+T	S+T	T
MX 2446-T64	S+T	T	-	S+T	S+T	T
MX 2448-T64	S+T	T	-	S+T	S+T	T
MX 2330-T72	S+T	T	-	S+T	S+T	T
MX 2331-T82	S+T	T	-	S+T	S+T	T
MX 2335-T82	S+T	T	-	S+T	S+T	T

S+T: Available as single pump station (S) with 1 pump or as twin pump station (T) with 2 pumps

T: Available only as twin pump station (T) with two pumps

Performance

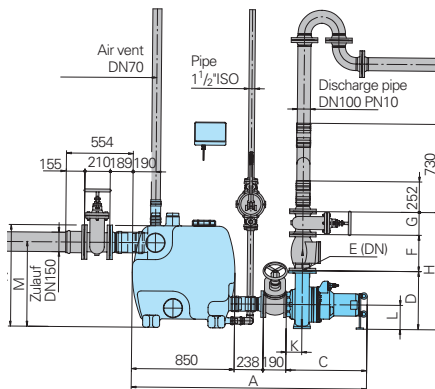


Type identification chart

Series	Sanimaster	PE 40 T	TP70M26/4D	Ex
Tank material				
Tank volume (litre/10)				
Number of pumps				
Type designation of sewage pump				
With explosion proof motors (on request)				

S = 1 pump (Single pump station)
T = 2 pumps (Twin pump station)

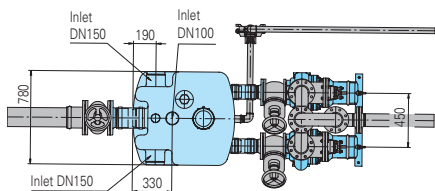
Tank types PE40/PE80



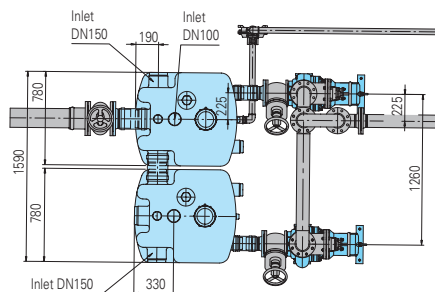
Dimensions

Tank-types	with pump types	Dimensions												
		A	A ₁	B	C	D	E	F	G	H	K	L	M	N
PE 40 S-	TP 70M13 up to 16/4D	1713	-	-	435	369	80	260	180	809	90	200	700	840
PE 40 T-	TP 70M26 up to 31/4D	1754	-	-	476	440	80	260	180	880	93	200	700	840
	TP 70V 36/2D	1750	-	-	472	369	80	260	180	809	90	200	700	840
	MX2339 up to 41/D44	1769	-	-	491	400	100	300	190	890	93	200	700	840
	MX2330 up to 35/T...	1896	-	-	618	400	100	300	190	890	93	200	700	840
	MX2444 up to 48/T...	1946	-	-	668	480	100	300	190	970	130	200	700	840
PE 80 T-	MX2339 up to 41/D44	1769	-	-	491	400	100	300	190	890	93	200	700	840
	MX2330 up to 35/T...	1896	-	-	618	400	100	300	190	890	93	200	700	840
	MX2444 up to 48/T...	1946	-	-	668	480	100	300	190	970	130	200	700	840
FE 18 S-	TP 70M13 up to 16/4D	846	970	350	435	369	80	260	180	809	90	200	700	820
VA 18 S-	TP 70M26 up to 31/4D	888	1011	350	476	440	80	260	180	880	93	200	700	820
	TP 70V 36/2D	846	1007	350	472	369	80	260	180	809	90	200	700	820
FE 18 T-	TP 70M13 up to 16/4D	1262	-	350	435	369	80	260	180	809	90	200	700	820
VA 18 T-	TP 70M26 up to 31/4D	1303	-	350	476	440	80	260	180	880	93	200	700	820
	TP 70V 36/2D	1299	-	350	472	369	80	260	180	809	90	200	700	820
FE 30 S-	TP 70M13 up to 16/4D	1512	-	600	435	369	80	260	180	809	90	200	700	820
FE 30 T-	TP 70M26 up to 31/4D	1553	-	600	476	440	80	260	180	880	93	200	700	820
VA 30 S-	TP 70V 36/2D	1549	-	600	472	369	80	260	180	809	90	200	700	820
VA 30 T-	MX 2339 up to 41/D44	1568	-	600	491	400	100	300	190	890	93	200	700	820
	MX2330 up to 35/T...	1695	-	600	618	400	100	300	190	890	93	200	700	820
	MX2444 up to 48/T...	1745	-	600	668	480	100	300	190	970	130	200	700	820
FE 50 S-	TP 70M13 up to 16/4D	1912	-	1000	435	369	80	260	180	809	90	200	700	820
FE 50 T-	TP 70M26 up to 31/4D	1953	-	1000	476	440	80	260	180	880	93	200	700	820
VA 50 S-	TP 70V 36/2D	1949	-	1000	472	369	80	260	180	809	90	200	700	820
VA 50 T-	MX 2339 up to 41/D44	1968	-	1000	491	400	100	300	190	890	93	200	700	820
	MX2330 up to 35/T...	2095	-	1000	618	400	100	300	190	890	93	200	700	820
	MX2444 up to 48/T...	2145	-	1000	668	480	100	300	190	970	130	200	700	820
FE 100 T-	MX 2339 up to 41/D44	2218	-	1250	491	400	100	300	190	890	93	200	1000	1200
VA 100 T-	MX2330 up to 35/T...	2345	-	1250	618	400	100	300	190	890	93	200	1000	1200
	MX2444 up to 48/T...	2395	-	1250	668	480	100	300	190	970	130	200	1000	1200

