



AVK HIGH PRESSURE, 250 PSI, DRY BARREL FIRE HYDRANT

27/00

UL/FM approved, modern type

001

AVK dry barrel hydrants are designed with a traffic flange for easy repair after collision. The hydrant's main valve has a ductile iron core which is fully encapsulated in EPDM rubber. The nozzle section can be rotated 360 degrees. The upper section of the hydrant is repairable under pressure.

Product Description:

Dry barrel hydrant - Modern type to AWWA C502 - UL listed - FM approved for fire protection application

Standards:

- Designed according to AWWA C502,
- Flange drilling to ANSI B 16.42, class 150

Test/Approvals:

- Hydraulic test to FM Class 1510, UL 246 and ULC CAN/ULC-5520-M91
- FM Approved. UL and ULC listed.

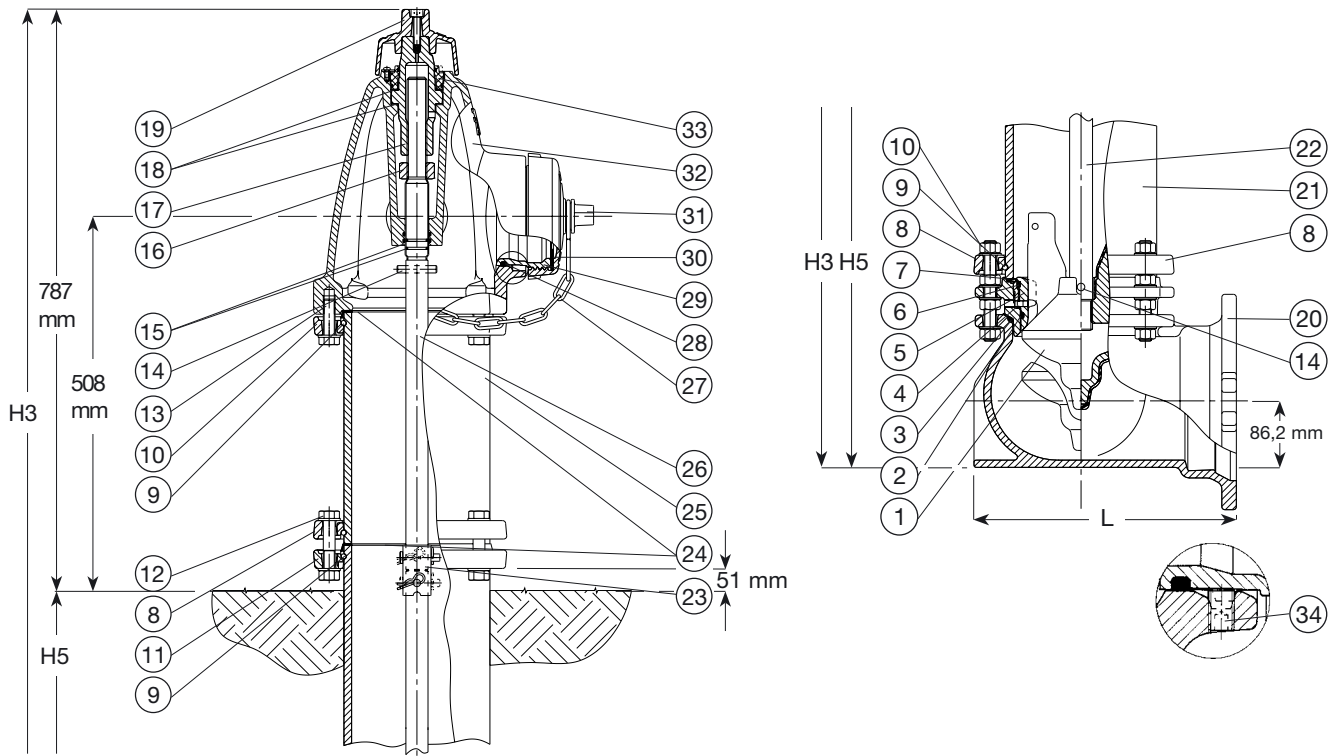
Features:

- UL/ULC listed and FM approved
- Meets or exceeds AWWA C502 (latest)
- High pressure rating (250 psi)
- 2 x 2.5" NST hose nozzles + 1 x 4" NST pumper nozzle
- The breakable flange and stem rod coupling ensure no leaking and easy repair at traffic knock down
- Ductile iron nozzle section, barrel section, bonnet, and base
- 5.25" valve opening for high flow rating
- Hydrant drain easily plugged if required - may be plugged internally or externally
- Extensions available in lengths from 6" to 60"
- Inlet shoe also available in DN 100, and flange drilling also in PN 10/16 (DN 100 not UL/FM approved)
- 1 1/2" pentagon operating nut
- Epoxy coating according to DIN 30677-2, GSK approved

Accessories:

Various outlet couplings, landing valves and extension pieces





Component List:

1. Main valve disc	Ductile iron w. EPDM rubber	2. Base gasket	NBR rubber
3. Lower seat O-ring	NBR rubber	4. Drain bushing	Bronze
5. Valve seat ring	Bronze	6. Upper seat O-ring	NBR rubber
7. Lower barrel O-ring	NBR rubber	8. Standpipe flange	Ductile iron
9. Lock ring	Stainless steel	10. Thr. rod/nut	Stainless steel
11. Breakable flange	Ductile iron	12. Bolt and nut	Stainless steel
13. Screw	Stainless steel	14. Seat removal/lock pin	Stainless steel
15. O-rings	NBR rubber	16. Stop nut	Zinc plated steel
17. Stem nut	Bronze	18. Anti friction washer	Polyamide
19. Weather shield	Grey cast iron	20. Base	Ductile iron
21. Lower barrel	Ductile iron	22. Lower stem rod	Epoxy coated steel
23. Breakable coupling	Stainless steel	24. Barrel gasket	NBR rubber
25. Upper barrel	Ductile iron	26. Upper stem rod	Stainless steel
27. Cap chain	Plated steel	28. Nozzle O-ring	NBR rubber
29. Nozzle	Bronze	30. Cap gasket	NBR rubber
31. Cap	Cast iron	32. Nozzle section	Ductile iron
33. Thrust nut	Bronze	34. Nozzle lock screw	Stainless steel

Reference Nos. and Dimensions:

AVK ref. nos	DN mm	H3 mm	H5 mm	L mm	Theoretic. weight kg
27-00-O0204-00008-CP	150	1701	914	343	154
27-00-O0205-00008-CP	150	1854	1067	343	163

The designs, materials and specifications shown are subject to change without notice. This is due to the continuous development of our product programme.

AVK ref. nos	DN mm	H3 mm	H5 mm	L mm	Theoretic. weight kg
27-00-O0206-00008-CP	150	2006	1219	343	172
27-00-O0207-00008-CP	150	2159	1372	343	181
27-00-O0208-00008-CP	150	2311	1524	343	190
27-00-O0209-00008-CP	150	2464	1677	343	199
27-00-O0210-00008-CP	150	2616	1829	343	208



K-81D Fire Hydrant

AWWA C502



K8103 DIRT SHIELD

Cast Iron ASTM A-126, Class B
One-piece component deflects moisture and dust exposure. Affords protection against freezing conditions ensuring operational efficiency.

K8105 STEM LOCK NUT "O" RING

Buna N, D2000

K8104 STEM LOCK NUT

Bronze Alloy CDA 84400, ASTM B-584
Non-corrodible bronze nut secures stem nut for operating thrust. Hold down nut provides additional weather protection with threading attachment to hydrant cap and large O-ring seal.

K8107 HYDRANT CAP / BONNET

Cast Iron ASTM A-126, Class B
Single unit design contains factory applied grease. Design also allows the choice of oil lubrication. Two o-ring seals at penetration point of operating stem prevent lubricant to escape and excludes water entry of chamber when hydrant is pressurized.

