

# Check Valve

# Model: MH-XQH-300

## Flange/Groove/Flange\*Groove/Groove\*Flange

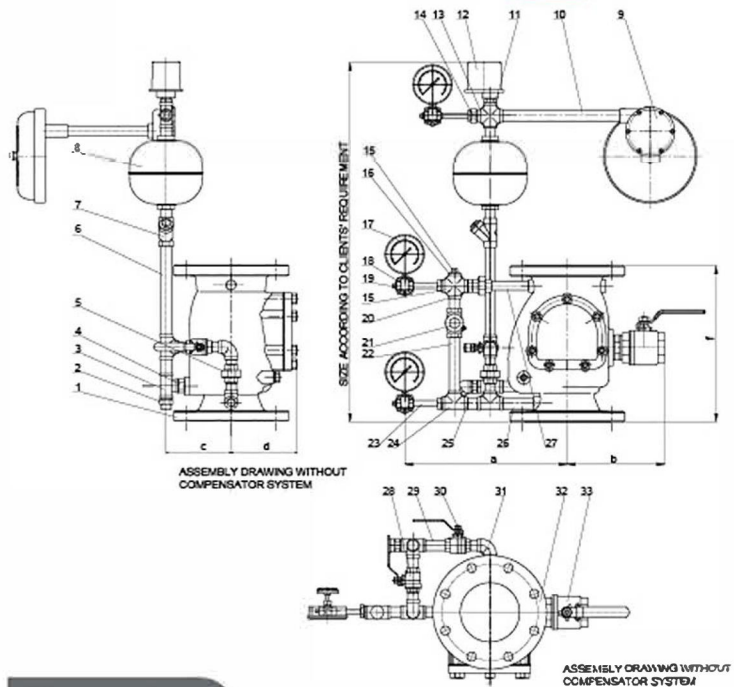
### Technical Features

- Maximum Adjust Pressure: 200PSI-300PSI/PN10/PN16
- Flange Standard: ASME/ANSI B16.1 Class 125 or ASME/ANSI B16.42 CLASS 150 or BS EN1092-2 PN16 or GB/T9113.1
- Groove Standard: AWWA C606/ISO 6182-12
- Working Temperature: 4°C-70°C
- Installation Height of the Gong According to Clients' requirements
- Gong can be Installed indoor or outdoor through wall as to clients' requirements
- External Dimensions for reference only
- Coating details: Epoxy coated interior and exterior by Electrostatic Spray or Coating upon request
- Alarm check valves use in wet pipe of sprinkler system, Fire protection system



### Valve Material List

Size	Name	Material	QTY.
1	Alarm Valve		1
2	Orifice,retard	C954/SS304	1
3	Tee	Steel/SS304	2
4	Nipple	Steel/SS304	6
5	Union	Steel/SS304	1
6	Nipple	Steel/SS304	1
7	Y Strainer	C954/SS304	1
8	Retard Chamber	Steel	1
9	Gong Assembly	Component	1
10	Nipple	Steel/SS304	1
11	Reducer Bushing	Steel/SS304	1
12	Pressure Switch	Component	1
13	Cross	Steel/SS304	1
14	Reducer Bushing	Steel/SS304	1
15	Plug	Steel/C954/SS304	1
16	Cross	Steel/SS304	2
17	Pressure Gauge	Component	3
18	3-way Valve Gauge	C954/SS304	3
19	Plug	Steel/C954/SS304	3
20	Orifice,retard	C954/SS304	1
21	Check Valve	C954/SS304	1
22	Nipple	Steel/SS304	1
23	Nipple	Steel/SS304	3
24	Tee	Steel/SS304	2
25	Nipple	Steel/SS304	4
26	Nipple	Steel/SS304	1
27	Nipple	Steel/SS304	1
28	Ball Valve	C954/SS304	1
29	Nipple	Steel/SS304	1
30	Ball Valve	C954/SS304	1
31	Elbow	Steel/SS304	2
32	Nipple	Steel/SS304	1
33	Ball Valve	C954/SS304	1



### Dimensions

Size	a	b	c	d
2"	340	205	145	110
2.5"	340	205	145	110
3"	340	205	145	110
4"	342	250	160	136
5"	349	274	180	162
6"	349	274	180	162
8"	415	290	205	195
10"	475	340	240	235
12"	495	368	270	270

## J282 PRESSURE RESTRICTING DEVICES



The valves are capable of adjustment to provide a range of the outlet pressures under flowing condition only.

