

## Fuel Cell Standards

### XIII. Fuel Cell Overview

#### XIII.b Fuel Cell Standards

Name	Issuing Body	Latest Revision	Description
J429	SAE- Society of Automotive Engineers		Mechanical and Material Requirements for Externally Threaded Fasteners
J518	SAE- Society of Automotive Engineers		Hydraulic Flanged Tube, Pipe, and Hose Connections, Four-Bolt Split Flange Type
J1453	SAE- Society of Automotive Engineers		Fitting--O-Ring Face Seal
J1766	SAE- Society of Automotive Engineers		Recommended Practice for Electric and Hybrid Electric Vehicle Battery Systems Crash Integrity Testing
J1926	SAE- Society of Automotive Engineers		Connections for General Use and Fluid Power.....
J2534	SAE- Society of Automotive Engineers		API (Recommended Practice for Pass-Thru Vehicle Programming)
J2574	SAE- Society of Automotive Engineers		Fuel Cell Vehicle Terminology
J2578	SAE- Society of Automotive Engineers		General Fuel Cell Vehicle Safety
J2579	SAE- Society of Automotive Engineers		Onboard Hydrogen Storage
J2600	SAE- Society of Automotive Engineers		Compressed Hydrogen Surface Vehicle Fueling Connection Devices
J2601	SAE- Society of Automotive Engineers		Fueling Protocols for Light Duty Gaseous Hydrogen Surface Vehicles
J2719	SAE- Society of Automotive Engineers		Hydrogen Fuel Quality
J2799	SAE- Society of Automotive Engineers		(R) Hydrogen Surface Vehicle to Station Communications Hardware and Software



J2919	SAE- Society of Automotive Engineers		Compressed Hydrogen Fuel Systems in Fuel Cell Powered Industrial Trucks
J2990	SAE- Society of Automotive Engineers		Hydrogen and Fuel Cell Vehicle First and Second Responder Recommended Practice
304	FVMSS-Federal Motor Vehicle Safety Standards issued by NHTSA		Compressed Natural Gas Fuel Container Integrity
305	FVMSS-Federal Motor Vehicle Safety Standards issued by NHTSA		Electric-Powered Vehicles: Electrolyte Spillage and Electrical Shock Protection
TP304-3	NHTSA-National Highway Traffic Safety Administration		Compressed Natural Gas (CNG) Fuel Container Integrity
Boiler & Pressure Vessel Code XII	ASME-American Society of Mechanical Engineers		Boiler & Pressure Vessel Code
B1.20.1	ANSI/ASME		Standard on Pipe Threads, General Purpose, Inch
	Parker Autoclave		
	Swagelok		
NFPA 2	NFPA-National Fire Protection Association		Hydrogen Technologies Code
NFPA 30A	NFPA-National Fire Protection Association		Code for Motor Fuel Dispensing Facilities and Repair Garages
NFPA 52	NFPA-National Fire Protection Association		Vehicular Alternative Fuel Systems
NFPA 55	NFPA-National Fire Protection Association		Storage, Use and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders and Tanks: Chapter 10 Gaseous Hydrogen Systems
CGA 350	CGA-Compressed Gas Association		Hydrogen and other combustible gases
CGA 580	CGA-Compressed Gas Association		Argon, Helium, Krypton, Neon, Nitrogen, Tetrafluoromethane, Xenon
CGA 677	CGA-Compressed Gas Association		Nitrogen 6000 psi
CGA 680	CGA-Compressed Gas Association		Nitrogen 3500 psi
CGA 695	CGA-Compressed Gas Association		Hydrogen 3500 psi



CGA 718	CGA-Compressed Gas Association		Argon, Helium, Krypton, Neon, Nitrogen, Tetrafluoromethane, Xenon 6000 psi
CGA 724	CGA-Compressed Gas Association		Hydrogen and other combustible gases 6000 psi
g-5.3	CGA-Compressed Gas Association		Commodity Specification for Hydrogen
g- 5.4	CGA-Compressed Gas Association		Standard for Hydrogen Piping Systems at User Locations
g-5.5	CGA-Compressed Gas Association		Hydrogen Vent Systems
HGV 2	CSA Group/ANSI -American National Standards Institute		Compressed Hydrogen Gas Vehicle Fuel Containers
HGV 3.1	CSA Group/ANSI -American National Standards Institute		Fuel System Components for Compressed Hydrogen Gas Powered Vehicles
HGV 4.1	CSA Group/ANSI -American National Standards Institute		Hydrogen Dispensing Systems
HGV 4.2	CSA Group/ANSI -American National Standards Institute		Hoses for Compressed Hydrogen Fuel Stations, Dispensers and Vehicle Fuel Systems
HGV 4.3	CSA Group/ANSI -American National Standards Institute		Test Methods for Hydrogen Fueling Parameter Evaluation
HGV 4.4	CSA Group/ANSI -American National Standards Institute		Standard for Breakaway devices for compressed hydrogen dispensing hoses and systems
HGV 4.5	CSA Group/ANSI -American National Standards Institute		Priority and Sequencing Equipment For Hydrogen Vehicle Fueling
HGV 4.6	CSA Group/ANSI -American National Standards Institute		Manually operated valves for use in gaseous hydrogen vehicle fueling stations
HGV 4.7	CSA Group/ANSI -American National Standards Institute		Automatic valves for use in gaseous hydrogen vehicle fueling stations
HGV 4.8	CSA Group/ANSI -American National Standards Institute		Hydrogen Gas Vehicle Fueling Station Compressor Guidelines
HGV 4.9	CSA Group/ANSI -American National Standards Institute		Hydrogen Fueling Stations
HGV 4.10	CSA Group/ANSI -American National Standards Institute		Standard for Fittings for compressed hydrogen gas and hydrogen rich gas mixtures
CSA SPE 2.1.3	CSA Group		Best practices for defueling, decommissioning, and disposal of compressed hydrogen gas vehicle fuel containers
ISO 19882	ISO-International Organization for Standardization		Gaseous hydrogen - Thermally activated pressure relief devices for compressed hydrogen vehicle fuel containers



To comment or offer suggestions on this standard, contact Ken Mays:

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