K8109 HYDRANT CAP GASKET

Cloth Inserted Rubber, D2000

K8112 BRONZE STEM SLEEVE "O"-RING

Buna N, D2000
Seal between brass ferrule and stem.

K8114 UPPER STEM

H.R. Steel A588
High strength steel stem has rugged acme threads at top end to match threads in bronze operating nut. Brass stem sleeve is machine fitted on segment that penetrates oil reservoir providing smooth, non-corrodible bearing surface for double O-ring seals. O-ring insert between sleeve and stem provides additional leakage protection.

K8115 UPPER BARREL / NOZZLE SECTION

Cast Iron ASTM A-126, Class B
Molded from durable cast iron and available with either two hose and one pumper nozzle or two hose nozzles.
Above ground hydrant assembly may be rotated full 360° on the standpipe flange to improve alignment to curb. Simply loosen flange bolts, rotate and retighten.

K8122R COUPLING PINS (2)

Stainless Steel, 18-8
Updated pin design uses spring loaded pin. No need for clevis pins, nuts, or other securing device.

K8118 BOLTS & NUTS (8)

Steel, (Zinc Plated)

K8120 O-RING

Buna N, D2000
O-ring seal provides ease of repair and 360° nozzle facing.

K8124 LOWER BARREL

Ductile Iron ANSI 21.50, 21.51

K8136 DRAIN VALVE

Bronze, B584 C954/955-AWWA GR E
Includes rubber facing that provides positive closure of bronze bushed drain ports during operation. After operation, the drain valve automatically drains all water from the barrel of the hydrant preventing cold weather freeze-up. Drain ports are purged during first three operating turns on opening and again on closing.

K8137 DRAIN VALVE FACING WITH INSERT

Buna N, Stainless Steel (D2000 / A276 (304)
Unique pressure activated drain valve assures positive shut off. The higher the pressure, the tighter the seal. Automatically compensates for wear due to usage. Does not rely on interference fit.

K8127 SEAT RING INSERT / RETAINER RING

Bronze K584 C836/844-AWWA GR A
Permanently affixed to elbow with O-ring seal. Provides bronze to bronze interface for easy seat removal.

K8129 DRAIN TUBE

Naval Brass B21-CDA 464

K8133 DRAIN VALVE PIN

304 Stainless Steel

K8134 ELBOW

Ductile Iron ASTM A-536, Grade 70-50-5
Fusion bonded epoxy coating inside and out. Meets AWWA C550 standards. 5 1/4" & 4 1/2" Mechanical Joint and Flange elbows available in 6" & 4" connections. 5 1/4" Tyton Joint / push-on available in 6" only.

AWWA

500 lbs. test pressure
250 lbs. working pressure

ULFM

400 lbs. test pressure
175 lbs. working pressure

The Guardian K81D Hydrant meets or exceeds all the latest provisions of AWWA, and UL 246-FM 1510 specifications (options are limited on UL/FM models).

K8101 ALEMITE FITTING

Stainless Steel A276 (304)
Subset grease fitting provides convenient access to lubricate operating threads for corrosion protection.

K8102 OPERATING STEM NUT

Bronze Alloy CDA 84400, ASTM B-584

K8146 ALLEN HEAD SET SCREW

Stainless Steel A276 (410)
Drilled and tapped hole in operating stem nut with stainless steel set screw. Secures hold down nut to hydrant cap.

K8106 THRUST WASHER

Nylatron GS MIL LP-410
Antifriction bearing at thrust collar reduces operating torque for smoother open/close cycles.

