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100 Series Gas Check Valves

Applications

CNG dispenser, Storage Vessels, Priority panels, Compressors.

Materials

ltem	Description	CV102 Material
1	Body	303 Stainless steel
2	Poppet Assembly	385 brass
3	Spring Retainer	385 brass
4	Poppet spring	Stainless steel

Product Specification

NPT thread is standard configuration to ASME B1.20.1.

Other thread types available upon request.

All products are manufactured to ISO 9001 standards.

Complies to PED 2014/68/EU.

More information available online at oasisngv.com/resources.

Not recommended for marine or coastal environments.



CV102-3NBSO - Check Valve 1/4"

Features & Benefits

Specialist CNG check valve designed for long life applications. Simple robust design. Single piece, certified bar stock.

Tamper proof.



Dimensions: Imperial (mm)

Part	Size	A (Bore)	B (Length)	C (Diameter)	Thread Type
CV102	1/4"	0.25" (6.4)	2.52" (64)	0.87 (22)	1/4" NPT

Product Specification

Part Code	Mass kg (lb)	Min. Crack Pressure psi (bar) *	Min. Re-seal Back Pressure psi (bar) **	Max. Operating Pressure psi (bar) ^	Min. Temp. °C (°F)	Max. Temp. °C (°F)	Cv
CV102-3NBSO	0.2 (0.4)	2 (0.1)	7 (0.5)	6000 (410)	-40 (40)	85 (185)	1

* Minimum upstream pressure at which the valve will operate.

** Minimum back pressure at which to re-seal check valve.

Maximum pressure at which the product can continuously operate at.



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200 Series Cartridge Check Valve

Applications

Manifold assemblies for valve panels, compressor and dispenser packages.

Suitable for CNG, Bio Gas, Nitrogen and Air.



CC200 Series Cartridge Check Valves

Materials

Item	Part	Material
1	Body	Stainless Steel
2	Retainer	Stainless Steel
3	End Cap	Stainless Steel
4	Seat	B16 PEEK
5	O-rings	Viton

Product Information

Specifically designed for manifold applications.

Reversible poppet design allows for an easy change of flow direction setup by simply flipping the poppet body.

Cartridge pocket designed to Oasis specification.

The valve is supplied with flow direction away from the end cap and into the manifold pocket - see detail in dimensions drawing.

Tested to ISO 5208:2015 (E) class A requirements.

Complies to PED 2014/68/EU.

All products are manufactured to ISO 9001 standards.

Item	Part	Material
6	Backup rings	Nitrile
7	Spring	Stainless Steel
8	Seat Insert	Aluminium

Features & Benefits

A compact cartridge valve that reduces the weight and footprint of manifold assemblies.

Simple thread-in installation, reducing the number of leak points within the system.

Provides flexibility of flow paths with reversible check valve cartridges without the need to change manifold design.

Field proven, 300 Series high-flow poppet design offers unsurpassed durability and sealing performance.

Easily serviceable in the field with readily available Oasis service kits.

We reserve the right to modify product specifications without prior notice.





200 Series Cartridge Check Valve



Dimensions Inch (mm)

Part Code	Size	ØA	В	С	Ø D	E (HEX)	F (HEX)	Thread
CC204-65XFW	1/2"	2.15 (54.5)	3.37 (85.5)	0.4 (10)	1.31 (33.3)	1.1(28)	1.89(48)	M39 x 1.75
CC206-65XFW	3/4"	2.44 (62)	4.18 (106.25)	0.4 (10)	1.87 (47.6)	1.65(42)	2.17(55)	M53 x 1.75

Product Specification

Part Code	Mass Ib (kg)	Min. Crack Pressure bar (psi) *	Max. Operating Pressure bar (psi) **	Min. Temp. °F (°C)	Max Temp. °F (°C)	Cycles Before Rekit [^]	Cv^^	Service Kit
CC204-65XFW	1.26 (0.57)	1.38 (20)	380 (5500)	-40 (-40)	185 (85)	15,000	8	CC204-SKXFW
CC206-65XFW	2.69 (1.22)	1.38 (20)	380 (5500)	-40 (-40)	185 (85)	15,000	23	CC206-SKXFW

* Minimum upstream pressure at which the valve will open.

