



*Fire
Solutions*

**COMPLETE SOLUTION FOR
FIRE HYDRANT**





COMPANY PROFILE

Arita Fire Solutions offers complete range of firefighting products and equipment with world class quality assuring dependable performance of property loss prevention system under the toughest conditions.

Arita Valve (Houston) Inc. is located in Texas, USA. We are extremely prudent of our product quality with profound understanding of their roles in our customers' safety system. Our manufacturing facilities strictly comply with UL and FM approval standards. We ensure the highest standard is achieved by conducting 100% zero omission of various tests on every piece of products sent out from our plants. We unceasingly innovate product design aspire to achieve higher reliability and continuity of our products.

Arita Fire Solutions stands by its brand reputation in delivering technical integrity, trustworthy quality and reliable performance worldwide.

QUALIFICATION





Dry Barrel Fire Hydrant

Arita HYD-15D Series

Descriptions

Arita HYD-15D Series dry barrel fire hydrant is designed with robust ductile iron material of its barrel section, nozzle section, bonnet and base. Be with the reliable safety flange and stainless steel stem coupling, it is convenient for repair if collision occurs and ensure no leakage. Main valve of the hydrant is easily removed from the bonnet flange or ground line flange.

Features

- Efficient hydraulic design with maximum flow characteristics and performance
- High Pressure Rating in 250psi and 2 times 500psi test pressure
- Standard pumper (4"/4.5") and hose nozzle(2.5") thread
- Internal and external fusion bonded epoxy power coating
- Flange and mechanical connection both available
- Multi length options for different bury depth
- FM approved and UL/CUL listed for used in fire protection application

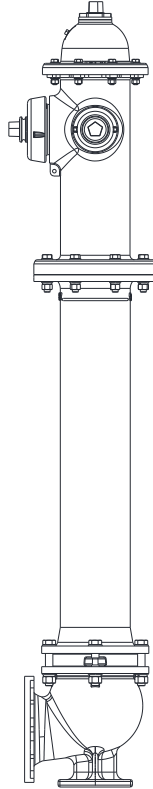
Technical Specification

- Design Standard: Arita HYD-15D Series/UL246/AWWA C502
- Nozzle Thread Standard: NFPA1963
- Working Pressure: 250psi
- Test Pressure: 500psi
- End Connection Standard:
 - flange connection in ANSI Class 125/150
 - BS EN1092-2 PN10/16 6"
 - mechanical connection in ANSI/AWWA C111/A21.11 6"
 - ANSI/AWWA C153/A21.53 6"
- Main Valve: 5-1/4"



