

HYDRANTS

HYDRASAN® I Features

The 71000 and 71050 Series (non-freeze) and 71020 and 71070 Series (mild climate) Wall Hydrants supply water for any use in all areas of public and private buildings. These hydrants are designed to be installed in walls of various types of construction. They incorporate features such as integral vacuum breaker-backflow preventer, pressure assisted closure and an automatic pressure relief valve. The 71000 and 71020 Series box type hydrants are for installation where any protrusion may be a hazard, or where aesthetics or potential vandalism dictate secure flush-with-wall concealment of hydrant. The 71050 and 71070 Series are for installation at the wall surface and are designed so that they will fit into the area occupied by a standard brick.

LATCHING COVER

This discourages vandalism and provides a flush surface in areas where any protrusion from the wall would be considered a hazard.

INSTALLATION

HYDRASAN® I Hydrant must be installed with head horizontal, outlet to right, (as shown). Complete installation, operation and maintenance instructions accompany each JOSAM HYDRASAN® Hydrant.

NIKALOY BOX AND SATIN SCORIATED COVER

Satin face, flush-mounted cover.

SELF-STORING TOOL

Key-operated, self storing tool assures that, should service ever become necessary, the working parts of the hydrant can be removed, repaired, and reassembled, quickly and easily, from the front, thus returning the hydrant to operation in a short period of time. No special tools are required.

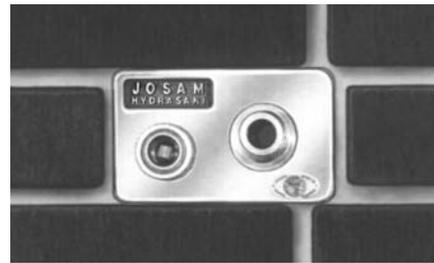
CONCEALED TYPES 71000 SERIES NON-FREEZE 71020 SERIES MILD CLIMATE



VACUUM BREAKER-BACKFLOW PREVENTER®

Integral with the hose connection nozzle, responds instantly during normal flow to seal off air ports and permit passage of outflow water. In event of pressure imbalance due to sudden supply pressure drop below outlet or back-pressure, response is immediate to seal against backflow and open air ports to relieve vacuum and backwater to atmosphere. A must for compliance with most plumbing codes for protection of the potable water supply.

EXPOSED TYPES 71050 SERIES NON-FREEZE 71070 SERIES MILD CLIMATE



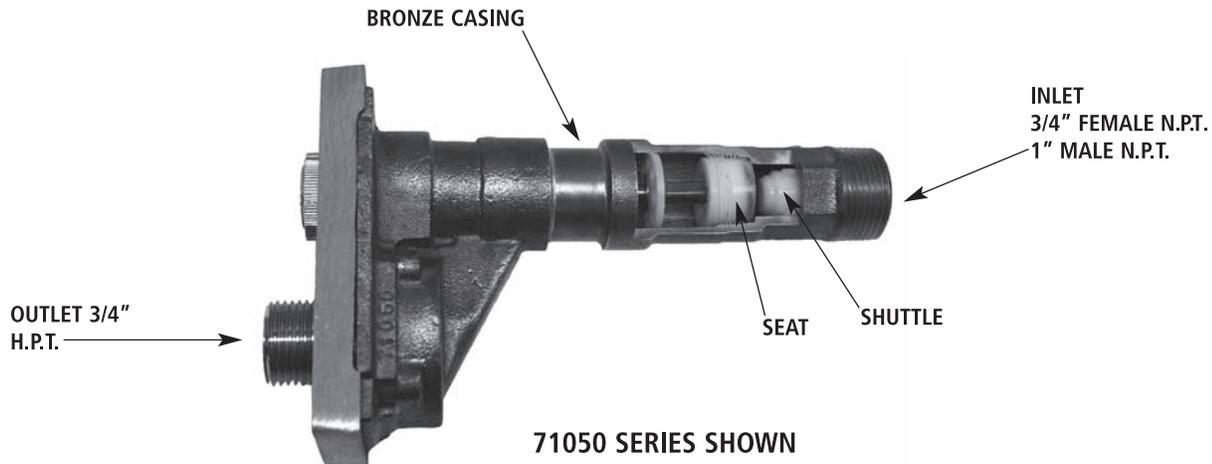
PRESSURE ASSISTED CLOSURE

Hydrant is closed utilizing the water pressure in the system. The greater the pressure, the more positive the seal. The force of water pressure moves the shuttle into its closed position. This design eliminates the surface to surface grinding created by conventional types of hydrant closures, thus prolonging the life of the working parts. Once sealed, the valve will hold even under upstream pressure drops to zero p.s.i.

PRESSURE RELIEF

Automatic pressure relief valve relieves water pressure in the attached hose and permits air circulation and drainage of hydrant and hose. Drainage will take place providing discharge end of hose is open. This helps prevent bursting of hoses in the event of freezing. All servicing is accomplished through face of hydrant. Removal and replacement of seat and shuttle are accomplished by the hydrant's self-storing tool, which is the actuator rod itself. No special tools are required when hydrant is serviced.

Covered by U.S. and Foreign Patents.



HYDRANTS

How To Order Wall Hydrants

Unless optional materials are specified, standard material shown in specification will be provided. Specify wall thickness.

