



## SB and SBRA Gunmetal Self-acting Temperature Control Valves

### Description

The SB and SBRA range of two-port valve are used in conjunction with Spirax Sarco SA control systems to provide a self-acting temperature control unit.

### Available types:


**SB** Normally open, single seat valve

**SBRA** Normally closed, single seat valve or single seat valve with bleed

### Optional extras

Extra bleed hole bypass

### Standards

These products fully comply with the requirements of the Pressure Equipment Directive (PED) and carry the  mark when so required.

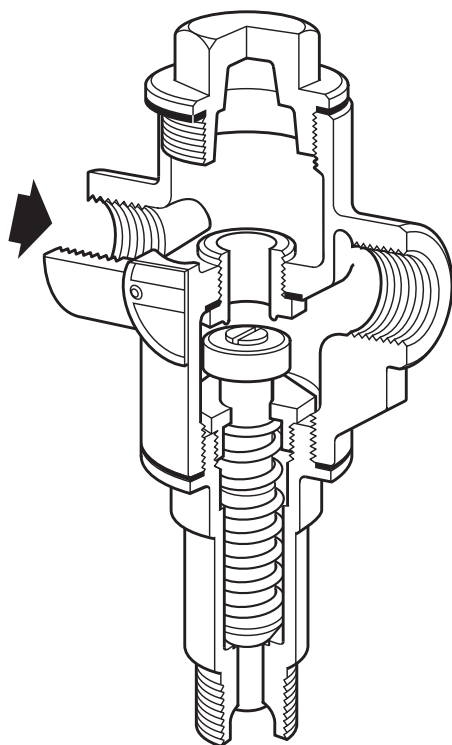
### Certification

The product is available with manufacturer's Typical Test Report.

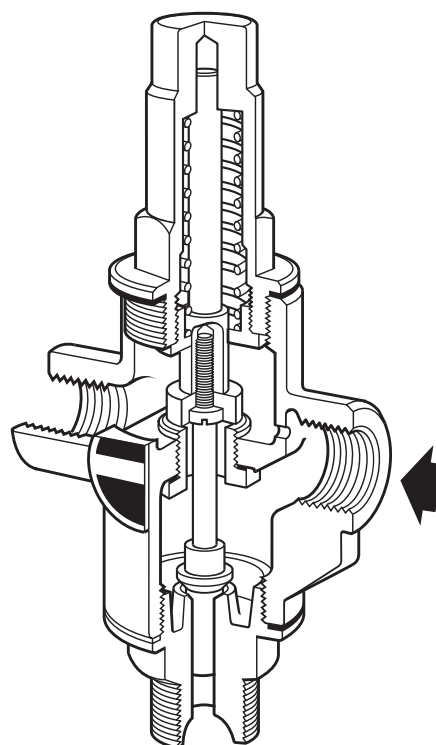
**Note:** All certification/inspection requirements must be stated at the time of order placement.

### Sizes and pipe connections

1/2", 3/4" and 1" screwed BSP (BS 21 parallel) or NPT.

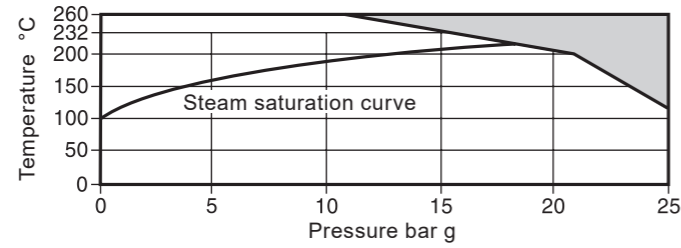


SB



SBRA

## Pressure/temperature limits



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

Body design conditions	PN25			
Maximum design pressure	25 bar g @ 120 °C			
Maximum design temperature	Fitted directly to an actuator	232 °C		
Minimum design temperature	-10 °C			
Maximum operating temperature	Fitted directly to an actuator	232 °C		
Minimum operating temperature	0 °C			
<b>Note:</b> For lower operating temperatures consult Spirax Sarco				
	<b>Size</b>	<b>½"</b>	<b>¾"</b>	<b>1"</b>
Maximum differential pressure bar	<b>SB</b>	17.2	10.3	6.8
	<b>SBRA</b>	12.0	7.0	4.7
Designed for a maximum cold hydraulic test pressure of	38 bar g			

