

MILLIKEN[®]

a **MUELLER** brand

COMPACT CHECK VALVES



MUELLER

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DOUBLE DISC CHECK VALVE

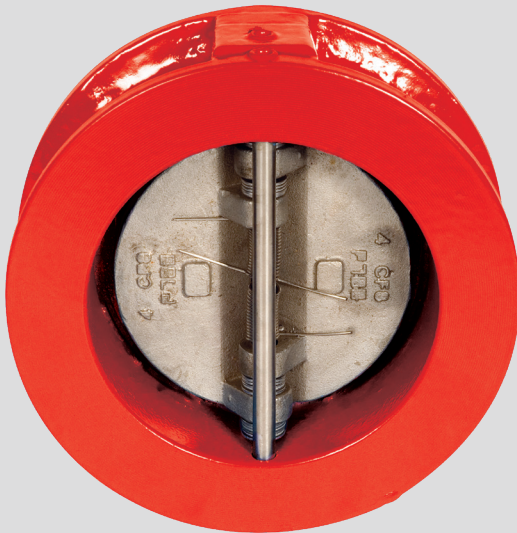
Milliken® Series 740G

SPRING LOADED CHECK VALVES

STANDARD FEATURES

- Spring Loaded for Non-Slam Closure
- Heavy Duty Ductile Iron Body
- Automatic Operation
- Designed for ANSI Class 125 Flange Bolting
- Economical Purchase Price
- Suitable for Horizontal or Vertical (up) Piping
- Available in Sizes 2" thru 24"
- Compact Design

SCOP OF THE LINE



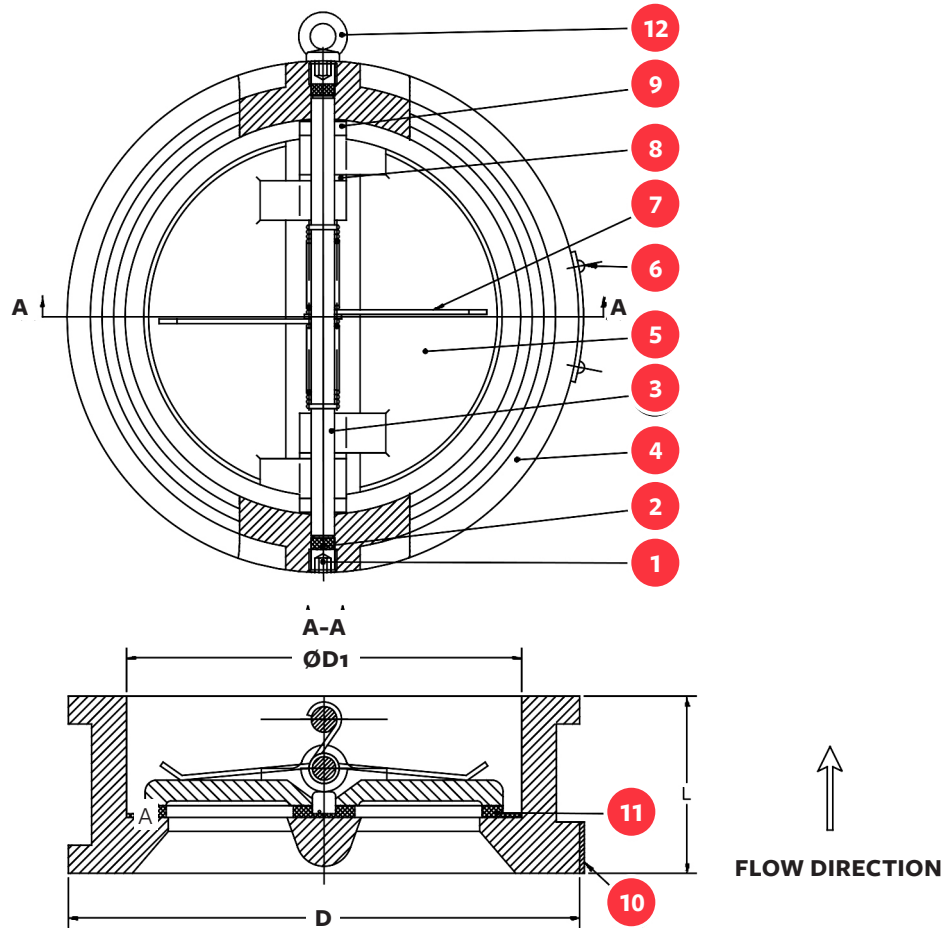
BODY	Ductile Iron-Wafer Pattern
DISC	304 Stainless Steel
SPRING	316 Stainless Steel
SEAT	EPDM (Elastomer)
RATING	250 psi
COATING	Fusion Bonded Epoxy (interior and exterior)
AVAILABILITY	2" through 24"

