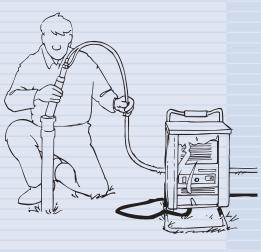
# GROUNDWATER PUMPS



You will return to the contents of P2 WATER by clicking the pictogram

P2.50

Lowering the submersible pump MP1 into a monitoring well.



Groundwater pumps are usually applied for developing and purging monitoring wells before executing a sampling procedure. Applying submersible pumps 12.27 and 12.12 sampling can be executed too.

12.27 Submersible pump sets MP1, suitable for purging and sampling monitoring wells

Various standard sets are available for purging and sampling monitoring wells to a depth of 20 to 90 m.

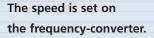
The submersible pump MP1, included in these sets, has been specially designed for purging and sampling of monitoring wells with a diameter from 50 mm. The pump motor is controlled by an adjustable frequency-converter. Due to the continuously variable setting of the frequency, the capacity of the pump can be adjusted from 0 to 2 m³/hour. This results in a steady flow of anaerobe water. A new measuring point has to be purged before sampling. The high capacity of this pump

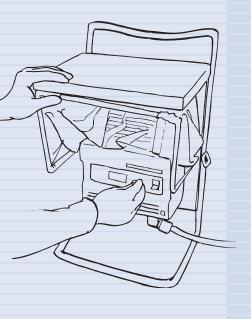
allows for quick purging of the measuring point. By setting a low pumping capacity the same pump can be used for sampling. Built-in safeguards protect the MP1 and the convertor against overload. The actual frequency as well as possible failure can be read from a display.

Among other items the standard sets contain: an MP1 submersible pump, a cooling jacket, a service kit, a frequency-converter, a badweather protection (IP23), a suspension cable, teflon tube with connection, a hose reel cart, a generator and insulation guard.

#### **Advantages**

- High top capacity for purging, smooth flow for sampling.
- ☐ Compact and easy to install; mobile.
- Resistant against corrosive fluids.
- ☐ The pumped medium only has contact with stainless steel and teflon.
- ☐ Anaerobe sampling.
- Simple cleaning procedures.







Submersible pump set, complete set



Submersible pump MP1



Frequency-converter

### **GROUNDWATER PUMPS**

#### 12.12.SA Submersible pump set, low cost

This low cost submersible pump set is suitable for use in monitoring wells with a diameter of minimal 40 mm. The set includes three submersible pumps "Gigant", three booster pumps, a roll of extension cable, sealed crimp splices (to make a waterproof cable extension), a roll of polyethylene sampling tube and a battery with battery charger.

Both pumps are small centrifugal pumps with small but powerful motors. This allows them to fit in narrow monitoring wells.

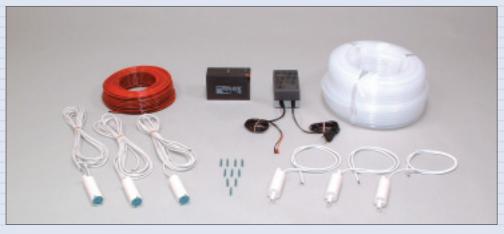
The Gigant pump can push water to a height of 10 meter. The Booster pumps have the same capacity and can be applied as boosters.

By fitting one or more Booster pumps directly over a Gigant pump the pressure can be raised to 20, 30 or more meter. The pumps can be used for purging a new sampling filter. Connecting the pumps to the regulator of the peristaltic pump 12 Vdc allows for setting a relaxed speed. This allows the pumps to be used also for taking samples (the regulator can

power a maximum of two pumps with a maximum sampling depth of approx. 12 meter). The low price of the pumps makes it possible to use them only once. This prevents the risk of cross-contamination. The pumps are made from non-toxic ABS plastic and are fitted with a stainless steel impeller.

#### 12.08 Water pump with combustion engine

This self-priming (up to a depth of 6 meter) centrifugal pump is used primarily for (fast) purging or emptying of monitoring wells and bore holes. Other applications are pumping water for irrigation, drinking water for cattle, etc. The pump has a quiet, reliable starting, economical fourstroke engine running on ordinary or unleaded petrol. The pump is not sensitive to polluted water and the maintenance is minimal and easily executed.



