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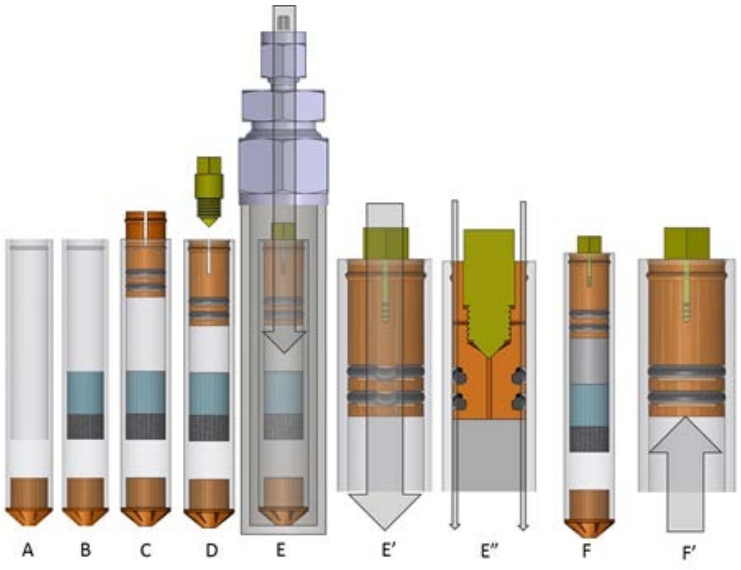
5mm and 7.5mm High Pressure High Temperature Rotor Assemblies from Revolution NMR

Revolution NMR is providing high pressure high temperature rotor Assemblies under exclusive license from Battelle Pacific Northwest National Laboratory



400 bar @ 20 °C ; 225 bar @ 250 °C – limit of most H. temp VT

A. Empty rotor.
B. Rotor with solid and liquid samples added.
C. Bushing installation.
D. Locking screw installation, prevents gas escape through vent and retains bushing.
E. Rotor in pressure vessel.
E′. Close-up of check valve with pressurization. Gas (gray arrow) will flow into rotor and equalize with the pressure in the vessel by flexing the O-rings over cuts made into the O-ring grooves.
E″. Close-up/Cross-section view check valve during pressurization. Rotor is shown rotated 90° from E′. Check valve cuts are placed 180° apart for balance, resulting in two paths for incoming gas (gray arrows).
F. Pressurized rotor ready for NMR experiment three-phase reaction mixture: solid (black), liquid (blue), and gas (gray).
F′. Close-up of check valve holding pressure O-rings forced against unmodified side of the O-ring grooves by the internal pressure

From *Operando MAS NMR Reaction Studies at High Temperatures and Pressures,*
Eric D. Walter,† Long Qi,*,‡,§,‖ Ali Chamas,‡ Hardeep S. Mehta,† Jesse A. Sears,† Susannah L. Scott,‡,§ and David W. Hoyt*, J. Phys. Chem. C (in press)

Please Review the Recent References (on reverse) and Ask Us for Information on Pricing and Delivery

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