



700 Series Ball Valves - ORFS (Matched Bore)

NOTE: This document is for O-Ring Face Seal (ORFS) Ball Valves Only. Please refer to 700 Series Ball Valves for other connection types.

Applications

CNG Compressors, Dispensers, Priority Panels, Isolation Valves and storage. Suitable with for use with CNG, Hydrogen, Helium, Bio-Gas, RNG, Biomethane, Nitrogen, air and others on enquiry.



BV706-666LDDN-1000 - 1" BALL VALVE ORFS

Materials

Item	Part	Material
1	Body	Stainless steel
2	Cap	Stainless steel
3	Stem	Stainless steel
4	Ball	Stainless steel
5	Seats	POM

Item	Part	Material
6	Gland & Thrust	POM
7	Body O-rings	NBR
8	Stem O-rings	NBR
9	Handle	Stainless Steel
10	Face Seal O-Ring	FKM

Product Information

ORFS threads comply to SAE J1453

Complies to PED 2014/68/EU (Pending).

CRN (Pending).

All products are manufactured to ISO 9001 standards.

Custom handle options available on request.

Also available with high cycle kit for dispenser and extreme cycle applications.

Video servicing instructions available online at OasisNGV.com/resources.

Features & Benefits

The 700 Series Matched Bore, Anti Blowout stem, all stainless steel certified bar stock, two-piece, serviceable valve.

Service kits are readily available & easy to install.

CNC machining allows tighter tolerances to be maintained, which extends the working life of the components.

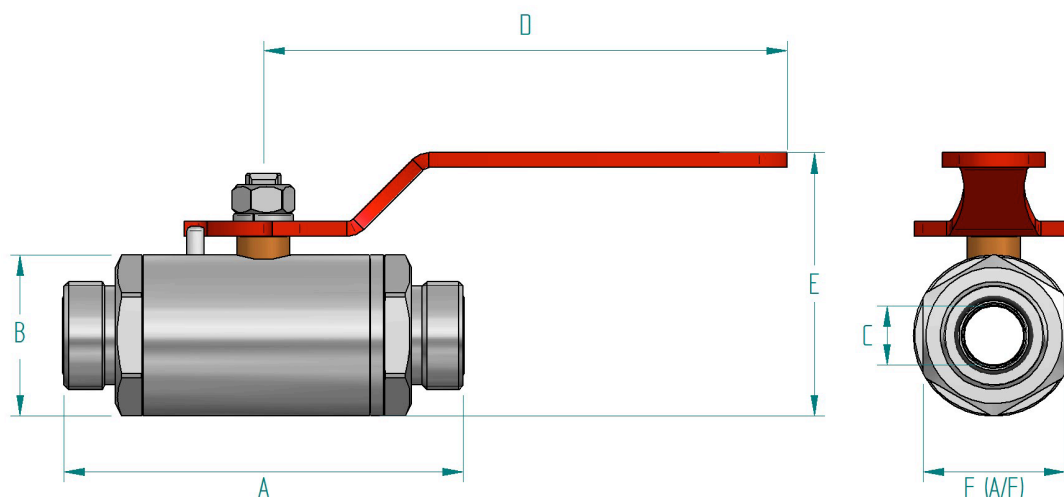
The complete Oasis range has been cycle tested to ensure LOWEST LIFE COST.

Matched bore valves suit the internal diameter of standard pressure tubes, unlocking maximum flow rates while reducing cost for the customer.

Available with actuators or as manual valves.

Two piece body and ORFS to ensure less leak points.

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Manual Valve ORFS Dimensions Inch (mm)

Part Code	Size	A	B	Ø C	D	E	Port Thread	F (A/F)
BV702-666SDDN-1000	3/8"	2.83" (72)	1.10" (28)	0.26" (6.5)	3.42" (87)	1.93" (49)	11/16" - 16 UN	1" (25)
BV703-666SDDN-1000	1/2"	3.35" (85)	1.25" (32)	0.37" (9.5)	4.90" (125)	2.28" (58)	13/16" - 16 UN	1.1" (28)
BV704-666LDDN-1000	3/4"	4.21" (107)	1.50" (38)	0.51" (13)	4.90" (125)	2.56" (65)	1-3/16" - 12 UN	1.3" (33.4)
BV706-666LDDN-1000	1"	5.31" (135)	2.16" (55)	0.79" (20)	6.96" (177)	3.50" (89)	1-7/16" - 12 UN	1.9" (48)
BV708-666LDDN-1000	1 1/4"	5.62" (143)	2.71" (69)	1.02" (26)	6.96" (177)	4.01" (102)	1-11/16" - 12 UN	2.3 (60)

