Title

Material Submittal for Fire Alarm Check Valve

Brand

AMERICAN AFC

AMERICAN
FIRE CONTROL

Index

Technical Data Sheets (Catalogues).

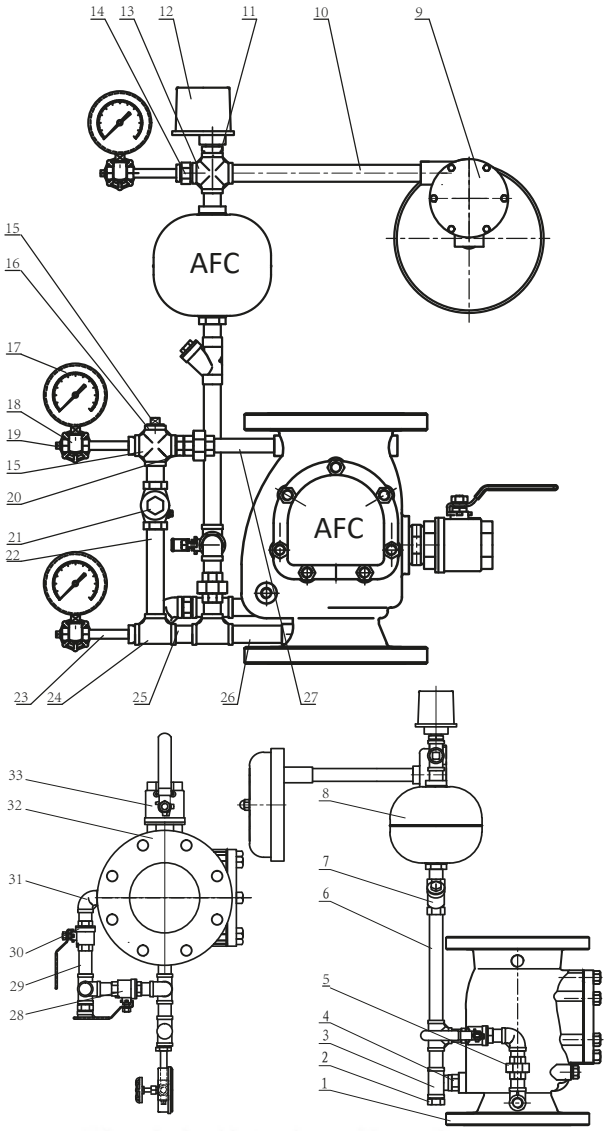
The American Fire Control Wet Alarm Check Valve Model ACV-300 is a crucial component designed for wet pipe sprinkler systems to bolster fire safety. Its primary function is to prevent water backflow into the main supply during sudden pressure drops, particularly in emergency scenarios such as fires. Equipped with an advanced alarm system, the ACV-300 ensures rapid detection of water flow, transmitting alerts to the control panel, enabling immediate response to potential fires.

SPECIFICATIONS

- Connection Flange (ACV-300F): The connection flange adheres to ANSI B16.1 Class 125/ANSI B16.42 Class 150/BS EN1092-2 PN16
- Connection Groove (ACV-300G): The grooved connection is in compliance with ANSI/AWWA C606
- Mounting: The installation position is vertical
- Working Pressure: The maximum working pressure is 300 PSI (21 Bar)
- Working Temperature: Designed to operate within a temperature range of 4°C to 70°C.
- Coating: The interior and exterior surfaces are coated with a fusion bonded epoxy powder for enhanced protection
- Sizes: 2",2.5",3",4",6",8",10",12"
- Listing and Approvals: UL listed, FM approved

PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM A536 65-45-12
2	Orifice,Retard	C954/SS304
3	Tee	Steel/SS304
4	Nipple	Steel/SS304
5	Union	Steel/SS304
6	Nipple	Steel/SS304
7	Y Strainer	C954/SS304
8	Retard Chamber	Steel
9	Gong Assembly	Component
10	Nipple	Steel/SS304
11	Reducer Pushing	Steel/SS304
12	Pressure Switch	Component
13	Cross	Steel/SS304
14	Reducer Pushing	Steel/SS304
15	Plug	Steel/C954/SS304
16	Cross	Steel/SS304
17	Pressure Gauge	Component
18	3 Way Valve Gauge	C954/SS304
19	Plug	Steel/C954/SS304
20	Orifice, Retard	C954/SS304
21	Check Valve	C954/SS304
22	Nipple	Steel/SS304
23	Nipple	Steel/SS304
24	Tee	Steel/SS304
25	Nipple	Steel/SS304
26	Nipple	Steel/SS304
27	Nipple	Steel/SS304
28	Ball Valve	C954/SS304
29	Nipple	Steel/SS304
30	Ball Valve	C954/SS304
31	Elbow	Steel/SS304
32	Nipple	Steel/SS304
33	Ball Valve	C954/SS304



AMERICAN FIRE CONTROL CO., LLC 255 S Orange Ave, Orlando, FL 32801, USA
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OPERATION

- The operation of the fire protection system is initiated during pressurization, allowing water to enter the system until equilibrium is reached between the water supply and system pressure. At this point, the clapper autonomously closes the waterway. Once the pressure stabilizes, the fire protection system is ready for activation, requiring the opening of the alarm control valve.
- Under standard conditions, the water pressure gauge on the system side of the alarm valve will display an equal or higher pressure reading than the gauge on the supply side of the valve. This discrepancy is a result of the bypass line connecting the downstream and upstream sides of the alarm valve, enabling the passage of water pressure surges without lifting the valve clapper from its seat. This design mitigates the risk of false alarms caused by excessive pressure surges trapped on the system side, courtesy of the check valve's presence.
- In the event of a sudden high-pressure surge, such as the initiation of a large fire pump, the valve clapper may momentarily lift. This temporary lift permits water to flow through the valve seat grooves into the retard chamber. Simultaneously, the water in the alarm line is automatically drained, a crucial step in preventing false alarms arising from successive transient surges in supply pressure.
- The restriction assembly positioned beneath the retard chamber comprises inlet and drain restriction orifices. These orifices are carefully calibrated, considering the volume of the retard chamber, to meet listing and approval requirements related to time-to-alarm. These specifications reflect a careful balance between minimizing the risk of false alarms due to transient surges in supply pressure and achieving the desired minimum time-to-alarm following a sprinkler operation. This intricate design ensures the reliable and precise performance of the ACV-300, aligning with industry standards and regulatory requirements.

INSTALLATION

1. The American Fire Control Alarm Check Valve, Model ACV-300, mandates vertical installation to ensure optimal performance.
2. Install the alarm valve in a conspicuous and easily accessible location. Adequate provision must be made to guarantee visibility and accessibility of the alarm line drain.
3. In scenarios where water pressure experiences fluctuations, employ the variable pressure trim with a retard chamber. Conversely, under stable water pressure conditions, opt for the constant pressure trim, excluding the retard chamber.
4. Install the valve with trim in strict accordance with the provided trim data. Failure to adhere to the specified trim connection guidelines may compromise the device's functionality, void listing and approval, and nullify the manufacturer's warranty.
5. Exercise caution during check valve installation in the trim to ensure proper alignment with the arrow mark on the check valve body, pointing in the correct direction.
6. Prevent false alarms or intermittent alarms caused by the cyclic opening and shutting of the waterway clapper due to excessive trapped air. Mitigate this risk by incorporating a breather valve in the system piping network and a vent valve at the system's extreme end to bleed off air and accommodate contraction and expansion.
7. Maintain the ball valve on the alarm line in an open position and secure it in the designated set position.
8. Properly support the pipe connecting the retard chamber and sprinkler alarm bell to avoid undue loading on the retard chamber.
9. Before putting the alarm valve into service, ensure thorough flushing of all newly installed system pipes to maintain optimal functionality.

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OPERATION MANUAL
FOR AMERICAN AFC ACV-300 WET ALARM CHECK VALVE

1. Notes:

The wet alarm valve is a kind of check valve that only allows water flow into the fire-sprinkling system in one direction and drives the supporting accessories to alarm under specified pressure and flow rate. Its functions in the system include: After the alarm water flow has been connected or disconnected and the sprinkler begins to act, the water flow will drive the alarm of the water motor alarm and the pressure switch; It prevents water from back flowing. The wet automatic sprinkler system composed by the wet alarm valve, pressure switch and sprinkler is a widely used fixed extinguishing system. The system pipe network is filled with clean water with a certain pressure all year round and has always been ready for providing service. When a fire breaks out in the protection zone, the temperature within the zone will rise, then the organic solution in the thermal sensitive components (glass ball) of the sprinkler will expand and produce great internal pressure until the glass ball shell breaks and triggers the water injection of the sprinkler and then the whole system to alarm, thus the purpose of fire alarm, fire control and firefighting is achieved.

This system is applicable to the places with the ambient temperature from 4℃ to 70℃. This system is generally installed in the places with fire hazards, like the hotel, shopping mall, hospital, theater, office building, conference center, warehouse, high-rise building and underground garage. This system has the advantages of safety and reliability, high success rate in fire extinguishing and fire control, long service life, wide range of use, convenient in maintenance and low cost etc.

2. Product structure and working principle

Product structure diagram (Figure 1)

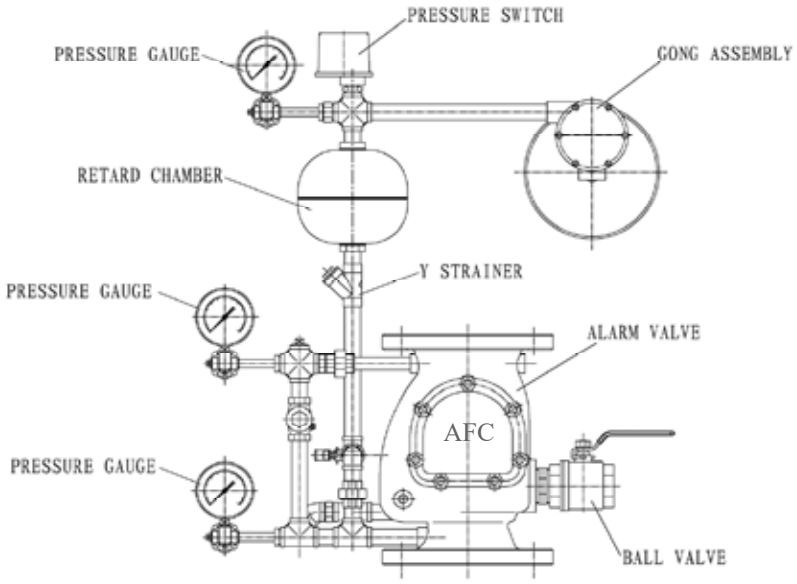

Figure 1

2.1 Product structure

As shown in Figure 1, ACV-300F, ACV-300G, ACV-300GF, ACV-300FG wet alarm instrument consists of wet alarm valve, delayer, water motor alarm, pressure switch, drain valve and filter etc.

2.1.1 ACV-300 Wet alarm valve

American AFC ACV-300 wet alarm valve is a cover plate type alarm valve which mainly consists of the valve body, valve seat ring and valve disc. The valve body is separated into the upper chamber and lower chamber. The upper chamber (system side) is connected to the system pipe network, whereas the lower chamber (water supply side) is connected to the water resource. The valve body is equipped with seat ring inside and there are many small groove holes leading to the inlet pipe of the delayer on the seat ring.

When the system is in servo state, the small groove holes in the seat ring will be covered by the valve disc and the waterway leading to the water motor alarm will be blocked; When the pressure between the upper side and the lower side reaches a certain value, the valve disc will open (differential pressure start), and the water will flow from the water supply side to the system side, then the alarm bell will ring and the fire extinguishing system will begin to spray water; Because the bypass is installed with compensator, when there is a slight leakage in the pipe network of the system side or water source pressure fluctuates, replenish water for the pipe network through the compensator to balance the pressure between the upper chamber and the lower chamber and stabilize the valve disc, so that the false alarm can be avoided.

2.1.2 Delayer

Delayer is a cylinder-shaped water storage container with an inlet and an outlet. Its lower inlet is connected to the alarm port of the alarm valve and its upper outlet is connected to the water motor alarm and the pressure switch. Due to the fluctuation of the water source of the system, the valve disc may open suddenly. The water will enter the delayer after passing through the groove and the small holes in the seat ring. Because the fluctuation period is very short, the valve disc will return

to its original position soon, so only a small amount water will flow into the delayer. Water collected by the delayer will be discharged from the orifice at the bottom. Because of the buffering effect of the delayer, the false alarm of the water powered alarm caused by the fluctuation of the water motor alarm can be avoided. The time needed for water flowing from the inlet to the outlet of the delayer is called delay time. The delay time of this instrument is 5-60S. When water flow stops, water in the delayer will be discharged from the orifice, and the discharge time is less than 5min.

2.1.3 Water motor alarm

The water motor alarm is an alarm instrument that will ring with water flow as its driving force. It is usually used as the supporting device of the alarm valve of the automatic fire-extinguishing sprinkler system. The water motor alarm consists of the alarm bell, bell clapper, rotation shaft, hydro-turbine and water pipes. When any sprinkler action or test valve of the automatic sprinkler system is opened, the alarm valve of the system automatically opens, then a small stream of water flows through the water supply pipe and impacts the turbine to rotate, which causes the hammer to continually impact the alarm bell and make a constant alarm.

