

HSC/EHSC-Series Spring Check Valve



Used in sanitary processes to prevent backflow of fluids.

The HSC-Series is for vertical applications and the EHSC-Series is for horizontal applications

These valves are certified clean-in-place for sizes 1" thru 4" and clean-out-of-place for sizes 1/2" and 3/4".

They are found in the food processing, beverage, dairy, personal care, winery, brewery, pet product and industrial markets.

Sizes

- 1/2" to 4"

Features

- Machined from solid bar
- Integrated spider design
- Standard O-ring and gasket seals

Specifications

- Standard connection: clamp
- Valve data
 - Maximum pressure: **145 PSI (10 bar)**
 - Maximum operating temperature: **200°F (93°C)**
 - Minimum operating temperature: **15°F (-9°C)**
- Materials of construction
 - Product contact metal components: 316L stainless steel
 - Non-product contact metal components: CF8
 - Product contact seals: EPDM, FKM
- Surface finish
 - Product contact metal components: Ra ≤ 32
- Cleaning method
 - CIP models: HSC and EHSC sizes 1" to 4"
 - COP models: HSC and EHSC sizes 1/2" to 3/4"



NOTE: Check valves should be sized for the application and not necessarily for the tubing size.

Cracking Pressure Chart

Size (in)	Cracking Pressure (PSIG)
1/2"	10.0
3/4"	4.0
1"	2.5
1-1/2"	1.0
2"	1.5
2-1/2"	0.8
3"	0.5
4"	0.4

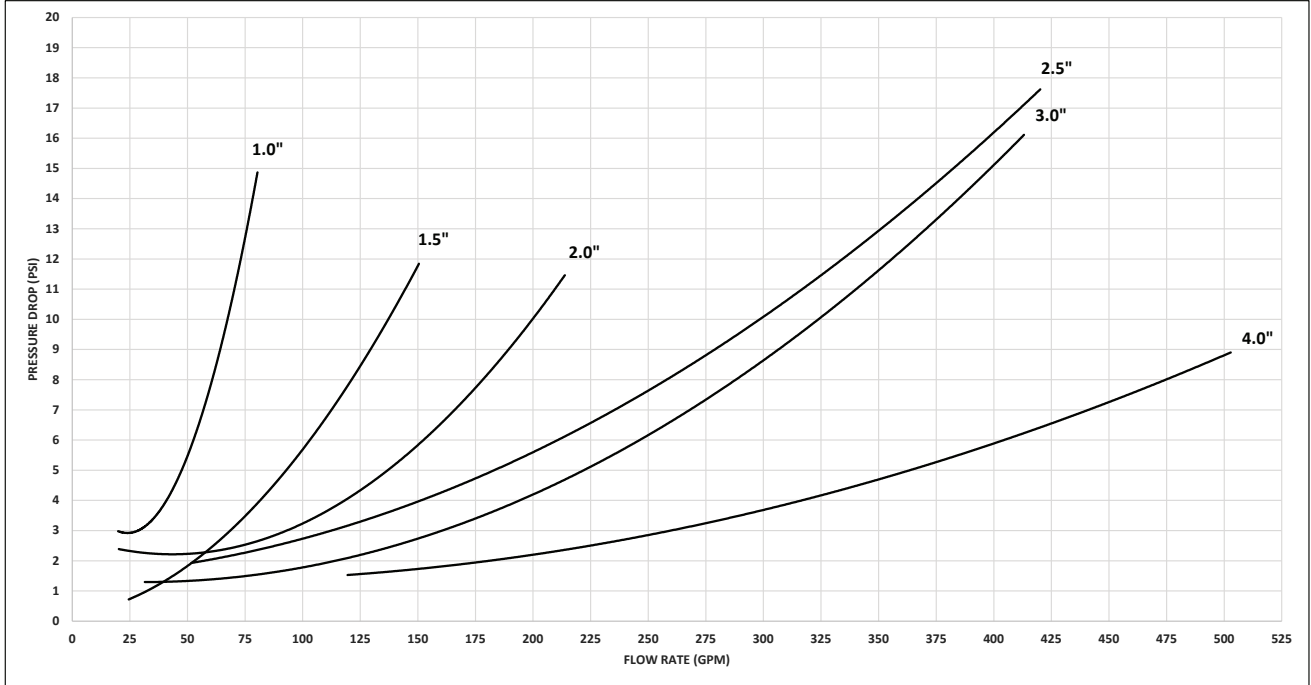
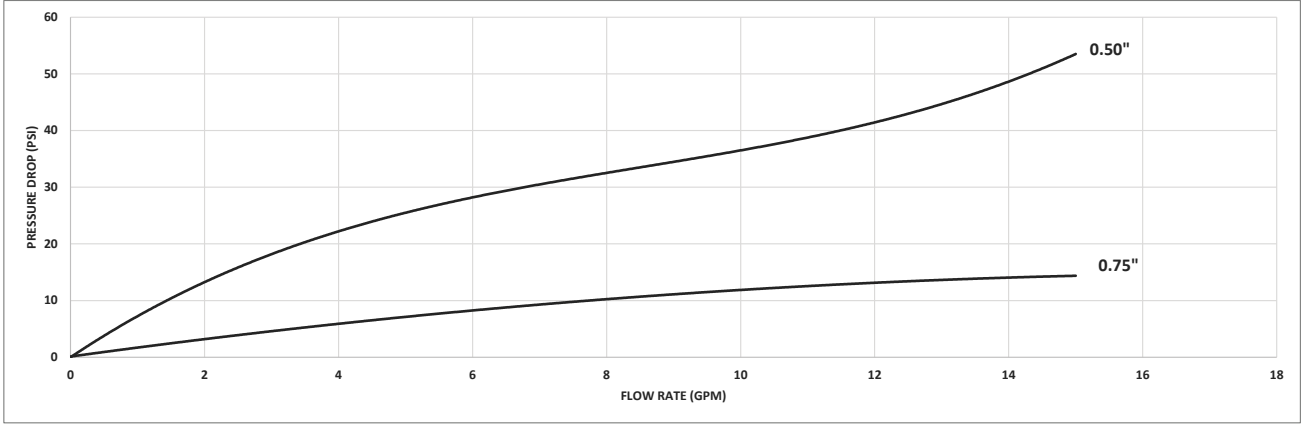
HSC/EHSC-Series Spring Check Valve - Part Number Key

