Buffer tanks



40–1000 L

Floor-standing tanks available without a heat exchanger or with one or two heat exchangers. Custom manufacture is available.

WRAS

CE

BUFFER TANKS

Construction and applications

Floor-standing buffer tanks



Technical overview

- Manufactured to EN 12897:2006. Material options include DCP01 cold-rolled steel, enamelled DCP01-03 EK and SS316L stainless steel.
- Metal cladding option up to 500 L according to the overview. Insulation is injected rigid polyurethane foam, 38–42 kg/m³ (DIN 53420).
- PVC fabric cladding option for 750 and 1000 L models, with 100 mm soft polyurethane foam insulation.
- Optional additional corrosion protection with enamel coating (DIN 4753-3). Magnesium anode (DIN 124382.2 / EN 12438).
- Compatible with solar thermal collectors, space heating, electric elements and heat pumps. Connections for temperature sensors and electric elements. Optional inlets and outlets.

Applications

- Non-enamelled tanks are for systems where stored water is not drawn for use. Enamelled models are available for applications where the stored water is used.
- Large-scale water heating for industrial facilities, public buildings, hotels, hospitals, schools and military facilities.

Benefits

- Improved heating system operating costs, with stable and fast hot water supply.
- Thermal energy storage in a space-saving design. Supplemental heating for traditional heating systems.
- Long service life with appropriate maintenance. Custom manufacture is available.

Catalogue notes

The overview lists metal cladding up to 500 L, while the model tables also list metal-clad dimensions and weights for 750 and 1000 L.

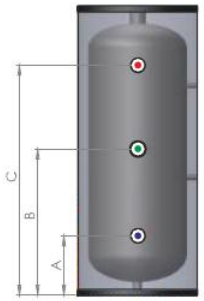
The original table lists 11 kg for the metal-clad BT.2.300.EN.2LE. This value is marked with an asterisk in the specifications.

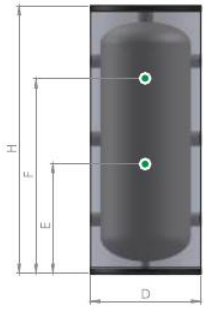
BUFFER TANKS

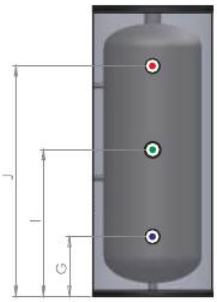
Without a heat exchanger

40, 60 and 80 L

DCP01-03/EK cold-rolled steel inner tank, 1.8 mm (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 38 kg/m³ (DIN 53420). Maximum working temperature 95°C. Optional backup heating element.







For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.0.40.EN	BT.0.60.EN	BT.0.80.EN
Tank capacity (L)	33	46	60
H · Total height (mm)	580	710	900
D · Metal-clad diameter (mm)	400	400	400
A · Optional inlet/outlet (mm)	165	150	180
B · Optional inlet/outlet (mm)	260	285	465
C · Optional inlet/outlet (mm)	415	560	740
E · Optional inlet/outlet (mm)	260	285	375
F · Optional inlet/outlet (mm)	415	560	675
G · Optional inlet/outlet (mm)	195	150	180
I · Optional inlet/outlet (mm)	290	285	465
J · Optional inlet/outlet (mm)	445	560	740
Inner tank diameter (mm)	320	320	320
Max. working pressure (bar)	8	8	8
Max. test pressure (bar)	12	12	12
Weight with metal cladding (kg)	28	35	42
Insulation with metal cladding (mm)	50	50	50
Non-enamelled price (€)	**336**	**364**	**390**
Enamelled price (€)	**407**	**443**	**471**
Stainless steel price (€)	**-**	**734**	**790**

Connection diameters (in)

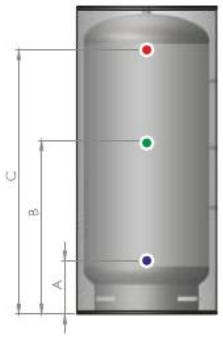
Connection / product code	BT.0.40.EN	BT.0.60.EN	BT.0.80.EN
A · Optional inlet/outlet	1¼"	1¼"	1¼"
B · Optional inlet/outlet	1½"	1½"	1½"
C · Optional inlet/outlet	1¼"	1¼"	1¼"
E · Optional inlet/outlet	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"
I · Optional inlet/outlet	1¼"	1¼"	1¼"

