Ball Cone® Check Valves

61 SERIES (MODEL CVB)

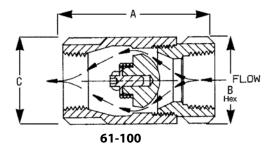


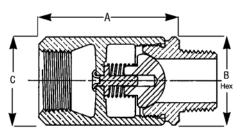


61-100 Female x Female Threaded 1/4" through 3"



61-200 Male x Female Threaded 1/4" through 2"





61-200

The Apollo Model CVB check valve with rugged bronze body and patented design (U.S. Pat. No. 4,172,465) RPTFE ball-cone check provides reliable protection against reverse flow. It is spring-loaded for fast seating and center guided for optimum alignment.

FEATURES

• 1/2 psi opening pressure

• Tight shut-off with liquid media

400 psig CWP

• 125 psig steam rating @350°F max

Straight-through design

American-made construction

• CRN OC 11218.5C

Lead Free Option (model 61LF)

MATERIALS OF CONSTRUCTION

Body Bronze - ASTM B584, UNS Alloy C84400

Retainer Brass - ASTM B16, (1/4" – 1")

Bronze - ASTM B584, (1-1/4" – 3")

Ball Check RPTFE - Reinforced Teflon™

Guide Brass - ASTM B16 Spring Stainless Steel

Flow Rate (Cv) GPM=gallons per minute at 1 psi pressure differential						
Size GPM						
1/4″	0.85					
3/8"	1.21					
1/2″	1.4					
3/4"	3.53					
1″	6					
1-1/4"	44					
1-1/2"	65					
2"	81					
2-1/2"	175					
3"	265					

Pressure Temperature Ratings					
Degree (F) PSIG					
-20 to 100	400				
200	200				
250	160				
275	150				
300	140				
325	130				
353	125				

NOTE: Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.

Dimensional Specifications

Bronze	LF Bronze	Bronze		Din	nensions (in.)	61-100	61-200
FNPT x FNPT		MNPT x FNPT	Size	A	В	C	Series Wt./100	Series Wt./100
61-101-01	61LF-101-01	61-201-01	1/4"	2.06	1.12	1.12	38	38
61-102-01	61LF-102-01	61-202-01	3/8"	2.12	1.12	1.12	37	37
61-103-01	61LF-103-01	61-203-01	1/2"	2.31	1.12	1.12	36	36
61-104-01	61LF-104-01	61-204-01	3/4"	2.87	1.37	1.50	75	76
61-105-01	61LF-105-01	61-205-01	1"	3.50	1.75	1.93	145	145
61-106-01	61LF-106-01	61-206-01	1-1/4"	4.18	2.12	2.37	275	237
61-107-01	61LF-107-01	61-207-01	1-1/2"	4.93	2.50	2.81	394	381
61-108-01	61LF-108-01	61-208-01	2"	6.00	3.00	3.68	630	636
61-109-01	61LF-109-01	-	2-1/2"	7.00	3.50	4.50	1400	-
61-100-01	61LF-100-01	-	3″	8.12	4.12	5.31	1665	-

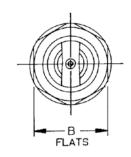
'Apollo' Valves

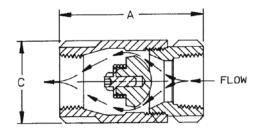
Ball Cone® Check Valves

62 SERIES (MODEL CVS)



62-100 Female x Female Threaded 1/4" through 2"





The Apollo Model CVS is uniquely suited for applications in corrosive environments, including chemical processing, pulp and paper and other process industries. The rugged stainless steel body and RPTFE ball cone check provide reliable, patented protection against reverse flow.

FEATURES

Unique (U.S. Patent #4,172,465) ball cone design provides tight shutoff in reverse flow conditions. The body of the valve is investment cast stainless steel for longer life in severe environments. It is spring-loaded for fast seating action and center guided so that radial alignment is never needed. Straight-through flow minimizes velocity change. It is rated 400 psig CWP, cold non-shock; 125 psig saturated steam. Opening pressure 1/2 psig.

