



spirax sarco

TI-P036-02
CH Issue 4

**BX and BXRA
Gunmetal
Self-acting Control Valves**

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.

Alternatively, they can be used as electrically actuated temperature control valves by fitting an EL7200 Series electric actuator with a suitable temperature transmitter and controller.

Available types

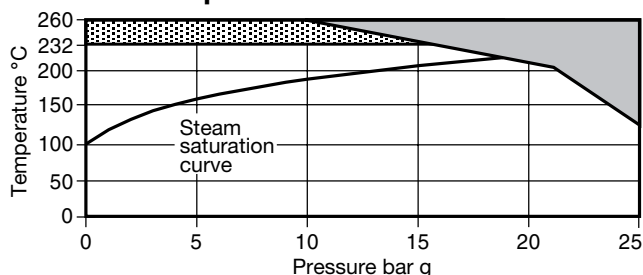
BX Normally open, single seat with four different orifice sizes: **BX2, BX3, BX4 and BX6.**

BXRA Normally closed, single seat.

Sizes and pipe connections

1/2" screwed BSP (BS 21 parallel) or NPT.

Pressure/temperature limits



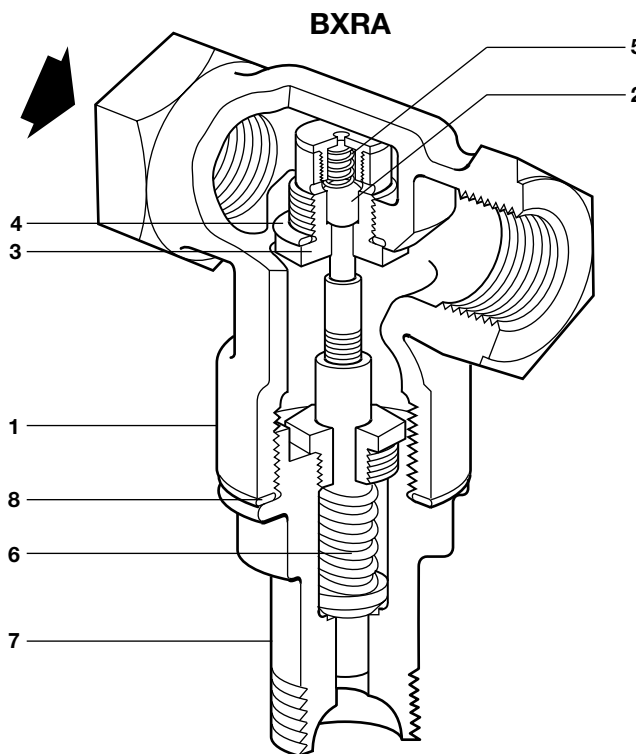
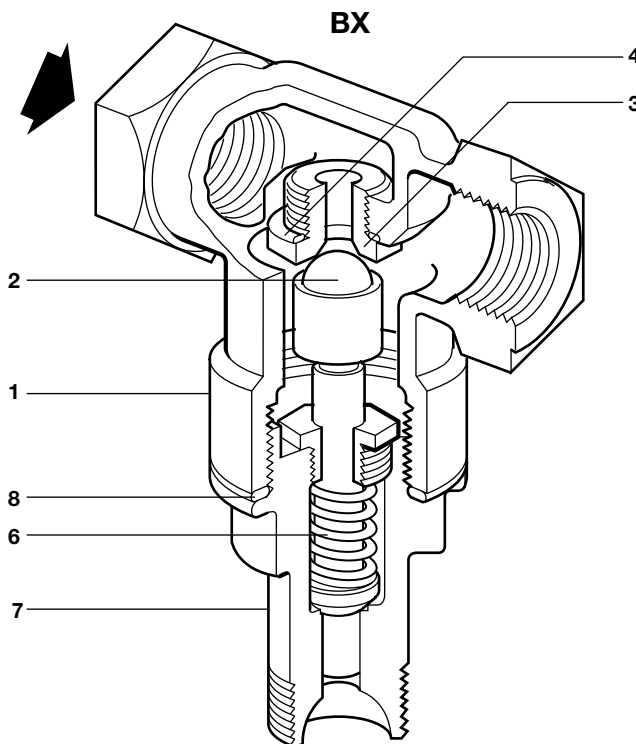
The product **must not** be used in this region.

