

# Mueller® Super Centurion 250™ Fire Hydrant



Designed for efficient flow and  
outstanding, long-term reliability

**Mueller Co.**

# Mueller® Super Centurion 250™ Fire Hydrant...250 psig rating, high flow, dependable performance, 10-year limited warranty...and convenient, reversible main valve

Performance is the real test of a fire hydrant. Proven flow characteristics, 250 psig rating, and easy operation and maintenance are among the features of the Mueller® Super Centurion 250™ 3-Way Fire Hydrant. Plus, the hydrant is backed by a 10-year limited warranty on materials and workmanship, and our plant is ISO 9001 certified, the highest level available.

- 250 psig working pressure; 500 psig test pressure.
- Convenient, reversible main valve doubles service life.
- Advanced safety coupling and flange design reduce traffic damage to hydrant. Convenient replacement kit available.
- Stainless steel safety stem coupling resists corrosion and assures a tight connection between stem sections.
- Efficient hydraulic design provides maximum flow.
- Hose and pumper nozzles are threaded in and field-replaceable.
- Forced lubrication system and anti-friction washer ease operation.
- Main valve is easily removed from either the bonnet flange or ground line flange.



- *Fully conforms to AWWA Standard C502*
- *Underwriters Laboratories Listed*
- *Factory Mutual Approved*





# From bonnet to shoe, performance is built in

**Dry-top design**, with unique, self-oiling system, provides automatic, positive lubrication for easy operation, even after years of service. Lubricant is forced over all stem threads and bearing surfaces in the operating mechanism each time the hydrant

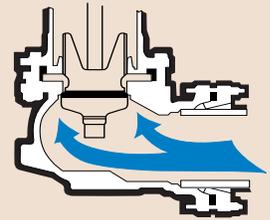
is operated. Dual O-ring seals prevent lubricant loss during shipping, storage or installation and keep water away from stem threads and bearing surfaces when the hydrant is in use. An anti-friction washer and automatic lubrication of the thrust collar add to easy operation.



depressed by a vehicle tire, and the main valve remains closed. Service is restored quickly and easily without excavation by replacing the safety flange and coupling using a convenient repair kit.

## Reversible, compression-type main valve

closes with water pressure for positive sealing. Double drain valves are force flushed each time the hydrant is operated and provide drainage of the barrel. A special wrench allows removal of the main valve and seat ring from either bonnet or ground level flange. The main valve is made of durable rubber which provides a long service life, yet is reversible, providing a convenient spare in place.



**Hose and pumper nozzles** are threaded-in for easy field replacement if damaged, or for changeover to different thread style. A special

locking method makes installation simple and secure. The nozzles can be faced in any direction by loosening the safety flange bolts and rotating the upper barrel assembly.



## Shoe is designed for maximum flow and easy connection

with its smooth transitional contours, extended neck and integral anti-rotation pads, allowing use of standard tee-head bolts. The shoe also has large blocking pads for easier setting and two lugs for strapping. (Strapping lugs are not provided on flanged connections.) The inside of the shoe is covered with Mueller HP® Epoxy Coating. The drain ring housing,

lower main valve plate and its retaining nut are also covered with epoxy. This thermosetting epoxy forms a tough, corrosion-resistant barrier to chemicals, physical impact and electrical currents.

