



## HSC and EHSC-Series Spring Check Valve



## Features

- Single-piece upper-body spider design
- Standard O-ring and gasket seal design
- Can be serviced in the field (no special tools required)
- Internal product contact surface finish  $\leq 32$  Ra
- Suitable for low and medium-viscosity fluids
- Connection: clamp (standard), others available upon request
- HSC drainable for vertical applications only, EHSC drainable for horizontal applications

Size	Pressure Rating	Cracking Pressure (PSI)	Operating Temperature	HSC EPDM 316L Stainless Steel Part #	HSC FKM 316L Stainless Steel Part #	EHSC EPDM 316L Stainless Steel Part #	EHSC FKM 316L Stainless Steel Part #
1/2"	145 PSI	10.0	15°F to 200°F (-9°C to 93°C)	HSCE050	HSCV050	EHSCV050	EHSCV050
3/4"		4.0		HSCE075	HSCV075	EHSCV075	EHSCV075
1"		2.5		HSCE100	HSCV100	EHSCV100	EHSCV100
1-1/2"		1.0		HSCE150	HSCV150	EHSCV150	EHSCV150
2"		1.5		HSCE200	HSCV200	EHSCV200	EHSCV200
2-1/2"		0.8		HSCE250	HSCV250	EHSCV250	EHSCV250
3"		0.5		HSCE300	HSCV300	EHSCV300	EHSCV300
4"		0.4		HSCE400	HSCV400	EHSCV400	EHSCV400

## Repair Kits

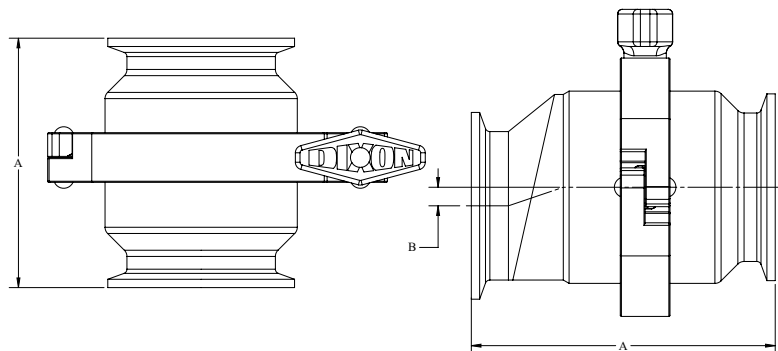
Size	HSC FKM Part #	HSC EPDM Part #	EHSC FKM Part #	EHSC EPDM Part #
1/2"	HSC-RKV050	HSC-RKE050	EHSC-RKV050	EHSC-RKE050
3/4"	HSC-RKV075	HSC-RKE075	EHSC-RKV075	EHSC-RKE075
1"	HSC-RKV100	HSC-RKE100	EHSC-RKV100	EHSC-RKE100
1-1/2"	HSC-RKV150	HSC-RKE150	EHSC-RKV150	EHSC-RKE150
2"	HSC-RKV200	HSC-RKE200	EHSC-RKV200	EHSC-RKE200
2-1/2"	HSC-RKV250	HSC-RKE250	EHSC-RKV250	EHSC-RKE250
3"	HSC-RKV300	HSC-RKE300	EHSC-RKV300	EHSC-RKE300
4"	HSC-RKV400	HSC-RKE400	EHSC-RKV400	EHSC-RKE400

1/2"-3/4" repair kit contains:  
 (1) body gasket  
 (1) plunger O-ring  
 (1) spider O-ring

1"-4" repair kit contains:  
 (1) body gasket  
 (1) plunger O-ring

1" EHSC repair kit contains:  
 (2) body gaskets  
 (1) plunger O-ring

## Dimensions



Size	HSC (in)	EHSC (in)	
		A	B
1/2"	2.70	3.10	0.3
3/4"	2.70	3.10	0.3
1"	3.30	4.00	0.3
1-1/2"	3.40	3.60	0.3
2"	3.40	4.10	0.3
2-1/2"	3.40	4.00	0.4
3"	3.40	4.00	0.4
4"	4.10	4.70	0.4

## HYC-Series Y - Ball Check Valve

  
58-02

This valve can be used in combination with a B45 Air Blow Check Valve to evacuate the upstream checked fluid from the processing line.