MATERIALS OF CONSTRUCTION

Body Stainless Steel - ASTM A351, CF8M
Retainer Stainless Steel - ASTM A276, 316 (1/4" – 1")
Stainless Steel - ASTM A351,CF8M (1-1/4" – 2")

Ball Check RPTFE - Reinforced Teflon™ Guide Stainless Steel - ASTM A276, 316

Spring Stainless Steel

Flow Rate (Cv) GPM=gallons per minute at 1 psi pressure differential					
Size GPM					
1/4"	0.85				
3/8"	1.21				
1/2"	1.4				
3/4"	3.53				
1"	6				
1-1/4"	44				
1-1/2"	65				
2"	81				

Pressure Temperature Ratings					
Degree (F)	PSIG				
-20 to 100	400				
200	200				
250	160				
275	150				
300	140				
325	130				
353	125				

Dimensional Specifications

Item Number	Size	A	В	C	Wt./100
62-101-01	1/4"	2.06	1.12	1.12	38
62-102-01	3/8"	2.12	1.12	1.12	37
62-103-01	1/2"	2.31	1.12	1.12	36
62-104-01	3/4"	2.87	1.37	1.50	75
62-105-01	1″	3.50	1.75	1.93	145
62-106-01	1-1/4"	4.18	2.12	2.37	237
62-107-01	1-1/2"	4.93	2.50	2.81	381
62-108-01	2"	6.00	3.00	3.68	636

<u>NOTE:</u> Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.



CHECK VALVE PART NUMBERING SYSTEM — BALL CONE CHECK MODELS

6 X	- X	Х	X	- XX
ТҮРЕ	CHECK	SPRING TYPE	SIZE (IN.)	OPTIONS
1 = Bronze	1 = Ball Cone (NPT-F x F)	0 = .5 psig Cracking Pressure	1 = 1/4"	01 = Standard
1LF = Lead Free Bronze	2 = Ball Cone (NPT-M x F)	2 = .2 psig Cracking Pressure	2 = 3/8"	PO1 = BSPP Thread
2 = Stainless Steel	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.

(Note: Not all combinations are available. Contact Customer Service for verification.)

NOTE: The Cv (Valve Constant) is the gallons of water per minute that the valve will pass with a 1 PSIG pressure drop across the valve.

FLOW OF LIQUID

$$Q = Cv \sqrt{\frac{\Delta P}{SpGr}}$$

or $\Delta P = \frac{(Q)^2 (SpGr)}{(Cv)^2}$

WHERE:

Q = flow in US gpm $\Delta P = \text{pressure drop (PSI)}$ SpGr = specific gravity at flowing temperature

Cv = valve constant

FLOW OF GAS

 $Q = 1360 \text{ Cv} \sqrt{\frac{\Delta P (P_2)}{(SpGr) (T)}}$

or $\Delta P = \frac{5.4 \times 10^{-7} (SpGr) (T) (Q)^2}{(Cv)^2 (P_s)}$

WHERE:

Q = flow in SCFH $\Delta P = pressure drop (PSI)$ SpGr = specific gravity

> (based on air - 1.0) P₂ = outlet pressure - psia (psig + 14.7)

T = (temp. °F + 460)Cv = valve constant

PRECAUTIONARY NOTE:

Not recommended for use with reciprocating pumps and similar applications which may induce repetitious vibrations. Low flow rates which do not fully open the valve, may result in undesirable noise and premature valve failure. Upstream flow disturbances, which create turbulence, may also result in rapid wear. Therefore, it is recommended that a minimum of 10 diameters of straight pipe be provided between the check valve and any upstream flow disturbances such as pumps, control valves, elbows, etc.

Soft Seated Check Valves

61-500/61-600 SERIES (MODEL CVBE)





61-500 Female x Female Threaded 1/4" through 2"



61-600 Female x Female Sweat 1/2" through 2"

The Apollo Model CVBE check valve is ideally suited for hydronic heating and other low flow applications. The rugged bronze body and check provide reliable protection against reverse flow.

FEATURES

The 61-500/61-600 features an EPDM soft seat for bubble tight shutoff, reduced noise and less vibration. It is spring-loaded for fast seating action and center guided for optimum alignment. Straight-through flow minimizes velocity change. The spring is fully protected from the flow stream, helping extend the service life of the valve. The valve is rated 400 psig CWP, cold non-shock; Maximum Temperature 250°F. Lead Free option now available in select models and sizes. Opening pressure 1/2 psig.

