



TI-P128-22
CMGT Issue 14

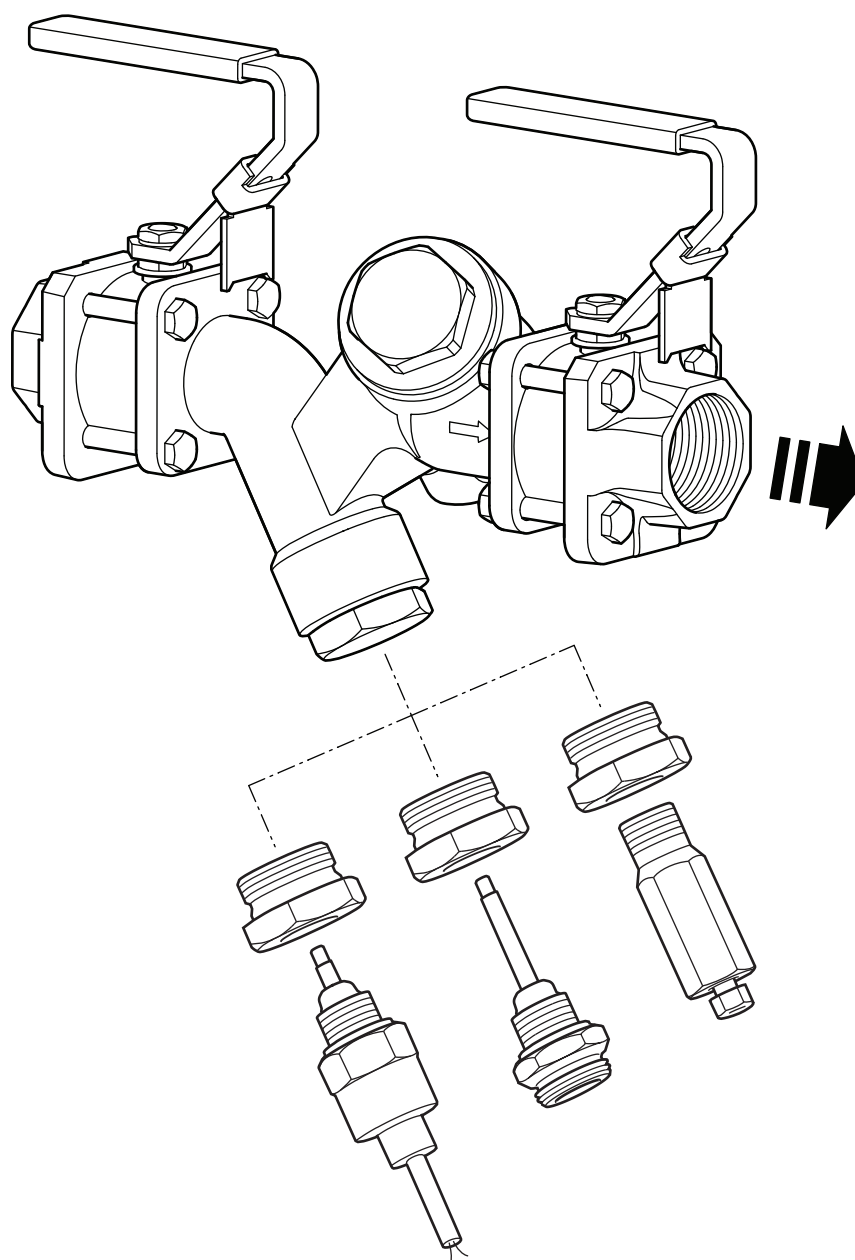
STS17.2

Stainless Steel

Compact Pipeline Connector Steam Trapping Station

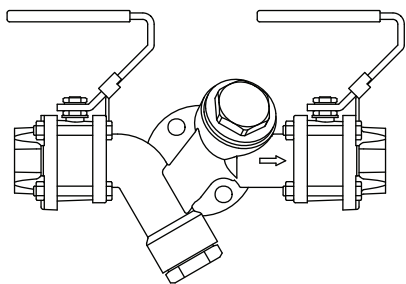
Description

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.

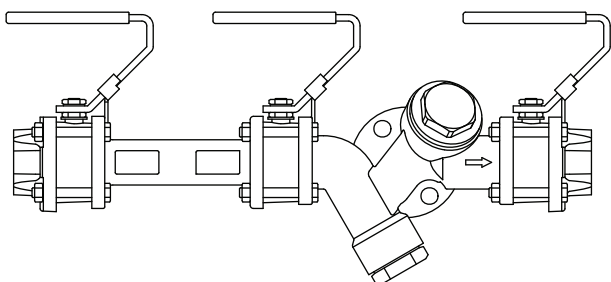


Available types

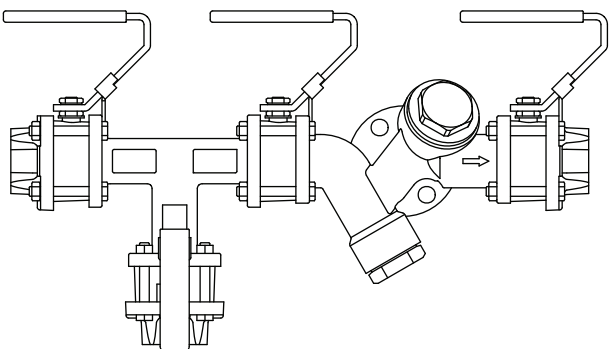
The STS17.2 is available in Single, Double or Double Block and Bleed variations, see below:



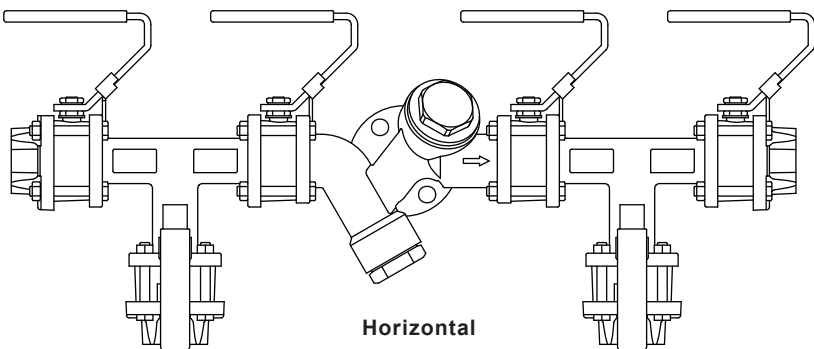
Single Isolation (SB)



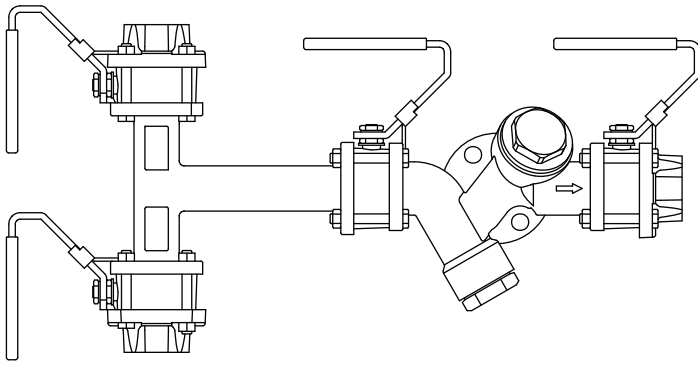
Double Isolation Upstream (DB US)



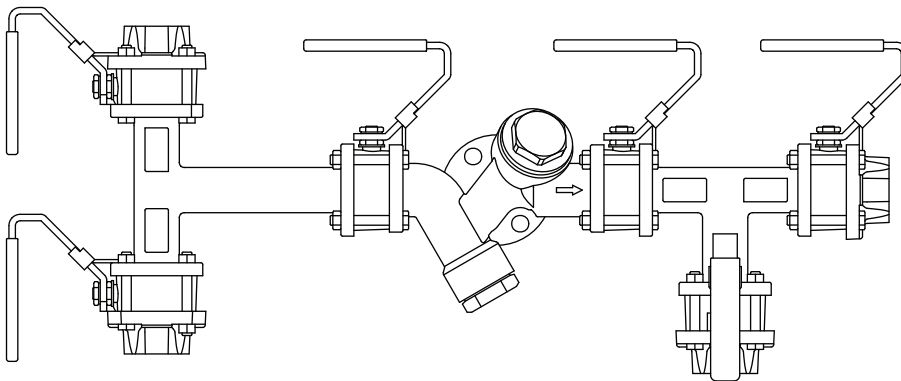
Double Block and Bleed Upstream Horizontal (DBB USH)



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 European Pressure Equipment Directive 2014/68/EU.

Certification

These products are available with certification to EN 10204 3.1.

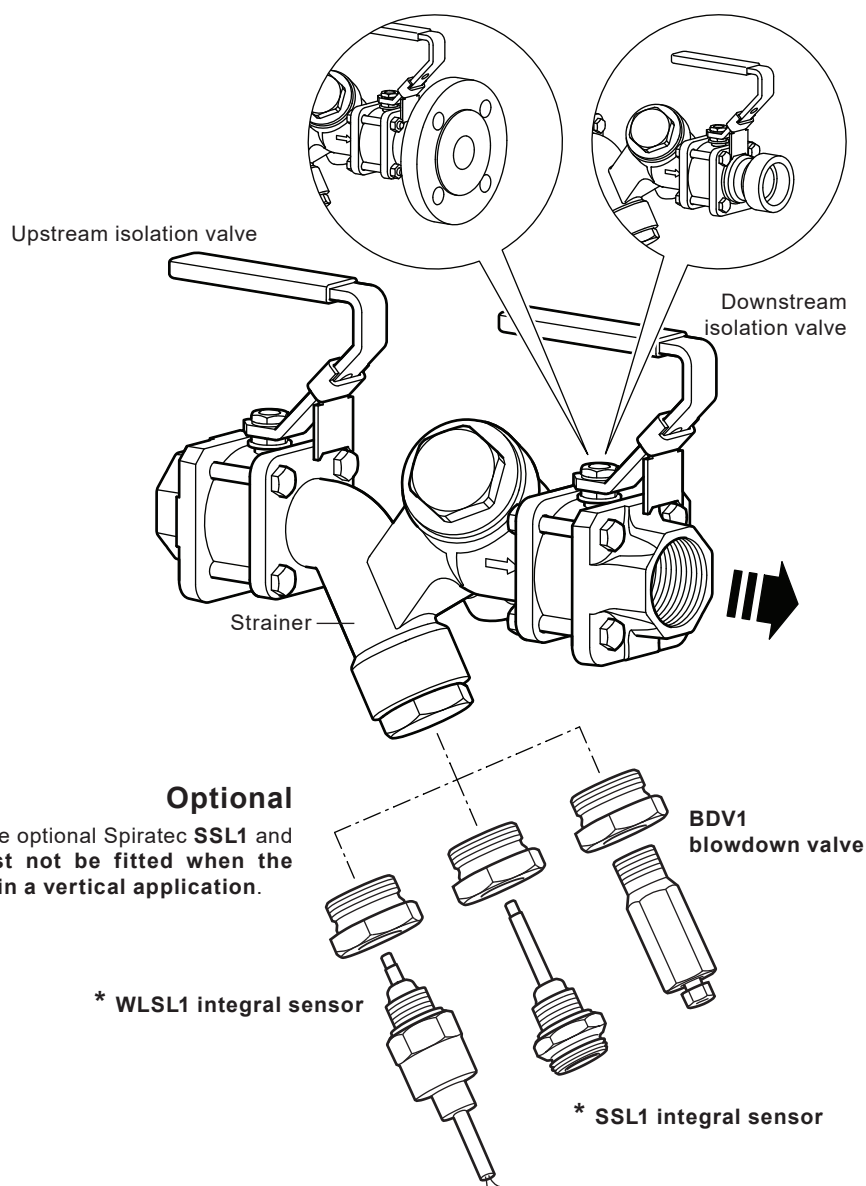
Note: All certification/inspection requirements must be stated at the time of order placement.
For other certification contact Spirax Sarco.

