AVIAID

Oil Pressure Spring Comparison Chart

Part No.	Color	Wire Size	Length	Low Pressure	Medium Pressure	High Pressure
30640-01	Red	0.040	2.500	30	40	50
30640-02	Natural	0.042	2.500	40	50	60
30640-03	Green	0.045	2.500	60	80	100
30640-04	Yellow	0.047	2.500	70	90	110
30640-05	Natural	0.051	2.250	60	90	110
30640-06	Blue	0.051	2.500	85	115	130
30640-07	Natural	0.051	2.750	115	140	170

A single stage unregulated section pump was run on our pump dyno with a remote regulator. We were watching a clear bypass line for the pressure at which the bypass cracked. These are the pressures we saw at the innermost, middle and outermost adjusting screw position. Our regulators are set up to allow about 6 full turns from in to out. We set position here by turning the adjusting screw in until it stops, then backing out 3 turns. There is a mechanical stop at the bottom of the thread that will give a bottom sense when turning adjusting screw in by hand. Please no breaker bars. It can be overwhelmed.

These pressures are meant to give an indication of the relative effect of each spring. They are measured on a test bench against a flow restrictor at the outlet port of the pump using 150F 30 SAE oil. Your observed conditions will usually dictate different readings. But the new .051 wire springs in 2.50" and 2.75" free lengths should allow significantly higher pressures that we saw with the original 2.25" spring. Conditions that will affect pressure are temperature, pump shaft rpm, oil chemistry (synthetic vs petroleum vs mineral oil), filtration, line restrictions including at feed point to block, and pump output. Use the information within the context of your operating system.