

# FV103 Light Duty Fill Valve & Transit Nozzle

## Application

CNG and Bio-Gas dispenser for filling vehicles with CNG and Bio-Gas as well as trailer load/unload systems.



FV103-9-10B-0 - Light Duty Fill Valve



FV103-9-11B-G - P36 Light Duty Transit Nozzle

## Materials

| Item | Description    | Material                |
|------|----------------|-------------------------|
| 1    | 90° Valve Body | 6061 Aluminium          |
| 2    | Valve Caps     | 304/316 Stainless Steel |
| 3    | Seats          | Delrin                  |
| 4    | Balls          | 316 Stainless Steel     |
| 5    | Stems          | 316 Stainless Steel     |
| 6    | Thrusts        | Delrin                  |
| 7    | Glands         | Delrin                  |

| Item | Description        | Material             |
|------|--------------------|----------------------|
| 8    | Stem O-rings       | Nitrile              |
| 9    | Stem Backup        | Nitrile              |
| 10   | Cap & Seat O-rings | Nitrile              |
| 11   | Spring Washer      | 304 Stainless Steel  |
| 12   | Stem Nuts          | 304 Stainless Steel  |
| 13   | Valve Handle       | 304 Stainless Steel  |
| 14   | NGV1 Nozzle        | See NC203 Spec Sheet |

## Product Information

All products are manufactured under ISO 9001 accredited standards.

The FULL FLOW design means more gas is dispensed faster to the vehicle, maximising the number of vehicle fills per day and minimising wasted gas.

Valve certified to PED 97/23/EC.

## Features & Benefits

The Oasis Light Duty Transit Nozzle redefines the flow rate standard for NGV gas delivery.

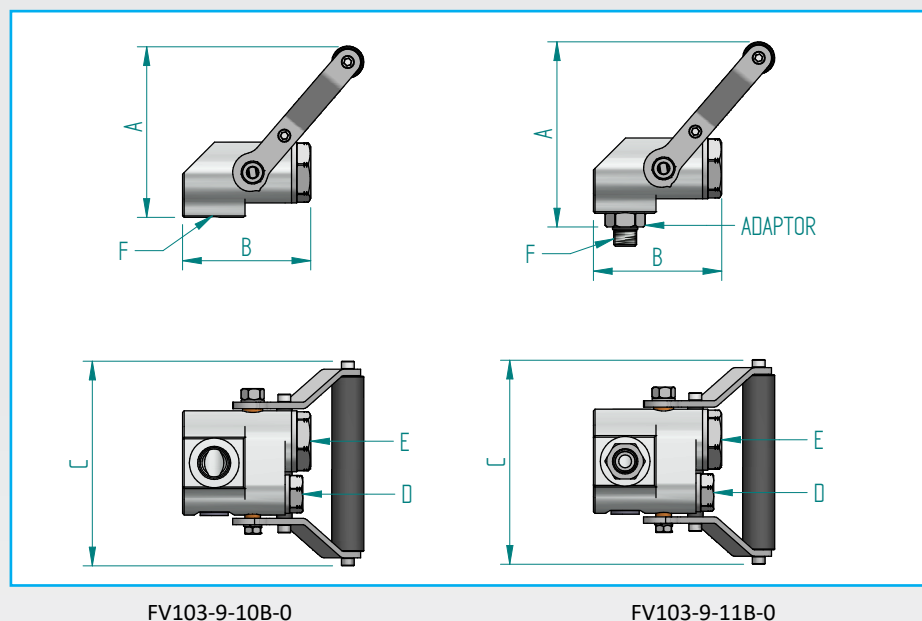
Intuitive fill valve operation.

All Oasis Light Duty Transit Nozzles are easily serviced in the field using Oasis's product specific service kits.

Adaptors are available to extend the position of the nozzle.

Instructions available online at [www.oasisngv.com/resources](http://www.oasisngv.com/resources).

# FV103 Light Duty Fill Valve & Transit Nozzle



## Dimensions Inch (mm)

| Part Code     | Size | A          | B         | C          | D (Vent)             | E (Inlet)            | F (Outlet) / Adaptor                 |
|---------------|------|------------|-----------|------------|----------------------|----------------------|--------------------------------------|
| FV103-9-10B-0 | 3/8" | 4.21 (107) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | 3/4 - 16 SAE Female / None           |
| FV103-9-11B-0 | 3/8" | 4.57 (116) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | 9/16 - 18 SAE Male / Adaptor         |
| FV103-9-1EB-0 | 3/8" | 6.18 (157) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | 9/16 - 18 SAE Male / 50mm Extension  |
| FV103-9-1FB-0 | 3/8" | 8.15 (207) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | 9/16 - 18 SAE Male / 100mm Extension |

