



A Dopak single coil, tube/shell type sample cooler is an effective and efficient heat exchanger. The compact design makes it easy to install, next to a Dopak sampling system mounted on a stainless steel support plate. It protects the sampling system against high temperatures and ensures safe sampling.

## 1 FEATURES

- Compact single coil design
- High cooling capacity
- A wide variety of exotic alloys is available for corrosion resistance

## 2 SPECIFICATIONS

Part number	Description	Connection process	Connection coolant	Tube/shell material
2011648	Dopak sample cooler	1/4" tube	3/8" F NPT	SS316 (L)
Maximum allowable working pressure (Coil):		235 bar @ 350 °C		
Minimum design metal temperature (Coil):		-48 °C @ 355 bar		
Maximum allowable working pressure (Jacket):		24 bar @ 148 °C		
Minimum design metal temperature (Jacket):		-48 °C @ 24 bar		



### 3 PERFORMANCE DATA

Approach temperature + cooling water inlet temperature = final sample temperature				
Flow rate cc/min	Sample temperature °C			Sample pressure drop (bar)
	149	260	371	
400	1	1	3	0,2
500	1	2	3	0,3
600	2	3	6	0,4
800	3	8	18	0,7
Approach temperature °C				
Typical performance data based on maximum cooling water at 12 l /minute				

Approach temperature + cooling water inlet temperature = final sample temperature				
Flow rate cc/min	Sample temperature °F			Sample pressure drop (psi)
	300	500	700	
400	1	2	5	3
500	2	3	6	4
600	3	5	10	6
800	5	14	32	10
Approach temperature °F				
Typical performance data based on maximum cooling at 3 GPM				

### 4 OPTIONS

- Temperature indicator
- (Throttling) Needle valve
- Block valves and / or drain valves
- Thermal relief valve
- Exotic alloy tube and shell material (Including but not limited to Monel, Hastelloy, (Super)Duplex, Alloy 625/825)

### 5 ALTERNATIVES

- ½" Single coil sample coolers
- Pipe spec. sample coolers (1/2", 3/4" or 1" size available)

**Note:**

Dopak sample coolers are exempt from CE marking per Pressure Equipment Directive (PED) 97/23/EC. The vessels are below or equal to the limits set forth in Article 3, Sections 1.1, 1.2, 1.3 and section 2 as applicable and are designed and manufactured in accordance with Sound Engineering Practice (SEP). Specifically, the vessels meet the general requirements of the ASME Section VIII, Division 1 Boiler And Pressure Vessel Code. The nameplate will bear the name of Dovanus B.V. and safety instructions will be included per Article 3, Section 3.

**For any other information required, please contact our sales department at Bergschenhoek, Houston (US) or your local Dopak representative.**

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