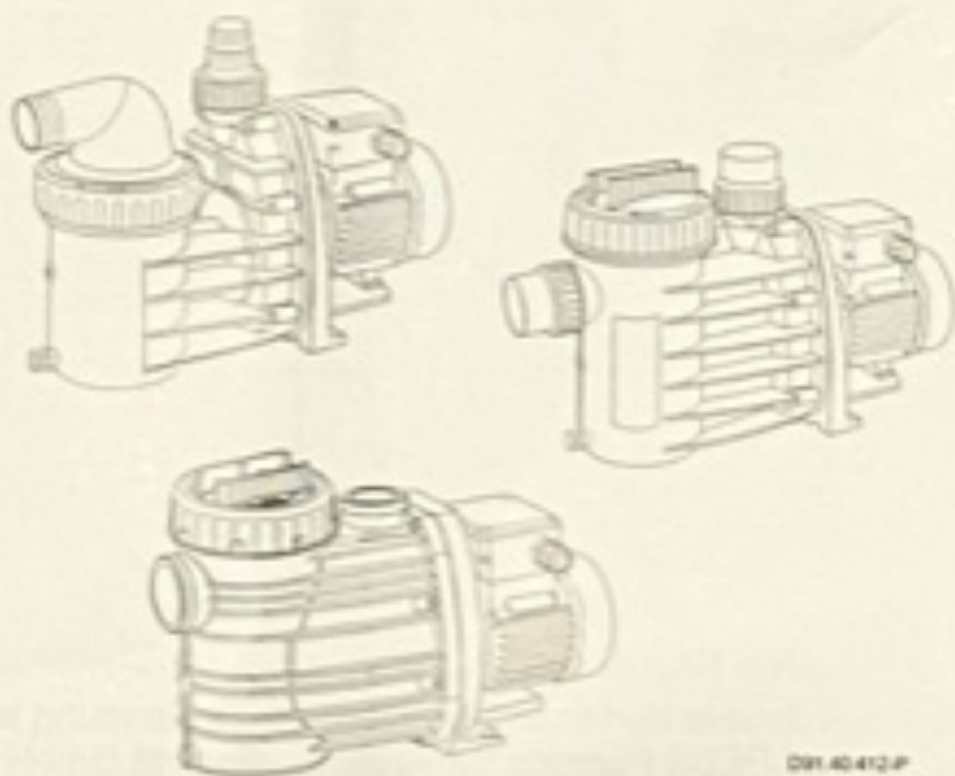


SPECK X

pumpen

DE Pumpendatenblatt
EN Data sheet

Pro-Pump 5 / Pro-Pump 7
Pro-Pump 9 / Pro-Pump 11
„Mountfield“