** Maximum pressure at which the product can continuously operate

^ The temperature's and cycles stated depend on the system conditions and may not be achievable in all situations.

Contact Oasis for further information.

^ The Cv flow rate is based on the flow through the check valve itself and does not take into account potential restrictions caused by manifold design.





200 Series Cartridge Check Valve



CC200 Series manifold pocket recommended dimensions

Dimensions (mm)

Part Code	ØA	Ø B	ØC	D	E (Thread)	F	ØG	∅ H (min)¹	ØI	J (O-ring groove surface finish)
CC204-65XFW	39.7 39.3	37.19 37.09	35.02 34.98	0.5mm	M39 x 1.75 Eff Ø 37.9 - 39.03 mm	4.46 4.36	39.09 39.05	35.05	37.49 37.45	RA: Max 0.8 Free from
CC206-65XFW	54.2 53.8	51.19 51.09	49.29 49.25	- x 45°	M53 x 1.75 Eff ∅ 51.9 - 53.03 mm	4.46 4.36	53.36 53.32	49.3	51.79 51.75	Burrs and Chatter

Dimensions (mm)

Part Code	ØK	L (Port, nominal) ²	Μ	Ν	Ο	Р	Q	R	S	т
CC204-65XFW	33.42 33.38	1/2"	75.8 75.7	61 60.9	47.6 47.5	26.31 26.21	24.11 24.01	16.6 16.4	2.73 2.63	1.6 1.4
CC206-65XFW	47.72 37.68	3/4"	96.3 96.2	76.56 76.46	58.2 57.8	30.6 30.5	29.1 29	21.1 20.9	2.98 2.88	1.6 1.4

1 Min bore diameter shown. Bore size in this area may be increased according to manifold design requirements.

For optimal flow Oasis recommends a bore diameter of 44mm for CC204-65XFV and 56mm for CC206-65XFV.

2 Lower port only shown in drawing. A side port which intersects the flow-bore (H) will be required for operation and is subject to the manifold designers requirements.

The dimensions given are internal dimensions of the manifold pocket only, for use with Oasis CC200 series cartridge check valves. Manifold design, including strength considerations and adherance to relevant standards, as well as testing and certification of the manifold, are the responsibility of the manifold designer.

We reserve the right to modify product specifications without prior notice.

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300 Series Check Valves

Applications

Unidirectional flow applications such as CNG Dispensers, Fill Panels, Priority Panels, Compressors, Trailers and Service Stations, where flow should only be allowed to travel in one direction.

Suitable for CNG, Hydrogen, Bio Gas, Nitrogen and Air.



CV300 Series Check Valves

Materials

Item	Part	Material
1	Body	316 Stainless steel
2	End cap	316 Stainless steel
3	Body insert	6061 Aluminium
4	Poppet	316 Stainless steel

Item	Part	Material
5	Poppet spring	304 Stainless steel
6	Poppet seal	B16 PEEK
7	End Cap O-rings	Nitrile

Product Information

Designed for unidirectional flow, direction shown on valve.

Multiple thread options available: NPT threads conform to ASME B1.20.1 SAE threads conform to SAE J1926-1 ORFS threads conform to SAE J1453-1 BSP threads conform to ISO 228-1

All products are manufactured to ISO 9001 standards.

Complies to ISO 5208:2015(E), Leak Rate A - No leakage Complies to PED 2014/68/EU.

CRN (0C19859.5CADD2) approved for all provinces and territories.

Features & Benefits

Check valves with a two-piece body and one-peice poppet, sets the standard in flow rates, strength and reliable sealing performance.

