Heavy Duty (HD) – Light Duty Vehicle (LDV) Fueling Interface

MY25 Toyota hydrogen fuel cell powertrain kit

CHSS Design	
Pressure Class	H70
Total Capacity	58.8 kg, 1464 L (6x 244 L), communication of total volume to HRS
Pressure Ramp Rate Target	3.4 MPa/min or lower per ambient temperature and initial pressure per SAE J2601-1 Cat. D Tables
Configuration	1x H70 Light Duty Vehicle receptacle w/ IrDA transmitter, driver's side

Interface Standards	
Fueling Connection Devices	ISO 17268 (2020 or latest) GH2 H70
Fueling Protocol	SAE J2601-1 (2020 or latest), Category D, H70-T40D/T30D
Station Communications	SAE J2799 (2019 or latest)
Hydrogen Fuel Quality	SAE J2719 (2020 or latest) harmonized with ISO 14687 (2019)

Application:

PACCAR Kenworth T680 and Peterbilt 579 models

https://pressroom.toyota.com/paccar-and-toyota-expand-hydrogen-fuel-cell-truck-collaboration-to-include-commercialization/#

https://kenworth.com/trucks/t680-fcev/

Heavy Duty (HD) – High Flow (HF) Fueling Interface

[Future] Toyota hydrogen fuel cell powertrain kit

CHSS Design	
Pressure Class	H70
Total Capacity	*58.8 kg, 1464 L (6x 244 L), communication of total CHSS volume to HRS
Flow Rate (High Flow receptacle)	180 g/s (10.8 kg/min) average, 300 g/s (18 kg/min) peak
Configuration	Driver's side, 2 receptacles (asynchronous operation): - 1x H70 Light Duty Vehicle receptacle w/ IrDA transmitter - 1x H70 High Flow receptacle w/ IrDA transmitter

Interface Standards		
Fueling Connection Devices	ISO 17268-2 GH2 H70 High Flow	Target to publish by end-2024
Fueling Protocol	SAE J2601-5, MC-HF-G (T30 or colder)	Target to publish by end-2023
Station Communications	SAE J2799 (update existing standard to include HF)	Target to publish by end-2023
Hydrogen Fuel Quality	SAE J2719 (2020 or latest) harmonized with ISO 14687 (2019)	N/A

*Larger CHSS capacities are considered.