



PRODUCT RANGE - 2013



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## German know-how, international expertise

We, as Nema Winkelmann, have been manufacturing top quality expansion tanks for heating & cooling systems, potable water and firefighting system applications. These are used with booster sets, pumps in all kinds of buildings such as homes, apartments, schools, business centers, factories, skyscrapers, airports, shopping malls, military compounds, etc.

Nema Winkelmann, as a part of the Winkelmann-Group, which consists of 18 independent business units, 6 production and distribution companies, 8 sales companies and 1 steel trading company, has always been the choice of the market and has proven to be a reliable partner for its clients.

The Winkelmann-Group at present employs about 3.000 people worldwide and effected an annual turnover of approximately 470 million Euros in 2012. Having set the standards higher, Nema Winkelmann is by far the leader of the market in Turkey.

In 2009 Nema Winkelmann has moved its production to its new premises located in Düzce, Turkey. The new company building is placed on a 50.000 square meter area of which 20.000 square meters are indoor production site with a new fully automated and highly efficient machine park.

Our vision is to be the best solution provider to humanity where water is needed with best pressurized systems to reserve it to its fullest for the future of our children by saving energy, cost and creating a healthy and green environment.

Our mission is to control water usage in the best efficient way with our proven quality systems, production methods and applications by continuously improving our processes and adapting to the needs of our clients.



## Expansion Vessels - Vertical

### NEMA NEL / N

- Suitable for heating, cooling and solar applications
- Completely welded body
- High quality rubber bladder according to DIN 4807-3
- Meets or exceeds EC norms for pressure vessels 97/23/CE
- Lifting lugs for safety-purpose (>200 lt)
- Factory fitted manometer (>100 lt)
- Eco-friendly durable powder paint
- Max. 120°C / 70°C



Volume Lt	Article-No. ■ Red Color	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
<b>NEL 8</b>	008.106010	1"	2.5	220	310	-	1.5
<b>NEL 12</b>	012.106010	1"	3	220	420	-	1.5
<b>NEL 19</b>	019.106010	1"	3.2	280	420	-	1.5
<b>NEL 24</b>	024.106010	1"	3.7	280	470	-	1.5
<b>NEL 35</b>	035.106010	1"	6.5	354	400	-	1.5
<b>NEL 50</b>	050.306010	1"	8.7	409	480	-	1.5
<b>NEX 50</b>	050.106010	1"	9.7	409	600	140	1.5
<b>NEX 60</b>	060.106010	1"	11	409	660	140	1.5
<b>NEX 80</b>	080.106010	1"	14	480	840	140	1.5
<b>NEX 100*</b>	100.106110	1"	16	480	970	140	1.5
<b>NEX 150*</b>	150.106110	1"	25	500	1100	140	1.5
<b>NEX 200*</b>	200.106110	1 1/4"	32	634	980	240	1.5
<b>NEX 250*</b>	250.106110	1 1/4"	36	634	1200	240	1.5
<b>NEX 300*</b>	300.106110	1 1/4"	40	634	1230	240	1.5
<b>NEX 400*</b>	400.106110	1 1/4"	60	740	1450	240	1.5
<b>NEX 500*</b>	500.106110	1 1/4"	71	740	1550	265	1.5
<b>NEX 600*</b>	600.106110	2"	92	740	1820	265	1.5
<b>NEX 750*</b>	750.106110	2"	101	740	1950	280	1.5
<b>NEX 1000*</b>	1000.106110	2"	150	800	2200	350	1.5

\*With Manometer

## Expansion Vessels - Vertical Floor Standing

### NEMA NEX 10

- Suitable for heating, cooling and solar applications
- Completely welded body
- High quality rubber bladder according to DIN 4807-3
- Meets or exceeds EC norms for pressure vessels 97/23/CE
- Lifting lugs for safety-purpose (>200 lt)
- Factory fitted manometer (>100 lt)
- Eco-friendly durable powder paint
- Max. 120°C / 70°C