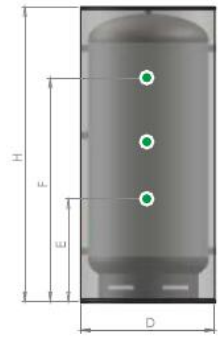
BUFFER TANKS

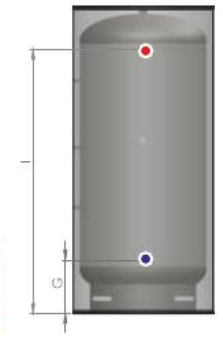
Without a heat exchanger

100–1000 L

DCP01-03/EK cold-rolled steel inner tank, 2.5 mm (3.0 mm for the 500 L model) (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 42 kg/m³ (DIN 53420). Zipped PVC fabric option with 100 mm soft polyurethane foam for 750 and 1000 L models. Maximum working temperature 95°C. Optional backup heating element.







For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.0.100.EN	BT.0.150.EN	BT.0.200.EN	BT.0.300.EN	BT.0.500.EN	BT.0.750.EN	BT.0.1000.EN
Tank capacity (L)	98	139	197	301	480	820	972
H · Total height (mm)	920	1250	1250	1800	1920	1800	2100
D · Metal-clad diameter (mm)	500	500	580	580	700	940	940
D · PVC-clad diameter (mm)	-	-	-	-	-	1040	1040
A · Optional inlet/outlet (mm)	175	175	185	185	220	340	360
B · Optional inlet/outlet (mm)	450	635	650	995	1030	1000	1170
C · Optional inlet/outlet (mm)	725	1065	1000	1605	1640	1510	1780
E · Optional inlet/outlet (mm)	360	360	365	645	680	650	820
O · Optional inlet/outlet (mm)	-	-	-	995	1030	925	1120
F · Optional inlet/outlet (mm)	550	890	825	1395	1430	1250	1570
G · Optional inlet/outlet (mm)	175	175	185	185	220	340	360
I · Optional inlet/outlet (mm)	315	1065	1000	1605	1640	1510	1780
Inner tank diameter (mm)	400	400	480	480	600	840	840
Max. working pressure (bar)	8	8	8	8	8	8	8
Max. test pressure (bar)	12	12	12	12	12	12	12
Weight with PVC cladding (kg)	-	-	-	-	-	187	250
Weight with metal cladding (kg)	48	63	55	95	150	209	278
Insulation with PVC cladding (mm)	-	-	-	-	-	100	100
Insulation with metal cladding (mm)	50	50	50	50	50	50	50
Non-enamelled price (€)	**407**	**545**	**635**	**720**	**1,157**	**1,368**	**1,608**
Enamelled price (€)	**494**	**658**	**770**	**861**	**1,382**	**1,735**	**2,045**
Stainless steel price (€)	**861**	**982**	**1,241**	**1,523**	**2,524**	**On request**	**On request**

Connection diameters (in)

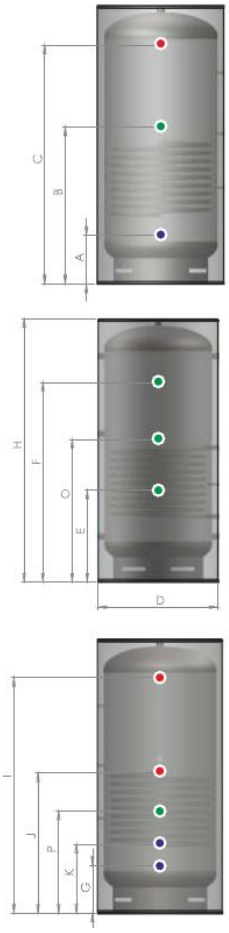
Connection / product code	BT.0.100.EN	BT.0.150.EN	BT.0.200.EN	BT.0.300.EN	BT.0.500.EN	BT.0.750.EN	BT.0.1000.EN
A · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"	1½"
B · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"	1½"
C · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"	1½"
E · Optional inlet/outlet	½"	½"	½"	½"	½"	½"	½"
O · Optional inlet/outlet	½"	½"	½"	½"	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"	½"	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"	1½"
I · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"	1½"

BUFFER TANKS

Single heat exchanger

150–1000 L

DCP01-03/EK cold-rolled steel inner tank, 2.5 mm (3.0 mm for the 500 L model) (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 42 kg/m³ (DIN 53420). Zipped PVC fabric option with 100 mm soft polyurethane foam for 750 and 1000 L models. Maximum working temperature 95°C. Optional backup heating element.



