NOBEL INTERNATIONAL

Efficiency and reliability, every day!

FORCED CIRCULATION TANKS

160 - 1000Lt

The solution
for big installations

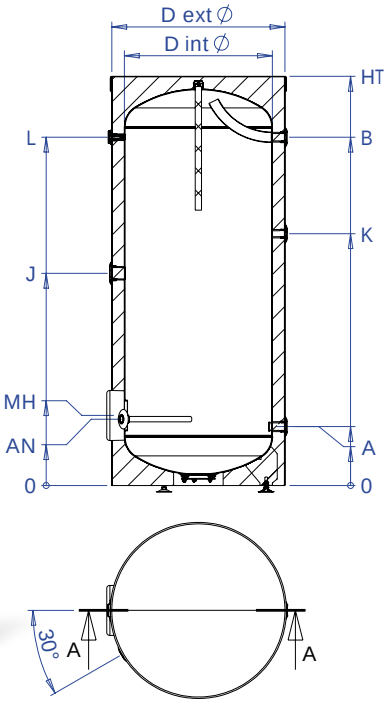
FORCED CIRCULATION TANK - WITHOUT HEAT EXCHANGER

MODEL		160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
Capacity	Lt	162	199	301	400	469	805	1002
Net Weight	kg	51	59	81	96	108	171	200
Insulation	mm	50	50	50	50	50	70	70
Heat Losses ΔT 45K	kWh/24h	1,4	1,5	1,7	2,2	2,5	3,2	3,5
Energy efficiency class		B	B	B	C	C	C	C
Maximum operational temperature	°C	95	95	95	95	95	95	95
Rated pressure	bar	10	10	10	10	10	8	8

MODEL			160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
External Diameter	D ext	mm	600	600	600	700	700	990	990
Internal Diameter	D int	mm	500	500	500	600	600	850	850
Height	HT	mm	1035	1230	1760	1655	1900	1770	2100
Manhole	MH	mm	287	287	287	283	283	459	459
Anode	AN	mm	272	272	272	268	268	411	411
Cold water inlet	A	mm	242	242	242	238	238	331	331
Hot water outlet	B	mm	787	982	1512	1408	1658	1372	1727
Lower HE Outlet	C	mm	-	-	-	-	-	-	-
Lower HE Inlet	D	mm	-	-	-	-	-	-	-
Upper HE Outlet	E	mm	-	-	-	-	-	-	-
Upper HE Inlet	F	mm	-	-	-	-	-	-	-
Sensor pocket 1	G	mm	-	-	-	-	-	-	-
Sensor pocket 2	H	mm	-	-	-	-	-	-	-
Heating element	J	mm	557	694	1012	858	993	953	1154
Recirculation	K	mm	602	712	1122	1018	1231	1025	1262
Thermometer	L	mm	787	982	1512	1408	1658	1372	1727

NOTE: Dimensional tolerance ±10mm

		160lt-500lt	800lt-1000lt
Height		HT	
External Diameter		D ext	
Internal Diameter		D int	
Manhole	MH	Ø180	Ø300
Cold water inlet	A	F 1"	F 1 1/2"
Hot water outlet	B	F 1"	F 1 1/2"
Heating element	J	F 1 1/2"	F 1 1/2"
Recirculation	K	F 3/4"	F 3/4"
Thermometer	L	F 1/2"	F 1/2"



