ELKHART BRASS
Fire Fighting Equipment

How to determine what size your traditional Elkhart ball valve is and how to determine if it's a Model 800 or 2800

Photos of the valve in question can be valuable tools for identifying them. In a lot of cases the valve type can be determined in a photo but in most cases scale or size is hard to judge in a photo.

The valves size may be all you need if you are just looking for a field repair kit as the 800 series and 2800 series valves of the same size both use the same kit. They also use the same valve ball. However if you are replacing a metal ball with a new plastic ball on a 1.5" or 2.0" valve you will need to replace the actuator shaft with the current one. The blade end was changed because it's made for use with the plastic ball. The other sizes do not require upgrading the actuator shaft. When you are replacing the actuator shaft for the 896 or 893 a washer spacer should be included also. In order to provide the correct actuator parts you will need to determine if the valve is an 800 or 2800 series. The tips below will help you determine what size the valve is and if the valve is an 800 or a 2800 series.

The 891 & 892 valves share handle assemblies, so do the 893 & 896, the 2891 & 2892, and the 2893 & 2896. Visually identifying the handles types can narrow down the possibilities to just two and then getting the body length and bolt circle can allow you to make a positive identification.

Tips to determine valve size;

- Valve body may have model number cast on body
  - 1.5" would have 891 & 2891
  - 2.0" would have 892 & 2892
  - 2.5" would have 896 & 2896
  - 3.0" would have 893 & 2893
- Measure length of valve body and compare to chart on page 5.
  - Your measurements will not always exactly match the chart and may be plus or minus a little, so you may have to determine size based on closest to the dimension on the chart.
- Measure bolt circle (bolt centers on a diagonal) and compare to chart on page 5.
  - Your measurements will not always exactly match the chart and may be plus or minus a little, so you may have to determine size based on closest to the dimension on the chart.

- Find out what size hex and how many bolts attach each end cap.
    - 4 bolts with 7/16” (0.437) hex used on 1.0” & 1.5” valves
    - 4 bolts with 1/2” (0.500) hex used on 2.0” valves
    - 4 bolts with 9/16” (0.562) hex used on 2.5” valves
    - 6 bolts with 9/16” (0.562) hex used on 3.0” valves

Tips to determine valve series;

1.0 Valve

- 890 is the only style valve offered in the 1.0” size. See photo on page 7.
    - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.

1.5” valve

- Valve body may have 891 & 2891 cast on it. If so model can be determined based on handle type.

- 891 & 2891 --- Arrow on valve body points towards handle stop boss.

- 891 --------- See photos on page 7.
    - The 891 & 892 share the same handles.
    - Both “E” & “D” style handles will have a lollipop style handle body.
    - New actuator shaft p/n 63758000 is **required** when replacing metal valve ball with plastic valve ball.
- 2891 -------- See photos on page 8.
    - The 2891 & 2892 share the same handles.
    - Both “F” & “D” style handles will have a thicker handle body that has a washer in the top that is almost as large as the top of the handle body itself. This large washer should have the words “HYDRO-LOC” stamped on it.
    - The “D” style handle’s remote arm extends out from the bottom of the handle body not the center like the 2896 & 2893.
    - New actuator shaft p/n 63759001 is **required** when replacing metal valve ball with plastic valve ball.

2.0” valve

- Valve body may have 892 & 2892 cast on it. If so model can be determined based on handle type.

- 892 & 2892 --- Arrow on valve body points away from handle stop boss.

- 892 --------- See photos on page 7.
    - The 891 & 892 share the same handles.
    - Both “E” & “D” style handles will have a lollipop style handle body.
    - New actuator shaft p/n 63760001 is **required** when replacing metal valve ball with plastic valve ball.
- 2892 ------- See photos on page 8.
    - The 2891 & 2892 share the same handles.
    - Both “F” & “D” style handles will have a thicker handle body that has a washer in the top that is almost as large as the top of the handle body itself. This large washer should have the words “HYDRO-LOC” stamped on it.
    - The “D” style handle’s remote arm extends out from the bottom of the handle body not the center like the 2896 & 2893.
    - New actuator shaft p/n 63761001 is **required** when replacing metal valve ball with plastic valve ball.

