

## WATER

## GOLF MIDI PLUS

## GOLF MAXI PLUS

Monovalent heating system with heat source water

tv max. 65°C



Series	HEATING						HEATING					
Dimensions LxWxH [mm]	1150 x 400 x 650						1150 x 600 x 650					
Model	<b>GMWW 7 plus</b>		<b>GMWW 10 plus</b>		<b>GMWW 13 plus</b>		<b>GMWW 15 plus</b>		<b>GMWW 19 plus</b>		<b>GMWW 23 plus</b>	
Order number / delivery class	254460 / III		254550 / II		254600 / II		254650 / II		254700 / II		254750 / II	
Price (see right-hand side of page)	<b>6.748,-</b>		<b>7.626,-</b>		<b>8.207,-</b>		<b>9.382,-</b>		<b>10.251,-</b>		<b>11.202,-</b>	
Energy efficiency class at max. FLT												
<b>Technical data:</b>												
Weight/hydraulic connection	[kg]/[Inch]	108 / 1 1/4"	110 / 1 1/4"	114 / 1 1/4"	125 / 1 1/4"	131 / 1 1/2"	135 / 1 1/2"					
Phases/nominal voltage/frequency	[-V/Hz]	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50					
Fuse (trip characteristic 'C')	[A]	10	10	10	13	16	16					
Refrigerant		R407C	R407C	R407C	R407C	R407C	R407C					
Evaporator		Stainless-steel plate PHE Mat. 1.4401					Stainless-steel plate PHE Mat. 1.4401					
Evaporator heat carrier temperature difference (heat use system)	[K]	4	4	4	4	4	4					
Min. heat carrier flow rate with 8°C heat source	[m³/h]	1,2	1,7	2,4	2,8	3,4	4,0					
Internal pressure difference	[mbar]	120	160	180	140	170	170					
Condenser		Stainless-steel plate PHE Mat. 1.4301					Stainless-steel plate PHE Mat. 1.4301					
Condenser heat carrier temperature difference (heat use system)	[K]	5	5	5	5	5	5					
Heat carrier flow rate	[m³/h]	1,2	1,7	2,3	2,6	3,3	3,9					
Internal pressure difference	[mbar]	140	150	170	130	160	160					
<b>Standard point W10/W35</b>												
Heating capacity	[kW]	<b>6,9</b>	<b>9,5</b>	<b>13,8</b>	<b>15,2</b>	<b>19,0</b>	<b>22,6</b>					
Basic cooling capacity	[kW]	<b>5,6</b>	<b>7,7</b>	<b>11,4</b>	<b>12,5</b>	<b>15,7</b>	<b>18,7</b>					
Power consumption	[kW]	<b>1,3</b>	<b>1,8</b>	<b>2,4</b>	<b>2,7</b>	<b>3,3</b>	<b>3,9</b>					
COP EN14511/EN 255		<b>5,3/5,8</b>	<b>5,3/5,7</b>	<b>5,7/6,1</b>	<b>5,6/6,2</b>	<b>5,7/6,1</b>	<b>5,8/6,2</b>					
Operating current	[A]	<b>2,6</b>	<b>3,6</b>	<b>5,0</b>	<b>5,3</b>	<b>6,5</b>	<b>7,6</b>					
<b>Operating point W10/W50</b>												
Heating capacity	[kW]	6,1	8,4	12,6	14,1	17,3	20,3					
Power consumption	[kW]	1,7	2,3	3,1	3,5	4,3	5,0					
COP EN14511/EN 255		3,6/3,9	3,7/3,9	4,1/4,3	4,0/4,3	4,0/4,3	4,1/4,3					
Operating current	[A]	3,4	4,6	6,4	6,8	8,5	9,8					
<b>Operating point W10/W60</b>												
Heating capacity	[kW]	5,8	7,9	11,8	12,9	16,2	19,0					
Power consumption	[kW]	2,1	2,7	3,8	4,4	5,4	6,2					
COP EN14511/EN 255		2,8/3,0	2,9/3,1	3,1/3,2	2,9/3,1	3,0/3,2	3,1/3,2					
Operating current	[A]	3,7	5,4	7,8	8,6	10,7	12,1					
<b>Operating point W10/W18</b>												
Cooling capacity	[kW]											
Exhaust heat capacity	[kW]											
Power consumption/operating current	[kW]/[A]											
COP EER												
<b>Operating point W10/W7</b>												
Cooling capacity	[kW]											
Exhaust heat capacity	[kW]											
Power consumption/operating current	[kW]/[A]											
COP EER												
<b>Compressor</b>												
Number		1	1	1	1	1	1					
Type		Scroll, fully hermetic					Scroll, fully hermetic					
Power stages		1	1	1	1	1	1					
Max. Operating current	[A]	4	6	8	9	11	12					
Max. start-up current	[A]	27	37	41	55	67	70					
Max. with soft-start	[A]	13,5	18,5	20,5	27,5	33,5	35					

