



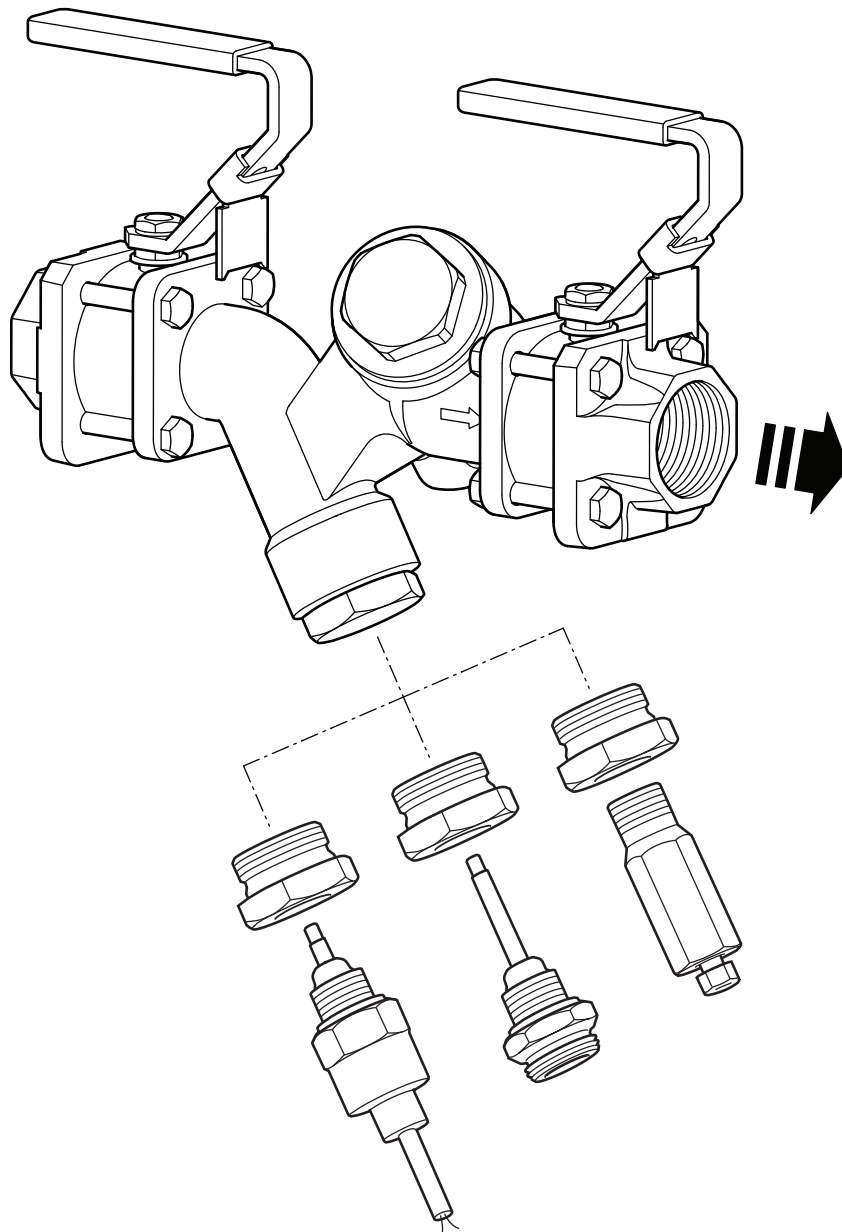
STS17.2

Stainless Steel

## Compact Pipeline Connector Steam Trapping Station

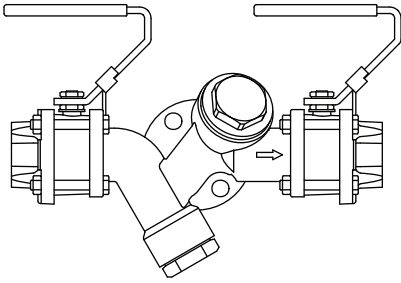
### Description

The STS17.2 compact pipeline connector steam trapping station has been designed to provide a convenient ready to install trapping solution, which includes: upstream and downstream isolation valves, body incorporating quickfit connector + strainer and check valve blanking plug.

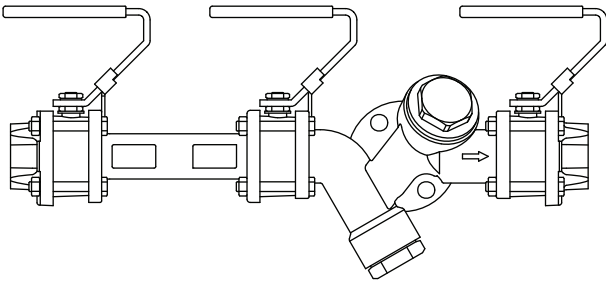


## Available types

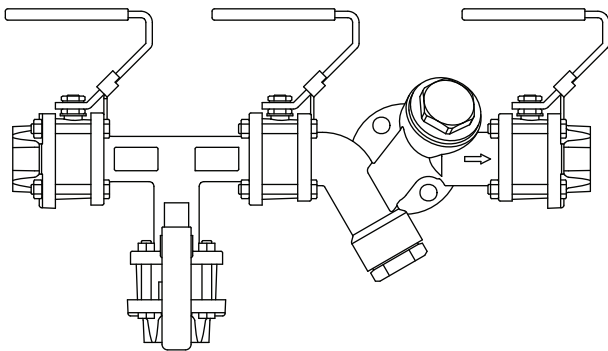
The STS17.2 is available in Single, Double or Double Block and Bleed variations, see below:



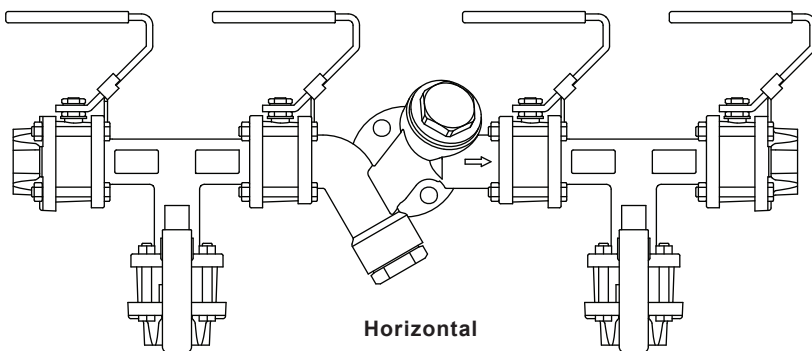
**Single Isolation (SB)**



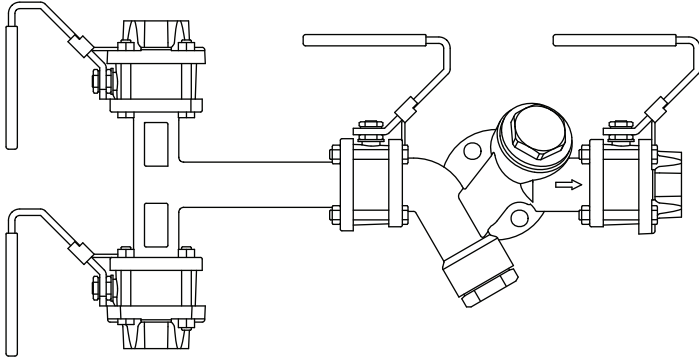
**Double Isolation Upstream (DB US)**



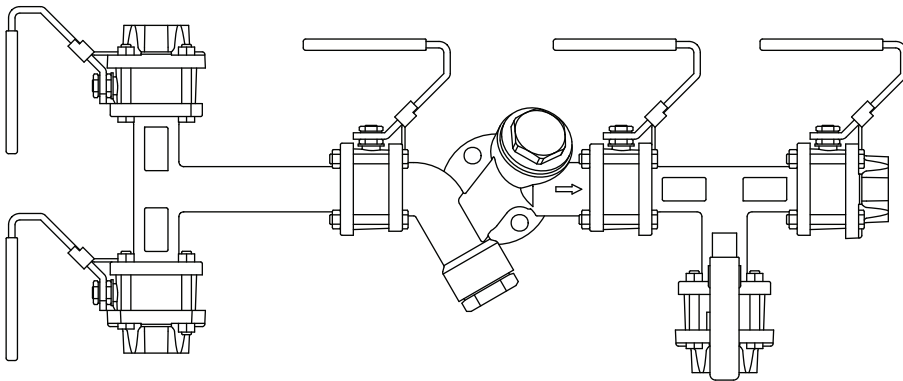
**Double Block and Bleed Upstream Horizontal (DBB USH)**



**Double Block and Bleed Upstream Horizontal Downstream Horizontal (DBB USH DSH)**



**Double Block and Bleed Upstream Vertical (DBB USV)**



**Double Block and Bleed Upstream Vertical Downstream Horizontal (DBB USV DSH)**

The DBB (Double Block and Bleed) variation provides enhanced safety and possibility to drain the steam trapped between the isolation valves by adding a T shaped connection.

The STS17.2 trapping solution incorporates Spirax Sarco quickfit technology, which allows speedy trap maintenance. The following swivel connector steam traps (sold separately) can be used with this pipeline connector enabling it to be tailored to suit any application:

- **UTD26** and **UTD52** thermodynamic steam traps.
- **UBP32** balanced pressure steam trap.
- **USM** bimetallic steam trap.
- **UFT32** ball float steam trap.
- **UIB30** and **UIB30H** inverted bucket steam traps.

### Standards

These products fully comply with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

### Certification

These products are available with certification to EN 10204 3.1.

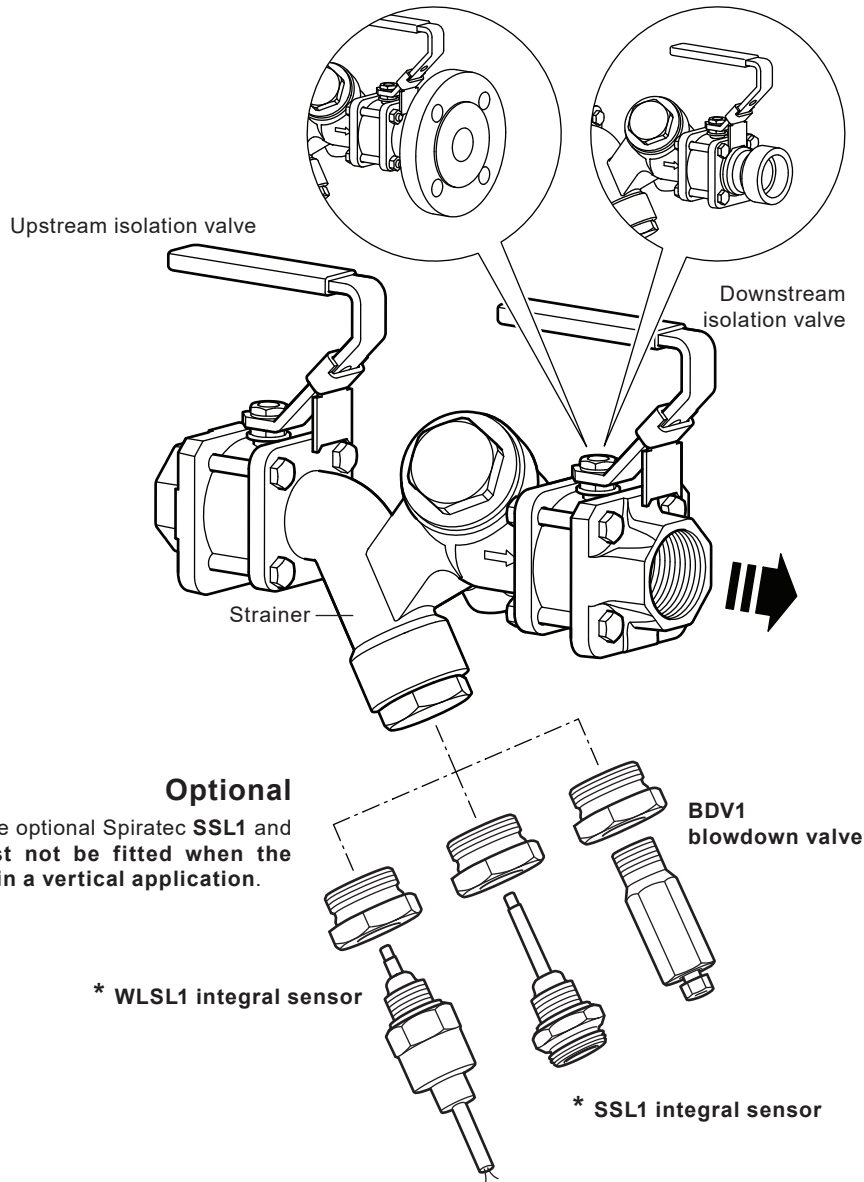
**Note:** All certification/inspection requirements must be stated at the time of order placement. For other certification contact Spirax Sarco.

## Sizes and pipe connections

1/2", 3/4" and 1" screwed BSP, NPT or socket weld.

1/2", 3/4" and 1" ASME 150 and ASME 300.

DN15, DN20 and DN25 flanged EN 1092 PN40.



