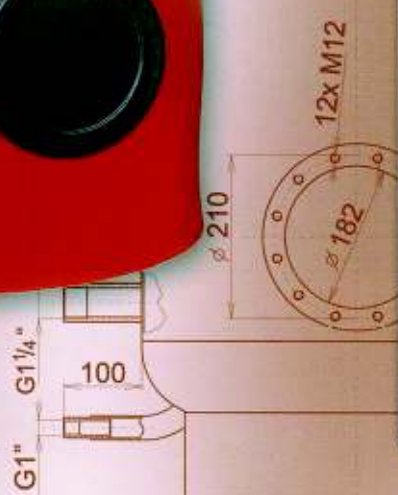
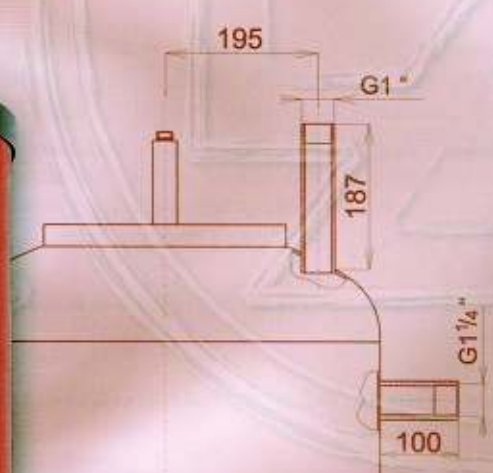
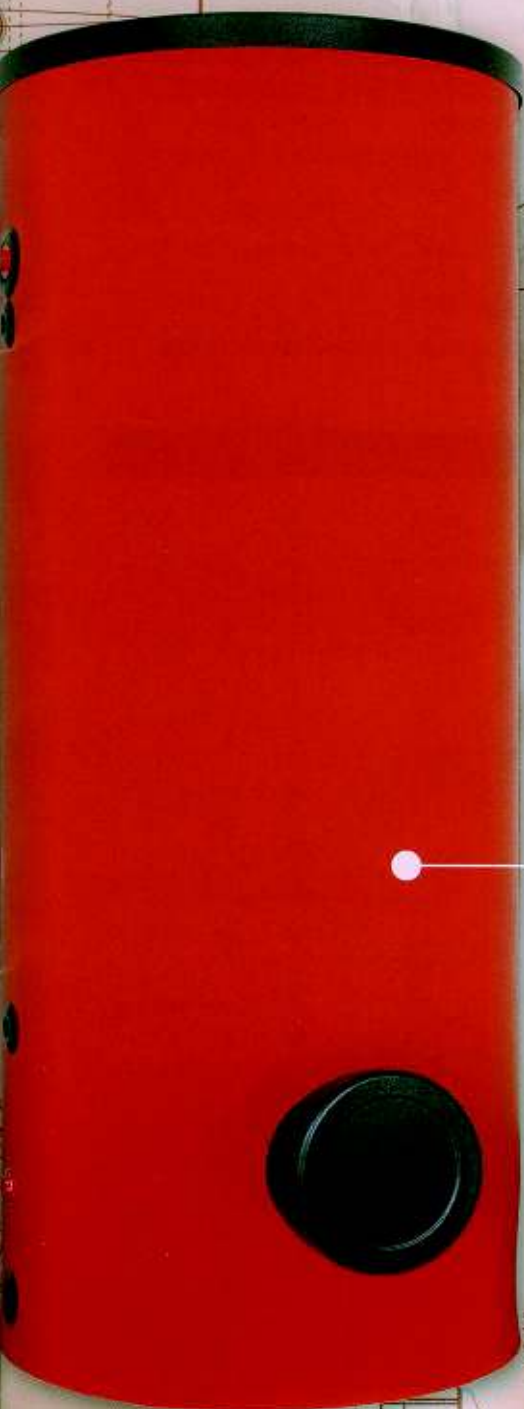


 **DRAŽICE**



NAD • NADO 500 • 750 • 1000
storage vessels

STORAGE VESSELS NAD AND NADO FUNCTIONS

Storage vessels are used for accumulating of excessive heat received from the heat source like, for example, a solid fuel boiler, a heat pump, solar collectors, fireplace inserts, etc. Some vessel types allow connecting more than one heat source at a time.

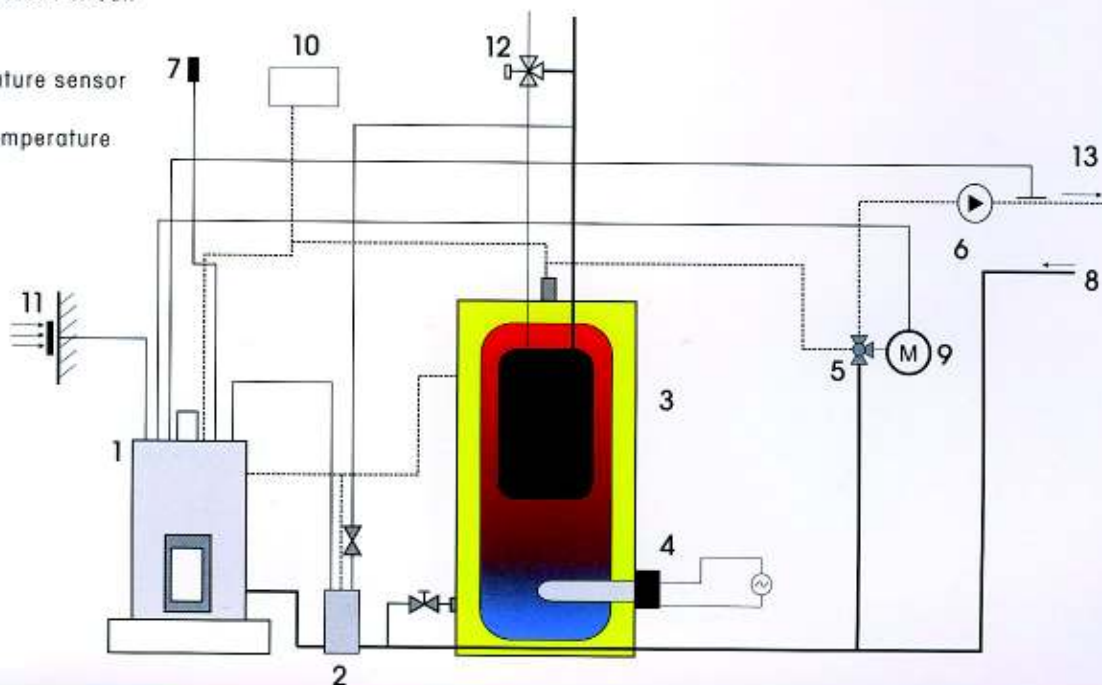
NAD vessels are used for heat storage in the heating system of type NADO and provides for direct HUW heating inside the inner enameled tank or HUW preheating for further water heaters. Everything depends on the temperature of heating water, which may be stored in the vessel. Connection to the boiler generally allows HUW heating in the inner vessel to the required temperature. On the other hand, connection to a solar collector or a heat pump will just allow to preheat HUW, and it would be necessary to attach a further water heater, for example, an electric water heater, which would warm up water to the required temperature, or to install a warming-up heating device into the storage tank (it might be a TJ 6/4" electric heating unit or a TPK heating flange).

