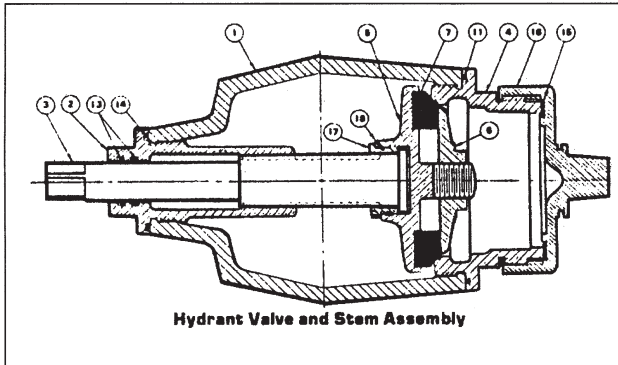


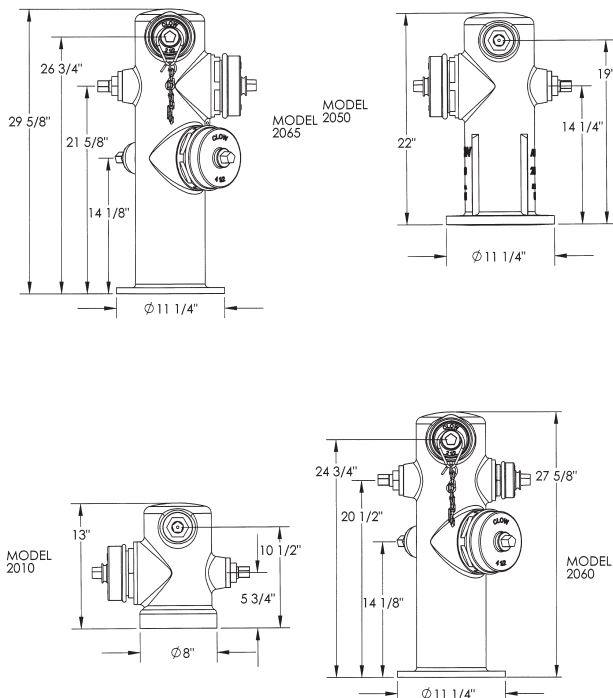
F2000 SERIES
WET BARREL HYDRANT
BRONZE

CLOW VALVE COMPANY



ITEM NO.	DESCRIPTION	MATERIAL	PART NUMBER	NO. PER
1	BODY	BRONZE		1
2	STEM SLEEVE	BRONZE	F1630001	1
3	STEM	BRONZE	F1630806	1
4	OUTLET	BRONZE	F1630003	1
5	CARRIER	BRONZE	F1630811	1
6	RETAINER NUT	BRONZE	F1630808	1
7	VALVE RUBBER	URETHANE	T1630013	1
11	O-RING (OUTLET)	BUNA-N	T1630276	1
13	O-RING (STEM)	BUNA-N	T1630269	2
14	O-RING (STEM SLEEVE)	BUNA-N	T1630278	1
15	PRO CAP GASKET	C.I. RUBBER	T1630176	1
16	PRO CAP	PLASTIC	T1630161	1
17	STEM NUT	BRONZE	F1630809	1
18	LOCK PIN	COPPER	T1630062	1

2000 SERIES DIMENSIONS



Traditional Engineering Excellence Over 100 Years

Fire hydrants are a key element of a municipality's fire protection system. They must be reliable, easy to maintain and aesthetically pleasing to the community. Municipalities have depended on CLOW to meet these requirements for over 130 years.

Advanced Technology The Clow Series 2000

The CLOW Series 2000 couples all bronze construction with a working water pressure of 200 psi. Hydrostatically shall tested up to 600 psi.

Exceptional Performance Series 2000 Features

1. Hydrant rated to withstand 200 psi working water pressure and fully hydrostatically tested to 400 psi.
2. Valve assemblies can be interchanged with parts can be removed from outlet port side for easy maintenance and repairs.
3. The 2000 Series low profile is manufactured with a geometric silhouette design which compliments the architecture of the most modern and progressive community.
4. High strength all bronze body casting conforming AWWA C503 Standard.
5. Removal of bronze outlets offer flexibility of field repairs without disassembling the hydrant head from the bury section. Threaded-in outlets with a bubble tight "O" ring make for quick, easy field repairs (without removing the hydrant head from the bury section).
6. Heavy duty operating stems meet or exceed AWWA torque requirements.
7. Light weight hydrant reducing handling and maintenance costs.
8. Furnished with heavy duty plastic caps in all size pentagons, 1 1/8", 1 1/2", and 1 3/4", equipped with chains. (Bronze caps optional).
9. Valve rubbers made from urethane rubber which is abrasion and nick resistant.
10. Hydrant can be drilled to all size hole drillings, 6H, 6HSD, and 8H standards.

F2000 SERIES
WET BARREL HYDRANT
BRONZE

CLOW VALVE COMPANY

Specifications

All Bronze Wet Barrel Hydrants

The wet barrel hydrant head shall be made of bronze meeting AWWA C503 Standard. It shall be capable of withstanding a hydrostatic test pressure of four times the working water without stressing the material beyond its yield point per Section 3.2.3.2 of AWW C503.