TECHNICAL SPECIFICATIONS

Check valve shall be of the double disc, wafer style with torsion spring induced closure. Valve shall be Wafer style for bolting between ANSI Class 125 flanges and shall be rated for 250 PSI service. Valves have a Ductile Iron body (ASTM A-536 65-45-12) to fit inside 125# ANSI bolt circles, a two piece Stainless Steel disc (ASTM type 304), type 304 Stainless Steel dual shafts, ASTM A313, type 316 Stainless Steel torsion spring and have an integrally molded elastomer seat vulcanized to the body. Valve for horizontal flow shall be installed with the shafts in vertical position. Double disc check valve shall be Milliken® Series 740G.

DOUBLE DISC CHECK VALVE

Milliken® Series 740G



2" - 24"

SIZE	L	ØD1	ØD	WEIGHT (LBS)
2"	2.13	2.56	4.10	7.49
2.5"	2.36	3.15	4.84	9.39
3"	2.64	3.70	5.31	12.52
4"	2.64	4.61	6.85	13.62
6"	3.74	6.69	8.70	24.78
8"	5	8.58	10.98	39.13
10"	5.51	10.43	13.35	62.83
12"	7.13	12.20	16.10	96.29
14"	7.24	14.76	17.64	130.07
16"	7.52	16.38	20.16	177.47
18"	8.00	18.43	21.54	244.71
20"	8.62	20.24	23.78	260.14
24"	8.74	24.33	28.11	374.78

ITEM	DESCRIPTION	QTY	MATERIAL
1	Plug	4	ASTM 1035
2	Seal	4	EPDM
3	Shaft	2	304 Stainless Steel
4	Body	1	Ductile Iron ASTM A-536 (65-45-12)
5	Disc	2	304 Stainless Steel
6	Screw	2	Aluminum
7	Spring	2	316 Stainless Steel
8	Washer 1	4	304 Stainless Steel
9	Washer 2	2	304 Stainless Steel
10	Name Plate	1	304 Stainless Steel
11	Seat	1	EPDM
12*	Lifting Ring	1	ASTM 1035

NOTE: * Only for 8" and larger

GLOBAL STYLE CHECK VALVE

Milliken® Series 821G

SCOPE OF THE LINE



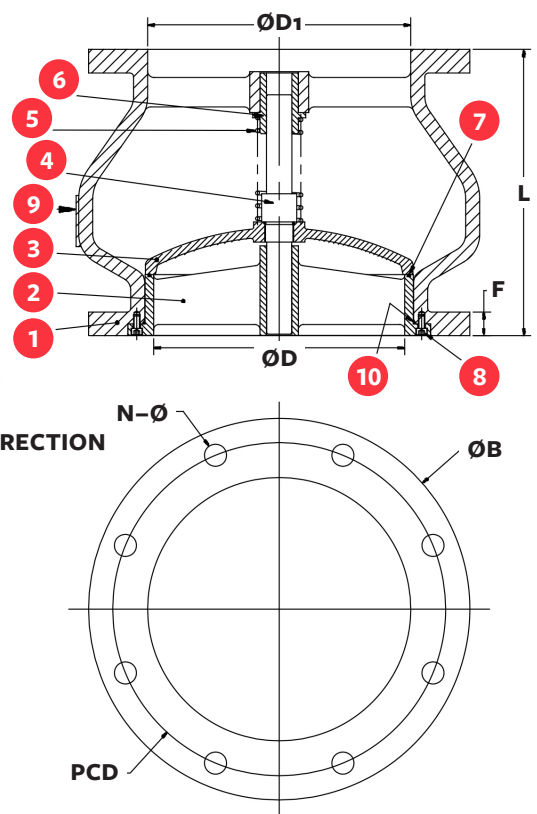
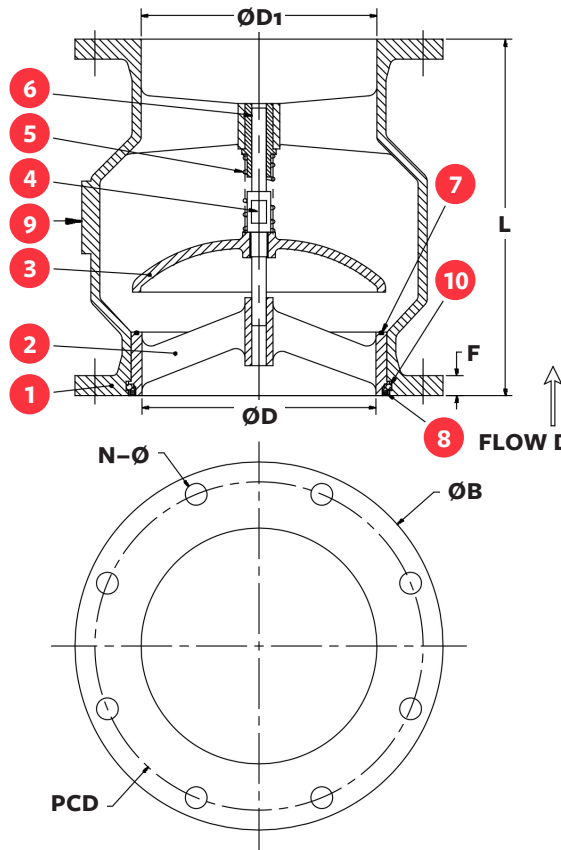
BODY	Ductile Iron ASTM A-536 Gr 65-45-12
DISC	304 Stainless Steel
SEAT	304 Stainless Steel / EPDM
SPRING	316 Stainless Steel (2" - 16") 304 Stainless Steel (18" - 24")
RATING	250 psi
FLANGES	ASME B16.1 CL.125
AVAILABILITY	2" through 24"