MATERIALS OF CONSTRUCTION

Body Bronze - ASTM B584, UNS Alloy C84400

Retainer Brass - ASTM B16 (1/4" – 1")

Bronze - ASTM B584 (1-1/4" – 2")

Seat EPDM

Guide Pin Stainless Steel
Spring Stainless Steel
Check Brass - ASTM B16
Guide Brass - ASTM B16

Flow Rate (Cv) GPM=gallons per minute at 1 psi pressure differential						
61-	500	61-	600			
Size	GPM	Size	GPM			
1/4"	0.85	-	-			
3/8"	1.21	-	-			
1/2"	1.4	1/2″	2.20			
3/4"	3.53	3/4"	4.78			
1"	6	1″	6			
1-1/4"	44	1-1/4"	44			
1-1/2"	65	1-1/2"	65			
2"	81	2"	81			

<u>NOTE:</u> Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.

CHECK VALVE PART N	IUMBERING SYSTEM -	- SOFT SEAT MODELS
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6 X	- X	X	X	- XX
TYPE	CHECK	SPRING TYPE	SIZE (IN.)	OPTIONS
1 = Bronze	5 = Soft Seat (NPT-F x F)	0 = .5 psig Cracking Pressure	1 = 1/4"	01 = Standard (EPDM Seat)
1LF = Lead Free Bronze	6 = Soft Seat (Solder)	2 = .2 psig Cracking Pressure	2 = 3/8"	PO1 = BSPP Thread (ISO 228)
	9 = Soft Seat Repair Kit		3 = 1/2"	TO1 = BSPT Thread (EN 10226)
	(EPR only)		4 = 3/4"	17 = Satin Chrome Plated
			5 = 1"	57 = Oxygen Cleaned
				A1 = Less Spring
				B1 = Nitrile Seat
				V1 = Viton Seat
				E05 = 5 psig Opening Pressure*
				E10 = 10 psig Opening Pressure*

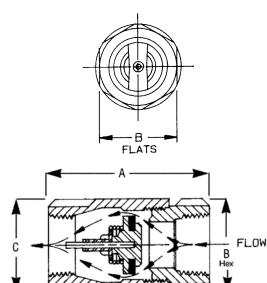
*Available in 1/4" through 1" Only.

(Note: Not all combinations are available. Contact Customer Service for verification.)



Soft Seated Check Valves

61-500/61-600 SERIES BRONZE (CONT.)



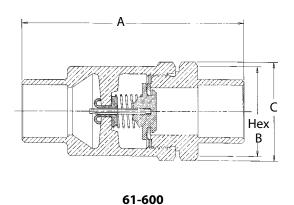
61-500 Dimensional Specifications

Item Number	LF Item Number	Size	Α	В	C	Wt./100
61-501-01	61LF-501-01	1/4"	2.31	1.12	1.12	38
61-502-01	61LF-502-01	3/8"	2.31	1.12	1.12	37
61-503-01	61LF-503-01	1/2"	2.31	1.12	1.12	36
61-504-01	61LF-504-01	3/4"	2.87	1.37	1.50	75
61-505-01	61LF-505-01	1″	3.50	1.75	1.93	145
61-506-01	61LF-506-01	1-1/4"	4.18	2.12	2.37	275
61-507-01	61LF-507-01	1-1/2"	4.93	2.50	2.81	394
61-508-01	61LF-508-01	2″	6.00	3.00	3.68	630

61-600 Dimensional Specifications

Item Number	LF Item Number	Size	A	В	C	Wt./100
61-603-01	61LF-603-01	1/2"	2.75	1.12	1.25	38
61-604-01	61LF-604-01	3/4"	3.68	1.50	1.62	75
61-605-01	61LF-605-01	1″	4.50	1.93	2.12	145
61-606-01	61LF-606-01	1-1/4"	6.11	2.13	2.38	330
61-607-01	61LF-607-01	1-1/2"	6.87	2.50	2.81	610
61-608-01	61LF-608-01	2"	7.46	3.38	3.75	1010

61-500



EPDM Seat

400

300

200

100

0° 100° 200° 300° 400°

Temperature °F

Soft Seated Check Valves

62-500 SERIES (MODEL CVSE)



62-500 Female x Female Threaded 1/4" through 1"

The Apollo Model CVSE is ideal for fluid flow applications in tough industrial environments. The stainless steel body and check provide lasting protection against reverse flow.