\* A+++ for top appliances which achieve this value, classification allowed from 2017.

Delivery class II - max. 4 weeks, order-based manufacture  
 Delivery class III - max. 4-8 weeks, order-based manufacture

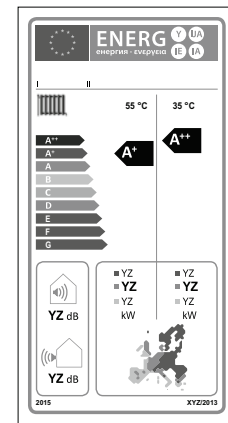
## GOLF MAXI HK PLUS



## HEATING/COOLING

1150 x 600 x 650

GMWW 10 HK plus	GMWW 13 HK plus	GMWW 15 HK plus	GMWW 19 HK plus	GMWW 23 HK plus
254558 / III	254608 / III	254658 / III	254708 / III	254758 / III
<b>9.450,-</b>	<b>10.160,-</b>	<b>11.297,-</b>	<b>12.308,-</b>	<b>13.297,-</b>
<b>A++</b> <b>A+++*</b>	<b>A++</b> <b>A+++*</b>	<b>A++</b> <b>A+++*</b>	<b>A++</b> <b>A+++*</b>	<b>A++</b> <b>A+++*</b>
35°C	55°C	35°C	55°C	35°C
110 / 1 1/4"	114 / 1 1/4"	125 / 1 1/4"	131 / 1 1/2"	135 / 1 1/2"
3/400/50	3/400/50	3/400/50	3/400/50	3/400/50
10	10	13	16	16
R407C	R407C	R407C	R407C	R407C
Stainless-steel plate PHE Mat. 1.4401	Stainless-steel plate PHE Mat. 1.4401			
4	4	4	4	4
1,7	2,4	2,8	3,4	4,0
160	180	140	170	170
Stainless-steel plate PHE Mat. 1.4301	Stainless-steel plate PHE Mat. 1.4301			
5	5	5	5	5
1,7	2,3	2,6	3,3	3,9
150	170	130	160	160
<b>W10/W35</b>				
<b>9,5</b>	<b>13,8</b>	<b>15,2</b>	<b>19,0</b>	<b>22,6</b>
<b>7,7</b>	<b>11,4</b>	<b>12,5</b>	<b>15,7</b>	<b>18,7</b>
<b>1,8</b>	<b>2,4</b>	<b>2,7</b>	<b>3,3</b>	<b>3,9</b>
<b>5,3/5,7</b>	<b>5,7/6,1</b>	<b>5,6/6,2</b>	<b>5,7/6,1</b>	<b>5,8/6,2</b>
<b>3,6</b>	<b>5,0</b>	<b>5,3</b>	<b>6,5</b>	<b>7,6</b>
<b>W10/W50</b>				
8,4	12,6	14,1	17,3	20,3
2,3	3,1	3,5	4,3	5,0
3,7/3,9	4,1/4,3	4,0/4,3	4,0/4,3	4,1/4,3
4,6	6,4	6,8	8,5	9,8
<b>W10/W60</b>				
7,9	11,8	12,9	16,2	19,0
2,7	3,8	4,4	5,4	6,2
2,9/3,1	3,1/3,2	2,9/3,1	3,0/3,2	3,1/3,2
5,4	7,8	8,6	10,5	12,1
<b>W10/W18</b>				
8,6	12,2	14,3	18,0	20,8
10,0	14,1	16,6	20,8	24,0
1,4/2,8	1,9/3,6	2,3/4,5	2,8/5,5	3,2/6,2
6,1	6,4	6,2	6,4	6,5
<b>W10/W7</b>				
5,5	8,4	9,7	10,6	13,8
6,7	10,1	11,6	12,8	16,6
1,2/2,4	1,7/3,2	1,9/3,7	2,2/4,3	2,8/5,4
4,6	4,9	5,1	4,8	4,9
1	1	1	1	1
Scroll, fully hermetic	Scroll, fully hermetic			
1	1	1	1	1
6	8	9	11	12
37	41	55	67	70
18,5	20,5	27,5	33,5	35