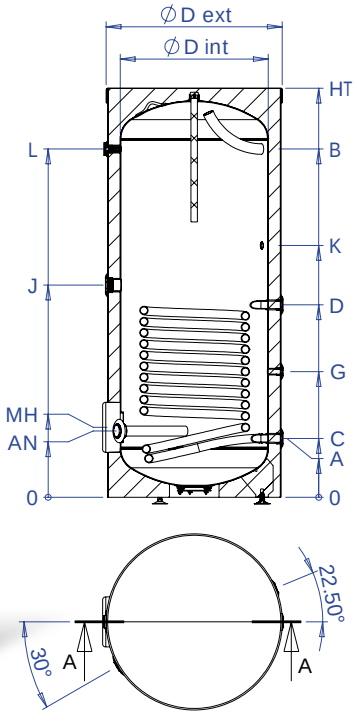
FORCED CIRCULATION TANK - SINGLE HEAT EXCHANGER

MODEL		160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
Capacity	Lt	155	191	289	386	452	776	968
Net weight	kg	68	78	109	127	147	223	264
Insulation	mm	50	50	50	50	50	70	70
Heat Exchanger Surface C1	m^2	0,85	0,95	1,48	1,65	2,06	2,69	3,18
Heat Exchanger Capacity C1	Lt	5,10	5,74	8,93	10,21	12,44	22,28	26,00
Heat Exchanger Output (60-80°C) C1	kW	28	32	41	48	60	75	90
Heat Exchanger Continuous Flow Rate (60-80°C) C1	L/h	639	786	885	1106	1278	1523	1917
Heat Losses ΔT 45K	kWh/24h	1,4	1,5	1,7	2,2	2,5	3,2	3,5
Energy Efficiency class		B	B	B	C	C	C	C
Heat Exchanger Pressure drop C1	mbar	18	19	24	28	62	51	117
Maximum operational temperature	°C	95	95	95	95	95	95	95
Rated pressure	bar	10	10	10	10	10	8	8
Rated pressure of the heat exchanger	bar	6	6	6	6	6	6	6
NL factor C1		2,8	4,2	8,6	12,5	19	28	36

MODEL			160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
External diameter	D ext	mm	600	600	600	700	700	990	990
Internal diameter	D int	mm	500	500	500	600	600	850	850
Height	HT	mm	1035	1230	1760	1655	1900	1770	2100
Manhole	MH	mm	287	287	287	283	283	459	459
Anode	AN	mm	272	272	272	268	268	411	411
Cold water inlet	A	mm	242	242	242	238	238	331	331
Hot water outlet	B	mm	787	982	1512	1408	1658	1372	1727
Lower HE outlet	C	mm	242	242	242	238	238	331	331
Lower HE inlet	D	mm	602	647	872	778	913	936	1046
Upper HE outlet	E	mm	-	-	-	-	-	-	-
Upper HE inlet	F	mm	-	-	-	-	-	-	-
Sensor pocket 1	G	mm	422	445	557	508	576	634	689
Sensor pocket 2	H	mm	-	-	-	-	-	-	-
Heating element	J	mm	652	694	1012	858	993	994	1154
Recirculation	K	mm	605	735	1088	1018	1184	1025	1262
Thermometer	L	mm	787	982	1512	1408	1658	1372	1727

NOTE: Dimensional tolerance ±10mm

		160lt-500lt	800lt-1000lt
Height		HT	
External Diameter		D ext	
Internal Diameter		D int	
Manhole	MH	Ø180	Ø300
Cold water inlet	A	F 1"	F 1 1/2"
Hot water outlet	B	F 1"	F 1 1/2"
Lower HE Outlet	C	F 1"	F 1 1/2"
Lower HE Inlet	D	F 1"	F 1 1/2"
Sensor pocket 1	G	F1/2"	F 1/2"
Heating element	J	F 1 1/2"	F 1 1/2"
Recirculation	K	F 3/4"	F 3/4"
Thermometer	L	F 1/2"	F 1/2"