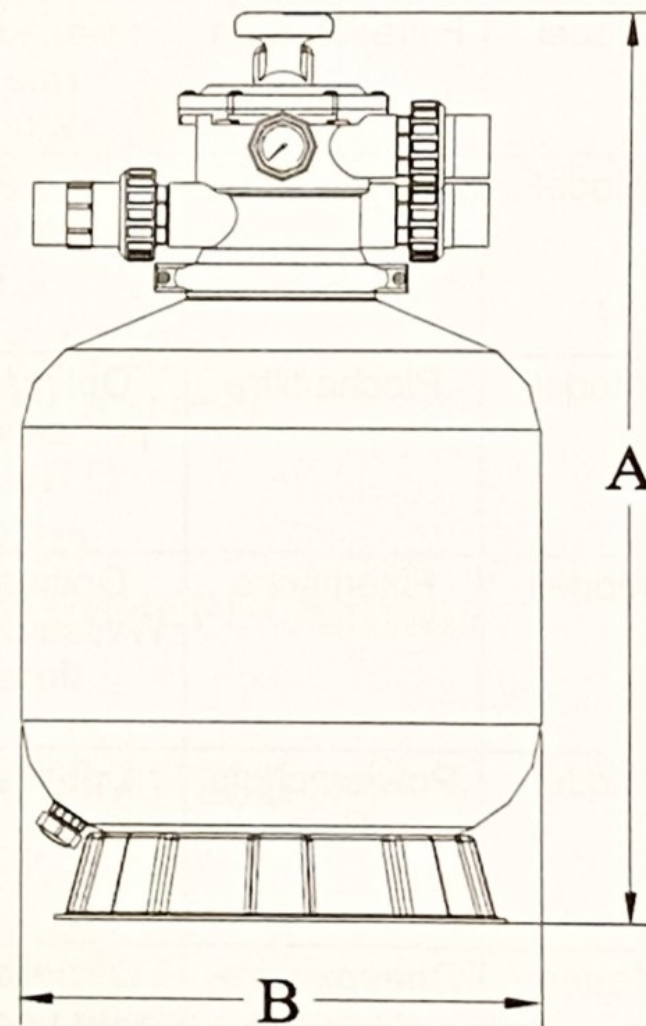


091.40.412-P



DIMENSION TABLE – TABULKA ROZMĚRŮ – TABULKA ROZMEROV – MAßTABELLE – TABELA WYMIARÓW – ТАБЛИЦА РАЗМЕРОВ

	A	B
P350	726	350
