



ANDERSON GREENWOOD

Product Overview

Our CT7 Gauge Siphon is designed to replace the old style 'pigtail' siphon, with savings of up to 50 percent. It provides a thermal barrier between hot vapors and the pressure gauge, switch, or transmitter. The CT7 makes a valuable contribution to the technique of installing and utilizing pressure gauges on steam, Dowtherm, and other hot vapor applications, as well as providing a seal barrier between a gauge or pressure measuring device.

Features and Benefits

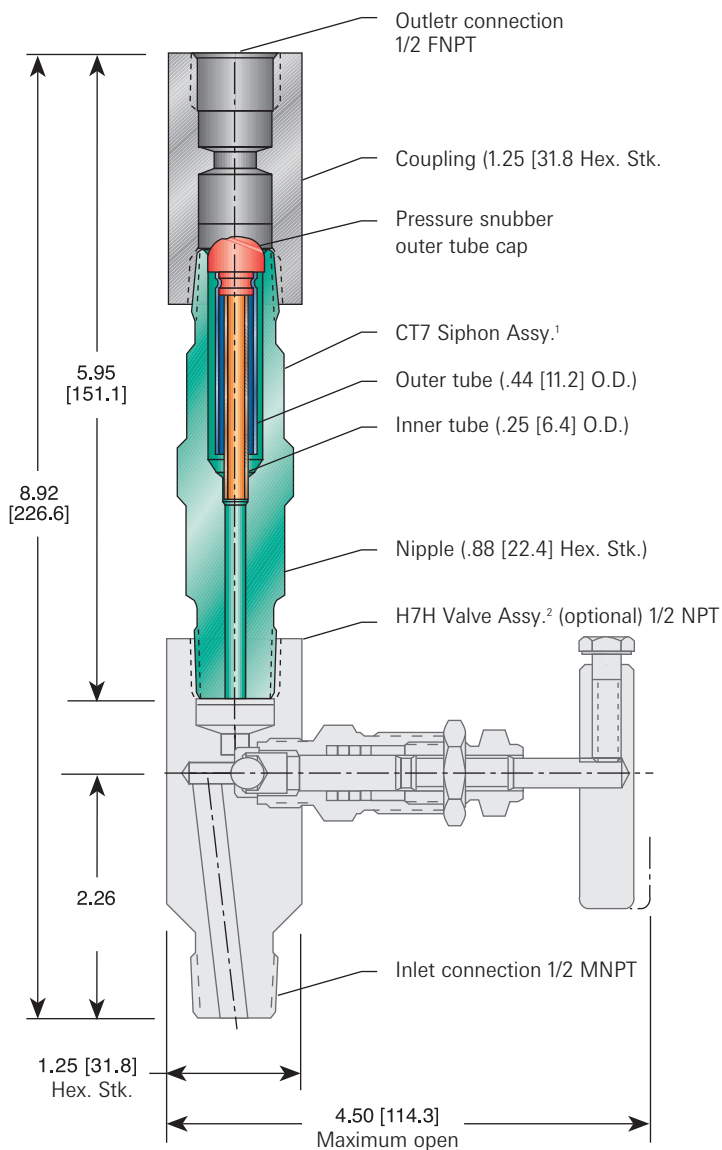
- Compact design requires minimum space for installation.
- Steam protection creates a condensate barrier between the live steam process line and the pressure measurement device. The low coefficient of heat transfer allows for a predictable temperature of the pressure measurement instrument.
- Freeze protection forms a barrier to prevent freezing of instruments on wet air lines when the gauge siphon is filled with glycol. However, when it contains kerosene, it acts as a freeze protector for aqueous liquid service.
- Immediate installation of piping without instruments during construction saves time.
- Gauge whip protection reduces gauge whip by eliminating longer 'pigtail.' Allows closer coupling to process.



Use of the H7H Valve in connection with the Gauge Siphon further reduces the gauge temperature by lengthening the condensate leg. The condensate will then 'hang-up' between the valve orifice and the top of the 1/4-inch tube. That is, condensate will also occupy the lower part of the Siphon.

As vapor temperature increases, it is important to get longer condensate legs. This can be accomplished by either connecting the CT7 to an H7H or mounting two CT7 siphons in series.

Hand Valves
CT7 Specifications - Dimensions



Standard Materials

Part No.3	NPT Connection		Coupling	Nipple	Inner and Outer Tubes	Maximum Pressure and Temperature Ratings	
	Outlet	Inlet					
CT7-44 ⁴	1/2" F	1/2" M	A108	A582-303	304 SS	1500 psig @ 850°F 6000 psig @ 200°F	[103 barg @ 454°C] [414 barg @ 93°C]
CT7C-44 ^{4,5}	1/2" F	1/2" M	A108	A105	CS	1500 psig @ 850°F 6000 psig @ 200°F	[103 barg @ 454°C] [414 barg @ 93°C]
CT7S-44 ⁶	1/2" F	1/2" M	A479-316	A479-316	316 SS	1500 psig @ 850°F 6000 psig @ 200°F	[103 barg @ 454°C] [414 barg @ 93°C]

