SCAMP Pump

SCAMP, the Self-Contained Actuating Magnetic Pump, is a positive displacement pump for low-flow, high-pressure cryogenic applications. The wide throttling capabilities of positive displacement pumps allow SCAMP to deliver in excess of 5,000 psid and 50 GPM while capable of reducing operating flow rates well below 1 ml/min for precision events. This pump is fully sealed, enabling operation within any environment from internal tank submersion to hard vacuum. Primary applications for SCAMP include fluid management systems, small and nanosatellite pump-fed propulsion, and RCS systems, while also suitable for terrestrial applications requiring high-pressure cryogens.

Features

- High pressure in excess of 5000 psid
- Near zero to 50 GPM flow rates
- Low cracking pressure
- Low-pressure drop
- Liquid, two-phase, and gaseous compatible
- Ambient to cryogenic operating temperature range
- Compatible with most liquids, including oxygen, hydrogen, methane, nitrogen, and numerous storable liquids and hydrocarbon fuels
- The non-contact design facilitates long life
- TRL 6 with path to level 7
- Zero NPSP capable

Callisto Pump

Patent 11,946,464