

**Check Valves
Transition, Compression & Repair Fittings**

April 2010



flo Control
Quality Products by NDS

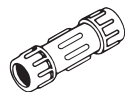
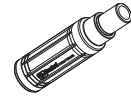
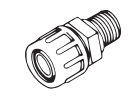


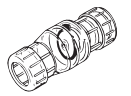
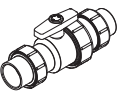

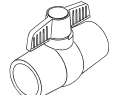


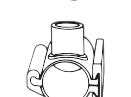
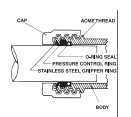
 **NDS**TM
WE PUT WATER IN ITS PLACE



Over 20 years ago, NDS began producing plastic drainage and landscape products. From the beginning, our commitment to leading the industry has been unwavering, leading to remarkable innovations and state-of-the-art products that fit every environment, every schedule, every need.

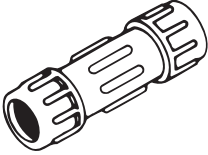
Today, our commitment to providing one-source solutions has led to the development of superior quality drainage products, landscape products, fittings, valve and meter boxes, and drip and micro irrigation products. No product is added to our line without meeting exhaustive testing and extensive research requirements. Plus, NDS is uniquely able to offer our complete inventory of products from regional warehouses in the US. Our goal: one-business-day delivery. Our track record: outstanding.

Take a moment to look through this catalog, noting the depth of our product offering. If you have any questions or to place an order, just call 1-800-726-1994 from 5 a.m. to 5 p.m. PST. and let us offer the best solution for you.

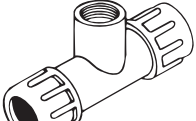
	COMPRESSION FITTINGS	2-3
	EXPANSION REPAIR COUPLINGS	4
	FLO-LOCK™ TRANSITION FITTINGS	4-6
	SCREENS TO MAKE FOOT VALVES	7
	SPRING CHECK VALVES	7-10
	SWING CHECK VALVES	10-12
	CHECKMATE / SUMP PUMP CHECK VALVES	12
	POOL VALVES	12
	BALL VALVES	13
	UNIONS	14
	FIRE HYDRANT CAP	14
	FLO-TAP™ & CLAMP IT™ SADDLES	14-16
	TECHNICAL DATA & INSTALLATION GUIDE	17-20
	MARKETING MATERIALS	21
	FLOW VELOCITY CHART	22
	WARRANTY AND TERMS	Back Cover

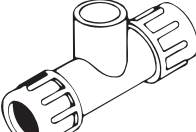
IPS COUPLINGS, TEES & ADAPTERS – SERIES 100

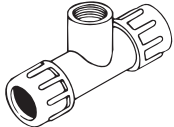
Rated @ 200 PSI Static Pressure @ 72°F


	Part No.	IPS Size UC Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Couplings — PVC 	110-05	½"	4"	White	28	8.5	41CF	PVC
	110-07	¾"	4¼"	White	24	9.0	41CF	NSF/ANSI 61, ANNEX G
	110-10	1"	4½"	White	15	7.5	41CF	UPC
	110-12	1¼"	5"	White	10	7.5	41CF	
	110-15	1½"	5½"	White	16	15.5	41CF	
	110-20	2"	6"	White	12	15.5	41CF	
	110-25	2½"	8"	White	3	6.0	41CF	
	110-30	3"	9"	White	3	9.9	41CF	
	110-40	4"	10"	White	3	13.5	41CF	
	110-60	6"	10"	White	1	7.0	41CF	

Couplings — CPVC	310-05	½"	4"	Tan	28	9.0	41CF	CPVC
	310-07	¾"	4¼"	Tan	24	10.5	41CF	

	Part No.	IPS Size UC Connection	IPS Branch	Body Size	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Threaded Tee 	120-05	½"	½" FPT	4"	White	24	7.5	41CF	PVC
	120-07	¾"	¾" FPT	4¼"	White	20	9.0	41CF	NSF/ANSI 61, ANNEX G
	120-10	1"	1" FPT	4½"	White	15	9.0	41CF	
	120-12	1¼"	1¼" FPT	5"	White	15	13.5	41CF	
	120-15	1½"	1½" FPT	5½"	White	12	13.5	41CF	
	120-20	2"	2" FPT	6"	White	10	14.5	41CF	

Slip Tee 	121-05	½"	½" S	4"	White	24	7.5	41CF	PVC
	121-07	¾"	¾" S	4¼"	White	20	8.5	41CF	NSF/ANSI 61, ANNEX G
	121-10	1"	1" S	4½"	White	15	8.5	41CF	UPC
	121-12	1¼"	1¼" S	5"	White	15	12.5	41CF	
	121-15	1½"	1½" S	5½"	White	12	12.5	41CF	
	121-20	2"	2" S	6"	White	10	14.0	41CF	

Reducing Tee w/ Threaded Outlet 	122-75	¾"	½" FPT	4¼"	White	20	8.0	41CF	PVC
	122-15	1½"	¾" FPT	5½"	White	12	12.5	41CF	NSF/ANSI 61, ANNEX G


	Part No.	IPS Size UC Connection	IPS Size MPT Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
PVC Male Adapter 	130-05	½"	½" MPT	White	25	4.0	41CF	PVC
	130-07	¾"	¾" MPT	White	20	4.0	41CF	NSF/ANSI 61, ANNEX G
	130-10	1"	1" MPT	White	30	9.0	41CF	UPC
	130-12	1¼"	1¼" MPT	White	20	8.0	41CF	
	130-15	1½"	1½" MPT	White	16	8.0	41CF	
	130-20	2"	2" MPT	White	12	8.5	41CF	

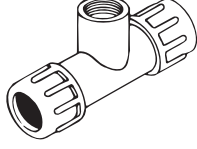
CTS COUPLINGS, TEES & ADAPTERS – SERIES 200

Rated @ 200 PSI Static Pressure @ 72°F

	Part No.	CTS size	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
PVC Couplings 	210-05	1/2" UC	4"	White	25	4.0	41CF	PVC
	210-07	3/4" UC	4"	White	28	8.0	41CF	NSF/ANSI 61, ANNEX G
	210-10	1" UC	4 1/4"	White	24	9.5	41CF	UPC
	210-12	1 1/4" UC	4 1/2"	White	15	8.0	41CF	
	210-15	1 1/2" UC	5"	White	10	8.0	41CF	
	210-20	2" UC	6"	White	12	14.0	41CF	


CPVC Couplings 	410-05	1/2" UC	4"	Tan	25	4.4	41CF	CPVC
	410-07	3/4" UC	4"	Tan	28	8.0	41CF	
	410-10	1" UC	4 1/2"	Tan	24	10.0	41CF	

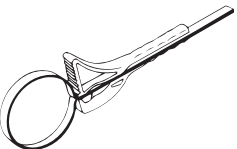
	Part No.	CTS Size	IPS Branch	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
PVC Threaded Tee 	220-05	1/2" UC	1/2" FPT	4"	White	36	7.5	41CF	PVC
	220-07	3/4" UC	3/4" FPT	4"	White	24	7.5	41CF	NSF/ANSI 61, ANNEX G
	220-10	1" UC	1" FPT	4 1/4"	White	18	9.0	41CF	
	220-12	1 1/4" UC	1 1/4" FPT	4 1/2"	White	12	8.5	41CF	
	220-15	1 1/2" UC	1 1/2" FPT	5"	White	15	14.5	41CF	
	220-20	2" UC	2" FPT	6"	White	10	14.0	41CF	

CPVC Threaded Tee 	420-05	1/2" UC	2 1/2" FPT	4"	Tan	36	8.0	41CF	CPVC
	420-07	3/4" UC	2 3/4" FPT	4"	Tan	24	8.8	41CF	

	Part No.	CTS Size	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
PVC Spigot Adapter 	1137-35	1/2" S x 3/8" Tube	White	50	10.0	41FL	Adapter converts 1/2" CTS valves to accept 3/8" supply tube. Not rated.

WRENCHES

	Part No.	For Use with IPS Compression Size	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Aluminum Wrenches 	W00-25	2 1/2"	Aluminum	1		41CF	Aluminum
	W00-30	3"	Aluminum	1		41CF	
	W00-40	4"	Aluminum	1		41CF	
	W00-60	6"	Aluminum	1		41CF	

Strap Wrenches (adjustable) 	BOA-104	1/2" - 4"	Bulk			41CF	Plastic Handle
	BOA-106	1/2" - 6"	Bulk			41CF	Rubber Strap

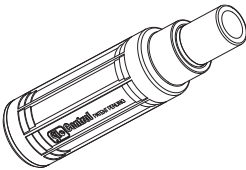
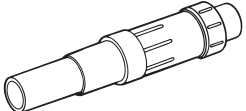
Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

For customer service, please send your fax to: 1-800-726-1998 or call 1-800-726-1994.