TECHNICAL SPECIFICATIONS

Check valve shall be of the silent operating type and the same size as the entering pipe. Globe style shall be rated for 250PSI service, have a Ductile Iron body (ASTM A-536 65-45-12), 125# ANSI Flat Face Flanges, ASTM A313 Type 304 Stainless Steel helical or conical spring, a Stainless Steel (ASTM type 304) seat and dual guided disc (top and bottom), 304 Stainless Steel guide bushing and type 304 Stainless Steel guide pins. Check valve to have a minimum open area in the body of 110% of the area of the entering or corresponding pipe. Valve is to operate silently in either vertical or horizontal positions, flow up or down. Globe style check valve shall be Milliken® Series 821G .

GLOBE STYLE CHECK VALVE

Milliken® Series 821G



2" - 12"

SIZE	L	ØD	ØD1	F	ØB	PCD	N-Ø	WEIGHT (LBS)
2"	5.24	2.20	2.36	0.63	6.00	4.75	4-0.75	16.50
2.5"	5.50	2.87	2.95	0.69	7.00	5.50	4-0.75	20.00
3"	6.00	3.35	3.54	0.75	7.52	6.00	4-0.75	26.50
4"	7.25	4.17	4.33	0.75	9.00	7.50	8-0.75	35.50
6"	9.75	6.06	6.30	0.75	11.00	9.50	8-0.875	64.00
8"	12.50	8.19	8.11	0.79	13.50	11.75	8-0.875	128.00
10"	15.50	10.16	10.23	0.87	16.00	14.25	12-1	174.50
12"	14.25	12.13	12.2	0.98	19.00	17.00	12-1	249.50

14" - 24"

SIZE	L	ØD	ØD1	F	ØB	PCD	N-Ø	WEIGHT (LBS)
14"	15.75	13.70	13.97	1.38	21.00	18.75	12-1.12	415
16"	17.64	15.47	16.23	1.46	23.50	21.25	16-1.12	500
18"	18.75	17.00	17.56	1.57	25.00	22.75	16-1.25	631
20"	20.63	19.29	19.84	1.65	27.50	25.00	20-1.25	741
24"	24.00	22.99	23.82	1.93	32.00	29.50	20-1.38	1,209

ITEM	DESCRIPTION	QTY	MATERIAL
1	Body	1	Ductile Iron ASTM A-536 (65-45-12)
2	Seat	1	304 Stainless Steel
3	Disc	1	304 Stainless Steel
4	Stem	1	304 Stainless Steel
5	2"-16" Spring	1	304 Stainless Steel
	18"-24" Spring	1	304 Stainless Steel
6	Guide Bushing	1	Bronze ASTM B584
7	Seal	1	EPDM
8	SHCS	2	304 Stainless Steel
9	Name Plate	1	304 Stainless Steel
10	Steel Ball (2"-12")	2	304 Stainless Steel
	Seat O-Ring (14"-24")	1	EPDM