The 62-500 features a Fluorocarbon (Viton®) soft seat for bubble tight shutoff, reduced noise and vibration. It is spring-loaded for fast seating action and center guided for optimum alignment. Straight-through flow minimizes velocity change. The spring is fully protected from the flow stream, helping extend the life of the valve. The 62-500 is rated 400 psig CWP, cold non-shock; Maximum Temperature 350°F.

FEATURES

- Bubble-tight shut-off, ideally suited for gaseous service
- 400 psig CWP non-shock
- Viton® check disc
- Approximate opening pressure 1/2 psi
- RoHS Compliant
- CRN OC 11218.5C

MATERIALS OF CONSTRUCTION

Body Stainless Steel - ASTM A351,CF8M Retainer Stainless Steel - ASTM A276, 316

Seat Fluorocarbon - Viton®
Spring Stainless Steel - AISI 316

Check Stainless Steel - ASTM A276, 316

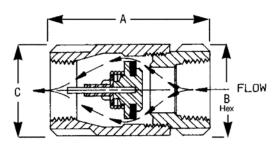
Flow Rate (Cv) GPM=gallons per minute at 1 psi pressure differential					
Size GPM					
1/4″	0.47				
3/8"	1.57				
1/2"	2.20				
3/4"	4.78				
1"	6.00				

NOTE: Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.



Soft Seated Check Valves

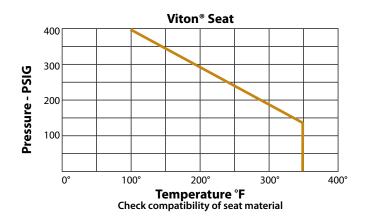
62-500 SERIES (MODEL CVSE) (CONT.)



Dimensional Specifications

Item Number	Size	A	В	C	Wt./100
62-501-01	1/4"	2.312	1.125	1.125	38
62-502-01	3/8"	2.312	1.125	1.125	37
62-503-01	1/2"	2.312	1.125	1.125	36
62-504-01	3/4"	2.875	1.375	1.500	75
62-505-01	1″	3.500	1.750	1.937	150

<u>NOTE:</u> Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.



CHECK VALVE PART NUMBERING SYSTEM — SOFT SEAT MODELS							
62	- X	X	X	- XX			
TYPE	CHECK	SPRING TYPE	SIZE (IN.)	OPTIONS			
62 = Stainless Steel	5 = Soft Seat (NPT-F x F) 6 = Soft Seat (Solder) 9 = Soft Seat Repair Kit (Viton only)	0 = .5 psig Cracking Pressure 2 = .2 psig Cracking Pressure	1 = 1/4" 2 = 3/8" 3 = 1/2" 4 = 3/4" 5 = 1"	01 = Standard (Viton seat) P01 = BSPP Thread (ISO 228) T01 = BSPT Thread (EN 10226) 17 = Satin Chrome Plated 57 = Oxygen Cleaned A1 = Less Spring B1 = Nitrile Seat F1 = EPDM Seat E05 = 5 psig Opening Pressure*			

^{*}Available in 1/4" through 1" Only.

(Note: Not all combinations are available. Contact Customer Service for verification.)



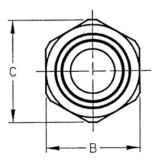
E10 = 10 psig Opening Pressure*

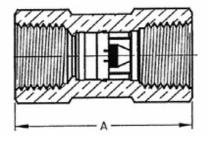
Mini Check Valves

61-700 SERIES (MODEL CV)



61-700 Female x Female Pipe Thread 1/4" through 1"





The Apollo Model CV check valve is ideally suited for cold water, and air applications for prevention of reverse flow. The modular check cartridge provides superior leak-tight performance with low pressure loss. It is rated at 230 PSIG with a maximum temperature of 200°F.

