

# Monoflex Product Catalog



*Quality well screen and sampling equipment from the leading manufacturer of groundwater monitoring products since 1973*



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*Quality Ground Water Monitoring Products Since 1973*



*Founded in 1973, Monoflex LLC.  
is a leading manufacturer  
of products for Environmental  
Monitoring & Remediation,  
Mineral Exploration, and Irrigation.*

### **Environmental Testing/Monitoring**

Flush Thread Pipe and accessories for environmental groundwater monitoring, remediation and dewatering.

### **Petroleum Observation Wells**

Schedule 40 PVC in 13 ft. lengths (10 ft. slotted with plug or point), in 2 to 12 inch diameters. Customized patterns and Schedule 80 also available.

### **Solvent Extraction Mining**

Schedule 40 and 80 Flush Thread, Plain End, and Belled End PVC Screens and Casings. Flush Thread and Plain End Screens and Casings.

### **Irrigation**

An extensive line of PVC Screens, Well Points, Casings and Irrigation accessories.

### **Horizontal Drilling**

Slotted and threaded PVC Screens and Casings specifically designed for horizontal drilling, air sparging, soil vapor extraction, leachate collection, remediation and methane relief.

### **Environmental Engineering/Remediation**

Monoflex environmental engineering and remediation products include: Disposable and Reusable Bailers of various materials, Ceramic Cup Lysimeters, Bladder Pumps, IVP Controllers and Porous Piezometers.

### **Direct Push**

We manufacture quality expendable steel push points and Prepak Well Screens for Direct Push applications.

### **Custom Applications**

Monoflex can slot, thread or perforate PVC and HDPE pipe to your specs. We also manufacture custom components for dewatering, injection/recovery systems, bioremediation, water treatment equipment, methane relief, piezometers, highway underdrains, pump strainers, diffusers, soil vapor extraction, industrial filters, soil stabilization and more.

*For additional information, please call:  
800-257-5183 or fax us at 610-367-5675.  
We can also be contacted via email at  
[monoflex@campbellmfg.com](mailto:monoflex@campbellmfg.com).*

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Monoflex Flush Thread Screens and Casings are used for groundwater monitoring, leak detection, recovery systems, water wells, etc. CNC computerized lathes are used to machine the threads to 2 TPI, 4 TPI, and 8 TPI (ASTM F-480) recommendations. Monoflex-designed automated slotting machines maintain continuous slot spacing and accuracy. Flush thread PVC is “Enviro-wrapped” as a standard procedure. **In addition to the many popular screens and casings listed in this catalog, Monoflex offers a full range of other product combinations, (see charts below). Chart Key: (S) Standard, (O) Optional.**

DIAMETERS	STANDARD LENGTHS				SCH 40 THREADS PER INCH			SLOT WIDTHS	INTEGRATED ENDS AVAILABLE		SPACING OF SLOTS		
	2.5'	5'	10'	20'	2TPI	4TPI	8TPI		PLUG	POINT	1/8"	1/4"	3/16"
1/2"	S	S	S	N/A			S	.006 - .500*	O	N/A	S	O	O
3/4"	S	S	S	N/A			S	.006 - .500*	O	N/A	S	O	O
1"	S	S	S	S			S	.006 - .500*	O	O	S	O	O
1-1/4"	S	S	S	S			S	.006 - .500*	O	O	S	O	O
1-1/2"	S	S	S	S		O	S	.006 - .500*	O	O	S	O	O
2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2-1/2"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	S	O	O
3"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
4"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
5"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	S	O	O
6"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	O	S	O
8"	S	S	S	S	S			.015 - .500*	O	N/A	N/A	S	N/A
10"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
12"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
14"	S	S	S	S	S			.050 - .500*	O	N/A	N/A	S	N/A
16"	S	S	S	S	S			.060 - .500*	O	N/A	N/A	S	N/A

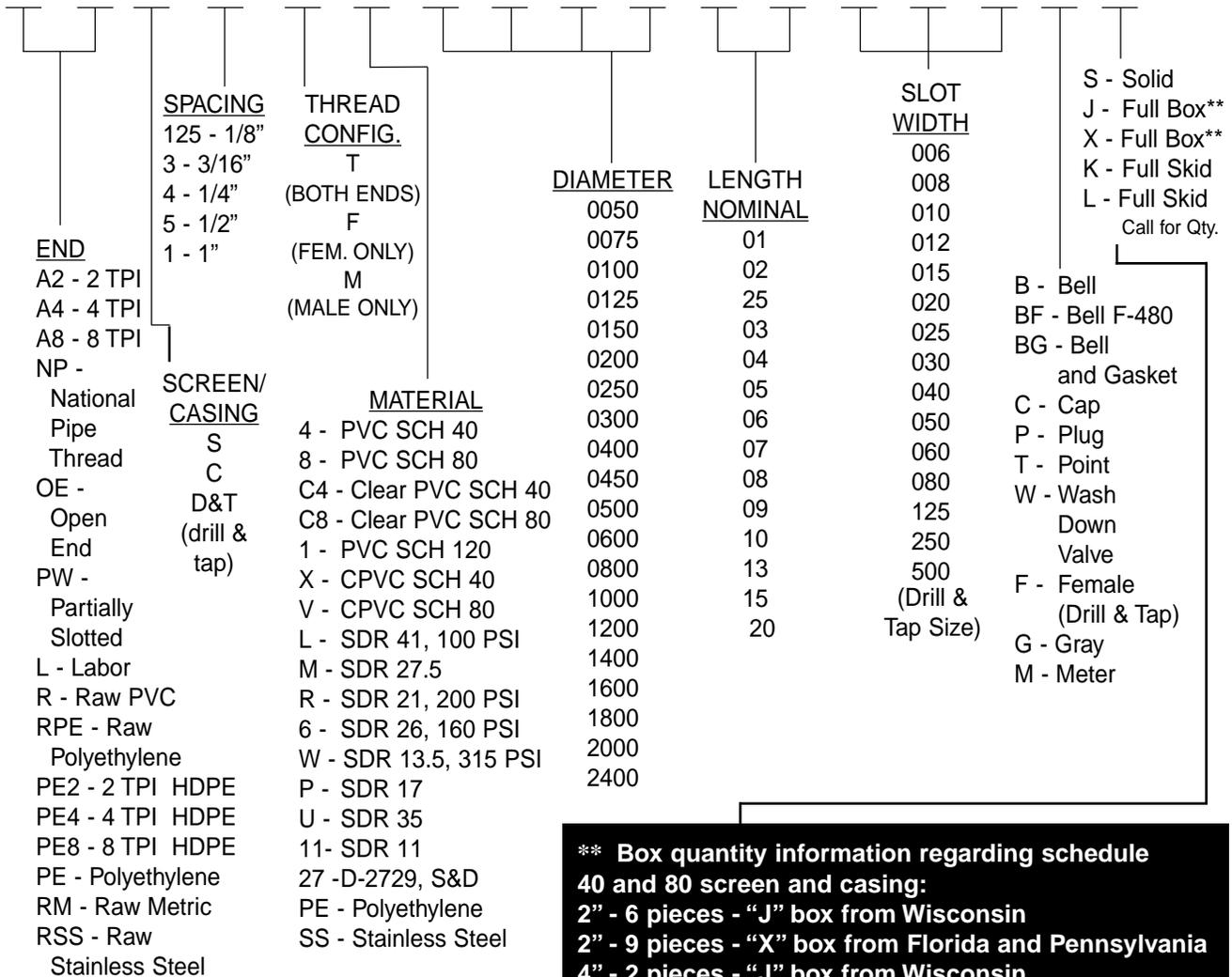
  

DIAMETERS	STANDARD LENGTHS				SCH 80 THREADS PER INCH			SLOT WIDTHS	INTEGRATED ENDS AVAILABLE		SPACING OF SLOTS		
	2.5'	5'	10'	20'	2TPI	4TPI	8TPI		PLUG	POINT	1/8"	1/4"	3/16"
1/2"	S	S	S	N/A		S	O	.006 - .500*	O	N/A	S	O	O
3/4"	S	S	S	N/A		S	O	.006 - .500*	O	N/A	S	O	O
1"	S	S	S	S		S	O	.006 - .500*	O	O	S	O	O
1-1/4"	S	S	S	S	S		O	.006 - .500*	O	O	S	O	O
1-1/2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2-1/2"	S	S	S	S	S	O	O	.010 - .500*	O	N/A	S	O	O
3"	S	S	S	S	S	O	O	.010 - .500*	O	O	S	O	O
4"	S	S	S	S	S	O	O	.010 - .500*	O	O	S	O	O
5"	S	S	S	S	S	O	O	.015 - .500*	O	N/A	S	O	O
6"	S	S	S	S	S	O	O	.020 - .500*	O	N/A	O	S	O
8"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
10"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
12"	S	S	S	S	S			.030 - .500*	O	N/A	N/A	S	N/A
14"	S	S	S	S	S			.050 - .500*	O	N/A	N/A	S	N/A
16"	S	S	S	S	S			.060 - .500*	O	N/A	N/A	S	N/A

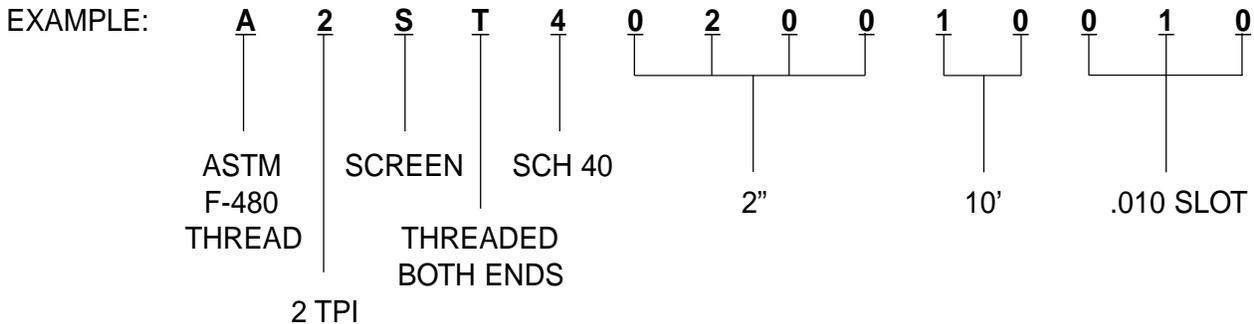
Lengths are measured as “laying length”, (not including male thread length), in 2” and 4” diameters, Sch. 40 and Sch. 80 and 6” Sch. 80. **All other diameters and schedules are measured end to end.** Standard slot widths are .010, .012, .015, .020, .030 and .040 inch. Standard slot spacing is 1/8”, 3/16” and 1/4”. \* Slot sizes .040 to .100 are manufactured at a **minimum** of 1/4” slot spacing. Slot sizes larger than .100 are manufactured at a minimum of 1/2” to 1” slot spacing. Many **custom** slot widths and patterns are available upon request, (please call regarding setup charges). Standard flush thread PVC screens and casings are male x female. National Pipe Taper thread (NPT) is also available. **Not all slot sizes and pipe diameters may be available from all plants.**

# MONOFLEX PART NUMBERING SYSTEM

(SCREEN, CASING, RAW PIPE AND CUSTOM DRILL & TAP ONLY)



**\*\* Box quantity information regarding schedule 40 and 80 screen and casing:**  
**2" - 6 pieces - "J" box from Wisconsin**  
**2" - 9 pieces - "X" box from Florida and Pennsylvania**  
**4" - 2 pieces - "J" box from Wisconsin**  
**4" - 4 pieces - "X" box from Florida and Pennsylvania**



## STANDARD LENGTH AND BOX QUANTITY FLUSH THREAD PVC SCREEN AND CASING

The following specifications represent the Monoflex standard for flush thread PVC screen and casing regarding “laying length” and “overall length”. The term “laying length” refers to the usable pipe length that is exposed once the pipe is assembled to another pipe. Laying length plus the length of the exposed male thread (pin) = overall length.

*Laying length may be obtained in any pipe size depending on the quantity and time frame allowed.*

<u>Pipe Dia.</u>	<u>Schedule</u>	<u>Thread Length</u>	<u>Bell Length</u>	<u>Box Quantity</u>
1/2"	40	1.050	1.250	25
1/2"	80	.825	1.250	25
3/4"	40	1.050	1.500	25
3/4"	80	1.125	1.500	25
1"	40	1.125	1.750	20
1"	80	1.000	1.750	20
1-1/4"	40	1.250	1.870	12
1-1/4"	80	1.500	1.870	12
1-1/2"	40	1.125	2.000	10
1-1/2"	80	1.500	2.000	10
2"	40	1.500	2.250	6/9X
2"	80	2.000	2.250	6/9X
2-1/2"	40	2.375	2.500	5
2-1/2"	80	2.375	2.500	5
3"	40	2.375	3.250	4
3"	80	2.375	3.250	4
4"	40	2.500	4.000	2/4X
4"	80	2.500	4.000	2/4X
5"	40	2.750	4.000	1
5"	80	2.750	4.000	1
6"	40	3.000	6.000	1
6"	80	3.000	6.000	1
8"	40	4.000	6.000	1
8"	80	4.000	6.000	1
10"	40	4.375	8.000	--
10"	80	4.375	8.000	--
12"	40	4.500	8.500	--
12"	80	4.500	8.500	--
14"	40	5.000	9.000	--
14"	80	5.000	9.000	--
16"	40	5.000	10.000	--
16"	80	5.000	10.000	--

\*Box quantity not available for 20' lengths.

2" and 4" X Boxes from Florida and Pennsylvania plants only.

Box quantities include open end screens and U-packs.

PVC PIPE SPECIFICATIONS

PVC Schedule 40

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/8	.405	.261	.068	.045	810
1/4	.540	.354	.088	.081	780
3/8	.675	.483	.091	.109	620
1/2	.840	.608	.109	.161	600
3/4	1.050	.810	.113	.214	480
1	1.315	1.033	.133	.315	450
1-1/4	1.660	1.364	.140	.426	370
1-1/2	1.900	1.592	.145	.509	330
2	2.375	2.049	.154	.682	280
2-1/2	2.875	2.445	.203	1.076	300
3	3.500	3.042	.216	1.409	260
3-1/2	4.000	3.520	.226	1.697	240
4	4.500	3.998	.237	2.006	220
5	5.563	5.017	.258	2.726	190
6	6.625	6.031	.280	3.535	180
8	8.625	7.943	.322	5.305	160
10	10.750	9.976	.365	7.532	140
12	12.750	11.890	.406	9.949	130
14	14.000	13.072	.437	11.810	130
16	16.000	14.940	.500	15.416	130
18	18.000	16.809	.562	20.112	130
20	20.000	18.743	.593	23.624	120
24	24.000	22.544	.687	32.873	120

PVC Schedule 80

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/8	.405	.203	.095	.058	1230
1/4	.540	.288	.119	.100	1130
3/8	.675	.407	.126	.138	920
1/2	.840	.528	.147	.202	850
3/4	1.050	.724	.154	.273	690
1	1.315	.935	.179	.402	630
1-1/4	1.660	1.256	.191	.554	520
1-1/2	1.900	1.476	.200	.673	470
2	2.375	1.913	.218	.932	400
2-1/2	2.875	2.289	.276	1.419	420
3	3.500	2.864	.300	1.903	370
3-1/2	4.000	3.326	.318	2.322	350
4	4.500	3.786	.337	2.782	320
5	5.563	4.767	.375	3.867	290
6	6.625	5.709	.432	5.313	280
8	8.625	7.565	.500	8.058	250
10	10.750	9.492	.593	11.956	230
12	12.750	11.294	.687	16.437	230
14	14.000	12.410	.750	19.790	220
16	16.000	14.214	.843	25.430	220
18	18.000	16.014	.937	31.830	220
20	20.000	17.814	1.031	40.091	220
24	24.000	21.418	1.218	56.882	210

PVC Schedule 120

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/2	.84	.480	.170	.223	1010
3/4	1.050	.690	.170	.295	770
1	1.315	.891	.200	.440	720
1-1/4	1.660	1.204	.215	.614	600
1-1/2	1.900	1.423	.225	.744	540
2	2.375	1.845	.250	1.052	470
2-1/2	2.875	2.239	.300	1.529	470
3	3.500	2.758	.350	2.184	440
4	4.500	3.572	.437	3.516	430
6	6.625	5.434	.562	6.759	370

SDR 21 - W.P. 200 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
3/4	1.050	.910	.060	.129
1	1.315	1.169	.063	.170
1-1/4	1.660	1.482	.079	.263
1-1/2	1.900	1.700	.090	.339
2	2.375	2.129	.113	.521
2-1/2	2.875	2.581	.137	.754
3	3.500	3.146	.167	1.106
3-1/2	4.000	3.596	.190	1.443
4	4.500	4.046	.214	1.825
5	5.563	5.001	.265	2.792
6	6.625	5.955	.316	3.964
8	8.625	7.755	.410	6.679

SDR 26 - W.P. 160 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
1	1.315	1.175	.060	.164
1-1/4	1.660	1.512	.064	.221
1-1/2	1.900	1.734	.073	.284
2	2.375	2.173	.091	.432
2-1/2	2.875	2.635	.110	.622
3	3.500	3.210	.135	.915
3-1/2	4.000	3.672	.154	1.183
4	4.500	4.134	.173	1.494
5	5.563	5.109	.214	2.288
6	6.625	6.085	.255	3.228
8	8.625	7.921	.332	5.468
10	10.750	9.874	.413	8.492
12	12.750	11.710	.490	11.956
14	14.000	12.860	.538	14.430
16	16.000	14.696	.615	18.810
18	18.000	16.534	.692	23.860
20	20.000	18.370	.769	29.470
24	24.000	22.043	.923	42.520

CLEAR

PVC Schedule 40

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/4	.540	.354	.088	.081	390
3/8	.675	.483	.091	.109	310
1/2	.840	.608	.109	.161	300
3/4	1.050	.810	.113	.214	240
1	1.315	1.033	.133	.315	220
1-1/4	1.660	1.364	.140	.429	180
1-1/2	1.900	1.592	.145	.509	170
2	2.375	2.049	.154	.682	140
2-1/2	2.875	2.445	.203	1.076	150
3	3.500	3.042	.216	1.409	130
3-1/2	4.000	3.520	.226	1.697	120
4	4.500	3.998	.237	2.006	110
6	6.625	6.031	.280	3.535	90
6 x 1/8	6.625	6.355	.125	1.647	45
8	8.625	7.943	.322	5.305	80

Note: Clear PVC Schedule 80 is available in 1/4" through 4" pipe diameters.

\* Note: All pressure ratings are for water at 73.4° F with solvent cemented joints.

Bell and Gasket PVC Pipe is available in Schedules 40, 80, 120 and SDR's 21, 26, 35, 41 and C-900.

Compounds used in the manufacture of PVC and CPVC Pipe meet ASTM Standard D-1784.

Schedules 40, 80 and 120 PVC Pipe meet ASTM Standard D-1785.

Pressure Rated (SDR Series) PVC Pipe meets ASTM Standard D-2241.

ASTM Standard D-1784 classification equivalents:

PVC Normal Impact = Type I Grade I = PVC 1120 = Cell Classification 12454-B

For more complete information, request "Condensed Catalog HPB-103-A&B"



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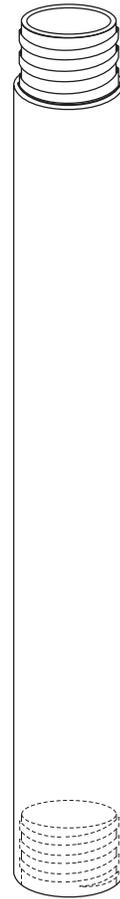
Web: www.campbellmfg.com  
Email: Monoflex@campbellmfg.com

## FLUSH THREAD PVC SCREEN AND CASING

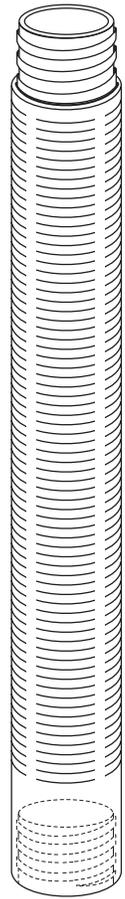
- ✓ Monoflex CNC computer lathed flush threads follow ASTM F-480 recommendations for reliable, consistent results on the job site.
- ✓ Our close tolerances provide a strong connection while retaining ease of assembly.
- ✓ Manufactured from quality PVC pipe, Monoflex flush thread screens and casings are available in diameters of 1/2" through 16" with 2, 4, or 8 threads per inch in Sch. 40 & Sch. 80. Other schedules and SDR's are available in PVC and high density polyethylene.
- ✓ Lengths are measured as "laying length", (not including male thread length), in 2" and 4" diameters, Sch. 40 and Sch. 80 and 6" Sch. 80. All other diameters and schedules are measured end to end. Custom lengths are available in all diameters.
- ✓ All standard Monoflex PVC threads are compatible with other materials threaded to ASTM F-480 recommendations, with the same TPI. **Note:** Threads on 14" and 16" Monoflex screens and casings are not ASTM F-480 as the flush thread guideline does not specify pipe diameters larger than 12".
- ✓ All standard screens provide maximum net open area. A wide variety of slot sizes and spacings are available to adapt to various site conditions and applications.
- ✓ 1/2" through 6" Sch. 40 and Sch. 80 screens and casings are provided with Buna-N O-rings. O-rings may be installed or packaged separately depending on size. O-rings for all other sizes and schedules are sold separately. Please specify if O-rings are required when placing order.
- ✓ All flush thread screens and casings are Envirowrapped and hermetically sealed at both ends as a standard practice.

The following pages list flush thread PVC screens and casings along with the appropriate Buna-N O-rings, and flush thread caps, plugs, and points. Custom lengths, threads and adapters are available.

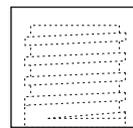
**Please specify part number when ordering.**



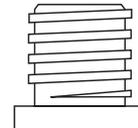
Flush Thread Casing



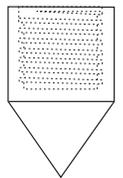
Flush Thread Screen



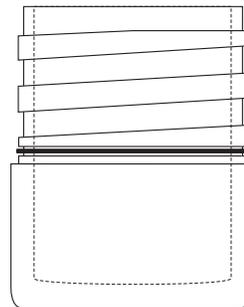
Female Cap (solid)



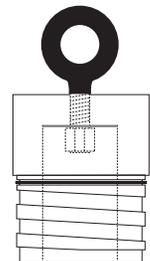
Male Plug (solid)



Female Point (solid)



Male Plug (molded)



Hoist Plug (solid)

## ENGINEERING SPECIFICATIONS

### PVC FLUSH THREAD MONITOR WELL SCREENS AND CASINGS

1. All PVC well screens and casings used on this project shall be manufactured by Monoflex and conform to ASTM F-480: "Standard Specification for Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR), SCH 40 and SCH 80."
2. PVC materials used to produce the raw PVC pipe shall meet ASTM Standard D-1784: "Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds for PVC Normal Impact, Type I Grade I (1120), cell classification 12454-B."
3. The finished schedules 40, 80, and 120 raw pipe shall meet the requirements of ASTM Standard D-1785: "Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120." In addition, both the raw material and the finished raw pipe shall be approved by the National Sanitation Foundation (NSF) for use in potable water applications.
4. The PVC pipe used to produce the well screens and casings shall be made from virgin plastic produced by the original compounder.
5. The pipe shall be homogeneous throughout and essentially uniform in color, opacity and density. The inside and outside surfaces shall be glossy in appearance and free of chalking, sticky or tacky material and visually free of oils, grease, dust and marks imparted as a result of the manufacturing process. In addition the pipe walls shall be free of ink, cracks, holes, blisters, voids, foreign inclusions, or other defects that are visible to the naked eye and that may affect the wall integrity. Machined slots or holes deliberately placed in the pipe are acceptable.
6. The outside diameters, wall thicknesses and out of roundness tolerances shall fall within the guidelines of Tables 1 & 2 of the ASTM F-480 Standard Specification when measured in accordance with Test Method D-2122.
7. All flush thread materials must be slotted and threaded without the use of any type of liquid coolant. Air is the only acceptable coolant.
8. Well screens 1/2" through 5" are to be slotted on 1/8" spacing. Well screens 6" and larger are to be slotted on 1/4" spacing unless otherwise specified. ALL well screens .040 slot and larger will be slotted on 1/4" spacing unless otherwise specified.
9. All screens and casings shall be nominal length except for 2" and 4" sch. 40 and 6" sch. 80 which shall be laying length. The term "laying length" refers to the overall length less the length required to complete the assembly.
10. The threads per inch for the various diameters and schedules of flush thread materials shall be the same as that produced by Monoflex, Bechtelsville, Pennsylvania or approved equal.
11. All flush thread screens & casings shall be supplied in individual polyethylene bags hermetically sealed at BOTH ends. Said products shall be shipped in cardboard boxes with properly secured ends. Each box shall display a color coded label containing a full description of the product inside. Said label must indicate the number of pieces per box, the threads per inch, the date of packaging, the signatures of the packer and QC inspector and show a drawing of the product.

