KF Check Valves

KF Industries

Superior Fluid Control Products

A Brand of CIRCOR Energy Products, Inc.

High Performance By Design

KF Industries has continuously provided the industry with technically superior products oriented toward applications that can be exceptionally severe. KF's diversity in check valve configurations and materials of construction provide opportunities to service customers in many different markets. KF Check Valve designers plan for your worst applications so you get the very best regardless of the factors involved—pressure, environment, media transported, and cost. Whether it's critical control of waste water flow, highly corrosive refining applications, or high-pressure in the oil patch, KF offers a wide range of sizes, materials, options, efficient design and stringent manufacturing standards. Specifying KF Check Valves guarantees you a valve optimally designed for your application.

Series 35 Check Valve: Firetest Performed at the Oklahoma City Firetest Facility

Applicable Standards

KF's Check Valves conform to ANSI, API, and NACE specification conformance to meet your application requirements.

ANSI-American National Standard Institute

B16.34	Specification Steel Valves
B16.5	Flanges & Flanged Fittings

API-America Petroleum Institute

6A	Specification for Wellhead Equipment
6D	Specification for Pipeline Valves
6FD	Specification for Fire Ratings

ISO-International Org. for Standardization

ISO 15156	For use in H_2S containing environments in oil & gas production.

NACE-National Assoc. of Corrosion Engineers

MR0175	Standard Material Requirements

You'll find KF Check Valves utilized in the following industries:

- Geothermal
- Refining
- Marine
- Industrial
- Mining
- Refrigeration
- Iron & Steel Mills
- Oil & Gas Production
- Automotive Manufacturing
- CO_2 Injection/Recovery
- Pulp & Paper
- Oilfield Production to NASA
- Food Processing
- Ethanol
- Water/Waste Water
- HVAC
- De-Salinization
- Waterflood

This catalog details the many ways KF Check Valves work for you. Contact us today for the representative or distributor nearest you. KF Check Valves are not intended for pulsating, reciprocating service except for the Series 50 Piston Check Valve.

Contents

Wafer Style Check Valves

Body Style Check Valves

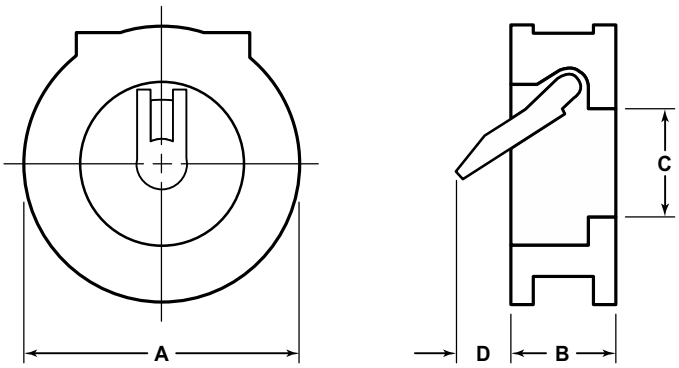
Check Valve Engineering & Application Data

KF Series 10 Check Valves

The Series 10 Check Valve is a flangeless bodied (wafer) style design with round port and spring assisted closure.

General Design Features

- Designed To Comply With API 6D, API 6A & API 594 Specifications.
- Available In A Wide Range Of Materials Including 316 Stainless Steel Trim
- NACE MR0175 / ISO 15156 (Optional)



Size & Pressure Class*

Pressure Class	Size (in.)
ANSI Class 125	2 - 12
ANSI Class 150	2 - 12
ANSI Class 300	2 - 12
ANSI Class 600	2 - 12

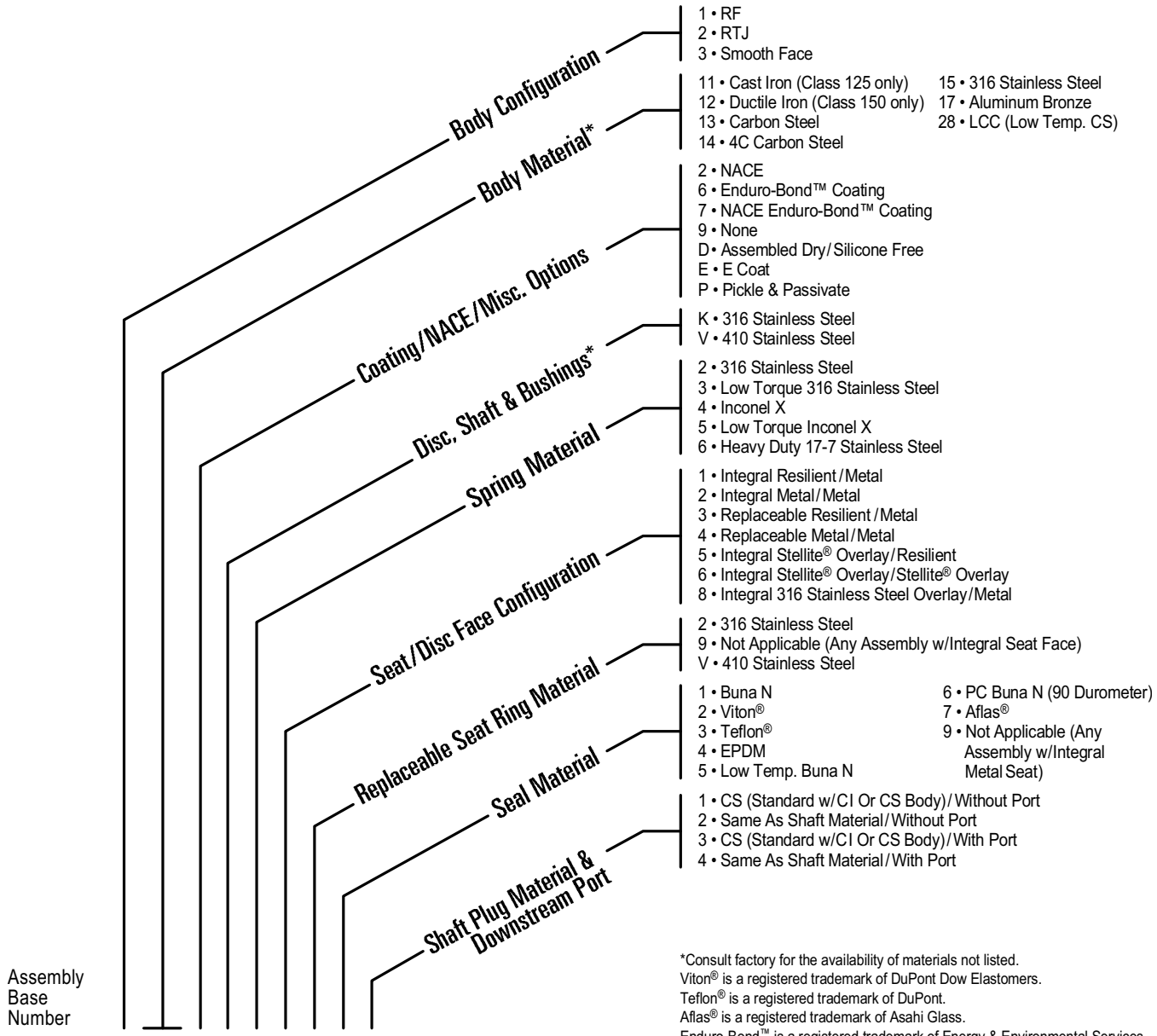
*Consult factory for sizes & PSI not shown.

Dimensional Data (in., mm), 2"-12", Class 125, 150, 300 & 600

Description	Class	Size (in.)													
		2		3		4		6		8		10		12	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Weight lbs./kg**	125	4	1.8	9	4.1	12	5.4	26	11.8	54	24.5	80	36.3	140	63.5
	150	5	2.3	11	5.0	16	7.3	30	13.6	50	22.7	90	40.8	145	65.8
	300	8	3.6	18	8.2	24	10.9	56	25.4	70	31.8	135	61.2	211	95.7
	600	8	3.6	18	8.2	31	14.1	62	28.1	167	75.7	354	160.6	465	210.9
A	125	4 1/8	104.8	5 3/8	136.5	6 7/8	174.6	8 3/4	222.3	11	279.4	13 3/8	339.7	16 1/8	409.6
	150	4 1/8	104.8	5 3/8	136.5	6 7/8	174.6	8 3/4	222.3	11	279.4	13 3/8	339.7	16 1/8	409.6
	300	4 3/8	111.1	5 7/8	149.2	7 1/8	181.0	9 7/8	250.8	12 1/8	308.0	14 1/4	362.0	16 5/8	422.3
	600	4 3/8	111.1	5 7/8	149.2	7 5/8	193.7	10 1/2	266.7	12 5/8	320.7	15 3/4	400.1	18	457.2
B**	125	2 1/8	54.0	2 5/8	66.7	2 5/8	66.7	3 3/4	95.3	5	127.0	5 1/2	139.7	7 1/8	181.0
	150	2 3/8	60.3	2 7/8	73.0	2 7/8	73.0	3 7/8	98.4	5	127.0	5 3/4	146.1	7 1/8	181.0
	300	2 3/8	60.3	2 7/8	73.0	2 7/8	73.0	3 7/8	98.4	5	127.0	5 3/4	146.1	7 1/8	181.0
	600	2 3/8	60.3	2 7/8	73.0	3 1/8	79.4	5 3/8	136.5	6 1/2	165.1	8 3/8	212.7	9	228.6
C	125	1 17/32	38.9	2 1/16	52.4	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 5/8	193.7	9 1/2	241.3
	150	1 17/32	38.9	2 1/16	52.4	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 5/8	193.7	9 1/2	241.3
	300	1 17/32	38.9	2 1/16	52.4	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 5/8	193.7	9 1/2	241.3
	600	1 17/32	38.9	2 1/16	52.4	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 3/8	187.3	9 1/2	241.3
D	125	1/2	12.7	1	25.4	1 3/4	44.5	3 1/2	88.9	3 1/2	88.9	4 11/16	119.1	5 3/32	129.4
	150	1/2	12.7	3/4	19.1	1 1/2	38.1	3 3/8	85.7	3 1/2	88.9	4 7/16	112.7	5 3/32	129.4
	300	1/4	6.35	3/4	19.1	1 1/4	31.8	3 3/8	85.7	3 1/2	88.9	4 7/16	112.7	5 3/32	129.4
	600	1/4	6.35	3/4	19.1	1 1/4	31.8	1 7/8	47.6	2	50.8	2	50.8	3 7/32	81.8

**Contact factory for weights and "B" dimensions of 10G Series Checks.

KF Series 10 & 10G Check Valve Assembly Part Number Code



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Series 10 Assembly Base Numbers

Class	MOP	Size (in.)						
		2	3	4	6	8	10	12
125	200	7054-	7056-	7057-	7059-	7060-	7061-	7062-
150	285	7087-	7089-	7090-	7092-	7093-	7094-	7095-
300	740	7120-	7122-	7123-	7125-	7126-	7127-	7128-
600	1480	7179-	7181-	7182-	7184-	7185-	7186-	7187-

Series 10G Assembly Base Numbers (Non API 594)

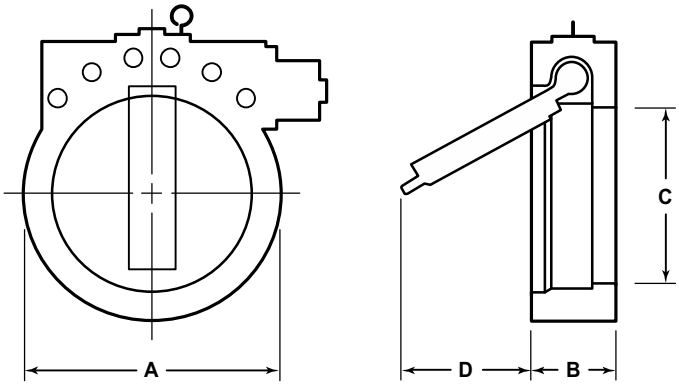
Class	Size (in.)								
	2	2 1/2	3	4	5	6	8	10	12
125	7295-	7296-	7297-	7298-	7299-	7300-	7301-	7302-	7303-
150	7313-	7314-	7315-	7316-	7317-	7318-	7319-	7320-	7321-

KF Series 10S Check Valves

Flangeless, semi-lug bodied (wafer) swing style design with round port and adjustable spring assisted closure.

