



Technical Bulletin: One-Minute NMR System Consumables 31 Aug 2007; DLO at Protasis/MRM

Vici/Valco Parts

- Filter disks, 2-um; #CFE-S2
 - Change if running pressure increases 20%, or every 3 months, or 1000 One-Minute NMR cycles, whichever comes first
- Leap Valve Rotor, #SSAC6W
 - Inspect every 3 months; change every 6 – 12 months regardless
 - look for scratches between the grooves, which cause carryover or odd pressure fluctuations
 - Look for loss of groove depth, which causes carryover or blockage
- Filter body, nuts, and ferrules; #CUCKF-MRM
 - Change only if cutting a tube to a new length or replacing a tube

MicroLiter Analytical Parts

Leap needle inlet guides with metal ferrules

- #L100.LCTEF (5-pack)
 - Change when the needle guides slides onto a syringe needle with little resistance, usually about every 1000-2000 One-Minute NMR cycles

Leap Parts

- 50- μ L Syringe, #LMK.2620617-2P (2-pack)
 - Change if the plunger is loose within the glass syringe barrel, or if solvent leakage is seen above the plunger within the syringe barrel
 - Check every 500 One-Minute NMR cycles by removing and pulling on the plunger to test for resistance; change every 2000-3000 cycles

Optimize Technologies Parts

Filter, in-the-port (optional)

- #10-04-03707 (5-pack; 10- μ m screen)
 - We recommend starting with this screen size
- #10-04-03389 (5-pack, 2- μ m screen)
 - Changing interval is hard to know for either screen size; depends greatly on nature of samples; a problem is indicated if sample loading efficiency decreases as indicated by a drop in NMR S/N

Upchurch Parts

- Tubing, black FEP, 1/16" o.d., 100- μ m i.d.; #PM-1148BLK (order by-the-inch)
 - Change only if a blockage or damage occurs (rarely)
- Filter disk for solvent uptake by HTSL; #C-402 (goes inside the A-314 filter assembly)
 - Change once per year and note directional arrow on body of A-314
- Filter disk for gas; #C-402 (goes inside the A-314 filter assembly; Discovery Tower users only)