Wet barrel fire hydrants shall feature independently valved parts. The working parts shall be engineered to function as a unit and to give trouble-free service over long periods of time.

Hydrants shall be designed for working pressure of 200 psi. The design factor of safety of hydrant valves shall be 5 based on ft/lb torque required for the closing and opening of individual valves at 200 psi working pressure hydrant capable of being opened or closed after being subjected to and opening torque of 200 ft.-lbs. applied at the operating system.

Length of Bury

The bury shall be specified to the nearest six inches measured from face of the hydrant flange to the center of the connecting pipe. The hydrant body shall be so designed that it may be removed by unbolt- ing from the bury section above the ground line. When specified by the purchaser, the bolts provided shall have tensile strength less than the shear force required to break the hydrant body.

Marking

All hydrants shall be permanently marked to identify the series number of the hydrant, the manufacturer, country and the year in which the hydrant was manufactured.

Testing

Hydrants shall be subjected to a hydrostatic pressure of 400 psi with the whole interior of the hydrant under pressure. Hydrant valves shall be fully opened and closed to insure full operation.

Hose Threads

Hose and pumper nozzle threads shall be in conformity with "National Standard Fire Hose Coupling Screw Threads", ASA FJ-26, unless otherwise specified.

Protector Caps

Protector caps shall be ABS plastic to meet ASTM D1788, Type 2, Grade 1. They shall be securely chained to the hydrant barrel and furnished (with or without) an inner gasket.

Standard nut size of the valve stem and protector caps shall be of pentagonal shape and furnished with a nut of 1 1/8" measured from point to flat of the pentagon. Nut sizes measuring 1 1/2" and 1 3/4" also furnished. Bronze protector caps can be furnished when specified by the purchaser.

Painting

Exterior of hydrant shall receive a primer coat and will be furnished with a traffic yellow enamel finish coat unless otherwise specified. A suitable clear sealer in lieu of primer/paint may be used if specified by the purchaser per Section 4.2.2.2 of AWWA C503.

Material Specifications

Bronze Casting: ASTM B-62

Valve Facings: Individual valves of hydrant shall be a urethane polyether base compound and cured to a shore durometer hardness of 90; tensile strength of 2700 psi; approved by FDA for use with potable water.

Bolts and Nuts: Bolts for joining the body to the bury section shall conform to ASTM A307, Grade B.

Stem Packing: An "O" ring seal of proper design shall be used. "O" rings shall be compounded to meet ASTM D2000 and have physical properties suitable for the application.

Hydrant Designation

Model 2010— 6 x 2-1/2 x 4/6 IPS

Model 2050— 6 x 2-1/2 x 4/4

Model 2060— 6 x 2-1/2 x 2-1/2 x 4/4—1/2

Model 2065— 6 x 2-1/2 x 4/4—1/2 x 4/4—1/2

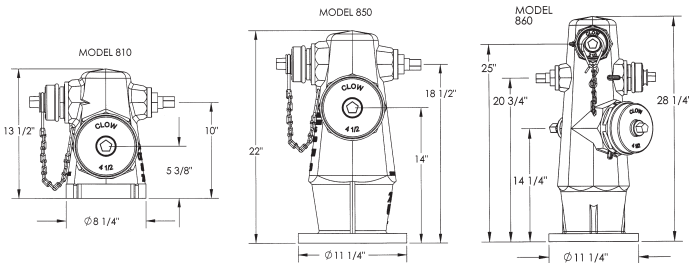
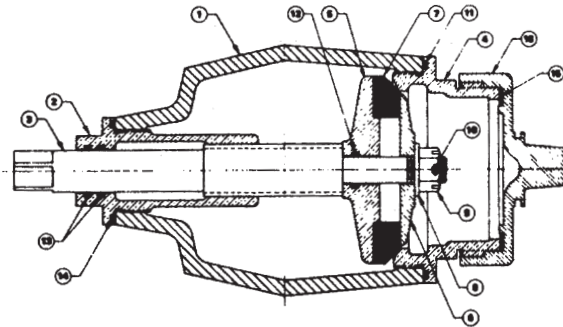
F800 SERIES FIRE HYDRANTS

CLOW VALVE COMPANY

Features:

- Meets or Exceeds AWWA C503
- High Strength Cast Iron Body
- Interior Ferrous Surfaces Epoxy Lined
- Improved Stem and Carrier Assembly
- Removable Bronze Outlets
- All Internal Working Parts Removable from Outlet Port
- Interchangeability of Steamer Connections
- Plastic Connections
- Low Cost
- Light Weight
- Streamlined Appearance

ITEM NO.	PART	PART NO.			MATERIAL
		2 1/2	4	4 1/2	
1	BODY	-----			CAST IRON
2	STEM SLEEVE	3427			BRONZE
3	STEM	3425	3426		BRONZE
4	OUTLET	3407	3412	3414	BRONZE
5	CARRIER	3409	3415		BRONZE
6	RETAINER	3411	3416		NDZ
7	VALVE RUBBER	11-351	11-349		C.I. RUBBER
8	WASHER	67-152			BRASS
9	SLOTTED NUT	7102			BRONZE
10	COTTER PIN	85-149			STAINLESS STEEL
11	O-RING (OUTLET)	14-207	14-209		BUNA-N
12	O-RING (CARRIER)	14-182			BUNA-N
13	O-RING (STEM)	14-187			BUNA-N
14	O-RING (STEM SLEEVE)	14-205			BUNA-N
15	PRO CAP GASKET	11-420	11-421	11-422	C.I. RUBBER
		12-430	12-431	12-432	
16	PRO CAP	-----			CAST IRON PLASTIC