HSC/EHSC-Series Spring Check Valve Part Number Key Example: HSCE050CCA		Series	Elastomers	Size	End Connections*	Surface Finish	Overall Length
		HSC	E	050	CC	A	
Series	Code						
HSC (vertical application)	HSC	←					
EHSC (horizontal application)	EHSC						
Elastomers	Code						
EPDM	E	←					
FKM	V						
Size	Code						
1/2"	050	←					
3/4"	075						
1"	100						
1-1/2"	150						
2"	200						
2-1/2"	250						
3"	300						
4"	400						
End Connections*	Code						
Clamp	CC	←					
Weld	BB						
Female I-line	FF						
Male I-line	MM						
Threaded bevel	TT						
Plain bevel	PP						
Q-line	QQ						
Clamp x weld	CB						
For clamp x clamp or weld x weld end, 32 Ra I.D. surface finish and no other modifications, end part number here. For all other configurations, continue below.							
Surface Finish	Code						
32 Ra (I.D. mech. polish)	A	←					
20 Ra (I.D. mech. polish)	B						
15 Ra (I.D. mech. polish)	C						
25 Ra (I.D. mech. polish)	D						
15 Ra (I.D. electropolish)	E						
30 Ra (I.D. mech. polish)	F						
20 Ra (I.D. electropolish)	G						
Overall Length	Code						
Standard	blank	←					
Custom**	###						

*Lower body connection listed first.

