

MUELLER Hydrant Security Device

When conducting a vulnerability assessment (V.A.), infiltration of a municipal water supply through an unsecured fire hydrant should be a primary concern.

Most of the hydrant security devices available throughout the country use a universal wrench or tool that can easily be obtained by a motivated wrongdoer. These security devices can be unlocked and replaced with little or no evidence of tampering to the water authority.

The Mueller Hydrant-Defender Device provides security to the hydrant nozzles at two levels. First, the 14 gauge (.075") 304 stainless steel straps prevent unauthorized access to all but the most determined individuals. Second, unlike most other security devices, evidence of tampering will be clearly visible. In the event of an emergency, fire personnel can quickly and easily open the lock and remove the Hydrant-Defender straps in seconds.

The stainless steel barrel lock* features a key, or keys, that are uniquely coded for the purchaser and strictly controlled by the manufacturer. When the device is securely locked, the hydrant nozzles and the operating nut can only be accessed by completely cutting through the heavy straps or barrel lock. Damage to the straps or lock will be clearly evident, even from a distance, and the water authority can investigate the problem immediately.

The Hydrant-Defender device is the most affordable hydrant security system available today. The unit can be factory installed on the Mueller Super Centurion® hydrant or ordered separately. Its straps are adjustable to accommodate variations in hydrant dimensions, and models are available to fit virtually any make of 3-way hydrant. Custom markings such as "Out of Service" or a durable epoxy paint custom matched to virtually any color scheme can be applied. Installation is quick and easy.

**Recommended lock must be purchased directly from lock manufacturer: Highfield Mfg. Co. (203) 384-2281*



Hydrant-Defender Security Device For Mueller A-421 / A-423 Super Centurion 250 Fire Hydrant (With or Without Weather Shield)

Hydrant Type*

Mueller Improved Fire Hydrant
Mueller A-421 or A-423 Super Centurion Fire Hydrant
Mueller A-421 or A-423 Super Centurion Fire Hydrant With 4" Storz
Mueller A-421 or A-423 Super Centurion Fire Hydrant With 5" Storz
Mueller A-411 Standard Post Fire Hydrant

Part Number**

HSZ02000
HSZ00100
HSZ01000
HSZ04000
HSZ01000

Ordering Information:

The following information is required to properly size the Mueller Adjustable Hydrant-Defender:

- A) Hydrant manufacturer
- B) Hydrant model
- C) Date of manufacture
- D) Main valve size
- E) Nozzle configuration (Example: 3-way, double pumper, etc.)
- F) Requested optional paint color (silver / stainless steel is standard)

*Contact Customer Service for makes and models not listed.

** Specify color of Hydrant-Defender Security Device ordered.

Rev. 3-18 Shaded area indicates changes

- **Super Centurion 250/HS™ 3-way and 4-way catalog numbers**
 - A-421** 4-1/2" main valve opening 3-way (2 hose nozzles / 1 pumper nozzle)
 - A-423** 5-1/4" main valve opening 3-way (2 hose nozzles / 1 pumper nozzle)
 - A-454** 5-1/4" main valve opening 3-way (3 hose nozzles)*
 - A-455** 5-1/4" main valve opening 4-way (4 hose nozzles)*
 - A-458** 5-1/4" main valve opening 4-way (3 hose nozzles / 1 pumper nozzle)*
 - A-459** 5-1/4" main valve opening 4-way (2 hose nozzles / 2 pumper nozzles)**

*Hose Gate Valves required for FM approved models

Super Centurion 200/HS™ 2-way catalog numbers

- A-420** 4-1/2" main valve opening 2-way (2 hose nozzles)
- A-422** 5-1/4" main valve opening 2-way (2 hose nozzles)
- A-425** 5-1/4" main valve opening 2-way (2 pumper nozzles)

