

Model 805YD (2-1/2" through 10") Double Check Backflow Preventer for Non-Toxic Service

Features

- The *DuraCheck* features all stainless steel check assemblies for corrosion resistance, reduced fouling and longer valve life.
- *DuraCast*[®] ductile iron body for superior strength, corrosion resistance and lighter weight.
- Low head loss

Specifications

Double check assemblies shall consist of two independent "Y" configured check valves. Checks shall be of the spring loaded, center stem guided type. All internal metal parts included in the check assemblies shall be of Series 300 stainless steel, and shall not contain any dissimilar metals. Elastomeric seat disc must be reversible, seat rings shall be B-61 bronze, or Series 300 stainless steel, bolted to the valve bodies incorporating an "O" ring seal to facilitate ease of field removal and replacement.

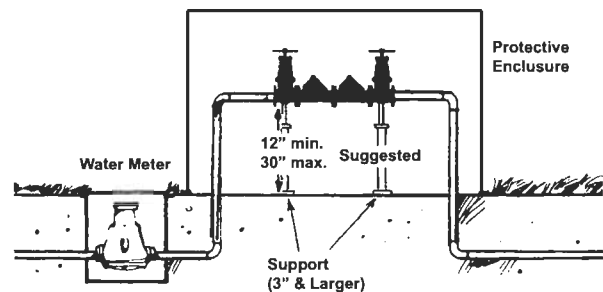
The check assembly shall be guided at the seat ring and at the cover by replaceable non-corrosive bushings to assure positive check seating. Head loss through the assembly shall not exceed 5.5 PSI at velocities from zero up to and including 7.5 FPS. Flow curves shall be documented by independent laboratory testing.

The assembly shall include flanged, full port resilient wedge shut-off valves and four vandal resistant full port ball valve testcocks, considered integral to the assembly. Assemblies must be factory assembled and backflow tested.

All double check valve assemblies shall be constructed so all internal parts, including seat rings, can be serviced without removing the device from the line.

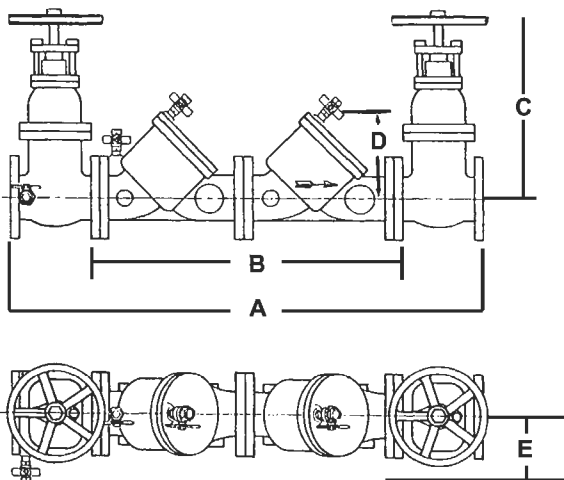
Typical Applications

Double Check Assemblies are used to prevent backflow of pollutants that are objectionable but not toxic. Double Checks may be installed under continuous pressure service and may be subjected to backpressure. Double checks can be used in sprinkler irrigation systems, fire protection without chemical additives, protection of industrial plants, industrial in-plant plumbing systems and other systems requiring protection. Local codes may vary; consult authorities for specific approved applications.



Installation

Model 805YD Double Check Backflow Preventers should be installed with adequate clearance and easy accessibility for testing and maintenance and must be protected from freezing. The assembly may be installed horizontally or vertically with flow up. Refer to local codes for specific installation requirements. Some codes may prohibit vertical installations. Larger sizes should be installed horizontally for ease of service. Thermal water expansion and/or water hammer down stream of the backflow preventer can cause excessive pressure. Excessive pressure situations should be eliminated to avoid possible damage to the system and assembly.



Dimensions and Weights

SIZE	A	B	C*	D	E	WT.(lbs.)
2½	37 ³ / ₁₆	22 ¹ / ₁₆	12½	7½	5¼	230
3	41 ¹ / ₁₆	25 ⁹ / ₁₆	14	8 ¹ / ₁₆	6	240
4	50 ⁷ / ₁₆	32 ⁵ / ₁₆	17 ³ / ₈	11	6¾	390
6	59 ¹ / ₁₆	38 ⁹ / ₁₆	21 ¼	14	8¼	675
8	69 ³ / ₁₆	46 ¹ / ₁₆	26	18	9½	1130
10	84 ³ / ₁₆	58 ¹ / ₁₆	30	22	10½	1530

* Applies to NRS gated valves only.

Characteristics and Materials

Maximum working pressure	175 PSI (1200 KPa)
Hydrostatic test pressure	350 PSI (2400 KPa)
Temperature range	32°F to 140°F
Fluid	Water
End detail	2-1/2" - 10"
	Flanged ANSI B16.1
Main valve body	Ductile iron grade 65-45-12 fusion epoxy coated internal and external
	Bronze
Main valve trim	Stainless steel
Internal check assembly	Stainless steel
Relief valve body and trim	Bronze
Elastomers	Nitrile
Springs	Stainless steel
Internal check assembly	Stainless steel
Shut-offs	Non-rising stem, RW gates, standard. Others available.
	Fusion bonded epoxy
	AWWA C550-90
	USC FCCC & HR approved.