Manual Valve ORFS Product Specification

Part Code	Mass lb (kg)	Min. Operating Pressure bar (psi) *	Max. Operating Pressure bar (psi) **	Min. Temp. °F (°C)	Max Temp. °F (°C)	Cv	Stem Open Torque ft- lb (Nm)^^	Cycles Before Rekit^	Service Kit
BV702-666SDDN-1000	0.62 (0.28)	34.5 (500)	410 (6000)	-40 (-40)	185 (85)	2.4	1.1 (1.5)	85,000	BV702-SK6SDDN-6
BV703-666SDDN-1000	0.93 (0.42)	34.5 (500)	410 (6000)	-40 (-40)	185 (85)	5.9	2.2 (3)	85,000	BV703-SK6SDDN-6
BV704-666LDDN-1000	1.57 (0.71)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	15.2	10.3 (14)	100,000	BV704-SK6LDDN-6
BV706-666LDDN-1000	4.28 (1.94)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	42.8	22.8 (31)	100,000	BV706-SK6LDDN-6
BV708-666LDDN-1000	6.70 (3.04)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	55.2	32.4 (44)	100,000	BV708-SK6LDDN-6

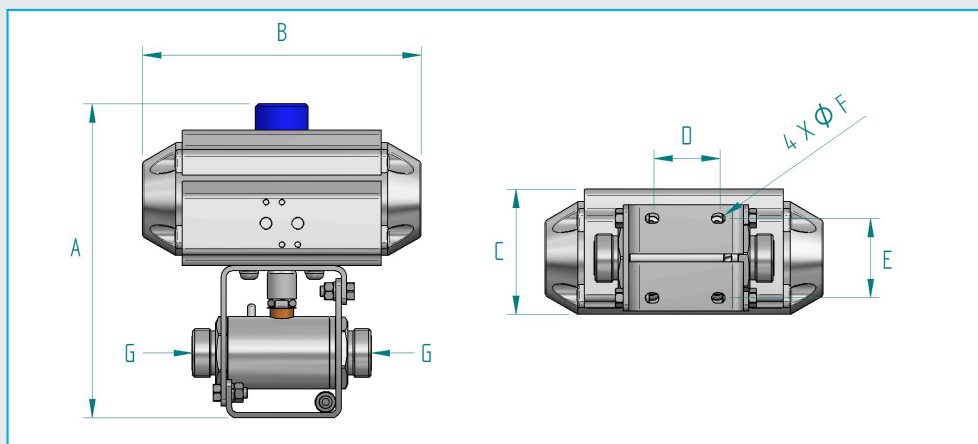
* Minimum system pressure the product will hold constant bubble tight seal.

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

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

^^ Opening torque at 6,000 psi

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ORFS Dimensions Inch (mm)

Part Code	Size	A	B	C	D	E	Ø F	(G) Port Thread	Actuator
BV702-666SDDN-0122 BV702-666SDDN-012L	3/8"	5.78" (147)	5.55" (141)	2.79" (71)	N/A	N/A	N/A	11/16" - 16 UN	AT051
BV703-666SDDN-0122 BV703-666SDDN-012L	1/2"	5.78" (147)	5.55" (141)	2.79" (71)	N/A	N/A	N/A	13/16" - 16UN	AT051
BV704-666LDDN-0124 BV704-666LDDN-012M	3/4"	6.7" (170)	6.26" (159)	3.26" (83)	N/A	N/A	N/A	1-3/16" - 12 UN	AT101
BV706-666LDDN-0146 BV706-666LDDN-014N	1"	9.33" (237)	8.3" (211)	3.74" (95)	1.97" (50)	2.36" (60)	0.32" (8)	1-7/16" - 12 UN	AT201
BV708-666LDDN-0148 BV708-666LDDN-014P	1 1/4"	10.27" (261)	9.7" (248)	4.17" (106)	1.97" (50)	3.15" (80)	0.32" (8)	1-11/16" - 12 UN	AT251

ORFS Product Specification

Part Code	Mass lb (kg)	Min. Operating Pressure bar (psi) *	Max. Operating Pressure bar (psi) **	Min. Temp. °F (°C)	Max. Temp. °F (°C)	Actuator Supply Pressure bar (psi) ^	Actuator Air Supply Port Size	Service Kit
BV702-666SDDN-0122 BV702-666SDDN-012L	3.81 (1.73)	34.5 (500)	410 (6000)	-40 (-40)	185 (85)	6-8 (87-116)	1/8" BSPP	BV702-SK6SDDN-6
BV703-666SDDN-0122 BV703-666SDDN-012L	4.17 (1.89)	34.5 (500)	410 (6000)	-40 (-40)	185 (85)	6-8 (87-116)	1/8" BSPP	BV703-SK6SDDN-6
BV704-666LDDN-0124 BV704-666LDDN-012M	5.91 (2.68)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	6-8 (87-116)	1/8" BSPP	BV704-SK6LDDN-6
BV706-666LDDN-0146 BV706-666LDDN-014N	12.5 (5.67)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	6-8 (87-116)	1/8" BSPP	BV706-SK6LDDN-6
BV708-666LDDN-0148 BV708-666LDDN-014P	19.2 (8.69)	0.5 (7)	410 (6000)	-40 (-40)	185 (85)	6-8 (87-116)	1/8" BSPP	BV708-SK6LDDN-6

(N/C) Normally Closed - Valve is in closed position when no pressure applied to actuator.

(N/O) Normally Open - Valve is in open position when no pressure applied to actuator.

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

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

^ Required actuator supply pressure to operate Air Torque Actuator.

^^ Opening Torque at 6,000 psi.