P400	757	400
P450	814	449
P500	845	527
P650	950	627
P700	1020	703



Pro-Pump 11

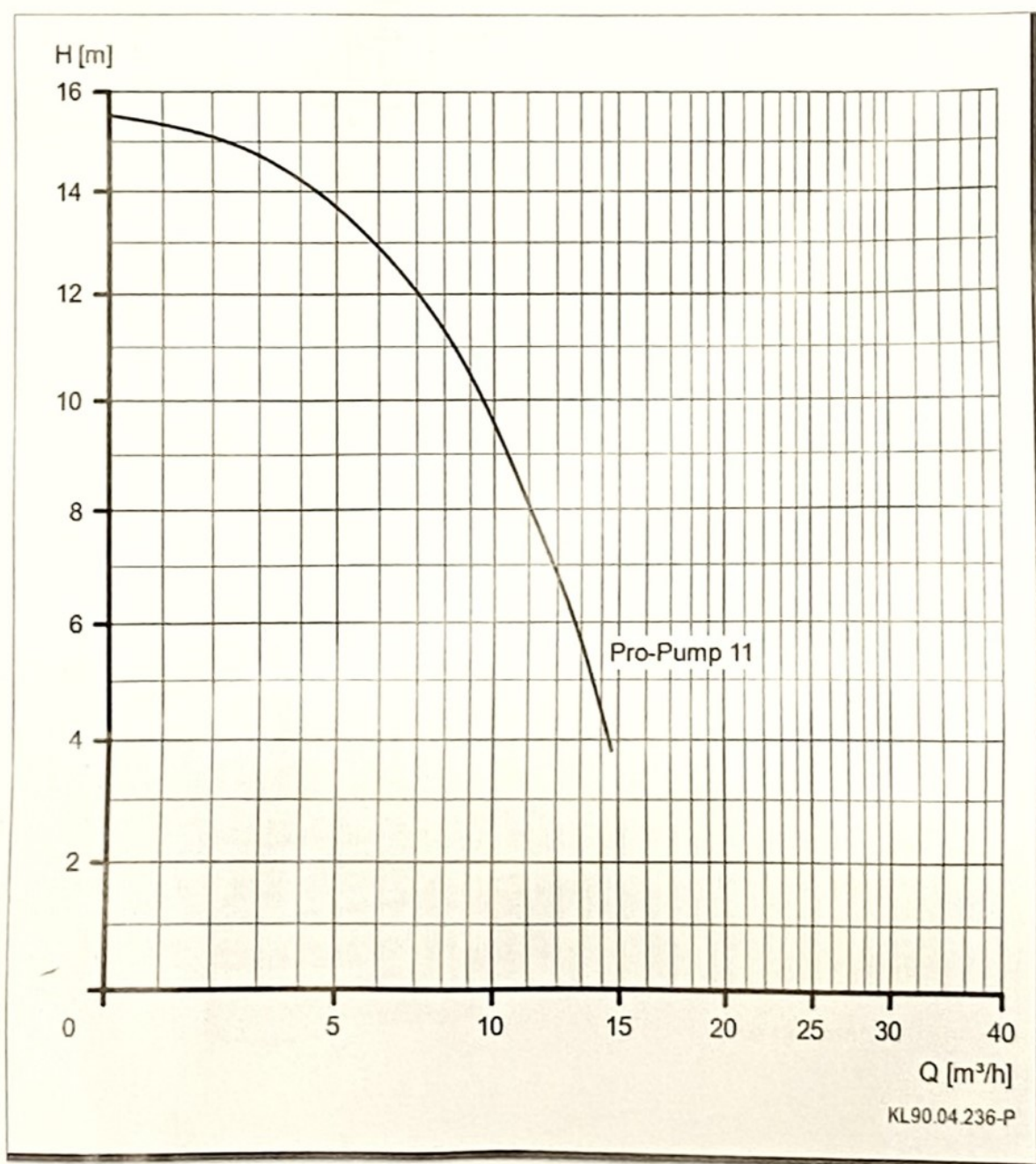
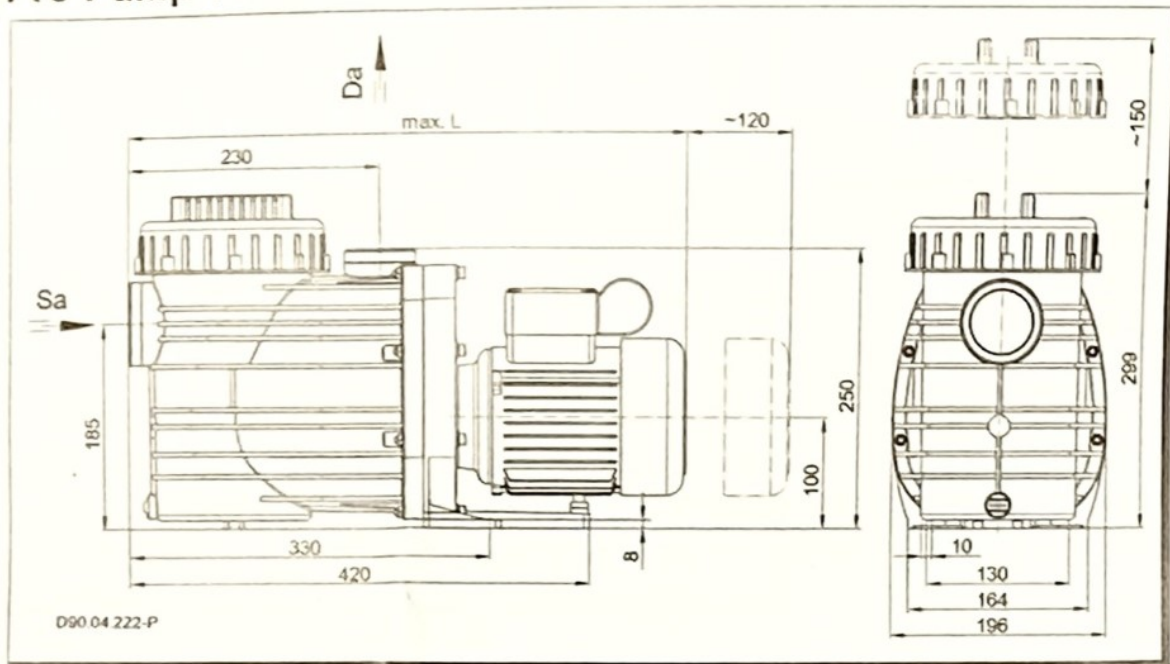