2.2 Working principle

The wet alarm valve is constantly in the servo state, and the system side is filled with water of working pressure. Because the pressure between the system side and the water supply side can be balanced by the bypass pipe and the compensator, and the area of the upper pressure-bearing surface is larger than that of the lower pressure-bearing surface, the false alarm caused by the opening of the valve disc due to water pressure fluctuation can be effectively avoided. When a fire alarm occurs in the control zone of the automatic sprinkler system, the thermal sensitive component in the sealed sprinkler will blow up in heat and spray water automatically, then the system side pressure of the wet alarm valve will drop. Because of the throttling action of the bypass pipe, the pressure between the system side and the water supply side can't reach balance immediately. The valve disc will open automatically under the effect of pressure difference and water from the water supply will flow into the pipe network of the system side for replenishment. Thus, the whole pipe network will be in the automatic fire extinguishing state. Meanwhile, due to a small amount of water flows to the delayer and the water motor alarm through the small holes in the seat ring, under certain pressure and flow rate, the water motor alarm will ring, then the pressure switch will transform the pressure signal into an electrical signal to start the fire pump and the auxiliary fire-fighting equipment for replenishing water and extinguishing the fire. Thus, the goal of automatic fire extinguishing and alarm is achieved. 3. Installation and commissioning

3.1 Installation

3.1.1 This instrument shall be installed in places where is easy to observe and access. Install The wet alarm valve vertically on the pipes which have been properly tested for its pressure and cleaned. Please note that the arrow for water flow direction is pointing upwards. Reserve enough operation space for repair and maintenance before installation;

3.1.2 Clean the system pipe network completely before installation. Ensure that the inner wall of the pipes is coated with rust-proof layer and there is no dreg or dirt in the pipes;

3.1.3 In order to facilitate the observation of the pipe in which an alarm occurs, it is recommended to discharge the water from an open port or have the water discharge state easy to be observed before installation.

3.1.4 Check whether there is any damage at the joint between the wet alarm valve and the flange, check whether the seal is in good condition and whether the valve disc moves flexibly, carry out the leakage test with a pressure of two times of the rated working pressure. After the test, the valve disc shall be free of leakage; If there is any problem, replace the spare parts or clear the trouble before assembling the parts together.

3.1.5 Turn the pressure gauge to the position where the reading is clearly visible;

3.1.6 The pressure switch shall be installed on the top of the delayer. This pressure switch must be installed vertically and could only be used indoors. After installation, check if it acts reliably.

3.1.7 The water motor alarm shall be installed on the top of the delayer, after installation, check if it acts reliably.

3.1.8 With the exception of support from the trim piping, the ratard chamber will also be binded by a clamp with the piping to avoid any movement or looseness. Pls refer to figure 2 for detailed information. The sizes of piping used for support of the retarding chamber is 3/4 in. with maximum lengths 3.28ft (1m)

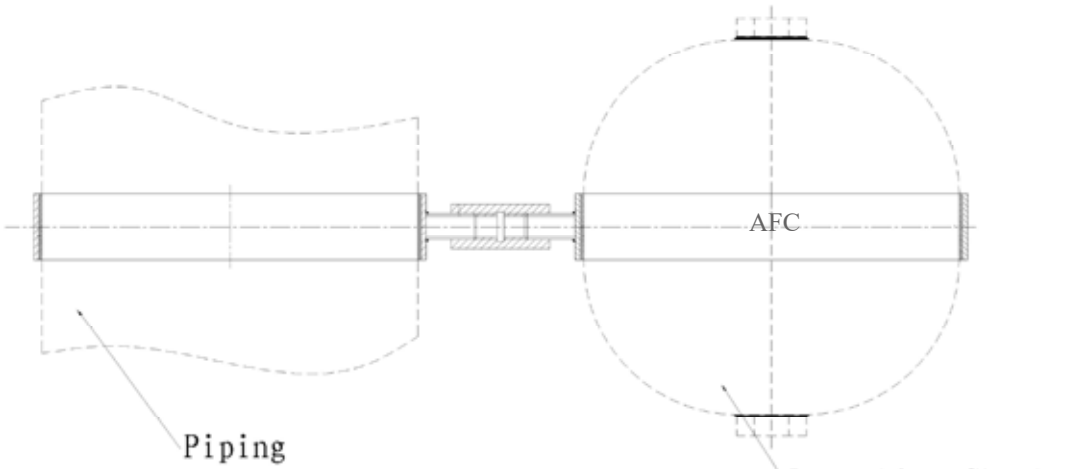

Figure2

3.2 Commissioning

3.2.1 After the completion of the pipe network installation, inject water in the pipe network to increase its pressure gradually and expel all the air from it. When the pressure increases to the system working pressure, check if there is any leakage in the whole system. If there is no leakage, start the alarm test and the water supply test for the pipes.

3.2.2 Alarm test: Open the discharge ball valve on the wet alarm valve instrument. When the flow rate reaches a certain value, the water motor alarm and the pressure switch will act accordingly to alarm.

3.2.3 Close the alarm ball valve and open the alarm test ball valve, the water of the water supply side will flow into the alarm instrument directly. The alarm functions of the pressure switch and the water motor alarm can be tested too when the valve disc is not in the servo state.

3.2.4 Pipeline water supply test: When opening the discharge ball valve, a large amount water will flow out steadily. If that's the case, it shows that the water supply of the pipe network is smooth, otherwise, expel the air from the pipeline system and clear the blockage to ensure the smooth water flow in the pipes.

4. Drain

The part where the wet alarm valve is installed shall be provided with drainage facilities. Such as drainage channels and drainage pipe. All the drain outlets should be piped into the drainage channels or drainage pipes separately. In order to facilitate the observation of the condition of the alarm pipeline, it is better to drain it through an open drain hole or install it in a form that can see the drainage condition. Please refer to Figure 3.

4.1 The Hydraulic motor drain outlet of the alarm bell is piped into a drainage channels or drainage pipe

4.2 The drain outlet located at the lower end of the retard chamber is piped into a drainage channels or drainage pipe.

4.3 The drainage ball valve is piped into a drainage channels or drainage pipe.

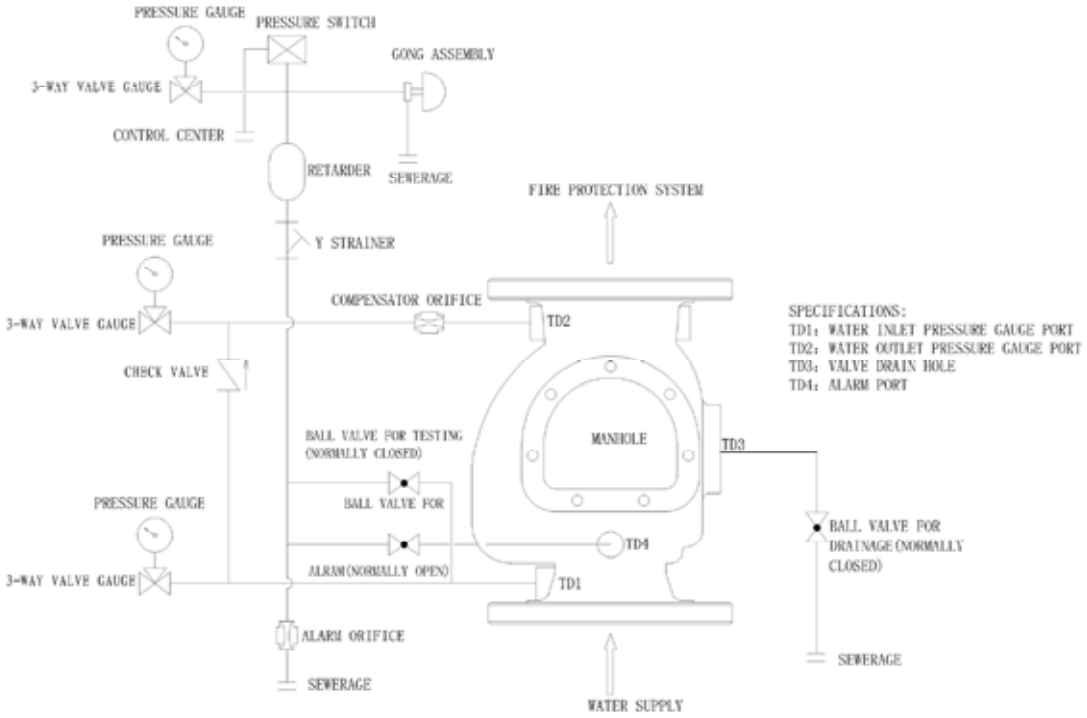

Figure 3

5. Periodical check and maintenance

5.1 Clean the dirt and foreign matters attached on the rubber seal surface of the valve disc. Generally, the service life of the rubber seals is no more than eighteen months. Replace the seals in time if they are worn out or aging.

5.2 Clean the dirt and foreign matters from the small holes and seal surface in the groove of the valve disc seals. Be careful not to scratch the surface and keep the small holes unobstructed. If the seal surface can't be repaired, replace it with a new one.

5.3 Clean the blockage in the filter of the alarm valve instrument timely and keep the pipeline unblocked.

5.4 Check and clean the dirt in the delayer, and be sure that the small throttle holes will not be blocked by foreign matters.

5.5 Check the water motor alarm every three months:

4.5.1 Turn on the alarm bell to check whether its sound is loud, immediately remove any trouble if found.

5.5.2 Remove the alarm shell and clear up the dirt and the sediment in the alarm, then reassemble the alarm shell and gaskets in turn.

5.5.3 Remove the leaking joints from the water-wheel and clear up the dirt in it.

5.6 Check the pressure switch periodically (it is recommended to test every three months or more frequently).

6. Causes and Troubleshooting of Common Faults

6.1 When a fault alarm occurs, check whether there is any obvious or hidden leakage at the pipe joints of the system side, or whether the seal between the valve disc components and the valve seat in the alarm valve is not sealed due to deformation or dirt and debris blocking. Remove the dirt and foreign matters or replace the seal.

6.2 When the throttling holes in the lower side of the delayer are blocked, the delayer will alarm or its delaying time will be shortened. And subsequently remove the cylindrical shell and the port of the throttling holes and wash them.

5.3 If the water pump does not respond when the test valve is open and reaches specified pressure, it might be because the setting value of the pressure switch is wrong, you should adjust the pressure adjusting nut in the pressure switch to the specified value.

6.4 If the water motor alarm does not act or ring loud enough, it might be because the control port is blocked or the bell clapper is stuck. Clean the spray nozzle, remove and wash the impeller and the bell clapper parts, and check if the impeller moves flexibly after reassembling.

UL Listed.

UL Product iQ®

Valves, Alarm

COMPANY

American Fire Control LLC
255 S Orange Ave
Orlando, FL 32801 United States

EX29512

View model for additional information

Alarm Valve, Model(s): ACV-300F, ACV-300FG, ACV-300-G, ACV-300GF

Last Updated on 2025-01-28

FM Approval.

FM Approvals

Sprinkler System Components | Water Motor Gongs | Waterflow Alarm System Valves

Models ACV-300G, ACV-300F, ACV-300FG, ACV-300GF, and RCA-1

Product Description

Model No	Description	Valve Size		Rated Working Pressure		End Connection	Remarks
		in	(mm)	psi	(kPa)		
ACV-300G	Alarm Check Valve	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12	(50, 65, 80, 100, 125, 150, 200, 250, 300)	300	(2065)	Grooved x Grooved	a, b, c
ACV-300F	Alarm Check Valve	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12	(50, 65, 80, 100, 125, 150, 200, 250, 300)	300	(2065)	Flanged x Flanged	a, b, c
ACV-300FG	Alarm Check Valve	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12	(50, 65, 80, 100, 125, 150, 200, 250, 300)	300	(2065)	Flanged x Grooved	a, b, c
ACV-300GF	Alarm Check Valve	2, 2 1/2, 3, 4, 5, 6, 8, 10, 12	(50, 65, 80, 100, 125, 150, 200, 250, 300)	300	(2065)	Grooved x Flanged	a, b, c

Remarks:

a. Resilient seat.

b. FM Approved for Vertical Installations Only

c. Approved for use with Model RCA-1 retard chamber

Details

Category	Waterflow Alarm System Valves
Class of Work	1041 - Alarm Check Valves
Approval Standard	FM 1041 - Alarm Check Valves
Certification Type	FM Approved
Listing Country	United States of America

Company

American Fire Control LLC
255 S Orange Avenue, Orlando , Florida 32801
United States of America
http://american-afc.com

Previous Approvals.