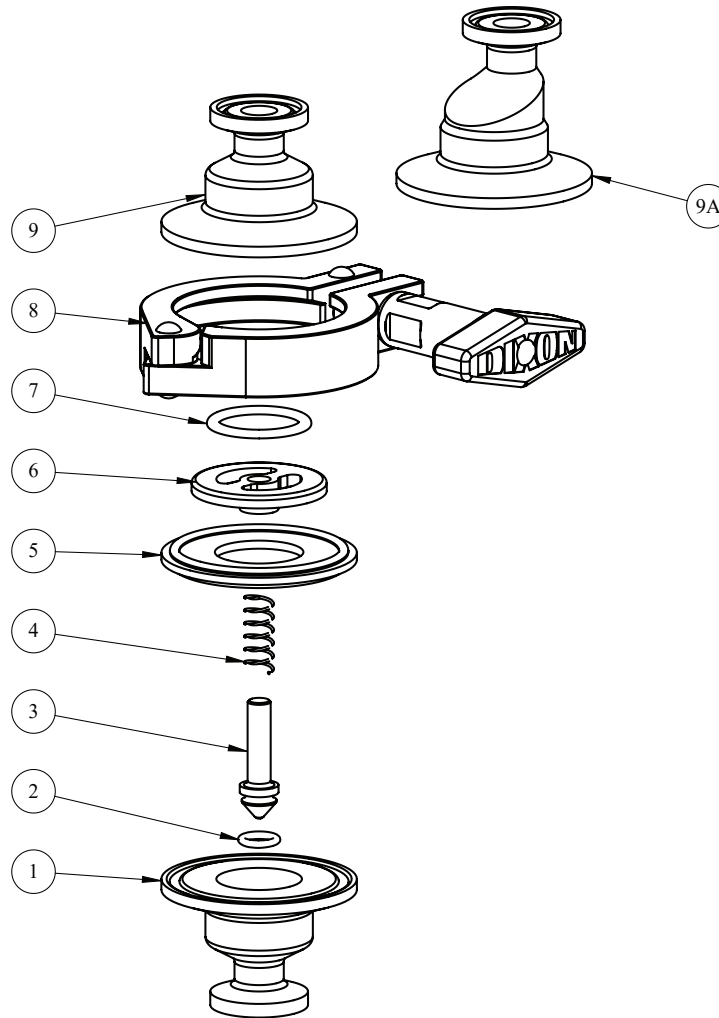
**Enter overall length number, no decimals (e.g. 575 = 5.75 in).

HSC/EHSC-Series Spring Check Valve - Pressure Drop Charts



HSC/EHSC-Series Spring Check Valve - Bill of Materials

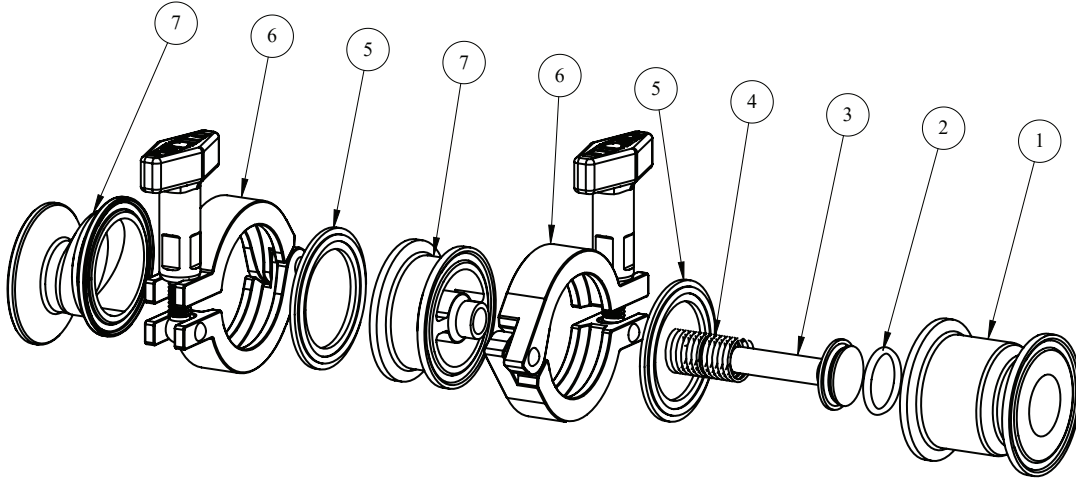
1/2" to 3/4"