VALVE SIZE (IN)	MAX. ALLOWABLE FLANGE ID	*STANDARD RING GASKET DIMENSIONS	
		GASKET I.D. (IN)	OD FOR 125 LB GLOBE TYPE (IN)
2	2.76	2.56	4.09
2.5	2.76	2.87	4.84
3	3.35	3.50	5.35
4	4.72	4.53	6.46
5	5.51	5.59	7.64
6	6.50	6.42	8.66
8	8.27	8.46	10.67
10	10.24	10.16	13.03
12	12.40	12.20	14.84
14	14.37	13.98	17.32
16	16.34	16.34	19.29
18	17.72	17.72	21.26
20	19.88	19.88	23.43
24	24.25	24.02	28.15

* Gasket supplied by others

NOTES:

1. Flat flanges and ring gaskets (rubber or compressed fiber) are required.
2. The mating companion flange I.D. must overlap the valve seat. This is required to provide proper seat retention.
3. The flange gasket must be properly centered and of the size indicated. This is required to achieve a seal between the seat O.D. and the body I.D. interface area.

COMPACT WAFER-SILENT CHECK VALVE

Milliken® Series 720G

SCOPE OF THE LINE



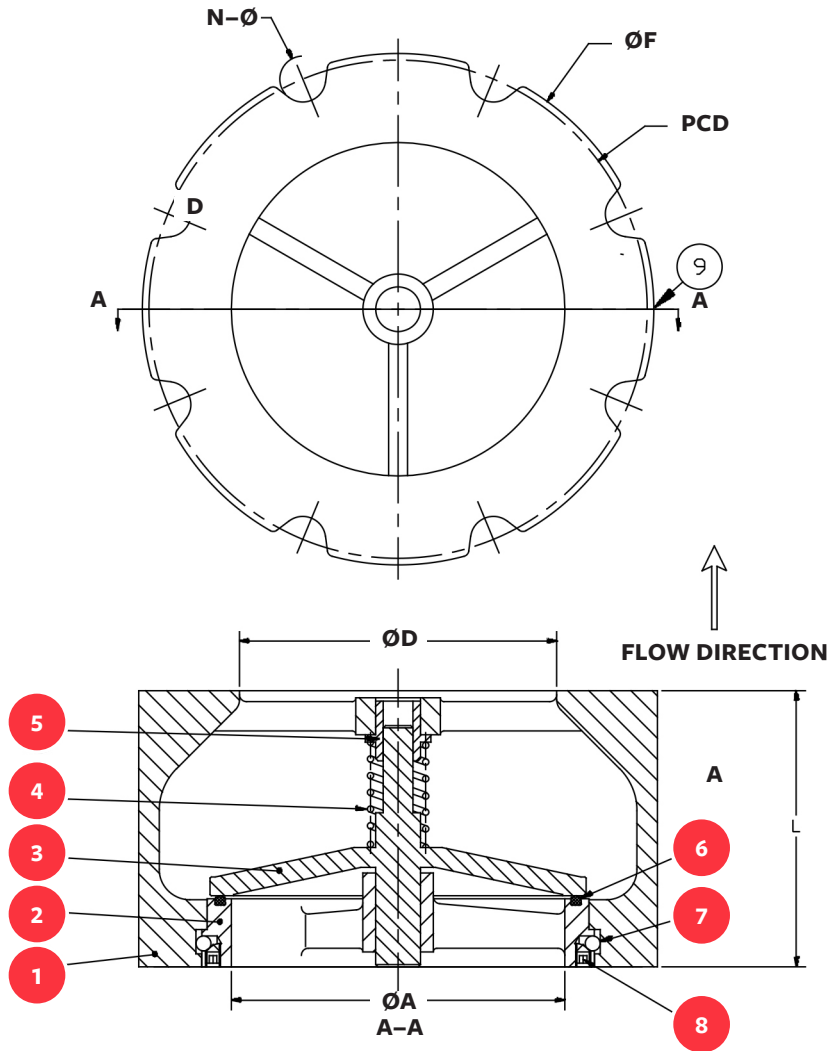
BODY	Ductile Iron ASTM A-536 Gr 65-45-12
DISC	304 Stainless Steel
SPRING	316 Stainless Steel
SEAT	304 Stainless Steel / EPDM
RATING	250 psi
COATING	Fusion Bonded Epoxy (interior and exterior)
AVAILABILITY	2" through 12"