Dry Barrel Fire Hydrant

Arita HYD-15D Series

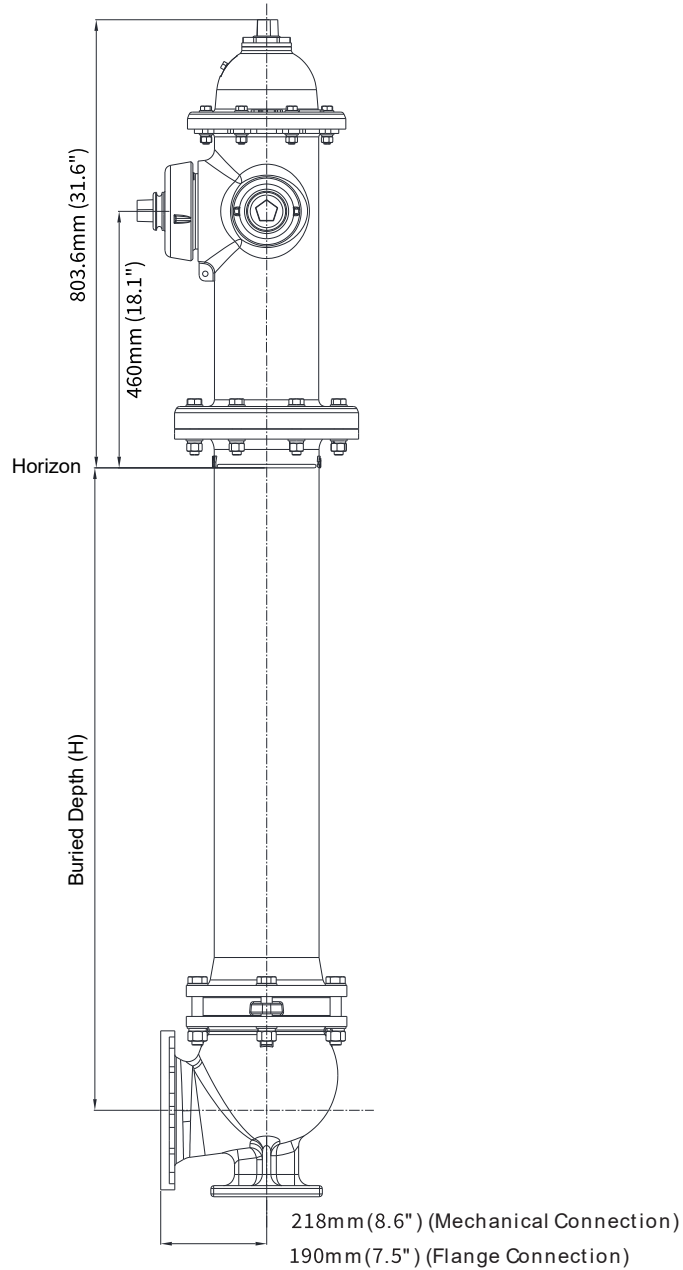


Part	Material	Part	Material
Operating Nut	C84400	Hexagon Head Bolts	SS304
Dust Ring	EPDM	Flat Washer	SS304
Lock Nut	CF8	Spring Washer	SS304
Antifriction Mat	C63000/PTFE	Hexagonal Nut	SS304
Plug	SS304	Drain Valve Cover Seal	EPDM
Cover	65-45-12	Pin	SS304
Upper Hydrant Body	65-45-12	Cotter Pin	SS304
Top Shaft	SS420/45	Upper Fire Hydrant Body Seal	EPDM
Gland	SS304	Hexagon Socket Head Screws	SS304
Fire Engine Nozzle Cap	65-45-12	Hose Nozzle Cap	65-45-12
Fire Engine Nozzle Gasket	EPDM	Hose Nozzle Gasket	EPDM
Fire Engine Nozzle	C84400	Hose Nozzle	C84400
Steel Wire Rope	SS304 Plastic coated	Hexagon Socket Set Screws	SS304
O-Ring	EPDM	Drain Valve Cap	C84400+EPDM
Coupling	SS420/45	Spring	SS304
Lower Hydrant Body	65-45-12	Seat	C84400
Safety Flange	65-45-12	Tablet	65-45-12
Under Shaft	SS420/45	Disc Sealing Ring	EPDM
Drain Valve Cover	65-45-12	Disc	65-45-12
MJ Elbow Body	65-45-12	Nut Press Ring	65-45-12+EPDM



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Buried Depth (H)

inch	1'	2'	3'	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"
mm	326	543	848	1001	1153	1306	1458	1611	1763	1916	2068

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Arita HYD-15D Series

PACKING INFORMATION

Packing method

1. Wooden case size (inner size) L*860*400

Notes: L is determined by the structural length of the lower vertical pipe in purchase order

2. 2 pieces be packed in one wooden case.

Packing steps

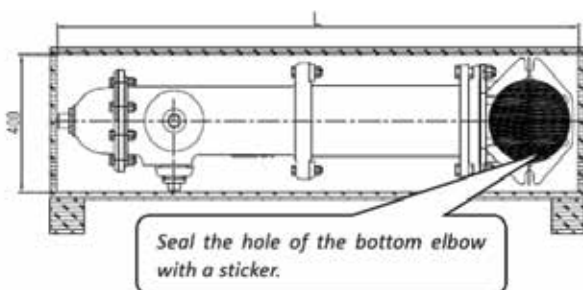
1. Check the appearance of hydrant, there must be no bumps, scratches, damage, peeling paint, rust, dust, dirt, etc., Flange end face is pasted with self-adhesive stickers, outer diameter 240, white background, blue characters (6")

2. Check the appearance, logo and inner cavity of the packing case, and the bottom is smooth should be smooth

3. Put a wooden board with a semi-circular groove at the bottom of the box, and then put a fire hydrant (the placement method is shown in the figure below), The empty space in the box is filled with protective materials, and then covered with wooden boards with semi-circular grooves

