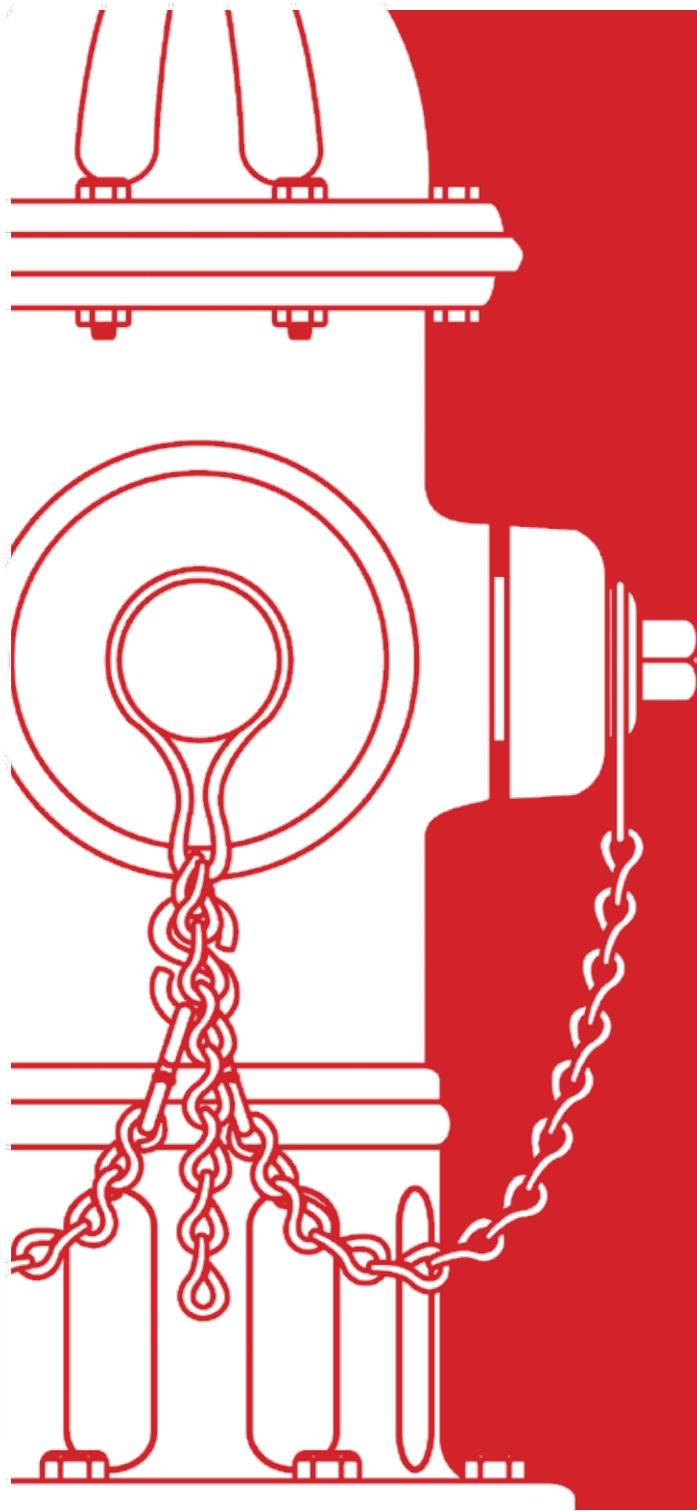


MUELLER®

Fire Hydrant Reference Manual



Mueller Co.

Reliable Connections™

Fire Hydrant Reference Material

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Fire Hydrant Identification

Fire Hydrant History



AWWA Dry Barrel Hydrants

Year of Manufacture	Hydrant Style	Model No.	Page
2014 - Present	Super Centurion® 350	A421 HP & A423 HP	5
1997 - Present	Super Centurion® 250	A421 & A423	6
2014 - Present	Super Centurion® 250	A454, A455, A458 & A459	6
2014 - Present	Super Centurion® 250 Snow Bury (UL Only)	A423	7
2007 - Present	Super Centurion® 250/HS	A421 & A423	8
2004 - Present	Super Centurion® 250 Monitor	A479	27
1988 - Present	Super Centurion® 200	A420, A422, A424 & A425	9
1988 - 1999	Super Centurion® 200 Spin-in	A465	10
1990 - 2007	Super Centurion® 200 Spin-in	A474	10
1989 - Present	Super Centurion® 200 Spin-in	A466, A467 & A468	10
1979 - Present	Modern Centurion®	A441 & A442	11
1975 - 1987	Centurion®	A420, A421, A422, A423 & A425	15
1980 - 1987	Centurion® Spin-in	A465, A466, A467 & A468	16
1973 - Present	2-1/8" Standard Post & Flush	A411 & A412	12
1973 - Present	5-1/4" Standard Flush	A415	13
1979 - 1991	Albertville Standard	A426, A427, A428 & A429	14
1979 - Present	Centurion® Stop-in Bonnet	A460, A461, A462 & A463	14
1981 - Present	Centurion® Modified Stop-in Bonnet	A470, A471, A472 & A473	14
1934 - 1980	Improved	A416	17
1969 - 1980	Modern Improved	A419	18
1964 - 1980	107	A417	19
1934 - 1980	Standard Post & Traffic	A413	20
1933	Columbian	-	21



UL/FM Dry Barrel Hydrants

Year of Manufacture	Hydrant Style	Model No.	Page
2014 - Present	Super Centurion® 350	A421 HP & A423 HP	23
1997 - Present	Super Centurion® 250	A421 & A423	24
2014 - Present	Super Centurion® 250	A454, A455, A458 & A459 (UL only)	24
2014 - Present	Super Centurion® 250 Snow Bury (UL Only)	A423	25
2007 - Present	Super Centurion® 250/HS (FM Only)	A421 & A423	8
2004 - Present	Super Centurion® 250 Monitor	A479	27
1989 - Present	Super Centurion® 200	A433 & A435	26
1989 - 1997	Super Centurion® 200	A434 & A436	26
1979 - Present	Modern Centurion®	A443 & A444	29
1979 - 1999	Modern Centurion® w/ Hose Gates	A445 & A446	29
1979 - 1988	Centurion®	A433, A434, A435 & A436	30
1979 - 1988	Centurion® w/ Hose Gates	A437, A438, A439 & A440	28/31
1953 - 1981	Chattanooga Style (Underwriter)	A400 & A401	32



AWWA Wet Barrel Hydrants

Year of Manufacture	Hydrant Style	Model No.	Page
1981 - 1985	Hi-Flow	A480	35
1966 - 1980	Hi-Flow	A450-A459	36

UL/FM Wet Barrel Hydrants

Year of Manufacture	Hydrant Style	Model No.	Page
1986 - 1996	Hi-Flow	A481	34

AWWA Dry Barrel Fire Hydrants



Mueller® Super Centurion® 350 Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2014 - Present	4-1/2"	A - 421 HP	3 - way
	5-1/4"	A - 423 HP	3 - way

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 350 WP, AWWA Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet.
- Triple Listed UL/FM/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 350 psig working pressure; 700 psig test pressure
- Same features as Super Centurion 250 but with:
 - High-strength fasteners
 - Thrust bearing in place of a thrust washer
 - Encapsulated reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange.
 - Single groove traffic flange



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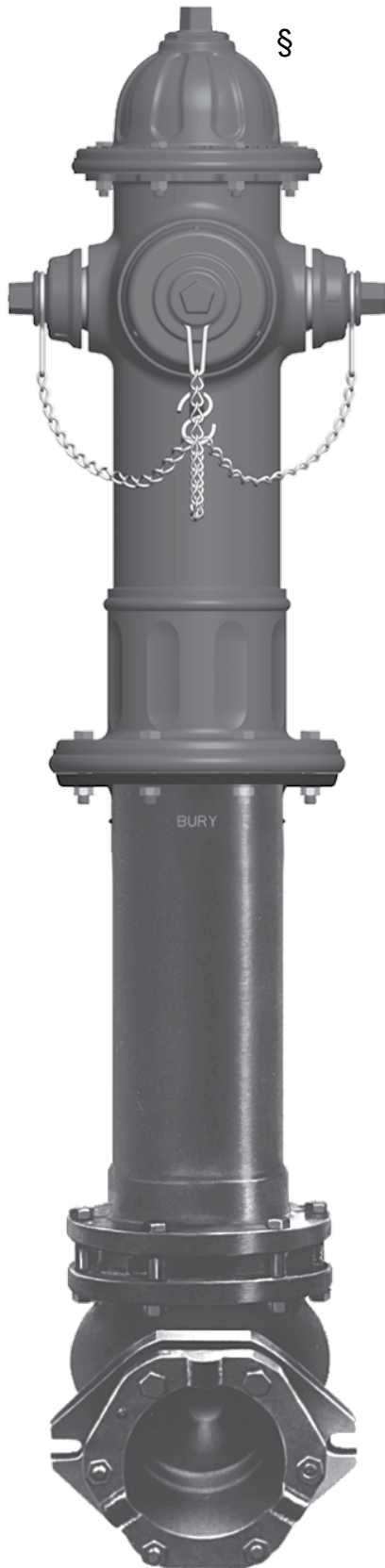
Mueller® Super Centurion® 250 Triple Listed Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1997 - Present	4-1/2"	A-421	3-way
	5-1/4"	A-423	3-way
2014 - Present	5-1/4"	A-454	3-hose
		A-455	4-hose
		A-458	1-pumper/3-hose
		A-459*	2-pumper/2-hose

* A-459 is UL but not FM

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 250 WP, AWWA-UL-FM, UL Listed Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet. (A-459 is AWWA-UL)
- Triple Listed UL/FM/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 250 psig working pressure; 500 psig test pressure
- Hose and pumper nozzles are threaded in with left hand thread and field replaceable.
- Hose and pumper nozzles on same plane.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.
- Upper and lower flanges of upper barrel have o-ring grooves. Upper flange of barrel is scalloped for easy removal.
- Stainless steel safety stem coupling.
- Approximately seventeen 1/4 turns to open.
- Hold down nut: OR has right-hand threads and OL has left-hand threads.
- Upper Stem

Valve Opening	Date of Manufacture	Overall Length
4-1/2" and 5-1/4"	1997 - Present	27-9/16"



Mueller® Super Centurion® 250 Snow Bury UL Listed Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2014 - Present	5-1/4"	A-423	3-way

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 250 WP, AWWA, UL Listed Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet.
- UL/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 250 psig working pressure; 500 psig test pressure
- Same features as standard Super Centurion 250
- 24" from Bury Line to Nozzle Centerline
- Order A423 with Option 901.



Mueller® Super Centurion® 250/HS Fire Hydrant with High Security Shoe

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2007 - Present	4-1/2"	A-421	3-way
	5-1/4"	A-423	3-way

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 250 WP, AWWA-FM, and High Security is cast on barrel between groundline flange and bonnet.
- AWWA-FM
- Ten year limited warranty
- 250 psig working pressure; 500 psig test pressure
- Available with 6" MJ or Flanged Shoe
- Hose and pumper nozzles are threaded in with left hand thread and field replaceable.
- Hose and pumper nozzles on same plane.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.
- Upper and lower flanges of upper barrel have o-ring grooves. Upper flange of barrel is scalloped for easy removal.
- Stainless steel safety stem coupling.
- Approximately seventeen 1/4 turns to open.
- Stainless steel identification tag noting HS-250 (optional); high security cast in upper barrel



§

Mueller® Super Centurion® 200 Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1988 - Present	4-1/2"	A-420	2-way
	4-1/2"	A-424	1 pumper
	5-1/4"	A-422	2-way
	5-1/4"	A-425	2 pumper

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet.
- AWWA C502
- Ten year limited warranty
- 200 psig working pressure; 400 psig test pressure
- Hose and pumper nozzles are threaded in with left hand thread and field replaceable.
- Combination hold-down nut and weather seal.
- Hose and pumper nozzles on same plane.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- E-Z grip bonnet.
- Approximately seventeen 1/4 turns to open.
- Bonnet and traffic flange gaskets changed to o-ring seal in 2011.
- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.

• Upper Stem

Valve Opening	Date of Manufacture	Overall Length
4-1/2" and 5-1/4"	1988 - Present	27-9/16"



Mueller® Super Centurion® 200 Spin-In Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1988 - 1999	4-1/2"	A-465	3-way
1988 - Present	4-1/2"	A-466	3-way
	5-1/4"	A-467	3-way
	5-1/4"	A-468	3-way
1990 - 2007	5-1/4"	A-474	2-pumper

- One piece lower barrel
- Hydrant designed to fit R.D. Wood-Mathews shoe; A-474 fits an East Jordan
- Less shoe, frost jacket and frost jacket cap.
- The A-465 fits the 4 1/2" bronze lined design R. D. Wood-Mathews Fire Hydrant having barrel dimensions of 7.250" O.D. x 4 TPI (threads per inch).
- The A-466 fits the 4" regular design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 6.250" O.D. x 4 TPI (threads per inch).
- The A-467 fits the 6" regular design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 8.875" O.D. x 4 TPI (threads per inch).
- The A-468 fits the 5" bronze lined design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 8.250" O.D. x 4 TPI (threads per inch). Seat ring removeable without removing lower barrel.
- 4 1/2" M.V.O. hydrants have 5 1/4" bonnets, upper barrels, safety flanges and lower barrels and are marked 5-1/4" even though the main valve opening is 4-1/2".

• 1997

Reversible main valve
Main Valve and Shoe Repair Kits will include both reversible main valve and the new lower valve plate in order to upgrade to 1997 models. Encapsulated main valve introduced in Feb. 2016.



§ **Mueller® Modern Centurion®
Fire Hydrant**

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1977 - Present	5-1/4"	A-441	2-way
	5-1/4"	A-442	3-way

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet.

- Contemporary style - no dome cap

- 1997

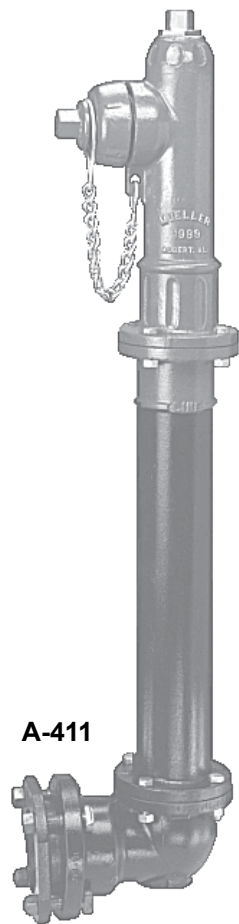
Reversible main valve
Stainless steel couplings marked "This End Up" - Arrow pointing in proper direction for installation.

- 1977 - 1996 - Kits

Main Valve and Shoe Repair Kits will include both the reversible main valve and the new lower valve plate to upgrade to 1997 models. Encapsulated main valve introduced in Feb. 2016.