EXPANSION REPAIR COUPLINGS

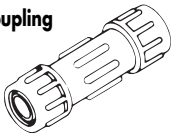
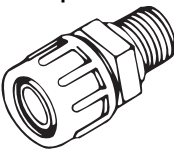
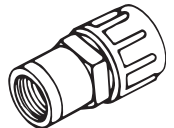
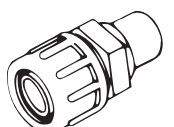
Rated @ 200 PSI Static Pressure @ 72°F



	Part No.	IPS Size (SxSpg)	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	118-05	1/2"	5 1/2"	White	28	6.5	41XC	PVC
	118-07	3/4"	5 3/4"	White	24	8.0	41XC	118-05 Thru 25:
	118-10	1"	6 7/8"	White	15	8.8	41XC	NSF/ANSI 14
	118-12	1 1/4"	7 7/8"	White	10	8.0	41XC	UPC
	118-15	1 1/2"	9 1/2"	White	16	19.0	41XC	
	118-20	2"	9 7/8"	White	12	18.5	41XC	
	118-25	2 1/2"	13 3/8"	White	3	10.0	41XC	
	118-30	3"	15 1/4"	White	3	13.0	41XC	
	118-40	4"	16 3/4"	White	3	20.5	41XC	
	117-05	1/2"	5 3/4"	White	28	9.0	41XC	PVC
	117-07	3/4"	6 3/4"	White	24	10.7	41XC	
	117-10	1"	7 3/4"	White	15	12.0	41XC	
	117-12	1 1/4"	9"	White	10	11.0	41XC	
	117-15	1 1/2"	10"	White	16	21.8	41XC	
	117-20	2"	10 1/2"	White	12	21.5	41XC	

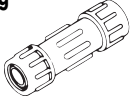

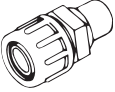
FLO-LOCK™

TUBE SIZE SIDR-7 COUPLINGS & ADAPTERS – SERIES 800

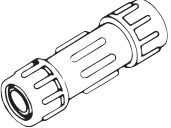
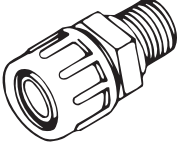

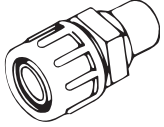
	Part No.	Tube Size	Connection Size	Length (inches)	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	810-07	3/4"	3/4" x 3/4" TS	4 1/2"	White	24	9.5	41FL	For use on Polyethylene
	810-10	1"	1" x 1" TS	4 1/2"	White	15	8.2	41FL	Tube size SIDR-7
	* 810-12	1 1/4"	1 1/4" x 1 1/4" TS	5"	White	10	7.7	41FL	160 & 200 PSI ASTM D-2239 PVC NSF/ANSI 61, ANNEX G UPC
*Inset stiffener supplied—must be used with this fitting									
	830-07	3/4"	3/4" MPT x 3/4" TS	2 5/8"	White	20	4.5	41FL	For use on Polyethylene
	830-10	1"	1" MPT x 1" TS	2 7/8"	White	28	9.0	41FL	Tube size SIDR-7
	830-12	1 1/4"	1 1/4" MPT x 1 1/4" TS	3 1/2"	White	16	7.3	41FL	160 & 200 PSI
	830-71	3/4" x 1"	3/4" MPT x 1" TS	2 7/8"	White	18	4.0	41FL	ASTM D-2239
	830-121	1" x 1 1/4"	1" MPT x 1 1/4" TS	3"	White	12	4.3	41FL	PVC NSF/ANSI 61, ANNEX G 830-07 thru 12: UPC
	831-07	3/4"	3/4" FPT x 3/4" TS	2 5/8"	White	20	6.0	41FL	For use on Polyethylene
	831-10	1"	1" FPT x 1" TS	2 7/8"	White	28	10.0	41FL	Tube size SIDR-7 160 & 200 PSI ASTM D-2239 PVC NSF/ANSI 61, ANNEX G
	833-07	3/4"	IPS Spg x 3/4" TS	3"	White	20	4.5	41FL	For use on Polyethylene
	833-71	3/4"	IPS Spg x 1" TS	3"	White	20	5.0	41FL	Tube size SIDR-7
	833-10	1"	IPS Spg x 1" TS	3"	White	28	9.0	41FL	160 & 200 PSI ASTM D-2239 PVC NSF/ANSI 61, ANNEX G UPC

Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

TUBE SIZE SDR-13.5 IPS COUPLINGS & ADAPTERS – SERIES 500

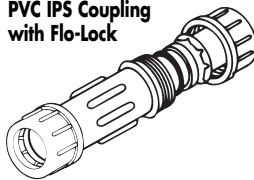
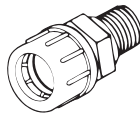

	Part No.	Tube Size	Connection Size	Length (inches)	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Coupling 	510-10	1"	1" TS x 1" TS	4½"	White	24	9.0	41FL	For use on Polyethylene Tube size SDR-13.5 ASTM D 3035 PVC NSF/ANSI 61, ANNEX G UPC
Male Adapter 	530-10	1"	1" MPT x 1" TS	2⅞"	White	18	3.5	41FL	For use on Polyethylene Tube size SDR-13.5 ASTM D 3035 PVC NSF/ANSI 61, ANNEX G UPC
Spigot Adapter 	533-10	1"	1" Spg x 1" TS	2⅞"	White	18	3.5	41FL	For use on Polyethylene Tube size SDR-13.5 ASTM D 3035 PVC NSF/ANSI 61, ANNEX G UPC

TUBE SIZE SDR-9 CTS COUPLINGS & ADAPTERS – SERIES 700

	Part No.	Tube Size	Connection Size	Length (inches)	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications	
Coupling 	710-07	¾"	¾" x ¾" TS	4"	White	35	10.0	41FL	For use on Polyethylene	
	710-10	1"	1" x 1" TS	4½"	White	24	8.8	41FL	Tube size SDR-9	
	710-17	1"	1" SDR-9 x ¾" SDR-11	4"	White	36	12.0	41FL	160-200 PSI	
	710-12	1¼"	1 1/4" x 1 1/4" TS	5"	White	15	7.0	41FL	ASTM D-2737	
	+ 710-15	1½"	1½" x 1½" TS	5"	White	16	9.5	41FL	PVC	
	+ 710-20	2"	2" x 2" TS	5½"	White	12	10.0	41FL	NSF/ANSI 61, ANNEX G	
	710-17-9	1"	1" x ¾" SDR 9	4"	White	36	2.0	41FL	UPC	
	+ Insert stiffeners supplied must be used with this fitting									
Male Adapter 	730-07	¾"	¾" MPT x ¾" TS	2⅝"	White	25	4.0	41FL	For use on Polyethylene	
	730-71	¾" x 1"	¾" MPT x 1" TS	2⅞"	White	18	4.0	41FL	Tube size SDR-9	
	730-10	1"	1" MPT x 1" TS	2⅞"	White	18	4.0	41FL	160-200 PSI	
	730-12-10	1" x 1¼"	1" MPT x 1 1/4" TS	3½"	White	12	5.0	41FL	ASTM D2737	
	730-12	1¼"	1 1/4" MPT x 1 1/4" TS	3½"	White	12	5.0	41FL	PVC	
	730-15	1½"	1½" MPT x 1½" TS	3½"	White	18	8.0	41FL	UPC except 730-12-10	
	+ 730-20	2"	2" MPT x 2" TS	4"	White	12	8.8	41FL		
	+ Insert stiffeners supplied must be used with this fitting									
Female Adapter 	731-07	¾"	¾" FPT x ¾" TS	2⅝"	White	25	4.5	41FL	For use on Polyethylene	
	731-71	¾" x 1"	¾" FPT x 1" TS	2⅞"	White	15	4.2	41FL	Tube size SDR-9	
	731-10	1"	1" FPT x 1" TS	3½"	White	15	4.2	41FL	160-200 PSI	
	731-12	1¼"	1¼" FPTx 1¼" TS	3½"	White	12	5.3	41FL	ASTM D2737	
	731-12-10	1" x 1¼"	1" FPT x 1¼" TS	3½"	White	12	5.3	41FL	PVC	
	731-15	1½"	1½" FPT x 1½" TS	4½"	White	18	9.0	41FL	NSF/ANSI 61, ANNEX G	
	+ 731-20	2"	2" FPT x 2" TS	2⅞"	White	12	9.5	41FL		
	+ Insert stiffeners supplied must be used with this fitting									
Spigot Adapter 	733-07	¾"	¾" IPS Spg x ¾" TS	2⅞"	White	18	4.0	41FL	For use on Polyethylene	
	733-71	¾"	¾" IPS Spg x 1" TS	2⅞"	White	18	4.0	41FL	Tube size SDR-9	
	733-10	1"	1" IPS Spg x 1" TS	3½"	White	18	4.0	41FL	160-200 PSI	
	733-12	1¼"	1¼" IPS Spg x 1 1/4" TS	3½"	White	12	5.0	41FL	ASTM D2737	
	733-15	1½"	1½" IPS Spg x 1 1/2" TS	3½"	White	18	8.0	41FL	PVC	
	+ 733-20	2"	2" IPS Spg x 2" TS	3½"	White	12	8.8	41FL	NSF/ANSI 61, ANNEX G UPC	
	+ Insert stiffeners supplied must be used with this fitting									


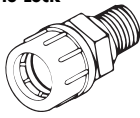
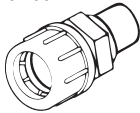
COUPLINGS & ADAPTERS – SERIES 100 – For use on IPS sizes

Rated @ 160 PSI Static Pressure @ 72°F

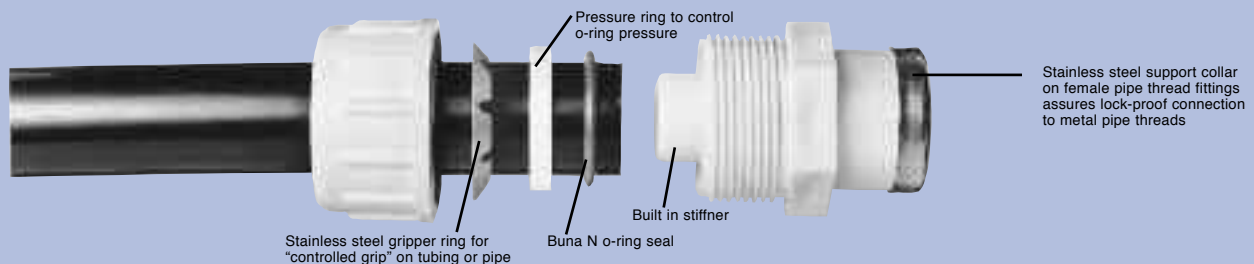
	Part No.	IPS Size	Body Length (inches)	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>PVC IPS Coupling with Flo-Lock</p>	112-05	½"	4"	White	28	8.5	41FL	For use on IPS sizes
	112-07	¾"	4¼"	White	24	9.5	41FL	Rated 160 PSI @ 72° F
	112-10	1"	4½"	White	15	7.5	41FL	
	112-12	1¼"	5"	White	10	8.0	41FL	
	112-15	1½"	5½"	White	16	16.5	41FL	
	112-20	2"	6"	White	12	15.0	41FL	
	Part No.	IPS Size	IPS Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>PVC IPS Male Adapter with Flo-Lock</p>	135-05	½"	½" MPT	White	25	4.0	41FL	For use on IPS sizes
	135-07	¾"	¾" MPT	White	20	4.0	41FL	Rated 160 PSI @ 72° F
	135-10	1"	1" MPT	White	30	9.0	41FL	NSF/ANSI 61, ANNEX G
	135-12	1¼"	1¼" MPT	White	20	8.0	41FL	UPC
	135-15	1½"	1½" MPT	White	16	8.0	41FL	
	135-20	2"	2" MPT	White	12	8.5	41FL	
 <p>PVC IPS Female Adapter with Flo-Lock</p>	136-05	½"	½" FPT	White	25	4.5	41FL	For use on IPS sizes
	136-07	¾"	¾" FPT	White	20	5.0	41FL	Rated 160 PSI @ 72° F
	136-10	1"	1" FPT	White	14	4.5	41FL	NSF/ANSI 61, ANNEX G
	136-12	1¼"	1¼" FPT	White	18	8.5	41FL	
	136-15	1½"	1½" FPT	White	16	9.0	41FL	
	136-20	2"	2" FPT	White	10	7.5	41FL	