SVB-TR-PRC-SBG-DCC-ME-MF-4799

Consultant: dar making progress together	THIRD SAUDI EXPANSION OF THE HOLY MOSQUE & SURROUNDING AREAS	Contractor: مجموعة بن لادن السعودية SAUDI BINLADIN GROUP Haramain Division قطاع الحرمين الشريفين

CONTRACTOR : SAUDI BINLADIN GROUP (HARAMAIN DIVISION) | Date : 06/Nov/2024

☐ New Submittal / ☑ Resubmittal	SUBMITTAL FOR TECHNICAL APPROVAL (STA)	Submittal Ref. No.: SHS-PRC-SBG-ME-MF-G-0203-01	DEPARTMENT: AR ☐ CV ☐ ST ☐ ME ☑ EL ☐ LC ☐

☐ Material Submittal ☐ Sample Submittal ☑ Pre-qualification ☐ Method Statement ☐ Other

To : DAR AL- HANDASAH

1. Subject: Prequalification Document for Modern Arab Enterprises Co. Ltd., KSA for Fire Protection Products Manufactured by American Fire Control (AFC). USA

2. Submittal Description: Prequalification Document for Modern Arab Enterprises Co. Ltd., KSA for Fire Protection Products Manufactured by American Fire Control (AFC), USA

RECEIVED 06-11-2024 dar Almutairi

Area Of Application : Service Building (All Zones)
Drawing Ref. : N/A
Specification Ref. : N/A
Attached MAT Approval Copy : N/A **Code : N/A**

Attachments	No.
Sample Board	☐
Catalogue	☐
Product Warranty	☐
Test Report	☐
Tech. Data	☐
Pre-Qualification	☑
Compliance Statement	☐
Drawings	☐
Supplier Calculation	☐
Reply of comments	☑
Certificates	☐
Method Statement	☐
Others	☑

Note: Original attachec ☐ Soft copy attached: ☑

3. MANUFACTURER / SUPPLIER:

Manufacturer & Address : American Fire Control (AFC), USA
Supplier & Address : Modern Arab Enterprises Co. Ltd., KSA

4. SBG Comments: ■ Please proceed ■ Refer to attached sheet

Submitted by	Sub-Contractor	Contractor	SBG Q.C
Name:	N.A	Engr. Haitham Qashou	Mr.
Signature:	N.A	Haitham	QUALITY DEPARTMENT SDCC SBG-FPP

This section will be used by Approving Authority only.

5. ENGINEER'S REPRESENTATIVE'S COMMENTS:

Refer to comments on the attached "A4" sheets (2 nos.)

H. Ghonaimy/M. Mohammadin/T. Abbas HG/MM/TA

05-12-2024

A). Approved ☐
B). Approved as Noted ☑
C). Revise & Resubmit ☐
D). Rejected ☐

Eng. Name. Mohamed Attai on behalf of Ezzat A.Halim Title..... Signature.. Mohamed Attia ....Date..07/12/2024

Approval shall not relieve the Contractor of its obligations and liabilities under the Contract or constitute authorization of any change to Contract Documents, and therefore shall not imply any recognition whatsoever of additional time and/ or cost.

Form No. QMPF-40-STA-R03

TMG ATRIUM

BENAN PROJECT

MATERIAL INSPECTION REQUEST

THABAT ثبات

DETAILS OF SCHEDULED INSPECTION — Section A

Package : BP-001 MIR No : TSC -BP01-TCC-ZFP-MIR-ME-00147

To : Zuhair Fayez Partnership Phase No. : Date : 21/ 20-Mar-24

Inspection scheduled for - Time: Date : 21/ 20-Mar-24

Location : Building/Plot : Level : Zone :

Material to be Inspected : Spec./Drwg ref : Submittal No :

Measuring Equipment used: Calibrated (Y/N)

Validity date:

Description of Required Inspection : Material inspection request for fire hydrant and vertical indicator post, see attached delivery notes for description and quantity

Proof of GC/MEP Co-ordinated Inspection

CONFIRMATION OF CONTRACTOR'S Q.C. INSPECTION — Section B

Confirmation of co-ordination and compliance with Specifications, Approved Drawings, Method Statement and Quality Control Plan

Tick box | YES | NO | Note: If **NO**, any departure from Specifications, Approved Drawings, Method Statement and Quality Control Plan to be recorded below.

Non Conformity and/or reference of attached Non Conformity Report (NCR): Date:

Contractor : Project Manager Date : 21/ 20-Mar-24

SUPERVISION CONSULTANT'S REVIEW COMMENTS — Section C

1. Firehydrant and Vertical indicator post inspected as per attached delivery note.
2. Quantity shall be considered after site installation request approval.

A	Approved
B	Approved with Comments ✓
C	Revised & Resubmit
D	For Information Only
R	Rejected

Consultant: Date : 23/03/24

PM/CM If Required : Date :

THE CONSULTANT'S COMMENTS SHALL NOT RELIEVE THE CONTRACTOR OF ANY OF HIS RESPONSIBILITIES UNDER THE CONTRACT

Received for Contractor : Date :

Receipted Copy to : PM / Others

Copy with Section A completed by Contractor to be passed to Consultant
Original with Section B completed to be handed to Consultant prior to Inspection
Consultant to complete Section C and return to Contractor

TMG | ATRIUM PROJECT MANAGEMENT

BENAN PROJECT
Package No.BP-0[redacted]

THABAT ثبات

SUBMI[redacted]

Submittal Reference:	TSC-BP01-SUB-TCC-ZFP-MAT-M[redacted]	Date:	18 ~~17~~-Mar-24
Revision:	00		
Document Type	Material Submittal	SUBMITTED FOR	CODE
		APPROVAL	FA
		FOR INFORMATION	FI
Project:. TMG Sales Centre Benan City Project	PACKAGE NO: BP-01		
	BUILDING NO: General	ACTION	
TO: Zuhair Fayez Partnerhip (ZFP)		APPROVED	A
Cc. Atrium Project Management (APM)- TMG		APPROVED AS NOTED ✓	(B)
WE ARE SENDING HERE WITH THE DRAWING / DOCUMENTS /		REVISE AND RESUBMIT	C
		NO ACTION REQUIRED	D
SAMPLES LISTED BELOW. (DELETE OR ADD AS NECESSARY)		REJECTED	R

ITEM	QTY.	Dwgs., Specs or BOQ Ref.	DOCUMENT / DRAWING NO.	DESCRIPTION	TYPE*	CODE SUBMIT.	CODE ACTION
1	1			Material Submittal for Fire Hydrant and Vertical Indicator Post	MAT		
				Technical Data attached			

23/03/2024

Contractor's Project Manager: **Mahmoud Ibrahim**

Signature: .... 18 ~~17~~-Mar-24

SC review comment / PMCM review comments
REMARKS:

① Fire Hydrant and vertical indicator post techically approved.
② Contractor shall comply with specs, codes, stds and approved shopdrawings.
③ Material shall be FM approved a[redacted] listed.

Correction or comments made relative to submittals during this review DO NOT relieve the contractor from compliance with the requirements of drawings and spe[redacted]ly for review of general conformance with design concept of the project.

FOR CLIENT (Optional):	DATE:	FOR CONSULTANT: Resident Engineer	DATE: 19/03/2024
COPIES			
		FOR PROJECT MANAGER: Project Manager	DATE:

(1) Code to be entered by consultant
(2) Code to be entered by Project Manager

* TYPE: SD - Shop Drawings; GT - Guarantee / Warrantee; IT - Test / Inspection; CA - Calculations; SM - Sample; MD - Manufacturer's Data; CT - Certificates; OT - Others

DATA SHEET

DRY BARREL FIRE HYDRANT

AMERICAN FIRE CONTROL
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SPECIFICATIONS

- Maximum Operating Pressure: 250 PSI (17.2 Bar)
- UL Listed, FM Approved for Fire Protection Roadside Service
- Conforms to AWWA C502 Requirements
- Factory Tested 100% to 500 PSI (34.5 Bar)
- Ductile Iron Body
- Steel Stem and Bronze Seat
- All Fasteners Below Ground 304 Stainless Steel
- Finish: Red and Black EpoxyPaint Interior and Exterior per AWWA C550
- Lubrication: Lube Oil Cold Temp
- Repairable Due to Traffic Breakage Without Excavation
- Seat and Disc Repairable Without Excavation
- Minimal Torque Seat and Disc Design for Closing and Opening Torque

UL LISTED

FM APPROVED

23/03/2024

Models

F-7700	ASME CLASS 150 / ISO PN16 Flanges
F-8700	AWWA Mechanical joint

3/14

23/03/2024

INLET

- 6" (ND150) ASME B16.5 Class 150
- DIN 2503 PN16 Flanged
- 6" Mechanical Connection per AWWA / ANSI C153 / A21.53

OUTLET

- Fire Pump Steamer 4 ½ " - 4nh
- 2 ½ " - 7.5NH Standard

DATA SHEET

DRY BARREL FIRE HYDRANT

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

DUCTILE IRON BODY • SEAT AND DISC REPAIRABLE WITHOUT EXCAVATION • AWWA C550 EPOXY COATED

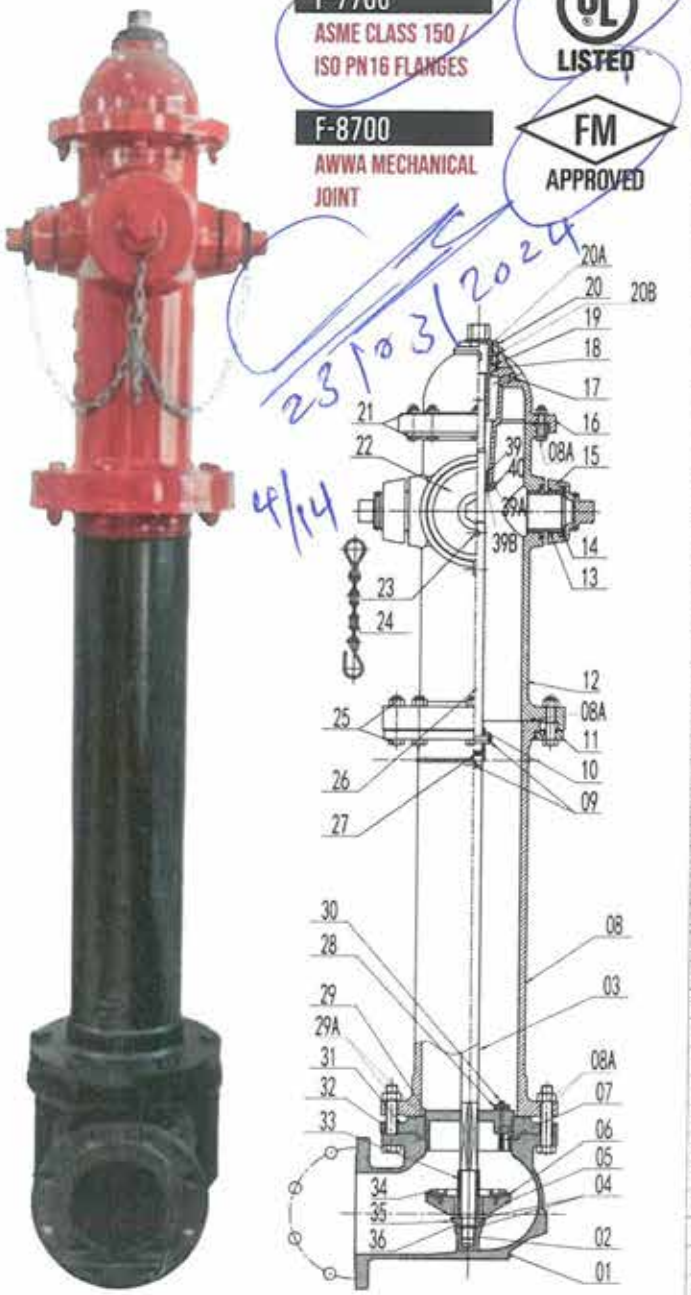
250 PSI (17.2 BAR) MAXIMUM OPERATING PRESSURE

F-7700
ASME CLASS 150 / ISO PN16 FLANGES

UL LISTED

F-8700
AWWA MECHANICAL JOINT

FM APPROVED



MATERIAL LIST		
ITEM	DESCRIPTION	SPECIFICATION
1	Connector Inlet	Ductile Iron ASTM A536 Grade 65-45-12
2	Lock Nut	Ductile Iron ASTM A536 Grade 65-45-12
3	Connecting Rod	Carbon Steel 1045 ASTM A29/29M
4	Lock Nut	Gasket EPDM ASTM D200
5	Tray	Ductile Iron ASTM A536 Grade 65-45-12
6	Seal	EPDM ASTM D2000
7	Drain Hole Spring	Stainless Steel 316 ASTM A240
8	Lower Barrel	Ductile Iron ASTM A536 Grade 65-45-12
8A	O- Ring	NBR ASTM D2000
9	Perforated Cylinder Pin	Carbon Steel 1045 ASTM A29/29M
10	Connecting Rod Sleeve	Carbon Steel 1045 ASTM A29/29M
11	Clamp Ring	Ductile Iron ASTM A536 Grade 65-45-12
12	Body Upper	Ductile Iron ASTM A536 Grade 65-45-12
13	Outlet Nipple	C95400 ASTM B148
14	Outlet Gasket	EPDM ASTM D2000
15	Outlet Cap	Ductile Iron ASTM A536 Grade 65-45-12
16	Upper Bonnet	Ductile Iron ASTM A536 Grade 65-45-12
17	Thread Plug	C95400 ASTM B148
18	Screw Stem Nut	C95400 ASTM B148
19	Screw Nut Gasket	C95400 ASTM B148
20	Screw Nut Seat	C95400 ASTM B148
20A	O-Ring	NBR ASTM D2000
20B	O-Ring	NBR ASTM D2000
21	Bonnet Bolts and Nuts	Carbon Steel 1035 ASTM A29/29M
22	Pumper Connection Cap	Ductile Iron ASTM A536 Grade 65-45-12
23	Cylindrical Pin	Carbon Steel 1045 ASTM A29/29M
24	Cover Chain	Carbon Steel Gr B ASTM A283-B
25	Body Bolts and Nuts	Carbon Steel 1035 ASTM A29/29M
26	Upper Stem	Carbon Steel 1045 ASTM A29/29M
27	Cushion	EPDM ASTM D2000
28	Drain Hole Cover	C95400 / EPDM
29	Seat	C95400 ASTM B148
29A	O-Ring	NBR ASTM D2000
30	Bolt and Nut	Stainless Steel 304 ASTM A240
31	Seat Retainer Plate	Ductile Iron ASTM A536 Grade 65-45-12
32	Lower Barrel Bolts and Nuts	1035 ASTM A29/29M
33	Annular Tube	Carbon Steel 1045 ASTM A29/29M
34	Plate Retainer	Ductile Iron ASTM A536 Grade 65-45-12
35	Lock Nut Seat	Ductile Iron ASTM A536 Grade 65-45-12
36	Check Turn Gasket	GR.B ASTM A283-B
37	Steamer Connector Tube	C95400 ASTM B148
38	Steamer Gasket	GR.B ASTM A283-B
39	Screw Stem Bushing	Stainless Steel 304 ASTM A240
39A	O-Ring	NBR ASTM D2000
39B	O-Ring	NBR ASTM D2000
40	Bolt	Stainless Steel 304 ASTM A240

Seat Repair Kit: Includes all seals, O-rings and removal tool "T" Handle. (1) item #4, (1) item #6,(1) item 8A, (1) item 20A, (1) item 20B, (2) item 29A (3) item 29B, (2) item 39A, (2) item 39B and (1) T handle stem wrench.

