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

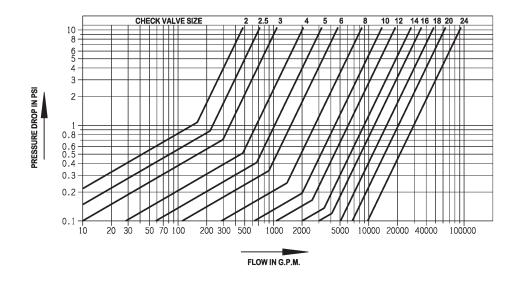
- Stainless steel hinge pin.
- Working parts are removable through the top of the valve.
- Tapped bosses available.
- Available with lever-and-spring or lever-and-weight.
- Double bronze side plug construction.
- Bodies are made of high strength cast iron with reinforced flanges - ANSI B 16.1/125 # flanges.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

•	Figure #1106 Series	2"-12"
	Test Pressure - Seat 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.

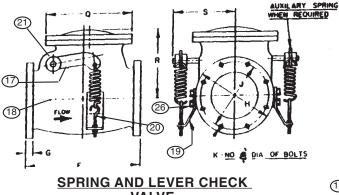
As stated in AWWA C508, "Conditions of water hammer, hydraulic pulsation, and excessive operating noise are results of system design rather than valve design and are beyond the scope of this standard and require special design and construction considerations."



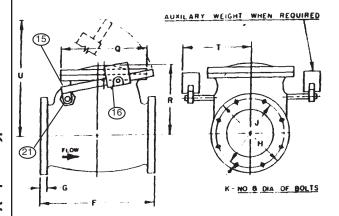
Note Regarding 14"-36" Check Valves:

Prior to 2014, Kennedy Valve supplied full-wall check valves as our standard on 14"-30" Valves. Throughout 2014, we transitioned to the reduced-wall ductile iron check valves as our new standard. Please be aware that this move has changed the flange-to-flange lay length in most cases. The 36" Check Valve is only available as a reduced-wall ductile iron valve. Please contact our sales staff for further information on these valves or if you are working on a project that has specific domestic requirements. Please scroll down for more information on the reduced-wall body check valves.

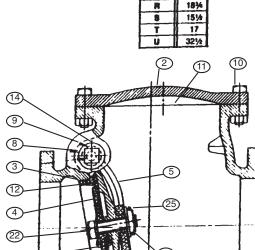
5-5



VALVE STYLE NO. 259-02/106ALS



LEVER AND WEIGHT CHECK **VALVE** STYLE NO. 159-02/106ALW



DIMENSION IN INCHES

30

136

21

18%

12-1

231/2

1834

VALVE

G

H

K

a

PLAIN CHECK VALVE STYLE NO. 59-02/106A

NOTES:

- 1 A 126 CL B CAST IRON
- 2 WEIGHT LEVER ARM ON 14" VALVE STEEL
- 3 A 126 CL B CAST IRON

150 PBI

4 ALL STEEL BOLTS & NUTS ARE ELECTRO ZINC PLATED

PART

NO.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

NO.

REQ'D

1

Varies

2

Varies

1

2

2

1

1

2

Varies

2

2

2

PART

Body

Cover

Body Ring

Clapper Arm

Clapper Stud

Clapper Nut

Hinge Pin

Side Plug (Plain Valve)

Cover Bolts & Nuts

Cover Gasket

Clapper Ring

Side Plug Gasket

Weight Lever Arm ²

Spring Lever Arm ³

Stuffing Box Assembly

Spring Bracket Cap Screw

"O" Ring Side Plug

Spring Bracket

Spring Eyebolt

Capscrew Bolt

Clamping Ring

Lock Washer

Cotter Pin

"0' Ring

Gasket

Weight

Spring

Clapper 1

14" SWING CHECK VALVE-RUBBER FACED-FLANGED END



DRAWN BY KM	DATE	2/28/74		
CHECKED	SCALE	NONE		
APPROVED				
	DWG		RE'	V.
	NO.	11802		

A.S.T.M.

SPEC. NO.