General Design Features

- Spring May Be Replaced Without Removing Valve From Line After Relieving Line Pressure & Flow
- NACE MR0175/ISO 15156 (Optional)



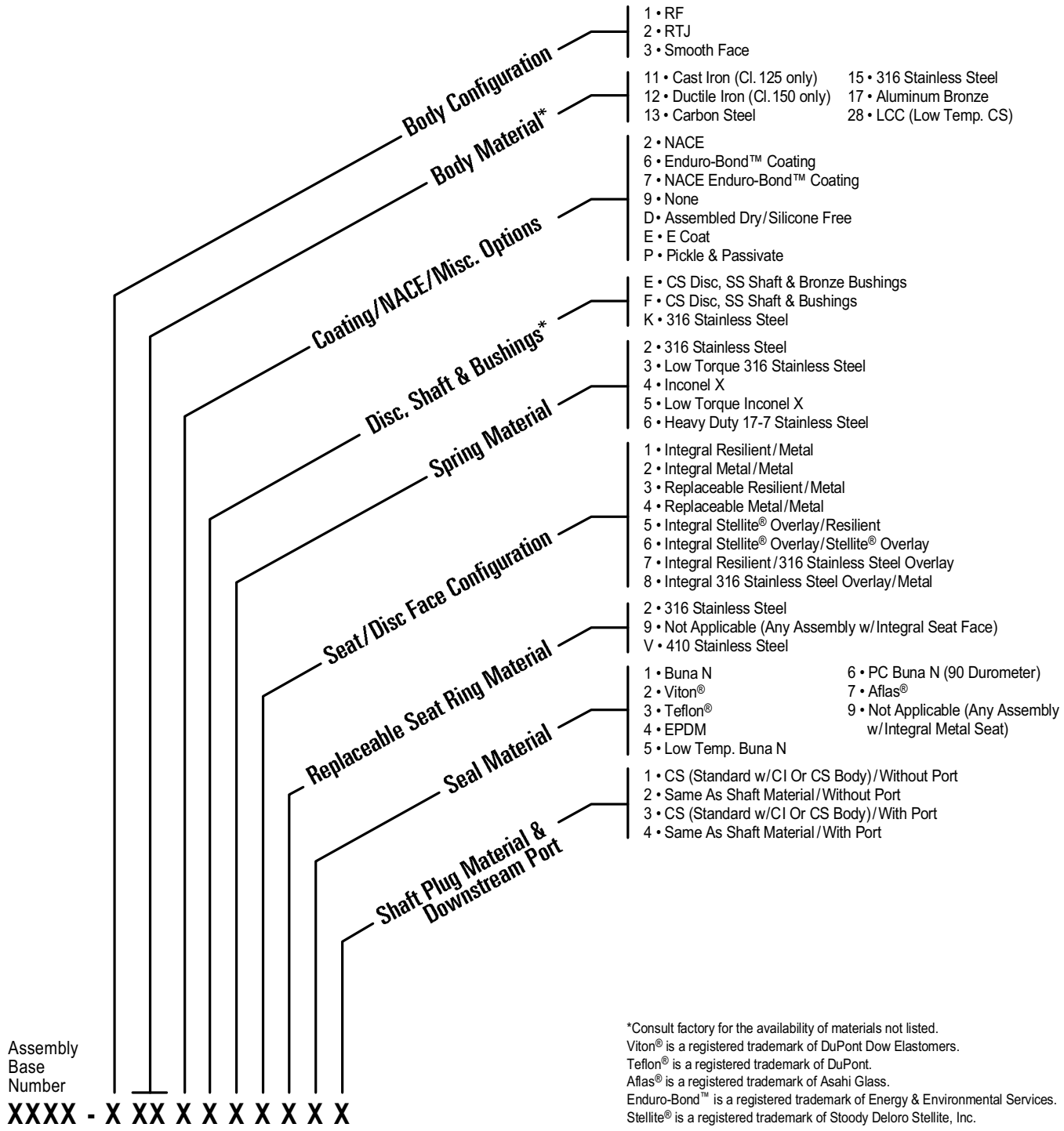
Size & Pressure Class

Pressure Class	Size (in.)
ANSI Class 125	14 - 72
ANSI Class 150	14 - 72
ANSI Class 300	14 - 72
ANSI Class 600	14-24

Dimensional Data (in., mm), 14"-36", Class 125, 150, 300 & 600

Description	Class	Size (in.)													
		14		16		18		20		24		30		36	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Weight lbs./kg	125	310	140.6	400	181.4	495	224.5	670	303.9	795	360.6	1360	616.9	1698	770.2
	150	310	140.6	400	181.4	495	224.5	670	303.9	795	360.6	—	—	—	—
	300	425	192.8	548	248.6	680	308.4	920	417.3	1100	499.0	—	—	—	—
	600	510	231.3	658	298.5	815	369.7	1115	505.8	1320	598.7	—	—	—	—
A	125	17 5/8	447.7	20 1/8	511.2	21 1/2	546.1	23 3/4	603.3	28 1/8	714.4	—	—	—	—
	150	17 5/8	447.7	20 1/8	511.2	21 1/2	546.1	23 3/4	603.3	28 1/8	714.4	34 3/4	882.7	41 1/4	1047.8
	300	19	482.6	21 1/8	536.6	23 3/8	593.7	25 5/8	650.9	30 3/8	771.5	—	—	—	—
	600	19 1/4	489.0	22 1/8	562.0	24	609.6	26 3/4	679.5	31	787.4	—	—	—	—
B	125	7 3/4	196.9	8 3/4	222.3	8 3/4	222.3	9 3/4	247.7	9 3/4	247.7	—	—	—	—
	150	7 3/4	196.9	8 3/4	222.3	8 3/4	222.3	9 3/4	247.7	9 3/4	247.7	9 3/4	247.7	14 1/2	1054.1
	300	7 3/4	196.9	9 1/8	231.8	9 3/4	247.7	10 3/4	273.1	10 3/4	273.1	—	—	—	—
	600	9 3/4	247.7	9 3/4	247.7	10 3/4	273.1	11 3/4	298.5	11 3/4	298.5	—	—	—	—
C	125	10 3/16	258.8	11	279.4	12 1/2	317.5	15	381.0	18 1/2	469.9	—	—	—	—
	150	10 3/16	258.8	11	279.4	12 1/2	317.5	15	381.0	18 1/2	469.9	23 1/2	596.9	28	711.2
	300	10 3/16	258.8	11	279.4	12 1/2	317.5	15	381.0	18 1/2	469.9	—	—	—	—
	600	10 3/16	258.8	11	279.4	12 1/2	317.5	15	381.0	18 1/2	469.9	—	—	—	—
D	125	7 1/2	190.5	8 3/4	222.3	10 1/4	260.4	12 1/4	311.2	15	381.0	—	—	—	—
	150	7 1/2	190.5	8 3/4	222.3	10 1/4	260.4	12 1/4	311.2	15	381.0	18 1/2	469.9	21 1/2	546.1
	300	5 1/2	139.7	7	177.8	8 3/4	222.3	10	254.0	12	304.8	—	—	—	—
	600	4 1/2	114.3	5 1/4	133.4	5 1/8	130.2	6 3/8	161.9	7	177.8	—	—	—	—

KF Series 10S Check Valve Assembly Part Number Code



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Assembly Base Numbers

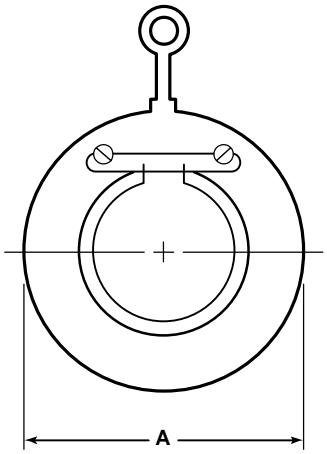
Class	MOP	Size (in.)				
		14	16	18	20	24
125	150	7063-	7064-	7065-	7066-	7068-
150	285	7096-	7097-	7098-	7099-	7101-
300	740	7129-	7130-	7131-	7132-	7134-
600	1480	7188-	7189-	7190-	7191-	7193-

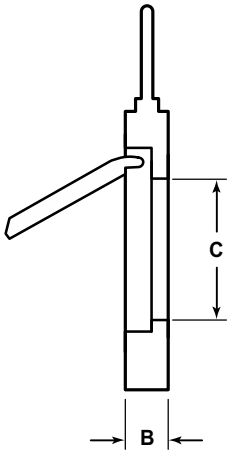
KF Series 12 Check Valves

Designed to comply with API 6D Specifications for short pattern wafer Check Valves.

General Design Features

- Standard 316 Stainless Steel Disc On 2" Through 4"





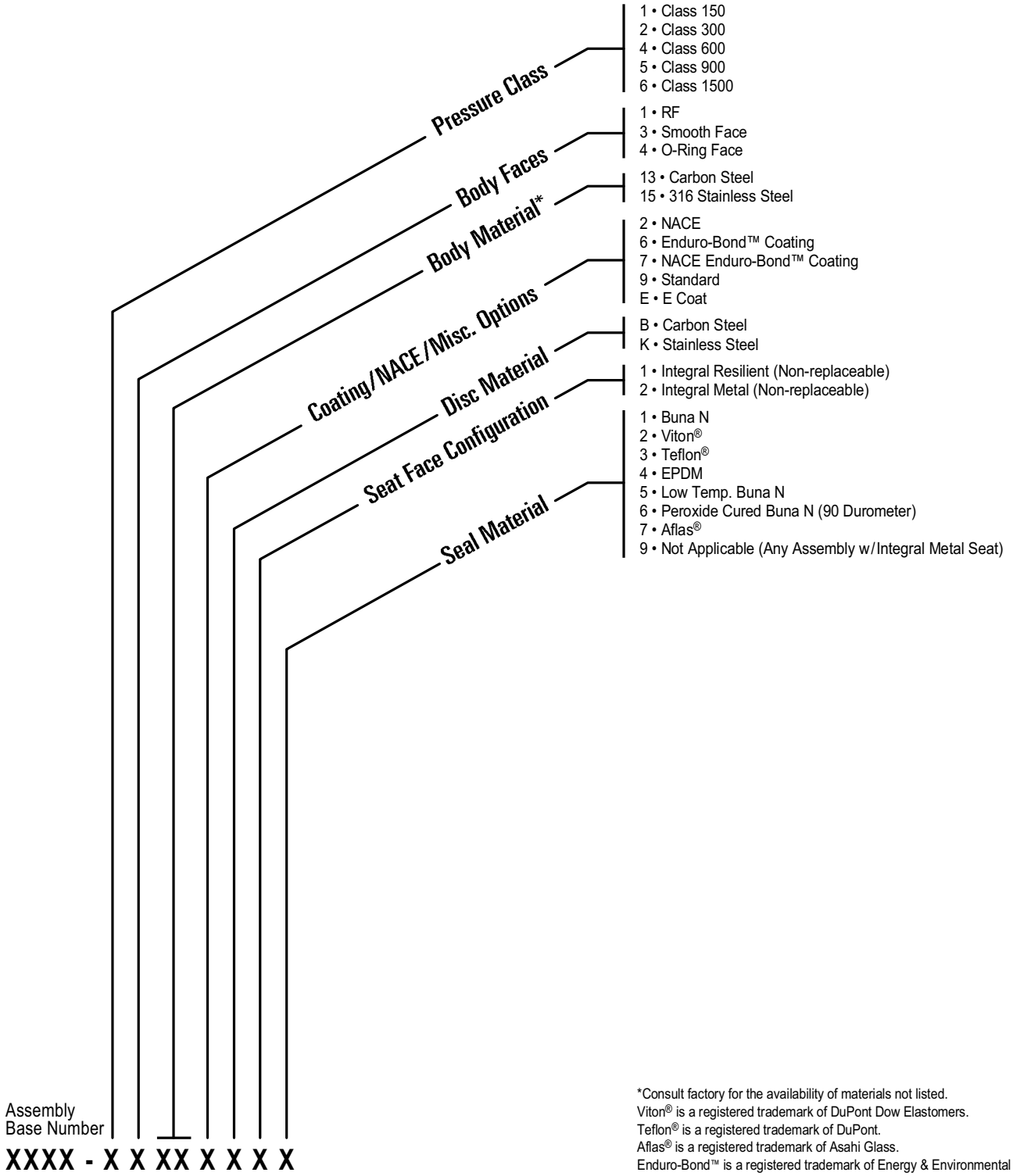
Size, Pressure Class & Maximum Operating Pressure

Pressure Class	Size (in.)	MOP (PSI)
ANSI Class 150	2-12	285
ANSI Class 300	2-12	740
ANSI Class 600	2-12	1480
ANSI Class 900	2-12	2220
ANSI Class 1500	2-8	3705

Dimensional Data (in., mm), 2"-12", Class 150, 300, 600, 900 & 1500

Description	Class	Size (in.)													
		2		3		4		6		8		10		12	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Weight lbs./kg	150	3	1.4	5	2.3	6	2.7	12	5.4	24	10.9	32	14.5	62	28.1
	300	3	1.4	6	2.7	7	3.2	15	6.8	29	13.2	60	27.2	103	46.7
	600	4	1.8	6	2.7	8	3.6	20	9.1	33	15.0	110	49.9	150	68.0
	900	4	1.8	7	3.2	12	5.4	24	10.9	57	25.9	131	59.4	234	106.1
	1500	4	1.8	9	4.1	19	8.6	49	22.2	74	33.6	—	—	—	—
A	150	4 1/8	104.8	5 3/8	136.5	6 7/8	174.6	8 3/4	222.3	11	279.4	13 3/8	339.7	16 1/8	409.6
	300	4 3/8	111.1	5 7/8	149.2	7 1/8	181.0	9 7/8	250.8	12 1/8	308.0	14 1/4	362.0	16 5/8	422.3
	600	4 3/8	111.1	5 7/8	149.2	7 5/8	193.7	10 1/2	266.7	12 5/8	320.7	15 3/4	400.1	18	457.2
	900	5 5/8	142.9	6 5/8	168.3	8 1/8	206.4	11 3/8	288.9	14 1/8	358.8	17 1/8	435.0	19 5/8	498.5
	1500	5 5/8	142.9	6 7/8	174.6	8 1/4	209.6	11 1/8	282.6	13 7/8	352.4	—	—	—	—
B	150	3/4	19.1	3/4	19.1	3/4	19.1	3/4	19.1	1 1/8	28.6	1 1/8	28.6	1 1/2	38.1
	300	3/4	19.1	3/4	19.1	3/4	19.1	7/8	22.2	1 1/8	28.6	1 1/2	38.1	2	50.8
	600	3/4	19.1	3/4	19.1	7/8	22.2	1 1/8	28.6	1 1/2	38.1	2 1/4	57.2	2 3/8	60.3
	900	3/4	19.1	3/4	19.1	7/8	22.2	1 3/8	34.9	1 3/4	44.5	2 1/4	57.2	3 1/8	79.4
	1500	3/4	19.1	7/8	22.2	1 1/4	31.8	1 3/4	44.5	2 1/4	57.2	—	—	—	—
C	150	1 1/16	27.0	1 7/8	47.6	2 13/16	71.4	4 1/2	114.3	5 5/8	142.9	7 1/2	190.5	8 11/16	220.7
	300	1 1/16	27.0	1 7/8	47.6	2 13/16	71.4	4 1/2	114.3	5 5/8	142.9	7 1/2	190.5	8 11/16	220.7
	600	1 1/16	27.0	1 7/8	47.6	2 5/8	66.7	4 1/8	104.8	5	127.0	7	177.8	8 1/2	215.9
	900	1 1/16	27.0	1 7/8	47.6	2 5/8	66.7	4 1/8	104.8	5	127.0	7	177.8	8 1/2	215.9
	1500	1 1/16	27.0	1 5/8	41.3	2 1/2	63.5	4 1/8	104.8	5	127.0	—	—	—	—

