



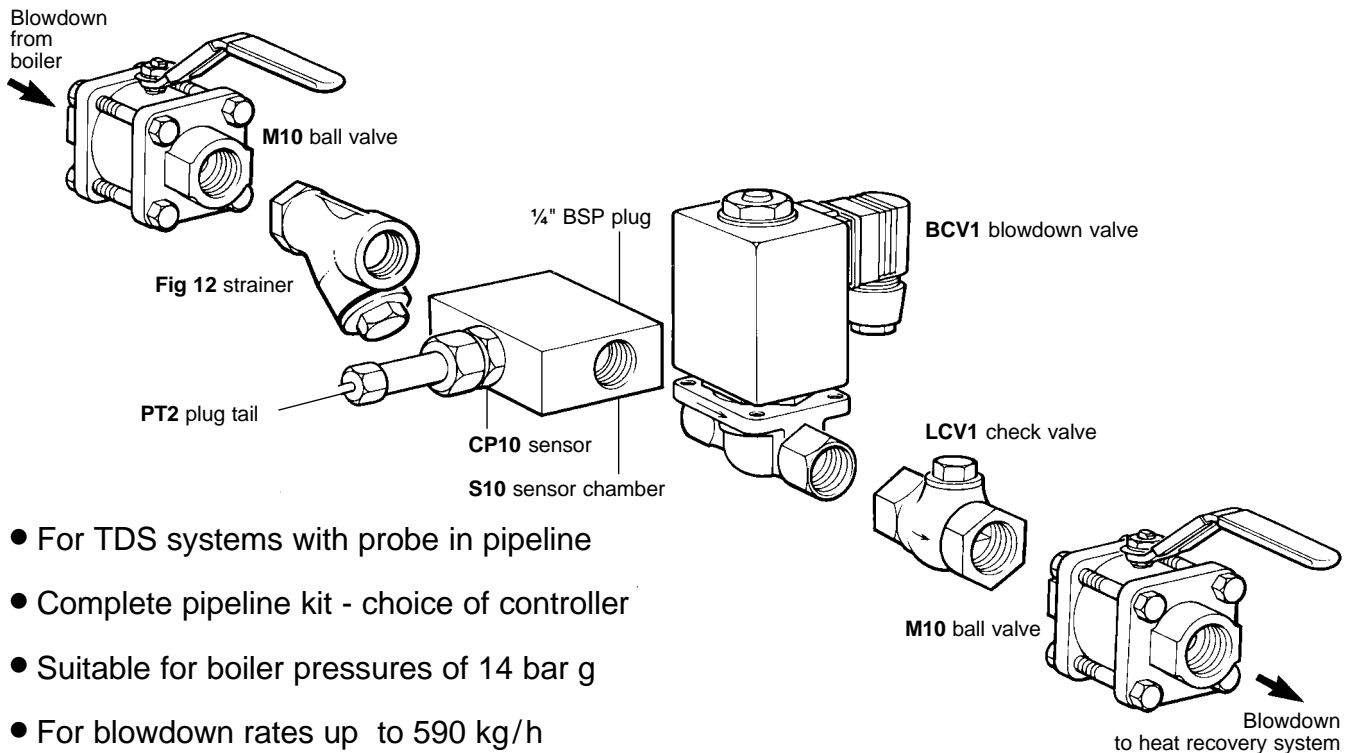
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# spirax sarco

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AB Issue 3

## BCS1 Pipeline Set



- For TDS systems with probe in pipeline
- Complete pipeline kit - choice of controller
- Suitable for boiler pressures of 14 bar g
- For blowdown rates up to 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" BSP.
- 1 x CP10 sensor and gasket.
- 1 x PT2 plug tail.
- 1 x Sensor chamber plug 1/4" BSP.
- 1 x BCV1 solenoid valve 1/2" BSP 230 V.
- 1 x LCV1 check valve 1/2" BSP.
- 1 x Fig 12 SG iron strainer 1/2" BSP.
- 2 x M10 ball valves 1/2" BSP.

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 BC1100, BC3200 and BC3210 are all suitable, and offer a choice of features. Full details are available in separate literature. Main features are listed opposite:-

### 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	
Fig 12 strainer	SG iron	
M10 ball valve	Zinc plated forged carbon steel	
See individual product literature for further information.		

### BC1100

- DIN rail or chassis plate mounting.
- LED indication of blowdown status.
- Potentiometer adjustment of set point and calibration.
- Choice of purge duration.
- 0-20 or 4-20 mA output.
- Selectable ranges (ppm or µS/cm).

**Also available:-** Wall-mounting plastic enclosure with DIN rail.

### BC3200

- Wall mounting.
- Two button commissioning, calibration, and operation.
- Selectable ranges (ppm or µS/cm).
- Four digit LED display of TDS and system status.
- High TDS alarm relay output.
- 0-20 or 4-20 mA output.
- Patented automatic probe cleaning circuit.
- Temperature compensation facility.
- Selectable security feature.
- Optional front cover lock available.

### BC3210

- As BC3200, but boiler panel mounting.
- Optional lockable cover available.

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## Limiting conditions

Maximum boiler pressure 14 bar g.

## Capacities

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

Boiler pressure (bar g)	Low to medium flowrates (Standard setting*)	Medium to high flowrates (High setting*)
1	60	175
2	85	250
4	115	350
6	130	385
8	150	445
10	165	495
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 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.