A storage vessel attached to the heating system with a solid fuel boiler allows the best performance of the boiler at the most friendly boiler operation temperature.

3-year warranty is provided for accumulation tanks NAD and NADO, and 2-year warranty is provided for electrical and other equipment.

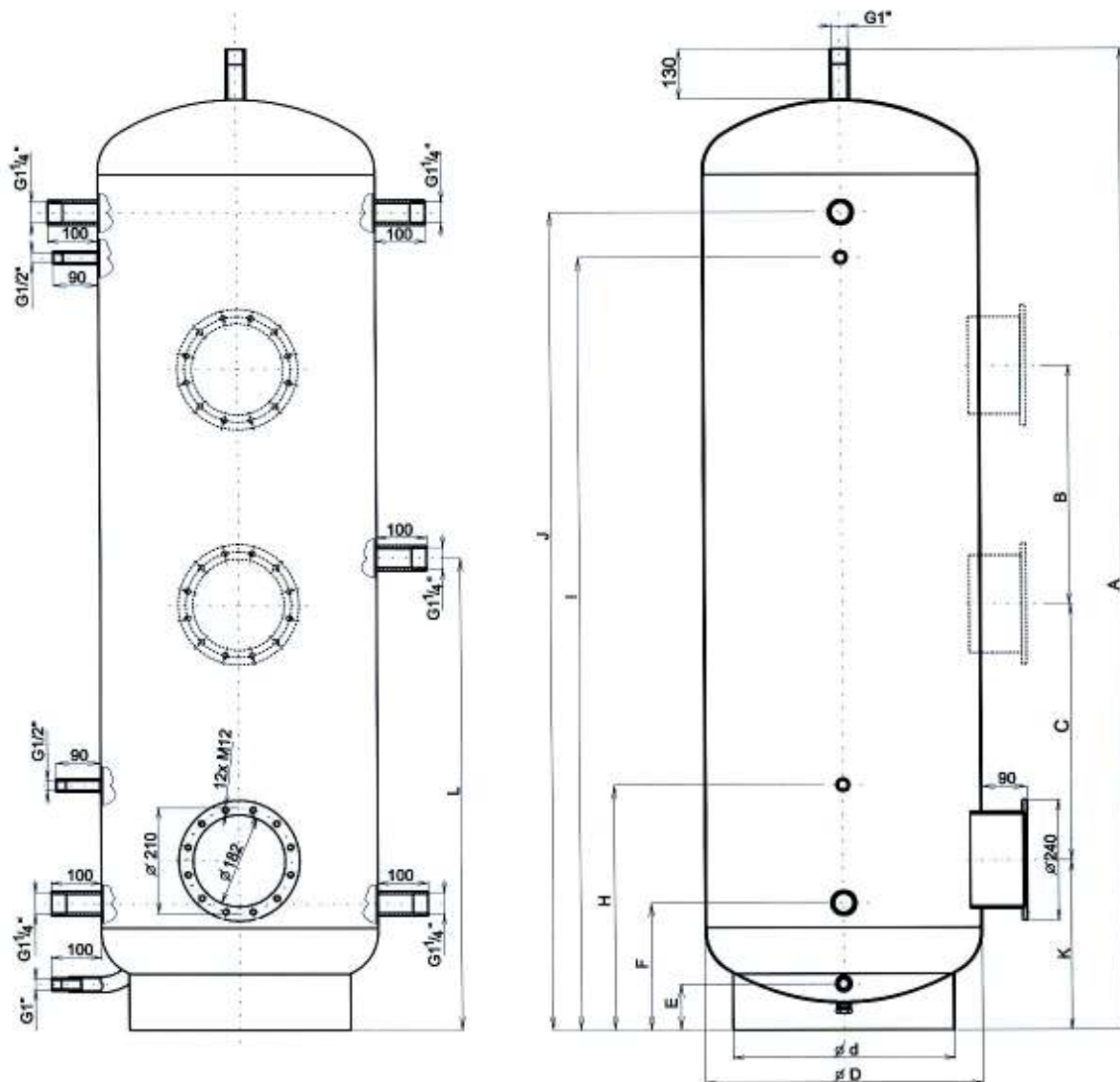
Solid fuel boiler connection example to NADO storage vessel

- 1 Solid fuel boiler
- 2 Heat regulator
- 3 Storage tanks NAD, NADO
- 4 Electric heating element
- 5 Intercepting valve
- 6 Circulation pump
- 7 Indoor thermostat
- 8 Heating system return circuit
- 9 Manometer
- 10 Radiator
- 11 Outdoor temperature sensor
- 12 Mixing valve
- 13 Heating water temperature sensor



Flange NAD storage vessels may be provided with 1 up to 3 optional flanges. A flange with screw spacing of 210 mm allows installing a TPK flange heating element. Positioning and number of sockets may be customized upon customer's requirements. The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

