CH Issue 4

spirax sarco

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

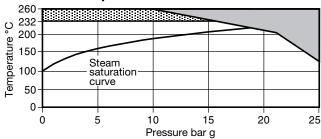
BX Normally open, single seat with four different orifice sizes: BX2, BX3, BX4 and BX6.

BXRA Normally closed, single seat.

Sizes and pipe connections

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

Pressure/temperature limits



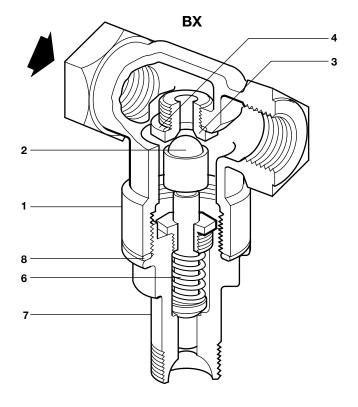
The product **must not** be used in this region.

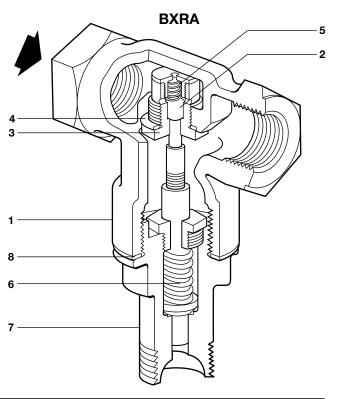
When the valve is operated with a self-acting temperature control system in this region, a Spirax Sarco spacer must be used.

Body design conditions		
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 maxim	um cold hydraulic test pressure o	f 38 bar a

Materials

No.	Part	Material	
1	Body	Gunmetal CC49	1 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 exfolia	ated graphite





K_V values

BX2	вхз	BX4	BX6	BXRA
0.38	0.64	1.03	1.65	0.59

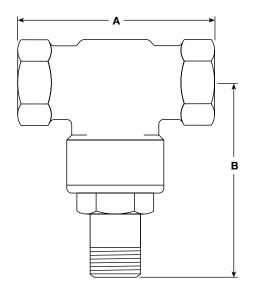
For conversion: $C_V (UK) = K_V \times 0.963$ $C_V (US) = K_V \times 1.156$

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	Α	В	Weight
1/2"	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 partsThe spare parts available are shown in solid outline. Parts drawn in broken line are not supplied as spares.

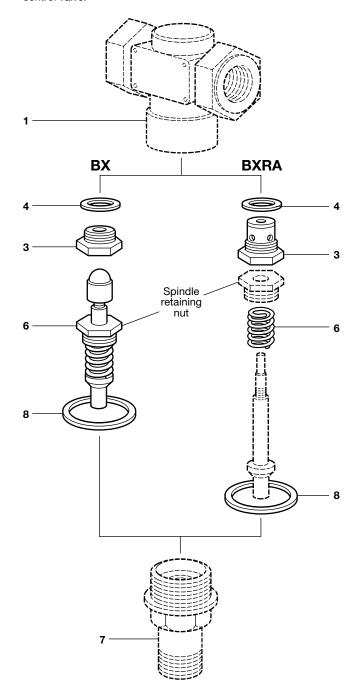
Available spares

Valve seat assembly	BX valve	3, 4, 6, 8	
valve scat 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 1/2" 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