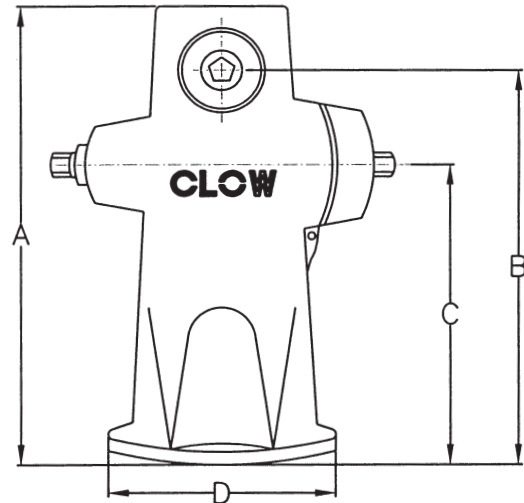
MODEL	WEIGHT	OUTLETS
810	70	(1)-2-1/2" (1)-4"-4-1/2"
845	105	(2)-2-1/2"
850	115	(1)-2-1/2" (1)-4"-4-1/2"
860	135	(2)-2-1/2" (1)-4"-4-1/2"

**F900 SERIES
WET BARREL HYDRANT
CLOW VALVE COMPANY**

DIMENSIONS

900 SERIES	WEIGHT	A	B	C	D
MODEL 945 OUTLETS 2-2½"	165#	24½"	20"	14"	11⅞"
MODEL 950 OUTLETS 1-2½" & 1-4-4½"	196#	24½"	20"	14"	11⅞"
MODEL 960* OUTLETS 2-2½" & 1-4-4½"	230#	29"	20"	14"	11⅞"

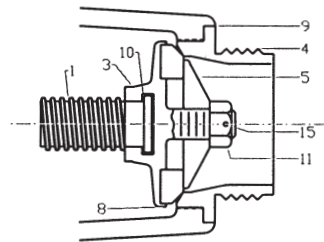
*SEE 960 PICTURED ON FRONT. DIMENSION FROM TOP OUTLET TO BASE IS 24".



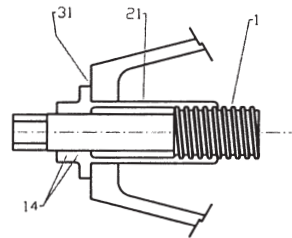
MODEL 950 SHOWN HERE

PARTS LIST

ITEM NO.	PART	MATERIAL	PART NO.	NO. PER
1	2 ½" STEM	BRONZE	F1630074	1
1	4/4 ½" STEM	BRONZE	F1630075	1
3	2 ½" CARRIER	BRONZE	F1630072	1
3	4/4 ½" CARRIER	BRONZE	F1630073	1
4	2 ½" OUTLET	BRONZE	F1630067	1
4	4" OUTLET	BRONZE	F1630068	1
4	4 ½" OUTLET	BRONZE	F1630069	1
5	2 ½" VALVE RETAINER	BRONZE	F1630070	1
5	4/4 ½" VALVE RETAINER	BRONZE	F1630006	1
8	2 ½" VALVE RUBBER	URETHANE	T1630077	1
8	4/4 ½" VALVE RUBBER	URETHANE	T1630013	1
9	2 ½" OUTLET GASKET	HARD FIBER	T1630080	1
9	4/4 ½" OUTLET GASKET	HARD FIBER	T1630081	1
10	O-RING (CARRIER)	NEOPRENE	T1630270	1
11	SLOTTED NUT	BRONZE	F1630076	1
14	O-RING (STEM)	NEOPRENE	T1630269	2
15	COTTER PIN	BRONZE	T1630280	1
21	2 ½" STEM SLEEVE	BRONZE	F1630065	1
21	4/4 ½" STEM SLEEVE	BRONZE	F16300666	1
31	STEM SLEEVE GASKET	HARD FIBER	T1630079	1