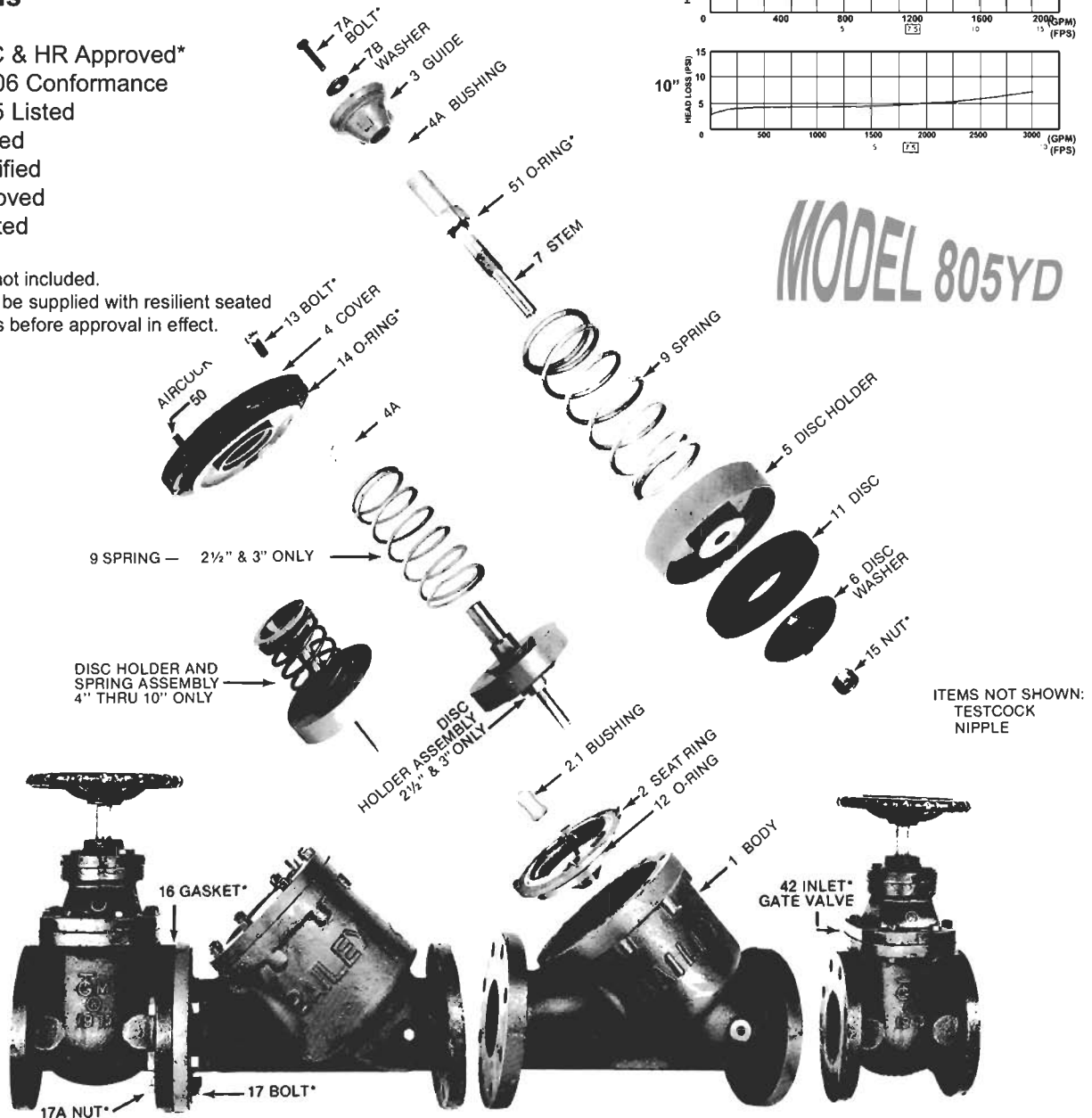
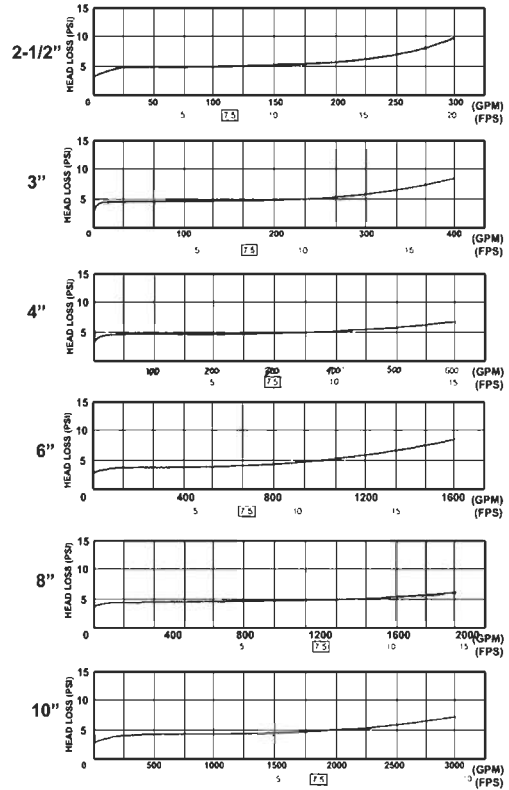
Approvals