Maximum pressure in the tank	0,6 MPa	Maximum heating water temperature in the tank	90 °C
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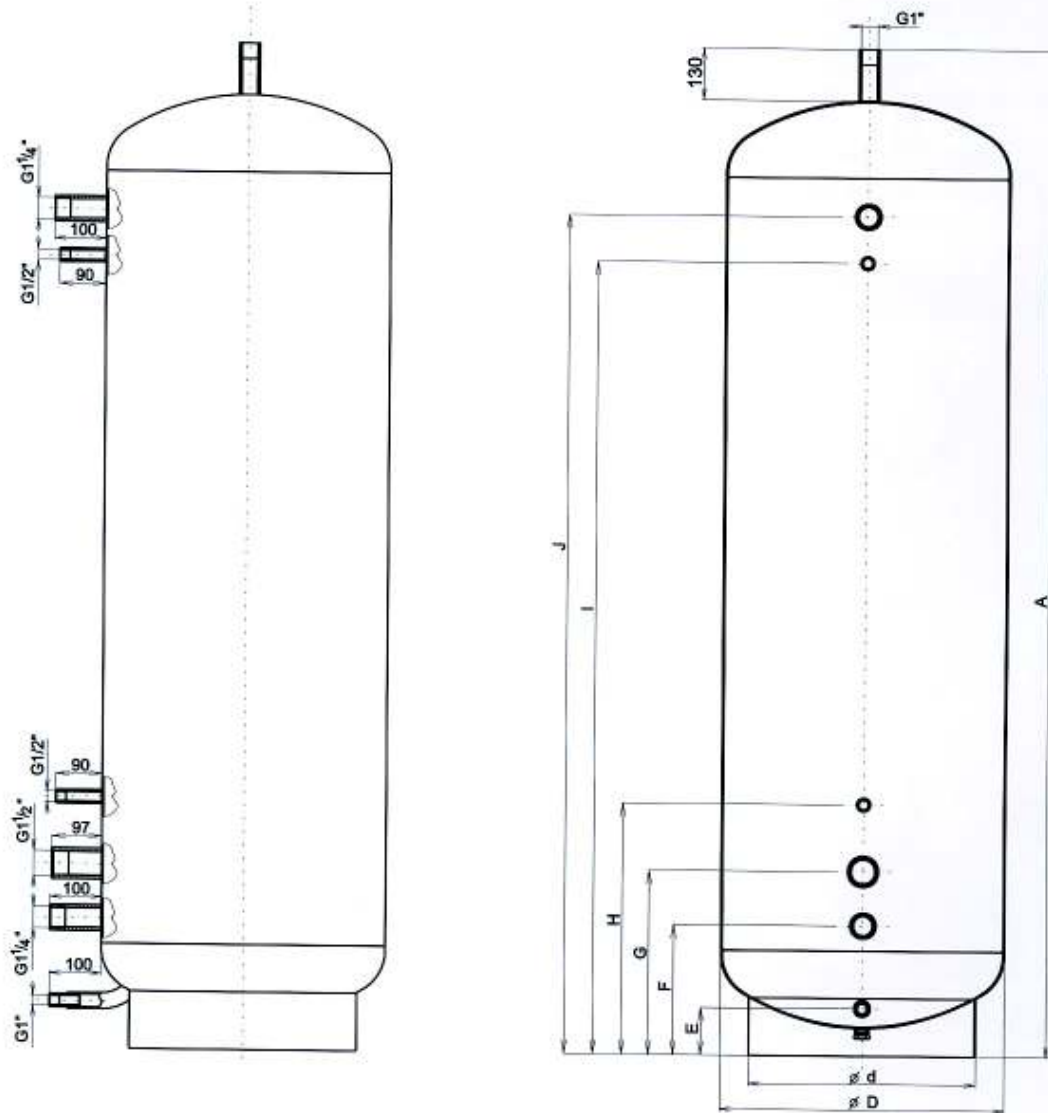


Volume (l)	Diameter D	A	B	C	E	F	H	I	J	K	L
500	600	1990	475	510	90	260	494	1545	1635	344	948
750	750	2020	475	510	90	272	506	1557	1647	356	960
1000	850	2063	475	510	90	287	521	1572	1662	371	975

NAD 500, 750, 1000 v2

Sockets for NAD storage vessels may be provided with G 6/4" optional sockets. A G 6/4" socket allows installing a TJ 6/4" electric heating unit. The number of sockets may vary and could be customized upon customer's requirements. The socket is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