Volume Lt	Article-No. ■ Red Color	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
<b>NEX 50</b>	050.110010	1"	11	409	600	140	2
<b>NEX 60</b>	060.110010	1"	12	409	660	140	2
<b>NEX 80</b>	080.110010	1"	17	480	840	140	2
<b>NEX 100*</b>	100.110110	1"	18	480	970	140	4
<b>NEX 150*</b>	150.110110	1"	29	500	1100	140	4
<b>NEX 200*</b>	200.110110	1 1/4"	38	634	980	240	4
<b>NEX 300*</b>	300.110110	1 1/4"	45	634	1230	240	4
<b>NEX 500*</b>	500.110110	1 1/4"	75	740	1550	265	4
<b>NEX 750*</b>	750.110110	2"	110	740	1950	280	4
<b>NEX 1000*</b>	1000.110110	2"	165	800	2200	350	4
<b>NEX 1500*</b>	1500.110110	2"	250	960	2400	350	4
<b>NEX 2000*</b>	2000.110110	2"	370	1100	2450	350	4
<b>NEX 2500*</b>	2500.110110	2"	450	1100	2750	350	4
<b>NEX 3000*</b>	3000.110110	2 1/2"	550	1200	2800	350	4
<b>NEX 4000*</b>	4000.110110	3"	655	1450	3100	350	4
<b>NEX 5000*</b>	5000.110110	3"	830	1450	3700	350	4

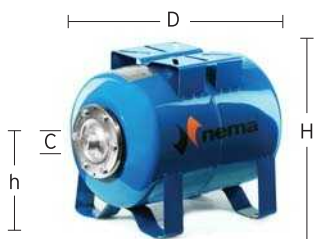
\*With Manometer



## Pressure Vessels - Horizontal

### NEMA NEQ -

- Suitable for potable water, hot water heating and hydro-pneumatic well applications
- Completely welded body
- High quality rubber bladder according to DIN 4807-3
- Meets or exceeds EC norms for pressure vessels 97/23/CE
- Eco-friendly durable powder paint
- Max. 120°C / 70°C



24 lt



50-80 lt



100 lt

	Volume Lt	Article-No.	Article-No.	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
		Red Color	Blue Color						
<b>10 bar</b>	<b>NEQ 24</b>	024.210010	024.210030	1"	4	280	470	150	2
	<b>NEQ 50</b>	050.210010	050.210030	1"	10,5	409	480	210	2
	<b>NEQ 60</b>	060.210010	060.210030	1"	11,5	409	560	210	2
	<b>NEQ 80</b>	080.210010	080.210030	1"	17	480	720	250	2
	<b>NEQ 100</b>	100.210010	100.210030	1"	18	480	800	250	4

## Pressure Vessels - Vertical

### NEMA NEL -

- Suitable for potable water, hot water heating and hydro-pneumatic well applications
- Completely welded body
- High quality rubber bladder according to DIN 4807-3
- Meets or exceeds EC norms for pressure vessels 97/23/CE
- Eco-friendly durable powder paint
- Max. 120°C / 70°C



	Volume Lt	Article-No.		Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Pre-Pressure Bar
		■ Red Color	■ Blue Color					
10 bar	NEL 8	008.110010	008.110030	1"	2,8	220	380	2
	NEL 12	012.110010	012.110030	1"	3,2	220	420	2
	NEL 19	019.110010	019.110030	1"	3,8	280	420	2
	NEL 24	024.110010	024.110030	1"	4,0	280	470	2
	NEL 35	035.110010	035.110030	1"	7,0	354	400	2
	NEL 50	050.310010	050.310030	1"	9,0	409	480	2
	NEL 60	060.310010	060.310030	1"	9,7	380	640	2
	NEL 24 SPHERE	024.410010	024.410030	1"	4,0	354	325	2
16 bar	NEL 8	008.116010	008.116030	1"	6	220	380	2
	NEL 12	012.116010	012.116030	1"	7	220	420	2
	NEL 19	019.116010	019.116030	1"	7,5	280	420	2
	NEL 24	024.116010	024.116030	1"	7,7	280	470	2
	NEL 35	035.116010	035.116030	1"	11	354	400	2
	NEL 50	050.316010	050.316030	1"	14	409	480	2
25 bar	NEL 8	008.125010	008.125030	1"	8	220	380	4
	NEL 12	012.125010	012.125030	1"	10	220	420	4
	NEL 19	019.125010	019.125030	1"	11	280	420	4
	NEL 24	024.125010	024.125030	1"	13	280	470	4
	NEL 35	035.125010	035.125030	1"	17	354	400	4
	NEL 50	050.325010	050.325030	1"	23	409	480	4

## Pressure Vessels - Vertical Floor Standing

### NEMA NEX -

- Suitable for potable water, hot water heating and hydro-pneumatic well applications
- Completely welded body
- High quality rubber bladder according to DIN 4807-3
- Meets or exceeds EC norms for pressure vessels 97/23/CE
- Lifting lugs for safety-purpose (>200 lt)
- Special designed manometer (>100 lt)
- Eco-friendly durable powder paint
- Max. 120°C / 70°C



