

## SAMPLE COOLERS SC32 and SC132

### DESCRIPTION

The ADCA SC32 and SC132 sample coolers are specially designed to cool samples of boiler water or steam for analysis.

Sample coolers prevent steam flashing-off from hot pressurised liquid samples, which can be dangerous and may result in an incorrect sample.

These devices may be used for boiler water analysis and other sampling or cooling applications compatible with the construction materials.

### MAIN FEATURES

Corrosion-resistant body and internals.

Self draining sample (top inlet, bottom outlet).

**OPTIONS:**

- Sample inlet valve.
- Cooling water inlet valve.
- Temperature indicator.
- Bolted cover.
- Different connection sizes and materials on request.
- Double coil high pressure design for larger capacities.

**USE:** Steam boilers and hot water systems.

**AVAILABLE MODELS:** SC32 and SC132 – stainless steel body and coil.

**SIZES AND CONNECTIONS:**

- Cooling water inlet/outlet: 1/2" on body (ISO 7 Rp or NPT).
- Sample tube inlet/outlet: 8 mm O/D.

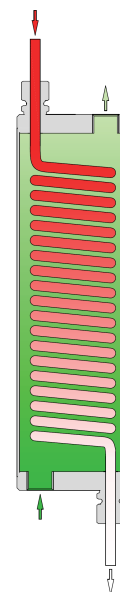
**INSTALLATION:**

- Vertical installation.
- See IMI – Installation and maintenance instructions.

**OPERATION:**

- Cooling water must be at its maximum flow before opening or closing the sample inlet valve, in order to avoid the risk of scalding.
- Sample valve must also be closed before opening the cooling water valve.
- Sample coil should always be completely immersed in water.

**PERFORMANCE:** 30 to 60 kg/h of sample liquid at  $\approx 30$  °C with 1 m<sup>3</sup>/h of inlet cooling water at 15 °C. For other pressures, temperatures and/or certified values, consult manufacturer.



#### CE MARKING – GROUP 2 (PED – EUROPEAN DIRECTIVE)

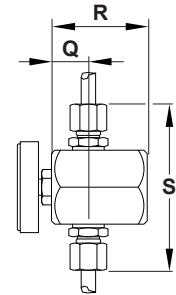
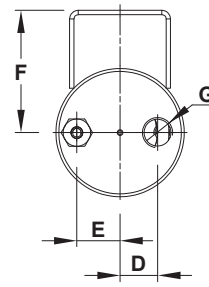
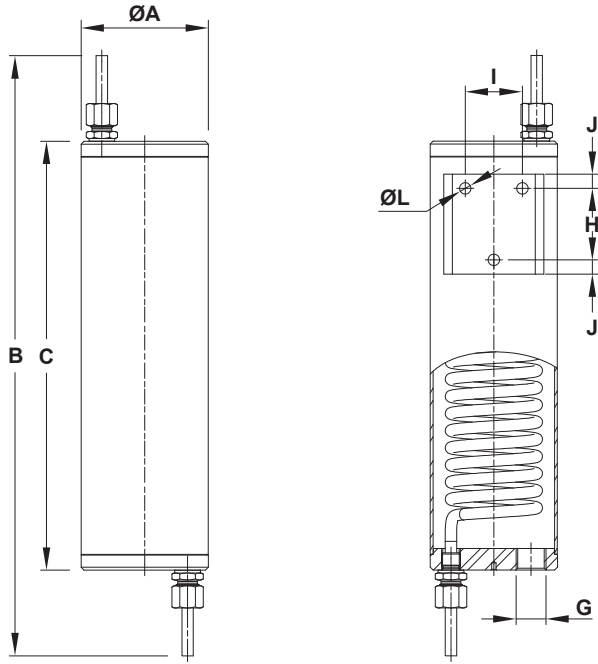
| PS 20 bar | CATEGORY |
|-----------|----------|
| All sizes | SEP      |

#### BODY LIMITING CONDITIONS

| MODEL         | BODY          |               | COIL          |               |
|---------------|---------------|---------------|---------------|---------------|
|               | ALLOW. PRESS. | RELATED TEMP. | ALLOW. PRESS. | RELATED TEMP. |
| SC32<br>SC132 | 20 bar        | 120 °C        | 110 bar       | 400 °C        |
|               |               |               | 90 bar        | 450 °C        |

Minimum operating temperature: - 10 °C.

Design code: AD-Merkblatt.

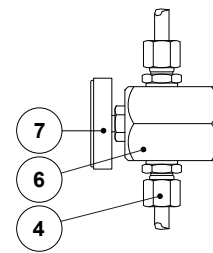
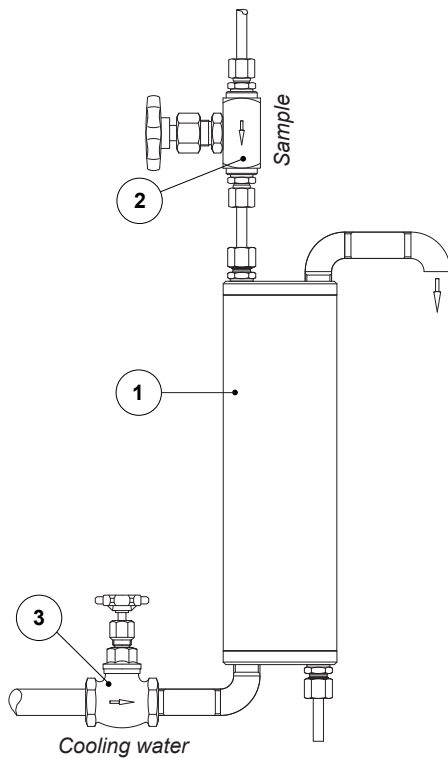


*Optional temperature indicator*

| EQUIPMENT              |                     |
|------------------------|---------------------|
| DESIGNATION            | MATERIAL            |
| Body                   | AISI 304 / 1.4301   |
| Cover                  | AISI 304 / 1.4301   |
| Coil                   | AISI 316L / 1.4404  |
| Compression fitting    | AISI 316Ti / 1.4571 |
| Discharge tube         | AISI 316L / 1.4404  |
| Thermometer connection | AISI 316 / 1.4401   |

| DIMENSIONS (mm) |    |     |     |    |    |    |      |    |    |    |    |    |    |    |           |
|-----------------|----|-----|-----|----|----|----|------|----|----|----|----|----|----|----|-----------|
| MODEL           | ØA | B   | C   | D  | E  | F  | G    | H  | I  | J  | ØL | Q  | R  | S  | WGT. (kg) |
| SC32            | 90 | 420 | 300 | 26 | 30 | 85 | 1/2" | 50 | 40 | 10 | 8  | 20 | 53 | 98 | 3,9       |
| SC132           | 90 | 520 | 400 | 26 | 30 | 85 | 1/2" | 50 | 40 | 10 | 8  | 20 | 53 | 98 | 4,8       |

## TYPICAL INSTALLATION



*Optional temperature indicator*

| EQUIPMENT |                                        |
|-----------|----------------------------------------|
| POS. No.  | DESIGNATION                            |
| 1         | Sample cooler                          |
| 2         | Sample inlet valve ADCA NV400 *        |
| 3         | Cooling water inlet valve ADCA GV32B * |
| 4         | Compression fitting (x2) 1/4" x 8 mm   |
| 6         | Thermometer connection                 |
| 7         | Bimetallic thermometer                 |

\* For operating conditions, check IS NV400.10 and IS GV32B.10.