A126 CL B

A-126 CL B

CDA84400

CDA84400

A-276-303

CDA84400

A-307GR B

A-126 CL B

A-126 CL B

A-307GR B

CDA84400

CDA84400

A-307GR B

CDA84400

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B-21

_

B-132

B-21

MATERIAL

Cast Iron

Cast Iron

See Note No. 1

Non-Asbestos

Copper Non-Asbestos

Copper Non-Asbestos

Neoprene

Cast Iron

Cast Iron

Steel Steel

Steel

Bronze

Bronze

Bronze

Bronze

Bronze

Rubber

Steel

Steel

See Note No. 3

Bronze

Bronze

Bronze

Bronze

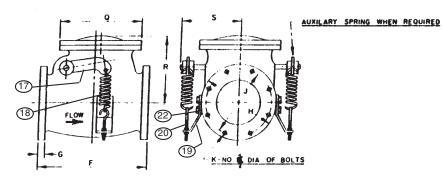
Stn Stl.

Bronze

Steel

WATER WORKING PRESSURE HYDROSTATIC TEST PRESSURE

(13)



SPRING AND LEVER CHECK

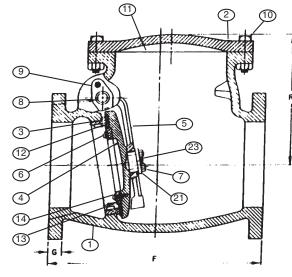
VALVE

STYLE NO. 259-02/106LS

NO & DIA OF BOLTS

AUXILARY WEIGHT WHEN REQUIRED

SCREWED OR FLANGED BY-PASS WHEN REQUIRED



PART

NO.

2

3

4

5

6

8

9

10

11

12

13

14

15 16

21 22

23

NO.

REQ'D

Varies

Varies

Varies

1

Varies

Varies

PART

Body

Cover

Body Ring

Clapper Arm

Lockwasher

Capscrew

Hinge Pin

Cover Gasket

Clapper Ring

Gland (Bronze Bushed)

Cover Bolt and Nuts

Clapper

PLAIN	CHECK	VALVE
STYLE	NO. 59	9-02/106

	oluppoi ittiig			1400	prono				
	Ring Clamp				Bronze			CDA84400	
	Ring Clamp Capscrew			Bronze			B-21	B-21	
	Weight Lever Arm	Weight Lever Arm			nze		B-62	2	
	Weight			Cas	t Iron		A-12	26CL. B	
	Spring Lever Arm			Bro	nze		B-62)	
	Spring			Ste	el			-	
	Spring Bracket			Ste	el			-	
	Spring Eyebolt			Ste				7GR.B	
	Cap Plate			Cas	t Iron			A-126CL. B	
	Spring Bracket Ca	pscrew		Ste				7GR B	
	Lockwire			Cop	per		B3-7	74	
100		VALVE SIZE	1		MENSIONS 18	20	24	30	
	†	E	_	3/8	_	_	_	_	
	ī	F	3	5	361/2	375/8	44	491/2	
1		G	17,	/16	19/16	1 11/16	17/8	21/8	
		Н	23	1/2	25	271/2	32	383/4	
7	R J		21	1/4	223/4	25	291/2	36	
"		K	16	-1	16-1 ¹ / ₈	20-11/8	20-11/4	28-1 ¹ / ₄	
••	7	Q	_	1/2	271/2	32	383/4	433/4	
	1 1	R	2	3	25	241/2	28	327/8	
	1 1	- 11		_					
		S	17		185/8	VER VALV	VES 221/2	251/8	

MATERIAL

Cast Iron

Cast Iron

Cast Iron

Bronze

Bronze

Bronze

Stn. Stl.

Steel

Cast Iron

Neoprene

Non-Asbestos

Steel

A.S.T.M. SPEC. NO.

A-126 CL B

A-126 CL B

CDA84400 A-126 CL B

CDA86400

A-276-303

A-126CL. B

A-307GR B

B-21

150 LBS--WATER WORKING PRESSURE 300 LBS--HYDROSTATIC TEST PRESSURE

19¹/₂

 $34^{1/2}$

<u>VALVE</u> STYLE NO. 159-02/106LW

16"-30" SWING C	HECK VALVE-RUBBEI	R FACED-					
FLANGED END							
		0.00.70					

LEVER & WEIGHT VALVES

223/8

281/2

 $54^{1/2}$

305/8

571/2

	DRAWN BY KM	DATE	10-22-73	
Kennedy	CHECKED	SCALE	NONE	
Romody	APPROVED			
™ ♥ 《 Valve		DWG		REV.
Z Tuito		NO.	11804	