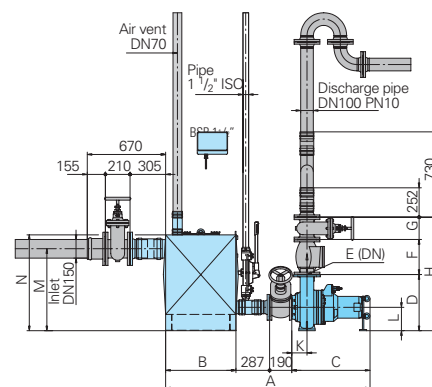
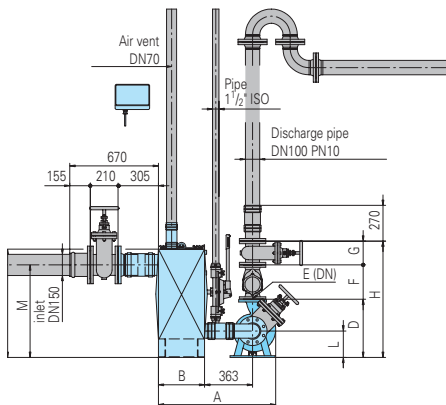
PE 40 S/T



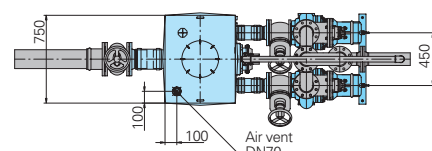
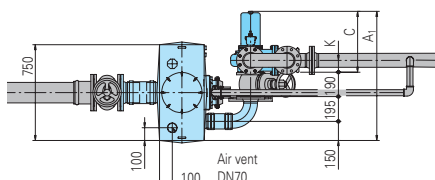
PE 80 T