TECHNICAL SPECIFICATIONS

Check valve shall be of the silent wafer type and the same size as the entering pipe. Valves shall be the compact wafer style and have a pressure and temperature rating equal to or greater than the pipeline in which they are installed. Compact wafer-silent style check valves thru 6 inches shall be rated for 250PSI service for installation between ANSI Class 125 flanges, have a Ductile Iron body (ASTM A-536 65-45-12), ASTM A313, Type 304 Stainless Steel helical or conical spring, a Stainless Steel guide bushing and type 304 Stainless Steel guide pins. Valves are to operate silently in either vertical or horizontal positions, flow up or down. Compact wafer-silent check valve shall be Milliken® Series 720G.

COMPACT WAFER-SILENT CHECK VALVE

Milliken® Series 720G



2" - 12"

SIZE	L	ØD	ØF	ØA	PCD	N-Ø	WEIGHT (LBS)
2"	2.63	2.68	4.33	2.52	4.75	4-0.75	4.75
2.5"	2.87	3.07	5.35	2.83	5.50	4-0.75	8.00
3"	3.13	3.54	5.98	3.38	6.00	4-0.75	12.80
4"	4.00	4.25	7.00	4.50	7.50	8-0.75	15.50
6"	5.50	6.38	9.72	6.38	9.50	8-0.875	37.50
8"	6.50	8.50	13.37	8.37	11.75	8-0.875	80.00
10"	8.27	10.67	15.89	10.06	14.25	12-1	132.50
12"	11.26	12.24	16.34	12.12	17.00	12-1	176.50

NOTES:

1. Flat flanges and ring gaskets (rubber or compressed fiber) are required.
2. The mating companion flange I.D. must overlap the valve seat. This is required to provide proper seat retention.
3. The flange gasket must be properly centered and of the size indicated. This is required to achieve a seal between the seat O.D. and the body I.D. interface area.

VALVE SIZE	MAX. ALLOWABLE ID OF FLG	*STD RING GASKET DIMENSIONS	
		GASKET I.D.	OD FOR 125 LB WAFER TYPE
2"	2.76	2.56	4.09
2.5"	2.76	2.87	4.84
3"	3.35	3.50	5.35
4"	4.72	4.53	6.46
5"	5.51	5.59	7.64
6"	6.5	6.42	8.66
8"	8.27	8.46	10.67
10"	10.24	10.16	13.03
12"	12.40	12.20	14.84

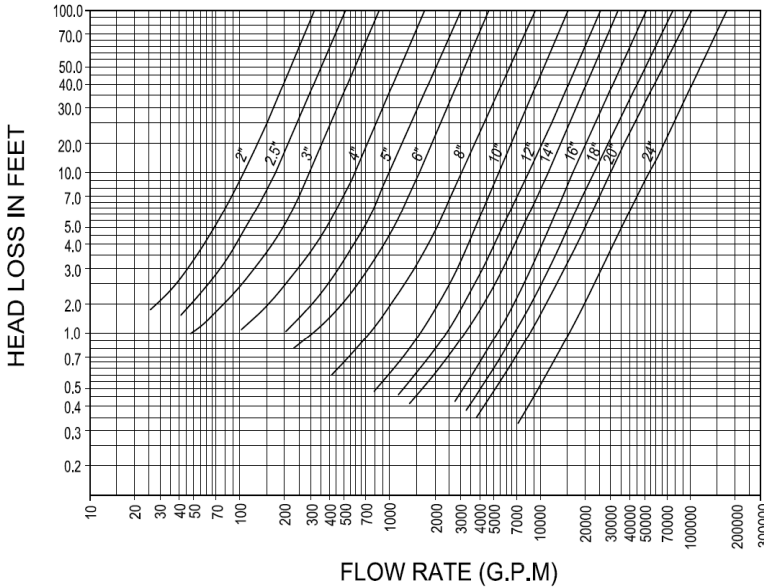
* Gasket supplied by others

ITEM	DESCRIPTION	QTY	MATERIAL
1	Body	1	Ductile Iron ASTM A-536 (65-45-12)
2	Seat	1	304 Stainless Steel
3	Disc	1	304 Stainless Steel
4	Spring	1	316 Stainless Steel
5	Guide Bushing	1	Bronze ASTM B584
6	Seal	1	EPDM
7	Steel Ball	1	304 Stainless Steel
8	Set Screw	2	316 Stainless Steel
9	Name Plate	1	304 Stainless Steel