50-80 lt



100-150 lt



200-500 lt



750-2500 lt



3000-5000 lt

	Volume Lt	Article-No.	Article-No.	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
		■ Red Color	■ Blue Color						
10 bar	<b>NEX 50</b>	050.110010	050.110030	1"	11	409	600	140	2
	<b>NEX 60</b>	060.110010	060.110030	1"	12	409	660	140	2
	<b>NEX 80</b>	080.110010	080.110030	1"	17	480	840	140	2
	<b>NEX 100*</b>	100.110110	100.110130	1"	18	480	970	140	4
	<b>NEX 150*</b>	150.110110	150.110130	1"	29	500	1100	140	4
	<b>NEX 200*</b>	200.110110	200.110130	1 1/4"	38	634	980	240	4
	<b>NEX 300*</b>	300.110110	300.110130	1 1/4"	45	634	1230	240	4
	<b>NEX 500*</b>	500.110110	500.110130	1 1/4"	75	740	1550	265	4
	<b>NEX 750*</b>	750.110110	750.110130	2"	110	740	1950	280	4
	<b>NEX 1000*</b>	1000.110110	1000.110130	2"	165	800	2200	350	4
	<b>NEX 1500*</b>	1500.110110	1500.110130	2"	250	960	2400	350	4
	<b>NEX 2000*</b>	2000.110110	2000.110130	2"	370	1100	2450	350	4
	<b>NEX 2500*</b>	2500.110110	2500.110130	2"	450	1100	2750	350	4
	<b>NEX 3000*</b>	3000.110110	3000.110130	2 1/2"	550	1200	2800	350	4
	<b>NEX 4000*</b>	4000.110110	4000.110130	3"	655	1450	3100	350	4
	<b>NEX 5000*</b>	5000.110110	5000.110130	3"	830	1450	3700	350	4

\*With Manometer



## Pressure Vessels - Vertical Floor Standing

### NEMA NEX -

	Volume Lt	Article-No.	Article-No.	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
		■ Red Color	■ Blue Color						
16 bar	NEX 50	050.116010	050.116030	1"	17	409	600	140	2
	NEX 60	060.116010	060.116030	1"	19	409	660	140	2
	NEX 80	080.116010	080.116030	1"	26	480	840	140	4
	NEX 100*	100.116110	100.116130	1"	28	480	970	140	4
	NEX 150*	150.116110	150.116130	1"	50	500	1100	140	4
	NEX 200*	200.116110	200.116130	1 1/4"	60	634	980	240	4
	NEX 300*	300.116110	300.116130	1 1/4"	75	634	1230	240	4
	NEX 500*	500.116110	500.116130	1 1/4"	110	740	1550	365	4
	NEX 750*	750.116110	750.116130	2"	220	740	1950	280	4
	NEX 1000*	1000.116110	1000.116130	2"	250	800	2200	350	4
	NEX 1500*	1500.116110	1500.116130	2"	340	960	2400	350	4
	NEX 2000*	2000.116110	2000.116130	2"	590	1100	2450	350	4
	NEX 2500*	2500.116110	2500.116130	2"	705	1100	2750	350	4
	NEX 3000*	3000.116110	3000.116130	2 1/2"	820	1200	2800	350	4
	NEX 4000*	4000.116110	4000.116130	3"	980	1450	3100	350	4
NEX 5000*	5000.116110	5000.116130	3"	1200	1450	3700	350	4	

	Volume Lt	Article-No.	Article-No.	Connection (C)	Weight kg	Diameter(D) mm	Height(H) mm	Inlet(h) mm	Pre-Pressure Bar
		■ Red Color	■ Blue Color						
25 bar	NEX 50	050.125010	050.125030	1"	28	409	600	140	4
	NEX 60	060.125010	060.125030	1"	30	409	660	140	4
	NEX 80	080.125010	080.125030	1"	39	480	840	140	5
	NEX 100*	100.125110	100.125130	1"	42	480	970	140	5
	NEX 150*	150.125110	150.125130	1"	70	500	1100	140	5
	NEX 200*	200.125110	200.125130	1 1/4"	105	634	980	240	5
	NEX 300*	300.125110	300.125130	1 1/4"	110	634	1230	240	5
	NEX 500*	500.125110	500.125130	1 1/4"	235	740	1550	365	5
	NEX 750*	750.125110	750.125130	2"	300	740	1950	280	5
	NEX 1000*	1000.125110	1000.125130	2"	330	800	2200	350	5
	NEX 1500*	1500.125110	1500.125130	2"	480	960	2400	350	5
	NEX 2000*	2000.125110	2000.125130	2"	680	1100	2450	350	5
	NEX 2500*	2500.125110	2500.125130	2"	835	1100	2750	350	5
	NEX 3000*	3000.125110	3000.125130	2 1/2"	990	1200	2800	350	5
	NEX 4000*	4000.125110	4000.125130	3"	1200	1450	3100	350	5
NEX 5000*	5000.125110	5000.125130	3"	1500	1450	3700	350	5	