**ORDER REQUIREMENTS CHECK-OFF SHEET**

**CASING REQUIREMENTS - FLUSH THREAD**

Length \_\_\_\_\_ Color (PVC = gray or white) \_\_\_\_\_  
 Schedule \_\_\_\_\_  Boxed  
 Diameter \_\_\_\_\_  Bundled  
 Individually Sealed  Skidded  
 Unsealed How Shipped \_\_\_\_\_  
 Thread Type & Threads Per Inch \_\_\_\_\_ Required Delivery Date \_\_\_\_\_

**WELL SCREEN REQUIREMENTS - ALL TYPES**

Length \_\_\_\_\_ How Shipped \_\_\_\_\_  
 Schedule \_\_\_\_\_ **End Type**  
 Diameter \_\_\_\_\_  Plain End  
 Slot Spacing \_\_\_\_\_  Belled End  
 # of Rows of Slots \_\_\_\_\_  Standard Bell Solvent Weld  
 Slot Size (in 1000ths of an inch) \_\_\_\_\_  F-480 Bell Solvent Weld Laying Length  
 Individually Sealed  Bell & Gasket  
 Unsealed  Threaded End  
 Boxed Thread Type & Threads Per Inch \_\_\_\_\_  
 Bundled Required Delivery Date \_\_\_\_\_  
 Skidded

**ORDER CHECK LIST**

- |                                     |                                |
|-------------------------------------|--------------------------------|
| Air/Gas Displacement Pumps          | Locking Plugs                  |
| Alconox®/Liqui-Nox®                 | Lufkin Tapes                   |
| Bailer Emptying Devices             | Lysimeters                     |
| Bailer Brushes                      | Lysimeter Accessories          |
| Bailer Cord                         | Manholes                       |
| Bailers (disposable)                | O-Rings                        |
| Bailers (reusable)                  | Oil/Water Interface Indicators |
| Bladder Pumps & Accessories         | Sparge Points                  |
| Bottom Fittings                     | Steel Locking Well Protectors  |
| Camera, Down-the-Hole Well Vu       | Vacuum Pumps                   |
| Centralizers                        | Wash-Down Valves               |
| Direct Push Expendable Steel Points | Water Level Indicators         |
| Dolphin Locks                       | Well Casings                   |
| Filter Sock                         | Well Screens                   |
| I.V.P. Pump Controller              |                                |

## SCH. 40 FLUSH THREAD PVC SCREEN AND CASING

### ❖ 1/2 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

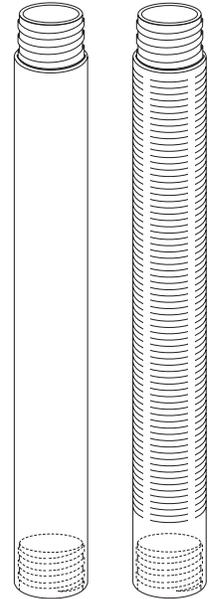
1/2" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A8CT4005025	1/2" x 2.5' Casing	25
A8CT4005005	1/2" x 5' Casing	25
A8CT4005010	1/2" x 10' Casing	25

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A8ST4005025 *	1/2" x 2.5' Screen	25
A8ST4005005 *	1/2" x 5' Screen	25
A8ST4005010 *	1/2" x 10' Screen	25

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING014	1/2" Buna-N O-ring	N/A
CAPA8F40050S	1/2" Flush Thread Cap - Solid	10
PLGA8M40050S	1/2" Flush Thread Plug - Solid	10



### ❖ 3/4 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

3/4" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

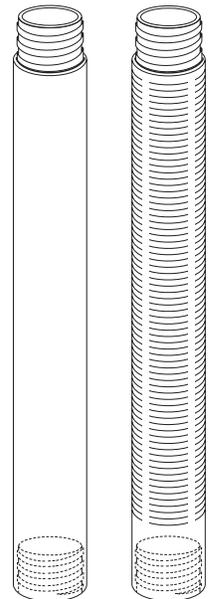
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A8CT4007525	3/4" x 2.5' Casing	25
A8CT4007505	3/4" x 5' Casing	25
A8CT4007510	3/4" x 10' Casing	25

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A8ST4007525 *	3/4" x 2.5' Screen	25
A8ST4007505 *	3/4" x 5' Screen	25
A8ST4007510 *	3/4" x 10' Screen	25

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING016	3/4" Buna-N O-ring	N/A
CAPA8F40075S	3/4" Flush Thread Cap - Solid	10
PLGA8M40075S	3/4" Flush Thread Plug - Solid	10
PNTA8 † 40075S	3/4" Flush Thread Point - Solid	10

† Specify M or F



**❖ 1 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

1" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

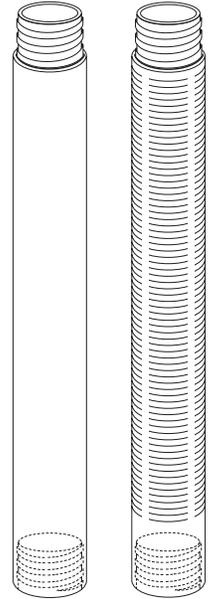
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A8CT4010025	1" x 2.5' Casing	20
A8CT4010005	1" x 5' Casing	20
A8CT4010010	1" x 10' Casing	20
A8CT4010020	1" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A8ST4010025 *	1" x 2.5' Screen	20
A8ST4010005 *	1" x 5' Screen	20
A8ST4010010 *	1" x 10' Screen	20
A8ST4010020 *	1" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING020	1" Buna-N O-ring	N/A
CAPA8F40100S	1" Flush Thread Cap - Solid	10
PLGA8M40100S	1" Flush Thread Plug - Solid	10
PNTA8 † 40100S	1" Flush Thread Point - Solid	10

† Specify M or F



**❖ 1.25 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

1.25" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

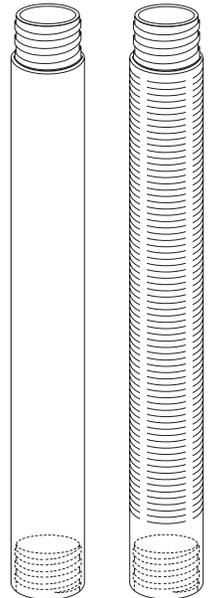
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A8CT4012525	1.25" x 2.5' Casing	12
A8CT4012505	1.25" x 5' Casing	12
A8CT4012510	1.25" x 10' Casing	12
A8CT4012520	1.25" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A8ST4012525 *	1.25" x 2.5' Screen	12
A8ST4012505 *	1.25" x 5' Screen	12
A8ST4012510 *	1.25" x 10' Screen	12
A8ST4012520 *	1.25" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING028	1.25" Buna-N O-ring	N/A
CAPA8F40125S	1.25" Flush Thread Cap - Solid	10
PLGA8M40125S	1.25" Flush Thread Plug - Solid	10
PNTA8 † 40125S	1.25" Flush Thread Point - Solid	10

† Specify M or F



❖ 1.50 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

1.5" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

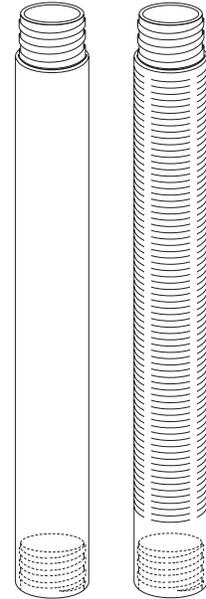
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A8CT4015025	1.50" x 2.5' Casing	10
A8CT4015005	1.50" x 5' Casing	10
A8CT4015010	1.50" x 10' Casing	10
A8CT4015020	1.50" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A8ST4015025 *	1.50" x 2.5' Screen	10
A8ST4015005 *	1.50" x 5' Screen	10
A8ST4015010 *	1.50" x 10' Screen	10
A8ST4015020 *	1.50" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING030	1.50" Buna-N O-ring	N/A
MLDCAPA8F40150	1.50" Flush Thread Cap - Molded	20
MLDPLGA8M40150	1.50" Flush Thread Plug - Molded	20
MLDPNTA8 † 40150	1.50" Flush Thread Point - Molded	20
PLGA8M40150HS	1.50" Hoist Plug - Male - Solid	N/A

† Specify M or F



❖ 2 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

2" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4020025	2" x 2.5' Casing	***
A2CT4020005	2" x 5' Casing	***
A2CT4020010	2" x 10' Casing	***
A2CT4020020	2" x 20' Casing	N/A

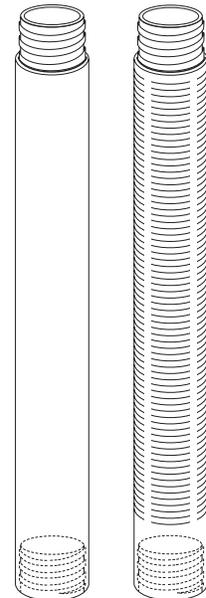
<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4020025 *	2" x 2.5' Screen	***
A2ST4020005 *	2" x 5' Screen	***
A2ST4020010 *	2" x 10' Screen	***
A2ST4020020 *	2" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING032	2" Buna-N O-ring	N/A
MLDCAPA2F40200	2" Flush Thread Cap - Molded	20
MLDPLGA2M40200	2" Flush Thread Plug - Molded	20
MLDPNTA2 † 40200	2" Flush Thread Point - Molded	20
PLGA2M40200HS	2" Hoist Plug - Male - Solid	N/A

† Specify M or F

\*\*\* For these items, see page 5 for Box Quantity Information



**❖ 2.50 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

2.5" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

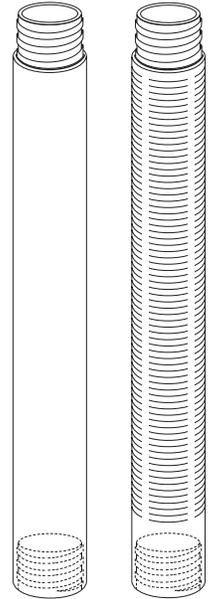
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4025025	2.50" x 2.5' Casing	5
A2CT4025005	2.50" x 5' Casing	5
A2CT4025010	2.50" x 10' Casing	5
A2CT4025020	2.50" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4025025 *	2.50" x 2.5' Screen	5
A2ST4025005 *	2.50" x 5' Screen	5
A2ST4025010 *	2.50" x 10' Screen	5
A2ST4025020 *	2.50" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING037	2.50" Buna-N O-ring	N/A
CAPA2F40250	2.50" Flush Thread Cap	20
PLGA2M40250	2.50" Flush Thread Plug	20
PNTA2 † 40250	2.50" Flush Thread Point	20
PLGA2M40250HS	2.50" Hoist Plug - Male - Solid	N/A

† Specify M or E



**❖ 3 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

3" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4030025	3" x 2.5' Casing	4
A2CT4030005	3" x 5' Casing	4
A2CT4030010	3" x 10' Casing	4
A2CT4030020	3" x 20' Casing	N/A

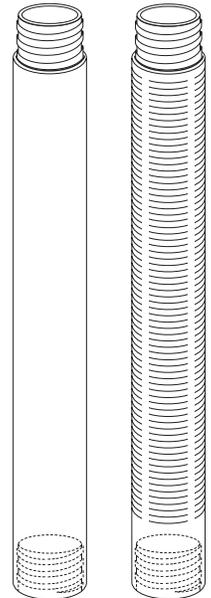
<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4030025 *	3" x 2.5' Screen	4
A2ST4030005 *	3" x 5' Screen	4
A2ST4030010 *	3" x 10' Screen	4
A2ST4030020 *	3" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING041	3" Buna-N O-ring	N/A
CAPA2F40300	3" Flush Thread Cap	20
PLGA2M40300	3" Flush Thread Plug	20
PNTA2 † 40300	3" Flush Thread Point	20
PLGA2M40300HS	3" Hoist Plug - Male - Solid	N/A

† Specify M or E

\*\*\* For these items, see page 5 for Box Quantity Information



**❖ 4 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

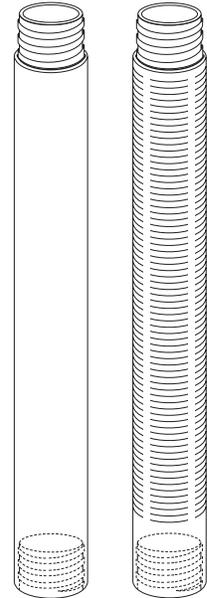
4" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4040025	4" x 2.5' Casing	***
A2CT4040005	4" x 5' Casing	***
A2CT4040010	4" x 10' Casing	***
A2CT4040020	4" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4040025 *	4" x 2.5' Screen	***
A2ST4040005 *	4" x 5' Screen	***
A2ST4040010 *	4" x 10' Screen	***
A2ST4040020 *	4" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING151	4" Buna-N O-ring	N/A
MLDCAPA2F40400	4" Flush Thread Cap - Molded	20
MLDPLGA2M40400	4" Flush Thread Plug - Molded	20
MLDPNTA2 † 40400	4" Flush Thread Point - Molded	20
PLGA2M40400HS	4" Hoist Plug - Male - Solid	N/A



**❖ 5 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

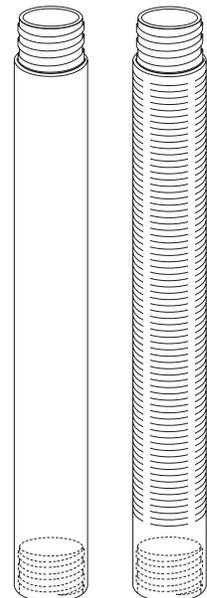
5" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4050025	5" x 2.5' Casing	1
A2CT4050005	5" x 5' Casing	1
A2CT4050010	5" x 10' Casing	1
A2CT4050020	5" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4050025 *	5" x 2.5' Screen	1
A2ST4050005 *	5" x 5' Screen	1
A2ST4050010 *	5" x 10' Screen	1
A2ST4050020 *	5" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING156	5" Buna-N O-ring
CAPA2F40500	5" Flush Thread Cap
PLGA2M40500	5" Flush Thread Plug
PLGA2M40500HS	5" Hoist Plug - Male - Solid
† Specify M or F	*** For these items, see page 5 for Box Quantity Information



**❖ 6 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

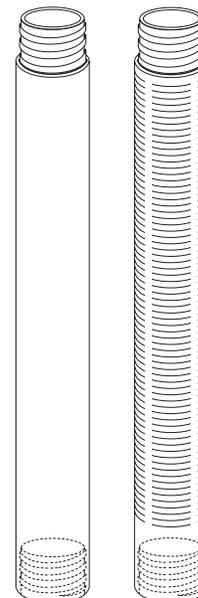
6" Schedule 40 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4060025	6" x 2.5' Casing	1
A2CT4060005	6" x 5' Casing	1
A2CT4060010	6" x 10' Casing	1
A2CT4060020	6" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4060025 *	6" x 2.5' Screen	1
A2ST4060005 *	6" x 5' Screen	1
A2ST4060010 *	6" x 10' Screen	1
A2ST4060020 *	6" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING158	6" Buna-N O-ring
CAPA2F40600	6" Flush Thread Cap
PLGA2M40600	6" Flush Thread Plug



**❖ 8 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

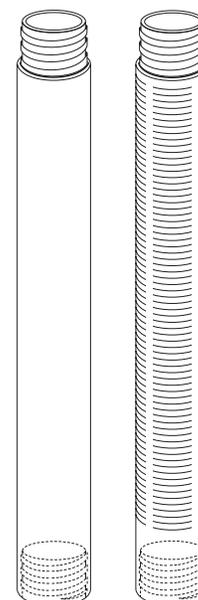
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4080025	8" x 2.5' Casing	1
A2CT4080005	8" x 5' Casing	1
A2CT4080010	8" x 10' Casing	1
A2CT4080020	8" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4080025 *	8" x 2.5' Screen	1
A2ST4080005 *	8" x 5' Screen	1
A2ST4080010 *	8" x 10' Screen	1
A2ST4080020 *	8" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING168	8" Buna-N O-ring
CAPA2F40800	8" Flush Thread Cap
PLGA2M40800	8" Flush Thread Plug



❖ 10 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

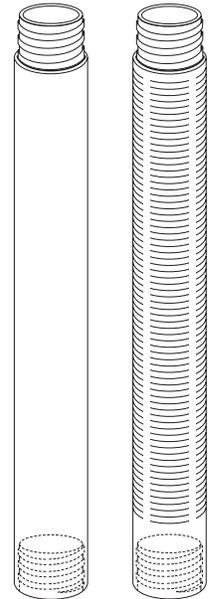
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4100025	10" x 2.5' Casing	N/A
A2CT4100005	10" x 5' Casing	N/A
A2CT4100010	10" x 10' Casing	N/A
A2CT4100020	10" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4100025 *	10" x 2.5' Screen	N/A
A2ST4100005 *	10" x 5' Screen	N/A
A2ST4100010 *	10" x 10' Screen	N/A
A2ST4100020 *	10" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING272	10" Buna-N O-ring
CAPA2F41000	10" Flush Thread Cap
PLGA2M41000	10" Flush Thread Plug



❖ 12 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)

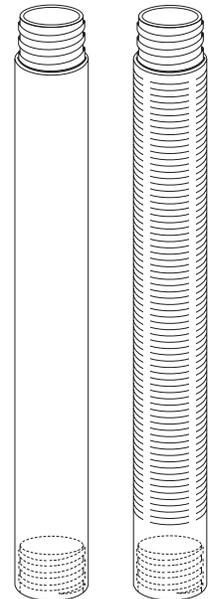
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4120025	12" x 2.5' Casing	N/A
A2CT4120005	12" x 5' Casing	N/A
A2CT4120010	12" x 10' Casing	N/A
A2CT4120020	12" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4120025 *	12" x 2.5' Screen	N/A
A2ST4120005 *	12" x 5' Screen	N/A
A2ST4120010 *	12" x 10' Screen	N/A
A2ST4120020 *	12" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING277	12" Buna-N O-ring
CAPA2F41200	12" Flush Thread Cap
PLGA2M41200	12" Flush Thread Plug



**❖ 14 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

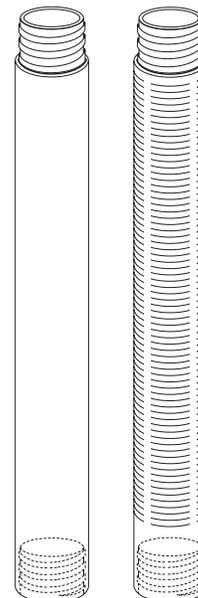
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4140025	14" x 2.5' Casing	N/A
A2CT4140005	14" x 5' Casing	N/A
A2CT4140010	14" x 10' Casing	N/A
A2CT4140020	14" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4140025 *	14" x 2.5' Screen	N/A
A2ST4140005 *	14" x 5' Screen	N/A
A2ST4140010 *	14" x 10' Screen	N/A
A2ST4140020 *	14" x 20' Screen	N/A

\* Specify *Slot Size*

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING281	14" Buna-N O-ring
CAPA2F41400	14" Flush Thread Cap
PLGA2M41400	14" Flush Thread Plug



**❖ 16 INCH - PVC - SCHEDULE 40 ❖ CLASS (02)**

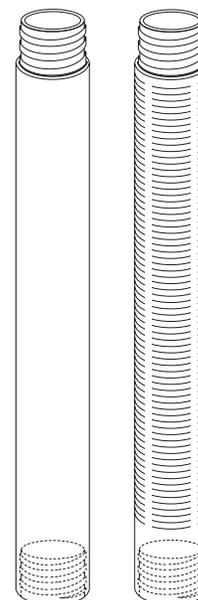
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT4160025	16" x 2.5' Casing	N/A
A2CT4160005	16" x 5' Casing	N/A
A2CT4160010	16" x 10' Casing	N/A
A2CT4160020	16" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST4160025 *	16" x 2.5' Screen	N/A
A2ST4160005 *	16" x 5' Screen	N/A
A2ST4160010 *	16" x 10' Screen	N/A
A2ST4160020 *	16" x 20' Screen	N/A

\* Specify *Slot Size*

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING	16" Buna-N O-ring
CAPA2F41600	16" Flush Thread Cap
PLGA2M41600	16" Flush Thread Plug



## SCH 80 FLUSH THREAD PVC SCREEN AND CASING

### ❖ 1/2 INCH - PVC - SCHEDULE 80 ❖

### CLASS (02)

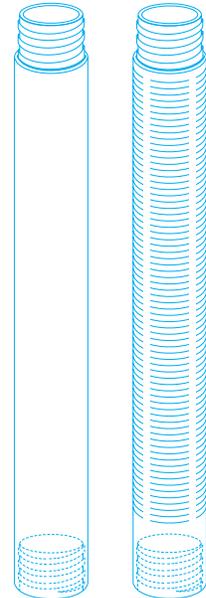
1/2" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A4CT8005025	1/2" x 2.5' Casing	25
A4CT8005005	1/2" x 5' Casing	25
A4CT8005010	1/2" x 10' Casing	25

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A4ST8005025 *	1/2" x 2.5' Screen	25
A4ST8005005 *	1/2" x 5' Screen	25
A4ST8005010 *	1/2" x 10' Screen	25

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING014	1/2" Buna-N O-ring	N/A
CAPA4F80050S	1/2" Flush Thread Cap - Solid	10
PLGA4M80050S	1/2" Flush Thread Plug - Solid	10



### ❖ 3/4 INCH - PVC - SCHEDULE 80 ❖

### CLASS (02)

3/4" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

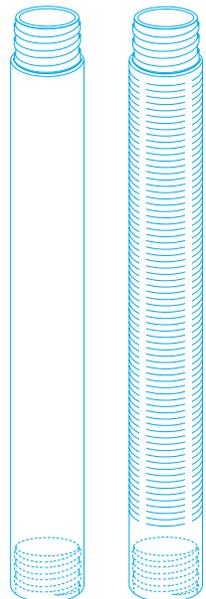
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A4CT8007525	3/4" x 2.5' Casing	25
A4CT8007505	3/4" x 5' Casing	25
A4CT8007510	3/4" x 10' Casing	25

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A4ST8007525 *	3/4" x 2.5' Screen	25
A4ST8007505 *	3/4" x 5' Screen	25
A4ST8007510 *	3/4" x 10' Screen	25

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING016	3/4" Buna-N O-ring	N/A
CAPA4F80075S	3/4" Flush Thread Cap - Solid	10
PLGA4M80075S	3/4" Flush Thread Plug - Solid	10
PNTA4 † 80075S	3/4" Flush Thread Point - Solid	10

† Specify M or E



❖ 1 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

1" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

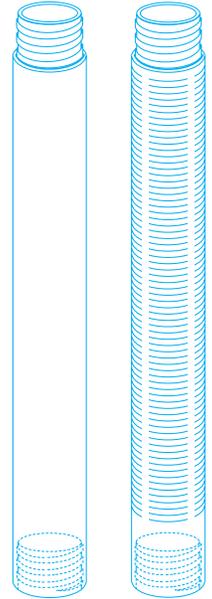
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A4CT8010025	1" x 2.5' Casing	20
A4CT8010005	1" x 5' Casing	20
A4CT8010010	1" x 10' Casing	20
A4CT8010020	1" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A4ST8010025 *	1" x 2.5' Screen	20
A4ST8010005 *	1" x 5' Screen	20
A4ST8010010 *	1" x 10' Screen	20
A4ST8010020 *	1" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING020	1" Buna-N O-ring	N/A
CAPA4F80100S	1" Flush Thread Cap - Solid	10
PLGA4M80100S	1" Flush Thread Plug - Solid	10
PNTA4 † 80100S	1" Flush Thread Point - Solid	10

† Specify M or F



❖ 1.25 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

1.25" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

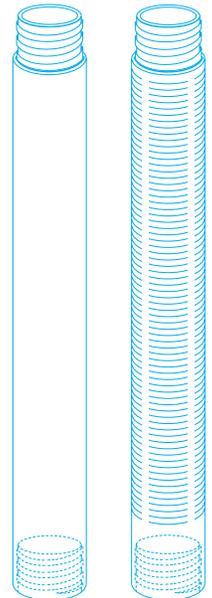
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8012525	1.25" x 2.5' Casing	12
A2CT8012505	1.25" x 5' Casing	12
A2CT8012510	1.25" x 10' Casing	12
A2CT8012520	1.25" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8012525 *	1.25" x 2.5' Screen	12
A2ST8012505 *	1.25" x 5' Screen	12
A2ST8012510 *	1.25" x 10' Screen	12
A2ST8012520 *	1.25" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING028	1.25" Buna-N O-ring	N/A
CAPA2F80125S	1.25" Flush Thread Cap - Solid	10
PLGA2M80125S	1.25" Flush Thread Plug - Solid	10
PNTA2 † 80125S	1.25" Flush Thread Point - Solid	10

† Specify M or F



❖ 1.50 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

1.5" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

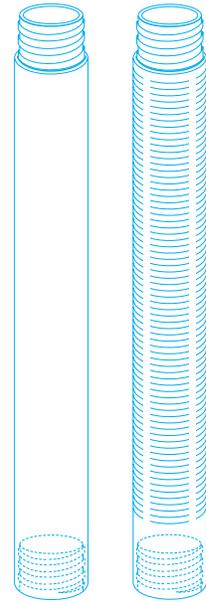
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8015025	1.50" x 2.5' Casing	10
A2CT8015005	1.50" x 5' Casing	10
A2CT8015010	1.50" x 10' Casing	10
A2CT8015020	1.50" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8015025 *	1.50" x 2.5' Screen	10
A2ST8015005 *	1.50" x 5' Screen	10
A2ST8015010 *	1.50" x 10' Screen	10
A2ST8015020 *	1.50" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING030	1.50" Buna-N O-ring	N/A
MLDCAPA2F80150	1.50" Flush Thread Cap - Molded	20
MLDPLGA2M80150	1.50" Flush Thread Plug - Molded	20
PNTA2 † 80150	1.50" Flush Thread Point	20
PLGA2M80150HS	1.50" Hoist Plug - Male - Solid	N/A

† Specify M or F



❖ 2 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

2" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8020025	2" x 2.5' Casing	***
A2CT8020005	2" x 5' Casing	***
A2CT8020010	2" x 10' Casing	***
A2CT8020020	2" x 20' Casing	N/A