Submersible pump set



Submersible pumps "Gigant"

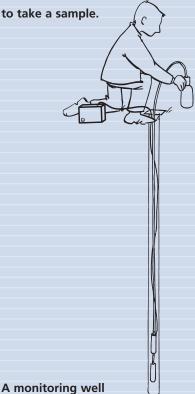


Water pump with combustion engine

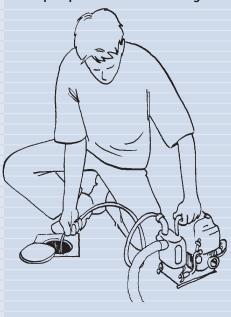


P2.50

Two submersible pumps have been connected to the battery



is purged using the water pump with combustion engine.







### **PARTS LIST**

Art.no.	•	Qty. n set	Art.no.	Description	Qty. in set
Groundwater	pumps (P2.50)			MP1 to monitoring w	
	Groundwater pumps are supplied in various designs,		**12.27.18	Hose reel cart small, t	o 1
	e.g.: - submersible pump MP1			Capacity till 60 m tube	e pump,
	(230 V) - submersible pumps (12 V)			5 leather straps to fix reel and mounting ins	
	- water pump with combustion engine		**99.13	Generator, max. power continuous power: 33 50 Hz, tank capacity 1	er 3700 W, 1 00 W, 230V
12.27	Submersible pump set, MP1 Depending on sampling dep			duration 8.8 hrs. Dime 580x477x508 mm. Incl	
	a choice can be made out of		**99.13.03	level guard Collector box, synthet	ic. to 1
	the following sets (for 20, 40 60, 80 and 90 m depth)		33.13.03	place generator when in the field (to preven and oil leakage). Dime	working t petrol-
12.27.SA	Submersible pump set, for p	ur-		80x60x12 cm	ensions.
	ging/sampling monitoring wells to a depth of 20 m and inside Ø from 50 mm, pressu		**99.13.01	Insulation guard to preelectrical apparatus w	
	head lift 86 m. Set with pum MP1, converter,generator, in:	р		obliged acc. to NEN10	)10 for
	tion			generator 2000 VA or Not suitable for main:	
	control, Teflon tube, cables, cooling jacket, hoose reel car	rt		with rim earthing. Inc	l. adapter
	+ service kit			cable with euro-plug (DIN49441/CEE7)	
**12.27.02	Submersible pump MP1, centrifugal type f. purging/	1	12.27.SB	Submersible pump s	•
	sampling monitoring wells,			ging/sampling moni wells to a depth of 4	•
	stainless steel 316, pressure			inside Ø from 50 mn	
	head lift max. 86 m, adjust. cap. Till max. 1.8 m3/h, 220 V			head lift 86 m. Set v	•
	1.1 kW, for connection to			MP1, converter gene	
	frequency converter, pump			insulation control, to tube, cables, cooling	
	Ø 45 mm, 287 mm long. Teflon cable 20 m			hoose reel cart + ser	-
**12.27.11	Service kit for submersible pump MP1 (impellers with	1	**12.27.04	Submersible pump MI	P1, 1
	pump chambers), incl. assembly instructions	y		centrifugal type f. pur sampling monitoring	wells,
**12.27.40	Frequency converter to	1		stainless steel 316, pro head lift max. 86 m, a	
	control submersible pump MP1 frequency adjustment between			cap. Till max. 1.8 m3/h	•
	46-405 Hz. Connection to 230 V			1.1 kW, for connection	
	50 Hz 2.2 kVA minimal. Maxim load 1.5 kW, IP21 protection	um		frequency converter, p Ø 45 mm, 287 mm lor Teflon cable 40 m	•
**12.27.41	(drip-proof), incl. cable/plug Stand with bad weather	1	**12.27.11	Service kit for submer	
	protection for frequency conve Protection IP23 (rainwater tigh	erter.		pump MP1 (impellers pump chambers), incl.	
**12.27.22	Suspension cable, stain-	1	**12.27.40	instructions Frequency converter t	o control 1
	less steel, for submersible pum incl. 2 cable clamps, length 20		12.27.10	submersible pump MF	
**12.27.12	Flange stainless steel, for connection of suspension	1		frequency adjustment 46-405 Hz. Connection	n to
**12.27.32	cable to pump Tube, teflon, Ø 18x13 mm, roll of 20 m	1		230 Volt 50 Hz 2.2 kV Maximum load 1.5 kV protection (drip-proof	V, IP21
**12.27.13	Tube connection, stainless	1		cable/plug	
	steel, for connection of tube with Ø 18x13 mm to submersib	ole	**12.27.41	Stand with bad weath protection for frequence converter. Protection	ncy
**10.01.13	pump MP1 Strap for e.g. tightning	1		(rainwater tight)	
	filter gauze, bag of 100 pcs.		**12.27.24	Suspension cable, stai	
**12.27.14	Cooling jacket, for adaption of submersible pump	1		steel, for submersible incl. 2 cable clamps, le	