Notes

- Shipping weight 1.2 lb [0.55 kg] each.
 - Shipping weight 1.5 lb [0.68 kg] each.
 - For ordering information, request part number CT7-44, CT7C-44 or CT7S-44.
 - CS is zinc-cobalt plated to prevent corrosion.
 - For Dowtherm applications.
 - Meets requirements of NACE MR0175-latest revision.
- Dimensions, inches [mm]

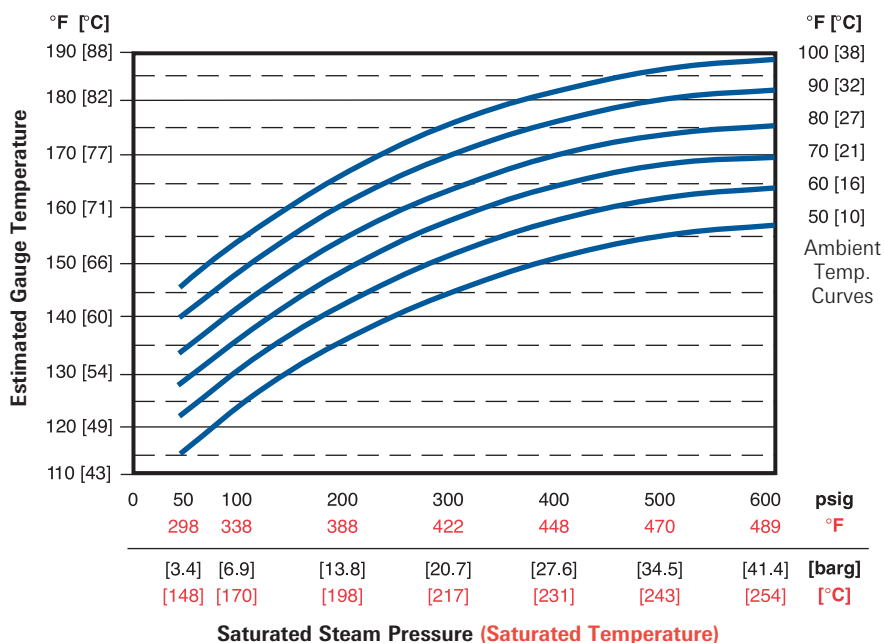
Using the charts

The gauge temperature of a CT7/H7 assembly can be estimated knowing the CT7/H7 material, the saturated steam condition and the ambient air temperature.

Example: Assume a CS CT7/H7 with 400 psig [27.6 barg] 448°F [231°C] saturated steam and 80° [27°C] ambient air. Read the CS chart up from 400 psig [27.6 barg] to the 80°F [27°C] curve, and then left to an estimated gauge temperature of 170°F [77°C].

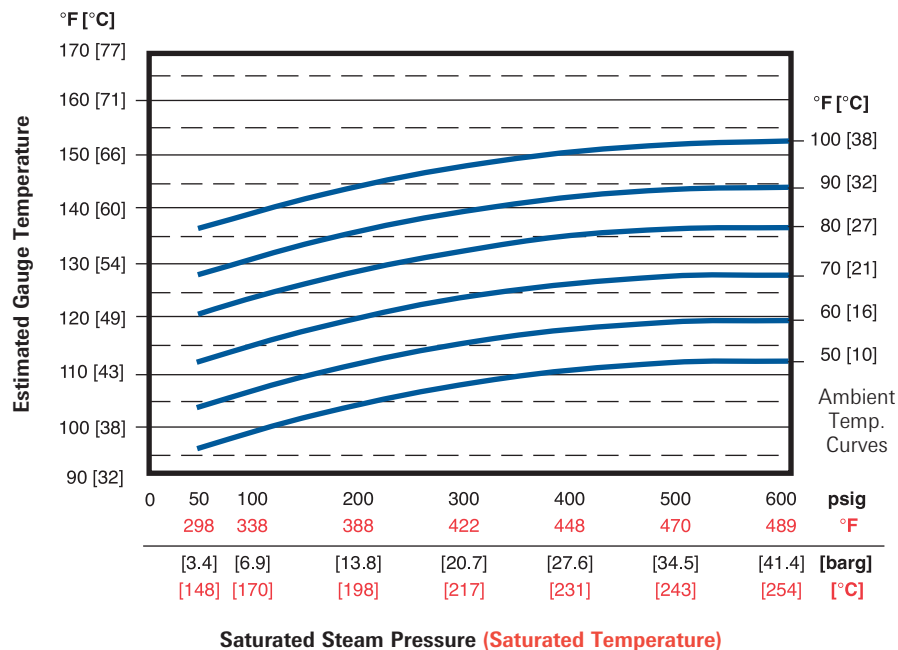
Note: The estimated gauge temperature for a 316 SS CT7/H7 under the same conditions would be 135°F [57°C].

CS CT7/H7 Assembly



Estimated Gauge Temperature vs. Saturated Steam Pressure for Various Ambient Temperatures (CS)

316 SS CT7/H7 Assembly



Estimated Gauge Temperature vs. Saturated Steam Pressure for Various Ambient Temperatures (316 SS)