- Pressure rating not marked on casting

March 2011 and newer - 250 psi
February 2011 and older - 200 psi



Mueller® Standard Post & Standard Flush Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
		new	old	
1973 - Present <i>(some records indicate A-411 were made as early as 1945)</i>	2-1/8"	A-411	A-24058	1-way post
	2-1/8"	A-411	A-24059	2-way post
	2-1/8"	A-412	A-24039	1-way traffic

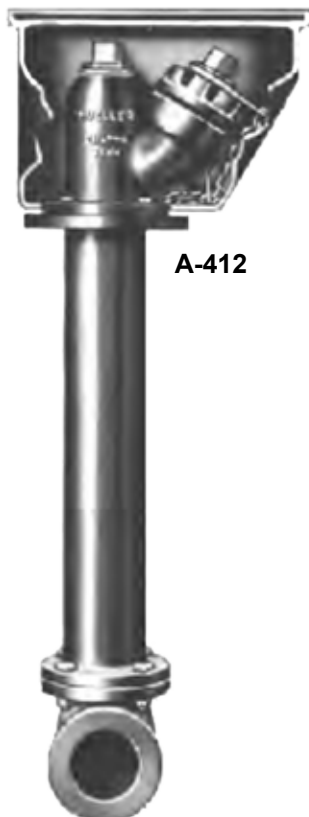
- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel.
- Wet top (no oil reservoir in bonnet).
- Oil screw on top of operating nut.
- Bolted barrel flanges at ground line.
- Does not have weather cap
- 2-1/2" nozzles
- Referred to as yard hydrant.
- Used for blow offs, sampling, irrigation, golf course watering, private estates, etc.
- Flush type has a cast iron box with lid.

A-411 - Post Type

1985 - Prior	Bolt-on bonnets and caulk-type nozzles.
1985	Shoe and seat ring changed.
	Bolt-on bonnets & thread-in nozzles - for a short period in 1985 some hydrants were produced in this manner.
1986 - Present	One piece upper section with threaded-in nozzles (Does not have separate bolted bonnet).

A-412 - Traffic Type

1973 - 1985	Caulk-type nozzles
1986 - Present	Thread-in nozzles



Shoe Type	Size			
	2"	2-1/4"	2-1/2"	3"
MJ	Current	X	N/A	Current
Flanged	X	N/A	N/A	Current
Screwed (NPT)	Current	N/A	Current	Current
Hub	X	N/A	N/A	X
Ring-Tite	N/A	N/A	N/A	X
Fluid-Tite	N/A	N/A	N/A	X



Standard



Centurion



Mueller® Standard Flush Type Fire Hydrant

Model	Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
			new	old	
Standard	1973 - 1987	4-1/4"	A-415	A-24040	3-way
		4-1/4"	A-415	A-24041	2-way
Standard	1973 - 2005	5-1/4"	A-415	A-24042	3-way
Centurion	2005 - Present	5-1/4"	A-415	N/A	3-way

- Mueller/Albertville, Ala, year of manufacture is cast on hydrant.
- Hydrant is enclosed in box with Fire Hydrant, Muller/Albertville, Ala cast on lid.
- One piece stem.
- Lid is not traffic rated.
- Rated at 200 psig working pressure; 400 psig testing pressure.
- In late 2005, redesigned to use Super Centurion® 250™ lower assembly.
- Uses Super Centurion 250 lower barrel, shoe, and valve assembly.
- Encapsulated main valve introduced in Feb. 2016.
- Anti-friction washer added June 2014.
- Uses A314 wrench

Note: current model nozzle caps are smooth, other wise similar to older model shown.

Albertville Standard & Stop-In Bonnet Hydrants

Albertville Standard Traffic Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1979 - 1991	4-1/2"	A-426	2-way
	4-1/2"	A-427	3-way
	5-1/4"	A-428	2-way
	5-1/4"	A-429	3-way

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between ground line flange and bonnet.
- Bonnet did not have a sealed reservoir and was lubricated with grease only.
- One-Piece cast iron Drain Ring/Drain Ring Housing
- Nozzles threaded into Upper Barrel.
- Bonnet used 8 bolts.
- Centurion[®] Traffic Flange.
- Mueller[®] Centurion replacement parts are compatible.

Centurion (Stop in Bonnet)

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles	Listings	Pressure Rating
1979 - N/A	4-1/2"	A-460	2-way	-	200
1979 - Present	4-1/2"	A-461	3-way	UL/FM/AWWA	250
	5-1/4"	A-462	2-way	AWWA	200
	5-1/4"	A-463	3-way	AWWA	250

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between ground line flange and bonnet.
- Same features as the Centurion hydrant with the addition of a Stop Nut inside bonnet to prevent over-torqueing of stem.
- Marked with an ID Tag to identify model of Stop-In Bonnet hydrant.

Centurion[®] (Modified Stop in Bonnet) Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles	Listings	Pressure Rating
1981 - N/A	4-1/2"	A-470	2-way	-	200
	4-1/2"	A-471	3-way	-	200
	5-1/4"	A-472	2-way	-	200
1981 - Present	5-1/4"	A-473	3-way	UL/FM/AWWA	250
2014 - Present	4-1/2"	A-461 HP	3-way	UL/FM/AWWA	350
	5-1/4"	A-473 HP	3-way	UL/FM/AWWA	350

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between ground line flange and bonnet.
- Same features as the Centurion hydrant with the addition of a Stop Nut inside bonnet to prevent over-torqueing of stem.
- Most Centurion hydrant replacement parts can be used for repairs, with the exception of the shorter Upper Stem and Operating Nut used in this model hydrant.
- Marked with an ID Tag to identify model of Stop-In Bonnet hydrant.



Mueller® Centurion® Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1975 - 1987	4-1/2"	A-420	2-way
	4-1/2"	A-421	3-way
	4-1/2"	A-424	1 pumper
	5-1/4"	A-422	2-way
	5-1/4"	A-423	3-way
	5-1/4"	A-425	2 pumper

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet.
- Hydrants have weather cap.
- Hydrants have hold-down nut with anti-friction washer.
- Arrow cast on bonnet indicates opening direction.
- Pumper nozzles on same plane as hose nozzles.

• Bonnet/Upper Stem

Valve Opening	Date of Manufacture	Cast on Bonnet	Overall Length
4-1/2"	1975 - 1976	S.R.	27-9/16"
4-1/2"	1977 - 1987	A.S.R	27-9/16"
5-1/4"	1975 - 1976	S.R.	29-1/32"
5-1/4"	1977 - 1986	A.S.R	28-13/32"
5-1/4"	1987	B.S.R	27-9/16"

• Nozzles

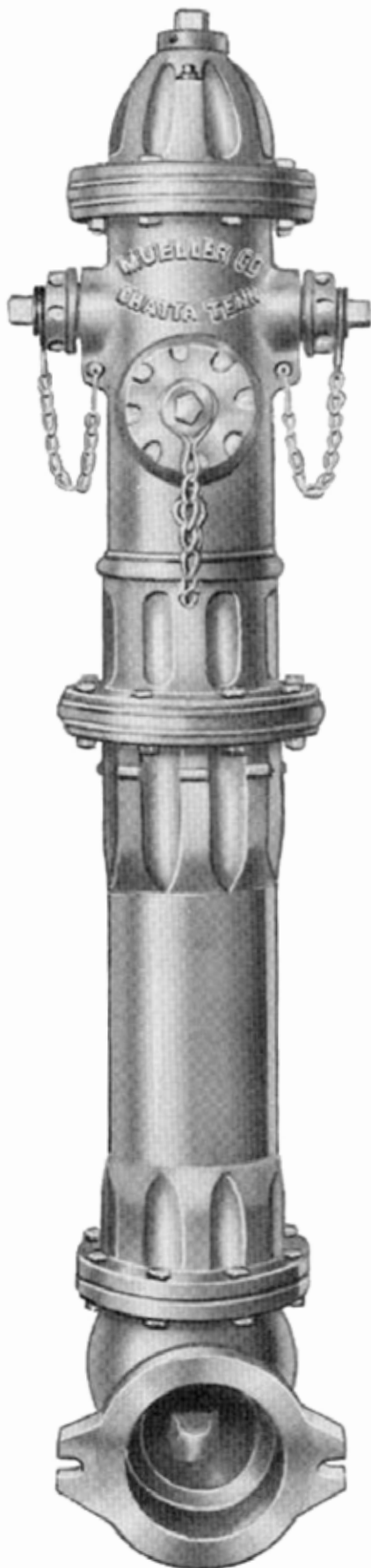
1975 - 1976	Hose and pumper nozzles thread to the right.
1977 - 1987	Hoze and pumper nozzles thread to the left.



Mueller[®] Centurion[®] Spin-In Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1980 - 1987	4-1/2"	A-465	3-way
	4-1/2"	A-466	3-way
	5-1/4"	A-467	3-way
	5-1/4"	A-468	3-way

- One piece lower barrel.
- Hydrant designed to fit R.D. Wood-Mathews shoe.
- Less shoe, frost jacket and frost jacket cap.
- The A-465 fits the 4 1/2" bronze lined design R. D. Wood-Mathews Fire Hydrant having barrel dimensions of 7.250" O.D. x 4 TPI (threads per inch).
- The A-466 fits the 4" regular design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 6.250" O.D. x 4 TPI (threads per inch).
- The A-467 fits the 6" regular design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 8.875" O.D. x 4 TPI (threads per inch).
- The A-468 fits the 5" bronze lined design R.D. Wood-Mathews Fire Hydrant having barrel thread dimensions of 8.250" O.D. x 4 TPI (threads per inch).
- 4 1/2" M.V.O. hydrants have 5 1/4" bonnets, upper barrels, safety flanges and lower barrels and are marked 5 1/4" even though the main valve opening is 4 1/2".



Mueller® Improved Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
		new	old	
1934 - 1980	4-1/4"	A-416	A-24009	3-way
	4-1/4"	A-416	A-24010	2-way
	4-1/2"	A-416	A-24012	3-way
	4-1/2"	A-416	A-24013	2-way
	5-1/4"	A-416	A-24015	3-way
	5-1/4"	A-416	A-24016	2-way
	5-1/4"	A-416	A-24017	3-way
	6-1/4"	A-416	A-24018	3-way
	6-1/4"	A-416	A-24019	2-way

- Mueller/Chattanooga, Tenn, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet. Also manufactured in Brea, CA.
- 150 psig pressure rating
- Oil filler plug on side of bonnet.

Date	Plug Location
1934 - 1947	Hydrant has conventional packing and has no external oil filler plug on bonnet (4 bolt bonnet needs to be removed to rill oil reservoir).
1948 - 1953	Bonnet has o-ring seals and no filler plug. O-rings are used in lieu of "conventional" packing.
1954	External oil filler plug. (bonnet does not have to be removed).
1962	Sealed reservoir bonnet. S.R. is cast on bonnet.

- Safety flange protection.
- Hose and pumper nozzles are caulked.
- Stem coupling

1934 - 1971	Brass safety stem coupling
1972 - 1980	Steel safety stem coupling

- Upper and lower stems

1934 - 1971	Threaded
1972 - 1980	Drilled

- Originally called the Mueller Columbian Improved when introduced.
- Approximately 15 1/2 turns to open.



Mueller[®] Modern Improved Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number (new / old)	Hydrant Styles
1969 - 1980	4-1/2"	A-419	2-way
	4-1/2"	A-419	3-way
	5-1/4"	A-419	3-way

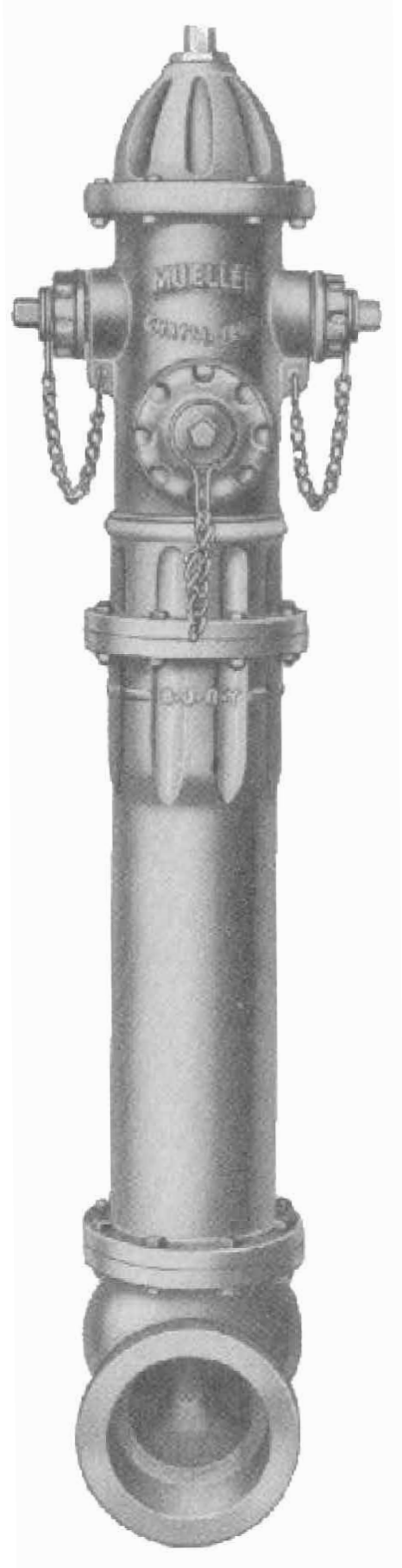
- Mueller/Chattanooga, Tenn, year of manufacture and main valve opening size is cast on the upper barrel.
- Contemporary style
- Barrel flange square
- No safety flange
- Used safety clips in lieu of breakable safety flange.
- Steel pin on safety coupling (replace with Centurion stem coupling).
- Oil filler plug located under weather cap.
- Caulked nozzles
- Upper can be replaced with a Modern Centurion upper.



Mueller® 107 Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
		new	old	
1964 - 1980	4"	A-417	A-24112	2-way
	4"	A-417	A-24113	3-way
	5"	A-417	A-24122	2-way
	5"	A-417	A-24123	3-way
	6"	A-417	A-24132	2-way
	6"	A-417	A-24133	3-way

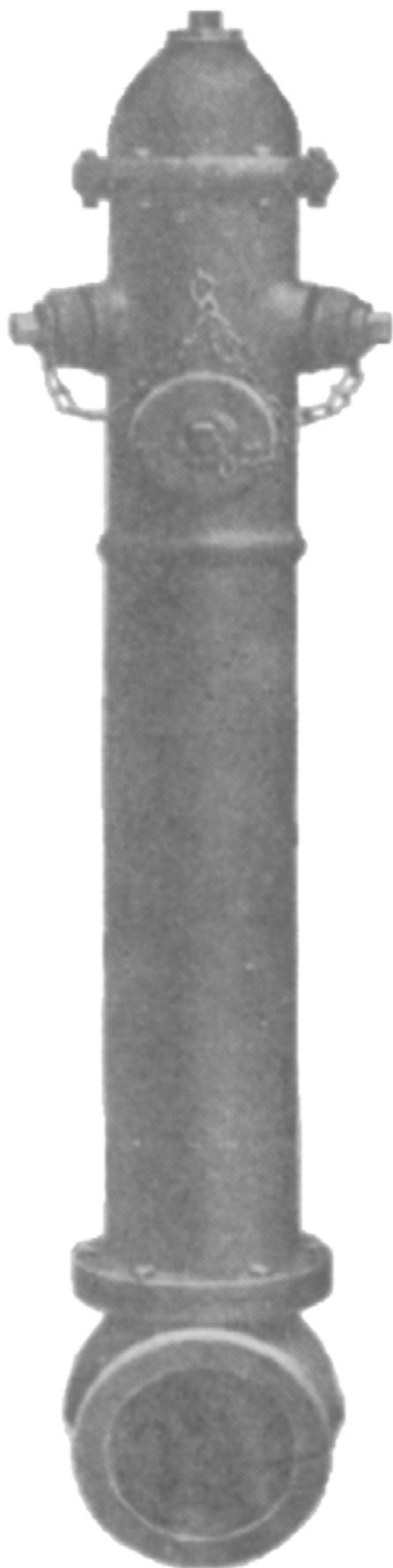
- Mueller/Chattanooga, Tenn, main valve opening size, model number 107 and year of manufacture is cast on the upper barrel between ground line flange and bonnet.
- Easily identified by even number valve opening.
- Grease lubricated
- No oil filler plug.
- Operating nut and weather shield are cast in one piece.
- Breakable safety flange at ground line (same as Improved).
- Stainless steel stem coupling (same as Centurion coupling).



