



NGV Products

RCQ series Receptacle

Catalog No. RCQ-3
July, 2012



DK-LOK RCQ series receptacles fully comply with and are certified to the ANSI/AGA/CGA/ NGV1 and ECE R110 standards for Compressed Natural Gas Vehicles (NGV) fueling connection devices.

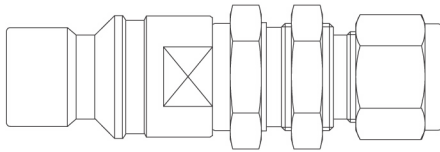
DK-LOK RCQ series receptacle is designed for permanent mounting on a compressed natural gas vehicle (NGV).

DK-LOK RCQA receptacle utilizes the NGV 1 profile which allows complete interchangeability to any fueling nozzles conforming to the NGV 1 standard.

Features

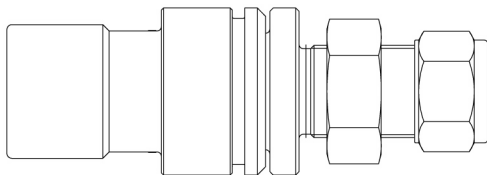
- RCQA series Receptacle design to meet the NGV1 profiles and delivered with integrated non-contact check valve.
- RCQA series Receptacle complies with NGV1 in dimension and performance.
- RCQB series is specifically designed for CNG refueling of bus and truck and delivered with integrated particle filter of 50 micron and non-contact check valve.
- RCQA and RCQB series are for fast-fill and time-fill dispensing.

RCQA Series Profile



RCQA series is designed for CNG refueling of cars.

RCQB Series Profile



RCQB series is specifically designed for CNG refueling of buses and trucks.

RCQA Certificates

ECE R110 Certificate No.: E13-110R00-0187-00
<ul style="list-style-type: none"> ● Working Pressure: 34.1 MPa(341 bar) at 120 °C ● Operating temperature: -40 to 120 °C
ANSI/AGA/CGA NGV1 TUV Certificate No.: 2010-CERT-015 (00)
<ul style="list-style-type: none"> ● Service Pressure: 250 bar / 25 MPa at 15 °C ● Operating temperature: -40 to 121 °C

RCQB Certificate

ECE R110 Certificate No.: E13-110R00-0195-00
<ul style="list-style-type: none"> ● Working Pressure: 27.3 MPa (273 bar) at 120 °C ● Operating temperature: -40 to 120 °C

Factory Test

Every receptacle is factory tested with nitrogen @ 1000 psig (68 bar) for no detectable leakage on sealing and shell integrity.

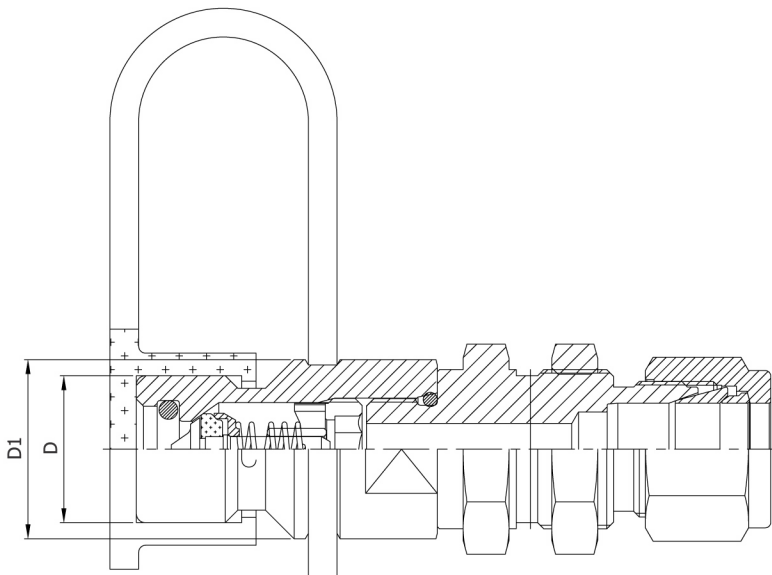
Cleaning

Every receptacle is cleaned and packaged in accordance with the requirements of our cleaning standard of DC-01.



