

A black and white photograph of a red Mueller Modern Improved Fire Hydrant. The hydrant is positioned in the lower-left foreground, featuring a low-profile design with two side outlets and a top cap, all secured with red chains. It is set against a background of a brick wall and some foliage. The overall image is in black and white, with the hydrant's color highlighted in red.

Introducing the

Mueller® *Modern Improved* Fire Hydrant

A modern way to improve community safety

- Sleek, low-profile design
- Dependable, all-weather operation
- Minimizes damage from traffic

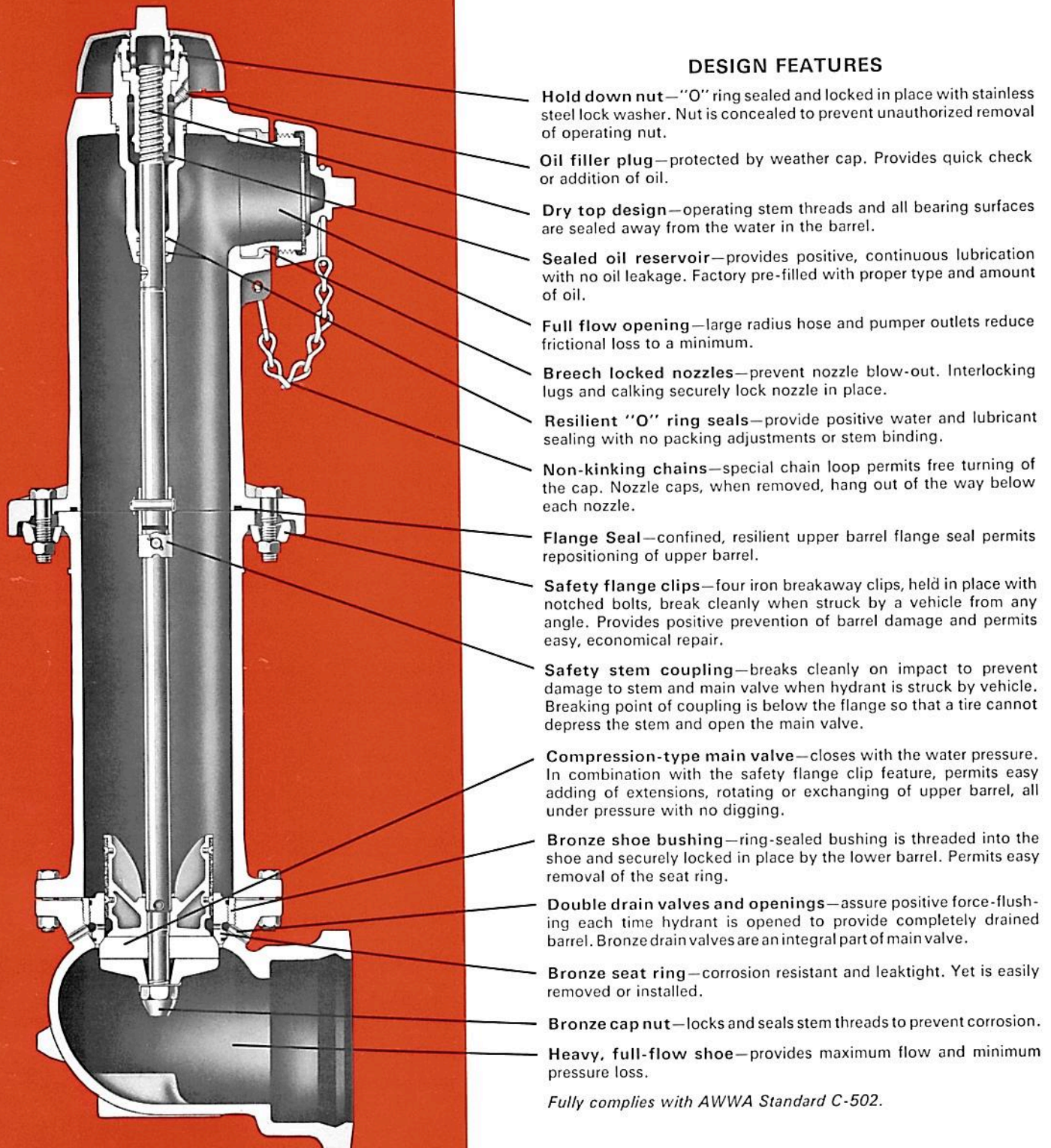
Fully complies with AWWA Standard C-502

the Mueller Modern Improved Fire Hydrant

gives you the modern appearance and superior, dependable performance essential to today's community safety requirements

The new Mueller Modern Improved Hydrant combines compact good looks with the most efficient, effective operational features available. Standing just 27" above the ground line on a square base, the hydrant presents an exceptionally low profile yet maintains the proper nozzle height. It requires no maintenance beyond a periodic lubrication check, and if damaged by traffic, can be repaired quickly and easily in a few minutes with an inexpensive repair kit. The main valve, shoe, barrels and nozzles are designed to provide maximum flow and maximum water pressure at the nozzle.