FEATURES

- 0.5 psi cracking pressure
- Acetyl silicone check with: Silicone rubber seat (1/4 & 3/8) Nitrile seat (1/2-1)

MATERIALS OF CONSTRUCTION

Body Brass, ASTM B16

Check Module Acetal/Brass/Silicone/Buna-N

Spring Stainless Steel 302

Dimensional Specifications

Item Number	Size	A	В	C	Wt./100
61-701-01	1/4"	1.72	0.81	0.92	22
61-702-01	3/8"	1.79	0.93	1.05	29
61-703-01	1/2"	2.02	1.06	1.17	38
61-704-01	3/4"	2.50	1.25	1.40	54
61-705-01	1"	2.95	1.62	1.76	110

Flow Rate (Cv) GPM=gallons per minute at 1 psi pressure differential					
Size GPM					
1/4″	0.78				
3/8"	1.81				
1/2"	6.00				
3/4"	11.50				
1"	17.50				

NOTE: Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.

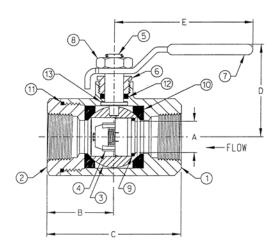


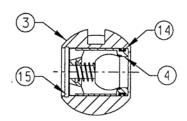
Ball Valve with Integral Check

70-100-BC



70-100-BC Female x Female Threaded 1/2" through 2"





The 70-100-BC Series ball valve combines two functions in a single design: positive shut-off and bubble-tight check capabilities. The BC Series is a unidirectional version of the industry-standard Apollo 70 Series ball valve. An easy flow design and superior check valve make these valves a smart choice for water or air in mechanical systems or OEM applications. Rated at 250 psi WOG and maximum temperature of 200°F.

FEATURES

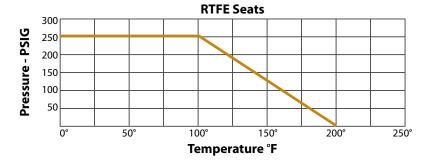
- Blowout-proof stems
- RPTFE seats and stuffing box ring
- Adjustable packing gland
- Chromium-plated ball
- Positive shut-off and bubble-tight check capability

MATERIALS OF CONSTRUCTION

1	Body	B584-C84400
2	Retainer	B16 (1/2"-1")
		B584-C84400 (1-1/4"-2")
3	Ball	B16 Brass Chrome Plated
4	Check Valve Insert	Acetal
5	Stem	B16 Brass
6	Gland Nut	B16 Brass
7	Lever and Grip	Steel, Zinc-plated w/vinyl
8	Lever Nut	Steel, Zinc-plated
9	O-Ring	Buna-N
10	Seat (2)	Reinforced TFE
11	Body Seal	TFE (1-1/4" - 2")
12	Stem Packing	Reinforced TFE
13	Stem Bearing	Reinforced TFE
14	Seal	EPDM (1/2")
15	Retaining Ring	Spring Steel (1/2")

Dimensional Specifications

Item Number	Size	A	В	C	D	E	Wt./100
70-103-BC	1/2"	0.50	1.12	2.25	1.80	3.87	0.63
70-104-BC	3/4"	0.68	4.50	3.00	2.12	4.87	1.33
70-105-BC	1″	0.87	1.68	3.37	2.25	4.87	1.77
70-106-BC	1-1/4"	1.00	2.00	4.00	2.73	5.50	3.29
70-107-BC	1-1/2"	1.25	2.18	4.37	3.09	8.00	4.63
70-108-BC	2"	1.50	2.34	4.68	3.28	8.00	6.01



NOTE: Not recommended for use with reciprocating pumps and similar applications. Low flows may result in undesirable noise and premature valve failure. See page 6 for additional precautions.



Swing Check Valves

61Y SERIES



Solder



NPT

PERFORMANCE RATING:

Saturated Steam: 125 psi (8.6 Bar)

to 353°F (178°C)

CWP: 200 psi (13.8 Bar)

at 100°F

Temp. Range: -20°F to 406°F

CLASS 125

The Apollo Swing Checks provides a cost effective "made in the USA" alternative to globally sourced check valves. These valves are cast, machined, assembled, and tested in South Carolina. The Apollo Swing Check can be installed in both horizontal or vertical line with upward flow. Bronze Disc, Solder.

