



BCV30 3/4" Blowdown Control Valve

- Electrohydraulically actuated valve with manual override
- Cast steel body with stainless steel internals
- Articulated valve cone ensures tight shut-off and correct alignment
- Spring closure on power failure
- Valve position indicator

Description

The Spirax Sarco BCV30 is an electrohydraulically actuated control valve for the blowdown of steam boilers or other high pressure drop, low flowrate applications.

It is generally used with a blowdown controller as part of an auto-matic TDS control system.

The flowrate is adjusted by limiting the spindle stroke to regulate the number of orifices that are uncovered.

The valve, which is supplied adjusted to its low flowrate setting of 0.4" stroke, is especially designed to minimize seat erosion and ensure consistent tight shut-off.

It can be adjusted to 0.6" stroke for medium flowrates, or to 0.8" stroke for high flowrates, by repositioning the internal cam. A valve position indicator is provided.

The valve can be opened manually by turning the actuator hand-wheel clockwise.

A 1/4" BSP tapping is provided for a sample cooler.

Full installation, adjustment and maintenance information is provided with the valve.

Sizes and pipe connections

3/4" Flanged ANSI 300

Operation

The valve is spring loaded to the closed position.

When power is applied to the actuator the valve opens to the position set by the internal limit switch.

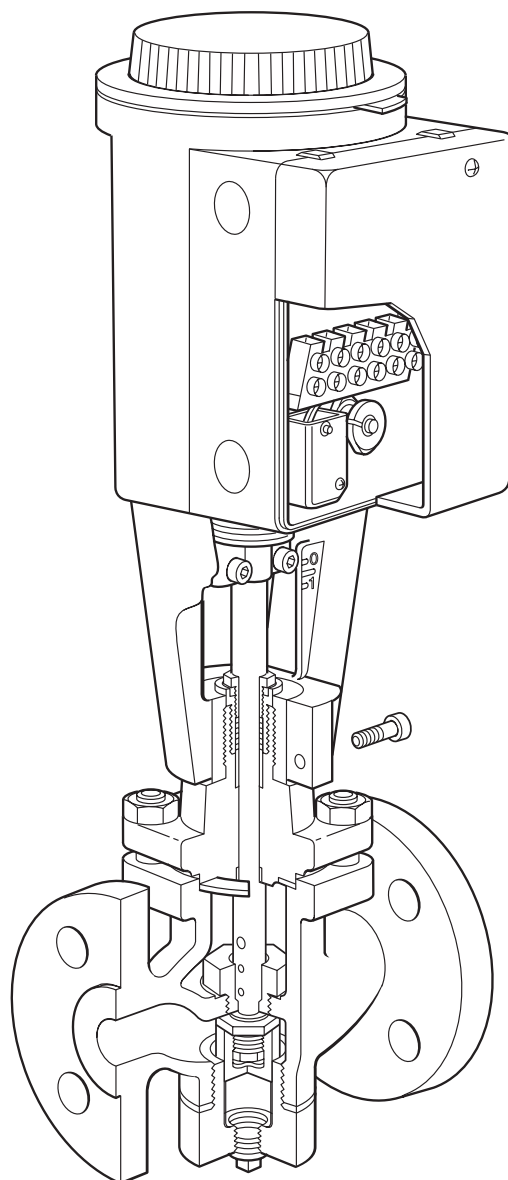
Limiting conditions

Maximum pressure	464 psi g (32 bar g)
Maximum temperature	462 °F (239 °C)
Maximum ambient temperature	122 °F (50 °C)
Protection rating	IP54

Outdoor installation is not recommended without additional protection.

Electrical data

230 V version	187 - 264 V	50 - 60 Hz
24 V version	19.2 - 28 V	50 - 60 HZ
Power consumption	15 VA	



Approval (24V version)

