



PRODUCT CATALOGUE 2015



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Oasis Ultra Fast Fill System™



Cutting Edge

Mankind's first precision engineers sought perfection in their production. They chose the finest materials and developed innovative tools and practices to carve out exceptional results. Their workmanship can still inspire us today.

Carving the most powerful tool of his time from a single flint, a prehistoric engineer knew that the true worth of an arrow is its CUTTING EDGE.

At Oasis, this timeless focus on exceptional results through first class engineering is represented in the Arrowhead of our logo.

Providing CUTTING EDGE solutions for over a quarter of a century, Oasis Products are specified worldwide. We have the skill and capability to develop any part you require to the exact dimensions. Designed and manufactured in New Zealand, to your specifications, for the world.

We invite you to discover the best in precision engineering and manufacturing, provided by our good looking and friendly staff.

Oasis Engineering Ltd.

Oasis Engineering is a precision engineering production facility. <u>ISO</u> <u>9001:2008 certified</u>, the systems and processes are in place to ensure our CNC machine centres are crafting the most accurate, highest quality components that will meet your specifications.

Oasis Engineering specialises in the manufacture of high pressure fluid control devices for the Natural Gas Vehicle industry (NGV), Hydrogen, Helium, Biogas and other gases. Oasis <u>ball valves</u> were the first to deliver gas at 3600 PSI. This innovation and focus on quality remains today with the continued development of lowest life cost products.







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Oasis Ultra Fast Fill System™

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Contact Us



Inline Trailer Breakaway

Oasis Ultra Fast Fill System™

INLINE TRAILER BREAKAWAY - IB100 SERIES



Features & Specifications

- Ultra High Flow
- Largest CNG Breakaway on the Market
- Specially Design for Trailer Applications
- Easily Serviced
- Service Kits Readily Available
- Ports adaptors available on requests
- Precision CNC Machined
- Ports 1 5/8—12 SAE Female
- Complies with PED 97/23/EC
- Part No. IB108-ASDSN



INLINE TRAILER BREAKAWAY SERVICE KITS



Features & Specifications

- Complete Service Kits Available
- Easy to InstallPre-Assembled
- FIE-Assembled
- Male Part Assembly Replacement Available
- Readily Available
- Assembly Tool Required for Installing Service Kits

Assembly tool required to install Service Kit

- Servicing Instructions and Video Available Online
- Servicing Video on www.OasisNGV.com
- Part Nos.
 - IB108-SKDSN (Service Kit)
 - IB108-ASDSN-M (Male Part Assembly)
 - TOOL-HC208 (Assembly Tool)

INLINE TRAILER BREAKAWAY ADAPTERS

Features & Specifications

- Precision CNC Machined
- Manufactured from Certified 304 Stainless Steel Bar Stock
- Part No.
 - XIB108-31 (IB108 to 1" SAE Female)
 - XIB108-32 (IB108 to 3/4" NPT Female)
 - XIB108-33 (IB108 to 1" NPT Female)
 - XIB108-34 (IB108 to 5/8" SAE Female)



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Ultra Fast Quick Coupler

Oasis Ultra Fast Fill System™

ULTRA FAST QUICK COUPLER





Features & Specifications

- Ultra High Flow Design
- 1" NPT Female Ports
- Design to ISO 7241-1 Series B Profile
- Tested to ISO 7241-2
- Hardened Segment Connection Design Increases Gripping Surface Area & Reduces Wear in Male Coupler
- Integrated Lock In Place Sleeve Ensures Correct Coupling with Visual Green Ring
- Male Dust Cap Included
- Male & Female Sold Separately
- Precision CNC Machined
- Service Kits Readily Available
- Service Instructions Supplied and Available Online
- Part Nos.
 - HC308-6NDDN-M (Male Coupler)
 - HC308-6NDDN-F (Female Coupler)



ULTRA FAST QUICK COUPLER SERVICE KIT



Features & Specifications

- Complete Service Kit Available
- Male & Female Service Kits Sold Separately
- Pre-Assembled
- Easy to Install
- Assembly Tool Required for Installing Service Kits

Assembly tool required to install Service Kit

- Servicing Instructions and Video Available Online
- Part Nos.
 - HC308-SKDDN-M (Male Part Service Kit)
 - HC308-SKDDN-F (Female Part Service Kit)
 - TOOL-HC308 (Assembly Tool)

ULTRA FAST QUICK COUPLER ACCESSORIES



- Dust Cap Available for Male Quick Coupler Part No. - HC308-DC
- SAE Adaptor for Titan Trailer Part No. - SHC308-17
- Quick Coupler Dummy Male Part No. - SHC308-18