### Determining the proper outlet pressure

1. The valves are reducing the downstream water pressure under flowing (residual) condition only.

The valve should not be set to provide less than the minimum pressure require by NFPA 14 while flowing 250 GPM for 2 1/2 inch size and 100GPM for 1 1/2 inch size.

NFPA 14-2007 edition requires that standpipe system shall be hydraulically designed to provide the required water flow rate at a minimum residual pressure of 100PSI at the outlet of hydraulically most remote 2 1/2 inch house connection and 65 PSI at the outlet of hydraulically most remote 1 1/2 inch hose station.

Outlet pressures which do not correspond to NFPA 14 requirements must be authorized by local fire department.

There will be a pressure drop due to friction between the outlet and the nozzle.

The amount of the loss should be calculated by qualified personnel to assure that the nozzle receives water pressure sufficient to its design needs.

Note that some fire hose nozzles may not operate properly when valve outlet pressure is set at the 100PSI minimum authorized in the 2007 edition of NFPA14.

The installer should consult with the fire authorities concerning pressure needed by their equipment.

The outlet pressures indicated in the curves are at the outlet of the valve.

2. To determine the pressures at the hose nozzle, the hydraulic calculate information provide in NFPA Fire Protection Handbook should be followed.
3. The valves are designed and listed to reduce inlet pressure under flowing conditions:  
Authorities having jurisdiction should be consulted to confirm that the outlet pressures and the flowing rates are acceptable

## Installation

1. Pipe unions or rubber-gasketed fittings are to be installed immediately up-stream and downstream of the valve to permit easy replacement.
2. Connect the valve to the piping
3. Select setting number from proper graph
4. Close the valve hand-tight
5. Loosen set screw in collar
6. Rotate indicator-cap until top collar reaches selected setting number. See Fig.1
7. Tighten set screw in collar. valve is now set
8. To override pressure restriction, pull spring clip. See Fig.2