## Optional extras

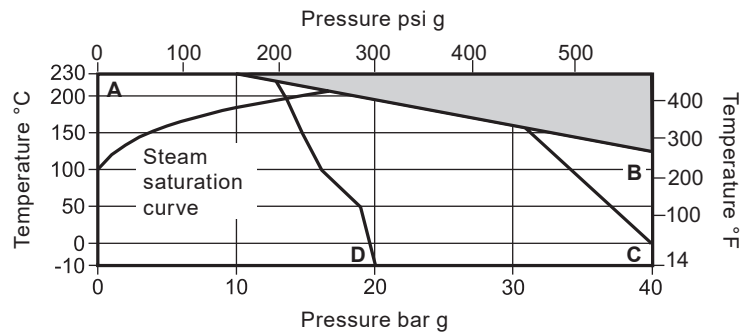
**Integral sensor type SSL1** (steam only) or **WLSL1** (for waterlogging) for use with R1C or **WLSL1 with DIODE** for use with R16C are available as optional extras, to enable operational monitoring of the steam trap. **Please note** that the optional Spiratec **SSL1** and **WLSL1** sensors **must not be fitted when the STS17.2 is installed in a vertical application.**

**BDV1 blowdown valve** is also available for cleaning the strainer during operation. Care should be taken when using the BDV1 blowdown valve as the discharge may be hot. Please note that a BDV1 cannot be used when a Spiratec sensor has been chosen to be part of the unit.

**Retrofit double isolation valve and spool piece** to convert a single upstream isolation version to double isolation.

**Insulation jacket** is available to reduce heat loss and energy wastage. See separate literature.

## Pressure / temperature limits



The product **must not** be used in this region.

**A - B** Flanged ASME Class 300, screwed and socket weld.

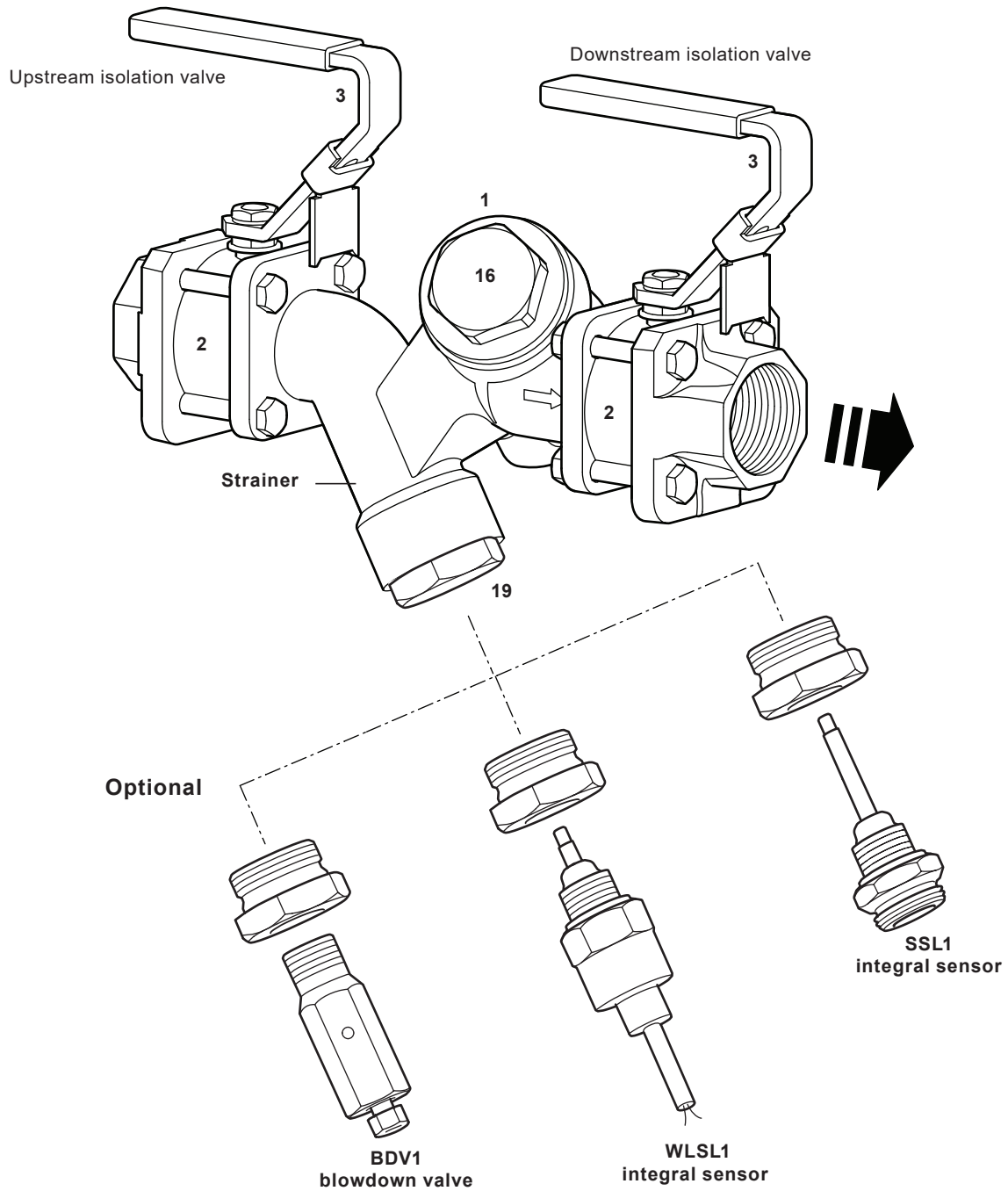
**A - C** Flanged EN 1092 PN40.

**A - D** Flanged ASME Class 150.

Body design conditions		PN40	
PMA	Maximum allowable pressure	580 psi g @ 248 °F	(40 bar g @ 120 °C)
TMA	Maximum allowable temperature	446 °F @ 145 psi g	(230 °C @ 10 bar g)
Minimum allowable temperature		14 °F	(-10 °C)
PMO	Maximum operating pressure for saturated steam service	ASME 150	200 psi g (13.6 bar g)
		All other connections	254 psi g (17.5 bar g)
TMO	Maximum operating temperature	446 °F @ 145 psi g	(230 °C @ 10 bar g)
Minimum operating temperature		14 °F	(-10 °C)
Designed for a maximum cold hydraulic test pressure of:		870 psi g	(60 bar g)

## Materials

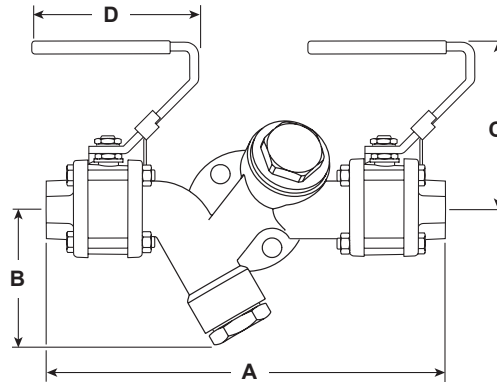
### STS17.2 version with single isolation