Traffic Repair Kit: Includes new connecting sleeve, clamp ring, pins and O-rings for above ground repair.(2) item 8A, (2) item 9, (1) item 10, (1) item 11, (1) item 20A, (1) item 27, (1) item 20B, (2) item 39A, (2) item 39B

DATA SHEET

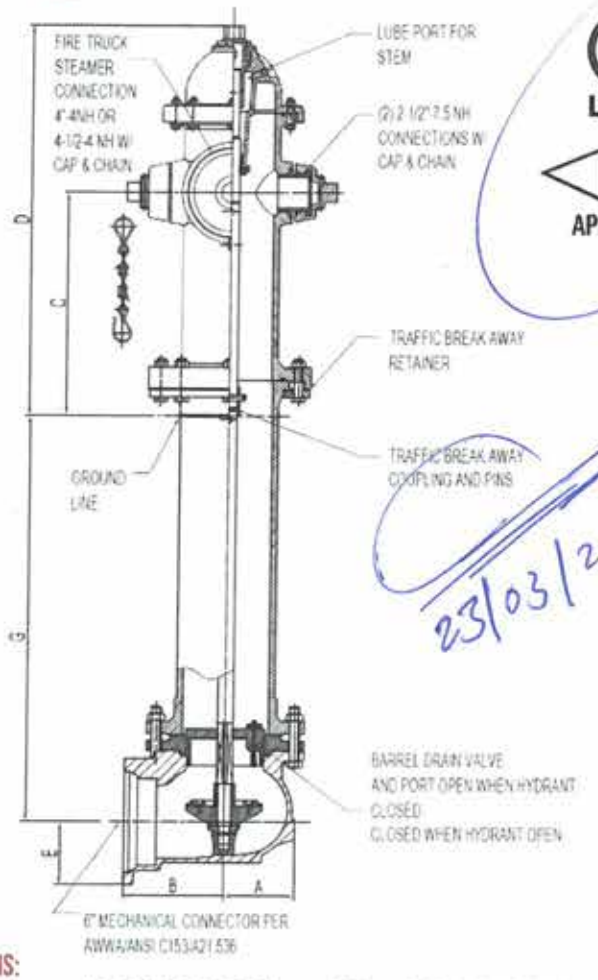
DRY BARREL FIRE HYDRANT

AMERICAN FIRE CONTROL

Dry Barrel Hydrant 6" (DN 150) Flanged or Mechanical Inlet, STD Outlets (2) 2 ½" -7.5NH Male Outlets and (1) 4 ½ " - 4 NH Male Steamer Pumper Connection:

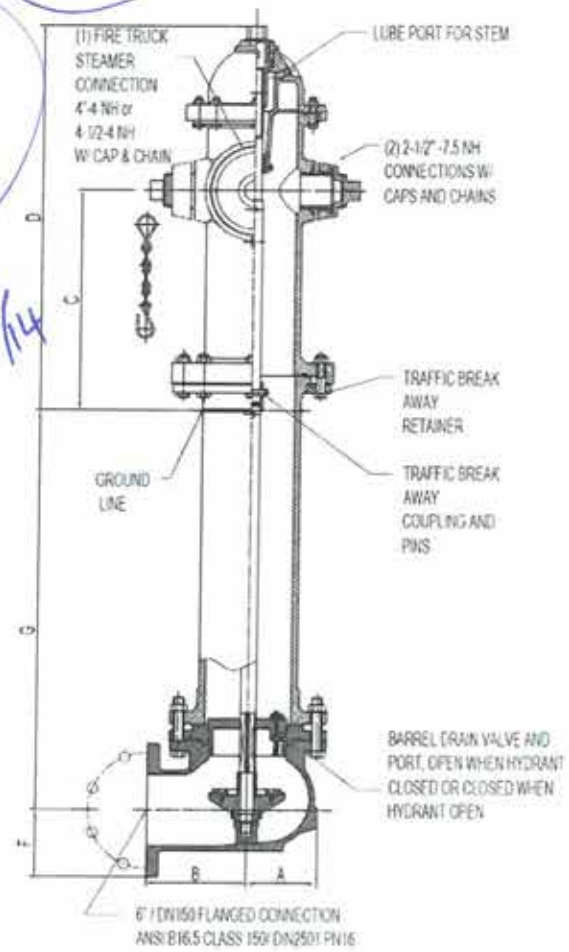
DIMENSIONAL INFORMATION

F-8700
AWWA MECHANICAL JOINT



UL LISTED
FM APPROVED

F-7700
ASME CLASS 150 / ISO PN16 FLANGES



23/03/2024

OPTIONS:

- Inlet flanged ASME B16.5 Class 150 or ISO2501 PN16, or / mechanical AWWA C153 / A21.536
- Depth choose one of above Dimension "G"
- Outlet (2) 2½" hose connection thread type specify, standard =7.5NH (other thread types available)
- Steamer pumper outlet standard=(1) 4½"-4NH, also available 4"-4NH optional adapter fitting

Part Number Flanged	Part Number Mechanical	A (mm/ inch)	B (mm/ inch)	C (mm/ inch)	D (mm/ inch)	E (mm/ inch)	F (mm/ inch)	G (mm/inch)	Weight (kg)
F-7700	F-8700	146/ 5.75	208/ 8.18	460/ 18.11	805/ 31.7	130/5.12	140/5.51	1063/42	185
								1215/48	190
								1368/54	196
								1520/60	211
								1673/66	220
								1825/72	241
								1978/78	246
								2130/84	251

DATA SHEET

5100 Vertical Indicator Post

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

The American 5100 Vertical Post Indicator is a critical component of fire protection systems, designed to provide a visual indication of the status of fire protection valves such as post indicator valves. These valves are commonly found in fire sprinkler systems, hydrant systems, and standpipe systems within buildings and industrial facilities. The VPI plays a crucial role in ensuring the efficient operation of these systems during fire emergencies.

SPECIFICATIONS

- Clearly displays valve status (open or shut) for operational awareness
- Enables remote operation of buried or hard-to-reach valves
- Secure design with a padlock-compatible wrench handle fitting over a "u" bracket
- Simplified installation with adjustable telescoping stem, eliminating the need for field cutting
- Easily customizable open and shut signs by removing the post head
- Compatible with gate valves sizes ranging from 4" to 12"
- UL listed and FM approved

CORROSION PROTECTION

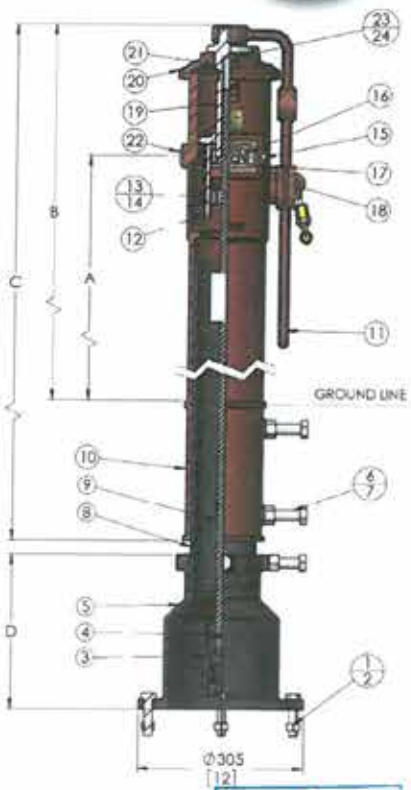
- Internally and externally spray epoxy painted ral3000

FIELD ADJUSTMENT

- Remove post head to adjust open and shut signs as required
- Adjust telescoping stem and pipe to desired length
- Attach base of post to the post plate on the valve using bolts/nuts provided

PART LIST

No.	Part Name	Specification/Material
1	Hex Cap Screw	Carbon Steel ASTM A307B
2	Hex Nut	Carbon Steel ASTM A307B
3	Crane Coupling	Ductile Iron ASTM A536 Gr. 65-45-12
4	Cotter Pin	Carbon Steel ASTM A307B
5	Base Flange	Cast Iron ASTM A126 Class B
6	Hex Nut	Carbon Steel ASTM A307B
7	Hex Cap Screw	Carbon Steel ASTM A307B
8	Standpipe	Carbon Steel ASTM A53
9	Stem 1" Square	Carbon Steel AISI 1045
10	Body	Cast Iron ASTM A126 Class B
11	Locking Wrench	Ductile Iron ASTM A536 Gr. 65-45-12
12	Target Carrier Nut	Stainless Steel AISI 304
13	Hex Cap Screw	Carbon Steel ASTM A307B
14	Hex Nut	Carbon Steel ASTM A307B
15	Hex Cap Screw	Carbon Steel ASTM A307B
16	Target	Cast Aluminum
17	Window Glass	Plexiglass
18	Gasket	EPDM ASTM D2000
19	Operating Nut	Stainless Steel AISI 304
20	Top Section	Cast Iron ASTM A126 Class B
21	Snap Ring	Spring Steel
22	Plug	Carbon Steel ASTM A307B
23	Square Nut	Carbon Steel ASTM A307B
24	Hex Cap Screw	Carbon Steel ASTM A307B



DATA SHEET

5100 Vertical Indicator Post

AMERICAN FIRE CONTROL

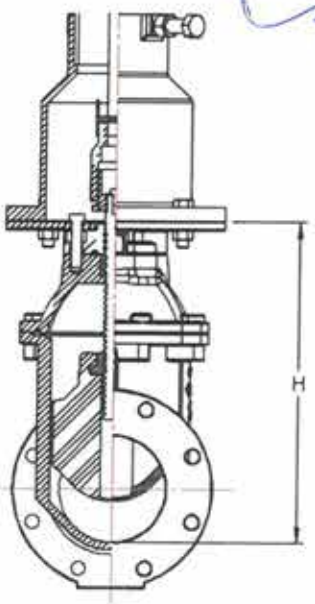
QUALITY IS A PRIORITY

DIMENSIONS

Valve Size	Model No.	A	B	C	D
4" ~12"	5100	700 (27.5")	1000 (39.3")	1248 (49.1")	297 (11.7")

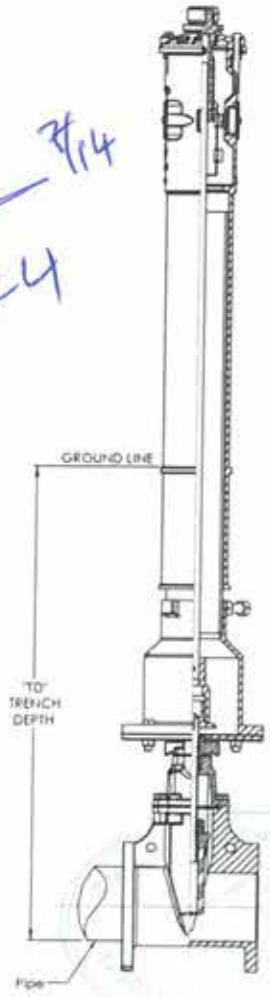
AMERICAN AFC A-3100 PIV-NRS Gate Valve

Valve Size	H
4"	11.9"
6"	17.2"
8"	20.79"
10"	26.18"
12"	30.31"



UL LISTED

FM APPROVED



Size	4"	6"	8"	10"	12"
Trench Depth Range (TD) Min	34.65"	39.76"	44.29"	48.62"	53.54"
Trench Depth Range (TD) Max	71.26"	76.38"	80.91"	85.24"	90.16"

CERTIFICATE

This is to certify that

8/14

23/03/2024

American Fire Control

255 S Orange Ave,
Orlando, FL 32801
United States of America

has implemented and maintains a **Quality Management System.**

Scope:
The Design and Manufacture of Ductile and Gray Iron Castings, Fire Hydrants, Indicator Posts, Check Valves, Gate Valves, Butterfly Valves and Associated Component.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2015

Certificate registration no.	051223010103
Date of original certification	2014-07-22
Date of certification	2023-12-05
Valid until	2026-12-04