## Features

- Two-piece construction
- Replaceable seat
- Can be serviced in the field (no special tools required)

## Materials

- Product contact metal components: CF8M (316)
- Non-product contact metal components: AISI 304
- Product contact seals: EPDM, FKM
- Ball: PTFE, EPDM, FKM, NBR

## Specifications

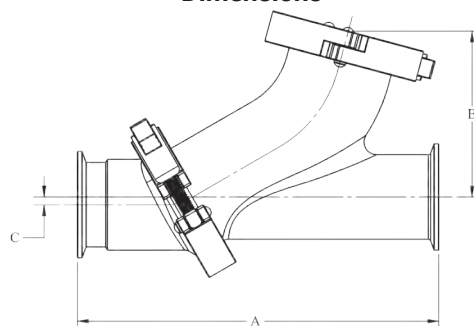
- Operating temperature range: **15°F to 200°F (-9°C to 93°C)**
- Maximum operating pressure: **150 PSI**
- Internal product contact surface finish  $\leq 32\text{Ra}$



Size	316L Stainless Steel with EPDM Part #	316L Stainless Steel with FKM Part #
1-1/2"	HYCEP150CCAA	HYCVP150CCAA
2"	HYCEP200CCAA	HYCVP200CCAA
2-1/2"	HYCEP250CCAA	HYCVP250CCAA
3"	HYCEP300CCAA	HYCVP300CCAA

For other configurations, contact Dixon Sanitary at 800.789.1718

## Dimensions



Valve Size	A (in)	B (in)	C (in)	PTFE Ball ø (in)	Rubber Ball ø (in)
1-1/2"	7.50	3.30	0.16	1.6	4.9
2"	8.50	3.90		2.1	6.6
2-1/2"	10.00	4.50		2.7	10.5
3"	11.50	5.30		3.6	17.5

All dimensions are approximate. Engineering dimensions are available upon request.  
Specifications are subject to change without notice.

## Repair and Seal Kits

Repair kit contains:

- (1) EPDM cap gasket
- (1) PTFE ball
- (1) EPDM/CF8M seat

Seal kit contains:

- (1) EPDM cap gasket
- (1) EPDM/CF8M seat

FKM seal kit contains:

- (1) FKM cap gasket
- (1) FKM /CF8M seat

Size	EPDM/PTFE Repair Kit Part #	FKM/PTFE Repair Kit Part #	EPDM Seal Kit Part #	FKM Seal Kit Part #	Replacement Ball Only Part #
1-1/2"	HYC-RKE150	HYC-RKV150	HYC-SKE150	HYC-SKV150	HYC-TB150
2"	HYC-RKE200	HYC-RKV200	HYC-SKE200	HYC-SKV200	HYC-TB200
2-1/2"	HYC-RKE250	HYC-RKV250	HYC-SKE250	HYC-SKV250	HYC-TB250
3"	HYC-RKE300	HYC-RKV300	HYC-SKE300	HYC-SKV300	HYC-TB300



## B45 Air Blow Check Valves

### Materials

- 316L stainless steel
- Stem seat and gasket: EPDM

### Specifications

- Maximum operating temperature: **212°F (100°C)**
- Maximum operating pressure: **145 PSI**

### Approval

- Conforms to 3A accepted practice 604-05 supplying air under pressure in contact with milk, milk products, and product contact when B45ABFD150 filter disc is used, filter sold separately



B45CC-R200



B45BC-R200

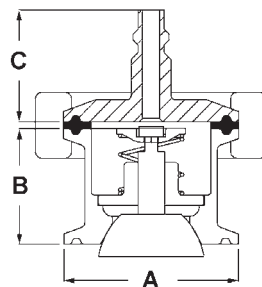


B45AB-R200

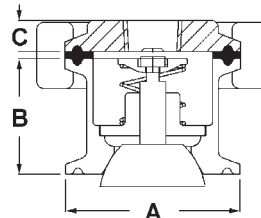
Can be used on the  
Dixon® HYC-Series Y-Ball  
Check Valves



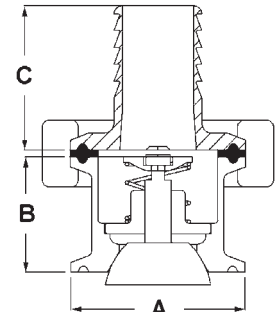
### Dimensions



B45AB



B45BC



B45CC

Size	A (in)	B (in)	C (in) Plug	C (in) FNPT	C (in) Hose Barb
1"-1-1/2"	1.984	1.30	1.26	.6	1.7
2"	2.516	1.30	1.26	.6	1.7
2-1/2"	3.047	1.30	1.26	.6	1.7
3"	3.579	1.30	1.26	.6	1.7
4"	4.682	1.30	1.26	.6	1.7

NOTE: All dimensions are approximate. Engineering dimensions are available upon request. Specifications are subject to change without notice.