ADAPTERS – SERIES 200, 400 AND 900 – For use on CTS sizes

Rated @ 160 PSI Static Pressure @ 72°F

	Part No.	CTS Size	Connection (inches)	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications	
 <p>PVC CTS Male Adapter with Flo-Lock</p>	235-05	½"	½" MPT	White	50	4.5	41FL	For use with CTS pipe	
	235-07	¾"	¾" MPT	White	25	4.0	41FL	Rated 160 PSI @ 72° F	
	235-10	1"	1" MPT	White	18	3.5	41FL	NSF/ANSI 61, ANNEX G	
	235-12	1¼"	1¼" MPT	White	24	7.5	41FL	UPC Except 235-20	
	235-15	1½"	1½" MPT	White	20	8.5	41FL		
	235-20	2"	2" MPT	White	12	7.5	41FL		
 <p>CPVC CTS Male Adapter with Flo-Lock</p>	435-05	½"	½" x ½" MPT	Tan	4.8	50	41FL	For use with CTS pipe	
	435-07	¾"	¾" x ¾" MPT	Tan	4.0	25	41FL	Rated 160 PSI @ 72° F	
	Part No.	CTS Size	IPS Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>PVC CTS Female Adapter with Flo-Lock</p>	935-07	¾"	¾" Spg	2 7/8"	White	20	4.5	41CV	For use with CTS pipe
	935-10	1"	1" Spg	2 7/8"	White	20	4.5	41CV	Rated 160 PSI @ 72° F
	935-12	1¼"	1¼" Socket	3 5/16"	White	25	8.0	41CV	ASTM B88
	935-125	1¼"	1½" Socket	3 5/16"	White	20	8.0	41CV	
	935-15	1½"	1½" Socket	4"	White	20	11.0	41CV	
	935-20	2"	2" Socket	5"	White	12	8.0	41CV	

As cap is tightened, pressure causes the gripper ring to bite into the pipe helping to eliminate pull out.



Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

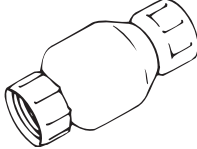
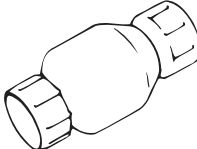
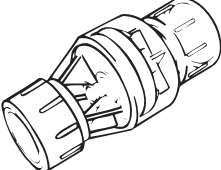
For customer service, please send your fax to: 1-800-726-1998 or call 1-800-726-1994.

	Part No.	IPS Size	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Foot Valve Screens 	1800-05	½"	2½"	Black	Bulk		41CV	Material: Polyethylene 100 mesh
	1800-07	¾"	2¾"	Black	Bulk		41CV	
	1800-10	1"	2½"	Black	Bulk		41CV	
	1800-12	1¼"	3½"	Black	Bulk		41CV	
	1800-15	1½"	3½"	Black	Bulk		41CV	
	1800-20	2"	3½"	Black	Bulk		41CV	

SPRING CHECK VALVES

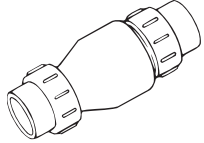
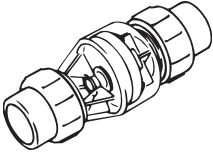
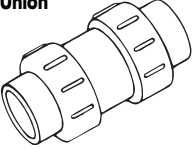
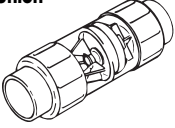
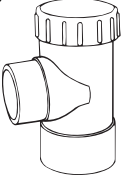
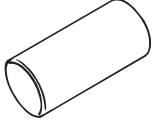
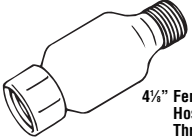
SPRING CHECK VALVES- PVC – SERIES 1001, 1002, 1011, 1012

Rated @ 200 PSI Static Pressure @ 72°F

	Part No.	Spring Tension	IPS Size Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications		
FPT x FTP EPDM Gasket 	1001-05	½ lb.	½"	4½"	White	20	4.5	41CV	PVC NSF/ANSI 61, ANNEX G		
	1001-07	½ lb.	¾"	4½"	White	20	4.5	41CV			
	1001-10	½ lb.	1"	5¼"	White	20	8.5	41CV			
	1001-12	½ lb.	1¼"	6¾"	White	15	12.0	41CV			
	1001-15	½ lb.	1½"	6¾"	White	15	13.0	41CV			
	1001-20	½ lb.	2"	7"	White	10	15.5	41CV			
	1001-25	½ lb.	2½"	8⅝"	White	8	26.0	41CV			
	1001-30	½ lb.	3"	8⅝"	White	8	26.0	41CV			
	1002-05	2 lb.	½"	4½"	White	20	4.5	41CV			
	1002-07	2 lb.	¾"	4½"	White	20	4.5	41CV			
	1002-10	2 lb.	1"	5¼"	White	20	8.5	41CV			
	1002-12	2 lb.	1¼"	6¾"	White	15	12.0	41CV			
	1002-15	2 lb.	1½"	6¾"	White	15	13.0	41CV			
	1002-20	2 lb.	2"	7"	White	10	15.5	41CV			
	1002-25	2 lb.	2½"	8⅝"	White	8	26.0	41CV			
	1002-30	2 lb.	3"	8⅝"	White	8	26.0	41CV			
	5x5 EPDM Gasket 	1011-05-025	¼ lb.	½"	4½"	White	20	4.0		41CV	PVC NSF/ANSI 61, ANNEX G
		1011-07-025	¼ lb.	¾"	4½"	White	20	4.5		41CV	
1011-05		½ lb.	½"	4½"	White	20	4.0	41CV			
1011-07		½ lb.	¾"	4½"	White	20	4.5	41CV			
1011-10		½ lb.	1"	5¼"	White	20	8.5	41CV			
1011-12		½ lb.	1¼"	6¾"	White	15	12.0	41CV			
1011-15		½ lb.	1½"	6¾"	White	15	13.5	41CV			
1011-20		½ lb.	2"	7"	White	10	16.0	41CV			
1011-25		½ lb.	2½"	8⅝"	White	8	26.0	41CV			
1011-30		½ lb.	3"	8⅝"	White	8	26.0	41CV			
1012-05		2 lb.	½"	4½"	White	20	4	41CV			
1012-07		2 lb.	¾"	4½"	White	20	4.5	41CV			
1012-10		2 lb.	1"	5¼"	White	20	8.5	41CV			
1012-12		2 lb.	1¼"	6¾"	White	15	12.0	41CV			
1012-15		2 lb.	1½"	6¾"	White	15	13.5	41CV			
1012-20		2 lb.	2"	7"	White	10	16.0	41CV			
1012-25		2 lb.	2½"	8⅝"	White	8	26.0	41CV			
1012-30		2 lb.	3"	8⅝"	White	8	26.0	41CV			
1015-25	5 lb.	2½"	8⅝"	White	8	26.0	41CV				
1015-30	5 lb.	3"	8⅝"	White	8	26.0	41CV				
5x5 Clear PVC EPDM Gasket 	1011C10	½ lb.	1"	5¼"	Clear	20	8.5	41CV	Clear PVC		
	1011C12	½ lb.	1¼"	6¾"	Clear	15	12.0	41CV			
	1011C15	½ lb.	1½"	6¾"	Clear	15	13.5	41CV			
	1011C20	½ lb.	2"	7"	Clear	10	16.0	41CV			
	1012C12	2 lb.	1¼"	6¾"	Clear	15	12.0	41CV			
	1012C15	2 lb.	1½"	6¾"	Clear	15	13.5	41CV			
	1012C20	2 lb.	2"	7"	Clear	10	16.0	41CV			
	1012C25	2 lb.	2½"	8⅝"	Clear	8	26.0	41CV			

SPRING CHECK VALVES - SERIES 1700, 1090, 1136



	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications	
	White PVC True Union									
	1700-07	½ lb.	¾" S x S	6.12"	White	20	9.8	41CV	Rated @ 200 PSI static pressure @ 72°F 1700-07 thru 20: NSF/ANSI 61, ANNEX G	
	1700-10	½ lb.	1" S x S	6.83"	White	20	14.0	41CV		
	1700-15	½ lb.	1½" S x S	8.345"	White	12	19.8	41CV		
	1700-20	½ lb.	2" S x S	9.735"	White	12	22.9	41CV		
	1702-07	2 lb.	¾" S x S	6.12"	White	20	9.8	41CV		
	1702-10	2 lb.	1" S x S	6.83"	White	20	14.0	41CV		
	1702-15	2 lb.	1½" S x S	8.35"	White	12	19.8	41CV		
	1702-20	2 lb.	2" S x S	9.74"	White	12	22.9	41CV		
		Clear PVC True Union								
1700C07		½ lb.	¾" S x S	6.12"	Clear	20	9.8	41CV		
1700C10		½ lb.	1" S x S	6.83"	Clear	20	14.0	41CV		
1700C15		½ lb.	1½" S x S	8.345"	Clear	12	19.8	41CV		
1700C20		½ lb.	2" S x S	9.735"	Clear	12	22.9	41CV		
1700C25		½ lb.	2½" S x S	12.625"	Clear	6	33.7	41CV		
1700C30		½ lb.	3" S x S	12.625"	Clear	6	33.7	41CV		
1702C15		2 lb.	1½" S x S	8.35"	Clear	12	19.8	41CV		
1702C20		2 lb.	2" S x S	9.74"	Clear	12	22.9	41CV		
	Compact White PVC True Union									
	1790-15	½ lb.	1½" S x S	6.540"	White	15	14.0	41CV		
	1790-20	½ lb.	2" S x S	7.350"	White	10	13.0	41CV		
	Compact Clear PVC True Union								Rated @ 200 PSI static pressure @ 72°F, Clear body with white nut and tail-piece	
	1790C15	½ lb.	1½" S x S	6.540"	Clear	15	14.5	22.54		41CV
	1790C20	½ lb.	2" S x S	7.350"	Clear	10	14.5	30.71		41CV
	1795C20	5 lb.	2" S x S	7.350"	Clear	10	14.5	30.71	41CV	
	CPVC 90°									
	1901-15	1 lb.	1½" S x S	5"	Tan	12	9	42.82	41CV	
	1903-15	3 lb.	1½" S x S	5"	Tan	12	9	42.82	41CV	
	1901-20	1 lb.	2" S x 2½" Spg	5½"	Tan	12	14	42.82	41CV	
	1903-20	3 lb.	2" S x 2½" Spg	5½"	Tan	12	14	42.82	41CV	
	In-Line Valve and Bypass Valve								Non-Adjustable EPDM Seal Rated @ 200 PSI static pressure at 72°F, NSF/ANSI 61, ANNEX G	
	1091-20	½ lb.	2" S x S	5"	White	12	6.9	17.31		41CV
	1095-20	5 lb.	2" S x S	5"	White	12	6.9	17.31	41CV	
	Hose Thread (EPDM Gasket)								Rated @ 200 PSI static pressure at 72°F, NSF/ANSI 61, ANNEX G	
	1136-07	½ lb.	¾" MHT x FHT	4 ½"	White	20	4.5	41CV		
	1136-07-05	5 lb.	¾" MHT x FHT	4 ½"	White	20	4.5	41CV		
	1136-07-10	10 lb.	¾" MHT x FHT	4 ½"	White	20	4.5	41CV		

