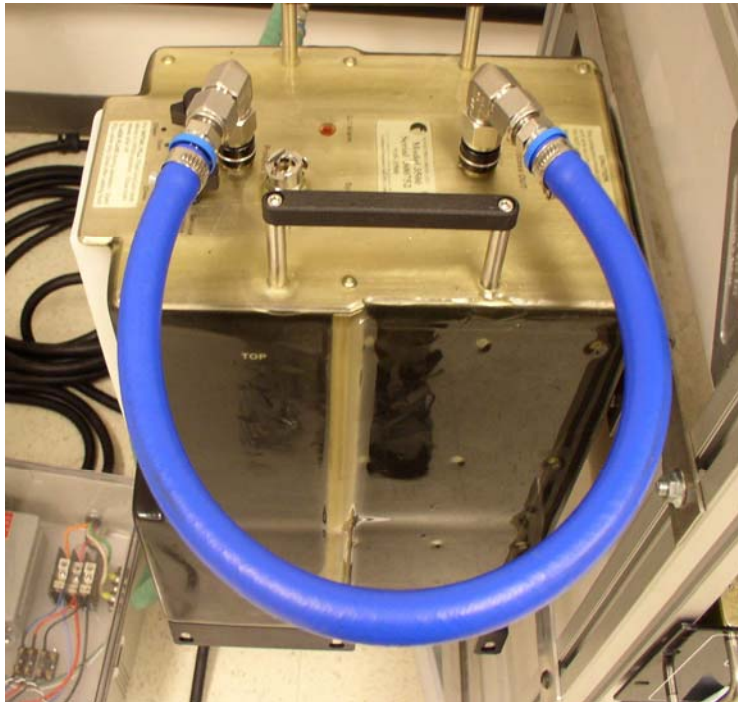


MARKETING INFORMATION BULLETIN #104

June 2006 – POU Product Line

**Low Loss Process Fluid Hose
for
POU Systems
“Blue Hose”**



Noah Continuous Improvement Program

Introduction & Problem Statement

Noah POU customers are familiar with the green ½” inner diameter process fluid hose that has been standard on all POU systems since they were first introduced. This premium silicone heater hose was endorsed by our perfluorinated fluid suppliers as a material that would perform well in the POU system’s operating temperature range of -20 to 90°C.

Several customers have reported a greater frequency of liquid level alarms on their high temperature (>60°C) setpoint applications, which is due to higher diffusion loss rates through the hose at higher temperatures. More frequent refills have resulted in higher costs of ownership for both the maintenance and tool-time associated with fluid top-offs, as well as the cost of the fluid.

Testing & Results

The effort to reduce high temperature diffusion losses, led Noah’s engineering team to test and qualify a new hose made of nitrile (blue). Our process fluid manufacturers have verified the suitability of this material for use with their perfluorinated fluids. Additionally, an independent testing lab confirmed the compatibility of this hose within the full operating range of Noah’s POU systems.

The following tests were conducted in the Noah Applications lab in Vancouver, WA; USA:

| POU Model PSC Model | Hose Type | Temperature Setpoint | Fluid loss to trigger LL1 alarm (@80°C) | Time to trigger LL1 alarm | Improvement |
|--------------------------------|------------------|---------------------------------|--|--------------------------------------|--------------------|
| POU 3300 PSC 4400 | Green Silicone | 80°C | 470 ml (*) | < 1 month | -- |
| POU 3300 PSC 4400 | Blue Nitrile | 80°C | 470 ml (*) | 6 months | ≥ 3X (**) |

(*) *FC3283 used* (**) *Conservative estimate of field improvement*

Conclusion

The measured improvement has convinced Noah to formally introduce the blue nitrile hose and to make it standard equipment for all future POU systems. The “Blue Hose” will be included on all quotes for Noah POU systems.

Ordering information follows:

| Noah Part Number | Description | Price / ft. | Lead-time ARO |
|-------------------------|--|--------------------|----------------------|
| 171-0679-B | Process Fluid Hose, ½” Blue (25’ per loop required) | \$7.40 | 3-4 weeks |
| 173-0101 | Process Fluid Hose, ¾” Blue (25’ per loop required) | \$10.00 | 3-4 weeks |