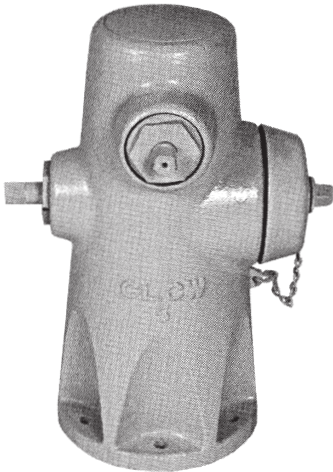
STANDARD TYPE "B" VALVE



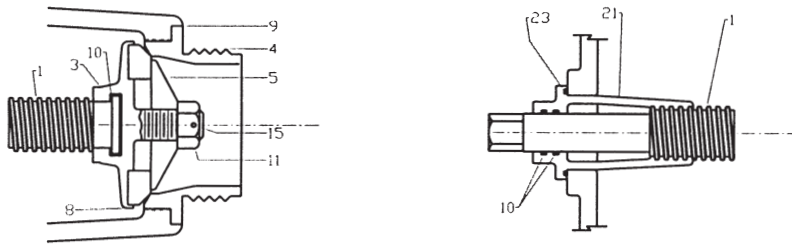
SLEEVE

EAST BAY SERIES
MODELS 4 & 5

CLOW VALVE COMPANY



Hydrant Valve & Sleeve Assemblies

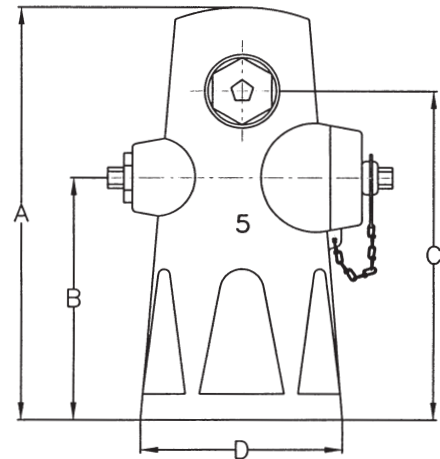


Parts Designation

- 1.** Stem **3.** Carrier **4.** Outlet **5.** Valve Retainer **8.** Valve Rubber **9.** Outlet Gasket **10.** O-Ring (stem)
11. Slotted Nut **13.** Bearing Washer **15.** Cotter Pin **21.** Stem Sleeve **23.** O-Ring (sleeve)

	MODEL F4		MODEL F5	
	2-2½"	2-3"	1-2½" 1-4" or 4½"	1-3" 1-4½"
A	24	24	24	24
B	13⅞	13⅞	13⅞	13⅞
C	18⅞	18⅞	18⅞	18⅞
D	11½	11½	11½	11½

Drilling – 6-¾" HOLES ON 9⅜" BOLT CIRCLE
Outlets– NATIONAL STANDARD HOSE THREADS
MEETS AND EXCEEDS AWWA C-503-75



**70 SERIES
CLOW FIRE HYDRANTS
CLOW VALVE COMPANY**

Independent Valves

The most widely used wet barrel California Type Fire Hydrant has an independent valve for each outlet. This feature permits bringing additional outlets into play without shutting off outlets already in use. Full main pressure is in the hydrant at all times.

Simple Construction

Working parts are few in number and are carefully machined of bronze to assure long, trouble-free service. All working parts can be removed by simply unscrewing the outlet valve seat. Hydrant body is heavy cast iron.

Outlet Threads

2-1/2" National Standard Hose Threads unless otherwise requested. Special hose threads can be furnished.

Steamer Outlets

Furnished regularly with 4" or 4-1/2" National Standard Thread. Other threads can be furnished to your specifications or sample. These steamer outlets provide an unrestricted stream for maximum water supply to the pumper. Steamer hydrant bodies are interchangeable with single or double hydrants of regular type, so that changeover can be accomplished without removing bury.

Pentagons

Standard pentagons on caps and stems are 1-1/8" from point to flat. Other sizes available.

Hydrant Flange

Standard bottom flanges on hydrants have 11-1/2" O.D. and are furnished with size 1/4" holes drilled on a 9-3/8" bolt circle. Other drilling available.

Break-off Check Valve

Furnished on any Rich Wet Barrel California Type Hydrant. This provides instantaneous shut-off of water when hydrant is broken off by collision.

Wharf Hydrant Connection




The above hydrants can be furnished with a 2" or 2-1/2" pipe connection on top so that a wharf hydrant (angle hose valve) may be added for additional fire protection, for filling sprinkling equipment or other areas.

Protecting Nuts

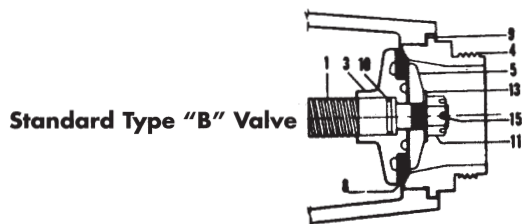
Cast iron pentagon protecting nuts on operating stems with corresponding size pentagon on hose caps can be supplied if specified.

Valve Assembly

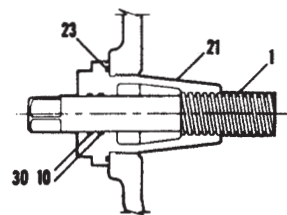
Valve assembly is attached to the stem with a bronze slotted nut and cotter pin. Leakage at the stem is prevented by the use of "O" ring seals. The heavy bronze stem is designed with coarse Acme threads for free and quick operation. Detailed drawing of valve assembly is shown below.