Oasis Ultra Fast Fill System™



3/4" BALL VALVE WITH VENT VALVE

Features & Specifications

- **Full Flow Design**
- Integrated Vent Valve for Venting the Line Easily
- Anti-Blowout Stem Design
- **Two Piece Valve**
- Precision CNC Machined
- **Easily Serviced**
- Service Kits Readily Available
- Code 62 Flange adaptor available

- NPT Female/Female Standard Thread Connections
- **Extended Cycle Testing to Ensure** Longevity
- **Delrin Seats**
- Nitrile O-rings
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- Complies With PED 97/23/EC
- Part No.
 - BV706-4E6ADDN-1000



3/4" BALL VALVE WITH VENT PORT



Features & Specifications

- **Full Flow Design**
- 1/4" Integrated Vent Port for Vent Valve, Pressure Gauge or Others
 - Anti-Blowout Stem Design
- Two Piece Valve
- Precision CNC Machined
- **Easily Serviced**
- Service Kits Readily Available
- Code 62 Flange adaptor available

- NPT Female/Female Standard Thread Connections
- Extended Cycle Testing to Ensure Longevity
- **Delrin Seats**
- Nitrile O-rings
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- Complies With PED 97/23/EC
- Part No. - BV706-4K6ADDN-1000



3/4" BALL VALVE WITH CODE 62

Features & Specifications

- **Full Flow Design**
- Code 62 Flanges on Both Ends
- Anti-Blowout Stem Design
- **Two Piece Valve**
- Precision CNC Machined
- **Easily Serviced**
 - Service Kits Readily Available
- **Extended Cycle Testing to Ensure** Longevity

- **Delrin Seats**
- Nitrile O-rings
- Flanges as per SAE J518-2
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- Complies With PED 97/23/EC
 - Part No.

- BV706-4Y6ADDN-M000





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3/4" BALL VALVE WITH CODE 62 FLANGES TO SAE THREAD

Features & Specifications

- Full Flow Design
- Code 62 Flange to SAE End Connections
- Anti-Blowout Stem Design
- Two Piece Valve
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
 Extended Cycle Testing to Ensure Longevity
- Delrin Seats
- Nitrile O-rings
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- Flange as per SAE J518-2
- Complies With PED 97/23/EC
- Part No.

- BV706-4X6ADDN-M000



3/4" BALL VALVE WITH CODE 62 FLANGES TO NPT THREAD



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Features & Specifications

- Full Flow Design
- Code 62 Flange to NPT End Connections
- Anti-Blowout Stem Design
- Two Piece Valve
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity

- Delrin Seats
- Nitrile O-rings
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- Flange as per SAE J518-2
- Complies With PED 97/23/EC
- Part No.

- BV706-4Z6ADDN-M000



3/4" BALL VALVE WITH CODE 62 FLANGES SERVICE KIT

Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined

- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online

We reserve the right to modify product specifications without prior notice



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Oasis Ultra Fast Fill System™

BALL VALVES - 34 - 410 BAR (500 - 6000 PSI) - BV700 SERIES



Features & Specifications

- Full Flow Design
- Anti-Blowout Stem Design
- Two Piece Valve
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity
- NPT & SAE Female/Female Threads
 Available
- Sizes Available from 1/4" to 1"

- Delrin Seats (Peek Available)
- Nitrile O-rings (Viton Available)
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- ISO 15500 Compliant
- API STD 607 Approved
- Complies With PED 97/23/EC



BALL VALVE SERVICE KITS - 34 - 410 BAR (500 - 6000 PSI)



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined

- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online

LOCK OUT HANDLE OPTION



BV702-LH

Features & Specifications

- Fully Secure On/Off Locked Handle Position
- Stainless Steel Laser Cut Segment
- Padlock & Valve not included
- Easily Retrofitted onto Standard Valves
- Ideal for Isolation Functions



BV703-LH / BV706-LH



Oasis Ultra Fast Fill System™

BALL VALVES - 0.48 - 410 BAR (7 - 6000 PSI) - BV700 SERIES



Features & Specifications

- Full Flow Design
- Anti-Blowout Stem Design
- Two Piece Valve
- Precision CNC Machined
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity
- NPT & SAE Female/Female Threads
 Available
- Sizes Available from 1/2" to 1"

- Delrin Seats (Peek Available)
- Nitrile O-rings (Viton Available)
- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- ISO 15500 Compliant
- API STD 607 Approved
- Complies With PED 97/23/EC