Mueller® Standard Post and Standard Traffic Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number (new / old)		Hydrant Styles
		new	old	
1934 - 1980	4-1/4"	A-413	A-24005	3-way post
	4-1/4"	A-413	A-24006	2-way post
	4-1/4"	A-413		1 pumper post
	4-1/2"	A-413	A-24025	3-way post
	4-1/2"	A-413	A-24026	2-way post
	4-1/2"	A-414	A-24027	3-way traffic
	4-1/2"	A-414	A-24028	2-way traffic
	5-1/4"	A-413	A-24007	3-way post
	5-1/4"	A-413	A-24008	2-way post
	6-1/4"	A-413	A-24004	3-way post

- Mueller/Chattanooga, Tenn., main valve opening size and year of manufacture is cast on upper barrel between groundline flange and bonnet.
- Post style hydrant has no traffic feature.
- 150 psig pressure rating
- Traffic models have "T" cast on upper barrel.
- Grease lubricated - grease fill screw is on top of operating nut and hold down nut.
- Does not have a weather cap.
- Hydrant has two flanges that are attached with breakable bolts but it does not have a safety flange.
- Hose/pumper nozzles are caulked/leaded nozzles.
- Smooth flanges at bonnet and ground line.
- Bonnet has 6 bolts - Albertville Standard had 8 bolts (see page 14).



Columbian Fire Hydrant

Year of Manufacture	Main Valve Opening Size
1933	4-1/2"
	4-1/2"

Mueller Co. purchased Columbian Iron Works Co. in 1933. This acquisition added fire hydrants and valves to the Mueller® line. The Columbian hydrant became the Mueller Standard (Non-Traffic) Hydrant.

- No year of manufacture is cast on the hydrant.
- One piece barrel from bonnet to shoe.

UL/FM Dry Barrel Fire Hydrants

*Note: Open right and open left hydrants are listed under UL 246.
Open left hydrants are approved under FM 1510 (FM does not open right hydrants).*



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Mueller® Super Centurion® 350 Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2014 - Present	4-1/2"	A-421 HP	3-way
	5-1/4"	A-423 HP	3-way

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 350 WP, AWWA Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet.
- Triple Listed UL/FM/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 350 psig working pressure; 700 psig test pressure
- Same features as Super Centurion 250 but with:
 - High-strength fasteners
 - Thrust bearing in place of a thrust washer
 - Encapsulated reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange.
 - Single groove traffic flange



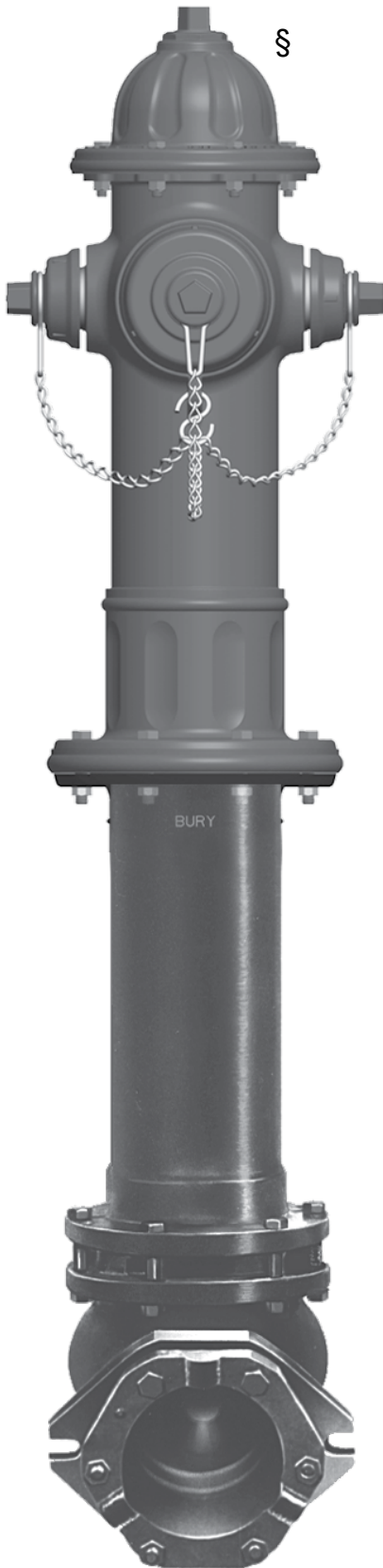
Mueller® Super Centurion® 250 Triple Listed Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1997 - Present	4-1/2"	A-421	3-way
	5-1/4"	A-423	3-way
2014 - Present	5-1/4"	A-454	3-hose
		A-455	4-hose
		A-458	1-pumper/3-hose
		A-459*	2-pumper/2-hose

* A-459 is UL but not FM

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 250 WP, AWWA-UL-FM, UL Listed Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet. (A-459 is AWWA-UL)
- Triple Listed UL/FM/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 250 psig working pressure; 500 psig test pressure
- Hose and pumper nozzles are threaded in with left hand thread and field replaceable.
- Hose and pumper nozzles on same plane.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.
- Upper and lower flanges of upper barrel have o-ring grooves. Upper flange of barrel is scalloped for easy removal.
- Stainless steel safety stem coupling.
- Approximately seventeen 1/4 turns to open.
- Hold down nut: OR has right-hand threads and OL has left-hand threads.
- Upper Stem

Valve Opening	Date of Manufacture	Overall Length
4-1/2" and 5-1/4"	1997 - Present	27-9/16"



Mueller® Super Centurion® 250 Snow Bury UL Listed Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2014 - Present	5-1/4"	A-423	3-way

- Mueller/Albertville, Ala, year of manufacture, main valve opening size, 250 WP, AWWA, UL Listed Fire Main Hydrant, and 584 N is cast on barrel between groundline flange and bonnet.
- UL/AWWA (4" shoe AWWA only)
- Ten year limited warranty
- 250 psig working pressure; 500 psig test pressure
- Same features as standard Super Centurion 250
- 24" from Bury Line to Nozzle Centerline
- Order A423 with Option 901.



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Mueller® UL/FM Super Centurion® Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number (new / old)	Hydrant Styles
1989 - 1997	4-1/2"	A-434	3-way
	5-1/4"	A-436	3-way
1989 - Present	4-1/2"	A-433	2-way
	5-1/4"	A-435	2-way

- Mueller/Albertville, Ala., year of manufacture and main valve opening size is cast on upper barrel between groundline flange and bonnet.

- UL/FM is cast on upper barrel.
- Combination hold down nut and weather seal.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- E-Grip bonnet
- 200 psig working pressure; 400 psig test pressure.
- Pumper nozzle is on same plan as hose nozzle.

- Test plugs

1989 - 1995	All hydrants have test plugs
1996 - Present	Test plug optional

- 1997

(4-1/2") A-434 & (5-1/4") A-436 replaced with (4-1/2") A-421 and (5-1/4") A-423 Triple Listed hydrants.

- Upper Stem

Valve Opening	Date of Manufacture	Overall Length
4-1/2" and 5-1/4"	1989 - Present	27-9/16"

- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.

- 4" shoe AWWA only



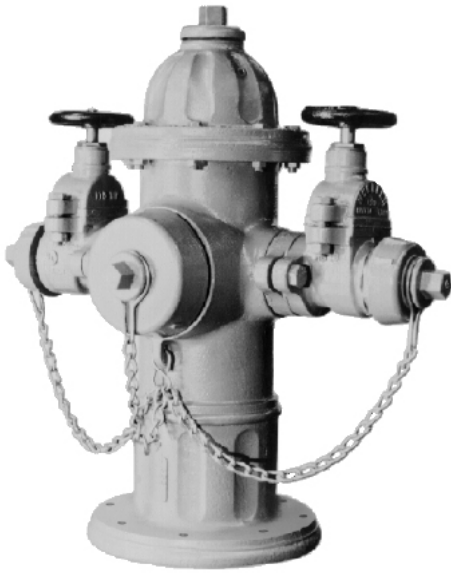
Mueller® UL/FM Super Centurion® Monitor Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
2004 - Present	5-1/4"	A-479	3-way

- Mueller/Albertville, Ala., year of manufacture and main valve opening size is cast on upper barrel between groundline flange and bonnet.
- UL/FM is cast on upper barrel.
- Combination hold down nut and weather seal.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- E-Grip bonnet
- 250 psig working pressure; 500 psig test pressure.
- Pumper nozzle is on same plan as hose nozzle.
- Upper Stem

Valve Opening	Date of Manufacture	Overall Length
5-1/4"	2004 - Present	27-9/16"

- Monitor has 4" ANSI/ASME B16.1 Class 125 outlet
- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.
- 4" shoe AWWA only



Mueller® UL/FM Super Centurion® Fire Hydrant with Independent Hose Gate Valves

Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
		Revised with Option 370	old	
1997 - Present	4-1/2"	A-433	A-437	2-way
	4-1/2"	A-421	A-438	3-way
	5-1/4"	A-435	A-439	2-way
	5-1/4"	A-423	A-440	3-way

- Mueller/Albertville, Ala., year of manufacture and main valve opening size is cast on upper barrel between groundline flange and bonnet.

- Old Catalog numbers were used from 1989 to 1996.
- UL/FM is cast on Upper Barrel.
- A-421 & A-423 are Triple listed (4" shoe AWWA only).
- Hydrants have independent hose gate valves attached to hydrant. Order Option 370 to hydrant order (2 hose gate valves in place of hose nozzles).
- Combined hold-down nut and weather shield.
- Arrow cast on bonnet indicates opening direction.
- B.S.R. is cast on bonnet.
- Pumper nozzle on same plane as hose nozzles.

- Test plugs

1989 - 1995	All hydrants have test plugs
1996 - Present	Test plug optional

- Upper Stem

Valve Opening	Date of Manufacture	Overall Length
4-1/2" and 5-1/4"	1989 - Present	27-9/16"

- Reversible main valve. Main valve is easily removed from either the bonnet flange or ground line flange. Encapsulated Main Valve introduced in Feb. 2016.



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Mueller® UL/FM Modern Centurion® Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1979 - 1999	5-1/4"	A-445	2-way with Hose Gate
	5-1/4"	A-446	3-way with Hose Gate
1979 - Present	5-1/4"	A-443	2-way
	5-1/4"	A-444	3-way

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet.
- Contemporary style - no dome cap
- Available with Hose Gate as an option.
- 175 psig pressure rating

- 1997

Reversible main valve. Encapsulated Main Valve introduced in Feb. 2016.

Stainless steel couplings marked "This End Up" - Arrow pointing in proper direction for installation.

- 1977-1996 - Kits

Main Valve and Shoe Repair Kits will include both the reversible main valve and the new lower valve plate to upgrade to 1997 models.



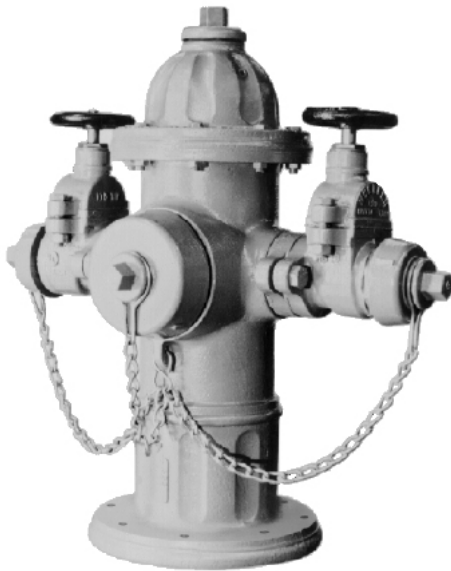
Mueller® UL/FM Centurion® Fire Hydrant

Year of Manufacture	Main Valve Opening Size	Catalog Number	Hydrant Styles
1979 - 1988	4-1/2"	A-433	2-way
	4-1/2"	A-434	3-way
	5-1/4"	A-435	2-way
	5-1/4"	A-436	3-way

- Mueller/Albertville, Ala, year of manufacture and main valve opening size is cast on barrel between groundline flange and bonnet.
- Replaced by Super Centurion in 1989 (see page 25).
- UL/FM is cast on upper barrel.
- Pumper nozzles on same plane as hose nozzles.
- Hydrants have test plugs.
- Hydrants have weather cap.
- Hydrants have hold-down nut with anti-friction washer.
- Arrow cast on bonnet indicates opening direction.
- 175 psig working pressure; 350 psig test pressure.

• Bonnet/Upper Stem

Valve Opening	Date of Manufacture	Cast on Bonnet	Overall Length
4-1/2"	1979 - 1987	A.S.R.	27-9/16"
4-1/2"	1988	B.S.R	27-9/16"
5-1/4"	1979 - 1986	A.S.R.	28-13/32"
5-1/4"	1987	A.S.R	27-9/16"
5-1/4"	1988	B.S.R	27-9/16"



Mueller® UL/FM Centurion® Fire Hydrant with Independent Hose Gate Valves

Year of Manufacture	Main Valve Opening Size	Catalog Number (new / old)	Hydrant Styles
1979 - 1988	4-1/2"	A-437	2-way
	4-1/2"	A-438	3-way
	5-1/4"	A-439	2-way
	5-1/4"	A-440	3-way

- Mueller/Albertville, Ala., year of manufacture and main valve opening size is cast on upper barrel between groundline flange and bonnet.
- 200 psig pressure rating.
- UL/FM is cast on Upper Barrel.
- Pumper nozzle on same plane as hose nozzles.
- Hydrants have test plugs.
- Hydrants have independent hose gate valves attached to hydrant.
- Hydrants have weather cap.
- Hydrants have hold down nut and anti-friction washer.
- Arrow cast on bonnet indicates opening direction.
- Centurion hydrants are still available with hose gates as an option.