Technical Data

Subjects	RCQA series	RCQB series
D	20.5 mm	32 mm
D1	P30: 25 mm P36: 24 mm	35 mm
Working Pressure	P30 and P36 NGV1 profiles P30 (3000 psi, 200 bar) P36 (3600 psi, 250 bar) Working pressure is maintained both in connection and disconnection position.	3900 psi (273 bar) Working pressure is maintained both in connection and disconnection position.
Temperature	- 40 to 120 °C (-40 to 250 °F)	
Rated Flow	1500 scfm	3600 scfm
Internal Orifice Area	0.075 in ² (0.48 cm ²)	0.23 in ² (1.49 cm ²)
Weight	90 gram (0.20 lbs)	450 gram (0.99 lbs)
Internal Check Valve	Included as standard.	Included as standard.
Particle Filter	Not applicable	Particle Filter of 50 micron included as standard.



Materials of Construction

Body: 316 Stainless steel

Connector: 316 Stainless steel

Internal components: stainless steel

Seals: Natural gas compatible HNBR

Dust protection cap:

Low temperature Nitrile compound.

- Receptacle is constructed out of high strength cold drawn 316 stainless steel bar.
- Internal check valve provides unidirectional flow to vehicle from dispenser.
- Self-centering check valve poppet makes sure of positive sealing.
- Non-barrel type design of check valve poppet reduces sticking caused by icing or contamination in the valve.
- Delivered with standard dust protection cap.

Safety

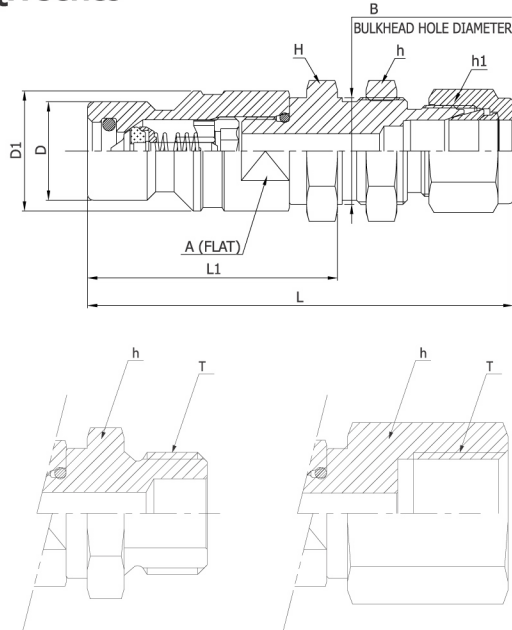
Key system prevents higher pressure fueling nozzle from connecting onto lower pressure receptacle.

Fueling nozzle for higher pressure P36 (3600 psi) receptacle mechanically not accepts connection with lower pressure P30 (3000 psi) receptacle. However fueling nozzle for lower pressure P30 receptacle accepts mechanically connection with higher pressure P36 receptacle.