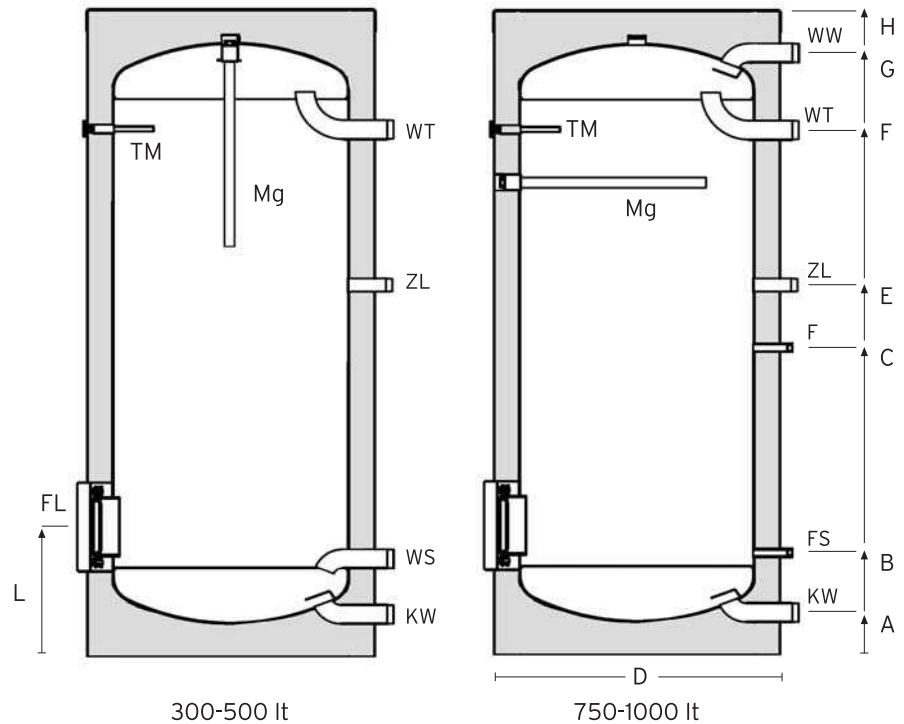
\*With Manometer



## Hot Water Heaters

### NEMA Accumulation Tanks

- Storage tank for hot water heating purpose
- Heavy duty S235JRG (St 37-2) quality steel
- Corrosion resistant Glass-Lined tank according to German DIN 4753
- Suit for electrical resistance
- Magnesium anode rod for tank protection - Mg
- Factory mounted thermometer - TM
- Extra thick (50-80 mm) PU soft foam insulation which is removable\*\*
- Clean-out and inspection access
- Max. operating pressure: 10 bar
- Max. operating temperature: 95 °C