Sizes and pipe connections

½", ¾" and 1" screwed BSP T Rp (ISO 7-1), NPT or socket weld.

½", ¾" and 1" ASME 150 and ASME 300.

DN15, DN20 and DN25 flanged EN 1092 PN40.



Optional extras

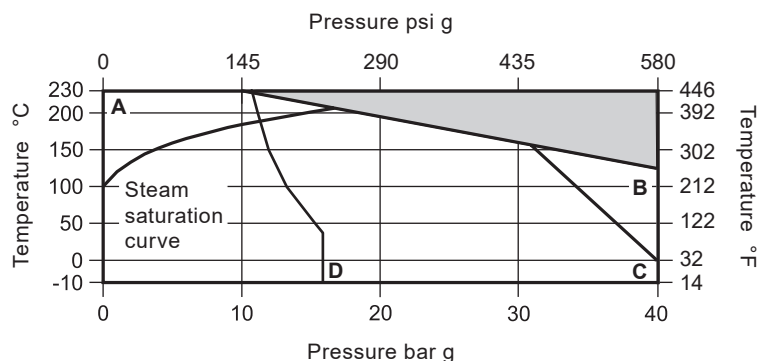
Integral sensor type SSL1 (steam only) or **WLSL1** (for waterlogging) for use with R1C or **WLSL1 with DIODE** for use with RI6C are available as optional extras, to enable operational monitoring of the steam trap. **Please note** that the optional Spiratec **SSL1** and **WLSL1** sensors **must not 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 Screwed, socket weld, butt weld and flanged ANSI 300.

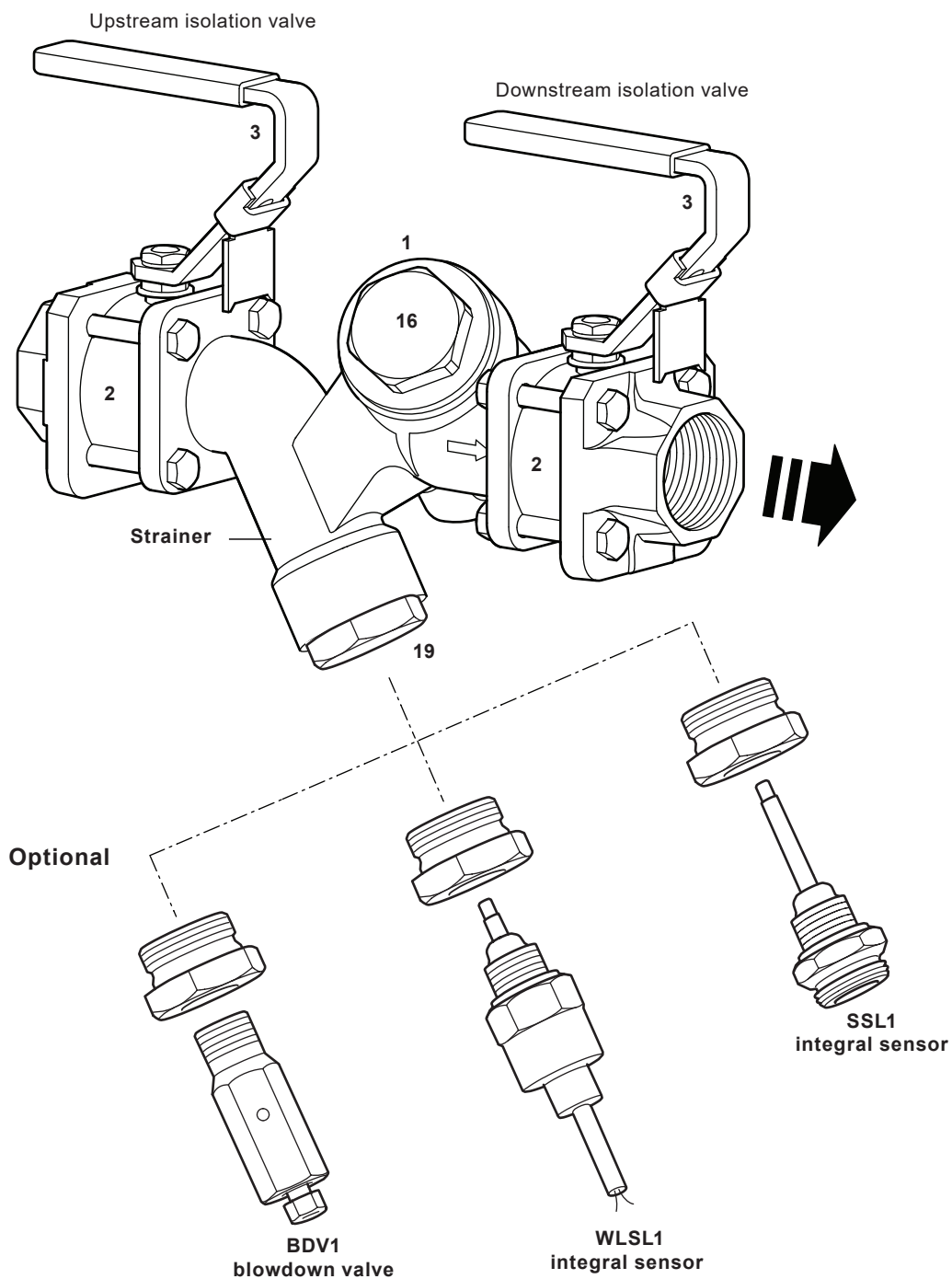
A - C Flanged EN 1092 PN40.