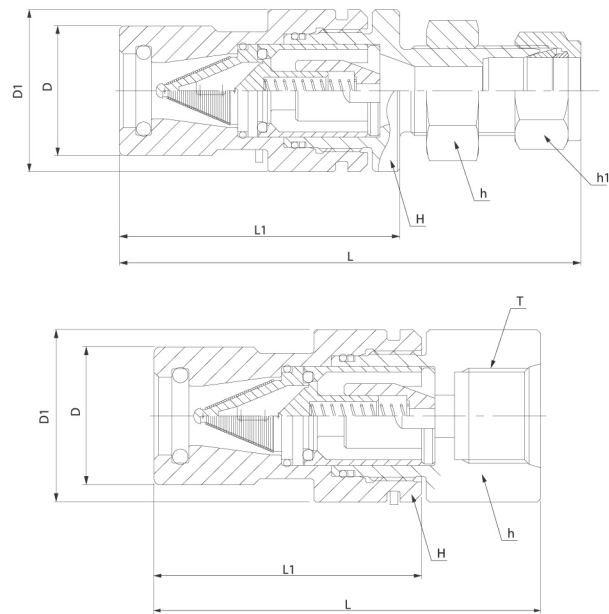
Operation

- RCQA series receptacle is compatible with any fueling nozzle conforming to the NGV1 standard.
- RCQA series is available in different service pressures of 3000 psi and 3600 psi.
- Internal check valve prevents flow while fueling nozzle is disconnected.
- Designed for time-fill and fast-fill.
- Cycle tested to withstand more than 20,000 connections.
- RCQB is recommended for refueling of heavy vehicles.

RCQA Series



RCQB Series



Ordering Numbers and Dimensions

Ordering Number		End Connection	Dimensions							Unit: mm		
RCQ	A-	Receptacle Bulkhead DK-LOK		D	D1	L	L1	A(Flats)	H	h	h1	B
				D4T-S	1/4" DK-LOK	20.5	25	84.4	52	20.6	25.4	25.4
		D6T-S	3/8" DK-LOK	85.9	17.46							
		D8T-S	1/2" DK-LOK	88.4	22.22							
		D6M-S	6 mm DK-LOK	84.3	14							
		D8M-S	8 mm DK-LOK	85.2	16							
		D10M-S	10 mm DK-LOK	86.1	19							
		D12M-S	12 mm DK-LOK	88.6	22							
		Receptacle Male Thread										
		M8G-S	1/2" Male ISO 228-1 (BSPP)	20.5	25	66.2	52	20.6	25.4	-	-	-
		M10U-S	7/8-14 SAE J514 Male with O-Ring			64.7				-	-	-
		MAN6-S	9/16-18 SAE J514 Male for 3/8" OD			67.1				-	-	-
		MAN6LH-S	9/16-18 SAE J514 Male left-handed thread for 3/8" OD			67.1				-	-	-
		Receptacle Female Thread										
		F8G-S	1/2" Female ISO 228-1 (BSPP)	20.5	25	71.9	52	20.6	25.4	-	-	-
		Receptacle Bulkhead DK-LOK										
		D4T-S	1/4" DK-LOK	20.5	24	84.4	52	20.6	25.4	25.4	14.28	22.22
		D6T-S	3/8" DK-LOK			85.9					17.46	
		D8T-S	1/2" DK-LOK			88.4					22.22	
		D6M-S	6 mm DK-LOK			84.3					14	
		D8M-S	8 mm DK-LOK			85.2					16	
		D10M-S	10 mm DK-LOK			86.1					19	
		D12M-S	12 mm DK-LOK			88.6					22	
		Receptacle Female Thread										
		F8G-P30-S	1/2" Female ISO 228-1 (BSPP)	20.5	24	71.9	52	20.6	25.4	-	-	-
		Receptacle Bulkhead DK-LOK										
		D8T-S	1/2" DK-LOK	32	35	115	70	34	34	30	22.22	22.2
		D10T-S	5/8" DK-LOK			115					25.4	
		D12M-S	12 mm DK-LOK			115					22	
		D16M-S	16 mm DK-LOK			115					25	
		Receptacle Internal Thread										
		F10U-S	7/8-14 internal thread SAE Boss J1926	32	35	90	62	34	34	30	-	-

How to order

RCQB series is supplied with particle filter of 50 micron and internal check valve as standard. To order receptacle with no particle filter, insert NF in the ordering number. Example: RCQB-D16M-NF-S

Safe Valve Selection

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. Dk Tech accepts no liability for any improper selection, installation, operation or maintenance.