• Bonnet/Upper Stem

Valve Opening	Date of Manufacture	Cast on Bonnet	Overall Length
4-1/2"	1979 - 1987	A.S.R.	27-9/16"
4-1/2"	1988	B.S.R	27-9/16"
5-1/4"	1979 - 1986	A.S.R.	28-13/32"
5-1/4"	1987	A.S.R	27-9/16"
5-1/4"	1988	B.S.R	27-9/16"

Mueller[®] UL Chattanooga Style Fire Hydrant (aka Underwriter Hydrant)



Year of Manufacture	Main Valve Opening Size	Catalog Number		Hydrant Styles
		new	old	
1953 - 1979	4-1/2"	A-400	A-20024	2-way & 3-way
	5-1/4"	A-400	A-20030	2-way & 3-way
	4-1/2"	A-401	A-20026	2-way
	5-1/4"	A-401	A-20035	2-way & 3-way
	6-1/4"	A-401	A-20040	3-way & 3 hose

- A-400 has threaded nozzles; A-401 included Hose Gate Valves.
- Mueller/Chattanooga, Tenn., year of manufacture and main valve opening size is cast on upper barrel.
- SH-FM is cast on upper barrel.
- Hydrants have test plugs.
- Pumper nozzle is lower than hose nozzle.
- Hose/pumper nozzles are caulked/lead.
- 150 psig pressure rating.
- Used A-20020 Hose Gate Valve; replace with A-373
- Changed to 2-piece design with upper barrel and bonnet in 1965. Removed SH.
- Prior to 1953 the hydrant was called the Mueller Columbian Underwriter hydrant.

Hi-Flo Wet Barrel Fire Hydrants

Note: For new wet barrel hydrants, contact your sales representative or our customer service center.



Mueller[®] Hi-Flo Wet Barrel Fire Hydrant (Triple Listed, AWWA UL & FM Approved)

Year of Manufacture	Catalog Number	Hose Nozzles		Pumper Nozzles	
		Number	Size	Number	Size
1986 - 1996	A-481-E	1	2-1/2"	1	4"
	A-481-F	1	2-1/2"	1	4-1/2"
	A-481-G	2	2-1/2"	1	4"
	A-481-H	2	2-1/2"	1	4-1/2"

- Mueller/Albertville, Ala., year of manufacture and A-481 is cast on hydrant.
- One piece design.



Mueller® Hi-Flo Wet Barrel Fire Hydrant

Year of Manufacture	Catalog Number	Hose Nozzles		Pumper Nozzles	
		Number	Size	Number	Size
1981 - 1985	A-480-A	2	2-1/2"	-	-
	A-480-B	1	2-1/2"	1	4"
	A-480-C	1	2-1/2"	1	4-1/2"
	A-480-D	2	2-1/2"	-	-
	A-480-E	1	2-1/2"	1	4"
	A-480-F	1	2-1/2"	1	4-1/2"
	A-480-G	2	2-1/2"	1	4"
	A-480-H	2	2-1/2"	1	4-1/2"
	A-480-J	1	2-1/2"	2	4"
	A-480-K	1	2-1/2"	2	4-1/2"

Catalog Number	UL	FM	AWWA
A-480-A	•	•	•
A-480-B	•		•
A-480-C			•
A-480-D	•	•	•
A-480-E	•		•
A-480-F	•		•
A-480-G	•	•	•
A-480-H	•	•	•
A-480-J			•
A-480-K			•

- Mueller/Albertville, Ala., year of manufacture and A-480 is cast on hydrant.
- Two piece design.



Mueller® Hi-Flo Wet Barrel Fire Hydrant

Year of Manufacture	Catalog Number
1966 - 1980	A-450
	A-451
	A-452
	A-453
	A-454
	A-455
	A-456
	A-457
	A-458
	A-459

- Mueller, Brea, CA and year is cast on hydrant.

Fire Hydrant Literature

Fire Hydrant Literature

*Forms are currently available for download at www.muellercompany.com

Hydrant	Description	Form Number
Mueller Super Centurion[®]	Mueller [®] Super Centurion [®] 350 Fire Hydrant Hydrant Operating Instructions*	12860
	Mueller Super Centurion Fire Hydrant Hydrant Operating Instructions*	11929
	Mueller Super Centurion 350 Fire Hydrant Brochure*	12843
	Mueller Super Centurion 250™ Fire Hydrant Brochure*	10818
	Mueller Super Centurion 350 Fire Hydrant Specification Sheet*	12858
	Mueller Super Centurion 250 Fire Hydrant Specification Sheet*	11937
	Mueller Super Centurion 200 Fire Hydrant Specification Sheet*	11328
	Mueller Super Centurion 250 Fire Hydrant Parts Poster*	11966
	Tamper-Resistant Hydrant Hold Down Nut	11681
	Installing Tamper-Proof Operating Mechanism	11248
	Hydrant Nozzle Discharge Table (Pito Chart)	10656
	Hydrant Record Index Card	10097
	Fire Hydrant Security Solutions*	12523
	Material Safety Data Sheet - Hydrant Oil*	-
	Hydrant Maintenance Video	-
Fire Hydrant Reference Manual*	12000	
Mueller Centurion[®]	Mueller Centurion Fire Hydrant Parts Wall Poster	10724
Mueller Modern Centurion[®]	Mueller Modern Centurion Operating Instructions*	10642
	Mueller Modern Centurion Fire Hydrant Brochure*	10819
	Mueller Modern Centurion Hydrant Specification Sheet*	10641
Mueller Improved	Improved Fire Hydrant Parts Wall Poster	9646
	Improved Fire Hydrant Maintenance Operating Instructions*	8520
Mueller Standard	Mueller Standard Hydrant Maintenance Instructions	9130
Mueller 107	Mueller 107 Fire Hydrant Operating Instructions	9272

Fire Hydrant Ordering Information

AWWA - UL/FM Fire Hydrants

Required information to order Fire Hydrants

Hydrant Type	<input type="checkbox"/> A-421	<input type="checkbox"/> A-423	<input type="checkbox"/> Other _____	
Opening Direction	<input type="checkbox"/> Left	<input type="checkbox"/> Right		
Lower Barrel	Feet _____	Inches _____		
Shoe	<input type="checkbox"/> 6" MJ with ACC	<input type="checkbox"/> 6" MJ less ACC	<input type="checkbox"/> Other _____	
Operating Nut	<input type="checkbox"/> 1-1/2" Pent	<input type="checkbox"/> 1-1/4" Square	<input type="checkbox"/> Other _____	
Upper Barrel	<input type="checkbox"/> 4-way	<input type="checkbox"/> 3-way	<input type="checkbox"/> 2-way	<input type="checkbox"/> 1-way
Hose Nozzle Size	<input type="checkbox"/> 2-1/2" NST	<input type="checkbox"/> _____		
Pumper Nozzle Size	<input type="checkbox"/> 4-1/2" NST	<input type="checkbox"/> _____		
Paint Color	<input type="checkbox"/> Red	<input type="checkbox"/> Yellow	<input type="checkbox"/> Other _____	
Drains	<input type="checkbox"/> Open	<input type="checkbox"/> Closed	<input type="checkbox"/> _____	
Special Options	<input type="checkbox"/> _____			
Stencil	<input type="checkbox"/> _____			

Spin-In Fire Hydrants

(less shoe, frost jacket and frost jacket cap)

Required information to order Spin-In Fire Hydrants

Hydrant Type	<input type="checkbox"/> A-466	<input type="checkbox"/> A-467	<input type="checkbox"/> A-468
Opening Direction	<input type="checkbox"/> Left	<input type="checkbox"/> Right	
Lower Barrel	Feet _____	Inches _____	
Operating Nut	<input type="checkbox"/> 1-1/2" Pent	<input type="checkbox"/> Other _____	
Hose Nozzle Size	<input type="checkbox"/> 2-1/2" NST	<input type="checkbox"/> Other _____	
Pumper Nozzle Size	<input type="checkbox"/> 4-1/2" NST	<input type="checkbox"/> Other _____	
Paint Color	<input type="checkbox"/> Red	<input type="checkbox"/> Yellow	<input type="checkbox"/> Other _____
Special Options	<input type="checkbox"/> _____		
Stencil	<input type="checkbox"/> _____		

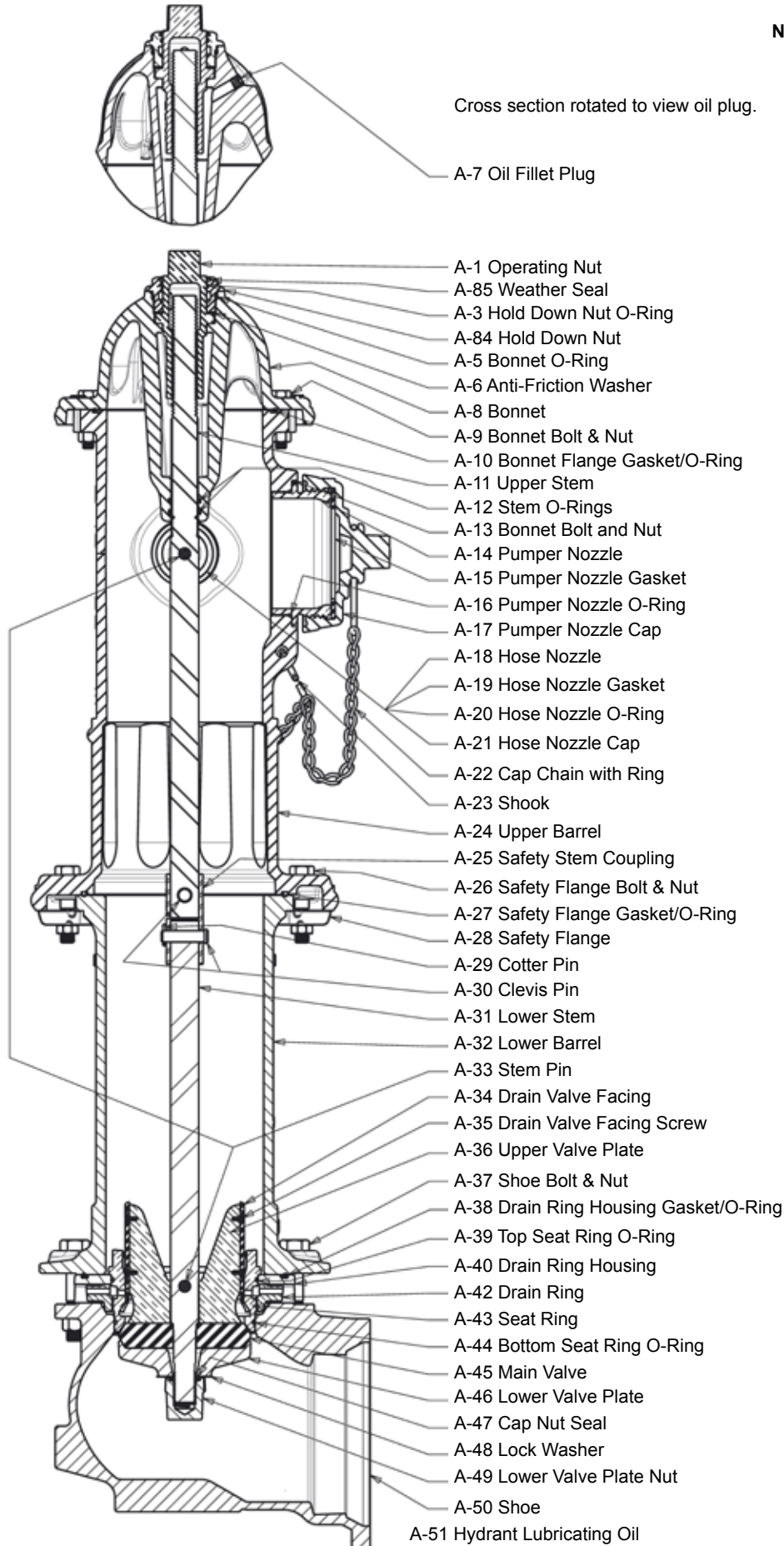
Wet Barrel Fire Hydrants

For more information contact

James Jones Company
1470 South Vintage Avenue
Ontario, CA 91761
Phone: 800.523.8618
Fax: 800.246.5663
www.joneswaterproducts.com

Fire Hydrant Parts

Not Shown: A-2 and A-41



Mueller[®] Super Centurion[®] 250, Super Centurion 200, and Centurion[®] Fire Hydrant Parts

Part numbers listed below are for 1-1/2" pent, National Standard Thread (NST). Contact Customer Service for all sizes and thread gauges. Super Centurion 350 hydrant parts - contact Customer Service for part numbers when replacing A-6, A-9, A-26, A-28, A-37, A-45, A-50, and A-84.

Reference Number	Description	1975 - 1987 4-1/2" and 5-1/4"	1988 - Present 4-1/2" and 5-1/4"
A-1	Operating Nut - 1 1/2" Pent. <i>(Contact Customer Service for part number for all other sizes.)</i>	175234 (left)	146440 (left)
		175308 (right)	146441 (right)
A-2	Weather cap	142818 (left)	Weather cap not used on Super Centurion 200
		142819 (right)	

		1975 - Present 4-1/2" and 5-1/4"	
A-3	Hold down nut o-ring	194898	
		1988 - Present 4-1/2" and 5-1/4"	
A-4	Hold Down Nut w/Anti Friction Washer	281951 (left)	Replaced w/A-84
		281952 (right)	A-85

		1975 - Present 4-1/2" and 5-1/4"	
A-5	Bonnet o-ring	142779	
A-6	Anti-friction washer	195546	
A-7	Oil plug	194932	
A-8	Bonnet	145703 (left)	
		145704 (right)	
A-9	Bonnet bolt and nuts (8 required)	280007	

		1975 - 1996 4-1/2" and 5-1/4"	1997 - Later 4-1/2" and 5-1/4"
A-10	Bonnet gasket / O-ring	198357	190348

		1975 - 1987 4-1/2"	1988 - Present 4-1/2"	1975-1976 5-1/4"	1977 - 1986 5-1/4"	1987 - Present 5-1/4"
A-11	Upper stem	287017 (left)	184092 (left)	184094 (left)	184193 (left)	184092 (left)
		287018 (right)	184093 (right)	184095 (right)	184194 (right)	184093 (right)
	Overall length	27-9/16"	27-9/16"	29-1/32"	28-13/32"	27-9/16"

		1975 - Present 4-1/2" and 5-1/4"
A-12	Stem o-ring (2 required)	194514
A-13	Nozzle lock	143137

		1975 - 1976 4-1/2" and 5-1/4"	1977 - Present 4-1/2" and 5-1/4"
A-14	Pumper Nozzle - 4 1/2" NST Threads <i>(Contact Customer Service for other thread gauges)</i>	142761 - 40560 Nozzles Thread Right	143124 - 40560 Nozzles Thread Left

		1975 - 2002 4-1/2" and 5-1/4"	2003 - Present 4-1/2" and 5-1/4"
A-15	Pumper Nozzle Cap Gasket - 4 1/2" NST <i>(Gaskets vary according to nozzle size.)</i>	192345	290273
A-16	Pumper nozzle o-ring	142781	142781
A-17	Pumper Nozzle Cap - 4 1/2" NST 1 1/2" Pent. <i>(Contact Customer Service for part number for all other sizes)</i>	158668-40560	158668-40560

		1975 - 1976 4-1/2" and 5-1/4"	1977 - Present 4-1/2" and 5-1/4"
A-18	Hose Nozzle - 2 1/2" NST <i>(Contact Customer Service for other thread gauges.)</i>	142762 - 75298 Nozzles Thread Right	143116 - 75298 Nozzles Thread Left

