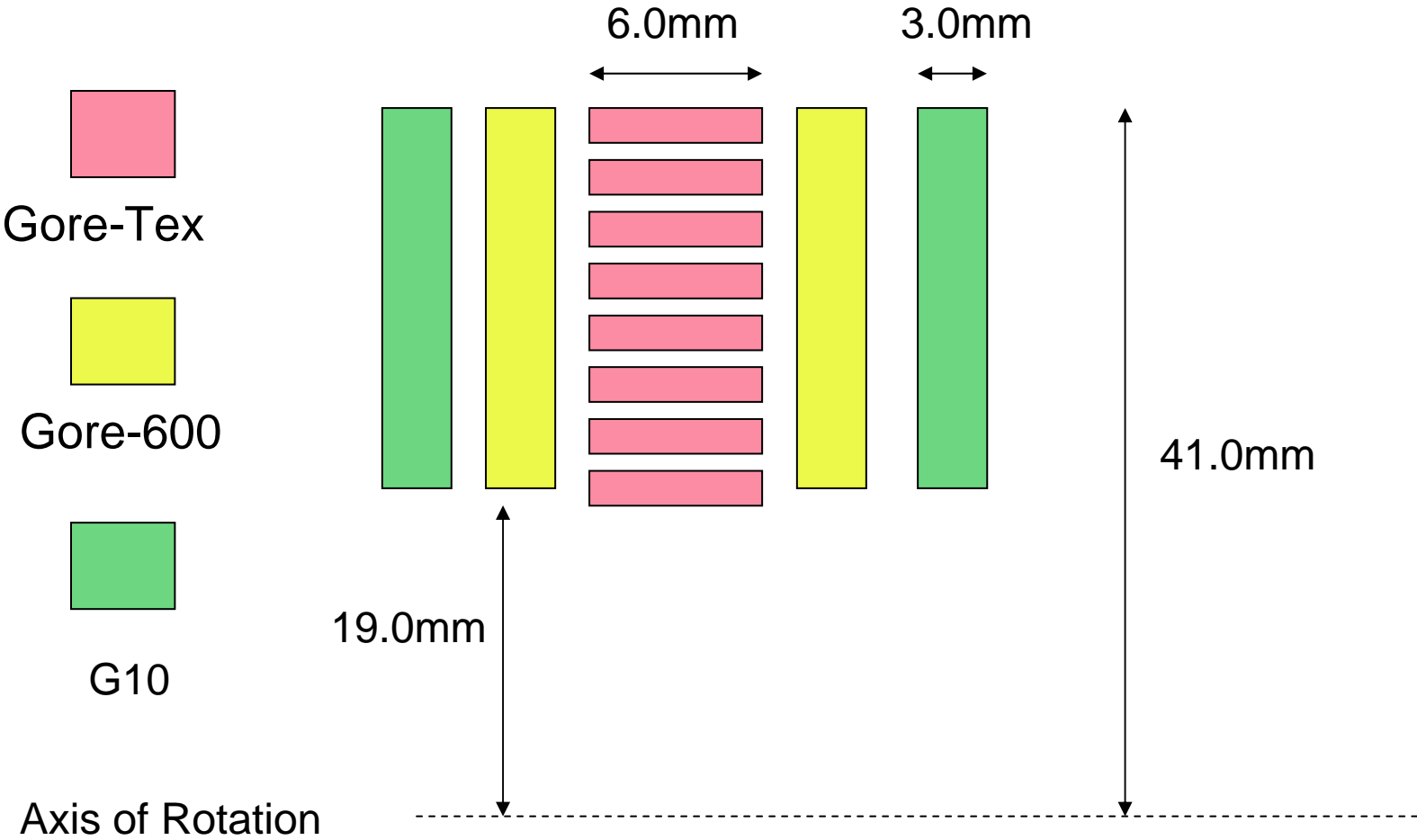


# Test of Magnet Lead Packing Scheme, H. Kirk (23 May 2007)



# Installing the Gore “Rope”



# Installing on the Solenoid



May 23, 2007

# Cryo Testing Results

- $2.5 \times 10^{-5}$  mbar l /s Ambient Background
- No observed leak at 10bar Room Temp
- Initial cooldown, flush: substantial leak
- Further tighten by closing gap 1.3mm
- $1.3 \times 10^{-3}$  mbar l /s leak rate
- Shock cooled in LN<sub>2</sub> bath
- 3<sup>rd</sup> cycle cooldown
- $0.8 \times 10^{-3}$  mbar l /s leak rate → 12 mg/day

# Cryo Testing Results II

- Gap closed to 10mm
- $3.8 \times 10^{-5}$  mbar l /s Ambient Background
- Leak rate 10bar Room Temp  $3.7 \times 10^{-4}$  mbar l /s
- Leak rate 10bar 80<sup>0</sup>K -Substantial
- Further tighten by closing gap to 9.5mm 14Nt-m
- $4 \times 10^{-5}$  mbar l /s Ambient Background
- RT 10bar He -- $2.1 \times 10^{-4}$  mbar l /s leak rate
- 80<sup>0</sup>K 10bar He –  $1.9 \times 10^{-2}$  mbar l/s leak rate
- Further tightening –gap at 9.4mm 16 Nt-m
- Awaiting re-test