## Product Specification

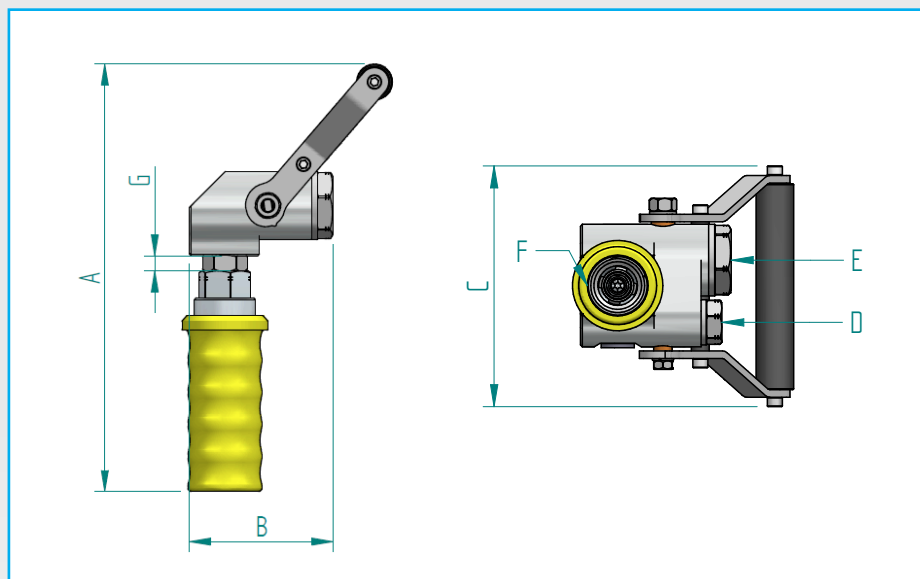
| Part Code     | Mass<br>lb (kg) | Min. Operating<br>Pressure<br>bar (psi) * | Max. Operating<br>Pressure<br>bar (psi) ** | Min.<br>Temp.<br>°F (°C) | Max.<br>Temp.<br>°F (°C) | Stem Open<br>Torque<br>ft-lb (Nm) | Max. Cycles<br>Before<br>Rekit ^ | Cv  | Light Duty Fill<br>Valve Service Kit |
|---------------|-----------------|-------------------------------------------|--------------------------------------------|--------------------------|--------------------------|-----------------------------------|----------------------------------|-----|--------------------------------------|
| FV103-9-10B-0 | 1.70 (0.77)     | 0.5 (7)                                   | 410 (6000)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 3.4 | FV103-SKLD                           |
| FV103-9-11B-0 | 1.79 (0.81)     | 0.5 (7)                                   | 410 (6000)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 3.4 | FV103-SKLD                           |
| FV103-9-1EB-0 | 2.03 (0.92)     | 0.5 (7)                                   | 410 (6000)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 3.4 | FV103-SKLD                           |
| FV103-9-1FB-0 | 2.36 (1.07)     | 0.5 (7)                                   | 410 (6000)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 3.4 | FV103-SKLD                           |

\* Minimum system pressure the product will hold constant bubble tight seal.

\*\* Maximum pressure at which the product can constantly operate at.

^ It is recommended that the fill valve is re-kitted on or before the maximum number of allowable cycles.

# FV103 Light Duty Fill Valve & Transit Nozzle



FV103-11B-9 - P36 Light Duty Transit Nozzle

## Dimensions Inch (mm)

| Part Code     | Size | A           | B         | C          | D (Vent)             | E (Inlet)            | F (Outlet) | G<br>(Adaptor length) |
|---------------|------|-------------|-----------|------------|----------------------|----------------------|------------|-----------------------|
| FV103-9-11B-F | 3/8" | 9.41 (239)  | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P30   | 0.35 (9)              |
| FV103-9-11B-G | 3/8" | 9.41 (239)  | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P36   | 0.35 (9)              |
| FV103-9-1EB-F | 3/8" | 11.02 (280) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P30   | 1.97 (50)             |
| FV103-9-1EB-G | 3/8" | 11.02 (280) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P36   | 1.97 (50)             |
| FV103-9-1FB-F | 3/8" | 12.95 (329) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P30   | 3.94 (100)            |
| FV103-9-1FB-G | 3/8" | 12.95 (329) | 3.15 (80) | 5.04 (128) | 7/16 - 20 SAE Female | 9/16 - 18 SAE Female | NGV1 P36   | 3.94 (100)            |

## Product Specification

| Part Code     | Mass<br>lb (kg) | Min. Operating<br>Pressure<br>bar (psi) * | Max. Operating<br>Pressure<br>bar (psi) ** | Min.<br>Temp.<br>°F (°C) | Max.<br>Temp.<br>°F (°C) | Stem Open<br>Torque<br>ft-lb (Nm) | Max. Cycles<br>Before<br>Rekit ^ | Cv  | Light Duty Transit Nozzle<br>Service Kits |
|---------------|-----------------|-------------------------------------------|--------------------------------------------|--------------------------|--------------------------|-----------------------------------|----------------------------------|-----|-------------------------------------------|
| FV103-9-11B-F | 3.24 (1.47)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |
| FV103-9-11B-G | 3.24 (1.47)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |
| FV103-9-1EB-F | 3.48 (1.58)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |
| FV103-9-1EB-G | 3.48 (1.58)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |
| FV103-9-1FB-F | 3.79 (1.72)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |
| FV103-9-1FB-G | 3.79 (1.72)     | 0.5 (7)                                   | 372 (5400)                                 | -40 (-40)                | 185 (85)                 | 3.7 (5)                           | 100,000                          | 1.6 | FV103-SKLD / NC203-SK1                    |

\* Minimum system pressure the product will hold constant bubble tight seal.

\*\* Maximum pressure at which the product can constantly operate at.

^ It is recommended that the fill valve is re-kitted on or before the maximum number of allowable cycles.

# FV103 Light Duty Fill Valve & Transit Nozzle

## Fill valve Service Kits

All wearing components are available for replacement with original Oasis service kits.

## FV103-SKLD

Fill valve service kit for sealing components, recommended to be replaced on or before the maximum cycles before re-kit as identified in product specifications.



## FV103-70

Fill valve handle replacement kit, to be replaced as required.

