



Heavy-Duty

Internal Solenoid Tank Valve

H-TV-600 Series

Designed for 1-1/8" hydrogen tank necks, this low-profile tank valve offers robust integration and safety features, making it a preferred choice for OEM hydrogen storage systems. Built on proven 2" valve technology, it includes an in-tank solenoid for improved durability and crash protection.

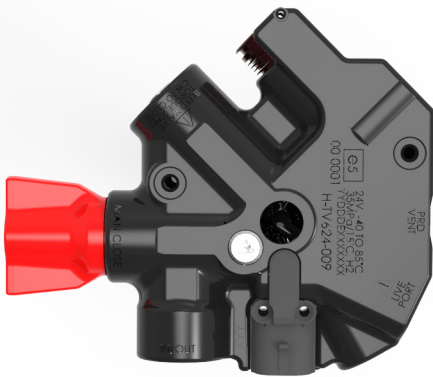


DESIGN

- Low-profile architecture to maximize usable tank length
- Based on proven 2" tank valve platform
- Lightweight construction for weight-sensitive applications
- 1-1/8" tank neck compatibility
- Commonly paired with temperature-sensing PRD end plugs

PERFORMANCE & OPTIONS

- Integrated high-flow pilot-activated pipe-away TPRD ($110 \pm 5^\circ\text{C}$)
- In-tank solenoid minimizes exposure to impact and corrosion
- Manual shutoff valve for maintenance control
- Bleed valve and check valve functionality included
- Optional pressure sensor and live ports
- Available in both 12 V and 24 V solenoid configurations
- Designed to operate from -40°C to $+85^\circ\text{C}$
- Certified to HPRD1, HGV 3.1, EC 79, ISO 19882, UN GTR 13, PED, EU 535, ECE R134



SPECIFICATIONS

GENERAL INFORMATION

APPLICATION	Hydrogen Tank Valve
DESIGN	Automatic valve, internal solenoid
BODY MATERIAL	Aluminum, anodized
FUEL TYPE	Hydrogen per SAE J2719 and ISO 14687
NOMINAL WORKING PRESSURE	35 MPaG
MAX WORKING PRESSURE	43.8 MPaG
OPERATING TEMPERATURE	-40 °C to +85 °C
FLOW COEFFICIENT (CV)	Fueling and defueling: > 0.5
T-PRD ACTIVATION	110 +/- 5 °C
T-PRD ORIFICE	up to 8 mm equivalent diameter
CHECK VALVE FUNCTION (FILL PATH)	Opening Pressure < 0.3 MPa

ELECTRICAL

COIL NOMINAL VOLTAGE	12 V	24 V
NOMINAL COIL RESISTANCE AT 20 °C	19.2 Ω	71.8 Ω
COIL NOMINAL POWER AT 20 °C	7.5 W	8 W

CONNECTIONS / OPTIONS /CERTIFICATIONS

SOLENOID	Mating connector: AMP Superseal 1.5, 2 pin; 282080-1
CYLINDER CONNECTION	1 1/8-12 UNF-2B
INLET / OUTLET PORT TYPE	9/16-18 UNF-2B (others possible)
TPRD VENT PORT TYPE	3/4-16 UNF-2B (others possible)
OPTIONS	1. Pressure sensor port (7/16-20 UNF-2B); 2. Live port (9/16-18 UNF-2B) 3. Excess Flow Valve (EFV) module 4. Excess Flow Valve (EFV) + Filter module
CERTIFICATIONS	HPRD1, HGV 3.1, EC79, ISO 19882, UN GTR 13, PED, EU 535 and R134