		1975 - 2002 4-1/2" and 5-1/4"	2003 - Present 4-1/2" and 5-1/4"
A-19	Hose Nozzle Cap Gasket - 2 1/2" NST <i>(Contact Customer Service for other thread gauges.)</i>	192342	290272
		1975 - Present 4-1/2" and 5-1/4"	
A-20	Hose nozzle o-ring	142847	

		1975 - 2002 4-1/2" and 5-1/4"	2003 - Present 4-1/2" and 5-1/4"
A-21	Hose Nozzle Cap - 2 1/2" NST 1 1/2" Pent <i>(Contact Customer Service for other thread gauges.)</i>	158661 – 75298	158661 – 75298
A-22	Cap chain with ring		142987
A-23	Chain "S" hook		147738
A-24	Upper Barrel less Nozzles <i>(Contact Customer Service)</i>		
A-25	Stainless steel safety coupling		190350
A-26	Safety flange bolt and nut (8 required)		280009 (4-1/2") 280016 (5-1/4")

		1975 - 1996 (Paper Gasket)	1975 - 1996 (Triple Seal Gasket)	1997 - Present
A-27	Safety flange gasket	199004 (4-1/2")	148726 (4-1/2")	-
		198358 (5-1/4")	148725 (5-1/4")	-
A-27	Safety flange O-ring	-	-	190348 (4-1/2")
		-	-	190349 (5-1/4")

		1997 - Present
A-28	Safety flange	175284-1 (4-1/2")
		175211-1 (5-1/4")
A-29	Cotter pin (2 required)	195235 (4-1/2" & 5-1/4")
A-30	Clevis pin (2 required)	195234

		1975 - Present 4-1/2" and 5-1/4"		
		Bury	Length	Catalog Number
A-31	Lower stem	1'6"	15-5/16"	184060
		2'0"	21-5/16"	184061
		2'6"	27-5/16"	184062
		3'0"	33-5/16"	184063
		3'6"	39-5/16"	184064
		4'0"	45-5/16"	184065
		4'6"	51-5/16"	184066
		5'0"	57-5/16"	184067
		5'6"	63-5/16"	184068
		6'0"	69-5/16"	184069
		6'6"	75-5/16"	184077
	7'0"	81-5/16"	184078	
A-32	Lower barrel	1'6"	10-3/4"	148706-1 (4-1/2") 148655-1 (5-1/4")
		2'0"	16-3/4"	148707-1 (4-1/2") 148656-1 (5-1/4")
		2'6"	22-3/4"	148708-1 (4-1/2") 148657-1 (5-1/4")
		3'0"	28-3/4"	148709-1 (4-1/2") 148658-1 (5-1/4")
		3'6"	34-3/4"	148710-1 (4-1/2") 148659-1 (5-1/4")
		4'0"	40-3/4"	148711-1 (4-1/2") 148660-1 (5-1/4")
		4'6"	46-3/4"	148712-1 (4-1/2") 148661-1 (5-1/4")
		5'0"	52-3/4"	148713-1 (4-1/2") 148662-1 (5-1/4")
		5'6"	58-3/4"	148714-1 (4-1/2") 148663-1 (5-1/4")
		6'0"	63-3/4"	148715-1 (4-1/2") 148664-1 (5-1/4")

		1975 - Present 4-1/2" and 5-1/4"
A-33	Stem pin for upper or lower stems	195347
A-34	Drain valve facing	142811
A-35	Drain screw (4 required)	142812
A-36	Bronze upper valve plate (includes A-34 and A-35)	184071 (4-1/2") 184055 (5-1/4")
A-37	Shoe bolt/nut (6 required)	280024
		1975 - 1996
A-38	Drain ring housing gasket	142859 (4-1/2") 142805 (5-1/4")
		1997 - Present
A-38	Drain ring o-ring	190348 (4-1/2") 190349 (5-1/4")
A-39	Top seat o-ring	195186 (4-1/2") 195083 (5-1/4")
A-40	Drain ring housing	148585 (4-1/2") 148584 (5-1/4")

		1975 - 1996 4-1/2" and 5-1/4"	1997 - Present
A-41	Bolt and Nut (Drain Ring Housing) (2 Required)	280070	N/A
A-42	Bronze drain ring		142833 (4-1/2") 142804 (5-1/4")
A-43	Bronze seat ring		142830 (4-1/2") 142764 (5-1/4")
A-44	Bottom seat o-ring		195161 (4-1/2") 142893 (5-1/4")

		1975 - 1996 (Non-Reversible Rubber)	1975 - 2015 (Reversible Rubber)	2016 - Present (Encapsulated Rubber)
		Interchangeable		
A-45	Main valve §	195800 (4-1/2")	190353 (4-1/2")	290614 (4-1/2")
		192913 (5-1/4")	190354 (5-1/4")	290615 (5-1/4")
A-46	Lower valve plate	175286-1 (4-1/2")	190355-1 (4-1/2")	190355-1 (4-1/2")
		175233-1 (5-1/4")	190356-1 (5-1/4")	190356-1 (5-1/4")
A-47	Cap nut seal	195547	195547	195547
A-48	Lock washer	142845	142845	142845
A-49	Lower valve plate nut	142771	142771	142771

		1975 - Present	
		4-1/2"	5-1/4"
A-50	Shoe-less accessories <i>* 6" MJ Shoe is interchangeable with all years</i> <i>**Component parts listed on page 49</i>	146768 - 6" Flange	146756 - 6" Flange
		240080 - 6" D-150 MJ	240081 - 6" D-150 MJ
		148554 - 6' Slip-On	148548 - 6' Slip-On
		148728 - * 6" MJ (DI)	148727 - * 6" MJ
		**148783 - 6" AquaGrip	**240083 - 6" AquaGrip

		1975 - Present 4-1/2" and 5-1/4"
A-51	Lubricating oil	280354 - 10.5 oz. 287063 - 12 pack 10.5 oz. 184048 - Gallon 290234 - 55 Gallon Drum

		1988 - Present 4-1/2" and 5-1/4"
A-84	Hold down nut	146501 (left)
		146502 (right)
A-85	Weather seal	197899

		1975 - Present 4-1/2" and 5-1/4"
A-310	Tamperproof operating wrench - 1-1/2" Pent.	175528

		1975 - Present 4-1/2" and 5-1/4"
A-311	Operating Wrench - 1 1/2" Pent. <i>(Contact Customer Service for all other sizes.)</i>	174510
A-316	Nozzle wrench	143129 - 2 1/2" 184098 (Jones) - 2 1/2" 143130 - 3" 143131 - 3 1/2", 4" & 4 1/2" 184099 - 5"
A-317	Nozzle lock tool	143132
A-359	Seat wrench	A359-00
A-366	Brass sleeve	174526 - 11" L/Detent
A-367		142660 - 7" W/Detent (Standard)
A-368		143210 - 14" W/Detent
*A-374	Wrench to Operate Tamperproof Hydrant	A374
*A-384	Spanner Wrench to Assemble and Disassemble Tamperproof Operating Nut Cap	A384
*A-391	Wrench to Assemble and Disassemble Tamperproof Cast Iron Hold Down Nut	A391

** All wrenches required to operate tamperproof hydrant

NOTE - AquaGrip® Component Parts

- 148792 - 6" DIPS/IPS Ring
- 240001 - 6" DIPS Grip Ring
- 240013 - 6" DIPS Intermediate Ring`
- 290229 - 6" DIPS/IPS Gasket
- 290278 - 6" Tee Head Bolt
- 290237 - 6" Nut (Break-away)
- 240069 - 6" IPS Grip Ring
- 240070-1 - 6" IPS Intermediate Ring
- 287406 - 6" DPS Vertical Aqua Grip Shoe Kits

NOTE - Centering Spiders

- 198044 - 4 1/2"
- 144658 - 5 1/4"

Fire Hydrant Parts

Interchangeable/Identical - 4-1/2" Valve Opening

▼ Except Super Centurion 350

Description	4-1/2" Centurion Fire Hydrant	4-1/2" Improved Fire Hydrant	4-1/2" Modern Improved Fire Hydrant	4" Mueller 107 FireHydrant
Operating nut	A-1 Same as H-51	H-51	Same as H-51	Not the Same
Weather cap	A-2* Interchangeable with H-52	H-52 Interchangeable with A-2	Not the Same	Not the Same
Hold down nut o-ring	A-3 Same as H-101	H-101	H-101	Not the Same
Pipe plug	A-7 Same as H-98	H-98	H-98	Not the Same
Stem o-ring	A-12 Same as H-93	H-93	H-93	Not the Same
Hose nozzle cap	A-21 Same as H-205	H-71**	H-205	H-71**
Hose nozzle cap gasket	A-19 Same as H-72	H-72	H-72	H-72
Pumper nozzle cap	A-17 Same as H-207 in 4 1/2" Size Only	H-67***	H-207	H-67***
Pumper nozzle cap gasket	A-15 Same as H-68	H-68	H-68	H-68
Chain	A-22 Same as H-69	H-69	H-69	H-69
Safety flange bolt and nut	A-26 ▼ Same as H-78	H-78	Not the Same	H-78
Safety flange	A-28 ▼ Same as H-77	H-77	Not the Same	H-77
Safety flange gasket	A-27 Same as H-76	H-76	Not the Same	H-76
Safety stem coupling	A-25 Same as H-125	H-125	H-125	H-125
Clevis pin	A-30 Same as H-136	H-136	H-136	H-136
Cotter pin	A-29 Same as H-137	H-137	H-137	H-137
Main valve	Not the Same ▼	H-88	H-88	Not the Same
Lower valve plate	A-46 Same as H-89	H-89	H-89	Not the Same
Safety flange repair kit	A-300 ▼	A-300	Not the Same	A-24150 Same as A-300 LESS LUBRICANT OIL
Barrel extension sections	A-319 ▼	Not the Same	4 1/2" A-333 Same as A-319	A-24155 Same as A-319 LESS LUBRICANT OIL

* These parts are not the same but can be interchanged with H-52

** These parts are not the same but can be interchanged with A-21 or H-205.

*** These parts are not the same but can be interchanged with A17 or H-207.

Fire Hydrant Parts

Interchangeable/Identical - 5-1/4" Valve Opening

▼ Except Super Centurion® 350 hydrant parts

Description	5-1/4" Centurion Fire Hydrant	5-1/4" Improved Fire Hydrant	5-1/4" Modern Improved Fire Hydrant	5" Mueller 107 FireHydrant
Operating nut	A-1 Same as H-51	H-51	H-51	Not the Same
Weather cap	A-2* Interchangeable with H-52	H-52 Interchangeable with A-2	H-201	Not the Same
Hold down nut o-ring	A-3 ▼ Same as H-101	H-101	H-101	Not the Same
Pipe plug	A-7 Same as H-98	H-98	H-98	Not the Same
Stem o-ring	A-12 Same as H-93	H-93	H-93	Not the Same
Hose nozzle cap	A-21 Same as H-205	H-71**	H-205	H-71**
Hose nozzle cap gasket	A-19 Same as H-72	H-72	H-72	H-72
Pumper nozzle cap	A-17 Same as H-207 in 4 1/2" Size Only	H-67***	H-207	H-67***
Pumper nozzle cap gasket	A-15 Same as H-68	H-68	H-68	H-68
Chain	A-22 Same as H-69	H-69	H-69	H-69
Safety flange bolt and nut	A-26 ▼ Same as H-78	H-78	H-209	H-78
Safety flange	A-28 ▼ Same as H-77	H-77	H-210	H-77
Safety flange gasket	A-27 Same as H-76	H-76	H-208	H-76
Safety stem coupling	A-25 Same as H-125	H-125	H-125	H-125
Clevis pin	A-30 Same as H-136	H-136	H-136	H-136
Cotter pin	A-29 Same as H-137	H-137	H-137	H-137
Main valve	A-45 ▼ Same as H-88	H-88	H-88	Not the Same
Lower valve plate	A-46 Same as H-89	H-89	H-89	Not the Same
Safety flange repair kit	A-301	A-301	Not the Same	A-24151 Same as A-301 LESS LUBRICANT OIL
Barrel extension sections	A-320	A-320	5 1/4" A-333 Same as A-320	A-24156 Same as A-320 LESS LUBRICANT OIL

* These parts are not the same but can be interchanged with H-52

** These parts are not the same but can be interchanged with A-21 or H-205.

*** These parts are not the same but can be interchanged with A17 or H-207.

Fire Hydrant Extension Kits

Interchangeable List

Hydrant Style	Catalog Number						Hydrant Extension Kit Not Available
	A-319-35 (4-1/2")	A-319 (4-1/2")	A-319-00 (4-1/2")	A-322 (4-1/2")	A-337 (4-1/2")	A-335 (4-1/2")	
	A-320-35 (5-1/4")	A-320 (5-1/4")	A-320-00 (5-1/4")	A-323 (5-1/4")	A-336 (5-1/4")	A-326 (5-1/4")	
Super Centurion [®] 350	•						
Super Centurion 200 & 250		•					
Centurion [®]		•					
Super Centurion 200 Spin-In		•					
Centurion Spin-In		•					
Modern Centurion (5-1/4" only)		•					
Standard Flush (A-415)							•
Standard Post (A-411) ^{*****}							•
Standard Flush (A-412)							•
Hi-Flo Wet Barrel							•
Improved ^{**}		• ^{***}	•				
Modern Improved		• ^{***}					
107 ^{****}		•					
Standard Post (A-413)							•
Standard Traffic (A-414) ^{*****}							•
UL/FM Super Centurion		•					
UL/FM Centurion		•					
UL/FM Modern Centurion (5-1/4" only)		•					
UL Chattanooga (A-400/A-401) ^{****}							•

* Spin-In Hydrants have 5 1/4" Upper Barrel so a 5 1/4" Kit must be used.

** Improved Hydrants Prior to 1972 have Brass Threaded Coupling. 1972 to Present have Pinned Coupling.

*** 4 1/2 Improved Hydrants Mfg. 1972 to present add -11 to catalogue P/N (A319-11- Bury).

**** 107 Hydrant 4" = A-319, 5" = A-320. (6" A-321 is no longer available).

***** UL Chattanooga A-400/A-401 6 1/4" = A-327/A-335/A-326 (is no longer available).

***** Standard Post and Traffic Kits A-413/A-414 = A-322/A323 & A-336/A-337 (no longer available)

Fire Hydrant Extension Parts List

Super Centurion® 350™
 Super Centurion 250™
 Super Centurion 200™
 Centurion®
 Super Centurion 200 Spin-In
 Centurion Spin-In
 Modern Centurion
 Mueller 107

UL/FM Super Centurion 200
 UL/FM Centurion
 UL/FM Modern Centurion®
 Modern Improved

Complete Kit*	Stem	Barrel	Parts Kit**	4-1/2" Improved Barrel
A319-006	158287	148716	287009***	240048
A319-010	158288	148717	287001***	240049
A319-016	158289	148718	280374	240050
A319-020	158290	148719	280374	240051
A319-026	158291	148720	280374	240052
A319-030	158292	148721	280374	240050 (2)
A319-036	158293	148719/148718	280374	240050/240051
A319-040	158294	148719/148719	280374	240051 (2)
A319-046	158295	148720/148719	280374	-
A319-050	158296	148720/148720	280374	-
A320-006	158287	148700	284592***	-
A320-010	158288	148701	287004***	-
A320-016	158289	148702	280375	-
A320-020	158290	148703	280375	-
A320-026	158291	148704	280375	-
A320-030	158292	148705	280375	-
A320-036	158293	148703/148702	280375	-
A320-040	158294	148703/148703	280375	-
A320-046	158295	148704/148703	280375	-
A320-050	158296	148704/148704	280375	-

* All parts are shipped inside the barrels

4 1/2 Improved Hydrants Mfg. 1972 to 1980 add -11 to catalog P/N (A319-11-Bury)

** Parts Kits Include- Extension Flange, Bolts, Nuts, Gaskets/O-Rings, Extension Couplings, Clevis/Cotter Pins, and Hydrant Oil.