Art.no.	•	Qty. n set	Art.no.	Description	Qty. in set
**12.27.12	Flange stainless steel, for connection of suspension	1		1.5 kW, IP21 protection (drip- proof), incl. cable/plug	
	cable to pump		**12.27.41	Stand with bad weather	r 1
**12.27.34	Tube, teflon, Ø 18x13 mm, roll of 40 m	1		protection for frequency Protection IP23 (rainwar	
**12.27.13	Tube connection, stainless steel, for connection of tube with Ø 18x13 mm to	1	**12.27.26	Suspension cable, stainle steel, for submersible po incl. 2 cable clamps, lene	ump,
	submersible pump MP1		**12.27.12	Flange stainless steel, fo	~
**10.01.13	Strap for e.g. tightning filter gauze, bag of 100 pcs.	1		connection of suspensio	
**12.27.14	Cooling jacket, for adaption of submersible pump MP1		**12.27.36	Tube, teflon, Ø 18x13 m roll of 60 m	nm, 1
	to monitoring wells with		**12.27.13	Tube connection, stainle	ess 1
	a Ø larger than 75 mm			steel, for connection of	tube
**12.27.18	Hose reel cart small, to	1		with Ø 18x13 mm to sul	omersible
	transport tube, cable and pum	p.		pump MP1	
	Capacity till 60 m tube. Incl.		**10.01.13	Strap for e.g. tightning	1
	holder for submersible pump,		10101110	filter gauze, bag of 100	
	5 I leather straps to fix tube or	1	**12.27.14	Cooling jacket, for adap	•
	reel and mounting instruction		12.27.11	of submersible pump M	
**99.13	Generator, max. power	J. 1		monitoring wells with a	
33.13	3700 W, continuous power:			than 75 mm	Ø larger
	3300 W, 230V 50 Hz, tank		**12.27.19	Hose reel cart large, to	transport
	capacity 17 l, run duration 8.8	hrs	12.27.13	tube, cable and pump.	•
	Dimensions 580x477x508 mm.	1113.		60 - 200 m tube. Incl. ho	
	Incl. oil level guard			submersible pump, 5 lea	
**99.13.03	Collector box, synthetic, to pla	ce 1		straps to fix tube on ree	
33.13.03	generator when working in the			mounting instructions	:i aiia
	field (to prevent petrol- and oi		**99.13	Generator, max. power	1
	leakage). Dimensions: 80x60x1		99.13	3700 W, continuous pov	
**99.13.01	Insulation guard to protect	1		3300 W, 230V 50 Hz, tar	
99.13.01	electrical apparatus which are	'		capacity 17 l, run durati	
	connected to a generator. Obli	and		Dimensions 580x477x 50	
	acc. to NEN1010 for generator	_		Incl. oil level guard	76 11111.
	2000 VA or more. Not suitable		**99.13.03	Collector box, synthetic,	to place 1
	for mains voltage with rim ear	thing	33.13.03	generator when workin	
	Incl. adapter cable with euro-p	_		field (to prevent petrol-	-
	(DIN49441/CEE7)	nug		leakage). Dimensions: 80x60x12 cm	and on
12.27.SC	Submersible pump set, for		**99.13.01	Insulation guard to prof	tect 1
12127130	purging/sampling monitoring	a	33113131	electrical apparatus whi	
	wells to a depth of 60 m and			are connected to a gene	
	inside Ø from 50 mm, pressu			Obliged acc. to NEN101	
	head lift 86 m. Set with pum			generator 2000 VA or m	
		ıþ		Not suitable for mains v	
	MP1, converter,generator,			with rim earthing. Incl.	•
	insulation control, Teflon tub	•		cable with euro-plug	ааарта.
	cables, cooling jacket, hoose reel cart + service kit			(DIN49441/CEE7)	
**12.27.06	Submersible pump MP1,	1	12.27.SD	Submersible pump set	, for
12.27.00	centrifugal type for purging/	'		purging/sampling moi	nitoring
	sampling monitoring wells,			wells to a depth of 80	_
	stainless steel 316, pressure he	ad		inside Ø from 50 mm,	
	lift max. 86m, adjust. cap. till	au		head lift 86 m. Set wit	-
	max. 1.8 m3/h, 220V 1.1 kW, fo	\r		MP1, converter,genera	
	connection to frequency conve			insulation control, Tef	
	pump Ø 45 mm, 287 mm long.			cables, cooling jacket,	
	Teflon cable 60 m			reel cart + service kit	Hoose
**12.27.11	Service kit for submersible	1		ice care + service kil	
12.27.11	pump MP1 (impellers with	'	**12.27.08	Submersible pump MP1	. 1
	pump chambers), incl. assembly	v	.2.27.00	centrifugal type f. purg	
	instructions	,		sampling monitoring we	-
**12.27.40	Frequency converter to control	1 1		stainless steel 316, press	
12.27.70	submersible pump MP1, freque			head lift ax. 86 m, adjus	
	adjustment between 46 405 H	-		Till may 1.9 m <sup>3</sup> /h 220 V	•