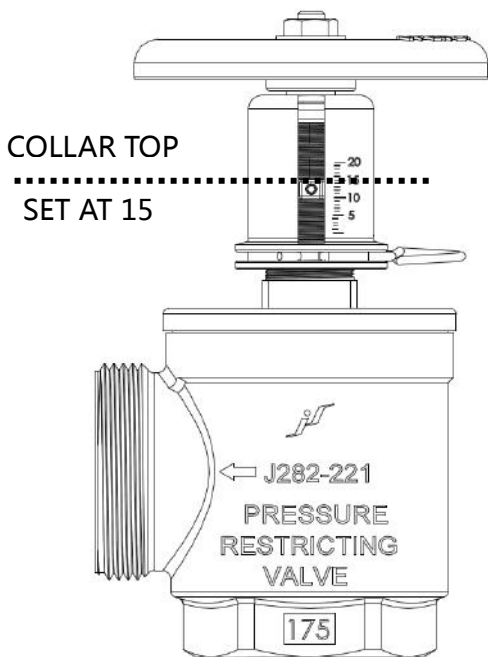


Fig.1

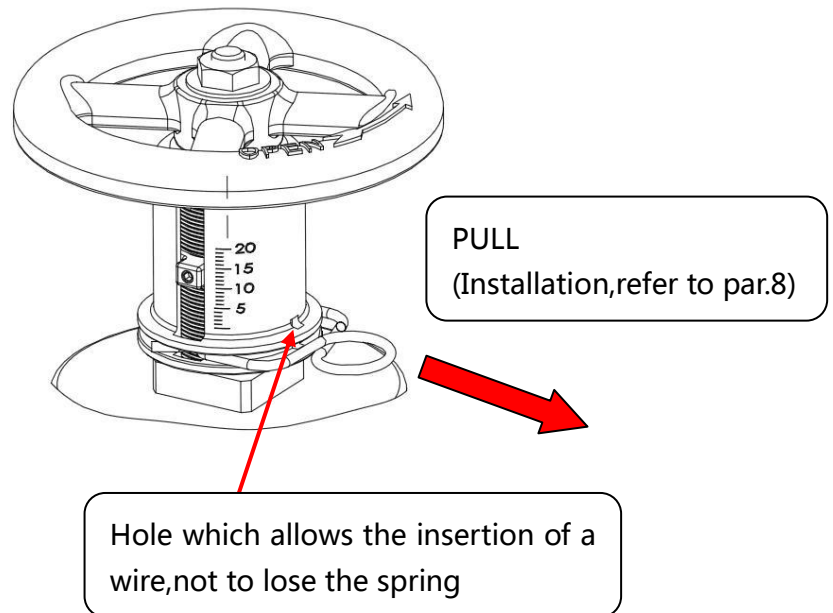


Fig.2

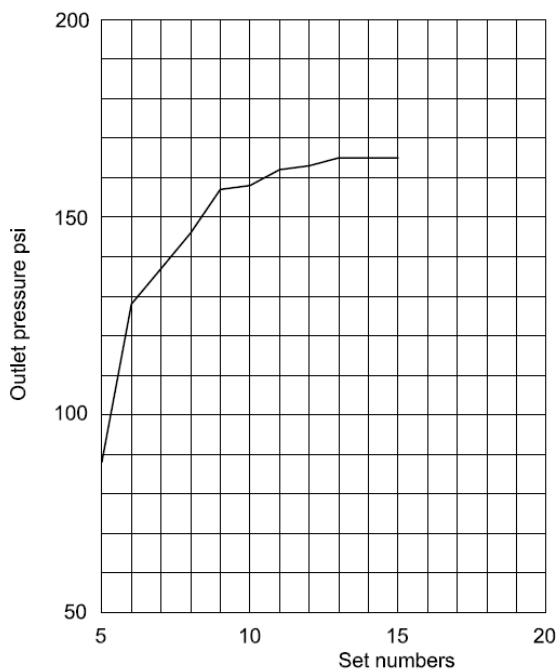
## Maintenance and testing

Maintenance and testing should be in accordance with NFPA 25.

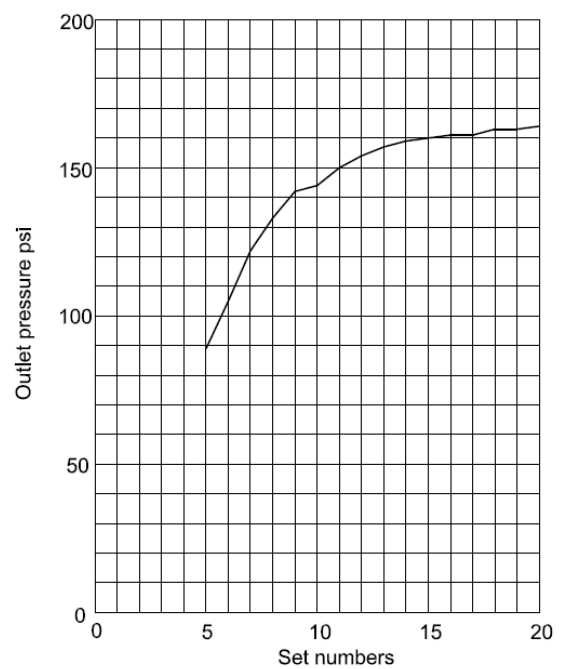
1. In the event the valve leaks, the test valve should be opened again to flush the valve.
2. The valves should be inspected for damage or corrosion annually.
3. The valve is not designed to accept replacement parts.
4. The system should be drained every two to three years and all valves opened fully and lubricant applied to the valve stem. The valve seat should be inspected for debris
5. The valve should be operated by hand, never using a torque bar or other device to exert pressure.
6. If the valve fails to perform as intended, the valve should be replaced.