EXAMPLE: Series No. 71000 Type No. 71000-6

Series No. _____ 71000

Wall Thickness in Inches _____ -6

Option, Union Elbow Assembly _____ -74

How To Order Yard Hydrants

Unless optional materials are specified, standard material shown in specification will be provided. Specify depth of bury.

EXAMPLE: Series No. 71600 Type No. 71600-91-4

Series No. _____ 71600

-91 1" Hose Pipe Threaded Outlet _____ -91

Depth Bury in Feet _____ -4

Option, 1/8" Tapped Drain Hole in Box _____ -97

HYDRANTS • Pictorial Selection Guide

BMW, HYDRANTS & SHOCKS

WALL HYDRANTS • Non-Freeze		WALL HYDRANTS • Mild Climate	
71000 with Vacuum Breaker & Box  Page 245	71050 with Vacuum Breaker  Page 246	71020 with Vacuum Breaker & Box  Page 245	71070 with Vacuum Breaker  Page 246
YARD HYDRANTS • Non-Freeze			TRI-TEMP
71400 Standard Duty  Page 247	71450 Heavy-Duty  Page 247	71600 Heavy-Duty  Page 247	71650 Non-Freeze  Page 248

HYDRANTS

Repair Kits

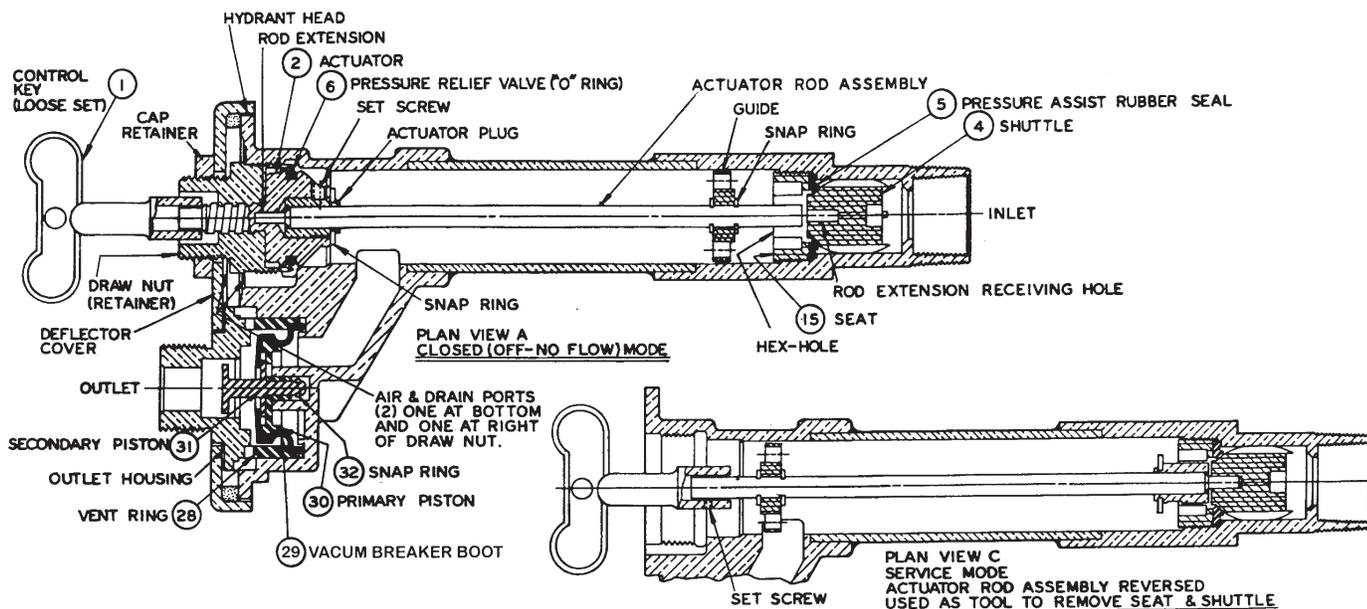
We recommend that a complete HYDRANT REPAIR KIT be installed when it becomes necessary to repair a hydrant.

PART NO.	ITEM	QTY.	PART NO.	ITEM	QTY.	PART NO.	ITEM	QTY.
71550P02U	KIT #2		71950P12U	KIT #12		71550P21U	KIT #21	
#1	5/16" Key	12	For 1420N - 71950			For 1400N – 1410N Old Style 71550 – 71650 – Previous Design		
71050P06U	KIT #6		#1	5/16" Key	1	#1	5/16" Key	1
#4	Shuttle	2	#2	Worm Stem	1	#2	Worm Stem	1
#5/15	Seal/Seat	2	#3	Brass Washer	1	#3	Brass Washer	1
71050P07U	KIT #7		#5	Packing	1	#4	Packing Nut	1
#1	1/4" Key with Set Screw	12	#12	Nylon Seat	1	#5	Packing	1
	Allen Wrench	12	#15	Plunger	1	#12	Nylon Seat	1
71050P08U	KIT #8		71600P14U	KIT #14		#15	Plunger	1
For HYDRASAN® I or II – Non-Freeze			For 1430N Old Style 3/4" or 1" 1440N or 71700 3/4" 71600 3/4" O.S.			71550P22U	KIT #22	
#1	1/4" Key with Set Screw	1	#1	5/16" Key	1	For 71500 – 71550 – 71650 New Style		
#2	Actuator	1	#2	Worm Stem	1	#1	5/16" Key	1
#4	Shuttle	1	#3	Brass Washer	1	#2	Worm Stem	1
#5	Pressure Assist Rubber Seal	1	#5	Packing	1	#3	Brass Washer	1
#6	Pressure Relief Valve (O-Ring)	1	#15	Plunger	1	#6	Worm Assy. Nut	1
#15	Seat	1	71600P15U	KIT #15		#12	Nylon Seat	1
	Allen Wrench	1	For 71600 3/4" or 1" New Style			#15	Plunger	1
71070P09U	KIT #9		#1	5/16" Key	1	#37	Retainer Seal	1
#4	Shuttle	2	#2	Worm Stem	1	#38	Worm Stem Seal	1
#5/15	Seal/Seat	2	#3	Brass Washer	1	71050P23U	KIT #23	
71070P10U	KIT #10		#15	Plunger	1	For HYDRASAN® I		
For HYDRASAN® I or II – Mild Climate			#37	Nylon Seal	1	#28	Vent Ring	2
#1	1/4" Key with Set Screw	1	#38	Worm Stem Seal	1	#29	Boot for Vacuum Breaker	2
#2	Actuator	1				#30	Primary Piston	2
#4	Shuttle	1				#31	Secondary Piston	2
#5	Pressure Assist Rubber Seal	1				#32	Snap Ring	2
#6	Pressure Relief Valve (O-Ring)	1						
#15	Seat	1						
	Allen Wrench	1						