adjustment between 46-405 Hz.

2.2 kVA minimal. Maximum load

Connection to 230 Volt 50 Hz



Till max. 1.8 m<sup>3</sup>/h, 220 V 1.1 kW,

for connection to frequency

converter, pump Ø 45 mm,



## **PARTS LIST**

Art.no.	•	Qty. n set	Art.no.	Description Qty. in se	
	287 mm long. Teflon cable 80			cables, cooling jacket, hoose	
**12.27.11	Service kit for submersible	1		reel cart + service kit	
	pump MP1 (impellers with pur	np			
	chambers), incl. assembly		**12.27.09	Submersible pump MP1,	1
**12.27.40	instructions Frequency converter to contro	l 1		centrifugal type f. purging/	
12.27.40	submersible pump MP1,			sampling monitoring wells,	
	frequency adjustment between	n		stainless steel 316, pressure head lift max. 86 m, adjust. cap.	
	46-405 Hz. Connection to			Till max. 1.8 m³/h, 220 V 1.1 kW,	
	230 Volt 50 Hz 2.2 kVA minima	al.		for connection to frequency	
	Maximum load 1.5 kW, IP21			converter, pump Ø 45 mm,	
	protection (drip-proof), incl.			287 mm long. Teflon cable 90 m.	
	cable/plug		**12.27.11	Service kit for submersible	1
**12.27.41	Stand with bad weather	1		pump MP1 (impellers with	
	protection for frequency			pump chambers), incl. assembly	
	converter. Protection IP23 (rainwater tight)			instructions	
**12.27.28	Suspension cable, stainless	1	**12.27.40	Frequency converter to control	. 1
12.27.20	steel, for submersible pump,			submersible pump MP1, frequency adjustment between 46-405 Hz.	
	incl. 2 cable clamps, length 80	m		Connection to 230 Volt 50 Hz	
**12.27.12	Flange stainless steel, for	1		2.2 kVA minimal. Maximum load	
	connection of suspension			1.5 kW, IP21 protection (drip-	
	cable to pump			proof), incl. cable/plug	
**12.27.38	Tube, teflon, Ø 18x13 mm,	1	**12.27.41	Stand with bad weather	1
	roll of 80 m			protection for frequency	
**12.27.13	Tube connection, stainless	1		converter. Protection IP23	
	steel, for connection of tube	-1-		(rainwater tight)	
	with Ø 18x13 mm to submersib pump MP1	oie	**12.27.29	Suspension cable, stainless	1
**10.01.13	Strap for e.g. tightning	1		steel, for submersible pump, incl. 2 cable clamps, length 90 m	
10.01.13	filter gauze, bag of 100 pcs.		**12.27.12	Flange stainless steel, for	1
**12.27.14	Cooling jacket, for adaption	1	12.27.12	connection of suspension	
	of submersible pump MP1 to			cable to pump	
	monitoring wells with a Ø larg	jer	**12.27.39	Tube, teflon, Ø 18x13 mm,	1
	than 75 mm			roll of 90 m	
**12.27.19	Hose reel cart large, to	1	**12.27.13	Tube connection, stainless	1
	transport tube, cable and pum			steel, for connection of tube	
	Capacity 60 - 200 m tube. Incl. holder for submersible pump,			with Ø 18x13 mm to submersible	
	5 leather straps to fix tube on		**10.01.13	pump MP1 Strap for e.g. tightning	1
	reel and mounting instructions	s	10.01.13	filter gauze, bag of 100 pcs.	'
**99.13	Generator, max. power	1	**12.27.14	ooling jacket, for adaption	1
	3700 W, continuous power:			of submersible pump MP1 to	
	3300 W, 230V 50 Hz, tank			monitoring wells with a	
	capacity 17 l, run duration 8.8	hrs.		Ø larger than 75 mm	
	Dimensions 580x477x508 mm.		**12.27.19	Hose reel cart large, to	1
***********	Incl. oil level guard			transport tube, cable and pump.	
**99.13.03	Collector box, synthetic, to pla			Capacity 60 - 200 m tube. Incl.	
	generator when working in th field (to prevent petrol- and o			holder for submersible pump, 5 leather straps to fix tube on	
	leakage). Dimensions:	"		reel and mounting instructions	
	80x60x12 cm		**99.13	Generator, max. power	1
**99.13.01	Insulation guard to protect	1		3700 W, continuous power:	-
	electrical apparatus which are			3300 W, 230V 50 Hz, tank	
	connected to a generator. Obli	iged		capacity 17 l, run duration 8.8 hrs.	
	acc. to NEN1010 for generator			Dimensions 580x477x508 mm.	
	2000 VA or more. Not suitable			Incl. oil level guard	
	mains voltage with rim earthir		**99.13.03	Collector box, synthetic, to place	1
	Incl. adapter cable with euro-p	nug		generator when working in the	
	(DIN49441/CEE7)			field (to prevent petrol- and oil leakage). Dimensions:	
12.27.SE	Submersible pump set, for			80x60x12 cm	
,	purging/sampling monitorin	a	**99.13.01	Insulation guard to protect	1
	wells to a depth of 90 m and	_		electrical apparatus which	•
	inside Ø from 50 mm, pressu			are connected to a generator.	
	head lift 86 m. Set with pum			Obliged acc. to NEN1010 for	
	MP1, converter,generator,	•		generator 2000 VA or more.	
	insulation control, Teflon tub	oe,		Not suitable for mains voltage	
The second secon					