A - D Flanged ASME Class 150.

Body design conditions				PN40
PMA	Maximum allowable pressure		40 bar g @ 120 °C	580 psi g @ 248 °F
TMA	Maximum allowable temperature		230 °C @ 10 bar g	446 °F @ 145 psi g
Minimum allowable temperature			-10 °C	14 °F
PMO	Maximum operating pressure for saturated steam service	ANSI 150	11.3 bar g	164 psi g
		All other connections	17.5 bar g	254 psi g
TMO	Maximum operating temperature		230 °C @ 10 bar g	446 °F @ 145 psi g
Minimum operating temperature			-10 °C	14 °F
Note: For lower operating temperatures consult Spirax Sarco				
Product is safe for use under full vacuum conditions				
Designed for a maximum cold hydraulic test pressure of:			60 bar g	870 psi g

Materials

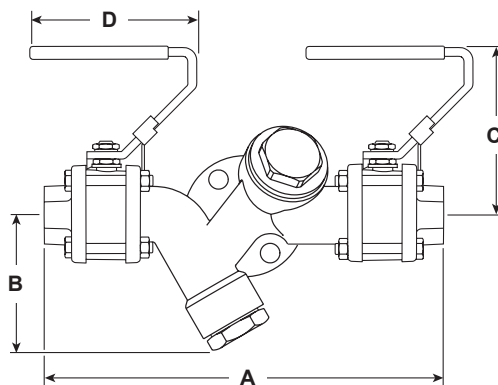
STS17.2 version with single isolation



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 mm (inches) and kg (lbs)

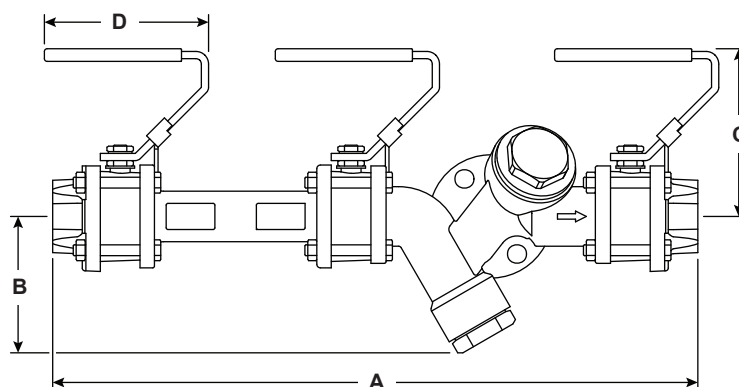
Single Isolation (SB)



Isolation	Size and connection	Dimension				Weight
		A	B	C	D	
Single	½" BSP T Rp (ISO 7-1), ½" NPT and ½" SW	222 (8.74)	76 (3.0)	93 (3.7)	90 (3.5)	3.60 (7.94)
	¾" BSP T Rp (ISO 7-1) and ¾" NPT					3.53 (7.78)
	¾" SW	213 (8.39)				3.54 (7.80)
	1" BSP T Rp (ISO 7-1) and 1" NPT	229 (9.02)				3.71 (8.18)
	1" SW	269 (10.6)				3.86 (8.51)
	½" ASME 150	268 (10.55)				4.45 (9.81)
	½" ASME 300	294 (11.6)				4.98 (11.0)
	DN15 EN 1092 PN40	284 (11.2)				5.12 (11.3)
	¾" ASME 150	272 (10.7)				4.67 (10.3)
	¾" ASME 300	306 (12.05)				5.98 (13.2)
	DN20 EN 1092 PN40	304 (12.0)				5.74 (12.7)
	1" ASME 150	271 (10.67)				4.96 (10.9)
	1" ASME 300	309 (12.2)				6.64 (14.6)
	DN25 EN 1092 PN40	304 (12.0)				6.24 (13.8)

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

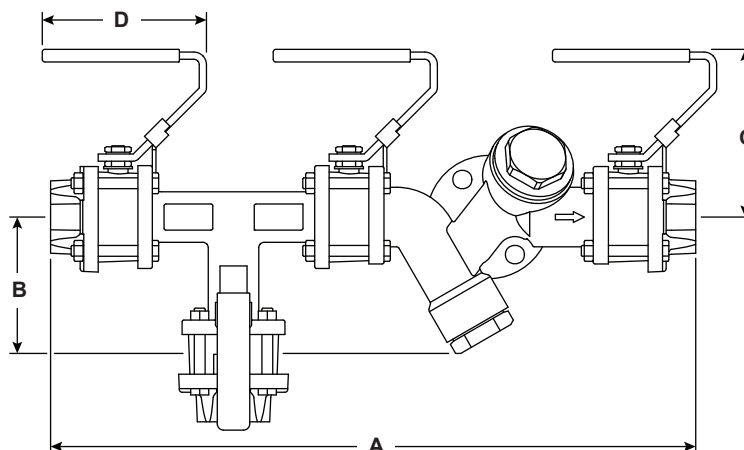
Double Isolation Upstream (DB US)