K8108 CAP BOLTS & NUTS (6)

Steel (Zinc Plated) A307 AE Grade 2

K8110 STEM FERRULE

Naval Brass B21-CDA 464

K8111 HYDRANT CAP "O"-RINGS (2)

Buna N, D2000

K8144 HOSE / PUMPER NOZZLE CAP

Cast Iron ASTM A-126, Class B

K143 HOSE / PUMPER NOZZLE CAP GASKET

Neoprene, D2000

K8141 HOSE / PUMPER NOZZLE RETAINING SCREW

Stainless Steel A276 (304)

K8140 HOSE NOZZLE

K8142 STEAMER / PUMPER NOZZLE

Bronze, B584 C83600

Tamper resistant quarter turn hose and steamer nozzles. Designed for ease of maintenance and field replacement

K8145 HOSE / PUMPER NOZZLE "O"-RING

Buna N, D2000

K8139 NOZZLE CAP CHAIN

Steel, A108

K8138 "S" HOOK

Steel, A108

K8116 STEM BREAK COUPLING

Cast Iron ASTM A-126, Class B
Designed to break from collision without damage to main valve or lower rod. Bottom half of coupling is designed to accept short disassembly wrench.

K8119 BREAKING RING / TRAFFIC FLANGE (2 HALVES)

Cast Iron ASTM A-126, Class B
Full 360° adjustment. Breaking ring on top for ease of replacement. Upon vehicular impact, safety flange ring fractures to allow above ground hydrant assembly to separate cleanly from standpipe without damage to internal parts or loss of water. Repair is easily accomplished with economical field repair kit.

K8123 LOWER STEM

H.R. Steel A588

K8135 ELBOW BOLTS AND NUTS (8)

304 Stainless Steel

K8125 ELBOW GASKET

Cellulose Fiber, FED F33947M4

K8126A SEAT RING UPPER "O"-RING

Buna N, D2000

K8128 SEAT RING

Bronze K584 C836/844-AWWA GR A

K8130 SEAT RING LOWER "O"-RING

Buna N, D2000

K8131 MAIN VALVE

SBR with Steel Insert

Available in 4 1/2" and 5 1/4".

K8132 BOTTOM PLATE

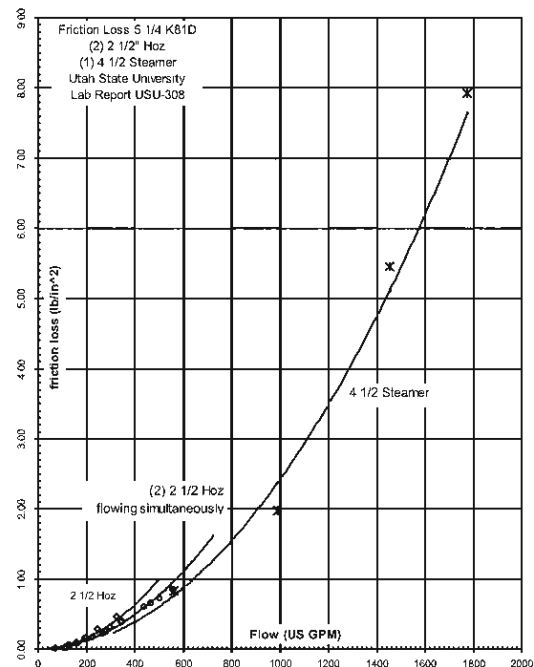
Cast Iron ASTM A-126, Class B
Single component cast iron main valve bottom plate compresses rubber seat against drain valve and securely attaches valve assembly to lower stem. Bottom plate is coated with same fusion bonded epoxy as applied on elbow.

NOTE: DRAWING SHOWS 5 1/4" MAIN VALVE OPENING. SOME PART DIFFERENCES ON 4 1/2 MAIN VALVE OPENING.

KENNEDY VALVE

A DIVISION OF MCWANE, INC.
www.kennedyvalve.com
2007

www.kennedyvalve.com



The Kennedy Guardian K-81D

Fire Hydrants have been used in fire protection for over 200 years. A.W.W.A. C502 was developed in 1913 as a standard for the manufacture and use of dry barrel hydrants. Kennedy has established itself as a leader in the industry with manufacturing experience dating back to 1877. Many of the early hydrants are in use today.

Kennedy's most recent design is the Guardian. Based on a simple design, it is easy to install, maintain and repair. The Guardian sets a standard for quality in the industry and meets or exceeds all requirements for A.W.W.A. C502 latest revision, and is UL listed and FM approved.

K-81D Meets or exceeds requirements of A.W.W.A. C-502 and is UL listed and FM approved.
K-81A Meets or exceeds requirements of A.W.W.A. C-502.

Kennedy Monitor Hydrant K81AM

FEATURES

- 1) MEETS or EXCEEDS ALL REQUIREMENTS OF AWWA C-502.
- 2) 5 1/4" MAIN VALVE OPENING.
- 3) EXCELLENT FLOW CHARACTERISTICS.
- 4) MONITOR ELBOW CAN BE POSITIONED INDEPENDENTLY OF THE UPPER BARREL.
- 5) EXISTING HYDRANTS CAN BE RETROFITTED EASILY AND AFFORDABLY.
- 6) MONITOR ELBOW IS AVAILABLE WITH EITHER 3" OR 4" ANSI DRILLING WITH THE SAME LARGE DISCHARGE ORIFICE

APPROVALS:

3" FLANGE – UL/FM APPROVED
4" FLANGE – FM ONLY
MONITOR HYDRANT CAN BE MAINTAINED THROUGH THE HYDRANT CAP WITHOUT EXCAVATION.

Options:

Upper Barrel Configurations

- 1 Steamer & 2 Hose Nozzles
- 2 Hose Nozzles
- 2 Steamer Nozzles
- 1 Steamer & 3 Hose Nozzles

Handwheel Operation – 16" ø

Inlet Connections

- 6" Mechanical Joint, Flanged or Push-on
- 6" ANSI Straight Shoe
- 6" 250# Raised Face Elbow
- 8" Mechanical Joint or Flanged Elbow

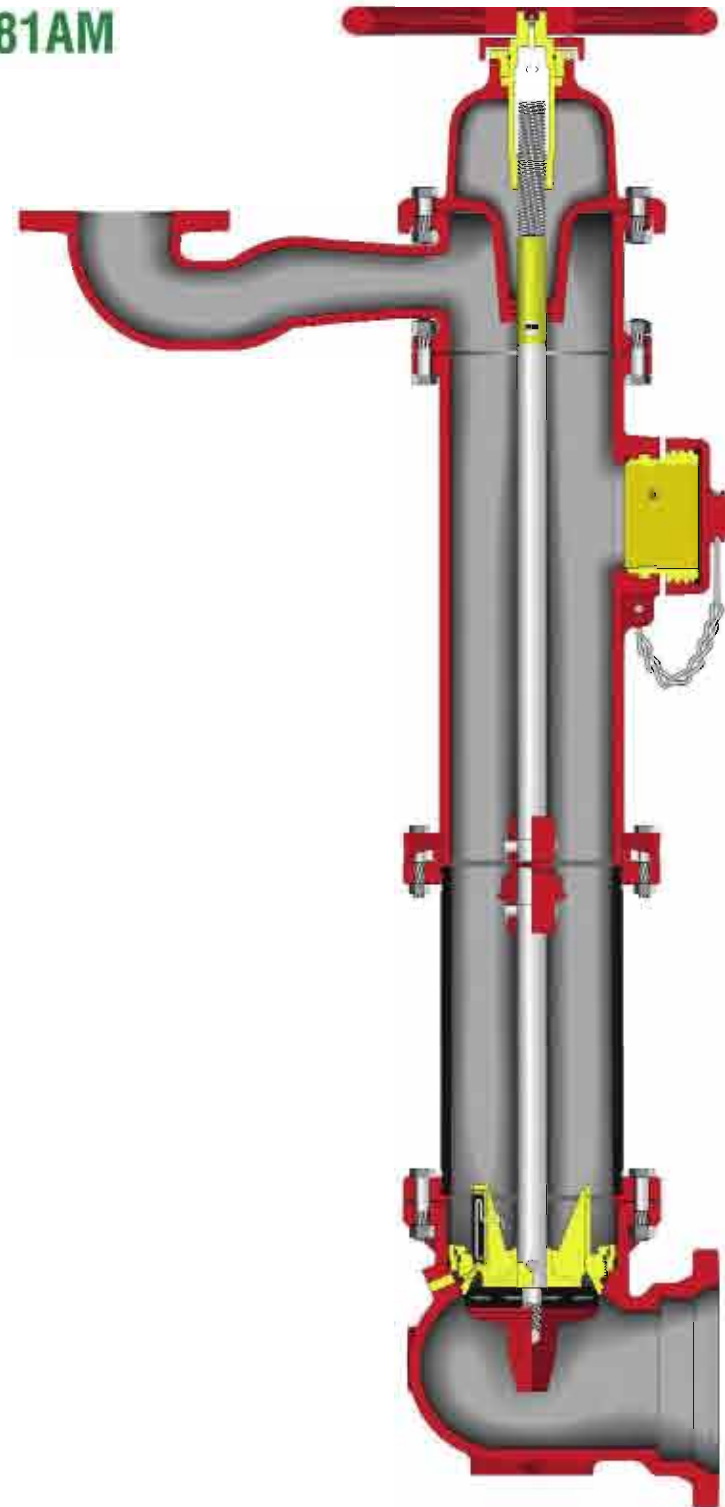
2 1/2" Size

Independent Hose Gate Valves

- Bolt-on/Figure 109xNS
- Screw-on/Figure 109xMN

Salt Water Protection

- Fusion Bonded Coatings
- Stainless Steel Stems & Fasteners



PARTS & ACCESSORIES



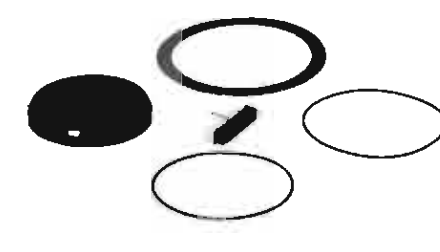
K8150 EXTENSION KIT

Conveniently packaged including all necessary parts to raise hydrant in any increment of 6". Specify if hydrant size is 4-1/2" or 5-1/4".



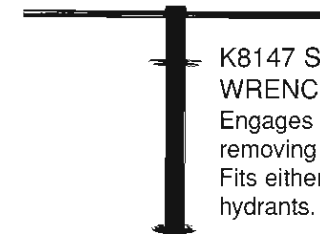
K8149 TRAFFIC REPAIR KIT

Available for 4-1/2" or 5-1/4" hydrant and packaged with all components needed to restore hydrant to service following collision.



MAIN VALVE REPAIR KIT

Available for 4-1/2" or 5-1/4" hydrant and packaged with all components needed to repair damaged valve assembly.



K8147 SEAT REMOVAL WRENCH

Engages stem coupling for removing main valve seat. Fits either 4-1/2" or 5-1/4" hydrants.



K8155 STOP NUT WRENCH



CENTERING SPIDER



K8148 PUMPER & HOSE NOZZLE WRENCHES, NOZZLES AND O-RINGS

Slots engage drive lugs in nozzle I.D. for removal. Quarter turn nozzles are left hand. Specify nozzle thread specification if other than National Standard.
NOTE: Order nozzle wrenches by I.D.



TAMPER RESISTANT GUARDIAN SHIELD



"SCREW-ON" IRON HOSE GATE VALVE



"BOLT-ON" IRON HOSE GATE VALVE



K-81A WITH "STORZ" OUTLET

1/4 turn hose to hydrant connection. Alleviates confusion if multiple steamer threads are used in your area. Available in 4" and 5" connections.



KENNEDY VALVE

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KENNEDY GUARDIAN K-81D FIRE HYDRANT



- Time Tested
- Proven Service
- Reliable Performance



PROUDLY



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USA