Art.no.	Description Qty in s		Description	Qty. in set
	with rim earthing. Incl. adapter cable with euro-plug (DIN49441/CEE7)	12.27.24	2 cable clamps, length Suspension cable, stain for submersible pump, 2 cable clamps, length	less steel, incl.
	To compose customer specific submersible pumps set MP1, a choice can be made out of	12.27.26	Suspension cable, stain steel, for submersible p	less steel oump, incl.
	the following components:	12.27.29	2 cable clamps, length s Suspension cable, stain for submersible pump,	less steel, incl.
	Pumps with electricity cable (different lengths):		2 cable clamps, length  Teflon tube with acce	
12.27.02	Submersible pump MP1,			
	centrifugal type f. purging/	12.27.13	Tube connection, stainl	-
	sampling monitoring wells,		for connection of tube	
	stainless steel 316, pressure		Ø 18x13 mm to submer	sible
	head lift max. 86 m, adjust. cap. Till max. 1.8 m³/h, 220 V	12.27.32	pump MP1 Tube, teflon, Ø 18x13 n	nm
	1.1 kW, for connection to	12.27.32	roll of 20 m	,
	frequency converter, pump	12.27.34	Tube, teflon, Ø 18x13 n	nm,
	Ø 45 mm, 287 mm long.		roll of 40 m	•
	Teflon cable 20 m	12.27.36	Tube, teflon, Ø 18x13 n	nm,
12.27.04	Submersible pump MP1,		roll of 60 m	
	centrifugal type f. purging/	12.27.38	Tube, teflon, Ø 18x13 n	nm,
	sampling monitoring wells, stainless steel 316, pressure	12.27.39	roll of 80 m Tube, teflon, Ø 18x13 n	am
	head lift max. 86 m, adjust.	12.27.39	roll of 90 m	11111,
	cap. Till max. 1.8 m³/h, 220 V		1011 01 30 111	
	1.1 kW, for connection to		PE tube with accessor	ies:
	frequency converter, pump			
	Ø 45 mm, 287 mm long.	12.27.16	Tube connection, stainl	
12.27.06	Teflon cable 40 m		steel, for connection of	tube
12.27.06	Submersible pump MP1, centrifugal type for purging/		with Ø 10x12 mm to submersible pump MP1	
	sampling monitoring wells,	12.20.13	Polyethylene tube,	
	stainless steel 316, pressure		Ø 10x12 mm, roll of 75	m,
	head lift max. 86m, adjust.		with ETU-hallmark	
	cap. till max. 1.8 m³/h, 220V			
	1.1 kW, for connection to	12.27.17	Tube connection, stainl	
	frequency converter, pump Ø 45 mm, 287 mm long.		steel, for connection of tube with Ø 12x16 mm	
	Teflon cable 60 m		submersible pump MP1	
12.27.08	Submersible pump MP1,	12.20.16	Polyethylene tube,	
	centrifugal type f. purging/		Ø 12x16 mm, roll of 50	m,
	sampling monitoring wells,		with ETU-hallmark	
	stainless steel 316, pressure	12.20.17	Polyethylene tube,	0
	head lift max. 86 m, adjust. cap. Till max. 1.8 m³/h, 220 V		Ø 12x16 mm, roll of 10 with ETU-hallmark	υ m,
	1.1 kW, for connection to	12.27.15	Tube connection, stainl	ess
	frequency converter, pump		steel, for connection of	
	Ø 45 mm, 287 mm long.		tube with Ø 16x20 mm	to
	Teflon cable 80 m steel 316,		submersible pump MP1	
	pressure head lift max. 86 m,	12.20.20	Polyethylene tube,	
	adjust. cap. Till max. 1.8 m³/h, 220 V 1.1 kW, for connection		Ø 16x20 mm, roll of 50 with ETU-hallmark	m,
	to frequencyconverter, pump		With LIO-Hallinark	
	Ø 45 mm, 287 mm long.		Other requirements:	
	Teflon cable 90 m		·	
		12.27.40	Frequency converter to	
	Installation cables with		control submersible pu	•
	accessories (different lengths):		MP1, frequency adjustr	
12.27.12	Flange stainless steel, for		between 46-405 Hz. Co to 230 Volt 50 Hz 2.2 k	
12.27.12	connection of suspension		minimal. Maximum loa	
	cable to pump		1.5 kW, IP21 protection	
	-		proof), incl. cable/plug	
12.27.22	Suspension cable, stainless steel,	12.27.41	Stand with bad weather	
	for submersible pump, incl.		protection for frequence	СУ





