# MAASS<sup>™</sup> Model J and JC Style PITLESS ACCESSORY OPTIONS



# PA (PITLESS ACCESSORY) OPTION

Now available for Maass<sup>™</sup> 1" Model J or JC Style Adapters, a <sup>1</sup>/2" NPT accessory outlet for the brass insert located in the well.

### ASK FOR THE PA (PITLESS ACCESSORY) OPTION.

#### For in well placement of:

- Pressure Relief Valve
  Pressure Switch
  Tra
  - Drain Valve
    Transducers
- Available for Model J Weld-on adapters, JC Clamp-on adapters, and JX Style pitless units with 1" outlet. The PA Option fits <u>5" ID</u> or larger well casings.

PART	MODEL
NUMBER	NUMBER
928000	5J1-PA
928002	6J1-PA
928006	5JC1-PA
928003	50DJC1-PA
928004	6JC1-PA



PA Option with

#370 Pressure Relief Valve

PA Option with Pressure Switch and PSP Package



MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES P. O. Box 547, 11283 Dundee Road, Huntley, IL 60142-0547 (800) 323-6259 • IL AREA (847) 669-5135 www.maassmidwest.com



MODEL NUMBER

PSP Pressure Switch

Package

PART NUMBER

928005

PSP (PRESSURE SWITCH PACKAGE)

For locating the pressure switch in the well, use Maass Midwest's PSP (Pressure Switch Package). Our PSP allows for easy, economical installation and removal of the pressure switch in the well.

Ask for the PSP (Pressure Switch Package).

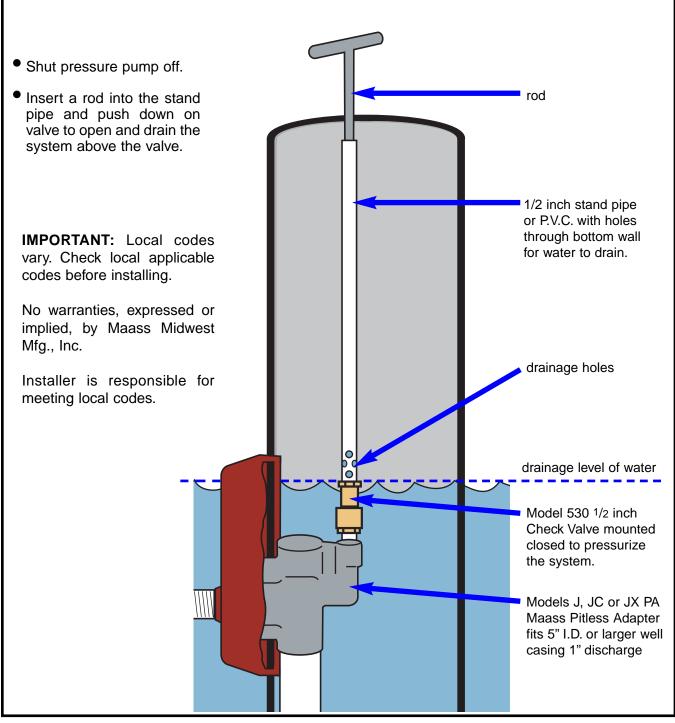
### Pressure Switch Package includes:

- 1/4" x 9' (usable length) coiled waterline with 1/4" NPT male ends.
- ◆ 1/4" x 1/2" brass bushing.
- 1" NPT coupling with SS bracket for pressure switch.
- 1" NPT coupling with SS hanger bracket.
- Pulsation plug for pressure switch.

Package is for <u>5" ID</u> or larger well casing. PSP package to be used in conjunction with Maass' PA Option shown above.

©2011, MAASS Midwest Manufacturing, Inc.

## SYSTEM DRAINAGE-



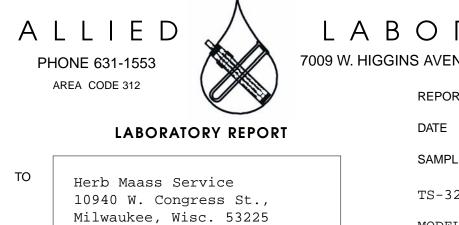


MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES

P. O. Box 547, 11283 Dundee Road, Huntley, IL 60142-0547 (800) 323-6259 • IL AREA (847) 669-5135 www.maassmidwest.com



©2011, MAASS Midwest Manufacturing, Inc.



