spirax sarco

S20
Sensor Chamber and Sensors

Description

The Spirax Sarco S20 sensor chamber is fitted with conductivity and temperature sensors used to determine the conductivity of liquids. The use of a temperature sensor enables an accurate measurement to be made when the temperature varies, as in the case of condensate return monitoring systems.

The hexagonal in-line sensor chamber is available screwed 1¼" BSP or 1" NPT.

Adjacent radial female screwed connections are provided for:

- CP10 conductivity sensor (⅜" BSP).

- TP20 temperature sensor (¼" BSP).

An additional ¼" BSP (¼" NPT) connection is provided on the other side of the chamber for taking a sample if required. Spirax Sarco can supply a sample cooler for cooling hot samples, or a blanking plug if the connection is not required.

Principal features:

- Allows continuous temperature compensated measurement

- Purpose designed sensor chamber for in-line mounting

- Simple removal of sensors for cleaning

S20 sensor chamber

CP10 conductivity sensor

TP20 temperature sensor

Limiting conditions

The sensor chamber assembly inclusive of sensors is limited to:

Maximum pressure	11 bar g
Maximum temperature	150 °C
Minimum conductivity	10 µS/cm or 10 ppm
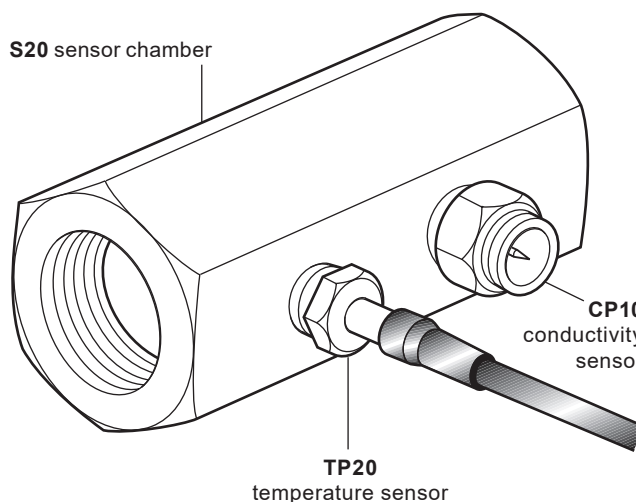
Materials

S20 sensor chamber		Stainless steel	BS 970 303 S31
CP10 conductivity sensor	Body	Stainless steel	BS 970 303 S31
	Insulator	PEEK	
	Pin	Stainless steel	BS 970 303 S31
	Seal	PTFE	
	Disc springs	Stainless steel	DIN 1.4122
	Washer	Stainless steel	A2 BS 4320
TP20 temperature sensor	Body and probe	Stainless steel 316	ASTM A269 Gr. 316
	Cable insulation	PFA	

Dimensions (approximate) in millimetres

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                              98
                                          60 A / F

              CP10 sensor shown
              with PT2 plug tail
                  fitted
  Standard length
     1 250
                                                          *        120

  1 250                                         TP20 temperature sensor

* ¼" BSP sample connection

                                    Bore Ø35
                                    1¼" BSP
                                       or
                                    Bore Ø26
                                     1" NPT
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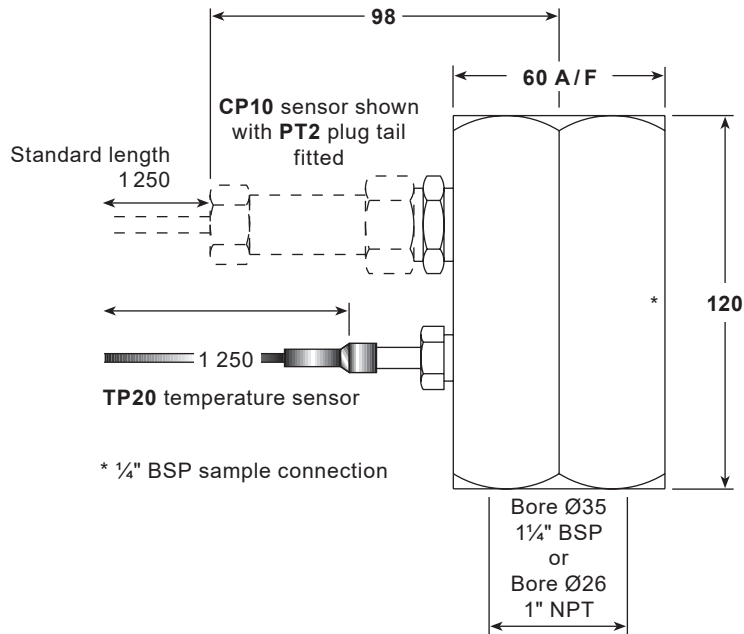
Weight

1.9 kg

Maintenance

The equipment requires no specific maintenance other than periodic inspection and cleaning as described in the Installation and Maintenance Instructions.

How to specify

In-line sensor chamber with conductivity and temperature sensors.

Safety information

This document does not contain enough information to install the product safely. Refer to the Installation and Maintenance Instructions provided with the product.
The CP10 sensor contains PTFE which can give off toxic fumes if exposed to excessive heat.

Installation

Caution: Do not install the sensor outdoors without additional weather protection.
The sensor chamber may be fitted in a vertical or horizontal pipeline with suitable isolation valves to allow inspection/cleaning of the sensors. Reducers may be fitted if required. Flow can be in either direction. The sensors themselves must be horizontal. For full information see the Installation and Maintenance Instructions.
Caution: Ensure the PT2 wire is not exposed to a temperature greater than 120 °C.

How to order

Example: 1 off Spirax Sarco S20 sensor chamber complete with CP10 sensor, PT2 plug tail, ¼" BSP blanking plug, and TP20 temperature sensor.