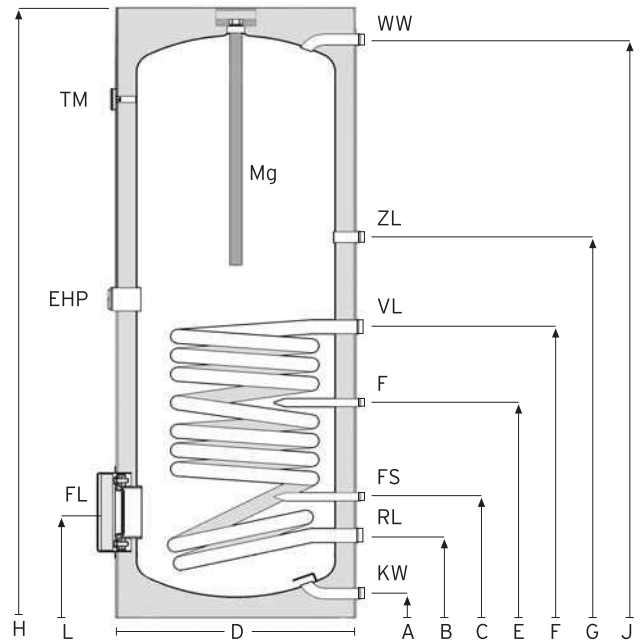
TYPE			NA 300	NA 500	NA 750	NA 1000
Diameter	Ø D	mm	600	700	910	1010
Nominal volume	Vn	l	300	500	750	1000
Height	H	mm	1834	1961	2000	2025
Weight		kg	87	96	155	211
Insulation thickness		mm	50	50	80	80
Hot water outlet	WW	R	---	---	2"	2"
	hc	mm	---	---	1908	1911
Cold water inlet	KW	R	1 1/2"	1 1/2"	2"	2"
	hA	mm	72	88	88	92
Storage hot water outlet	WT	R	1 1/2"	1 1/2"	2"	2"
	hf	mm	1546	1672	1640	1647
Storage cold water inlet (NA300-NA500)	WS	R	1 1/2"	1 1/2"	---	---
	hb	mm	272	238	---	---
Recirculation	ZL	R	3/4"	3/4"	1 1/4"	1 1/4"
	he	mm	1180	1265	1145	1154
Sensor tube for heating - F	hc	mm	---	---	945	952
Sensor tube for solar - FS	hb	mm	272	238	290	297
Blind flange	FL	mm	150	150	225	225
	hL	mm	325	275	378	386
Article No	White <input type="checkbox"/>		7.NAST.0300-50	7.NAST.0500-50	7.NAST.0750-41	7.NAST.1000-41



\*\* Insulation delivered separately for NA 750 - NA 1000 models

## Hot Water Heaters

# NEMA Single coil water heat

- Storage tank for hot water heating purpose
- Heavy duty S235JRG (St 37-2) quality steel
- Corrosion resistant Glass-Lined tank according to German DIN 4753
- Suit for electrical resistance - EHP
- Magnesium anode rod for tank protection - Mg
- Factory mounted thermometer - TM
- Extra thick (50-80 mm) PU soft foam insulation which is removable\*\*
- Clean-out and inspection access - FL
- Max. operating pressure  
Tank : 10 bar  
Coil : 16 bar
- Max. operating temperature  
Tank : 95 °C  
Coil : 110 °C



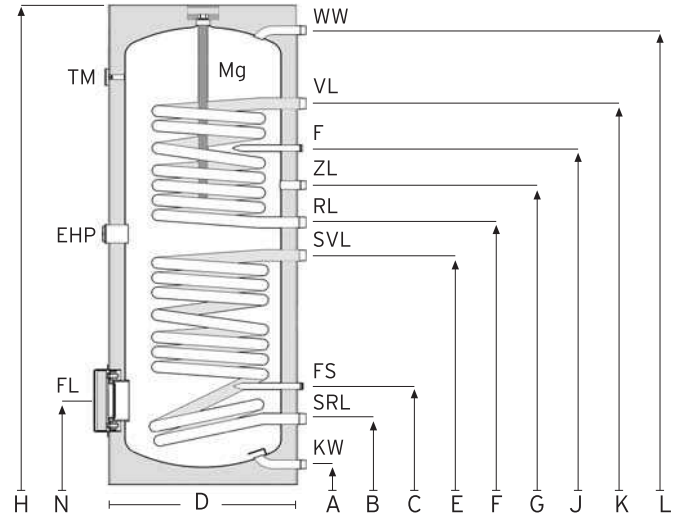
TYPE			NS 160	NS 200	NS 300	NS 400	NS 500	NS 750	NS 1000
Diameter	Ø D	mm	540	540	700	700	700	910	1010
Nominal volume	Vn	l	158	198	300	385	478	750	982
Height	H	mm	1222	1473	1334	1631	1961	2000	2025
Surface		m <sup>2</sup>	0.75	0.95	1.43	1.8	1.9	3.7	4.5
Weight		kg	47	56	85	101	150	243	303
Insulation thickness		mm	45	45	50	50	50	80	80
Hot water outlet	WW	R	3/4"	3/4"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>J</sub>	mm	1106	1366	1226	1523	1853	1886	1900
Cold water inlet	KW	R	3/4"	3/4"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>A</sub>	mm	55	55	55	55	55	99	103
Recirculation	ZL	R	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	h <sub>G</sub>	mm	732	899	918	1111	1264	1417	1489
Boiler Supply	VL	R	1"	1"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>F</sub>	mm	596	686	548	908	965	1314	1324
Boiler return	RL	R	1"	1"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>B</sub>	mm	191	191	220	220	220	288	297
Sensor tube for heating - F	h <sub>E</sub>	mm	461	506	548	683	695	1079	1087
Sensor tube for solar - FS	h <sub>C</sub>	mm	260	280	306	369	380	402	411
Blind flange	FL	mm	150	150	150	150	150	225	225
	h <sub>L</sub>	mm	246	246	275	275	275	378	386
Continuous rating t <sub>KW</sub> =10 °C, t <sub>WW</sub> =45 °C, t <sub>VL</sub> =55 °C		kW	25	31	48	57	65	99	110
		l / h	615	760	1170	1395	1590	2440	2715
Article No	Silver (Model 160-500)		7.NSCW.0160-50	7.NSCW.0200-50	7.NSCW.0300-50	7.NSCW.0400-50	7.NSCW.0500-50	7.NSCW.0750-41	7.NSCW.1000-41
	White (Model 750-1000)								