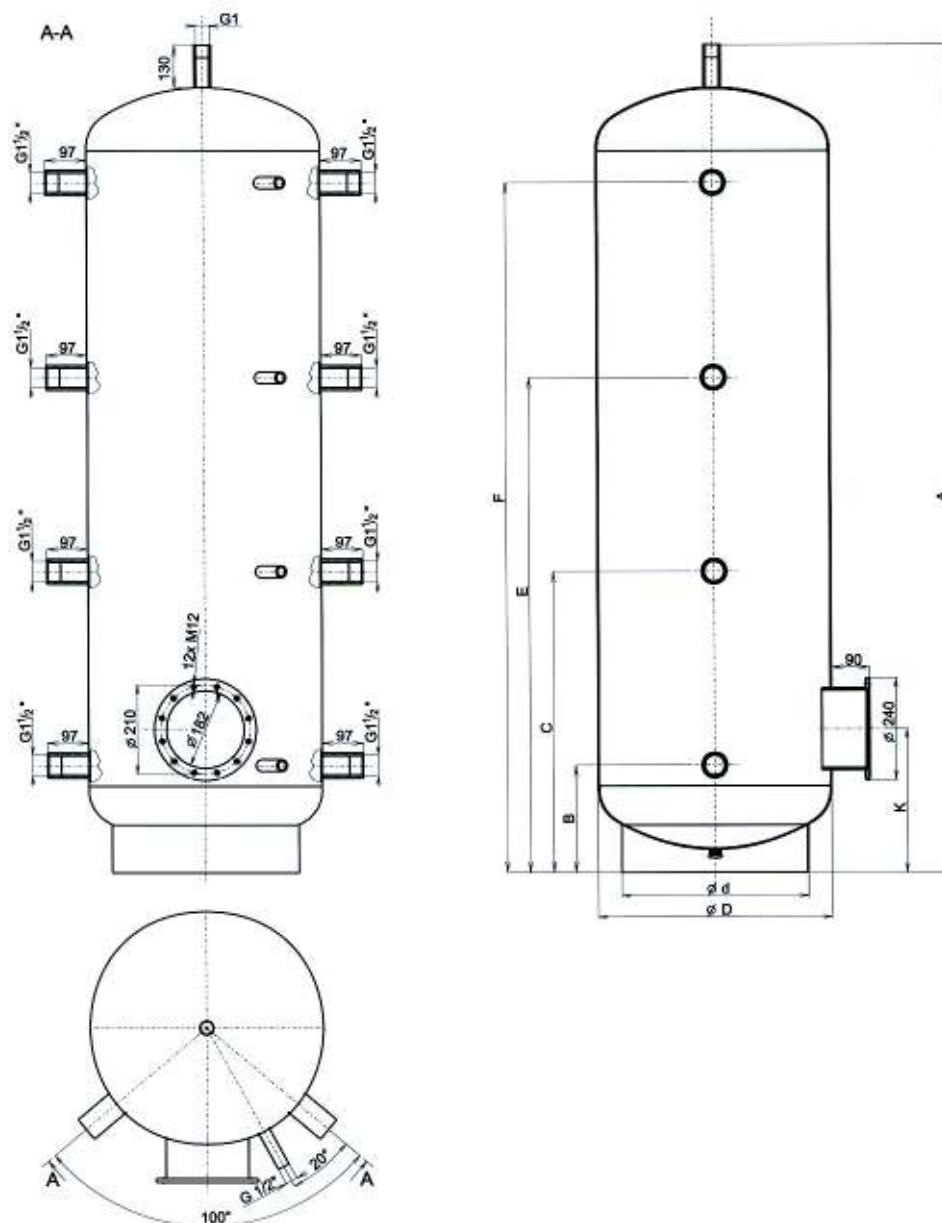
Maximum pressure in the tank	0,6 MPa	Maximum heating water temperature in the tank	90 °C
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Volume (l)	Diameter D	A	E	F	G	H	I	J
500	600	1990	90	260	364	494	1545	1635
750	750	2020	90	272	376	506	1657	1647
1000	850	2053	90	287	391	521	1672	1662

NAD storage vessels are produced in two versions: with a flange with screw spacing of 210 mm for a TPK flange heating element, and without a flange, but with sockets only. The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

Maximum pressure in the tank	0,6 MPa	Maximum heating water temperature in the tank	90 °C
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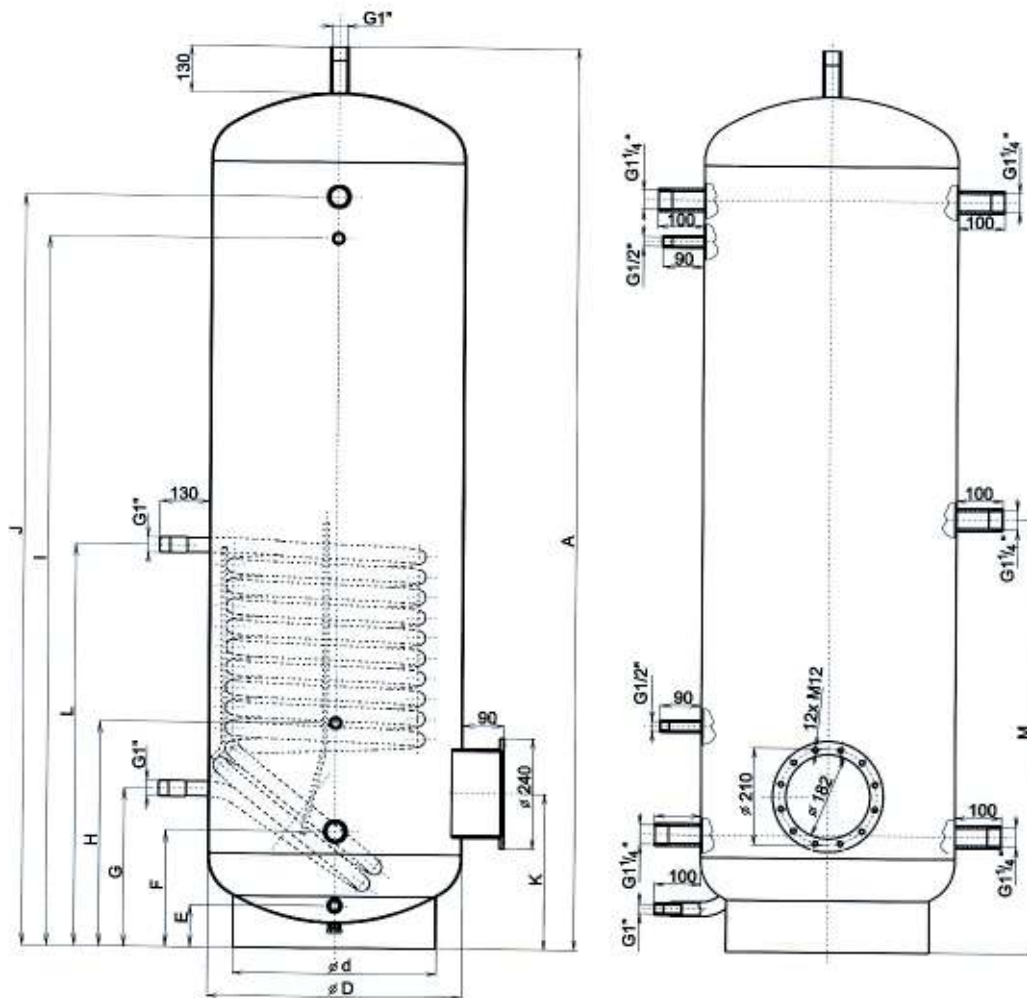