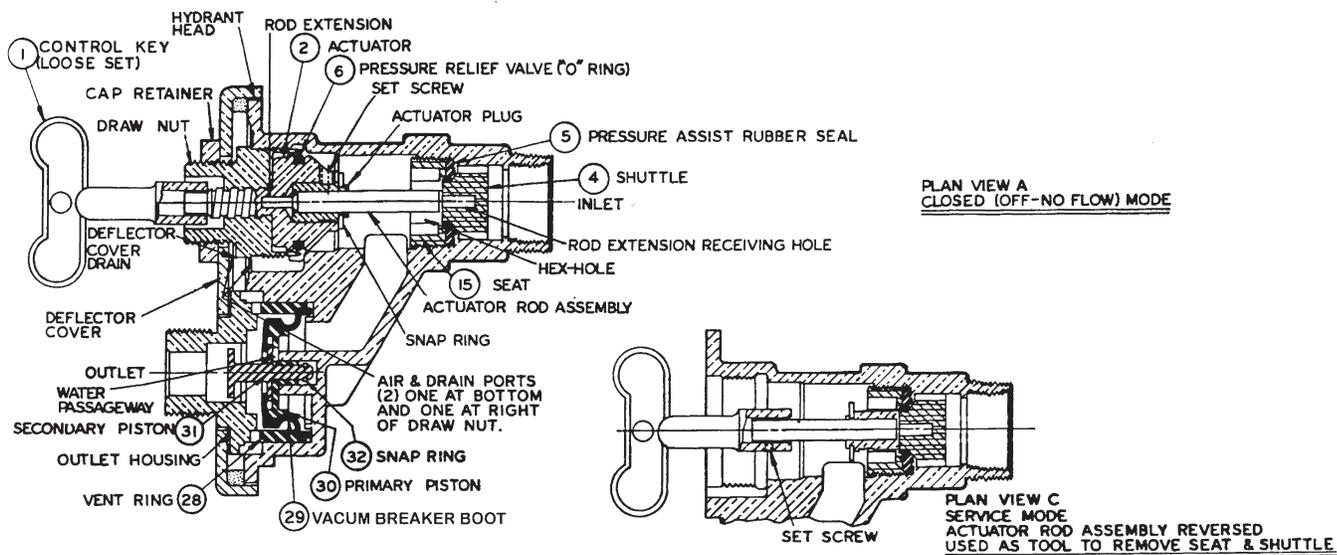
HYDRANTS

Parts Drawings

Hydrant replacement parts are available in Repair Kits only. See facing page to determine appropriate kit number. For replacement rod assemblies, contact your local representative.