IMPROVED
Quiet Design

4 ¼" Female
Hose
Thread


¾" Male Hose Thread

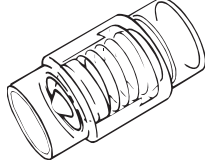
Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

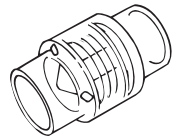
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SPA SPRING CHECK VALVES

	Part No.	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	1070-15GR	4"	Gray	12	7.6	41CV	Drain for portable spa
	1070-15BK	4"	Black	12	7.6	41CV	
	1070-15CL	4"	Clear	12	7.6	41CV	
	1071GH	2.94"	Garden Hose Adpt.	1	—	41CV	

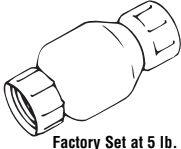
	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	1047-10	1/7 lb.	1" S x 1 1/4" Spg	3 3/8"	White	20	5.0	41CV	1/4 lb. for air blowers Rated@ 200 PSI static pressure @ 72°F
	1047-32M	1/7 lb.	32mm	3 3/8"	White	20	5.0	41CV	
	1050-10	1/4 lb.	1" S x 1 1/4" Spg	3 3/8"	White	20	5.0	41CV	
	1050-20	1/4 lb.	1 1/2" S x 2" Spg	5 1/8"	White	12	7.4	41CV	
	1055-20	5 lb.	1 1/2" S x 2" Spg	5 1/8"	White	12	8.0	41CV	


	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	1050C10	1/4 lb.	1" S x 1 1/4" Spg	3 3/8"	Clear	20	5.0	41CV	Clear PVC, 1/4 lb. for air blowers Rated@ 200 PSI static pressure @ 72°F
	1050C20	1/4 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.4	41CV	
	1050C20-05	1/2 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.4	41CV	
	1050C20-10	10 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.4	41CV	
	1050C20-12	12 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.4	41CV	
	1050C20-15	15 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.4	41CV	
	1052C20	2 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	7.5	41CV	
	1055C20	5 lb.	1 1/2" S x 2" Spg	5 1/8"	Clear	12	8.0	41CV	

	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	S1050C20	1/4 lb.	1 1/2" S x 2" Spg	4"	Clear	12	6	41CV	Clear PVC, 1/4 lb. for air blowers Rated@ 200 PSI static pressure @ 72°F
	S1050C20-05	1/2 lb.	1 1/2" S x 2" Spg	4"	Clear	12	6	41CV	
	S1052C20	2 lb.	1 1/2" S x 2" Spg	4"	Clear	12	6	41CV	
	S1057C20	7 lb.	1 1/2" S x 2" Spg	4"	Clear	12	6	41CV	

ADJUSTABLE SPRING CHECK VALVES — SERIES 1200


Rated @ 200 PSI Static Pressure @ 72°F

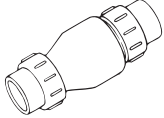
	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>Factory Set at 5 lb.</p>	1205-05	2 - 5 lb.	1/2"	4 1/8"	White	20	4.5	41CV	Rated @ 200 PSI static pressure @ 72°F Adjusting nut 1 1/2 turn = 1 lb. force. 1205-05 thru 20 & 1205-07-20: NSF/ANSI 61, ANNEX G
	1205-07	2 1/2 - 5 lb.	3/4"	4 1/8"	White	20	4.5	41CV	
	1205-10	4 1/8 - 17 lb.	1"	5 1/4"	White	20	8.5	41CV	
	1205-12	4 - 50 lb.	1 1/4"	6 3/16"	White	15	12.5	41CV	
	1205-15	3 1/2 - 50 lb.	1 1/2"	6 3/16"	White	15	13.5	41CV	
	1205-20	1 3/4 - 14 1/2 lb.	2"	9 3/4"	White	10	14.5	41CV	
	1201-05	1 lb.	1/2"	4 1/8"	White	20	4.5	41CV	
	1203-05	3 lb.	1/2"	4 1/8"	White	20	4.5	41CV	
	1205-07-20	20 lb.	3/4"	4 1/8"	White	20	4.5	41CV	
	1205V07	5 lb.	3/4" w/ VITON	4 1/8"	White	20	4.5	41CV	


	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>Factory Set at 5 lb.</p>	1225-07	2 1/2 - 5 lb.	3/4"	4 1/8"	White	20	4.5	41CV	Rated @ 200 PSI static pressure @ 72°F Adjusting nut 1 1/2 turn = 1 lb. force.
	1225-10	4 1/4 - 17 lb.	1"	5 1/4"	White	20	8.5	41CV	
	1225-15	3 1/2 - 50 lb.	1 1/2"	6 3/16"	White	15	13.5	41CV	
	1225-20	1 3/4 - 14 1/2 lb.	2"	9 3/4"	White	10	17.0	41CV	
	1228-15	30 lb.	1 1/2" w/ VITON	6 3/16"	White	15	12.5	41CV	

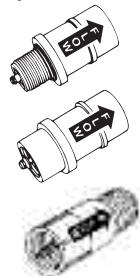
SPRING CHECK VALVES



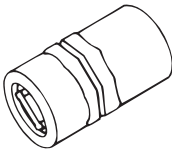
	Part No.	Spring Tension	IPS Size	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 White PVC FPT x MPT Factory Set at 5 lb.	1235-05	2 - 4½ lb.	½"	4 ¼"	White	20	4.5	41CV	PVC
	1235-07	2½ - 5 lb.	¾"	4 ¼"	White	20	4.5	41CV	Adjusting nut 1½ turn = 1 lb. force.
	1235-10	4¼ - 17 lb.	1"	5 ¼"	White	20	8.5	41CV	All 1235-xx-xx
	1235-05-30	30 lb.	½"	4 ¼"	White	20	4.5	41CV	NSF/ANSI 61, ANNEX G
	1231-05	1 lb.	½"	4 ¼"	White	20	4.5	41CV	

 White PVC True Union Factory Set at 5 lb.	1750-20	1 - 14 lb.	2"	9 ¾"	White	10	19.0	41CV	PVC
	1753-20	15 - 30 lb.	2"	9 ¾"	White	10	19.0	41CV	Adjusting nut 1½ turn = 1 lb. force.

 Vacuum Relief Valve	1171V57	½ lb.	½" S x ¾" MPT	4 ¼"	Black	20	19.0	41CV	Adjusting nut 1½ turn = 1 lb. force. Polypropylene w/cap and Viton Seals Not yet rated
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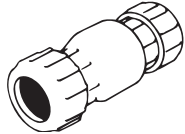
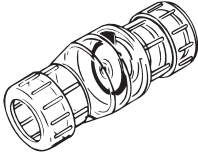
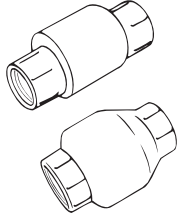
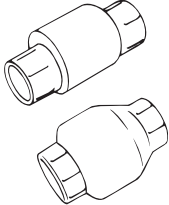
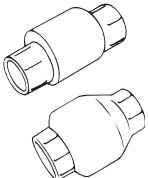
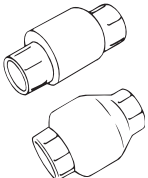
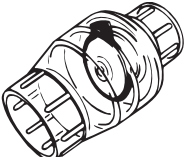
 Inline Adjustable Factory Set at 5 lb.	1101-05	2-14 lb.	½"	MPT x FPT	Gray	30	3.2	41CV	Preset @ approx. 5 lb with EPDM Seal Adjusting nut 1½ turn = 1 lb. force.
	1101-07	2-14 lb.	¾"	MPT x FPT	Gray	25	3.5	41CV	
	1101-10	2-14 lb.	1"	MPT x FPT	Gray	20	4.2	41CV	
	1100-05	2-14 lb.	½"	FPT x FPT	Gray	30	3.2	41CV	
	1100-07	2-14 lb.	¾"	FPT x FPT	Gray	25	3.5	41CV	
	1100-10	2-14 lb.	1"	FPT x MPT	Gray	20	4.2	41CV	
	1102-07	2-14 v	¾"	FPT x MPT	Gray	25	3.5	41CV	

BREAKAWAY COUPLING VALVES

	Part No.	Spring Tension	IPS Size & Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 Flo-Check Breakaway Coupling — Cal Trans Orange	1010-05-O	—	½" FPT x ½" FPT	Orange	3	30	41CV	Rated @ 150 PSI static pressure @ 72°F
	1010-07-O	—	¾" FPT x ¾" FPT	Orange	4	25	41CV	

To be used on galvanized or iron pipe only.