KF Series 12 Check Valve Assembly Part Number Code



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Assembly Base Numbers

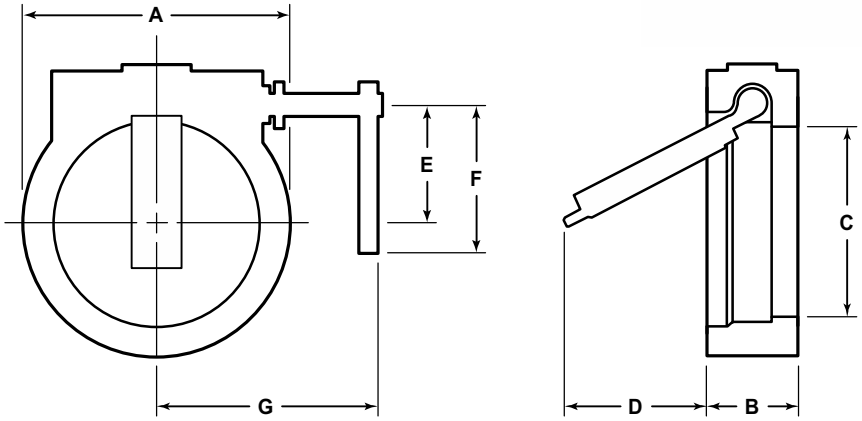
Size (in.)						
2	3	4	6	8	10	12
7330-	7332-	7333-	7335-	7336-	7337-	7338-

KF Series 18 Check Valves

Flangeless bodied (wafer) with non-API lay length swing style Check Valve with external spring assisted closure.

General Design Features

- Externally Adjustable Shaft Packing Gland & Back-Flush Lever Is Standard.
- Available With Either Right-Hand Or Left-Hand Lever Orientation



Note: KF Right-Hand Version Shown

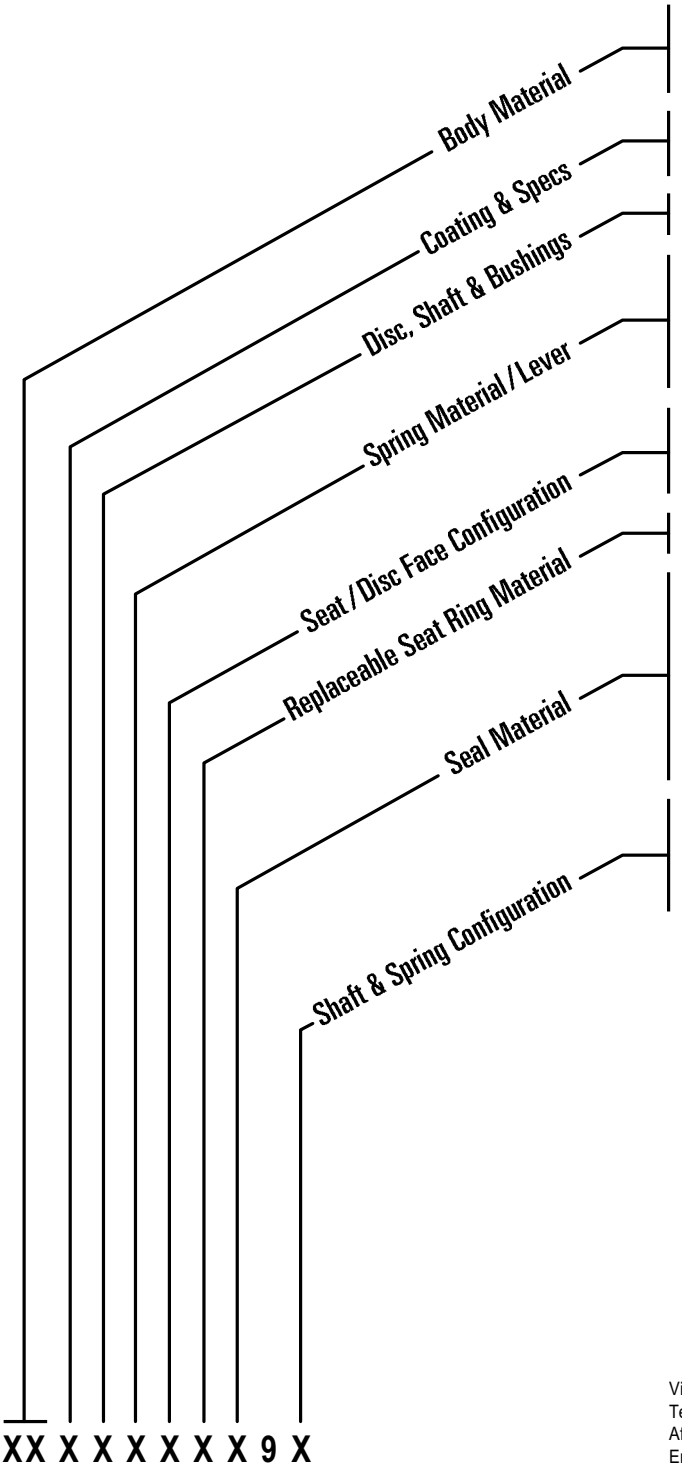
Size & Pressure Class

Pressure Class	Size (in.)
ANSI Class 125	4 - 12
ANSI Class 150	4 - 12

Dimensional Data (in., mm), 4"-12", Class 125 & 150

Description	Class	Size (in.)									
		4		6		8		10		12	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Weight lbs./kg	125	14	6.4	25	11.3	33	15.0	55	24.9	78	35.4
	150	14	6.4	25	11.3	33	15.0	55	24.9	78	35.4
A	125	6 7/8	174.6	8 3/4	222.3	11	279.4	13 3/8	339.7	16 1/8	409.6
	150	6 7/8	174.6	8 3/4	222.3	11	279.4	13 3/8	339.7	16 1/8	409.6
B	125	2 1/4	57.2	2 3/4	69.9	2 7/8	73.0	3 1/8	79.4	3 1/2	88.9
	150	2 1/4	57.2	2 3/4	69.9	2 7/8	73.0	3 1/8	79.4	3 1/2	88.9
C	125	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 5/8	193.7	9 1/2	241.3
	150	3 1/32	77.0	4 3/4	120.7	6 7/16	163.5	7 5/8	193.7	9 1/2	241.3
D	125	2 1/2	63.5	4	101.6	5 1/2	139.7	7	177.8	9 1/2	241.3
	150	2 1/2	63.5	4	101.6	5 1/2	139.7	7	177.8	9 1/2	241.3
E	125	2 9/32	57.9	3 1/4	82.6	4 1/32	102.4	4 3/4	120.7	5 7/8	149.2
	150	2 9/32	57.9	3 1/4	82.6	4 1/32	102.4	4 3/4	120.7	5 7/8	149.2
F	125	7	177.8	7	177.8	11 1/4	285.8	13	330.2	15	381.0
	150	7	177.8	7	177.8	11 1/4	285.8	13	330.2	15	381.0
G	125	6 1/4	158.8	7 1/2	190.5	8 1/2	215.9	10 1/2	266.7	12 1/2	317.5
	150	6 1/4	158.8	7 1/2	190.5	8 1/2	215.9	10 1/2	266.7	12 1/2	317.5

KF Series 18 Check Valve Assembly Part Number Code



Body Material
- 11 • Cast Iron (Class 125 only)
- 12 • Ductile Iron (Class 150 only)
- 13 • Carbon Steel
- 15 • 316 Stainless Steel

Coating & Specs
- 6 • Endurobond™
- 9 • None
- D • Assemble Dry/Silicone Free
- E • E Coat
- P • Pickle & Passivate

Disc, Shaft & Bushings
- G • 304 SS Disc & Shaft, Bronze Bushings
- K • 316 Stainless Steel

Spring Material / Lever
- 1 • Carbon Steel / Carbon Steel Lever
- 2 • Stainless Steel / Carbon Steel Lever
- 3 • Stainless Steel / Stainless Steel Lever & Stainless Steel Fasteners & Packing Follower
- 4 • Stainless Steel / Enduro-Bond™ Coated Lever, & Packing Follower w/ Stainless Steel Fasteners

Seat / Disc Face Configuration
- 1 • Integral Resilient / Metal
- 2 • Integral Metal / Metal
- 3 • Replaceable Resilient / Metal
- 4 • Replaceable Metal / Metal

Replaceable Seat Ring Material
- 2 • 316 Stainless Steel
- 9 • Not Applicable (Any Assembly w/ Integral Seat Face)

Seal Material
- 1 • Buna N
- 2 • Viton®
- 3 • Teflon®
- 4 • EPDM
- 5 • Low Temp. Buna N
- 6 • Peroxide Cured Buna N (90 Durometer)
- 8 • Nitrile F / MTBE Service
- 9 • Not Applicable (Any Assembly w/ Integral Seat Face)
- G • HNBR

Shaft & Spring Configuration
- 1 • Right Shaft Spring Mount
- 2 • Left Shaft Spring Mount
- 3 • Dual Shaft, Right Spring Mount
- 4 • Dual Shaft, Left Spring Mount
- 5 • Dual Shaft, BOTH Spring Mount

Assembly Base Number

XXXX - XX X X X X X X 9 X

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Teflon® is a registered trademark of DuPont.
Aflas® is a registered trademark of Asahi Glass.
Enduro-Bond™ is a registered trademark of Energy & Environmental Services.

Assembly Base Numbers

Class	MOP	Size (in.)				
		4	6	8	10	12
125	200	7377-	7379-	7380-	7381-	7382-
150	285	7392-	7394-	7395-	7396-	7397-

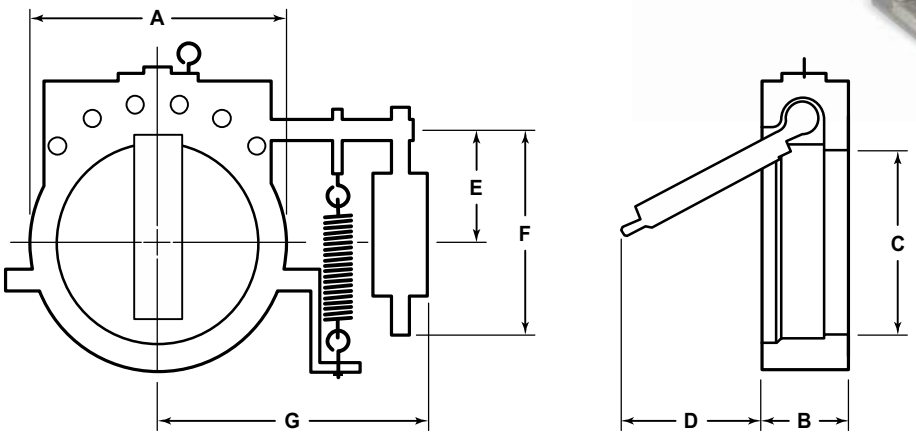
KF Series 20 & 22 Check Valves

Semi-lug, flangeless bodied swing style design with externally adjustable spring assisted closure.