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	
Maximum design temperature	Fitted to a Spirax Sarco spacer	260°C
	Fitted directly to an actuator	232°C
Maximum differential pressure	BX	17.2 bar
	BXRA	10.3 bar
Designed for a maximum cold hydraulic test pressure of 38 bar g		

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



Local regulations may restrict the use of this product to below the conditions quoted. In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

K_v values

BX2	BX3	BX4	BX6	BXRA
0.38	0.64	1.03	1.65	0.59

For conversion: C_v (UK) = $K_v \times 0.963$ C_v (US) = $K_v \times 1.156$

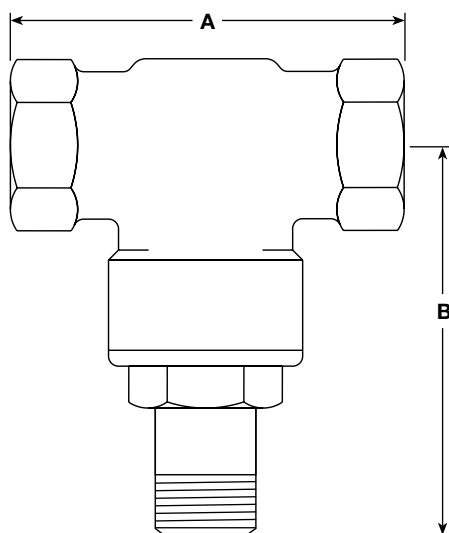
Capacities

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

For water sizing capacities, see TI-GCM-09.

Dimensions / weights (approximate) in mm and kg

Size	A	B	Weight
½"	95	83	0.7

**Safety information, installation and maintenance**

For full details see the Installation and Maintenance Instructions (IM-S21-01) 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 ½" 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 broken line are not supplied as spares.