Item	Size	Part #	Description	Material	Qty.	
					HSC	EHSC
1	1/2"	HSC-LB050	lower body, clamp	316L SS	1	1
	3/4"	HSC-LB075	lower body, clamp	316L SS	1	1
2	both	see repair kits	plunger O-ring	see repair kits	1	1
3	1/2"	HSC-P050	plunger	316L SS	1	1
	3/4"	HSC-P075	plunger	316L SS	1	1
4	1/2"	HSC-SP050	spring	316L SS	1	1
	3/4"	HSC-SP075	spring	316L SS	1	1
5	both	see repair kits	plunger O-ring	see repair kits	1	1
6	1/2"	HSC-S050	spider	316L SS	1	1
	3/4"	HSC-S075	spider	316L SS	1	1
7	both	see repair kits	spider O-ring	see repair kits	1	1
8	both	13MHHM100-150	clamp	CF8	1	1
9	1/2"	HSC-UB050	concentric upper body, clamp	316L SS	1	-
	3/4"	HSC-UB075	concentric upper body, clamp	316L SS	1	-
9A	1/2"	EHSC-UB050	eccentric upper body, clamp	316L SS	-	1
	3/4"	EHSC-UB075	eccentric upper body, clamp	316L SS	-	1

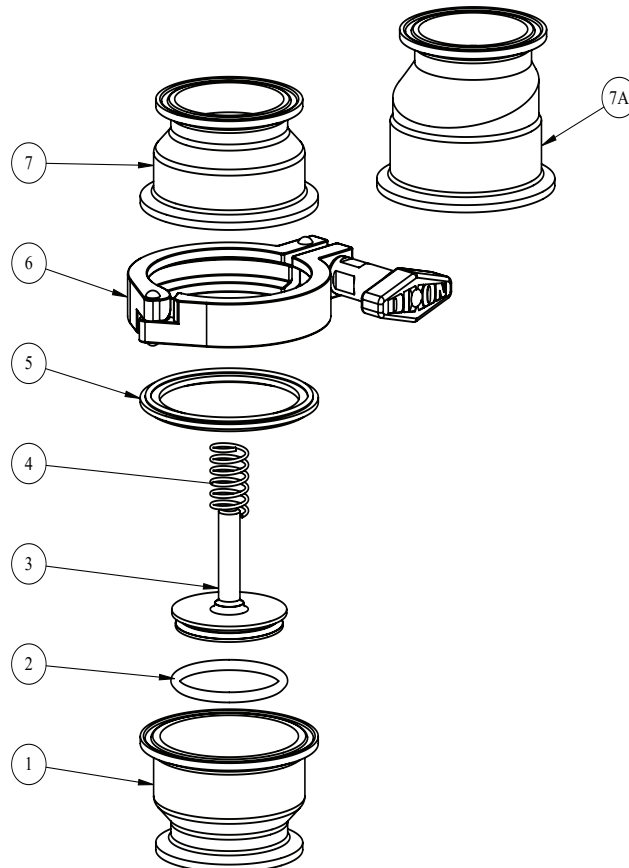
EHSC-Series Spring Check Valve - Bill of Materials

1"



Item	Part #	Description	Material	Qty.
1	HSC-LB100	lower body, clamp	316L SS	1
2	see repair kits	plunger O-ring	see repair kits	1
3	HSC-P100	plunger	316L SS	1
4	HSC-SP100	spring	316L SS	1
5	see repair kits	body gasket	see repair kits	2
6	13MHHM100-150	clamp	CF8	2
7	EHSC-UB100	2 pc upper body, clamp	316L SS	1