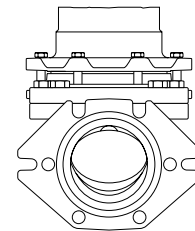
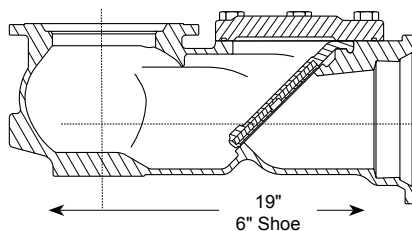
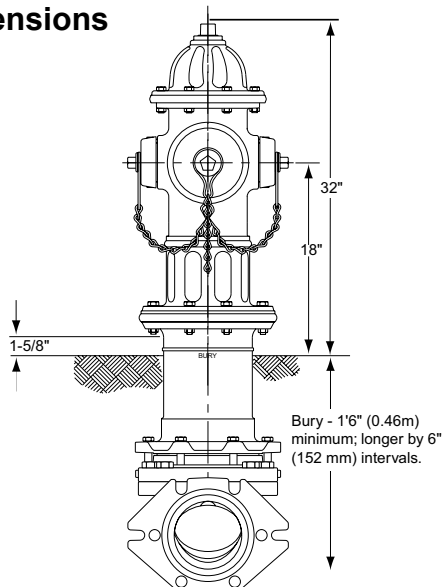
Super Centurion 200/HS™ 1-way catalog number

- A-424** 4-1/2" main valve opening 1-way (1 pumper nozzle)

- 10 year limited warranty on material and workmanship
- Meets all applicable parts of ANSI/AWWA C502 Standard
- Post type dry barrel design
- Dry top design with O-ring sealed oil reservoir
- Hydrant shoe incorporates a fabric and steel reinforced elastomeric flapper check valve located inside the hydrant inlet, allowing normal operation and access to the hydrant main valve through bonnet or ground flange.
- Traffic feature with stainless steel stem coupling
- Compression-type main valve closes with pressure for positive seal; it is made of rubber and is conveniently reversible providing a spare for long service life.
- Operating nut available in wide variety of shapes and sizes – open left or right
- Field replaceable hose and pumper nozzles
- Hose and pumper nozzles have large radius, full flow openings for low friction loss
- Contoured shoe is designed for full flow
- Dual bronze drain valves provide effective barrel drainage
- 250 psig (1725 kPa/17 barg) maximum working pressure, 500 psig (3450 kPa/35 barg) static test pressure for 3-way hydrants;
- 200 psig (1400 kPa/14 barg) maximum working pressure, 400 psig (2800 kPa/28 barg) static test pressure for 2-way and 1-way hydrants



Dimensions



Non-rotating bolt design:
cast-in pads eliminate need
for anti-rotation bolts.

