DoubleMax
Specifications

DoubleMax is an instantaneous indirect double-wall water heater.

IDENTIFICATION

As manufactured by THERMO 2000 Inc., the instantaneous indirect double-wall water heater required for a closed-circuit system must be a:

DoubleMax 50-4 ☐   DoubleMax 80-5 ☐   DoubleMax 120-9 ☐   DoubleMax 120-9A ☐

TANK AND HEAT EXCHANGER DESCRIPTION

The indirect water heater heat exchanger shall be equipped with double-wall copper piping in the form of parallel helicoidal lines having a maximum operating pressure of 150 psi. All copper components and assembly will meet the low lead requirements for potable plumbing products and the NSF 61 standard (International Standard Drinking Water Systems Components Health Effects).

The indirect water heater tank shall have a patented steel injector through which the boiler water fluid enters the top of the tank and a steel collector through which the boiler water circuit fluid exits at the bottom of the tank. The tank is made of high-density carbon steel. All joints are arc-welded using the MIG/Argon method. The tank is designed for a maximum allowable working pressure of 150 psi (125 psi for ASME model; DoubleMax 120-9A). The ASME model undergoes a hydrostatic test at 163 psi. The tank shall be insulated with 2'' HFC-free polyurethane insulation limiting heat loss to ½ °F per hour. The outer jacket of the tank is made of cold rolled steel coated with baked powder-based paint.

STANDARD FEATURES

- ASME rated pressure relief valve set at 30 psi (50 psi on models DoubleMax 120-9 and DoubleMax 120-9A) protecting the tank
- ½'' automatic air vent with a shut-off valve for easy replacement.
- 2 ½'' diameter temperature and pressure indicator on the front
- Immersion well for sensor or aquastat included
- ¾'' drain (ball) valve made of brass, which have a maximum working pressure of 150 psi
- The tank has three adjustable legs for leveling
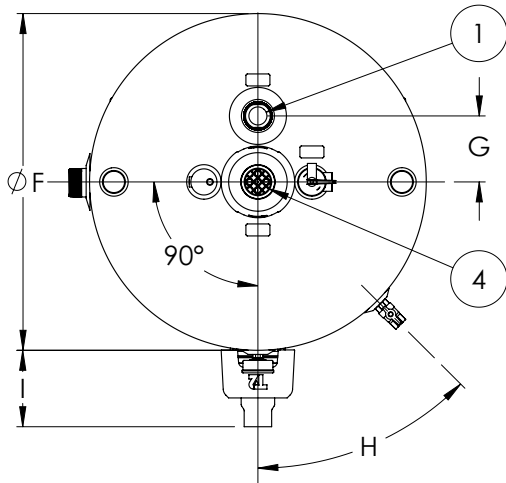
AVAILABLE OPTION

Aquastat with adjustable temperature differential, WR 11D18-1 or equivalent, that makes contact when the temperature falls below the tank's water temperature set point minus an adjustable differential (5 to 45F) and breaks contact when the temperature rises over the set point (100F to 195F).