UL	UL-429
United States Standard	Electrically operated

ULC	C22.2 No. 139-1982
Canadian Standard	Electrically operated valves

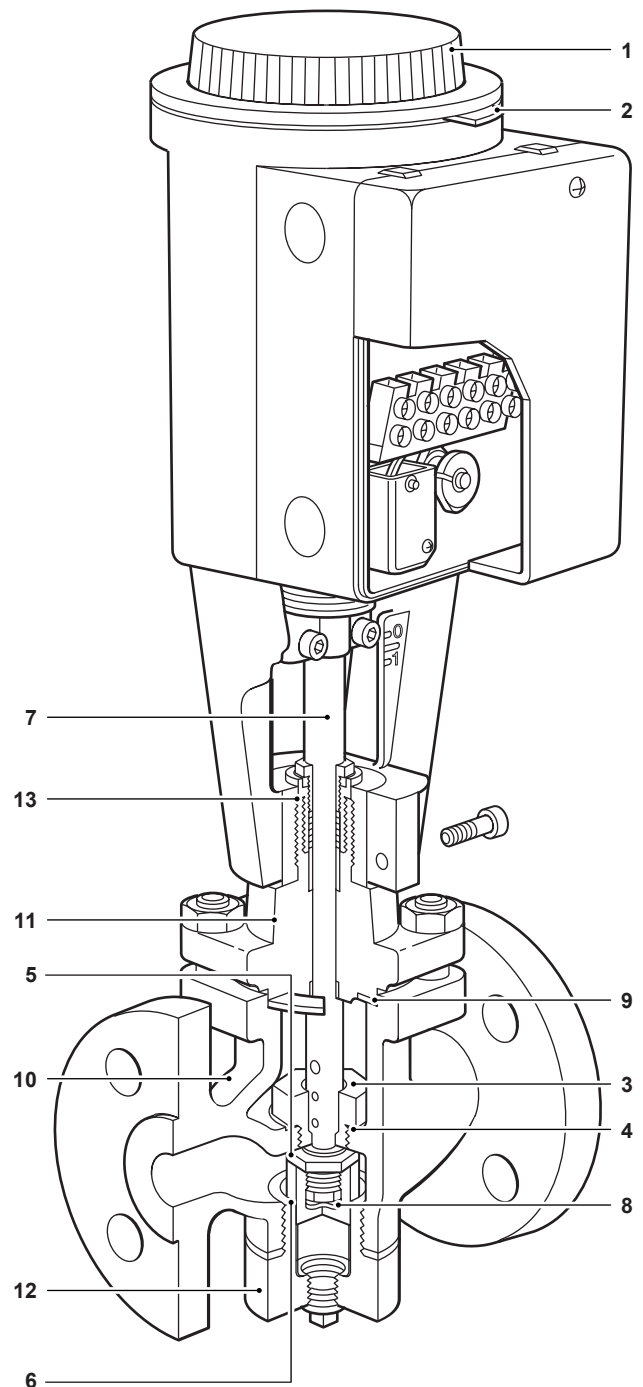
Blowdown valve capacity in lb/h (kg/h)

Boiler pressure		Low flowrates		Medium flowrates		High flowrates	
psi g (bar g)		0.4" stroke (10mm)		0.6" stroke (15 mm)		0.8" stroke (20 mm)	
80	(5.5)	880	(400)	1210	(549)	1900	(862)
102	(7)	1015	(460)	1565	(710)	2540	(1152)
145	(10)	1260	(572)	2100	(953)	3310	(1501)
218	(15)	1540	(699)	2540	(1111)	3640	(1651)
290	(20)	1720	(780)	2760	(1211)	3750	(1701)
464	(32)	2075	(941)	3090	(1402)	3970	(1801)

Materials

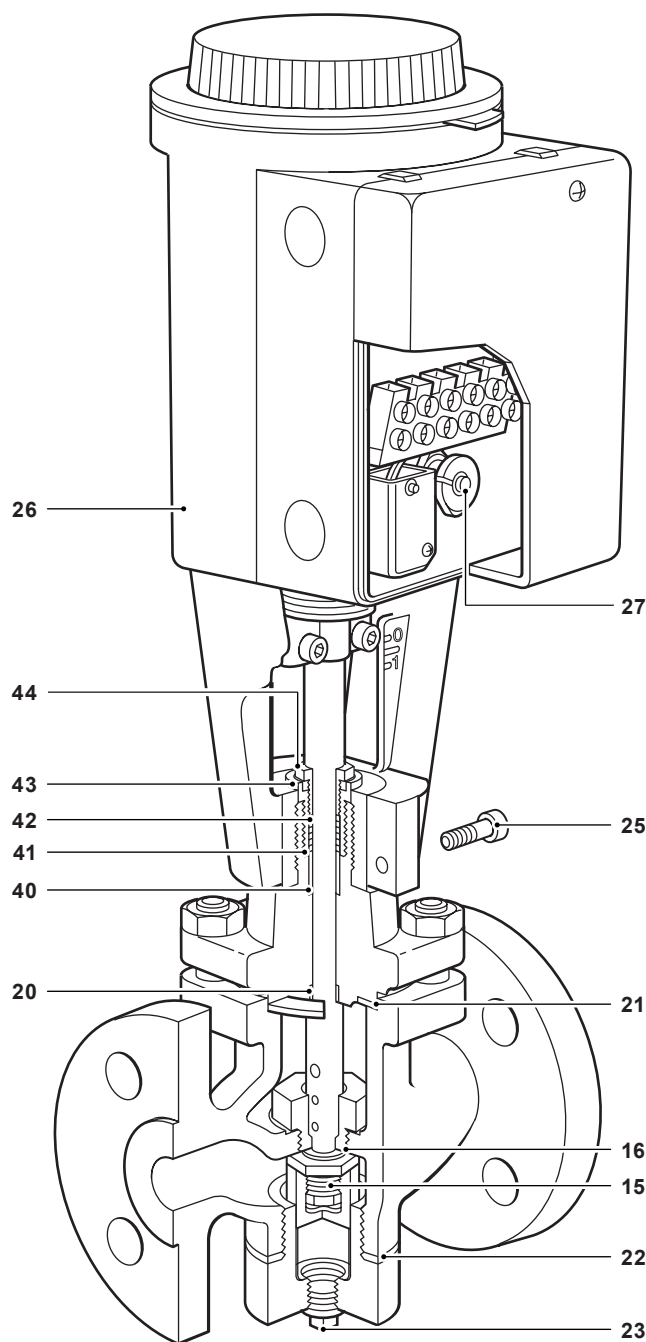
No.	Description	Material	
1	Actuator handwheel		
2	Manual indicator		
3	Seat	Martenistic stainless steel	Type 431
4	Washer (seat)		
5	Valve cone	Martenistic stainless steel	Type 431
6	Cap		
7	Stem		
8	Wave spring		
9	Gasket		
10	Body	Cast carbon steel	DIN 17245 GS-C25
11	Bonnet	Forged steel carbon	DIN 17234 C 22.8
12	Bottom Cover	Carbon steel	BS 907 230 M07
13	Gasket		