HYDRASAN® I 71000 & 71050 Series

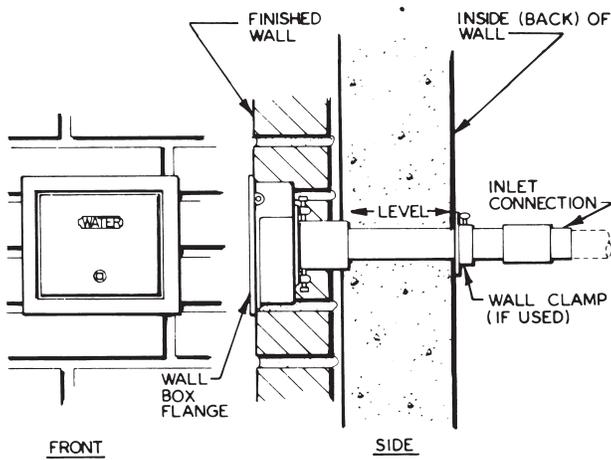


HYDRASAN® I 71020 & 71070 Series

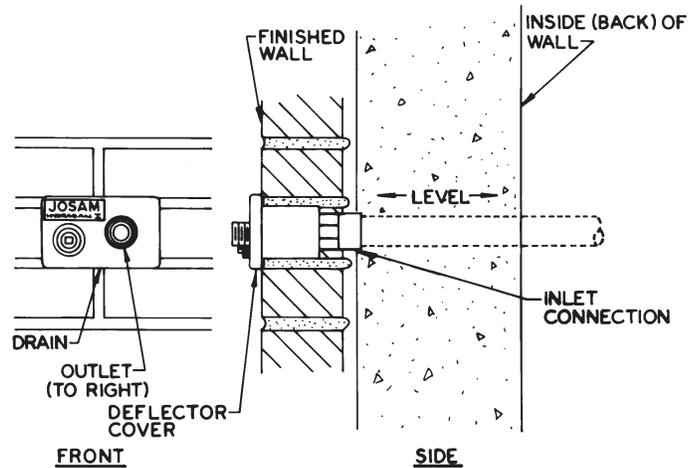
BMW, HYDRANTS & SHOCKS

HYDRANTS

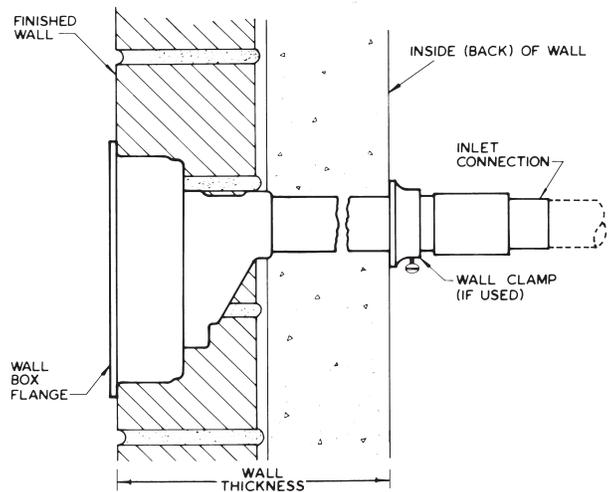
Typical Installations



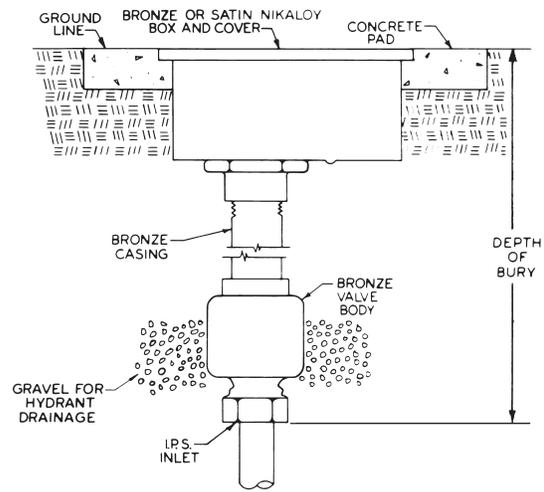
71000 Series HYDRASAN® I installed in an exterior brick wall



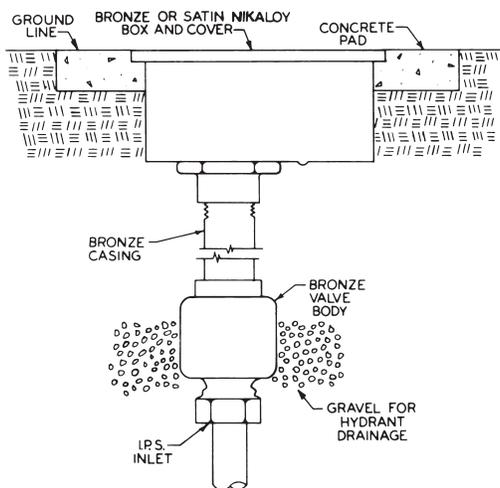
71070 Series HYDRASAN® I installed in an exterior brick wall



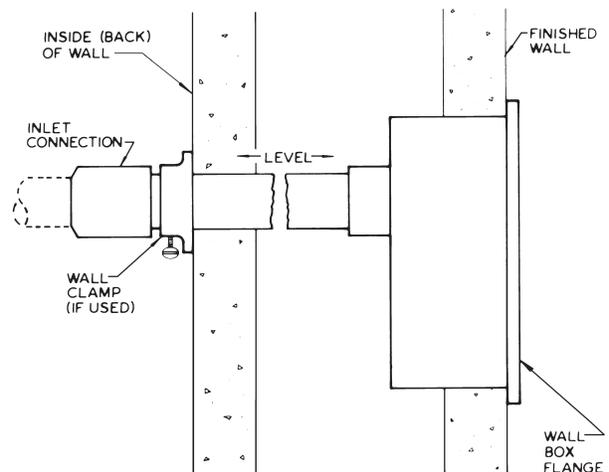
Drawing showing how to determine wall thickness



Drawing showing how to determine depth of bury



71600 Series Hydrant shown installed in a yard



71650 Series TRI-TEMP Hydrant shown installed in a block wall

BWW, HYDRANTS & SHOCKS

71000 SERIES HYDRASAN® I WITH VACUUM BREAKER • NON-FREEZE

APPLICATION

For use where a potable water supply is required outside a building. The shut off design provides for frost protection and the integral vacuum breaker and backflow preventer protect the potable water supply. The recessed box with hinged latching cover conceals the nozzle and operating mechanism and prevents unauthorized use.