No.	Part	Material	
1	Body	Stainless steel	ASTM A351 Gr. CF8
2	Isolation ball valves	Stainless steel	ASTM A182 F316L
3	Handle	Stainless steel	AISI 316
16	Check valve blanking plug	Stainless steel	ASTM A276 431
19	Strainer cap	Stainless steel	ASTM A582 416

**Dimensions/weights (approximate) in inches (mm) and lbs (kg)**

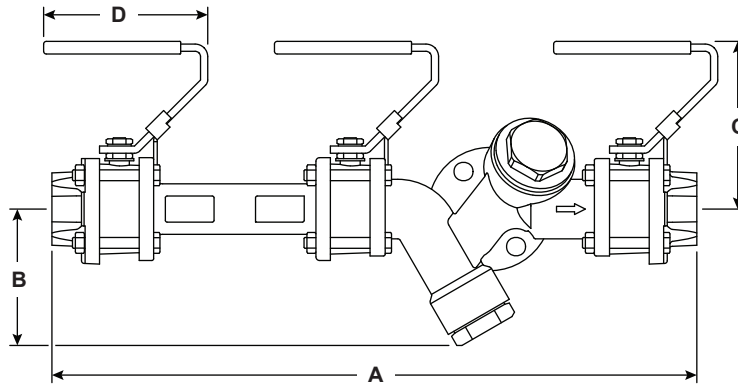
**Single Isolation (SB)**



Isolation	Size and connection	Dimensions								Weights	
		A		B		C		D			
Single	½" BSP, ½" NPT and ½" SW	8.7	(222)	2.9	(76)	3.6	(93)	3.5	(90)	7.9	(3.60)
	¾" BSP and ¾" NPT	8.7	(222)	2.9	(76)	3.6	(93)	3.5	(90)	7.7	(3.53)
	¾" SW	8.3	(213)	2.9	(76)	3.6	(93)	3.5	(90)	7.8	(3.54)
	1" BSP and 1" NPT	9.0	(229)	2.9	(76)	3.6	(93)	3.5	(90)	8.1	(3.71)
	1" SW	10.5	(269)	2.9	(76)	3.6	(93)	3.5	(90)	8.5	(3.86)
	½" ASME 150	10.5	(268)	2.9	(76)	3.6	(93)	3.5	(90)	9.8	(4.45)
	½" ASME 300	11.5	(294)	2.9	(76)	3.6	(93)	3.5	(90)	10.9	(4.98)
	DN15 EN 1092 PN40	11.1	(284)	2.9	(76)	3.6	(93)	3.5	(90)	11.2	(5.12)
	¾" ASME 150	10.7	(272)	2.9	(76)	3.6	(93)	3.5	(90)	10.2	(4.67)
	¾" ASME 300	12.0	(306)	2.9	(76)	3.6	(93)	3.5	(90)	13.1	(5.98)
	DN20 EN 1092 PN40	11.9	(304)	2.9	(76)	3.6	(93)	3.5	(90)	12.6	(5.74)
	1" ASME 150	10.6	(271)	2.9	(76)	3.6	(93)	3.5	(90)	10.9	(4.96)
	1" ASME 300	12.1	(309)	2.9	(76)	3.6	(93)	3.5	(90)	14.1	(6.64)
	DN25 EN 1092 PN40	11.9	(304)	2.9	(76)	3.6	(93)	3.5	(90)	13.7	(6.24)

**Dimensions/weights** (approximate) in inches (*mm*) and lbs (*kg*)

**Double Isolation Upstream (DB US)**

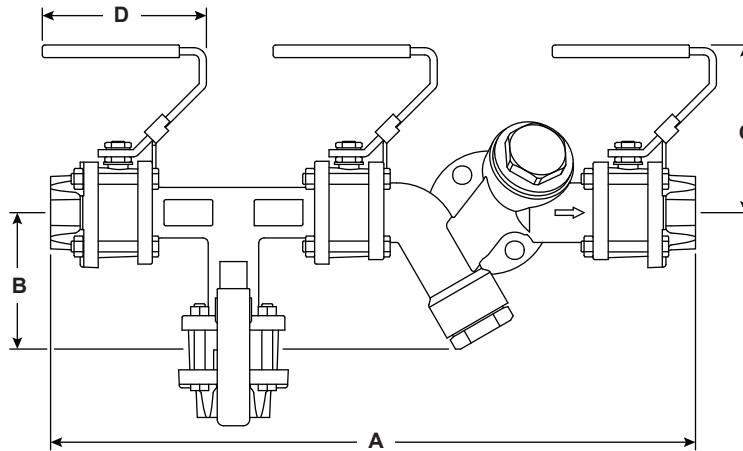


Isolation	Size and connection	Dimensions								Weights	
		A		B		C		D			
Double	½" BSP, ½" NPT and ½" SW	13.7	(350)	2.9	(76)	3.6	(93)	3.5	(90)	11.7	(5.32)
	¾" BSP and ¾" NPT	13.7	(350)	2.9	(76)	3.6	(93)	3.5	(90)	11.5	(5.25)
	¾" SW	13.4	(341)	2.9	(76)	3.6	(93)	3.5	(90)	11.5	(5.26)
	1" BSP and 1" NPT	14.0	(357)	2.9	(76)	3.6	(93)	3.5	(90)	11.9	(5.43)
	1" SW	15.6	(397)	2.9	(76)	3.6	(93)	3.5	(90)	12.3	(5.58)
	½" ASME 150	15.5	(396)	2.9	(76)	3.6	(93)	3.5	(90)	13.6	(6.17)
	½" ASME 300	16.6	(422)	2.9	(76)	3.6	(93)	3.5	(90)	14.7	(6.70)
	DN15 EN 1092 PN40	16.2	(412)	2.9	(76)	3.6	(93)	3.5	(90)	15.0	(6.84)
	¾" ASME 150	15.7	(400)	2.9	(76)	3.6	(93)	3.5	(90)	14.0	(6.39)
	¾" ASME 300	17.0	(434)	2.9	(76)	3.6	(93)	3.5	(90)	16.9	(7.70)
	DN20 EN 1092 PN40	17.0	(432)	2.9	(76)	3.6	(93)	3.5	(90)	16.4	(7.46)
	1" ASME 150	15.7	(399)	2.9	(76)	3.6	(93)	3.5	(90)	14.7	(6.68)
	1" ASME 300	17.2	(437)	2.9	(76)	3.6	(93)	3.5	(90)	18.4	(8.36)
	DN25 EN 1092 PN40	17.0	(432)	2.9	(76)	3.6	(93)	3.5	(90)	17.5	(7.97)



Dimensions/weights (approximate) in inches (mm) and lbs (kg)

