

Part Number: 114093
 114093 (-001, -002, -003, -004, -005)

Part Description: Compressed Natural Gas (CNG) Fuel
 Storage Cylinder



Product Technical Specifications

General Specifications

Internal Volume	139 ±2.1 Gallons (528 ±8 L)
Overall Length @ 350 psi	79.75" ±0.25" (2025.5 ±5.5mm)
Overall Diameter @ 350 psi	25" ±0.2" (635 ±5mm)
Dimension from Valve Boss to Center of First Isolator (-001)	15.4"±0.1" (392 ±2mm)
Dimension from Valve Boss to Center of First Isolator (-002)	16.5"±0.1" (419 ±2mm)
Dimension from Valve Boss to Center of First Isolator (-003)	15.4"±0.1" (392 ±2mm)
Dimension from Valve Boss to Center of First Isolator (-004)	15.5"±0.1" (393 ±2mm)
Dimension from Valve Boss to Center of First Isolator (-005)	25.2"±0.1" (641 ±2mm)
Isolator Center to Center (-001)	49.3"±0.1" (1251 ±2mm)
Isolator Center to Center (-002)	44.1"±0.1" (1119 ±2mm)
Isolator Center to Center (-003)	49.2"±0.1" (1250 ±2mm)
Isolator Center to Center (-004)	45.3"±0.1" (1150 ±2mm)
Isolator Center to Center (-005)	39.4"±0.1" (1000 ±2mm)
Maximum Strap Width for Isolators (-001, -002, -003, -004, -005)	4.25" (108 mm)
Cylinder Mass (114093)	204 ±11 lb (92.6 ±5 kg)
Cylinder Mass (-001, -002, -003, -004, -005)	249 ±11 lb (113 ±5 kg)
Approved Service Gas	Compressed Natural Gas (CNG)
Service Life	20 Years
Cylinder Construction	Type IV
Cylinder Certifications	NGV2-2007
Service Pressure	3600 psi (24.8 MPa) @ 70°F (21°C)
Minimum Working Pressure	290 psi (2 MPa)
Cylinder Temperature Range	-40°F (-40°C) to 185°F (85°C)
Color	Black

For Gasoline Gallon Equivalent (GGE), Diesel Gallon Equivalent (DGE) and Standard Cubic Feet (SCF) information for this cylinder refer to the *Quantum CNG Cylinder General Specifications* document.

Approved Valves and Pressure Relief Devices (PRD)



Only approved valves and PRD's are to be installed in your Quantum cylinder. Installation of a valve, PRD, or combination of the two components not approved for your cylinder will result in death or serious injury.

Manual Valves:

1. Quantum PN 114816, Use with PRD #1

Automatic Valves:

None Approved

PRD's

1. Quantum PN 114962 PRD Manifold Assembly
This PRD is only approved for use with manual valve #1 indicated above.



The PRD manifold assemblies indicated above **MUST** be built and installed using the specifications and criteria defined on the PRD manifold assembly data sheet for the cylinder and valve combination being used.

The PRD manifold assembly **MUST** be properly secured, if the PRD manifold is not secured the PRD manifold assembly may not operate as intended during a PRD event. Failure of the PRD manifold to operate as intended will result in death or serious injury.

Electrical Characteristics

Voltage Range	N/A
Nominal Resistance @ 70°F (21°C)	N/A
Nominal Current Draw	N/A
Peak Current Draw	N/A

Electrical Interface

Solenoid Connector	N/A
Temperature Sensor Connector	N/A

Mechanical Interface

Valve Interface	1 1/8" -12 UNF-2B
Valve Boss Material	Anodized Aluminum
Second Valve Interface (if applicable)	N/A

Torque Specifications

Valve Interface (Recommended)	100 Ft. lb. (135 N.m.)
PRD (#1) Interface	17 Ft. lb. (23 N.m.)
Second Valve Interface (if applicable)	N/A

Maintenance Parts

Valve Interface O-Ring	Quantum PN 111409-216
PRD (114962 Manifold Assembly)	Quantum PN 114056
Replacement Certification Label	Contact Quantum Technologies
Replacement Warning Label	Quantum PN 113224

Cylinder Brackets

Some jurisdictions require that cylinder manufacturer approved cylinder brackets be used for installation of cylinders. Use only cylinder brackets produced or approved by Quantum Technologies for mounting your CNG.

Use only cylinder brackets produced or approved by Quantum Technologies for mounting your CNG cylinder.

Selection and use of cylinder brackets is the sole responsibility of the installer to ensure the bracket selected will comply with all regulations applicable in the jurisdiction where the vehicle will be operated.

Maintenance Considerations

Inspect the CNG cylinder and brackets every 3 years or 36,000 miles (60,000 km), whichever comes first. The frequency and level of inspection may vary based on state and local requirements.

For additional information, refer to the *Type 4 Compressed Natural Gas (CNG) Cylinder Installation and Maintenance Guide* available at www.qtwv.com/.