Portable Metal Hydride Canisters

Although you can run your fuel cell system directly from a compressed hydrogen cylinder, for many applications it is necessary to have a better storage solution with a higher energy density or as low pressure buffer for a hydrogen generator or to store excess hydrogen for later use in a fuel cell.



Pressure Reducer for Metal Hydride Canisters

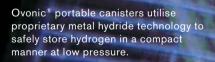


H₂-Refilling Kit for Metal Hydride Canisters





70 | 220 | 900 std. litres



When hydrogen bonds to the metal alloy powder contained in the canisters, it is stored in a solid state at densities many times greater than traditional compressed gas storage.

Easy to use and refill from different hydrogen sources, the canisters aresuitable for a wide range of applications.

- Available at hydrogen capacities of 70, 220, 900 standard litres
- Equipped with manual shut-off and quick coupler
- Equipped with thermal + pressure relief certified to CGA S-1.1

Available accessories:

- Refilling kit for compressed hydrogen cylinders
- Connecting kit for Hydrogen
 Generator HG 30
- Canister pressure reducer for low delivery pressure



		HS 70	HS 220	HS 900	
Hydrogen capacity *	Rated (@ 17 bar refilling pressure)	6.5 70	20 220	80 900	g std. litres
	@ 10 bar refilling pressure	~ 50	~ 150	~ 600	std. litres
Discharge performance **	Rated discharge rate	1.4	3.5	7	std.litres/min
	Equivalent fuel cell power	100	250	500	W_{el}
Physical	Diameter	51	64	90	mm
	Length (incl. Quick coupler)	205	305	425	mm
	Weight	0.8	2.2	7	kg
Refilling	Hydrogen quality	≥ 5.0 (99.999 %)			
	Refilling pressure	1017 (150250) ~ 1 hour in flowing ambient air			bar g (psi g)
	Refilling time				
Thermal	Operating temperature	0+75			°C
	Storage temperature	-29+54			°C
Safety	Connector	Stainless steel quick coupler, Parker type Q4CY			
	Safety device	Manual shut-off			
	-	Thermal / pressure relief certified to CGA S-1.1			

^{*)} The actual hydrogen capacity realised from metal hydride canisters depends on a number of factors: desorption rate, charge conditions and ambient conditions.

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^{**)} Since the metal alloy absorbs heat as hydrogen is released, heat must be added to sustain a high flow rate associated with high power discharge.