*** Parts Kit includes extension stem

Note: For 350 psig hydrants add "-35" to part number (ex: A-319-35-006)

Fire Hydrant Extension Parts List

Improved hydrants manufactured prior to 1972

Complete Kit*	Stem Extension Sub Assembly**	Stem Only	Barrel	Parts Kit
A319-00-006	184466	175513	240048	287006
A319-00-010	184467	175506	240049	287000
A319-00-016	184468	175507	240050	280504
A319-00-020	184469	175508	240051	280504
A319-00-026	184470	175509	240052	280504
A319-00-030	184471	175510	240050 (2)	280504
A319-00-036	184531	175511	240050/240051	280504
A319-00-040	184532	175512	240051 (2)	280504
A320-00-006	184466	175513	175498	287007
A320-00-010	184467	175506	175499	287003
A320-00-016	184468	175507	175500	280505
A320-00-020	184469	175508	175501	280505
A320-00-026	184470	175509	175502	280505
A320-00-030	184471	175510	175503	280505
A320-00-036	184531	175511	184758	280505
A320-00-040	184532	175512	184759	280505

* All parts are shipped inside the barrels

** Consists of Extension Thimble, Stem and Set Screw

Fire Hydrant Repair Kits

4", 4-1/2", 4-1/4" Main Valve Opening

Hydrant Style	Bonnet Repair Kit	Safety Flange Repair Kit	Extension Kit	Shoe Repair Kit	Main Valve Repair Kit	Tamper Proof Retrofit Kit*	
						Left	Right
Super Centurion®350	-	A-300-35	A-319-35	-	-	284275	282476
Super Centurion 250 & 200	280355	A-300	A-319	280356	280358	284275	282476
Centurion®	280355	A-300	A-319	280356	280358	284275	284276
Improved	280360	A-300 (after 1972)	A-319-11 (after 1972)	280362 (4-1/4")	280365 (4-1/4")	284275	284276
		A-300-00 (prior to 1972)	A-319-00 (prior to 1972)	280363 (4-1/2")	280366 (4-1/2")		
Modern Improved	-	A-307	A-319-11	280391	280393	-	-
Mueller® 107	280368 (4")	A-300 (4")	A-319 (4")	280370 (4")	280372 (4")	-	-
Standard Post (A-413)	-	-	A-322 (4-1/4" and 4-1/2")	-	-	-	-
Standard Traffic (A-414)	-	A-306	A-337	-	-	-	-

5" and 5-1/4" Main Valve Opening

Hydrant Style	Bonnet Repair Kit	Safety Flange Repair Kit	Extension Kit	Shoe Repair Kit	Main Valve Repair Kit	Tamper Proof Retrofit Kit*	
						Left	Right
Super Centurion 350	-	A-301-35	A-320-35	-	-	284275	282476
Super Centurion 250 & 200	280355	A-301	A-320	280357	280359	284275	282476
Centurion	280355	A-301	A-320	280357	280359	284275	284276
Super Centurion Spin-In	280355	A-301	A-320	-	-	-	-
Centurion Spin-In	280355	A-301	A-320	-	-	-	-
Improved	280361	A-301 (after 1972)	A-320 (after 1972)	280364	280367	284275	284276
		A-301-00 (prior to 1972)	A-320-00 (prior to 1972)				
Modern Improved	-	-	A-320	280392	280394	-	-
Mueller 107	280369 (5")	A-301 (5")	A-320 (5")	280371 (5")	280373 (5")	-	-
Standard Post (A-413)	-	-	-	-	-	-	-
Standard Traffic (A-414)	-	A-308	-	-	-	-	-

* The A-374 Wrench (To operate Tamperproof Hydrant), A-384 Spanner Wrench (To assemble and disassemble Tamperproof Operating Nut Cap) and A-391 Wrench (To assemble and disassemble Tamperproof Cast Iron Hold Down Nut) are also required.

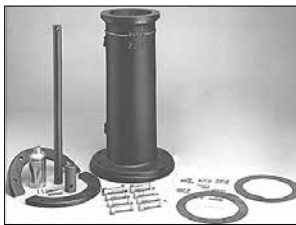
Mueller[®] Super Centurion 200, 250, and 350 Fire Hydrant Repair Kits



Bonnet Repair Kit - 280355

4-1/2" and 5-1/4"

- | | |
|---------------------------|--------------------------------------|
| (1) Bonnet gasket (Flat) | (1) Anti-friction washer |
| (1) Weather seal | (2) Stem O-rings |
| (1) Hold down nut o-rings | (1) 10.5 oz. hydrant lubricating oil |
| (1) Bonnet O-rings | (1) Instruction sheet |



Extension Repair Kit - A319-Length (4-1/2") / A320-Length (5-1/4") 350 PSI Hydrant - A319-35-Length (4-1/2") / A320-35-Length (5-1/4")

- | | |
|-----------------------|--|
| (1) Stem | (1) Bonnet gasket |
| (1) Barrel* | (1) Steel extension stem coupling |
| (1) Extension flange* | (2) Cotter pins |
| (1) Gasket | (1) 10.5 oz. can hydrant lubricating oil |
| (8) Bolts and nuts* | (1) Instruction sheet |
| (2) Clevis pins | Extension lengths: 0'6", 1'0", 1'6", 2'0", 2'6", 3'0", 3'6", |
| (3) O-rings* | 4'0", 4'6", 5'0" and 6'0" (*kits 3'-6" and longer include 2 barrels) |



Main Valve Repair Kit - 280358 (4-1/2") / 280359 (5-1/4")

- | | |
|-----------------------------|----------------------------------|
| (1) Top seat O-rings | (1) Bronze seat ring |
| (1) Bottom seat O-rings | (1) Reversible lower valve plate |
| (1) Reversible main valve § | (1) Instruction sheet |
| (1) Cap nut seals | (1) Lock washer |



Shoe Repair Kit - 280356 (4-1/2") / 280357 (5-1/4")

- | | |
|-------------------------------|--|
| (2) Drain valve facings | (1) Lock washer |
| (4) Drain valve facing screws | (6) Shoe bolts and nuts |
| (1) Drain ring housing gasket | (2) Drain ring bolts and nuts |
| (1) Top seat O-ring | (1) 10.5 oz. can hydrant lubricating oil |
| (1) Bottom seat O-ring | (1) Drain ring housing "O" ring. |
| (1) Reversible main valve § | (1) Reversible lower valve plate |
| (1) Cap nut seal | (1) Instruction sheet |



Safety Flange Repair Kit - A300 (4-1/2") / A301 (5-1/4")

350 PSI Hydrant - A300-35 (4-1/2") / A301-35 (5-1/4")

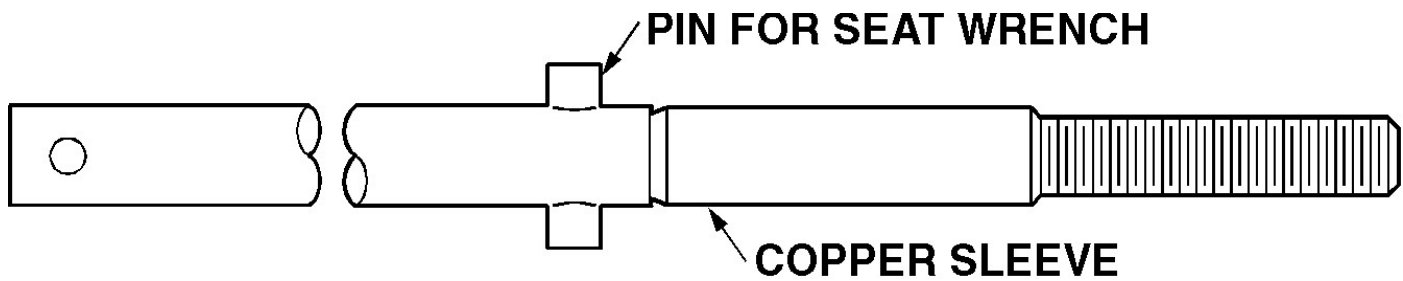
- | | |
|--|---------------------------------------|
| (1) Safety flange | (1) Bonnet gasket (Flat - A-300 only) |
| (1) Safety flange gasket (Flat - A-300 only) | (1) Bonnet "O" ring gasket |
| (8) Safety flange bolts and nuts | (1) Safety Flange "O" ring |
| (1) S.S. Safety stem coupling | (1) 10.5 oz. hydrant lubricating oil |
| (2) Clevis pins | (1) Instruction sheet |
| (3) Cotter pins | |

Tamper-proof Retrofit Repair Kit - 284275 (open left) / 284276 (open right)

- | | |
|-----------------------|--------------------------|
| (1) Bonnet O-ring | (2) Retainer clip |
| (1) Hold down nut | (1) Hold down nut O-ring |
| (1) Operating nut cap | (1) Anti-friction washer |
| (1) Ring retainer | (1) Weather seal |
| (1) Operating nut | (1) Instruction sheet |

Fire Hydrant Upper/Lower Stems

Mueller® Super Centurion® 200 and 250 (new style drilled) Fire Hydrant Upper Stem



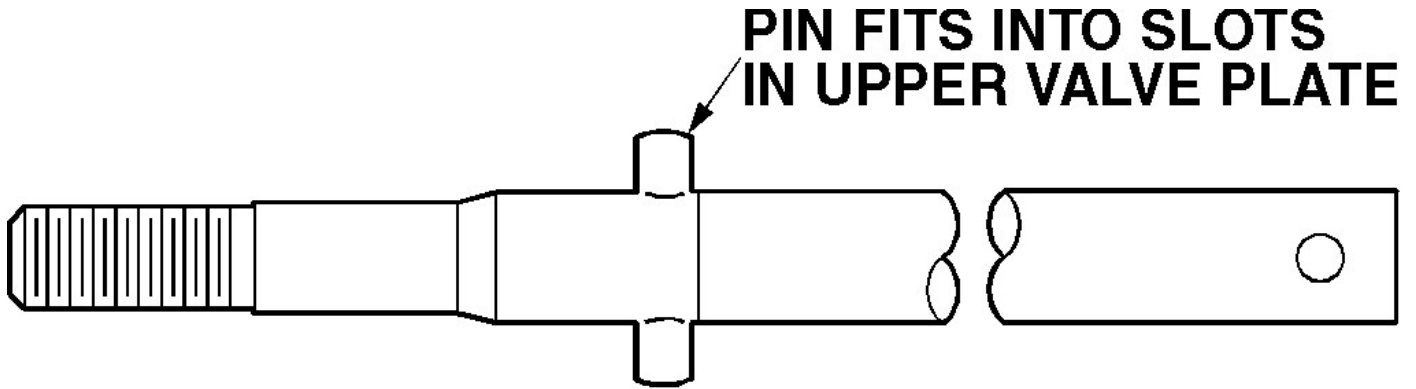
A-11

200 psi and 250 psi Hydrant						
Valve Opening Size	A-11 Upper Stem New Style Drilled					Overall Length
	Date of Manufacture	Left	Stem Identification Color	Right	Stem Identification Color	
4-1/2"	1975 - Present	184092	Black	184093	Red	27 9/16"
5-1/4"	1975 - 1976	184094	White	184095	Silver	29 1/32"
5-1/4"	1977 - 1986	184193	Orange	184194	Yellow	28 13/32"
5-1/4"	1987 - Present	184092	Black	184093	Red	27 9/16"

350 psi Hydrant						
Valve Opening Size	A-11 Upper Stem New Style Drilled					Overall Length
	Date of Manufacture	Left	Stem Identification Color	Right	Stem Identification Color	
4-1/2"	2014 - Present	184092	Black	184093	Red	27 9/16"
5-1/4"	2014 - Present	184092	Black	184093	Red	27 9/16"

250 psi "Snow Bury" Hydrant						
Valve Opening Size	A-11 Upper Stem New Style Drilled					Overall Length
	Date of Manufacture	Left	Stem Identification Color	Right	Stem Identification Color	
5-1/4"	2014 - Present	241195	Black	241196	Red	33 9/16"

Mueller® Super Centurion® 200, 250, and 350 Hydrants
Fire Hydrant Lower Stem

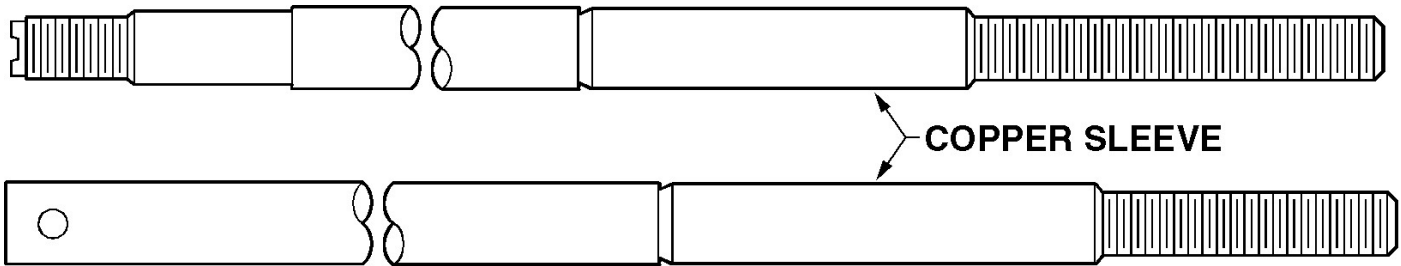


A-31

A-31 Lower Stem New Style Drilled - 4-1/2" and 5-1/4" - 1975 - Present		
Bury Length	Catalog Number	Overall Length
1'6"	184060	15 5/16"
2'0"	184061	21 5/16"
2'6"	184062	27 5/16"
3'0"	184063	33 5/16"
3'6"	184064	39 5/16"
4'0"	184065	45 5/16"
4'6"	184066	51 5/16"
5'0"	184067	57 5/16"
5'6"	184068	63 5/16"
6'0"	184069	69 5/16"
6'6"	184077	75 5/16"
7'0"	184078	81 5/16"

Improved Fire Hydrant Upper Stem

H-74 (prior to 1972)

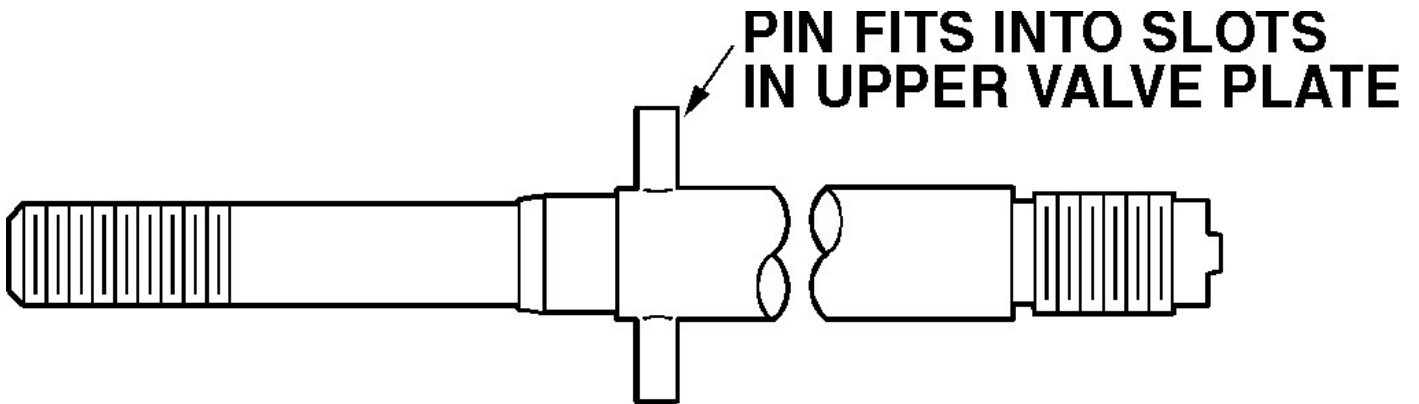


H-103 (after 1972)

Valve Size Opening	Date of Manufacture	Catalog Number - Upper Stem		Overall Length
		Left	Right	
H-74 Old Style Threaded				
4 1/4" & 4 1/2"	Prior to 1972	185222	185223	28 3/8"
5 1/4"	Prior to 1972	185224	185225	31 5/8"
H-103 New Style Drilled				
4 1/4" & 4 1/2"	1972 or Later	185681	185682	30 1/16"
5 1/4"	1972 or Later	185683	185684	33 5/16"

Note: Improved upper stems are not color coded.