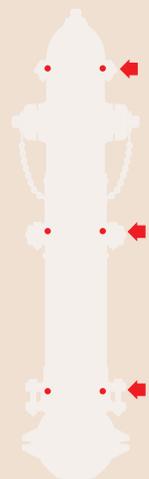


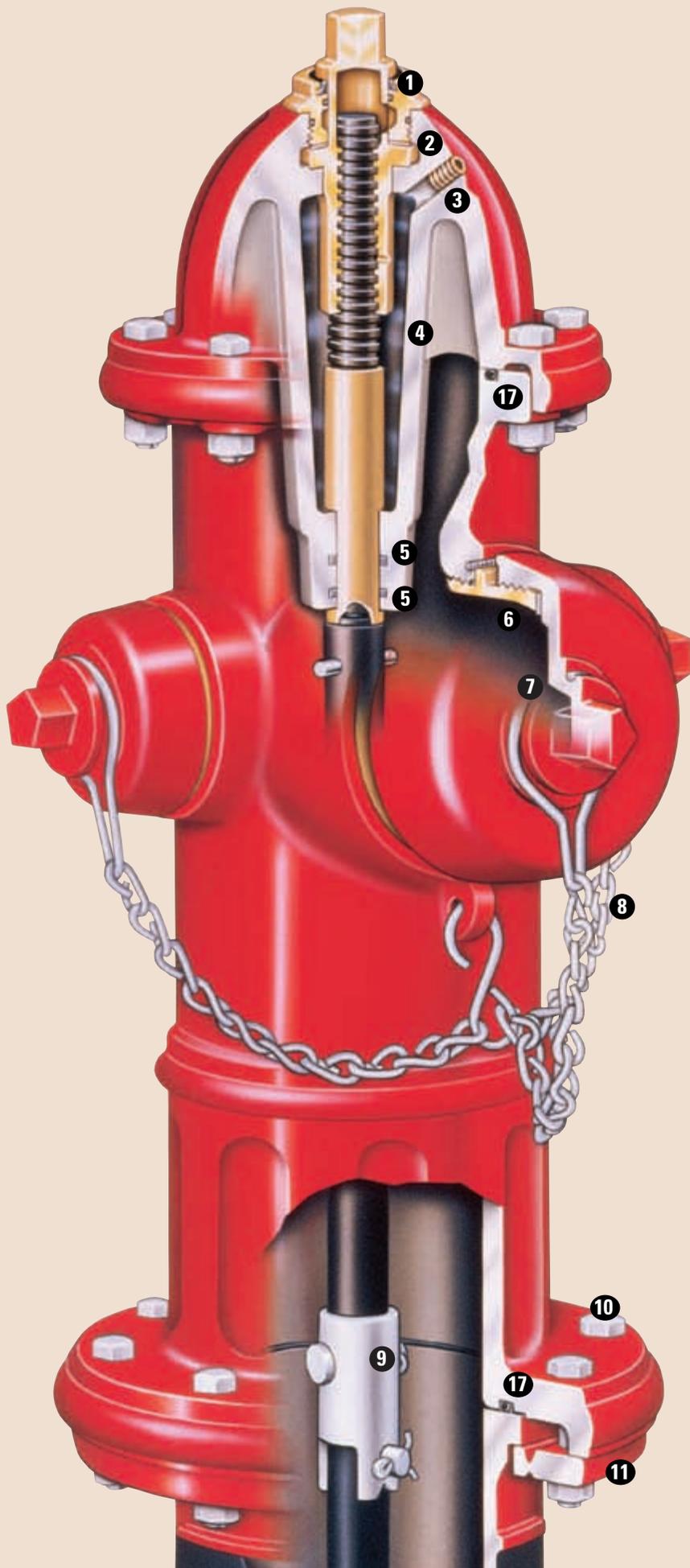
**Improved safety flange and stainless steel stem coupling** perform more predictably to protect the main connection from traffic induced damage and minimize damage to the hydrant. If struck by a vehicle, the safety flange breaks away below the ground flange area and the safety stem coupling *pulls apart*. No loose pieces can fall into the lower barrel where they could affect main valve or drain operation.

The high strength stainless steel safety coupling resists corrosion and assures a tight connection between the stem sections during normal hydrant operation. Upon traffic impact, the coupling tears away, leaving the lower stem below ground level where it cannot be



**O-ring sealed flanges** at the bonnet, ground line and shoe simplify maintenance by eliminating gasket adhesion at these points, making disassembly easier. The O-rings are easier than flat gaskets to position during reassembly, and provide superior pressure handling.





**1 Hold-down nut** — features integral weather seal. Prevents unauthorized removal of hold-down nut or bronze operating nut. Resilient wiper seal prevents water entry and protects from freezing; material resistant to sunlight deterioration. O-ring provides second level seal.