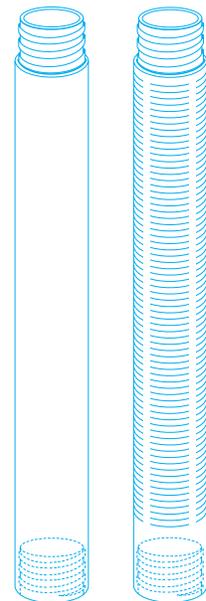
<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8020025 *	2" x 2.5' Screen	***
A2ST8020005 *	2" x 5' Screen	***
A2ST8020010 *	2" x 10' Screen	***
A2ST8020020 *	2" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING032	2" Buna-N O-ring	N/A
MLDCAPA2F80200	2" Flush Thread Cap - Molded	20
MLDPLGA2M80200	2" Flush Thread Plug - Molded	20
MLDPNTA2 † 80200	2" Flush Thread Point - Molded	20
PLGA2M80200HS	2" Hoist Plug - Male - Solid	N/A

† Specify M or F

\*\*\* For these items, see page 5 for Box Quantity Information



❖ 2.50 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

2.5" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

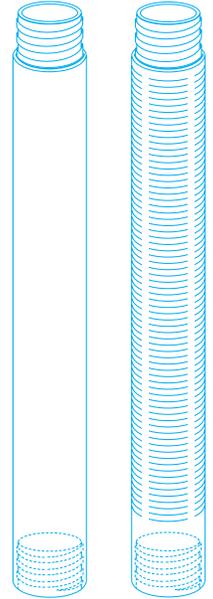
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8025025	2.50" x 2.5' Casing	5
A2CT8025005	2.50" x 5' Casing	5
A2CT8025010	2.50" x 10' Casing	5
A2CT8025020	2.50" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8025025 *	2.50" x 2.5' Screen	5
A2ST8025005 *	2.50" x 5' Screen	5
A2ST8025010 *	2.50" x 10' Screen	5
A2ST8025020 *	2.50" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING036	2.50" Buna-N O-ring	N/A
CAPA2F80250	2.50" Flush Thread Cap	20
PLGA2M80250	2.50" Flush Thread Plug	20
PNTA2 † 80250	2.50" Flush Thread Point	20
PLGA2M80250HS	2.50" Hoist Plug - Male - Solid	N/A

† Specify M or E



❖ 3 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

3" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

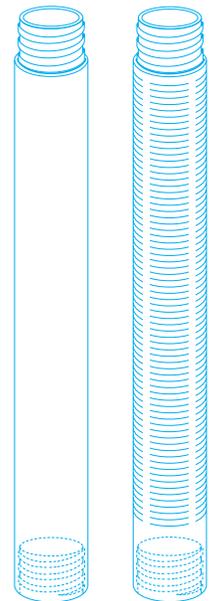
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8030025	3" x 2.5' Casing	4
A2CT8030005	3" x 5' Casing	4
A2CT8030010	3" x 10' Casing	4
A2CT8030020	3" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8030025 *	3" x 2.5' Screen	4
A2ST8030005 *	3" x 5' Screen	4
A2ST8030010 *	3" x 10' Screen	4
A2ST8030020 *	3" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING041	3" Buna-N O-ring	N/A
CAPA2F80300	3" Flush Thread Cap	20
PLGA2M80300	3" Flush Thread Plug	20
PNTA2 † 80300	3" Flush Thread Point	20
PLGA2M80300HS	3" Hoist Plug - Male - Solid	N/A

† Specify M or E



❖ 4 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

4" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

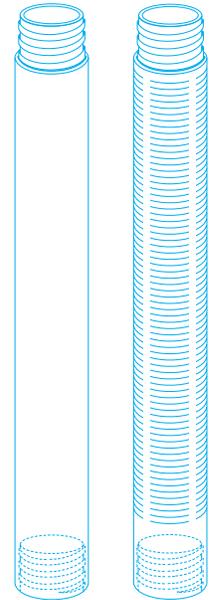
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8040025	4" x 2.5' Casing	***
A2CT8040005	4" x 5' Casing	***
A2CT8040010	4" x 10' Casing	***
A2CT8040020	4" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8040025 *	4" x 2.5' Screen	***
A2ST8040005 *	4" x 5' Screen	***
A2ST8040010 *	4" x 10' Screen	***
A2ST8040020 *	4" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>PIECES PER BOX</u>
ORING155	4" Buna-N O-ring	N/A
MLDCAPA2F80400	4" Flush Thread Cap - Molded	20
MLDPLGA2M80400	4" Flush Thread Plug - Molded	20
MLDPNTA2 † 80400	4" Flush Thread Point - Molded	20
PLGA2M80400HS	4" Hoist Plug - Male - Solid	N/A

† Specify M or F



❖ 5 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

5" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

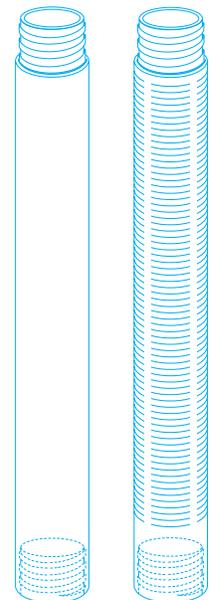
<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8050025	5" x 2.5' Casing	1
A2CT8050005	5" x 5' Casing	1
A2CT8050010	5" x 10' Casing	1
A2CT8050020	5" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8050025 *	5" x 2.5' Screen	1
A2ST8050005 *	5" x 5' Screen	1
A2ST8050010 *	5" x 10' Screen	1
A2ST8050020 *	5" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING242	5" Buna-N O-ring
CAPA2F80500	5" Flush Thread Cap
PLGA2M80500	5" Flush Thread Plug
PLGA2M80500HS	5" Hoist Plug - Male - Solid

\*\*\* For these items, see page 5 for Box Quantity Information



❖ 6 INCH - PVC - SCHEDULE 80 ❖

CLASS (02)

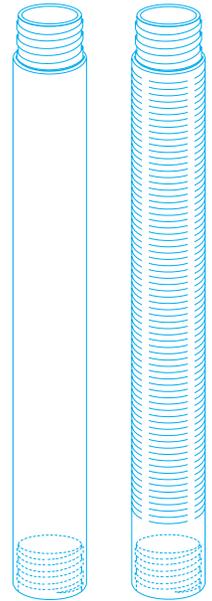
6" Schedule 80 Buna-N O-rings are included with screen and casing orders at no additional charge. Replacement Buna-N O-rings may be purchased separately.

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8060025	6" x 2.5' Casing	1
A2CT8060005	6" x 5' Casing	1
A2CT8060010	6" x 10' Casing	1
A2CT8060020	6" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8060025 *	6" x 2.5' Screen	1
A2ST8060005 *	6" x 5' Screen	1
A2ST8060010 *	6" x 10' Screen	1
A2ST8060020 *	6" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING251	6" Buna-N O-ring
CAPA2F80600	6" Flush Thread Cap
PLGA2M80600	6" Flush Thread Plug



❖ 8 INCH - PVC - SCHEDULE 80 ❖

CLASS (02)

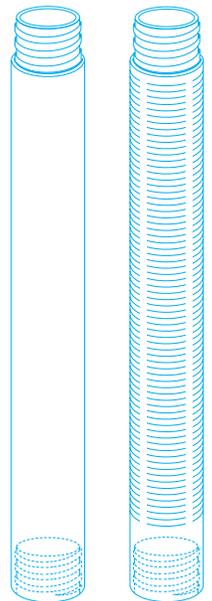
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8080025	8" x 2.5' Casing	1
A2CT8080005	8" x 5' Casing	1
A2CT8080010	8" x 10' Casing	1
A2CT8080020	8" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8080025 *	8" x 2.5' Screen	1
A2ST8080005 *	8" x 5' Screen	1
A2ST8080010 *	8" x 10' Screen	1
A2ST8080020 *	8" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING262	8" Buna-N O-ring
CAPA2F80800	8" Flush Thread Cap
PLGA2M80800	8" Flush Thread Plug



❖ 10 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

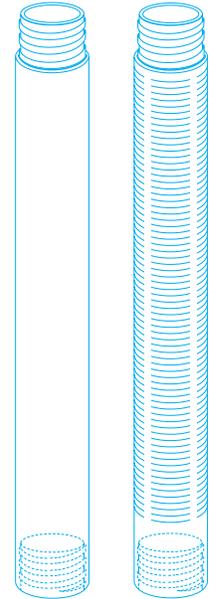
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8100025	10" x 2.5' Casing	N/A
A2CT8100005	10" x 5' Casing	N/A
A2CT8100010	10" x 10' Casing	N/A
A2CT8100020	10" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8100025 *	10" x 2.5' Screen	N/A
A2ST8100005 *	10" x 5' Screen	N/A
A2ST8100010 *	10" x 10' Screen	N/A
A2ST8100020 *	10" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING270	10" Buna-N O-ring
CAPA2F81000	10" Flush Thread Cap
PLGA2M81000	10" Flush Thread Plug



❖ 12 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

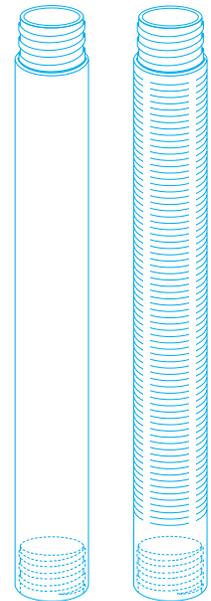
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8120025	12" x 2.5' Casing	N/A
A2CT8120005	12" x 5' Casing	N/A
A2CT8120010	12" x 10' Casing	N/A
A2CT8120020	12" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8120025 *	12" x 2.5' Screen	N/A
A2ST8120005 *	12" x 5' Screen	N/A
A2ST8120010 *	12" x 10' Screen	N/A
A2ST8120020 *	12" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING276	12" Buna-N O-ring
CAPA2F81200	12" Flush Thread Cap
PLGA2M81200	12" Flush Thread Plug



❖ 14 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

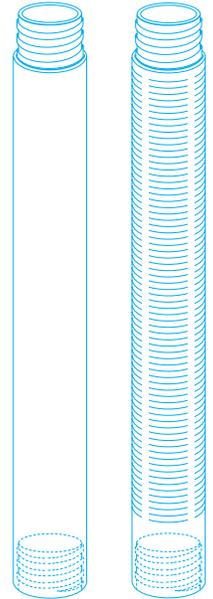
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8140025	14" x 2.5' Casing	N/A
A2CT8140005	14" x 5' Casing	N/A
A2CT8140010	14" x 10' Casing	N/A
A2CT8140020	14" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8140025 *	14" x 2.5' Screen	N/A
A2ST8140005 *	14" x 5' Screen	N/A
A2ST8140010 *	14" x 10' Screen	N/A
A2ST8140020 *	14" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING281	14" Buna-N O-ring
CAPA2F81400	14" Flush Thread Cap
PLGA2M81400	14" Flush Thread Plug



❖ 16 INCH - PVC - SCHEDULE 80 ❖ CLASS (02)

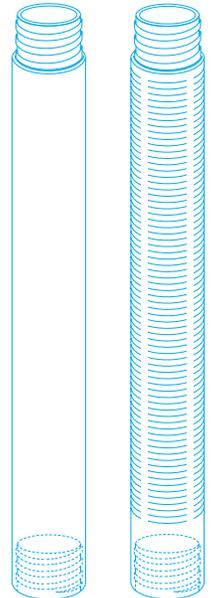
Buna-N O-rings sold separately (not included as standard).

<u>PART NUMBER</u>	<u>FLUSH THREAD CASING</u>	<u>PIECES PER BOX</u>
A2CT8160025	16" x 2.5' Casing	N/A
A2CT8160005	16" x 5' Casing	N/A
A2CT8160010	16" x 10' Casing	N/A
A2CT8160020	16" x 20' Casing	N/A

<u>PART NUMBER</u>	<u>FLUSH THREAD SCREEN</u>	<u>PIECES PER BOX</u>
A2ST8160025 *	16" x 2.5' Screen	N/A
A2ST8160005 *	16" x 5' Screen	N/A
A2ST8160010 *	16" x 10' Screen	N/A
A2ST8160020 *	16" x 20' Screen	N/A

\* Specify Slot Size

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ORING	16" Buna-N O-ring
CAPA2F81600	16" Flush Thread Cap
PLGA2M81600	16" Flush Thread Plug



## OPEN END SLOTTED PVC WELL SCREEN CLASS (03)

- ✓ Monoflex open end slotted well screen is commonly used for water wells, horizontal drainage, sewage filtration, lake intake screens and de-watering projects. Well screens are available in 1/2" through 24" diameters, and in various pipe schedules and SDR's.
- ✓ Manufactured from PVC pipe, Monoflex well screen is continuous slotted to precision tolerances by specially designed automated machines. A complete fabrication service allows us to slot any portion of any size listed below to your specifications. Custom products may incur a set up charge.
- ✓ Slot sizes .006 - .500 are available in various diameters and schedules. Standard slot spacing is 1/8" on 1/2" through 5" diameter screens and 1/4" spacing is standard on 6" through 24" diameter screens. Many other slot spacings, (3/16", 3/4", 7/8", etc.), and row configurations are available. **Standard screen lengths are 2.5', 5', 10', and 20'. Other lengths are available, call for price.**

### SCHEDULE (40)

#### PART NUMBER\*\*\*

OES40050	†	*
OES40075	†	*
OES40100	*	*
OES40125	*	*
OES40150	*	*
OES40200	*	*
OES40250	*	*
OES40300	*	*
OES40400	*	*
OES40500	*	*
OES40600	*	*
OES40800	*	*
OES41000	*	*
OES41200	*	*
OES41400	*	*
OES41600	*	*
OES41800	*	*
OES42000	*	*
OES42400	*	*

#### DIAMETER

1/2"
3/4"
1"
1-1/4"
1-1/2"
2"
2-1/2"
3"
4"
5"
6"
8"
10"
12"
14"
16"
18"
20"
24"

### SCHEDULE (80)

#### PART NUMBER\*\*\*

OES80050	†	*
OES80075	†	*
OES80100	*	*
OES80125	*	*
OES80150	*	*
OES80200	*	*
OES80250	*	*
OES80300	*	*
OES80400	*	*
OES80500	*	*
OES80600	*	*
OES80800	*	*
OES81000	*	*
OES81200	*	*
OES81400	*	*
OES81600	*	*
OES81800	*	*
OES82000	*	*
OES82400	*	*

#### DIAMETER

1/2"
3/4"
1"
1-1/4"
1-1/2"
2"
2-1/2"
3"
4"
5"
6"
8"
10"
12"
14"
16"
18"
20"
24"

\* Specify Length & Slot Size

\*\*\*Add "T" or "P" suffix to designate point (T) or plug (P).

† Maximum length is 10' on these sizes.

For Box Quantity see page 5.

## BELLED ONE END SLOTTED PVC WELL SCREEN

Belled slotted well screen available in most sizes listed above in standard bell or F-480 belled one end. Call Monoflex customer service for price and availability.



**PVC SLIP FITTINGS**

**CLASS (07)**



<u>SLIP PLUGS</u>		<u>QTY</u>
<u>SCH 40</u>	<u>SIZE</u>	<u>Box</u>
40PL2	1/2"***	--
40PL3	3/4"	50
40PL4	1"	100
40PL5	1-1/4"	50
40PL6	1-1/2"	25
40PL8	2"	25
40PL12	3"	10
40PL16	4"	5
40PL20	5"	4
40PL24	6"	5
40PL32	8"	4
40PL40	10"	2
40PL48	12"	2
40PL56	14"*	--
40PL64	16"*	--
40PL72	18"*	--
40PL80	20"*	--
40PL96	24"*	--

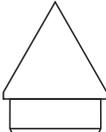
\* Plate style. Not sold separately.

\*\* Not sold separately, manufactured from gray PVC barstock.

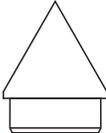


<u>SLIP PLUGS</u>		<u>QTY</u>
<u>SCH 80</u>	<u>SIZE</u>	<u>Box</u>
80PL3	3/4"	50
80PL4	1"	50
80PL5	1-1/4"	25
80PL6	1-1/2"	25
80PL8	2"	25
80PL12	3"	10
80PL16	4"	5
80PL20	5"†	--
80PL24	6"†	--
80PL32	8"†	--
80PL40	10"†	--
80PL48	12"†	--

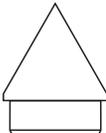
† Pipe turned out. Not sold separately.



<u>SLIP POINTS</u>		<u>QTY</u>
<u>SCH 40</u>	<u>SIZE</u>	<u>Box</u>
40PT4	1"	100
40PT5	1-1/4"	50
40PT6	1-1/2"	50
40PT8	2"	50
40PT12	3"	10
40PT16	4"	5



<u>SLIP POINTS</u>		<u>QTY</u>
<u>SCH 80</u>	<u>SIZE</u>	<u>Box</u>
80PT5	1-1/4"	25
80PT6	1-1/2"	25
80PT8	2"	25



<u>SLIP POINTS</u>		<u>QTY</u>
<u>SDR 26</u>	<u>SIZE</u>	<u>Box</u>
160PT5	1-1/4"	25
160PT6	1-1/2"	25



<u>SLIP PLUGS</u>		<u>QTY</u>
<u>SDR 26</u>	<u>SIZE</u>	<u>Box</u>
160PL5	1-1/4"	25
160PL6	1-1/2"	25
160PL8	2"	25
160PL12	3"	10

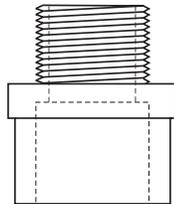
Items identified as "not sold separately" are machined to fit and sold only as an assembled Monoflex well screen.

**PVC SLIP FITTINGS & ADAPTERS CLASS (07)**

**MALE**

**ADAPTERS**

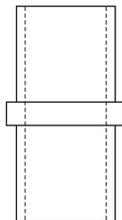
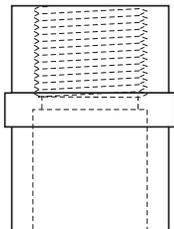
	<u>SIZE</u>
40MA2	1/2"
40MA3	3/4"
40MA4	1"
40MA5	1-1/4"
40MA6	1-1/2"
40MA8	2"
40MA12	3"
40MA16	4"
40MA24	6"
40MA32	8"



**FEMALE**

**ADAPTERS**

	<u>SIZE</u>
40FA2	1/2"
40FA3	3/4"
40FA4	1"
40FA5	1-1/4"
40FA6	1-1/2"
40FA8	2"
40FA12	3"
40FA16	4"
40FA24	6"
40FA32	8"



**INTERNAL SLIP COUPLINGS**

<u>SCH 40 x SCH 40</u>	<u>SIZE</u>	<u>QTY</u>	<u>BOX</u>
ISC11/4S4	1-1/4" x 1-1/4"	10	
ISC11/2S4	1-1/2" x 1-1/2"	10	
ISC2S4	2" x 2"	10	

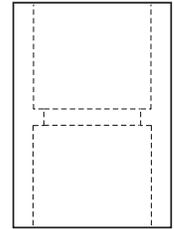
**INTERNAL SLIP COUPLINGS**

<u>SCH 40 x SDR 26</u>	<u>SIZE</u>
ISC11/2S4XS160	1-1/2" x 1-1/2"

**SLIP**

**COUPLINGS**

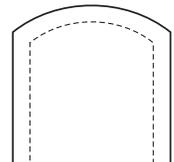
	<u>SIZE</u>
40SC2	1/2"
40SC3	3/4"
40SC4	1"
40SC5	1-1/4"
40SC6	1-1/2"
40SC8	2"
40SC12	3"
40SC16	4"
40SC20	5"
40SC24	6"
40SC32	8"
40SC40	10"
40SC48	12"



**SLIP CAPS**

**SCH 40**

	<u>SIZE</u>
40CAP2	1/2"
40CAP3	3/4"
40CAP4	1"
40CAP5	1-1/4"
40CAP6	1-1/2"
40CAP8	2"
40CAP10	2-1/2"
40CAP12	3"
40CAP16	4"
40CAP24	6"
40CAP32	8"
40CAP40	10"
40CAP48	12"

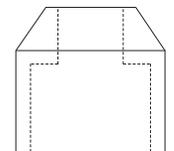


Larger sizes available

**REDUCING**

**COUPLING**

	<u>SIZE</u>
RDCP4X2SXS	4" x 2"

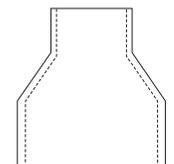


**REDUCING**

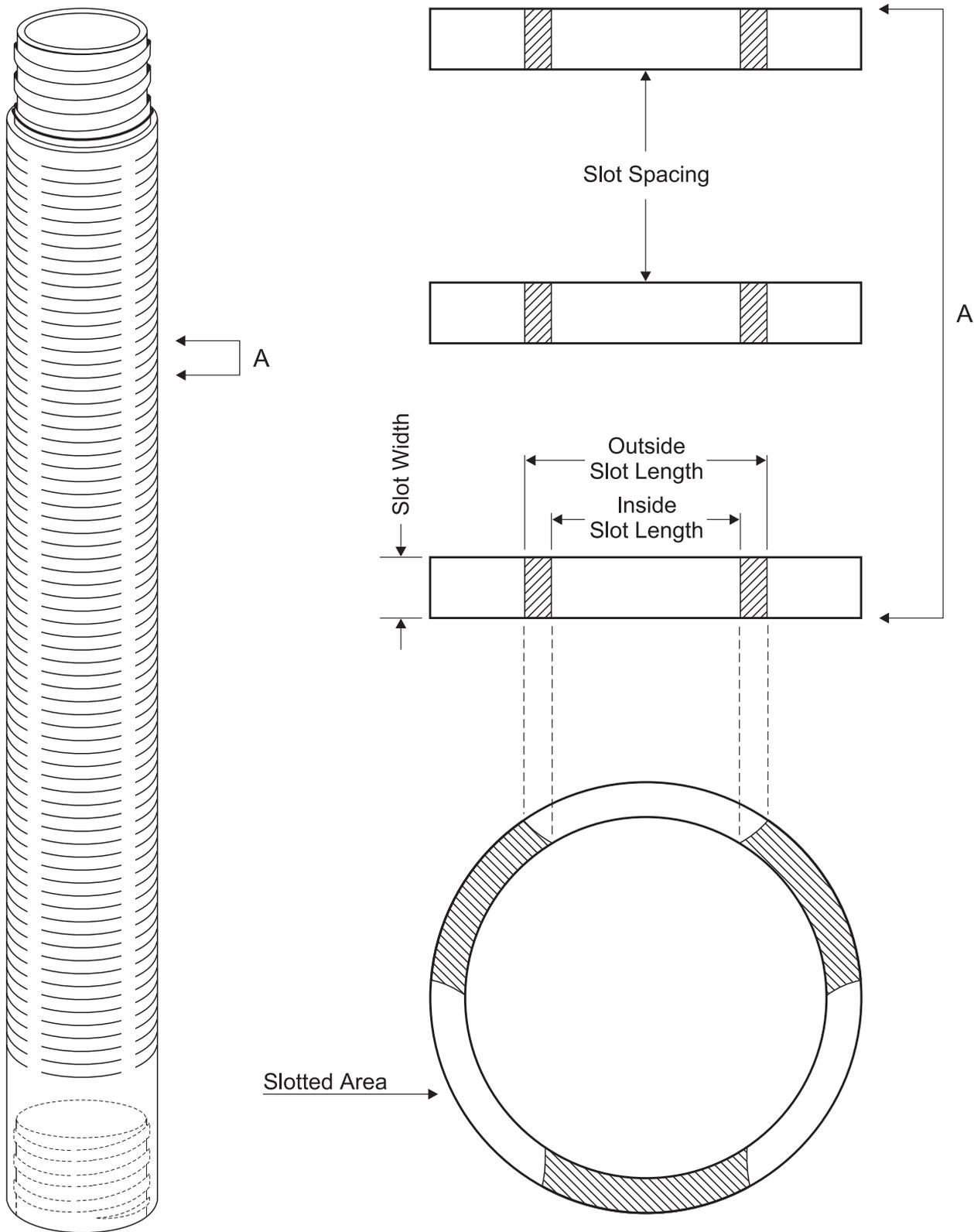
**COUPLING**

	<u>SIZE</u>
RDCP4X2CL	4" x 2"