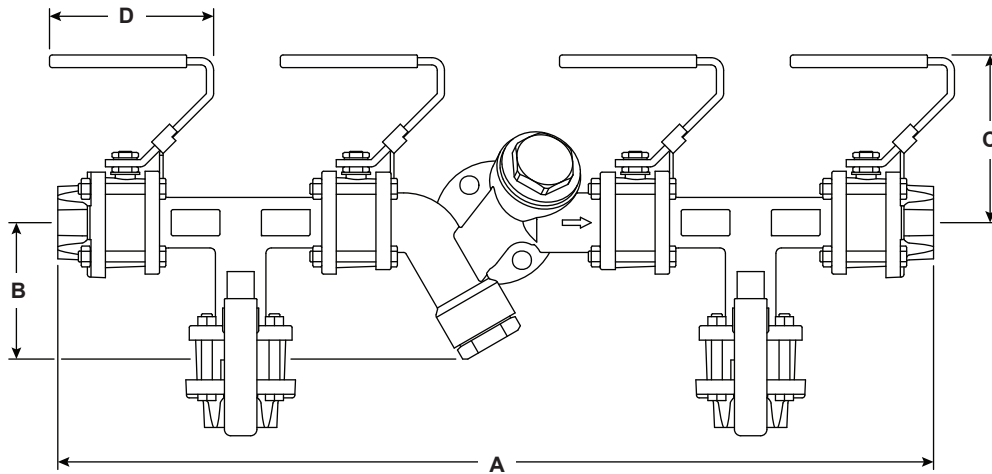
**Double Block and Bleed Upstream Horizontal (DBB USH)**



STS17.2 type	Size and connection		Dimensions								Weights	
			A		B		C		D			
DBB USH	½"	BSP	13.8	(351)	4.6	(118)	6.3	(93)	3.5	(90)	14.0	(6.37)
DBB USH	½"	NPT	13.8	(351)	4.6	(118)	6.3	(93)	3.5	(90)	14.0	(6.37)
DBB USH	½"	SW	13.8	(351)	4.6	(118)	6.3	(93)	3.5	(90)	14.7	(6.67)
DBB USH	½"	ASME 150	15.6	(397)	5.5	(141)	6.3	(93)	3.5	(90)	21.5	(9.77)
DBB USH	½"	ASME 300	16.6	(423)	6.0	(154)	6.3	(93)	3.5	(90)	24.0	(10.9)
DBB USH	½"	PN40	16.2	(413)	5.8	(149)	6.3	(93)	3.5	(90)	24.3	(11.04)
DBB USH	¾"	BSP	13.8	(351)	4.6	(118)	6.3	(93)	3.5	(90)	14.0	(6.37)
DBB USH	¾"	NPT	13.8	(351)	4.6	(118)	6.3	(93)	3.5	(90)	14.0	(6.37)
DBB USH	¾"	SW	13.4	(342)	4.6	(118)	6.3	(93)	3.5	(90)	14.7	(6.67)
DBB USH	¾"	ASME 150	15.7	(401)	5.6	(143)	6.3	(93)	3.5	(90)	21.5	(9.77)
DBB USH	¾"	ASME 300	17.1	(435)	6.2	(160)	6.3	(93)	3.5	(90)	24.0	(10.9)
DBB USH	¾"	PN40	17.0	(433)	6.2	(159)	6.3	(93)	3.5	(90)	24.3	(11.04)
DBB USH	1"	BSP	14.0	(358)	4.6	(118)	6.3	(93)	3.5	(90)	14.3	(6.52)
DBB USH	1"	NPT	14.0	(358)	4.6	(118)	6.3	(93)	3.5	(90)	14.3	(6.52)
DBB USH	1"	SW	15.6	(398)	5.4	(138)	6.3	(93)	3.5	(90)	14.9	(6.82)
DBB USH	1"	ASME 150	15.7	(400)	5.4	(139)	6.3	(93)	3.5	(90)	22.2	(10.07)
DBB USH	1"	ASME 300	17.2	(438)	6.2	(158)	6.3	(93)	3.5	(90)	25.3	(11.5)
DBB USH	1"	PN40	17.0	(433)	6.1	(156)	6.3	(93)	3.5	(90)	25.7	(11.64)

Dimensions/weights (approximate) in inches (mm) and lbs (kg)

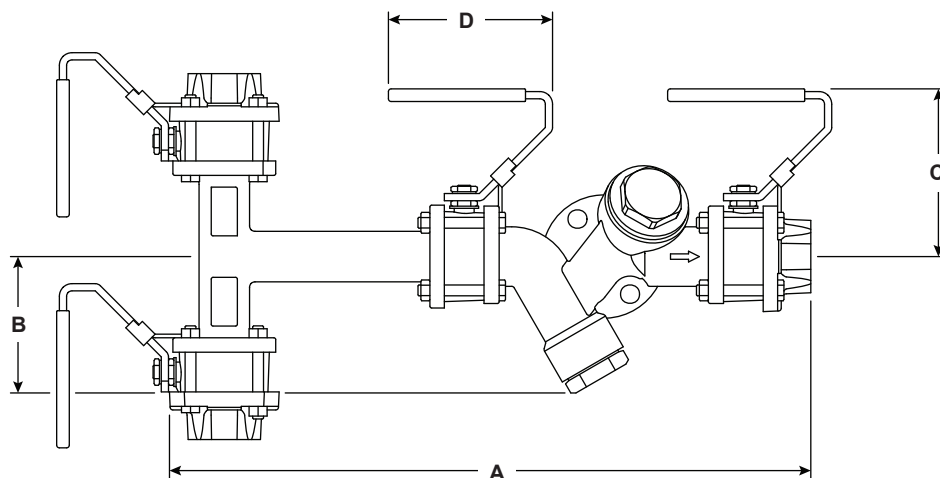
**Double Block and Bleed Upstream Horizontal Downstream Horizontal (DBB USH DSH)**