**2 Anti-friction washer** — helps assure easy operation over life of hydrant.

**3 Oil filler plug** — permits visual check of oil level. Allows addition of oil without removing bonnet.

**4 Sealed oil reservoir** — O-ring sealed to prevent leakage. Lubricant is forced over stem threads and bearing surfaces each time hydrant is operated.

**5 Dual O-ring seals** — seal in lubricant; seal out water.

**6 Field-replaceable hose and pumper nozzles** — O-ring sealed; threaded in place and retained by stainless steel locks.

**7 Full flow openings** — large, smooth radius hose and pumper openings reduce friction loss.

**8 Heavy-duty, non-kinking chains** — special chain loop permits free turning of cap.

**9 Stainless steel safety stem coupling** — provides a tight, corrosion resistant connection during normal operation. If vehicle hits hydrant, coupling pulls free without breaking into pieces, preventing stem or main valve damage. Designed so a tire cannot depress stem and open main valve.

**10 Zinc-plated bolts and nuts** — protect against corrosion.

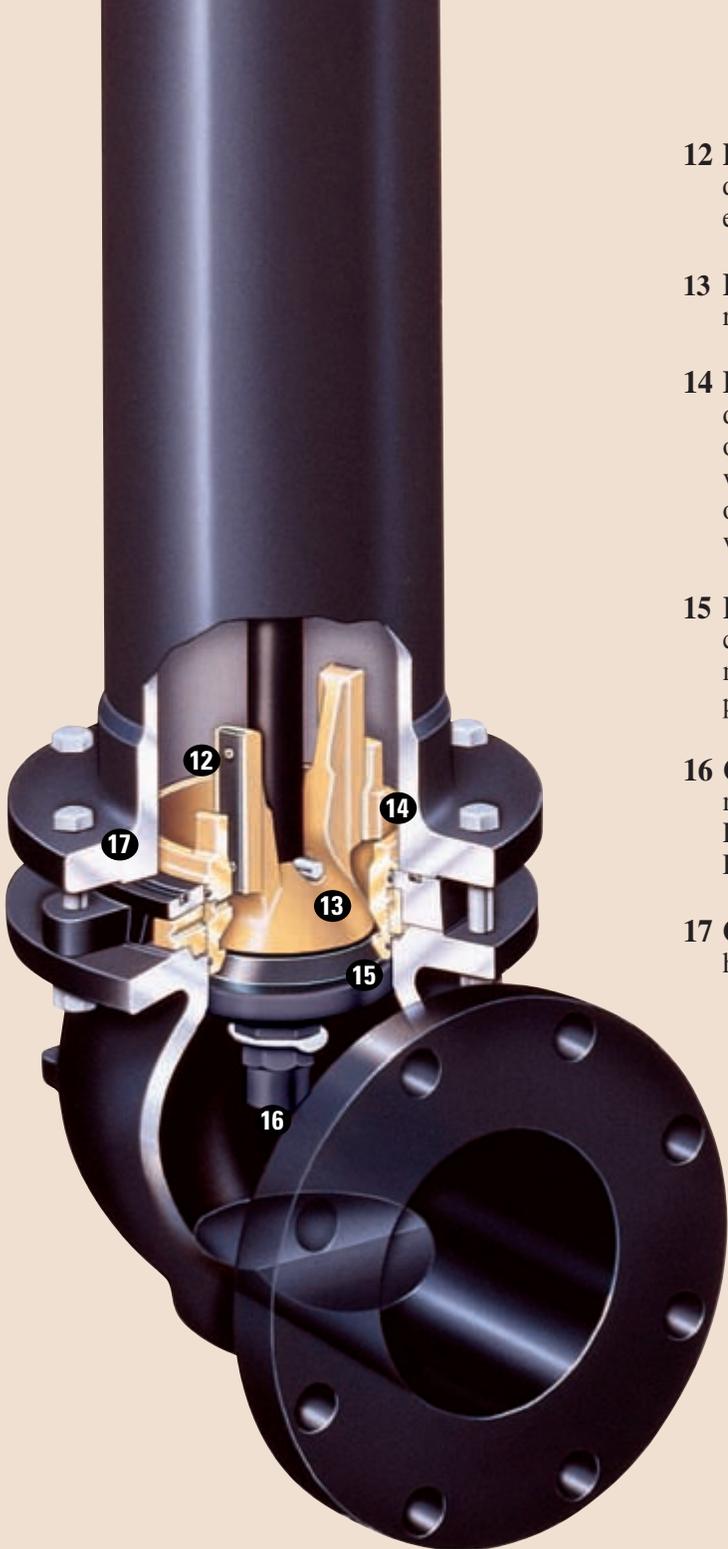
**11 Safety flange** — breaks cleanly to help prevent barrel damage, but strong enough to withstand normal handling. Allows economical repair, adding of extension section, rotation or changing of upper barrel without excavation.

