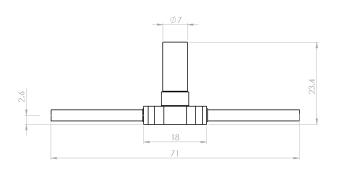


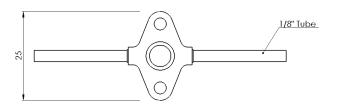
## **Low Pressure Valves NW0.8**



AST's miniaturized low pressure valves have been developed for an outstanding high actuation lifetime. A total of 1.1 billion ( $10^9$ ) cycles have been demonstrated.

The high flow version (NW0.8) of the valve has been qualified for FORMOSAT 5 mission in the application of a cold gas thruster. The 7 mm valve can be provided with customer specific interfaces.





	Performance Characteristics
Operating Media	Inert gases (GHe, GN2, GXe, GKr, GAr, etc.)
Inlet Pressure (MEOP)	1 6 bar
Proof Pressure	2 x MEOP
Burst Pressure	4 x MEOP
Internal Leakage	< 10 <sup>-6</sup> sccs GHe
External Leakage	< 10 <sup>-8</sup> sccs GHe
Flow Rate	7 l/min at 2 bar (g)
Valve Type	2/2 way, normally closed
Fluid Interface	1/8" tube or customer specific
Orifice Size	0.8 mm
Weight	0.016 kg w/o cable or fitting 0.004 kg w/o holder
Operating Voltage	22 36 V pull in 50% hold
Switch Time	on: <2ms, off: <2ms
Coil Resistance (20°C)	140 Ohm
Operational Temperature Range	-30° +80° C
Vibration	> 20g RMS
Lifetime	1 million actuations qualified 1 billion actuations demonstrated
Export Restrictions	ITAR free
Wetted Surfaces	Stainless steel / FKM

## **AST Advanced Space Technologies GmbH**

Zeppelinstrasse 9b D-28816 Stuhr www.ast-space.com