FEATURES

- Renewable Seat Disc
- Metal Seat
- Dezincification Resistant Bronze
- 100% Factory tested
- Solder Connections
- 100% machined and assembled in US
- Lead Free Option (model 61YLF)

MATERIALS OF CONSTRUCTION

Body	Bronze, ASTM B62
Cap	Bronze, ASTM B62
Hanger	Stainless Steel
Pin	Stainless Steel
Seat*	Bronze, ASTM B62
Dlug	Rracc

* PTFE and Viton seat option

APPROVALS

- Standard MSS SP-80
- Lead Free MSS SP-139
- CRN 0C 14667.5

Lead Free

Bronze, ASTM B584-C89836 Bronze, ASTM B584-C89836 Stainless Steel

Stainless Steel

Bronze, ASTM B584-C89836

<u>WARNING:</u> Do not use in reciprocating compressor service. See page 13 for additional precautions.

Dimensional Specifications (Solder)

161S Item Number (Metal)	161S-LF Item Number (Metal)	163S Item Number (Metal)	163S-LF Item Number (Metal)	Size	Height	Length	Wt./100
61Y-093-01	61YLF-093-01	61Y-103-T1	61YLF-103-T1	1/2"	1.65	2.53	.62
61Y-094-01	61YLF-094-01	61Y-104-T1	61YLF-104-T1	3/4"	1.9	3.36	.91
61Y-095-01	61YLF-095-01	61Y-105-T1	61YLF-105-T1	1″	2.26	4.07	1.7
61Y-096-01	61YLF-096-01	61Y-106-T1	61YLF-106-T1	1-1/4"	2.99	5.28	3.2
61Y-097-01	61YLF-097-01	61Y-107-T1	61YLF-107-T1	1-1/2"	2.99	5.28	2.7
61Y-098-01	61YLF-098-01	61Y-108-T1	61YLF-108-T1	2"	3.74	6.50	4.9
61Y-099-01	-	61Y-109-T1	-	2-1/2"	5.11	8.30	9.7
61Y-090-01	-	61Y-100-T1	-	3"	6.05	9.58	15.0

Height is measured from centerline to top of access cap.

Dimensional Specifications (NPT)

161T Item Number (Metal)	161T-LF Item Number (Metal)	162T Item Number (Viton)	163T Item Number (PTFE)	163T-LF Item Number (PTFE)	Size	Height	Length	Wt./100
61Y-191-01	61YLF-191-01	61Y-201-V1	61Y-201-T1	-	1/4"	1.51	2.14	.64
61Y-192-01	61YLF-192-01	61Y-202-V1	61Y-202-T1	-	3/8"	1.51	2.14	.62
61Y-193-01	61YLF-193-01	61Y-203-V1	61Y-203-T1	61YLF-203-T1	1/2"	1.65	2.48	.73
61Y-194-01	61YLF-194-01	61Y-204-V1	61Y-204-T1	61YLF-204-T1	3/4"	1.9	2.94	1.06
61Y-195-01	61YLF-195-01	61Y-205-V1	61Y-205-T1	61YLF-205-T1	1″	2.26	3.57	1.7
61Y-196-01	61YLF-196-01	61Y-206-V1	61Y-206-T1	61YLF-206-T1	1-1/4"	2.99	4.50	3.3
61Y-197-01	61YLF-197-01	61Y-207-V1	61Y-207-T1	61YLF-207-T1	1-1/2"	2.99	4.50	3.1
61Y-198-01	61YLF-198-01	61Y-208-V1	61Y-208-T1	61YLF-208-T1	2″	3.74	5.25	5.5
61Y-199-01	-	-	-	-	2-1/2"	5.11	8.00	11.7
61Y-190-01	-	-	-	-	3″	6.05	9.24	17.8

Height is measured from centerline to top of access cap.

www.apollovalves.com



Swing Check Valves

61Y SERIES



PERFORMANCE RATING:

Saturated Steam: 150 psi (10.4 Bar)

to 366°F (185°C)

CWP: 300 psi (20.7 Bar) at 100°F

Temp. Range: -20°F to 406°F

CLASS 150

The Apollo Model 164 Swing Check provides a cost effective "made in the USA" alternative to globally sourced check valves. These valves are cast, machined, assembled, and tested in South Carolina. The Apollo Swing Check can be installed in both horizontal or vertical line with upward flow. Bronze Seat, NPT.