Clean line style



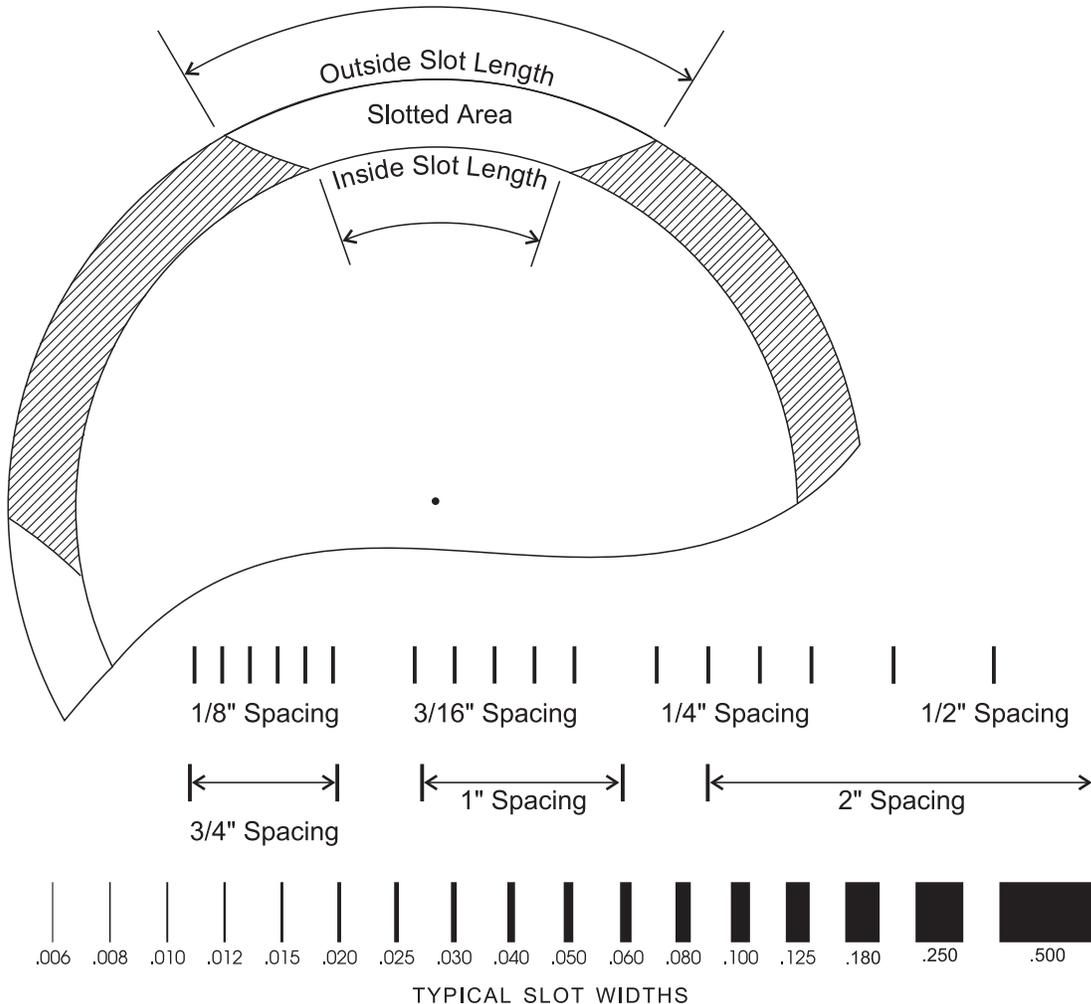
# ANATOMY OF SLOTTED PIPE



Cross-sectional View Through Slots

# SLOTTED PIPE REQUEST FOR QUOTATION

Company Name: \_\_\_\_\_ Contact: \_\_\_\_\_  
 Address: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: (        ) \_\_\_\_\_ Fax: (        ) \_\_\_\_\_ Date: \_\_\_\_\_  
 Diameter: \_\_\_\_\_ Sch. / SDR: \_\_\_\_\_ O.D.: \_\_\_\_\_ I.D.: \_\_\_\_\_ Min. Wall: \_\_\_\_\_  
 Material: \_\_\_\_\_ QTY: \_\_\_\_\_ Ends: \_\_\_\_\_ Lengths: \_\_\_\_\_  
 Slot Width: \_\_\_\_\_ Outside Slot Length: \_\_\_\_\_ Slot Spacing: \_\_\_\_\_  
 No. Rows of Slots: \_\_\_\_\_ Row Locations & Positions: \_\_\_\_\_  
 NOA (In Square Inches/Foot): \_\_\_\_\_ NOA (as a % of inside surface area): \_\_\_\_\_  
 Ink: \_\_\_\_\_ Gray: \_\_\_\_\_ White: \_\_\_\_\_ Drawing: \_\_\_\_\_  
 Packaging: \_\_\_\_\_ Sip Via: \_\_\_\_\_



**PERFORATED PIPE REQUEST FOR QUOTATION**

Date: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

Job Name: \_\_\_\_\_ Location: \_\_\_\_\_

Contact: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

**Perforated Pipe Specifications:**

Dia.: \_\_\_\_\_ Sch.: \_\_\_\_\_ SDR: \_\_\_\_\_ Length: \_\_\_\_\_ Color: \_\_\_\_\_

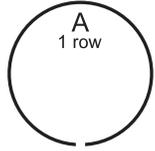
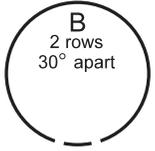
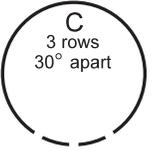
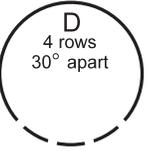
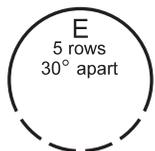
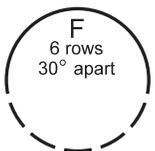
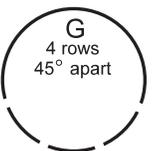
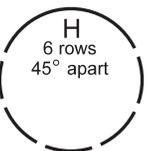
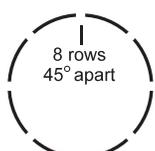
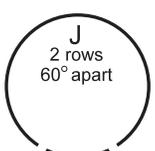
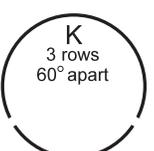
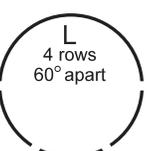
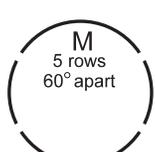
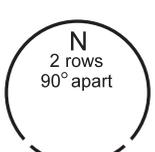
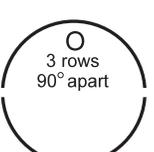
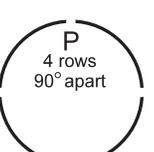
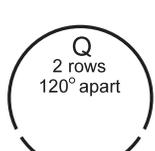
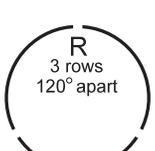
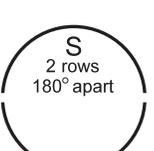
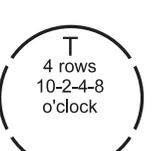
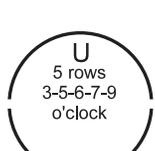
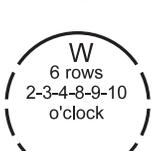
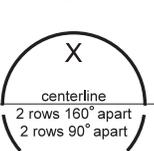
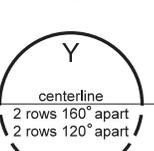
#Pcs.: \_\_\_\_\_ Footage: \_\_\_\_\_ Material: \_\_\_\_\_ *All PVC will be quoted as Type I unless otherwise specified.*

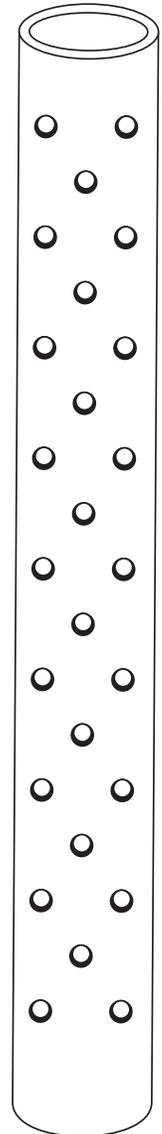
Pipe ends: \_\_\_\_\_ #/rows/holes: \_\_\_\_\_ Configuration of rows: \_\_\_\_\_

Hole dia.: \_\_\_\_\_ Hole spacing (center to center): \_\_\_\_\_ Pattern: Staggered  Non-staggered

Pipe furnished by: MONOFLEX  Distributor  Drawing attached?  Yes  No

Please select one of the following patterns by drawing a circle around it. Many other patterns are available. If none of these patterns satisfy your requirements please submit a drawing. Note 30° = 1 hour on the clock.

<p><b>A</b> 1 row</p> 	<p><b>B</b> 2 rows 30° apart</p> 	<p><b>C</b> 3 rows 30° apart</p> 	<p><b>D</b> 4 rows 30° apart</p> 
<p><b>E</b> 5 rows 30° apart</p> 	<p><b>F</b> 6 rows 30° apart</p> 	<p><b>G</b> 4 rows 45° apart</p> 	<p><b>H</b> 6 rows 45° apart</p> 
<p><b>I</b> 8 rows 45° apart</p> 	<p><b>J</b> 2 rows 60° apart</p> 	<p><b>K</b> 3 rows 60° apart</p> 	<p><b>L</b> 4 rows 60° apart</p> 
<p><b>M</b> 5 rows 60° apart</p> 	<p><b>N</b> 2 rows 90° apart</p> 	<p><b>O</b> 3 rows 90° apart</p> 	<p><b>P</b> 4 rows 90° apart</p> 
<p><b>Q</b> 2 rows 120° apart</p> 	<p><b>R</b> 3 rows 120° apart</p> 	<p><b>S</b> 2 rows 180° apart</p> 	<p><b>T</b> 4 rows 10-2-4-8 o'clock</p> 
<p><b>U</b> 5 rows 3-5-6-7-9 o'clock</p> 	<p><b>W</b> 6 rows 2-3-4-8-9-10 o'clock</p> 	<p><b>X</b> centerline 2 rows 160° apart 2 rows 90° apart</p> 	<p><b>Y</b> centerline 2 rows 160° apart 2 rows 120° apart</p> 



## U-PACK® WELL SCREENS - SCH. 40 CLASS (02)

- ✓ Monoflex U-Pack® Well Screens offer an economical solution for installing wells where a normal sand pack is not feasible. Typical applications include horizontal and angled wells, artesian wells, rock wells, jetted wells, open excavations, silty and fine grained soils, heaving sands, industrial filtration, and the relining of deteriorated wells.
- ✓ U-Pack® well screens consist of an outer PVC well screen and a centralized inner PVC well screen.
- ✓ U-Pack® well screens are shipped fully assembled and ready to pack. Since they are shipped empty, freight costs are reduced and ease of handling is increased. These units are filled on site with a clean filter media before, during, or after the well is drilled. A different filter media may be used for each hole depending on the well requirements.
- ✓ All materials are clean, ink free, NSF approved, and no glues or solvents are used in the manufacture or assembly of these units.
- ✓ U-Pack® well screens are available from 1/2" to 6" diameters in a variety of lengths, slot sizes, and slot configurations. Standard threads conform to ASTM F-480. Standard slot spacings are 1/8" and 1/4". While .010 and .020 are the most common slot sizes, other slot sizes are available.
- ✓ Flush Thread U-Pack® screens are compatible with our PVC flush thread casings. Units can be ordered with flush thread caps or female flush thread points for the bottom.

PART NUMBER	SLOT SIZE	NOMINAL SIZE	TOTAL LENGTH	OUTER PIPE		INNER PIPE		LBS. EACH
				O.D.	I.D.	O.D.	I.D.	
FP4010X00505 *	*	1" x 1/2"***	5'	1.315	1.169	.840	.608	3
FP4010X00510 *	*	1" x 1/2"***	10'	1.315	1.169	.840	.608	5
FP4015X7505 *	*	1-1/2" x 3/4"	5'	1.900	1.592	1.050	.810	6
FP4015X7510 *	*	1-1/2" x 3/4"	10'	1.900	1.592	1.050	.810	11
FP4020X07505 *	*	2" x 3/4"	5'	2.375	2.049	1.050	.810	7
FP4020X07510 *	*	2" x 3/4"	10'	2.375	2.049	1.050	.810	13
FP4020X01005 *	*	2" x 1"	5'	2.375	2.049	1.315	1.033	8
FP4020X01010 *	*	2" x 1"	10'	2.375	2.049	1.315	1.033	15
FP4030X0205 *	*	3" x 2"	5'	3.500	3.042	2.375	2.049	12
FP4030X0210 *	*	3" x 2"	10'	3.500	3.042	2.375	2.049	23
FP4040X0205 *	*	4" x 2"	5'	4.500	3.998	2.375	2.049	15
FP4040X0210 *	*	4" x 2"	10'	4.500	3.998	2.375	2.049	29
FP4050X0405 *	*	5" x 4" †	5'	5.563	5.017	4.500	3.998	24
FP4050X0410 *	*	5" x 4" †	10'	5.563	5.017	4.500	3.998	45
FP4060X0405 *	*	6" x 4"	5'	6.625	6.031	4.500	3.998	30
FP4060X0410 *	*	6" x 4"	10'	6.625	6.031	4.500	3.998	58



\* Specify Slot Size

\*\*1" FL Plant utilizes SDR 21; WI & PA Plant utilize Schedule 40.

† Will fit inside 6 1/4" hollow stem augers.

**Note:** If more than one unit is to be installed per well, order double female flush thread couplings to attach one unit to the next. Monoflex flush thread wash down valves may also be used to assist in the placement of these screens.

Sold in "J" Box quantities.

### Double Female Flush Thread Couplings

PART NUMBER	SIZE	TPI
FP40050DFFTC	1/2"	8
FP40075DFFTC	3/4"	8
FP40100DFFTC	1"	8
FP40150DFFTC	1-1/2"	8
FP40200DFFTC	2"	2
FP40400DFFTC	4"	2

**SUBMERSIBLE PUMP SCREENS CLASS (03)**

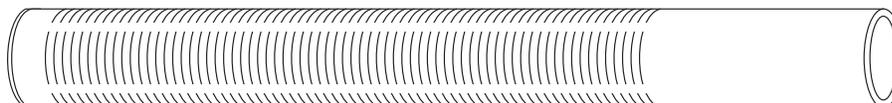
Monoflex Submersible Pump Screens are used to protect submersible pumps in wells, lakes, ponds, tanks, excavations and other locations where sand and other foreign matter may clog pump impellers. Each unit consists of a 4" Sch. 40 slotted PVC well screen with a slip plug glued in one end and a high impact ABS well seal in the opposite end. The standard well seal is a Campbell Manufacturing PS4X1SS with stainless steel nuts, bolts and washers. The well seal accommodates a 1" drop pipe and has a 1/2" vent tapping and a 3/4" cable hole. Other well seals are available.



<u>PART NUMBER</u>	<u>SLOT</u>	<u>SPACING</u>	<u>ROWS</u>	<u>LENGTH</u>
SPS4X60X010	.010	1/8"	5	5 ft.
SPS4X60X015	.015	1/8"	5	5 ft.
SPS4X60X020	.020	1/8"	5	5 ft.
SPS4X60X060	.060	1/4"	5	5 ft.

**PETROLEUM OBSERVATION WELL SCREENS CLASS (03)**

All Monoflex Petroleum Observation Well Screens are constructed of Schedule 40 PVC pipe unless otherwise specified. Custom slotted screens to meet EPA, state or local specifications are also available.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
PW4020015 * 10P	2" x 15' Sch. 40 - 10' Slotted with Plug**
PW4040013 * 10P	4" x 13' Sch. 40 - 10' Slotted with Plug**
PW4060013 * 10P	6" x 13' Sch. 40 - 10' Slotted with Plug
PW4080013 * 10P	8" x 13' Sch. 40 - 10' Slotted with Plug
PW4100013 * 10P	10" x 13' Sch. 40 - 10' Slotted with Plug
PW4120013 * 10P	12" x 13' Sch. 40 - 10' Slotted with Plug

\* Specify Slot Size  
\*\* Points also available for 2" & 4"

**HIGH DENSITY POLYETHYLENE CLASS (02 & 03)**

Monoflex HDPE Screen and Casing is available in a variety of diameters, SDR's and lengths with either flush thread joints for ease of assembly or as plain end for butt fusing in the field. Polyethylene pipes are available as slotted screen or with round drilled holes. 2" SDR 11 is available slotted with a filter sock covering to provide high net open area while maintaining fine filtration. This configuration incorporates a Monoflex custom 4 TPI thread. Pricing is based on the job requirements.



High Density Polyethylene Flush Thread Screen



High Density Polyethylene Open End Screen



High Density Polyethylene Flush Thread Screen with Filter Sock

# CLEAR PVC PIPE, FITTINGS AND VISUALLY CLEAR FLUSH THREAD CASING

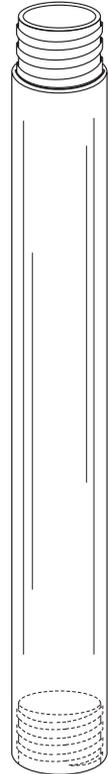
## Material

PVC Clear piping is produced from a rigid, virgin Polyvinyl Chloride (PVC) compound with a Cell Classification of 12454 per ASTM D1784. This material enables the clear piping to safely carry a maximum service temperature of 140°F when appropriate temperature/pressure de-rating factors are applied. In addition to exhibiting desirable physical properties and optimum transparency, this material complies with the provisions of Title 21 of the United States FDA Code of Federal Regulations, and is safe for use in food contact applications.

Clear PVC pipe provides the same reliable chemical resistance properties that PVC piping has demonstrated over the years. In general, it is resistant to most acids, bases, salts and oxidants. Detailed chemical resistance data is available and should be referenced for proper material selection. Since this material is a nonconductor, it is not subject to electrolytic or galvanic corrosion. This material is compatible with standard PVC pipe, fittings, valves, and flush thread screens and casings, and can be incorporated into existing PVC systems via the solvent cement joining process, or threaded together using ASTM F-480 threads. In addition to a full line of clear fittings for most applications, an endless array of standard PVC components and accessories is readily available.

## Product Ratings

Clear PVC pipe is manufactured to Schedule 40 IPS dimensions in 1/4" through 10" diameters, and Schedule 80 IPS dimensions in 1/4" to 6" diameters. This provides sufficient wall thickness for most pressure applications without jeopardizing clarity. As a rigid PVC piping, clear PVC maintains its integrity in harsh environments. It is suitable for use in industrial, food service, and environmental applications. Flush thread piping is non-pressure rated. Refer to the table below for dimensions, tolerances and pressure ratings for Sch. 40 non-threaded pipes. Please call for Schedule 80 specifications.



### Sch. 40 Dimensions and Pressure Ratings

Nominal Pipe Size (in.)	O.D.	Average I.D.	Minimum Wall	Nominal Weight Lbs./ft.	Max. W.P. PSI*
1/4	.540	.354	.088	.081	390
3/8	.675	.483	.091	.109	310
1/2	.840	.608	.109	.161	300
3/4	1.050	.810	.113	.214	240
1	1.315	1.033	.133	.315	220
1-1/4	1.660	1.364	.140	.426	180
1-1/2	1.900	1.592	.145	.509	170
2	2.375	2.049	.154	.682	140
2-1/2	2.875	2.445	.203	1.076	150
3	3.500	3.042	.216	1.409	130
3-1/2	4.000	3.520	.226	1.697	120
4	4.500	3.998	.237	2.006	110
6	6.625	6.031	.280	3.535	90
6 x 1/8†	6.625	6.355	.125	1.647	45
8	8.625	7.943	.322	5.305	80
10	10.750	9.976	.365	7.532	70

### Physical Properties

Property	Value	Test Method
Cell Classification	12454	ASTM D1784
Specific Gravity	1.337 g/cm <sup>3</sup> @ 73°F	ASTM D792
Tensile Strength @ yield	7094 psi @ 73°F	ASTM D638
Modulus of Elasticity	435,000 psi	ASTM D638
Izod Impact	.76 ft-lbs / inch notch @ 73°F	ASTM D256
Coefficient of Linear Expansion	3.77 x 10 <sup>-5</sup> in / in °F	ASTM D696
Flammability	V-O	UL-94
Hardness, Shore D	76 ± 3	ASTM D2240

### De-rating Factor

These temperature de-rating factors are to be multiplied by the pressure ratings listed to determine the maximum pressure rating of the system at elevated temperatures.

Operating Temp. (°F)	De-rating Factor
73	1.00
80	.88
90	.75
100	.62
110	.51
120	.40
130	.31
140	.22

\* Pressure ratings shown are for water, non-shock @ 73°F

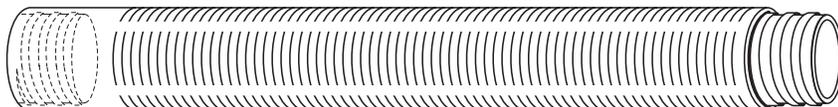
† This size does not meet Schedule 40 criteria.



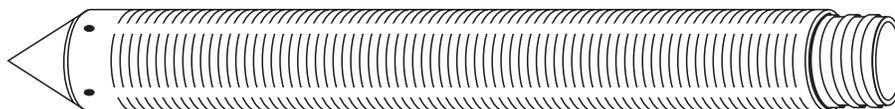
# WELL SCREEN PRODUCTS COMPARISON GUIDE



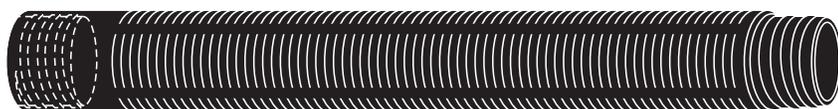
Flush Thread PVC Casing



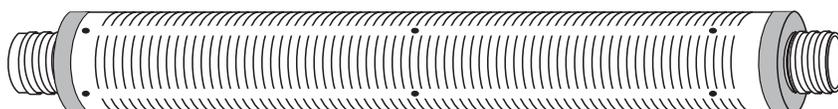
Flush Thread PVC Well Screen



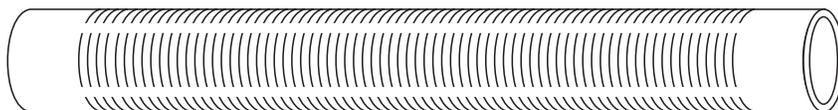
Flush Thread PVC Well Screen With Riveted Point



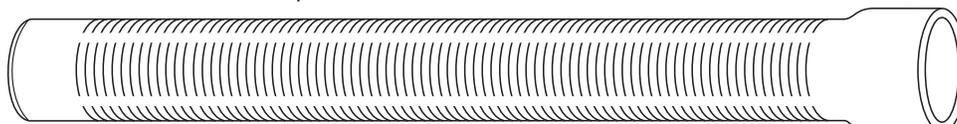
Flush Thread HDPE Well Screen



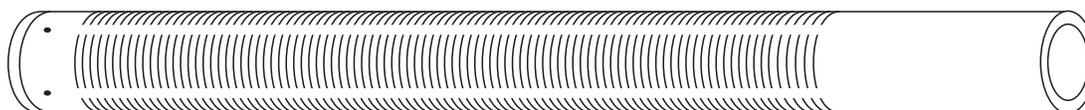
Flush Thread PVC U-Pack Well Screen



Open End PVC Well Screen



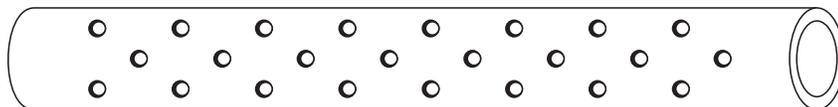
Belled One End PVC Well Screen With F-480 Bell



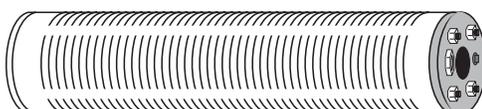
PVC Petroleum Observation Well Screen With Riveted Plug



Open End HDPE Well Screen



Perforated Pipe With Round Drilled Holes



PVC Submersible Pump Screen

## 418XA SERIES MORRISON MANHOLES CLASS (08)

The 418XA series manholes are limited access style manholes. These manholes are designed to be an access port to monitoring wells that are completed below grade in driveways. They are designed to help prevent unauthorized access. The cover has the words "MONITORING WELL" cast in place. The cover bolts to the rim creating a tight seal and is accessible only with a wrench. Locator lugs on the cover assure proper realignment to the rim when placing the cover back on. The cover seal keeps surface water from entering the well. A Buna-N seal fits into a machined groove on the cover making replacement easy without the need for any tools or adhesives.



Covers and rings may be ordered painted white with a black triangle. Manholes with heavy duty skirts, welded skirts, as well as the fully cast 519 series manholes shown below are also available. All Morrison manholes have been independently tested to meet AASHTO standard for "H-20" truck loadings, ASTM A48, and section 206-3 of the American Public Works Association. Each manhole is individually boxed.

<u>PART NUMBER</u>	<u>SIZE</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>	<u>PCS./PALLET</u>
MM418XA710	7" x 10"	Limited Access, Standard Skirt	8	60
MM418XA9X7	9" x 7"	Limited Access, Standard Skirt	17	60
MM418XA9X12	9" x 12"	Limited Access, Standard Skirt	20	36
MM418XAHD9X12	9" x 12"	Limited Access, Heavy Duty Skirt*	22	36
MM418XAW9X12	9" x 12"	Limited Access, Welded Heavy Skirt	22	36
MM418XA12X7	12" x 7"	Limited Access, Standard Skirt	27	60
MM418XA12X12	12" x 12"	Limited Access, Standard Skirt	30	36-48

\* Wrench included.

## 519 SERIES MORRISON MANHOLES CLASS (08)

The 519 series manholes are rugged manholes featuring a full cast iron body and lid with no seams, rivets, or sheet metal. Completely watertight including special O-ring seal for the bolt. The words "MONITORING WELL" are cast into the lid and a black and white decal (official API warning) is permanently embedded on the surface. Single stainless steel bolt for limited access remains attached when the cover is removed. Brass spider holds cover uniformly tight to the seal. This combination of brass and stainless eliminates the chance of a bolt rusting tight to an iron thread. The manhole cover is machined to allow replacement of the Buna-N seal without the use of glue. A removable brass label plate is attached to the rim to allow for stamping of the well number. Morrison manholes have been independently tested to meet AASHTO standard for "H-20" truck loadings, ASTM A48, and section 206-3 of the American Public Works Association. Each 519 series manhole is individually boxed and supplied with a wrench.



<u>PART NUMBER</u>	<u>SIZE</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>	<u>PCS./PALLET</u>
MM5199X7	9" x 7"	Fully Cast Watertight Manhole	32	48
MM51912X7	12" x 7"	Fully Cast Watertight Manhole	67	24

Other manholes & locking vaults in various sizes and styles also available. Call for prices and availability.