CB-MS-3923

To verify certificate, visit at :
https://uafaccreditation.org
https://www.iafcertsearch.org

ARS Assessment Private Limited

Managing Director

UAF Address : 400, North Center Dr, STE 202, Norfolk, VA 23502, United States of America :
This certificate remains the property of ARS and must be returned to ARS on Cancellation or Suspension of the certificate Validity of the certificate is subject to successful completion of surveillance audits. Further clarification regarding the scope of this certificate and the applicability of standard may be obtained by consulting the Organization on info@arscert.com

CERTIFICATE

This is to certify that

23/03/2024

American Fire Control

255 S Orange Ave,
Orlando, FL 32801
United States of America

has implemented and maintains an **Environmental Management System.**

Scope:
The Design and Manufacture of Ductile and Gray Iron Castings, Fire Hydrants, Indicator Posts, Check Valves, Gate Valves, Butterfly Valves and Associated Component.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 14001 : 2015

Certificate registration no.	051223020104
Date of original certification	2014-07-22
Date of certification	2023-12-05
Valid until	2026-12-04

CB-MS-3923

To verify certificate, visit at :
https://uafaccreditation.org
https://www.iafcertsearch.org

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Managing Director

UAF Address : 400, North Center Dr, STE 202, Norfolk, VA 23502, United States of America :
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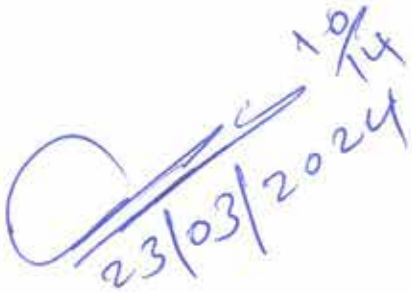
CERTIFICATE

This is to certify that

American Fire Control

255 S Orange Ave,
Orlando, FL 32801
United States of America



has implemented and maintains an **Occupational Health and Safety Management System.**

Scope:
The Design and Manufacture of Ductile and Gray Iron Castings, Fire Hydrants, Indicator Posts, Check Valves, Gate Valves, Butterfly Valves and Associated Component.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 45001 : 2018

Certificate registration no.	051223030105
Date of original certification	2014-07-22
Date of certification	2023-12-05
Valid until	2026-12-04

CB-MS-3923

To verify certificate, visit at :
https://uafaccreditation.org
https://www.iafcertsearch.org

ARS Assessment Private Limited

Managing Director

UAF Address : 400, North Center Dr, STE 202, Norfolk, VA 23502, United States of America :
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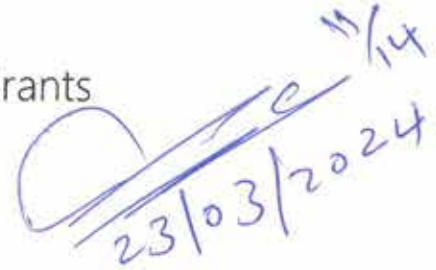
HBOR.EX28963 - Hydrants

Hydrants



American Fire Control LLC
255 S Orange Ave
Orlando, FL 32801 United States

EX28963

Base-valve design:

Model	Base-valve Size, in.	Hose Outlet (No. of Outlets), in.	Pumper Outlet (No. of Outlets), in.	Rated Pressure, psig
F-8700	5-1/4	(2) 2-1/2	(1) 4-1/2	250
F-7700	5-1/4	(2) 2-1/2	(1) 4-1/2	250

Wet-barrel design:

Model	Hose Outlet (No. of Outlets), in.	Pumper Outlet (No. of Outlets), in.	Rated Pressure, psig
FW-9000	(2) 2-1/2	(1) 4-1/2	250

Last Updated on 2023-02-10

FM Approvals

Member of the FM Global Group

Other Fire Protection Products | Fire Hydrants (Dry Barrel Type) | Hydrants, Dry Barrel

Model F-7800, F-8700, F-8800, and F-7700

Product Description

12/14
23/03/2024

Product Specification

Model No	Size		# of Hose Outlets	Hose Outlet Size		Pumper Connection Size		Rated Working Pressure		Remarks
	in	(mm)		in	(mm)	in	(mm)	psi	(kPa)	
F-7800	6	(152)	2	2 1/2	(64)	4	(102)	250	(1720)	a
F-8700	6	(152)	2	2 1/2	(64)	4 1/2	(114)	250	(1720)	a
F-8800	6	(152)	2	2 1/2	(64)	4	(102)	250	(1720)	b
F-7700	6	(152)	2	2 1/2	(64)	4 1/2	(114)	250	(1720)	b

Remarks:

a.) Available with a ANSI/AWWA C111/A21.11 Mechanical Joint Inlet Connection

b.) Available with a ASME B16.5 Class 150 Flanged Joint Inlet Connection

FM Approvals

Member of the FM Global Group

Details

Category	Hydrants, Dry Barrel
Class of Work	1510 - Hydrants(Dry Brl Ty), Pvt FS
Certification Type	FM Approved
Listing Country	United States of America

Company

American Fire Control LLC
255 S Orange Avenue, Orlando,
Florida 32801
United States of America
http://american-afc.com

DP WORLD	COMMENT RESOLUTION SHEET(CRS)	ARCHIRODON	AECOM Imagine it. Delivered.

Project Name	**Package Jeddah South Container Terminal Upgrade - Design & Build Main Works**			**Date:**	30 July 2023
Project No.	**60622986**	**CRS Reference No.: 003215**	Rev.0A	**Page:**	1 of 1

Comment Resolution Sheet Information	Code	ER Reference No.
CRS Status: ☒CLOSED ☐OPEN	**1**	
* All new comments are marked in RED		

CONTRACTOR'S DOCUMENT NO./ TRANSMITTAL REFERENCE	DOCUMENT TITLE / REFERENCE	RECEIVED	ISSUED
11099-SUB-UDC-GL-MAR-002	Material Approval Request for Zone Control Valves-Rev.0A Vendor: United Diamond Contractors	17 July 2023	30 July 2023

S/NO.	DOCUMENT /DRAWING/ REPORT SECTION OR CLAUSE NO.	ENGINEER'S COMMENTS	CONTRACTOR'S RESPONSE	FINAL RESOLUTION
1.		Material Approval Request for Zone Control Valves-Rev.0A Supplied by United Diamond Contractors is acceptable subject to the condition that it complies with the approved IFC Drawings, Contract Specifications and the Employer's Requirements.		

Jacobs

TECHNICALLY ACCEPTABLE
30/ 07/ 23

APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT

DP WORLD JEDDAH

Contract No.: SAJED-M&I-2019-144/DB/2020/059

MATERIAL APPROVAL REQUEST FOR ZONE CONTROL VALVES

VENDOR: UNITED DIAMOND CONTRACTORS

Jacobs

TECHNICALLY ACCEPTABLE
30/ 07/ 23

APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT FURNISHED.

Rev.	Issue Date	Issue Status	Completed by		Reviewed by		Approved by	
0A	13.07.2023	IFA	Job Position	Technical Office Section Head	Job Position	Technical Office Manager	Job Position	Project Manager
			Name	Karamullah Sharief	Name	Mohamed Khairy	Name	Dipankar Chakravorty
			Signature		Signature		Signature	

INDEX

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30/ 07/ 23

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3.TECHNICAL SPECIFICATIONS (REFERENCE LIST)

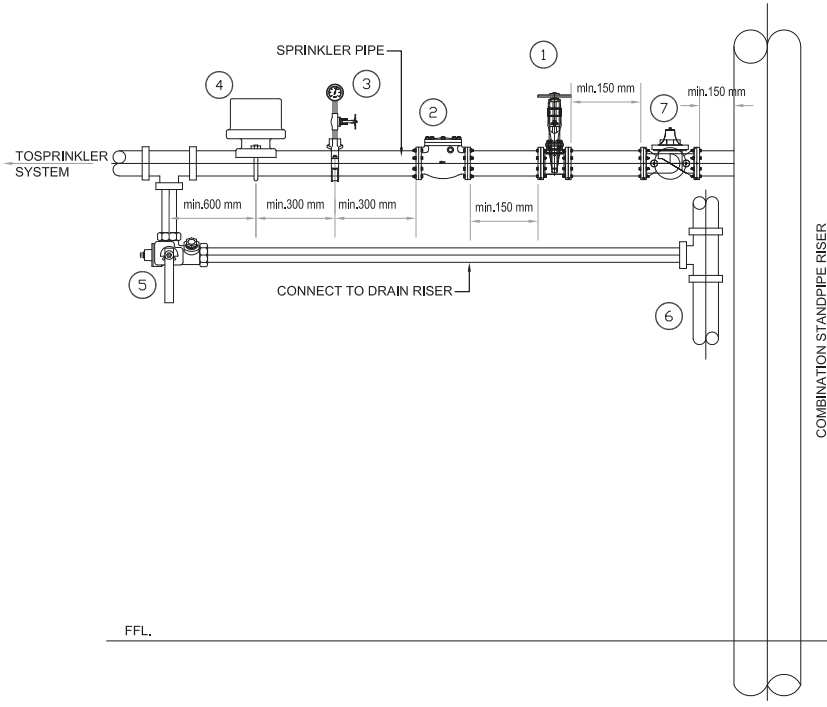
REFERENCE	TITLE
11099-ENG-B-GL-PB-SPE-0040	SPECIFICATION FOR BUILDING MECHANICAL SERVICES

Jacobs

TECHNICALLY ACCEPTABLE
30/ 07/ 23

APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT FURNISHED.

Sr. #	Description	Brand Name	Model
1.1	OS&Y Gate Valve	American Fire Control	A-3000
1.2	OS&Y Gate Valve	Mueller	R-MFP2
2.1	Swing Check Valve	American Fire Control	A-3150
2.2	Swing Check Valve	Mueller	A2122
3	Water Flow Switch	Potter	VSR
4	Supervisory / Tamper Switch	Potter	OSYSU
5	Pressure Guge	AGF	7500
6	Test & Drain Valve	GIACOMINI	A61
7	Pressure Reducing Valve	CLA-VAL	90G-21



ZONE CONTROL VALVE ASSEMBELY 6, 4" DIA. PIPE.

SR. NO.	DESCRIPTION	MODEL NO.	MAKE
1	O.S&Y TYPE GATE VALVE WITH TAMPER SWITCH	TBA	TBA
2	CHECK VALVE	TBA	
3	PRESSURE GAUGE	TBA	TBA
4	FLOW SWITCH	TBA	TBA
5	COMBINATION TEST AND DRAIN VALVE	TBA	TBA
6	DRAIN RISER	TBA	TBA
7	PRESSURE REDUCING VALVE	TBA	TBA

NOTES / REFERENCES

1) ALL THE MARTIAL WILL BE INSTALLED AS APPROVED MATERIAL SUBMITTAL

1 FLOOR CONTROL VALVE ASSEMBLY DETAIL
SCALE: NTS

Jacobs

TECHNICALLY ACCEPTABLE
30/ 07/ 23

APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT FURNISHED.

DATA SHEET

A-3000 OS&Y Resilient Wedge Gate Valve - Flanged Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

The American A-3000 Flange OS&Y (Outside Screw and Yoke) Gate Valve is a reliable and robust valve designed for various industrial applications. This valve complies with the AWWA C515 standard ensuring high-quality performance and adherence to industry standards. It features a heavy-duty handwheel and attachment nut and high-quality graphite packing.

TECHNICALLY ACCEPTABLE
30/ 07/ 23

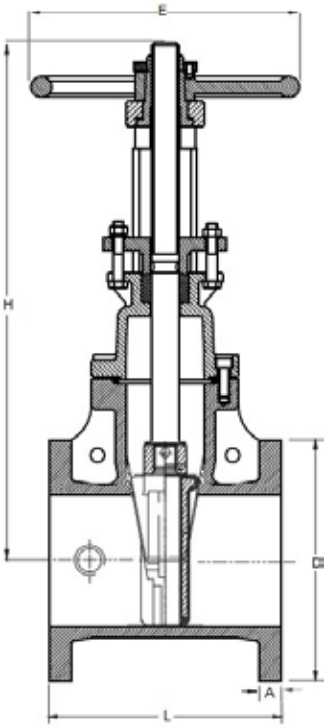
APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT FURNISHED.