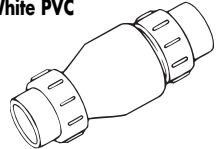
SWING CHECK VALVES – SERIES 1500

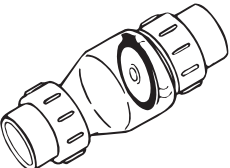
	Part No.	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
White PVC Compression 	1500-12	1/4" UC x UC	7 1/2"	White	12	5.6	41CV	Rated @ 125 PSI static pressure @ 75°F NSF/ANSI 61, ANNEX G
	1500-15	1/2" UC x UC	7 1/2"	White	12	6.3	41CV	
	1500-20	2" UC x UC	9 3/4"	White	12	16.0	41CV	
	1500-30	3" UC x UC	14"	White	2	10.0	41CV	
Clear PVC Compression 	1500C15	1/2" UC x UC	7 1/2"	Clear	12	6.3	41CV	Clear PVC
	1500C20	2" UC x UC	9 3/4"	Clear	12	16.0	41CV	
White PVC Threaded 	1520-05F	1/2" FPT x FPT	3 1/2"	White	20	4.0	41CV	PVC NSF/ANSI 61, ANNEX G
	1520-07F	3/4" FPT x FPT	3 1/2"	White	25	5.0	41CV	
	1520-10F	1" FPT x FPT	5 1/8"	White	25	10.0	41CV	
	1520-12F	1 1/4" FPT x FPT	5 1/4"	White	12	6.9	41CV	
	1520-15F	1 1/2" FPT x FPT	5 3/4"	White	12	7.0	41CV	
	1520-20F	2" FPT x FPT	6"	White	12	13.0	41CV	
	1520-20ST	2" FPT x S	6"	White	12	13.0	41CV	
White PVC S x S 	1520-05	1/2" S x S	3 1/2"	White	20	4.0	41CV	PVC NSF/ANSI 61, ANNEX G
	1520-07	3/4" S x S	3 1/2"	White	25	5.0	41CV	
	1520-10	1" S x S	5 1/8"	White	25	10.0	41CV	
	1520-12	1 1/4" S x S	5 1/4"	White	12	6.9	41CV	
	1520-15	1 1/2" S x S	5 3/4"	White	12	7.0	41CV	
	1520-20	2" S x S	6"	White	12	13.0	41CV	
	1520-30	3" S x S	9"	White	4	11.0	41CV	
	1520-40	4" S x S	9 1/2"	White	1	3.2	41CV	
	1520-20V	2" S x S w/Viton seal	6"	White	12	13.0	41CV	
CPVC 	1520H10	1" S x S	5 1/8"	Gray	25	10	41CV	CPVC
	1520H15	1 1/2" S x S	5 3/4"	Gray	12	7	41CV	
	1520H20	2" S x S	6"	Gray	12	13	41CV	
	1520H30	3" S x S	9"	Gray	4	11	41CV	
	1520H40	4" S x S	9 1/2"	Gray	1	3.2	41CV	
Clear PVC Threaded 	1520C05F	1/2" FPT x FPT	3 1/2"	Clear	20	4.0	41CV	Clear PVC
	1520C07F	3/4" FPT x FPT	3 1/2"	Clear	25	5.0	41CV	
	1520C10F	1" FPT x FPT	5 1/8"	Clear	25	10.0	41CV	
	1520C15F	1 1/2" FPT x FPT	5 3/4"	Clear	12	7.0	41CV	
	1520C20F	2" FPT x FPT	6"	Clear	12	13.0	41CV	
Clear PVC S x S 	1520C05	1/2" S x S	3 1/2"	Clear	20	4.0	41CV	Clear PVC
	1520C07	3/4" S x S	3 1/2"	Clear	25	5.0	41CV	
	1520C10	1" S x S	5 1/8"	Clear	25	10.0	41CV	
	1520C12	1 1/4" S x S	5 1/4"	Clear	12	6.9	41CV	
	1520C15	1 1/2" S x S	5 3/4"	Clear	12	7.0	41CV	
	1520C20	2" S x S	6"	Clear	12	13.0	41CV	
	1520C30	3" S x S	9"	Clear	4	11.0	41CV	
	1520C40	4" S x S	9 1/2"	Clear	1	3.2	41CV	
	1520C10V	1" S x S	5 1/8"	Clear	25	10.0	41CV	
	1520C15V	1 1/2" S x S w/ Viton seal	5 3/4"	Clear	12	7.0	41CV	
	1520C20V	2" S x S w/ Viton seal	6"	Clear	12	13.0	41CV	

Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

TRUE UNION CHECK VALVES

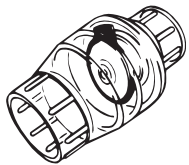
Rated @ 125 PSI Static Pressure @ 72°F

	Part No.	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	List Price (EA)	Specifications
 <p>White PVC</p>	1720-07	¾" U x U	5½"	White	20	9.0	41CV	PVC
	1720-10	1" U x U	6⅞"	White	20	14.5	41CV	
	1720-15	1½" U x U	8"	White	12	13.5	41CV	
	1720-20	2" U x U	9⅝"	White	12	23.7	41CV	
	1720-30	3" U x U	12⅝"	White	6	33.5	41CV	


 <p>Clear PVC</p>	1720C07	¾" U x U	5½"	Clear	20	9.0	41CV	PVC
	1720C10	1" U x U	6⅞"	Clear	20	14.5	41CV	Clearbody with white nuts and tailpieces
	1720C15	1½" U x U	8"	Clear	12	13.5	41CV	
	1720C20	2" U x U	9⅝"	Clear	12	23.7	41CV	
	1720C30	3" U x U	12⅝"	Clear	6	33.5	41CV	

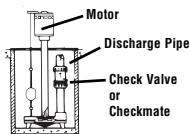
SWING CHECK VALVES WITH SPRING ASSIST

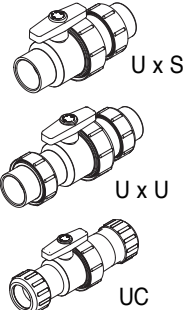
Rated @ 125 PSI Static Pressure @ 72°F

	Part No.	Spring Tension	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>Spring Loaded Swing Check Valve</p>	1580-15	½ lb.	1½" SxS	5¾"	White	12	7.0	41CV	PVC
	1580-20	½ lb.	2" SxS	6"	White	12	13.0	41CV	See "Color"
	1780-15	½ lb.	1½" UxU	8"	White	12	13.5	41CV	
	1780-20	½ lb.	2" UxU	9⅞"	White	12	23.7	41CV	
	1580C15	½ lb.	1½" SxS	5¾"	Clear	12	7.0	41CV	
	1580C20	½ lb.	2" SxS	6"	Clear	12	13.0	41CV	
	1780C15	½ lb.	1½" UxU	8"	Clear	12	13.5	41CV	
	1780C20	½ lb.	2" UxU	9⅞"	Clear	12	23.7	41CV	
	1989H22	½ lb.	2" SxS	1½"	Black	20	29.6	41PV	


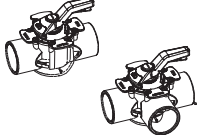
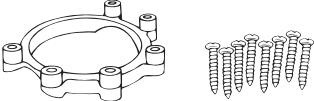
ASUMP PUMP VALVES / CHECKMATE

	Part No.	IPS Size & Connection	Body Length	Check Valve Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
 <p>Sump Pump Valve</p>	1400-15	1¼" or 1½" UC	5¼"	White	12	7.0	41CV	Rated @ 125 PSI Static @ 72°F. Buna "N" Gaskets are included in both 1¼" and 1½" size applications.

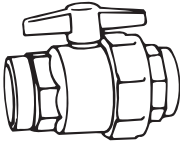
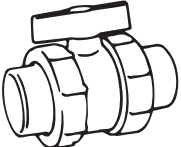


 <p>Checkmate</p>	2200-15	1½" U x S	8"	White	12	20.8	41BV	2200-xx has "swing check". †2280C20 has clear check body with spring/swing check valve
	2200C15	1½" U x S	8"	Clear	12	20.8	41BV	
	2200-15UC	1½" UC	10 ¾"	White	12	25.9	41BV	
	2200-15TU	1½" U x U	10 ½"	White	12	25	41BV	
	2200-20	2" U x S	9⅝"	White	12	30	41BV	
	2200C20	2" U x S	9⅝"	Clear	12	30	41BV	
	2200C20TU	2" U x U	12⅜"	Clear	12	36.2	41BV	
	2200-20UC	2" UC	12 ⅝"	White	12	37.5	41BV	
	2200-20TU	2" U x U	12 ⅜"	White	12	36.2	41BV	
	†2280C20	2" U x S	10⅞"	Clear	12	32	41BV	
	2280C20TU	2" U x U	13⅞"	Clear	12	36.8	41BV	

NEW
Clear Check Valve

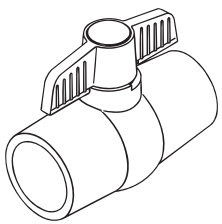
	Part No.	IPS Size & Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
CPVC Three-Way Diverter Valve 	1930-15	1½"	Tan	1	16.8	41PV	
	1930-20	2" S & 2½" Spg	Tan	1	19.4	41PV	
	1928H22	2" S x 2 1/2" Spg 2-port Straight Valve	Black		1.575	41PV	
	1938H22	2" S x 2½" Spg 3-port Diverting Valve	Black		1.685	41PV	
	1930-15-15	Fits 1½" & 2"	Tan	1	1.5	41PV	

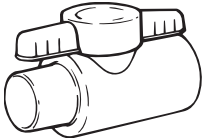
SERVICEABLE BALL VALVES

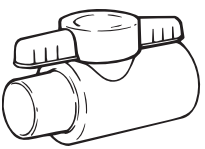
	Part No.	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
PVC Single Union Serviceable 	1350-15	1½" S x S	5½"	White	13.0	12	41BV	Serviceable on cap side
	1350-20	2" S x S	6"	White	11.0	6	41BV	
	1350-30	3" S x S	5¾"	White	8.0	1	41BV	
	1351-15	1½" FPT x FPT	4½"	White	13.0	12	41BV	
	1351-20	2" FPT x FPT	5¼"	White	11.0	6	41BV	
PVC True Union Serviceable 	1360-15	1½" S x S	5¾"	White	15.0	12	41BV	Serviceable between both cap sides