**Front view detail
of Mechanical Joint**

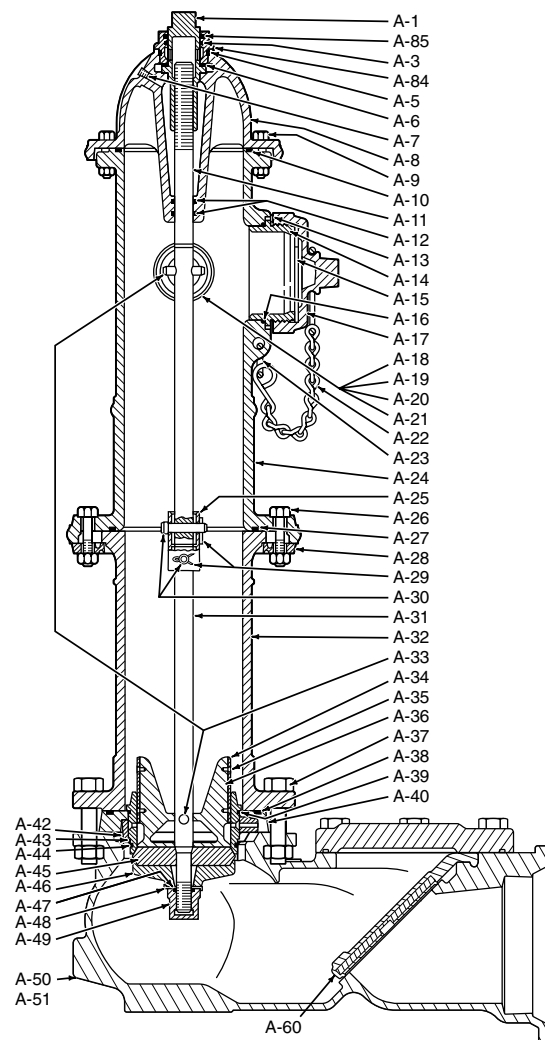
MUELLER® SUPER CENTURION 250/HS™ "HIGH SECURITY" FIRE HYDRANT PARTS



9A.3

Shaded area indicates change Rev. 3-18

Catalog Part Number	Description	Material	Material standard
A-1	Operating Nut	Bronze	ASTM B62
A-3	Hold Down Nut O-ring	Rubber	ASTM D2000-Buna N
A-5	Bonnet O-ring	Rubber	ASTM D2000-Buna N
A-6	Anti-friction Washer	Acetal	-
A-7	Oil Plug	Brass	ASTM B16
A-8	Bonnet	Cast Iron	ASTM A126 CL.B
A-9	Bonnet Bolt and Nut	Steel	SAE J429 Grade 2
A-10	Bonnet O-ring	Rubber	ASTM D2000-Buna N
A-11	Upper Stem	Steel	ASTM A576 1144T
A-12	Stem O-ring	Rubber	ASTM D2000-Buna N
A-13	Nozzle Lock	Stainless Steel	ASTM A276
A-14	Pumper Nozzle	Bronze	ASTM B584
A-15	Pumper Nozzle Gasket	Rubber	ASTM D2000-Neoprene
A-16	Pumper Nozzle O-ring	Rubber	ASTM D2000-Buna N
A-17	Pumper Nozzle Cap	Cast Iron	ASTM A126 CL.B
A-18	Hose Nozzle	Bronze	ASTM B584
A-19	Hose Nozzle Gasket	Rubber	ASTM D2000-Neoprene
A-20	Hose Nozzle O-ring	Rubber	ASTM D2000-Buna N
A-21	Hose Nozzle Cap	Cast Iron	ASTM A126 CL.B
A-22	Cap Chain	Steel	Plated
A-23	Chain Ring	Steel	Plated
A-24	Upper Barrel	Cast Iron	ASTM A126 CL.B
A-25	Stem Safety Coupling	Steel	ASTM A890
A-26	Traffic Bolt and Nut	Steel	SAE J429 Grade 2
A-27	Traffic Flange O-ring	Rubber	ASTM D2000-Buna N
A-28	Traffic Flange	Cast Iron	ASTM A126 CL.B
A-29	Cotter Pin	Stainless Steel	ASTM A276
A-30	Clevis Pin	Stainless Steel	ASTM A276
A-31	Lower Stem	Steel	ASTM A576 1144T
A-32	Lower Barrel	Cast Iron	ASTM A126 CL.B
A-33	Stem Pin	Stainless Steel	ASTM A582
A-34	Drain Valve Facing	Plastic	
A-35	Drain Valve Screw	Stainless Steel	ASTM A276
A-36	Upper Valve Plate (includes A-34 and A-35)	Bronze	ASTM B584
A-37	Shoe bolt and nut	Steel	SAE J429 Grade 2
A-38	Drain Ring Housing O-ring	Rubber	ASTM D2000-Buna N
A-39	Seat Ring Top-O-ring	Rubber	ASTM D2000-Buna N
A-40	Drain Ring Housing	Cast Iron	ASTM A-126 CL.B
A-41	Drain Ring Housing Bolt and Nut	Steel	SAE J429 Grade 2
A-42	Drain Ring	Bronze	ASTM B62
A-43	Seat Ring	Bronze	ASTM B584
A-44	Seat Ring Bottom O-ring	Rubber	ASTM D2000
A-45	Reversible Encapsulated Main Valve	Rubber	ASTM D2000 reinforced Cast Iron ASTM A126 CL.B
A-46	Lower Valve Plate	Cast Iron	ASTM A126 CL.B
A-47	Cap Nut Seal	Rubber	ASTM D2000-Nitrile
A-48	Lock Washer	Stainless Steel	ASTM A276
A-49	Lower Valve Plate Nut	Cast Iron	ASTM A126 CL.B
A-50	Shoe	Ductile Iron	ASTM A536
A-51	Hydrant Lubricating Oil (not shown)	-	-
A-60	Flapper	Rubber*	ASTM D2000
A-61	Lid	Ductile Iron	ASTM A536
A-84	Hold Down Nut	Bronze	ASTM B62
A-85	Weather Seal	Rubber	ASTM D2000 EPDM