SPECIFICATIONS	F74	F75	F76
TYPES AND SIZES			
OUTLETS	DOUBLE 2 1/2"	TOP STEAMER AND ONE 2 1/2"	STEAMER AND TWO 2 1/2"
HEIGHT DIMENSIONS FROM BOTTOM FLANGE OF BODY			
OVER-ALL	24 1/2"	26 1/2"	29 3/4"
TOP OUTLET	17 1/2"	STEAMER 19"	23 1/2"
2ND OUTLET	13"	13"	19"
3RD OUTLET			STEAMER 13"

Hydrant Valve & Sleeve Assemblies



Standard Type "B" Valve



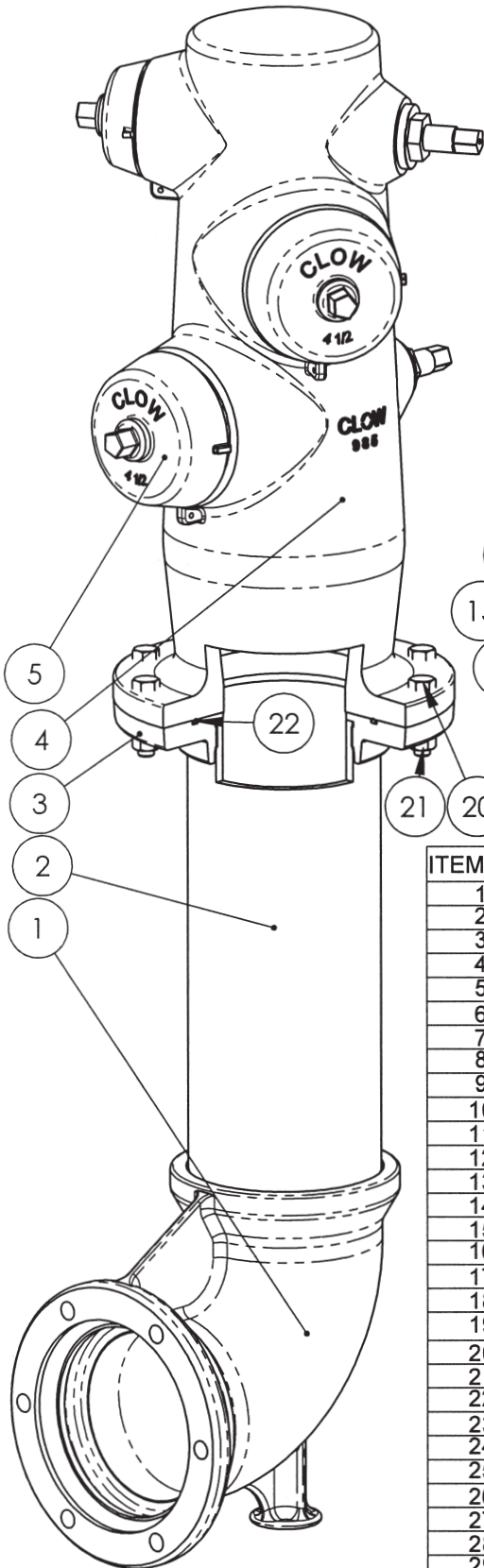
Sleeve

Parts Designation

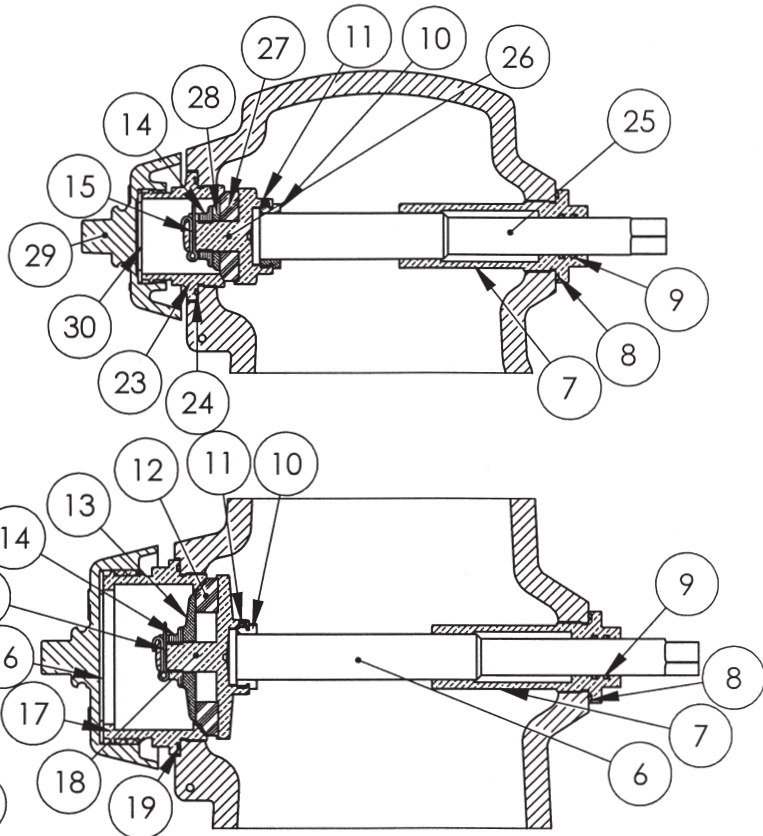
1. Stem 3. Carrier 4. Outlet 5. Valve Retainer 8. Valve Rubber 9. Outlet Gasket 10. O-Ring (stem)
11. Slotted Nut 13. Bearing Washer 15. Cotter Pin 21. Stem Sleeve 23. O-Ring (sleeve) 30. Back Up Washer

