



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 are fitted with G-Stor H2 cylinders and valves, for instance fuel-cell transit buses and commercial vehicles.

Our cylinders were also used on hydrogen-powered commuter buses during 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.

H ₂ capacity	Service pressure	Water volume	Diameter	Length	Tank weight	Total weight tank + fuel	Thread size	Neck mount	Part #
kg	bar	l	mm	mm	kg	kg			
0.7	350	29	281	730	17	17.7	2.000-12UN-2B	No	L028H35
0.8	350	34	281	830	19	19.8	2.000-12UN-2B	No	L034H35
0.9	350	39	281	926	21	21.9	2.000-12UN-2B	No	L039H35
2.3	350	94	340	1458	48	50.3	2.000-12UN-2B	No	Q095H35
1.6	350	68	399	850	37	38.6	2.000-12UN-2B	No	V068H35
1.8	350	74	399	900	39	40.8	2.000-12UN-2B	No	V074H35
3.6	350	150	415	1614	74	77.6	2.000-12UN-2B	Yes	W150H35
4.9	350	205	415	2110	95	99.9	2.000-12UN-2B	Yes	W205H35
7.8	350	322	415	3165	141	148.8	2.000-12UN-2B	Yes	W322H35
2.13	700	53	332	1161	58	60.1	2.000-12UN-2B	No	M053H70

All cylinders are dual-ported, unless otherwise noted, with boss thread connection = 2.000-12UN-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.