



Spring-assisted, Non-slam, Axial Flow, Silent Check Valves

DSV[®] Sanitary Check Valve

- 1/2" to 4" line size
- 150 CWP, 108 ASME pressure class
- Meets 3A Standard 58-02
- CIP (Clean In Place)
- Clamped ends
- 316L body and seat (A351 CF3M)
- 316 disc, spring & guide assembly . • 32 Ra internal surface finish
- (#4 Ground Finish)
- Electropolished spring
- .16 to .66 psig cracking pressure
- EPDM body seal (300°F max temp.)
- Edge-guided disc (1/2" thru 2")
- Edge/center-guided disc (2-1/2", 3", 4")
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Options:
- 15 Ra internal finish
- Tuf-Steel[®] or Viton[®] body seal

SCV[®] Check Valve

- 1/2" to 3" line size
- 750 & 3600 CWP
- FNPT or Socket Weld ends
- Stainless steel construction
- . Inconel[®] X-750 spring
- Zelon[®] "O" ring body seal •
- Body-guided disc .
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Simplified 5-part construction

SCV-R[®] Check Valve

Higher cracking pressures

FNPT or Socket Weld ends

Inconel® X-750 spring

Body-guided disc

Easy maintenance

non-slam

Versatile

Stainless steel construction

Zelon[®] "O" ring body seal

Spring assisted silent closing,

Horizontal or vertical installation

Tight shutoff – lapped disc & seat • Options:

(.8 to 40.8 psig) 1/2" to 2" line size

- Easy maintenance
- Versatile

• 750 CWP

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Straight thru inline or offset inlet/outlet



Basic-Check® Valve

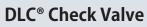
- 1/4" to 2-1/2" line size (MNPT)
- 450 to 6000 CWP
- NPT Threaded ends
- Stainless steel construction
- Edge-guided disc •
- Spring assisted silent closing, non-slam .
- Tight shutoff lapped disc & seat Horizontal or vertical installation
- Easy maintenance
- . Versatile
- Options:
 Inconel[®] X-750 spring
 Soft seat

Restrictor Check Valve

- Higher cracking pressures • (2 to 40 psi, depending on size)
- 1/4" to 2-1/2" line size (MNPT)
- 450 to 2500 CWP .
- NPT Threaded ends
- Stainless steel construction
- Edge-guided disc •
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Easy maintenance

Vacuum Breakers

- 1" to 4" line size (MNPT)
- 450 to 6000 CWP .
- . Threaded O.D. (MNPT)
- Unthreaded inlet bore
- Stainless steel construction
- Edge-guided disc
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Easy maintenance .
- Versatile



- 1/2" to 3" line size
- ASME class 150 and 300
- RF flanged ends
- ASME B16.10 face-to-face dimensions
- Stainless steel construction
- Inconel[®] X-750 spring .
- Electron beam welded body
- Body-guided disc
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Simplified 4-part construction
- Versatile



- Options:
 - Alloy 20 or Hastelloy® C body
 - 316 SS spring
 - Soft seat (TFE-Viton[®] only)
- NACE †



Fax: 610-524-9242





- Options: Soft seat

Options:

Soft seat

• Inconel® X-750 spring

- - Options: Alloy 20 or

Hastelloy[®] C body

Body seal weld

• 316 SS spring

Soft seat

• Allov 20 or

Soft seat

Hastelloy[®] C body

 Seal weld body • 316 SS spring

• NACE +

PDC[®] Check Valve

- Pulse-damped design for modulating "air" or "gas" applications Discharge of reciprocating air/gas compressors
 - Self-sizing
- 2" to 26" line size*
- ASME class 150 to 1500
- RF & RTJ flanged ends
- ASME B16.10 face-to-face dimensions
- Meets API 6D
- Standard Body Materials:**
- A216 WCB carbon steel
- A351 CF8M stainless steel
- A352 LCC low-carbon steel
- Stainless steel trim
- Center-guided/dual-guided stem
- · Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation



- Protected spring
- Axial flow
- Nozzle style
- Easy maintenance
- Options: Inconel[®] X-750 spring
- Soft seat • NACE †