LABORATORIES

## 7009 W. HIGGINS AVENUE CHICAGO, ILLINOIS 60656

REPORT NO.

June 6, 1968

SAMPLE DESCRIPTION:

TS-326-A

MODEL 5 JIA Pitless Unit

RECEIVED:

A test was made to determine the ability of the Pitless Unit described above to support the weight of pump, drop pipe and other materials which might be suspended from the unit insert in actual use. 30 psi water pressure was applied to the unit thru its normal outlet, and a hydraulic piston used to apply force between a capped pipe screwed into the bottom of the insert, and the bottom of the casing.

The pitless unit withstood a force equal to 4000 pounds of weight on the insert without any evidence of leakage or failure.

A pressure drop curve was run with the unit in its normal service arrangement, according to standard test procedures, with the following results:

Flow Rate	Pressure Drop
gpm	psi
10	0.13
15	0.34
20	0.66
30	1.7
40	3.3

Richard 7. Weickart

Richard R. Weickart, P.E. Director



PHONE 631-1553 AREA CODE 312



7009 W. HIGGINS AVENUE CHICAGO, ILLINOIS 60656

March 29, 1973

John J. Surinak Maas Lifetime Pitless Adaptors Div. of Surinak Engr. & Mfg. Inc. 13100 W. Cleveland Ave. New Berlin, Wisc. 53151

Re: Test Series 468

LABORATORIES

This is to certify that on March 7. 1973, loading tests were conducted with hydraulic pistons to determine the dead weights which could be supported by weld-on pitless adaptors and over-the-top well caps installed on standard well casings. The following are the results of these tests:

Model Number	Pitless Adaptor Description Yielded at
6 J 2	2" outlet adaptor on 6" casing 12 + tons
6 J 2 1/2	2 1/2" outlet adaptor on 6" casing 12 tons
8 J 3	3" outlet adaptor on 8" casing 15 tons
10 J 4	4" outlet adaptor on 10" casing 25 tons

Examinations of the above adaptors following the tests showed that the yields occurred in the threads of the adaptors supporting the drop pipes.

Similar loading tests on over-the-top well caps gave the following results:

Cap for 6" and 7" casings: yielded and fractured at 17 tons

Cap for 8" casing: yielded and fractured at 15 tons.

Ruchard 7. Weickart

Richard R. Weickart, P.E. Director

NOTE: STANDARD PRODUCT RECOMMENDED SAFETY FACTOR IS 1/3 OF YIELD FACTOR DESIGNATED IN TEST SERIES 468.

TESTED FOR DEAD WEIGHT ONLY; SHOCK, PUMP TORQUE, HYDRAULIC PRESSURE, VIBRATION, ETC., WERE NOT FACTORED.



## MAASS<sup>™</sup> MODEL J WELD-ON PITLESS ADAPTER



## FEATURES:

- Permanently installed by welding for increased strength and durability
- J Series of adapters and units available with stainless steel, nickel-bronze inserts, stainless steel housings, and Viton or Teflon O-rings for monitoring/remediation applications
- Only two one inch outlet size Model J Pitless needed to fit all well casing sizes

## **ENGINEERING SPECIFICATION**

## MAASS<sup>™</sup> MODEL J WELD ON PITLESS ADAPTER

The Pitless Adapter will be a Model J field - weld type, as manufactured by Maass-Midwest Manufacturing, using an eight degree bronze locking type wedge with an O-ring forced against a non-magnetic, type 304 stainless steel flanged nipple. The Pitless Adapter housing shall be of cast steel and shall be welded to the well casing. Model J ( \_\_\_\_\_\_ ) inch well casing and ( \_\_\_\_\_\_ ) inch outlet.

WELL CASING SIZE	MODEL	WATER OUTLET and DROP PIPE SIZE	WEIGHT (APPROX.)	WORKING LOAD • (LBS.)
4" - 5"	J	1"	6 lbs.	4,000
4" - 5"	J	1 <sup>1</sup> /4"	7 lbs.	5,000
4" - 5"	J	11/2"	8 <sup>1</sup> /2 lbs.	5,000
5"	J	2"	12 lbs.	6,000
6" or larger	J	1"	6 lbs.	4,000
6" or larger	J	11/4"	7 lbs.	5,000
6" or larger	J	11/2"	8 <sup>1</sup> /2 lbs.	5,000
6" or larger	J	2"	12 lbs.	6,000
6" or larger	J	21/2"	18 lbs.	8,000
8" or larger	J	3"	32 lbs.	10,000
10" or larger	J	4"	50 lbs.	16,000

## MODEL J WELD ON PITLESS ADAPTER SIZES

**NOTE:** The weight of the pump, pipe and water column should not exceed the working load of the adapter nor the NPT joint strength of the pipe.