USC FCCC & HR Approved*
AWWA C506 Conformance
ASSE 1015 Listed
CSA Certified
+ UL Classified
+ FM Approved
IAPMO Listed

+ 2-1/2" size not included.

* Valves must be supplied with resilient seated shut-off valves before approval in effect.

Flow Curves



Model 805YD Repair Kits & Assemblies

Description	Qty.	Size 2½"	Size 3"	Size 4"	Size 6"	Size 8"	Size 10"
Spring Assembly (3, 4.1, 5, 6, 7, 7.1, 7.2, 9, 11, 15, and 50)	-	905-086	905-088	902-467	902-469	902-471	902-473
Rubber Parts (11, 14, and 50)	-	905-059	905-060	905-061	905-062	905-063	905-064
Seat Kit (2, 2.1, 2.2 and 12)	-	902-386YD	902-385YD	902-384YD	902-383YD	902-382YD	902-381YD
Lg. Mounting Kit (16, 17, 17.1; Both Ends)	-	905-036	905-037	905-038	905-039	905-040	905-041
Cover Assembly (4, 4.1, 14, Aircock (not shown))	-	902-497	902-498	902-499	902-500	902-501	902-502

Model 805YD Individual Parts

Fig No.	Description	Qty.	Size 2½"	Size 3"	Size 4"	Size 6"	Size 8"	Size 10"
1	Body	-	-	-	-	-	-	-
2	Seat Ring (not shown)	1	101-145	101-144	101-136	101-137	101-138	101-139
2.1	Bushing	1	500-291	500-291	500-292	500-292	780-282	780-282
2.3	Washer (not shown)	6	360-079	360-079	360-095	360-078	360-078	360-078
2.4	Capscrew (not shown)	6	519-513-04	519-513-04	511-514-06	511-514-06	511-514-06	511-514-06
3	Guide	2	-	-	190-001	190-002	190-003	190-004
4	Cover	2	880-094	880-095	880-081	880-082	880-083	880-084
4A	Bushing	2	780-312	780-312	780-313	780-313	780-313	780-313
5	Disc Holder	2	190-013	190-014	190-005	190-006	190-007	190-008
6	Disc Washer	2	190-016	190-017	190-009	190-010	190-011	190-012
7	Stem	2	780-332	780-333	780-334	780-335	780-336	780-337
7	Stem	2	780-332R	780-333R	780-334R	780-335R	780-336R	780-337R
7A	Screw	2	-	511-515-08	511-515-08	511-515-08	511-515-08	511-515-08
7B	Washer	2	-	780-338	780-338	780-338	780-338	780-338
9	Spring	2	-	780-342	780-343	780-344	780-345	780-346
11	Seat Disc	2	780-357	780-358	780-359	780-360	780-361	780-362
12.1	O-Ring	2	398-237-72	398-242-72	398-253-72	398-263-72	398-272-72	398-381-72
13	Capscrew	16	511-516-08	511-516-08	511-517-10	511-519-12	511-520-12	511-520-14
14	O-Ring	2	398-346-72	398-354-72	398-364-72	398-374-72	398-379-72	398-381-72
15	Hexnut	2	521-547-00	521-547-00	521-550-00	521-550-00	521-551-00	521-550-00
16	Gasket	1	780-365	780-366	780-367	780-368	780-369	780-370
17	Capscrew	4	511-019-18	511-019-20	511-019-22	511-020-26	511-020-28	511-021-30
17A	Hexnut	12	521-019-00	521-019-00	521-019-00	521-020-00	521-020-00	521-021-00
17B	Lift Strap (not shown)	2	300-114	300-114	300-114	300-115	300-115	300-115
40	Ball Valve	3	781-047	781-047	781-047	781-048	781-048	781-048
41	Nipple	1	571-181-46	571-181-46	571-181-46	571-181-56	571-181-56	571-181-56
41A	Nipple (not shown)	2	571-181-43	571-181-43	571-181-43	571-181-53	571-181-53	571-181-53
50	Aircock	-	780-416	780-416	780-416	780-416	780-416	780-416
51	O-Ring (not shown)	2	398-014-72	398-014-72	398-116-72	398-116-72	398-118-72	398-118-72
Gate Valves								
42	Resilient Seated NRS	-	781-005	781-006	781-007	781-008	781-009	781-010
42	Resilient Seated OS&Y	-	780-891	780-893	780-895	780-897	780-899	780-901

