



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.

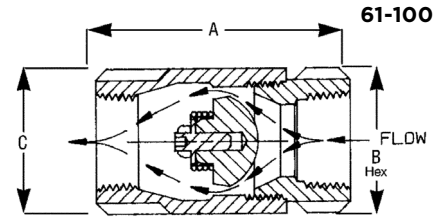
PART NO. MATRIX

| 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.)

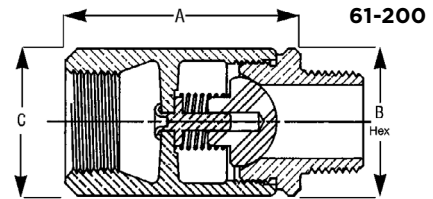
DIMENSIONS

| 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