



SP FTS AirJet™ XR

Sample Cooler for Liquid- and Solid-State NMR



SP FTS AirJet™ XR sample coolers provide sample temperature control for X-ray diffraction, NMR, EPR, and any other applications.

These mechanically refrigerated systems control the temperature of a supplied gas stream to between -90°C and $+100^{\circ}\text{C}$. An optional air dryer allows for the use of a house compressed air supply.

The unique temperature controller provides precise regulation of heat input to produce a temperature stability of $\pm 0.5^{\circ}\text{C}$. The non-magnetic variable length flexible delivery lines allow you to position the air stream for proper sample temperature control.

SP FTS AirJet™ XR

Sample Cooler

Features

- Mechanically refrigerated
- Temperature control range of -90 to 100 °C
- Flow rates to 2 scfm (56 lpm)
- 8', 15', 20' or 35' delivery line lengths available
- Low flow safety buzzer
- Includes USB adapter, 2m cable and software for plug and play operation
- Multi-function temperature controller

Benefits

- Eliminates need for expendable refrigerants
- Satisfies a wide range of applications
- Satisfies specific application requirements
- Non-magnetic delivery line
- Alerts users when air flow to unit is low
- Permits complete control of machine from a PC and allows for data logging
- Provides accurate temperature control with temperature indication

Agency Approvals

- CE (2006/42/EC), (2006/95/EC), (006/108/EC)

Contact
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for more information

Performance Specifications	XR402	XR902
Maximum Low Temperature	-40 °C	-90 °C
Temperature Control	Standard	Optional
Temperature Control Range	-40 to 100 °C	-90 to 100 °C
Temperature Control Stability	± 0.5 °C	± 0.5 °C
Temperature Indication Display*	0.1 °C	0.1 °C
Flow Rate Range	0.25 to 2 scfm (7 to 56 lpm)	0.25 to 2 scfm (7 to 56 lpm)
Communication Interface (Control Only)	RS485/USB (with software)	RS485/USB (with software)

Note: Performance specifications are based on SP test data from units using dry air with dew point of less than -100° and operating at an ambient room temperature of approximately 22 °C (72 °F).

Temperature Flow †	XR402	XR902 (Control)	XR902 (No Control)
0.25 scfm (7 lpm)	-30 to 100 °C	-65 to 100 °C	-75 °C
0.50 scfm (14 lpm)	-33 to 100 °C	-80 to 100 °C	-85 °C
0.75 scfm (21 lpm)	-37 to 100 °C	-85 to 100 °C	-90 °C
1.00 scfm (28 lpm)	-40 to 100 °C	-90 to 100 °C	-90 °C
1.25 scfm (35 lpm)	-40 to 100 °C	-90 to 100 °C	-90 °C
1.50 scfm (42 lpm)	-40 to 100 °C	-90 to 100 °C	-90 °C
1.75 scfm (49 lpm)	-40 to 100 °C	-90 to 75 °C	-90 °C
2.00 scfm (56 lpm)	-40 to 75 °C	-90 to 50 °C	-90 °C

Air Requirements	XR402	XR902
Flow	56 lpm (2 scfm)	56 lpm (2 scfm)
Minimum Pressure	45 psi	45 psi
Dew Point	< -60 °C	< -100 °C

Temperature Flow	XR402	XR902	XR902
60 Hz Option	120 V, 5 A ‡	120 V, 12 A ‡	120 V, 11 A ‡
50 Hz Option	220 V, 2 A ‡	220 V, 5 A ‡	220 V, 4 A ‡

Note: All equipment configured with the 60 Hz option is supplied with a 5-15P NEMA configuration (i.e., Ⓢ). All equipment configured with the 50 Hz option is supplied with a non-terminated AWG 18-3 power cord.



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