BALL VALVE SERVICE KITS - 0.48 - 410 BAR (7 - 6000 PSI)



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined

• Delrin Seats

- Nitrile O-rings
- Service Instructions Supplied and Available Online

REVERSING SEGMENT



Features & Specifications

- Simple & Cost Effective Solution
- Changes Handle Operation
- Direction
- Laser Cut from Certified 304 Stainless Steel
- Robust & Simple Design
- Easy to Install



We reserve the right to modify product specifications without prior notice



Oasis Ultra Fast Fill System™

BALL VALVE WITH ACTUATOR MOUNTING KIT - BV700 SERIES



Features & Specifications

- Supplied Assembled Including Ball Valve, • Bracket, Drive Dog and Bolts to Fit Actuator •
- High Precision Stainless Steel Laser Cut Bracket
- Designed for Air Torque Actuators
- Extended Cycle Testing to Ensure Longevity
- Bolts Pattern to ISO 5211
- Ball Valve as per Valve Specifications
- Complies With PED 97/23/EC •
- API STD 607 Approved
- ISO 15500 Compliant
- Sizes Available from 1/4" to 1"



BALL VALVE WITH AIRTORQUE ACTUATOR - BV700 SERIES



Features & Specifications

- Supplied Assembled Including Ball Valve, Drive Dog and Air Torque Actuator
- Spring Return Pneumatic Actuator
- High Precision Stainless Steel Laser Cut Bracket
- **Extended Cycle Testing to Ensure** Longevity
- Fail Close Standard Configuration
- Sizes Available from 1/4" to 1"



LIMIT SWITCHES



- **Readily Available**
- Easy to Install
- Position Indicating Switch
- Mechanical
- **Explosion Proof**



Sandwich Ball Valves

Oasis Ultra Fast Fill System™

SANDWICH BALL VALVE - 34 TO 410 BAR - 7 TO 6000 PSI - SV100 SERIES



Features & Specifications

- Designed for Manifold Applications
- Anti-Blowout Stem Design
- Minimize Service Down Time
- Two Piece Valve
- Easily Serviced
- Service Kits Readily Available
- Extended Cycle Testing to Ensure Longevity
- Precision CNC Machined

- Manufactured from Certified 304 Stainless Steel Bar Stock. SS316 also Available
- End Cap Connection Options Available
 Upon Request
- Delrin Seats (Peek Available)
- Nitrile O-rings (Viton Available)
- Sizes Available from 3/8" to 1"



SANDWICH BALL VALVE WITH ACTUATOR MOUNTING KIT - SV100 SERIES



Features & Specifications

- Designed for Manifold Applications
- Anti-Blowout Stem Design
- Two Piece Valve
- Supplied Assembled Including Valve, Bracket, Drive Dog and Bolts to Fit Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Easily Serviced

- Extended Cycle Testing to Ensure Longevity
- Precision CNC Machined
- Designed for Air Torque & Rotex Actuators
- End Cap Connection Options Available Upon Request
- Bolts Pattern to ISO 5211
- Sizes Available from 3/8" to 1"



SANDWICH BALL VALVE SERVICE KIT

- Complete Service Kit Available
- Easy to Install
- Pre-assembled Stem
- Ball & Stem Manufactured from Certified 316 Stainless Steel Bar Stock Precision CNC Machined
- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online





Sandwich Ball Valves

Oasis Ultra Fast Fill System™

SANDWICH BALL VALVE WITH AIRTORQUE ACTUATOR - SV100 SERIES



Features & Specifications

- Supplied Assembled Including Valve, Drive Dog and Air Torque Actuator
- Spring Return Pneumatic Actuator
- High Precision Stainless Steel Laser Cut Bracket
- Fail Close Standard Configuration
- Extended Cycle Testing to Ensure Longevity
- Sandwich Ball Valve as per Valve Specifications
- Sizes Available from 3/8" to 1"



SANDWICH BALL VALVE END CAPS OPTIONS



Features

Sandwich Ball Valve has been designed for manifold or valve applications where minimizing service down time is critical.

The flat face design allows to customized end caps connexions as per customer needs. These connexions can be made as threaded (SAE, BSP, NPT), weld ends, tube lock, flanged, etc.