WARRANTIES

The instantaneous indirect double-wall water heater is covered by a 15-year warranty on residential applications and 10 years on commercial applications. Parts and accessories are guaranteed for 2 years. (consult the terms of the warranty included at the end of the instruction manual shipped with the water heater).
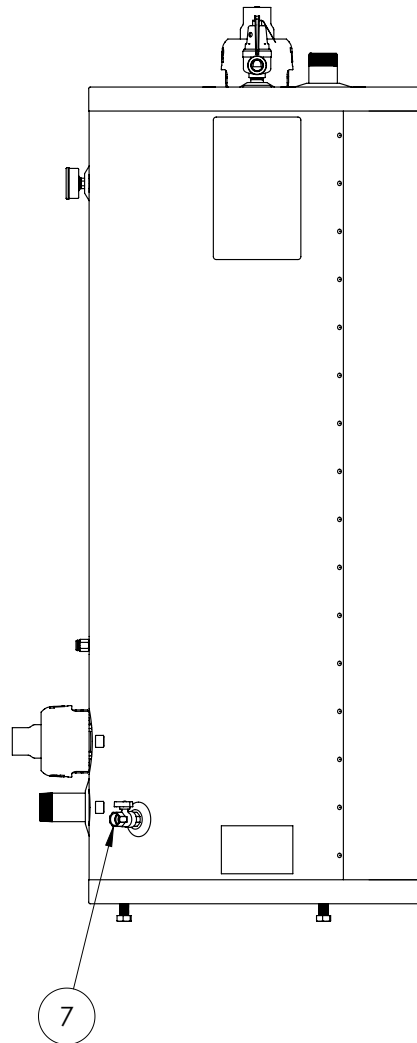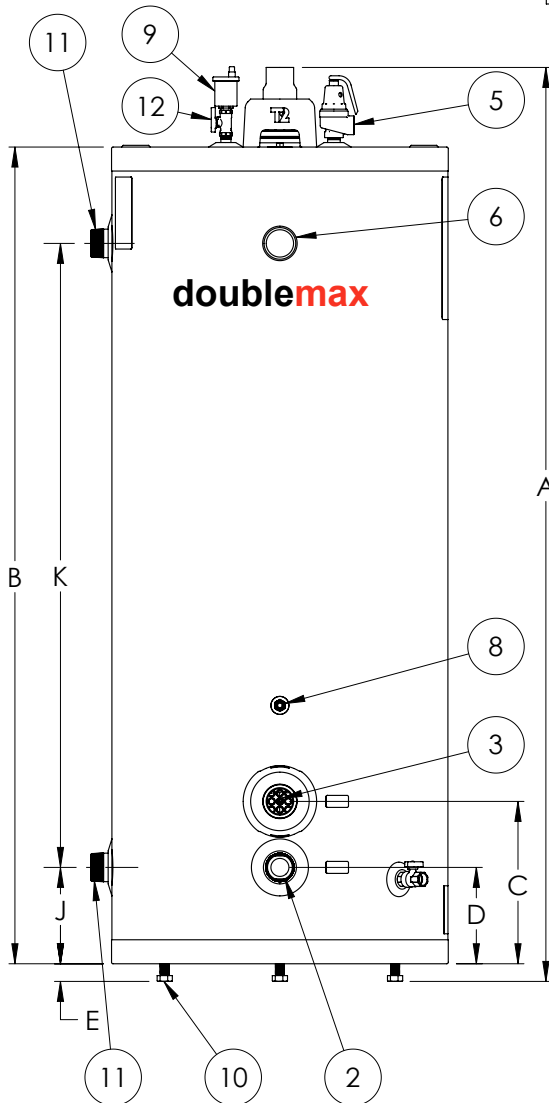
TECHNICAL DATA

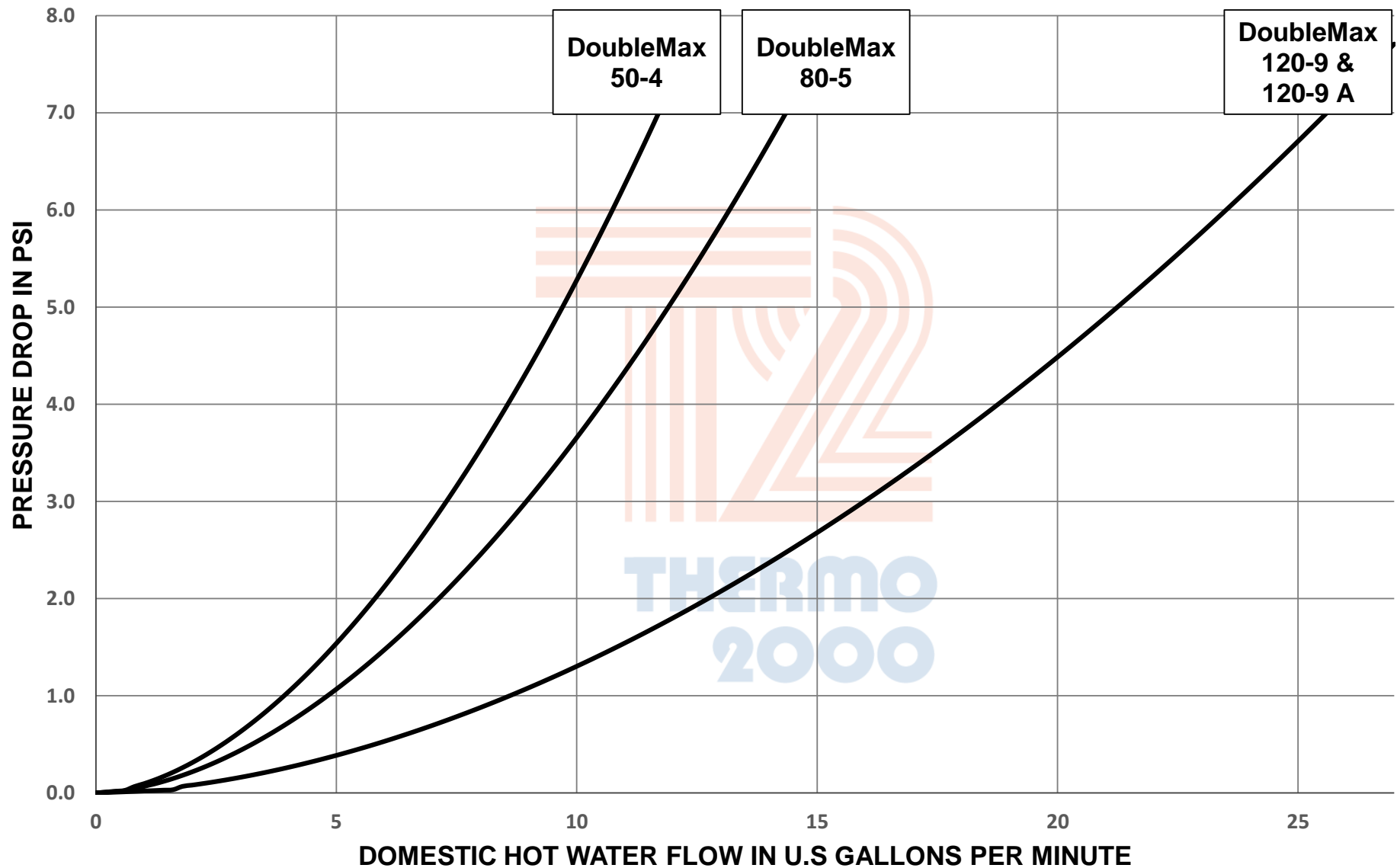| Models	Tank Volume	Heat transfer area (sq. ft.)	Domestic water connection	Boiler connection	Weight equipment	Shipping weight
DOUBLEMAX 120-9A	120 US gal.	55.6 ft²	2 1/2'' Copper F	2'' NPT M	530 lbs	610 lbs
DOUBLEMAX 120-9	119 US gal.	55.6 ft²	2'' Copper F	2'' NPT M	530 lbs	610 lbs
DOUBLEMAX 80-5	80 US gal.	30.9 ft²	1-1/2'' Copper F	1-1/2'' NPT M	355 lbs	440 lbs
DOUBLEMAX 50-4	50 US gal.	24.7 ft²	1-1/2'' Copper F	1-1/4'' NPT M	260 lbs	330 lbs