**250 psig working pressure rating** — compatible with today's trend toward higher pressure system components.

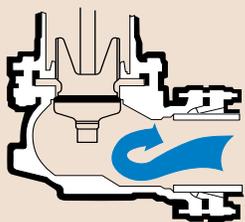
- 12 Drain valve facings** — specially designed, long-life plastic facings provide effective sealing.
- 13 Bronze upper valve plate** — conical design reduces turbulence.
- 14 Bronze seat ring** — threaded into bronze drain ring and O-ring sealed. Can be removed or installed from above ground. Double drain valves force-flush drain openings to keep them open for effective barrel drainage. Bronze drain valves are integral parts of main valve assembly.
- 15 Reversible, compression-type main valve** — closes with pressure for positive seal. Rubber material has long service life, yet is reversible, providing a convenient spare in place.
- 16 Cap nut** — retains main valve. Sealed by cap nut gasket to prevent corrosion of stem threads. Locked in place by a stainless steel lock washer. Epoxy coated to resist corrosion.
- 17 O-ring flange seals** — superior pressure handling, easier disassembly and maintenance.

**Contoured shoe** — designed for maximum flow. Extended neck and anti-rotation pads allow use of standard tee-head bolts.

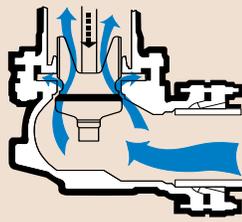
**Mueller HP® Epoxy Coating**— covers shoe interior, main valve lower plate and its retaining cap nut. Drain ring housing is also covered to resist corrosion and deposits, and ease main valve removal.



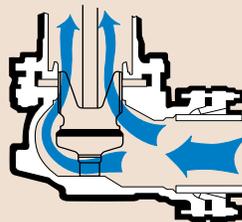
**Main valve operation**



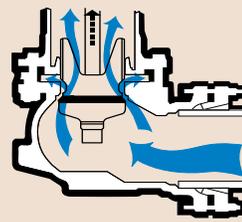
**Closed** — main valve held closed by operating nut and water pressure; barrel is dry.



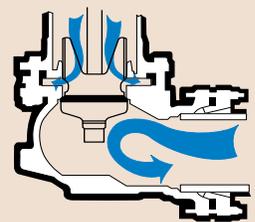
**Opening** — water pressure force-flushes double drain valves and drain openings; establishes drainage field around hydrant.



**Fully open** — main valve guides seal drain valves closed.



**Closing** — water pressure again force-flushes drain valves.



**Fully closed** — drain valves are open to allow drainage of barrel.

# Mueller® Centurion® Fire Hydrant

250 psig working pressure — 500 psig test pressure

**A-421** 4-1/2" three-way 2 hose nozzles and 1 pumper nozzle

**A-423** 5-1/4" three-way 2 hose nozzles and 1 pumper nozzle

200 psig working pressure — 400 psig test pressure

(Many of the same features as the Centurion 250™ hydrant)

**A-420** 4-1/2" two-way 2 hose nozzles

**A-422** 5-1/4" two-way 2 hose nozzles

**A-424** 4-1/2" one-way 1 pumper nozzle

**A-425** 5-1/4" two-way 2 pumper nozzles

## Storz pumper nozzle option —

- Available for 5" pumper nozzles, an integral storz connection allows the fire department to connect its pumper hose to the hydrant with a quick, quarter-turn action.
- No thread alignment, cross threading or leakage problems.