SPECIFICATIONS

- Complies with AWWA C515 standard
- Flanged end to ANSI B16.1 Class 125/ANSI B16.42 Class 150/BS EN1092-2 PN16
- Size Range: Available in sizes ranging from 2.5" to 12"
- Max working pressure: 300PSI (21 bar) /Max testing pressure: 600PSI (42bar)
- Working Temperature: 0°C to 80°C (32°F to 176°F)
- Fusion-bonded epoxy coating inside and outside complying with AWWA C550 standards
- Approvals: UL listed , FM approved

PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM A536 65-45-12
2	Resilient Wedge	Ductile Iron ASTM A536/EPDM ASTM D2000
3	Wedge Nut	Stainless Steel 304
4	Dowel Pin	Stainless Steel 304
5	Stem Back Seat O-Ring	EPDM ASTM D2000
6	Bonnet Gasket	EPDM ASTM D2000
7	Bonnet	Ductile Iron ASTM A536
8	Packing	PTFE Graphite
9	Threaded Rod	Stainless Steel 304
10	Gland	Ductile Iron ASTM A536 65-45-12
11	Gland Nut	Stainless Steel 304
12	Yoke	Ductile Iron ASTM A536 65-45-12
13	Handwheel	Ductile Iron ASTM A536 65-45-12
14	Handwheel Nut	C95400 Aluminum Bronze
15	Stem	Stainless Steel 304
16	Bolt	Stainless Steel 304
17	Yoke Screw	C95400 Aluminum Bronze
18	NPT Plug	C95400 Aluminum Bronze



DIMENSIONS

SIZE		L		H OPEN		H CLOSED		A		D		E	
IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
2.5	65	7.48	190	16.96	431	14.56	370	0.70	18	7	178	7.87	200
3	80	7.99	203	18.46	469	16.53	420	0.74	19	7.51	191	7.87	200
4	100	9.01	229	21.22	539	17.59	447	0.94	24	9.01	229	10.24	260
6	150	10.51	267	28.18	716	23.89	607	0.98	25	10.98	279	12.39	315
8	200	11.49	292	36.29	922	29.68	754	1.14	29	13.50	343	14.75	375
10	250	12.99	330	44.64	1134	35.03	890	1.18	30	15.98	406	16.37	416
12	300	14.01	356	51.96	1320	40.59	1031	1.25	32	19.01	483	17.51	445

WEIGHTS

VALVE SIZE	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB (KG)	46.3 (21)	64 (29)	79.4 (36)	136.7 (62)	213.8 (97)	315.3 (143)	425.5 (193)

AMERICAN FIRE CONTROL CO., LLC 255 S Orange Ave, Orlando, FL 32801, USA
+1 607 252 6814 info@american-afc.com www.american-afc.com

DATA SHEET

A-3150 Swing Check Valve - Flanged Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

The American A-3150 Swing check valves are designed only for fire protection services, also referred to as non-return, retention, or one-way valve, a check valve is designed to only allow the flow of water in one direction, a swing type clapper is found inside the valve which is spring loaded preventing water from flowing in a return direction.

UL LISTED
FM APPROVED

SPECIFICATIONS

- Meet or exceed the requirements of AWWA C508 Standard,
- Full waterway designed
- Max working pressure:300PSI (21 bar) /Max testing pressure 600PSI (42bar)
- Approvals:UL listed, FM approved
- Flanged ends to ANSI B 16.1 class 125 or ANSI B16.42 class 150
- Min/Max working temperature: 0°C to 80°C (32°F to 176°F)

COATINGS

- The interior and exterior of the valve coated with fusion-bonded epoxy in accordance with ANSI/AWWA C550

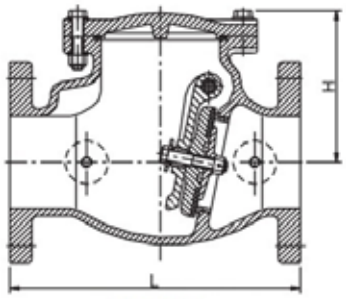
Jacobs

TECHNICALLY ACCEPTABLE
30/ 07/ 23

APPROVAL OF THIS DOCUMENT DOES NOT RELIEVE VENDOR OF HIS RESPONSIBILITY FOR DESIGN, FABRICATION, AND PERFORMANCE OF THE EQUIPMENT FURNISHED.

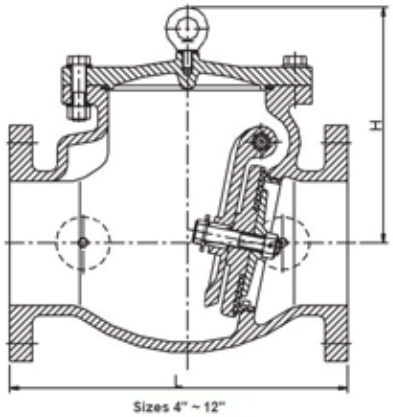
PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM, A536 65-45-12
2	Cover	Ductile Iron ASTM, A536 65-45-12
3	Gasket	EPDM ASTM D2000
4	Clapper Arm	Ductile Iron ASTM, A536 65-45-12
5	Disc Ring	EPDM ASTM D2000
6	Disc	Ductile Iron ASTM, A536 65-45-12
7	Retainer Washer	Bronze ASTM A148
8	Hinge Pin	Stainless Steel ASTM A276, 304
9	Pin Plug	Stainless Steel ASTM A276, 304
10	Seat Ring	Bronze ASTM A148



DIMENSIONS

IN	DN	L	H
2”	DN50	8”	5.6”
2.5”	DN65	8.5”	5.8”
3”	DN80	9.5”	6.4”
4”	DN100	11.5”	6.8”
6”	DN150	14”	9.2”
8”	DN200	19.5”	11.8”
10”	DN250	24.5”	13.7”
12”	DN300	27.5”	16.5”



WEIGHTS

VALVE SIZE	2”	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB (KG)	33(15)	44(20)	55(25)	75(34)	143(65)	251(114)	408(185)	617(280)

AMERICAN FIRE CONTROL CO., LLC 255 S Orange Ave, Orlando, FL 32801, USA
+1 607 252 6814 info@american-afc.com www.american-afc.com

Lynx Contracting Company
P.O.Box: 341904
Riyadh, Ar Riyāḍ 11333
P: +966 0506249251

Project: 004 Jawharat Mall - Jeddah
Jeddah
Jeddah, Makkah

Submittal #COM-1873.0 - Fire Fighting Valves
COM - Material Submittal

Distribution Summary

Distributed by Ubada Dange (Contractor Main - Lynx Contracting Company) on Oct 11, 2023

To Omar Turk (Contractor Main - Lynx Contracting Company), Abdulllah Shalan (Contractor Main - Lynx Contracting Company), Read Sabbah (Contractor Main - Lynx Contracting Company)

Message FOR CONST. --REFER TO THE CONSULTANT COMMENTS

Attachments Jawhart Jeddah Mall FF Valve MTS Rv-0.pdf, 12 - MAR - firefighting valves.pdf

Name	Response	Attachments	Comments
Naseem Yousef Anaqerh (Consultant - Echo Architecture)	Approved as Noted		**Approved as noted subject to :** - all maerials are UL/FM approved . - all material to comply with specifaction and project documents. - Alarm Check Valve type H with variable pressure trim with retard chamber and motor gong . - Butterfly valves for shops only . - follow detail of installtion as per drawing and NFPA recommendation .
Ahmad Basheer (Contractor Main - Lynx Contracting Company)	For Record Only		

Revision	0	**Submittal Manager**	Ubada Dange (Contractor Main - Lynx Contracting Company)
Status	Closed	**Date Created**	Oct 1, 2023
Issue Date	Oct 1, 2023	**Spec Section**	COM - Material Submittal
Responsible Contractor	SC - Injaz Technical for Contracting Est.	**Received From**	
Received Date		**Submit By**	
Final Due Date	Oct 9, 2023	**Lead Time**	
		Cost Code	5112500-15500 - FIRE PROTECTION
Location	Mechanical	**Type**	Manufacturer Data & Specs

Approvers Nisar Ahmed (Contractor Main - Lynx Contracting Company), Ali Danon (Contractor Main - Lynx Contracting Company), Ahmad Basheer (Contractor Main - Lynx Contracting Company), Syed Fizan (Contractor Main - Lynx Contracting Company), Marko Injac (Contractor Main - Lynx Contracting Company), Feras Jabr (Contractor Main - Lynx Contracting Company), Naseem Yousef Anaqerh (Consultant - Echo Architecture), Mohammed Jamal (Consultant - Echo Architecture), Ibrahim Quraishi (Consultant - Echo Architecture)

Ball in Court

Distribution Syed Fizan (Contractor Main - Lynx Contracting Company)

Description
Submitted Material List:
1) OS&Y Gate Valve - American Fire Control.
2) Swing Check Valve - American Fire Control.

3) Supervisory Switch - Potter.
4) Flow Switch - Potter.
5) Test & Drain Valve - HD Fire.
6) Pressure Gauge - AGF.
7) Alarm Check Valve - HD Fire.
8) Butterfly Valve - American Fire Control.

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					12 - MAR - firefighting valves.pdf Jawhart Jeddah Mall FF Valve MTS Rv-0.pdf
Ubada Dange		Oct 3, 2023	Oct 1, 2023	Submitted	
Nisar Ahmed	Oct 1, 2023	Oct 5, 2023	Oct 2, 2023	For Record Only	
Ali Danon	Oct 1, 2023	Oct 5, 2023		Pending	
Ahmad Basheer	Oct 2, 2023	Oct 7, 2023	Oct 10, 2023	For Record Only	
Comment	for approval				
Syed Fizan	Oct 2, 2023	Oct 7, 2023		Pending	
Marko Injac	Oct 2, 2023	Oct 7, 2023		Pending	
Feras Jabr	Oct 2, 2023	Oct 7, 2023		Pending	
Naseem Yousef Anaqerh	Oct 10, 2023	Oct 9, 2023	Oct 11, 2023	Approved as Noted	
Comment	**Approved as noted subject to :** - all maerials are UL/FM approved . - all material to comply with specifaction and project documents. - Alarm Check Valve type H with variable pressure trim with retard chamber and motor gong . - Butterfly valves for shops only . - follow detail of installtion as per drawing and NFPA recommendation .				
Mohammed Jamal	Oct 10, 2023	Oct 9, 2023		Pending	
Ibrahim Quraishi	Oct 10, 2023	Oct 9, 2023		Pending	

KING ABDULAZIZ INTERNATIONAL AIRPORT
JEDDAH- SAUDI ARABIA
HAJJ TERMINAL COMPLEX

UNITED DIAMOND CONTRACTORS CO.

Project Name : Fire Protection System

Project ID : UDC-P-528 Contractor : UNITED DIAMOND CONTRACTORS Co

Contract NO :

Reference No : UDC-P528-ME-FF-MS-006 Revision No : 0 Date : 12-Feb-24

Subject : Fire Fighting Valves - American Fire Control - AFC

Specification & BOQ Reference :

Documentation

DOCUMENTS	DRAWINGS	MATERIALS
Specify: Technical Submittal	☐ Design Drawings ☐ Shop Drawings ☐ As Built Drawings	■ Materials Submittals ☐ Calculation ☐ Samples

Attachments (Hard Copies & PCM):

Documents	■ Yes	☐ No	Soft Copy / CD	■ Yes	☐ No
Drawings	☐ Yes	☐ No	Samples	☐ Yes	☐ No
Technical Data	■ Yes	☐ No	Others		

Review & Approval

Reviewers (RC)		Initial Approval A B C D	Remarks
☐ Architectural			
☐ Structural			
■ Mechanical	* OY&Y Gate Valves - American Fire Control - AFC		
☐ Electrical			
☐ Contract Administrator			
☐ PCM & Planning			
☐ Quality Assurance			
☐ Safety			
☐ Surveying			
☐ Others			

Final Approval Code:

A - Approved ☐ C - Revise and Resubmit ☐

B - Approved As Noted, Resubmittal Not Required ☑ D - Not Approved ☐

Consultant's Comments

- Follow The Instruction of NFBA Code.

UDC Representative		Consultant or Client Representative	
Name	Eng. Mahmoud Ismaeil	Name	Ahmad Galal
Signature		Signature	
Date	12-Feb-24	Date	19/2/2024
Stamp		Stamp	

اسم المشروع : إنشاء القرية الشعبية - اشبيليا	القرية الشعبية	رقم المشروع	Q03/2022

الاستشاري	المطور	المقاول
المركز المعماري ARCH.CENTRE	شركة درة اشبيلية للاستثمار	المرشد للمقاولات والبريكاست ALMARSHAD CONTRACTING & PRECAST

طلب إعتمـــاد مواد — REQUEST FOR MATERIALS APPROVAL

نوع التقديم :	ميكانيكا	رقم التقديم :	M-MAT-14	تاريخ التقديم:	2/11/2023
				0	REV

نوع المادة المقدمة : AMEICAN FIRE CONTROL

جداول الكميات والمواصفات	مواصفات المادة المقدمة للإعتماد (حسب العقد) :
رقم البند: 15-1	
رقم الصفحة:	
رقم المواصفه: 15-100	
مكان الاستخدام: كامل المشروع	عينات

م	المادة		بلد المنشأ	المصنع أو الوكيل	هاتف
1	TEST & DRAIN VALVE (HD FIRE)	(B)	امريكا	شركة الاعمال العربية المتحدة	6991226
2	BUTTERFLY VALVE (AMEICAN FIRE CONTROL)	(B)	امريكا		
3	FLOW SWITCH (POTTER)	(B)	امريكا		
4	PRESSURE GAUGE (AGF)	(B)	امريكا		

توقيع و ختم المقاول: Contractor's Stamp & Sin

المهندس المختص: م/ السيد هيكل
التوقيع :
التاريخ : 2/11/2023

مدير المشروع: م/ غسان الحسين
التوقيع :
التاريخ : 2/11/2023

RECEIVED 04 NOV 2023 المرشد للمقاولات مشروع القرية الشعبية

ملاحظات و توصيات الإستشاري :

☐ التوصية بالموافقـــه A ☒ التوصية بالموافقــه مع ملاحظاتB ☐ التوصية بالرفض مع اعادة التقديمC

لا مانع من اعتماد اكسسوارات الحريق طبقا للآتي:

(1) محبس لاختبار د (UL-FM) (HD.Fire) مصنوع (ZCVA)

(2) محبس فراشة مع Tamper switch ومتصل بلوحة انذار الحريق (UL-FM)

