

## SAMPLE COOLERS SC332, SC432 and SC532

### DESCRIPTION

The ADCA sample coolers were 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.

This device 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.  
Counter-current flow for better performance.

**OPTIONS:**            Sample inlet valve.  
                              Cooling water inlet valve.  
                              Temperature indicator.  
                              Bolted top plate.  
                              Different connection sizes and materials under request.

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

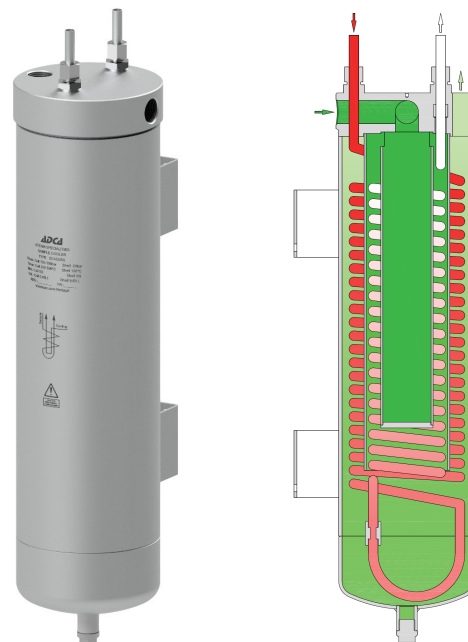
**AVAILABLE MODELS:**    SSC332/SS, SC432/SS and SC532/SS – stainless steel body and coil.  
All above models are available in high pressure versions, e.g. SC332H/SS

**SIZES AND CONNECTIONS:**    SC332 and SC332H:  
Cooling water inlet/outlet: 1/2" (ISO 7 Rp or NPT).  
Sample tube inlet/outlet: 10 mm O/D.  
SC432, SC532, SC432H and SC532H:  
Cooling water inlet/outlet: 3/4" (ISO 7 Rp or NPT).  
Sample tube inlet/outlet: 10 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 ≈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.



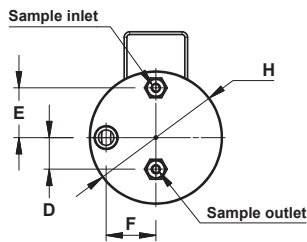
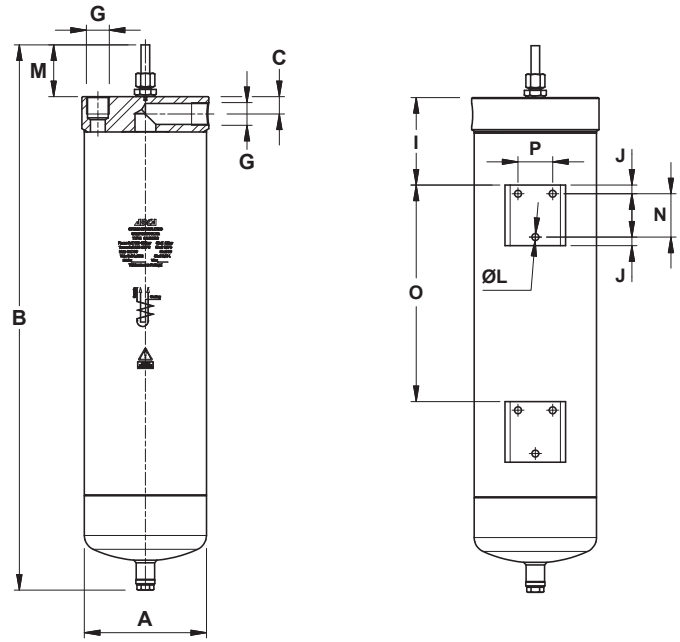
LIMITING CONDITIONS				
MODEL	BODY		COIL	
	ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.
SC332 SC432 SC532	20 bar	100 °C	130 bar	300 °C
			120 bar	400 °C
			110 bar	450 °C
			100 bar	500 °C

Minimum operating temperature: - 10 °C.  
Design code: AD-Merkblatt.

LIMITING CONDITIONS				
MODEL	BODY		COIL	
	ALLOW. PRESS.	RELATED TEMP.	ALLOW. PRESS.	RELATED TEMP.
SC332H SC432H SC532H	20 bar	100 °C	280 bar	300 °C
			268 bar	400 °C
			260 bar	450 °C
			245 bar	550 °C

Minimum operating temperature: - 10 °C.  
Design code: AD-Merkblatt.

MATERIALS	
DESIGNATION	MATERIAL
Body	AISI 304 / 1.4301 or AISI 316 / 1.4401
Covers	AISI 304 / 1.4301 or AISI 316 / 1.4401
Coil	AISI 316Ti / 1.4571
Compression fittings	AISI 316Ti / 1.4571
Discharge tube	AISI 316Ti / 1.4571



DIMENSIONS (mm)																
MODEL	A	B	C	D	E	F	G	H	I	J	L	M	N	O	P	WGT. (kg)
SC332/SS	89	665	15	18	35	35	1/2"	100	96	10	8	60	50	250	40	9
SC432/SS	141	631	20	35	55	55	3/4"	147	101	10	8	60	50	250	40	18,3
SC532/SS	141	731	20	35	55	55	3/4"	147	151	10	8	60	50	250	40	22,3

Remark: same dimensions for high pressure versions.

### TYPICAL INSTALLATION

MATERIALS	
POS. N°	MATERIAL
1	Sample cooler
2	Sample inlet valve ADCA NV400 *
3	Cooling water inlet valve ADCA GV32B *
4	Compression fittings (x2) 3/8" x 10 mm

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