Sample label



## Accessories included in price of heat pump:

OTE 3 Interior Climate Manager / for heating/cooling incl. remote room control with graphic display

DN 32 or DN 40 heat use and heat source system flow meter control

Noise-dampening underlay

Noise-dampening underlay for heating/cooling

Flexible connecting hose – 4 pcs. per heat pump 1 1/4", 1 1/2" x 750 mm with bend

High-efficiency, energy-saving circulation pump – heat use/heat source internal

## Optional accessories:

	Nr.	Models	Price
Hot-water heating via internal 3-way switching module incl. 1 additional flexible hose	990494	GMWW 7 plus + 10 plus / HK	<b>457,-</b>
	990495	GMWW 13 plus / HK	<b>457,-</b>
Hot-water heating via external 3-way switching module	290229	GMWW 15 plus / HK	<b>279,-</b>
	290341	GMWW 19 plus + 23 plus / HK	<b>345,-</b>
Commissioning lump sum (see information on pages 62-63) Net	801301	GMWW 7 plus	<b>486,-</b>
	801302	GMWW 10 plus	<b>492,-</b>
	801303	GMWW 10 HK plus	<b>504,-</b>
	801304	GMWW 13 plus	<b>497,-</b>
	801305	GMWW 13 HK plus / 15 plus	<b>509,-</b>
	801306	GMWW 15 HK plus	<b>529,-</b>
	801307	GMWW 19 plus	<b>595,-</b>
	801308	GMWW 19 HK plus	<b>613,-</b>
	801309	GMWW 23 plus	<b>600,-</b>
	801310	GMWW 23 HK plus	<b>619,-</b>
Start-up current limiter	990808	GMWW 7 plus – 19 plus / HK	<b>219,-</b>
	990803	GMWW 23 plus / HK	<b>268,-</b>
Immersion pump with non-return valve, motor protection relay, 20 m cable, rope and clamps, depending on required pressure head see p. 40–41			
Immersion pump I	290527	GMWW 7 plus + 10 plus	<b>1.271,-</b>
Immersion pump II	290528	GMWW 7 plus + 10 plus	<b>1.271,-</b>
Immersion pump III	290529	GMWW 13 plus – 23 plus	<b>1.271,-</b>
Immersion pump IV	290530	GMWW 13 plus – 23 plus	<b>1.271,-</b>
Filter for heat source	922484	GMWW 7 plus – 15 plus / HK	<b>119,-</b>
	922485	GMWW 19 plus + 23 plus / HK	<b>259,-</b>
Centrifugal filter for larger quantities of impurities (pressure differential p min. 0.8 bar required)	922234	all	<b>1.652,-</b>
Surcharge for stainless-steel soldered plate heat exchanger (integrated in machine)	980131	GMWW 7 plus + 10 plus / HK	<b>1.002,-</b>
	980132	GMWW 13 plus + 15 plus / HK	<b>1.347,-</b>
	980114	GMWW 19 plus / HK	<b>1.459,-</b>
	980133	GMWW 23 plus / HK	<b>1.649,-</b>
Heating/cooling upgrade with touch-display Room Terminal and integrated web2com server	980169	extra for all heating/cooling systems	<b>490,-</b>