General Design Features

- Externally Adjustable Shaft Packing Is Standard
- Available With Either Right-Hand, Left-Hand, Or Double Extended Lever/ Shaft Orientation
- Standard Flush Port Connection
- Series 22 Air Cushion Dampens Final 10% Of Closure
- Series 20 Modifiable In The Field To Accept Series 22 Air Cushion

Note: KF Series 22 Right-Hand Version Shown With Optional Lever & Weight



Size, Pressure Class & Maximum Operating Pressure

Pressure Class	Size (in.)	MOP (PSI)
ANSI Class 125	2 - 72	200/150*
ANSI Class 150	2 - 72	285
ANSI Class 300	2 - 72	740
ANSI Class 600	2 - 24	1480

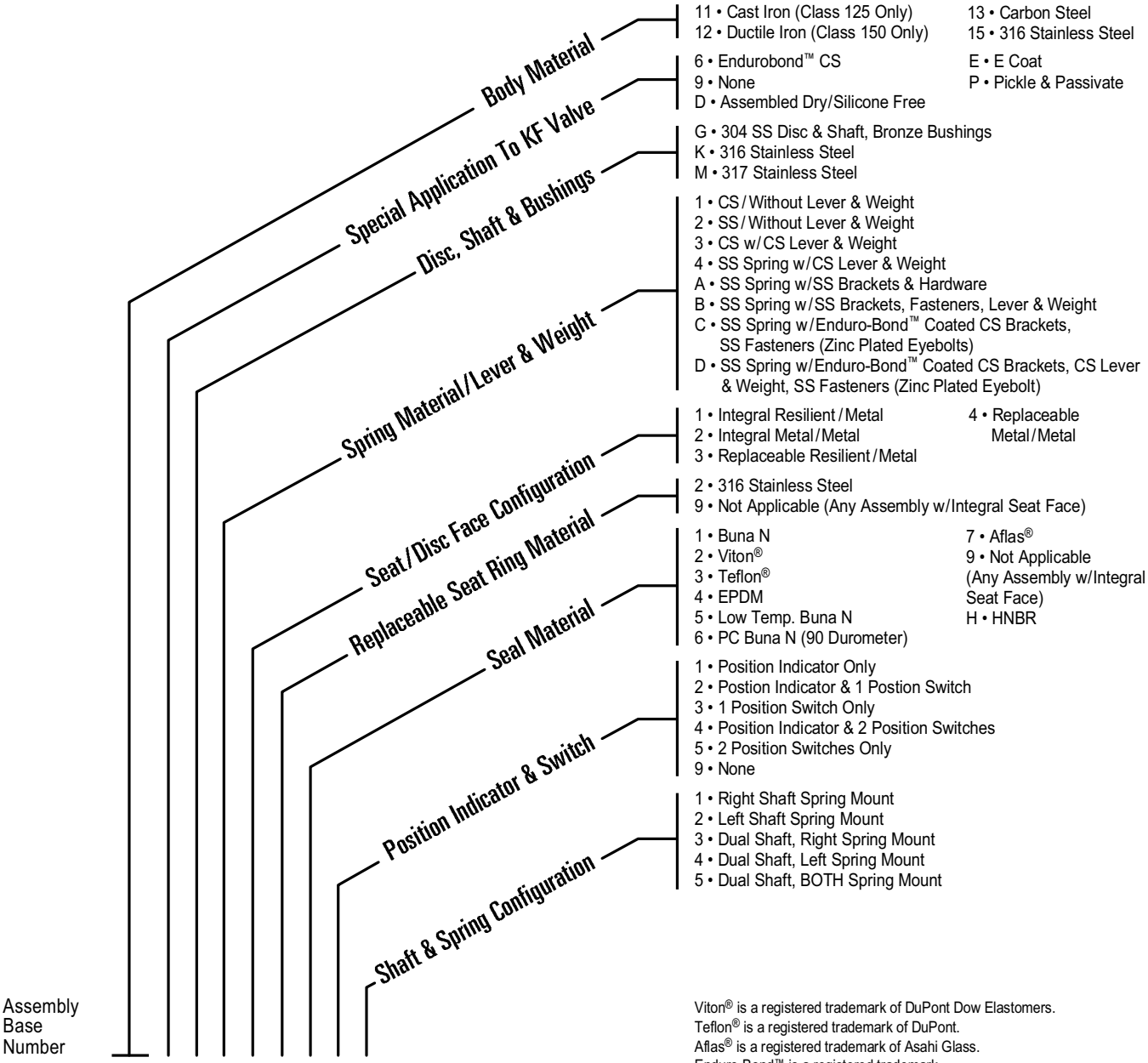
*Class 125, 200 PSI up to 12", 150 PSI 14" & larger.

Dimensional Data (in., mm), 2" - 30", Class 125 & 150 only

Description	Size (in.)												
	2	3	4	6	8	10	12	14	16	18	20	24	30
Wt./lbs.	29	39	52	73	88	152	220	320	445	582	763	897	1360
A	4 1/8	5 3/8	6 7/8	8 5/8	10 7/8	13 1/4	16	17 5/8	20 1/8	21 1/2	23 3/4	28 1/8	34 1/2
B	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4	4 3/4	4 3/4	7 3/4	8 3/4	8 3/4	9 3/4	9 3/4	9 3/4
C	1 1/2	2 1/16	3 1/32	4 3/4	6 9/16	7 5/8	9 1/2	10 3/16	11	12 1/2	15 1/8	18 5/8	23 5/8
D	13/32	25/32	1 3/8	3 13/32	5 13/32	6 1/8	7 7/8	7 1/16	8 1/16	9 3/4	11 1/2	14 11/32	22 1/16
E	1 7/32	1 51/64	2 17/64	3 11/32	4 3/8	5 11/32	6 3/8	7	8 1/8	9	10 7/8	12 1/4	15 1/2
F	6 5/8	9 7/8	9 7/8	12 1/2	12 1/2	12 1/2	17	30	30	30	31 1/2	31 1/2	31 1/2
G	8 3/4	9 3/4	9 3/4	11 1/2	13 1/2	14 1/2	16 1/2	20 1/4	22 1/4	23 1/4	27	31	36 3/4

Description	Size (mm)												
	2	3	4	6	8	10	12	14	16	18	20	24	30
Wt./kg	13.2	17.7	23.6	33.1	39.9	68.9	99.8	145.1	201.8	264.0	346.1	406.9	616.9
A	104.8	136.5	174.6	219.1	276.2	336.6	406.4	447.7	511.2	546.1	603.3	714.4	876.3
B	95.3	95.3	95.3	95.3	95.3	120.7	120.7	196.9	222.3	222.3	247.7	247.7	247.7
C	38.1	52.4	77.0	120.7	166.7	193.7	241.3	258.8	279.4	317.5	384.2	473.1	600.1
D	10.3	19.8	34.9	86.5	137.3	155.6	200.0	179.4	204.8	247.7	292.1	364.3	560.4
E	31.0	45.6	57.5	84.9	111.1	135.7	161.9	177.8	206.4	228.6	276.2	311.2	393.7
F	168.3	250.8	250.8	317.5	317.5	317.5	431.8	762.0	762.0	762.0	800.1	800.1	800.1
G	222.3	247.7	247.7	292.1	342.9	368.3	419.1	514.4	565.2	590.6	685.8	787.4	933.5

KF Series 20 & 22 Check Valves Assembly Part Number Code



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Assembly Base Numbers, Series 20

Class	Size (in.)												
	2	3	4	6	8	10	12	14	16	18	20	24	30
125	7425-	7427-	7428-	7430-	7431-	7432-	7433-	7434-	7435-	7436-	7437-	7439-	7440-
150	7458-	7460-	7461-	7463-	7464-	7465-	7466-	7467-	7468-	7469-	7470-	7472-	7473-

Assembly Base Numbers, Series 22

Class	Size (in.)												
	2	3	4	6	8	10	12	14	16	18	20	24	30
125	7550-	7552-	7553-	7555-	7556-	7557-	7558-	7559-	7560-	7561-	7562-	7564-	7565-
150	7583-	7585-	7586-	7588-	7589-	7590-	7591-	7592-	7593-	7594-	7595-	7597-	7598-

KF Series 31 Check Valves

Threaded, grooved and socket weld end connections swing style design with threaded bonnet.

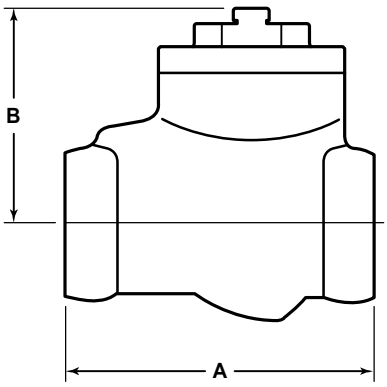
General Design Features

- Available In Ductile Iron, Carbon Steel, 316SS & Aluminum Bronze, 316SS Trim Is Standard
- Acceptable For Vertical "Upflow" Applications & Suitable For Pigging
- Standard Seating Configuration Has O-Ring Seal Located In Disc For Ease Of Replacement
- NACE MR0175/ISO 15156

Size & Pressure Rating

Ductile Iron	
Pressure Rating	Size (in.)
300 MOP	1 - 4
600 MOP	1 - 4
750 MOP	1 - 4
1000 MOP	1 - 4
1500 MOP	1 - 4
2000 MOP	1 - 4

Carbon Steel	
Pressure Rating	Size (in.)
300 MOP	1 - 4
750 MOP	1 - 4
1500 MOP	1 - 4
2220 MOP	1 - 4
3000 MOP	1 - 3
5000 MOP	1 Only



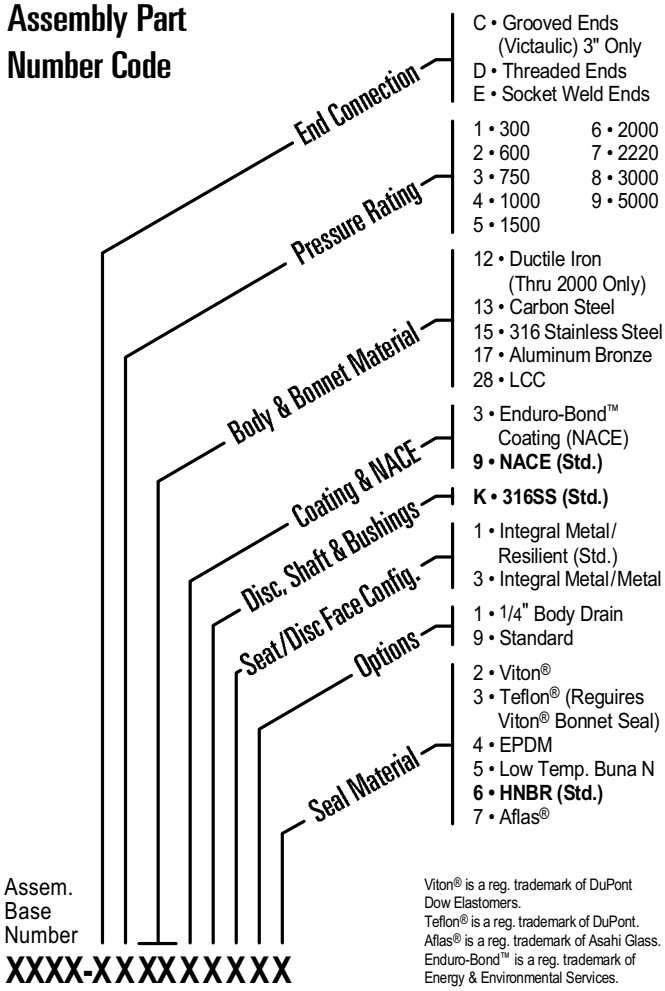
Dimensional Data (in., mm), 1" - 4"

Description	Size (in.)			
	1	2	3	4
Wt. (lbs.) (Ductile Iron)	5	10	23	46
Wt. (lbs.) (CS, SS, Alum. Brnz.)	5	13	28	46
A (Ductile Iron)	4 1/4	6	8	10
A (CS, SS, Alum. Brnz.)	4 1/4	6	8 3/4	10
B (All Materials)	2	3 5/8	6	7

Description	Size (mm)			
	1	2	3	4
Wt. (kg) (Ductile Iron)	2.3	4.5	10.4	20.9
Wt. (kg) (CS, SS, Alum. Brnz.)	2.3	5.9	12.7	20.9
A (Ductile Iron)	108.0	152.4	203.2	254
A (CS, SS, Alum. Brnz.)	108.0	152.4	222.3	254
B (All Materials)	50.8	92.1	152.4	177.8

Consult factory for part numbers and dimensional data for parts not listed.

Assembly Part Number Code



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Assembly Base Numbers

Size (in.)			
1	2	3	4
7677-	7679-	7681-	7682-

KF Series 31B Check Valves

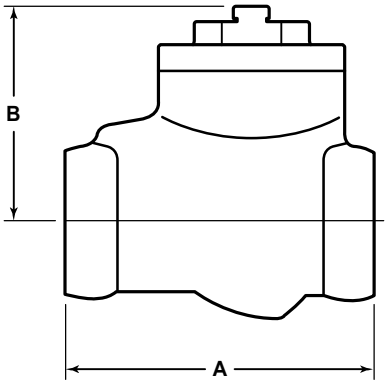
Threaded end connection swing style design with threaded bonnet.