STS17.2 type	Size and connection	Dimensions								Weights	
		A		B		C		D			
DBB USH DSH	½" BSP	18.8	(479)	4.6	(118)	6.3	(93)	3.5	(90)	19.0	(8.64)
DBB USH DSH	½" NPT	18.8	(479)	4.6	(118)	6.3	(93)	3.5	(90)	19.0	(8.64)
DBB USH DSH	½" SW	18.8	(479)	4.6	(118)	6.3	(93)	3.5	(90)	19.9	(9.04)
DBB USH DSH	½" ASME 150	20.6	(525)	5.5	(141)	6.3	(93)	3.5	(90)	28.4	(12.89)
DBB USH DSH	½" ASME 300	21.6	(551)	6.0	(154)	6.3	(93)	3.5	(90)	31.3	(14.22)
DBB USH DSH	½" PN40	21.2	(541)	5.8	(149)	6.3	(93)	3.5	(90)	31.6	(14.36)
DBB USH DSH	¾" BSP	18.8	(479)	4.6	(118)	6.3	(93)	3.5	(90)	19.0	(8.64)
DBB USH DSH	¾" NPT	18.8	(479)	4.6	(118)	6.3	(93)	3.5	(90)	19.0	(8.64)
DBB USH DSH	¾" SW	18.5	(470)	4.6	(118)	6.3	(93)	3.5	(90)	19.9	(9.04)
DBB USH DSH	¾" ASME 150	20.8	(529)	5.6	(143)	6.3	(93)	3.5	(90)	28.4	(12.89)
DBB USH DSH	¾" ASME 300	22.1	(563)	6.2	(160)	6.3	(93)	3.5	(90)	31.3	(14.22)
DBB USH DSH	¾" PN40	22.0	(561)	6.2	(159)	6.3	(93)	3.5	(90)	31.6	(14.36)
DBB USH DSH	1" BSP	19.1	(486)	4.6	(118)	6.3	(93)	3.5	(90)	19.4	(8.84)
DBB USH DSH	1" NPT	19.1	(486)	4.6	(118)	6.3	(93)	3.5	(90)	19.4	(8.84)
DBB USH DSH	1" SW	20.7	(526)	5.4	(138)	6.3	(93)	3.5	(90)	19.6	(9.24)
DBB USH DSH	1" ASME 150	20.7	(528)	5.4	(139)	6.3	(93)	3.5	(90)	29.2	(13.29)
DBB USH DSH	1" ASME 300	22.2	(566)	6.2	(158)	6.3	(93)	3.5	(90)	33.1	(15.02)
DBB USH DSH	1" PN40	22.0	(561)	6.1	(156)	6.3	(93)	3.5	(90)	33.4	(15.16)

Dimensions/weights (approximate) in inches (mm) and lbs (kg)

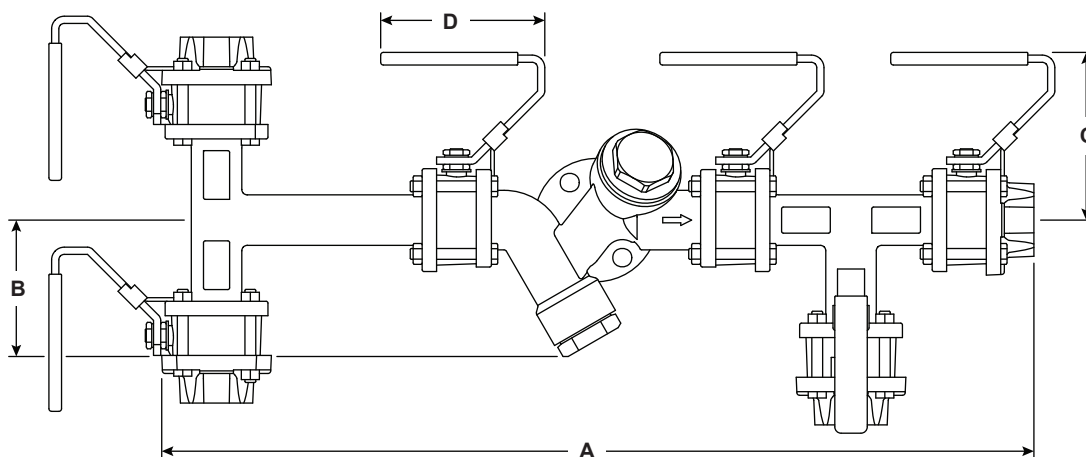
Double Block and Bleed Upstream Vertical (DBB USV)



STS17.2 type	Size and connection		Dimensions								Weights	
			A		B		C		D			
DBB USV	1/2"	BSP	16.2	(414)	4.1	(106)	3.6	(93)	3.5	(90)	14.4	(6.57)
DBB USV	1/2"	NPT	16.2	(414)	4.1	(106)	3.6	(93)	3.5	(90)	14.4	(6.57)
DBB USV	1/2"	SW	16.2	(414)	4.1	(106)	3.6	(93)	3.5	(90)	15.1	(6.87)
DBB USV	1/2"	ASME 150	17.2	(437)	5.0	(129)	3.6	(93)	3.5	(90)	21.9	(9.97)
DBB USV	1/2"	ASME 300	17.7	(450)	5.5	(142)	3.6	(93)	3.5	(90)	24.4	(11.1)
DBB USV	1/2"	PN40	17.5	(445)	5.3	(137)	3.6	(93)	3.5	(90)	24.7	(11.24)
DBB USV	3/4"	BSP	16.2	(414)	4.1	(106)	3.6	(93)	3.5	(90)	14.4	(6.57)
DBB USV	3/4"	NPT	16.2	(414)	4.1	(106)	3.6	(93)	3.5	(90)	14.4	(6.57)
DBB USV	3/4"	SW	16.1	(411)	4.1	(106)	3.6	(93)	3.5	(90)	15.1	(6.87)
DBB USV	3/4"	ASME 150	17.2	(439)	5.1	(131)	3.6	(93)	3.5	(90)	21.9	(9.97)
DBB USV	3/4"	ASME 300	17.9	(456)	5.8	(148)	3.6	(93)	3.5	(90)	24.4	(11.1)
DBB USV	3/4"	PN40	17.9	(455)	5.7	(147)	3.6	(93)	3.5	(90)	24.7	(11.24)
DBB USV	1"	BSP	16.4	(418)	4.1	(106)	3.6	(93)	3.5	(90)	14.8	(6.72)
DBB USV	1"	NPT	16.4	(418)	4.1	(106)	3.6	(93)	3.5	(90)	14.8	(6.72)
DBB USV	1"	SW	17.2	(438)	4.9	(126)	3.6	(93)	3.5	(90)	15.4	(7.02)
DBB USV	1"	ASME 150	17.2	(439)	5.0	(127)	3.6	(93)	3.5	(90)	22.6	(10.27)
DBB USV	1"	ASME 300	18.0	(458)	5.7	(146)	3.6	(93)	3.5	(90)	25.7	(11.7)
DBB USV	1"	PN40	17.9	(456)	5.6	(144)	3.6	(93)	3.5	(90)	26.1	(11.84)

Dimensions/weights (approximate) in inches (mm) and lbs (kg)