## Technical features

The valves are designed and listed to operate at max. pressure 175 PSIG

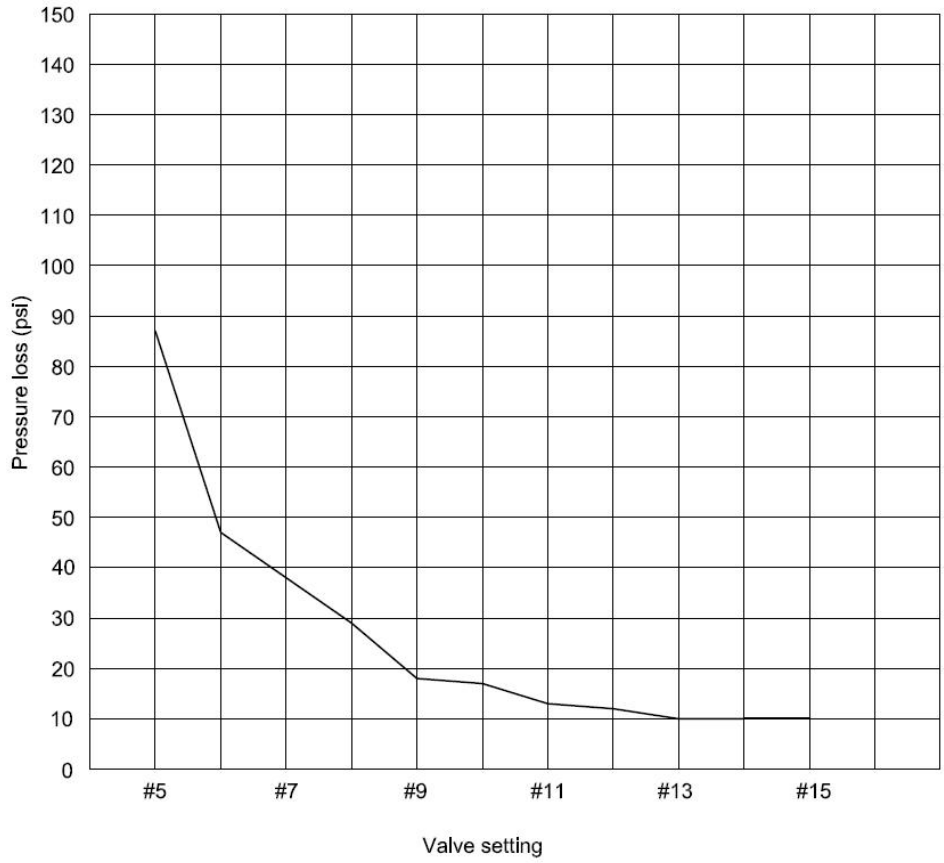


J282-1½"  
Set numbers are based on figures obtained using 50 Ft of 1½" hose and a 1/2" non-adjustable nozzle.  
Inlet pressure 175psi and flow 100gpm

