

# The Kennedy Guardian

Fire hydrants have been used in fire protection for over 100 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 1905. 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.

K81D 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.

## Guardian Features

**Fig. K81D**

**One Piece Bonnet**  
Newly designed for easier maintenance.

**Sealed Grease Cavity**  
For easier operation and maintenance.

**Traffic Flange**  
Full 360° adjustment. New Breaking Ring on top for easy replacement and interchangeability on all K-81 models.

**Corrosion Resistant**  
Bronze Drain Valve.

**Bronze to Bronze Seating**  
This standard feature assures easy seat removal.

**Full Cover Bottom Plate**  
Prevents corrosion to the lower stem threads and prevents main valve distortion. Provides a positive stop against the elbow.

**Weather Shield**  
To protect exposed operating area from freezing rain and dirt.

**Thrust Washer**  
For easy turning operation.

**Two O-Rings**  
To protect operating threads from corrosion.

**O-Ring**  
To seal between brass ferrule and stem.

**Nozzle**  
Tamper resistant.

**Breakable Coupling**  
Minimizes damage from traffic accident. New design makes repairs more efficient.

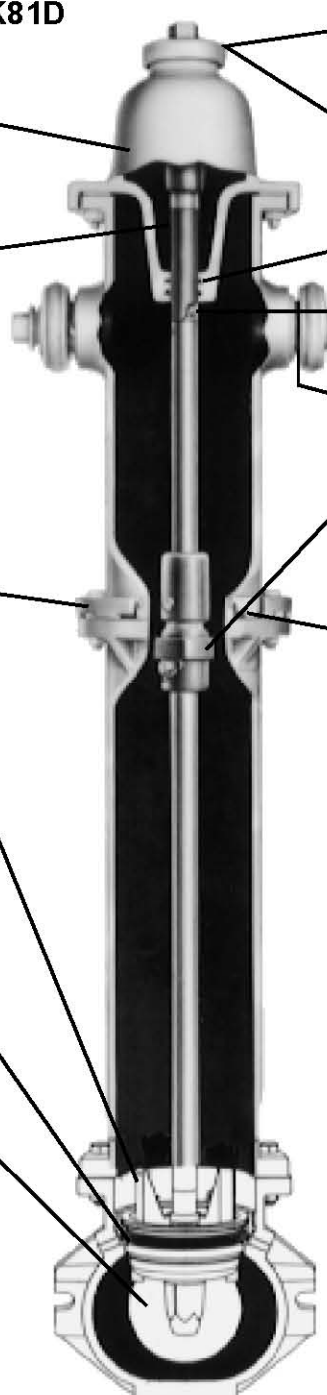
**O-Ring**  
For ease of repair and nozzle facing.

**AWWA**  
400 psi test pressure  
200 psi working pressure

**ULFM**  
400 psi test pressure  
175 psi working pressure

**Easy to install—Even easier to maintain**

- **Tamper resistant** quarter turn hose and steamer nozzles. For those who know how, replacement is easy.
- **Easy to use**, short, simple, inexpensive and lightweight seat removal wrench.
- **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.
- **Two sizes available**, 5¼" valve opening and 4½" valve opening to best meet your needs.
- **Fully and easily lubricated** operating threads for corrosion protection and ease of operation.
- **The Guardian K-81D Hydrant** meets or exceeds all the latest provisions of AWWA, and UL 246-FM 1510 specifications (options are limited on UL/FM models)