NON-SERVICEABLE BALL VALVES

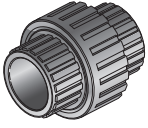


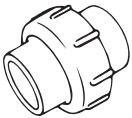
	Part No.	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
MIP Non-Serviceable 	E1310-05	½" S x S	3¼"	White	36	6.5	41BV	EPDM O-Ring Rated @ 150 PSI static pressure @72°F
	E1310-07	¾" S x S	3 ¾"	White	18	5.9	41BV	
	E1310-10	1" S x S	4¼"	White	25	12.4	41BV	
	E1310-12	1¼" S x S	4½"	White	12	7.6	41BV	
	E1310-15	1½" S x S	5¼"	White	12	11.6	41BV	
	E1310-20	2" S x S	5¾"	White	6	9.6	41BV	
	E1320-05	½" FPT x FPT	3¼"	White	36	6.7	41BV	
	E1320-07	¾" FPT x FPT	3¼"	White	18	6.1	41BV	
	E1320-10	1" FPT x FPT	4¼"	White	25	13.0	41BV	
	E1320-12	1¼" FPT x FPT	4¼"	White	12	8.0	41BV	
	E1320-15	1½" FPT x FPT	5½"	White	12	12.0	41BV	
	E1320-20	2" FPT x FPT	5¾"	White	6	10.0	41BV	

PVC Non-Serviceable 	1300-05	½" S x S	2 5/8"	White	36	7.0	41BV	EPDM O-Ring Rated @ 150 PSI static pressure @72°F
	1300-07	¾" S x S	3¼"	White	18	3.5	41BV	
	1300-10	1" S x S	3½"	White	25	9.0	41BV	

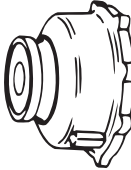
	Part No.	CTS Size & Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
CPVC Non-Serviceable 	1115-05	½" S x S	Tan	36	5	41BV	
	1117-07	¾" S x S	Tan	8	4	41BV	

UNIONS

	Part No.	IPS Size & Connection	Body Length	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
Unions — Schedule 80 	1680-05F	½" FPT x FPT		Gray	12		41UN	PVC
	1680-07F	¾" FPT x FPT		Gray	12		41UN	
	1680-10F	1" FPT x FPT		Gray	12	8.0	41UN	
	1680-12F	1¼" FPT x FPT		Gray	6	8.0	41UN	
	1680-15F	½" FPT x FPT		Gray	6	13.0	41UN	
	1680-20F	2" FPT x FPT		Gray	6	16.5	41UN	
	1680-05	½" S x S		Gray	12		41UN	
	1680-07	¾" S x S		Gray	12		41UN	
	1680-10	1" S x S		Gray	12	8.0	41UN	
	1680-12	1¼" S x S		Gray	6	8.0	41UN	
	1680-15	1½" S x S		Gray	6	13.0	41UN	
	1680-20	2" S x S		Gray	6	16.5	41UN	

Unions — Schedule 40 	1600-10	1" S x S	2.5"	White	30	8.0	41UN	PVC
	1600-12	1¼" S x S	3"	White	20	8.0	41UN	
	1600-15	1½" S x 2" Spg	3.87"	White	24	13.0	41UN	
	1600-20	2" S x 2½" Spg	4.39"	White	20	16.5	41UN	
	1600-25	2½" S x S	4.8"	White	18	28.0	41UN	
	1600-30	3" S x S	4.53"	White	14	20.0	41UN	
	1600B15	1½" S x 2" Spg	3.87"	Black	24	13.0	41UN	
	1600B20	2" S x 2½" Spg	4.39"	Black	20	16.5	41UN	

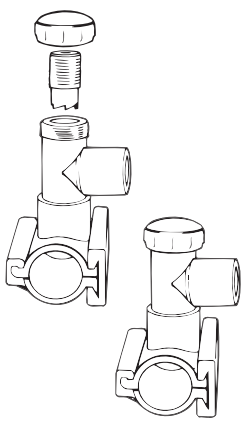
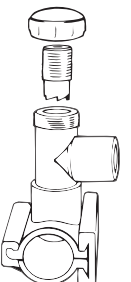


	Part No.	IPS Size	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
	23-25T	2½" FPT x ¾" FPT	Gray	15	8.0	41UN	
	22-040	4" Sewer cleanout	Black	6	10.0	41UN	

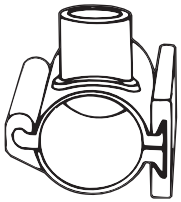
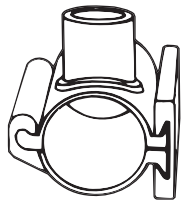
SADDLES

FLO-TAP™ HOT/WET TAPS FOR PVC PIPE

Rated @ 200 PSI Static Pressure @ 72°F

	Part No.	Pipe Size	Branch Size & Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications
For PVC Pipes ¾" and 1" Service Lines 	3115	1½"	¾" S x 1" Spg	Gray	5	5.5	41FS	PVC Type II
	3120	2"	¾" S x 1" Spg	Gray	5	6.0	41FS	
	3125	2½"	¾" S x 1" Spg	Gray	5	6.0	41FS	
	3130	3"	¾" S x 1" Spg	Gray	5	11.0	41FS	
	3140	4"	¾" S x 1" Spg	Gray	5	11.0	41FS	
	3160	6"	¾" S x 1" Spg	Gray	5	13.0	41FS	
For PVC Pipes 1 ½" and 2" Service Lines 	3220	2"	1½" S x 2" Spg	Gray	5	9.5	41FS	PVC Type II
	3225	2½"	1½" S x 2" Spg	Gray	5	9.5	41FS	
	3230	3"	1½" S x 2" Spg	Gray	5	15.0	41FS	
	3240	4"	1½" S x 2" Spg	Gray	5	14.0	41FS	
	3260	6"	1½" S x 2" Spg	Gray	5	20.0	41FS	
	3280	8"	1½" S x 2" Spg	Gray	5	25.0	41FS	

CLAMP-IT™ SADDLES

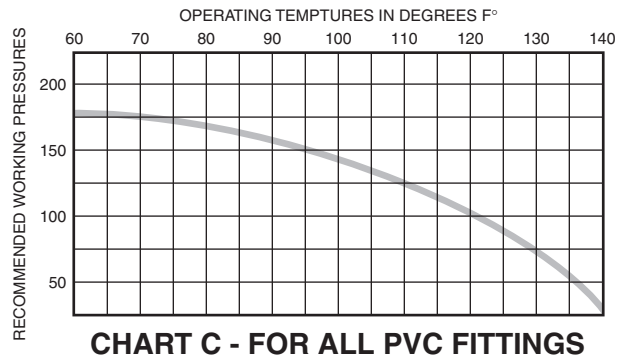
	Part No.	Pipe Size	IPS Tap Size & Connection	Color	Pkg. Qty.	Case (lbs.)	Product Class	Specifications		
For Poly Pipe — PE Pipe-IPS Fixed Outlet 	321507P	1½"	¾" FPT	Gray	25	9.0	41FS	For polyethylene tubing main line Pressure Rated @ 125 PSI @ 72°F NSF/ANSI 61, ANNEX G PVC Type II		
	321510P	1½"	1" FPT	Gray	25	9.0	41FS			
	325010P	2½"	1" FPT	Gray	25	11.0	41FS			
	322010P	2"	1" FPT	Gray	25	9.0	41FS			
	331510P	1½"	1" S	Gray	25	9.0	41FS			
	332007P	2"	¾" S	Gray	25	9.0	41FS			
	332010P	2"	1" S	Gray	25	9.0	41FS			
	335010P	2½"	1" S	Gray	25	11.0	41FS			
	343010P	3"	1" FPT	Gray	15	8.0	41FS			
	344007P	4"	¾" FPT	Gray	15	8.0	41FS			
	344010P	4"	1" FPT	Gray	15	10.0	41FS			
	353010P	3"	1" S	Gray	15	10.0	41FS			
	For IPS Pipe Sizes — PVC-IPS Fixed Outlet 	421507	1½"	¾" FPT	Gray	5	4.0		41FS	For PVC pipe main line Pressure Rated @ 200 PSI @ 72°F NSF/ANSI 61, ANNEX G PVC Type II
		421510	1½"	1" FPT	Gray	5	4.5		41FS	
		422007	2"	¾" FPT	Gray	5	4.5		41FS	
422010		2"	1" FPT	Gray	5	4.5	41FS			
422012		2"	1½" FPT	Gray	5	5.0	41FS			
422015		2"	1½" FPT	Gray	5	5.0	41FS			
422507		2½"	¾" FPT	Gray	5	5.0	41FS			
422510		2½"	1" FPT	Gray	5	5.0	41FS			
422515		2½"	1½" FPT	Gray	5	5.0	41FS			
422520		2½"	2" FPT	Gray	5	5.0	41FS			
432007		2"	¾" S	Gray	5	4.5	41FS			
432010		2"	1" S	Gray	5	4.5	41FS			
432012		2"	1¼" S	Gray	5	4.5	41FS			
432015		2"	1½" S	Gray	5	5.0	41FS			
432510		2½"	1" S	Gray	5	5.0	41FS			
432515		2½"	1½" S	Gray	5	5.0	41FS			
432520		2½"	2" S	Gray	5	5.0	41FS			
443007		3"	¾" FPT	Gray	5	8.0	41FS			
443010		3"	1" FPT	Gray	5	8.0	41FS			
443012		3"	1½" FPT	Gray	5	8.5	41FS			
443015		3"	1½" FPT	Gray	5	8.5	41FS			
443020		3"	2" FPT	Gray	5	8.5	41FS			
444007		4"	¾" FPT	Gray	5	9.5	41FS			
444010		4"	1" FPT	Gray	5	9.5	41FS			
444012		4"	1¼" FPT	Gray	5	10.0	41FS			
444015		4"	1½" FPT	Gray	5	10.0	41FS			
444020		4"	2" FPT	Gray	5	10.0	41FS			
446007		6"	¾" FPT	Gray	5	12.0	41FS			
446010		6"	1" FPT	Gray	5	12.0	41FS			
446012		6"	1¼" FPT	Gray	5	12.0	41FS			
446015		6"	1½" FPT	Gray	5	12.5	41FS			
446020		6"	2" FPT	Gray	5	12.5	41FS			
448007		8"	¾" FPT	Gray	5	17.0	41FS			
448010		8"	1" FPT	Gray	5	17.0	41FS			
448015		8"	1½" FPT	Gray	5	17.0	41FS			
448020		8"	2" FPT	Gray	5	17.0	41FS			
453007		3"	¾" S	Gray	5	8.0	41FS			
453010		3"	1" S	Gray	5	8.0	41FS			
453012		3"	1¼" S	Gray	5	8.0	41FS			
453015		3"	1½" S	Gray	5	8.5	41FS			
453020		3"	2" S	Gray	5	8.5	41FS			
454007		4"	¾" S	Gray	5	9.5	41FS			
454010	4"	1" S	Gray	5	9.5	41FS				
454015	4"	1½" S	Gray	5	9.5	41FS				
454020	4"	2" S	Gray	5	9.5	41FS				
456007	6"	¾" S	Gray	5	11.5	41FS				
456010	6"	1" S	Gray	5	11.5	41FS				
456015	6"	1½" S	Gray	5	12.0	41FS				
456020	6"	2" S	Gray	5	12.0	41FS				
458010	8"	1" S	Gray	5	17.0	41FS				
458015	8"	1½" S	Gray	5	17.0	41FS				
458020	8"	2" S	Gray	5	17.0	41FS				

Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

INFORMATION

UPC #6-70686-

TEMPERATURE VARIATION AND WORKING PRESSURE CHART



IMPORTANT

Non shock valves manufactured from PVC Type 1 material

WATER HAMMER – NDS requires that all PVC plastic piping systems be designed and constructed to **AVOID EXCESSIVE WATER HAMMER**. Water hammer can cause damage, and failure to pipe, valves, and fittings within the piping system. Not recommended in any shock applications.

NDS **DOES NOT RECOMMEND** the use of thermoplastic piping products for systems to transport or store compressed air or gases, or the testing of thermoplastic piping systems with compressed air or gases in above and below ground locations. The use of our product in exposed, compressed air or gas systems automatically voids our warranty for such products and its use against our recommendations is entirely the responsibility and liability of the installer.

NDS will not accept responsibility for damage or impairment of its products, or other consequential or incidental damages caused by misapplication, incorrect assembly, and/or exposure to harmful substances or conditions. See warranty on back cover.

Check valves are suitable for usage on grinder pump systems as long as the grinder pump is inspected for proper usage, and is on a preventative maintenance schedule.

NDS does not recommend using a FPT (female) PVC fitting with a MPT (male) metal fitting; ASTM F1498. Unless the female PVC fitting is used with a metal reinforcement ring, it may expand beyond its strength around a metal fitting, which can result in cracks and leaks.

CLAMP IT™ / FLO-TAP SADDLES

CLAMP-IT SADDLE DRILL SIZES

OUTLET SIZE OVER 2½" PIPE	DRILL SIZE
¾" IPS S & FPT	¾"
1" IPS S & FPT	1"
1¼" IPS S & FPT	1¼"
1½" IPS S & FPT	1½"
2" IPS S & FPT	2"

For 2½" IPS Saddle with a 2" outlet –
Drill Size must be 1½" due to pipe restriction

FLO-TAP™ HOT/WET TAP SADDLES

For ¾" and 1":

To drive cutter use a standard ¾" ratchet with a 6" extension. TAP Cuts .750" hole.

For 1½" and 2":

To drive cutter use a standard ½" ratchet with a 6" extension. TAP Cuts 1.250" hole.

Captures Coupon – No pipe chips in water system. CAUTION: Do not tap any PVC pipes with wall thickness exceeding .540" (8" C – 900 SDR 18, CLASS 150.) Refer to temperature variation and working pressure chart on page 26 for maximum pressure vs. maximum temperature.

NOT FOR USE WITH COMPRESSED AIR OR NATURAL GAS LINES.

TECHNICAL DATA

NDS requires that the local and state plumbing codes be reviewed and understood prior to installing any of Flo Control's products. These codes will provide proper installation procedures.

1. PVC MATERIAL SPECIFICATION PVC Type I, Grade I, Cell Class 12454-B meeting requirements of ASTM D-1784-03 is used in the manufacturing of all fittings recommended for use of potable cold water (see chart C for temperature vs. pressure). Not recommended for use on systems exceeding 100 psi at 120 degrees F.

2. CPVC MATERIAL SPECIFICATION CPVC Type IV, Grade I, Cell Class 23447-B meeting requirements of ASTM D-1784-03 is used in the manufacturing of all fittings recommended for use on potable Hot Water Systems in accordance with ASTM D-2846-73. Not recommended for use on systems that will exceed 100 psi at 180 degrees F.

3. BUNA-N SEALS are in accordance with ASTM D-2000. It is generally resistant to many hydrocarbons, fats, oils, greases, hydraulic fluids and chemicals. It is generally attacked by Ozone, Ketones, Esters, Aldehydes, chlorinated and nitro hydrocarbons. Reference chemical resistance under NBR (Nitrile) Elastomers for specific listings.

4. EPDM O-RINGS The o-ring material is made of high quality EPDM (Ethylene Propylene Copolymer) which is in accordance with ASTM D-2000. EPDM has exceptionally good weather aging and ozone resistance, excellent water and chemical resistance, and excellent aging resistance for most applications. EPDM is a polymer where oil and solvent resistance is poor. However, it is fairly good in ketones and alcohols. Reference chemical resistance under EPDM, EPT, or EPR Elastomers for specific listings.

5. DOUBLE SEAL of standard compression fitting. A compressive action is created as the cap is tightened squeezing the Buna-N seals into the tapered recessed areas of the cap and body. This process creates a highly concentrated pressure at the two "double seal" points, thus providing positive protection against leakage. (See Figure A)

6. ACME THREAD General purpose 10 pitch and 5 pitch Acme thread on Compression Cap section, eliminates the possibility of cross threading. This smooth running design prevents binding or galling as is often experienced in standard tapered threads.

7. SPRINGS Series 300 Stainless Steel.

INSTALLATION INSTRUCTIONS

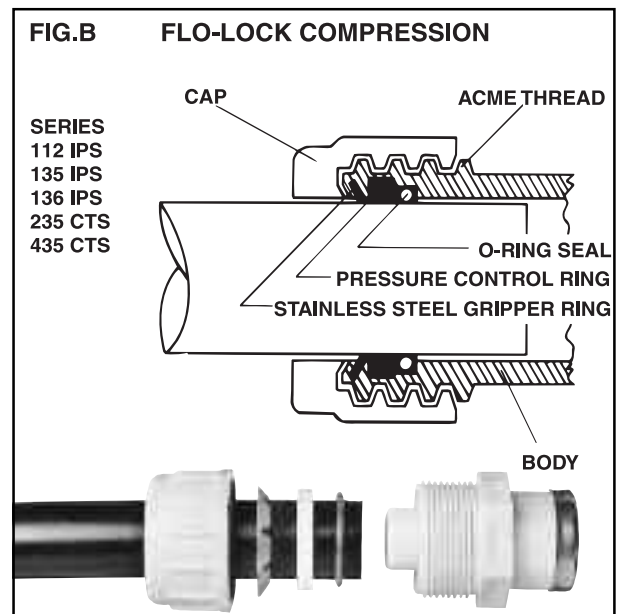
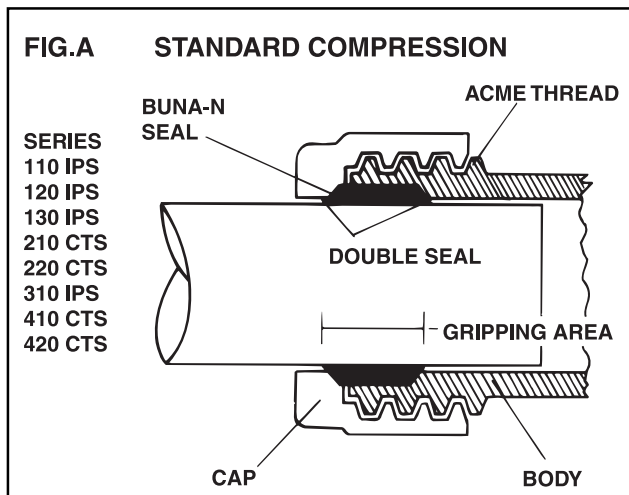
NOTE: NDS does not recommend using a FPT (female) PVC fitting with a MPT (male) metal fitting; ASTM F1498. Unless the female PVC fitting is used with a metal reinforcement ring, it may expand beyond its strength around a metal fitting, which can result in cracks and leaks.

1. COMPRESSION FITTINGS Compression cap should be drawn up hand tight to insure proper alignment and seating of gasket, then tighten $\frac{3}{4}$ to 1 turn with a Flo Spanner Wrench or strap wrench. Average torque should be approximately 25 foot pounds on $\frac{1}{2}$ " through 2" IPS, and 35 foot pounds on 2 $\frac{1}{2}$ " and larger IPS. Compression fittings are not for use on compressed air lines or natural gas lines. When installing the Standard Compression Seal fittings the pipe line must be restrained from lateral movement by thorough soil compaction on straight runs and thrust blocking at change of direction or reduction in size. Not for use on pipe lines suspended on hangers.

2. PIPE THREADS Use teflon tape on all IPS thread connections. IPS thread connection should be made hand tight plus $\frac{1}{2}$ to $\frac{3}{4}$ turn with a wrench.

3. FLO LOCK ADAPTERS for use on pipe with wall thickness of SDR-26, Class 160 or greater and copper tubing. Not recommended for use on galvanized pipe unless surface is sanded smooth. (See Figure B)

4. SOLVENT WELDING – NDS requires that all parts that are to be solvent cemented are clean of any and all foreign materials. Solvent cement manufacturers include installation instructions on the container. It is important to follow correct cementing instructions to avoid problems. Excessive cement or the incorrect type of cement can cause failures in thermoplastic products.