doublemax

COMPONENT IDENTIFICATION

1 Boiler Water Supply (Inlet)
2 Boiler Water Return (Outlet)
3 Domestic Water inlet
4 Domestic Water outlet
5 Pressure relief valve **3/4NPTF**
6 Temp. & Press. indicator **1/2NPTM**
7 Tank drain valve **3/4NPTF**
8 Immersion well
9 Automatic air vent **1/2NPTM**
10 Adjustable leg
11 Extra Tappings
12 Ball valve **1/2NPT**

DIMENSIONS

MODELS	A	B	C	D	E	F	G	H	I	J	K
	in.	in.	in.	in.	in.	in.	in.	degrees	in.	in.	in.
DOUBLEMAX 50-4	59 1/4	52	10 3/4	6 3/4	1 1/2	22	4	45	5 5/8	6 3/4	38
DOUBLEMAX 80-5	73 3/4	66 1/2	11	7	1 1/2	24	4	45	5 5/8	7	52
DOUBLEMAX 120-9	76 1/4	68 1/4	13 1/2	8	1 1/2	28	5 1/2	45	6 3/8	8	52
DOUBLEMAX 120-9A	79 1/4	69 5/8	12 1/4	6 1/2	1 1/2	28	6	45	9	13 1/4	43 1/2

Domestic Water Side (Secondary Circuit)
Pressure Drop <u>VS</u> Domestic Hot Water Flow
DoubleMax™ Instantanious Indirect Double-Wall Water Heater

Y-axis: PRESSURE DROP IN PSI (0.0 to 8.0)

X-axis: DOMESTIC HOT WATER FLOW IN U.S GALLONS PER MINUTE (0 to 25)

Curve labels:
- DoubleMax 50-4
- DoubleMax 80-5
- DoubleMax 120-9 & 120-9 A

Pressure Drop <u>VS</u> Boiler Water Flow Rate
DoubleMax™ Instantanious Indirect double-wall water heater

Y-axis: PRESSURE DROP IN FEET OF HEAD OF WATER (0.0 to 7.0)

X-axis: BOILER WATER FLOW RATE IN U.S. GALLONS PER MINUTE (0 to 100)

Curve labels:
- DoubleMax 50-4
- DoubleMax 80-5
- DoubleMax 120-9 & 120-9A