Isolation	Size and connection	Dimension				Weight
		A	B	C	D	
Double	½" BSP T Rp (ISO 7-1), ½" NPT and ½" SW	350 (13.8)	76 (3.0)	93 (3.7)	90 (3.5)	5.32 (11.7)
	¾" BSP T Rp (ISO 7-1) and ¾" NPT					5.25 (11.57)
	¾" SW	341 (13.4)				5.26 (11.6)
	1" BSP T Rp (ISO 7-1) and 1" NPT	357 (14.1)				5.43 (12.0)
	1" SW	397 (15.63)				5.58 (12.3)
	½" ASME 150	396 (15.6)				6.17 (13.6)
	½" ASME 300	422 (16.6)				6.70 (14.8)
	DN15 EN 1092 PN40	412 (16.2)				6.84 (15.1)
	¾" ASME 150	400 (15.7)				6.39 (14.1)
	¾" ASME 300	434 (17.1)				7.70 (17.0)
	DN20 EN 1092 PN40	432 (17.0)				7.46 (16.4)
	1" ASME 150	399 (15.71)				6.68 (14.7)
	1" ASME 300	437 (17.2)				8.36 (18.4)
	DN25 EN 1092 PN40	432 (17.0)				7.97 (17.6)

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

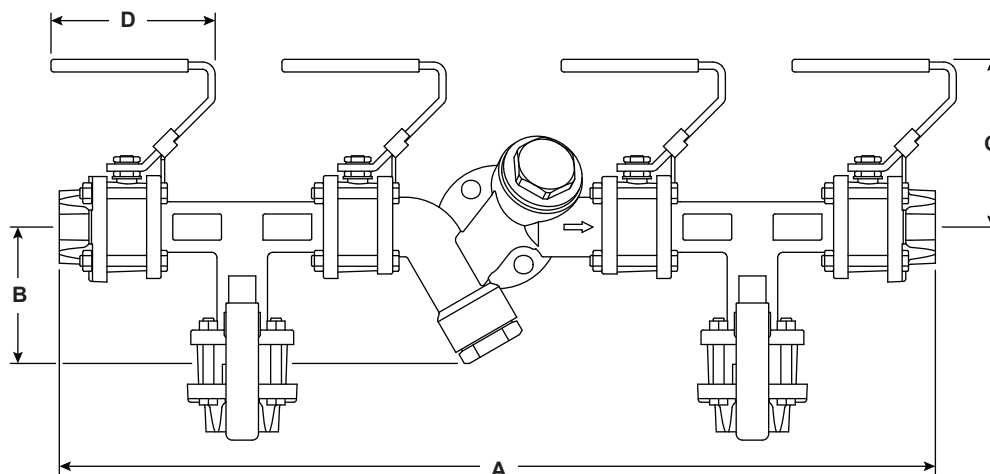
Double Block and Bleed Upstream Horizontal (DBB USH)



STS17.2 type	Size and connection		Dimension				Weight
			A	B	C	D	
DBB USH	½"	BSP T Rp (ISO 7-1)	351 (13.8)	118 (4.65)	93 (3.7)	90 (3.5)	6.37 (14.0)
DBB USH	½"	NPT					6.67 (14.7)
DBB USH	½"	SW					9.77 (21.5)
DBB USH	½"	ASME 150	423 (16.7)	154 (6.06)			10.9 (24.0)
DBB USH	½"	ASME 300	413 (16.3)	149 (5.87)			11.04 (24.3)
DBB USH	¾"	BSP T Rp (ISO 7-1)	351 (13.8)	118 (4.65)			6.37 (14.0)
DBB USH	¾"	NPT					6.67 (14.7)
DBB USH	¾"	SW					9.77 (21.5)
DBB USH	¾"	ASME 150	401 (15.8)	143 (5.63)			10.9 (24.0)
DBB USH	¾"	ASME 300	435 (17.1)	160 (6.30)			11.04 (24.3)
DBB USH	¾"	PN40	433 (17.0)	159 (6.26)			6.52 (14.4)
DBB USH	1"	BSP T Rp (ISO 7-1)	358 (14.1)	118 (4.65)			6.82 (15.0)
DBB USH	1"	NPT					10.07 (22.2)
DBB USH	1"	SW					11.5 (25.4)
DBB USH	1"	ASME 150	400 (15.7)	139 (5.47)			11.64 (25.7)
DBB USH	1"	ASME 300	438 (17.2)	158 (6.22)			
DBB USH	1"	PN40	433 (17.0)	156 (6.14)			

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

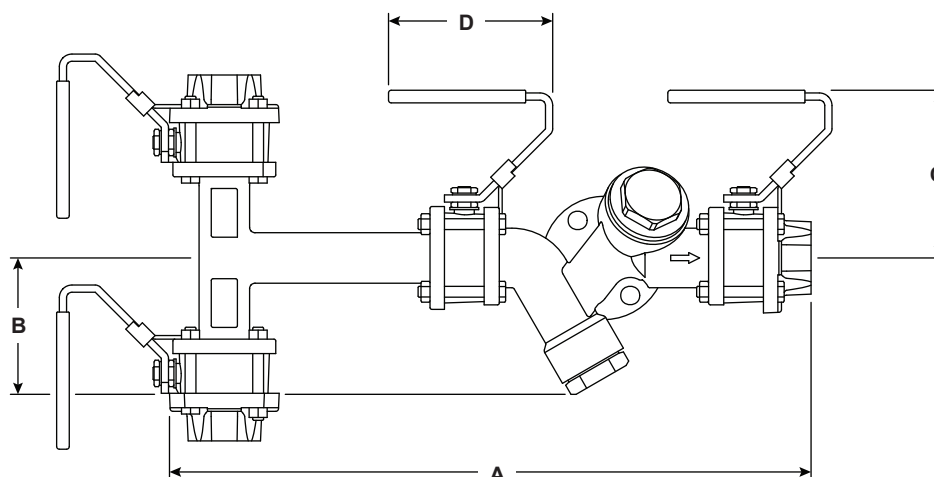
Double Block and Bleed Upstream Horizontal Downstream Horizontal (DBB USH DSH)