General Design Features

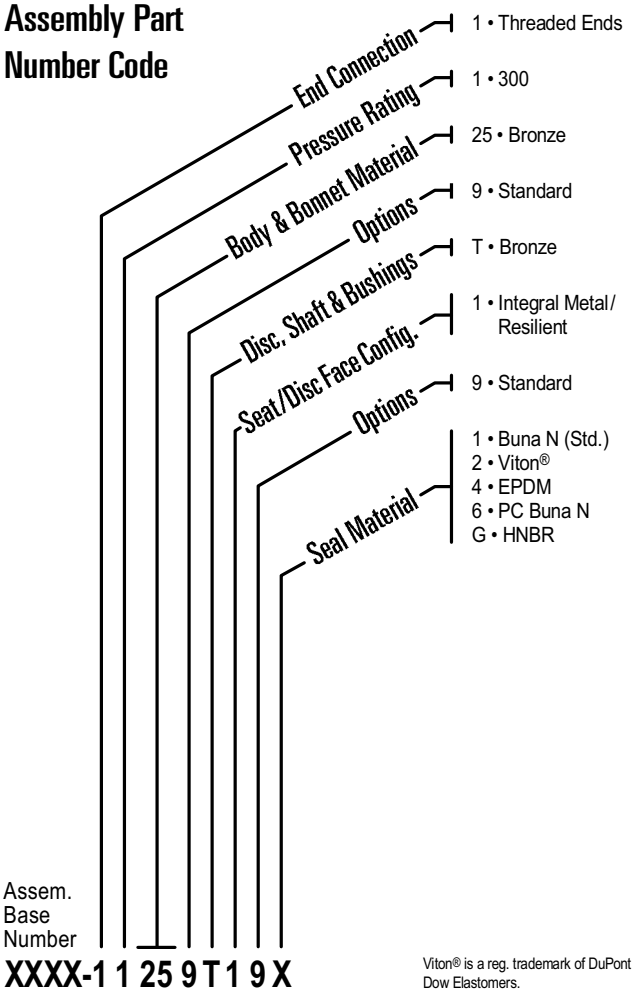
- Bronze Body & Bonnet
- Acceptable For Vertical "Upflow" Applications & Suitable For Pigging
- NACE MR0175/ISO 15156

Size & Pressure Rating

Bronze	
Pressure Rating	Size (in.)
300 MOP	1 - 4



Assembly Part Number Code



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Dimensional Data (in., mm), 1" - 4"

Description Wt.(lbs)	Size (in.)			
	1	2	3	4
	4.5	8	17	37
A	3 3/4	5 1/4	7 1/4	9 1/4
B	2	3	4 3/8	5 1/4

Description Wt.(kg)	Size (mm)			
	1	2	3	4
	2.0	3.6	7.7	16.8
A	95.2	133.3	184.1	235
B	50.8	76.2	111.1	133.3

Assembly Base Numbers

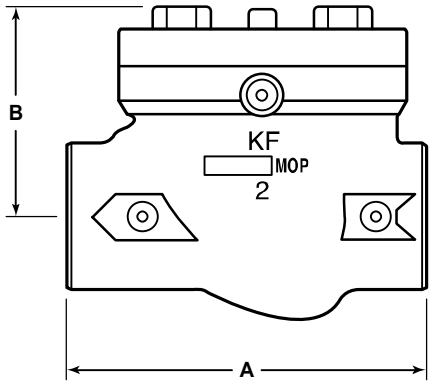
Size (in.)			
1	2	3	4
7677	7679	7681	7682

KF Series 32 Check Valves

Now offered in a "New" economical lighter weight design with easy to replace drop-in disc which has been designed to be stronger and more reliable.

General Design Features

- Available In Threaded & Socketweld End Connections
- Swing Style Design With Bolted Bonnet
- Materials Include Carbon Steel, 316 Stainless Steel & Aluminum Bronze
- Standard Trim Includes 316 Stainless Steel Disc, Shaft & Bushings
- Standard Seating Configuration Has O-Ring Seal Located In Disc For Ease Of Replacement
- Available With Metal-to-Metal & Stellite® Seating Surfaces
- Acceptable For Vertical "Upflow" Applications & Suitable For Pigging
- NACE MR0175/ISO 15156



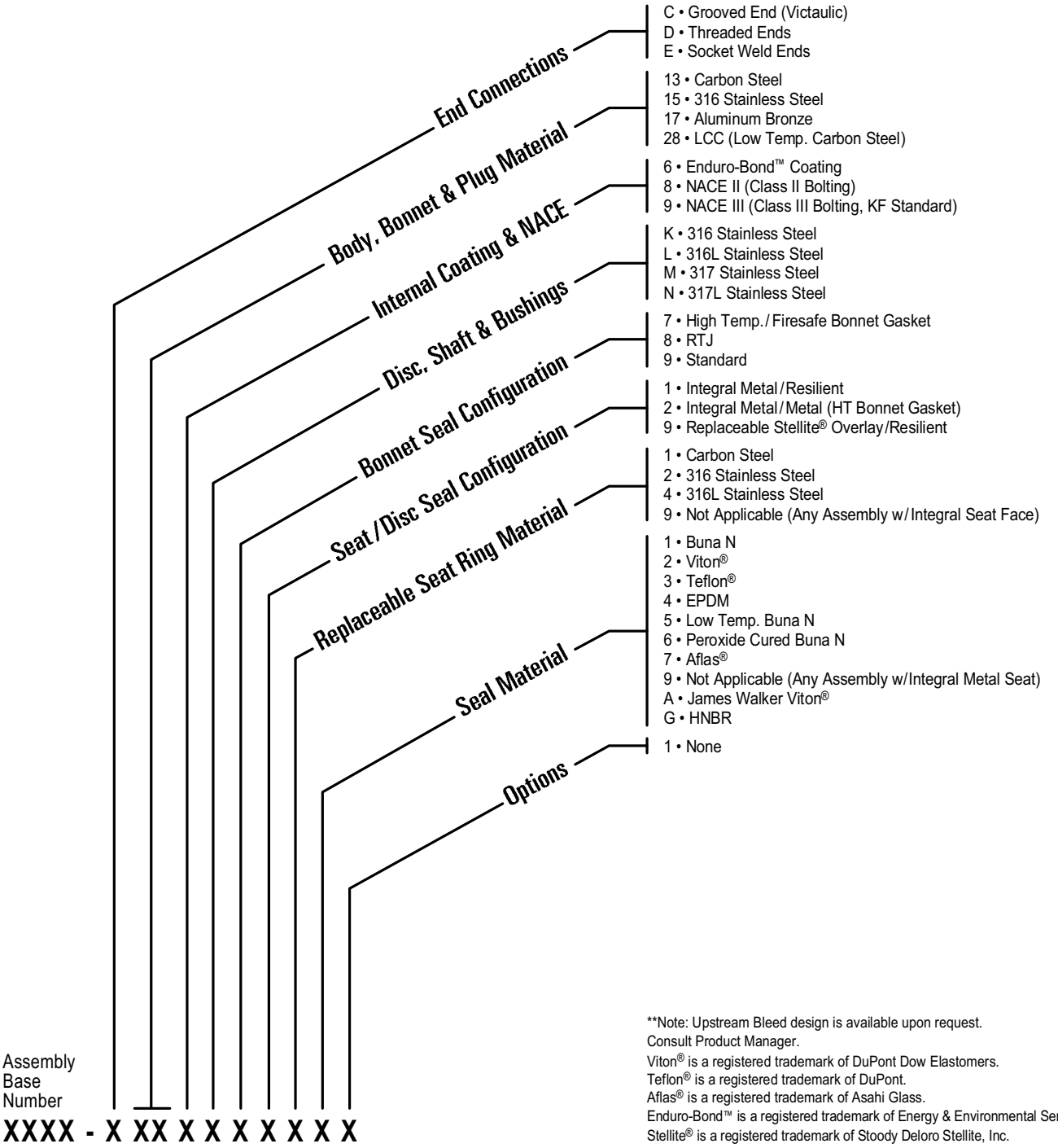
Size & Pressure Rating

Pressure Rating	Size (in.)
300 MOP	2 - 3
750 MOP	2 - 3
1500 MOP	2 - 3
2220 MOP	2

Dimensional Data (in., mm), 1"- 4", Class 300, 750, 1500 & 2220

Description	Class	Size (in.)			
		2		3	
		in.	mm	in.	mm
Weight lbs./kg	300	27	12.2	Consult Factory for Weights	
	750	27	12.2		
	1500	27	12.2		
	2220	30	13.6		
A	300	7 1/4	184.2	10 3/4	273.1
	750	7 1/4	184.2	10 3/4	273.1
	1500	7 1/4	184.2	10 3/4	273.1
	2220	7 1/4	184.2	10 3/4	273.1
B	300	4 1/4	108.0	5 3/4	146.1
	750	4 1/4	108.0	5 3/4	146.1
	1500	4 1/4	108.0	5 3/4	146.1
	1500	4 3/4	120.7	5 3/4	146.1

KF Series 32 Check Valve Assembly Part Number Code



**Note: Upstream Bleed design is available upon request. Consult Product Manager.

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Enduro-Bond™ is a registered trademark of Energy & Environmental Services.
Stellite® is a registered trademark of Stoody Deloro Stellite, Inc.

Assembly Base Numbers

Class	Size (in.)	
	2	3
300	7703-	7705-
750	7713-	7715-
1500	7723-	7725-
2220	7733-	—

KF Series 35 Check Valves

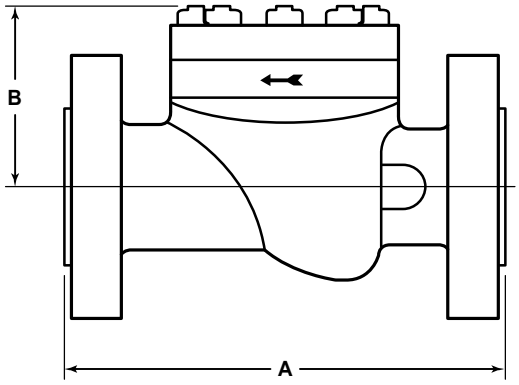
Flanged end (RF & RTJ) swing style integrally cast flange design.

General Design Features

- Std. Trim Includes 316 Stainless Steel Disc, Shaft & Bushings
- Unique Opt. 316 Stainless Steel Removable Seat Available
- Installs In Vertical "Upflow" Applications With No Modification & Suitable For Pigging
- NACE MR0175 / ISO 15156

Dim. Data (in., mm), 2 1/16"–7 1/16", API 2000, 3000 & 5000

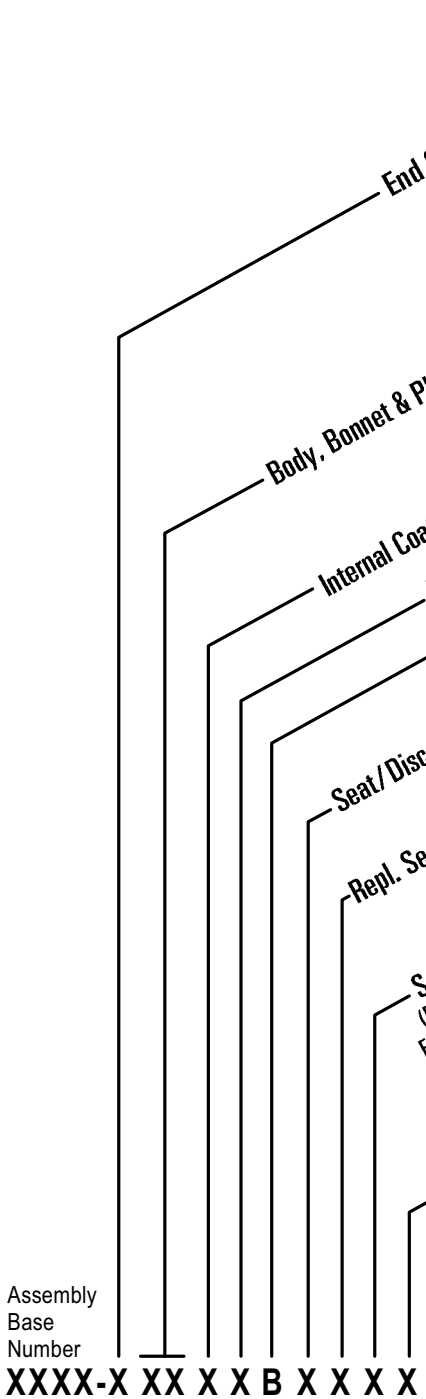
Descript.	API	Size (in.)							
		2 1/16		3 1/8		4 1/16		7 1/16	
		in.	mm	in.	mm	in.	mm	in.	mm
Wt. lbs./kg	2000	48	21.8	97	44.0	155	70.3	300	136.1
	3000	78	35.4	115	52.2	215	97.5	435	197.3
	5000	78	35.4	128	58.1	365	165.6	765	347.0
A	2000	11 5/8	295.3	14 1/8	358.8	17 1/8	435.0	22 1/8	562.0
	3000	14 5/8	371.5	15 1/8	384.2	18 1/8	460.4	24 1/8	612.8
	5000	14 5/8	371.5	18 5/8	473.1	21 5/8	549.3	28	711.2
B	2000	5 1/4	133.4	6 1/4	158.8	7 1/2	190.5	10 1/4	260.4
	3000	5 7/8	149.2	6 3/4	171.5	8 1/4	209.6	10 3/4	273.1
	5000	6 1/8	155.6	7 3/8	187.3	8 7/8	225.4	11 5/8	295.3
Ring Size	2000	R23	R23	R31	R31	R37	R37	R45	R45
	3000	R24	R24	R31	R31	R37	R37	R45	R45
	5000	R24	R24	R35	R35	R39	R39	R46	R46