Fig. 1

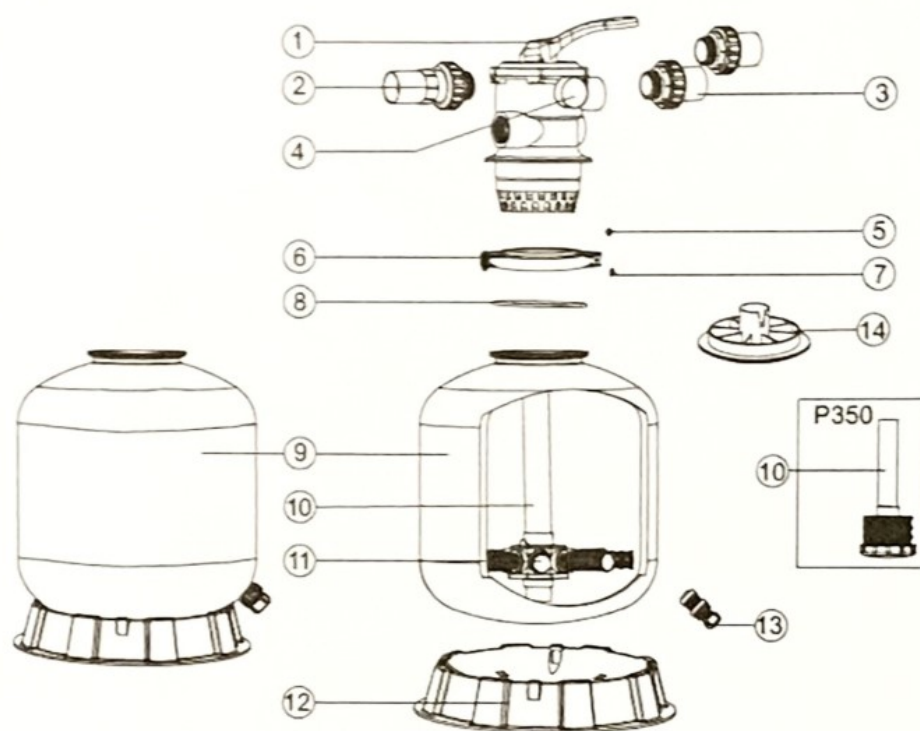


Fig. 2

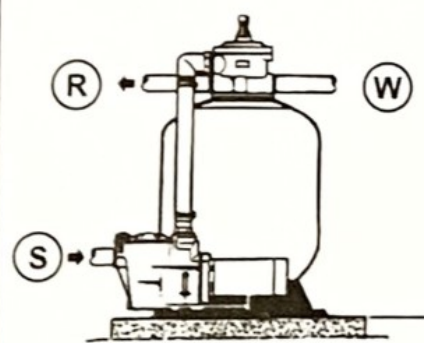
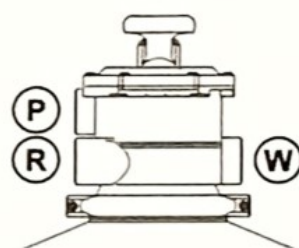


