



#### VALVE AND FLOW CONTROL SPECIALISTS SERVICE AND RELIABILITY

No.DKSPC-1 September 2016

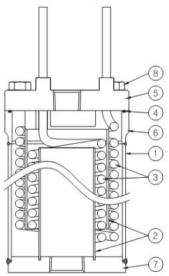
# **Sampling Cooler**

**DKSPC Series** 

- · For boiler water, steam, or condensate sampling
- · Stainless steel body and coil tube to minimize corrosion
- · Counter current flow for efficient cooling

# **DKSPC Series Sampling Cooler**





## **Features**

- · Single or double spiral coil tube
- · All stainless steel materials
- · Metal O-Ring endured high temperature sampling
- · Cooling inlet and outlet connections are available

#### Operation

It is important that there must be flowing before opening the inlet of sample valve.

The below condition shall be followed for safe operation and accurate sampling.

- 1) Open the inlet valve of coolant and check whether it comes out through the outlet or not.
- 2) To get the coolant sample, the flow rate should be adjusted while the inlet valve is being opened slowly. Generally, 25°C should be perfect.
- 3) The coolant should be flowed for a while before you receive the sample on the container. By doing this you can get the exact sample for the analysis.
- 4) When you have enough sample firstly close the inlet valve and then, close the inlet valve of coolant.
- 5) After close the inlet sample valve, the coolant will be possible to drop of connector while the sample in the coil is being drained.

# **Material of Construction**

Component	Materials	
1. Outer Pipe	Stainless Steel 304	
2. Inner Pipe	Stainless Steel 304	
3. Single / Double Coil Tube	ASTM A213 / A269 TP316	
4. Metal O-Ring	Stainless Steel 316L	
5. Upper Flange	Stainless Steel 304	
6. Lower Flange	Stainless Steel 304	
7. Bottom Plate	Stainless Steel 304	
B. Hex. Head Bolt	Stainless Steel	



























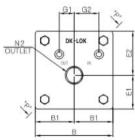


# **IDK-LOK** Sampling Cooler

### **Pressure-Temperature Ratings**

Part No.	Tube Description	Working Pressure for Cylinder	Working Pressure for Tube	Service Flow for below	Area
DKSPC-TS4T-12N8N-S	Tube O.D 1/4" x T0.035" (Single Spiral)	450psig@650°F 31 bar@343°C	3,400psig@1,000°F 234 bar@537°C	1,200 cc/min.	1.2 ft2
DKSPC-TD4T-12N8N-S	Tube O.D 1/4" x T0.035" (Double Spiral)	450psig@650°F 31 bar@343°C	3,400psig@1,000°F 234 bar@537°C	2,000 cc/min.	1.7 ft2
DKSPC-TS6T-12N12N-S	Tube O.D 3/8" x T0.049" (Single Spiral)	450psig@650°F 31 bar@343°C	2,500psig@700°F 172 bar@371°C	1,800 cc/min.	2.4 ft2
DKSPC-TD6T-12N12N-S	Tube O.D 3/8" x T0.049" (Double Spiral)	450psig@650°F 31 bar@343°C	2,500psig@700°F 172 bar@371°C	3,500 cc/min.	3.5 ft2

## **Ordering Information and Dimensions**



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<sup>\*</sup> Note: All dimensions shown are for reference only and are subject to change.

### **Maintenance and Spare Part Ordering**

#### Maintenance - Disassembly and Reassembly

- 1. Remove the hex. head bolts at upper flange. (required spanner size 3/8") and separate the upper flange and lower flange.
- 2. Remove the old metal o-ring and clean the each part by appropriate cleaning solution.
- 3. Replace the new metal o-ring and tighten the hex. head bolts.
- 4. Tighten torque are about 48 N·m for DKSPC-TS4T/DKSPC-TD4T (Tube O.D 1/4") and 61 N·m for DKSPC-TS-6T/DKSPC-TD6T(Tube O.D 3/8").
- 5. After reassembly, shell test shall be performed at new metal o-ring showing visible leak.

#### Spare Part Ordering- Material: Metal O-Ring

Part No.	Metal O-Ring Ordering No	
DKSPC-TS4T-8N12N-S	0000 05 1 67 5	
DKSPC-TD4T-8N12N-S	9ORG-85-1.6T-S	
DKSPC-TS6T-12N12N-S	9ORG-113-1.6T-S	
DKSPC-TD6T-12N12N-S		



# **Factory Test and Packaging**

VIEW "P" - "P"

Every Sampling Cooler is factory tested with nitrogen gas at working pressure for cylinder.

#### **IDK-LOK**° USA

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