Dimensional Data (in., mm), 2"–16", Class 125, 300, 600, 900 & 1500

Descript.	Class	Size (in.)																	
		2		3		4		6		8		10		12		14		16	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Wt. lbs./kg	150	19	8.6	48	21.8	75	34.0	110	49.9	220	99.8	530	240.4	650	294.8	1150	521.6	2010	911.7
	300	26	11.8	65	29.5	101	45.8	185	83.9	370	167.8	530	240.4	900	408.2	1450	657.7	2010	911.7
	600	48	21.8	97	44.0	155	70.3	300	136.1	560	254.0	1020	462.7	1355	614.6	1975	895.8	2500	1134.0
	900	80	36.3	115	52.2	215	97.5	435	197.3	775	351.5	1250	567.0	1620	734.8	—	—	—	—
	1500	118	53.5	128	58.1	365	165.6	765	347.0	1220	553.4	1560	707.6	2050	929.9	—	—	—	—
A	150	8	203.2	9 1/2	241.3	11 17/32	292.9	14	355.6	19 1/2	495.3	24 1/2	622.3	27 1/2	698.5	31	787.4	34	863.6
	300	10 1/2	266.7	12 1/2	317.5	14	355.6	17 1/2	444.5	21	533.4	24 1/2	622.3	28	711.2	33	838.2	34	863.6
	600 RF	11 1/2	292.1	14	355.6	17	431.8	22	558.8	26	660.4	31	787.4	33	838.2	35	889.0	39	990.6
	600 RTJ	11 5/8	295.3	14 1/8	358.8	17 1/8	435.0	22 1/8	562.0	26 1/8	663.6	31 1/8	790.6	33 1/8	841.4	35 1/8	892.2	39 1/8	993.8
	900 RF	14 1/2	368.3	15	381.0	18	457.2	24	609.6	29	736.6	33	838.2	38	965.2	—	—	—	—
	900 RTJ	14 5/8	371.5	15 1/8	384.2	18 1/8	460.4	24 1/8	612.8	29 1/8	739.8	33 1/8	841.4	38 1/8	968.4	—	—	—	—
	1500 RF	14 1/2	368.3	18 1/2	469.9	21 1/2	546.1	27 3/4	704.9	32 3/4	831.9	39	990.6	44 1/2	1130.3	—	—	—	—
	1500 RTJ	14 5/8	371.5	18 5/8	473.1	21 5/8	549.3	28	711.2	33 1/8	841.4	39 3/8	1000.1	45 1/8	1146.2	—	—	—	—
B	150	4 3/4	374.7	5 1/2	139.7	6 1/4	158.8	8	203.2	10 1/2	266.7	13	330.2	13 5/8	346.1	17	431.8	21 3/4	552.5
	300	4 3/4	374.7	5 1/2	139.7	6 1/2	165.1	8 7/8	225.4	11 3/4	298.5	13	330.2	14 1/2	368.3	18 1/4	463.6	21 3/4	552.5
	600	5 1/4	133.4	6 1/4	158.8	7 1/2	190.5	10 1/4	260.4	13	330.2	14 5/8	371.5	16 3/8	415.9	19 3/4	501.7	23 1/2	596.9
	900	5 1/4	133.4	6 3/4	171.5	8 1/4	209.6	10 3/4	273.1	13 3/4	349.3	15 1/2	393.7	17 1/4	438.2	—	—	—	—
	1500	5 7/8	149.2	7 3/8	187.3	8 7/8	225.4	11 5/8	295.3	15 1/2	393.7	18 1/4	463.6	20 1/2	520.7	—	—	—	—
Ring Size	600	R23	R23	R31	R31	R37	R37	R45	R45	R49	R49	R53	R53	R57	R57	R61	R61	R65	R65
	900	R24	R24	R31	R31	R37	R37	R45	R45	R49	R49	R53	R53	R57	R57	—	—	—	—
	1500	R24	R24	R35	R35	R39	R39	R46	R46	R50	R50	R54	R54	R58	R58	—	—	—	—

KF Series 35 Check Valve Assembly Part Number Code



End Connection

1 • RF
2 • RTJ
3 • BW/Std. (2" & 3")
4 • BW/Sch. 40 (4"-16" Only)
5 • BW/XS (4"-8")
6 • BW/Sch. 80 (10"-16" Only)
7 • BW/XXS (2"-12" Only)
9 • Flat Faced

A • RF x BW/Std. (2" & 3")
B • RF x BW/Sch. 40 (4"-16" Only)
C • RF x BW/XS (4"-8")
D • RF x BW/Sch. 80 (10"-16" Only)
E • RF x BW/XXS (2"-12" Only)

Body, Bonnet & Plug Material*

13 • CS (Blk. Finish CS Bolting)
14 • 4C (Blk. Finish CS Bolting)
15 • 316SS (Xylan Ctd. CS Bolting)
17 • Alum Brnz. (Xylan Ctd. CS Bolting & Monel Plug)
26 • 317SS (Xylan Ctd. CS Bolting)
28 • LCC (Blk. Finish LT Bolting & 316SS Plug)

51 • CS (Xylan Ctd. CS Bolting)
63 • CS (Zinc Plated CS Bolting)
68 • LCC (Zinc Plated LTCS Bolting)
73 • CS (Cadmium Plated CS Bolting)
78 • LCC (Cadmium Plated LTCS Bolting)

Internal Coating & NACE

4 • NACE II (Class II Bolting)
7 • NACE III & Enduro-Bond™ Ctg.

8 • NACE II & Enduro-Bond™ Ctg.
9 • NACE III / Class III Bolting (Std.)

Disc & Trim

F • CS Disc, 316SS Shaft & Bushings
K • 316SS (Std.)

M • 317SS
S • Alum. Brnz. Disc, Monel Shaft & Bushings

Seat/Disc Seal Config.

B • Standard

1 • Integral Metal / Resilient
2 • Integral Metal / Metal
3 • Replaceable Resilient / Metal
4 • Replaceable Metal / Metal
5 • Integral Stellite® Overlay / Resilient

6 • Integral Stellite® Overlay / Stellite® Overlay
7 • Integral Metal / 316SS Overlay (4" & Larger)
8 • Integral 316SS Overlay / 316SS Overlay (4" & Larger)
0 • Replaceable Stellite® Overlay / Stellite® Overlay

Repl. Seat Ring Mat.

2 • 316SS

9 • Not Appl. (Integral Seat Face)

Seal Material (Bonnet, Seat/Disc Face, Seat Sub-Seal)

1 • Buna N
2 • Viton®
3 • Teflon®*
4 • EPDM
5 • Low Temp. Buna N
6 • PC Buna N
7 • Aflas®
9 • Not Applicable (For HT Bonnet Gasket w/Integral M x M Seat, Opt. 2, 6, 7, & 8)

A • James Walker Viton®
B • Viton® GF
G • HNBR
Z • Graphite Rope (Requires M x M w/HT Bonnet Gasket & Replaceable Seat, Opt. 4 & 0)

Options

1 • None
2 • Body Drain
3 • Firesafe (HT Bonnet Gasket)
4 • Firesafe (HT Bonnet Gasket) w/Body Drain

5 • Upstream Bleed
8 • Body Drain & Upstream Bleed

*For replaceable seats only: Use Viton® seals.
Consult factory for the availability of materials and sizes not listed.
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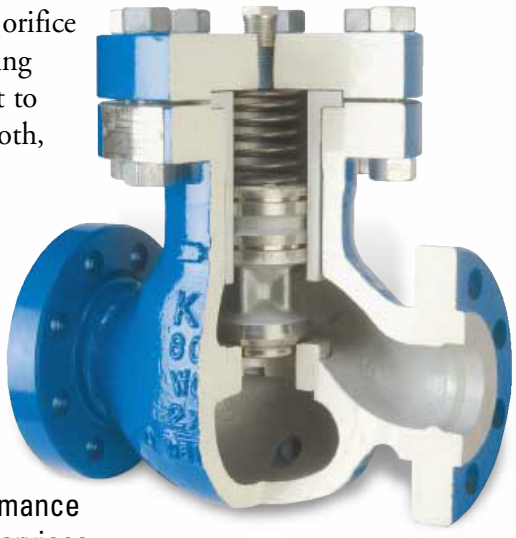
Assembly Base Numbers, 2"-24", Class 150, 300, 600, 900 & 1500 • 2 1/16"-7 1/16", API 2000, 3000 & 5000

Class	MOP	Size (in.)											
		2	3	4	6	8	10	12	14	16	18	20	24
150	285	7776-	7778-	7779-	7781-	7782-	7783-	7784-	7785-	7786-	7787-	7788-	7790-
300	740	7802-	7804-	7805-	7807-	7808-	7809-	7810-	7811-	7812-	7813-	—	7816-
600	1480	7854-	7856-	7857-	7859-	7860-	7861-	7862-	7863-	7864-	7865-	7866-	7868-
900	2220	7880-	7882-	7883-	7885-	7886-	7887-	7888-	—	—	—	7892-	—
1500	3705	7906-	7908-	7909-	7911-	7912-	7913-	7914-	—	—	—	—	—

API	Size (in.)			
	2 1/16	3 1/8	4 1/16	7 1/16
2000	7917-	7918-	7919-	7920-
3000	7926-	7927-	7928-	7929-
5000	7935-	7936-	7937-	7938-

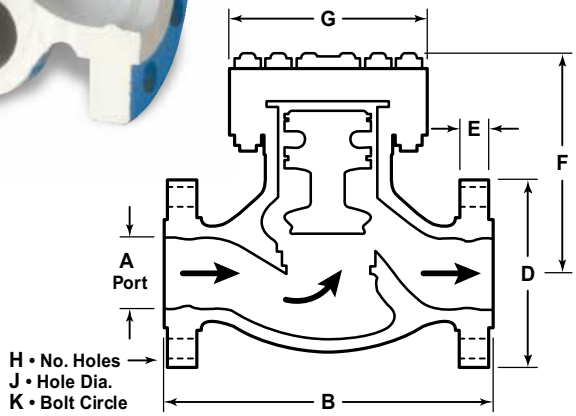
KF Series 50 Piston Check Valves

The precisely metered check valve and orifice in the piston head, combined with spring assisted closure, controls piston descent to avoid seat slamming and promote smooth, quiet operation and positive backflow prevention with fluids or gasses.



General Design Features

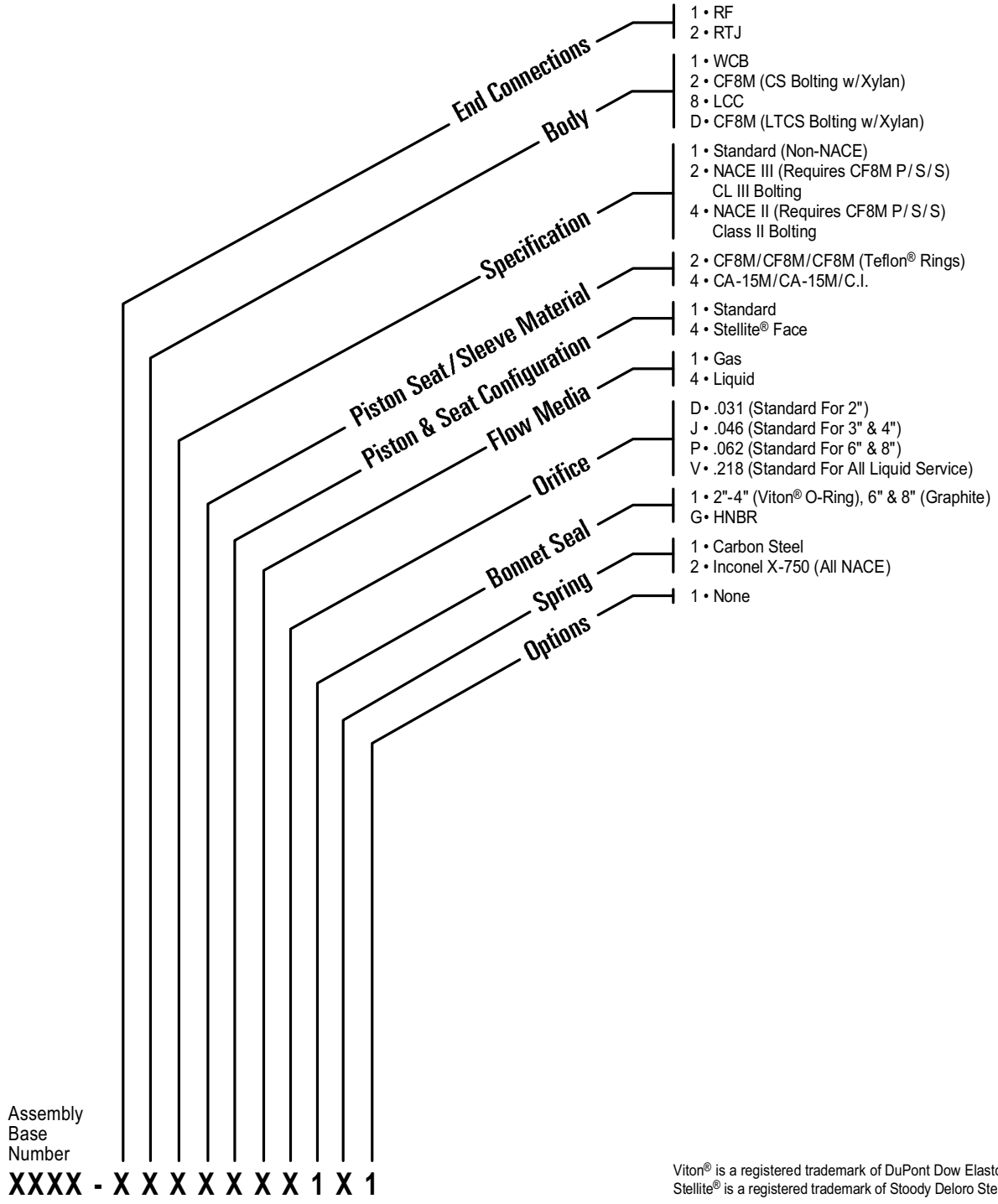
- Threaded Piston Seat That Is Easily Removed & Replaced While Valve Is In-line
- Smooth, Highly Polished Replaceable Sleeve For Easy Maintenance & Long-lasting Performance
- Ideal For Compressor & Pulsating Services
- Available With Stellite® Sealing Surface & End Connections In Raised Face Or Ring Type Joint In Sizes 2" Through 8"
- Meets Or Exceeds ANSI B16.34 Requirements With Flanges Conforming To B16.5.
- NACE MR0175/ISO 15156 (Optional)