Tank types FE 18 S/VA 18 S



Tank types FE 18 T/VA 18 T, FE 30-50 S+/VA 30-50 S+, FE 100 T/VA 100 T

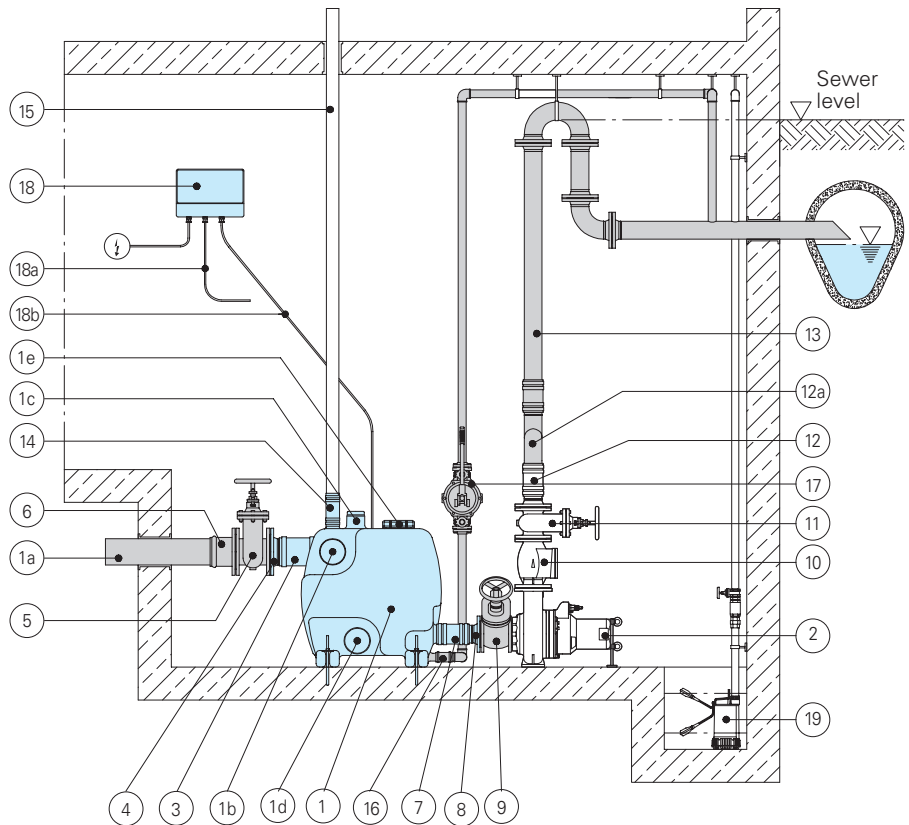


Control panel

Pneumatic level control series PS with pressure operation. Available with float switch control on request. Electronic control box for control and monitoring of all main functions.

- Plastic housing IP 54 (DOL start) IP 65 (star-delta-start)
- Motor protection
- Motor contactor resp. star-delta-combination
- Motor fuses (only star-delta-star)
- Manual-0-automatic switch
- Pilot lights for operation, direction of rotation, alarm and faults
- Volt free contact for remote signal
- Mains-operated alarm with buzzer
- Mains-independent alarm with battery charger for storage battery 9,6 V
- Temperature control of the pump motors
- Power voltage 400-415 V / 3Ph
- Control voltage 230-240 V / 1Ph
- Twin pump station control panel additionally with auto-change over after each pump cycle, operation of second pump at high flow, automatic change to stand by pump in case of pump failure.

Installation and Accessories



Accessories

Part Description	Dim.	Part no.	Part Description	Dim.	Part no.	Part Description	Dim.	Part no.
① Collecting tank		*	⑪ Flanged gate valve with gasket and fixing bolts, discharge pipe	DN 80 DN 100	2216080 2216100	⑬ Elastic union piece for diaphragm pump	BSP 1 1/2"	*
①a Horizontal inlet	DN 150		⑫ Flanged elastic piece with gasket and screws	DN80 DN80/100 DN 100	2159021 ** **	⑭ Diaphragm pump	BSP 1 1/2" M 8502455	
①b Alternative horizontal inlet/upper tank connection	DN 150		⑫a Flanged union piece with gasket and screws for twin pump station PE 40	DN80/80 DN100/100 DN 100/150	2155080 2155100 2155150	⑮ Control panel with pneumatic or float switch level control		*
①c Vertical inlet	DN 100		ditto for twin pump station PE 80	DN100/100 DN 100/150	2155200 2155205	⑯ Power cable for pump motor		*
①d Lower tank connection	DN 150		⑬ Flanged discharge pipe consisting of:			⑰ Pneumatic pressure hose		*
①e Cleaning cover			- Flanged FF-piece, gasket and screws	DN 80 DN 100 DN 150	2152081 2152201 2152251	⑱ Submersible drainage pump, series Chromatic, H 117, TP 28		
② Sewage pump		*	- additional m	DN 80 DN 100 DN 150	2150080 2150100 2150150		see individual leaflet	
③ Elastic hose connector, inlet	DN 150	*	- 90° flanged elbow with gasket and screws	DN 80 DN 100 DN 150	2153302 2153303 2153353		* equipment supplied	
④ Flanged pipe socket	DN 150	2171017	- 180° flanged elbow with gasket and screws	DN 80 DN 100 DN 150	2153401 2153403 2153453		** equipment supplied depending on pump discharge size	
⑤ Flanged gate valve with gasket and fixing bolts, tank inlet	DN 150	2216150	⑭ Elastic union piece for air vent pipe	DN 70	*			
⑥ Flanged socket with gasket and fixing bolts	DN 150	2158015	⑮ Air vent pipe	DN 70	on request			
⑦ Elastic hose connector	DN 100	*						
⑧ Flanged pipe socket	DN 100	*						
⑨ Flanged gate valve with gasket and fixing bolts, pump inlet	DN 100	2216100						
⑩ Flanged swing check valve with gasket and screws, cleaning cover and aeration fixture	DN 80 DN 100	2212807 2212809						

HOMA

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