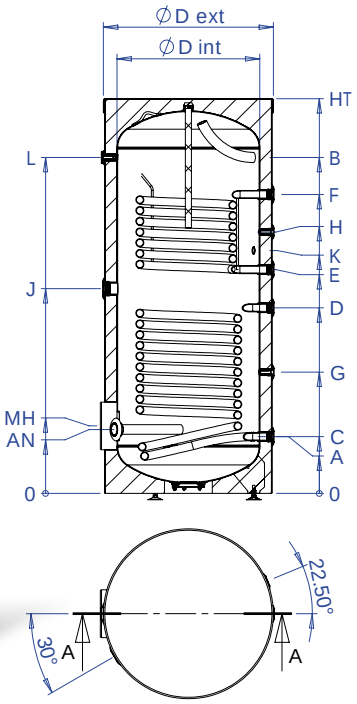
FORCED CIRCULATION TANK - DOUBLE HEAT EXCHANGER

MODEL		160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
Capacity	Lt	153	187	283	378	443	763	952
Net Weight	kg	72	88	121	143	166	248	289
Insulation	mm	50	50	50	50	50	70	70
Heat Exchanger surface C1	m^2	0,64	0,85	1,27	1,65	2,06	2,45	3,18
Heat Exchanger surface C2	m^2	0,42	0,62	0,85	0,97	0,96	1,46	1,49
Heat Exchanger Capacity C1	Lt	3,83	5,10	7,66	10,21	12,44	20,11	26,00
Heat Exchanger capacity C2	Lt	2,55	3,83	5,10	5,87	6,06	11,96	12,17
Heat Exchanger output (60-80°C) C1	kW	17	26	36	48	60	69	90
Heat Exchanger Output (60-80°C) C2	kW	13	19	26	25	31	41	43
Heat Exchanger Continuous Flow Rate (60-80°C) C1	L/h	418	639	835	1106	1278	1401	1917
Heat Exchanger Continuous Flow Rate (60-80°C) C2	L/h	319	393	639	614	762	958	958
Heat losses ΔT 45K	kWh/24h	1,4	1,5	1,7	2,2	2,5	3,2	3,5
Energy efficiency class		B	B	B	C	C	C	C
Heat Exchanger Pressure drop C1	mbar	18	18	27	28	60	53	117
Heat Exchanger Pressure drop C2	mbar	3	9	19	26	26	12	12
Maximum operational temperature	°C	95	95	95	95	95	95	95
Rated pressure	bar	10	10	10	10	10	8	8
Rated pressure of the heat exchanger	bar	6	6	6	6	6	6	6
NL factor C1		2,8	4,00	8,2	12,5	19	26	35
NL factor C2		0,5	0,8	2,5	2,3	3,2	10	16

MODEL			160lt Ø600	200lt Ø600	300lt Ø600	400lt Ø700	500lt Ø700	800lt Ø990	1000lt Ø990
External diameter	D ext	mm	600	600	600	700	700	990	990
Internal diameter	D int	mm	500	500	500	600	600	850	850
Height	HT	mm	1035	1230	1760	1655	1900	1770	2100
Manhole	MH	mm	287	287	287	283	283	459	459
Anode	AN	mm	272	272	272	268	268	411	411
Cold water inlet	A	mm	242	242	242	238	238	331	331
Hot water outlet	B	mm	787	982	1512	1408	1658	1372	1727
Lower HE outlet	C	mm	242	242	242	238	238	331	331
Lower HE inlet	D	mm	507	602	782	778	913	881	1046
Upper HE outlet	E	mm	607	712	942	938	1073	1025	1262
Upper HE inlet	F	mm	787	982	1302	1253	1388	1375	1612
Sensor pocket 1	G	mm	375	422	512	508	576	606	689
Sensor pocket 2	H	mm	697	847	1122	1096	1231	1200	1437
Heating element	J	mm	557	657	862	858	993	953	1154
Recirculation	K	mm	605	735	1088	1018	1184	1025	1262
Thermometer	L	mm	787	982	1512	1408	1658	1372	1727

NOTE: Dimensional tolerance ±10mm

		160lt-500lt	800lt-1000lt
Height		HT	
External Diameter		D ext	
Internal Diameter		D int	
Manhole	MH	Ø180	Ø300
Cold water inlet	A	F 1"	F 1 1/2"
Hot water outlet	B	F 1"	F 1 1/2"
Lower HE outlet	C	F 1"	F 1 1/2"
Lower HE inlet	D	F 1"	F 1 1/2"
Upper HE outlet	E	F 1"	F 1 1/2"
Upper HE inlet	F	F 1"	F 1 1/2"
Sensor pocket 1	G	F 1/2"	F 1/2"
Sensor pocket 2	H	F 1/2"	F 1/2"
Heating element	J	F 1 1/2"	F 1 1/2"
Recirculation	K	F 3/4"	F 3/4"
Thermometer	L	F 1/2"	F 1/2"



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160 - 1000Lt

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