What is the pressure limit on high pressure PEEK nuts and ferrules?

The pressure limit is dependent on both the female part used ***as well as*** the tubing being used therefore a definitive answer cannot be given. However, using a high-pressure 10-32 threading connection, the fitting will normally hold the PEEK tubing at higher pressure than the burst pressure of the tubing. Caution is recommended when exceeding pressure limits of your HPLC system.

If using stainless-steel tubing with a PEEK nut, this will be a different scenario. Here the tubing might slip out of the connection, dependent on how hard you tighten the connection. This is difficult to declare, but the burst/slip pressure is about 5000 to 6000 psi.

If you want to be sure to have a good grip on the tubing, the double ferrule connection is recommended. This higher-pressure connection uses a double-sided cone ferrule with a special shaped nut and will grip the tubing at two places instead of only one place as with most finger tight fittings. This double cone adds at least about 25% to the pressure stability as compared to the standard ferrule or one-piece fitting.

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