STS17.2 type	Size and connection		Dimension				Weight
			A	B	C	D	
DBB USH DSH	½"	BSP T Rp (ISO 7-1)	479 (18.9)	118 (4.65)	93 (3.7)	90 (3.5)	8.64 (19.0)
DBB USH DSH	½"	NPT					8.64 (19.0)
DBB USH DSH	½"	SW					9.04 (19.9)
DBB USH DSH	½"	ASME 150	525 (20.7)	141 (5.55)			12.89 (28.42)
DBB USH DSH	½"	ASME 300	551 (21.7)	154 (6.06)			14.22 (31.35)
DBB USH DSH	½"	PN40	541 21.3)	149 (5.87)			14.36 (31.66)
DBB USH DSH	¾"	BSP T Rp (ISO 7-1)	479 (18.9)	118 (4.65)			8.64 (19.0)
DBB USH DSH	¾"	NPT					9.04 (19.9)
DBB USH DSH	¾"	SW					470 (18.5)
DBB USH DSH	¾"	ASME 150	529 20.8)	143 (5.63)			14.22 (31.35)
DBB USH DSH	¾"	ASME 300	563 (22.2)	160 (6.30)			14.36 (31.66)
DBB USH DSH	¾"	PN40	561 (22.1)	159 (6.26)			8.84 (19.5)
DBB USH DSH	1"	BSP T Rp (ISO 7-1)	486 (19.1)	118 (4.65)			9.24 (20.4)
DBB USH DSH	1"	NPT					13.29 (29.3)
DBB USH DSH	1"	SW	526 (20.7)	138 (5.43)			15.02 (33.11)
DBB USH DSH	1"	ASME 150	528 (20.8)	139 (5.47)			15.16 (33.42)
DBB USH DSH	1"	ASME 300	566 (22.3)	158 (6.22)			
DBB USH DSH	1"	PN40	561 (22.1)	156 (6.14)			

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

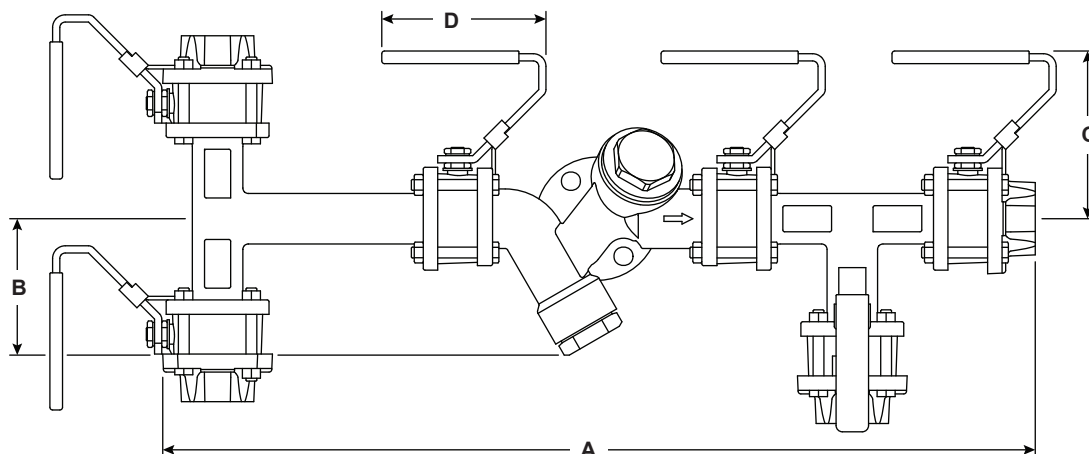
Double Block and Bleed Upstream Vertical (DBB USV)



STS17.2 type	Size and connection		Dimension				Weight
			A	B	C	D	
DBB USV	½"	BSP T Rp (ISO 7-1)	414 (16.3)	106 (4.17)	93 (3.7)	90 (3.5)	6.57 (14.5)
DBB USV	½"	NPT					6.87 (15.1)
DBB USV	½"	SW					9.97 (22.0)
DBB USV	½"	ASME 150	437 (17.2)	129 (17.2)			11.1 (24.5)
DBB USV	½"	ASME 300	450 (17.7)	142 (5.59)			11.24 (24.8)
DBB USV	½"	PN40	445 (17.5)	137 (5.39)			6.57 (14.5)
DBB USV	¾"	BSP T Rp (ISO 7-1)	414 (16.3)	106 (4.17)			6.87 (15.1)
DBB USV	¾"	NPT					9.97 (22.0)
DBB USV	¾"	SW	411 (16.2)	106 (4.17)			11.1 (5.83)
DBB USV	¾"	ASME 150	439 (17.3)	131 (5.16)			11.24 (24.8)
DBB USV	¾"	ASME 300	456 (18.0)	148 (5.83)			6.72 (14.8)
DBB USV	¾"	PN40	455 (17.9)	147 (5.79)			7.02 (15.5)
DBB USV	1"	BSP T Rp (ISO 7-1)	418 (16.5)	106 (4.17)			10.27 (22.64)
DBB USV	1"	NPT					11.7 (25.8)
DBB USV	1"	SW	438 (17.24)	126 (4.96)			11.84 (26.10)
DBB USV	1"	ASME 150	439 (17.3)	127 (5.00)			
DBB USV	1"	ASME 300	458 (18.03)	146 (5.75)			
DBB USV	1"	PN40	456 (18.0)	144 (5.67)			