# KENNEDY GUARDIAN K81D FIRE HYDRANT (4 1/2)

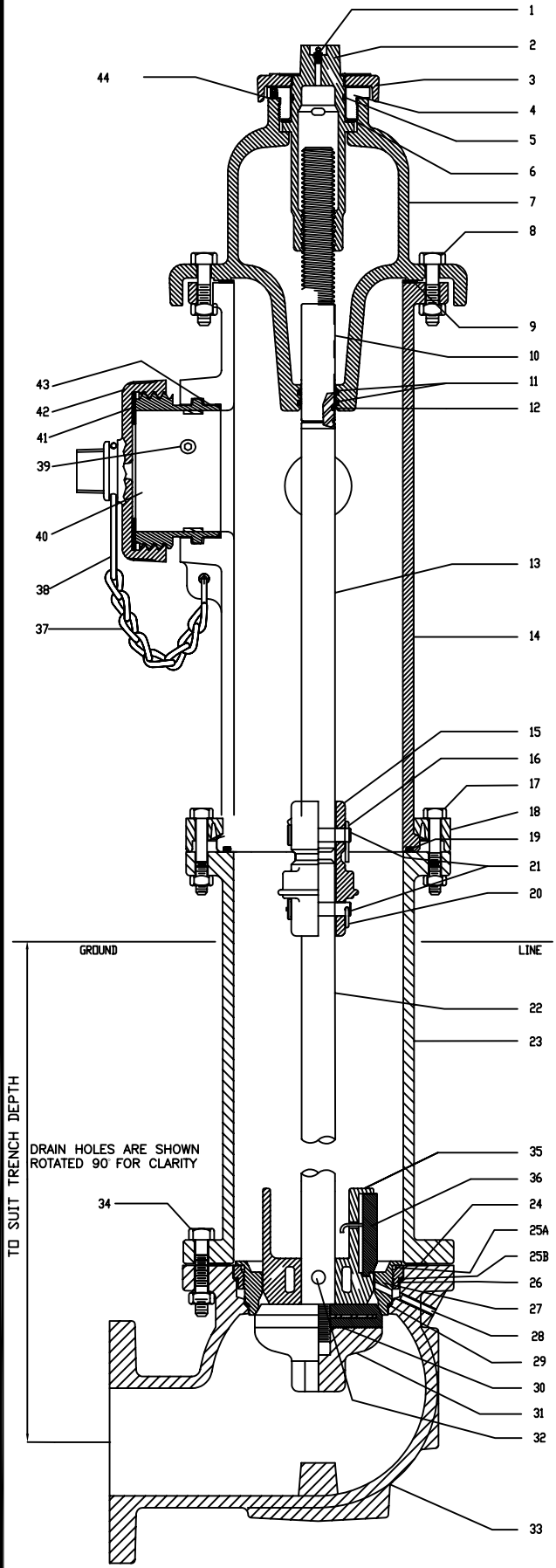
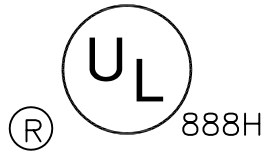
ITEM#	QTY	DESCRIPTION	MATERIAL
1	1	ALEMITE FITTING	STAINLESS STEEL A276 (304)
2	1	OPERATING STEM NUT	BRONZE B584 CB4400
3	1	DIRT SHIELD	CAST IRON A126 CLASS B
4	1	STEM LOCK NUT	BRONZE B584 CB4400
5	1	O-RING	BUNA-N D20000
6	1	THRUST WASHER	NYLATRON GS
7	1	HYDRANT CAP	CAST IRON A126 CLASS B
8	6	CAP BOLTS & NUTS	ZINC PLATED STEEL
9	1	CAP GASKET	CLOTH INSERTED RUBBER D2000
10	1	STEM FERRULE	NAVAL BRASS B21-CDA 464
11	2	DOME O-RING	BUNA-N D20000
12	1	UPPER ROD O-RING	BUNA-N D20000
13	1	UPPER STEM	H.R. STEEL A588
14	1	UPPER BARREL	CAST IRON A126 CLASS B
15	1	STEM BREAKING COUPLING	CAST IRON A126 CLASS B
16	2	COTTER PIN	STAINLESS STEEL A276 (18-8)
17	8	BOLTS & NUTS	ZINC PLATED STEEL
18	2	BREAKING RING	CAST IRON A126 CLASS B
19	1	O-RING	BUNA-N D20000
20	2	BRIDGE PIN	STAINLESS STEEL A276 (18-8)