WLC[®] Wafer Check Valve

- 1" to 10" line size
- ASME class 150 to 2500
- RF & RTJ wafer ends
- Face-to-face dimensions:
- MSS SP-126 (class 150 and 300) API 594 (class 600 and above)
- Standard Body Materials: • A216 WCB carbon steel
- A351 CF8M stainless steel
- Optional body materials Alloy 20 • Inconel[®] 625 • Titanium
- Hastelloy[®] Duplex SS
- Stainless steel trim
- Center-guided/dual-guided stem
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat Horizontal or vertical installation
- Protected spring

- Wafer design



- Axial flow
- Nozzle style
- Easy maintenance
- Versatile
- Options:
- Inconel[®] X-750 spring
 - Soft seat
- Custom sizing for low flow applications
- Stellite[®] trim
- NACE †
- Severe duty body/trim

ALC[®] Wafer Check Valve

- 2" to 24" line size
- ASME class 150 and 300
- RF wafer ends
- API 594 face-to-face dimensions
- Standard Body Materials: • A216 WCB carbon steel
- A351 CF8M stainless steel
- Stainless steel seat, disc & bushing
- Nitronic[®] 60 stem
- Inconel[®] X-750 spring
- Center-guided stem
- Spring assisted silent closing, non-slam

* Consult DFT for larger sizes. ** Consult DFT for additional alloys. + See DFT catalog.

- Tight shutoff lapped disc & seat
- Horizontal or vertical installation

Tel: 610-363-8903

- Protected spring
- Wafer design
- · Axial flow
- Nozzle style



- Easy maintenance
- Versatile
- Options:
 - 316 SS spring
 - Soft seat
 - Custom sizing for low

Toll-Free: 800-206-4013

- flow applications
- NACE †

Excalibur[®] Check Valve

- 2" to 24" line size*
- ASME class 150 to 1500 .
- RF & RTJ flanged ends, butt weld ends
- ASME B16.10 face-to-face dimensions
- Standard Body Materials:** • A216 WCB carbon steel A351 CF8M stainless steel
- Stainless steel trim
- Center-guided/dual-guided stem •

Easy maintenance

Inconel[®] X-750 spring

Custom sizing for low

flow applications

Severe Service trim

Stellite[®] trim

Versatile

Options:

Soft seat

• NACE †

Axial flow

• Options:

Nozzle style

• Soft seat

NACE †

Email: dft@dft-valves.com

• 316 SS spring

• Custom sizing - low flow

Inconel[®] X-750 spring

Custom sizing for low

flow applications

Cryogenic service

Severe Service trim

Stellite[®] trim

Versatile

Options:

Soft seat

• NACE †

•

- Spring assisted silent closing, •
- non-slam
- Tight shutoff lapped disc & seat
- Two-piece body •
- Horizontal or vertical installation •
- Protected spring
- Axial flow
- Nozzle style

GLC® Check Valve

"Short" face-to-face dimensions

• ASME class 150 and 300, 2" to 24"

• 1" to 42" line size*

Meets API 6D

API 6FD Fire Test

Stainless steel trim

Protected spring

• Easy maintenance

• Sizes 2" thru 24" line size

ASME class 150 and 300

• Standard body materials:

• API 594 face-to-face dimensions

• A216 Grade WCB carbon steel

 A351 CF8M stainless steel Stainless steel seat, disc & bushing

• Seat Leakage per MSS SP-61

lugs (10" size and larger)

Spring-assisted silent closing

• Tapped holes in body for lifting

Horizontal or vertical installation

Threaded Lug Design

• ASME B16.5

• RF flanged ends

Nitronic[®] 60 stem

Inconel[®] X-750 Spring

Center-guided stem

Axial flow

Nozzle style

•

•

Standard Body Materials:**

• A216 WCB carbon steel

A351 CF8M stainless steel

Center-guided/dual-guided stem

• Tight shutoff – lapped disc & seat

Horizontal or vertical installation

• Spring assisted silent closing, non-slam

TLW[®] Tapped Lug Wafer Check Valve

ASME class 150 to 2500 RF & RTJ flanged ends

Nickel-Aluminum Bronze Check Valves

- Excalibur®-NAB
- GLC[®] NAB

These silent check valves are designed to withstand the harsh environments of salt and brackish water applications where corrosion resistance and marine life deterrents are a must.

- Spring assisted silent closing
- Center-guided/dual-guided stem
- Nozzle style
- Easy maintenance
- Solves problems associated with water hammer in severe applications and environments

See DFT[®] Model Excalibur[®] Silent Check Valve & DFT[®] Model GLC[®] Silent Check Valve (left) for a complete lists of features.