985/980 WET BARREL HYDRANT
MJ BURY INLET SHOWN

CLOW VALVE COMPANY



985 HYDRANT SHOWN



ITEM NO.	DESCRIPTION	MATERIAL	985 QTY.	980 QTY.
1	MJ Bottom	Ductile Iron	1	1
2	8" Pipe	Ductile Iron	1	1
3	Bury Upper Flange	Ductile Iron	1	1
4	Hydrant Nozzle Section	Ductile Iron	1	1
5	Pumper Nozzle Cap	Gray Iron	2	1
6	Lower/Middle Nozzle Stem	Brass	2	2
7	Stem Sleeve	Bronze	3	3
8	O-Ring - Stem Sleeve	Rubber	3	3
9	O-Ring - Stem	Rubber	6	6
10	Stem Nut	Brass	3	3
11	Set Screw	Stainless Steel	3	3
12	Valve Rubber - 4 1/2"	Rubber	2	1
13	Retainer - 4 1/2"	Bronze	2	1
14	Slotted Nut	Brass	3	3
15	Cotter Pin	Brass	3	3
16	Cap Gasket - 4 1/2"	Rubber	2	1
17	Nozzle - 4 1/2"	Brass	2	1
18	Carrier - 4 1/2"	Bronze	2	1
19	O-Ring - 4 1/2" Nozzle	Rubber	2	1
20	3/4" Hex Head Bolt	Stainless Steel	8	8
21	3/4" Hex Nut	Stainless Steel	8	8
22	O-Ring - Bury Upper Flange	Rubber	1	1
23	Nozzle - 2 1/2"	Brass	1	2
24	O-Ring - 2 1/2" Nozzle	Rubber	1	2
25	Upper Nozzle Stem	Brass	1	1
26	Carrier - 2 1/2"	Bronze	1	2
27	Valve Rubber - 2 1/2"	Rubber	1	2
28	Retainer - 2 1/2"	Bronze	1	2
29	Hose Nozzle Cap	Gray Iron	1	2
30	Cap Gasket - 2 1/2"	Rubber	1	2

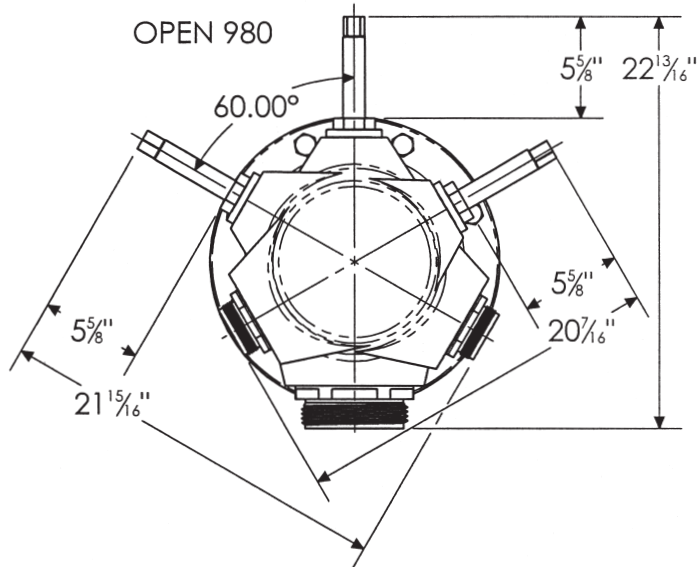
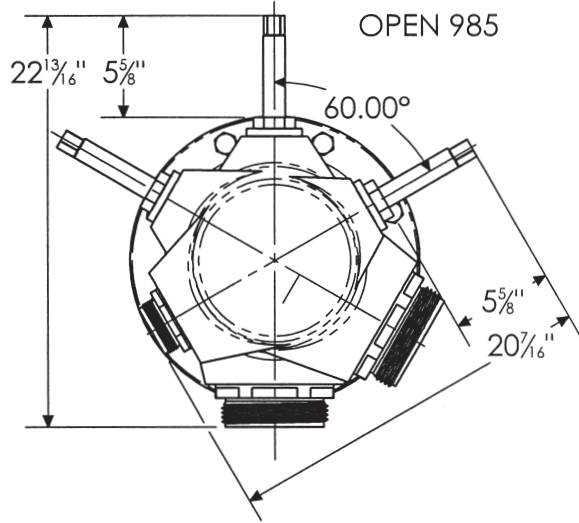
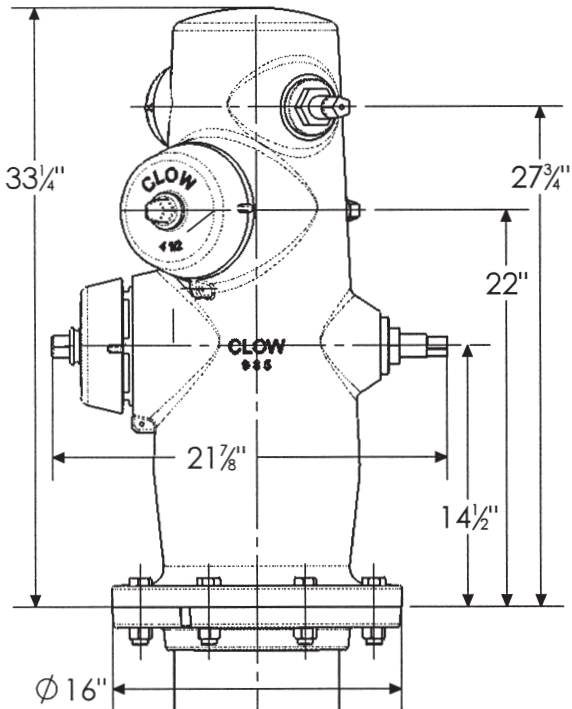
THIS HYDRANT DOES NOT HAVE A BREAK-OFF FEATURE AND MUST BE PROTECTED FROM ANY IMPACT

