# **Kennedy Swing Check Valves**

A.W.W.A. C508 was developed in 1976 to set a standard for the manufacture, testing and application of Iron Body Bronze Mounted (IBBM) Check Valves. The valves are designed with an iron body and include either metal-to-metal or composition-to-metal seating.

Kennedy Swing Check Valves are designed and manufactured in conformance with A.W.W.A. C508 and are for use on water, oil and gas lines. Under certain circumstances where it is desirable to have more positive control of the closing of the disc, the valves can be supplied with either lever-and-spring or lever-and-weight. For restricted spacing requirements Kennedy Valve manufactures a Wafer Check Valve that also helps to control water hammer.

### **Features**



#### Swing Check Valve-AWWA

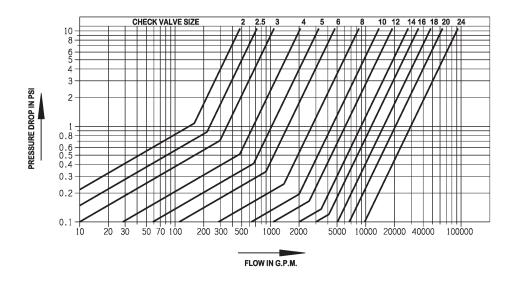
- Stainless steel hinge pin.
- Working parts are removable through the top of the valve.
- Tapped bosses available.
- Available with lever-and-spring or lever-and-weight.
- Double bronze side plug construction.
- Bodies are made of high strength cast iron with reinforced flanges - ANSI B 16.1/125 # flanges.
- May be installed in a vertical line with the flow up.

<ul> <li>Figure #1106 Series</li> </ul>		2"-12"
Test Pressure - Sea	at and Shell	400 PSI
Working Pressure -	non-shock CWP	200 PSI

•	Figure #106 Series	14"-24"
	Test Pressure - Seat and Shell	300 PSI
	Working Pressure - non-shock CWP	150 PSI

#### FLOW VERSUS PRESSURE DROP

#### Data Representative of Kennedy Figure 1106 and 1106A Swing Check Valves







It is generally recommended, that when using Kennedy swing check valves, that you locate the valve at least 5 to 10 pipe diameters down stream from any flow disturbance or obstruction (valve, pump, elbow, reducer, etc.). Turbulence close to the check valve may result in valve "chatter" resulting in premature failure of the check valve.

As stated in AWWA C508, "Conditions of water hammer, hydraulic pulsation, and excessive operating noise are results of system design rather than valve design and are beyond the scope of this standard and require special design and construction considerations."