PIPE SIZE LEGEND

Abbreviation	Description
CTS	Copper Tube Size
IPS	Iron Pipe Size (same as Sched 40 OD)
SDR	PE Tubing Size
SIDR	PE Tubing Size
TS	PE Tube Size

CONNECTION TYPE LEGEND

Abbreviation	Description
Spg	Spigot
MPT	Male Pipe Taper Thread
FPT	Female Pipe Taper Thread
S	Slip
U	Union fitting with Slip connection
U x U	True Union — Slip connection w/ Union on each end
UC	Union fitting with Compression connection
FHT	Female Hose Thread
MHT	Male Hose Thread
MIP	Male Iron Pipe

PIPE & TUBE DIMENSIONS

ASTM	SIDR-7	OD	ID	Wall	
D2239	3/4"	1.060	0.824	0.118	
	1"	1.349	1.049	0.150	
	1 1/4"	1.774	1.380	0.197	
	1 1/2"	2.070	1.610	0.230	
	2"	2.657	2.067	0.295	
		SIDR-9	OD	ID	Wall
D2239	3/4"	1.008	0.824	0.092	
	1"	1.283	1.049	0.117	
	1 1/4"	1.686	1.380	0.153	
	1 1/2"	1.968	1.610	0.179	
	2"	2.527	2.067	0.230	
		SDR-9	OD	ID	Wall
D2737	3/4"	0.875	0.681	0.097	
	1"	1.125	0.875	0.125	
	1 1/4"	1.375	1.069	0.153	
	1 1/2"	1.625	1.263	0.181	
		SDR-11	OD	ID	Wall
D2737	3/4"	0.875	0.715	0.080	
	1"	1.125	0.921	0.102	
	1 1/4"	1.686	1.436	0.125	
		SDR-13.5	OD	ID	Wall
D3035	3/4"	1.050	0.874	0.078	
	1"	1.315	1.101	0.097	
	1 1/4"	1.660	1.394	0.123	
	1 1/2"	1.900	1.598	0.141	
		SCH 40	OD	ID	Wall
D1785	1/2"	0.840	0.622	0.109	
	3/4"	1.050	0.824	0.113	
	1"	1.315	1.049	0.133	
SCH 40 FITTINGS D2466	1 1/4"	1.660	1.380	0.140	
	1 1/2"	1.900	1.610	0.145	
	2"	2.375	2.067	0.154	
		SCH 80	OD	ID	Wall
D1785	1/2"	0.840	0.546	0.147	
	3/4"	1.050	0.742	0.154	
	1"	1.315	0.957	0.179	
	1 1/4"	1.660	1.278	0.191	
SCH 80 FITTINGS D2467	1 1/2"	1.900	1.500	0.200	
	2"	2.375	1.939	0.218	
	2 1/2"	2.875	2.323	0.276	
		CTS TYPE L	OD	ID	Wall
B88	1/2"	0.625	0.545	0.040	
	5/8"	0.750	0.666	0.042	
	3/4"	0.875	0.785	0.045	
	1"	1.125	1.025	0.050	
	1 1/4"	1.375	1.265	0.055	
	1 1/2"	1.625	1.505	0.060	
	2"	2.125	1.985	0.070	
	2 1/2"	2.625	2.465	0.080	
	3"	3.125	2.945	0.090	

Note: All dimensions are nominal. All weights are for shipping purposes only. Price (U.S. Dollars) and availability are subject to change.

FLO CONTROL, INC

**MAXIMUM RECOMMENDED FLOW VELOCITIES
THROUGH FLO CONTROL PLASTIC VALVES**

VALVE SIZES

FLOW G.P.M.	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	FLOW G.P.M.
	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	VELOCITY F.P.S.	
1	1.05	0.06	0.37								1
2	2.11	1.20	0.74	0.43							2
3	3.17	1.80	1.11	0.64	0.47						3
4	4.22	2.41	1.48	0.86	0.63						4
5	5.28	3.01	1.86	1.07	0.79						5
6	6.33	3.61	2.23	1.29	0.95	0.57					6
8	8.44	4.81	2.97	1.72	1.26	0.76	0.54				8
10	10.55	6.02	3.71	2.15	1.58	0.96	0.67				10
15		9.02	5.57	3.22	2.36	1.43	1.01	0.65			15
20			7.42	4.29	3.15	1.91	1.34	0.87			20
25			9.28	5.36	3.94	2.39	1.67	1.08			25
30			11.14	6.33	4.73	2.87	2.01	1.30			30
35				7.51	5.62	3.35	2.35	1.52	0.88		35
40				8.58	6.30	3.82	2.64	1.73	1.01		40
45				9.65	7.09	4.30	3.01	1.95	1.13		45
50				10.72	7.88	4.78	3.35	2.17	1.26		50
60					9.46	5.74	4.02	2.60	1.51		60
70					11.03	6.69	4.69	3.04	1.76		70
80						7.65	5.36	3.47	2.02		80
90						8.60	6.03	3.91	2.27		90
100						9.56	6.70	4.34	2.52	1.11	100
125						11.95	8.38	5.42	3.15	1.39	125
150							10.05	6.51	3.78	1.67	150
175								7.59	4.41	1.94	175
200								8.68	5.04	2.22	200
225								9.76	5.67	2.50	225
250								10.85	6.30	2.78	250
275									6.93	3.05	275
300									7.56	3.33	300
325									8.19	3.61	325
350									8.82	3.89	350
375									9.45	4.17	375
400									10.08	4.44	400
425										4.72	425
450										5.00	450
475										5.28	475
500	NOTE: FLO CONTROL DOES NOT RECOMMEND THE USE OF ANY PLASTIC PIPE SYSTEM WITH FLOW VELOCITIES EXCEEDING 5.00 FEET PER SECOND (F.P.S.). FLOW VELOCITIES ABOVE 5.00 F.P.S. ARE SHOWN IN SHADED AREA.									5.55	500
550										6.11	550
600										6.67	600

TERMS AND CONDITIONS OF SALE

Terms: Standard terms are 2% NET 10 days. A 1 1/2% per month (18% per annum) service charge will be added to all past due accounts. All invoices are to be paid in US Currency. Title and risk of loss pass to buyer upon shipment.

Freight Allowance: Freight prepaid on orders of \$1000.00 NET or more. Prepaid freight levels are based on shipments to one location only. It is the responsibility of the customer to determine if his purchase order meets the minimum freight allowance required. NDS reserves the right to select the carrier and point of shipment.

Canadian Orders: Freight prepaid on orders of \$1,500.00 (US\$) NET or more. Custom DuraCast only orders freight prepaid on orders of \$2500.00 (US\$) NET or more.

The above freight policies apply to the continental US and Canada only. For other areas please contact NDS.

Errors & Claims: All claims for shortage in shipment or damaged material must be noted on the "Bill of Lading" and a written request for credit submitted to NDS within 15 days of shipment. NDS responsibility ceases upon delivery to the carrier.

Returned Goods: Returned goods will be accepted only after written approval and shipping instructions are received from NDS. A return goods authorization number is required and must be on all cartons, documents, and correspondence. All returns are subject to a 25% restocking charge, freight cost of returned goods (plus "out freight if applicable"). A higher restocking charge may be assessed against any return requiring extraordinary handling costs.

Minimum Order: \$50.00 minimum order net billing. A 15% broken box charge will be added for other than full box quantities.

Limited One Year Warranty: The liabilities of NDS are limited solely and exclusively to replacement as set forth in our standard "Statement of Warranty", alone and do not include any liability for incidental, consequential or other damage of any kind whatsoever, whether any claim is based upon theories of contract, warranty, negligence or tort and without any limitations and do not include shipping charges, labor, installation or any other losses or expenses incurred in operation of any replacement specialty item or fitting. NDS drainage products are designed to be used for exterior surface drainage only.

Limited Lifetime Warranty: NDS warrants to the original owner of its NDS catch basins, grates, channel and Pro Series valve boxes, subject to the conditions set forth in this warranty, that NDS catch basins, grates, channel and Pro Series valve boxes will remain free from manufacturing defects.

All NDS products are guaranteed against defects resulting from faulty workmanship or materials. Claims for labor costs and other expenses required to replace defective products or repair of any damage resulting from the use thereof will not be allowed by NDS. Our liability is limited to replacement of products acknowledged by NDS to be defective.

Exclusive Warranties and Remedies: The FOREGOING REMEDIES ARE EXCLUSIVE AND ARE GIVEN AND ACCEPTED IN LIEU OF (I) ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; AND (II) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN CONTRACT OR TORT, WHETHER OR NOT ARISING FROM NDS, INC.'S NEGLIGENCE, ACTUAL OR IMPUTED. The remedies of customer shall be limited to those provided herein to the exclusion of any and all other remedies including, without limitation, incidental or consequential damages. No agreement varying or extending the foregoing warranties or these limitations will be binding on NDS, Inc., unless such is signed in writing by an authorized officer of NDS, Inc.

The liability of NDS, Inc., hereunder shall be limited to restoring to good working order, provided that NDS, Inc., is not required to restore the product to good working order when such failure is due to causes beyond NDS, Inc.'s control, including but not limited to, acts of God, acts of civil or military authority, priorities, strikes, floods, epidemics, war, riots, and other causes that are beyond the manufacturers control.

These provisions are complete and exclusive statements of all terms and conditions between NDS, Inc., and the consumer. These provisions may not be varied, supplemented, qualified or interpreted by any prior course of dealings, written or oral or by trade usage. No NDS, Inc. agent, officer or employee has authority to make any representation, promise or warranty concerning these provisions.



- Catch Basins & Grates
 - Channel Drains
 - Dura Slope™ Pre-Sloped Trench Drain Systems
 - EZflow Gravel Free French Drain
 - Flo-Well® Manufactured Dry Well
 - Flo Control™ Ball Valves
- Flo Control™ Check Valves
 - Flo Control™ Transition, Compression & Repair Fittings
 - Backwater & Diverter Valves
 - Sewer & Drain Fittings
 - Permeable Pavers
 - Root Barriers
- Valve Boxes
 - Meter Boxes
 - Flexible Couplings
 - Flexible Saddles
 - Agrifim™ Drip Irrigation

PARTIAL CLIENT LIST

The White House
Los Angeles Country Club
Pebble Beach
Cypress Point
Spyglass Hill
PGA West Stadium Golf Course
Princeville Golf Course
Ritz Carlton
Santa Barbara Zoo

Sheraton Hotels
Sherwood Country Club
Soldier Field
Del Webb & Sun City Country Clubs
Westin Hotels
Riviera Country Club
Buchart Gardens
Disney World
Disneyland

Florida University
Harbortown Golf Links
Hyatt Grand Champions
La Quinta Resort
Marriott Hotels
MGM Grand Hotel & Theme Park
Mirage Hotel
Jack La Lane Athletic Clubs
Olympic Training Center

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- Philadelphia, PA
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