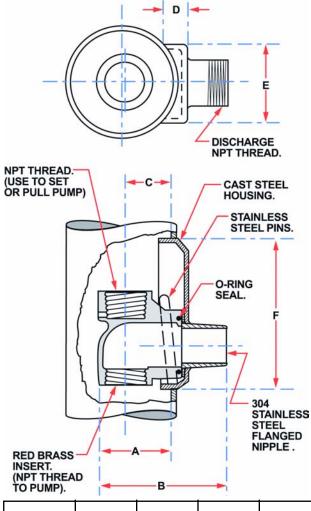
HOW TO ORD	DER MODEL	J WELD ON P	ITLESS ADAPTER
		DROP &	
CASING SIZE +	MODEL	+ DISCHARGE -	+ PART NUMBER
6"	J	2"	6J2

©2011, MAASS Midwest Manufacturing, Inc.

# MEMBER:

## **DWEST** MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES

## **MAASS<sup>™</sup> MODEL J SERIES PITLESS ADAPTERS**





## MAASS<sup>™</sup>MODEL J WELD-ON PITLESS ADAPTER

NOTE:

- 1. THE REMOVEABLE BRASS INSERT PERMITS EASY PUMP REMOVAL FOR SERVICE OR REPLACEMENT.
- 2. DIMENSIONS AND WEIGHTS MAY VARY SLIGHTLY DUE TO INDIVIDUAL CASTING AND WEIGHT VARIANCES.

WEIGHT (LBS)	F	E	D	С	В	А	DROP DISCHARGE NPT & PIPE SIZE	FITS WELL CASING	PITLESS ADAPTER MODEL
6	<b>7</b> <sup>5</sup> /16	31/4	11/4	13/4	5 <sup>1</sup> /8	2 <sup>3</sup> /4	1"	4" & 5"	4J1
7	8	311/16	11/4	<b>1</b> <sup>11</sup> /16	5 <sup>1</sup> /8	2 <sup>3</sup> /16	11/4"	4" & 5"	4J1 <sup>1</sup> /4
81/2	8	3 <sup>11</sup> /16	1 <sup>1</sup> /4	1 <sup>11</sup> /16	5 <sup>5</sup> /16	3	11/2"	4" & 5"	4J1 <sup>1</sup> /2
12	8 <sup>7</sup> /8	47/ <sub>16</sub>	11/2	2 <sup>5</sup> /16	6 <sup>5</sup> /8	33/4	2"	5"	5J2
6	71/4	31/4	11/4	1 <sup>5</sup> /8	5 <sup>1</sup> /8	21/2	1"	6", 7", 8"+	6J1
7	8	3 <sup>5</sup> /8	1 <sup>1</sup> /4	1 <sup>9</sup> /16	5 <sup>1</sup> /8	2 <sup>5</sup> /8	1 <sup>1</sup> /4"	6", 7", 8"+	6J1 <sup>1</sup> /4
8	8	311/16	11/4	<b>1</b> <sup>11</sup> /16	5 <sup>5</sup> /16	27/8	11/2"	6", 7", 8"+	6J1 <sup>1</sup> /2
12	8 <sup>7</sup> /8	47/ <sub>16</sub>	11/2	2 <sup>3</sup> /8	6 <sup>3</sup> /4	37/8	2"	6", 7", 8"+	6J2
18	10 <sup>7</sup> /8	5	1 <sup>1</sup> /2	2 <sup>3</sup> /4	7 <sup>1</sup> /2	4 <sup>1</sup> /2	21/2"	6", 7", 8"+	6J2 <sup>1</sup> /2
32	12 <sup>9</sup> /16	6 <sup>1</sup> /8	17/8	37/8	9 <sup>9/</sup> 16	6	3"	8", 10", 12"+	8J3
50	15 <sup>1</sup> /4	7 <sup>3</sup> /8	2	41/4	10 <sup>1</sup> /2	7	4"	10", 12", 14"+	10J4

©2011, MAASS Midwest Manufacturing, Inc.