# EMCO WHEATON MONITORING WELL MANHOLES

## CLASS (08)

These Monitoring Well Manholes have a painted ductile iron lid and rim with a black triangle. The bolt-down units have water tight lids that are equipped with stainless steel bolts. Alignment tabs are also included on the bolt-down units. Monitoring Well Manholes have an optional steel, polyethylene, or heavy-duty, 100% welded skirt. Each unit is fully painted inside and out, and meets AASHTO H20 wheel loading requirements. An ID tag large enough for all new regulatory requirements is available on the 8" models. The 8" lay-in models have a large notch that eliminates broken screwdrivers.



<u>PART NUMBER</u>	<u>STYLE</u>	<u>SKIRT TYPE</u>	<u>OVERALL HEIGHT</u>	<u>CLEARHOLE ID</u>	<u>MAX DIA.</u>	<u>LBS. EA.</u>
6" MEWA0721-106	Bolt-Down	Steel	7.5"	4.5"	6.7"	6.3
8" MEWA0721-008L	Lay-in	Poly	12.0"	7.8"	9.9"	10.4
MEWA0721-188L	Lay-in	Steel	9.0"	7.8"	9.9"	11.9
MEWA0721-008	Bolt-down	Poly	12.0"	6.0"	9.9"	11.7
MEWA0721-088	Bolt-down	Poly	8.0"	6.0"	9.9"	9.5
MEWA0721-108	Bolt-down	Steel	12.5"	6.0"	9.9"	13.7
MEWA0721-188	Bolt-down	Steel	9.0"	6.0"	9.9"	12.8
MEWA0721-208	Bolt-down	HD Steel	12.5"	6.0"	9.9"	12.7
12" MEWA0721-001	Bolt-down	Poly	12.0"	9.4"	15.1"	23.0
MEWA0721-101	Bolt-down	Steel	12.0"	9.4"	15.1"	28.8
MEWA0721-119	Bolt-down	Steel	19.0"	9.4"	15.1"	36.3
MEWA0721-128	Bolt-down	Poly	8.0"	9.4"	15.1"	21.9
MEWA0722-001	Bolt-down	Poly	12.0"	9.4"	15.1"	24.3
w/ locking cap and collar						
18" MEWA0721-018	Bolt-down	Steel	12.0"	13.8"	18.3"	51.0
MEWA0721-118	Bolt-down	Steel	18.0"	13.8"	18.3"	58.3

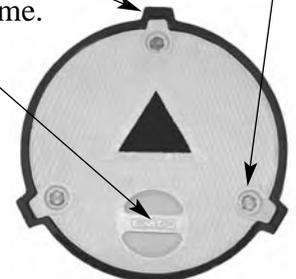
Optional Item: MEWA0720-001 Locking Cap and Collar



Stainless steel bolts - no more rusted bolts.

Alignment tabs - bolt holes line up the first time, every time.

Built-in side handle on 18" models - one hand opening and positioning.  
Other styles available.

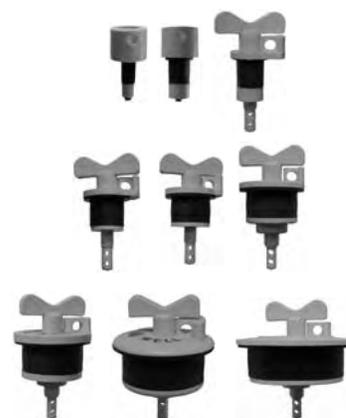


Other manholes available include:  
Standard manholes 8" through 42",  
Composite manholes 38" and 42",  
Square manholes and vaults 18" and 24".

**ECONOMY LOCKING PLUGS****CLASS (08)**

Monoflex heavy duty locking plugs have no metal parts, are simple to use and are a reliable locking system. Easily disassembled in the field. High-Tech liquid tight seamless dual rubber gaskets. Accepts #1 or #3 type pad locks or lock-out tags. Strong instrument tethering tool; dual use. Manufactured from an engineering grade polymer blend commonly used to replace steel gears in industry, resistant to most chemicals, unaffected by freezing or high temperatures. Easily convertible for pressure/vacuum gauges and threaded line fittings. Advanced engineered design will not separate in well. Smooth acting ergo grip easy on, easy off wing nut. Large easy to read well I.D. lettering. Bright safety color. Flush OD design for easy well installation. Designed, engineered and manufactured in the U.S.A.

<u>PART NUMBER</u>	<u>FITS PIPE SIZE</u>	<u>BOX QTY.</u>	<u>OUNCE EA.</u>
LPLG0050-40/80	1/2" Schedule 40/80	25/50	1.7
LPLG0075-40	3/4" Schedule 40	25/50	1.9
LPLG0075-80	3/4" Schedule 80	25/50	1.9
LPLG0100-40/80	1" Schedule 40/80	50/100/200/400	1.7
LPLG0125-40/80	1.25" Schedule 40/80	50/100/200	1.9
LPLG0150-40/80	1.50" Schedule 40/80	50/100/200	2.1
LPLG0200-40	2" Schedule 40	50/100/200	3.4
LPLG0200-80	2" Schedule 80	50/100/200	3.3
LPLG0250-40/80	2.50" Schedule 40/80	50/100	4.6
LPLG0300-40/80	3" Schedule 40/80	25/100	6.4
LPLG0400-40	4" Schedule 40	25/50	9.9
LPLG0400-80	4" Schedule 80	25/100	9.2
LPLG0500-40/80	5" Schedule 40/80	25	16
LPLG0600-40/80	6" Schedule 40/80	12	27
LPLG0800-40/80	8" Schedule 40/80	<i>Coming Soon</i>	

**LOCKING PLUGS - MONOFLEX****CLASS (08)**

Monoflex economy locking plugs are constructed of high impact ABS plastic. These units fit the inside diameter of Schedule 40 PVC or steel wells. An expanding urethane gasket seals the well. Each locking plug will accommodate a padlock for vandal resistant security.

<u>PART NUMBER</u>	<u>SIZE</u>	<u>QTY BOX</u>	<u>LBS. EA.</u>
LPLG8	8"	1	3.00



8" Plug

**LOCKING PLUGS - MORRISON BROS. CLASS (08)**

Designed to provide a watertight, tamper-proof seal at the top of a monitoring or observation well. Simply slip the plug into the open end of the well pipe. Then, as you turn the lockable brass wing bolt, the Buna-N seal expands against the inside of the pipe, holding the plug securely in place. To complete the installation and lock the well, slip a standard padlock through the matching holes in the stainless steel lock lever and brass wing bolt. All three sizes fit Schedule 40 PVC or steel, and Schedule 5 or Schedule 10 stainless steel pipe. An optional adapter ring is needed to fit 4" stainless steel wells. These units do not fit Schedule 80 pipes. The "Blaze Orange" glass-filled nylon top is easy to spot, sheds water, and features molded-in "TEST WELL-NO FILL" warning. 6" locking plugs are available with or without a bailer ring attached.

<u>PART NUMBER</u>	<u>SIZE</u>	<u>QTY BOX</u>	<u>BAILER RING</u>	<u>LBS. EA.</u>
MM678XA2	2"	20	No	.50
MM678XA4	4"	20	No	.75
MM678XA6	6"	12	No	2.00
MM678XA6R	6"	12	Yes	2.00



MM678XA2

MM678XA6

MM678XA4

**DOLPHIN PADLOCK**

LOCK Brass Dolphin Padlock (Keyed Alike) with 2 keys



**CLASS (08)**

**LOCKING WELL PROTECTORS**

**CLASS (08)**

Rugged Monoflex steel locking well protectors provide vandal proof protection for monitoring wells. Wide hinges secure the lid and precisely aligned tabs make them easy to lock. All steel well protectors are primer painted. Custom lengths available. **Brass Dolphin padlocks sold separately.**



<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
LWPS4	4" Square x 5' Long - Steel	23.5
LWPS6	6" Square x 5' Long - Steel	51
LWPS8	8" Square x 5' Long - Steel	100

Round aluminum well protectors are available upon request.

LOCK Brass Dolphin Padlock (Keyed Alike) with 2 keys

**--- ALL LOCKING WELL PROTECTORS ARE F.O.B. FACTORY ---**

**ROYER ALUMINUM LOCKING WELL CAPS CLASS 08**

This Aluminum Locking Well Cap is ideal for Monitoring Wells and prevents vandalism. Each cap features three Allen set screws to secure ring to casing and has a Permanent Well Log Pad inside of cover to record Well Depth, Amount of Casing, Gallons per Minute and Date.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LCAP8R	Locking Cap, 8-3/4"
LCAP10R	Locking Cap, 10-3/4"
LCAP12R	Locking Cap, 12-3/4"

NOTE: Other sizes available.



**WATER LEVEL INDICATOR****CLASS (08)**

All units utilize a dog-bone style measuring tape to alleviate tape from sticking to the side of the well casing. Wires are stainless steel. Tape graduations are in 1/100ths of a foot. Water Level Indicator reels are aluminum and powder coated for long life durability. No need to take reel apart to change battery or electronics. 9V battery can be changed in seconds. Quick connect electronics can be completely replaced in less than a minute. Sensitivity dial allows probe's sensitivity to be reduced when there is cascading water in a well. Audible and visual signals indicate the water level. A test button to check battery, indicator light and audible signal is mounted on the faceplate. Standard probe diameter is 5/8". 7/16" diameter probe is available upon request. Water Level Indicators are also available in metric graduations.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
WLI100F-01	100' Water Level Indicator	6.2
WLI200F-01	200' Water Level Indicator	7.4
WLI300F-01	300' Water Level Indicator	8.6
WLI400F-01	400' Water Level Indicator	10.8
WLI500F-01	500' Water Level Indicator	12.0
WLIRCASE100/500	Water Level Indicator Case	

**WATER/OIL INTERFACE INDICATOR****CLASS (08)**

Constructed same as the Water Level Indicator. Unique sensitivity control button enables quick readings through heavy oils and prevents false positives of water and hydrocarbons. Detects floating or sinking hydrocarbons (LNAPLs or DNAPLs). Detects the presence of water in storage tanks. Measures as little as .010 or .25mm of floating product (sheen). Designed to keep working despite normal wear and tear. Powers down to protect battery life after 10 minutes.

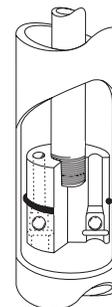
<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
WOLI100F-01	100' Water/Oil Level Indicator	7.0
WOLI200F-01	200' Water/Oil Level Indicator	8.5
WOLI300F-01	300' Water/Oil Level Indicator	10.0
WOLI400F-01	400' Water/Oil Level Indicator	13.0
WOLI500F-01	500' Water/Oil Level Indicator	14.5
WOLIRCASE100/500	Water/Oil Level Indicator Case	



**PVC SURGE BLOCKS**

**CLASS (06)**

Monoflex PVC surge blocks are used for well development or well rehabilitation. All units are constructed of solid PVC and machined to match the applicable inside diameter of Schedule 40 PVC wells. Internally threaded with female pipe thread for use with steel pipe extensions.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
SB2XFPT3/4	2" Solid Surge Block with 3/4" female NPT	.35
SB4XFPT1	4" Solid Surge Block with 1" female NPT	1.65
SB6XFPT1 1/4	6" Solid Surge Block with 1-1/4" female NPT	4.00

**STAINLESS STEEL CENTRALIZERS**

**CLASS (08)**

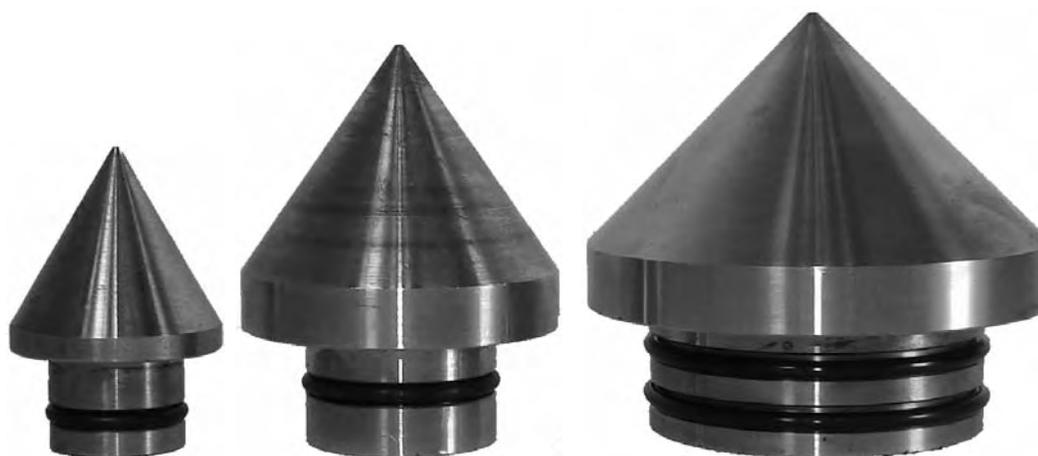
Monoflex adjustable centralizers hold screens and casings in place to eliminate off center placement during installation. Constructed from high quality spring stainless steel, Monoflex centralizers resist corrosion and will not contaminate the well. Stainless steel worm gears tighten easily for quick attachment to the screens and casings.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
SSC2X12	2" Adjusts up to 12" diameter hole	.40
SSC3X12	3" Adjusts up to 12" diameter hole	.55
SSC4X12	4" Adjusts up to 12" diameter hole	.60
SSC5X12	5" Adjusts up to 12" diameter hole	.60
SSC6X20	6" Adjusts up to 20" diameter hole	.70
SSC8X24	8" Adjusts up to 24" diameter hole	1.00
SSC10X26	10" Adjusts up to 26" diameter hole	1.00
SSC12X28	12" Adjusts up to 28" diameter hole	1.00

**DIRECT PUSH STEEL POINTS**

**CLASS 00**



We now offer 3 different sizes of quality expendable steel push points for the Direct Push Market. Manufactured in Bechtelsville, PA Sold in box quantities only.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>BOX QTY.</u>
DP158SJ	1 5/8" steel with o-ring	25
DP212SJ	2 1/2" steel with o-ring	20
DP312SJ	3 1/2" steel with 2 o-rings	10

**PVC WASH-DOWN VALVES**

**CLASS (06)**

Monoflex PVC wash-down valves are designed to position well screens in sandy soils and to thin drilling fluids. A ball valve opens under pressure from a water stream and rises into a closed position when the water is turned off. The internal female pipe thread (right hand thread) allows the water pipe to bypass the screen for jetting. The outer diameter may be flush thread, or slip. Outside diameters are the same as the equivalent nominal pipe size.

**FLUSH THREAD WASH-DOWN VALVES**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
WDVA2M40200	2" 2TPI male Sch. 40 flush thread WDV with 3/4" female NPT
WDVA2M40200AF	2" 2TPI male Sch. 40 flush thread WDV without fem. NPT thread
WDVA2M40400	4" 2TPI male Sch. 40 flush thread WDV with 1-1/4" female NPT
WDVA2M40400AF	4" 2TPI male Sch. 40 flush thread WDV without fem. NPT thread



**SLIP WASH-DOWN VALVES**

(SLIP BY SLIP COUPLING REQUIRED)

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
WDVS2	2.375 O.D. wash-down valve with 3/4" female NPT
WDVS2-AF	2.375 O.D. wash-down valve without female NPT thread
WDVS4	4.500 O.D. wash-down valve with 1-1/4" female NPT
WDVS4-AF	4.500 O.D. wash-down valve without female NPT thread



**NPT WASH-DOWN VALVES**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
WDVNPTM40200AF	2.375 O.D. wash-down valve with 2" male NPT thread and with no 3/4" female NPT. Other sizes in this configuration may be available. Call for price and availability.

**MOLDED WASH-DOWN VALVES\***

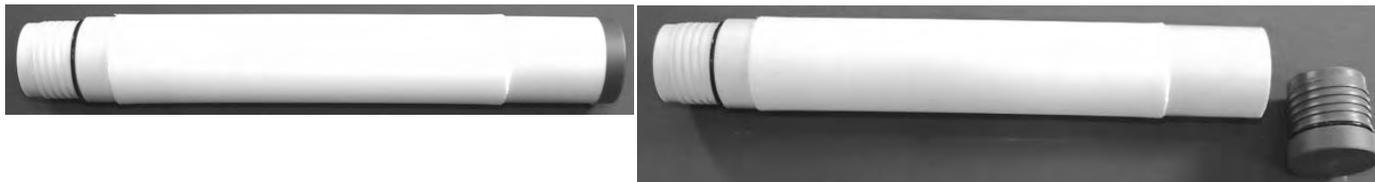
<u>PART NUMBER</u>	<u>DESCRIPTION</u>
WDVMLDS2	2.750 O.D.* molded wash-down valve with 1" female NPT. Integral 2" slip coupling, can be glued onto Schedule 40 or Schedule 80 PVC pipe. This unit incorporates a molded tooth style that provides a very effective cutting action when jetting in well screens.
WDVMLDNPTM2	2.750" O.D.* molded wash-down valve with 1" female NPT. A piece of 2" Schedule 40 PVC with 2" male NPT threads is glued into the integral 2" slip coupling. This unit incorporates a molded tooth style that provides a very effective cutting action when jetting in well screens.



\* **Note:** O.D. of this unit, 2.750, is larger than the nominal O.D. of 2" pipe which is 2.375.

**SPARGE POINTS /SCHUMAPROBE**

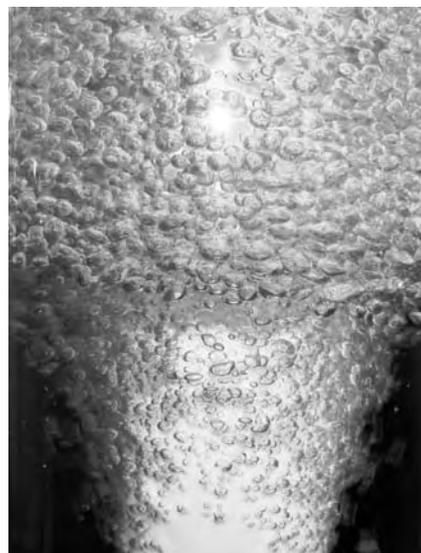
**CLASS (09)**



The Sparge Point (aka Schumasoil®, Schumaprobe or Piezometer) pictured above is a short sample for illustrative purposes. It shows the optional male flush threaded plug.



Bubbles with Monoflex Well Screen



Bubbles with Monoflex 40 Micron Sparge Point

Our newly designed Sparge Point is unique in that it is the only Sparge Point on the market that has a male flush thread on one end and female flush thread on the other end. These units may be screwed together for longer lengths or placed at various depths within the well.

They may be screwed to 8 TPI, ASTM F-480, flush threaded PVC or flush threaded stainless steel casing. Adapters from flush thread to NPT thread are available. These will accept your choice of flush thread plugs, caps or points. All fittings sold separately.

- Size: 1" (nominal)
- Schedule 40
- Nominal O.D.: 1.315
- Maximum O.D.: 1.415
- Pore Size: 40 Micron, 20 Micron optional
- Body Length: 24"
- Overall Length: 28"

**PART NUMBER**

PIEZPLY1.3X1X24A8  
 PIEZPLY1.3X1X24A8X  
 Call for other sizes

**DESCRIPTION**

1" X 24" 40 Micron Sparge Point  
 1" X 24" 40 Micron Sparge Point (Box Quantity of 25 each)

**POLYESTER FILTER SOCK**

**CLASS (08)**

Monoflex filter sock is a continuous-woven, seamless, 100% polyester filter fabric knitted specifically for groundwater applications where extra filtration is needed. All sizes are sold in 100' rolls. Monoflex filter sock installs easily and quickly over slotted well screens without the need for any special equipment and are simply secured in place with plastic wire ties. Monoflex filter sock does not require glue or ultrasonic sealing, thus eliminating weak spots. When properly installed, they do not tear or bunch-up on the screen.

- ✓ Seamless, knitted filter fabric
- ✓ Filtration opening size for plush fabric is 250 microns
- ✓ Developed specifically for groundwater monitoring and remediation
- ✓ Vertical and horizontal applications
- ✓ Open pit and tank installations
- ✓ Helps prevent well failures
- ✓ Highly resistant to most chemicals including strong and weak acids and alkalines, organic chemicals, and salt solutions
- ✓ Widely recommended by environmental professionals
- ✓ Unequaled durability when compared to non-woven materials
- ✓ Allows high rate of water or chemical flow while filtering out fine particles
- ✓ Extremely cost effective
- ✓ Easy to install
- ✓ Patented technology - field tested since 1985



*Sold in 100' rolls only.*

*Each roll covers approximately 7 or 8, 10' well screens. Do NOT pre-cut filter sock to length prior to application.*

**PART NUMBER**

PFSOC1  
 PFSOC2  
 PFSOC4  
 PFSOC6  
 PFSOC8

**DESCRIPTION**

1" Polyester filter sock - 100' roll - plush fabric  
 2" & 3" Polyester filter sock - 100' roll - plush fabric  
 4" Polyester filter sock - 100' roll - plush fabric  
 6" Polyester filter sock - 100' roll - plush fabric  
 8" Polyester filter sock - 100' roll - plush fabric  
 (8" sock covers up to 12" diameter pipe)



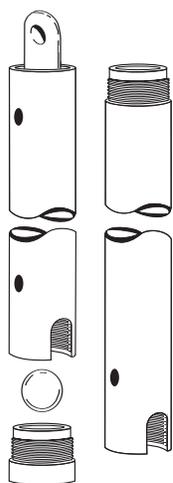
Phone: 800-257-5183  
 Fax: 610-367-5675

Web: [www.campbellmfg.com](http://www.campbellmfg.com)  
 Email: [Monoflex@campbellmfg.com](mailto:Monoflex@campbellmfg.com)

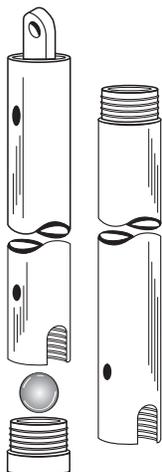
**MONOFLEX BAILERS**

**CLASS (05)**

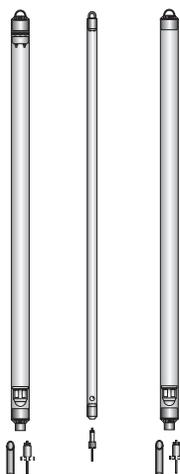
**Monoflex Bailer Specifications**



Re-usable White PVC Bailer



Re-usable Clear PVC Bailer



HDPE Disposable Bailers

**PVC - White or Clear Re-usable Bailers**

Manufactured from the same high quality PVC as our screen and casing products. PVC bailers are available in outside diameters ranging from .840 to 3.500 (17.15 mm to 88.90 mm) and in a variety of lengths. Custom lengths and many styles, such as Point Source™ are available. Please refer to the following catalog pages for detailed specifications.

**304 Stainless Steel Bailers**

Monoflex 304 Stainless Steel Bailers are ideal for applications where plastic bailers may not be suitable. 304 Stainless Steel bailers are available in outside diameters ranging from .500 to 3.500 (12.7 mm to 88.9 mm) and in a variety of lengths. Please refer to the following catalog pages for detailed specifications.

**PTFE (Polytetrafluoroethylene) Bailers**

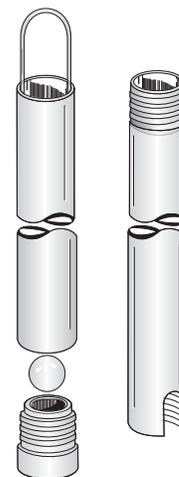
Monoflex manufactures two types of PTFE (Polytetrafluoroethylene) bailers to suit sampling applications where PVC or 304 Stainless Steel may not be suitable. *White PTFE (Polytetrafluoroethylene)* re-usable bailers are 1.660 outside diameter (42.2 mm) and available in a variety of lengths. *Disposable PTFE (Polytetrafluoroethylene)* bailers are available with a 1.500 O.D. (38.1 mm), in one and three foot lengths. Many styles are available as well as custom lengths. Please refer to the following catalog pages for detailed specifications.

**Disposable High Density Polyethylene (HDPE) Bailers**

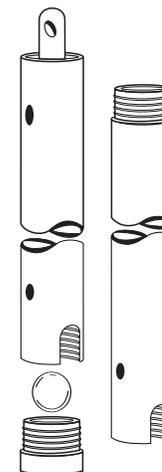
Monoflex HDPE disposable bailers are available in .750 and 1.500 outside diameters (19.1 mm and 38.1 mm), weighted and non-weighted, in three-foot (91.4 cm) lengths. Please refer to the following catalog pages for detailed specifications.

**Single-Use PVC Bailers**

The new, economical Single-Use PVC bailer is produced from the same high quality PVC pipe as our screen and casing products. The Schedule 40 body helps the bailer sink fast, reducing sampling time. The Single-Use PVC bailer is available in 1.660 outside diameter (42.2 mm) and in a variety of lengths. Please refer to the following catalog pages for detailed specifications.