Important information supplementing General Information on pages 22–23, 42–43 and 60–61: the heat pump must be switched off in order to clean the filter. For safety reasons, no automatic or semi-automatic filtration systems may be used – comply with all instructions for maintenance and operation. Internal 3-way switching module only with the Golf Midi model. All pipe cross-sections must be sized and installed in accordance with nominal volume flows. Comply with the operating limits of heat source and heat use systems. For wall conduits, see the 'Accessories' page and the OCHSNER Manual. Operating limits for water/water heat pumps must be adhered to. Insulate the pipework of cooling systems against the formation of condensation. Ensure that the hydraulic safety and pressure systems are appropriately sized to ensure operational safety, particularly for defrosting or cooling operations. Inspect on an annual basis in accordance with official standards (VDI 2035).

As an approximation: System filling pressure during heating and cooling operation [bar] = MEV inlet pressure + 0.3 [bar], filling pressure of cooling system [bar] = MEV inlet pressure + 0.5 [bar]

# WATER

Monovalent heating system with Heat source Water

tv max. 55°C

## GOLF MAXI



## STANDARD



Series	HEATING				HEATING	
	1150 x 600 x 650				1850 x 695 x 585	
Dimensions LxWxH [mm]						
Model	<b>GMWW 28</b>	<b>GMWW 38</b>	<b>OWWP 56</b>	<b>OWWP 96</b>	<b>OWWP 96 R</b>	<b>65</b>
Order number / delivery class	254350 / III	254450 / III	222100 / III	222200 / III	223200 / III	
Price incl. accessories (see right-hand side of page)	<b>12.138,-</b>	<b>14.459,-</b>	<b>21.049,-</b>	<b>27.859,-</b>	<b>27.802,-</b>	
Energy efficiency class at max. FLT						

### Technical data:

Weight/hydraulic connection	[kg]/[Inch]	162 / 1 1/2"	175 / 2"	238 / 2"	320 / 2"	320 / 2"
Phases/nominal voltage/frequency	[~V/Hz]	3/400/50	3/400/50	3/400/50	3/400/50	3/400/50
Fuse (trip characteristic 'C')	[A]	20	25	40	63	63
Refrigerant		R 407 C	R 407 C	R 407 C	R 407 C	R 134a
Evaporator		Stainless-steel plate HE Mat. 1.4401		Stainless-steel plate HE Mat. 1.4401		
Condenser heat carrier temperature difference (heat use system)	[K]	4	4	4	4	4
Min. heat carrier flow rate with 8°C heat source	[m³/h]	4,8	6,7	10,9	18,1	11,5
Internal pressure difference	[mbar]	230	340	200	200	90
Evaporator		Stainless-steel plate HE Mat. 1.4301		Stainless-steel plate HE Mat. 1.4301		
Evaporator heat carrier temperature difference (heat use system)	[K]	5	5	5	5	5
Heat carrier flow rate	[m³/h]	4,6	6,5	10,4	17,3	10,9
Internal pressure difference	[mbar]	220	330	180	200	80
<b>Standard point W10/W35</b>						
Heating capacity	[kW]	<b>29,5</b>	<b>37,3</b>	<b>59,9</b>	<b>99,5</b>	<b>63,0</b>
Basic cooling capacity	[kW]	<b>24,1</b>	<b>30,4</b>	<b>49,7</b>	<b>82,6</b>	<b>52,3</b>
Power consumption	[kW]	<b>5,4</b>	<b>6,9</b>	<b>10,2</b>	<b>16,9</b>	<b>10,7</b>
COP EN14511/EN 255		<b>5,5/5,8</b>	<b>5,4/5,7</b>	<b>5,9/6,3</b>	<b>5,9/6,3</b>	<b>5,9/6,3</b>
Operating current	[A]	<b>11,8</b>	<b>14,2</b>	<b>19,4</b>	<b>31,3</b>	<b>19,8</b>
<b>Operating point W10/W50</b>						
Heating capacity	[kW]	25,8	34,4	54,9	89,6	59,7
Power consumption	[kW]	7,1	9,7	14,3	23,5	14,6
COP EN14511/EN 255		3,6/3,8	3,5/3,7	3,8/4,0	3,8/4,0	4,1/4,3
Operating current	[A]	15,5	20,0	27,2	43,5	27,0
<b>Operating point W10/W60</b>						
Heating capacity	[kW]					57,3
Power consumption	[kW]					18,1
COP EN14511/EN 255						3,2/3,3
Operating current	[A]					33,5
<b>Operating point W10/W18</b>						
Cooling capacity	[kW]					
Exhaust heat capacity	[kW]					
Power consumption/Operating current	[kW]/[A]					
COP EER						
<b>Operating point W10/W7</b>						
Cooling capacity	[kW]					
Exhaust heat capacity	[kW]					
Power consumption/Operating current	[kW]/[A]					
COP EER						
<b>Compressor</b>						
Number		1	1	1	1	1
Type		Scroll, fully hermetic		Scroll, fully hermetic		
Power stages		1	1	1	1	1
Max. Operating current	[A]	17	22	32	52	52
Max. start-up current	[A]	99	127	198	272	272
Max. with soft-start	[A]	49,5	63,5	99	136	136