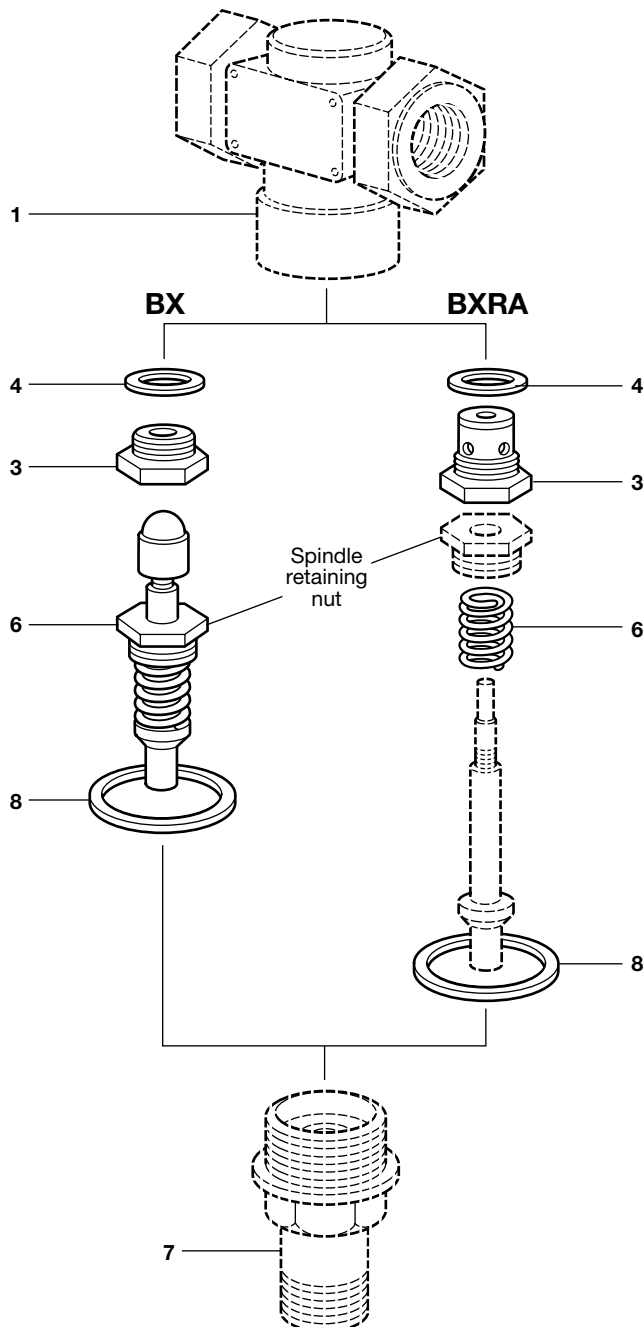
Available spares



Valve seat assembly	BX valve	3, 4, 6, 8
	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.

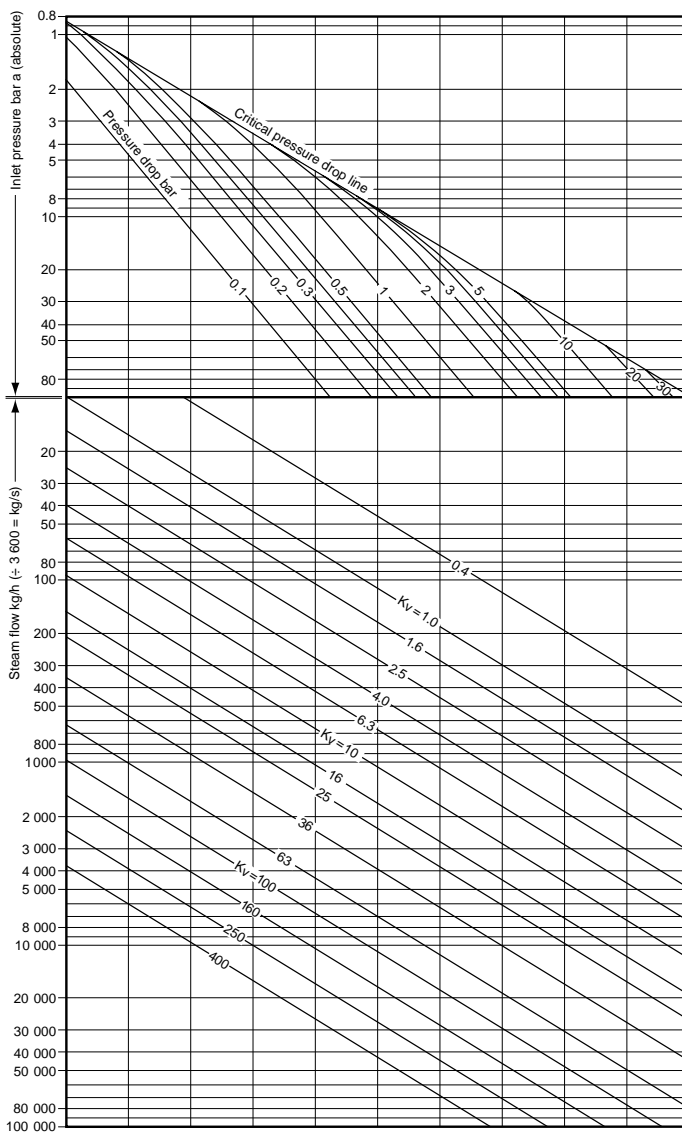
Example: 1 - Valve seat assembly for a ½" BXRA self-acting control valve.

**Recommended tightening torques**

Item no.	Part	 or  mm	N m
3	Valve seat	18 A/F	40 - 50
7	Bonnet		40 - 50

Saturated steam sizing chart

This sizing chart is empirical and should not be used for critical applications



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