

BCV 30 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 automatic 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 .4" stroke, is especially designed to minimize seat erosion and ensure consistent tight shut-off.

It can be adjusted to .6" stroke for medium flowrates, or to .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 handwheel 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 psig (32 barg)
Maximum temperature	462°F (239°C)
Maximum ambient temperature	122°F (50°C)
Protection rating	(IP54)

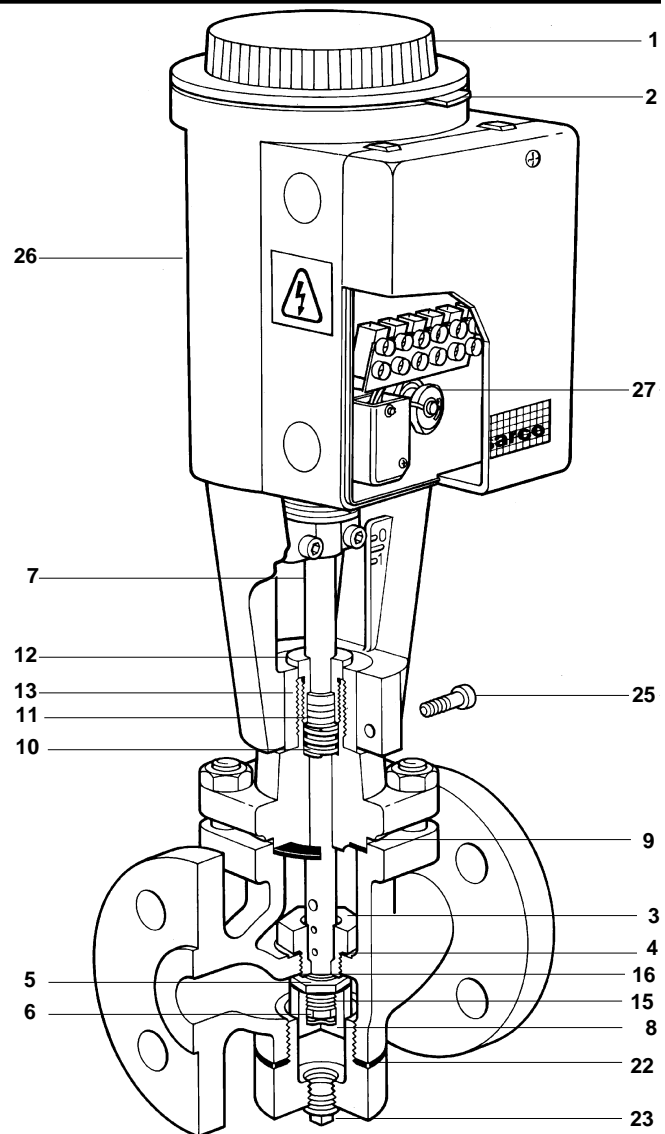
Outdoor installation is not recommended without additional protection.

Electrical data

230 V version	187 V - 264 V	50-60 Hz
115 V version	99 V - 121 V	50-60 Hz
24 V version	19.2 V - 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



No. Description

1	Actuator handwheel
2	Manual indicator
3	Seat
4	Washer (seat)
5	Cone
6	Cap
7	Stem
8	Wave spring
9	Gasket
10	Spring
11	Chevron seal set

No. Description

12	Stuffing box
13	Gasket
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

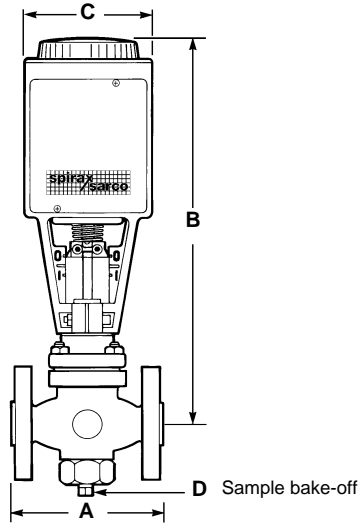
BCV 30 Blowdown Control Valve

Materials

Valve		
Body	Cast carbon steel	DIN 17245 GS-C25
Bonnet	Forged steel carbon	DIN 17234 C 22.8
Stuffing box	Martenistic stainless steel	Type 431
Bottom Cover	Carbon steel	BS 907 230 M07
Internals	Martenistic stainless steel	Type 431 (Valve cone and seat hardened)
Actuator		
Casing	Die cast Aluminum	
Cover	ABS	
Cylinder/piston	Aluminum	

Dimensions/Weights (approximate) in inches and lbs.

Size	A	B	C	D	Weight
3/4"	6"	15-3/8"	5"	1/4" BSP	20 lb.



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 & 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 & 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
----------------------------	--------------------------------------

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

Safety Information

WARNING

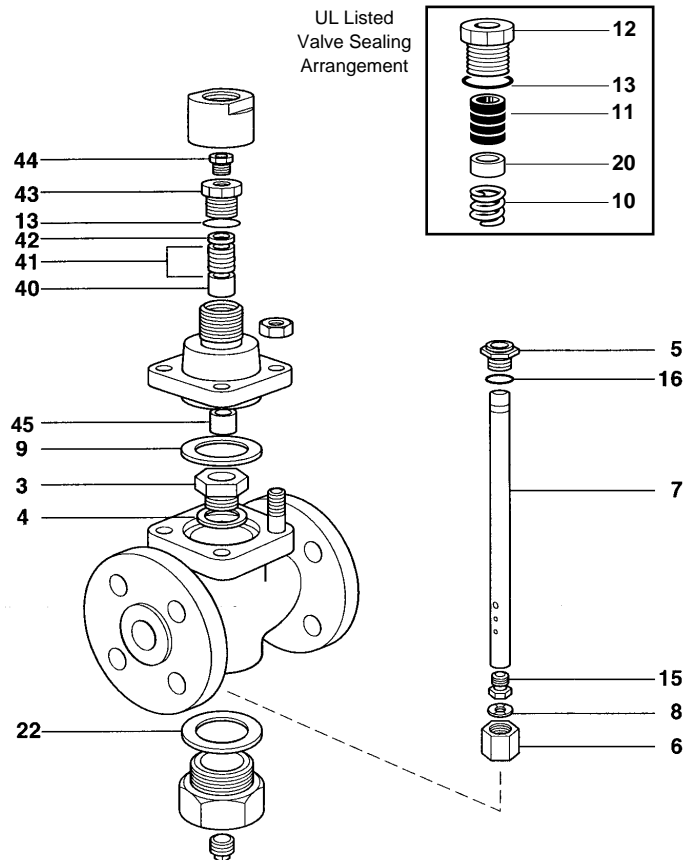
Your attention is drawn to Safety Information Leaflet IM-GCM-10, as well as to any National or Regional regulations. This product is designed and constructed to withstand the forces encountered during normal use. Use of the product for any purpose other than a blowdown control valve could cause damage 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 & 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 & Maintenance Instructions (IM-P403-15).



Blowdown Valve Capacity in lb/h

Boiler Pressure psig	Low Flowrates .4" stroke (10mm)	Medium flowrates .6" stroke (15 mm)	High flowrates .8" stroke (20 mm)
80	880	1210	1900
102	1015	1565	2540
145	1260	2100	3310
218	1540	2540	3640
290	1720	2760	3750
464	2075	3090	3970