### Repair Kit

- Repair kit, B45AB-RK, contains
- (1) EPDM/316L stainless perforated disc
  - (1) 304 stainless spring retainer
  - (1) 304 stainless spring
  - (1) nylon stem guide
  - (1) 316L/EPDM stem and plug

### Sizing Chart

NOTE: When using air blow check valves with ball check valves, refer to the sizing chart below.

Ball Check Valve Size	Air Blow Check Valve Size
1-1/2"	2"
2"	2-1/2"
2-1/2"	3"
3"	4"

## HAV-Series Air Relief Check Valves

**A**  
**3**  
58-02

### Sizes

- 1-1/2" to 2"

### Features

- No special tools required
- Ball and gaskets are replaceable
- Valve seals are under pressure and vacuum

### Materials

- Materials of construction technical data:
  - Product contact components: 304 stainless steel
  - Ball: polypropylene (standard) or PTFE
  - Gasket: EPDM (standard); others available upon request

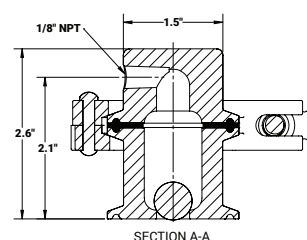
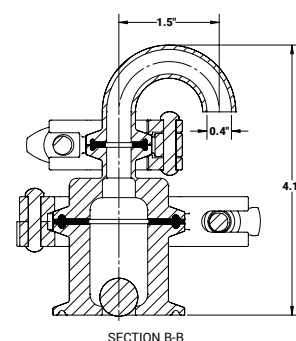
### Specifications

- Product temperature technical data:
  - Maximum operating temperature: **212°F (100°C)**
- Product pressure technical data:
  - Maximum operating pressure: **145 PSI**
- Surface finish technical data:
  - Internal product contact surface finish  $\leq 32$  Ra
  - Others available upon request
- 3A approved only when used with elbow extension

Size	3A Elbow Part #	NPT Part #
1-1/2"	HAV3EA150	HAVNEA150
2"	HAV3EA200	HAVNEA200

### Repair Kits for HAV-Series Air Relief Check Valves

Size	Polypropylene Ball Part #	PTFE Ball Part #
All	HAV-3P	HAV-3T



**M**

## Series-C Check Valves



brass



steel

**Feature**

- Provides free flow in one direction and dependable shutoff in the opposite direction

**Material**

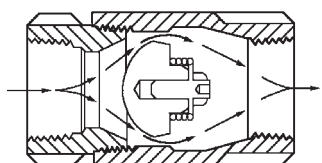
- Seal: Nitrile

**Specifications**

- Maximum operating pressure: brass **2000 PSI** at 70°F (21°C); Steel **5000 PSI** at 70°F (21°C)
- Cracking pressure: **5 PSI**

Female NPT	Free Flow GPM	Maximum Operating PSI at 70°F (21°C)	Brass Part #	Maximum Operating PSI at 70°F (21°C)	Steel Part #
1/8"	3	2000	BCV200	5000	SCV200
1/4"	5	2000	BCV400	5000	SCV400
3/8"	8	2000	BCV600	5000	SCV600
1/2"	15	2000	BCV800	5000	SCV800

## Domestic Ball Cone Check Valves



Pressure Ratings

Temperature	Pressure WOG (PSI)
-20°F to 100°F (-29°C to 38°C)	400
200°F (93°C)	200
250°F (121°C)	160
275°F (135°C)	150
300°F (149°C)	140
325°F (163°C)	130
353°F (178°C)	125

**Application**

- For use with water, oil, or inert gases. Not recommended for use on or near reciprocating pumps or other similar vibration causing machinery.

**Features**

- Tight shutoff with liquid media
- No radial alignment necessary
- Straight through and streamlined for minimum change in velocity
- Reinforced PTFE check is spring loaded for fast seating action.