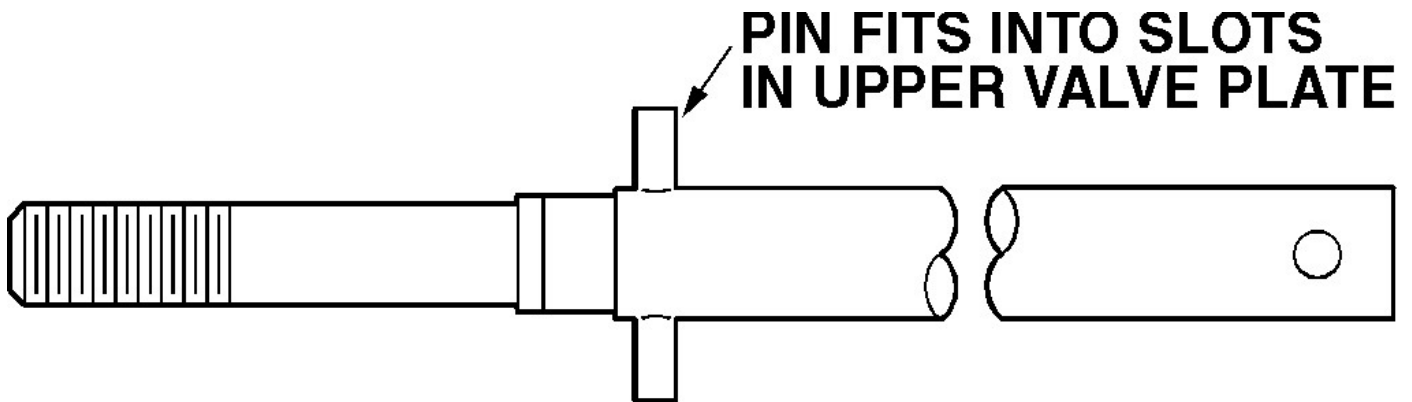
**Mueller® Improved (old style threaded)
Fire Hydrant Lower Stem**



H-79

H-79 Lower Stem Old Style Threaded - 4-1/4", 4-1/2", and 5-1/4" Prior to 1972		
Bury Length	Catalog Number	Overall Length
1'6"	185300	16 3/4"
2'0"	185301	22 3/4"
2'6"	185302	28 3/4"
3'0"	185303	34 3/4"
3'6"	185304	40 3/4"
4'0"	185305	46 3/4"
4'6"	185306	52 3/4"
5'0"	185307	58 3/4"
5'6"	185308	64 3/4"
6'0"	185309	70 3/4"
6'6"	185310	76 3/4"
7'0"	185311	82 3/4"

Mueller[®] Improved (new style drilled) Fire Hydrant Lower Stem



H-104

H-104 Lower Stem New Style Drilled - 4-1/4", 4-1/2", and 5-1/4" After 1972		
Bury Length	Catalog Number	Overall Length
1'6"	185687	14 3/4"
2'0"	185688	20 3/4"
2'6"	185689	26 3/4"
3'0"	185690	32 3/4"
3'6"	185691	38 3/4"
4'0"	185692	44 3/4"
4'6"	185693	50 3/4"
5'0"	185694	56 3/4"
5'6"	185695	62 3/4"
6'0"	185696	68 3/4"
6'6"	185697	74 3/4"
7'0"	185698	80 3/4"

Fire Hydrant Troubleshooting

Fire Hydrant Troubleshooting

PROBLEM

Pulsation or chatter during opening and flow of water from hydrant.

Cause: Loose condition in stem at lower valve plate nut.

Corrective Action: Tighten lower valve plate nut and secure with SS lock washer.

Cause: Loose condition in stem caused by more than one extension being used.

Corrective Action: Replace multiple extension stems with single extension stem.

Cause: Excessive looseness at the safety coupling due to over tightening or high number of open/close cycles.

Corrective Action: Replace safety coupling and pins.

PROBLEM

Hydrant slams shut while being closed.

Cause: Play in stem due to wear on stem couplings.

Corrective Action: Inspect the safety/extension coupling for damage and assure couplings are installed with the correct end up.

Cause: Loose main valve assembly.

Corrective Action: Remove main valve assembly and tighten lower valve plate nut securing with SS lock washer.

PROBLEM

Hard turning of operating nut during operation of hydrant.

Cause: Debris or foreign material in operating mechanism of hydrant within the bonnet.

Corrective Action: Disassemble operating nut, hold down nut, and anti-friction washer. Clean, lubricate, and assemble with new anti-friction washer (assuring that the anti-friction washer is placed on the top surface of the operating nut). Check for damaged o-rings at the bottom of the bonnet, which seal oil in the reservoir, replacing if necessary. Fill bonnet with fresh oil.

Cause: Hydrant has been struck possibly bending stem.

Corrective Action: Check upper stem and coupling(s) for damage. Replace if necessary.

PROBLEM

Internal leakage in the upper barrel when main valve is closed.

Cause: Damaged main valve or seat ring.

Corrective Action: Replace main valve and/or seat ring.

Cause: Leakage through center of main valve around stem due to loose lower valve plate nut.

Corrective Action: Tighten lower valve plate nut and secure with SS lock washer

Cause: Damage to copper sleeve on stem hitting bottom of bonnet preventing full main valve closure.

Corrective Action: Inspect upper stem and replace if sleeve is damaged.

Cause: O-rings on seat ring may be damaged.

Corrective Action: Replace o-rings on seat ring.

PROBLEM

Excessive external leakage at the drain area of the hydrant when main valve is open.

Cause: Damaged or worn drain valve facings

Corrective Action: Replace drain valve facings.

Cause: Damaged upper seat ring o-ring.

Corrective Action: Replace upper seat ring o-ring.

PROBLEM

External Leakage at the drain valve area when the main valve is closed and barrel has drained.

Cause: Damaged lower seat ring o-ring.

Corrective Action: Replace lower seat ring o-ring.

Cause: Damaged main valve or seat ring.

Corrective Action: Replace main valve or seat ring.

PROBLEM

Loss of oil from the reservoir in the bonnet.

Cause: Leakage between bonnet o-ring and stem sleeve.

Corrective Action: Replace o-ring in the bonnet and upper stem if the sleeve has been damaged. Fill bonnet with fresh oil.

PROBLEM

Unable to remove seat ring with Centurion hydrant seat removal tool.

Cause: Unable to exert sufficient torque on seat ring.

Corrective Action: Try use of seat wrench attached to lower stem at safety coupling location. Be sure main valve is fully closed or damage to upper valve plate will occur. If this fails, use "Improved" hydrant seat removal wrench, which acts directly on the seat ring wrench flats.

PROBLEM

Opens hard in cycles.

Corrective Action: Check for bent stem or operating nut drilled off center.

PROBLEM

Oil filler plug will not come out.

Cause: Corroded or painted over.

Corrective Action: Clean paint from oil filler plug, lubricate, and use easy out to remove. Do Not use a torch to heat the bonnet and filler plug, this will only cause damage to the o-rings within the bonnet.

PROBLEM

Oil stain on bonnet.

Corrective Action: Overfilled oil reservoir occurs when oil reservoir is filled when hydrant is in open position. Fill oil reservoir only when hydrant is in the closed position and fill until it overflows out of the oil filler hole. Wipe excess clean with rag.

PROBLEM

Nozzles facing in the wrong direction.

Corrective Action: Loosen safety flanges, or breakaway bolts. Turn operating nut in the opening direction. Water pressure against the main valve will raise the upper barrel releasing the pressure from the o-ring or gasket. This will allow the worker to turn the upper barrel without damage to the flange gasket. Tighten bolts and pressurize the barrel checking for leaks.

PROBLEM

Hydrant opens but will not close.

Cause: Safety coupling is broken or loose.

Corrective Action: Remove bonnet and upper barrel and replace safety coupling.

Cause: Cap nut on lower valve plate may be broken or loose.

Corrective Action: Remove main valve assemble and tighten or repair securing with SS lock washer.

PROBLEM

Drain holes leak when hydrant is fully open.

Cause: Drain valve facings are damaged.

Corrective Action: Remove main valve assembly and replace drain valve facings.

Cause: Top o-ring on seat ring may be damaged.

Corrective Action: Remove main valve assembly and replace top o-ring.

PROBLEM

Drain holes leak when hydrant is fully closed.

Cause: Damaged main valve.

Corrective Action: Remove main valve and replace if damaged.

Cause: Bottom o-ring on seat ring may be damaged.

Corrective Action: Remove main valve assembly and replace bottom o-ring.

PROBLEM

Hydrant will not drain.

Cause: Drain holes may be plugged with debris.

Corrective Action: Loosen cap and open hydrants until water starts flowing. Tighten cap back down and then leave hydrant open 2-3 turns to force flush drain holes. Allow this flushing for around 2-3 minutes or until holes are cleared and hydrant is draining properly.

Cause: Not all hydrants are required to drain.

Corrective Action: Assure that hydrant installed is a draining hydrant.

PROBLEM

Hydrant will not close after main valve replacement.

Cause: Seat ring not tightened properly.

Corrective Action: Remove bonnet and retighten main valve assembly.

Cause: Damaged seat ring or o-rings upon replacement.

Corrective Action: Remove main valve assembly and check for damaged o-rings or seat rings.

PROBLEM

Hydrant will not close after hydrant extension put on.

Cause: Safety/extension coupling misplaced or upside down.

Corrective Action: Check for placement of extension coupling and safety coupling. Relocate to correct position if misplaced. (Safety coupling always goes on top.)

PROBLEM**Hydrant will not open.**

Cause: Corrosion or paint has locked operating nut to bonnet, hold down nut, or upper stem.

Corrective Action: Disassemble, clean, lubricate, and reassemble.

Cause: Debris may have accumulated in shoe of hydrant.

Corrective Action: Remove main valve assembly and flush hydrant utilizing the isolation valve. Reassemble and test hydrant.

Cause: Hydrant opens opposite direction and paint has covered indication on bonnet or weather cap.

Corrective Action: Locate opening direction and attempt to open again.

PROBLEM**Flow from hydrant is low.**

Cause: Hydrant not fully open or isolation valve is not fully open.

Corrective Action: Check for number of turns when opening hydrant, 17-1/4 turns on all centurion hydrants. Also, assure that isolation valve is fully open utilizing the formula for amount of turns to open or close all gate valves: 3 x nominal size of valve + (2 or 3) turns.

PROBLEM**Operating nut turns but hydrant will not open.**

Cause: Operating nut is locked to upper stem and safety coupling is broken.

Corrective Action: Remove bonnet and upper barrel. Remove operating nut from upper stem, clean, lubricate, and reassemble. Replace safety coupling.

PROBLEM**How many turns to open a hydrant?**

17-1/4 turns on all Centurion hydrants.

PROBLEM**What parts are required to convert from one bury depth to another bury depth?**

A-31: Lower Stem

A-32: Lower Barrel

A-27: Safety Flange Gasket

A-38: Drain Ring Gasket

PROBLEM

What parts are required to change Super Centurion 200 or Centurion® operating nut from open left to open right or visa versa?

A-1: Operating nut (specify size, shape, and opening direction)

A-2: Weather cap – Hydrants 1987 or earlier.

A-4: Hold down nut – Hydrants 1987 or earlier.

A-84: Hold down nut – 1988 or later.

A-8: Bonnet (Prior to 1988 Centurion Hydrants did not have a directional arrow cast on the bonnet to indicate the opening direction. Instead, it was indicated on the weather cap of the hydrant. On Centurion 200 hydrants, the arrow is cast on the bonnet.)

A-11: Upper Stem (Specify year and valve opening size.)

PROBLEM

What parts are required to change from one size operating nut to another?

Specify thread gauge and order the following:

A-15: Pumper Nozzle Gasket

A-17: Pumper Nozzle Cap (Specify size and shape of operating nut.)

A-19: Hose Nozzle Gasket

A-21: Hose Nozzle Cap (Specify size and shape of operating nut.)

A-1: Operating Nut (Specify size, shape, and opening direction.)

A-311: Operating Wrench (Specify size and shape.)

A-22: Cap Chain w/Ring

A-23: Chain Hook(s)

PROBLEM

How to read hydrant pumper/hose nozzle thread gauges?

The first number in the code is the number of threads per inch. The last three digits are the pitch diameter as demonstrated in the example below:

Example: 60454 – 6 threads per inch with a pitch diameter of 4.54.

PROBLEM

What parts are required to convert size of pumper nozzle?

Specify size of pumper nozzle and thread gauge and order the following:

A-13: Nozzle Lock

A-14: Pumper Nozzle

A-15: Pumper Nozzle Gasket

A-16: Pumper Nozzle O-ring

A-17: Pumper Cap (Specify size and shape of operating nut.)