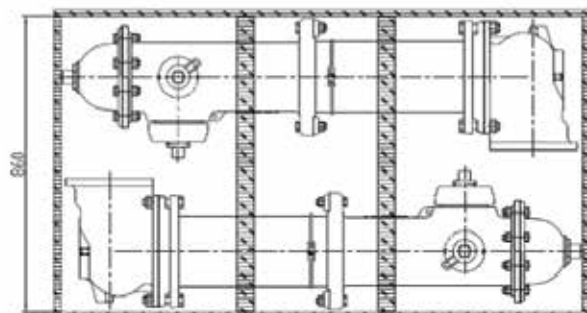
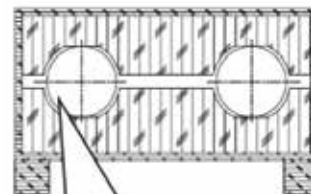
4. Check the accompanying documents according to the "Production Order" and put them in the packing box

5. Pack and tighten the tape, and then check the appearance. No objects should be pressed or leaked.



INSPECTION BEFORE DELIVERY

1. The fire hydrants have been pressure tested before leaving the factory to ensure no leakage.
2. Place inlet of the hydrants face down when needed to store and recheck as following requirements before installation.
3. Check whether the fire hydrant is damaged during shipment before installation. Rotate the operating nut to fully open and close the fire hydrant to ensure that components are intact.
4. Pressure and leak tests should be performed on the hydrant before installation to ensure that the nozzles and threaded fasteners are not loose during shipping time.
5. After the inspection and testing are completed, close the main hydrant valve.





Dry Barrel Fire Hydrant

Arita HYD-15D Series

INSTALLATION

1. The fire hydrant must be installed if conditions are permitted. The installation location must comply with local regulations or municipal design standards.
2. Install the fire hydrant with the water supply line for the fire protection system.
3. Unless otherwise specified by the locality, it is recommended that the distance from the road edge to the fire hydrant should be at least 2 feet.
4. Place the fire engine nozzle face to the street to be quickly connected to the fire pump.
5. The hose nozzle must be installed at least 18 inches [46 cm] above the ground so that the hydrant wrench can be properly operated to remove the nozzle cover or use the fire hydrant.
6. A gate valve (auxiliary valve) must be installed on the pipeline to isolate the fire hydrant and the main channel for maintenance or emergency shutdown. An end cap or other support shall be provided at the piping system's junction to remove the hydrant without closing the main water pipe.
7. The gate valve should be installed as close as possible to the main pipeline.
8. Install hydrants using solid feet (such as slate or concrete bases) to prevent settlement and deformation of the hydrant lines and risers. Joint end caps or other supports should be provided.
9. When the support needed to push down, do not block the drain hole of the fire hydrant.
10. The drain must be set at a place with a higher water level. The fire hydrant must be appropriately marked and drained to avoid freezing after each use.
11. Do not connect the drain to domestic water or rainwater sewer.

MAINTENANCE AND REPAIR

1. Close the fire hydrant gate valve to prevent water from the main water pipe to the fire hydrant.
2. Remove any hose nozzle cover and open the fire hydrant three times according to the hydrant cover's direction.



3. Loosen and remove the lock nut and operating nut, and take care to keep the abrasion pad.
4. Insert the chamfered end of the protective sleeve (accessory) down into the thread of the upper valve shaft to protect the O-ring when removing the valve cover.
5. Remove the bolt and nut, gently lift it from the upper body, then remove the bonnet. Remove the bonnet O-ring from the upper flange groove of the hydrant body.



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6 Remove the protective sleeve, put the seat wrench bracket (accessory) on the valve stem, insert the Tshaped seat wrench (accessory) from the bracket hole and the upper shaft until the slot stuck into the pin. Then tighten the wrench bracket screw and turn the seat wrench counterclockwise to remove the seat assembly for approximately seven cycles.



7. Pull the nut washer and remove the seat assembly to clean, inspect, and replace any worn or damaged parts.

8. The O-ring seal is easily damaged during the disassembly and assembly process. Please prepare sufficient spare parts for replacement.

9. Reassemble the parts in the order of disassembly after the replacement is completed. Please pay attention to: 1) After tightening the nut, bend the nut washer to any hexagonal plane of the nut to prevent loosening. 2) When assembling the bonnet, place the chamfered end of the copper sleeve up on the upper shaft thread.