304 Stainless Steel Bailer



White PTFE Bailer



PVC Single-Use Bailer

**WHITE PVC BAILERS****CLASS (05)**

Monoflex white PVC re-usable bailers are designed to suit basic sampling needs. The threaded, all PVC construction eliminates contamination by solvents and the removable bottom check valve makes cleaning quick and easy. Available outside diameters are .840 - 3.500 in lengths of 12", 24" and 36". **Call for price and availability for custom lengths and bailer extensions.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BPWS.84X12	1/2" White PVC threaded bailer, .840 O.D. x 12" long
BPWS.84X24	1/2" White PVC threaded bailer, .840 O.D. x 24" long
BPWS.84X36	1/2" White PVC threaded bailer, .840 O.D. x 36" long
BPWS1.05X12	3/4" White PVC threaded bailer, 1.050 O.D. x 12" long
BPWS1.05X24	3/4" White PVC threaded bailer, 1.050 O.D. x 24" long
BPWS1.05X36	3/4" White PVC threaded bailer, 1.050 O.D. x 36" long
BPWS1.315X12	1" White PVC threaded bailer, 1.315 O.D. x 12" long
BPWS1.315X24	1" White PVC threaded bailer, 1.315 O.D. x 24" long
BPWS1.315X36	1" White PVC threaded bailer, 1.315 O.D. x 36" long
BPWS1.66X12	1-1/4" White PVC threaded bailer, 1.660 O.D. x 12" long
BPWS1.66X24	1-1/4" White PVC threaded bailer, 1.660 O.D. x 24" long
BPWS1.66X36	1-1/4" White PVC threaded bailer, 1.660 O.D. x 36" long
BPWS2.375X12	2" White PVC threaded bailer, 2.375 O.D. x 12" long
BPWS2.375X24	2" White PVC threaded bailer, 2.375 O.D. x 24" long
BPWS2.375X36	2" White PVC threaded bailer, 2.375 O.D. x 36" long
BPWS3.50X12	3" White PVC threaded bailer, 3.500 O.D. x 12" long
BPWS3.50X24	3" White PVC threaded bailer, 3.500 O.D. x 24" long
BPWS3.50X36	3" White PVC threaded bailer, 3.500 O.D. x 36" long

**Bailer Accessories (See table of contents)**

- Bailer Brushes
- Braided Nylon Cord
- PTFE (Polytetrafluoroethylene) Coated Stainless Steel Wire
- Bottom Emptying Devices
- Alconox® Powdered Cleaner
- Liqui-Nox® Liquid Detergent

**WHITE PVC POINT SOURCE™ BAILERS CLASS (05)**

Monoflex white PVC re-usable Point Source™ bailers are designed to retrieve a sample from specific depths. The threaded, all PVC construction eliminates contamination by solvents and the removable top and bottom check valves make cleaning quick and easy. Available outside diameters are .840 - 3.500 in lengths of 12", 24" and 36".

**Call for price and availability for custom lengths and bailer extensions.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BPWD.84X12	1/2" White PVC threaded Point Source™ bailer, .840 O.D. x 12" long
BPWD.84X24	1/2" White PVC threaded Point Source™ bailer, .840 O.D. x 24" long
BPWD.84X36	1/2" White PVC threaded Point Source™ bailer, .840 O.D. x 36" long
BPWD1.05X12	3/4" White PVC threaded Point Source™ bailer, 1.050 O.D. x 12" long
BPWD1.05X24	3/4" White PVC threaded Point Source™ bailer, 1.050 O.D. x 24" long
BPWD1.05X36	3/4" White PVC threaded Point Source™ bailer, 1.050 O.D. x 36" long
BPWD1.315X12	1" White PVC threaded Point Source™ bailer, 1.315 O.D. x 12" long
BPWD1.315X24	1" White PVC threaded Point Source™ bailer, 1.315 O.D. x 24" long
BPWD1.315X36	1" White PVC threaded Point Source™ bailer, 1.315 O.D. x 36" long
BPWD1.66X12	1-1/4" White PVC threaded Point Source™ bailer, 1.660 O.D. x 12" long
BPWD1.66X24	1-1/4" White PVC threaded Point Source™ bailer, 1.660 O.D. x 24" long
BPWD1.66X36	1-1/4" White PVC threaded Point Source™ bailer, 1.660 O.D. x 36" long
BPWD2.375X12	2" White PVC threaded Point Source™ bailer, 2.375 O.D. x 12" long
BPWD2.375X24	2" White PVC threaded Point Source™ bailer, 2.375 O.D. x 24" long
BPWD2.375X36	2" White PVC threaded Point Source™ bailer, 2.375 O.D. x 36" long
BPWD3.50X12	3" White PVC threaded Point Source™ bailer, 3.500 O.D. x 12" long
BPWD3.50X24	3" White PVC threaded Point Source™ bailer, 3.500 O.D. x 24" long
BPWD3.50X36	3" White PVC threaded Point Source™ bailer, 3.500 O.D. x 36" long



## CLEAR PVC BAILERS

## CLASS (05)

Monoflex clear PVC re-usable bailers are designed to suit basic sampling needs. The threaded, all PVC construction eliminates contamination by solvents and the clear PVC permits a visual check of the sample. The removable bottom check valve makes cleaning quick and easy. Available outside diameters are 1.050 - 3.500 in lengths of 12", 24" and 36".

**Call for price and availability for custom lengths and bailer extensions.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BPCS1.05X12	3/4" Clear PVC threaded bailer, 1.050 O.D. x 12" long
BPCS1.05X24	3/4" Clear PVC threaded bailer, 1.050 O.D. x 24" long
BPCS1.05X36	3/4" Clear PVC threaded bailer, 1.050 O.D. x 36" long
BPCS1.315X12	1" Clear PVC threaded bailer, 1.315 O.D. x 12" long
BPCS1.315X24	1" Clear PVC threaded bailer, 1.315 O.D. x 24" long
BPCS1.315X36	1" Clear PVC threaded bailer, 1.315 O.D. x 36" long
BPCS1.66X12	1-1/4" Clear PVC threaded bailer, 1.660 O.D. x 12" long
BPCS1.66X24	1-1/4" Clear PVC threaded bailer, 1.660 O.D. x 24" long
BPCS1.66X36	1-1/4" Clear PVC threaded bailer, 1.660 O.D. x 36" long
BPCS2.375X12	2" Clear PVC threaded bailer, 2.375 O.D. x 12" long
BPCS2.375X24	2" Clear PVC threaded bailer, 2.375 O.D. x 24" long
BPCS2.375X36	2" Clear PVC threaded bailer, 2.375 O.D. x 36" long
BPCS3.50X12	3" Clear PVC threaded bailer, 3.500 O.D. x 12" long
BPCS3.50X24	3" Clear PVC threaded bailer, 3.500 O.D. x 24" long
BPCS3.50X36	3" Clear PVC threaded bailer, 3.500 O.D. x 36" long



### Bailer Accessories (See table of contents)

- Bailer Brushes
- Braided Nylon Cord
- PTFE (Polytetrafluoroethylene) Coated Stainless Steel Wire
- Bottom Emptying Devices
- Alconox® Powdered Cleaner
- Liqui-Nox® Liquid Detergent

**CLEAR PVC POINT SOURCE™ BAILERS**

**CLASS (05)**

Monoflex clear PVC re-usable Point Source™ bailers are designed to retrieve a sample from specific depths. The threaded, all PVC construction eliminates contamination by solvents and the clear PVC permits a visual check of the sample. The removable top and bottom check valves make cleaning quick and easy. Available outside diameters are 1.050 - 3.500 in lengths of 12", 24" and 36".

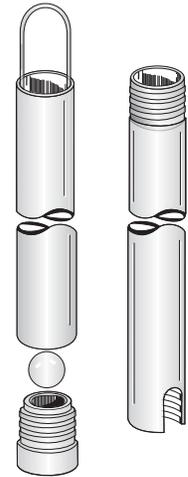
**Call for price and availability for custom lengths and bailer extensions.**

<b>PART NUMBER</b>	<b>DESCRIPTION</b>
BPCD1.05X12	3/4" Clear PVC threaded Point Source™ bailer, 1.050 O.D. x 12" long
BPCD1.05X24	3/4" Clear PVC threaded Point Source™ bailer, 1.050 O.D. x 24" long
BPCD1.05X36	3/4" Clear PVC threaded Point Source™ bailer, 1.050 O.D. x 36" long
BPCD1.315X12	1" Clear PVC threaded Point Source™ bailer, 1.315 O.D. x 12" long
BPCD1.315X24	1" Clear PVC threaded Point Source™ bailer, 1.315 O.D. x 24" long
BPCD1.315X36	1" Clear PVC threaded Point Source™ bailer, 1.315 O.D. x 36" long
BPCD1.66X12	1-1/4" Clear PVC threaded Point Source™ bailer, 1.660 O.D. x 12" long
BPCD1.66X24	1-1/4" Clear PVC threaded Point Source™ bailer, 1.660 O.D. x 24" long
BPCD1.66X36	1-1/4" Clear PVC threaded Point Source™ bailer, 1.660 O.D. x 36" long
BPCD2.375X12	2" Clear PVC threaded Point Source™ bailer, 2.375 O.D. x 12" long
BPCD2.375X24	2" Clear PVC threaded Point Source™ bailer, 2.375 O.D. x 24" long
BPCD2.375X36	2" Clear PVC threaded Point Source™ bailer, 2.375 O.D. x 36" long
BPCD3.50X12	3" Clear PVC threaded Point Source™ bailer, 3.500 O.D. x 12" long
BPCD3.50X24	3" Clear PVC threaded Point Source™ bailer, 3.500 O.D. x 24" long
BPCD3.50X36	3" Clear PVC threaded Point Source™ bailer, 3.500 O.D. x 36" long



## STAINLESS STEEL BAILERS & EXTENSION CLASS (05)

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BSS.50X12	Stainless steel threaded bailer, .500 O.D. x 12" long
BSS.50X24	Stainless steel threaded bailer, .500 O.D. x 24" long
BSS.50X36	Stainless steel threaded bailer, .500 O.D. x 36" long
BSS1.05X12	Stainless steel threaded bailer, 1.050 O.D. x 12" long
BSS1.05X24	Stainless steel threaded bailer, 1.050 O.D. x 24" long
BSS1.05X36	Stainless steel threaded bailer, 1.050 O.D. x 36" long
BSS1.66X12	Stainless steel threaded bailer, 1.660 O.D. x 12" long
BSS1.66X24	Stainless steel threaded bailer, 1.660 O.D. x 24" long
BSS1.66X36	Stainless steel threaded bailer, 1.660 O.D. x 36" long
BSS3.50X12	Stainless steel threaded bailer, 3.500 O.D. x 12" long
BSS3.50X24	Stainless steel threaded bailer, 3.500 O.D. x 24" long
BSS3.50X36	Stainless steel threaded bailer, 3.500 O.D. x 36" long
BXSS1.66X _ _	Stainless steel threaded bailer extension 1.660 O.D. x 12", 24" or 36" long.



All stainless steel bailers have PTFE (Polytetrafluoroethylene) seats, Viton O-rings and stainless steel check balls and bodies; except, .50 bailers have stainless steel seats.

**Note:** Call for price and availability for bailer extensions. Other sizes available.

## POLYETHYLENE DISPOSABLE BAILERS CLASS (05)

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BPES1.5X36	HDPE disposable bailer, 1.500 O.D. x 36" long, non-weighted
BPEDW1.5X36	HDPE disposable bailer, 1.500 O.D. x 36" long, weighted
BPES.75X36	HDPE disposable bailer, .750 O.D. x 36" long, non-weighted

**Note:** 25 pieces per box on all sizes. 20 boxes per pallet on 1.5" sizes.

These bailers are assembled by sonic welding.

Other lengths are available, call for availability and pricing.

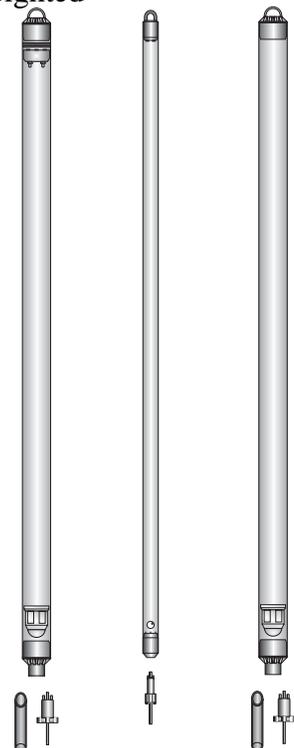
**Monoflex** high density polyethylene disposable bailers for all your sampling needs. Fully assembled and ready for use. So unique that these bailers are patented. (Patent #5,597,966)

### 1.5" X 36" Bailers

- Weighted bailers contain stainless steel washers
- Unique flexible PVC torpedo ball provides excellent seal
- Heavy duty bailer hook facilitates rope attachment
- 1/2" I.D. Quick emptying device provided with each bailer
- VOC Slow emptying device provided with each bailer
- Individually hermetically sealed in polyethylene bags
- 1000 ml Capacity

### .75" X 36" Bailers

- Heavy duty bailer hook facilitates rope attachment
- VOC Slow emptying device provided with each bailer
- Individually hermetically sealed in polyethylene bags
- 220 ml Capacity



**PVC SINGLE-USE BAILERS**

**CLASS (05)**

The new, economical PVC Single-Use bailer is produced from the same high quality white PVC pipe as our screen and casing products. No solvents, glues, or adhesives are used in the manufacturing process or construction of these bailers. These bailers are for one time use or dedication and cannot be disassembled. The Schedule 40 PVC body helps the bailer sink fast, reducing sampling time.



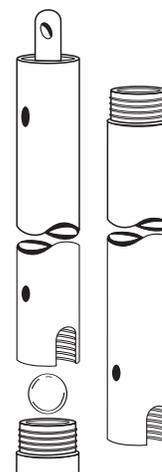
<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BPWSU1.66X24	PVC Single-Use bailer, 1.660 O.D. x 24" long
BPWSU1.66X36	PVC Single-Use bailer, 1.660 O.D. x 36" long
BPWSU1.66X48	PVC Single-Use bailer, 1.660 O.D. x 48" long
BPWSU1.66X60	PVC Single-Use bailer, 1.660 O.D. x 60" long

**Note:** 10 pieces per box on all lengths.

**WHITE PTFE (POLYTETRAFLUOROETHYLENE) BAILERS**

**CLASS (05)**

Monoflex white PTFE (Polytetrafluoroethylene) re-usable bailers have an open top design and are threaded to allow disassembly for easy decontamination. PTFE (Polytetrafluoroethylene) Bailers are suitable for sampling virtually any potential contaminant while maintaining the integrity of the collected sample.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BTWS1.66X_*	White PTFE re-usable bailer, 1.660 O.D.

\* Specify length (12", 24", 36")

**Note:** Call for price and availability for bailer extensions.

**PTFE (POLYTETRAFLUOROETHYLENE) DISPOSABLE BAILERS**

**CLASS (05)**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BTEFS1.5X12X	PTFE disposable bailer, 1.500 O.D. x 12" long
BTEFS1.5X36X	PTFE disposable bailer, 1.500 O.D. x 36" long

**Note:** 10 pieces per box on both lengths.



## MONOFLEX BAILER ACCESSORIES

### BAILER EMPTYING DEVICES

### CLASS (05)

Monoflex provides devices, (with or without a tap), to permit emptying of the bailer contents through the lower ball check without loss or contamination. The tap is useful if a sampling program requires multiple small sample containers to be filled. These devices are made of PVC or PTFE (Polytetrafluoroethylene) in sizes to fit Monoflex reusable bailers. Examples are shown at right; many sizes and configurations are available. Please call for availability and pricing.



**PVC or PTFE (Polytetrafluoroethylene) quick emptying style for PVC, PTFE or Stainless Steel bailers**



**PVC with Delrin® shut off valve for PVC bailers**



**PVC with Delrin® shut off valve for PVC bailers**



**PTFE (Polytetrafluoroethylene) body with PTFE shut off valve for PTFE bailers**

### BAILER SUSPENSION CORDS

### CLASS (05)

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BNC1/8X1	Braided Nylon cord, 1/8" diameter, 420 lb. test
BPC3/16X1	Polypropylene cord, 3/16" diameter, 420 lb. test
TSBW5/64X1	PTFE (Polytetrafluoroethylene) coated stainless steel wire, 5/64" diameter, 270 lb. test

**Note:** Nylon and Polypropylene bailer cords are sold in 25 foot increments.

PTFE (Polytetrafluoroethylene) coated stainless steel bailer cord is sold in 100 foot increments.

### LUFKIN TAPES

### CLASS (05)

Pro Series Hi-Viz® Orange Linear Fiberglass Tapes. Heavy duty fiberglass tapes offer twice the stretch resistance of ordinary tapes. Tape width is 1/2". Available in 100' or 300' lengths. 3:1 retrieval ratio enables fast rewinding of tape. Tape is marked in 1/8" increments.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>LBS. EA.</u>
TAPE1/2X100FOR1/8	100' length	10
TAPE1/2X300FOR1/8	300' length	11



**MONOFLEX BAILER ACCESSORIES**

**LIQUI-NOX® CRITICAL CLEANING LIQUID DETERGENT**

**CLASS (05)**

Concentrated, anionic detergent, with a pH of 8.5, for manual and ultrasonic cleaning of sampling equipment such as re-usable bailers, bladder pumps and air/gas pumps. Free rinsing to give reliable results without interfering residues. Extremely mild and completely soluble in hard and soft water. USDA authorized. Dilute 1:100. Liqui-Nox® can also be used with steam or high pressure washers for decontaminating equipment in the field such as, drill rigs, augers, and personnel protective equipment. Liqui-Nox® is available in the following quantities: one quart bottles twelve per case, one gallon bottles four per case, and 15 and 55 gallon drums.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LIQUI-NOXQT	Liqui-Nox 1 quart bottle
LIQUI-NOXQTCASE	Liqui-Nox Case 12/ 1 quart bottles
LIQUI-NOX1GAL	Liqui-Nox 1 gallon bottle
LIQUI-NOXGALCSE	Liqui-Nox Case 4/ 1 gallon bottles

**ALCONOX® POWDERED PRECISION CLEANER**

**CLASS (05)**

Concentrated, anionic detergent, with a pH of 9.5, for manual and ultrasonic cleaning of sampling equipment such as re-usable bailers, bladder pumps and air/gas pumps. Free rinsing to give reliable results without interfering residues. Alconox® is primarily used in lab ware washers and is ideal for cleaning contaminants from glassware, metal, plastic, ceramic, porcelain, rubber and fiberglass. Excellent replacement for corrosive acids and hazardous solvents. USDA authorized. Dilute 1:100. Alconox® is available in the following quantities: 4 lb. boxes: nine per case, 25 and 50 lb. cases, and 100 and 300 lb. drums.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
ALCONOX4LB	Alconox Detergent 4 lb. Box
ALCONOXCASE	Alconox Detergent Case 4 lb. boxes, 9 boxes per case
ALCONOXDISPCASE	Alconox Detergent Dispensers 12 boxes per case, each box had 50 1/2 oz. containers

**BAILER BRUSHES**

**CLASS (05)**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BAILERBRUSH12"	12" Long bailer cleaning brush
BAILERBRUSH40"	40" Long bailer cleaning brush



# ISOMEGA® BLADDER PUMPS

# CLASS (09)

Monoflex Isomega® Bladder Pumps obtain representative water samples from monitoring wells. Isomega® Bladder Pumps employ a closed collection system that eliminates agitation or air contact with the sample. This, and the use of an inert PTFE (Polytetrafluoroethylene) bladder, ensures water sample integrity. The closed system provides the best method available for recovering water samples containing dissolved volatile organic compounds (VOC's). Monoflex Isomega® Bladder Pumps may be used as portable or dedicated systems.

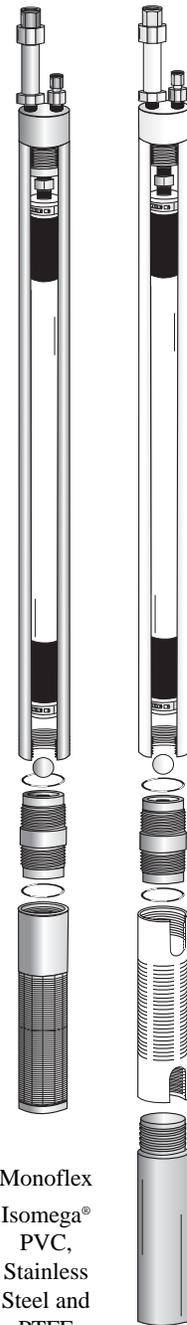
**Monoflex Isomega® Bladder Pumps are available in PVC, PTFE (Polytetrafluoroethylene) and 304 Stainless Steel.** Optional electropolishing is available for Stainless Steel pumps. 316 Stainless Steel pumps are available as a special order. All PVC and PTFE (Polytetrafluoroethylene) Monoflex Isomega Bladder Pumps are supplied with a .020 slotted bottom inlet screen and Stainless Steel pumps are supplied with a .020 slot wire-wrapped bottom inlet screen.

Monoflex Isomega® Bladder Pumps should be operated with the Monoflex Integrated Vacuum/Pressure Pump Controller. The Monoflex I.V.P. Pump Controller features simple, user friendly controls in a durable, weatherproof case. Monoflex I.V.P. Pump Controllers are capable of low flow rates for sampling or higher rates for well purging. For more information and complete operating instructions, visit our website at [www.campbellmfg.com](http://www.campbellmfg.com) to view or download the Monoflex Bladder Pump Instruction Manual.

Monoflex offers factory assembly of pump, tubing and well heads for dedicated systems. For more information on Monoflex pumps, visit our website at [www.campbellmfg.com](http://www.campbellmfg.com) to view or download the Monoflex Bladder Pump Instruction Manual.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BLDPMPPI.66X30	PVC Bladder Pump with PTFE Bladder, 1.660 O.D. x 30"
BLDPMPSS1.66X30	304 Stainless Steel Bladder Pump with PTFE Bladder, 1.660 O.D. x 30"
BLDPMPTF1.66X30	PTFE Bladder Pump with PTFE Bladder, 1.660 O.D. x 30"
BLPMPBAGS1.6X30	PTFE Bladder Assembly for Isomega® Bladder Pump, 1.660 O.D. x 30"
BLPMPBLDRVLV1/2	Cold Weather Bleeder Valve

Monoflex Isomega® Bladder Pump Specifications					Estimated Gallons Per Minute at Various Pump Cycles Per Minute (CPM)					
Pump Outside Diameter	Pump Total Length	Pump Body Material	Chamber Length	Chamber Capacity	4 CPM	6 CPM	8 CPM	10 CPM	12 CPM	14 CPM
1.660 (42.16mm)	52" (132cm)	PVC	30" (76.2cm)	.109 gal (413 ml)	.436 gpm 1.65 l/min	.654 gpm 2.48 l/min	.872 gpm 3.30 l/min	1.09 gpm 4.13 l/min	1.31 gpm 4.96 l/min	1.53 gpm 5.79 l/min
1.660 (42.16mm)	45" (114cm)	304 Stainless Steel	30" (76.2cm)	.133 gal (504 ml)	.532 gpm 2.01 l/min	.798 gpm 3.02 l/min	1.06 gpm 4.01 l/min	1.33 gpm 5.04 l/min	1.60 gpm 6.06 l/min	1.86 gpm 7.04 l/min
1.660 (42.16mm)	45" (114cm)	PTFE	30" (76.2cm)	.117 gal (443 ml)	.468 gpm 1.77 l/min	.702 gpm 2.66 l/min	.936 gpm 3.54 l/min	1.17 gpm 4.43 l/min	1.40 gpm 5.30 l/min	1.64 gpm 6.21 l/min



Monoflex Isomega® PVC, Stainless Steel and PTFE (Polytetrafluoroethylene) Bladder Pumps

**Note:** Standard tubing fitting sizes are 1/2" O.D. for sample recovery and 1/4" O.D. for air supply.

Other sizes are available, please call for price and availability.

Replacement bladder assemblies are available for 20" and 40" pumps. Consult factory for pricing.

Custom pump lengths are available. Consult factory for pricing and availability.

All PVC pumps are weighted to insure submergence. PVC pumps are 7" (17.8cm) longer than Stainless Steel and PTFE (Polytetrafluoroethylene) models. PTFE (Polytetrafluoroethylene) bladder pumps contain some Stainless Steel components.



Phone: 800-257-5183  
Fax: 610-367-5675

Web: [www.campbellmfg.com](http://www.campbellmfg.com)  
Email: [Monoflex@campbellmfg.com](mailto:Monoflex@campbellmfg.com)

**AIR/GAS DISPLACEMENT PUMPS CLASS (09)**

Monoflex Air/Gas Displacement Pumps are designed for initial well pumping, purging prior to sampling, or to pump contaminants from recovery wells. Monoflex Air/Gas Displacement Pumps contain a larger pump chamber than Monoflex Isomega® Bladder Pumps. This makes them ideal for pumping large volumes of water or contaminant. Monoflex Air/Gas Displacement Pumps may be used for sampling if air to water contact is permissible.

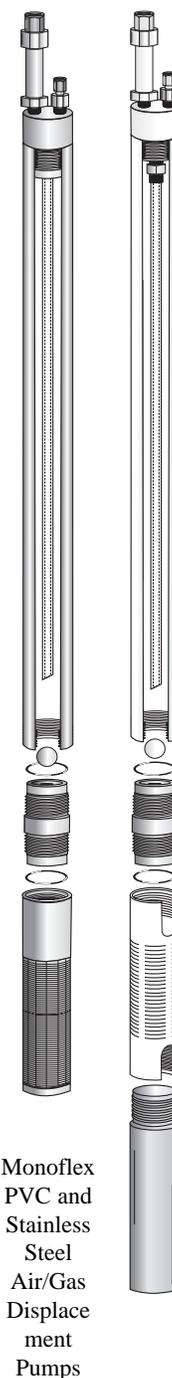
Advantages of Monoflex Air/Gas Displacement Pumps are their ability to safely pump turbid water and their dry run capability. With only two moving parts, a check ball beneath the pump chamber and in the sample discharge fitting, Monoflex Air/Gas Displacement Pumps can safely pump turbid water. In the event of slow well recovery, Monoflex Air/Gas Displacement Pumps can run dry without damage to the pump.

