

MILLIKEN

FLEX CHECK

— FLEXIBLE DISC CHECK VALVE —



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In keeping with Milliken's commitment to quality, reliability and value the ductile iron *Flex Check* continues to set the standard. Simplicity and innovation are designed into each valve to provide dependable maintenance free performance. Specify with confidence: The Milliken *Flex Check* has undergone a rigorous 1,000,000 continuous cycle test with no signs of wear or distortion to the valve disc or seat. Test results are available from an independent testing facility upon request.

BODY

The Milliken *Flex Check* body is manufactured in ductile iron in ASTM A-536 Grade 65-45-12 as standard and features a full flow area providing 100% unrestricted flow and low head loss. Flanges are in full compliance with ANSI B16.1 for Class 125.

BONNET

The ductile iron domed access bonnet allows for easy removal and inspection of the flexible disc assembly.

DISC

The only moving part in the Milliken *Flex Check* is in the disc which features a fully encapsulated steel disc with nylon reinforcement in the flex area. The molded elastomer with integral o-ring ensures a bubbletight shut off preventing backflow.

BODY SEAT

The body seat is constructed on a 45 degree angle to reduce the travel of the disc to the full open position - significantly reducing the potential for waterhammer.

STANDARD FEATURES:

- Ductile Iron Construction
- 285 CWP Rated-All Sizes
- Inherent Non-Slam Design
- 100% Full Flow Area
- Only One Moving Part
- 25 Year Warranty*
- Epoxy Lined Interior
- Complies with AWWA C508-01

FLOW

The flow area of the Milliken *Flex Check* is equal to or greater than the equivalent pipe size throughout, resulting in low head losses compared to other types of check valves.

INSTALLATION

The Milliken *Flex Check* is suitable for installation in both horizontal and vertical pipelines with flow upward.

COATINGS

The valve interior is fully coated with a liquid thermosetting epoxy suitable for use in potable water service. The exterior is provided as standard with a universal primer enamel suitable for coating in the field. Special coatings can be furnished on request.

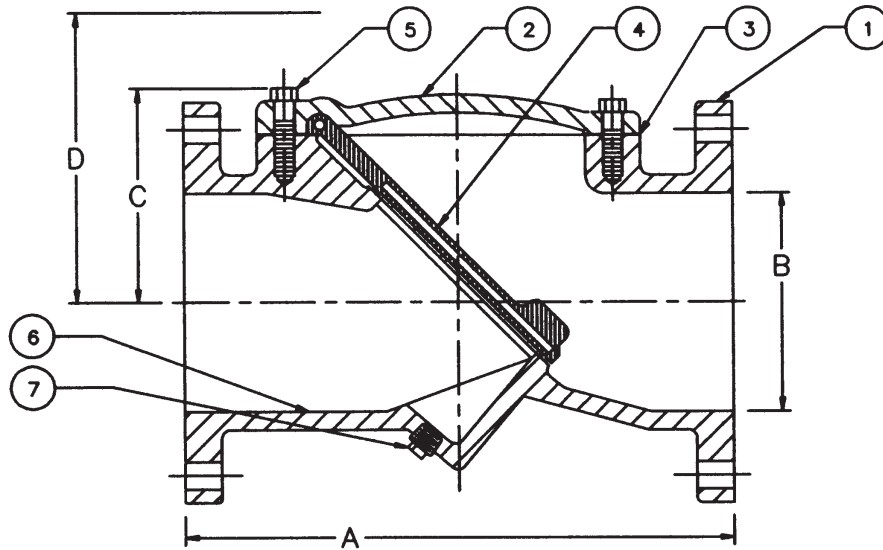
ACCESSORIES / OPTIONS

- External Backflush Device (3"-24")
- Rubberlining (3"-24")
- Disc Position Indicator Switch
- Flow Control Device
- Differential Pressure Taps
- PN 16 Flanges
- Buna-N, EPDM

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FLEXIBLE DISC CHECK VALVE - FIGURE 851



MATERIALS OF CONSTRUCTION

NO.	DESCRIPTION	MATERIAL	ASTM DESIGNATION
1	BODY	DUCTILE IRON	ASTM A-536-Gr 65-45-12
2	BONNET	DUCTILE IRON	ASTM A-536-Gr 65-45-12
3	GASKET	RUBBER	
4	DISC	STEEL/BUNA-N or EPPM	ASTM A-36/D-2000
5	BONNET BOLTS	STEEL	SAE GRADE 5
6	INTERIOR LINING	EPOXY	
7	PLUG	MALLEABLE	

DIMENSION 'D' CLEARANCE REQUIRED TO REMOVE ACCESS COVER.

VALVE SIZE	A	B	C	D
2	8.0	2.0	3.38	8.38
2-1/2	8.5	2.5	3.38	8.38
3	9.5	3.0	3.88	9.00
4	11.5	4.0	4.63	9.63
5	13.75	5.0	5.13	10.25
6	15.0	6.0	5.88	11.00
8	19.5	8.0	7.63	13.75
10	24.5	10.0	9.88	16.00
12	27.5	12.0	11.38	18.50
14	31.0	14.0	13.38	20.50
16	32.0	16.0	15.38	23.50
18	36.0	18.0	17.13	25.25
20	40.0	20.0	19.13	29.25
24	48.0	24.0	22.75	32.75

FLANGES ARE PER ANSI B16.1 CLASS 125/150 FLAT FACED.

NOTE: Drawings are for information purposes only; please request certified drawings before preparing piping diagrams

TECHNICAL SPECIFICATION

FLEXIBLE DISC CHECK VALVE

2"-24"

Check valve shall be of the flanged, flexible disc, full body check valve type with no internal moving parts except the closure disc. Valves shall be rated to **285 CWP** for all sizes, and fully complies with AWWA C508-01 in all respects.

The valve body shall be constructed of ductile iron **ASTM A-536 Grade 65-45-12** with flow equal to the nominal pipe inside diameter throughout the valve. Seat shall be constructed on a 45 degree angle to reduce disc travel and provide higher flow rates. The seat and internal body shall be fully coated with a two part thermosetting epoxy suitable for use in both water and wastewater applications.

The domed bonnet shall be manufactured of ductile iron **ASTM A-536 Grade 65-45-12**. The bonnet-to-body seal shall be provided by a gasket to allow easy removal and replacement of the access bonnet. Bonnet bolting shall be **SAE Grade 5**.

The flexible disc shall feature a fully encapsulated steel pressure plate with integral molded "O" ring on the face of the elastomer. Nylon reinforcements shall be provided in the flexible hinge area of the disc assembly. *The flexible hinge portion of the disc shall be warranted for 25 years.

The manufacturer shall furnish certified results of a proof of design test performed at an independent testing laboratory. Testing shall include a million-cycle continuous test to demonstrate the durability of the flexible connection.

Flexible disc check valves shall be the **Series 850 Flex Check** as manufactured by **Milliken Valve Company of Bethlehem, Pennsylvania**.



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