PRESSURE DROP CHART

For Double Door Type Check (740G) & Globe Type Silent Check (821G) Valves

DOUBLE DISC CHECK VALVE – SERIES 740G

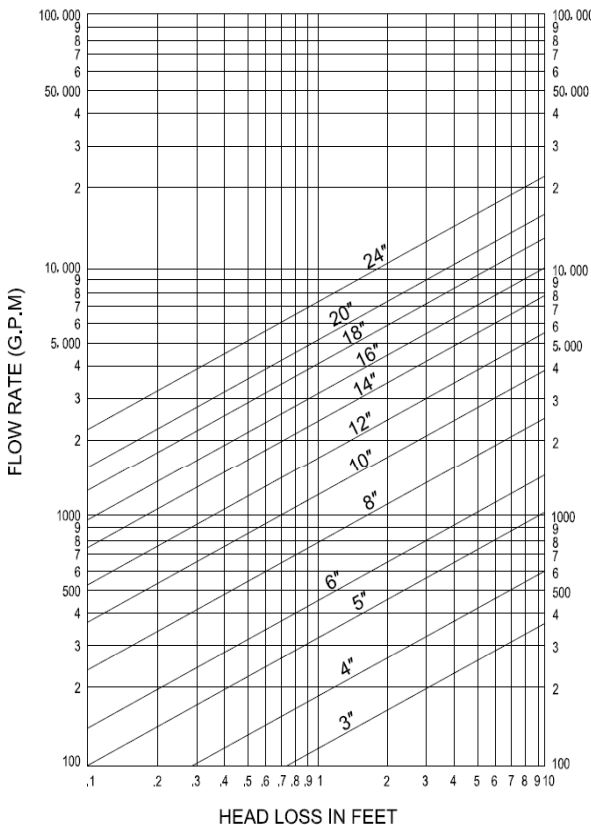


C_v VALUE OF DOUBLE DISC WAFFER CHECK VALVES

NOMINAL DIAMETER (INCHES)	C _v
2"	79
2.5"	120
3"	226
4"	404
5"	695
6"	1075
8"	1920
10"	3360
12"	5320
14"	6200
16"	7650
18"	9900
20"	12700
24"	19200

*C_v = The flow rate of water in U.S. gallons per minute of 60° F water, which passes through the valve with 1PSI pressure drop across the valve.

GLOBE STYLE CHECK VALVE – SERIES 821G



C_v VALUE OF 821G GLOBE SILENT CHECK VALVES

NOMINAL DIAMETER (INCHES)	C _v
2.5"	130
3"	160
4"	275
5"	452
6"	639
8"	1110
10"	1720
12"	2490
14"	3450
16"	4480
18"	5700
20"	7000
24"	10050

*C_v = The flow rate of water in U.S. gallons per minute of 60° F water, which passes through the valve with 1PSI pressure drop across the valve.