Volume (l)	Diameter D	A	B	C	E	F	K
500	600	1990	259	717	1175	1635	344
750	750	2020	271	729	1187	1647	356
1000	850	2053	286	744	1202	1662	371

NAD 500, 750, 1000 v4

NAD storage vessels may be provided with a flange with 210 mm screw spacing for a TPK heating unit installation. There may be installed more than one flange. The tank has a 1.5 m² exchanger for further heating system connection (for example, SOLAR). Changes in the number and location of couplings are optionally available. A coupling 6/4" can be added on top of the exchanger of the tank NAD v4 for further assembling of the electrical heating unit TJ 6/4", aimed at additional heating (for example, with solar collectors, heat pumps, etc.). The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

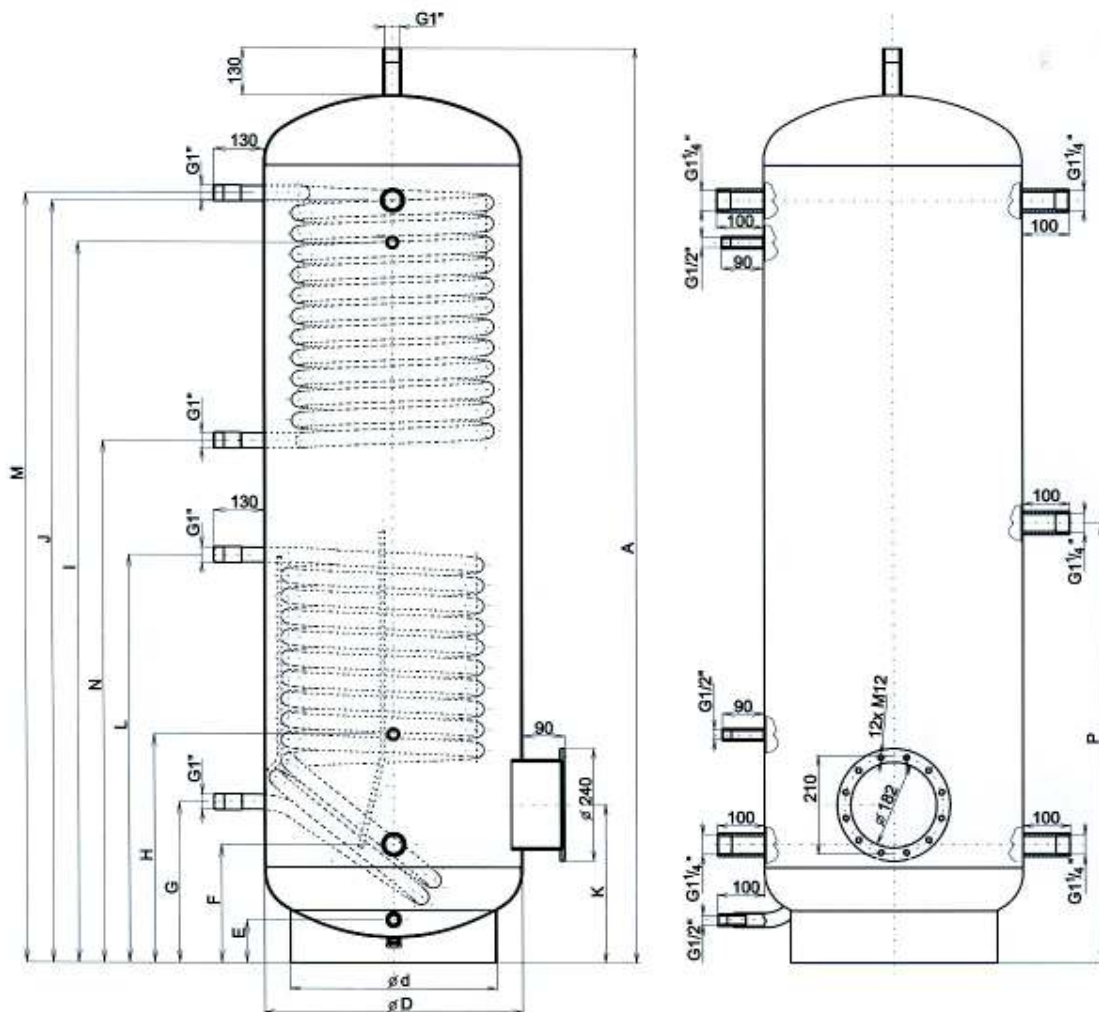
Maximum pressure in the tank	0,6 MPa	Maximum heating water temperature in the tank	90 °C
Maximum pressure in the exchanger	1 MPa	Maximum heating water temperature in the exchanger	110 °C



Volume (l)	Diameter D	A	E	F	G	H	I	J	K	L	M
500	600	1990	90	260	350	494	1545	1635	344	878	948
750	750	2020	90	272	362	506	1557	1647	356	890	960
1000	850	2053	90	287	377	521	1572	1662	371	905	975

NAD storage vessels may be provided with a flange with 210 mm screw spacing for a TPK heating unit installation. There may be installed more than one flange. The tank has two 1.5 m² exchangers for further heating system connection (for example, SOLAR). Changes in the number and location of couplings are optionally available. A coupling 6/4" can be added on top of the exchanger of the tank NAD v5 for further assembling of the electrical heating unit TJ 6/4", aimed at additional heating (for example, with solar collectors, heat pumps, etc.). The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (mollitan) insulation.