1" to 4" HSC, 1-1/2" to 4" EHSC

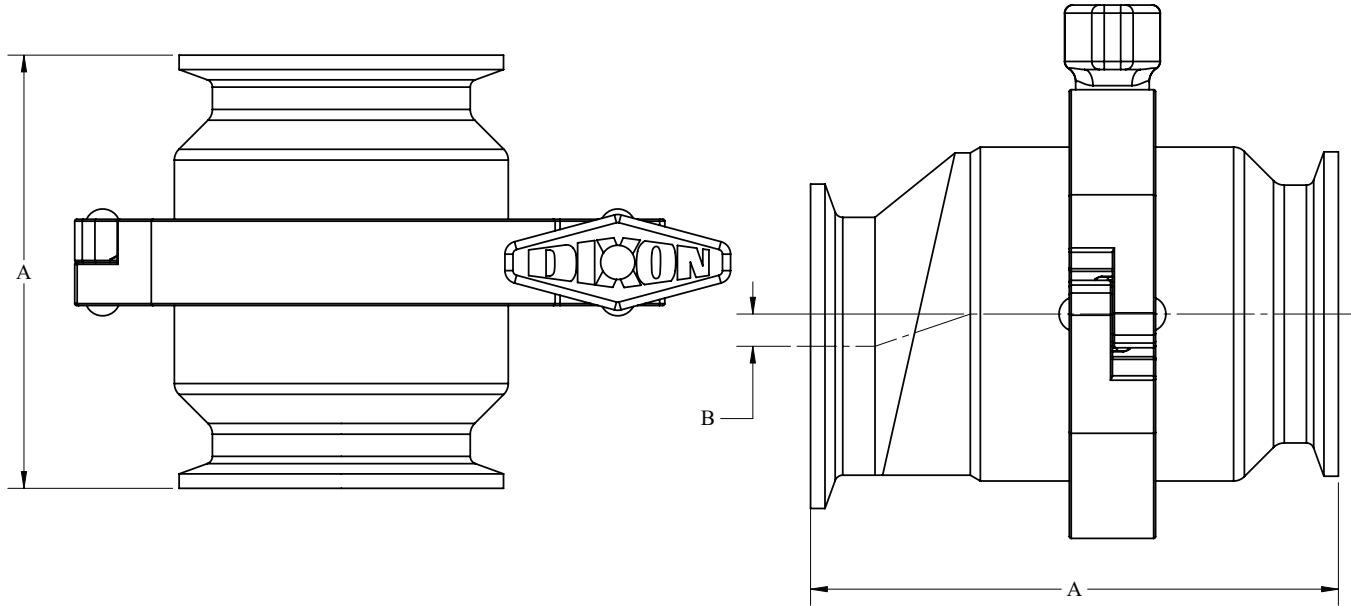


HSC/EHSC-Series Spring Check Valve - Bill of Materials

1" to 4" HSC, 1-1/2" to 4" EHSC

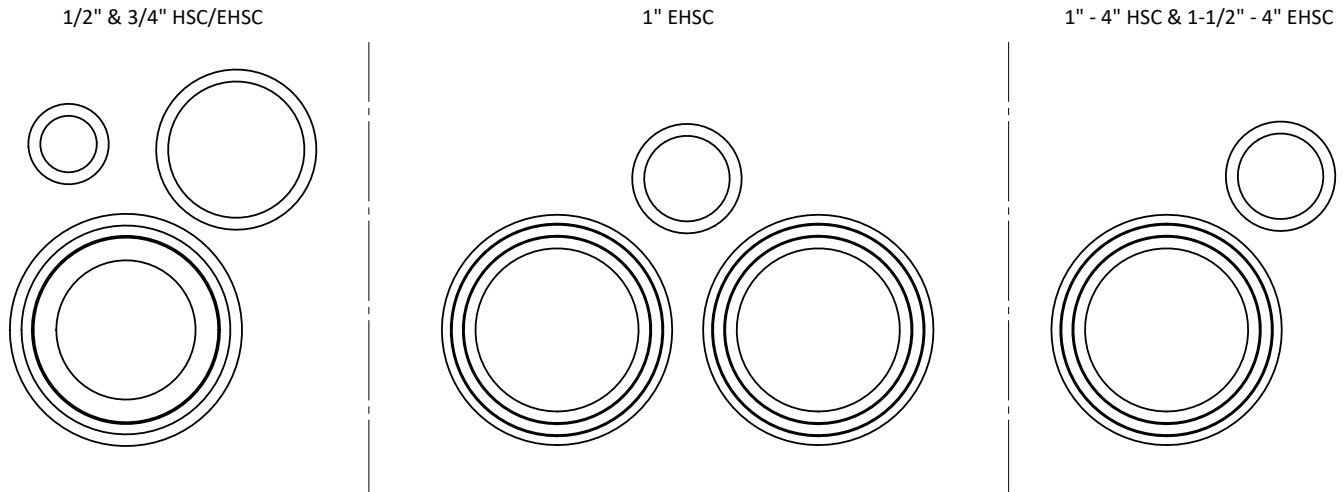
Item	Size	Part #	Description	Material	Qty.	
					HSC	EHSC
1	1"	HSC-LB100	lower body, clamp	316L SS	1	-
	1-1/2"	HSC-LB150	lower body, clamp	316L SS	1	1
	2"	HSC-LB200	lower body, clamp	316L SS	1	1
	2-1/2"	HSC-LB250	lower body, clamp	316L SS	1	1
	3"	HSC-LB300	lower body, clamp	316L SS	1	1
2	4"	HSC-LB400	lower body, clamp	316L SS	1	1
2	all	see repair kits	plunger O-ring	see repair kits	1	1
3	1"	HSC-P100	plunger	316L SS	1	-
	1-1/2"	HSC-P150	plunger	316L SS	1	1
	2"	HSC-P200	plunger	316L SS	1	1
	2-1/2"	HSC-P250	plunger	316L SS	1	1
	3"	HSC-P300	plunger	316L SS	1	1
3	4"	HSC-P400	plunger	316L SS	1	1
4	1"	HSC-SP100	spring	316L SS	1	-
	1-1/2"	HSC-SP150	spring	316L SS	1	1
	2"	HSC-SP200	spring	316L SS	1	1
	2-1/2"	HSC-SP250	spring	316L SS	1	1
	3"	HSC-SP300	spring	316L SS	1	1
4	4"	HSC-SP400	spring	316L SS	1	1
5	all	see repair kits	plunger O-ring	see repair kits	1	1
6	1"	13MHHM100-150	clamp	316L SS	1	-
	1-1/2"	13MHHM200	clamp	316L SS	1	1