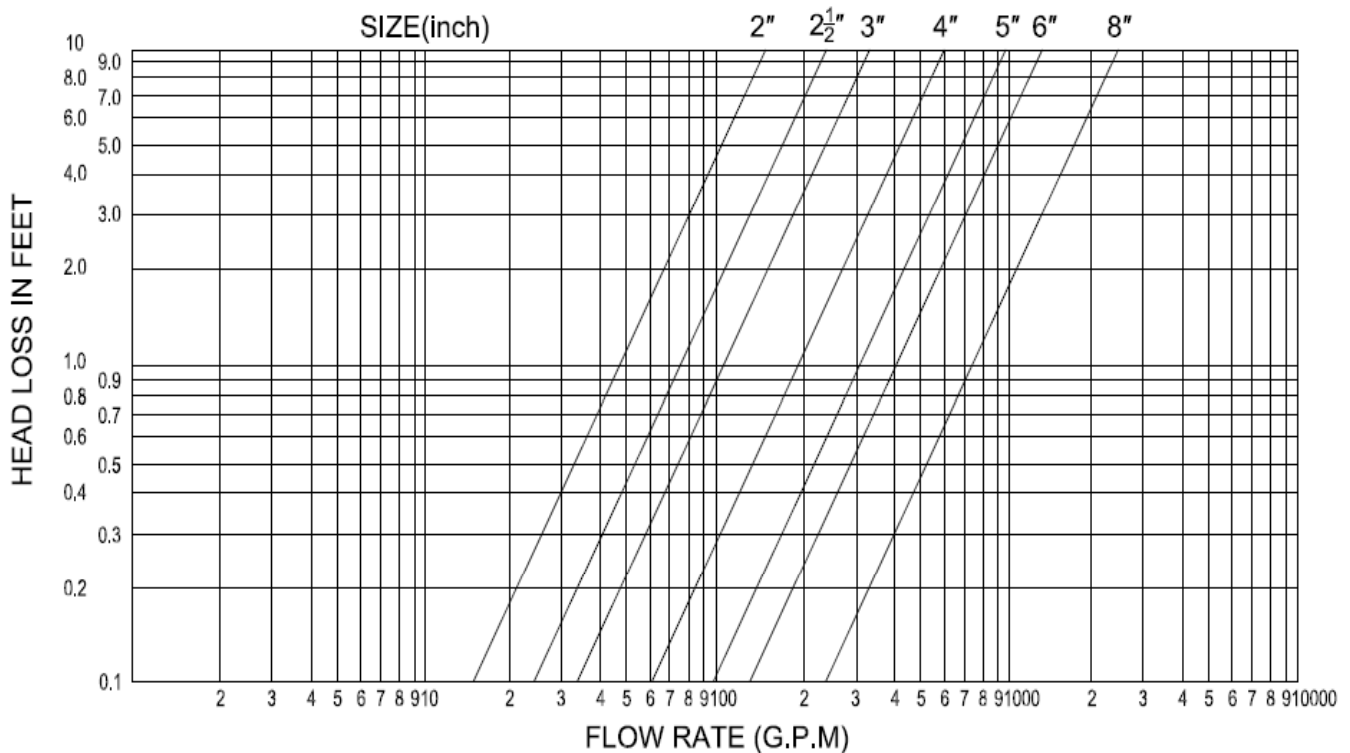
These charts are based on the flow of clean water at ambient temperature. Consult our Engineering Department for pressure drop information on steam, gases or viscous fluids.

Good piping practice recommends placement of check valves a distance equal to 5 to 10 pipe diameters from any turbulence producing device such as elbow, pumps etc.

PRESSURE DROP CHART

For Compact Wafer Silent Check (720G) Valve

COMPACT WAFER SILENT CHECK VALVE – SERIES 720G



C_v VALUE OF 720G WAFER SILENT CHECK VALVE

NOMINAL DIAMETER (INCHES)	C _v
2"	67
2.5"	108
3"	155
4"	274
5"	433
6"	575
8"	1047
10"	1490
12"	2070

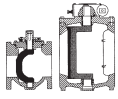
*C_v = The flow rate of water in U.S. gallons per minute of 60° F water, which passes through the valve with 1PSI pressure drop across the valve.

This chart is based on the flow of clean water at ambient temperature. Consult our Engineering Department for pressure drop information on steam, gases or viscous fluids.

Good piping practice recommends placement of check valves a distance equal to 5 to 10 pipe diameters from any turbulence producing device such as elbow, pumps etc.

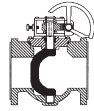
NOTES

MILLIKEN® Product Guide



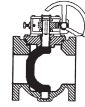
SERIES 600/601
Eccentric Plug Valve
Flanged and MJ

- Welded Nickel Seat
- Stainless Steel Bearings
- ANSI-B16.1 Flanges
- Solid Ductile Iron Plug
- Low Pressure Drop
- Flanged & MJ Ends
- Sizes 2" - 72" FL
- Sizes 3" - 48" MJ



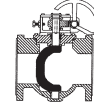
SERIES 601SS
Eccentric Plug Valve

- Integral Stainless Seat
- Stainless Bearings
- Stainless Steel Body
- ANSI B16.5 Class 150 Flanges
- Solid Stainless Steel Plug
- Low Pressure Drop
- Size: 1/2" - 24"



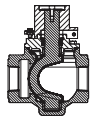
SERIES 601RL
Eccentric Plug Valve
Rubber Lined

- Soft or Hard Rubber Lining
- Stainless Steel Bearings
- ANSI B16.1 Flanges
- Solid Ductile Iron Plug
- Low Pressure Drop
- Sizes 3" - 54"
- Metal Plugs Available - Consult Factory



SERIES 602
Eccentric Plug Valve
High Pressure

- Ductile Iron Body
- ANSI B16.1 Flanges
- MJ AWWA C111
- Welded Nickel Seat
- Solid Ductile Iron Plug
- Low Pressure Drop
- Sizes 2" - 72" FL
- Sizes 3" - 48" MJ