Maximum pressure in the tank	0,6 MPa	Maximum heating water temperature in the tank	90 °C
Maximum pressure in the exchanger	1 MPa	Maximum heating water temperature in the exchanger	110 °C



Volume (l)	Diameter D	A	E	F	G	H	I
500	600	1990	90	260	350	494	1545
750	750	2020	90	272	362	506	1567
1000	850	2053	90	287	377	521	1572

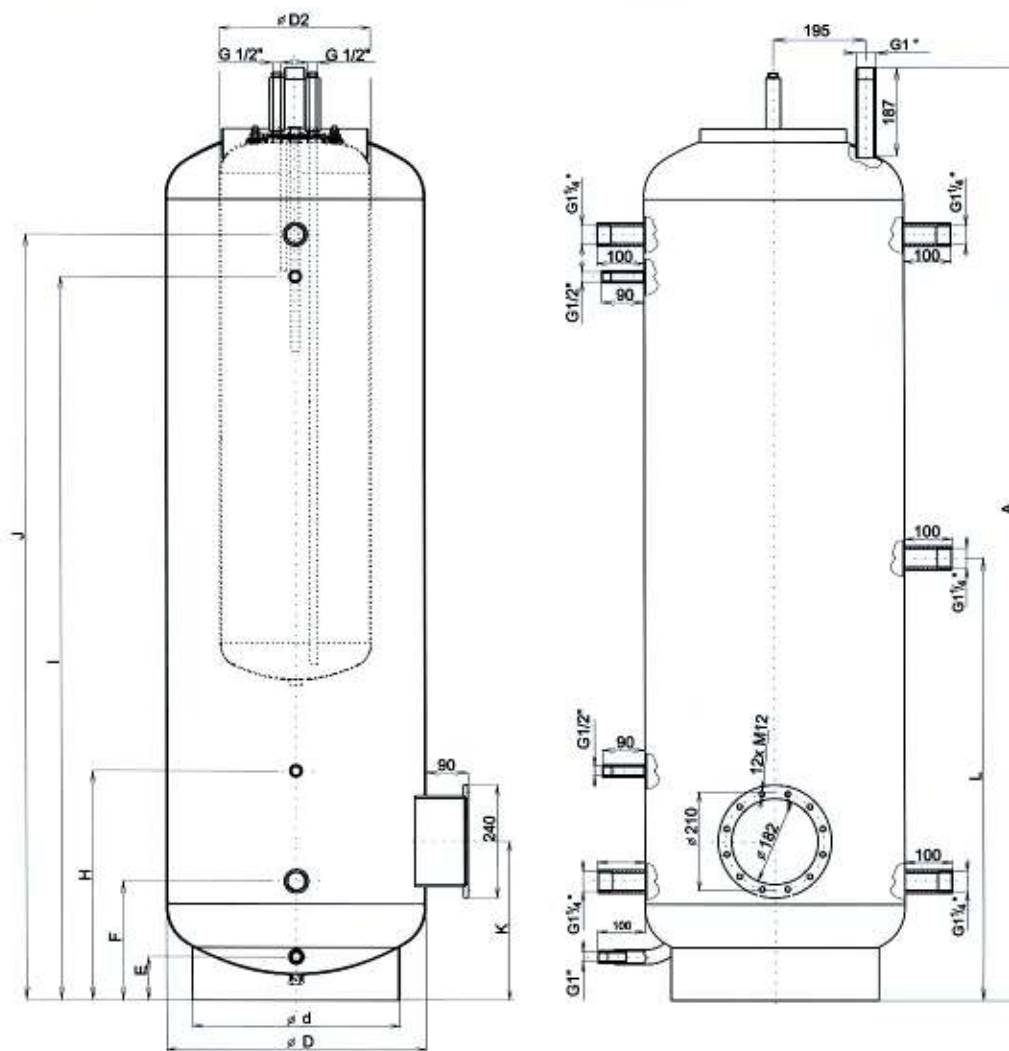
Volume (l)	J	K	L	M	N	P
500	1635	344	875	1650	1119	948
750	1647	356	887	1662	1131	960
1000	1662	371	902	1677	1146	975

NADO 500, 750, 1000 v1

Storage vessels NADO are produced in two versions: type NAD with a flange, or another type with a 6/4" socket. The vessel contains an inner enameled storage reservoir with a capacity of 60, 100, 160 or 200 litre depending on the storage vessel size. The flange and the 6/4" socket are plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

Maximum pressure in the tank	0,3 MPa	Maximum heating water temperature in the tank	90 °C
Maximum pressure in the inner tank	0,6 MPa	Maximum utility water temperature in the inner reservoir	90 °C

Type	Diameter D2 = 320 mm HUW reservoir capacity	Diameter D2 = 440 mm HUW reservoir capacity	Diameter D2 = 500 mm HUW reservoir capacity
NADO 500	60, 100	160	200
NADO 750	60, 100	160	200
NADO 1000	60, 100	160	200

