

SAX | Sanitary Autoclave Xtreme-Duty

Specifications

The SAX is designed for extreme autoclave applications where the most rugged sensor and cable combination is needed. The completely waterproof design easily handles the harsh, repeated steam/vacuum cycling of the autoclave process and incorporates an armored protective jacket to virtually eliminate sensor/cable separation and failure during rough handling or accidental stretching/extension. The SAX's "ruggedized" shock-resistant sensor and ultra flexible steel-braid armored jacket provide the ultimate in protection for large "walk-in" chambers where movement of carts and equipment or repeated handling and accidental "abuse" often occur. The SAX utilizes a replaceable sensor to minimize downtime and cost of ownership.

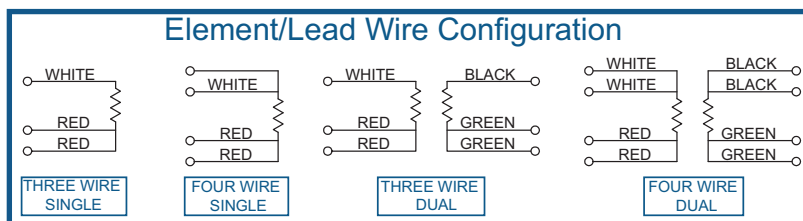
Features and Benefits:

- Application: Chamber probe
- Accuracy: Standard*
- Sheath: 316 stainless steel in 0.25" diameter (0.375" diameter for dual 4 wire design)
- Element/Lead Wire Configuration: Single 3 or 4 wire and dual 3 or 4 wire
- Cable: Twisted Teflon® insulated wires on sensor; Armored jacket (silicone cover over a 304 stainless steel braid, over fiberglass braid welded to an inner PTFE tube). Jacket is fully vacuum and high pressure rated, meets 3A, USP Class VI and FDA 21CFR177.1550.
- Through-Wall Installation: Sanitary feedthru, order separately (reference SFX)
- Cleanability: 316 stainless steel (sheath and fittings) and Teflon®/silicone cable construction
- User Replaceable Sensor: Armored jacket can be left in place (installed) and sensor can be removed and a new one easily installed (reference SAX drawing)

*Accuracy of 0.2°C can be achieved via matching sensor with transmitter

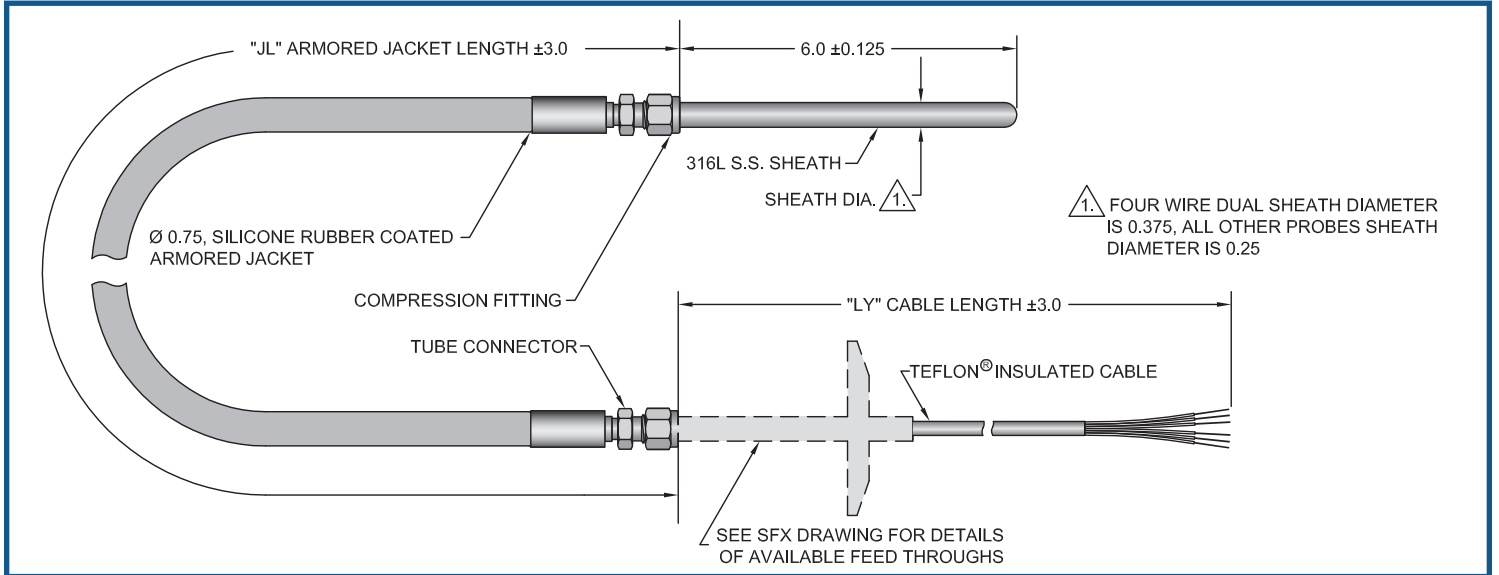
Specifications:

- Element Configuration: Single or dual element, 100 ohms at 0°C, 0.00385 ohm/ohm/°C nominal alpha
- Temperature Range: -50°C to 200°C
- Transition Fitting and Cable Temperature Limits: -50°C to 200°C continuous
- R0 Interchangeability: R0 ±0.10 ohms or R0 ±0.05 ohms
- Short-Term Repeatability and Hysteresis: ±0.025°C (0.01 ohms) maximum change at 0°C over any 5 consecutive thermal cycles from 0°C to 135°C
- Repeatability: ±0.10°C (0.04 ohms) maximum shift at 0°C after 10 cycles between -50°C and 200°C
- Stability: ±0.26°C (0.10 ohms) maximum shift at 0°C after 1000 hours at 200°C
- Pressure: 1 psia to 35 psia
- Insulation Resistance: 100 megohms minimum at 100 VDC at room temperature



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Ordering Information



All dimensions in inches

Accuracy

-10 Standard RTD $\pm 0.10\%$ of resistance at 0 degrees C

Element / Wire Configuration and Sensor Diameter

- A *Three wire single element, 0.25 Dia. sensor sheath
- B Four wire single element, 0.25 Dia. sensor sheath
- C *Three wire dual element, 0.25 Dia. sensor sheath
- D Four wire dual element, 0.375 Dia. sensor sheath

"JL" Armored Jacket Length, 72.0 inch minimum length

- 120 120 inch armored jacket length
- 180 180 inch armored jacket length
- 240 240 inch armored jacket length

Specify armored jacket length in inches, 12 inch increments

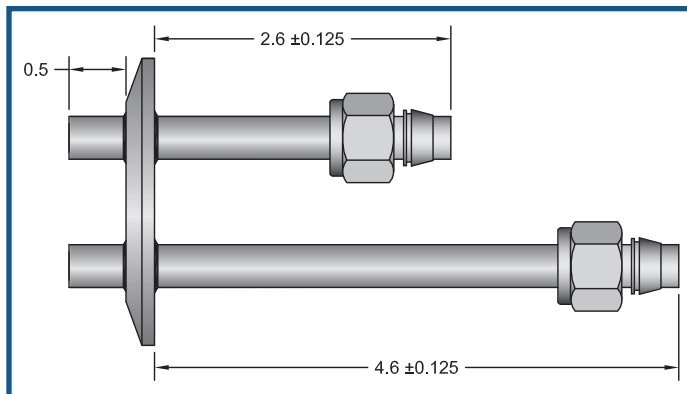
"LY" Cable Length Beyond Armored Jacket, 12.0 inch minimum length

- 060 60.0 inch cable length
- 120 120.0 inch cable length
- 180 180.0 inch cable length

Specify cable length in inches, 12 inch increments

SAX

SFX | Sanitary Feedthru Xtreme-Duty



(2 port configuration shown. See the SFX drawing for full details.)

Cap Size

- 15 1.5" Cap (1 Port configuration only)
- 20 2.0" Cap (1 Port configuration only)
- 25 2.5" Cap
- 30 3.0" Cap
- 40 4.0" Cap

Number of Ports

- 1 1 Port
- 2 2 Ports
- 3 3 Ports
- 4 4 Ports

SFX

* For all Three Wire sensors – please specify **actual "installed" cable length** as certain lengths cannot be shortened upon installation without impacting sensor accuracy. Visit burnsengineering.com and type in keyword: SAC, SAL, SAH or SAX for the specification drawing with cable length criteria; or contact Burns Customer Service for more information.