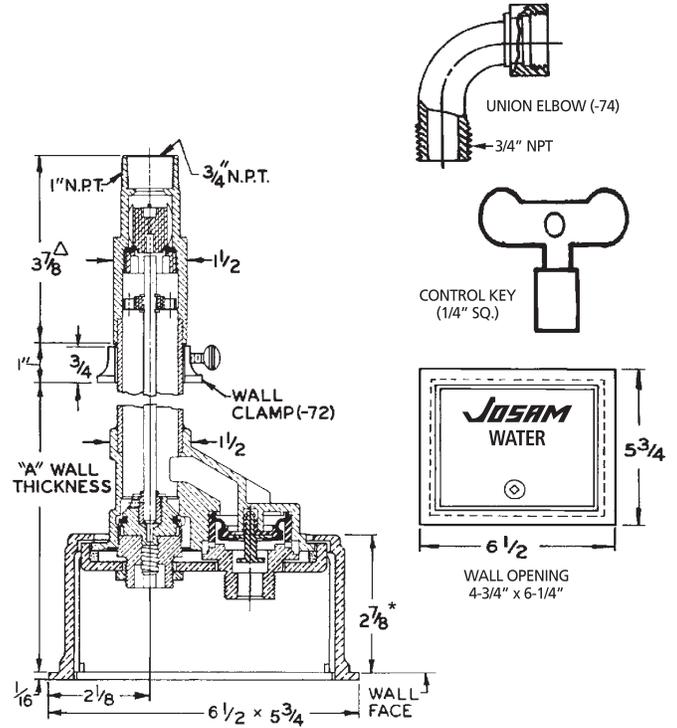
SPECIFICATION

JOSAM 71000 Series cast bronze box type non-freeze wall Hydrant with satin stainless steel hinged latching cover, 3/4" H.P.T. outlet, integral vacuum breaker-backflow preventer, pressure relief valve, bronze casing, bronze operating parts convertible into service tool, 3/4" female and 1" male N.P.T. inlet connection.

Available Options

- * -52 Satin Finish Face, Cast Bronze Box
- * -54 Satin Finish Face, Cast Nikaloy Box
- 72 Wall Clamp
- 73 Solder Inlet Adapter
- 74 Union Elbow Assembly
- 91 1" Hose Pipe Threaded Outlet
- 95 Cylinder Vandal-Proof Lock

TYPE NO.	A	LBS.	TYPE NO.	A	LBS.
71000-4	4-3/4	8	71000-16	16-3/4	11
71000-6	6-3/4	9	71000-18	18-3/4	11
71000-8	8-3/4	10	71000-20	20-3/4	12
71000-10	10-3/4	10	71000-22	22-3/4	12
71000-12	12-3/4	10	71000-24	24-3/4	13
71000-14	14-3/4	11			



△ WHEN UNION ELBOW IS USED, THIS DIM. IS 6-3/8" OVERALL.
 * BOX DEPTH IS 1-5/8" ON NIKALOY AND BRONZE BOXES.

BMW, HYDRANTS & SHOCKS

71020 SERIES HYDRASAN® I WITH VACUUM BREAKER • MILD CLIMATE

APPLICATION

For use where a potable water supply is required outside a building. The integral vacuum breaker and backflow preventer protect the potable water supply. The recessed box with hinged latching cover conceals the nozzle and operating mechanism and prevents unauthorized use.

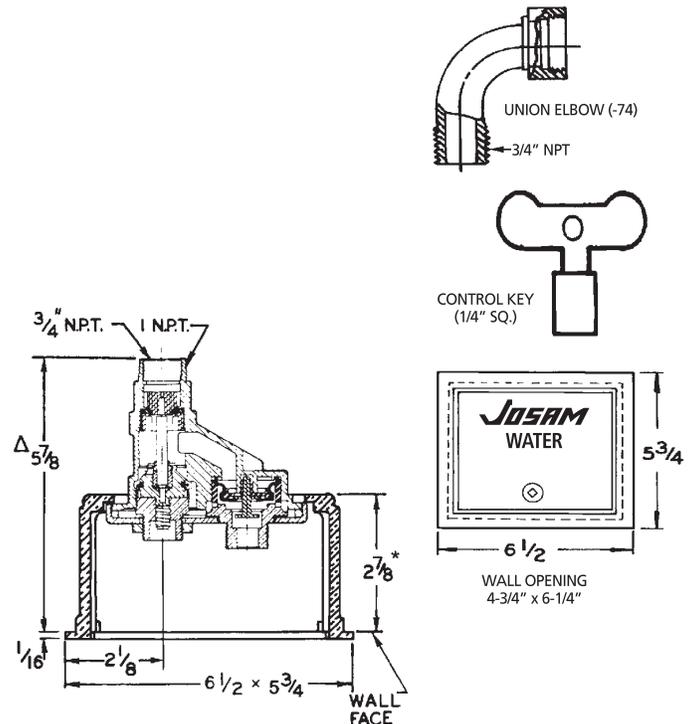
SPECIFICATION

JOSAM 71020 Series cast bronze box type mild-climate wall Hydrant with satin stainless steel hinged latching cover, 3/4" H.P.T. outlet, integral vacuum breaker-backflow preventer, pressure relief valve, bronze operating parts convertible into service tool, 3/4" female and 1" male N.P.T. inlet connection.

Available Options

- * -52 Satin Finish Face, Cast Bronze Box
- * -54 Satin Finish Face, Cast Nikaloy Box
- 72 Wall Clamp
- 73 Solder Inlet Adapter
- 74 Union Elbow Assembly
- 91 1" Hose Pipe Threaded Outlet
- 95 Cylinder Vandal-Proof Lock

TYPE NO.	LBS.
71020	8



△ WHEN UNION ELBOW IS USED, THIS DIM. IS 7-5/8" OVERALL.
 * BOX DEPTH IS 1-5/8" ON NIKALOY AND BRONZE BOXES.

