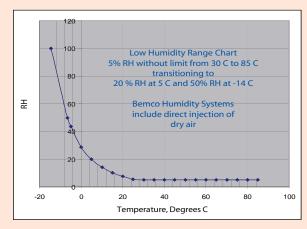
# **Options**

All Standard "F" Series options such as ports, windows, shelves, GN2 purge, LN2 boost, and casters (please request a FNR, F, or FHC bulletin) plus:

- A window wiper with an external operating handle.
- A 5-gallon water reservoir with an internal pump, low level sensor, low level alarm and isolation valve to allow system operation without a source of pressurized water. This system requires occasional manual filling.
- A single cartridge, point of use, demineralization system that produces up to 4-liters / minute of water. Includes a water purity indicator.
- Dual cartridge point of use demineralization system with digital water purity monitor.

Prior to selecting a water demineralization system we recommend that you contact a local water conditioning company for a survey of your laboratory's available water supply.



The FW Series allows you to test your products at low humidity over almost the entire operating range.

#### Instrumentation

Controls are mounted on the side or top to prevent dripping from damaging the instruments. Available instruments include:

- Microprocessor-based, FM Approved high over-temperature safety control.
- Set of two, one high and one low microprocessor-based, FM Approved temperature safety controls.
- Remote control over an Ethernet Link.
- 12-inch, two pen, chart printing, circular recorder.
- Strip chart recorder.
- See Bemco Instrument Bulletin for further descriptions.





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### **Description:**

Take a giant step forward with a Humidity chamber that offers the advanced features of the Bemco Wide or Narrow Range Bemco mechanically refrigerated, F Series Temperature chambers.

With a standard desiccant drier and a direct humidity sensor you can reliably test at both high and low humidities. **Environmental Test and Space Simulation Systems** 

Why settle for the appearance of testing when you can have a system that actually works?

Choose Bemco, the chamber that others only copy.

Contact Us For a Free Quotation or Additional Information 5% to 95% RH 5 C to 85 C (41 F to 185 F)

**Direct Dry Air Injection!** 

**FW** 

Wide Range Humidity with F Series Features





# **FW Temperature Humidity Chamber**



Cooling and heating rates are based on the Bemco F Series of Temperature Chambers. NR (Narrow Range), Standard Range, and HC (High Capacity) cooling and heating systems are offered. Please request an FNR, F, or FHC bulletin to review the available specifications and options.

+ or - 1 C (+ or - 1.8 F) guaranteed control, + or - 0.15 C (+ or - 0.25 F) typical. + or - 5% RH guaranteed, + or - 1% RH typical. Humidity 5% RH to 95% RH, see chart, 95% RH at 85 C (185 F) maximum.

All electrical wiring meets the United States National Electric Code. U.L. and CSA approved components are used where possible.

# **Conditioning**

Chamber air is recirculated by the same high volume, stainless steel axial fan system located behind a hinged rear mounted diffuser baffle included on the Bemco F. FNR or FHC Chambers.

Both single stage and cascade (one refrigeration system cools another to achieve very low temperatures) are available.

Cooling system performance and features match the Bemco F. FNR or FHC Chamber systems. Consult the FNR, F, and FHC to review the specifications.

# **Humidity**

Chamber humidity is increased by a Bemco mass transfer vapor generator with a sight glass, low water sensor, and automatic drain freeze protection. It can be shut-off and drained when very low humidity control is desired.

Chamber humidity is decreased by the direct injection of -73 C (-100 F) dew point dry air produced by a dual bed regenerative compressed air drier furnished with an isolation valve, an inlet particulate and coalescing filter and an outlet filter regulator.

#### Construction

FW Series chambers include the same high quality features offered with the Bemco F, FNR and FHC Chambers plus:

A sloped roof insert to minimize potential water dripping on test objects in accordance with MIL-STD-810 and MIL-STD-202. This feature reduces overall height (shown in the table below) by 1-1/2 inches.

A trapped drain line to remove condensed water from the workspace.

A door drip trough to catch condensed water.

#### **Controls**

Each Bemco FW chamber is furnished with a two channel microprocessor based programmable 1/4-DIN solid state 256-step ramping controller which includes a 4-line LCD interface display and a large red LED display.

Temperature inside the FW chamber is sensed by a precision thermocouple.

Humidity is sensed by a direct reading electronic humidity sensor accurate to + or - 2% RH over the dew point temperature range of -20 C to 85 C (-4 F to 185 F).

Model	Interior	Interior	Interior	Exterior	Exterior	Exterior	Weight	Live Load
Number	Height	Width	Depth	Height	Width	Depth	Pounds	Watts, -55 C
FW8	24"	24"	24"	74"	36"	57"	1000	1425
FW16	30"	30"	30"	70" (1)	52"	65"	1300	1580
FW27	36"	36"	36"	76" <sup>(1)</sup>	58"	71"	1500	1580
FW64	48"	48"	48"	88"(1)	70"	85"	2500	4500

(1) Add approximately 10" to height near the rear of the workspace for fan motors



Request a Free Quotation or Analysis of your Testing needs. Our experienced engineers are ready to Bemco Inc. help you.

#### We Deliver

Bemco chambers really simulate the environments expected. We take your specifications and requirements literally. Our equipment does what we promise and you specify. We are truly focused on Excellence.

#### **Combined Environments**

Temperature, Humidity, Altitude, Vibration, Vacuum, Rain, Sunshine, Salt Spray, Sand and Dust, and Gasses. Space Simulation Systems, Walk-in Chambers, Drive-in Rooms, PAO Fluid Chillers, and Air Servos.