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

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



STS17.2 type	Size and connection		Dimension				Weight
			A	B	C	D	
DBB USV DSH	½"	BSP T Rp (ISO 7-1)	542 (21.3)	118 (4.65)	93 (3.7)	90 (3.5)	8.84 (19.5)
DBB USV DSH	½"	NPT					9.24 (20.4)
DBB USV DSH	½"	SW					13.09 (28.86)
DBB USV DSH	½"	ASME 150	565 (22.2)	141 (5.55)			14.42 (31.79)
DBB USV DSH	½"	ASME 300	578 (22.8)	154 (6.06)			14.56 (32.10)
DBB USV DSH	½"	PN40	573 (22.6)	149 (5.87)			8.84 (19.5)
DBB USV DSH	¾"	BSP T Rp (ISO 7-1)	542 (21.3)	118 (4.65)			9.24 (20.4)
DBB USV DSH	¾"	NPT					13.09 (28.86)
DBB USV DSH	¾"	SW	538 (21.2)	143 (5.63)			14.42 (31.79)
DBB USV DSH	¾"	ASME 150	567 (22.32)	160 (6.30)			14.56 (32.10)
DBB USV DSH	¾"	ASME 300	584 (23.0)	159 (6.26)			9.04 (19.9)
DBB USV DSH	¾"	PN40	583 (22.95)	138 (5.43)			9.44 (20.8)
DBB USV DSH	1"	BSP T Rp (ISO 7-1)	546 (21.5)	118 (4.65)			13.49 (29.74)
DBB USV DSH	1"	NPT					15.22 (33.55)
DBB USV DSH	1"	SW	566 (22.3)	158 (6.22)			15.36 (33.86)
DBB USV DSH	1"	ASME 150	567 (22.32)	156 (6.14)			
DBB USV DSH	1"	ASME 300	586 (23.1)				
DBB USV DSH	1"	PN40	584 (23.0)				

Spare parts - Double isolation conversion kit

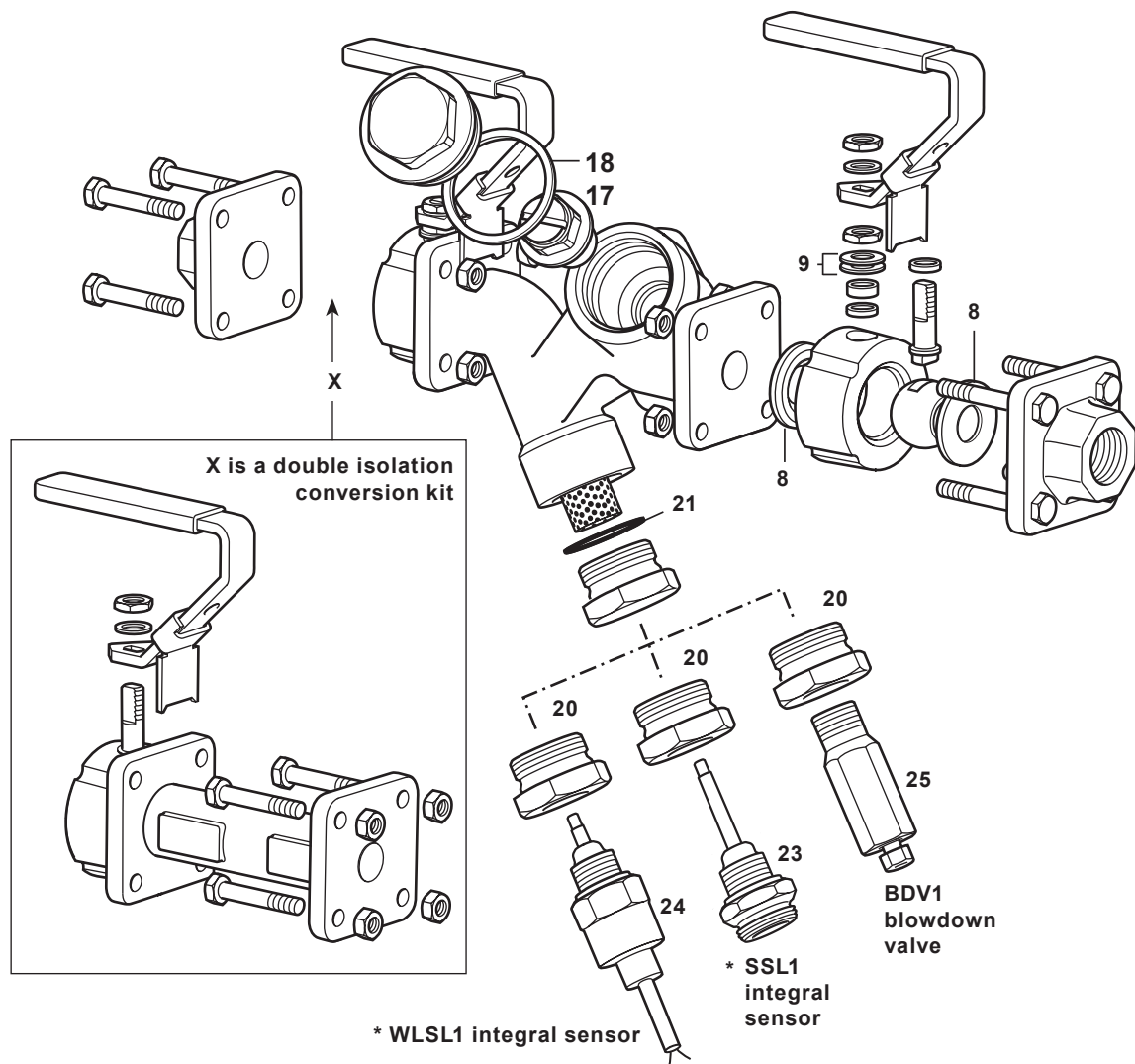
The spare parts are available as indicated below. No other parts are supplied as spares.