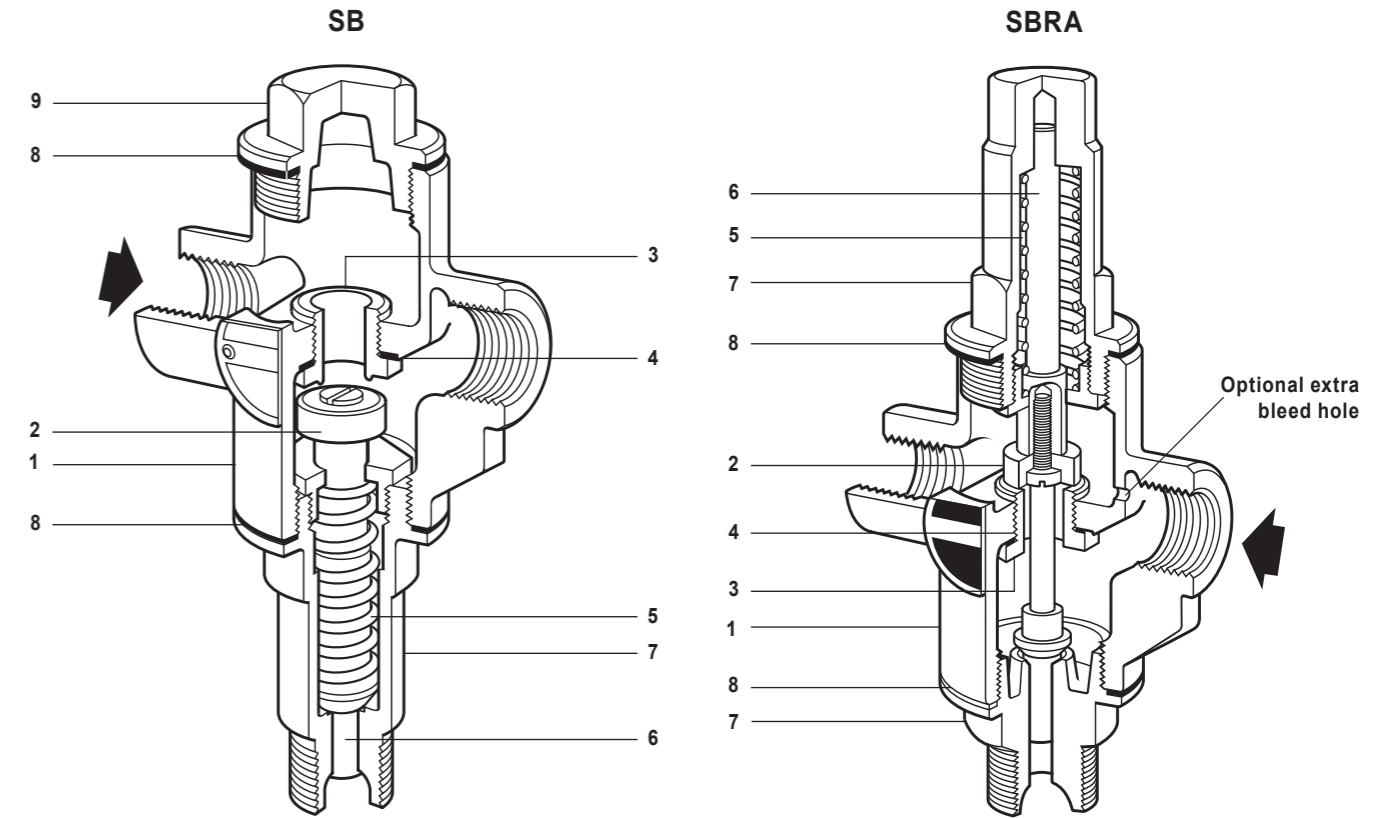
## K<sub>v</sub> values

DN15	DN20	DN25	For conversion: C <sub>v</sub> (UK) = K <sub>v</sub> x 0.963 C <sub>v</sub> (US) = K <sub>v</sub> x 1.156
2.58	3.86	6.80	

## Capacities

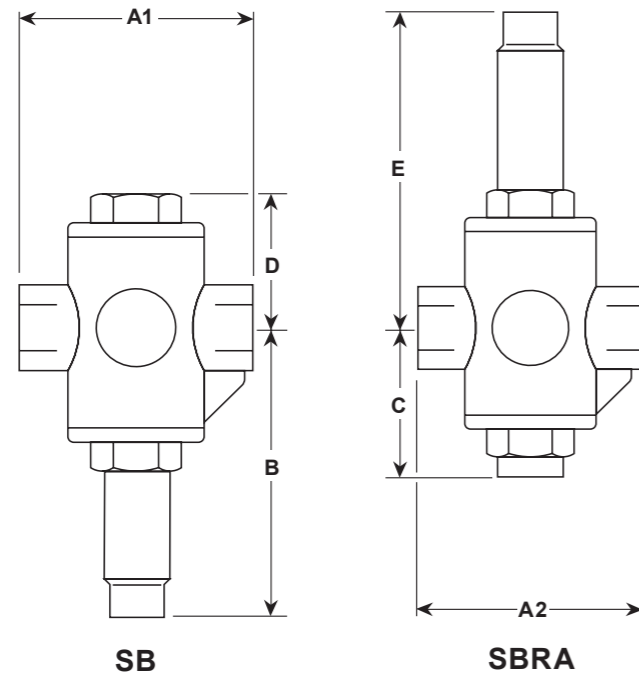
For saturated steam sizing capacities, see TI-GCM-08.  
For water sizing capacities, see TI-GCM-09.

## Materials



No.	Part	Material	
1	Body	Gunmetal	BS 1400 LG2
2	Valve plug	Stainless steel	BS 970 431 S29
3	Valve seat ring	Stainless steel	BS 970 431 S29
4	Valve seat gasket	Copper	BS 2870 C102
5	Return spring	Stainless steel	BS 2056 302 S26
6	Stem	Brass	BS 2874 CZ 121
7	Bonnet	Brass	BS 2872 CZ 122
8	Bonnet gasket	Reinforced exfoliated graphite	
9	Cap	Brass	BS 2872 CZ 122

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



Size	A1	A2	B	C	D	E	Weight
DN15	79	79	101	66	50	95	1.0
DN20	95	79	101	66	50	95	1.3
DN25	105	79	101	66	50	95	1.5

**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions supplied with the product.

**Installation note:**

The valve should be fitted in a horizontal line. The actuator position will depend on the type fitted to the valve.

**How to order**

**Example:** 1 off Spirax Sarco 1" SB self-acting temperature control valve with bronze body having screwed BSP connections.

**Spare parts**

The spare parts available are shown in heavy outline. Parts drawn in a grey line are not supplied as spares.

**Available spares**

Valve seat and stem assembly	SB	A, D, E, L
	SBRA	A1, D1, E, T1, R, S
Set of all gaskets	SB	E, L
	SBRA	L1, L2, E

**How to order spares**

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of valve.

**Example:** 1 - Valve seat and stem assembly for a 3/4" SBRA self-acting temperature control valve.