A-22: Cap Chain w/Ring

A-23: Chain Hook(s)

Fire Hydrant Weights

4-1/2" Mueller® Super Centurion® 200, 250, & 350 Fire Hydrant Weights



Finished hydrant weights for the 4-1/2" x 6" Super Centurion 200, 250, and 350																			
Lower barrel lengths:																			
		1.6	2.0	2.6	3.0	3.6	4.0	4.6	5.0	5.6	6.0	6.6	7.0	7.6	8.0	8.6	9.0	9.6	10
HUB	3 way	390	405	420	435	450	465	480	495	510	529	540	612	639	666	693	720	747	774
	2 way	380	395	410	425	440	455	470	485	500	516	530	602	629	656	683	710	737	764
MJ	3 way	355	370	385	397	422	437	452	467	475	491	505	577	604	631	658	685	712	739
	2 way	345	360	375	390	401	417	427	442	457	481	495	567	594	621	648	675	702	729
D-150	3 way	392	407	422	437	452	467	482	497	512	527	542	614	641	668	695	722	749	776
	2 way	382	397	412	427	442	457	472	487	502	517	532	604	631	658	685	712	739	766
FLG.	3 way	375	390	405	420	435	450	465	480	495	510	526	540	612	639	666	693	720	747
	2 way	365	380	395	410	425	440	455	470	485	500	516	530	602	629	656	683	710	737
SLP/ON	3 way	380	395	410	425	440	455	470	485	500	515	531	545	617	634	671	696	724	817
	2 way	370	385	400	415	430	445	460	475	490	505	521	535	607	624	661	688	714	732

Centurion Woods - Less Shoe - subtract 100 pounds

5-1/4" Mueller® Super Centurion® 200, 250, & 350 Fire Hydrant Weights



Finished hydrant weights for the 5-1/4" x 6" Super Centurion 200, 250, and 350																			
Lower barrel lengths:																			
		1.6	2.0	2.6	3.0	3.6	4.0	4.6	5.0	5.6	6.0	6.6	7.0	7.6	8.0	8.6	9.0	9.6	10
HUB	3 way	431	449	466	483	500	517	534	551	568	585	602	687	707	729	750	771	792	813
	2 way	423	441	458	475	492	509	526	543	560	577	594	679	699	721	742	763	784	805
MJ	3 way	382	402	417	411	431	461	476	491	516	531	553	638	658	680	701	722	743	764
	2 way	372	394	409	391	411	431	456	471	491	528	545	630	650	672	693	714	736	756
D-150	3 way	439	457	474	491	508	524	542	559	576	593	606	695	715	737	758	779	800	821
	2 way	431	449	466	483	499	516	534	551	568	585	600	687	707	729	750	771	792	813
FLG.	3 way	418	435	450	465	480	497	514	531	548	565	582	654	681	708	735	762	789	816
	2 way	410	427	444	461	478	495	512	529	546	563	580	651	679	706	733	760	787	814
SLP/ON	3 way	394	409	424	439	454	469	484	499	514	529	544	616	643	670	697	724	751	778
	2 way	386	401	416	431	446	461	476	491	506	521	536	608	635	662	689	716	743	770

Centurion Woods - Less Shoe - subtract 100 pounds

5-1/4" Mueller® Modern Centurion Fire Hydrant Weights



Finished hydrant weights for the 5-1/4" x 6" Modern Centurion																		
Lower barrel lengths:																		
	1.5	2.0	2.6	3.0	3.6	4.0	4.6	5.0	5.6	6.0	6.6	7.0	7.6	8.0	8.6	9.0	9.6	10
HUB	405	423	440	457	474	491	508	525	542	559	576	661	681	703	724	745	766	787
FLANGED	392	410	427	444	462	479	495	520	554	560	565	654	668	688	712	717	755	805
MJ	369	387	404	421	439	456	472	497	531	537	542	631	645	665	689	694	732	782
A.C.	394	412	429	446	464	481	497	516	531	546	565	656	670	690	714	719	755	808
D-150 - MJ	413	430	465	482	499	516	533	550	567	584	669	689	711	732	753	764	777	795
SLIP-ON	386	404	421	438	455	472	489	506	523	540	557	642	662	684	705	726	747	768

Fire Hydrant Parts Weights

Super Centurion® 200, 250, & 350 Centurion®
Super Centurion 200 Spin-In Centurion Spin-In
Modern Centurion

UL/FM Super Centurion 200
UL/FM Centurion
UL/FM Modern Centurion

Catalog Number	Description	Weight	
A-1	Operating nut	2 lbs.	
A-2	Weather cap	1/4 lb	
A-8	Bonnet	36 lbs.	
A-11	Upper stem	5 lbs.	
A-14	Pumper nozzle	3-1/2 lbs.	
A-17	Pumper nozzle cap	6 lbs.	
A-18	Hose nozzle	1 lb	
A-21	Hose nozzle cap	2 lbs.	
A-24	Upper barrel less nozzles	-	
	4-1/2" - 2 way	92 lbs.	
	4-1/2" - 3 way	105 lbs.	
	5-1/4" - 2 way	103 lbs.	
	5-1/4" - 3 way	107 lbs.	
A-32	Lower barrel	4-1/2"	5-1/4"
	1'6"	56 lbs.	63.5 lbs.
	2'0"	71 lbs.	75.6 lbs.
	2'6"	82 lbs.	92.4 lbs.
	3'0"	94.6 lbs.	105.7 lbs.
	3'6"	112.5 lbs.	125.8 lbs.
	4'0"	123.4 lbs.	142.6 lbs.
	4'6"	141.4 lbs.	161.4 lbs.
	5'0"	153.8 lbs.	175.7 lbs.
	5'6"	171 lbs.	199.4 lbs.
A-50	Shoe	-	
	Super Centurion	60 lbs.	
	Slip-On	88 lbs.	
A-51	10.5 lubricating oil	0.8 lbs.	
A-311	Operating wrench	2 lbs.	
A-316	Nozzle wrench	7 lbs.	
A-359	Seat wrench	29 lbs.	
A-366 / A-367 / A-368	Brass sleeve	1/4 lb	
A-300 / A-301 / A-300-35 / A-301-35	Safety flange repair kit	12 lbs.	
280355	Bonnet repair kit	1 lb	
280356 - 4 1/2"	Shoe repair kit	5 lbs.	
280357 - 5 1/4"	Shoe repair kit	5 lbs.	
280358 - 4 1/2"	Main valve repair kit	7 lbs.	
280359 - 5 1/4"	Main valve repair kit	7 lbs.	

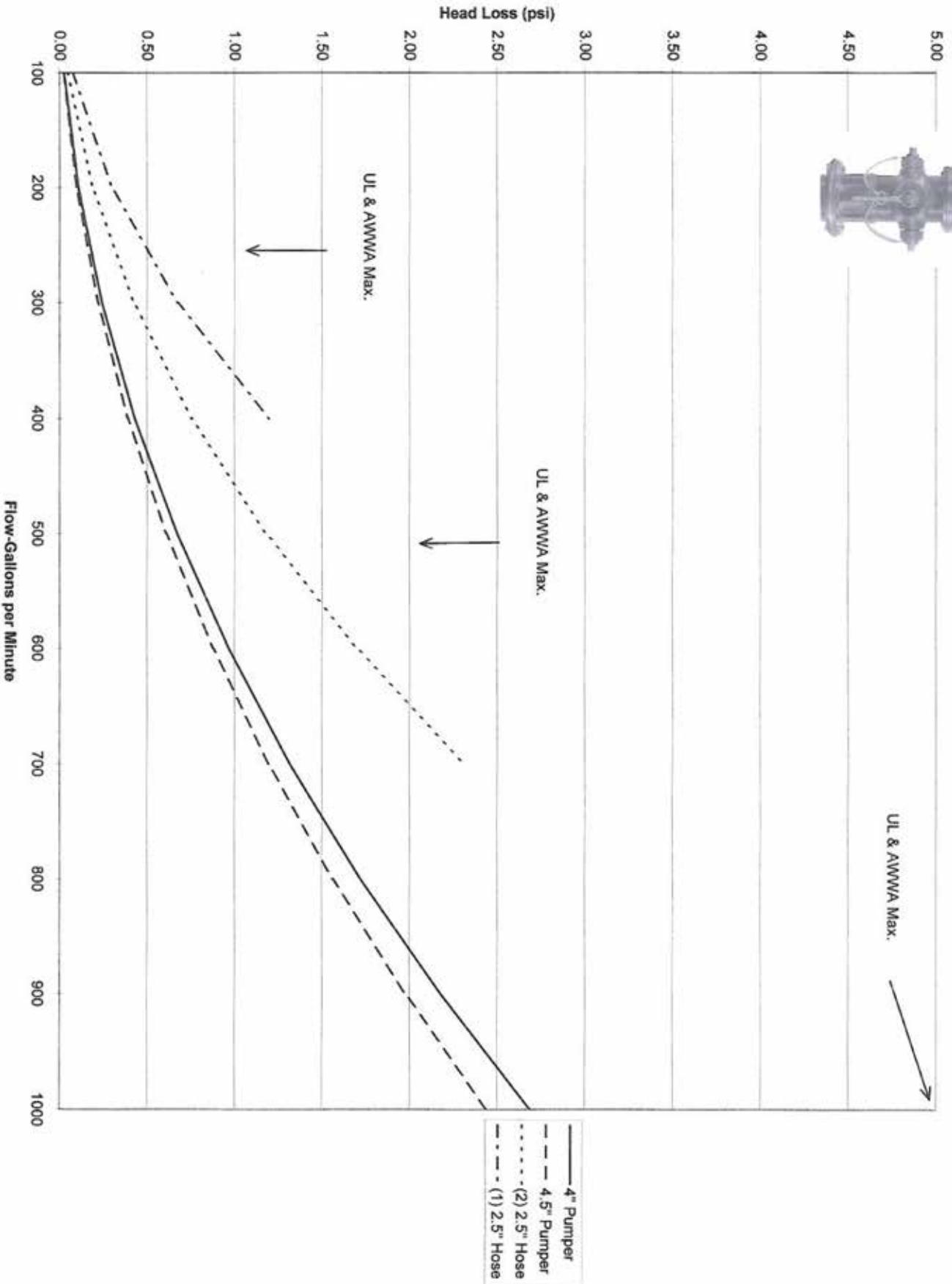
Fire Hydrant Extension Kit Weights

Super Centurion[®] 200, 250, & 350
 Centurion[®]
 Super Centurion 200 Spin-In
 Centurion Spin-In
 Modern Centurion
 107

UL/FM Super Centurion 200
 UL/FM Centurion
 UL/FM Modern Centurion
 Improved
 Modern Improved

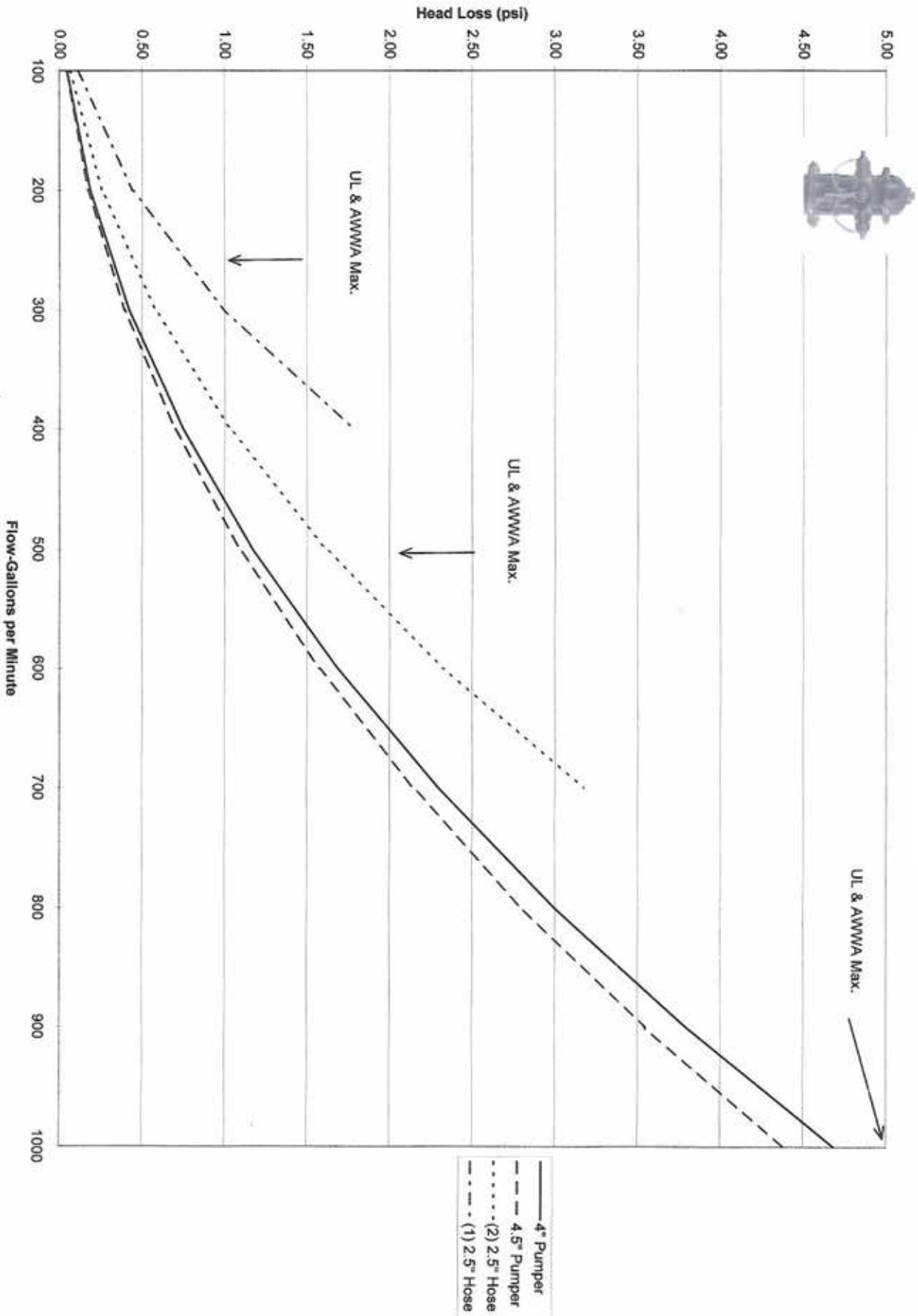
Main Valve Opening Size	Hydrants Manufactured After 1972*	Weight	Imrpoved Hydrants Prior to 1972	Weight
4-14", 4-1/2", and 4"	A319-006 / A319-35-006	44	A319-00-006	45
	A319-010/ A319-35-010	63	A319-00-010	64
	A319-016/ A319-35-016	82	A319-00-016	83
	A319-020/ A319-35-020	108	A319-00-020	109
	A319-026/ A319-35-026	131	A319-00-026	132
	A319-030/ A319-35-030	155	A319-00-030	156
	A319-036/ A319-35-036	198	A319-00-036	199
	A319-040/ A319-35-040	222	A319-00-040	223
5-14" and 5"	A320-006/ A320-35-006	50	A320-00-006	51
	A320-010/ A320-35-010	70	A320-00-010	71
	A320-016/ A320-35-016	91	A320-00-016	92
	A320-020/ A320-35-020	112	A320-00-020	113
	A320-026/ A320-35-026	156	A320-00-026	157
	A320-030/ A320-35-030	184	A320-00-030	185
	A320-036/ A320-35-036	213	A320-00-036	214
	A320-040/ A320-35-040	232	A320-00-040	233

* This includes 4 ½ Improved P/N A319-11-Bury



Mueller[®] Super Centurion[®] 250 - Model 423
5-1/4" Main Valve w/6" MJ Shoe Inlet





Mueller[®] Super Centurion[®] 250 - Model 421
4-1/2" Main Valve w/6" MJ Shoe Inlet



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