GLC®-Cast Iron Check Valve

- 2-1/2" to 24" line size
- ASME class 125 and 250
- 2 1/2" to 24" line size (Cl. 125)

2 ¹/₂" to 8" line size (Cl. 250)
FF Flanged ends

- Privanged ends
 Meets MSS SP-125
- A126 Class B Cast iron body
- Bronze or 316 SS trim
- Center-guided/dual-guided stem
- Spring assisted silent closing, non-slam
- AWWA seat leakage
- Horizontal or vertical installation
- Axial Flow
- Nozzle style
- Easy maintenance

- Options:
- Buna-N soft seat

Y-Calibur[®] Check Valve

- Fully repairable in-line
- 4" to 14" line size*
- ASME class 600 to 2500
- Butt weld ends
- ASME B16.10 face-to-face dimensions
- Standard Body Materials:**
 A216 WCB carbon steel
- A351 CF8M stainless steel
 Stainless steel trim
- Center-guided/dual-guided stem
- Spring assisted silent closing
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Protected spring
- Axial Flow
- Nozzle style
- Easy maintenance
- Versatile



- Options:
 - Inconel[®] X-750 spring
 Soft Seat
 - Custom sizing for low flow applications
 - Stellite[®] trim
 - NACE +

BNC[®] In-Line Globe Style Check Valve

- 2" to 24" line size*
- ASME class 150 to 1500
- Butt weld ends
- ASME B16.34
- Standard Body Materials:**
 A216 WCB carbon steel
- Carbon steel &
- stainless steel trim
- Hardfaced seat and disc
- Center-guided/dual-guided stem
- Spring assisted silent closing
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- One piece globe style body, not repairable in-line
- Protected spring
- Axial Flow
 - Axial Flow
 Nozzle style
 - Options:

Options:

*Consult DFT for larger sizes ** Consult DFT for additional alloys. + See DFT Catalog

Need a detailed cut sheet of a DFT Check Valve? Visit us online at www.dft-valves.com/literature

Soft seat

Inconel[®] X-750 spring

Fax: 610-524-9242

- Inconel[®] X-750 spring
 Custom sizing for
- low flow applications

WLC[®]-Cast Iron Wafer Style Check Valve

- 2" to 10" line size
- ASME class 125 and 250
- FF wafer ends
- Meets MSS SP-125
- A126 Class B Cast iron body
- Bronze or 316 SS trim
- Center-guided/dual-guided stem
 Spring assisted silent closing, non-slam
- AWWA seat leakage
- Horizontal or vertical installation
- Protected spring
- Wafer design
- Axial Flow
- Nozzle styleEasy maintenance
- Options: Buna-N soft seat

FBC[®] Compact Insert Check Valve

- 1" to 4" line size
- ASME class 150 and 300
- Meets ASME B16.34-2013 & MSS SP-126
- Use in Schedule 40 pipe,
- consult factory for Schedule 80Stainless steel construction
- Edge-guided disc
- Spring assisted silent closing, non-slam
- Tight shutoff lapped disc & seat
- Horizontal or vertical installation
- Extended tag for easy identification of the installed valve
- Easy maintenance
- Versatile