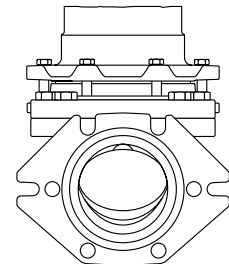
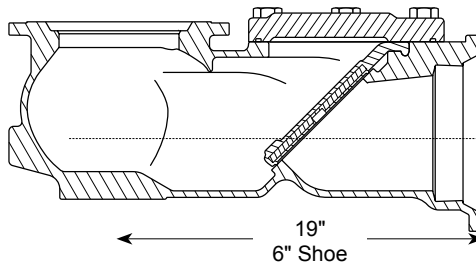
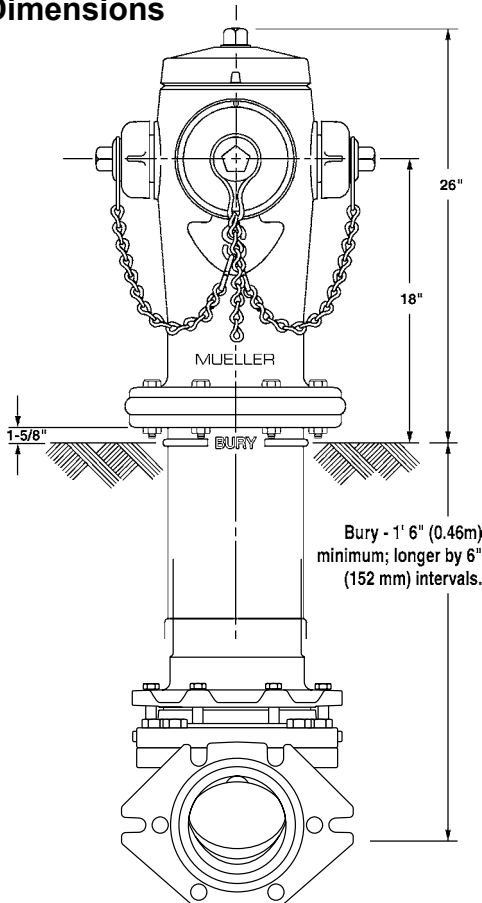
* Reinforced: DI flapper insert, fabric in hinge area.

Rev. 3-18 Shaded area indicates changes

- **Catalog numbers -**
 - A-441** 5-1/4" main valve opening two way (two hose nozzles)
 - A-442** 5-1/4" main valve opening three way (two hose nozzles and one pumper nozzle)
- Modern, sleek exterior design
- Meets all applicable parts of ANSI/AWWA C502 Standard
- Post type dry barrel design
- Dry top design with O-ring sealed oil reservoir
- Hydrant shoe incorporates a fabric and steel reinforced elastomeric flapper check valve located inside the hydrant inlet, allowing normal operation and access to the hydrant main valve through bonnet or ground flange.
- Traffic feature with stainless safety stem coupling
- Compression type main valve closes with pressure for positive seal; it is made of rubber and is conveniently reversible providing a spare for long service life
- Operating nut available in wide variety of shapes and sizes
- Field replaceable hose and pumper nozzles
- Hose and pumper nozzles have large radius, full flow openings for low friction loss
- Contoured shoe is designed for full flow
- Dual bronze drain valves provide effective barrel drainage
- 200 psig (1400 kPa/14 barg) maximum working pressure, 400 psig (2800 kPa/28 barg) test pressure



Dimensions



Non-rotating bolt design:
cast-in pads eliminate need
for anti-rotation bolts.