### **PARTS LIST**

Art.no.	•	ty. set	Art.no.	•	ty. 1 set
	converter. Protection IP23 (rainwater tight)		**12.12.08	Boosterpump, in-line, ABS/ stainless steel, Ø 36 mm, max.	1
42.27.44				flow rate 8 l/min, pressure head	
12.27.14	Cooling jacket, for adaption			lift 10 m (at final voltage 12 Vo	it),
	of submersible pump MP1 to monitoring wells with a			with 0.3 m PVC coated cable, set of 3 pcs.	
	Ø larger than 75 mm		**12.12.11	Sealed crimp splices, polyamid,	1
12.27.18	Hose reel cart small, to			set of 10pcs for making water- proof cable extension	
12.27.10	transport tube, cable and			(1.5-2.5 mm²),	
	pump. Capacity till 60 m tube.		**12.12.12	Cable for extension of dip	1
	Incl. holder for submersible			pump cables, 2x1.5 mm², pvc	
	pump, 5 leather straps to fix			coated, roll of 100 m	
	tube on reel and mounting		**12.20.13	Polyethylene tube,	1
	instructions			Ø 10x12 mm, roll of 75 m,	
12.27.19	Hose reel cart large, to			with ETU-hallmark	
	transport tube, cable and		**12.25.02	Lead-acid battery,	1
	pump. motor- and suspension cable with straps and completely	.,	**12.25.22.01	maintenance free Battery charger 230V - 50Hz.	1
	mounting on hose reel cart.	у	12.23.22.01	For 12V lead batteries, max.	'
	No quarantee on cleanness of			charging current 1A. Wiplane	
	hose/cable bundle outside			plugs for connection on battery	,
	and pump			12.25.02. For charging peristalt	
				pump 12.25 (from serial no.	
	Spare parts + repairs:			98000300, Jan. '98) in combinat with cable 12.25.22.02	ion
12.27.11	Service kit for submersible				
	pump MP1 (impellers with			Individual pumps:	
	pump chambers), incl. assembly				
	instructions		12.12.06	Submersible pump "Gigant",	
12.27.43	Submersible pump MP1,			ABS/Inox, Ø 36mm, max.	
	centrifugal type f. purging/			capacity 8 l/min, pressure	
	sampling monitoring wells, stainless steel 316, pressure			head lift 10 m (at final voltage 12 Volt), with strainer, with 5 m	
	head lift max. 86 m, adjust.			PVC coated cable, set of 3 pcs.	
	cap. Till max. 1.8 m³/h, 220 V		12.12.08	Boosterpump, in-line, ABS/	
	1.1 kW, for connection to			stainless steel, Ø 36 mm, max.	
	frequency converter, pump			flow rate 8 l/min, pressure head	l
	Ø 45 mm, 287 mm long.			lift 10 m (at final voltage	
	Without cable			12 Volt), with 0.3 m PVC coated	
12.27.49	Cable fitting parts, set for			cable, set of 3 pcs.	