71050 SERIES HYDRASAN® I WITH VACUUM BREAKER • NON-FREEZE

APPLICATION

For use where a potable water supply is required inside or outside a building. The shut off design provides for frost protection and the integral vacuum breaker and backflow preventer protect the potable water supply. Will fit into the area occupied by a standard brick.

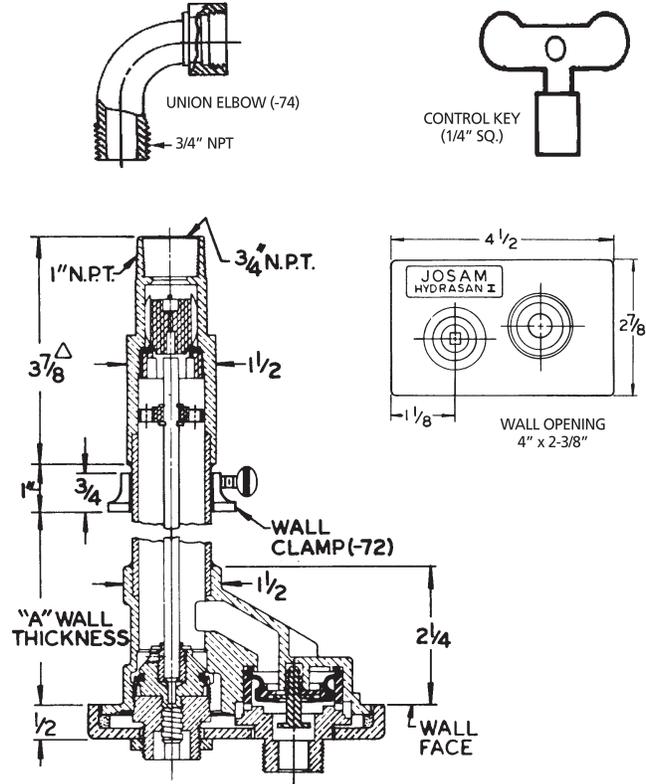
SPECIFICATION

JOSAM 71050 Series cast bronze non-freeze wall Hydrant with satin finish Nikaloy face, 3/4" H.P.T. outlet, integral vacuum breaker-backflow preventer, pressure relief valve, bronze casing, bronze operating parts convertible into service tool, 3/4" female and 1" male N.P.T. inlet connection.

Available Options

- 50 Satin Finish Bronze Face
- 72 Wall Clamp
- 73 Solder Inlet Adapter
- 74 Union Elbow Assembly
- 91 1" Hose Pipe Threaded Outlet

TYPE NO.	A	LBS.	TYPE NO.	A	LBS.
71050-3	2-3/4	3	71050-14	14	5
71050-4	4	3	71050-16	16	5
71050-6	6	3	71050-18	18	5
71050-8	8	4	71050-20	20	6
71050-10	10	4	71050-22	22	6
71050-12	12	4	71050-24	24	6



Δ WHEN UNION ELBOW IS USED, THIS DIM. IS 6-3/8" OVERALL.

71070 SERIES HYDRASAN® I WITH VACUUM BREAKER • MILD CLIMATE

APPLICATION

For use where a potable water supply is required inside or outside a building. The integral vacuum breaker and backflow preventer protect the potable water supply. Will fit into the area occupied by a standard brick.

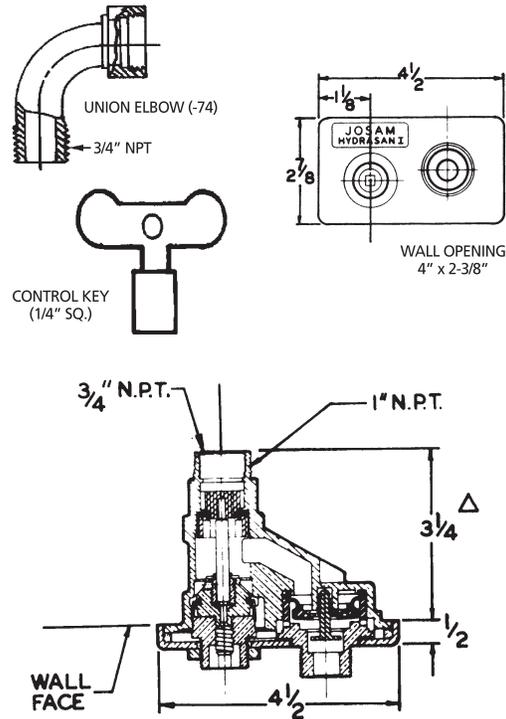
SPECIFICATION

JOSAM 71070 Series cast bronze mild-climate wall Hydrant with satin finish Nikaloy face, 3/4" H.P.T. outlet, integral vacuum breaker-backflow preventer, pressure relief valve, bronze operating parts convertible into service tool, 3/4" female and 1" male N.P.T. inlet connection.

Available Options

- 50 Satin Finish Bronze Face
- 72 Wall Clamp
- 73 Solder Inlet Adapter
- 74 Union Elbow Assembly
- 91 1" Hose Pipe Threaded Outlet

TYPE NO.	LBS.
71070	4



Δ WHEN UNION ELBOW IS USED, THIS DIM. IS 5-3/4" OVERALL.