Fig. 3



DESCRIPTION – POPIS – POPIS – BESCHREIBUNG – OPISANIE – ОПИСАНИЕ

No.	EN	CZ	SK	DE	PL	RU	Qty
1	Valve	Ventil	Ventil	Ventil	Zawór	Клапан	1
2	Union 1½" / d50 – waste	Šroubení 1½" / d50 – odpad	Šrúbenie 1½" / d50 – odpad	Verschraubung 1½" / d50 – Entleeren	Šrubunek 1½" / d50– ścieki	Резьба 1½" / d50 – слив	1
3	Union 1½" / d50	Šroubení 1½" / d50	Šrúbenie 1½" / d50	Verschraubung 1½" / d50	Šrubunek 1½" / d50	Резьба 1½" / d50	2
4	Pressure gauge	Manometr	Manometer	Manometer	Manometr	Манометр	1
5	M6 nut	Matice M6	Matica M6	Schraubenmutter M16	Nakrętka M6	Гайка M6	2
6	Clamp	Spona	Spona	Schelle	Zacisk	Зажим	1
7	M6 bolt	Šroub M6	Skrutka M6	Schraube M6	Śruba M6	Винт M6	2
8	Valve gasket	Těsnění ventilu	Tesnenie ventila	Ventildichtung	Uszczelka zaworu	Уплотнение клапана	1
9	Tank	Nádoba	Nádoba	Kessel	Zbiornik	Контейнер	1
10	Centre tube	Centrální trubice	Centrálna rúrka	Steigrohr	Centralna rurka	Центральная трубка	1
11	Drain tube	Odvodňovací trubice	Odvodňovacia rúrka	Entleerungsrohr	Rurka odwadniająca	Сливная трубка	8
12	Base	Podstava	Podstava	Standfuß	Podstawa	Подставка	1
13	Drain plug	Vypouštěcí zátk	Vypúšťacia zátk	Ablassstopfen	Zatyczka do wypuszczania	Выпускная пробка	1
14	Lid	Kryt	Kryt	Schutzkappe	Pokrywa	Кожух	1
15*	Teflon tape	Teflonová páska	Teflónová páska	Teflonband	Taśma teflonowa	Тефлоновая лента	1

*) Not shown / Nezobrazeno / Nezobrazené / Nicht abgebildet / Nie pokazano na rysunku / Нет изображения

**SPECIFICATIONS - TECHNICKÉ ÚDAJE - TECHNICKÉ ÚDAJE - TECHNISCHE DATEN - DANE
TECHNICZNE - ТЕХНИЧЕСКИЕ ДАННЫЕ**

Max. work. pressure - Maximální pracovní přetlak - Maximálny pracovný pretlak - Max. Betriebsdruck -
Maksymalne ciśnienie robocze - Максимальное рабочее избыточное давление = 2,0 bars

Model	Filtration area	Designed flow rate	Pressure loss at designed flow rate	Suggested clearance sideways / up	Filter sand parameters	
Model	Plocha filtru	Optimální průtok vody	Tlaková ztráta při optimálním průtoku	Doporučené montážní vzdálenosti do strany / nad	Parametry filtračního písku	
Model	Plocha filtra	Optimálny prietok vody	Tlaková strata pri optimálnom prietoku	Odporúčané montážne vzdialenosti do strany / nad	Parametre filtračného piesku	
Modell	Filterfläche	Optimaler Wasserdurchfluss	Druckverlust bei optimalem Wasserdurchfluss	Empfohlene Montageabstände seitlich/ oberhalb	Filtersand-Parameter	
Model	Powierzchnia filtra	Optymalny przepływ wody	Strata ciśnienia przy optymalnym przepływie	Zalecane odległości montażowe z boku/ nad	Parametry filtra piaskowego	
Модель	Поверхность фильтра	Оптимальный расход воды	Перепад давления при оптимальном расходе	Рекомендуемое монтажное расстояние сбоку / сверху	Параметры фильтрующего песка	
					Size Zrnitosť Zrnitosť Körnung Ziarnistość Размер зерна	Amount Množství Množstvo Menge Ilość Количество
	m ²	m ³ /h	Bars	cm	mm	kg
P350	0,10	5,00	0,14	45 / 45	0,65 – 1,25	20
P400	0,13	6,12	0,14	45 / 45	0,65 – 1,25	35
P450	0,16	7,50	0,14	45 / 45	0,65 – 1,25	45
P500	0,22	10,80	0,14	45 / 45	0,65 – 1,25	85
P650	0,31	15,30	0,14	45 / 45	0,65 – 1,25	145
P700	0,39	19,20	0,14	45 / 45	0,65 – 1,25	210

TD 50 Hz	Sa [Rp]	Da [Rp]	d-Saug [mm]	d-Druck [mm]	max. L [mm]
Pro-Pump 11	2	1½	50	50	550