For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.1.150.EN	BT.1.200.EN	BT.1.300.EN	BT.1.500.EN	BT.1.750.EN	BT.1.1000.EN
Tank capacity (L)	131	183	277	470	766	928
H · Total height (mm)	1250	1250	1800	1920	1800	2100
D · Metal-clad diameter (mm)	500	580	580	700	940	940
D · PVC-clad diameter (mm)	-	-	-	-	1040	1040
A · Optional inlet/outlet (mm)	175	185	185	220	340	360
B · Optional inlet/outlet (mm)	635	650	995	1030	1000	1170
C · Optional inlet/outlet (mm)	1065	1000	1605	1640	1510	1780
E · Optional inlet/outlet (mm)	360	365	645	680	650	820
O · Optional inlet/outlet (mm)	-	-	995	1030	925	1120
F · Optional inlet/outlet (mm)	890	825	1395	1430	1250	1570
G · Optional inlet/outlet (mm)	175	185	185	220	340	360
I · Optional inlet/outlet (mm)	1065	1000	1605	1640	1510	1780
J · Main exchanger inlet (mm)	585	555	935	970	925	1060
P · Temperature sensor (mm)	445	215	645	630	735	770
K · Main exchanger outlet (mm)	315	320	345	380	550	520
Inner tank diameter (mm)	400	480	480	600	840	840
Main exchanger connection (in)	¾	1	1	1	1	1
Main exchanger area (m²)	0.28	0.38	0.60	0.90	1.20	1.70
Main exchanger capacity (L)	1.5	1.7	2.4	2.7	3.5	4.8
Max. working pressure (bar)	8	8	8	8	8	8
Max. test pressure (bar)	12	12	12	12	12	12
Weight with PVC cladding (kg)	-	-	-	-	237	300
Weight with metal cladding (kg)	68	85	115	174	259	328
Insulation with PVC cladding (mm)	-	-	-	-	100	100
Insulation with metal cladding (mm)	50	50	50	50	50	50
Non-enamelled price (€)	**700**	**815**	**875**	**1,312**	**1,557**	**1,802**
Enamelled price (€)	**818**	**1,030**	**1,050**	**1,551**	**1,969**	**2,327**
Stainless steel price (€)	**1,157**	**1,495**	**1,805**	**2,877**	**On request**	**On request**

Connection diameters (in)

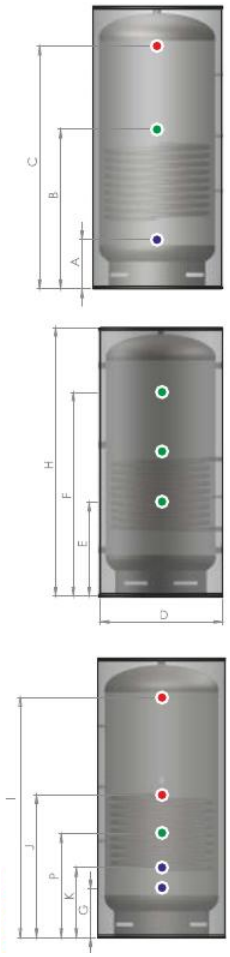
Connection / product code	BT.1.150.EN	BT.1.200.EN	BT.1.300.EN	BT.1.500.EN	BT.1.750.EN	BT.1.1000.EN
A · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
B · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
C · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
E · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
O · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
I · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
J · Main exchanger inlet	¾"	¾"	1"	1"	1"	1"
P · Temperature sensor	½"	½"	1½"	1½"	1½"	1½"
K · Main exchanger outlet	¾"	¾"	1"	1"	1"	1"

BUFFER TANKS

Single long heat exchanger

200–1000 L

DCP01-03/EK cold-rolled steel inner tank, 2.5 mm (3.0 mm for the 500 L model) (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 42 kg/m³ (DIN 53420). Zipped PVC fabric option with 100 mm soft polyurethane foam for 750 and 1000 L models. Maximum working temperature 95°C. Optional backup heating element.