2.5” valve

- Valve body may have 896 & 2896 cast on it. If so model can be determined based on handle type.

- 896 --------- See photos on page 7.
    - The 896 & 893 share the same handles.
    - Style E or F handle will have a fluted knob. F style handle knob will have the word “LOCK” with an arrow on the face.
    - Top of the handle body will be machined flat and it will have a star shaped hole in the center.
        - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.
        - If replacing actuator shaft include washer spacer p/n 63592001 for a brass handle or 63592005 for chrome.
- 2896 -------- See photos on page 8.
    - The 2896 & 2893 share the same handles.
    - Style F handles will have a round ball shaped knob.
    - The handle body will have a washer in the top that is almost as large as the top of the handle body itself. This large washer should have the words “HYDRO-LOC” stamped on it.
    - The “D” style handle’s remote arm extends out from the center of the handle body not the bottom like the 2891 & 2892.
        - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.

3.0" valve

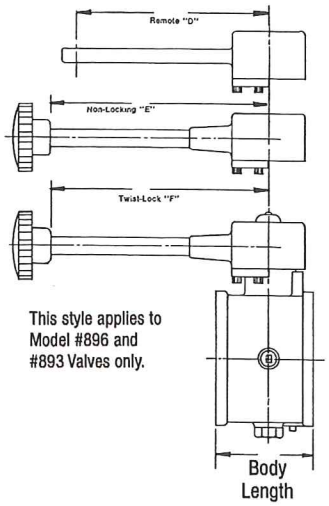
- Valve body may have 893 & 2893 cast on it. If so model can be determined based on handle type.

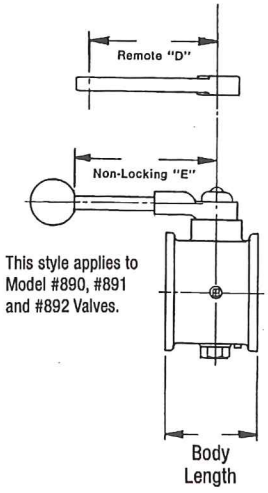
- 893 --------- See photos on page 7.
    - The 896 & 893 share the same handles.
    - Style E or F handle will have a fluted knob. F style handle knob will have the word "LOCK" with an arrow on the face.
    - Top of the handle body will be machined flat and it will have a star shaped hole in the center.
        - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.
        - If replacing actuator shaft include washer spacer p/n 63592001 for a brass handle or 63592005 for chrome.
- W - 893 --------- see photos on page 7.
    - The inlet end of body has a 8 hole octagon shaped flange
    - Top of the "D" handle body will be machined flat and it will have a star shaped hole in the center.
        - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.
- 2893 -------- See photos on page 8.
    - The 2896 & 2893 share the same handles.
    - Style F handles will have a round ball shaped knob.
    - The handle body will have a washer in the top that is almost as large as the top of the handle body itself. This large washer should have the words "HYDRO-LOC" stamped on it.
    - The "D" style handle's remote arm extends out from the center of the handle body not the bottom like the 2891 & 2892.
        - New actuator shaft is **not required** when replacing metal valve ball with plastic valve ball.

