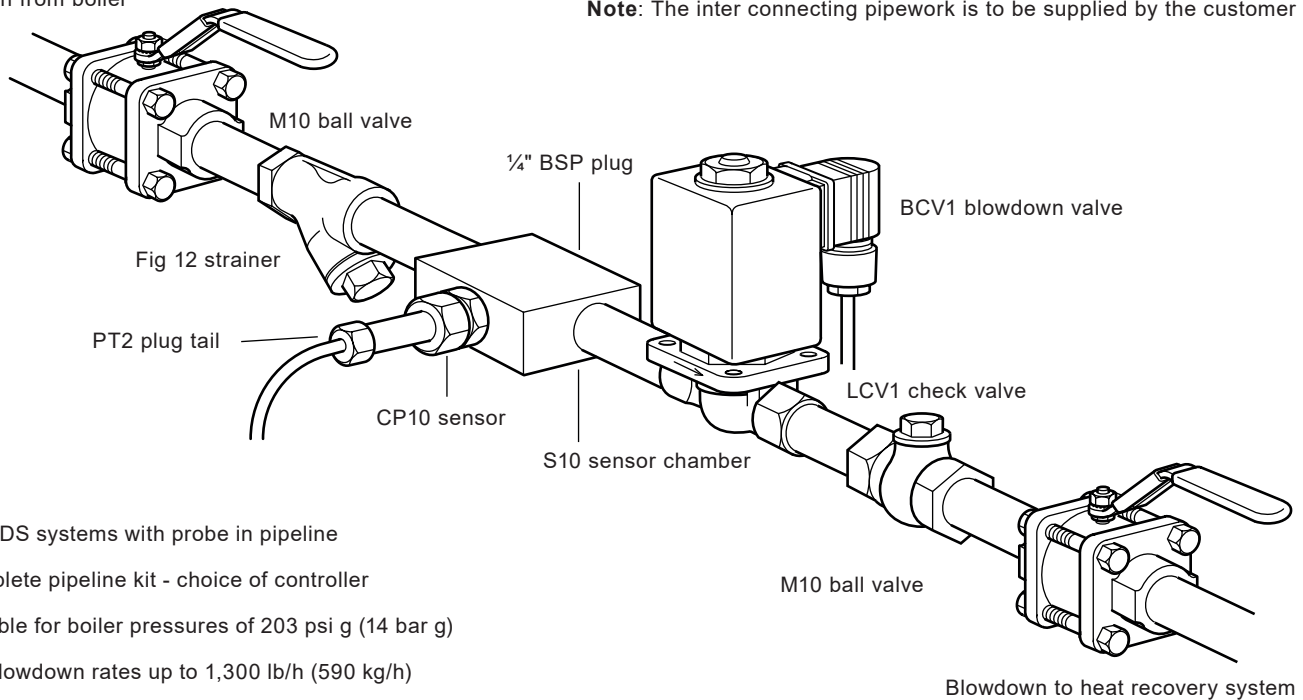




BCS1 Blowdown System Pipeline Set

Blowdown from boiler

Note: The inter connecting pipework is to be supplied by the customer



- For TDS systems with probe in pipeline
- Complete pipeline kit - choice of controller
- Suitable for boiler pressures of 203 psi g (14 bar g)
- For blowdown rates up to 1,300 lb/h (590 kg/h)

Description

The BCS1 pipeline set is a kit of components selected to enable straightforward installation of a TDS control system where the probe assembly is to be mounted in the pipeline, rather than directly in the boiler shell.

The BCS1 pipeline set consists of the following items:

- 1 x S10 sensor chamber 1/2" NPT.
- 1 x CP10 sensor and gasket.
- 1 x PT2 plug tail. (3/8" BSP)
- 1 x Sensor chamber plug 1/4" BSP.
- 1 x BCV1 solenoid valve 120 V.
- 1 x LCV1 check valve 1/2" NPT.
- 1 x y type cast iron strainer (1/2" NPT, 20 Mesh).
- 2 x M10 ball valves 1/2" NPT.

Alternative products are available, but not as part of a kit.

A controller is also required, and should be selected from the Spirax Sarco range.

The BC3150 and BC3250 are all suitable, and offer a choice of features. Full details are available in separate literature.

Main features are listed on page 2.

Materials

S10 sensor chamber	Stainless steel	BS 970 303 S31
CP10 sensor body and pin	Stainless steel	BS 970 303 S31
PT2 plug tail	Brass body	
Sensor chamber plug	Carbon steel	
BCV1 solenoid valve	Brass body, stainless steel seat, PTFE seal.	
LCV1 check valve	Bronze	
Strainer	Cast iron	
M10 ball valve	Zinc plated forged carbon steel	

See individual product literature for further information.

Optional Blowdown Controllers

BC3150 - Principal features:

- Blowdown controller with temperature compensation.
- Type approved as a TDS limiter and controller.
- Works with CP10, CP30 or CP32 conductivity probes.
- Wide range: 1-9990 µS/cm or ppm – (x1, x 10, x 100 x 1000).
- LCD display with direct probe condition indicator.
- Infrared communications. - UL and TÜV approved

BC3250 - Principal features:

- Blowdown controller with bottom blowdown timer.
- Multi-voltage 110 Vac to 240 Vac.
- UL and TÜV approved.
- Display in µS/ cm or ppm.
- LCD graphics display of PV and sequential trend graph.
- Filter for turbulent conditions.
- Infrared communications. - Diagnostic / test facility.
- 0/4 - 20 mA output.
- EIA 485 / Modbus communications.

Limiting conditions

Maximum boiler pressure 203 psi g (14 bar g).

Capacities

The capacity of the system is limited by the blowdown valve capacity at various boiler pressures.

Boiler pressure psi g (bar g)	Low to medium flowrates (kg/hr) (Standard setting*)	Medium to high flowrates (kg/hr) (High setting*)
14.5 (1)	60	175
29.0 (2)	85	250
58.0 (4)	115	350
87.0 (6)	130	385
116.0 (8)	150	445
145.0 (10)	165	495
203.0 (14)	200	590

*At 'Standard setting' the controller is set to open the valve for 10 seconds every 30 seconds.

When blowing down at 'High setting' the controller opens the valve continuously.

Weight

Boxed kit approximately 8.2 lbs (3.7 kg).

Electrical data

BCV1 solenoid (blowdown) valve	
Voltage range	209 V to 264 V
Frequency range	50 to 60 Hz
Power consumption	40 VA (inrush)
	16 VA/10 W (hold)
Protection rating	IP65

Safety information

WARNING: Your attention is drawn to Safety Information Leaflet IM-GCM-10, as well as to any National or Regional regulations. The products contained in the BCS1 pipeline set are designed and constructed to withstand the forces encountered during normal use. Use of the BCS1 pipeline set other than for the control of TDS could cause damage to the products and may cause injury or fatality to personnel. The BCV1 valve and CP10 sensor contain PTFE which can give off toxic fumes if exposed to excessive heat.

Installation

This document does not contain sufficient information to install the product safely. See the Installation and Maintenance Instructions provided with each kit.

Available spares

Armature and spring set for BCV1 blowdown valve (kit).
Stock No. 4034080

How to order

Example: 1 off Spirax Sarco BCS1 pipeline set.