HOSE NOZZLE REPLACEMENT

Remove the nozzle cap, use a 2.5 hexagon wrench to remove the hexagon socket head cap screws, and use a special wrench to unscrew the nozzle clockwise. Replace the O-ring at the same time of replacing the nozzle and perform the pressure test as the replacement is completed.



SAFETY FLANGE REPLACEMENT

First step: Remove the upper hydrant body

Second step: Clean the lower hydrant body

Third Step: Upper Hydrant Body Assembly

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(Please contact us for specified details of safety flange replacement)



Wet Barrel Fire Hydrant

Arita HYD-15W Series

Descriptions

Arita HYD-15W Series wet barrel fire hydrant is designed with robust ductile iron material of its barrel section, nozzle section. Rated for high working pressure in 250psi. Offers easy operation and simplified maintenance.

Features

- Robust ductile iron material for long service life
- High pressure rating in 250psi and 2 times 500 psi testing pressure
- Multi hose nozzles selection
- Internal and external fusion bonded epoxy power coating
- FM approved and UL/CUL listed for used in fire protection application
- Monitor flange available for extra devices connection

Technical Specification

- Design Standard: Arita HYD-15W/UL246/AWWA C503
- Nozzle Thread Standard: NFPA1963
- Working Pressure: 250psi
- Inlet Flange Connection in ANSI Class125/150 6" BS EN 1092-2 PN10/16 6"
- Monitor Flange Connection in ANSI Class125/150 4"

Model Options

Model	Hose Nozzle	Pumper Nozzle	Monitor Flange
	2.5"	4.5"/4"	4"
2H0P	2	0	0
2H0PM	2	0	1
1H1P	1	1	0
1H1PM	1	1	1
2H1P	2	1	0
2H1PM	2	1	1



Pumper Nozzle (P)



Hose Nozzle (H)



Monitor Flange (M)

Wet Barrel Fire Hydrant

Arita HYD-15W Series



2H1P



2H1PM

Materials

Part	Material
Hydrant Body	65-45-12
Steel Wire Rope	SS304 Plastic coated
O-Ring	EPDM
Fire Engine Nozzle Cap	65-45-12
Fire Engine Nozzle	C84400
Fire Engine Nozzle Gasket	EPDM
4.5" Gland	CF8
Inner Six Angle Flat End Set Screw	A2
4.5" Disc Sealing Ring	EPDM
4.5" Disc	CF8
Shaft	SS304/SS420
Fixed Nut	CF8
Inner Six Angle Cylindrical Head Screw	A2-70
4.5" Shaft Nut	C84400
Operating Nut	CF8
Hexagonal Nut	A2-70
Hose Nozzle Cap	65-45-12
Hose Nozzle	C84400
Hose Nozzle Gasket	EPDM
2.5" Gland	CF8
2.5" Disc Sealing Ring	EPDM
2.5" Disc	CF8
Shaft Stem Nut	C84400
Inner Six Angle Set Screw	Carbon Steel +Zn

Technical Specification

Hose Nozzle": 2.5" * 2

Pumper Nozzle: 4.5" or 4" * 1

2H1PM Monitor flange connection:

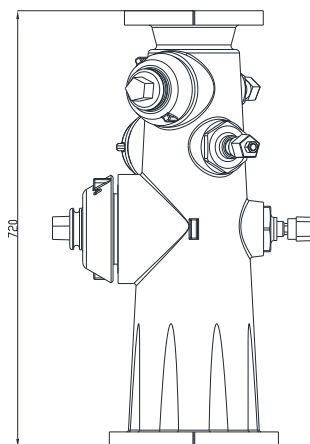
ANSI Class125/150 4"

BS EN1092-2 PN10/16 4"

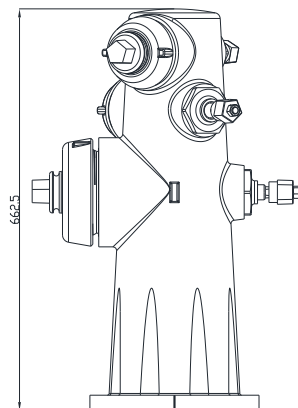
Inlet flange connection :

ANSI Class125/150 6"

BS EN1092-2 PN10/16 6"