SERIES 613A
Eccentric Plug Valve
Threaded End

- Ductile Iron Construction
- Round Port
- Stainless Steel Bearings
- Low Pressure Drop
- Memory Stop
- NPT End Connections
- Sizes 1/2" - 2"



SERIES 604E
Eccentric Plug Valve
Three Way Valve

- Epoxy Seat
- Solid Ductile Iron Plug
- Stainless Steel Bearings
- Low Pressure Drop
- Lift & Turn NOT Required
- High Solids & Flow Capacity
- Sizes 3" - 16"



SERIES 606
Eccentric Plug Valve
Grooved End

- Welded Nickel Seat
- Stainless Steel Bearings
- AWWA C-606 Grooved
- Solid Ductile Iron Plug
- Low Pressure Drop
- Ductile or Steel Pipe
- Sizes 3" - 24"



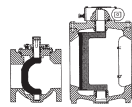
SERIES 611/610
Eccentric Plug Valve
Flanged and MJ

- Ductile Iron Body
- ANSI B16.1 Flanges
- MJ AWWA C111
- Welded Nickel Seat
- Solid Ductile Iron Plug
- Low Pressure Drop
- Sizes 2" - 72" FL
- Sizes 3" - 48" MJ



MODEL 625
Eccentric Plug Valve

- Available in Threaded and Flanged Ends
- Rated for 175 psi
- Sizes 1/2" - 4"
- UL / CGA Listed



SERIES 600FP/601FP
Eccentric Plug Valve

- Full / 100% PORT
- Welded Nickel Seat
- Stainless Steel Bearings
- ANSI-B16.1 Flanges
- Solid Ductile Iron Plug
- Low Pressure Drop
- Flanged & MJ Ends
- Sizes 2" - 48" FL
- Sizes 3" - 48" MJ

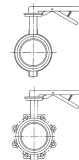


FIGURE 396/397
General Service Butterfly Valve

- Meets MSS SP 67
- Ductile Iron Body
- DI-NP Disc
- Other Materials Upon Request
- Wrench or Gear Operated Available
- 2" - 48" Size Range

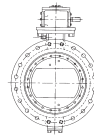


FIGURE 510A/511A
AWWA Butterfly Valve

- Complies with AWWA C-504
- Class 150B Flanged or MJ
- Cast Iron Body and Disc
- Seat in Body
- Flow Through Disc on 24" and Larger
- Epoxy Paint on All Sizes Standard
- 3" - 72"



SERIES 8500
AWWA Swing Check

- Full Waterway
- Ductile Iron Construction
- Weight or Spring
- Air Cushion
- SS Body Seat Ring
- Buna Disc Insert
- Sizes 3" - 24"



SERIES 8000
AWWA Swing Check

- Full Waterway
- Weight or Spring
- Bronze / SS Body Seat Ring
- Bronze / Buna / EPDM Disc Insert
- Sizes 2" - 36"



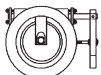
SERIES 9000
AWWA Swing Check

- Clear Waterway
- Weight or Spring
- Air or Oil Cushion
- Bronze / SS Body Seat Ring
- Bronze / Buna / EPDM Disc Insert
- Sizes 3" - 72"



SERIES 720A
Wafer Check Valve

- Center Guided
- Check Valve
- Rated for 250 psi
- SS Disc / EPDM Seat
- Sizes 2" - 12"



SERIES 700
Wafer Check Valve

- ANSI Class 125 / 150
- High Flow Capacity
- Narrow Face-to-Face
- Sizes 3" - 12"
- 316 SS Internals
- Disc Position Indicator

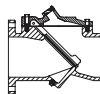


FIGURE 851
Flex Check

- Million Cycle Certification
- Complete Ductile Iron Construction
- 250 psi Pressure Rating
- Fully Epoxy Lined Interior
- No Internal Shafts, Bearings or Bushings
- No External Levers, Weights or Springs
- Mechanical Indicator (3" - 16")
- 2" - 24" Size Range
- Backflush Devices
- Proximity Switches



FIGURE 740A
Double Disc Check Valve

- Wafer Pattern Check Valve Rated for 250 psi
- Available in Sizes 2" - 36" With a SS Disc / EPDM Seat

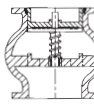


FIGURE 821A
Global Style Check Valve

- Center Guided Check Valve
- SS Disc / EPDM Seat and is Available in Sizes 2" - 24"

For more information about Milliken or to view our full line of water products, please visit www.millikenvalve.com or call Milliken customer service at 1.800.423.1323.

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