



Specification Data:

G-Stor™ H2 Alternative Fuel Cylinders



Giving you more
innovation

Luxfer's G-Stor™ H2 products are the leading line of lightweight high-pressure hydrogen storage cylinders.

G-Stor™ H2

FOR FUEL CELL VEHICLES

Luxfer's G-Stor™ H2 products are the leading line of lightweight high-pressure hydrogen-storage cylinders used by a number of the world's largest OEMs that design, develop and manufacture state-of-the-art compressed hydrogen-storage systems for fuel-cell applications.

The G-Stor™ H2 advantage is our lightweight, impermeable Type 3 cylinder technology. It is also available with Luxfer's proprietary high-pressure hydrogen electronic solenoid valve, resulting in a certified, cost-effective hydrogen-storage solution that is ideal for fuel cell transit buses, heavy-duty trucks, vans, bulk gas transport, and forklifts.

Numerous hydrogen-storage systems fitted with G-Stor™ H2 cylinders and valves are operating around the globe. Luxfer provided G-Stor™ H2 cylinders for fuel-cell transit buses to transit agencies throughout Southern California and Europe.

Our cylinders were also used on hydrogen-powered commuter buses during the Winter Olympics in Vancouver and the Summer Olympics in London, and we continue to supply H2 systems around the world. G-Stor™ H2 is the ideal solution for applications requiring fill pressures up to 10,153 psi (700 bar) to increase fuel range.

Benefits of G-Stor™ H2

- Lightweight.
- Zero permeation.
- Fast-fill capability.
- Operating pressures ranging from 5,076 psi (350 bar) to 10,153 psi (700 bar).
- Available with Luxfer's Electronic Solenoid Valve (ESV) high-precision gas-flow control (pictured).



Benefits of Hydrogen

- Significantly safer to store than liquid fuels – leaks will disperse into the air instead of on the ground.
- If created by water electrolysis using renewable energy such as solar, then greenhouse gases are eliminated.
- Fuel cell vehicles offer a near-silent operation and reduced maintenance with no moving engine parts.
- Water is the only byproduct from a fuel cell vehicle.

Diameter		Length		H2 capacity		Weight		Total weight, tank and fuel		Water volume	Boss thread connection	Neck mount	Part #
in	mm	in	in	lb	kg	lb	kg	lb	kg	l			
11.7	298	27.6	700	1.6	0.7	40.6	18.4	42.2	19.1	30.7	2.000-12UN	No	M030H
13.4	340	29.1	740	2.2	1	56.4	25.6	58.7	26.6	42	2.000-12UN	No	Q042H
13.4	340	34.4	875	2.8	1.3	64.4	29.2	67.1	30.5	52	2.000-12UN	No	Q052H
15.7	400	35.4	900	4	1.8	85.8	38.9	85.8	38.9	74.2	2.000-12UN	No	V074H
13.4	340	57.4	1458	5	2.3	106.5	48.3	111.5	50.6	94.1	2.000-12UN	No	Q095H
16.3	415	83.1	2110	10.8	4.9	209.4	95	220.2	99.9	202	2.000-12UN	Yes	W205H
16.3	415	123.1	3128	17	7.7	304.2	138	321.2	145.7	318	2.000-12UN	Yes	W320H

All listed cylinders have a service pressure of 350 bar. Contact Luxfer for 700 bar options.

All cylinders are dual-ported, unless otherwise noted, with boss thread connection = 1 1/8 - 12 UNF - 2B.

Other sizes and custom cylinder lengths and size configurations are available upon request with minimum order. Approved pressure relief device must be used for fire protection.

Cylinder specifications are nominal values and are subject to change without notice.