For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.1.200.EN.1LE	BT.1.300.EN.1LE	BT.1.500.EN.1LE	BT.1.750.EN.1LE	BT.1.1000.EN.1LE
Tank capacity (L)	180	274	463	755	914
H · Total height (mm)	1250	1800	1920	1800	2100
D · Metal-clad diameter (mm)	580	580	700	940	940
D · PVC-clad diameter (mm)	-	-	-	1040	1040
A · Optional inlet/outlet (mm)	185	185	220	340	360
B · Optional inlet/outlet (mm)	650	995	1030	1000	1170
C · Optional inlet/outlet (mm)	1000	1605	1640	1510	1780
E · Optional inlet/outlet (mm)	365	645	680	650	820
O · Optional inlet/outlet (mm)	-	995	1030	925	1120
F · Optional inlet/outlet (mm)	825	1395	1430	1250	1570
G · Optional inlet/outlet (mm)	185	185	220	340	360
I · Optional inlet/outlet (mm)	1000	1605	1640	1510	1780
J · Main exchanger inlet (mm)	555	935	970	925	1060
P · Temperature sensor (mm)	215	645	630	735	770
K · Main exchanger outlet (mm)	320	345	380	550	520
Inner tank diameter (mm)	480	480	600	840	840
Main exchanger connection (in)	1¼	1¼	1¼	1¼	1¼
Main exchanger area (m²)	1.97	2.8	3.9	5	5.9
Main exchanger capacity (L)	9.8	12	13.5	18.4	20
Max. working pressure (bar)	8	8	8	8	8
Max. test pressure (bar)	12	12	12	12	12
Weight with PVC cladding (kg)	-	-	-	200	285
Weight with metal cladding (kg)	72	101	155	225	305
Insulation with PVC cladding (mm)	-	-	-	100	100
Insulation with metal cladding (mm)	50	50	50	50	50
Non-enamelled price (€)	**1,120**	**1,580**	**2,122**	**3,920**	**4,312**
Enamelled price (€)	**On request**	**On request**	**On request**	**4,634**	**5,174**
Stainless steel price (€)	**On request**	**On request**	**On request**	**On request**	**On request**

Connection diameters (in)

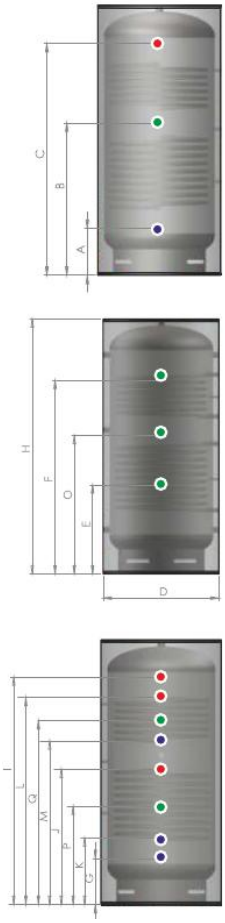
Connection / product code	BT.1.200.EN.1LE	BT.1.300.EN.1LE	BT.1.500.EN.1LE	BT.1.750.EN.1LE	BT.1.1000.EN.1LE
A · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
B · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
C · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
E · Optional inlet/outlet	½"	½"	½"	½"	½"
O · Optional inlet/outlet	½"	½"	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
I · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
J · Main exchanger inlet	1¼"	1¼"	1¼"	1¼"	1¼"
P · Temperature sensor	½"	½"	½"	½"	½"
K · Main exchanger outlet	1¼"	1¼"	1¼"	1¼"	1¼"

BUFFER TANKS

Two heat exchangers

150–1000 L

DCP01-03/EK cold-rolled steel inner tank, 2.5 mm (3.0 mm for the 500 L model) (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 42 kg/m³ (DIN 53420). Zipped PVC fabric option with 100 mm soft polyurethane foam for 750 and 1000 L models. Maximum working temperature 95°C. Optional backup heating element.