**Front view detail
of Mechanical Joint**

MUELLER® MODERN CENTURION 250/HS™

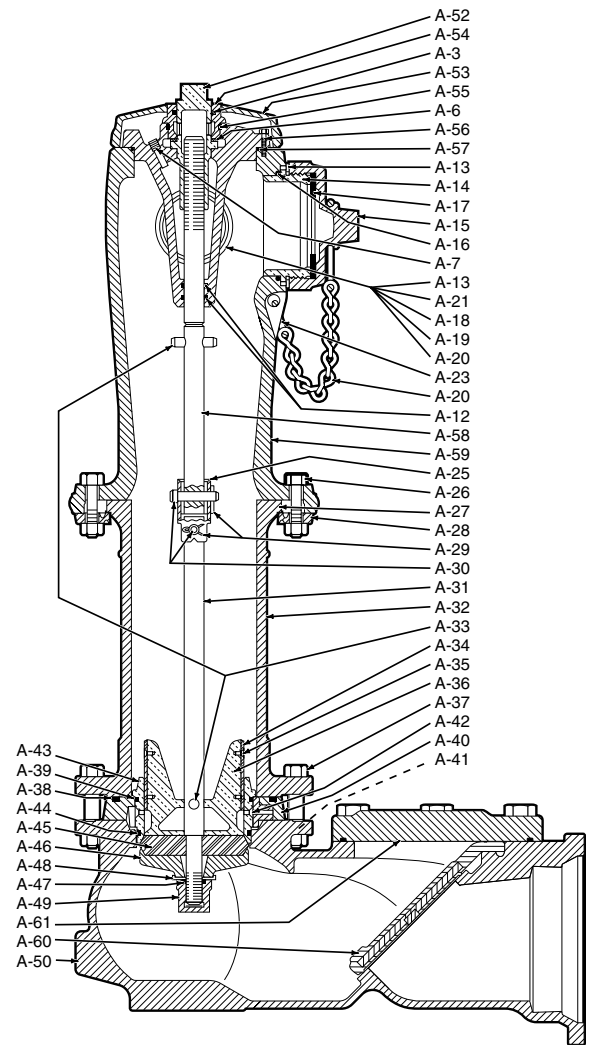
"HIGH SECURITY" FIRE HYDRANT PARTS



9A.5

Shaded area indicates change Rev. 3-18

Catalog Part No.	Description	Material	Material standard
A-3	Hold Down Nut O-ring	Rubber	ASTM D2000-Buna N
A-5	Bonnet O-ring	Rubber	ASTM D2000-Buna N
A-6	Anti-friction Washer	Acetal	-
A-7	Oil Plug	Brass	ASTM B16
A-12	Stem O-ring	Rubber	ASTM D2000-Buna N
A-13	Nozzle Lock	Stainless Steel	ASTM A276
A-14	Pumper Nozzle	Bronze	ASTM B584
A-15	Pumper Nozzle Gasket	Rubber	ASTM D2000-Neoprene
A-16	Pumper Nozzle O-ring	Rubber	ASTM D2000-Buna N
A-17	Pumper Nozzle Cap	Cast Iron	ASTM A126 CL.B
A-18	Hose Nozzle	Bronze	ASTM B584
A-19	Hose Nozzle Gasket	Rubber	ASTM D2000-Neoprene
A-20	Hose Nozzle O-ring	Rubber	ASTM D2000-Buna N
A-21	Hose Nozzle Cap	Cast Iron	ASTM A126 CL.B
A-22	Cap Chain	Steel	Plated
A-23	Chain Ring	Steel	Plated
A-25	Stem Coupling	Stainless Steel	ASTM A890
A-26	Traffic Flange Bolt and Nut	Steel	SAE J429 Grade 2
A-27	Traffic Flange O-ring	Rubber	-
A-28	Traffic Flange	Cast Iron	ASTM A126 CL.B
A-29	Cotter Pin	Stainless Steel	ASTM A276
A-30	Clevis Pin	Stainless Steel	ASTM A276
A-31	Lower Stem	Steel	ASTM A576 GR.B
A-32	Lower Barrel	Cast Iron	ASTM A126 CL.B
A-33	Stem Pin	Stainless Steel	ASTM A276
A-34	Drain Valve Facing	Plastic	-
A-35	Drain Valve Screw	Stainless Steel	ASTM A276
A-36	Upper Valve Plate	Bronze	ASTM B584
A-37	Shoe bolt and nut	Steel	SAE J429 Grade 2
A-38	Drain Ring Housing O-ring (1997 and newer models; pre-1997 models have flat gasket)	Rubber	ASTM D2000-Buna N
A-39	Seat Ring Top-O-ring	Rubber	ASTM D2000-Buna N
A-40	Drain Ring Housing	Cast Iron	ASTM A-126 CL.B
A-41	Drain Ring Housing Bolt and Nut (not shown; used only on pre-1997 model hydrants)	Steel	SAE J429 Grade 2
A-42	Drain Ring	Bronze	ASTM B584
A-43	Seat Ring	Bronze	ASTM B584
A-44	Seat Ring Bottom O-ring	Rubber	ASTM D2000-Buna N
A-45*	Reversible Main Valve (1997 and new models only; pre-1997 models use non-reversible main valve and lower valve plate - not shown)	Rubber	Rubber ASTM D2000 reinforced Cast Iron ASTM A126 CL.B
A-46	Lower Valve Plate (1997 and new models only; pre-1997 models use non-reversible main valve and lower valve plate - not shown)	Cast Iron	ASTM A126 CL.B