985/980 WET BARREL HYDRANT
DIMENSIONS

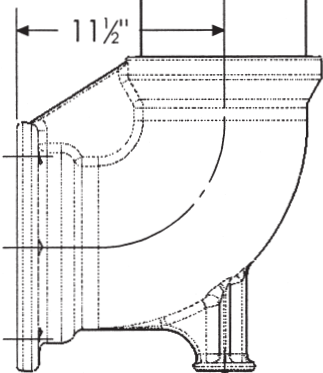
CLOW VALVE COMPANY

OVERALL HYDRANT WEIGHT:
(2' BURY DEPTH SHOWN ADD 37 LBS
FOR EACH ADDITIONAL FOOT OF BURY)

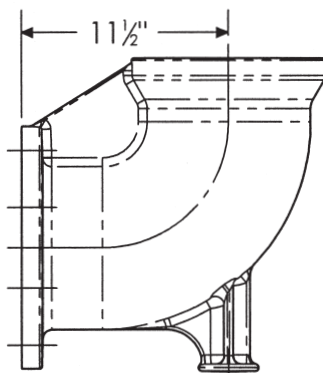
CONFIGURATION	OVERALL WEIGHT
985 MJ BOTTOM	647 LBS
985 FLANGE BOTTOM	638 LBS
985 TYTON BOTTOM	650 LBS
980 MJ BOTTOM	621 LBS
980 FLANGE BOTTOM	612 LBS
980 TYTON BOTTOM	624 LBS



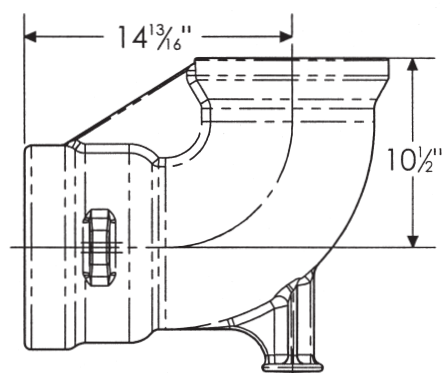
350 PSI Working Pressure



MJ BOTTOM



FLANGE BOTTOM



TYTON BOTTOM

THIS HYDRANT DOES NOT HAVE A BREAK-OFF FEATURE AND MUST BE PROTECTED AGAINST ANY IMPACT

90 SERIES
CLOW FIRE HYDRANT

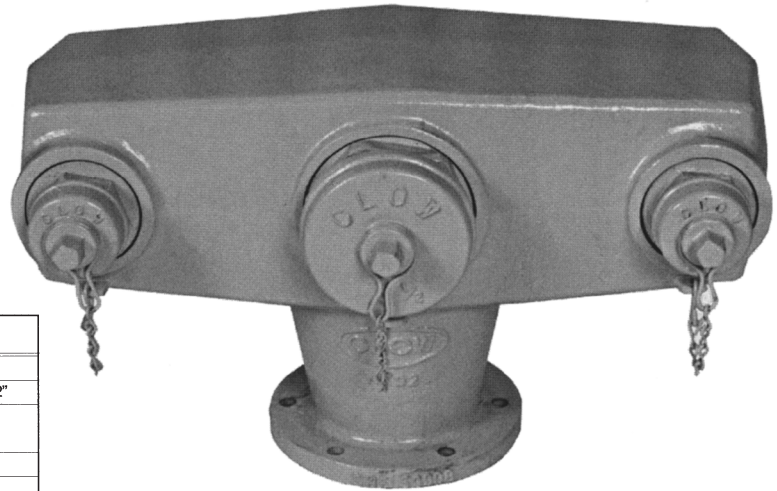
CLOW VALVE COMPANY

F-92

F-94



AWWA C503
Meet and exceed requirements



SPECIFICATIONS	92	94
OVERALL HEIGHT OF BODY	18-1/4"	18"
OVERALL WIDTH OF BODY	31-1/8"	22-1/2"
DISTANCE OF HOSE OUTLETS FOR SPANNER WRENCH CLEARANCE	12"	12"
DISTANCE FROM CENTER LINE OF HOSE		
OUTLET TO FACE OF BOTTOM FLANGE	13"	13"
NUMBER AND SIZE OF HOSE OUTLETS	2-2-1/2" 1-4" or 4-1/2"	1-2-1/2" 1-4" or 1-4-1/2"

NO. 92-94 - 2 way

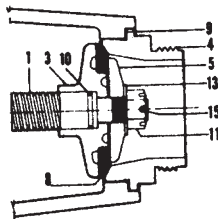
No. F92 (2) 2-1/2 1-4"
No. F94 (1) 2-1/2"
(1) 4"

HUB TYPE **MECHANICAL JOINT** **BURY LENGTH**
(AS SPECIFIED)

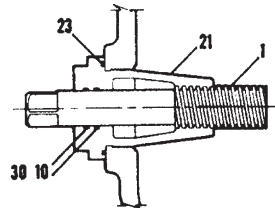
NOTE: 90 SERIES BURY HYDRANT FLANGE REGULARY FURNISHED
SLOTTED TO ACCOMMODATE PARALLEL ADJUSTMENT.
HYDRANT BREAK-OFF CHECK VALVE = 30 CAN BE SUPPLIED.

