

spirax/sarco®

IPC20 and IPC21 Pipeline Connectors with Integral Spiratec Sensors (Trap Required)

The **IPC20** is a pipeline connector with integral strainer and Spiratec sensor for use with UTD52L, UTD52H, UTD30L, UTD30H and UBP32 steam traps. The **IPC21** is a pipeline connector with an integral strainer and Spiratec sensor for use with UIB30, UIB30H, UFT14 and UFT32 steam traps. Both the **IPC20** and **IPC21** can be fitted with the following sensor options:

SSL1 Sensor - for detection of steam leakage.

WLS1 sensor with diode - for use with R16C monitor to detect steam wastage and waterlogging.

WLS1 sensor without diode - for use with R1C to detect steam wastage and waterlogging.

Limiting Operating Conditions

Max. Operating Pressure (PMO) 464 psig 32 barg connector only
Trap may dictate actual PMO if lower when assembled
(See trap TIS sheet)

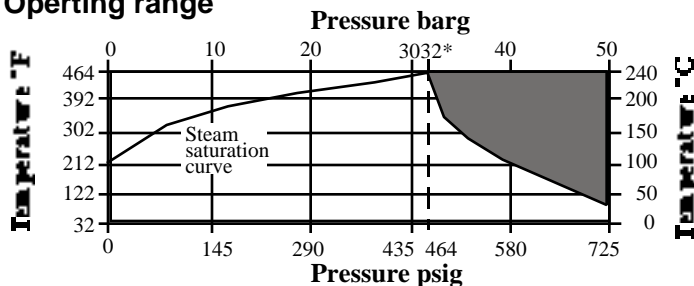
Max. Operating Temperature (TMO) 464°F (240°C)

Pressure Shell Design Conditions

Max. Allowable Pressure (PMA) 725 psig 50 barg connector only
Trap when mounted to connector may dictate PMA if lower
(See Trap TIS sheet)

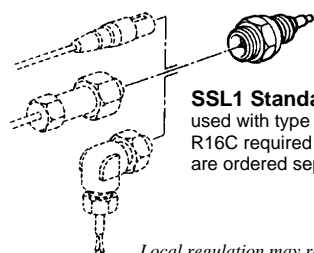
Max. Allowable Temperature (TMA) 464°F (240°C)
Selected trap may lower these values

Operating range



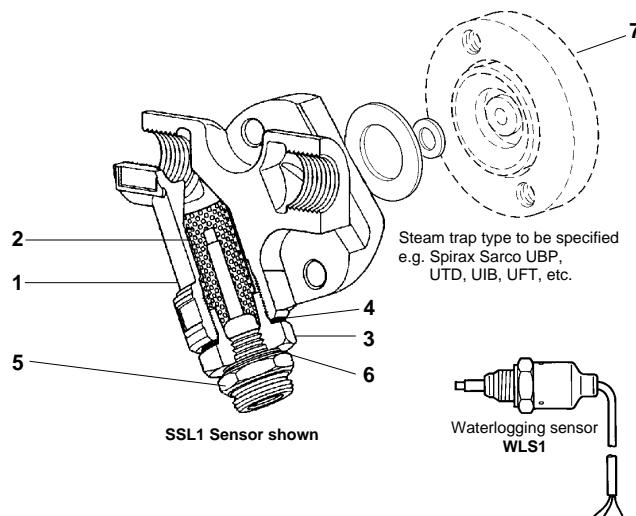
The product must not be used in this region.

* Maximum operating pressure recommended for saturated steam service.



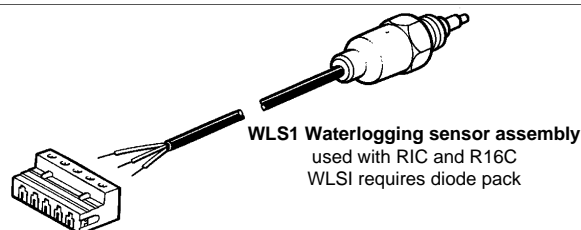
SSL1 Standard sensor
used with type 30 meter, R1C and R16C R1C & R16C required a PT1, PT2, or PT3 Plug tails are ordered separately

Model	IPC20 & IPC21 Series
PMO	Dependent on Trap Type
Sizes	1/2", 3/4", 1"
Connections	NPT Standard
Construction	Stainless Steel
Options	SW connections to ANSI B16.11 BSP



Materials

No.	Part	Material
1	Body	Austenitic stainless steel ASTM A 351 CF8
2	Strainer	Austenitic stainless steel 316L
	Screen	(0.8 mm perforations)
3	Strainer Cap	Austenitic stainless steel AISI 303
4	Cap gasket	Stainless steel BS 1449 304 S16
5	Sensor	Stainless steel ASTM A582 416
6	Sensor gasket	Stainless steel
7	Selected trap (see trap TIS)	
	UTD52L, H, HP	TIS 2.5161
	UTD30L & H	TIS 2.517
	UFT14	TI-P146-02 US
	UIB30, 30H	TIS 2.412
	UBP32	TIS 2.0008