Dimensional Data (in., mm), 2"- 8", Class 600 & 900

Description	Class	Size (in.)									
		2		3		4		6		8	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
Weight lbs./kg	600	85	38.6	175	79.4	290	131.5	550	249.5	810	367.4
	900	135	61.2	235	106.6	335	152.0	790	358.3	1285	582.9
A	600	2.067	52.5	3.068	77.9	4.026	102.3	6.065	154.1	7.981	202.7
	900	1.939	49.3	2.900	73.7	3.826	97.2	5.761	146.3	7.625	193.7
B	600RF	11	279.4	14 3/4	374.7	18 1/2	469.9	20 3/4	527.1	24	609.6
	900 RF	13 5/8	346.1	14 7/8	377.8	19 3/8	492.1	21 7/8	555.6	24 7/8	631.8
	600 RTJ	11 1/8	282.6	14 7/8	377.8	18 5/8	473.1	20 7/8	530.2	24 1/8	612.8
	900 RTJ	13 3/4	349.3	15	381.0	19 1/2	495.3	22	558.8	25	635.0
D	600	6 1/2	165.1	8 1/4	209.6	10 3/4	273.1	14	355.6	16 1/2	419.1
	900	8 1/2	215.9	9 1/2	241.3	11 1/2	292.1	15	381.0	18 1/2	469.9
E	600	1 1/4	31.8	1 1/2	38.1	1 3/4	44.5	2 1/8	54.0	2 7/16	61.9
	900	1 3/4	44.5	1 3/4	44.5	2	50.8	2 7/16	61.9	2 3/4	69.9
F	600	8 1/2	215.9	10 3/4	273.1	12 3/4	323.9	18	457.2	20 3/4	527.1
	900	9 1/4	235.0	11 1/8	282.6	13	330.2	18 1/2	469.9	21 1/8	536.6
G	600	7 1/2	190.5	9 7/8	250.8	11	279.4	14 1/2	368.3	16 7/8	428.6
	900	8 1/2	215.9	11	279.4	11 1/2	292.1	15 3/8	390.5	19 1/4	489.0
H	600	8	203.2	8	203.2	8	203.2	12	304.8	12	304.8
	900	8	203.2	8	203.2	8	203.2	12	304.8	12	304.8
J	600	5/8	15.9	3/4	19.1	7/8	22.2	1	25.4	1 1/8	28.6
	900	7/8	22.2	7/8	22.2	1 1/8	28.6	1 1/8	28.6	1 3/8	34.9
K	600	5	127.0	6 5/8	168.3	8 1/2	215.9	11 1/2	292.1	13 3/4	349.3
	900	6 1/2	165.1	7 1/2	190.5	9 1/4	235.0	12 1/2	317.5	15 1/2	393.7
Ring Groove RTJ Only	600	R23	R23	R31	R31	R37	R37	R45	R45	R49	R49
	900	R24	R24	R31	R31	R37	R37	R45	R45	R49	R49

KF Series 50 Piston Check Valves Assembly Part Number Code



Viton® is a registered trademark of DuPont Dow Elastomers.
Stellite® is a registered trademark of Stoody Deloro Stellite, Inc.

Assembly Base Numbers

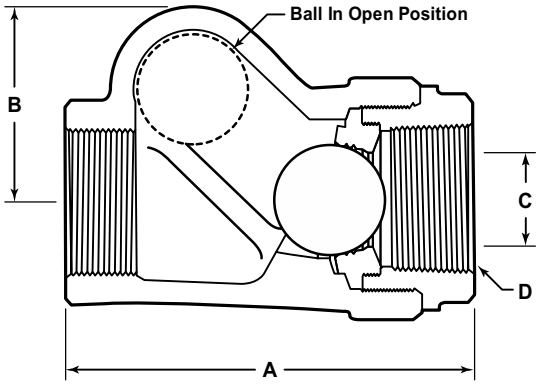
Class	MOP	Size (in.)				
		2	3	4	6	8
300	740-	1023-	1024-	1025-	1026-	1027-
600	1480-	1029-	1030-	1031-	1032-	1033-
900	2220-	1034-	1035-	1036-	1037-	1038-

KF Series 60 Ball Check Valves

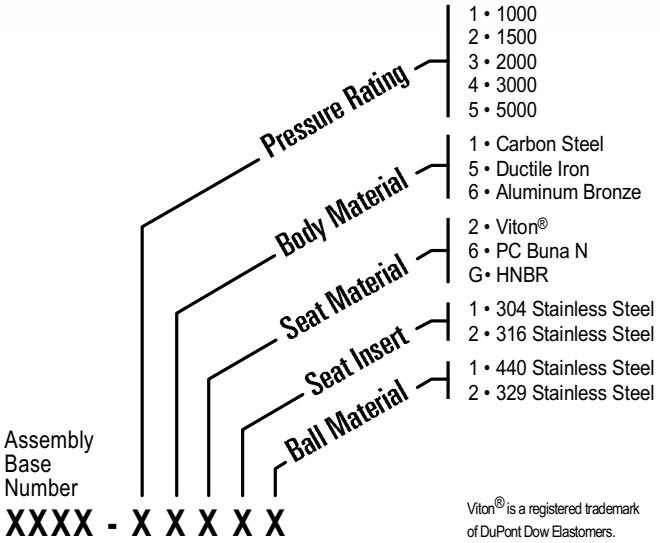
The Series 60 Check Valve is for horizontal or vertical "upflow" installation. Gravity return eliminates need for ball return spring.

General Design Features

- Replaceable Resilient Seat With A Metal-to-Metal Back-up Seal
- Pulsating & Low Flow Rate Service Causes Minimal Part Wear & Flow Restriction Is Nominal
- NACE MR0175/ISO 15156



Valve Illustrated In Closed Position



Viton® is a registered trademark of DuPont Dow Elastomers.

Dimensional Data (in., mm), 1"- 2"

Description	Size (in.)			
	1		2	
	in.	mm	in.	mm
Weight lbs./kg	3 1/2	1.6	14	6.4
A	4 3/8	111.1	6 1/2	165.1
B	1 15/16	49.2	3 1/8	79.4
C	15/16	23.8	1 1/2	38.1
D	1 -11 1/2 NPT	1 -11 1/2 NPT	2-11 1/2 NPT	2-11 1/2 NPT

Assembly Base Numbers

Size (in.)	
1	2
7966-	7968-

Flow Coefficiet (C_V)

Size (in.)	
1	2
30	105

Material Pressure Ratings

Pressure Rating	Material
1000 MOP	Ductile Iron
1500 MOP	Ductile Iron, Aluminum Bronze
2000 MOP	Ductile Iron, Cast Steel, Aluminum Bronze
3000 MOP	Cast Steel, Aluminum Bronze
5000 MOP	Cast Steel

Engineering Data
When to Specify KF Wafer Check Valves

The wafer check is installed between two (2) flanges inside the bolt circle of the studs. Its unique design with a short face-to-face can tackle the toughest conditions. Compared to a conventional swing check valve, the wafer check valve is lighter, and easier to install. The lighter weight makes the valve less expensive, especially in the higher alloy materials. Wafer check valves reduce maintenance, installation, shipping cost and storage space. Unlike the conventional swing check valve, the wafer check valve requires only one (1) set of studs and half the nuts. Expensive joints or special supports are not required.

KF wafer swing check valves perform in either horizontal or vertical upflow, they may be used in virtually any service except for pulsating, reciprocating service. The round unobstructed port design on the KF wafer swing valve makes the valve suitable for application in industries where dirty media are present. The round port decreases velocities, reduces pressure drop, damaging turbulence and debris collecting in the port area.

KF wafer swing check valves are designed to comply with API standard 594 and API 6D (long pattern). Valve materials of construction conform to ASTM standards and, when requested, to NACE standard MR0175. KF wafer swing check valves are offered in sizes 2" and larger.

Trim Technology

Hardface Trim

The seating faces of the disc and the seat (either integral or removable) are weld overlayed with .06 inches minimum thickness of hardface to produce corrosion resistant, hardfaced sealing surfaces. The disc can be furnished with either metal-to-metal or elastomer seals. Base metal can be either Carbon or Stainless Steel. Removable seats with overlay are not available in Wafer Checks.

Stainless Overlay Trim

The seating surfaces of the disc and seat (either integral or removable) are weld overlayed with .06 inches minimum thickness of 316L Stainless Steel to produce corrosion resistant sealing surfaces. The disc can be furnished with either metal-to-metal or elastomer seals.

Metal-To-Metal Trim

Generally used for higher temperatures (those exceeding the capabilities of elastomers and plastics). The seating faces of the disc and seat (either integral or removable) are metal-to-metal. This configuration can be furnished in Carbon Steel, Stainless Steel or hardface trims. The leakage rate will not exceed that specified by API-598.

Removable/Replaceable Seat Ring

A removable seat ring can be furnished in any trim for 2" and larger bolted cover check valves. Unique patented seat provides easy replacement. Wafer Check Valves are also available with replaceable seat rings.

API Firesafe Bolted Bonnets

Many sizes and pressure classes of KF bolted bonnet full body style through conduit Check Valves are available as firesafe per API 6FD.

Contact factory for availability of other materials.

Applications

Series 10

Heating, Ventilating & Air Conditioning
Irrigation
Blower
Pneumatic Conveying
Suction & Discharge Pumping Systems
Water Injection & Tank Discharge
Chemical Processing
Ship (On/Off Land, Fire Main, Fuel Oil)
Vapor-Recovery
Raw Water
Condenser & Cooling Water
Vacuum
Refrigeration
Mobile Tank
Refinery

Series 12

Intended for applications where valve is normally closed and the flow is relatively low, steady and not pulsating. Velocity not to exceed:
Liquid/15 ft. per second
Gases/100 ft. per second

Series 18 & 20*

Sewage Handling
Dry Material Handling
Pulp & Paper (Body: 317 Stainless Steel, Internal Spring, Inconel, Ext. Stainless Steel)
Sump Pump
Mining
Blower Discharge
Manifold Systems
Slurry Pumps
Oil & Gas Transmission
Recirculation Systems
Booster Stations
Chemical & Food Processing
Iron & Steel Mills
Irrigation & Waste Water
Municipal, Ind. Water & Desalinization
Ethanol

Series 22**

Raw Sewage & Back Wash
Sludge or Slurry
Ethanol

*Series 18 & 20 also suitable for Series 10 Applications.
**Series 22 also suitable for Series 18 & 20 Applications.

Engineering Data
Cross Reference for Series 10 Check Valve

Apco: 902AEIF (digit #3 designates size)
Gulf: MB 12-581SF
Marlin: 2A125HSNSF (digit #1 designates size)
Mission: 12HMP
Muesco: 2.0-71-A-H-B-3H (digits #1 & 2 designates size)
Keystone: FIG 810
Pro-Quip: 1AH11-1AO
Technocheck: 5050
Valmatic: 8802-GAN-SSF (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 125, Cast Iron Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 912CRIR (digit #3 designates size)
Gulf: MB 15-221SR
Marlin: 2A150CCNSR (digit #1 designates size)
Mission: 15SMF
Muesco: 2.0-72-D-H-D-3H (digits #1 & 2 designates size)
Keystone: FIG 810
Pro-Quip: 2BB11-1B
Technocheck: 5051
Valmatic: 8602-CCN-SSF (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 150, Carbon Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 932CRIR (digit #3 designates size)
Gulf: MB 30-221SF
Marlin: 2A300-CCNSR (digit #1 designates size)
Mission: 30SMF
Muesco: 2.0-74-D-H-D-3H (digits #1 & 2 designates size)
Keystone: FIG 809
Pro-Quip: 4BB11-1B
Technocheck: 5053
Valmatic: 8502-CCN-SSR (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 300, Carbon Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 962CRIR (digit #3 designates size)
Gulf: MB 60-221SR
Marlin: 2A600-CCNSR (digit #1 designates size)
Mission: 60SMF
Pro-Quip: 6BB11-1B
Technocheck: 5056
Valmatic: 8302-CCN-SSR (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 600, Carbon Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 912GRIR (digit #3 designates size)
Gulf: MB 15-641SR
Marlin: 2A150-SSNSR (digit #1 designates size)
Mission: 15CMF
Muesco: 2.0-72-H-H-H-3H (digits #1 & 2 designates size)
Keystone: FIG 810
Pro-Quip: 2DD11-1B
Technocheck: 5051-316
Valmatic: 8602-SSN-SSR (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 150, 316 Stainless Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 932GRIR (digit #3 designates size)
Gulf: MB 30-641SR
Marlin: 2A300-SSNSR (digit #1 designates size)
Mission: 30CMP
Muesco: 2.0-74-H-H-H-3H (digits #1 & 2 designates size)
Pro-Quip: 4DD11-1B
Technocheck: 5053-316
Valmatic: 8502-SSN-SSR (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 300, 316 Stainless Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Apco: 962GRIR (digit #3 designates size)
Gulf: MB 60-641SR
Marlin: 2A600-SSNSR (digit #1 designates size)
Mission: 60CMP
Pro-Quip: 6DD11-1B
Technocheck: 5056-316
Valmatic: 8302-SSN-SSR (digits #3 & 4 designates size)

Equivalent: KF Series 10 ANSI 600, 316 Stainless Steel Body, 316 Stainless Steel Trim, Buna N Seal.