21	2	CLEVIS PIN(S)	STAINLESS STEEL A276 (18-8)
22	1	LOWER STEM	HR STEEL A588
23	1	LOWER BARREL	DUCTILE IRON ANSI 21.50, 21.51
24	1	ELBOW GASKET	CELLULOSE FIBER
25	1	UPPER O-RING	BUNA-N D20000
26	1	SEAT RING INSERT	BRONZE B584 CB4400
27	1	SEAT RING	BRONZE B584 CB4400
28	1	DRAIN TUBE	NAVAL BRASS B21-CDA 464
29	1	LOWER O-RING	BUNA-N D20000
30	1	MAIN VALVE	NEOPRENE WITH STEEL INSERT
31	1	BOTTOM PLATE	CAST IRON A126 CLASS B
32	1	DRAIN VALVE PIN	CAD PLATED STEEL
33	1	ELBOW	CAST IRON A126 CLASS B
34	8	ELBOW BOLTS & NUTS	ZINC PLATED STEEL
35	1	DRAIN VALVE	BRONZE B584 CB4400
36	1	DRAIN VALVE FACING W/INSERT	BUNA-N W/STAINLESS STEEL
37	*	NOZZLE CAP CHAIN	STEEL A108
38	1	NOZZLE CHAIN BAND	STEEL A108
39	*	PUMPER NOZZLE RETAINING SCREW	STAINLESS STEEL A276 (304)
40	1	NOZZLE	BRONZE B584 CB4400
41	1	NOZZLE CAP GASKET	RUBBER D20000 TYPE AA
42	1	NOZZLE CAP	CAST IRON A126 CLASS B
43	1	PUMPER O-RING	BUNA-N D20000
44	1	HOLD DOWN NUT SET SCREW	STAINLESS STEEL A276 (410)