A-47	Cap Nut Seal	Rubber	ASTM D2000-Nitrile
A-48	Lock Washer	Stainless Steel	ASTM A276
A-49	Lower Valve Plate Nut	Cast Iron	ASTM A126 CL.B
A-50	Shoe**	Cast Iron	ASTM A126
A-51	Hydrant Lubricating Oil (not shown)	-	-
A-52	Operating Nut	Bronze	ASTM B62
A-53	Weather Cap	Cast Iron	ASTM A126 CL.B
A-54	Hold Down Nut	Bronze	ASTM B62
A-55	Housing	Cast Iron	ASTM A126 CL.B
A-56	Housing Bolt	Steel	SAE J429 Grade 2
A-57	Top Housing O-ring	Rubber	ASTM D2000
A-58	Upper stem	Steel	ASTM A576 GR.117
A-59	Upper Barrel	Cast Iron	ASTM A126 CL.B
A-60	Flapper	Rubber†	ASTM D2000
A-61	Lid	Ductile Iron	ASTM A536



* Pre-1997 models may be upgraded to use the reversible main valve by also replacing the lower valve plate with the 1997 model.

** 6" MJ shoe material is Ductile Iron, ASTM A536

† Reinforced: DI flapper insert, fabric in hinge area.

Rev. 3-18 Shaded area indicates changes

MUELLER TAMPER-PROOF OPERATING NUT

This simple, yet effective option fights three challenges to the fire hydrants in your system:

- Unauthorized operation
- Theft of parts
- Vandal inflicted damage to the operating and hold-down nuts

A cast iron cap that spins freely on top of the hydrant bonnet shields the operating mechanism and protects it from would-be vandals. Common tools cannot grip the cap, the operating nut or the specially shaped hold-down nut. Only authorized utility and fire personnel will have the tools needed to operate the hydrant or to remove the cap and hold-down nut if the hydrant ever needs repair.

The Tamper-Proof feature can be ordered factory-installed on new Centurion hydrants, or as a kit to retrofit Centurion and Mueller Improved hydrants in the field.



Factory Installed Fire Hydrants with Tamper-Proof Feature

For 4-1/2" and 5-1/4" Mueller® Centurion® Hydrants



Option 114 - Centurion Fire Hydrant with installed Tamper-Proof feature for open left or open right. Specify "Option 114" on order.



Option 110 - Centurion Fire Hydrant with installed Tamper-Proof cast iron hold-down nut only, for open left or open right. Specify "Option 110" on order.

Tamper-Proof Retrofit Kit

For 4-1/2" or 5-1/4" Centurion and Mueller Improved fire hydrants currently in use.

