Pressure Drop vs. Particulate Loading
920 & 920R Series Accessible Coalescent Oil Separators

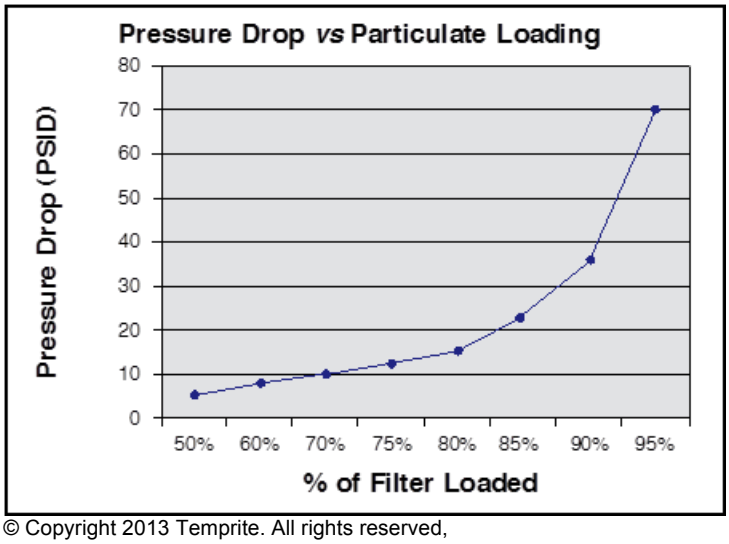
Pressure Drop	Approximate % of Filter Loaded	Action*
<5 psid – 0.34 bar	50%	
<7 psid – 0.48 bar	60%	
<10 psid – 069 bar 70%	70%	
<12 psid – 0.83 bar	75%	**Change Filter**
<15 psid – 1.03 bar	80%	**Change Filter**
<20 to 25 psid – 1.4 to 1.7 bar	85%	**Change Filter**
<30 to 40 psid – 2.1 to 2.8 bar	90%	**Filter O-ring could dislodge**
<60 to 80 psid – 4.1 to 5.5 bar	95%	**Filter could rupture**

*For systems with a hermetic oil separator (i.e., 900 Series) the filter is not replaceable. The whole oil separator must be removed and replaced with either a new 900 Series separator or a new 920 or 920R Series oil separator.

The above figures are for design conditions given in the Temprite catalog with normal oil loading. System design conditions such as pipe sizing, other discharge line components, piping layout, under-sized oil separators, higher density oils, high oil levels or liquid loading may cause a higher than normal pressure drop.

The above figures area for Medium Temp R-22 systems with 150-300 SSU or 32-48 cST viscosity mineral oil. Higher density oils such as 450 SSU or 68 cST will have a slightly higher pressure drop. For other conditions see below:

For High Temp: multiply by 1.36
For Low Temp: multiply by 0.49
For R-404A (HP-62) with 22-32 cST viscosity POE oil: multiply by 0.86
For R-507 (AZ-50) with 22-32 cST viscosity POE oil: multiply by 0.875



Pressure drop can compound at exponential rates. That's why it's important to keep the 920 and 920R Series Standard Filter clean and free of debris and solid contaminants.

© Copyright 2013 Temprite. All rights reserved,