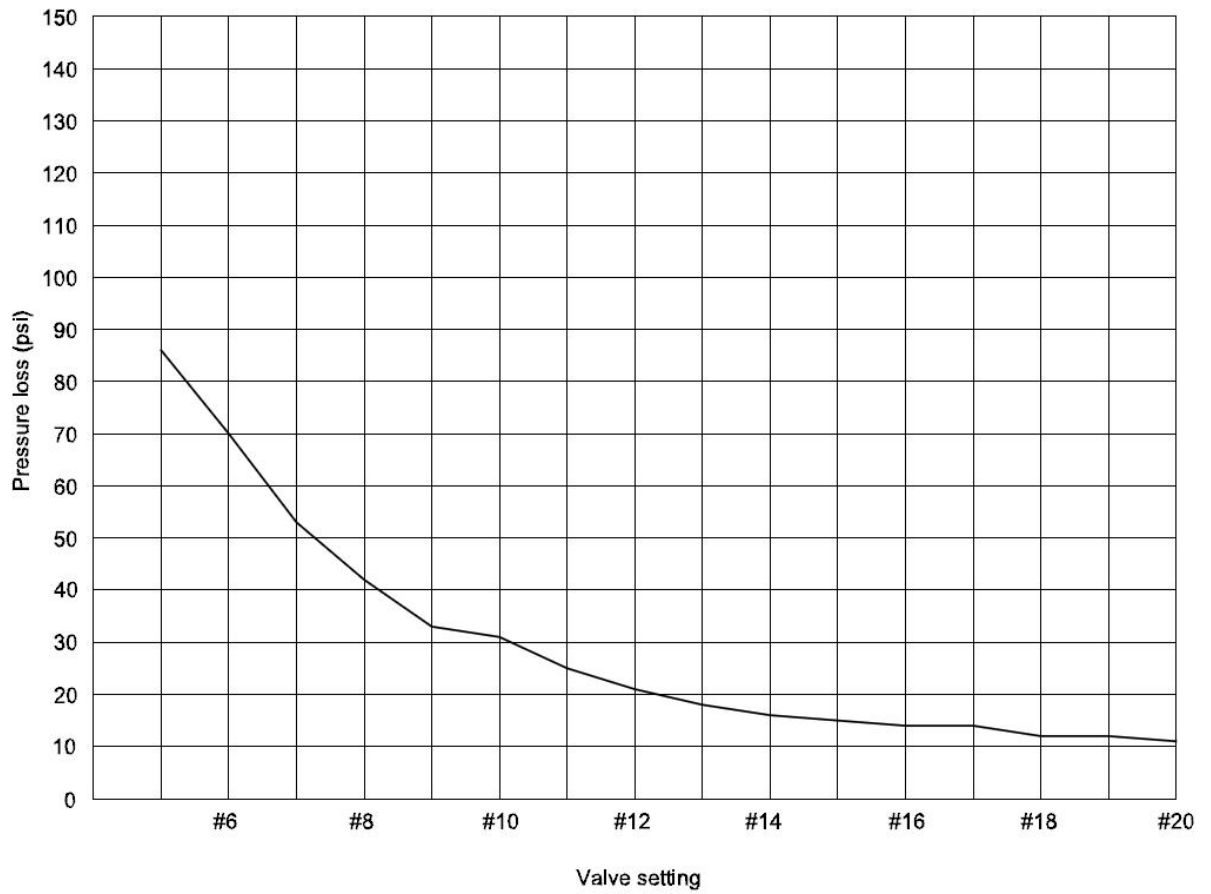


J282-2½"  
Set numbers are based on figures obtained using 50 Ft of 2½" hose and a 1/8" non-adjustable nozzle.  
Inlet pressure 175psi and flow 250 GPM

Pressure loss 1-1/2" J282 while flowing 100 gpm



Pressure loss 2-1/2" J282 while flowing 250 gpm





# PRESSURE RESTRICTING DEVICE

Part No.: J282

## 1. Features

- Max Working Pressure: 175 PSI
- Size: 1-1/2", 2-1/2"
- Connection Type: Threaded
- Input – Output Pressure:  
Input Pressure: 175psi – Output Adjustments Pressure: 30-165psi



The valve should not be set to provide less than the minimum pressure requires by NFPA 14 while flowing 250 GPM for 2 1/2 inch size and 100GPM for 1 1/2 inch size.

NFPA 14-2007 edition requires that standpipe system shall be hydraulically designed to provide the required water flow rate at a minimum residual pressure of 100PSI at the outlet of hydraulically most remote 2 1/2 inch house connection and 65 PSI at the outlet of hydraulically most remote 1 1/2 inch hose station.

## 2. Installation

1. Pipe unions or rubber-gasketed fittings are to be installed immediately up-stream and downstream of the valve to permit easy replacement.
2. Connect the valve to the piping
3. Select setting number from proper graph
4. Close the valve hand-tight
5. Loosen set screw in collar
6. Rotate indicator-cap until top collar reaches selected setting number. (Fig.1)
7. Tighten set screw in collar. valve is now set
8. To override pressure restriction, pull spring clip. (Fig.2)