1~ 230 V

TD 50 Hz	P ₁ [kW]	P ₂ [kW]	I [A]	L _{pa} (1m) [dB(A)]	L _{wa} [dB(A)]	m [kg]	WSK/PTC
Pro-Pump 11	0,69	0,45	3,20	57,8	66	9,2	●/○

TD 50 Hz	H _{max.} [m]	SP	H _s [m]	H _z [m]	IP	W-KI	n [min ⁻¹]	T [°C]	P-GHI [bar max.]
Pro-Pump 11	15,5	●	3	3	55	F	2840	40(60)	2,5

You have just become the owner of a sand filter unit with a base and a top multi-way valve.

Note: The illustrations and specifications shown in this Guide are not binding and may differ from the product supplied. The manufacturer reserves the right to make changes without prior notice.

OPERATING PRINCIPLE

Your filtration unit uses special filter sand for removing impurities from flowing water. The filter sand fills the filter vessel and works as a permanent trap for impurities. Swimming pool water containing impurities is supplied by a pump via a coarse pre-filter and fed into the multi-way valve (hereinafter the valve) and then to the top area of the filter vessel. The water is then forced through the sand, which removes fine impurities from it, to the bottom part of the vessel. The water goes back into the swimming pool via the valve. The whole process is continuous, automatic and ensures complete circulation of the water in the swimming pool.

INSTALLATION

The installation merely requires simple tools such as a screwdriver and some wrenches, and Teflon sealing tape for sealing joints between the plastic components.

1. Place the filtration unit on a solid level substrate, such as a concrete slab, so that its position meets the requirements for connecting it to the power grid, the shortest position pipeline connection to the swimming pool, valve accessibility and winterizing. The tip of the filtration vessel can be located up to 1.5 m above the water level.
2. Mount the pump and the pump base (if supplied).
3. Fill the vessel with filter sand via the vessel flange, as described below:
 - a) Insert the centre tube (10) in the vessel and install the drain tubes (11), if not factory-installed. Place the centre tube in the centre of the vessel bottom. Close the top hole in the tube with the lid (14) or a suitable end cap to prevent sand entering it. **Before filling the vessel with sand, make sure all the drain tubes (11) are firmly installed.**
 - b) For better distribution of the filter sand, first fill about a third of the vessel with water. That will prevent excessive strain on the drain tubes when filling with sand. Before that, make sure the drain plug (13) is in place.
 - c) Carefully pour the recommended amount of sand with the recommended grain size (see the table) into the vessel. The sand, when spread flat, should reach up to the middle of the vessel. Do not put more than the recommended amount of sand in the vessel. Check that the centre tube has remained upright.
 - d) Remove the lid (14) or end cap from the top opening.
4. Install the valve on the filtration unit:
 - a) Clean the vessel flange. Take the valve (1), mount the gasket (8) on it, smear the gasket lightly with grease, and mount it on the vessel flange. Turn the valve so that the valve hole marked "PUMP" (P) faces the pump.
 - b) Put the clamp (6) on the flange-valve joint. Make sure the clamp sits properly all around the joint and then tighten it with the pair of bolts (7) and nuts (5). Tighten both threaded joints symmetrically.
 - c) Remove the plastic bolt from the side of the valve body and screw the pressure gauge (4) into the hole. Tighten the pressure gauge carefully by hand, without forcing it.
5. Connect the pump to the valve opening marked "PUMP" (P); connect the return nozzle that sends water back into the swimming pool to the valve opening marked "RETURN" (R); connect the pump suction end with the swimming pool skimmer (S); and connect the waste pipeline to the valve opening marked "WASTE" (W). See Figures 2 and 3. When installing the threaded joints, seal them with a sufficient quantity of Teflon tape.

6. Connect the pump motor to the electrical supply following the instructions in the pump manual.
7. To prevent any water leakage from the vessel, make sure the drain plug (13) is in place.