2H1PM



2H1P



Wet Barrel Fire Hydrant

Arita HYD-15W Series

Materials

Part	Material
Hydrant Body	65-45-12
Steel Wire Rope	SS304 Plastic coated
O-Ring	EPDM
Fire Engine Nozzle Cap	65-45-12
Fire Engine Nozzle	C84400
Fire Engine Nozzle Gasket	EPDM
4.5" Gland	CF8
Inner Six Angle Flat End Set Screw	A2
4.5" Disc Sealing Ring	EPDM
4.5" Disc	CF8
Shaft	SS304/SS420
Fixed Nut	CF8
Inner Six Angle Cylindrical Head Screw	A2-70
4.5" Shaft Nut	C84400
Operating Nut	CF8
Hexagonal Nut	A2-70
Hose Nozzle Cap	65-45-12
Hose Nozzle	C84400
Hose Nozzle Gasket	EPDM
2.5" Gland	CF8
2.5" Disc Sealing Ring	EPDM
2.5" Disc	CF8
Shaft Stem Nut	C84400
Inner Six Angle Set Screw	Carbon Steel +Zn



1H1P



1H1PM

Technical Specification

Hose Nozzle": 2.5" * 1

Pumper Nozzle: 4.5" or 4" * 1

1H1PM Monitor flange connection:

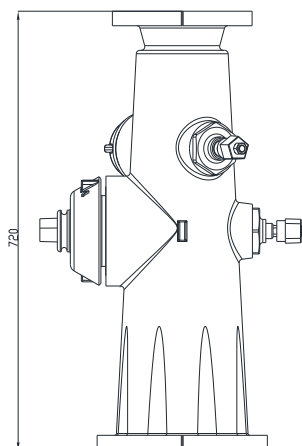
ANSI Class125/150 4"

BS EN1092-2 PN10/16 4"

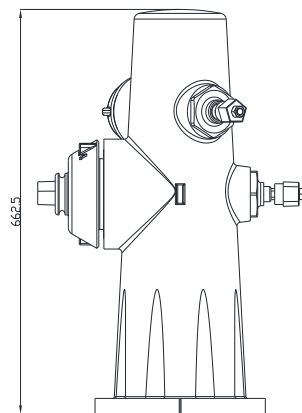
Inlet flange connection :

ANSI Class125/150 6"

BS EN1092-2 PN10/16 6"



1H1PM



1H1P

Wet Barrel Fire Hydrant

Arita HYD-15W Series



2H0P



2H0PM

Technical Specification

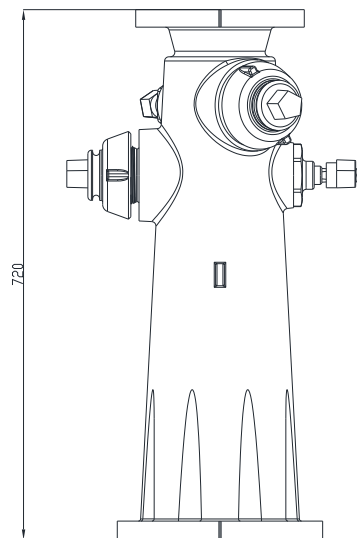
Hose Nozzle": 2.5" * 2

2H0PM Monitor flange connection:
ANSI Class125/150 4"
BS EN1092-2 PN10/16 4"

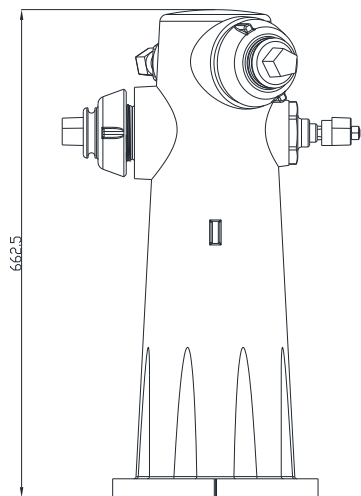
Inlet flange connection :
ANSI Class125/150 6"
BS EN1092-2 PN10/16 6"

Materials

Part	Material
Hydrant Body	65-45-12
Steel Wire Rope	SS304 Plastic coated
O-Ring	EPDM
Hose Nozzle Cap	65-45-12
Hose Nozzle	C84400
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2.5" Disc	CF8
Shaft	SS304/SS420
Fixed Nut	CF8
Inner Six Angle Cylindrical Head Screw	A2-70
Shaft Nut	C84400
Operating Nut	CF8
Hexagonal Nut	A2-70
Inner Six Angle Set Screw	Carbon Steel +Zn



2H0PM



2H0P

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