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Oasis Ultra Fast Fill System™

ONE PIECE CHECK VALVES - MAX PRESSURE: 410 BAR / 6000 PSI - CV100 SERIES



Features & Specifications

- Ideal for High Pressure Gas Applications
- High Duty Applications
- Simple Robust Design
- Precision CNC Machined

- Manufactured from Certified 303 Stainless Steel Bar Stock
- NPT Female/Female Thread
 Connections. Other Threads Available
- Size: 1/4"



CHECK VALVES - MAX PRESSURE: 410 BAR / 6000 PSI - CV200 SERIES



Features & Specifications

- High Flow Designed
- Easily Serviced
- Manufactured from Certified 304 Stainless Steel Bar Stock (SS316 also Available)
- Precision CNC Machined

- NPT Female/Female Thread Connections. Other Threads Available
- Service Kits Readily Available
 - Sizes Available from 3/8" to 1"



ELECTRICAL ISOLATING COUPLER - MAX PRESSURE: 410 BAR / 6000 PSI - EC100 SERIES



Features & Specifications

- Full Flow Design
- Isolates a Section of Pipe to Allow the Safe Dissipation of Static Electricity Created by High Pressure Flow
- Reduces Pipe Corrosion
- Standard Product is NPT Male/NPT Female Connections. Other Threads also Available.
- Easily Serviced
- Service Kit Readily Available
- Precision CNC Machined
- Manufactured from Certified 304 Stainless Steel (SS316 Available)
- Sizes Available from 1/2" to 1"



We reserve the right to modify product specifications without prior notice



Oasis Ultra Fast Fill System™

CNG DISPENSER MANIFOLD



Features & Specifications

Oasis dispenser manifolds are designed with high flow rates in mind. Using Oasis sandwich valve and integrated check valve technology, we have created a compact high flow dispenser manifold that performs at the top of its game. When the time comes, maintenance is easy with the extraction of the sandwich valve only requiring the removal of 4 bolts.

Part No. DM104-84 — 1/2" SAE CNG Full Flow Dispenser Manifold



CNG PRIORITY MANIFOLD



Features & Specifications

Oasis has been creating custom solutions for some of the biggest names in the game. Providing the complete plug and play unit, Oasis can customize a manifold system that will integrate:

- 1. Sandwich Ball Valves
- 2. Check Valves
- 3. Coupling Systems

We have the capacity to design, prototype, test and manufacture a custom solution using either the manifold valve or the sandwich valve technology, delivering to you the complete package with total ease of service.

Part No.

PM104-STD-SAE-ASM — 1/2" SAE CNG Priority Panel With Compressor Top Up
 PM104-TBL-SAE-ASM — 1/2" SAE CNG Priority Panel With Trailer Low Bank





Oasis Ultra Fast Fill System™

45 DEGREE FILL VALVE WITH BUS & TRUCK NOZZLE - 240 - 248 BAR (3000 - 3600 PSI)



Features & Specifications

- 45 Degree Fill Valve Body Design with Bus &
 Truck Nozzle Assembled
- Hardened Segment Connection Nozzle Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Fill Valve Designed to ANSI/CGA NGV1 Standard
- Nozzle Designed & Tested to ISO14469-2 Standard
- Nozzle to Fit DN12 (C200) Receptacles as per ISO 14469-2 Standard
- Complies with PED 97/23/EC
- Part No. FV103-4-020-C



90 DEGREE FILL VALVE WITH BUS & TRUCK NOZZLE - 240 - 248 BAR (3000 - 3600 PSI)



Features & Specifications

- 90 Degree Fill Valve Body Design with Bus &
 Truck Nozzle Assembled
- Hardened Segment Connection Nozzle
 Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
 - Fill Valve Designed to ANSI/CGA NGV1 Standard
- Nozzle Designed & Tested to ISO14469-2 Standard
- Nozzle to Fit DN12 (C200) Receptacles as per ISO 14469-2 Standard
- Complies with PED 97/23/EC
- Part No. FV103-9-020-C



180 DEGREE FILL VALVE WITH BUS & TRUCK NOZZLE - 240 - 248BAR (3000 - 3600PSI)



- 180 Degree Fill Valve Body Design with Bus
 & Truck Nozzle Assembled
- Hardened Segment Connection Nozzle
 Design Increases Gripping Surface Area &
 Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Fill Valve Designed to ANSI/CGA NGV1 Standard
- Nozzle Designed & Tested to ISO14469-2 Standard
- Nozzle to Fit DN12 (C200) Receptacles as per ISO 14469-2 Standard
- Complies with PED 97/23/EC
 - Part No. FV103-0-AC6-C





Oasis Ultra Fast Fill System™

45 DEGREE FILL VALVE WITH P30 (3000PSI) OR P36 (3600PSI) NGV1 NOZZLE



Features & Specifications

- 45 Degree Fill Valve Body Design with NGV1
 P30/P36 Nozzle Assembled
- Hardened Segment Connection Nozzle Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Designed to ANSI/CGA NGV1
- Complies with PED 97/23/EC

Part Nos.