For clarity, the materials table is continued on the next page



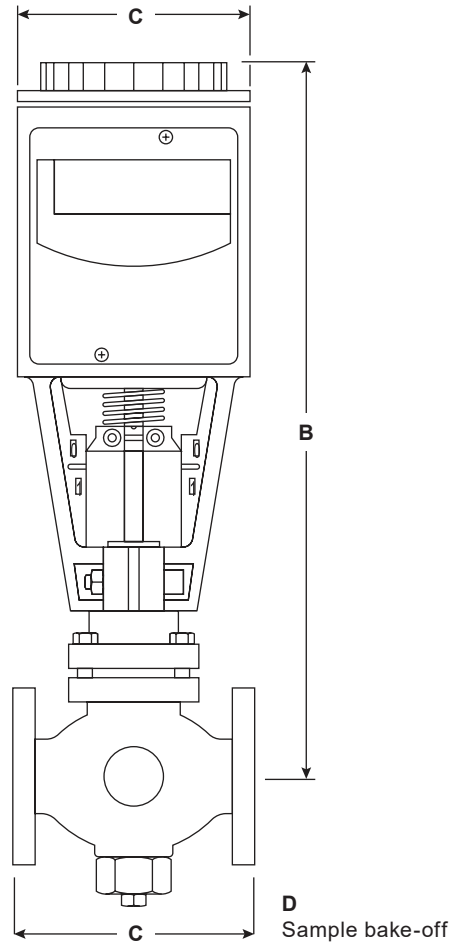
Materials (continued)

No.	Description	Material
15	Plug	
16	Gasket	
20	Guide bush	
22	Gasket	
23	Plug 1/4" BSP	
25	Clamping screw	
26	Actuator (without limit switch assembly)	
27	Limit switch assembly	
40	Bottom support ring	
41	Graphite stem seal set	
42	Top support ring	
43	Stuffing box	Martenistic stainless steel Type 431
44	Gland nut	



Dimensions/Weights (approximate) in inches (mm) and pounds (kg)

Size	A	B	C	D	Weight
3/4"	6 (152)	15.4 (391)	5 (127)	1/4" BSP	20 (9.1)



Safety Information

WARNING

Your attention is drawn to Safety Information Leaflet IM-GCM-10, as well as to any National or Regional regulations. This product is designed and constructed to withstand the forces encountered during normal use. Use of the product for any purpose other than a blowdown control valve could cause damage to the product and may cause injury or fatality to personnel.

Installation

This document does not contain sufficient information to install the product safely. See the Installation and Maintenance Instructions provided with every unit. Do not install the valve outside without additional weather protection.

Maintenance

It is recommended that the valve is examined annually and parts replaced if necessary. For detailed maintenance instructions, see Installation and Maintenance Instructions (IM-P403-15).

How to order

Example: Spirax Sarco BCV30 blowdown valve, 24V, flanged 3/4" ANSI 300, and approved by Underwriters Laboratory as a Listed Product.

Spare parts

Spare parts are available as listed below. No other parts are available as spares.

Gasket and packing set

24V (UL) Stock No. 4034480	4, 9, 10, 11, 12, 13, 16, 20, 22
115/230V Stock No. 4034482	4, 9, 13, 16, 22, 41

Valve cone, seat and stem set

24V (UL) Stock No. 4034481	3, 5, 6, 7, 8, 15
115/230V Stock No. 4034483	3, 5, 6, 7, 8, 15, 16, 45 + Gasket and packing set

Adjustable stuffing box kit

115/230V Stock No. 4034484	40, 42, 43, 44 + Gasket and packing set
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Note: The adjustable graphite seal system is not currently approved for use on the UL Listed valve.

Actuator with limit switch assembly

115V	Stock No. 4034466
230V	Stock No. 4034467
24V (UL)	Stock No. 4034468

Actuator limit switch assembly:

24 (UL) /115/230V versions	Stock No. 4034419
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