Item	Open Left	Open Right
	Part Number	Part Number
Kit Complete	284275	284276
Bonnet O-Ring	142779	142779
Hold-Down Nut	146782	146783
Operating Nut Cap	145548	145549
Ring Retainer	145553	145553
Operating Nut	145554	145555
Retaining Clip	145557	145557
Hold-Down Nut O-Ring	194898	194898
Anti-Friction Washer	195546	195546

Wrenches for 4-1/2" and 5-1/4" Tamper-Proof Hydrants



A-391

Operating Nut Wrench

Used to assemble and disassemble the Tamper-Proof Hold-Down Nut.



A-384

Spanner Wrench

Used to assemble and disassemble the Tamper-Proof Operating Nut Cap.



A-374

Operating Wrench

Operates the Tamper-Proof Hydrant and removes Hose and Pumper Nozzle Caps. (Also operates hydrants without tamper-proof feature).

Rev. 3-18 Shaded area indicates changes

The Mueller Tamper-Resistant Hydrant Hold-Down Nut is specially designed to make Mueller Centurion® and Improved Fire Hydrants more resistant to tampering. It replaces the existing hold-down nut (and weather cap on hydrants dated 1987 and earlier) and surrounds the operating nut, helping prevent unauthorized operation of the hydrant. The special operating wrench for use with this option may also be used with other hydrants.

The O-ring sealed hold-down nut may be ordered "open left" or "open right" as either original equipment or as a retrofit.



Retrofit parts and wrench

Part Numbers	Centurion and Improved Hydrant
Open right	144983
Open left	143112
Operating wrench	A-310

Preinstalled

When ordered as original equipment, option #004 must be specified.

MUELLER® SA-SERIES CHECK VALVE



9A.9

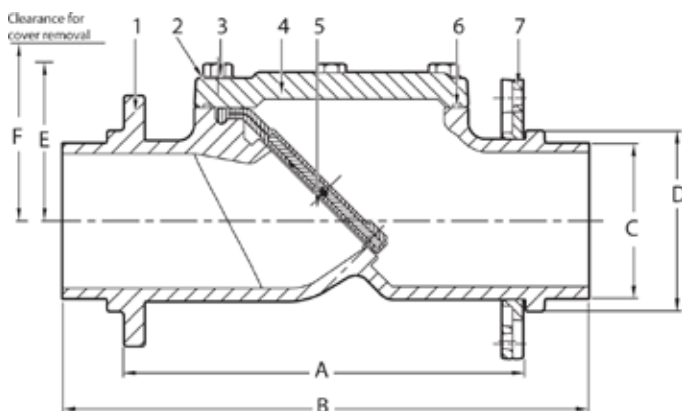
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- Catalog number - **0600-850M-0**
- Size – 6"
- Ductile iron body and cover
- 100% unobstructed flow path
- Inherit non-slam, quiet operation
- Bubble-tight shut off, without backflow
- Swivel MJ gland on one end aids pipe or valve alignment
- Epoxy coated interior and exterior
- Stainless steel bolts
- Domed bonnet for easy inspection of flexible disc and seat
- Rated at 250 psi (1725 kPa/17 barg)



Check Valve Parts

Part Number	Description	Material	Material Standard
1	Body	Ductile Iron	ASTM A536
2	Washer	Stainless Steel	A276 Type 304
3	Cover Bolt	Stainless Steel	A276 Type 304
4	Cover	Ductile Iron	ASTM A536
5	Disc	Ductile Iron and EPDM	ASTM 536 and D2000
6	O-ring	Rubber	ASTM D2000
7	Swivel Flange	Ductile Iron	ASTM A536



Dimensions**

Valve Size*	A	B	C	D	E	F	Weight**
6"	17.63"	24.50"	6.90"	8.02"	6.81"	11.00"	175

*Nominal

**All dimensions are in inches. All weights are in pounds and are approximate.

9A.10



MUELLER® HYDRANT-DEFENDER®
SECURITY DEVICE

Rev. 5-13 Shaded area indicates changes



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