

510

## Continuous Blowdown Ball Valve 510 PN 16 DN 15

### Purpose and Application

Ball valve with electric actuator for discharging boiler blowdown from steam boilers. The continuous blowdown ball valve 510 is designed for use with the boiler blowdown controller LRR 1-50, LRR 1-52 or the conductivity switch LRS 1-50 and the conductivity electrodes LRG 16-9 or LRG 16-4. The equipment combination is designed for use in automatically operated installations, e. g. in compliance with the directives for operation without constant supervision to TRD 604 EN 12952 and EN 12953.

### Design

The continuous blowdown ball valve 510 consists of a maintenance-free three-piece stainless steel ball valve with an integrated electric actuator.

### Design

Continuous blowdown ball valve 510 with screwed sockets BSPT 1/2".

### Function

The TDS (= total dissolved solids) content of the boiler water is monitored by the conductivity controller by means of a conductivity electrode. When the set point adjusted on the conductivity controller is exceeded in the boiler water (e. g. due to increased steam outlet), the conductivity controller switches the relay for the valve position to "OPEN". The degree of opening and consequently the flowrate of the ball valve in "OPEN" position can be adjusted with a control cam on the servomotor.

### Technical Data

#### Service pressure

10 barg at 185°C

#### Kvs value

10.2 m³/h

#### Nominal size

BSPT 1/2", DN 15

#### End connection

Screwed sockets

#### Material

1.4401

#### Actuator

EF 0.7

#### Mains voltage

230V, 50/60 Hz

#### Power consumption

4 VA

#### Actuator speed

60 sec. for 90°

#### Torque

15 Nm

#### Ambient temperature

Max. 60°C

#### Protection

IP 65

#### Actuator case material

Housing: Die-cast aluminium

Cover: Plastic

#### Weight

approx. 2.5 kg

### Important Notes

The continuous blowdown valve must be installed in the continuous blowdown line of the boiler (see example of installation).

**Continuous Blowdown  
Ball Valve 510  
PN 16 DN 15**

**Order & Enquiry Specification**

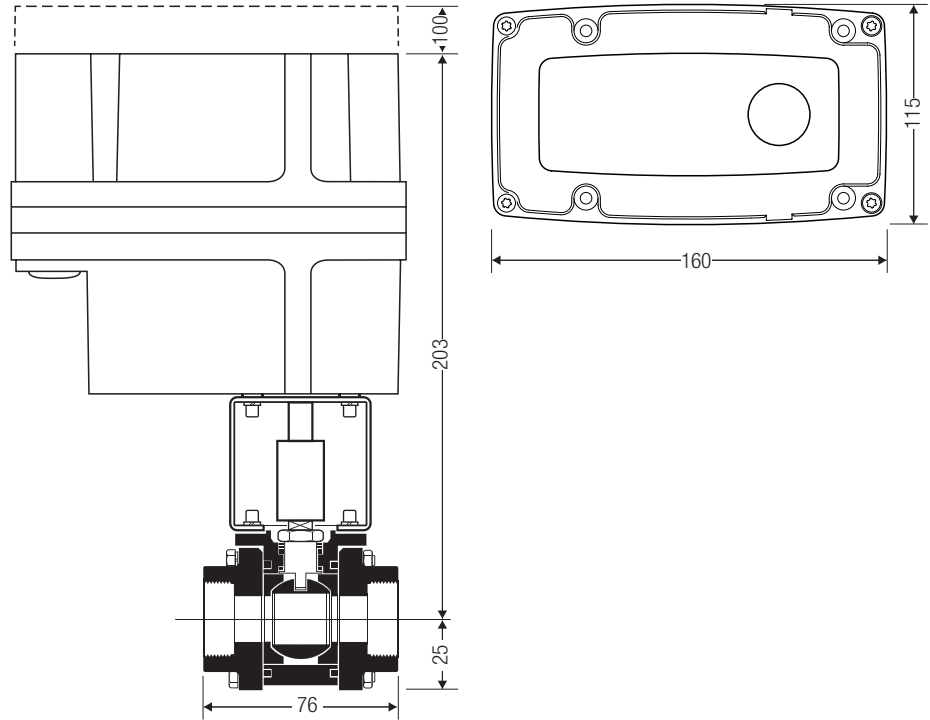
GESTRA Continuous blowdown ball valve  
Continuous blowdown ball valve 510  
Acceptance inspection.....  
Length of installation 76 mm

The following test certificates can be issued on request, at extra cost: In accordance with EN 10204-2.1, -2.2 and -3.1B.  
All inspection requirements have to be stated with the order. After supply of the equipment certification cannot be established. For tests and inspection charges please consult us.

**Ancillaries**

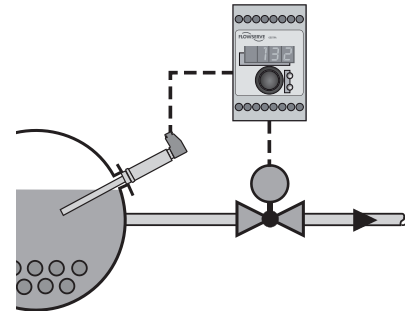
Conductivity controller LRR 1-50, LRR 1-52  
Conductivity switch LRS 1-50  
Conductivity electrodes LRG 16-9, LRG 16-4

**Dimensions**

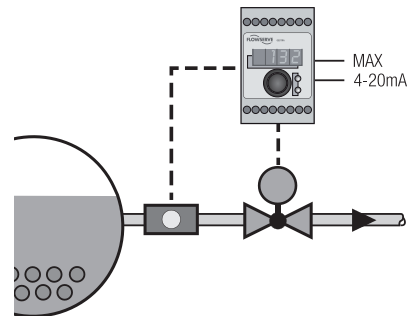


**Examples of installation**

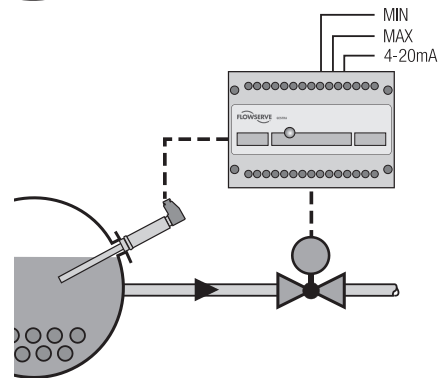
Example 1:  
Conductivity electrode LRG 16-4  
Conductivity switch LRS 1-50  
Continuous blowdown ball valve 510



Example 2:  
Conductivity electrode LRG 16-9  
Continuous blowdown controller LRR 1-50  
Continuous blowdown ball valve 510



Example 3:  
Conductivity electrode LRG 16-4  
Continuous blowdown controller LRR 1-52  
Continuous blowdown ball valve 510



Supply in accordance with our general terms of business.

**GESTRA AG**

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