DESIGN FEATURES



Hold down nut—"O" ring sealed and locked in place with stainless steel lock washer. Nut is concealed to prevent unauthorized removal of operating nut.

Oil filler plug—protected by weather cap. Provides quick check or addition of oil.

Dry top design—operating stem threads and all bearing surfaces are sealed away from the water in the barrel.

Sealed oil reservoir—provides positive, continuous lubrication with no oil leakage. Factory pre-filled with proper type and amount of oil.

Full flow opening—large radius hose and pumper outlets reduce frictional loss to a minimum.

Breech locked nozzles—prevent nozzle blow-out. Interlocking lugs and calking securely lock nozzle in place.

Resilient "O" ring seals—provide positive water and lubricant sealing with no packing adjustments or stem binding.

Non-kinking chains—special chain loop permits free turning of the cap. Nozzle caps, when removed, hang out of the way below each nozzle.

Flange Seal—confined, resilient upper barrel flange seal permits repositioning of upper barrel.

Safety flange clips—four iron breakaway clips, held in place with notched bolts, break cleanly when struck by a vehicle from any angle. Provides positive prevention of barrel damage and permits easy, economical repair.

Safety stem coupling—breaks cleanly on impact to prevent damage to stem and main valve when hydrant is struck by vehicle. Breaking point of coupling is below the flange so that a tire cannot depress the stem and open the main valve.

Compression-type main valve—closes with the water pressure. In combination with the safety flange clip feature, permits easy adding of extensions, rotating or exchanging of upper barrel, all under pressure with no digging.

Bronze shoe bushing—ring-sealed bushing is threaded into the shoe and securely locked in place by the lower barrel. Permits easy removal of the seat ring.

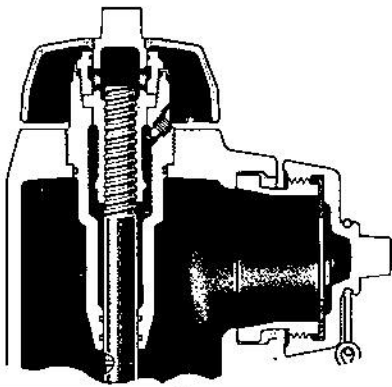
Double drain valves and openings—assure positive force-flushing each time hydrant is opened to provide completely drained barrel. Bronze drain valves are an integral part of main valve.

Bronze seat ring—corrosion resistant and leaktight. Yet is easily removed or installed.

Bronze cap nut—locks and seals stem threads to prevent corrosion.

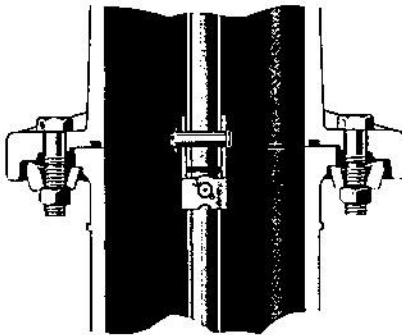
Heavy, full-flow shoe—provides maximum flow and minimum pressure loss.

Fully complies with AWWA Standard C-502.



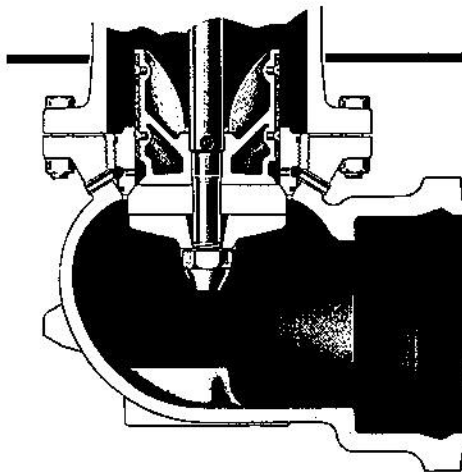
Dry Top Design—Sealed Lubrication System

An "O" ring-sealed oil system provides continual lubrication to the operating mechanism to assure ease of operation at all times. Dual "O" ring seals prevent loss of lubricant during shipping, storage, installation or use, and seal water away from stem threads and bearing surfaces when the hydrant is in use. "O" ring seals in the operating housing and hold down nut seal out rain, snow, dirt and other foreign matter.



Safety Flange Clip and Safety Stem Coupling Design

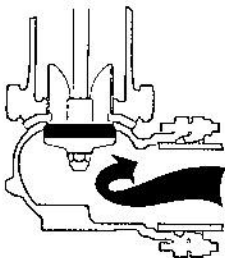
Traffic damage to the hydrant is minimized by safety mechanisms on both the barrel and the stem that break clean on vehicular impact from any angle. There is no damage to either barrel section and no stem bending. The main valve is not damaged and remains closed, preventing water loss and permitting easy repair from above ground with no digging. The hydrant is restored to service by simply replacing the four safety flange clips and the safety stem coupling—it takes only a few minutes using a low cost repair kit.