Precision manufactured from certified stainless steel bar stock, provides endurance and reliability in any application.

Flow protected springs with optimized flow paths give increased flow rates and greater resistance to chatter.

Easy to install service kits are readily available, allowing in-field servicing and reduced downtime.

Springs with different cracking pressures available upon request, minimum order quantities may apply.



300 Series Check Valves

NPT Product Specification

Part Code	Mass Ib (kg)	Min. Crack Pressure psi(bar)*	Max. Operating Pressure psi (bar)**	Min Temp. °F (°C)	Max Temp. °F (°C)	Cycles Before Rekit^	Cv	Service Kit
CV304-6NXDN	1.1 (0.5)	2 (0.14)	6000 (410)	-40 (-40)	185 (85)	15,000	8	CV304-SKXDN
CV306-6NXDP	3.28 (1.49)	2 (0.14)	6000 (410)	-40 (-40)^^	185 (85)	15,000	23	CV306-SKXDP
CV308-6NXDP	5.79(2.63)	0.5 (0.03)	6000 (410)	-40 (-40)^^	185 (85)	15,000	34	CV308-SKXDP

* Minimum upstream pressure at which the valve will open.

** Maximum pressure at which the product can continuously operate.

One cycle refers to the application of max operating pressure in the opposite direction of flow. It is recommended that the check valve is
re-kitted on or before the maximum number of allowable cycles.

^ This product uses a low temperature nitrile O-ring compound and may be suitable for use down to -65°F (-54°C) in certain applications. Contact Oasis to discuss your requirements.



NPT Dimensions Inch (mm)

Part Code	Size	Diameter ∅ A	Length B	Bore C	Hex D (A/F)	Port Thread E
CV304-6NXDN	1/2"	1.49 (38)	2.85 (72.5)	0.51 (13)	1.31 (33.4)	1/2" NPT Female
CV306-6NXDP	3/4"	2.15 (54.5)	3.94 (100)	0.79 (20.1)	1.89 (48)	3/4" NPT Female
CV308-6NXDP	1″	2.72 (69.2)	4.29 (109)	0.98 (24.9)	2.36 (60)	1" NPT Female



300 Series Check Valves

SAE Product Specification

Part Code	Mass Ib (kg)	Min. Crack Pressure psi(bar)*	Max. Operating Pressure psi (bar)**	Min Temp. °F (°C)	Max Temp. °F (°C)	Cycles Before Rekit^	Cv	Service Kit
CV304-6SXDN	1.1 (0.5)	2 (0.14)	6000 (410)	-40 (-40)	185 (85)	15,000	8	CV304-SKXDN-S
CV306-6SXDP	3.28 (1.49)	2 (0.14)	6000 (410)	-40 (-40)^^	185 (85)	15,000	23	CV306-SKXDP-S
CV308-6SXDP	5.79(2.63)	0.5 (0.03)	6000 (410)	-40 (-40)^^	185 (85)	15,000	34	CV308-SKXDP-S

* Minimum upstream pressure at which the valve will open.

** Maximum pressure at which the product can continuously operate.

^ One cycle refers to the application of max operating pressure in the opposite direction of flow. It is recommended that the check valve is re-kitted on or before the maximum number of allowable cycles.

^ This product uses a low temperature nitrile O-ring compound and may be suitable for use down to -65°F (-54°C) in certain applications. Contact Oasis to discuss your requirements.