\*\* Insulation delivered separately for NS 750 - NS 1000 models

## Hot Water Heaters

### NEMA Double coil water heater

- Storage tank for hot water heating purpose
- Heavy duty S235JRG (St 37-2) quality steel
- Corrosion resistant Glass-Lined tank according to German DIN 4753
- Suit for electrical resistance - EHP
- Magnesium anode rod for tank protection - Mg
- Factory mounted thermometer - TM
- Extra thick (50-80 mm) PU soft foam insulation which is removable\*\*
- Clean-out and inspection access - FL
- Max. operating pressure
  - Tank : 10 bar
  - Coil : 16 bar
- Max. operating temperature
  - Tank : 95 °C
  - Coil : 110 °C



TYPE			ND 200	ND 300	ND 400	ND 500	ND 750	ND 1000
Diameter	Ø D	mm	540	600	700	700	910	1010
Nominal Volume	Vn	l	192	295	380	470	750	995
Height	H	mm	1473	1834	1631	1961	2000	2025
Surface-solar		m <sup>2</sup>	0.95	1.55	1.8	1.9	1.93	2.45
Surface-heating		m <sup>2</sup>	0.7	0.8	1.05	1.3	1.17	1.12
Weight		kg	85	106	130	160	217	275
Insulation thickness		mm	45	50	50	50	80	80
Hot water outlet	WW	R	3/4"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>L</sub>	mm	1370	1725	1523	1856	1887	1905
Cold water inlet	KW	R	3/4"	1"	1"	1"	1 1/4"	1 1/4"
	h <sub>A</sub>	mm	55	90	55	55	99	103
Recirculation	ZL	R	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
	h <sub>G</sub>	mm	901	1179	1111	1264	1242	1243
Boiler supply -solar	SVL	R	1"	1"	1"	1"	1"	1"
	h <sub>E</sub>	mm	688	964	909	965	830	884
Boiler return - solar	SRL	R	1"	1"	1"	1"	1"	1"
	h <sub>B</sub>	mm	193	254	220	220	288	297
Sensor tube for solar - FS	h <sub>C</sub>	mm	282	403	369	380	402	411
Sensor tube for heating - F	h <sub>J</sub>	mm	1013	1289	1223	1409	1332	1333
Boiler supply	VL	R	1"	1"	1"	1"	1"	1"
	h <sub>K</sub>	mm	1148	1424	1354	1604	1467	1423
Boiler return	RL	R	1"	1"	1"	1"	1"	1"
	h <sub>F</sub>	mm	788	1064	1006	1114	1151	1153
Blind flange	FL	mm	150	150	150	150	225	225
	h <sub>N</sub>	mm	248	324	275	275	378	387
Continuous rating-solar tKW=10 °C, tWW=45 °C, tVL=55 °C		kW	24	26	31	40	33	32
		l / h	550	630	740	970	815	780
Article No	Silver (Model 200-500)		7.NDCW.0200-50	7.NDCW.0300-50	7.NDCW.0400-50	7.NDCW.0500-50	7.NDCW.0750-41	7.NDCW.1000-41
	White (Model 750-1000)							

\*\* Insulation delivered separately for ND 750 - ND 1000 models



# Quality and System Certification





**PRODUCTION FACILITY**

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