(3) Flow switch مصنوع (Potter) - (UL-FM) معتمد (ZCVA)

(4) عداد ضغط مصنوع AGF - (UL-FM) ويستخدم لجميع نظام الغاز من (ZCVA) أو مضخات الحريق

ويتم تقديم شهادة المنشأ عند التوريد للموقع مع شهادات الضمان

المهندس المختص: م/سامح نصير
التوقيع:
التاريخ: 4 / 11 / 2023

مدير المشروع: م/صلاح كامل
التوقيع:
التاريخ: 4 / 11 / 2023

المركز المعماري ARCH.CENTRE مشروع القرية الشعبية في

ملاحظات هامه : 1 [illegible] 2 [illegible]

شركة أنظمة المعدن
Metal Systems Company

طرز

مشروع
استكمال متطلبات الدفاع المدني لإصلاحية الطائف

المالك : وزارة الداخلية - المديرية العامة للسجون
المقاول الرئيسي : مجموعة بن لادن السعودية
الاستشاري الرئيسي : شركة دار الهندسة
استشاري اعمال السلامة : مكتب عاشور للاستشارات
مقاول أعمال الدفاع المدني: شركة أنظمة المعدن المحدودة

طلب اعتماد مواد المشروع

رقم التقديم	رقم المشروع	اسم المشروع	التاريخ
١	١	استكمال متطلبات الدفاع المدني لإصلاحية الطائف	2024-4-21

مقدم الى	مكتب عاشور للاستشارات الهندسية

نوع التقديم		خرائط تنفيذيه	●	مواد للاعتماد		نموذج طلب معلومات		طلبات تغيير		وثيقة نظام الجودة		اخرى

تفاصيل طلب الاعتماد	قطع غيار الشركات المصنعة American Fire Control, Tyco, Viking &HD Fire
المرفقات	مواصفات المنتج الفنية + تقرير اختبار
الملاحظات	١- التأكيد على أن تكون [illegible] على جميع [illegible]. ٢- الرجوع إلى الاستشاري العام لاعتماد مواصفات الرشاشات من حيث الشركات الموردة.

حالة المراجعة		قيد الانتظار		موافقة	✓	وافق كما لوحظ		تم -إعادة الارسال الرفض		غير مكتمل - إعادة الارسال		[illegible] بوظيفي اخر

ختم المقاول

ختم استشاري السلامة
للاستشارات الهندسية
Lic. 5900116391
٢٠٢٤/٤/٢٧

MAERSK

MAERSK HEAD OFFICEJEDDAH (RASD BUILDING)

UNITED DIAMOND CONTRACTORS CO.
شركة اتحاد المقاولون الماسية

Project Name : MAERSK HEAD OFFICEJEDDAH (RASD BUILDING)

Project ID : UDC-P 585 Contractor : UNITED DIAMOND CONTRACTORS Co.

Contract NO.:

Reference No : UDC-P585-ME-DR-MAT-007 Revision No : 0 Date : 19-Jun-23

Subject : FF - Zone Control Valve

Specification & BOQ Reference :

Documentation

DOCUMENTS	DRAWINGS	MATERIALS
Specify : Technical Submittal	☐ Design Drawings ☐ Shop Drawings ☐ As Built Drawings	■ Materials Submittals ☐ Calculation ☐ Samples

Attachments (Hard Copies & PCM)

Documents	■ Yes	☐ No	Soft Copy / CD	■ Yes	☐ No
Drawings	☐ Yes	☐ No	Samples	☐ Yes	☐ No
Technical Data	■ Yes	☐ No	Others		

Review & Approval

Reviewers (BIC)		Initial Approval A	B	C	D	Remarks
☐ Architectural						
☐ Structural						
■ Mechanical	Fire Fighting - Zone Control Valve - American Fire Control - Mueller - Potter - Ashcroft - AGF - Giacomini					
☐ Electrical						
☐ Contract Administrator						
☐ PCM & Planning						
☐ Quality Assurance						
☐ Safety						
☐ Surveying						
☐ Others						

Final Approval Code:

A - Approved ☑ **C** - Revise and Resubmit ☐

B - Approved As Noted, Resubmittal Not Required ☐ **D** - Not Approved ☐

Consultant's Comments

Accepted.

UDC Representative		Consultant or Client Representative	
Name :	Mahmoud Ismail Mohamed	Name :	Fawakh Masood
Signature :		Signature :	
Date :		Date :	20/06/23
Stamp :		Stamp :	BABIL Design Department

Material List

Sr.#	Description	Brand Name	Model
1.1	OS&Y Gate Valve	American Fire Control	A-3000
1.2	OS&Y Gate Valve	Mueller	R-MFP2
2	Swing Check Valve	American Fire Control	A-3150
3	Water Flow Switch	Potter	VSR
4	Suppervisory / Tamper Switch	Potter	OSYSU
5.1	Pressure Guge	Ashcroft	1005P
5.2	Pressure Guge	AGF	7500
6.1	Test & Drain Valve	American Fire Control	TDF-100
6.2	Test & Drain Valve	GIACOMINI	A61

Material Submittal

Submittal Ref:	RAC-AEC-MK27-TSL-MEC-0035	Rev No:	00	Date:	04/07/2024
Program Title:	Developmental Housing Program of Saudi Arabia				
Project Title:	AL-SADAN, Jeddah, P1&P3, (Contract # 23001513)				
The Employer:	National Housing Company (NHC)				
Third party:	Dar AL Riyadh				
Consultant:	Al Mnabr Consulting Engineering				
Contractor:	REZAIK ABDULAH SAEID ALGEDRAWY ALSEBAITY AND PARTNERS COMPANY LTD.				

Guidance notes:

The submission should only include documents which are deemed compliant with the SOPR, Applicable Codes and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.

Review Discipline:

Architectural ☐	Structural/Civil ☐	MECH/Plumb ☒	Elec. ☐	Others (specify) ☐

Material Details:				DAR AL RIYADH Review
Notes: DAR AL RIYADH review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report.				
Proposed by: REZAIK AL GEDRAWY CO.		The Consultant (Designer & The Engineer)		
Sign/Stamp		Sign/Stamp		

Material Information		Checklist	
Location/element Ref:	Mechanical Works	Drawing/Specification	☐
Specified Material:	FIREFIGHTING VALVES AND SPRINKLER SYSTEM	Product Datasheet	☒
Proposed Material:	FIREFIGHTING VALVES AND SPRINKLER SYSTEM	Compliance Certificates/Documents	☒
Manufacturer & Product code ref:	United Diamond Contractors Company.	Compliance Statement	☒
Remarks/Notes:	Pre-Qualification Approved - RAC-AEC-MK27-SAT-MEC-0027	Sample (available)	☒

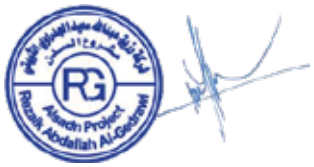
THE ENGINEER*	Review Date:		Rejected	Approved	Signed:	
	Print Name:					

PMC	Recommendations to NHC Date:		Objection	No Objection	Signed:	
	Print Name:			✓		

NHC	Review Date:		Objection	No Objection	Signed:	
	Print Name:					

Supplier Approval Request					
Submittal Ref:	RAC-AEC-MK27-SAT-MEC-0027	Rev No:	00	Date:	20/02/2024
Program Title:	Developmental Housing Program of Saudi Arabia				
Project Title:	AL-SADAN, Jeddah, P1&P3, (Contract # 23001513)				
The Employer:	National Housing Company (NHC)				
Third party:	Dar AL Riyadh				
Consultant:	Al Mnabr Consulting Engineering				
Contractor:	REZAIK ABDULAH SAEID ALGEDRAWY ALSEBAITY AND PARTNERS COMPANY LTD.				

Guidance notes:					
The submission should only include documents which are deemed compliant with the SOPR, Applicable Codes and have been reviewed and coordinated between the Contractor and Designer (and Engineer if applicable) and should include any authorised variations/changes as instructed.					
Review Discipline:					
Architectural ☐	Structural/Civil ☐	MECH/Plumb ■	Elec. ☐	Others (specify) ☐	

Document Details: √				DAR AL RIYADH Review
Notes: DAR AL RIYADH review will recommend either Objection or No Objection to each item. Non-Objected shall be issued to the NHC with the recommendation to approve. Objected shall be returned to the Contractor with an Objection report.				
The Title: Pre-Qualification of United Diamond Contractors Co.				
Proposed by: REZAIK AL GEDRAWY CO.		The Consultant (Designer & The Engineer)		
Sign/Stamp		Sign/Stamp		

S. No:	Document Title/Description:	Reference No:	Rev No:	Remarks
1	Pre-Qualification of United Diamond Contractors Co.			Attached file

Reviewed for compliance by:
Notes: The Engineer* shall review and approve when the Supervision Consultant differs from the Designer only. DAR AL RIYADH shall only issue recommendationsbased upon 'No Objection' to the Client. Any 'Objections' shall be returned to the Contractor with a review report for action and may be copied to the NHC when necessary.

THE ENGINEER*	Review Date:		Rejected	Approved	Signed:	
	Print Name:					

PMC	Recommendations to NHC Date:		Objection	No Objection	Signed:	
	Print Name:			✓		

NHC	Review Date:		Objection	No Objection	Signed:	
	Print Name:					

TECHNICAL SUBMITTAL

Project Name	:	El Sadan Society Jeddah
Client	:	National Housing Company
Consultant	:	Dar Al Riyadh
FF Consultant	:	Al Mnabr Consultng
Main Contractor	:	Rezaik Al Gedrawy Company
FF Supplier	:	United Diamond Contractors
Scope Of Work	:	1- Fire Fighting Valves – AFC 2- Fire Fighting Valves 3- Sprinkler System
Ref. #	:	UDC-P698-ME-FF-MAT-002

Date : 1 July 2024

INDEX

DATA SHEET

AG-3000 OS&Y Resilient Wedge Gate Valve - Grooved Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

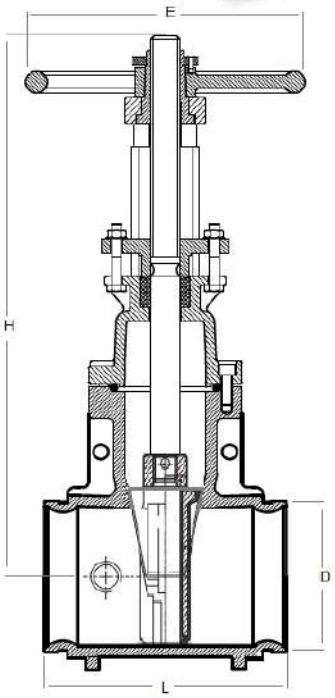
The American AG-3000 Grooved OS&Y (Outside Screw and Yoke) Gate Valve is a reliable and robust valve designed for various industrial applications. This valve complies with the AWWA C515 standard ensuring high-quality performance and adherence to industry standards. It features a heavy-duty handwheel and attachment nut and high-quality graphite.

SPECIFICATIONS

- Complies with AWWA C515 standard
- End Connections: Groove to AWWA C606
- Size Range: Available in sizes ranging from 2.5" to 12"
- Max working pressure: 300PSI (21 bar) /Max testing pressure: 600PSI (42bar)
- Working Temperature: 0°C to 80°C (32°F to 176°F)
- Fusion-bonded epoxy coating inside and outside complying with AWWA C550 standards
- Approvals: UL listed , FM approved

PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM A536 65-45-12
2	Resilient Wedge	Ductile Iron ASTM A536/EPDM ASTM D2000
3	Wedge Nut	Stainless Steel 304
4	Dowel Pin	Stainless Steel 304
5	Stem Back Seat O-Ring	EPDM ASTM D2000
6	Bonnet Gasket	EPDM ASTM D2000
7	Bonnet	Ductile Iron ASTM A536
8	Packing	PTFE Graphite
9	Threaded Rod	Stainless Steel 304
10	Gland	Ductile Iron ASTM A536 65-45-12
11	Gland Nut	Stainless Steel 304
12	Yoke	Ductile Iron ASTM A536 65-45-12
13	Handwheel	Ductile Iron ASTM A536 65-45-12
14	Handwheel Nut	C95400 Aluminum Bronze
15	Stem	Stainless Steel 304
16	Bolt	Stainless Steel 304
17	Yoke Screw	C95400 Aluminum Bronze
18	NPT Plug	C95400 Aluminum Bronze



DIMENSIONS

SIZE		L		H OPEN		H CLOSED		E		D	
IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
2.5	65	7.48	190	16.96	431	14.56	370	7.87	200	2.99	76
3	80	7.99	203	18.46	469	16.53	420	7.87	200	3.5	88.9
4	100	9.01	229	21.22	539	17.59	447	10.24	260	4.5	114.3
6	150	10.51	267	28.18	716	23.89	607	12.39	315	6.62	168.3
8	200	11.49	292	36.29	922	29.68	754	14.75	375	8.62	219.1
10	250	12.99	330	44.64	1134	35.03	890	16.37	416	10.74	273
12	300	14.01	356	51.96	1320	40.59	1031	17.51	445	12.75	323.9

WEIGHTS

VALVE SIZE	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB (KG)	36.4(16.5)	48.5(22)	57.3(26)	105.8(48)	158.7(72)	240.3(109)	337.3(153)

AMERICAN FIRE CONTROL CO., LLC 255 S Orange Ave, Orlando, FL 32801, USA
+1 607 252 6814 info@american-afc.com www.american-afc.com

DATA SHEET

AG-3500 Swing Check Valve – Grooved Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

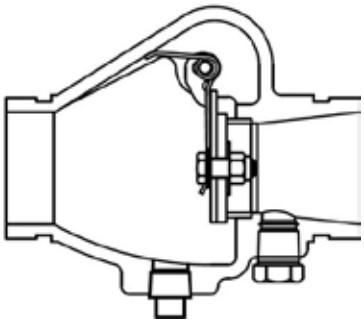
The American AG-3500 Grooved swing check valves are designed to exclusively permit the flow of water in one direction. Inside the valve a swing-type clapper equipped with a spring mechanism ensures that water can only move in the intended direction preventing any backflow. This critical feature is essential for maintaining the effectiveness and reliability of fire protection systems.