## GOLF MAXI HK



## STANDARD HK



## HEATING/COOLING

1150 x 600 x 650

## GMWW 28 HK

254358 / III

14.461,-



## GMWW 38 HK

254458 / III

17.058,-



## HEATING/COOLING

1850 x 695 x 585

## OWWP 56 HK

222108 / III

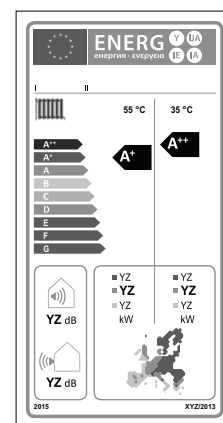
24.745,-



## OWWP 96 HK

222208 / III

32.212,-



Sample label



35°C	55°C	35°C	55°C	35°C	55°C	35°C	55°C
A++	A++	A++	A++	A++	A++	A++	A++
A+++*	A+++*	A+++*	A+++*	A+++*	A+++*	A+++*	A+++*
162 / 1 1/2*	175 / 2*	238 / 2*	320 / 2*				
3/400/50	3/400/50	3/400/50	3/400/50				
20	25	40	63				
R 407 C	R 407 C	R 407 C	R 407 C				
Stainless-steel plate HE Mat. 1.4401	Stainless-steel plate HE Mat. 1.4401						
4	4	4	4				
4,8	6,7	10,9	18,1				
230	340	200	200				
Stainless-steel plate HE Mat. 1.4301	Stainless-steel plate HE Mat. 1.4301						
5	5	5	5				
4,6	6,5	10,4	17,3				
220	330	180	200				
<b>W10/W35</b>							
<b>29,5</b>	<b>37,3</b>	<b>59,9</b>	<b>99,5</b>				
<b>24,1</b>	<b>30,4</b>	<b>49,7</b>	<b>82,6</b>				
<b>5,4</b>	<b>6,9</b>	<b>10,2</b>	<b>16,9</b>				
<b>5,5/5,8</b>	<b>5,4/5,7</b>	<b>5,9/6,3</b>	<b>5,9/6,3</b>				
<b>11,8</b>	<b>14,2</b>	<b>19,4</b>	<b>31,3</b>				
<b>W10/W50</b>							
25,8	34,4	54,9	89,6				
7,1	9,7	14,3	23,5				
3,6/3,8	3,5/3,7	3,8/4,0	3,8/4,0				
15,5	20,0	27,2	43,5				
<b>W10/W18</b>							
28,2	39,2	66,8	105,8				
32,8	45,4	76,8	121,6				
4,6/10,1	6,2/12,8	10,0/19,0	15,8/29,2				
6,1	6,3	6,7	6,7				
<b>W10/W7</b>							
17,8	22,0	43,5	72,7				
21,4	26,5	51,8	86,5				
3,6/7,9	4,5/9,3	8,3/15,8	13,8/25,5				
4,9	4,9	5,2	5,3				
1	1	1	1				
Scroll, fully hermetic	Scroll, fully hermetic						
1	1	1	1				
17	22	32	52				
99	127	198	272				
49,5	63,5	99	136				

\* A+++ for top appliances which achieve this value, classification allowed from 2017.