Available spares	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	Note: 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

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

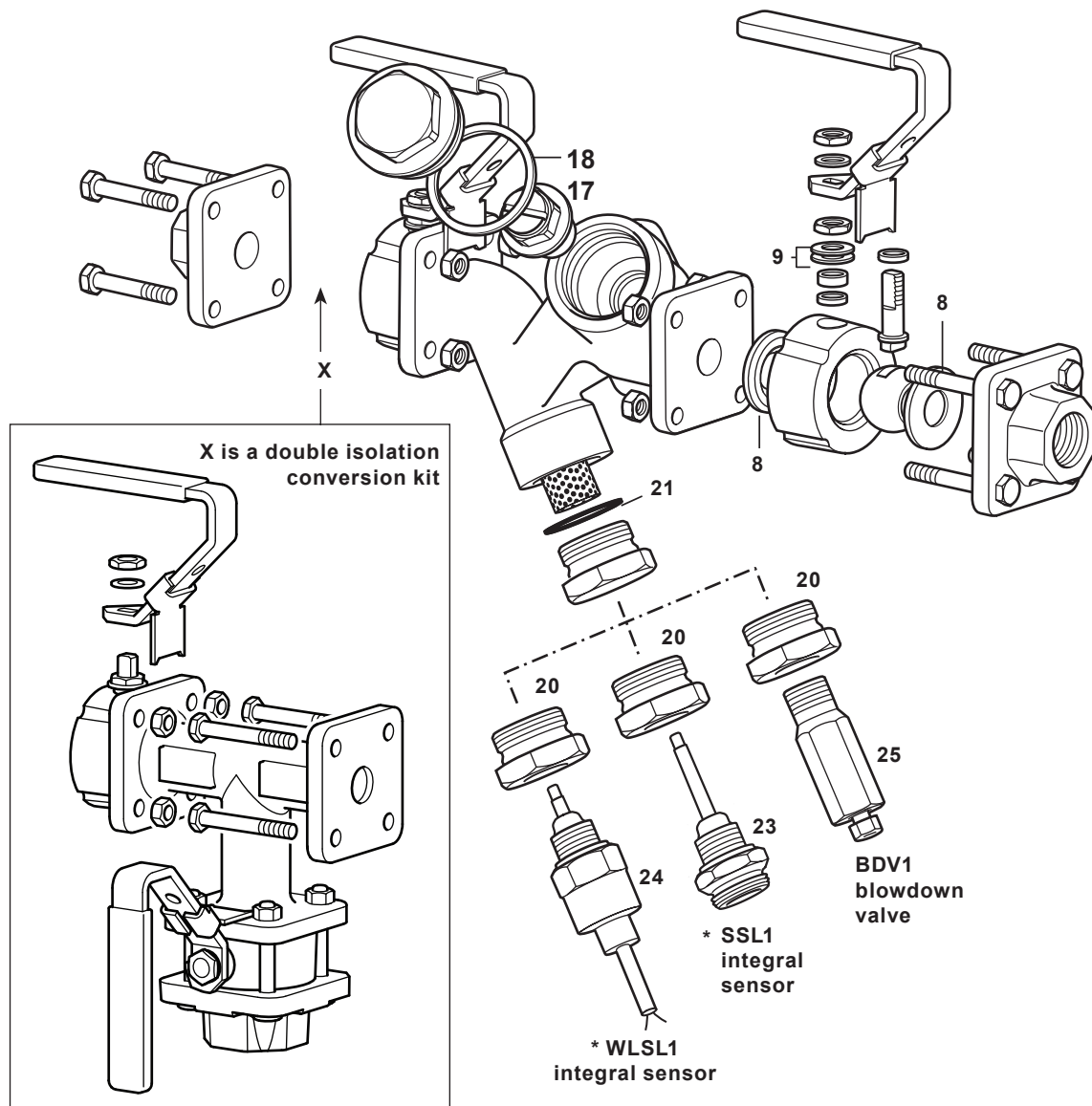
The spare parts are available as indicated below. No other parts are supplied as spares.

Available spares	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	Note: 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 ½" STS17.2 compact pipeline connector steam trapping station.



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 T Rp (ISO 7-1) STS17.2 stainless steel pipeline compact connector steam trapping station, having a Spiratec SSL1 sensor.

How to order*

Product Description	STS17.2	Steam trapping station
Connection size	1/2"	Ø1/2" Connection
	3/4"	Ø3/4" Connection
	1"	Ø1" Connection
Connection type	BSP	BSP T Rp (ISO 7-1) Threaded (both ends)
	NPT	NPT Threaded (both ends)
	SW	Socket Weld (both ends)
	ASME 150	ASME B16.5 Cl.150 (both ends)
	ASME 300	ASME B16.5 Cl.300 (both ends)
	PN40	BS EN 1092-1 (both ends)
Isolation quantity	SB	Single Isolation
	DB	Double Isolation
	DBB	Double Block and Bleed
Upstream connection orientation	US	Upstream (only used for DB)
	USH	Upstream Horizontal (Only used for DBB)
	USV	Upstream Vertical (Only used for DBB)
Downstream connection orientation**	DSH	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.