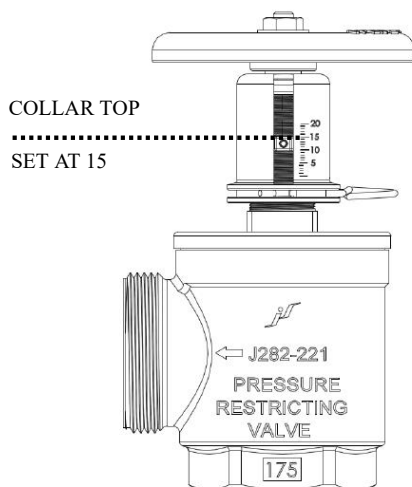
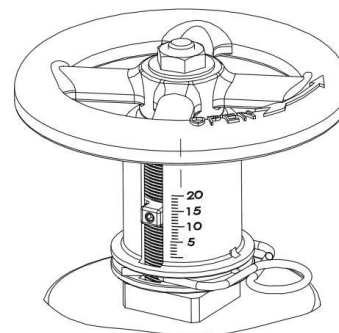


Fig.1



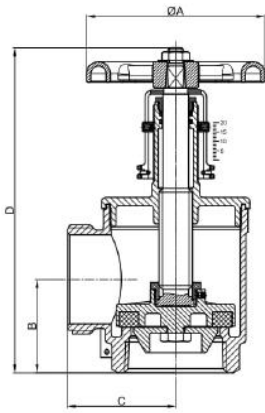
Hole which allows the insertion of a wire, not to lose the spring

Fig.2

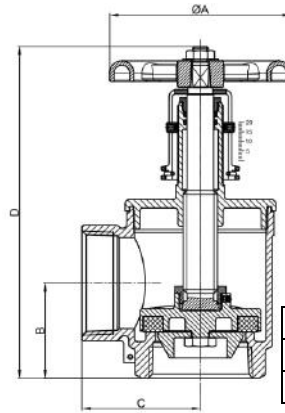




3. Dimention



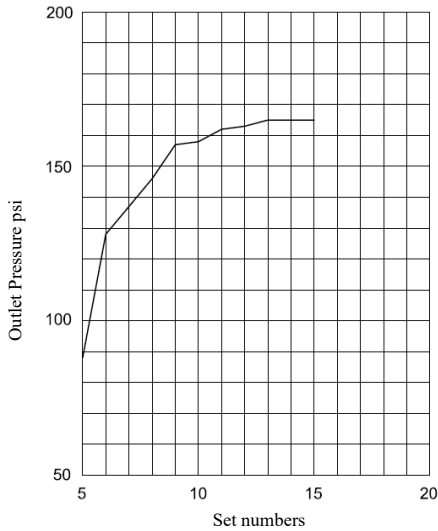
	A	B	C	D
1 1/2" × 1 1/2"	100	48	58	171
2 1/2" × 2 1/2"	127	67	77	231



	A	B	C	D
1 1/2" × 1 1/2"	100	48	62	171
2 1/2" × 2 1/2"	127	67	83	231

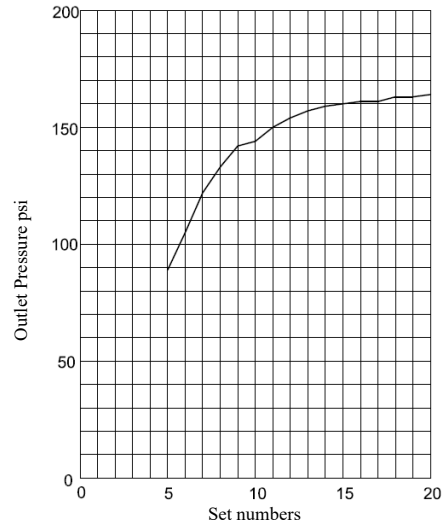
4. Technical features

The valves are designed and listed to operate at max.pressure 175 PSIG.



J282-1 1/2"

Set numbers are based on figures obtained using 50 Ft of 1 1/2" hose and a 1/2" non-adjustable nozzle. Inlet pressure 175psi and flow 100gpm.



J282-2 1/2"

Set numbers are based on figures obtained using 50 Ft of 2 1/2" hose and a 1 1/8" non-adjustable nozzle. Inlet pressure 175psi and flow 250gpm.