SPECIFICATIONS

- Grooved dimensions comply with metric or AWWA C606 standard
- Max working pressure:350PSI (24 bar) /Max testing pressure 700PSI (48 bar)
- Approvals: UL listed, FM approved
- Min/Max working temperature: 0°C to 80°C (32°F to 176°F)
- Application: indoor and outdoor use
- Installation: horizontal or vertical

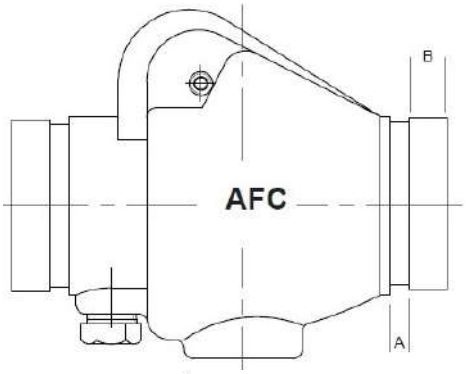
COATINGS

- The interior and exterior of the valve coated with fusion-bonded epoxy in accordance with ANSI/AWWA C550 or painting according to request



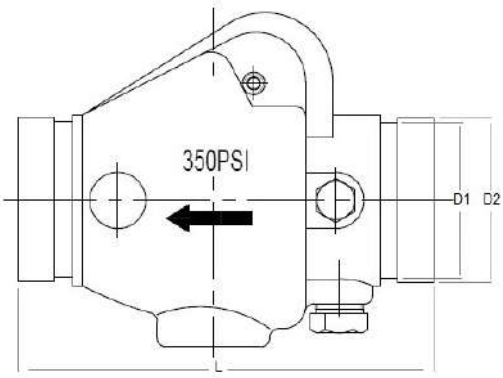
PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM, A536 65-45-12
2	Clapper	Stainless Steel ASTM A276, 304
3	Coil Spring	Stainless Steel ASTM A276, 304
4	Nut	Stainless Steel ASTM A276, 304
5	Bolt	Stainless Steel ASTM A276, 304
6	Spring Washer	Stainless Steel ASTM A276, 304
7	Seal Ring	EPDM ASTM D2000
8	Seat	Bronze , C95400
9	Drain Plug	Stainless Steel ASTM A276, 304
10	Pin Plug	Stainless Steel ASTM A276, 304
11	Gasket	EPDM ASTM D2000
12	Hinge Pin	Stainless Steel ASTM A276, 304



DIMENSIONS

IN	DN	A	B	D1	D2	L
2”	DN50	0.31”	0.63”	2.25”	2.37”	6.65”
2.5”	DN65	0.31”	0.63”	2.84”	2.99”	7.12”
3”	DN80	0.31”	0.63”	3.34”	3.50”	7.79”
4”	DN100	0.37”	0.63”	4.33”	4.50”	8.42”
6”	DN150	0.37”	0.63”	6.33”	6.62”	10.63”
8”	DN200	0.44”	0.75”	8.44”	8.63”	12.80”
10”	DN250	0.50”	0.75”	10.75”	10.55”	17.99”
12”	DN300	0.50”	0.75”	12.75”	12.53”	21.06”



WEIGHTS

VALVE SIZE	2”	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB	6.17	10.14	13.66	19.62	44.75	78.70	124.12	173.72
(KG)	(2.80)	(4.60)	(6.20)	(8.90)	(20.30)	(35.70)	(56.30)	(78.80)

AMERICAN FIRE CONTROL CO., LLC 255 S Orange Ave, Orlando, FL 32801, USA
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DATA SHEET

A-3000 OS&Y Resilient Wedge Gate Valve - Flanged Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

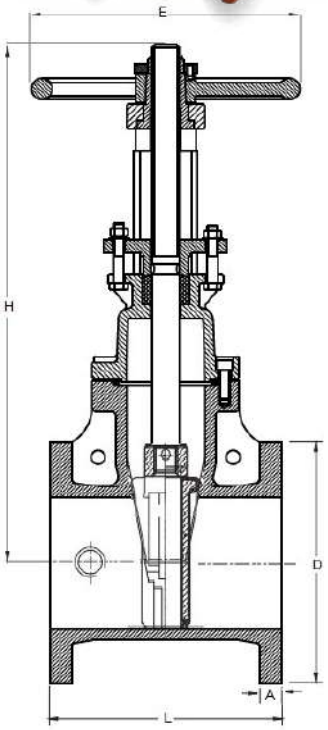
The American A-3000 Flange OS&Y (Outside Screw and Yoke) Gate Valve is a reliable and robust valve designed for various industrial applications. This valve complies with the AWWA C515 standard ensuring high-quality performance and adherence to industry standards. It features a heavy-duty handwheel and attachment nut and high-quality graphite packing.

SPECIFICATIONS

- Complies with AWWA C515 standard
- Flanged end to ANSI B16.1 Class 125/ANSI B16.42 Class 150/BS EN1092-2 PN16
- Size Range: Available in sizes ranging from 2.5" to 12"
- Max working pressure: 300PSI (21 bar) /Max testing pressure: 600PSI (42bar)
- Working Temperature: 0°C to 80°C (32°F to 176°F)
- Fusion-bonded epoxy coating inside and outside complying with AWWA C550 standards
- Approvals: UL listed , FM approved

PART LIST

ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM A536 65-45-12
2	Resilient Wedge	Ductile Iron ASTM A536/EPDM ASTM D2000
3	Wedge Nut	Stainless Steel 304
4	Dowel Pin	Stainless Steel 304
5	Stem Back Seat O-Ring	EPDM ASTM D2000
6	Bonnet Gasket	EPDM ASTM D2000
7	Bonnet	Ductile Iron ASTM A536
8	Packing	PTFE Graphite
9	Threaded Rod	Stainless Steel 304
10	Gland	Ductile Iron ASTM A536 65-45-12
11	Gland Nut	Stainless Steel 304
12	Yoke	Ductile Iron ASTM A536 65-45-12
13	Handwheel	Ductile Iron ASTM A536 65-45-12
14	Handwheel Nut	C95400 Aluminum Bronze
15	Stem	Stainless Steel 304
16	Bolt	Stainless Steel 304
17	Yoke Screw	C95400 Aluminum Bronze
18	NPT Plug	C95400 Aluminum Bronze



DIMENSIONS

SIZE		L		H OPEN		H CLOSED		A		D		E	
IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.
2.5	65	7.48	190	16.96	431	14.56	370	0.70	18	7	178	7.87	200
3	80	7.99	203	18.46	469	16.53	420	0.74	19	7.51	191	7.87	200
4	100	9.01	229	21.22	539	17.59	447	0.94	24	9.01	229	10.24	260
6	150	10.51	267	28.18	716	23.89	607	0.98	25	10.98	279	12.39	315
8	200	11.49	292	36.29	922	29.68	754	1.14	29	13.50	343	14.75	375
10	250	12.99	330	44.64	1134	35.03	890	1.18	30	15.98	406	16.37	416
12	300	14.01	356	51.96	1320	40.59	1031	1.25	32	19.01	483	17.51	445

WEIGHTS

VALVE SIZE	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB (KG)	46.3 (21)	64 (29)	79.4 (36)	136.7 (62)	213.8 (97)	315.3 (143)	425.5 (193)

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DATA SHEET

A-3150 Swing Check Valve - Flanged Ends

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

The American A-3150 Swing check valves are designed only for fire protection services, also referred to as non-return, retention, or one-way valve, a check valve is designed to only allow the flow of water in one direction, a swing type clapper is found inside the valve which is spring loaded preventing water from flowing in a return direction.

SPECIFICATIONS

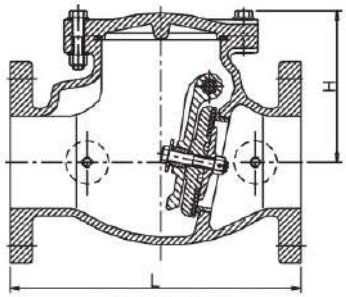
- Meet or exceed the requirements of AWWA C508 Standard,
- Full waterway designed
- Max working pressure:300PSI (21 bar) /Max testing pressure 600PSI (42bar)
- Approvals:UL listed, FM approved
- Flanged ends to ANSI B 16.1 class 125 or ANSI B16.42 class 150
- Min/Max working temperature: 0°C to 80°C (32°F to 176°F)

COATINGS

- The interior and exterior of the valve coated with fusion-bonded epoxy in accordance with ANSI/AWWA C550

PART LIST

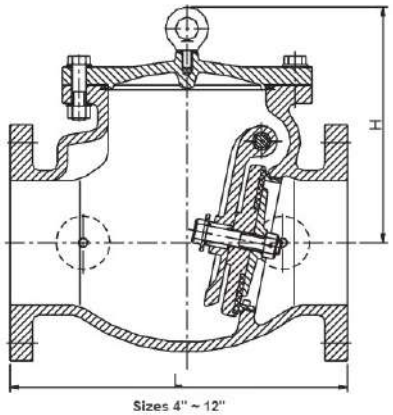
ID	PART	MATERIAL
1	Valve Body	Ductile Iron ASTM, A536 65-45-12
2	Cover	Ductile Iron ASTM, A536 65-45-12
3	Gasket	EPDM ASTM D2000
4	Clapper Arm	Ductile Iron ASTM, A536 65-45-12
5	Disc Ring	EPDM ASTM D2000
6	Disc	Ductile Iron ASTM, A536 65-45-12
7	Retainer Washer	Bronze ASTM A148
8	Hinge Pin	Stainless Steel ASTM A276, 304
9	Pin Plug	Stainless Steel ASTM A276, 304
10	Seat Ring	Bronze ASTM A148



Sizes 2" ~ 3"

DIMENSIONS

IN	DN	L	H
2”	DN50	8”	5.6”
2.5”	DN65	8.5”	5.8”
3”	DN80	9.5”	6.4”
4”	DN100	11.5”	6.8”
6”	DN150	14”	9.2”
8”	DN200	19.5”	11.8”
10”	DN250	24.5”	13.7”
12”	DN300	27.5”	16.5”



Sizes 4" ~ 12"

WEIGHTS

VALVE SIZE	2”	2.5”	3”	4”	6”	8”	10”	12”
WEIGHT LB (KG)	33(15)	44(20)	55(25)	75(34)	143(65)	251(114)	408(185)	617(280)

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KEPCO POWER COMPANY / DOOSAN	**Design Change Notice**	DCN No. **JCP-DCN-0106**
	JAFURAH COGENERATION PLANT	GRADE: A

REQUESTER :

☐ CIVIL ☐ ARCHI. ■ MECH. ☐ ELEC. ☐ I&C ☐ PIPING ☐ Others ( )

REFERENCE DOCUMENT / DCN NO.(*)	REV	REMARKS / TITLE
JCP-YT01-00SGA-130003	1	HYDRANT, WATER MONITOR & VALVES MATERIAL SUBMITTAL
JCP-DCN-0106		Previous latest DCN No.

REASONS FOR CHANGE:

HYDRANT Valve from "American Fire Control" is added to this submittal as the approved brand from "Viking" are facing problems in supplying within the targeted schedule. The selected new brand "American Fire Control" is UL-listed / FM-approved as well and is suitable for this application.

EXISTING CONDITION:

Page 6 of 41

DESCRIPTION OF CHANGE

Page 6 of 41

OWNER'S COMMENTS

Status-1 : Approved

Comment specified by Owner after review

1.Noted

PREPARED BY		25.09.24
CHECKED BY		25.09.24
APPROVED BY		25.09.24
OWNER'S REVIEW	**NAME :**	**DATE :**

DOCUMENT INCORPORATION (DOCUMENT(S) TO BE REVISED TO INCORPORATE DCN)

DOCUMENT NO.	REV NO.	REMARKS/TITLE
JCP-YT01-00SGA-130003	1INT1	HYDRANT, WATER MONITOR & VALVES MATERIAL SUBMITTAL

GRADE : A: Urgent major change B: Major change, not urgent C: Minor Change

Authorization Letter.

AMERICAN FIRE CONTROL
QUALITY IS A PRIORITY

Date: October 28,2024
Ref.: 01027/24

Subject: Distribution in Saudi Arabia

To whom it may concern

This is to confirm that Azeidk Group is our authorized distributor in Saudi Arabia for American Fire Control's range of fire protection products.

Azeidk Group will be responsible for the distribution and support of our products throughout the Kingdom.

We trust that this information provides the reassurance you require. Should you need any further details or wish to discuss this matter further, please do not hesitate to contact us.

Yours sincerely,

Mark Smith
Sales & Marketing Director