- FV103-4-010-A (FV with P30 Nozzle)
 - FV103-4-010-B (FV with P36 Nozzle)



90 DEGREE FILL VALVE WITH P30 (3000PSI) OR P36 (3600PSI) NGV1 NOZZLE



Features & Specifications

- 45 Degree Fill Valve Body Design with NGV1
 P30/P36 Nozzle Assembled
- Hardened Segment Connection Nozzle
 Design Increases Gripping Surface Area &
 Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Designed to ANSI/CGA NGV1
- Complies with PED 97/23/EC
- Part Nos.
 FV103-9-010-A (FV with P30 Nozzle)
 FV103-9-010-B (FV with P36 Nozzle)



180 DEGREE FILL VALVE WITH P30 (3000PSI) OR P36 (3600PSI) NGV1 NOZZLE

- 45 Degree Fill Valve Body Design with NGV1
 P30/P36 Nozzle Assembled
- Hardened Segment Connection Nozzle
- Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon
 Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
 - Designed to ANSI/CGA NGV1
- Complies with PED 97/23/EC
- Part Nos.
 FV103-0-AD6-A (FV with P30 Nozzle)
 - FV103-0-AD6-B (FV with P36 Nozzle)





Oasis Ultra Fast Fill System™

FILL VALVE WITH 50mm NGV1 NOZZLE EXTENSION





Features & Specifications

- 45 & 90 Degree Fill Valve Body Design with 50mm NGV1 P30/P36 Nozzle Extension Assembled
- Hardened Segment Connection Nozzle Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Designed to ANSI/CGA NGV1
- Complies with PED 97/23/EC
- Part Nos.
 - FV103-4-0E0-A (FV with P30 Nozzle)
 - FV103-9-0E0-B (FV with P36 Nozzle)



FILL VALVE WITH 100mm NGV1 NOZZLE EXTENSION





- 45 & 90 Degree Fill Valve Body Design with 100 mm NGV1 P30/P36 Nozzle Extension Assembled
- Hardened Segment Connection Nozzle Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Port Adaptor Options Available Upon Request
- Extended Cycle Testing to Ensure Longevity

- Inlet Connection 3/4-16 SAE Female
- Designed to ANSI/CGA NGV1
- Complies with PED 97/23/EC
- Part Nos.
 FV103-4-0F0-A (FV with P30 Nozzle)
 FV103-9-0F0-B (FV with P36 Nozzle)



FILL VALVE EXTENSIONS AND ADAPTORS



Features & Specifications

- Precision CNC Machined
- Manufactured from Certified Stainless Steel Bar Stock

Adaptors required to fit NGV1 Nozzle or Bus & Truck Nozzle to Fill Valve



We reserve the right to modify product specifications without prior notice



Oasis Ultra Fast Fill System™

45 DEGREE FILL VALVE - 410 BAR (6000 PSI) - FV100 SERIES



Features & Specifications

- Full Flow
- 45 Degree Body Design
- Manufactured from Certified Aluminium & 304 Stainless Steel Bar Stock
- Serviceable
- Ports adaptors available on requests
- Extended Cycle Testing to Ensure Longevity

Adaptor required to fit to NGV1 Nozzle or Bus & Truck Nozzle

- Precision CNC Machined
- Inlet & Outlet Connections 3/4-16 SAE Female
- Complies with PED 97/23/EC
- Designed to ANSI/CGA NGV1 Standard
- Part No.
 - FV103-4-000-0



90 DEGREE FILL VALVE - 410 BAR (6000 PSI) - FV100 SERIES



Features & Specifications

- Full Flow
- 90 Degree Body Design
- Manufactured from Certified Aluminium & 304 Stainless Steel Bar Stock

Adaptor required to fit to NGV1 Nozzle or Bus & Truck Nozzle

- Serviceable
- Ports adaptors available on requests
- Extended Cycle Testing to Ensure Longevity
- Precision CNC Machined
- Inlet & Outlet Connections 3/4-16 SAE Female
- Complies with PED 97/23/EC
- Designed to ANSI/CGA NGV1 Standard
- Part No.