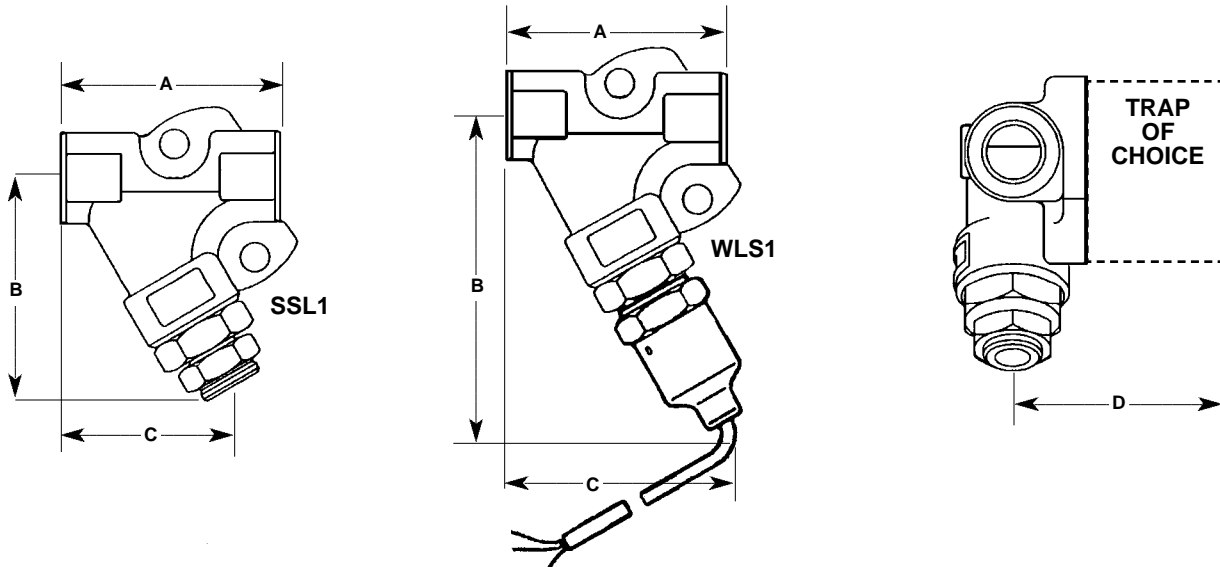
WLS1 Waterlogging sensor assembly
used with RIC and R16C
WLS1 requires diode pack

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.

In the interests of development and improvement of the product, we reserve the right to change the specification.

TI-P128-17 US 02.03

IPC20 and IPC21 Pipeline Connectors with Integral Spiratec Sensors (Trap Required)



SSL1 SENSOR IN PC 20 OR 21 CONNECTOR

Size	A	B	C	Sensor	Withdraw	PT1/Type 30 plug tail withdraw	PT1/Type 30 plug tail withdraw	PT2 plug tail withdraw	PT2 plug tail withdraw	PT3 plug tail withdraw	PT3 plug tail withdraw	Weight Connector only
1/2"	3.2	3.1	2.6	B	C	B	B	B	C	B	C	2.7
	81	79	66	124	91	142	89	147	105	122	89	1.2
3/4"	3.5	3.2	2.7	5	3.7	5.7	4.1	5.9	4.3	4.9	3.7	2.9
	89	81	69	127	94	145	104	150	109	124	94	1.3
1"	3.9	3.4	2.9	5.1	3.9	5.9	4.3	6.1	4.5	5.1	3.9	3.3
	99	86	74	130	99	150	109	155	114	130	99	1.5

WLS1 SENSOR IN PC 20 OR 21 CONNECTOR

Size	A	B	C	Sensor	Withdraw	Weight Connector only
1/2"	3.2	5	3.6	B	C	2.7
	81	127	91	170	117	1.2
3/4"	3.5	5.1	3.8	6.8	4.8	2.9
	89	130	97	173	122	1.3
1"	3.9	5.2	4.0	7.0	5.0	3.3
	99	132	102	178	127	1.5

WLS1 SENSOR IN PC 20 OR 21 CONNECTOR

Size	UTD52L D	UTD52H D	UFT14 D	UBP32 D	UIB30 D	UIB30H D
1/2"	3.3	3.8	7.3	2.2	5.0	6.0
	84	97	185	56	127	152
3/4"	3.3	3.8	7.3	2.6	4.9	6.0
	84	97	185	66	124	152
1"	3.4	3.8	7.3	3.3	5.0	6.3
	86	97	185	84	127	160

Spare Parts

The spare parts available are detailed below. No other parts are supplied as spares.

Available spares

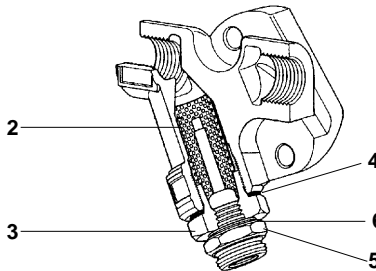
Strainer screen and gasket	2, 4
Sensor and sensor gasket	5, 6

How to order spares

Always order spares using the description given in the column headed 'Available spares' state the size and model number. Example: 1 - Strainer screen and gasket for the 1/2" IPC20 connector.

Installation

The connector will be installed in a horizontal pipeline. The connector face must be in a vertical plane with the Sensor in a downward position. Full ported isolation valves should be installed up stream and down stream of the connector. The trap should be fitted to the connector with its cap uppermost or as shown in the related trap IMI. Note each trap type will have its own IMI.



Recommended tightening torques

Item	Hex Bolt	Hex Nut	Ft/Lbs
3	32 A/F	M28 x 1.5P	125 - 140
5	24 A/F		37 - 41

Maintenance

The sensor should be removed periodically to inspect and clean the tip and insulator.

Sample Specification

Connector shall be supplied with either a SSL1 steam loss only or WLS1 steam loss and water logging sensor. The connector with integral sensor will be made in sizes 1/2" to 1" in stainless steel with NPT, BSP or SW connections. The connector shall be capable of working with any of the Spirax Sarco universal connector steam traps. The SSL1 Sensor will work with TYPE 30, R1C, R16C. The WLS1 will work with the R1C and the R16C. The connector is designed to remain in line with the trap and sensor easily removable without disturbing the piping.

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