MAASS



**IDWEST** MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES

# IDWEST MAASS™ MODEL J PITLESS ADAPTERS

Patented: U.S.A. and Canada

## WHEN ALL ELSE FAILS, PLEASE READ THESE INSTRUCTIONS.

INSTALLATION INSTRUCTIONS:



Using cutting guide, establish location of hole to be cut.



Trace outline of housing onto well casing.



Cut hole with cutting torch; pry out cut portion (shown below).



SAFETY FIRST: Properly shore-up trench to prevent cave-ins. Wear correct safety gear for installation conditions. The installer is responsible for safe installation of the product. The installer is responsible for installation and product meeting state, provincial, and local codes/regulations.

The trench along side of well casing should be dug deep enough to prevent frost penetration. The trench should be wide enough for comfortable working.

of adapter.



Maass<sup>™</sup> Model J 1. Establish location of hole to be cut: Snap cutting guide Pitless Adapter Weldonto the well casing (1a) at the location where you wish to install On Unit, Cutting Guide, the adapter by pushing cutting guide onto the well casing. Then set and various items steel housing into the cutting guide and check for correct location needed for installation.

**1b**. If no cutting guide is available, hold housing on O.D. of well casing in correct position, and mark around outside of housing Cut casing on inside of rectangular mark.

2. Cut hole in well casing: After location has been established, remove adapter and proceed with cutting the opening in the well casing using one of the following methods:

2a. With cutting torch, cut a hole near the inside bottom corner of the cutting guide opening. Then move cutting torch to the cutting guide, resting the side of the tip on the cutting guide, and moving the cutting torch slowly along all four sides of the guide. After opening has been cut and cutting guide has been removed, pry out cut portion of casing at the bottom edge. (See photo at lower left.)

2b. Instead of a cutting torch, a 4 1/2" hand grinder with cutting wheel may be used to cut opening in steel well casing. Avoid cutting the rectangle oversize. Remove cut portion of well casing.

NOTE: With either method 2a or 2b, steel lips on top and bottom of housing must fit into cut hole. Do not cut too wide of a hole as gaps on side will be hard to fill. Brass insert face must fit through cut hole.

3. Remove all slag and burrs from cut opening.

Continued on reverse side.



Or use a 4 1/2" hand grinder to cut opening.



Remove slag and burrs.



©2008, MAASS Midwest Manufacturing, Inc.



# 

## MAASS<sup>™</sup> MODEL J SANITARY PITLESS ADAPTER





- **INSTALLATION INSTRUCTIONS** continued
- **4. Set pitless housing into opening to check fit.** If it does not fit the opening, note where interference is and install the cutting guide again, and re-cut opening to fit, cleaning off all slag and burrs when finished.
- **5**. **Set pitless housing into opening** with the water flow opening on the bottom end of the housing. The housing must fit snugly against the well casing. Then tack top center of housing and both right and left bottom corners. This is done to keep the weld from pulling the housing out of place while welding the first pass.

## SEE YOUR DISTRIBUTOR OR REPRESENTATIVE FOR ADDITIONAL INFORMATION.

We suggest using a 1/8" weld rod reverse polarity, which penetrates like Fleet Weld 5P or AWS E6010 with a D.C. Welder, starting from the bottom side and working up for the first pass.

Perform the first weld pass over the entire housing. Starting with the second pass, work from top to bottom with 1/8" rod (never larger than 5/32" rod). This weld must be 1/4" in size at all points (or the same thickness as well casing). The weld must be sound and water tight, free from pin holes/weld defects, as required by all state, provincial, and local codes/regulations.

If you have not achieved a 1/4" full weld at all areas, add a third pass.

We suggest using 1/8" rod with reverse polarity because it will result in better penetration, allowing better control over molten metal, making a smoother, stronger weld. When doing two or three passes, the average cutting and welding time is 20 minutes per unit.

## **INSTALLATION OF SUBMERSIBLE PUMP:**

Assemble pump and pipes to pitless brass casting, as per state, provincial, and local codes/regulations.

IMPORTANT: "O" Ring must be lubricated with petroleum jelly (Vaseline) or silicone grease before installing. (DO NOT USE PIPE DOPE.)