SAE Dimensions Inch (mm)

Part Code	Size	Diameter ∅ A	Length B	Bore C	Hex D (A/F)	Port Thread E
CV304-6SXDN	1/2"	1.49 (38)	2.85 (72.5)	0.51 (13)	1.31 (33.4)	3/4-16 SAE Female
CV306-6SXDP	3/4"	2.15 (54.5)	3.94 (100)	0.79 (20.1)	1.89 (48)	1 1/16-12 SAE Female
CV308-6SXDP	1″	2.72 (69.2)	4.29 (109)	0.98 (24.9)	2.36 (60)	1 5/16-12 SAE Female



300 Series Check Valves

ORFS Product Specification

Part Code	Mass Ib (kg)	Min. Crack Pressure psi(bar)*	Max. Operating Pressure psi (bar)**	Min Temp. °F (°C)	Max Temp. °F (°C)	Cycles Before Rekit^	Cv	Service Kit
CV304-6FXDN	0.9(0.4)	2 (0.14)	6000 (410)	-40 (-40)	185 (85)	15,000	2.6	CV304-SKXDN-F
CV306-6FXDP	2.5(1.12)	2 (0.14)	6000 (410)	-40 (-40)^^	185 (85)	15,000	10.5	CV306-SKXDP-F
CV308-6FXDP	4.3(1.95)	0.5 (0.03)	6000 (410)	-40 (-40)^^	185 (85)	15,000	24.8	CV308-SKXDP-F

* Minimum upstream pressure at which the valve will open.

** Maximum pressure at which the product can continuously operate.

One cycle refers to the application of max operating pressure in the opposite direction of flow. It is recommended that the check valve is re-kitted on or before the maximum number of allowable cycles.

^ This product uses a low temperature nitrile O-ring compound and may be suitable for use down to -65°F (-54°C) in certain applications. Contact Oasis to discuss your requirements.



ORFS Dimensions Inch (mm)

Part Code	Size	Diameter ∅ A	Length B	Length C	Bore Ø D	Hex E (A/F)	End Thread F
CV304-6FXDN	1/2"	1.49 (38)	2 (50.8)	3 (76.8)	0.4 (9.5)	1.31 (33.4)	13/16-16 UN ORFS
CV306-6FXDP	3/4"	2.15 (54.5)	2.76 (70)	4.1 (104)	0.6 (15.5)	1.89 (48)	1 3/16-12 UN ORFS
CV308-6FXDP	1″	2.72 (69.2)	3 (77)	4.4 (112)	0.8 (20.5)	2.36 (60)	1 7/16-12 UN ORFS



300 Series Check Valves

BSP Product Specification

Part Code	Mass Ib (kg)	Min. Crack Pressure psi(bar)*	Max. Operating Pressure psi (bar)**	Min Temp. °F (°C)	Max Temp. °F (°C)	Cycles Before Rekit^	Cv	Service Kit
CV304-6BXDN	1.1 (0.5)	2 (0.14)	6000 (410)	-40 (-40)	185 (85)	15,000	8	CV304-SKXDN-B
CV306-6BXDP	3.28 (1.49)	2 (0.14)	6000 (410)	-40 (-40)^^	185 (85)	15,000	23	CV306-SKXDP-B
CV308-6BXDP	5.79(2.63)	0.5 (0.03)	6000 (410)	-40 (-40)^^	185 (85)	15,000	34	CV308-SKXDP-B

* Minimum upstream pressure at which the valve will open.

** Maximum pressure at which the product can continuously operate.

^ One cycle refers to the application of max operating pressure in the opposite direction of flow. It is recommended that the check value is re-kitted on or before the maximum number of allowable cycles.

^ This product uses a low temperature nitrile O-ring compound and may be suitable for use down to -65°F (-54°C) in certain applications. Contact Oasis to discuss your requirements.



BSP Dimensions Inch (mm)

Part Code	Size	Diameter ∅ A	Length B	Bore C	Hex D (A/F)	Port Thread E
CV304-6BXDN	1/2"	1.49 (38)	2.85 (72.5)	0.51 (13)	1.31 (33.4)	1/2" BSPP
CV306-6BXDP	3/4"	2.15 (54.5)	3.94 (100)	0.79 (20.1)	1.89 (48)	3/4" BSPP
CV308-6BXDP	1″	2.72 (69.2)	4.29 (109)	0.98 (24.9)	2.36 (60)	1" BSPP