For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.2.150.EN	BT.2.200.EN	BT.2.300.EN	BT.2.500.EN	BT.2.750.EN	BT.2.1000.EN
Tank capacity (L)	131	178	270	460	751	912
H · Total height (mm)	1250	1250	1800	1920	1800	2100
D · Metal-clad diameter (mm)	500	580	580	700	940	940
D · PVC-clad diameter (mm)	-	-	-	-	1040	1040
A · Optional inlet/outlet (mm)	175	185	185	220	340	360
B · Optional inlet/outlet (mm)	635	650	995	1030	1000	1170
C · Optional inlet/outlet (mm)	1065	1000	1605	1640	1510	1780
E · Optional inlet/outlet (mm)	355	395	545	580	500	720
O · Optional inlet/outlet (mm)	-	-	995	1030	925	1120
F · Optional inlet/outlet (mm)	885	855	1395	1430	1350	1570
G · Optional inlet/outlet (mm)	175	185	185	220	340	360
I · Optional inlet/outlet (mm)	1065	1000	1605	1640	1510	1780
J · Main exchanger inlet (mm)	585	555	935	970	925	1060
P · Temperature sensor (mm)	445	215	645	630	735	770
K · Main exchanger outlet (mm)	315	320	345	380	550	520
L · Secondary exchanger inlet (mm)	950	895	1445	1480	1360	1620
Q · Temperature sensor (mm)	865	1035	1295	1330	1250	1440
M · Secondary exchanger outlet (mm)	780	725	1124	1160	1120	1280
Inner tank diameter (mm)	400	480	480	600	840	840
Main exchanger connection (in)	¾	1	1	1	1	1
Secondary exchanger connection (in)	¾	1	1	1	1	1
Main exchanger area (m²)	0.28	0.38	0.60	0.90	1.20	1.70
Secondary exchanger area (m²)	0.20	0.25	0.35	0.65	0.90	1.16
Main exchanger capacity (L)	2.3	2.2	3.6	3.9	5	7.5
Secondary exchanger capacity (L)	1.5	1.7	2.4	2.7	3.5	4.8
Max. working pressure (bar)	8	8	8	8	8	8
Max. test pressure (bar)	12	12	12	12	12	12
Weight with PVC cladding (kg)	-	-	-	-	237	300
Weight with metal cladding (kg)	68	85	115	174	259	328
Insulation with PVC cladding (mm)	-	-	-	-	100	100
Insulation with metal cladding (mm)	50	50	50	50	50	50
Non-enamelled price (€)	**762**	**889**	**1,030**	**1,690**	**1,819**	**2,073**
Enamelled price (€)	**889**	**1,002**	**1,171**	**1,972**	**2,234**	**2,651**
Stainless steel price (€)	**1,439**	**1,833**	**2,200**	**3,243**	**On request**	**On request**

Connection diameters (in)

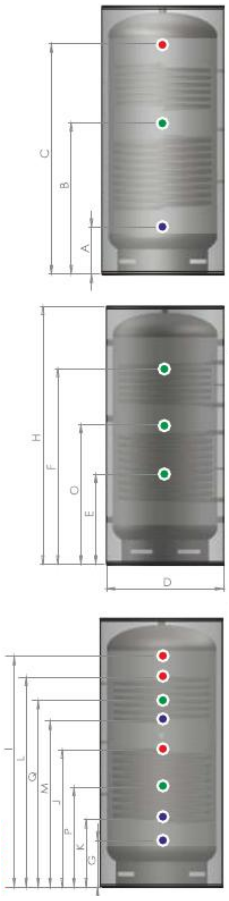
Connection / product code	BT.2.150.EN	BT.2.200.EN	BT.2.300.EN	BT.2.500.EN	BT.2.750.EN	BT.2.1000.EN
A · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
B · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
C · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
E · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
O · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
I · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"	1½"
J · Main exchanger inlet	¾"	1"	1"	1"	1"	1"
K · Main exchanger outlet	¾"	1"	1"	1"	1"	1"
L · Secondary exchanger inlet	¾"	1"	1"	1"	1"	1"
M · Secondary exchanger outlet	¾"	1"	1"	1"	1"	1"

BUFFER TANKS

Two heat exchangers

One standard and one long · 200–1000 L

DCP01-03/EK cold-rolled steel inner tank, 2.5 mm (3.0 mm for the 500 L model) (EN 10130:2006). RAL 9010 pre-painted galvanised steel cover, 0.5 mm (EN 10204/2.2). MIG welding. Rigid polyurethane foam, 42 kg/m³ (DIN 53420). Zipped PVC fabric option with 100 mm soft polyurethane foam for 750 and 1000 L models. Maximum working temperature 95°C. Optional backup heating element.