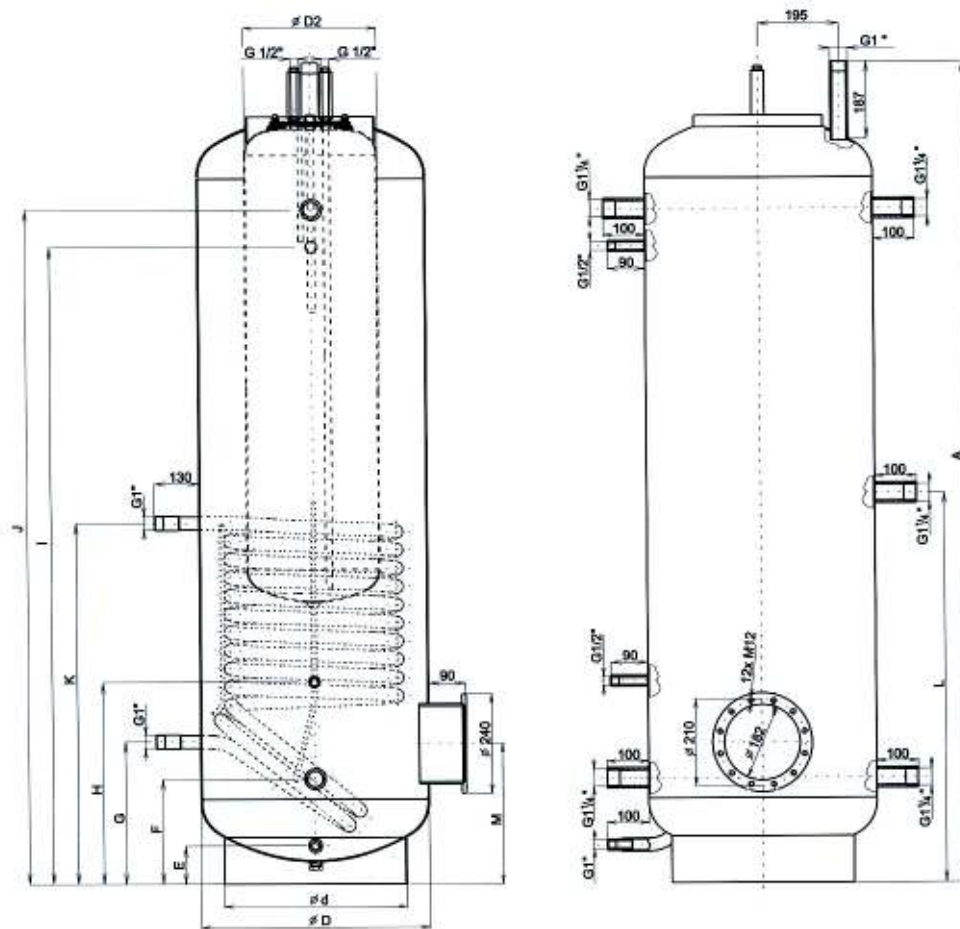


Volume (l)	Diameter D	A	E	F	G	H	I	K	L
500	600	1990	90	260	494	1545	1635	344	948
750	750	2020	90	272	506	1557	1647	356	960
1000	850	2053	90	287	521	1572	1662	371	975

NADO storage vessels may be provided with a flange with 210 mm screw spacing for a TPK heating unit installation. The tank contains a 1.5 m² exchanger for further heating system connection (for example, SOLAR). There may be installed two exchangers one above the other. The vessel contains an inner enameled reservoir with the capacity of 60, 100, 120 or 140 litres depending on the storage vessel size. Changes in the number and location of couplings are optionally available. A coupling 6/4" can be added between of the exchanger and the vessel of the tank NAD v2 with the HUW 140 storage tank for further assembling of the electrical heating unit TJ 6/4", aimed at additional heating (for example, with solar collectors, heat pumps, etc.). The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

Maximum pressure in the tank	0,3 MPa	Maximum heating water temperature in the tank	90 °C
Maximum pressure in the exchanger	1 MPa	Maximum heating water temperature in the exchanger	110 °C
Maximum pressure in the inner tank	0,6 MPa	Maximum utility water temperature in the inner reservoir	90 °C

Type	Diameter D2 = 320 mm HUW reservoir capacity	Diameter D2 = 440 mm HUW reservoir capacity	Diameter D2 = 500 mm HUW reservoir capacity
NADO 500	60, 100	120	140
NADO 750	60, 100	120	140
NADO 1000	60, 100	120	140



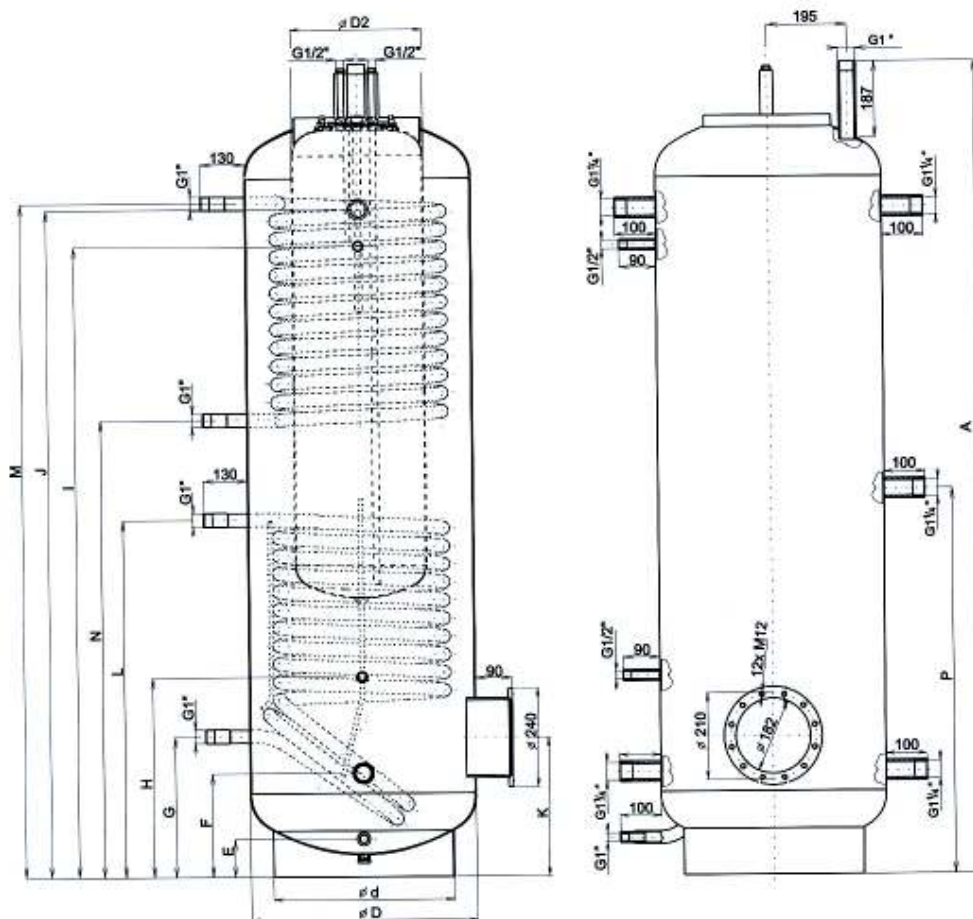
Volume (l)	Diameter D	A	E	F	G	H	I	J	K	L	M
500	600	1990	90	260	350	494	1545	1635	344	948	875
750	750	2020	90	272	362	506	1557	1647	356	960	887
1000	850	2053	90	287	377	521	1572	1662	371	975	902

NADO 500, 750, 1000 v3

NADO storage vessels may be provided with a flange with 210 mm screw spacing for a TPK heating unit installation. The tank contains two exchangers, with the heating surface of 1.5 m² each, for further heating system connection (for example, SOLAR). The vessel contains an inner enameled reservoir with a capacity of 60 or 100 litres depending on the storage vessel size. The number and positioning of sockets may vary and could be customized upon customer's requirements. The flange is plugged in the basic design. Storage vessels may be supplied with 100 mm thick polyurethane foam (molitan) insulation.