	connection of cable to			Accessories to extend the	
12.27.00	submersible pump MP1			electricity cable of the pumps	:
12.27.99	Loan frequency converter to control submersible pump		12.12.11	Sealed crimp splices, polyamid,	
	MP1, frequency adjustment		12.12.11	set of 10pcs for making water-	
	between 46-405 Hz			proof cable extension	
				(1.5-2.5 mm <sup>2</sup> ),	
12.12.SA	Submersible pump set, low		12.12.12	Cable for extension of dip	
	costs. Complete set for monitor	oring		pump cables, 2x1.5 mm <sup>2</sup> , pvc	
	wells Ø 40 mm, consisting of			coated, roll of 100 m Sampling	
	submersible pump "Gigant" (3	3x),		tube for the pumps:	
	booster pump (3x), extension				
	cable, sample tube and batter	-	12.20.13	Polyethylene tube,	
	with battery-charger. For sam	pling		Ø 10x12 mm, roll of 75 m, with ETU-hallmark	
	till a depth of 14.5 m.		12.20.16	Polyethylene tube,	
	We something the		12.23.10	Ø 12x16 mm, roll of 50 m,	
	We supply a complete			with ETU-hallmark	
	submersible pump set (standard set):				
	zailualu selj.			Accessories for the power	
**12.12.06	Submersible pump "Gigant",	1		supply (2 options):	
	ABS/Inox, Ø 36mm, max.	•			
	capacity 8 l/min, pressure		12.25	Peristaltic pump 12 Vdc,	
	head lift 10 m (at final voltage			specially suited for use in	
	40.17 10 10 11 11 11 11 11			the field, micro-processor	
	12 Volt), with strainer, with 5 m PVC coated cable, set of 3 pcs.			controlled, with 3 memory	



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
	functions for fixed rates of				
	revolution. CE-approved.				
	Strong IP64 housing.  Membrane keypads control.				
	Incl. built-in battery 12 V.				
	Excl. charger				
12.25.02	Lead-acid battery, maintena	nce			
	free, plugs for connection o				
	battery 12.25.02. For chargin	_			
	peristaltic pump 12.25 (from serial no. 98000300, Jan. '98				
	in combination with cable	,			
	12.25.22.02				
12.08	Water pump with combus	tion			
	engine, type WX-10, 1.64				
	suction head lift max. 7 m head lift 35 m, incl. quick	, total			
	couplings				
	Accessories for sampling:				
12.00.01	Continue to manage the con-				
12.08.01	Suction/pressure hose, Ø 32x25 mm, length 12.5 m,				
	incl. footvalve and quick				
	couplings				
99.08.07	Sample bottle, brown glass,				
	wide neck, screw cap with to				
	insertion, 1000 cc, set of 6 p	CS.			