Delivery class III - max. 4-8 weeks, order-based manufacture

## Accessories included in price of heat pump:

OTE 3 Interior Climate Manager / for heating/cooling incl. remote room control with graphic display

DN 32, DN 40 or DN 50 heat use and heat source system flow volume control

Noise-dampening underlay

Flexible connecting hose – 4 pcs. per heat pump, 1 1/2" x 750 mm or 2" x 1.000mm, with bend

## Optional accessories:

	Nr.	Models	Price
	801311	GMWW 28	<b>608,-</b>
	801312	GMWW 28 HK	<b>616,-</b>
Commissioning lump sum (see information on pages 62-63)	801313	GMWW 38	<b>619,-</b>
Net	801314	GMWW 38 HK	<b>626,-</b>
	801315	OWWP 56	<b>768,-</b>
	801316	OWWP 56 HK	<b>768,-</b>
	801317	OWWP 96 oder OWWP 96 R	<b>885,-</b>
	801318	OWWP 96 HK	<b>885,-</b>
Start-up current limiter	990803	GMWW 28 / HK	<b>268,-</b>
	990804	GMWW 38 / HK	<b>307,-</b>
	990205	OWWP 56 / HK	<b>1.341,-</b>
	990373	OWWP 96 / HK + 96 R	<b>1.484,-</b>
High-efficiency, energy-saving heat use/heat source external circulation pump			
Circulation pump 30	922461	GMWW 28 + 38 / HK	<b>1.221,-</b>
Circulation pump 40.1	922347	OWWP 56 / HK + 96 R	<b>1.391,-</b>
Circulation pump 65	922462	OWWP 96 / HK	<b>2.572,-</b>
Immersion pump with non-return valve, motor protection relay, 20 m cable, rope and clamps, depending on required pressure head see p. 40-41			
Immersion pump V	290531	GMWW 28 + GMWW 38	<b>1.362,-</b>
Immersion pump VI	290532	GMWW 28 + GMWW 38	<b>1.362,-</b>
Immersion pump VII	290533	OWWP 56 + OWWP 96 / 96 R	<b>1.438,-</b>
Immersion pump VIII	290534	OWWP 56 + OWWP 96 / 96 R	<b>1.626,-</b>
Filter for heat source	922485	GMWW 28 / HK	<b>259,-</b>
	922486	GMWW 38 / HK + OWWP 56 / 56 HK + 96 / HK + 96 R	<b>507,-</b>
Centrifugal filter for larger quantities of impurities (pressure differential p min. 0.8 bar required)	922234	GMWW 28 / HK	<b>1.652,-</b>
	922235	GMWW 38 / HK	<b>2.008,-</b>
	922276	OWWP 56 / HK	<b>2.611,-</b>
	922277	OWWP 96 / HK + 96 R	<b>2.726,-</b>
Surcharge for stainless-steel soldered plate heat exchanger (integrated in machine)	980134	GMWW 28 / HK	<b>2.039,-</b>
	980116	GMWW 38 / HK	<b>1.838,-</b>
	980120	OWWP 56 / HK	<b>5.150,-</b>
	980122	OWWP 96 + 96 R	<b>5.058,-</b>
	980168	OWWP 96 HK	<b>5.058,-</b>
Hot-water heating via external 3-way switching module	290341	GMWW 28 / HK	<b>345,-</b>
	290342	GMWW 38 / HK + OWWP 56 / 56 HK + 96 / HK + 96 R	<b>372,-</b>