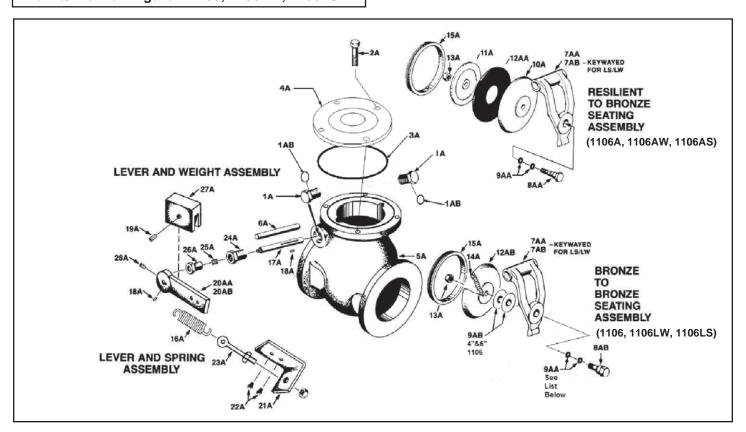
## **AWWA**

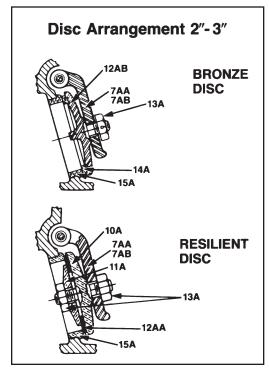
### **SWING CHECK VALVES 2"-12" TECHNICAL DATA & PARTS LIST**

KENNEDY VALVE

Resilient/Bronze - Figure # 1106A, 1106AW, 1106AS

Bronze/Bronze - Figure # 1106, 1106LW, 1106LS



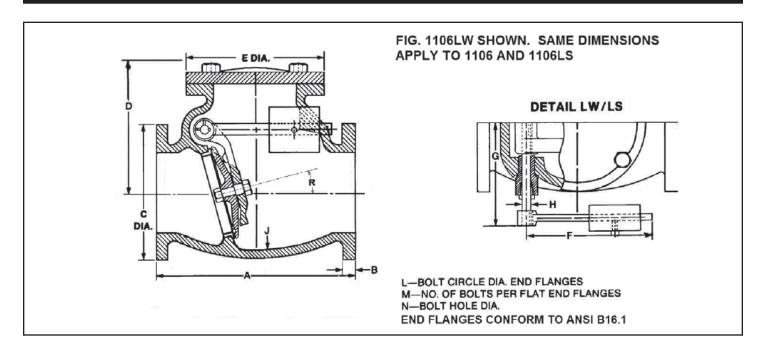


Part No. Qty.		Description	Material & ASTM Spec.					
1A With	2	Side Plug With O-Ring	Bronze					
IAB (O-Ring)	1 for LS/LW							
2A	* SEE FOOT NOTE	Cap Bolts	Stainless Steel, ASTM F593C (18-8)					
3A	1	O-Ring	Syn. Rubber					
4A	1	Сар	Cast Iron, ASTM A126 Class B					
5A	1	Body	Cast Iron, ASTM A126 Class B					
6A	1	Hinge Pin	SS A-276 (304)					
7AA	1	Hinge	Bronze (2'-3")					
			D.I. A-536 (4"-12")					
7AB	1	Hinge w/keyway for LS/LW	Bronze (2"-3")					
			Ductile Iron ASTM A536 (4"-12")					
8AA	1	Disc Bolt (4"-12")	Bronze (4"-12")					
8AB	1	Disc Bolt (4"-12")	Bronze (10"-12")					
			Steel (4"-8")					
9AA	2	Disc Bolt O-Ring (4"-12" 1106A, 8"-12" 1106)	Syn. Rubber					
9AB	2	Disc Bolt Gasket (4" & 8" 1106)						
10A	1	Disc Holder	Bronze (2"-3") ***					
			Cast Iron, ASTM A126 Class B (4"-12")					
11 A	1	Disc Plate	Bronze					
12AA	1	Disc	Nitrile (Buna N) Rubber					
12AB**	1	Disc	Bronze (2"-3") ***					
			Cast Iron, ASTM A126 Class B (4"-12")					
13A	1	Disc Nut	Stainless Steel, ASTM F593C (18-8)					
	2 w/resilient disc (2"-3")							
14A**	1	Disc Ring (4"-12") (2"-3")***	Bronze					
15A	1	Seat Ring	Bronze					
16A	1	Spring	Steel					
17A	1	Extended Hinge Pin for LS/LW	Stainless Steel, ASTM A-276 (304)					
18A	2	Key for LS/LW	Stainless Steel, ASTM A-276 (304					
19A	1	Set Screw	Steel					
20AA	1	Lever Arm for LS	Steel					
20AB	1	Lever Arm for LW	Steel					
21A	1	Bracket	Steel					
22A	2	Hex Head Bracket Bolt	Steel					
23A	1	Eye Bolt w/2 Hex Nuts	Steel					
24A	1	Stuffing Box	Bronze					
25A	-	Packing	Graphite Filled					
26A	1	Gland	Bronze					
27A	1	Weight	Cast Iron, ASTM A126 Class B					
28A	1	Set Screw	Steel					

Qty of cover bolts, 2"-8" = 4 bolts, 10"-12" = 6 bolts.

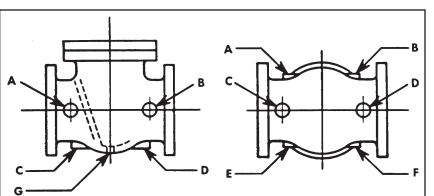
<sup>\*\*</sup> Denotes that part is available only as part of an assembly. 
\*\*\*Cast integral (2"-3").

# Dimensional Data 2"-12" 1106/1106LW/106LS



	*A		В		С		D		E		F		(	G		Н		J		L		М		N		R	
SIZE	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
2"	8.00	203	0.65	17	6.00	152	6.00	152	6.56	167	6.50	165	4.72	120	0.50	13	0.34	9	4.75	121	4	102	0.75	19	10.00	254	
2 1/2"	8.50	216	0.69	18	7.00	178	6.44	164	6.56	167	6.50	165	4.94	125	0.50	13	0.41	10	5.50	140	4	102	0.75	19	8.00	203	
3"	9.50	241	0.78	20	7.50	191	6.85	174	6.56	167	6.50	165	5.34	136	0.50	13	0.44	11	6.00	152	4	102	0.75	19	8.00	203	
4"	11.50	292	1.00	25	9.00	229	8.69	221	9.00	229	7.75	197	8.19	208	0.62	16	0.41	10	7.50	191	8	203	0.75	19	12.00	305	
6"	14.00	356	1.03	26	11.00	279	10.51	267	11.00	279	9.75	248	9.00	229	0.75	19	0.43	11	9.50	241	8	203	0.87	22	15.00	381	
8"	19.50	495	1.25	32	13.50	343	12.56	319	13.50	343	14.13	359	10.18	259	0.87	22	0.75	19	11.75	298	8	203	0.87	22	15.00	381	
10"	24.50	622	1.31	33	16.00	406	14.07	357	16.75	425	18.00	457	11.62	295	1.00	25	0.81	21	14.25	362	12	305	1.00	25	15.00	381	
12"	27.50	699	1.38	35	19.00	483	16.13	410	19.00	483	18.00	457	13.75	349	1.00	25	0.87	22	17.00	432	12	305	1.00	25	15.00	381	

BODY MARKINGS									
(ONE SIDE)	(OPPOSITE SIDE)								
`A.W.W.A.´	FIG. NO.								
KENNEDY	200 W								
I									
CAP MARKINGS									
YEAR									
KENNEDY									
SI	7F								



#### **BOSS AND DRAIN TAPPING SCHEDULE**

VALVE SIZE (In.) 2-31/2 4-5 6 8,10,12

MAX. SIZE
PIPE TAP (NPT) 3/4 1 11/4 2

When ordering Check Valves tapped for bypass or drain, specify exact location and size of tap using letters above for boss designation. These locations of drain and by-pass tappings conform to the Manufacturers Standardization Society (MSS SP-45 current edition).