

# PTD-177

## Monopropellant Diaphragm Tank – COTS



<b>HERITAGE</b>	Herschel Planck, Sentinel 3	
<b>FLUIDS</b>	N <sub>2</sub> H <sub>4</sub> (Hydrazine)	
<b>PRESSURANT GAS</b>	He, N <sub>2</sub>	
<b>PROPELLANT MANAGEMENT</b>	Diaphragm	
<b>MATERIALS</b>	Shell	Ti-6Al-4V
	Tube	Ti-3Al-2.5V
	Diaphragm	EPDM
<b>MOUNTING INTERFACE</b>	equatorial trunnions	
<b>TOTAL VOLUME</b>	177 l	10.801 in <sup>3</sup>
<b>PROPELLANT VOLUME</b>	135 l	8.238 in <sup>3</sup>
<b>TEMPERATURE RANGE</b>	0 / +50 °C	+32 / +122 °F
<b>TANK DRY MASS</b>	15,5 kg	34,2 lbs
<b>DIAMETER</b>	654,6 mm	25,77 in
<b>LENGTH</b>	827,0 mm	32,56 in
<b>MEOP*</b>	24,0 bar	348 psi
<b>PROOF PRESSURE (x 1,50)</b>	36,0 bar	522 psi
<b>BURST PRESSURE (x 2,00)</b>	48,0 bar	696 psi
<b>BURST PRESSURE TESTED</b>	55,5 bar	805 psi

\* Maximum Expected Operating Pressure