\* VARIES

MEETS OR EXCEEDS AWWA C502

250 PSI WORKING PRESSURE AWWA  
 200 PSI WORKING PRESSURE UL/FM  
 500 PSI HYDROSTATIC TEST PRESSURE

LISTED



TO SUIT TRENCH DEPTH

DRAIN HOLES ARE SHOWN ROTATED 90 FOR CLARITY

KENNEDY VALVE ELMIRA, NEW YORK A DIVISION OF MCWANE INC.		DWN: TRIJ
		DATE: 7/1/05
		DWG. NO. FH-129

# Guardian K81D Technical/Dimensional Data (AWWA-UL/FM)

URNS TO OPEN = 17 1/2

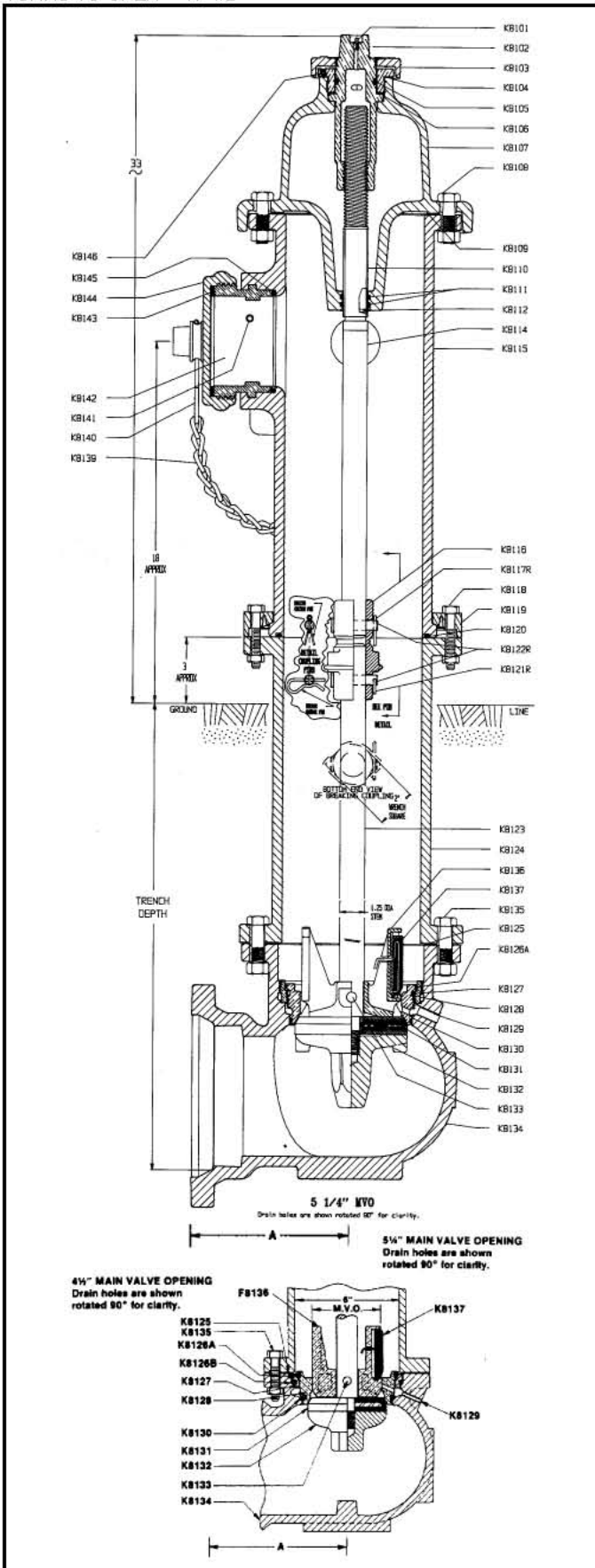


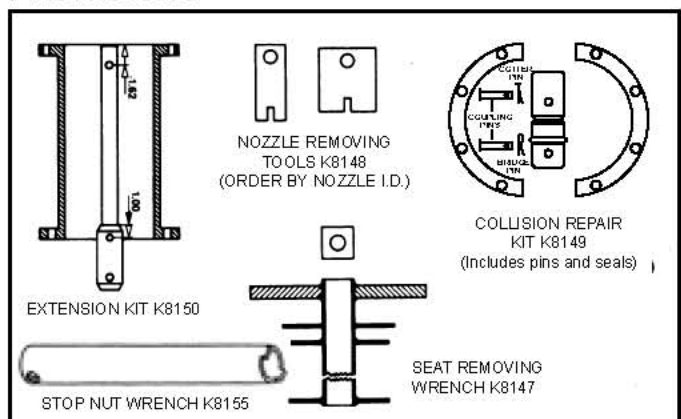
Figure K81D

## PARTS LIST

DETAIL	PART	MATERIAL	ASTM SPEC (or as subd)
K8101	ALEMITE FITTING	STAINLESS STEEL	A276 (304)
† K8102	OPERATING STEM NUT	BRONZE	B584 C B4400/AW/M/A GR A
K8103	DIRT SHIELD	CAST IRON	A126 CLASS B
K8104	STEM LOCK NUT	BRONZE	B584 C B4400/AW/M/A GR A
† K8105	O-RING	BUNA-N (SYN. RUBBER)	D2000
† K8106	THRUST WASHER	NYLATRON G.S	MLL LP-410
K8107	HYDRANT CAP	CAST IRON	A126 CLASS B
K8108	CAP BOLTS & NUTS	STEEL (ZINC PLATED)	
† K8109	CAP GASKET	CLOTH INSERTED RUBBER	D20000
* K8110	STEM FERRULE	NAVAL BRASS	B21-CDA 464
† K8111	O-RING	BUNA-N (SYN. RUBBER)	D20000
* K8112	O-RING	BUNA-N (SYN. RUBBER)	D20000
K8114	UPPER STEM	H.R. STEEL	A588
K8115	UPPER BARREL	CAST IRON	A126 CLASS B
K8116	STEM BREAKING COUPLING	CAST IRON	A126 CLASS B
K8117R	COTTER PIN	STAINLESS STEEL (18-8)	A276
K8118	BOLTS & NUTS	STEEL (ZINC PLATED)	
K8119	BREAKING RING	CAST IRON	A126 CLASS B
K8120	O-RING	BUNA-N (SYN. RUBBER)	D20000
K8121R	BRIDGE PIN	STAINLESS STEEL (18-8)	A276
K8122R	CLEVIS PIN(S)	STAINLESS STEEL (18-8)	A276
K8123	LOWER STEM	H.R. STEEL	A588
K8124	LOWER BARREL	DUC TILE IRON (or C.I.)	ANSI 21.50, 21.51
† K8125	ELBOW GASKET	CELLULOSE FIBER	FED F39477M4