**Specifications**

- Pressure rating: **400 PSI WOG**, cold non-shock; **125 PSI** saturated steam
- Cracking pressure: **.5 PSI**
- Temperature range: **-20°F to 353°F (-29°C to 178°C)**

## Ball Cone Check Valve Female NPT x Female NPT

Size	Brass Part #	316 Stainless Steel Part #
1/4"	61-101	62-101
3/8"	61-102	62-102
1/2"	61-103	62-103
3/4"	61-104	62-104
1"	61-105	62-105
1-1/4"	61-106	62-106
1-1/2"	61-107	62-107
2"	61-108	62-108
2-1/2"	61-109	---
3"	61-100	---

## Ball Cone Check Valve Male NPT x Female NPT

Size	Brass Part #
1/4"	61-201
3/8"	61-202
1/2"	61-203
3/4"	61-204
1"	61-205
1-1/4"	61-206
1-1/2"	61-207
2"	61-208



## 800 PSI Stainless Steel Check Valves

### Features

- Soft PTFE seat is spring loaded for fast seating action
- Flow profile designed to minimize head loss
- Corrosion resistance, excellent for use on chemicals
- Dual guided stem and disc

### Specifications

- Temperature range: **10°F to 450°F (-12°C to 232°C)**
- Pressure rating: **800 PSI WOG; 125 PSI saturated steam**
- Cracking pressure: **.5 PSI**

Female NPT	316 Stainless Steel Part #
1/4"	SSCVIL025
3/8"	SSCVIL038
1/2"	SSCVIL050
3/4"	SSCVIL075
1"	SSCVIL100
1-1/4"	SSCVIL125
1-1/2"	SSCVIL150
2"	SSCVIL200



## Forged Steel Check Valves

### Features

- ASTM A105, ANSI B120.1
- Bolted bonnet
- Can be used for steam service

### Specifications

- Class 800
- Pressure rating: **1975 PSI**
- Maximum temperature: **800°F (427°C)**

Female NPT	Forged Steel Part #
1/2"	FSCV50
3/4"	FSCV75
1"	FSCV100
1-1/4"	FSCV125
1-1/2"	FSCV150
2"	FSCV200



## Spring-Loaded Check Valves

### Features

- Soft seat for bubble tight shutoff, spring loaded for fast seating action
- Flow profile designed to minimize head loss

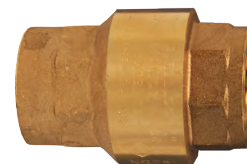
### Material

- Nitrile rubber seat

### Specifications

- Pressure rating: 1/2" - 2" **400 PSI WOG**; 3" - 4" **175 PSI WOG**
- Temperature range: **10°F to 210°F (-10°C to 100°C)**
- Cracking pressure: **0.50 PSI**

Female NPT	Brass Part #
1/2"	CV050
3/4"	CV075
1"	CV100
1-1/4"	CV125
1-1/2"	CV150
2"	CV200
3"	CV300
4"	CV400



Strainer with Spring-Loaded Check Valves

Features

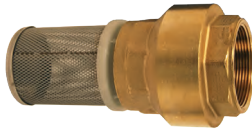
- Soft seat for bubble tight shutoff, spring loaded for fast seating action
- Flow profile designed to minimize head loss

Material

- Brass with nitrile rubber seat and stainless steel strainer

Specifications

- Temperature range: 10°F to 210°F (-10°C to 100°C)
- Cracking pressure: 0.50 PSI
- Pressure rating: 1-1/2" to 2" 400 PSI WOG, 3"-4" 175 PSI WOG



Female NPT	Brass Part #
1-1/2"	BVFS20
2"	BVFS25
3"	BVFS35
4"	BVFS40

Swing Check Valves

Applications

- For use in plumbing and liquid piping systems to prevent back flow
- For horizontal or vertical use

Features

- Full flow performance with a minimum of turbulence or pressure loss
- A positive seating disc allows flow only in one direction and a screw-in cap provides easy access for periodic cleaning.

Material

- Brass disc

Specifications

- Pressure rating: 200 PSI WOG
- Temperature range: -20° to 150°F (-29°C to 66°C)



Female NPT	Brass Part #
1/2"	SWCV50
3/4"	SWCV75
1"	SWCV100
1-1/4"	SWCV125
1-1/2"	SWCV150
2"	SWCV200
3"	SWCV300
4"	SWCV400

Domestic Swing Check Valves

Features

- Class 150
- ASME B1.20.1
- 100% factory tested

Specifications

- Working pressure: 300 PSI cold, 150 PSI steam
- Temperature range: -20°F to 406°F (-29°C to 208°C)

Material

- Metal seat



Female NPT	Brass Part #
1/2"	DSCV50
3/4"	DSCV75
1"	DSCV100
1-1/4"	DSCV125
1-1/2"	DSCV150
2"	DSCV200