



SUBMITTAL SHEET

61-100/200

In-Line Check Valve



61-100
FEMALE x FEMALE THREADED
1/4" THROUGH 3"



61-200
MALE x FEMALE THREADED
1/4" THROUGH 2"



Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO#:	
Rep:	
Wholesale Dist.:	

DESCRIPTION

Apollo 61 Series Ball Cone® Check Valves offer reliable protection against reverse flow and exceptional resistance to chemicals and corrosion using proven ASTM quality materials. Well-suited for a broad range of applications, including saturated steam and chemical service. May be installed in both horizontal and vertical flow with upward flow. Made in the USA.

FEATURES

- Female (Inlet) x Female Threaded (1/4" -3")
- Male (Inlet) x Female Threaded (1/4" -2")
- Spring Actuated
- Tight Shut-off with Liquid Media
- Flow Straight-Through Design Efficiency
- RPTFE Ball Cone® for Chemical Resistance
- 100% Factory Tested
- **Made in the USA - ARRA Compliant**

OPTIONS & SIZES

- Lead Free (61LF-100)
- Soft Seat (61-500)
- Lead Free Soft Seat (61LF-500)
- Solder x Solder Soft Seat (61-600)
- (-A1) 0 psig Cracking Pressure (No Spring)
- (-E05) 5 psig Cracking Pressure (1/4"-1" Only)
- (-E10) 10 psig Cracking Pressure (1/4"-1" Only)
- (-57) Oxygen Cleaned
- (-17) Satin Chrome Plate Finish
- BSPP Threads (1/2" - 1" only)

Note: Not all combinations available. Call customer service for more details.

STANDARD MATERIALS LIST

BODY	Bronze, ASTM B584, UNS C84400
RETAINER	(1/4" - 1-1/4") ASTM B16 Brass (1-1/2" - 3") ASTM B584 Bronze
SPRING	Stainless Steel
BALL CONE CHECK	RPTFE, 15% Glass Filled
STEM	Brass, ASTM B16

PERFORMANCE RATING

- Max Pressure:
400 psi (2758 kPa) @ 100°F
125 psi (862 kPa) Steam @ 350°F
- Max Temp: 406°F (176.6°C)

APPROVALS

- CRN: OC11218.5C

NOTE: Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature wear.

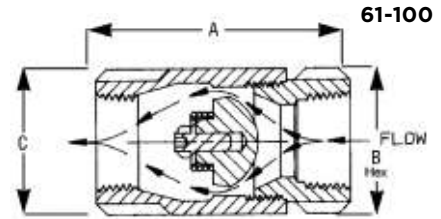
PART NO. MATRIX

61	- X	X	X	- XX
TYPE	CHECK	SPRING TYPE	SIZE (IN.)	OPTIONS
BRONZE	1 - BALL CONE (FNPT X FNPT)	0 - .5 PSIG CRACKING PRESSURE	1 - 1/4"	01 - STANDARD
	2 - BALL CONE (MNPT X FNPT)	2 - .2 PSIG CRACKING PRESSURE	2 - 3/8"	PO1 - BSPP THREAD**
	0 - BALL CONE REPAIR KIT		3 - 1/2"	TO1 - BSPT THREAD**
			4 - 3/4"	17 - SATIN CHROME PLATED
			5 - 1"	57 - OXYGEN CLEANED
			6 - 1-1/4"	A1 - LESS SPRING
			7 - 1-1/2"	E05 - 5 PSIG OPENING PRESSURE*
			8 - 2"	E10 - 10 PSIG OPENING PRESSURE*
			9 - 2-1/2"***	
			0 - 3"***	

*Available in 1/4" through 1" only. | **Minimums apply | ***Available on 61-100 only
(Note: Not all combinations are available. Contact Customer Service for verification.)

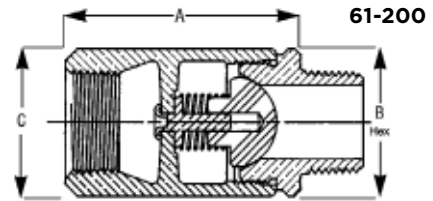
DIMENSIONS

PART NO.	SIZE (IN.)	DIMENSIONS (IN AND MM)						WT. (LB.)	WT. (KG.)
		A	A (MM)	B	B (MM)	C	C (MM)		
61-100 (FNPT X FNPT)									
61-101-01	1/4"	2.06	52.32	1.12	28.45	1.12	28.45	.38	.17
61-102-01	3/8"	2.12	53.85	1.12	28.45	1.12	28.45	.38	.17
61-103-01	1/2"	2.31	58.67	1.12	28.45	1.12	28.45	.38	.17
61-104-01	3/4"	2.87	72.90	2.37	60.20	1.50	38.10	.75	.34
61-105-01	1"	3.50	88.90	1.75	44.45	1.93	49.02	1.45	.66
61-106-01	1-1/4"	4.19	106.17	2.12	53.85	2.37	60.20	2.75	1.25
61-107-01	1-1/2"	4.94	125.48	2.50	63.50	2.81	71.37	3.94	1.79
61-108-01	2"	6.00	152.40	3.00	76.20	3.68	93.47	6.30	2.85
61-109-01	2-1/2"	7.12	177.8	3.87	98.29	4.50	114.30	14.0	6.35
61-100-01	3"	8.13	206.25	5.31	134.87	4.63	117.60	16.6	7.52



DIMENSIONS

PART NO.	SIZE (IN.)	DIMENSIONS (IN AND MM)					WT. (LB.)	WT. (KG.)
		A	B	B (MM)	C	C (MM)		
61-200 (MNPT X FNPT)								
61-201-01	1/4"	2.38	1.12	28.45	1.12	28.45	.38	.17
61-202-01	3/8"	2.38	1.12	28.45	1.12	28.45	.38	.17
61-203-01	1/2"	2.57	1.12	28.45	1.12	28.45	.38	.17
61-204-01	3/4"	3.09	2.37	60.20	1.50	38.10	.75	.34
61-205-01	1"	3.85	1.75	44.45	1.93	49.02	1.45	.66
61-206-01	1-1/4"	4.44	2.12	53.85	2.37	60.20	2.75	1.25
61-207-01	1-1/2"	5.16	2.50	63.50	2.81	71.37	3.94	1.79
61-208-01	2"	6.47	3.00	76.20	3.68	93.47	6.30	2.85



FLOW RATE

SIZE	GPM	
	CV	KV
1/4"	.85	.85
3/8"	1.21	1.21
1/2"	1.40	1.40
3/4"	3.53	3.53
1"	6.00	6.00
1-1/4"	44	44
1-1/2"	65	65
2"	81	81
2-1/2"	175	175
3"	265	265

GPM - gallons per minute at 1 psi pressure differential

Cv - expresses the flow capacity in gallons per minute (GPM) of 60°F water with a pressure drop of 1 psi (lb/in²).

Kv - the flow of water with temperature ranging 5 - 30°C through a valve in cubic meters per hour (m³/h) with a pressure drop of 1 bar