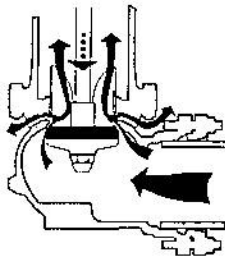
Compression-Type Main Valve

Water pressure holds the main valve closed, permitting easy maintenance or repair of the entire barrel assembly from above ground without the need for water shut-off. The compression-type valve, in conjunction with the safety flange clip feature, permits easy addition of extension sections or rotation or exchange of upper barrel section for different nozzle arrangements.

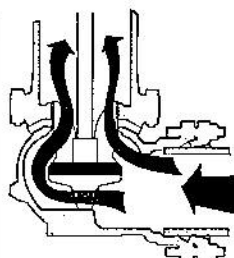
MAIN VALVE OPERATION



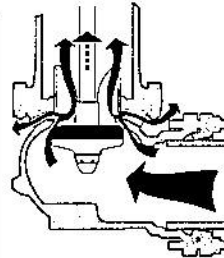
Closed—main valve held closed by water pressure; barrel is dry.



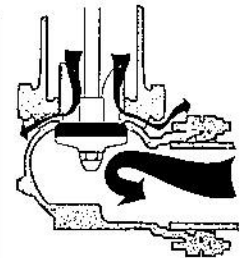
Opening—water pressure force-flushes double drain valves and drain openings.



Open—main valve guides seal drain valves closed.



Closing—water pressure again force-flushes drain valves.



Closed—drain valves are open to allow complete drainage from barrel.

Specify MUELLER® A-419 Modern Improved Hydrants for any fire protection need



TWO-WAY A-419 HYDRANTS—two 2½" hose nozzles; 4½" valve opening. For 150 psi Working Pressure, 300 psi Test Pressure.

THREE-WAY A-419 HYDRANTS—two 2½" hose nozzles and one pumper nozzle; 4½" or 5½" valve openings. For 150 psi Working Pressure, 300 psi Test Pressure.

When ordering, specify the following:

- Quantity required, each size.
- Size of valve opening and catalog number.
- Nozzle arrangement.
- Depth of bury (ground line to bottom of connecting pipe).
- Type and size of inlet connection (see chart below).
- Size and shape of operating nut (1½" pentagon is standard. Square, hexagon or other size pentagon can be furnished).
- Direction of opening.
- Hose nozzle threading—send male coupling on hydrant nozzle to show threads desired, EXCEPT in the following cases: (a) If using National Standard, specify accordingly on order. (b) If we have previously furnished hydrants at the same location and there is no change. (Complete records are kept on file in our Engineering Department for reference.)
- Pumper nozzle threading—Same instructions as number 8.
- Color—unless otherwise specified, the hydrant will be enameled above the ground line with fire hydrant red. When so ordered, we will enamel any color (or colors) specified to match existing standards in your city.

ACCESSORIES



A-307 SAFETY FLANGE REPAIR KIT(Same kit used for 4½" and 5½" hydrants). Consists of notched steel safety stem coupling with clevis pins and cotter pins, bolts, nuts, safety flange clips, upper barrel seal and Mueller Hydrant Lubricating oil.



A-24091 OPERATING WRENCH—One wrench operates hose nozzle cap, pin type and lug type hose couplings, hydrant operating nut and hold down nut. Wrench is also used to remove weather caps from both 4½" and 5½" hydrants. Order by quantity, Catalog No., and size and shape of operating nut.



A-333 (4½" and 5½") BARREL EXTENSION SECTIONS—Barrel Extension Sections in 6" increments from 6" through 4'0". Each is furnished with stem extension, steel coupling, solid flanges, gasket, bolts and Mueller Hydrant Lubricating oil. Order by hydrant size, Catalog No., and length desired.



A-367 BRASS SLEEVE—Protects "O" rings from damage by stem threads when replacing safety stem coupling, removing main valve or inserting extension section.



A-358 SEAT WRENCH—Seat Wrench is used to remove main valve and seat ring. Compact, lightweight seat removal wrench fits all sizes of hydrants, depths of bury. Wrench self centers on lower barrel flange.



H-96 HYDRANT LUBRICATING OIL—This special all-weather oil flows freely through a temperature range of minus 60 to plus 150 degrees. Can contains 8 oz. of oil—exactly enough to fill oil reservoir to correct level.

SIZES AND TYPES OF INLET CONNECTIONS

Size of Hydrant	Hub	Flanged	Slip On	A-C	Mech. Joint	D-150 Mech. Joint
4½"	4", 6"	4", 6"	4", 6"	4", 6"	4", 6"	4", 6"
5½"	4", 6"	4", 6"	4", 6"	4", 6"	4", 6"	4", 6"

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

MUELLER CO.

DECATUR, ILL.

FACTORIES AT: DECATUR, CHATTANOOGA, BREA (LOS ANGELES), MUELLER, LIMITED, SARNIA, CANADA

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