Engineering Data
Wafer Check Temperature & Working Pressure By Classes
A216 Grade WCB or A105 Carbon Steel, Per ANSI B16.34

Temperature °F	Working Pressure By Classes (PSIG)					
	150	300	600	900	1500	2500
-20 to 100	285	740	1480	2220	3705	6170
200	260	675	1350	2025	3375	5625
300	230	655	1315	1970	3280	5470
400	200	635	1270	1900	3170	5280
500	170	600	1200	1795	2995	4990
600	140	550	1095	1640	2735	4560
650	125	535	1075	1610	2685	4475
700	110	535	1065	1600	2665	4440
750	95	505	1010	1510	2520	4200
800	80	410	825	1235	2060	3430
850	65	270	535	805	1340	2230
900	50	170	345	515	860	1430
950	35	105	205	310	515	860
1000	20	50	105	155	260	430

A352 Grade LCB Low Temp. Carbon Steel, Per ANSI B16.34

Temperature °F	Working Pressure By Classes (PSIG)					
	150	300	600	900	1500	2500
-20 to 100	265	695	1390	2085	3470	5785
200	250	655	1315	1970	3280	5470
300	230	640	1275	1915	3190	5315
400	200	620	1235	1850	3085	5145
500	170	585	1165	1745	2910	4850
600	140	535	1065	1600	2665	4440
650	125	525	1045	1570	2615	4355

A352 Grade LCC Low Temp. Carbon Steel, Per ANSI B16.34 (650°F Max.)
A217 Grade Martensitic Stainless Steel CA-15, Per ANSI B16.34 Annex F

Temperature °F	Working Pressure By Classes (PSIG)					
	150	300	600	900	1500	2500
-20 to 100	290	750	1500	2250	3750	6250
200	260	750	1500	2250	3750	6250
300	230	730	1455	2185	3640	6070
400	200	705	1410	2115	3530	5880
500	170	665	1330	1995	3325	5540
600	140	605	1210	1815	3025	5040
650	125	590	1175	1765	2940	4905
700	110	570	1135	1705	2840	4730

Engineering Data

Wafer Check Temperature & Working Pressure By Classes

A126 Class B Cast Iron, Per ANSI B16.1

Temperature °F	Working Pressure By Classes (PSIG)					
	125			250		
	NPS 1-12	NPS 14-24	NPS 30-48	NPS 1-12	NPS 14-24	NPS 30-48
-20 to 150	200	150	150	500	300	300
200	190	135	115	460	280	250
225	180	130	100	440	270	225
250	175	125	85	415	260	200
275	170	120	65	395	250	175
300	165	110	50	375	240	150
325	155	105	—	355	230	125
353	150	100	—	335	220	100
375	145	—	—	315	210	—
406	140	—	—	290	200	—
425	130	—	—	270	—	—
450	125	—	—	250	—	—

A395 Ductile Iron, Per ANSI B16.42

Temperature °F	Working Pressure By Classes (PSIG)	
	150	300
-20 to 100	250	640
200	235	600
300	215	565
400	200	525
500	170	495
600	140	465
650	125	450

B148 Alloy 952 Aluminum Bronze, Per ANSI B16.31

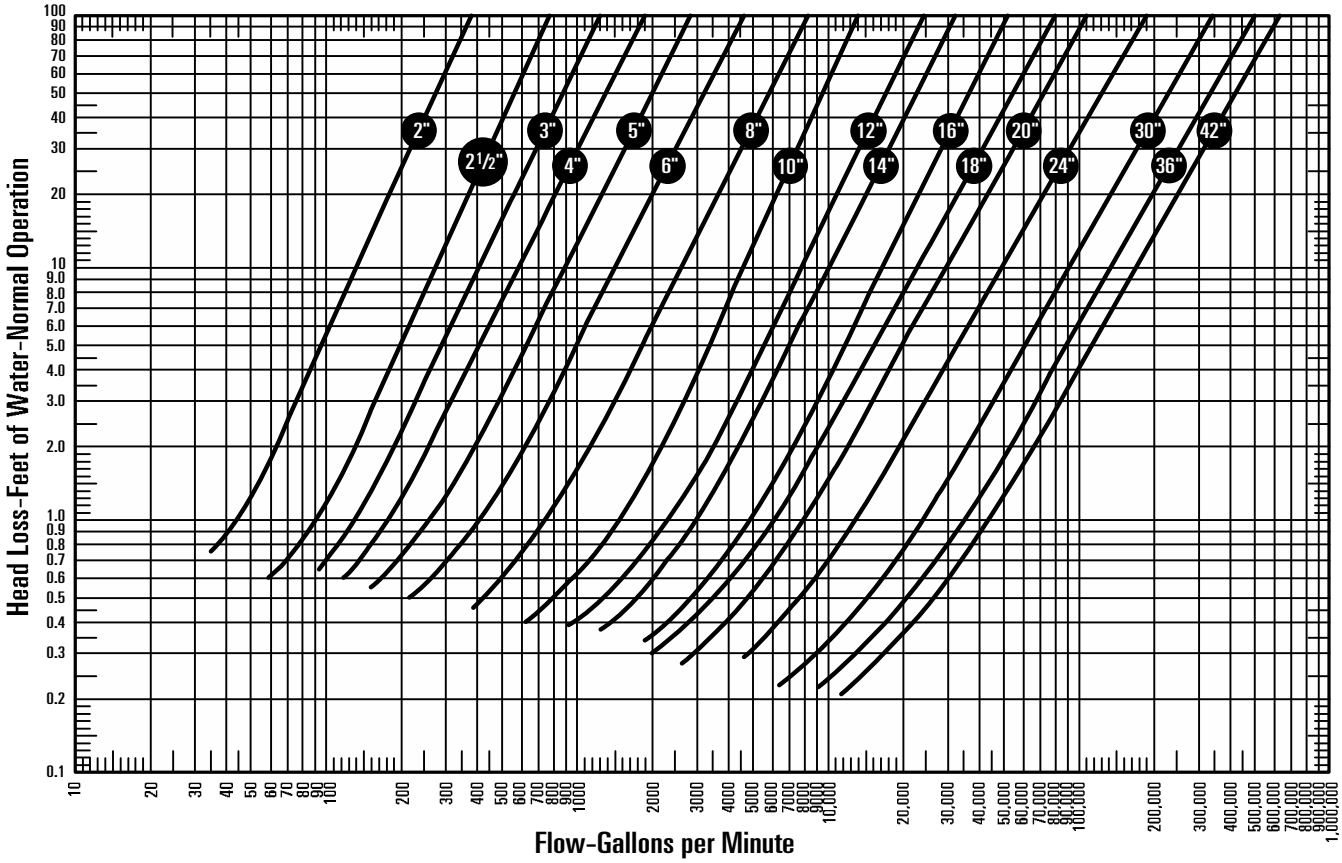
Temperature °F	Working PressureBy Classes (PSIG)					
	150	300	600	900	1500	2500
-20 to 100	195	515	1030	1545	2575	4290
150	165	430	855	1285	2140	3570
200	155	400	800	1205	2005	3340
250	145	385	770	1150	1920	3200
300	140	370	740	1110	1850	3085
350	140	365	735	1100	1835	3060
400	140	365	725	1090	1820	3030
450	140	360	725	1085	1805	3010
500	140	360	720	1080	1800	3000

Engineering Data
Wafer Check Temperature & Working Pressure By Classes
A351 Grade CF8M 316 Stainless Steel, Per ANSI B16.34

Temperature °F	Working Pressure By Classes (PSIG)					
	150	300	600	900	1500	2500
-20 to 100	275	720	1440	2160	3600	6000
200	240	620	1240	1860	3095	5160
300	215	560	1120	1680	2795	4660
400	195	515	1030	1540	2570	4280
500	170	480	955	1435	2390	3980
600	140	450	905	1355	2255	3760
650	125	445	890	1330	2220	3700
700	110	430	865	1295	2160	3600
750	95	425	845	1270	2110	3520
800	80	415	830	1245	2075	3460
850	65	405	810	1215	2030	3320
900	50	395	790	1180	1970	3280
950	35	385	775	1160	1930	3220
1000	20	365	725	1090	1820	3030
1050	—	360	720	1080	1800	3000
1100	—	325	645	965	1610	2685
1150	—	275	550	825	1370	2285
1200	—	205	410	620	1030	1715
1250	—	180	365	545	910	1515
1300	—	140	275	410	685	1145
1350	—	105	205	310	515	860
1400	—	75	150	225	380	630
1450	—	60	115	175	290	485
1500	—	40	85	125	205	345

Engineering Data

Performance Loss Curves (Wafer Check Valves Only)



Notes: 1. Curves are for water at 60°F.
2. Feet of water x .4335=PSI Drop.
3. Use curves for estimating purposes only, performance is based upon ideal inlet and outlet conditions with no springs or weights. Since spring and/or weight requirements for acceptable operation may vary from system to system, their effects must be added.

Sealing Member Materials*

Material	Temp. Range
Aflas®	+32 to 450°F
Buna N	-20 to 250°F
EPDM	-50 to 450°F
HNBR	-50 to 350°F
Low Temp Buna N	-50 to 250°F
Peroxide Cured Buna N (90 Duro)	-20 to 275°F
Teflon®	-50 to 425°F
Viton®	-15 to 400°F

* Depends on media

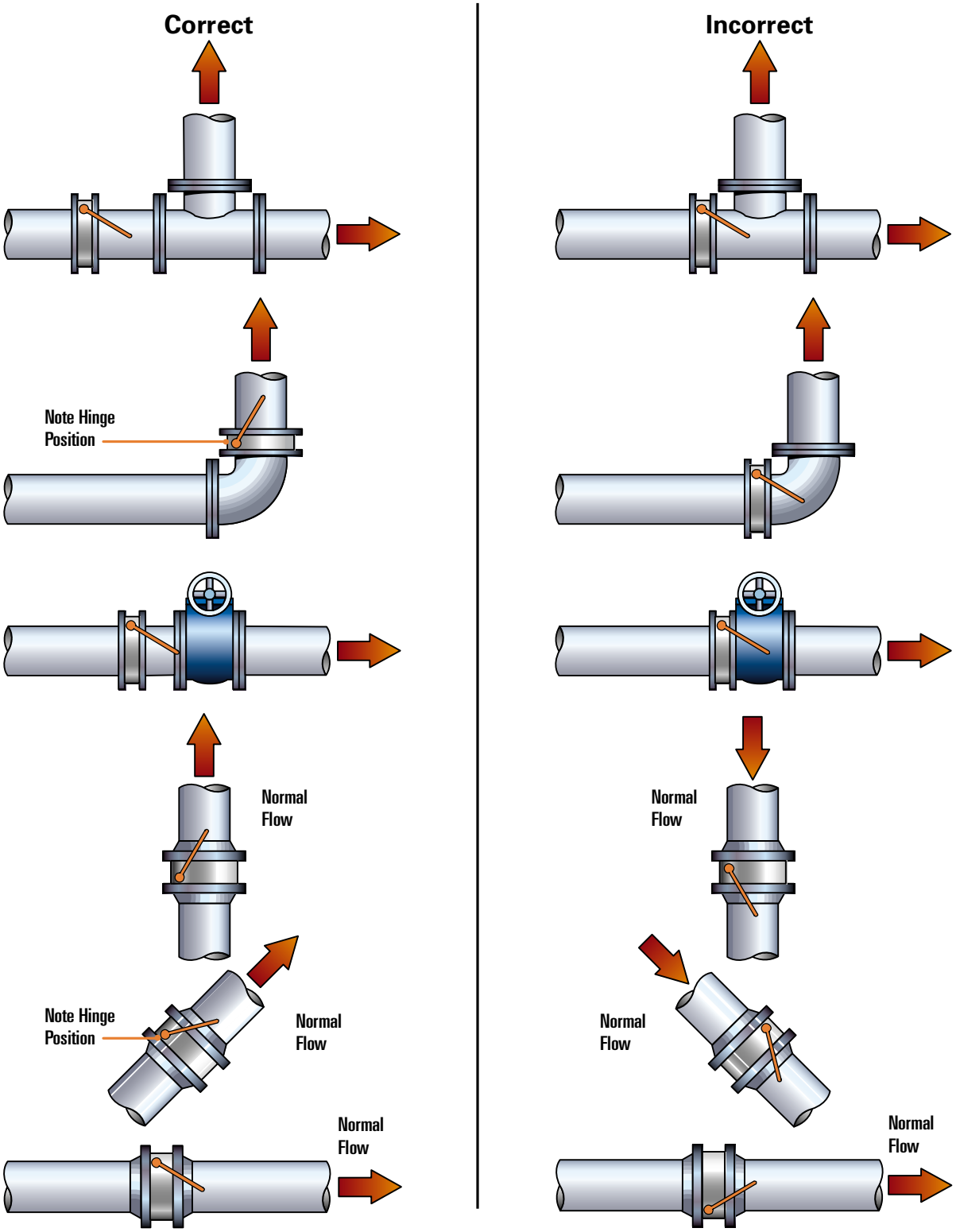
Flow Coefficients (C_v)

Series	Size (in.)												
	2	3	4	5	6	8	10	12	14	16	18	20	24
10, 19, 20, 22	95	156	366	430	710	1280	2350	3850	4260	7000	9550	13,000	25,000
12	75	124	300	405	675	1000	1950	3050	—	—	—	—	—
35	120	250	450	—	1320	2816	5200	8500	10,250	13,500	17,250	21,500	31,500

Engineering Data, Recommendations for Installed Position

Position the check valve to promote smooth flow. Allow clearance for disc movement.
Install the valve in horizontal or upward flow for proper valve closure.

Note: Swing Check Valves should not be used in reciprocating compressor or pulsating service.
For such applications the KF Series 50 Piston Check Valve is recommended.



Notes:

Notes:

Worldwide Sales Offices

KF Industries, a leading brand of CIRCOR Energy Products, Inc.
reaches into every corner of the globe serving the oil & gas and industrial marketplace.
Supplying an extensive range of product offerings
through a worldwide network of manufacturer representatives and distributors,
KF Industries is the right choice for all your flow control needs.

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