Maximum pressure in the tank	0,3 MPa	Maximum heating water temperature in the tank	90 °C
Maximum pressure in the exchanger	1 MPa	Maximum heating water temperature in the exchanger	110 °C
Maximum pressure in the inner tank	0,6 MPa	Maximum utility water temperature in the inner reservoir	90 °C

Type	Diameter D2 = 320 mm • HUW reservoir capacity
NADO 500	60, 100
NADO 750	60, 100
NADO 1000	60, 100



Volume (l)	Diameter D	A	E	F	G	H	I
500	600	1990	90	260	350	494	1545
750	750	2020	90	272	362	506	1557
1000	850	2053	90	287	377	521	1572

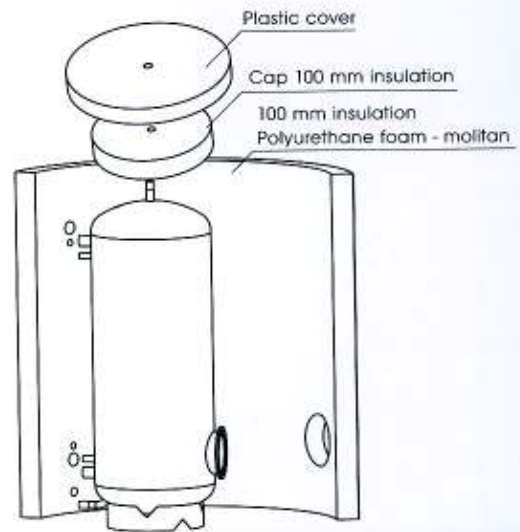
Volume (l)	J	K	L	M	N	P
500	1635	344	875	1647	1119	943
750	1647	356	887	1659	1131	955
1000	1662	371	902	1674	1146	970

Thermal insulation

100 mm thick polyurethane foam (molitan).
The top cover, covers of flanges and hole caps are integral components. Insulation is supplied in separate packing

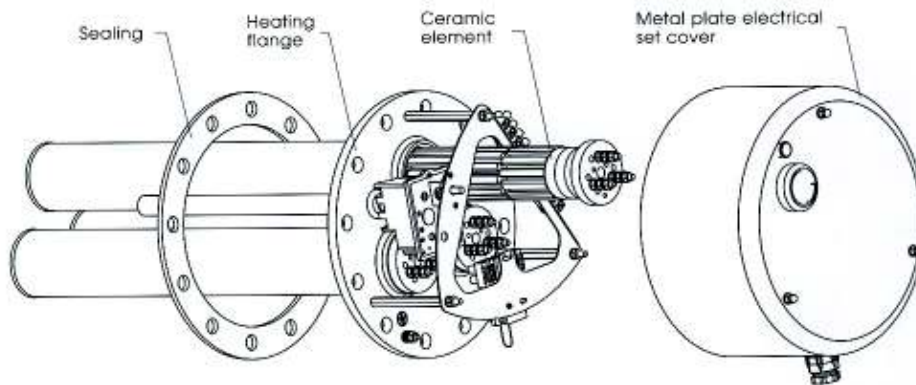
No-maintenance external current anode (optional)

A protection anode is unwearable by corrosion and does not require any maintenance.
The protection external current anode with an external power supply consists of minipotentiostats and a titanium electrode, which are linked to each other by a connecting cable.
Cathodic protection potentiostat for enamelled water heaters with an integrated LED warning light (red/green). A feeding and reference electrode that is coated with noble metal oxides and connected to the protection electric current is unwearable. The reference anode is used in measuring the working actual potential in the tank



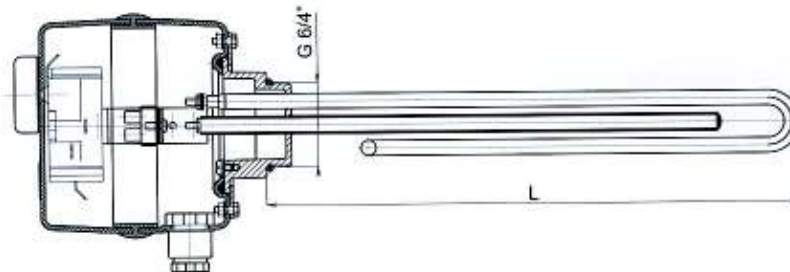
Flange heating unit

TPK 210 - 12/2,2kW
TPK 210 - 12/3 - 6kW



Screw-in electric heating unit

- TJ 6/4" - 2
- TJ 6/4" - 2,5
- TJ 6/4" - 3,3
- TJ 6/4" - 3,75
- TJ 6/4" - 4,5
- TJ 6/4" - 6
- TJ 6/4" - 7,5
- TJ 6/4" - 9



Type	Output kW	Connection	Heating rate from 10°C to 60°C (approx. 150 l)		Electric protection category	Temperature settings range °C	Length of the element (1) mm
			hour	hour			
TJ 6/4" - 2	2	1 PE-N AC 230 V / 50 Hz	4,5	2,2	IP 45	0 - 75	350
TJ 6/4" - 2,5	2,5	1 PE-N AC 230 V / 50 Hz	4	2			360
TJ 6/4" - 3,3	3,3	3 PE-N AC 400 V / 50 Hz	2,7	1,5			330
TJ 6/4" - 3,75	3,75	3 PE-N AC 400 V / 50 Hz	2,3	1,2			350
TJ 6/4" - 4,5	4,5	3 PE-N AC 400 V / 50 Hz	2	1			400
TJ 6/4" - 6	6	3 PE-N AC 400 V / 50 Hz	1,5	0,7			520
TJ 6/4" - 7,5	7,5	3 PE-N AC 400 V / 50 Hz	1,3	0,6			580
TJ 6/4" - 9	9	3 PE-N AC 400 V / 50 Hz	1	0,5			610