	2"	13MHHM250	clamp	316L SS	1	1
	2-1/2"	13MHHV300	clamp	316L SS	1	1
	3"	13MHHM400	clamp	316L SS	1	1
6	4"	13MHHM500	clamp	316L SS	1	1
7	1"	HSC-UB100	concentric upper body, clamp	316L SS	1	-
	1-1/2"	HSC-UB150	concentric upper body, clamp	316L SS	1	-
	2"	HSC-UB200	concentric upper body, clamp	316L SS	1	-
	2-1/2"	HSC-UB250	concentric upper body, clamp	316L SS	1	-
	3"	HSC-UB300	concentric upper body, clamp	316L SS	1	-
7	4"	HSC-UB400	concentric upper body, clamp	316L SS	1	-
7A	1-1/2"	EHSC-UB150	eccentric upper body, clamp	316L SS	-	1
	2"	EHSC-UB200	eccentric upper body, clamp	316L SS	-	1
	2-1/2"	EHSC-UB250	eccentric upper body, clamp	316L SS	-	1
	3"	EHSC-UB300	eccentric upper body, clamp	316L SS	-	1
7A	4"	EHSC-UB400	eccentric upper body, clamp	316L SS	-	1

HSC/EHSC-Series Spring Check Valve - Dimensions



Size	HSC		EHSC	
		A		B
1/2"	2.7		3.1	0.3
3/4"	2.7		3.1	0.3
1"	3.3		4.0	0.3
1-1/2"	3.4		3.6	0.3
2"	3.4		4.1	0.3
2-1/2"	3.4		4.0	0.4
3"	3.4		4.0	0.4
4"	4.1		4.7	0.4

HSC/EHSC-Series Spring Check Valve - Repair Kits



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

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