

TI-P036-02 CTLS Issue 7

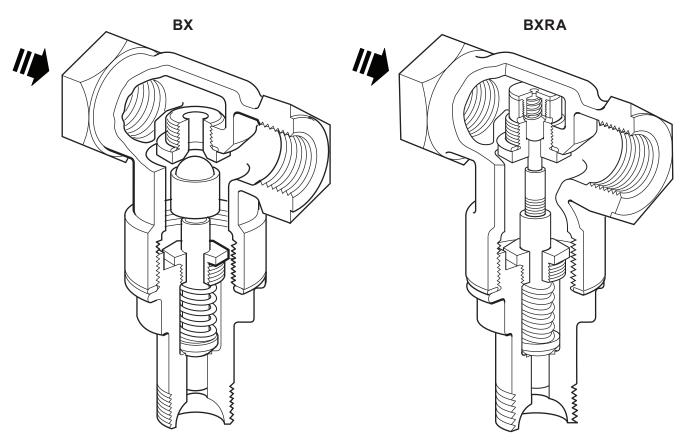
### Description

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

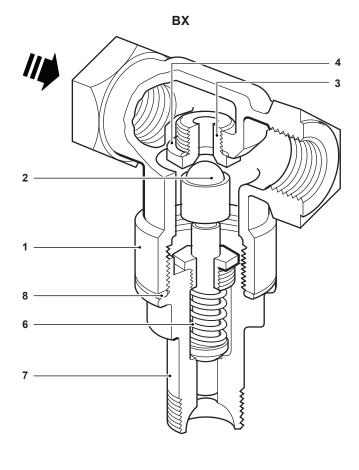
#### Available types

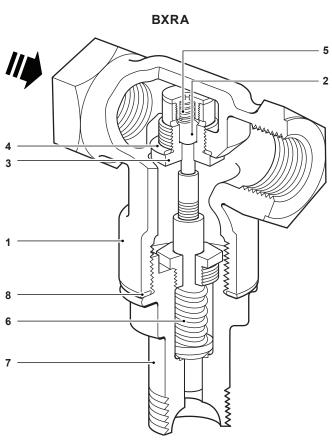
вх	Normally open, single seat with four different orifice sizes: BX2, BX3, BX4 and BX6.
BXRA	Normally closed, single seat.

# Sizes and pipe connections 1/2" screwed BSP (BS 21 parallel) or NPT.



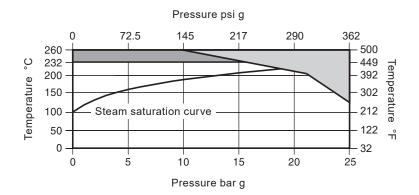
# **Materials**





No.	Part	Material	
1	Body	Gunmetal	CC491 K or CC491 K M
2	Valve closure member	Stainless steel	AISI 440B
3	Valve seat ring	Stainless steel	BS 970 431 S29
4	Valve seat gasket	Copper	BS 2870 C102
5	Ball return spring	Stainless steel	BS 2056 302 S26
6	Main return spring	Stainless steel	BS 2056 302 S26
7	Bonnet	Brass	BS 2872 CZ 122
8	Bonnet gasket	Reinforced exfoliated graphite	

# Pressure/temperature limits



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

When the valve is operated with a self-acting temperature control system in this region, a Spirax Sarco spacer must be used.

Body design conditions			PN25
	Fitted to a Spirax Sarco spacer	260 °C	500 °F
Maximum design temperature	Fitted directly to an actuator	232 °C	450 °F
	BX	17.2 bar	250 psi
Maximum differential pressure	BXRA	10.3 bar	150 psi
Designed for a maximum cold hydraulic test pressure of:		38 bar g	550 psi g

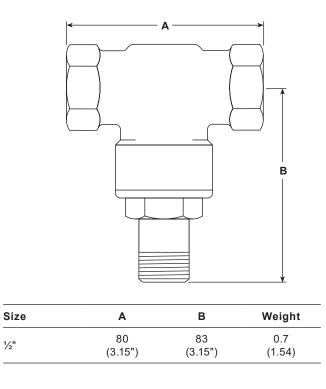
# K<sub>V</sub> values

BX2	BX3	BX4	BX6	BXRA	For conversion: - C <sub>V</sub> (UK) = K <sub>V</sub> x 0.963
0.38	0.64	1.03	1.65	0.59	$C_V(US) = K_V \times 0.905$ $C_V(US) = K_V \times 1.156$

### Capacities

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

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



**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

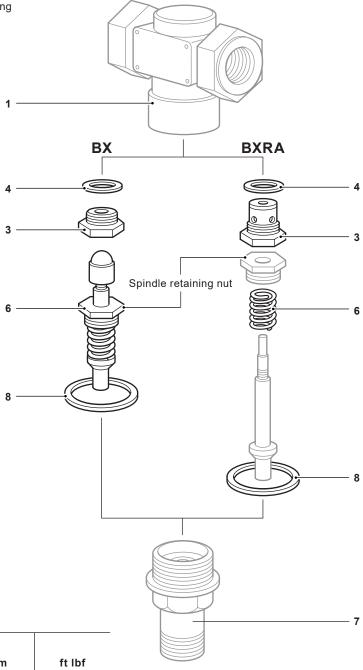
Example: 1 off Spirax Sarco 1/2" screwed BSP BX4 self-acting control valve with gunmetal body and stainless steel trim.

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

Available spares	BX valve	3, 4, 6, 8
Valve seat assembly	BXRA valve	3, 4, 6, 8
Gasket set (packet of 3 each)		4,8

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 assembly for a <sup>1</sup>/<sub>2</sub>" BXRA self-acting control valve.



# **Recommended tightening torques**

ltem	Part	or mm	N m	ft lbf
3	Valve seat	18 A/F	40 - 50	30 - 37
7	Bonnet		40 - 50	30 - 37