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Valve Selection Chart

	THREADED VALVES			FLANGED VALVES				SANITARY VALVES	WAFER VALVES			IN-LINE REPAIRABLE VALVES VALVES						
	Basic-Check	Restrictor Check	SCV®	SCV-R [®]	Vacuum Breaker	DLC®	Excalibur®	GLC®	GLC [®] - CAST IRON	PDC®	DSV®	ALC [®] / TLW [®]	FBC®	WLC®	WLC [®] - CAST IRON	Y-CALIBUR®	BNC®	Excalibur [®]
SIZE	1/4 to 2-1/2	1/4 to 2-1/2	1/2 to 3	1/2 to 2	1 to 4 (OD)	1/2 to 3	2 to 24	1 to 42	2-1/2 to 42	2 to 26	1/2 to 4	2 to 24	1 to 4	1 to 10	2 to 10	4 to 14	2 to 24	2 to 24
ENDC																		
ENDS NPT	Х	Х	X(1)	X(1)	Х													
SW		Λ	X(1)	X(1)														
FLG			7(1)	Λ(1)		Х	Х	Х	Х	Х								
RTJ							X	X	~	X				Х				
BW							Х									Х	Х	Х
FLG/BW							Х											
Victaulic®							Х											
Wafer												Х	Х	Х	Х			
Clamped											Х							
ASME CLASS																		
125									Х						Х			
150						Х	Х	Х		Х		Х	Х	Х				Х
250									Х						Х			
300						Х	Х	Х		Х	1	X	Х	Х			N	X
600							Х	Х		X		X(7)		X		X	X	X
900							Х	Х		Х	1	X(7)		Х		X	Х	X
1500 2500							Х	X X		Х		X(7)		X X		XX	Х	XX
2300								٨						Λ		Λ		Λ
750 CWP			Х	Х														
3600 CWP			X	Λ														
OTHER	X(2)	X(2)			X(2)			X(3)			X(2)			X(3)				
								(
MATERIALS								BODY	/TRIM									
Cast Iron									X(4)						X(4)			
WCB/316 SS*							Х	Х		Х		Х		Х		Х	Х	Х
316 SS/316 SS*	X(5)	X(5)	Х	Х	X(5)	Х	Х	Х		Х	X(5)	Х	Х	Х			Х	Х
Other Alloys			Х	Х		Х	Х	Х		Х	Х			Х		Х		Х
ODTIONIC																		
OPTIONS											1							
Soft Seat X-750 Spring	X X	X X	X X(6)	X X(6)	X X	X X(6)	X X	X X	Х	X X		X X(6)	X X	X X	Х	X X	X	X X

Notes: 1. NPT x SW available.

5. BODY & SEAT: BSE, BSS, BSSV. Restrictor Check: 303 SS, BSA: 416 SS, BSSH6, BSSH7, BSSV6: 316 SS, DSV:316L SS (A351 CF3M)

 CWP RATING BSS, BSA, BSE, BSSV, Restrictor Check: 450 to 2500 CWP depending on size; BSSH6, BSSV6: 450 to 6000 CWP depending on size. BSSH7: 800 to 6000 CWP depending on size. DSV: ASME/ANSI Class 108.

3. API 2000 and 5000 ARE AVAILABLE. Contact DFT for sizes. 4. TRIM MATERIAL: BRONZE OR 316 SS 6. Inconel® X-750 spring is standard. 7. Class 600, 900, & 1500 available for TLW only (not available for ALC).

* CF8M is the cast grade of 316 SS.

Use the DFT® VALVE DATA SHEET to collect your valve data specifications (available to download from the resource library at www.dft-valves.com).





Spring-assisted, Non-slam, Axial Flow, Silent Check Valves

The Importance of Check Valve Selection and Sizing

Knowing which check valves can withstand different environmental factors, and how check valve sizing works is the key to a longer lifetime of use, proper flow, and overall efficiency of your fluid, steam or gas flow system.

It is important that check valves be sized for their application and flow, not based just on their line size. Choosing the appropriate-sized check valve means it will be working at its highest level, providing efficient service with maximum protection. Proper check valve sizing will optimize a system's reliability, providing the longest and most trouble free service. An undersized valve will cause higher pressure losses and create excessive noise and vibration, and an oversized valve can lead to premature wear and failure of the valve's internal components. When the valve's disc is stable and in the fully open position against the internal stop or fully closed position against the seat, no disc fluttering will occur.

The correct valve selection not only allows the valves to last longer, but pumps and other related components on the same system will have increased longevity as well, resulting in reduced overall maintenance and costs. Well functioning check valves also enhance the safety of their applications.



For more information on Check Valve Sizing and Selection:

Download DFT's Valve Sizing eBook at www.dft-valves.com/literature

or Consult with the experts at DFT to choose the optimal check valve for your applications.

DFT [®] valves serve broad pro	ocess industries:	
Chemical	 Petrochemical 	• Textiles
• Food & Beverage	 Pharmaceutical 	 Ultra-pure Water
General Industry	 Power Generation 	Desalination
• Mining	 Pulp and Paper 	Building Maintenance
• Oil and Gas	• Steel	

DFT Inc. specializes in preventing check valve problems and failures caused by water hammer and reverse flow. The in-line, spring-assisted check valves are designed to meet customer requirements for horizontal and vertical installations in liquids, gas or steam.

Whatever your size, pressure or piping configurations, DFT has the valve that's right for you.

Consult DFT for engineered sizing solutions for your check valve related issues.

For more informa	© tion	REPRESENTED BY:
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