**Monoflex Air/Gas Displacement Pumps are available in PVC and 304 Stainless Steel.** Optional electropolishing is available for Stainless Steel pumps. 316 Stainless Steel pumps are available as a special order. All PVC Air/Gas Displacement Pumps are supplied with a .020 slotted bottom inlet screen and Stainless Steel pumps are supplied with a .020 slot wire-wrapped bottom inlet screen.

Monoflex Air/Gas Displacement Pumps should be operated with the Monoflex Integrated Vacuum/Pressure Pump Controller. The Monoflex I.V.P. Pump Controller features simple, user friendly controls in a durable, weatherproof case. Monoflex I.V.P. Pump Controllers are capable of low flow rates for sampling or higher rates for well purging. For more information and complete operating instructions, visit our website at [www.campbellmfg.com](http://www.campbellmfg.com) to view or download the Monoflex Bladder Pump Instruction Manual.

Monoflex also offers factory assembly of pump, tubing and well heads for dedicated systems. For more information on Monoflex pumps, visit our website at [www.campbellmfg.com](http://www.campbellmfg.com) to view or download the Monoflex Bladder Pump Instruction Manual.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
AGPMPPVC1.66X30	PVC Air/Gas Displacement Pump, 1.660 O.D. x 30"
AGPMSS1.66X30	304 Stainless Steel Air/Gas Displacement Pump, 1.660 O.D. x 30"



Monoflex Air/Gas Displacement Pump Specifications					Estimated Gallons Per Minute at Various Pump Cycles Per Minute (CPM)					
Pump Outside Diameter	Pump Total Length	Pump Body Material	Chamber Length	Chamber Capacity	4 CPM	6 CPM	8 CPM	10 CPM	12 CPM	14 CPM
1.660 (42.16mm)	52" (132cm)	PVC	30" (76.2cm)	.142 gal (538 ml)	.568 gpm 2.15 ℓ/min	.852 gpm 3.23 ℓ/min	1.14 gpm 4.32 ℓ/min	1.42 gpm 5.38 ℓ/min	1.70 gpm 6.44 ℓ/min	1.99 gpm 7.53 ℓ/min
1.660 (42.16mm)	45" (114cm)	304 Stainless Steel	30" (76.2cm)	.211 gal (799 ml)	.844 gpm 3.19 ℓ/min	1.27 gpm 4.81 ℓ/min	1.69 gpm 6.40 ℓ/min	2.11 gpm 7.99 ℓ/min	2.53 gpm 9.58 ℓ/min	2.95 gpm 11.2 ℓ/min

**Note:** Standard tubing fitting sizes are 1/2" O.D. for sample recovery and 1/4" O.D. for air supply. Other sizes are available, please call for price and availability.  
 Custom pump lengths are available. Consult factory for pricing and availability.  
 All PVC pumps are fitted with a 7" threaded PVC solid roundbar to insure submergence, therefore, PVC pumps are 7" (17.8cm) longer than Stainless Steel models.

# I.V.P. PUMP CONTROLLER

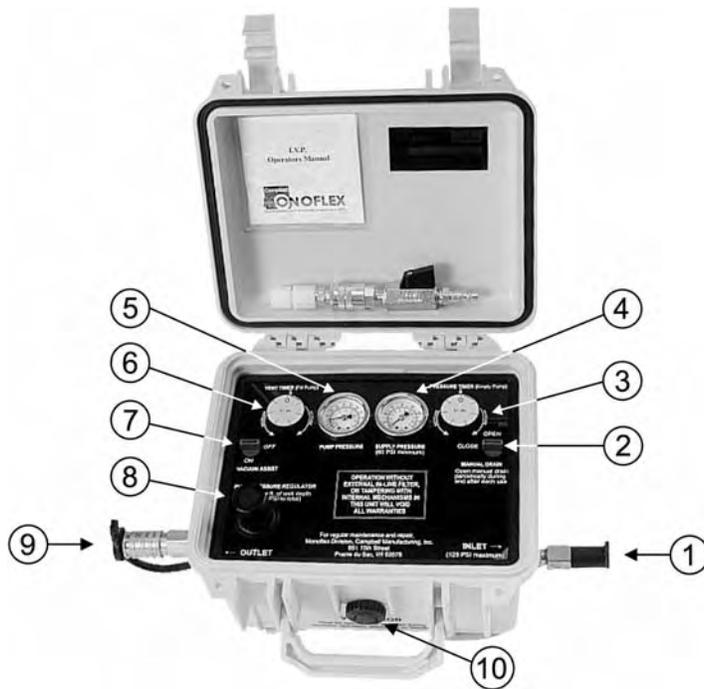
# CLASS (09)

The Monoflex Integrated Vacuum/Pressure Pump Controller is designed to operate pneumatic pumps and samplers with a maximum operating pressure of 125 PSI (8.6 bar). The Monoflex I.V.P. Controller is supplied in a waterproof case with quick disconnect air fittings.

During operation, the I.V.P. Pump Controller sends regulated pulses of air, to either a bladder pump or air/gas pump, to cycle the pump. The duration of the pressure and venting cycles are regulated by the controller, as set by the operator, to maximize pumping efficiency. An air supply from either an oil-less type air compressor or a compressed air or nitrogen tank is required to supply the controller with air which in turn supplies the pump.

With a maximum operating pressure of 125 PSI (8.6 bar), the Monoflex I.V.P. Pump Controller can operate pumps to 250 ft. (75 m) of head. An exclusive feature of the controller is the Vacuum Assist mode. During the fill (vent) cycle, the chambers of all pneumatic pumps fill with the pumped fluid. The Vacuum Assist feature maximizes the amount of fluid entering the pump by applying a low level vacuum to the pump chamber. In situations where there is a minimum amount of head above the pump body, use of the Vacuum Assist feature can substantially increase the pumping results. Each controller is supplied with a Monoflex I.V.P. Controller Accessory Kit and Operation Manual.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
BLDPMPIVPCNTRL	Monoflex I.V.P. Pump Controller with vacuum assist



**Monoflex Integrated Vacuum/Pressure (I.V.P.) Pump Controller**

**Monoflex I.V.P. Pump Controller Features:**

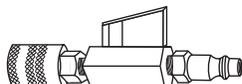
- (1) **Air Inlet** - For connecting air pressure supply from compressor or tank, 125 PSI maximum.
- (2) **Manual Drain** - Used to drain internal water trap. Open periodically during and after each use while controller is pressurized.
- (3) **Pump Pressure Timer** - Adjusts how long the pump is pressurized during sample recovery.
- (4) **Supply pressure gauge** - Displays air pressure supply from compressor or tank, 60 PSI minimum required to operate controller.
- (5) **Pump Pressure Gauge** - Displays air pressure supply to the pump.
- (6) **Pump Vent Timer** - Adjusts how long the pump chamber fills with liquid.
- (7) **Vacuum Assist switch** - When used, the controller “deflates” the bladder during the vent cycle to maximize the amount of sample entering the pump chamber. Use if the pump is partially submerged.
- (8) **Pump Pressure Regulator** - For adjusting the amount of pressure sent to the pump.
- (9) **Air Outlet** - For connecting air supply to pump.
- (10) **Vent Knob** - Must be opened if lid is closed during controller operation.

**I.V.P. CONTROLLER ACCESSORY KIT**

**CLASS (09)**

PART NUMBER  
BLDCONTACCKIT

DESCRIPTION  
Accessory kit for Monoflex I.V.P. Pump Controller



Shut off valve with air coupler plug by quick disconnect for air supply to I.V.P. Pump Controller



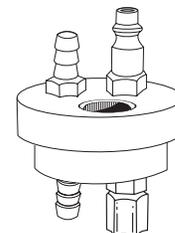
Air coupler plug by compression fitting for 1/4" O.D. plastic tubing. For air supply to pump from controller when used as a portable system

**LOW PROFILE WELL HEAD ASSEMBLY**

**CLASS (09)**

PART NUMBER  
BLPMPLPWHD2

DESCRIPTION  
Low profile well head assembly for 2" Sch. 40 well casing  
Monoflex Well Head Assemblies are designed for the limited space between the well casing and protective well cover. All assemblies are flush with the outside diameter of the well casing. Stocked for 2" Schedule 40 wells with corrosion resistant brass and nylon fittings. Other sizes, fitting materials such as stainless steel, and water level indicator hole sizes are optional.



**QUICK RECOIL AIR LINE**

**CLASS (09)**

PART NUMBER  
HOSERECOILW/FIT  
HOSERECOIL1/4ID

DESCRIPTION  
12' x 1/4" ID recoil hose with galvanized quick disconnect fittings  
12' x 1/4" ID recoil hose with 1/4" male NPT on each end

Designed to provide easy attachment from the well head assembly to the controller. Available with or without quick disconnect air line fittings. Stainless steel quick disconnect fittings are available for an extra charge.



**FLEXIBLE PLASTIC TUBING**

**CLASS (09)**

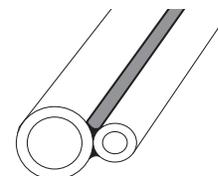
TUBING SIZED FOR MONOFLEX BLADDER AND AIR/GAS PUMPS

PART NUMBER  
TUBT/P1/4X1/2B

DESCRIPTION  
1/4" O.D. Polyethylene tubing bonded to 1/2" PTFE tubing.

Monoflex supplies tubing in various sizes and materials suitable for use with pumps and lysimeter systems. Materials include PTFE (Polytetrafluoroethylene) type FEP, Polyethylene, PTFE (Polytetrafluoroethylene) lined polyethylene and Nylon. Bonded with 1/2" O.D. PTFE (Polytetrafluoroethylene) tubing for sample recovery. Available in sizes from 1/4" O.D. and larger.

**Note:** Tubing may be purchased separately for each size, or purchased with each size bonded together. All Monoflex tubing is sold in 25 foot increments. Maximum run length available will depend on tubing diameter and material.



**BLADDER BAG ASSEMBLY**

**CLASS (09)**

PART NUMBER  
BLPMPBAGS1.6X\_\*

DESCRIPTION  
PTFE Bladder Bag Assembly for Monoflex Isomega® Bladder Pump  
\* Specify Pump chamber length: 20", 30", 40" or 60". Actual bag lengths measure 18", 27", 38" or 58".

Designed for sample purity and durability, the Monoflex PTFE (Polytetrafluoroethylene) Bladder Bag Assembly makes field repairs simple. Fully assembled, tested and ready to use, it features a stainless steel nipple for connection to any Monoflex Isomega® Bladder Pump.



PNEUMATIC PUMP ACCESSORIES

## POROUS CUP LYSIMETERS FOR VADOSE ZONE MONITORING CLASS (09)

Investigation of the vadose (unsaturated) zone is an essential part of many environmental monitoring programs. The ability to detect groundwater pollutants as they travel towards the water table is possible with the use of Monoflex Lysimeters. Early detection, by removing samples of soil pore water, may result in less expensive remedial measures.

Monoflex Lysimeters are soil pore water collection devices, designed for permanent installation beneath the ground surface. They are closed tubular devices with a porous ceramic filter element at one end. Monoflex Lysimeters are provided with two ports; one to allow application of a vacuum or pressure, the other to allow delivery of collected water samples to the surface.

They operate by establishing continuity between the soil pores and those in the porous element of the lysimeter. The lysimeter should be surrounded by a silica flour or a sifted soil slurry to ensure intimate contact with the surrounding soil. An equilibrium will be established between the water in the soil pores, the slurry and the porous lysimeter filter element. Application of a vacuum to the inside of the Monoflex Lysimeter will cause the pore water to flow from the soil pores through the slurry and the porous filter element and into the lysimeter body. The soil pore water may then be transferred to the ground surface via the sample recovery line, by pressurizing the vacuum/pressure line.

### MONOFLEX SHALLOW SAMPLING LYSIMETER

#### PART NUMBER

LYSCCPVCSHALLOW

#### DESCRIPTION

Monoflex Shallow Sampling Lysimeters are ideal for obtaining vadose zone water samples from a maximum depth of twenty feet. Threaded porous cups allow easy replacement in the event of accidental breakage. Dimensions are 1.900 O.D. x 17.5" in length. The sample capacity is 400 ml. Other sample capacities are available as a special order.



### MONOFLEX DEEP SAMPLING LYSIMETER

#### PART NUMBER

LYSCCPVCDEEP

#### DESCRIPTION

Monoflex Deep Sampling Lysimeters are ideal for obtaining vadose zone water samples from depths greater than twenty feet. The use of a ball check above the threaded porous cup prevents damage to the cup and surrounding soil slurry from over pressurization during sample recovery. Dimensions are 1.900 O.D. x 27" in length. The sample capacity is 400 ml. Other sample capacities are available as a special order.



## BENEFITS OF A MONOFLEX LYSIMETER SYSTEM

#### DEPENDABLE

Monoflex Lysimeters are used in a variety of applications and may provide quality water samples for many years. All Monoflex Lysimeters are assembled and tested in a controlled environment at our facility. Testing consist of submergence of assembled units in distilled water, pressurized to 14.5 PSI (1 bar). All flush thread joints are checked for proper seal and ceramic cups tested to ensure proper porosity. **No glue or solvents are used in the manufacturing processes or assembly of Monoflex Lysimeters.**

#### QUICK AND EASY

After a borehole is drilled, a Monoflex Lysimeter installation can be completed in a minimal amount of time. Complete instructions are available on our website at [www.campbellmfg.com](http://www.campbellmfg.com). Monoflex simplifies your installation by offering a variety of lysimeter accessories including well head assemblies, flexible plastic tubing, vacuum pumps, threaded extension casing, stainless steel centralizers and steel well protectors.

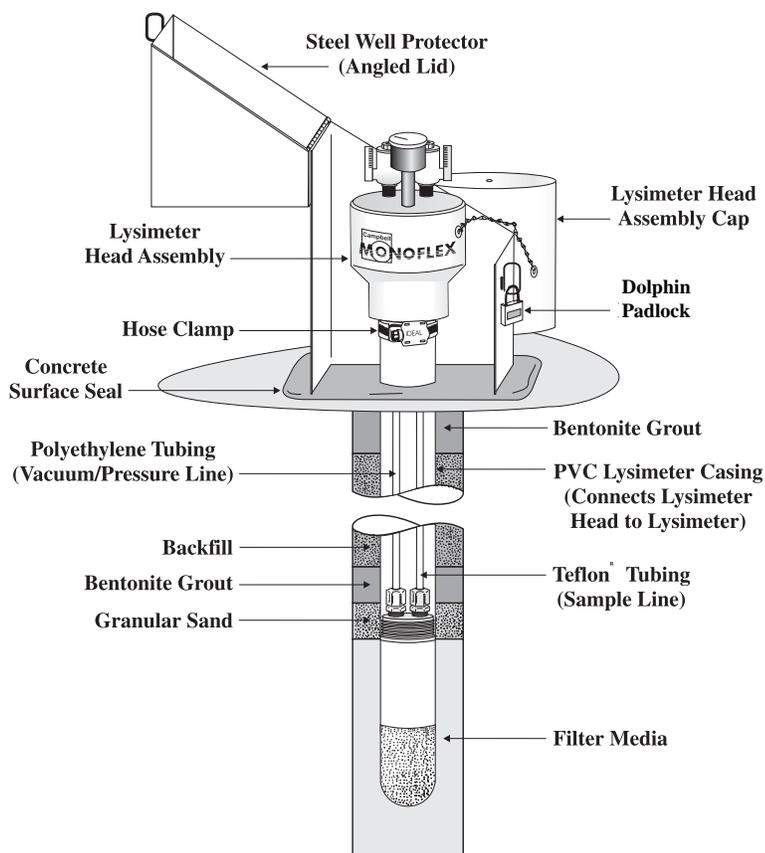
#### VARIETY OF APPLICATIONS

- Soil pore liquid collection
- Pesticide studies
- Water quality studies
- Leak detection for liners
- Mining applications
- Septic system monitoring
- Hazardous waste monitoring
- Storage tank monitoring
- Agricultural studies
- Golf course management

# POROUS CUP LYSIMETERS FOR VADOSE ZONE MONITORING CLASS (09)

## LYSIMETER OPERATION

- Monoflex Porous Ceramic Cup Lysimeters are designed for permanent installation beneath the ground surface. Their purpose is to collect water from the vadose (unsaturated) zone. The system is designed for long term use in one location.
- Lysimeters consist of a threaded porous ceramic cup, a PVC body in which the sample is collected, and a threaded top plug with two color coded tube fittings installed. The fittings are for 1/4" O.D. (6.35 mm) tubing, one for the vacuum/pressure operation (red) and one for sample recovery (blue). The tubing connects to the corresponding fittings between the lysimeter and the lysimeter head assembly. The lysimeter is threaded directly to the PVC flush thread extension casing, and the lysimeter head assembly slips onto the casing at ground level. The PVC flush thread lysimeter casing enables placement of the lysimeter at the desired depth while protecting the lysimeter tubing.
- The lysimeter is placed in a 6" (15.24 cm) diameter borehole with either a 200 mesh silica flour slurry or naturally occurring sifted soil slurry poured around the porous ceramic cup. A bentonite seal (grout), backfill, and concrete seal are placed above the slurry to protect the installation from contamination from ground surface run-off (see illustration).
- To activate the lysimeter, close the sample ball valve (blue handle) on the well head assembly, attach a hand operated or 12-volt electric vacuum pump to the open vacuum/pressure ball valve (red), generating a vacuum of approximately 24 in. Hg (71.1 cm. Hg). Once a vacuum is generated, water will flow from the soil pores through the slurry, through the porous ceramic cup and into the lysimeter body. Soil tension, pore size and amount of available moisture will affect the time needed to collect a sample.
- Recovery of the sample is achieved by opening the sample recovery ball valve and applying the proper pressure to the opened vacuum/pressure ball valve. The capacity of the sample chamber is 400 ml.



## LYSIMETER INSTALLATION ORDER CHECKLIST

- Lysimeter - Shallow or Deep Sampling
- Lysimeter Head Assembly
- Dolphin Padlock for Well Protector
- 1/4" O.D. PTFE (Polytetrafluoroethylene) Tubing (sample recovery line)
- 1/4" O.D. Polyethylene Tubing (vacuum/pressure line)
- 1/4" Tubing Groover
- 1.900 O.D. PVC Flush Thread Extension Casing
- Vacuum/Pressure Hand Pump (or 12-volt electric)
- 1-1/2" Stainless Steel Centralizer
- Steel Well Protector

## ITEMS NOT SUPPLIED BY MONOFLEX

- Bentonite Grout
- Concrete
- 200 Mesh Silica Flour (50 lb. pails)

**LYSIMETER HEAD ASSEMBLY**

**CLASS (09)**

The Monoflex Lysimeter Head Assembly is designed for placement on the lysimeter casing at the ground surface. The well head assembly provides a neat and secure termination of the tubes from the lysimeter. A vacuum-pressure gauge and two ball valves are mounted on a PVC plate beneath a weatherproof cap.

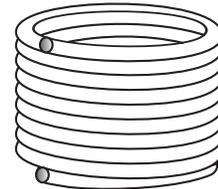


<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LYSHDASSPVC	PVC Lysimeter Well Head Assembly

**FLEXIBLE PLASTIC TUBING**

**CLASS (09)**

Monoflex supplies tubing in various sizes and materials suitable for use with lysimeters and bladder pump systems. Materials include PTFE (Polytetrafluoroethylene) type FEP, Polyethylene, PTFE (Polytetrafluoroethylene) lined polyethylene and Nylon. Available in sizes from 1/4" O.D. and larger.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
TUBPOLY1/4OD	Polyethylene tubing, 1/4" O.D.
TUBTEF1/4OD	PTFE (Polytetrafluoroethylene) tubing, 1/4" O.D.

**Note:** All Monoflex tubing is sold by the foot. Maximum run length available will depend on tubing diameter and material.

**TUBING GROOVER**

**CLASS (09)**

A tool for flexible tubings, such as PTFE (Polytetrafluoroethylene) and polyethylene, which places a groove the correct distance from the end of the tubing. This tool is required when flexible tubing is used with "nut and ferrule" style compression fittings, as in a Monoflex Lysimeter installation. Order the corresponding tubing groover size for the tubing size being used.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
TUBGRVR1/4OD	Tubing groover for 1/4" O.D. flexible tubing
TUBGRVR1/2OD	Tubing groover for 1/2" O.D. flexible tubing

**LYSIMETER EXTENSION CASING (PVC) CLASS (09)**

Manufactured from the same high quality Sch. 40 PVC as our flush thread screens and casings. Extension casings enable the user to place the lysimeter at the desired depth while protecting the lysimeter tubing. Lysimeter casing is produced in five and ten foot lengths. All lysimeter extension casings include a Buna-N O-ring.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LYS8CT4015005	Lysimeter Extension Casing, with O-ring, 8 TPI, 1.900 O.D. x 5'
LYS8CT4015010	Lysimeter Extension Casing, with O-ring, 8 TPI, 1.900 O.D. x 10'

**VACUUM/PRESSURE GAUGE ASSEMBLY CLASS (09)**

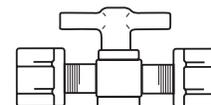
When installed on the lysimeter vacuum/pressure tube, this assembly allows for constant monitoring during the pore water extraction phase. During sample recovery, it will allow the operator to monitor the air pressure being applied to the lysimeter. **This gauge is required if the well head assembly is not purchased.**



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LYSVACGAUGEASSY	Lysimeter vacuum/pressure gauge assembly

**PTFE (POLYTETRAFLUOROETHYLENE) STOPCOCK VALVE CLASS (09)**

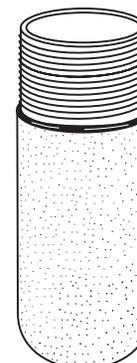
Designed to allow easy sealing of either the sample recovery or vacuum/pressure lines when not using a lysimeter well head assembly. The PTFE (Polytetrafluoroethylene) stopcock is sized to be used with 1/4" O.D. flexible plastic tubing. Two PTFE stopcocks are required for each lysimeter.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
VLVTEF1/4TX1/4T	PTFE (Polytetrafluoroethylene) stopcock for 1/4" O.D. flexible tubing

**REPLACEMENT CERAMIC CUP CLASS (09)**

Replacement ceramic cups for Monoflex shallow and deep sampling lysimeters. These ceramic cups are threaded for ease of disassembly from the lysimeter body for decontamination or replacement if accidental breakage occurs. The V-groove style male thread is compatible only with the bottom female thread of either a shallow or deep style Monoflex lysimeter body.



<u>PART NUMBER</u>	<u>DESCRIPTION</u>
LYSCUPCER1.9	Threaded ceramic lysimeter cup, 1.900 O.D. x 5-3/16"

## MANUAL VACUUM/PRESSURE PUMP CLASS (09)

This hand pump is designed to apply a vacuum to the lysimeter for sample collection within the lysimeter body. The pump can be converted to apply pressure for sample recovery, (delivers sample to the ground surface), by changing the black rubber tubing fitting to the opposite end of the pump.

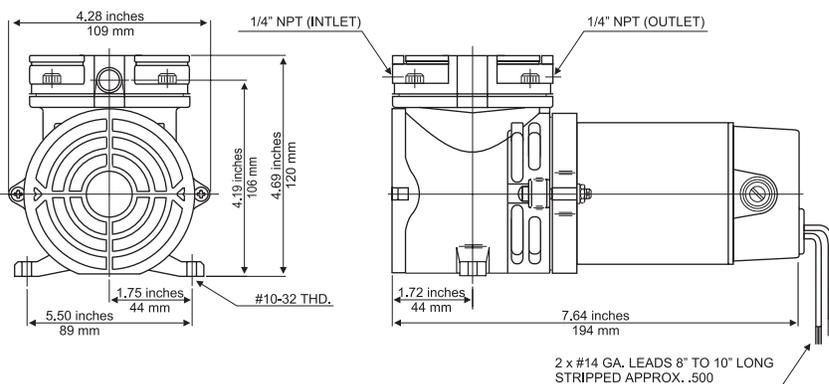


**PART NUMBER** LYSVACPMPMANUAL  
**DESCRIPTION** Manual lysimeter vacuum/pressure pump

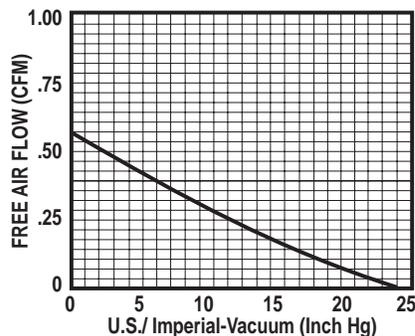
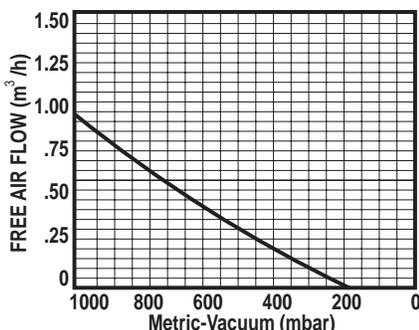
## ELECTRIC VACUUM PUMP (12-VOLT) CLASS (09)

This 12-volt DC electric diaphragm vacuum pump is capable of pulling 24 in. Hg on several lysimeters simultaneously. Inlet and outlet connections are supplied with order.