BWW, HYDRANTS & SHOCKS

71400 SERIES GROUND HYDRANT • NON-FREEZE

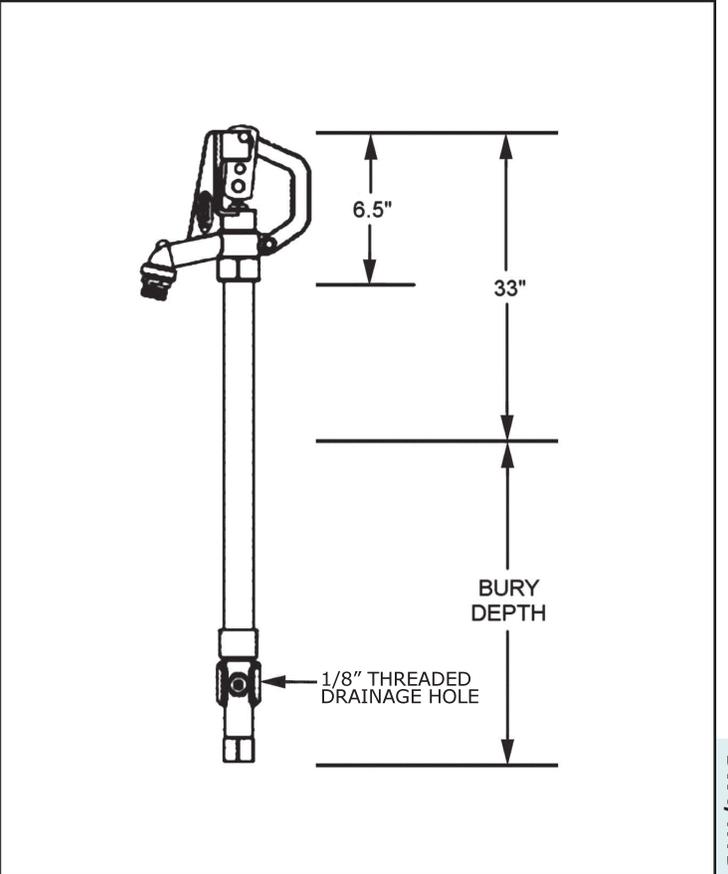
APPLICATION

For use where an outside potable water supply is required. N.P.T. hole drains the body for frost protection.

SPECIFICATION

JOSAM 71400 Series galvanized steel non-freeze ground Hydrant with cast iron head, solid brass 3/4" H.P.T. outlet, cam type operating control lever for full or variable flow, stainless steel operating rod, one-piece plunger and 3/4" F.P.T. inlet.

TYPE NO.	SIZE	OVERALL LENGTH	LBS.
71400-1	1' Bury	45"	11
71400-2	2' Bury	57"	13
71400-3	3' Bury	69"	15
71400-4	4' Bury	81"	17
71400-5	5' Bury	93"	19
71400-6	6' Bury	105"	21



71450 SERIES GROUND HYDRANT, HEAVY-DUTY • NON-FREEZE

APPLICATION

For use in industrial environments where an outside potable water supply is required. N.P.T. hole drains the body for frost protection.

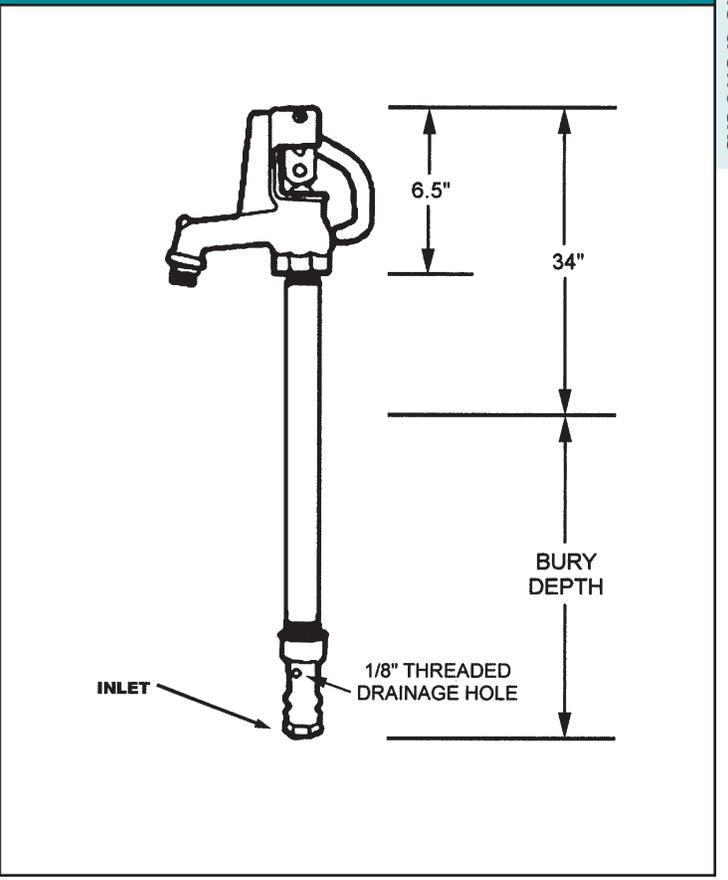
SPECIFICATION

JOSAM 71450 Series galvanized steel non-freeze ground Hydrant with heavy-duty cast iron head, solid brass H.P.T. outlet, cam type operating control lever for full or variable flow, stainless steel operating rod, one-piece plunger and 3/4" F.P.T. inlet.

