

**DESCRIPTION**

VACCO Industries' family of pneumatic couplings provides precision operations required for space applications under extreme high pressure conditions.



FEATURES	APPLICATIONS	HERITAGE
<ul style="list-style-type: none"> <li>⊕ Size: 1/4" to 1"</li> <li>⊕ Operating Pressure: Vacuum to 5000 psig</li> <li>⊕ Fluids: GHe, GOX, GN<sub>2</sub>, Ethylene Glycol, N<sub>2</sub>O<sub>4</sub>, and MMH Vapor</li> <li>⊕ Type: Breakaway and/or Manual Latch</li> <li>⊕ Alignment: .0625 in Offset, 5° Angulation</li> <li>⊕ Operating Temperature: -300° F to +350° F</li> <li>⊕ Life Cycle: Up to 4000 cycles</li> <li>⊕ Leakage: As low as 10E-06 sccs GHe</li> </ul>	<p>Fill, Vent, Purge, and Leak Check of:</p> <ul style="list-style-type: none"> <li>⊕ Propellant Pressurization Tanks and Systems</li> <li>⊕ Life Support Systems</li> <li>⊕ Environmental Control Systems</li> <li>⊕ Pressurant Storage Containers</li> </ul>	<ul style="list-style-type: none"> <li>⊕ Lunar Module</li> <li>⊕ Space Shuttle</li> </ul>

**PERFORMANCE CHARACTERISTICS**

	Interstage	GH <sub>2</sub> /GN <sub>2</sub> Loading	GHe Loading	ECLSS
<b>Vehicle</b>	Lunar Module	Space Shuttle	Space Shuttle	Space Shuttle
<b>Application</b>	Interstage	Ground Servicing	Ground Servicing	Ground Servicing
<b>Tube Size</b>	3/8"	1/2", 1"	1/4", 3/8", 5/8"	1/4"
<b>Type</b>	Breakaway	Pneumatic Manual Latching	Breakaway Manual Latching	Breakaway Manual Latching
<b>Weight, Flight</b>	0.67/0.57 lbs	2.55 lbs	0.38 lbs	1.08 lbs
<b>Operating Fluid</b>	Ethylene Glycol, O <sub>2</sub>	GHe, GN <sub>2</sub>	GHe, GN <sub>2</sub> , N <sub>2</sub> O <sub>4</sub> , MMH	GOX, GN <sub>2</sub>
<b>Operating Temperature</b>	0° to +160°F	-250° to 350°F	-300° to +150°F	-150° to +180°F
<b>Operating Pressure</b>	0 to 1575 psig	0 to 4500 psig	0 to 5000 psig	0 to 3300 psig
<b>Leakage Mated Flight Capped</b>	1X10 <sup>-4</sup> sccs GHe 1X10 <sup>-4</sup> sccs GHe N/A	— 1.0 scim GHe N/A	1X10 <sup>-2</sup> sccs GHe 1X10 <sup>-4</sup> sccs GHe 1X10 <sup>-4</sup> sccs GHe	5.4 sccs GHe 2.7 sccs GHe 5X10 <sup>-3</sup> sccs GHe
<b>Self-Alignment</b>	.062" Offset 5° Conical	.062" Offset 5° Conical	.062" Offset 2.5° Conical	.062" Offset 5° Conical
<b>Life Cycles</b>	200	2000	600	4000
<b>Flow Factors</b>	3.4	1.46	4.9	—
<b>Features</b>	X — — X —	X Manual — — X	X Carrier Plate Mounted, Manual X X X	X Manual — — X
<b>Self Sealing Actuation</b>				
<b>Interlock</b>				
<b>Position Indication Indexing</b>				