Note 1: Do not use force when connecting the union to the valve.

Note 2: Use Teflon tape for sealing the threads.

Note 3: If connecting the vessel to a d50 mm pipeline, use a suitable cleaning agent and glue for those connections.

STARTING UP THE FILTRATION UNIT

IMPORTANT: ONLY CHANGE VALVE POSITIONS WITH THE PUMP SWITCHED OFF.

Before changing the position, wait about half a minute after switching off the pump for any churned up impurities to settle.

1. Check the tightness of all connections and wash the filter sand.
2. Press the valve control lever down and turn it to the position BACKWASH. **Always press the lever down first and only then turn it; otherwise, the gasket may be damaged.**
3. Fill the pump with water and start it. **CAUTION: The inlet and outlet pipelines must be clear; otherwise, there is a risk of material damage or serious injury!** Switch it off once clear water starts coming out of the waste pipeline. This initial rinsing will remove any dust particles and impurities from the filter sand.
4. Turn the valve control lever to the position RINSE. Start the pump again for about 10-20 seconds to force any impurities out of the valve interior.
5. Then switch off the pump, put the valve control lever in the position FILTER and switch on the pump again. This position is used for normal water filtration.
6. Check the whole assembly to see whether there are any water leaks, and tighten the unions and bolts as needed.
7. Note down the initial pressure shown by the pressure gauge on the valve when the filter is clear (this value differs between swimming pools depending on the pump used and pipeline length and shape). After some time, sand contamination will reduce the water flow rate and increase the pressure. If the pressure has increased 70 kPa from the initial pressure, the filter sand needs to be washed (see above).

Note 1: Initial filtering of new swimming pool water will require more frequent washing of the filter sand, as the water contains more impurities.

Note 2: Clean the filter screen and skimmer baskets periodically to ensure correct operation of the filtration system.

Note 3: Installations containing heaters or cleaning systems with nozzles are very sensitive to hydraulic thrust because they operate at high pressures. Their installation must include all measures to reduce the risk of hydraulic thrust.

FUNCTIONS OF THE MULTI-WAY VALVE POSITIONS

FILTER

Normal filtration, 6-8 hours a day. Water circulates via the pump and filter sand and back into the swimming pool. The swimming pool vacuum cleaner is also used in this position.

BACKWASH

Washing of the filter sand. If the pressure gauge shows a pressure 70 kPa above the initial pressure at the start of the cycle, the filter needs washing. Procedure: switch off the pump, turn the valve control lever to the position BACKWASH, switch on the pump and let it run until clear water comes out of the waste pipeline. This must be followed by a rinse.

RINSE

Rinsing of the filter after washing. Procedure: switch off the pump, turn the valve control lever to the position RINSE, switch on the pump and let it run for about 10-20 seconds. This will settle the sand and pump the rest of the dirty backwash water into the waste pipeline and prevent it being sucked back into the sand. Then switch off the pump, put the valve control lever in the position FILTER and switch on the pump again.

WASTE

A bypass of the filtration vessel. Used for reducing the water level in the swimming pool, emptying the swimming pool or, when using a vacuum cleaner, for moving larger quantities of impurities from the swimming pool directly into the waste pipeline.

RECIRCULATE

Water circulation outside the filter. The water circulates via the filtration assembly outside the filtration vessel with filter sand. This is used, for example, for faster dissolution of swimming pool chemicals.

CLOSED

Closes the water flow from the pump to the filter.

NEVER SWITCH ON THE PUMP IN THIS VALVE POSITION.

WINTERIZING

1. Unscrew the drain plug (13) and drain the water from the filter vessel. Do not replace the plug; store it safely.
2. Press the valve control lever and turn it to an intermediate position or to the position OPEN/WINTER if present on the valve. This will permit water to drain from the valve as well. Leave the control lever in this "open" position.
3. Drain and winterize the pump according to the pump operating manual instructions.