

High-Pressure Hydrogen Hose Assemblies

For Enhanced Safety at Hydrogen Refueling Stations and Hydrogen Transfer.



Leak-Tight Hydrogen Refueling and Transfer

Parker Hydrogen Hose Assemblies are designed to meet the high demands of high-pressure hydrogen dispensing and transfer up to 103.5 MPa. They offer a high level of reliability, robustness, safety and a long service life for critical hydrogen applications. These hose assemblies meet or exceed international hydrogen standards, such as ISO 19880-5 and ANSI/CSA HGV 4.2 - pressure class H70. Moreover, the -4 size hose is fully certified by a third party to ANSI/CSA HGV 4.2.



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Features & Benefits:

- **Leak-tight assembly** due to a perfect fit of hose and fittings, even at temperatures as low as -40°C. Highest safety for extremely critical applications.
- **Durable construction** Extended service life and reduced frequency of replacement.
- **Proven performance** Recognized as a leading product through extensive field testing.
- **Ease of use** A tight bend radius allows for easy installation in tight spaces.
- **High kink resistance** Minimized risk of hose damage by end user.
- **Fast refueling at -40°C.** Low refilling time for end user.
- **Hose size -4: HGV 4.2 certified** First hose certified to HGV 4.2 to meet this market requirement.
- **Meets or exceeds ISO 19880-5** The hose meets the highest market requirements .
- **Low permeation rates** Improved safety (gas concentrations) and minimized hydrogen loss.
- **Enhanced safety** Exceeds H70 pressure requirements with a 103.5 MPa working pressure capacity in case of pressure spikes.

ENGINEERING YOUR SUCCESS.

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Hose Construction

Core:

High Performance Polymer

Reinforcement:

Steel wire

Cover:

Polyamide, pinpricked

Operating Parameters

Temperature Range:

-40 °C to +85 °C

-40 °F to +185 °F

Relevant Standards:

ISO 19880-5 & ANSI / CSA HGV 4.2



Hose Options	I.D.		O.D.		Max. Working Pressure		Pressure Class Acc. to HGV 4.2 / ISO 19880-5	Weight	Min. Bend Radius		Standards
	mm	inch	mm	inch	MPa	psi			mm	in	
HGV70	6.4	1/4	13	0.51	103.5	15011	H70	0.33	150	5.90	Certified acc. to ANSI/CSA HGV 4.2
H70-04	6.4	1/4	13	0.51	103.5	15011	H70	0.33	150	5.90	Meets or exceeds ISO 19880-5 & HGV 4.2
H70-08	13	1/2	22.7	0.89	96.25	13960	H70	0.98	250	9.84	Meets or exceeds ISO 19880-5 & HGV 4.2

- Factory-made assemblies only.
- Each assembly pressure-tested.

Hose Assembly Nomenclature:

HGV70-AY604C-xxxx

H70-AY604C-xxxx

H70-AY1108C-xxxx

xxxx = assembly length in mm

Hose Fittings (stainless steel)

Hose size -4: M Type female 9/16 -18 UNF

Hose fittings size -8: M Type female 1-12 UNF

Other end configurations available on request.