APPARATUS VALVES

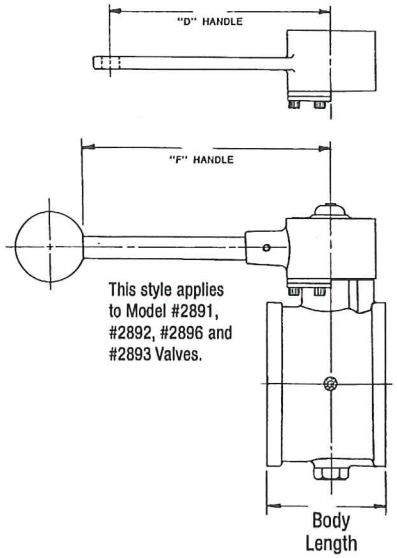
HANDLE OPTIONS

800 SERIES VALVES



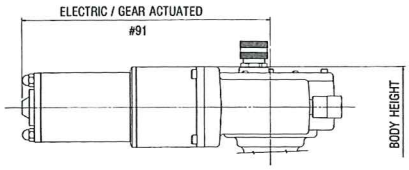


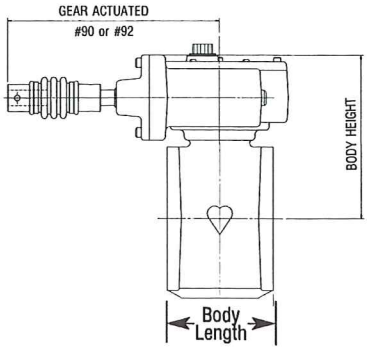
2800 SERIES VALVES



	BODY		HANDLES		
Size	Model	Length	"D"	"E"	"F"
1.0"	890	1.781"	3.5"	3.875"	—
	—	—	—	—	—
1.5"	891	2.5"	3.5"	3.875"	—
	2891	2.5"	3.5"	—	4.312"
2.0"	892	3"	3.5"	3.875"	—
	2892	3"	3.5"	—	4.312"
2.5"	896	3.375"	6.75"	8"	8"
	2896	3.375"	6.75"	—	8"
3.0"	893	4.234"	6.75"	8"	8"
	2893	4.234"	6.75"	—	8"

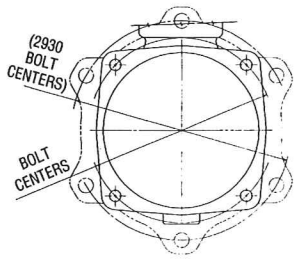
2900 SERIES VALVES





	BODY		ACTUATOR LENGTH			
Model	Size	Length	Height	#90	#91	#92
2915	1.5"	2.5"	4.63"	N/A	6.38"	N/A
2920	2"	3"	4.88"	N/A	6.38"	N/A
2925	2.5"	3.39"	5.16"	—	6.38"	—
2930	3"	4.23"	6"	6.83"	8.5"	6.82"
2940	4"	4.77"	6.31"	6.82"	8.5"	6.82"

BOLT CENTERS



SIZE	END CAP BOLT CENTERS	END CAP BOLT PATTERN
1"	2.719"	4 Bolt
1.5"	3.5"	4 Bolt
2"	4.19"	4 Bolt
2.5"	5.06"	4 Bolt
3"	6"	6 Bolt
4"	7.25"	4 Bolt

Fraction	Decimal	Fraction	Decimal
1/64	.015625	33/64	.515625
1/32	.03125	17/32	.53125
3/64	.046875	35/64	.546875
1/16	.0625	9/16	.5625
5/64	.078125	37/64	.578125
3/32	.09375	19/32	.59375
7/64	.109375	39/64	.609375
1/8	.125	5/8	.625
9/64	.140625	41/64	.640625
5/32	.15625	21/32	.65625
11/64	.171875	43/64	.671875
3/16	.1875	11/16	.6875
13/64	.203125	45/64	.703125
7/32	.21875	23/32	.71875
15/64	.234375	47/64	.734375
1/4	.25	3/4	.75
17/64	.265625	49/64	.765625
9/32	.28125	25/32	.78125
19/64	.296875	51/64	.796875
5/16	.3125	13/16	.8125
21/64	.328125	53/64	.828125
11/32	.34375	27/32	.84375
23/64	.359375	55/64	.859375
3/8	.375	7/8	.875
25/64	.390625	57/64	.890625
13/32	.40625	29/32	.90625
27/64	.421875	59/64	.921875
7/16	.4375	15/16	.9375
29/64	.453125	61/64	.953125
15/32	.46875	31/32	.96875
31/64	.484375	63/64	.984375
1/2	.50	1	1.00

890 1.0” Apparatus Valve

891 1.5” Apparatus Valve

892 2.0” Apparatus Valve

896 2.5” Apparatus Valve

893 3.0” Apparatus Valve

W-893 Special 3.0” Tank-to-Pump Valve

F

2891 1.5” Hydro-Loc® Apparatus Valve

F

2892 2.0” Hydro-Loc® Apparatus Valve

D

D

F

2896 2.5” Hydro-Loc® Apparatus Valve

F

2893 3.0” Hydro-Loc® Apparatus Valve

D

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