Important information supplementing General Information on pages 22–23, 42–43 and 60–61: the heat pump must be switched off in order to clean the filter. For safety reasons, no automatic or semi-automatic filtration systems may be used – comply with all instructions for maintenance and operation. Use internal 3-way switching modules only with the Golf Midi model. All pipe cross-sections must be sized and installed in accordance with nominal volume flows. Comply with the operating limits of heat source and heat use systems. For wall conduits, see the 'Accessories' page and the OCHSNER Manual. Operating limits for water/water heat pumps must be adhered to. Insulate the pipework of cooling systems against the formation of condensation. Ensure that the hydraulic safety and pressure systems are appropriately sized to ensure operational safety, particularly for defrosting or cooling operations. Inspect on an annual basis in accordance with official standards (VDI 2035). As an approximation:

System filling pressure during heating and cooling operation [bar] = MEV inlet pressure + 0.3 [bar], filling pressure of cooling system [bar] = MEV inlet pressure + 0.5 [bar]

Prices in €, excl. VAT

## SIZING

## GOLF MIDI PLUS



## GOLF MAXI PLUS



Heat pump model		GMWW 7 plus	GMWW 10 plus	GMWW 13 plus	GMWW 15 plus	GMWW 19 plus	GMWW 23 plus
Connection dimensions		DN 32 1 1/4" AG	DN 32 1 1/4" AG	DN 32 1 1/4" AG	DN 32 1 1/4" AG	DN 40 1 1/2" AG	DN 40 1 1/2" AG
Nominal flow rate – source	[m³/h]	1,2	1,7	2,4	2,8	3,4	4
Pressure loss – internal	[mbar]	120	160	180	140	170	170
Pressure loss – filter	[mbar]	30	50	100	150	30	40
Pressure loss – flow rate meter	[mbar]	20	30	60	70	30	40

## Immersion pump I

Order no.: 290527

Pressure head	[m]	17,5	16	12			
Residual pressure head	[m]	<b>15,8*</b>	<b>13,6*</b>	9,6			
Efficiency	[%]	45	50	52			

## Immersion pump II

Order no.: 290528

Pressure head	[m]	23,5	21,5	16,5			
Residual pressure head	[m]	<b>21,8*</b>	<b>19,1*</b>	13,1			
Efficiency	[%]	45,0	50,0	52			

## Immersion pump III

Order no.: 290529

Pressure head	[m]	28,5	28	26	24	22	18,5
Residual pressure head	[m]	26,8	25,6	<b>22,6*</b>	<b>20,4*</b>	<b>19,7*</b>	<b>16*</b>
Efficiency	[%]	35	43	53	56	59	59

## Immersion pump IV

Order no.: 290530

Pressure head	[m]	44	42	39,5	38	34	29
Residual pressure head	[m]	42,3	38,6	<b>36,1*</b>	<b>34,6*</b>	<b>31,7*</b>	<b>26,5*</b>
Efficiency	[%]	33	43	53	56	59	59

## Immersion pump V

Order no.: 290531

Pressure head	[m]				25	25	24,5
Residual pressure head	[m]				21,4	22,7	22
Efficiency	[%]				37	43	48

## Immersion pump VI

Order no.: 290532

Pressure head	[m]				38	36,5	37
Residual pressure head	[m]				34,4	34,2	34,5
Efficiency	[%]				37	43	48

## Immersion pump VII

Order no.: 290533

Pressure head	[m]						38
Residual pressure head	[m]						35,5
Efficiency	[%]						36

## Immersion pump VIII

Order no.: 290534

Pressure head	[m]						51
Residual pressure head	[m]						48,5
Efficiency	[%]						36

When selecting the correct immersion pump, the geodetic pressure head and friction losses, including pipework components and fittings must be taken into account with regard to the required nominal flow rate of the relevant heat pump.

Internal losses of pressure, including original OCHSNER accessories, have been taken into account when specifying the residual pressure head. When using a centrifugal filter, the pressure differential of 800 mbar necessary for this function must be taken into account! For safe and efficient operation, circuit control valve must be fitted and regulated for the purposes of regulating the hydraulic systems in the appliance.