FEATURES

Renewable Seat Disc

Metal Seat

• Dezincification Resistant Bronze

100% Factory testedNPT Connections

100% manufactured in USA

MATERIALS OF CONSTRUCTION

Body & Cap Bronze ASTM B62 Hanger & Pin Stainless Steel Seat Bronze ASTM B62

Plug Brass

<u>WARNING:</u> Do not use in reciprocating compressor service. See page 13 for

additional precautions.

Dimensional Specifications

164T Item Number (Metal)	Size	Height	Length	Wt./100
61Y-211-01	1/4″	1.51	2.14	.64
61Y-212-01	3/8"	1.51	2.14	.62
61Y-213-01	1/2"	1.65	2.48	.73
61Y-214-01	3/4"	1.90	2.94	1.06
61Y-215-01	1"	2.26	3.57	1.70
61Y-216-01	1-1/4"	2.99	4.50	3.40
61Y-217-01	1-1/2"	2.99	4.50	3.10
61Y-218-01	2"	3.74	5.25	5.50
61Y-219-01	2-1/2"	5.11	8.00	11.70
61Y-210-01	3"	6.05	9.24	17.80

Height is measured from centerline to top of access cap.

61Y SERIES



PERFORMANCE RATING:

Saturated Steam: 300 psi (20.7 Bar)

CWP: 600 psi (41.4 Bar)

at 100°F (38°C)

Temp. Range: -20°F to 422°F

(-29°C to 216°C)

CLASS 300

FEATURES

- Y-Pattern
- Bronze Disc / PTFE Disc
- NPT

MATERIALS OF CONSTRUCTION

Body & Cap Bronze ASTM B61 Hanger & Pin Stainless Steel

Seat Bronze ASTM B61 PTFE

Plug Brass

Dimensional Specifications

168T Item Number (Metal)	169T Item Number (PTFE)	Size	Height	Length	Wt./100
61Y-753-01	61Y-753-T1	1/2"	1.65	2.50	.75
61Y-754-01	61Y-754-T1	3/4"	1.90	2.95	1.20
61Y-755-01	61Y-755-T1	1″	2.27	3.57	1.80
61Y-756-01	61Y-756-T1	1-1/4"	3.00	4.50	3.50
61Y-757-01	61Y-757-T1	1-1/2"	3.00	4.50	3.20
61Y-758-01	61Y-758-T1	2"	3.75	5.25	5.60

Height is measured from centerline to top of access cap.



Swing Check Valves

6SC SERIES



910F Class 125

910FLW Class 125

Lever & Weight Design

920F Class 250

Model 910FLW

The Apollo International™ Model 910 and 920 Flanged Cast Iron Swing Check valves provide full flow capabilities. They provide reliable and economical protection against reverse flow. The Apollo Swing Check valves can reliably be installed in most plumbing and heating systems including building service piping. Flanged connection with bolted bonnet for easy access to internals.

FEATURES

 Compatible with ANSI 125# & 150# Flanges

Full Port

Minimal Pressure Drop

· Flanged Connection

• Bolted Bonnet

Integral Bronze Seat

• MSS SP-71 approval

MATERIALS OF CONSTRUCTION

Body Cast Iron (ASTM A126 CL-B)
Bonnet Cast Iron (ASTM A126 CL-B)
Bolts Steel (ASTM A307 B)

Nameplate Aluminum Body Gasket Graphite

Nuts Steel (ASTM A307 B) Side Plug Brass (ASTM B16)

Gasket Graphite

Hanger Pin Brass (ASTM B16)

Hanger Ductile Iron (ASTM A536 65-45-12)
Disc Ring Cast Bronze (2"-6") Cast Iron (8"-20")

Disc Cast Iron (ASTM A126 CL-B)

Washer Steel (ASTM A307 B)

Split Pin Stainless Steel (ASTM 420 S42000) Seat Ring Cast Bronze (2"-6") Cast Iron (8"-20")

Disc Nut Steel (ASTM A307 B) Stud Bolt Steel (ASTM A307 B

<u>WARNING:</u> Do not use in reciprocating compressor service. See page 13 for additional precautions.