Hydrant Valve & Sleeve Assemblies

Standard Type "B" Valve



Sleeve



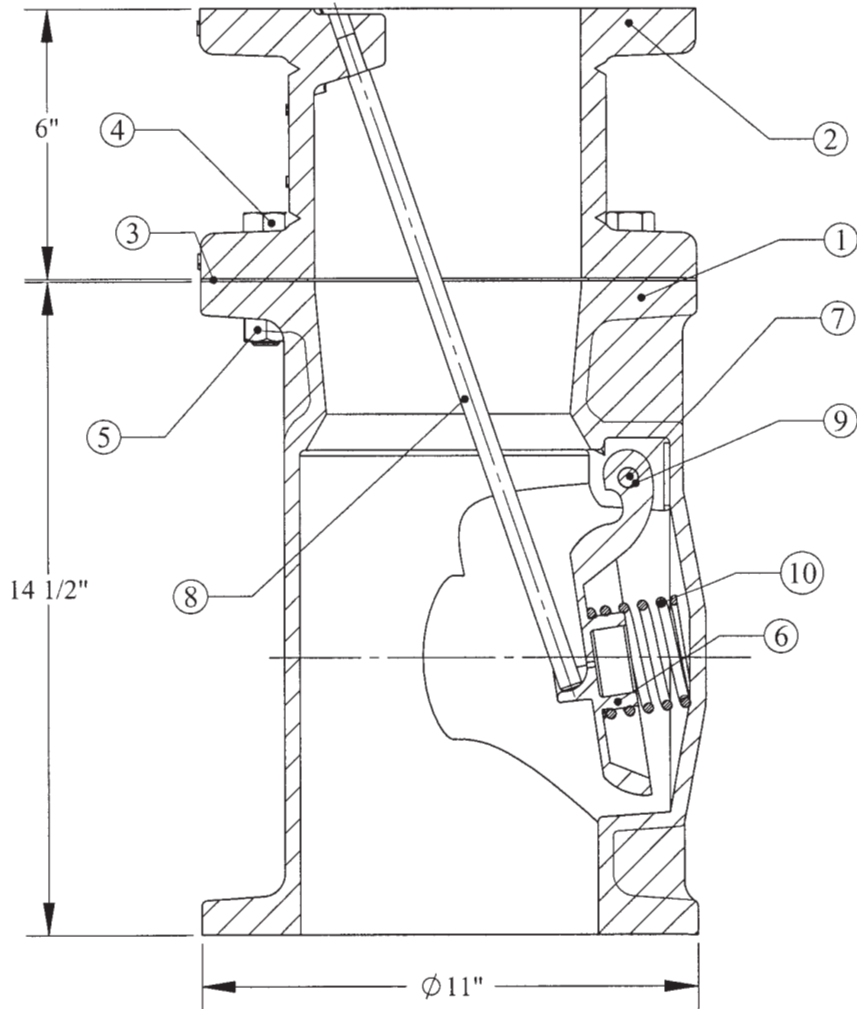
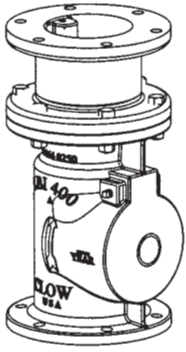
Parts Designation

- 1.** Stem **3.** Carrier **4.** Outlet **5.** Valve Retainer **8.** Valve Rubber **9.** Outlet Gasket **10.** O-Ring (stem)
11. Slotted Nut **13.** Bearing Washer **15.** Cotter Pin **21.** Stem Sleeve **23.** O-Ring (sleeve) **30.** Back Up Washer

BREAK OFF CHECK VALVE
MATERIAL LIST

CLOW VALVE COMPANY

MODEL LBI 400A



ITEM NO.	QTY.	MATERIAL	WEIGHT	DESCRIPTION
1	1	DI ASTM A536 65-45-12	64.092	Body
2	1	GI ASTM A 126B	44.964	Extension
3	1	CLOTH INSERTED RUBBER	0.135	Gasket
4	6	AISI 304 SS		5/8-11 X 3 Hex Head Bolt
5	6	AISI 304 SS		5/8" Hex Head Nut
6	1	BRASS ASTM B584 C83600	3.836	Flapper
7	1	AISI 304 SS	0.128	Pin
8	1	AISI 304 SS	1.098	Breakoff Bar
9	2	AISI 304 SS		1/4 NPT Pipe Plug
10	1	AISI 316 SS	0.392	Spring