## 4-way with monitor elbow —

- Monitor style eliminates a possible leak path with separate monitor nozzle attachment.
- All parts interchangeable with Mueller Super Centurion 250 hydrant.
- 250 psi working pressure; 500 psi test pressure.
- Full flow 4-way openings: 4" monitor elbow, one 4-1/2" pumper nozzle, two 2-1/2" hose nozzles.



## Sizes and types of inlet connections

Size of Hydrant	Aqua-Grip™ System IPS/DIPS	Flanged*	Mech. Joint	D-150 Mech. Joint	Slip-On
4-1/2"	6"***	4", 6"	4", 6", 8"	4", 6"	6"
5-1/4"	6"***	4", 6"	4", 6", 8"	4", 6"	6"

(Auxiliary gate valves with flanged outlet and choice of inlet can be attached to hydrant with flanged inlet.)

\*Available with vertical or horizontal inlet.

\*\*Two styles available: IPS (PVC, PE, steel) or DIPS (DI, PVC, PE).

## Mueller accessories

**A-359-00 seat wrench** — universal fit; used to remove main valve and seat ring from bonnet level or ground line. Wrench self-centers on barrel flanges.



**A-367 brass sleeve** — protects O-rings from damage when the bonnet is removed from the upper stem.



**A-311 operating wrench** — operates nozzle caps, pin- and lug-type hose couplings, hydrant operating and hold-down nuts.



**A-51 hydrant lubricating oil** — 10.5 oz. can of all-weather oil exactly fills oil reservoir.



## Ordering hydrants, accessories, or repair kits

For complete ordering information refer to the Mueller Water Distribution Products Catalog (available on-line).

Manufactured under one or more of the following:  
U.S. Patent No. 4,717,178; 4,842,246.



Main Office — Decatur, IL  
Water Division: 1-800-423-1323  
Canada — Mueller Canada Inc., Milton, Ontario 1-905-878-0541  
www.muellercompany.com  
e-mail: moreinfo@muellercompany.com

All products must be installed and maintained in accordance with applicable instructions and/or standards.



## Hydrant repair kits

Having everything you need in a convenient kit helps make routine maintenance easier and periodic hydrant upgrading simpler. Kits are available for five different hydrant sections. Specific kits include:

### 1 Bonnet repair kit

Weather seal. Hold-down nut O-ring.  
Bonnet O-ring. Anti-friction washer.  
Stem O-rings.  
Bonnet flange O-ring and gasket.†  
Hydrant lubricating oil.

### 2 Safety flange repair kit

Stem coupling. Safety flange.  
Flange gasket. Hydrant lubricating oil.  
Replacement bolts and nuts.  
Bonnet flange O-ring and gasket.†

### 3 Extension kit

Extension barrel. Extension stem.  
Flange. 8 bolts and nuts.  
Flange O-ring and gasket.†  
Hydrant lubricating oil.  
Stem coupling and hardware.  
Bonnet flange O-ring and gasket.†

### 4 Main valve kit

Top seat O-rings. Lower valve plate.††  
Bottom seat O-rings. Cap nut seal.  
Main valve.†† Lock washer.  
Bronze seat ring.

### 5 Shoe repair kit

Drain valve facings. Cap nut seal.  
Top seat O-ring. Main valve.††  
Lower valve plate.†† Lock washer.  
Bottom seat O-ring. Shoe nuts and bolts.  
Drain valve facing screws.  
Drain ring housing O-ring and gasket.  
Hydrant lubricating oil.

†Kit includes both O-ring and gasket to accommodate either 250 psig or 200 psig style hydrants.

††Reversible style main valve and lower valve plate — must be used together when replacing non-reversible style parts.