Dimensional Specifications

910F Number	910FLW Number	920F Number	Size	Height	Length 910F & 910FLW	Length 920F	Wt. 910F	Wt. 910FLW	Wt. 920F
6SC-108-B1	6SC-108-B1L	6SC-208-B1	2"	4.41	8.00	10.51	26	39	30
6SC-109-B1	6SC-109-B1L	6SC-209-B1	2-1/2"	5.24	8.50	11.50	39	45	44
6SC-100-B1	6SC-100-B1L	6SC-200-B1	3"	5.67	9.50	12.50	47	63	55
6SC-10A-B1	6SC-10A-B1L	6SC-20A-B1	4"	6.61	11.50	14.00	82	99	90
6SC-10B-B1	6SC-10B-B1L	6SC-20B-B1	5"	7.80	13.00	15.75	124	132	135
6SC-10C-B1	6SC-10C-B1L	6SC-20C-B1	6"	8.54	14.00	17.50	160	170	172
6SC-10E-01	6SC-10E-01L	6SC-20E-01	8"	10.28	19.50	21.00	271	282	289
6SC-10G-01	6SC-10G-01L		10"	11.30	24.50		437	439	
6SC-10H-01	6SC-10H-01L		12"	12.56	27.50		644	672	
6SC-10J-01			14"	17.50	31.00		950		
6SC-10K-01			16"	23.45	36.00		1160		
6SC-10M-01			18"	27.50	36.00		1720		
6SC-10N-01			20"	29.25	40.00		2094		

Wafer Check Valves

6WC SERIES



PERFORMANCE RATING:

MODEL 910WB

CWP: 200 psi (13.8 Bar) at 100°F (2-12")

150 psi (10.3 Bar) at 100°F (14-24")

Temp. Range: 10°F to 180°F

MODEL 910WE

CWP: 200 psi (13.8 Bar) at 100°F (2-12")

Temp. Range: -30°F to 275°F

The Apollo International[™] Model 910WB and 910WE Cast Iron Wafer Check valves provide full flow capabilities. It provides reliable and economical protection against reverse flow. The Apollo Wafer Check valve can reliably be installed in most plumbing and heating systems including building service piping. Wafer flanged connection.

FEATURES

• Wafer Flanged Connection

• Compatible with ANSI 125# &

150# Flanges

Full Port

Minimal Pressure Drop

Light Weight

 Spring Assisted Closing for Quicker Response

MATERIALS OF CONSTRUCTION

Body Cast Iron (ASTM A126 CL-B)

Seat Ring EPDM (910WE)

Seat Ring Nitrile (Buna-N) (910WB)

Disc Aluminum Bronze
Spring Stainless Steel 316
Stem Stainless Steel 316

Screw Carbon Steel

Pin Stainless Steel 316

<u>WARNING:</u> Do not use in reciprocating compressor service. See page 13 for additional precautions.

910WB & 910WE Dimensional Specifications

910WB Number	910WE Number	Size	Diameter	Length	Wt.	Max. Cracking Pressure (psi)
6WC-108-N1	6WC-108-E1	2"	4.00	2.12	5	0.70
6WC-109-N1	6WC-109-E1	2-1/2"	4.75	2.38	7	0.70
6WC-100-N1	6WC-100-E1	3"	5.25	2.62	10	0.70
6WC-10A-N1	6WC-10A-E1	4"	6.75	2.62	12	0.70
6WC-10B-N1	6WC-10B-E1	5"	7.50	3.25	15	0.70
6WC-10C-N1	6WC-10C-E1	6"	8.50	3.75	22	0.70
6WC-10E-N1	6WC-10E-E1	8"	11.00	5.00	35	0.70
6WC-10G-N1	6WC-10G-E1	10"	13.25	5.50	66	0.70
6WC-10H-N1	6WC-10H-E1	12"	16.00	7.12	108	0.70
6WC-10J-N1		14"	17.75	7.25	172	1.00
6WC-10K-N1		16"	20.00	7.50	132	1.00
6WC-10M-N1		18"	21.50	8.00	223	1.00
6WC-10N-N1		20"	23.75	8.38	333	1.00
6WC-10P-N1		24"	28.00	8.75	474	1.00