- FV103-9-000-0



180 DEGREE FILL VALVE - 410 BAR (6000 PSI) - FV100 SERIES



Features & Specifications

- Full Flow
- 180 Degree Body Design
- Manufactured from Certified Aluminium & 304 Stainless Steel Bar Stock
- Serviceable
- Ports adaptors available on requests
 Extended Cycle Testing to Ensure Longevity

Adaptor required to fit to NGV1 Nozzle or Bus & Truck Nozzle

- Precision CNC Machined
- Inlet & Outlet Connections 3/4-16 SAE Female
- Complies with PED 97/23/EC
- Designed to ANSI/CGA NGV1 Standard
 - Part No.
 - FV103-0-AA6-0





Oasis Ultra Fast Fill System™

FILL VALVE SERVICE KIT



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Price Competitive
- Readily Available
- Pre-Assembled Stems
- Balls & Stems Manufactured from Certified 316 Stainless Steel Bar Stock
- Precision CNC Machined
- Delrin Seats
- Nitrile O-rings
- Service Instructions Supplied and Available Online
- Part No. FV103-SKDN



FILL VALVE HANDLE SERVICE KIT



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Precision CNC Machined & Laser Cut
- Part No. FV103-70





- Complete Service Kit Available
- Easy to Install
- Black Nylon Material
- Part No. FV103-17





Oasis Ultra Fast Fill System™

BUS & TRUCK NOZZLE - 200 - 248BAR (3000 - 3600PSI) - NC100 SERIES



Features & Specifications

- Serviceable
- Manufactured from Certified 316 Stainless Steel Bar Stock
- Extended Cycle Testing to Ensure Longevity Hardened Segment Connection Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Inlet Adaptor Connections Available

Adaptor required to fit to Fill Valve

- Nozzle to Fit DN12 (C200) Receptacles as per ISO 14469-2 Standard
- Nozzle Designed & Tested to ISO 14469-2 Standard
- Complies with PED 97/23/EC
- Class A tested to 100,000 + cycles
- Part No. NC104-200



NGV1 NOZZLES - 200 BAR (3000 PSI) & 248 BAR (3600 PSI) - NC100 SERIES



Features & Specifications

- Serviceable
- Manufactured from Certified 316 Stainless Steel Bar Stock
- Extended Cycle Testing to Ensure Longevity
- Hardened Segment Connection Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Inlet Adaptor Connections Available

Adaptor required to fit to Fill Valve

- Designed to ANSI/CGA NGV1 Standards
- Complies with PED 97/23/EC
- Class A tested to 100,000 + cycles
- Part Nos.
 NC103-P30 (Blue)
 NC102 P3C (Valle)
 - NC103-P36 (Yellow)



BUS & TRUCK NOZZLE / NGV1 NOZZLES SERVICE KITS



Features & Specifications

- Complete Service Kit Available.
 - Easy to Install
- Price Competitive
- Readily Available
- Pre-Assembled Poppet

- Precision CNC Machined
- Service Instructions Supplied and Available Online
- Part Nos.
 NC104-SK200 (For Bus & Truck Nozzle)
 NC103-SKNGV1 (For NGV1 Nozzle)

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Storage & Trailers

Oasis Ultra Fast Fill System™

TANK HEAD VALVE



Features & Specifications

- Full Flow—Anti-Blowout Stem Design
- Minimizes Cylinder Neck Valves Constriction
- Positional Adjustable Adapter/Valve
 Combination
- Suitable for Most Bulk Industrial Gases
- Quarter Turn Handle
- Manufactured from Certified Stainless Steel Bar Stock
- Service Kit Readily Available
- Other PRD and End Caps Options Available
- Certified to ANSI/AGA NGV 3.1
- Certified to ISO 15500-4
- Part Nos.
 TH104-42B1200-1000 (1/2" Tank Head Valve)
 TH1004 SK1 (1/2" Tank Head Valve Service
 - TH104-SK1 (1/2" Tank Head Valve Service Kit)

Other options available upon request. Contact Oasis for further details.



TRAILER LOAD/UNLOAD MANIFOLD



- Compact Full Flow Manifold System
- Anti-Blowout Stem Design
- Double Quick Release Coupler Ports
- Integrated 1/4" Ball Valve
- Suitable for Most Bulk Industrial Gases
- Quarter Turn Handles
- Saves installation time and cost

- Service Kit Readily Available
- Saves Commissioning Time Reduces Joint Inspections
- Manufactured from Certified Stainless Steel Bar Stock
- Part Nos.
 - TM106-4A62DDN-E000 (Trailer Manifold)
 - TM106-SK62DDN-S (Service Kit)







