

1/2" Pneumatic GHe/GN₂ Disconnect 09046000-01 | 09048000-01

VACCO's 1/2" GHe/GN₂ Pneumatic Disconnect was developed for the ARES US LH₂ and LO₂ pressuring system. Its design is based on the qualified 1" Space Shuttle Pneumatic Disconnect.

With a non-latching, push-pull connection and disconnection, this quick disconnect has a robust design. Its total life cycle is 500 with 400 at cryogenic LN₂ temperature.



Features

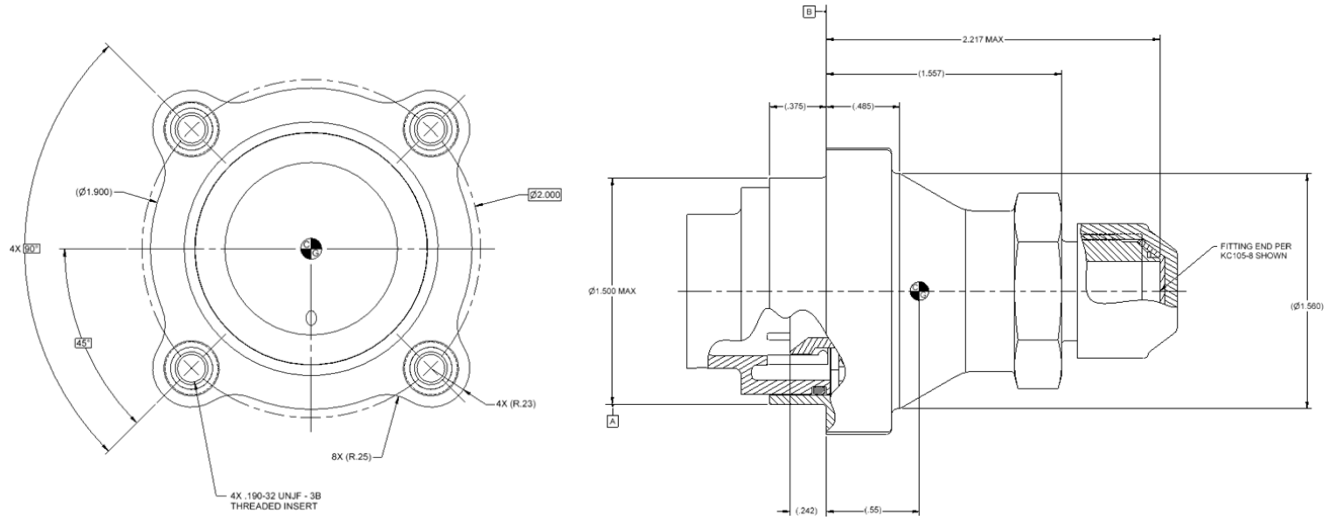
- Self-sealing poppet valves on both flight half and ground half
- Poppet valves on both halves held in normally-closed position by compression spring
- Ball/socket design on flight and ground half accommodates ±.060 axial and 22.5 feet radial misalignment, while maintaining a sealed interface
- Accommodates 7° separation angle of umbilical plate pivot
- Construction materials (A286 CRES stainless steel and Inconel) are LOX compatible
- Sealing interface on both ground half and flight half removable for refurbishment or replacement

Operating Parameters

Pressures		Rated Flow Capacity	
Operating.....	5,000 psig	-423°F.....	0.6 lbs/sec GHe
Proof.....	7,500 psig	Ambient.....	.086 lbs/sec GHe
Burst.....	12,500 psig	Mating Force.....	75 lbf @ 0 psig
Mated Leakage at Operating Temperatures.....		Separation Force.....	1,600 lbf @ 5,000 psig
Ambient Temp.....	10 SCIM GHe	Weight	
LN ₂ and LH ₂ Temp.....	200 SCIM GHe	Flight Half.....	3.4 lbs max
		Ground Half.....	5.7 lbs max

Performance characteristics are based on customer requirements. As such, they are not representative of component capabilities or limitations.

09004600-01 Flight Half



09004800-02 Ground Half