### Double Block and Bleed Upstream Vertical Downstream Horizontal (DBB USV DSH)



STS17.2 type	Size and connection		Dimensions								Weights	
			A		B		C		D			
DBB USV DSH	½"	BSP	21.3	(542)	4.6	(118)	3.6	(93)	3.5	(90)	19.4	(8.84)
DBB USV DSH	½"	NPT	21.3	(542)	4.6	(118)	3.6	(93)	3.5	(90)	19.4	(8.84)
DBB USV DSH	½"	SW	21.3	(542)	4.6	(118)	3.6	(93)	3.5	(90)	20.3	(9.24)
DBB USV DSH	½"	ASME 150	22.2	(565)	5.5	(141)	3.6	(93)	3.5	(90)	28.8	(13.09)
DBB USV DSH	½"	ASME 300	22.7	(578)	6.0	(154)	3.6	(93)	3.5	(90)	31.7	(14.42)
DBB USV DSH	½"	PN40	22.5	(573)	5.8	(149)	3.6	(93)	3.5	(90)	32.0	(14.56)
DBB USV DSH	¾"	BSP	21.3	(542)	4.6	(118)	3.6	(93)	3.5	(90)	19.4	(8.84)
DBB USV DSH	¾"	NPT	21.3	(542)	4.6	(118)	3.6	(93)	3.5	(90)	19.4	(8.84)
DBB USV DSH	¾"	SW	21.1	(538)	4.6	(118)	3.6	(93)	3.5	(90)	20.3	(9.24)
DBB USV DSH	¾"	ASME 150	22.3	(567)	5.6	(143)	3.6	(93)	3.5	(90)	28.8	(13.09)
DBB USV DSH	¾"	ASME 300	22.9	(584)	6.2	(160)	3.6	(93)	3.5	(90)	31.7	(14.42)
DBB USV DSH	¾"	PN40	22.9	(583)	6.2	(159)	3.6	(93)	3.5	(90)	32.0	(14.56)
DBB USV DSH	1"	BSP	21.4	(546)	4.6	(118)	3.6	(93)	3.5	(90)	19.2	(9.04)
DBB USV DSH	1"	NPT	21.4	(546)	4.6	(118)	3.6	(93)	3.5	(90)	19.2	(9.04)
DBB USV DSH	1"	SW	22.2	(566)	5.4	(138)	3.6	(93)	3.5	(90)	20.8	(9.44)
DBB USV DSH	1"	ASME 150	22.3	(567)	5.4	(139)	3.6	(93)	3.5	(90)	29.7	(13.49)
DBB USV DSH	1"	ASME 300	23.0	(586)	6.2	(158)	3.6	(93)	3.5	(90)	33.5	(15.22)
DBB USV DSH	1"	PN40	22.9	(584)	6.1	(156)	3.6	(93)	3.5	(90)	33.8	(15.36)

### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P128-23) supplied with the product.

### How to order

**Example:** 1 off Spirax Sarco ½" screwed BSP STS17.2 stainless steel pipeline compact connector steam trapping station, having a Spiratec SSL1 sensor.

## Spare parts - Double isolation conversion kit

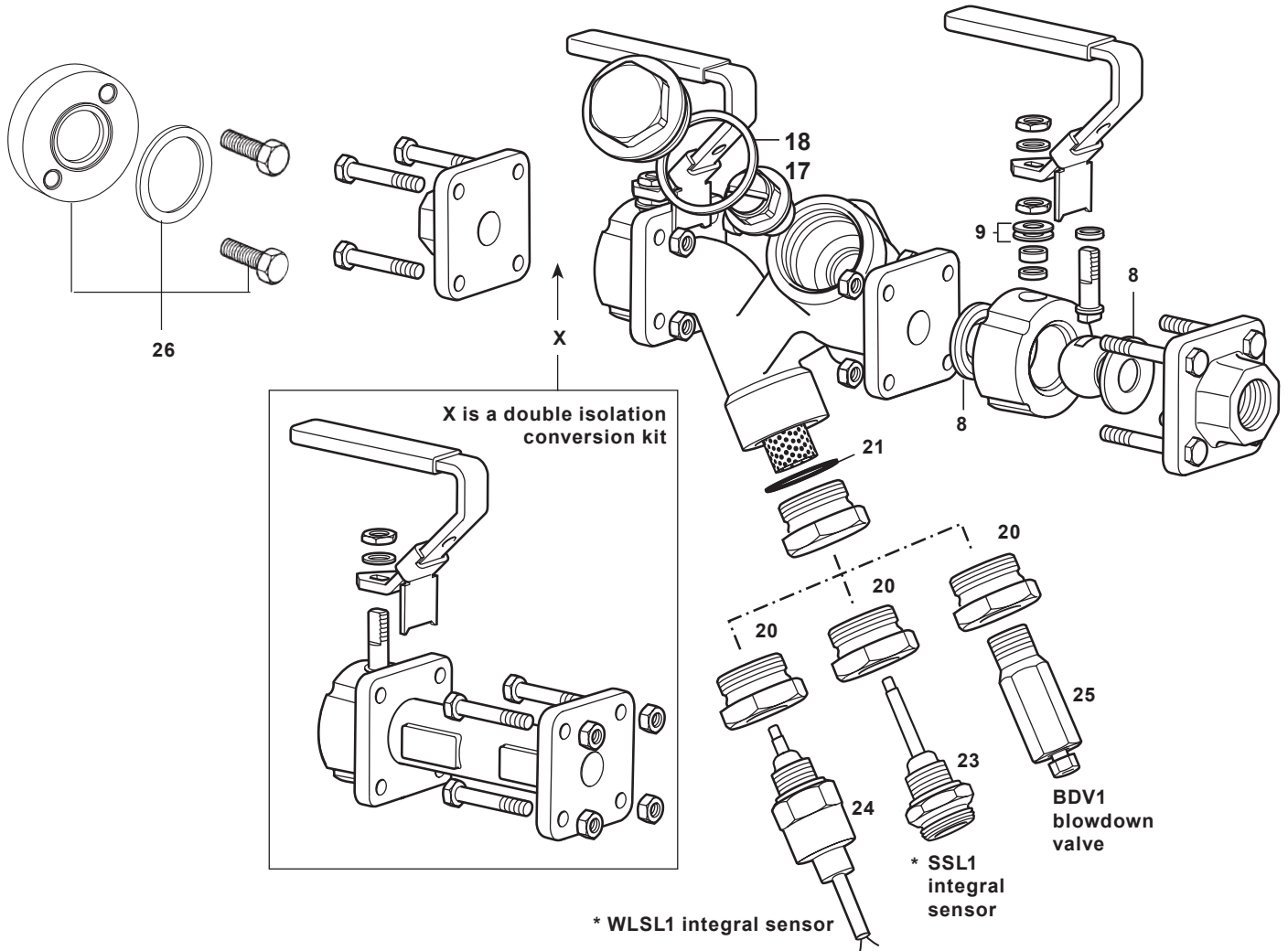
The spare parts are available as indicated below. No other parts are supplied as spares.