Storage & Trailers

Oasis Ultra Fast Fill System™

HIGH PRESSURE QUICK RELEASE COUPLER - 310BAR (4500PSI) - HC200 SERIES



Features & Specifications

- High Flow Design
- Available in 1"
- Manufactured from Certified 316 Stainless Steel Bar Stock
- Serviceable
- Designed to ISO7241-1 Series B Profile
- Tested to ISO7241-2
- Standard Connection NPT Threads
- Extended Cycle Testing to Ensure Longevity
- Hardened Segment Connection Design Increases Gripping Surface Area & Reduces Wear in Receptors
- Part Nos.
 - HC208-6NDDN-F (1" NPT Female Part)
 - HC208-6NDDN-M (1" NPT Male Part)



HP QUICK RELEASE COUPLER - MAX PRESSURE: 410 BAR (6000 PSI) - HC100 SERIES



Features & Specifications

- High Flow Design
- NPT Female/Female Thread Connections. Other Threads Available
- Hardened Segment Connection Design
 Increases Gripping Surface Area
- Easily Serviced
- Service Kits Readily Available

- Precision CNC Machined
- Manufactured from Certified 316 Stainless Steel Bar Stock
- Part Nos.
 - HC404-6NDSN-F (1/2" NPT Female Part)
 - HC404-6NDSN-M (1/2" NPT Male Part)



HIGH PRESSURE QUICK RELEASE COUPLER SERVICE KIT



Features & Specifications

- Complete Service Kit Available
- Easy to Install
- Price Competitive
- Readily Available
- Pre-Assembled Poppet

Oasis Tool required to install service kit.

- Male & Female Parts Service Kit Available
- Precision CNC Machined
- Service Instructions Supplied and Available Online



Customized Solutions

Oasis Ultra Fast Fill System™

e2e — Engineer to Engineer

<u>e2e</u>



At Oasis Engineering we are passionate about SETTING THE STANDARD when it comes to our products & processes. As well as our standard range of products we can also customise or manufacture to your requirements. All our sales team are engineers so please talk to us e2e (Engineer 2 Engineer) to discuss your very own requirements.

Here are examples of some of the things that we have been commissioned to undertake.

CUSTOM VALVE EXTENSION

Specification Details



Testament to the "freakishly good" design of the Oasis Ball valve, the Oasis valve is being retrofitted to many installations. Maintaining the proven long cycle life of the Oasis Ball valve, the custom valve extension is used when a non-Oasis valve being replaced is longer in length than the Oasis standard design.

We can custom manufacture a cap that will meet the length dimensions for your needs. Talk to us e2e so that we can craft a solution that meets your needs.

ACCESSORIES

CUSTOMIZED HANDLE SOLUTIONS



Features & Specifications

- Customized Handle Solutions to Suit Your Requirements
- Laser cut from Stainless Steel
- Powder Coated
- Printed Logo Design



ASSEMBLY TOOLS AVAILABLE



Features & Specifications

- Quick Release Coupler Poppet Assembly Tool
- Inline Trailer Breakaway Assembly Tool
 - We reserve the right to modify product specifications without prior notice

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Oasis Ultra Fa



st Fill System™



Glossary of Terms

Delrin (Valve Seat Material)

Unique thermoplastic material which is ideally suited as a valve seat where low friction and long wear life are important. Suitable for temperatures up to 248 degrees Fahrenheit (120 degrees centigrade).

Nitrile (O-ring Material)

This is an organic compound suitable for use as an O-ring. N90 stipulates the hardness of the compound. Suitable for temperatures up to 248 degrees Fahrenheit (120 degrees centigrade).

Flow Coefficient (Cv)

Allows flow capacities of valves at different sizes, types and manufacturers to be compared using physically measured data. Oasis uses the imperial flow coefficient Cv to allow easy valve flow comparisons. The flow coefficient is defined as the flow rate in US Gallons per minute [gpm] of water at a temperature of 60° Fahrenheit with a pressure drop across the valve of 1 psi. Oasis measures all Cv data using the method described in ANSI ISA-S75-Control Valve Capacity Test Procedures.

The flow coefficient describes the relationship between the pressure drop across an orifice, valve or other assembly and the corresponding flow rate.

Mathematically the flow coefficient can be expressed as:

$$C_v = F \sqrt{\frac{SG}{\Delta P}}$$

Where: Cv = Flow coefficient or flow capacity rating of valve.

- F = Rate of flow (US gallons per minute).
- SG = Specific gravity of fluid (Water = 1).
- ΔP = Pressure drop across valve (psi).