**PART NUMBER** LYSVACPMPELECT  
**DESCRIPTION** 12-volt DC electric, low speed, vacuum pump  
 FTMNY1/4TX1/4PR Replacement inlet and outlet connections (1 each per box)



Model	HP	RPM	Airflow		Maximum Vacuum		kW	Net Wt.	
			CFM @ 0" Hg	m <sup>3</sup> /h@ 1000 mbar	inch Hg	mbar		lbs.	kg
Low Speed DC LYSVACPMPELECT	1/16	1800 (D.C.)	0.56	0.95	24.0	200	0.05	5.63	2.56



LYSIMETER ACCESSORIES

## CAMERA - WELL VU

Exclusively Available Throught Monoflex, Model MLC300 Camera Manufactured by Well Vu. Low cost down-the-hole camera system. Simple to operate in the field. Goes to 300 feet. Sharp resolution. Shock Resistant Camera Housing. Connects to vehicle battery. RCA Video Jack connects to TV, VCR, Laptop, DVD or Monitor. 1 year warranty. Other sizes and models available.

**PART NUMBER**  
MLC300

**DESCRIPTION**  
Camera, Down-the-hole Well Vu

Call for other sizes and models.



## FORMULAS

### WELL GRAVEL REQUIREMENTS:

To find the required amount of gravel necessary to fill the annular void between the outside of the well screen and the inside of the borehole, subtract the cylindrical volume of the well screen from the cylindrical volume of the borehole.

Cylindrical volume =  $D^2 \times .7854 \times \text{Length in inches} = \text{cubic inches}$ .

**Example:**  $5.64'' (2'' \text{ well screen outside diameter squared}) \times .7854 \times 1200'' = 5,316 \text{ cubic inches}$   
 $36'' (6'' \text{ borehole diameter squared}) \times .7854 \times 1200'' = 33,930 \text{ cubic inches}$

Subtract the screen number from the borehole number, result is 28,614 cubic inches. Then divide the result by 1728, (equal to one cubic foot in inches), the result is 16.6 cubic feet. Then divide this number by 27, (equal to one cubic yard in feet), **the result is .61 cubic yards.**

One yard of well gravel weighs approximately 2600 lbs., allow 10-15% or more for waste, depending on drilling conditions.

### WELL SCREEN OPEN AREA:

**NOA** = Net Open Area in square inches per linear foot.

**GPM** = Gallons Per Minute

**NOA**  $\times .31$  = GPM at an entrance velocity of .1 foot per second.

**GPM**  $\div .31$  = NOA

**To Find NOA:**  $12'' \div (\text{slot width} + \text{spacing}) = \# \text{ of slots/row/foot (theoretically)}$ .

Number of slots/row/foot  $\times$  number of rows  $\times$  slot width  $\times$  inside slot length = NOA

**Surface Area** = Total number of square inches on the inside or the outside of a screen.

**NOA  $\div$  Surface Area** = Percentage of open area for a given screen.

**To Find Surface Area:** O.D. in inches  $\times 3.1416 \times 12'' =$  outside surface area in sq. inches per foot.

I.D. in inches  $\times 3.1416 \times 12'' =$  inside surface area in sq. inches per foot.

### Example

10" Sch. 40, (10.750" O.D., 9.976" I.D.), .020 slot, 1/4" (.250) spacing, 1-9/16" inside slot length, 9 rows of slots

**NOA** =  $12'' \div (.020 + .250)$  or  $12'' \div .270 = 44 \text{ slots/row/foot, (theoretically)}$ .

44 slots  $\times$  9 rows  $\times$  .020 slot width  $\times$  1.563" inside slot length = 12.38 sq. inches NOA

**GPM** = 12.38 sq. inches  $\times .31 = 3.84 \text{ GPM @ } .1 \text{ ft./sec. At } .2 \text{ ft./sec.} = 7.68 \text{ GPM}$

**% of Open Area:** 9.976 I.D.  $\times 3.1416 = 31.340 \times 12'' = 376.08 \text{ sq. inches}$ .

12.380 NOA  $\div 376.08 \text{ sq. inches} = 3.29\% \text{ open area based on the inside wall of the screen.}$

## CONVERSION TABLES - METRIC/ENGLISH

### Linear Measure

1 mil =	0.001 inch =	0.0254 millimeter
1 millimeter =	.03937 inch	
1 inch =	1,000 mils =	2.54 centimeters
12 inches =	1 foot =	0.3048 meter
3 feet =	1 yard =	0.9144 meter
1,760 yards or 5,280 feet =	1 (statute) mile =	1.6093 kilometers
1 meter =	39.37 inches	
1000 micron =	.03937 inches	

### Square Measure

144 square inches =	1 square inch =	6.452 square centimeters
9 square feet =	1 square foot =	929.03 square centimeters
	1 square yard =	0.8361 square meter

### Cubic Measure

1,728 cubic inches =	1 cubic inch =	16.387 cubic centimeters
1 cubic foot =	1 cubic foot =	0.0283 cubic meter
27 cubic feet =	7.48 gallons	
1,000 cubic millimeters =	1 cubic yard =	0.7646 cubic meter
1,000 cubic centimeters =	1 cubic centimeter =	0.06102 cubic inch
1,000 cubic decimeters =	1 cubic decimeter =	61.023 cubic inches or 0.0353 cubic foot
	1 cubic meter =	35.314 cubic feet or 1.308 cubic yards

### Capacity Measure

10 milliliters =	1 centiliter =	0.338 fluid ounce
10 centiliters =	1 deciliter =	3.38 fluid ounces or 0.1057 liquid quart
10 deciliters =	1 liter =	1.0567 liquid quarts or 0.9081 dry quart
10 liters =	1 decaliter =	2.64 gallons or 0.284 bushel
10 decaliters =	1 hectoliter =	26.418 gallons or 2.838 bushels
10 hectoliters =	1 kiloliter =	264.18 gallons or 35.315 cubic feet

### Weights

10 milligrams =	1 centigram =	0.1543 grain or 0.000353 ounce (avdp.)
10 centigrams =	1 decigram =	1.5432 grains
10 decigrams =	1 gram =	15.432 grains or 0.035274 ounce (avdp.)
10 grams =	1 decagram =	0.3527 ounce
10 decagrams =	1 hectogram =	3.5274 ounces
10 hectograms =	1 kilogram =	2.2046 pounds
10 kilograms =	1 myriagram =	22.046 pounds

### Water Weights

Water =	8.3 pounds/gallon
Head of water =	.433 lbs/sq. inch/ft. of water

Inches	Centimeters	Inches	Centimeters	Feet	Meters
1/4	= .6350	6	= 15.24	1	= .3048
3/8	= .9525	6-1/2	= 16.51	2.5	= .762
1/2	= 1.2700	7-1/2	= 19.05	5	= 1.524
5/8	= 1.5875	8	= 20.32	10	= 3.048
3/4	= 1.9050	8-1/2	= 21.59	13	= 3.9624
1	= 2.5400	10	= 25.40	20	= 6.096
1-1/4	= 3.1750	12	= 30.48	100	= 30.48
1-1/2	= 3.81	14	= 35.56		
2	= 5.08	16	= 40.64		
2-1/2	= 6.35	18	= 45.72		
3	= 7.62	20	= 50.80		
4	= 10.16	24	= 60.96		
4-1/2	= 11.43	36	= 91.44		
5	= 12.70	48	= 121.92		

## GLOSSARY OF TERMS

**Activated Carbon:** A highly adsorbent powdered or granular carbon made usually by carbonization or chemical activation and used primarily for purifying by adsorption.

**Annular Disposal:** The injection of brines between the production and surface casings of a conventional oil or gas well.

**Aquifer:** A rock or soil formation capable of storing, transmitting and yielding water to wells.

**Artesian Well:** A well made by boring into the earth until water is reached which from internal pressure flows up into the casing and may overflow.

**ASTM:** American Society for the Testing of Materials. This organization sets standards for the manufacture of PVC pipe and other industrial materials.

**Bentonite:** A naturally occurring clay which is used to make a drilling fluid for rotary drilled wells and also is used to seal and plug drilled holes. The most common bentonite is a sodium-based Wyoming bentonite (montmorillonite) which has the specific characteristic of swelling in fresh water.

**Brine:** This salty water, found naturally in oceans and in relatively deep formations underground, is a waste by-product that is brought to the surface during oil and gas well drilling and production.

**BTEX:** Benzene, Toluene, Ethel-Benzene, Xylene.

**Cap:** A threaded or slip fitting that goes over the male end of a pipe, well screen or casing. A flush thread cap has female threads.

**Centralizers:** Adjustable or rigid stainless steel or plastic devices that are attached to the outside of well screens and casings to center them in the borehole.

**Compound:** A combination of ingredients before being processed or made into a finished product. Sometimes used as a synonym for material formulation.

**CPVC Pipe:** Chlorinated Polyvinyl Chloride pipe. A rigid plastic piping which has good mechanical strength at high temperatures and relatively low cost. The CPVC molecule has one more chlorine atom per repeating monomer unit than does the PVC (Polyvinyl Chloride) molecule. This extra chlorine is responsible for the material's high temperature strength.

**Critical Groundwater Areas:** Aquifers and their recharge zones which require special attention and controls due to their vulnerability to contamination or depletion.

**D-1784:** ASTM Standards for the compound used to manufacture PVC pipe.

**D-1785:** ASTM Standards for the manufacture of Schedules 40, 80, and 120 PVC pipe.

**D-2241:** ASTM Standards for the manufacture of pressure rated (SDR) PVC pipe.

**D-2665:** ASTM Standards for the manufacture of PVC-DWV pipe.

**Dry Bulk Density:** The weight of one cubic foot of material before being wetted.

**DWV:** Drain, Waste, and Vent. PVC Pipe used primarily in non-pressure applications.

**Effluent:** Waste material (as liquid industrial refuse, or sewage) discharged into the environment especially when serving as a pollutant.

**Evaporation:** The process by which water is changed from a liquid or solid into vapor. Evaporation is part of the hydrologic cycle.

**F-480:** ASTM specifications that outline certain requirements for the manufacture of well casings and well screens in both belled end and flush threaded. These specifications apply to PVC and ABS (Acrylonitrile-butadiene-styrene). These requirements must be met only if the materials are going to be designated as F-480.

**Flush Thread:** A square thread joint used in the monitor well industry that provides for the assembly of PVC, Stainless Steel, HDPE, PTFE (Polytetrafluoroethylene) and other well casings and screens without the use of solvents or cements and maintains the original O.D. and I.D. of the aforementioned units.

**Glacial Till:** Unconsolidated material deposited directly by a glacier and consisting of a mixture of clay, silt, sand, gravel and boulders.

**Gravel Pack:** Graded sand that is placed in the annulus between the outer wall of a well screen and the walls of the borehole.

**Groundwater:** Water beneath the surface of the ground in a saturated zone.

**Grout:** A slurry like mixture used to seal the annulus between the well casing and the borehole to eliminate contamination from above migrating downward into the screened aquifer. Common forms of grout are bentonite, cement, and cement/bentonite mixtures. Grouts are often tremied into place.

## GLOSSARY OF TERMS (CONTINUED)

**Hardness:** A measure of the amount of dissolved minerals such as calcium and magnesium in water. The presence of these substances interferes with the lathering and cleansing properties of soap and causes scaling in pipes and water heaters.

**Heat of Hydration:** The heat given off by the curing of cement.

**Hydrogeology:** The study of ground water and its relationship to the geologic environment.

**Hydrologic Cycle:** The complete cycle of events through which water circulates between the earth's atmosphere, surface and subsurface.

**IAPD:** International Association of Plastic Distributors.

**I.D.:** Inside Diameter.

**Impermeable:** Having a texture that does not permit water to move through easily.

**Infiltration:** The movement of water into and through a soil.

**Injection Well:** A well used to dispose of fluids underground. Fluids enter either by gravity flow or by injection under pressure.

**Landfill:** A disposal site in the land for waste material.

**Leachate:** The substance that results when any liquid percolates through waste material and extracts dissolved or suspended material from it.

**LUST Program:** A program designed to eliminate Leaking Underground Storage Tanks in the U.S.A.

**Lysimeter:** A device for measuring the percolation of water through soils and for determining the soluble constituents removed in the drainage. Lysimeters are frequently placed in the vadose zone to monitor for the presence of contaminants.

**Net Open Area:** The total number of square inches of opening per linear foot of well screen as measured on the inside diameter.

**NGWA:** National Ground Water Association.

**Non-point Source Pollution:** Pollution that can not be traced to a specific point of origination. Agricultural runoff and acid mine drainage are two major non-point sources of pollution.

**NSF:** National Sanitation Foundation. This organization sets standards for the food and potable water industries.

**O.D.:** Outside Diameter.

**Overburden:** The unconsolidated formation overlying competent rock.

**Perforation:** A round drilled hole in plastic or steel pipe.

**Permeability:** The measurement of the ability of a geologic formation to transmit or yield water.

**pH:** The negative logarithm of the effective hydrogen-ion concentration or hydrogen-ion activity in gram equivalents per liter used in expressing both acidity and alkalinity on a scale whose values run from 0 to 14 with 7 representing neutrality. Numbers less than 7 indicate increasing acidity, and numbers greater than 7 indicate increasing alkalinity; *also:* the condition represented by such a number.

**Piezometer:** A well used to determine the elevation of the groundwater (commonly found on dewatering sites). A device used to measure the changes in hydrostatic pressure in a well, such as a vibrating wire piezometer.

**Plug:** A threaded or slip fitting that goes into the female end of a pipe, well screen or casing. A flush thread plug has male threads.

**Point Source Pollution:** Pollution that can be traced to a specific known point such as a sewer, pipe, tank, ditch or drain.

**Pollution:** The presence or addition of undesirable substances to the air, water or land that results in a threat to public health or a decrease in the usefulness of the environment for beneficial purposes.

**Porosity:** The measurement of the ability of a rock or soil to store or hold water.

**PPI:** Plastic Pipe Institute.

**PVC Normal Impact:** Type I Grade I, 1120, cell classification 12454-B, ASTM D-1784.

**PVC High Impact:** Type II Grade I, 2110, cell classification 15343-D, ASTM D-1784.

**PVC Pipe:** Extruded plastic pipe (technically known as Unplasticized Polyvinyl Chloride) made from Polyvinyl Chloride resin and other minor ingredients. PVC is inert to attack by strong acids, alkalis, salt solutions, alcohols, and many other chemicals. PVC pipe is used extensively in water wells, monitor wells and water distribution systems.

## GLOSSARY OF TERMS (CONTINUED)

**Recharge:** An addition or replenishment of water to the ground water supply by infiltration of precipitation or surface water through the soil.

**Resin:** An organic substance, generally synthetic, which is used as a base material for the manufacture of some plastics.

**Saturated Zone:** The part of a water-bearing material in which all voids are filled with water.

**Schedule Pipe:** Plastic pipe that is produced to the same dimensions as steel pipe. As the schedule number increases the inside diameter decreases while the outside diameter remains constant for any given pipe size. Sch. 80 is a heavier wall pipe than Sch. 40 and Sch. 120 is heavier than Sch. 80. Unlike pipe produced to SDR's, the pressure rating of schedule pipe decreases as the diameter increases. Schedule pipe and SDR pipe have the same O.D.'s with the exception of SDR 35 which has O.D.'s based on cast iron pipe sizes (there are other exceptions as well).

**SDR:** Standard Dimension Ratio. Pipe made to a particular SDR will have the same pressure rating regardless of diameter. For example SDR 21 pipes have a pressure rating of 200 PSI and SDR 26 pipes have a pressure rating of 160 PSI for all sizes.

**SIDR:** Standard Internal Dimension Ratio. Pipe made to this specification is internal diameter controlled.

**Slot:** A machined opening in pipe whose length is greater than it's width. Most commonly machined using a saw blade, however; the opening may be milled.

**Stabilizer:** A chemical substance which is frequently added to plastic compounds to inhibit undesirable changes in the material, such as discoloration due to heat or light.

**Surface Impoundment:** A holding area often used by industry to store wastewater as part of the treatment process.

**Thermoplastic Materials:** Materials which soften when heated to normal processing temperatures without the occurrence of appreciable chemical change, but are quickly hardened by cooling. Unlike thermosetting materials; they can be reheated to soften, and re-cooled to "set", almost indefinitely; they may be formed and reformed many times by heat and pressure.

**Thermosetting:** Plastic materials which undergo a chemical change and harden permanently when heated in processing. Further heating will not soften these materials.

**Transpiration:** Part of the hydrologic cycle whereby water is returned to the atmosphere from the leaves of plants.

**Unconfined Aquifer:** An aquifer whose water table is exposed to atmospheric pressure. In unconfined aquifers the water level found inside the well casing or screen is the same as that in the surrounding soils; as opposed to wells drilled into artesian aquifers where the level inside the well will rise to a level greater than that which water was first encountered during drilling.

**Unconsolidated Formations:** Soils composed of sands, gravels, silts, clays, organic materials, etc. As opposed to consolidated formations consisting of competent rock.

**UST:** Underground Storage Tank.

**Vadose Zone:** The zone containing water under pressure less than that of the atmosphere, including soil water, intermediate vadose water, and capillary water. This zone is limited above by the land surface and below by the surface of the zone of saturation, that is, the water table.

**VOC's:** Volatile Organic Compounds.

**Wash-Down Valves:** Monoflex wash-down valves are designed to position well screens in sandy soils and to thin drilling fluids. Water pumped through a wash-down valve attached to the bottom of a screen acts to jet the screen into place. The internal female pipe thread allows for the attachment of the jetting pipe. When the water is shut off a check ball rises into a closed position to seal off the bottom of the well.

**Water Table:** The level below which the soil or rock is saturated with water, sometimes referred to as the upper surface of the saturated zone.

**Well:** A vertical drilled hole into an underground formation, usually to obtain a source of water; to monitor ground water quality; or to determine the position of the water table. Said holes may also be drilled on an angle or horizontally.

**Well field:** An area which contains two or more water supply wells that provide ground water for a single water system. In general, well fields provide water for communal, commercial, industrial, and agricultural uses.

## SHIPPING CLAIMS AND DAMAGES

Monoflex is willing to assist you in every possible way to collect claims for materials lost or damaged by freight carriers. However, this willingness on our part does not make us responsible for collection of the claim or replacement of the materials. The acceptance of a shipment from us by a transportation company is their acknowledgement that the products are in good condition, properly packaged and all items accounted for. **THE CARRIER WHO DELIVERS MERCHANDISE TO YOUR DOOR IS RESPONSIBLE FOR LOSS OR DAMAGE TO ANY OF THESE MATERIALS.** For your protection Monoflex has the following suggestions:

Count the total number of boxes, packages, pallets, etc. and compare this to the bill of lading. Confirm that you have received all items related to this shipment. If the quantities do not tally, have the delivery person note the discrepancy on the bill of lading and sign it. If the missing packages are not received in a few days, you must file a freight claim directly with the carrier for the shorted materials.

Visually inspect all merchandise for damage; this includes any torn or crushed boxes, broken banding or stretch wrap and any items that have been separated from their original shipment packaging. If there is damage, have the delivery person note the nature and extent of the damage on the bill of lading. Take pictures. Notify the transportation company's office immediately and arrange for them to inspect the merchandise. File a claim directly with the carrier and notify Monoflex immediately. If packaging is in good condition, then we suggest you sign the bill of lading, "**OKAY PENDING FURTHER INSPECTION**".

If damage is noticed when the merchandise is unpacked, notify the transportation company's office immediately and ask to have it inspected. **DO NOT** destroy or discard any packages or packing until the claim is settled. **DO NOT** return the merchandise to Monoflex. Notify Monoflex of the problem and re-order as required. Monoflex is not responsible for shipping damages and must therefore process and invoice replacement orders as a new order. The customer is responsible for all invoices from Monoflex, regardless of freight carrier claims, etc. To prevent credit problems, please notify Monoflex with a written memo if you hold an invoice for payment and why.

If a shipment is not received, Monoflex can place a tracer on these items and if lost, can file a claim. If this happens, please contact our sales office and advise them of the loss. A tracer will be placed to determine where the shipment is. If a shipment is received damaged, you will need to follow the above recommendations.

Any items that were shipped incorrectly by Monoflex can be returned within 5 days of receipt of goods, with proper authorization. Obtain an RGA number from the Monoflex sales office. This RGA number must appear on all packages! Packages returned without it will be refused. This prevents lost credits or misplaced returns because of lack of information. Monoflex will help customers in any way we can to assist with freight claims. Following the above recommendations should alleviate any problems you might have along the way. If you have any recommendations that might reduce claims, please contact us at:

*Monoflex - 127 E. Spring Street, P.O. Box 600, Bechtelsville, PA 19505-0600*

*Phone: (800) 257-5183      FAX (610) 367-5675*

## WARRANTY, TERMS AND CONDITIONS OF SALE

### Warranty

Monoflex's warranty obligation is limited to repairing or replacing (at Monoflex's option) non-conforming goods. The warranty period for Monoflex's products is one year and commences on the date of purchase by the Monoflex customer. Repair shall occur during Monoflex's normal business hours during the warranty period. Examination and repair or replacement of such Products will be effected on location or at Monoflex's facilities, at Monoflex's option. Products to be examined, replaced or repaired at Monoflex's facilities must be returned to Monoflex by Purchaser within the warranty period, transportation charges prepaid. If examined Products are found not to be defective or are not for some other reason within the warranty coverage, Monoflex's service time expended on and off location will be charged to the Purchaser.

### Warranty Limitation and Exclusion

Purchaser agrees to use, maintain and install Product in accordance with recommendations and instructions of Monoflex. Monoflex will have no warranty obligation under this agreement if the Product is subjected to abuse, misuse, negligence or accident.

### Disclaimer of Warranties

The warranty printed above is the only warranty applicable to this purchase. All other warranties, express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose are disclaimed and excluded. There are no warranties which extend beyond the description on the face hereof. These warranties are exclusive and substituted for all others, express or implied, arising by law or otherwise. Under no circumstances shall seller be liable for special, indirect or consequential damages as described in §2-715 of the uniform commercial code. The price stated for the equipment is a consideration in limiting seller's liability. No action, whether in contract or tort, arising out of the transactions under this agreement may be brought by purchaser more than one year after the cause of action has accrued.

### Limitation of Liability

It is understood and agreed that Monoflex's liability and the remedy of Purchaser or other third party whether in contract, in tort, whether caused by Product failure or failure of Monoflex to perform, under any warranty, in negligence or otherwise, arising from sale or use of said Product, shall be limited to and not exceed the return of the amount of the purchase price paid by the Purchaser.

### Complaints

Complaints concerning defective goods or errors shall be made immediately to Monoflex, Bechtelsville, PA.

### Product Changes

The right is reserved to make changes in pattern, design or materials when deemed necessary, without prior notice. Products which have become obsolete by reason of design change or discontinued as a manufactured item may not be returned for credit.

### Returned Goods

Materials must not be returned unless consent has first been obtained in writing from Monoflex. Returns of saleable goods subject to 25% restocking charge.

### Risk of Loss/Damage

All goods are at the risk of the Purchaser after they have been delivered by us to the carrier and receipt obtained for same (in good order).

### Orders

Orders are subject to acceptance at Monoflex.

### Responsibility

Monoflex will not be responsible for delays resulting from strikes, accidents, failure of suppliers, negligence of carriers, or other causes beyond our control.

### Ordering Information

When ordering material, please use Monoflex part number, size, schedule and other definitive information necessary.

### Standard Package Quantities

Order by standard packaged quantities shown in catalog. When quantity is not shown, item is individually packaged or sold in bulk.

### Special Products

Products made to customer's specifications are not refundable and requests for cancellation of orders will not be considered if the manufacture of materials is in process when the request reaches the home office. Custom manufactured products will incur a set up charge.

### Errors, Shortages, Etc.

Claims for errors, shortages, etc., must be made upon receipt of goods, otherwise no allowance will be made.

### Prices and Quotations

All prices and quotations are subject to change without notice. Items not listed in this catalog will be quoted on application. Prices and quotations in Monoflex product catalog do not constitute offers. A request to purchase is to be construed as an offer and Monoflex retains all authority to accept or reject offers.

### Taxes

Any tax that may be imposed by law on the sale of articles made or sold by this company shall be added to the sale price of such articles.

### Export

Handling, packaging and documentation charges will be added to invoices on export shipments when applicable.

### Minimum Charge

None.

### Interest

Interest at 18% per annum will be charged on invoices not paid upon maturity. No discount allowed after due date.

### Freight

All prices F.O.B. factory.

### Standard Terms

2% 15 days net 30.





# Groundwater sampling just became easier.



Monoflex introduces a new line of Isomega™ Pneumatic Bladder Pumps, Air/Gas Displacement Pumps and Accessories. Monoflex Isomega™ Bladder Pumps are available in PVC, Stainless Steel and PTFE, (not pictured). These pumps feature a bladder assembly constructed of PTFE for durability and to ensure sample integrity. Air/Gas Displacement Pumps are available in PVC and Stainless Steel, and are commonly used for well purging prior to sampling. Also available is the Monoflex Integrated Vacuum/Pressure (I.V.P.) Controller, which is used for cycling Monoflex pneumatic pumps. The I.V.P. Controller features a "Vacuum Assist" mode, which maximizes pump performance by increasing the amount

of fluid drawn into the pump on each cycle. A complete line of accessories, such as well head assemblies, PTFE and polyethylene pump tubing compliments our pneumatic pump line.

Additional information on these featured products and other environmental products such as Lysimeters and Bailers may be found in the Geotechnical section of this catalog.



Telephone: 800-257-5183  
Facsimile: 610-367-5675  
Email: [monoflex@campbellmfg.com](mailto:monoflex@campbellmfg.com)





*Monoflex's three U.S. manufacturing facilities are strategically located to provide our high quality products on a timely basis throughout North America, South America, and overseas.*

**Monoflex Northeast**

Bechtelsville, Pennsylvania

**Monoflex Southeast**

Largo, Florida

**Monoflex Midwest**

Prairie du Sac, Wisconsin



*Quality Ground Water Monitoring Products Since 1973*

**Sales and Customer Service**

Telephone: 800-257-5183

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