† K8126A	O-RING	BUNA-N (SYN. RUBBER)	D2000
* K8127	SEAT RING INSERT	BRONZE	B584 C B4400/AW/M/A GR A
† K8128	SEAT RING	BRONZE	B584 C B4400/AW/M/A GR A
K8129	DRAIN TUBE	NAVAL BRASS	B21-CDA 464
† K8130	O-RING	BUNA-N (SYN. RUBBER)	D20000
† K8131	MAIN VALVE	NEOPRENE W/STL INSERT	UL 262 10.1
K8132	BOTTOM PLATE	CAST IRON	A126 CLASS B
K8133	DRAIN VALVE PIN	STEEL (CAD PLATED)	
K8134	ELBOW	CAST IRON	A126 CLASS B
K8135	ELBOW BOLTS AND NUTS	STEEL (ZINC PLATED)	
K8136	DRAIN VALVE	BRONZE	B584 C B4400/AW/M/A GR A
† K8137	DRAIN VALVE FACING W/INSERT	BUNA-N W/STAINLESS STEEL	D20000/A276 (304)
K8139	NOZZLE CAP CHAIN	STEEL	A108
K8140	NOZZLE CHAIN BAND	STEEL	A108
† K8141	NOZZLE RETAINING SCREW	STAINLESS STEEL	A276 (304)
# K8142	NOZZLE	BRONZE	B584 C B3900
†# K8143	NOZZLE CAP GASKET	RUBBER	D20000 TYPE AA
# K8144	NOZZLE CAP	CAST IRON	A126 CLASS B
†# K8145	O-RING	BUNA-N (SYN. RUBBER)	D20000
K8146	ALLEN HEAD SET SCREW	STAINLESS STEEL	A276 (410)
K8147	SEAT REMOVAL WRENCH		
K8148	NOZZLE REMOVAL TOOLS		
† K8149	COLLISION REPAIR KIT		
K8150	GRADE EXTENSION KIT		

\* Denotes that part is available only as part of an assembly.  
 # Must specify type of Nozzle, Hose or Steamer.  
 † Recommended spare parts.

## Accessories



Style	Shoe Size	A	MARKINGS	
M.J.	4	7 3/4	FRONT	BACK
M.J.	6	8	YEAR	K.V. MONOGRAM
Flange	4	7 7/8	KENNEDY	KENNEDY
Flange	6	8 1/8	ELMIRA, N.Y.	ELMIRA, N.Y.
Asb. Cem.	4	8 3/4	SIZE	SIZE
Asb. Cem.	6	9 3/8	TYPE	UL/FM
Bell	6	9 5/8	200CWP	175
Tyton	6	9	Contact Factory for UL/FM Limitations	

Bell and Tyton ends available only in 5 1/4" Main Valve Hydrants.  
 4" shoe dimensions apply to 4 1/2" Main Valve Hydrants only.