SCFM

Standard cubic feet per minute. A measure of volumetric flow rate for gas standardised to atmospheric conditions per minute. Most Oasis cut sheets (product information sheets) show the theoretical SCFM flow rate of air through the valve against the pressure drop across the valve. This is derived from the measured Cv value of the valve.

SCFH

Standard cubic feet per hour. See SCFM.

GGE

GGE corresponds to the amount of CNG containing the same energy content as one gallon of gasoline. This was defined by the National Conference on Weights and Measures at its 79th annual meeting in July 1994. GGE is defined as 1 gallon of gasoline and is equivalent to 5.66lbs of CNG, or 123.5 standard cubic feet of CNG.

DGE

DGE corresponds to the amount of CNG containing the same energy content as one gallon of gasoline. This has not been officially defined by the National Conference on Weight and Measures but is often taken as 1 gallon of gasoline which is equivalent to 6.38lbs of CNG, or 139.2 standard cubic feet of CNG.

SCFM to GGE/min and DGE/min

It is possible to approximate the GGE or DGE flow rate from the theoretical SCFM flow rate calculated by Oasis. This can be done by picking a point on the flow/pressure drop graphs on the cut sheets (product specifications). Divide the flow rate by 0.775 for CNG applications then divide the result by 123.5 for GGE/min or 139.2 for DGE/min.

Service pressure

The pressure that the product is designed for and intended for use at. This can be expected to be 200bar (3000psi) or 250bar (3600psi) for Oasis products.

Min operating pressure

The Minimum system pressure the product will hold a constant bubble tight seal. Very small leakages may be observed through the valve at the specified pressure.

Max pressure

The Maximum pressure at which the product can continuously operate at without affecting the life of the product.

Test pressure

The Maximum static pressure that can be applied without affecting the operation of the product.

Min temperature

The Minimum temperature that the product can be expected to function correctly at and maintain product specifications.

Maximum temperature

The Maximum temperature that the product can be expected to function correctly at and maintain product specifications.

Glossary of Terms

Cycles before rekit

Most Oasis products are designed to be serviced when the wearing components reach the end of their life cycle. This can easily be done at a remote location with standard maintenance tools and Oasis Servicing Instructions. Where a custom tool is required this can be supplied by Oasis. Product specific service kits can be purchased from Oasis or Oasis Authorized Distributors which will return the product to working order. Oasis recommends that products are serviced on or before the cycles before rekit limit is reached.

Reference standards

NFPA52 – Vehicular Gaseous Fuel Systems Code ANSI NGV 3.1 – Fuel System Components For Compressed Natural Gas Powered Vehicles ANSI/IAS NGV4.4 –Breakaway Devices for Natural Gas Dispensing Hoses and Systems ANSI/CSA NGV1 - Compressed Natural Gas Vehicle (NGV) Fuelling Connection Devices ISO 15500- Compressed Natural Gas (CNG) Fuel System Components ISO 14469 – Road Vehicles - Compressed Natural Gas (CNG) Refuelling Connector API STD 607 – Fire Test for Quarter-turn Valves and Valves Equipped with Non-metallic Seats PED 97/23/EC - Pressure Equipment Directive (PED) (97/23/EC)

Servicing Instructions

Step by step instructions provided by Oasis to help ensure trouble free servicing of products and long lasting products.

Installation and Operation Instructions

Step by step instructions provided by Oasis detailing correct and safe use of Oasis products.

NPT N.P.T; National Pipe Taper Taper: 1 in 16 by diameter Thread Angle: 60° National Pipe Thread Taper (NPT) is a U.S. standard for tapered threads used on threaded pipes and fittings. A sealant compound or Teflon tape must be used to for a leak free seal. NPT threads are covered by ANSI/ASME B1.20.1 pipe threads standard.

Pipe Size (inches)	Threads per Inch (TPI)	Nominal outside pipe diameter
1/4	18	.540in or 13.716mm
3/8	18	.675in or 17.145mm
1/2	14	.840in or 21.336mm
3/4	14	1.050in or 26.67mm
1	11.5	1.315in or 33.4mm

SAE

S.A.E; Society of Automotive Engineers

Thread Angle: 60°

SAE straight thread boss or UNO (UN O ring) are a port system that relies on an O Ring to seal the thread. There is no need for any sealant compound or Teflon tape to make a seal. SAE straight thread boss are covered by SAE J516 and SAE J1926.

Pipe Size (inches)	Thread size & TPI	O Ring
1/4	7/16-20 UNF	904
3/8	9/16-18 UNF	906
1/2	3⁄4-16 UNF	908
3/4	1 1/16-12 UN	912
1	1 5/16-12 UN	916





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