	Isolation ball valve seat and stem seals	8, 9	
	Strainer screen and gasket	21, 22	
<b>Available spares</b>	Spare sensor and sensor gasket	SSL1 Spiratec sensor WLSL1 diode waterlogging sensor	23 24
	Spiratec retrofit kit	<b>Note:</b> State whether an SSL1 or WLSL1 sensor is required.	20, 21 + 23 or 24
	Check valve assembly		17, 18
	Double isolation conversion kit (includes spool piece and additional isolation valve)		X
	BDV1 blowdown valve retrofit kit		20, 21 + 25
	Blind flange kit		26

### How to order spares

Always order spares using the description given in the column headed 'Available spares' and state the size and model number.

**Example:** 1 - 1 off Spare Spiratec sensor and sensor gasket with WLSL1 diode waterlogging sensor for a 1/2" STS17.2 compact pipeline connector steam trapping station.



## Spare parts - Double Block and Bleed conversion kit

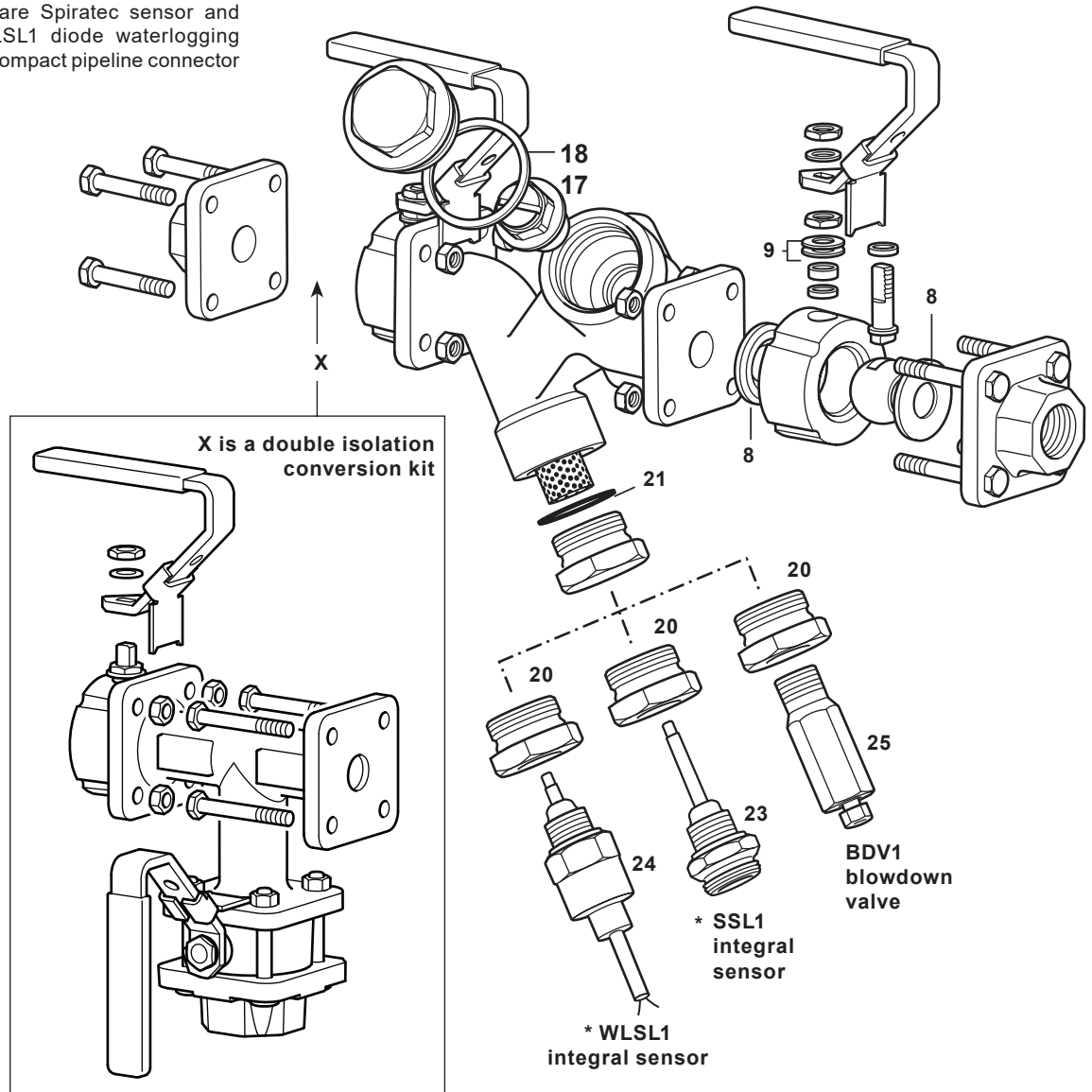
The spare parts are available as indicated below. No other parts are supplied as spares.

<b>Available spares</b>	Isolation ball valve seat and stem seals		8, 9	
	Strainer screen and gasket		21, 22	
	Spare sensor and sensor gasket	SSL1 Spiratec sensor		23
		WLSL1 diode waterlogging sensor		24
	Spiratec retrofit kit	<b>Note:</b> State whether an SSL1 or WLSL1 sensor is required.		20, 21 + 23 or 24
	Check valve assembly			17, 18
	Double Block and Bleed conversion kit (includes spool piece, connectors additional isolation valves and their bolts/studs/nuts)			X
	BDV1 blowdown valve retrofit kit			20, 21 + 25

### How to order spares

Always order spares using the description given in the column headed 'Available spares' and state the size and model number.

**Example:** 1 - 1 off Spare Spiratec sensor and sensor gasket with WLSL1 diode waterlogging sensor for a 1/2" STS17.2 compact pipeline connector steam trapping station.



## How to order\*

<b>Product Description</b>	<b>STS17.2</b>	Steam trapping station
<b>Connection size</b>	½"	Ø1/2" Connection
	¾"	Ø3/4" Connection
	1"	Ø1" Connection
<b>Connection type</b>	<b>BSP</b>	BSP Threaded (both ends)
	<b>NPT</b>	NPT Threaded (both ends)
	<b>SW</b>	Socket Weld (both ends)
	<b>ASME 150</b>	ASME B16.5 Cl.150 (both ends)
	<b>ASME 300</b>	ASME B16.5 Cl.300 (both ends)
<b>Isolation quantity</b>	<b>PN40</b>	BS EN 1092-1 (both ends)
	<b>SB</b>	Single Isolation
	<b>DB</b>	Double Isolation
<b>Upstream connection orientation</b>	<b>DBB</b>	Double Block and Bleed
	<b>US</b>	Upstream (only used for DB)
	<b>USH</b>	Upstream Horizontal (Only used for DBB)
<b>Downstream connection orientation**</b>	<b>USV</b>	Upstream Vertical (Only used for DBB)
	<b>DSH</b>	Downstream Horizontal (Only used for DBB)

\* These combinations are Spirax Sarco standard, for any other combination or special item addition please get in touch.

\*\* This cell will be left blank when the intention is to not have any downstream connection.