After assembling pump and pipes to brass pitless casting, align assembled unit over well, with water flow opening facing desired direction. Lower the pump and pipes into well casing with a hoist or other means. When you are a short distance from the pitless housing, pull pipes against well casing, sliding along the casing as the pump is lowered, and the pitless brass casting will slip into the housing. Check for proper hook up, then tap down on lift-out pipe with hammer to seat "O" Ring against stainless steel base. Release from hoist mechanism <u>only after checking for</u> **proper hook up and tapping to seat "O" Ring.** 

If pump with brass casting is pulled at a later date, it is recommended that the "O" Ring be replaced and the replacement "O" Ring be lubricated with petroleum jelly before resetting the pump. The stainless steel and brass in the **Maass™ Pitless Adapter** will defeat rust, corrosion and electrolysis, greatly easing serviceability.

No locking device is required on the Model J Pitless Adapter for plastic pipe or high water levels.

**SERVICE TIP:** When chlorinating a well, it is best to have the chlorine enter the well below the pitless adapter via a tube or spout, so the chlorine does not come into contact with the pitless adapter or well casing. After chlorination of the well, the pitless adapter and well casing should be thoroughly flushed with water to remove any chlorine residue. Chlorine will create a corrosive action on steel and brass, making future removal of a pitless adapter difficult.

#### LIMITED WARRANTY

All Maass Pitless Adapters are made with first quality materials and workmanship and when properly installed, used, and maintained, shall perform according to Water System Council Standards PAS-97(04). Should any part prove defective within one year it will be replaced F.O.B. our factory, providing permission is first obtained from our factory, and part is returned, shipping prepaid. Liability limited to Maass Pitless Adapter only. In no event shall Maass Midwest Mfg., Inc. be liable for incidental, special, or consequential damages in any way connected with the products for breach of warranty, expressed or implied. No other expressed or implied warranties shall apply, including but not limited to implied warranties of merchantability and fitness for a particular use.

See catalog or web site for complete limited warranty.



## SPECIFICATION OF SUPPLIES

## MAASS<sup>™</sup> MODEL JC PITLESS ADAPTER

The Pitless Adapter will be a clamp-on type as manufactured by Maass-Midwest Manufacturing, using an eight degree bronze locking type wedge with an O-ring forced against a non-magnetic type 304 stainless steel flanged nipple. The housing of the adapter will be of cast steel and shall have two steel lips resting on the well casing to support the pitless adapter in position. The cast steel housing will have a neoprene gasket for sealing the housing to the outside of the well casing and the housing will be held in place with two 304 stainless steel straps and stainless steel hardware.

MODEL	ADAPTER HOUSING SIZE	WELL CASING O.D.	DISCHARGE AND DROP PIPE	WEIGHT (APPROX.)
4JC1	4"	41/2"	1"	11 lbs.
50DJC1	5"OD	4.950" to 5"	1"	11 lbs.
5JC1	5"	5 <sup>9</sup> /16"	1"	11 lbs.
60DJC1	6"OD	5.9" to 6"	1"	11 <sup>3</sup> /4 lbs.
6JC1	6"	6 <sup>5</sup> /8"	1"	11 <sup>3</sup> /4 lbs.
7JC1	7"	7"	1"	12 lbs.
4JC1 <sup>1</sup> /4	4"	41/2"	1 <sup>1</sup> /4"	1 <sup>3</sup> /4 lbs.
50DJC11/4	5"OD	4.950" to 5"	<b>1</b> <sup>1</sup> /4"	11 <sup>1</sup> /4 lbs.
5JC1 <sup>1</sup> /4	5"	5 <sup>9/</sup> 16"	<b>1</b> <sup>1</sup> /4"	11 <sup>1</sup> /4 lbs.
60DJC1 <sup>1</sup> /4	6"OD	5.9" to 6"	1 <sup>1</sup> /4"	12 <sup>3</sup> /4 lbs.
6JC1 <sup>1</sup> /4	6"	6 <sup>5</sup> /8"	<b>1</b> <sup>1</sup> /4"	12 <sup>3</sup> /4 lbs.
7JC1 <sup>1</sup> /4	7"	7"	11/4"	13 lbs.

#### MODEL JC CLAMP-ON PITLESS ADAPTER SIZES

NOTE: The rated working load of all Model JC Pitless Adapters is 4000 pounds. The weight of the pump, pipe and water column should not exceed the working load of the adapter nor that of the joint strength of the NPT pipe threads.