Available Option

-91 1" Hose Pipe Threaded Inlet and Outlet

TYPE NO.	SIZE	OVERALL LENGTH	LBS.
71450-1	1' Bury	46"	13
71450-2	2' Bury	58"	15
71450-3	3' Bury	70"	17
71450-4	4' Bury	82"	19
71450-5	5' Bury	94"	21
71450-6	6' Bury	106"	23



BMW, HYDRANTS & SHOCKS

71600 SERIES YARD HYDRANT, BOX TYPE • NON-FREEZE

APPLICATION

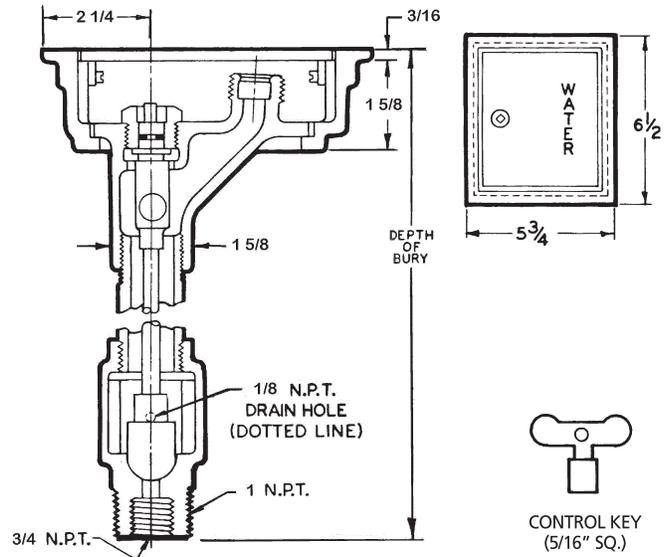
For use where an outside potable water supply is required. The 1/8" NPT hole drains the body for frost protection and the recessed box with hinged latching cover conceals the nozzle and operating mechanism and prevents unauthorized use.

SPECIFICATION

JOSAM 71600 Series cast bronze non-freeze yard Hydrant with 3/4" H.P.T. outlet, satin finish face Nikaloy box, hinged latching cover, bronze casing, Neoprene plunger, removable bronze operating parts and straight inlet with standard hose connection.

Available Options

- 52 Satin Finish Face, Bronze Box
- 91 1" Hose Pipe Threaded Outlet
- 95 Cylinder Vandal-Proof Lock
- 97 1/8" Tapped Drain Hole in Box



TYPE NO.	SIZE	LBS.
71600-2	2' Bury	6
71600-3	3' Bury	8
71600-4	4' Bury	11
71600-5	5' Bury	13
71600-6	6' Bury	15

71650 SERIES TRI-TEMP WALL HYDRANT, BOX TYPE • NON-FREEZE

APPLICATION

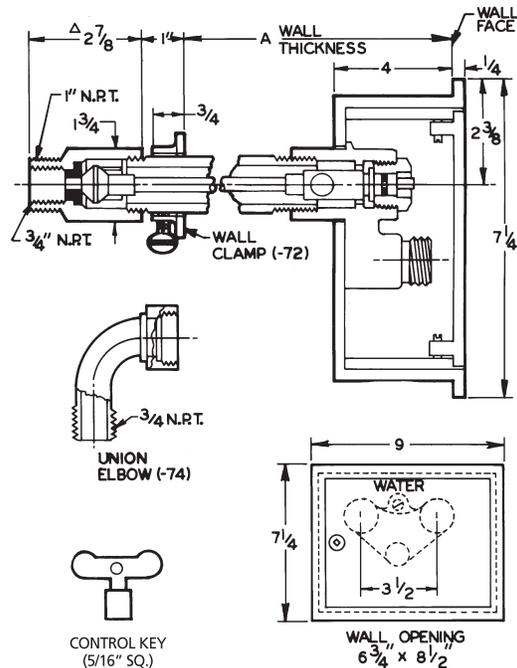
For use where a potable supply of cold, hot or mixed water is required such as dairies or wash down sites. The shut off design provides for frost protection and the recessed box with hinged latching cover conceals the nozzle and operating mechanism and prevents unauthorized use.

SPECIFICATION

JOSAM 71650 Series TRI-TEMP cast bronze non-freeze wall Hydrant with T-Handle, satin finish face Nikaloy box, hinged latching cover, bronze casings, Neoprene plungers, removable nylon seats, removable bronze operating parts, 3/4" female and 1" male N.P.T. inlet connections for hot and cold water and a mixing chamber with 3/4" H.P.T. outlet.

Available Options

- 72 Wall Clamps
- 73 Solder Inlet Adapters
- 74 Union Elbow Assemblies
- 81 Vacuum Breaker
- 91 1" Hose Pipe Threaded Outlet
- 95 Cylinder Vandal-Proof Lock



TYPE NO.	A	LBS.	TYPE NO.	A	LBS.
71650-6	6	24	71650-16	16	29
71650-8	8	25	71650-18	18	30
71650-10	10	26	71650-20	20	31
71650-12	12	27	71650-22	22	32
71650-14	14	28	71650-24	24	33

△ WHEN UNION ELBOW IS USED, THIS DIM. IS 5-3/8" OVERALL.