For DHW buffer tanks and forced-circulation systems, the catalogue specifies an expansion tank, a relief valve and anodic protection on the hot water loop.

Specifications / product code	BT.2.200.EN.2LE	BT.2.300.EN.2LE	BT.2.500.EN.2LE	BT.2.750.EN.2LE	BT.2.1000.EN.2LE
Tank capacity (L)	174	267	453	746	897
H · Total height (mm)	1250	1800	1920	1800	2100
D · Metal-clad diameter (mm)	580	580	700	940	940
D · PVC-clad diameter (mm)	-	-	-	1040	1040
A · Optional inlet/outlet (mm)	185	185	220	340	360
B · Optional inlet/outlet (mm)	650	995	1030	1000	1170
C · Optional inlet/outlet (mm)	1000	1605	1640	1510	1780
E · Optional inlet/outlet (mm)	395	545	580	500	720
O · Optional inlet/outlet (mm)	-	995	1030	925	1120
F · Optional inlet/outlet (mm)	855	1395	1430	1350	1570
G · Optional inlet/outlet (mm)	185	185	220	340	360
I · Optional inlet/outlet (mm)	1000	1605	1640	1510	1780
J · Main exchanger inlet (mm)	555	935	970	925	1060
P · Temperature sensor (mm)	215	645	630	735	770
K · Main exchanger outlet (mm)	320	345	380	550	520
L · Secondary exchanger inlet (mm)	895	1445	1480	1360	1620
Q · Temperature sensor (mm)	1035	1295	1330	1250	1440
M · Secondary exchanger outlet (mm)	725	1124	1160	1120	1280
Inner tank diameter (mm)	480	480	600	840	840
Main exchanger connection (in)	1¼	1¼	1¼	1¼	1¼
Secondary exchanger connection (in)	1	1	1	1	1
Main exchanger area (m²)	1.97	2.8	3.9	5	5.9
Secondary exchanger area (m²)	0.3	0.6	0.8	0.9	1.16
Main exchanger capacity (L)	9.8	12	13.5	18.4	20
Secondary exchanger capacity (L)	1.7	2.4	2.7	3.5	4.8
Max. working pressure (bar)	8	8	8	8	8
Max. test pressure (bar)	12	12	12	12	12
Weight with PVC cladding (kg)	-	-	-	259	330
Weight with metal cladding (kg)	90	11*	177	278	375
Insulation with PVC cladding (mm)	-	-	-	100	100
Insulation with metal cladding (mm)	50	50	50	50	50
Non-enamelled price (€)	**1,457**	**2,165**	**2,880**	**5,162**	**5,594**
Enamelled price (€)	**On request**	**On request**	**On request**	**6,143**	**6,720**
Stainless steel price (€)	**On request**	**On request**	**On request**	**On request**	**On request**

Connection diameters (in)

Connection / product code	BT.2.200.EN.2LE	BT.2.300.EN.2LE	BT.2.500.EN.2LE	BT.2.750.EN.2LE	BT.2.1000.EN.2LE
A · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
B · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
C · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
E · Optional inlet/outlet	½"	½"	½"	½"	½"
O · Optional inlet/outlet	½"	½"	½"	½"	½"
F · Optional inlet/outlet	½"	½"	½"	½"	½"
G · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
I · Optional inlet/outlet	1½"	1½"	1½"	1½"	1½"
J · Main exchanger inlet	1¼"	1¼"	1¼"	1¼"	1¼"
P · Temperature sensor	½"	½"	½"	½"	½"
K · Main exchanger outlet	1¼"	1¼"	1¼"	1¼"	1¼"
L · Secondary exchanger inlet	1"	1"	1"	1"	1"
Q · Temperature sensor	½"	½"	½"	½"	½"
M · Secondary exchanger outlet	1"	1"	1"	1"	1"

* 11 kg as listed in the original English catalogue.