#### MONITORING AND REMEDIATION WELL APPLICATIONS

For well monitoring and remediation well applications, Maass-Midwest offers a specialized Model JC Pitless Adapter having an electroless nickel plated brass insert and a Viton O-ring seat. To specify this type of adapter, place a letter "N" after the Drop & Discharge" size, as in the example which follows:

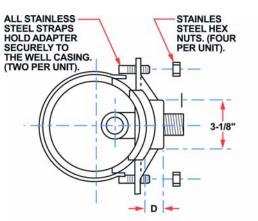
HOW TO ORDER MODEL JC CLAMP-ON PITLESS ADAPTER							
WELL CASING SIZE	WELL  DROP &  MODEL    CASING SIZE +  MODEL  +  DISCHARGE +  OPTION  =  NUMBER						
<b>6</b> <sup>5</sup> /8"	JC	11/4"		6JC1 <sup>1</sup> /4			
5"	JC	1"	Ν	50DJC1-N			

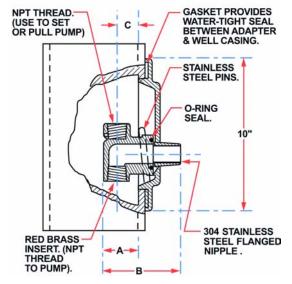
©2011, MAASS Midwest Manufacturing, Inc.



IDWEST MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES









## FEATURES:

- 304 stainless steel clamps and nuts
- Cast steel lips support adapter housing on wall of well casing; no lock needed
- Ideal for use on either plastic or steel well casing
- Buna N rubber gasket seals cast steel housing against O.D. of well casing at point of attachment
- Model JC available with nickel plated or stainless steel inserts and Viton or Teflon O-rings for monitoring/remediation applications

## NOTE:

- 1. When the brass insert is removed from the adapter, the inside of the well casing is unobstructed, permitting easy pump removal during service or replacement.
- 2. Cast steel housing has two "lips" for positive placement on the well casing; to prevent vertical movement of the housing after installation; and to provide solid support for the pump ad discharge pipes.
- **3.** Dimensions and weights may very slightly due to individual casting and weight variances.

WEIGHT (LBS)	D	С	В	А	DROP DISCHARGE NPT & PIPE SIZE	WELL CASING SIZE (O.D.)	PITLESS ADAPTER MODEL
11	7.	1 <sup>5</sup> /8	5 <sup>1</sup> /8	2 <sup>13</sup> /16	1"		4-JC1
11 <sup>3</sup> /4	7/8	1 <sup>11/</sup> 16	5 <sup>1</sup> /4	2 <sup>3</sup> /4	11/4"	4 <sup>1</sup> /2"	4-JC1 <sup>1</sup> /4
11	454	1 <sup>9</sup> /16	5 <sup>1</sup> /8	2 <sup>3</sup> /4	1"	_ ;;	50D-JC1
111/4	15/16	1 <sup>5</sup> /8	5 <sup>1</sup> /4	2 <sup>11/</sup> 16	11/4"	5"	50D-JC <sup>1</sup> /4
11	454	<b>1</b> 9/16	5 <sup>1</sup> /8	2 <sup>3</sup> /4	1"		5-JC1
11 <sup>1</sup> /4	15/16	1 <sup>5</sup> /8	5 <sup>1</sup> /4	2 <sup>11</sup> /16	1 <sup>1</sup> /4"	5 <sup>9/</sup> 16"	5-JC1 <sup>1</sup> /4
11 <sup>3</sup> /4	. 1 /	1 <sup>3</sup> /8	5 <sup>1</sup> /8	2 <sup>9</sup> /16	1"	0.1	6OD-JC1
12 <sup>3</sup> /4	1 <sup>1</sup> /8	<b>1</b> 7/16	5 <sup>1</sup> /4	21/2	11/4"	6"	6OD-JC <sup>1</sup> /4
11 <sup>3</sup> /4		1 <sup>3</sup> /8	5 <sup>1</sup> /8	2 <sup>9</sup> /16	1"	05/ "	6-JC1
12 <sup>3</sup> /4	<b>1</b> 1/8	<b>1</b> 7/16	5 <sup>1</sup> /4	21/2	11/4"	6 <sup>5</sup> /8"	6-JC1 <sup>1</sup> /4
12	411	1 <sup>3</sup> /8	5 <sup>1</sup> /8	2 <sup>9</sup> /16	1"		7-JC14
13	1 <sup>1</sup> /8	1 <sup>7</sup> /16	5 <sup>1</sup> /4	2 <sup>1</sup> /2	1 <sup>1</sup> /4"	7"	7-JC1 <sup>1</sup> /4

©2011, MAASS Midwest Manufacturing, Inc.

MAASS



**DWEST** MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES