



# ABOVEGROUND SYSTEMS

# CLEAN AND CLEAR® FILTER SYSTEMS

## ABOVEGROUND CARTRIDGE POOL SYSTEMS

Clean & Clear Filter System



The Clean & Clear Filter System pairs the OptiFlo® Pump with the Clean & Clear Cartridge Filter, a high quality filtration unit using a thermoplastic chemical-resistant tank. All models are equipped with easy spin-on unions for plumbing hookups. Available in 50, 75, 100, 125, 150, 175 & 200 sq. ft. sizes.

CALIFORNIA PROPOSITION 65 WARNING  
 ⚠️ WARNING: Cancer and Reproductive Harm.  
 ⚠️ AVERTISSEMENT: Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠️ ADVERTENCIA: Cáncer y Daño Reproductivo.  
 www.p65warnings.ca.gov. PN 202124

### Featured Highlights

- Unionized pump and filter connections
- Integrated continuous High Flow™ Internal Air Relief<sup>1</sup>
- Chemical-resistant thermoplastic tank body
- Lock ring with spring-loaded safety latches
- Coreless media for easy cleaning
- High Flow manual air relief valve
- 1-inch drain and wash out
- Single piece base and body design

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>2</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>2</sup>			Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour		
<b>CLEAN AND CLEAR SYSTEM</b>										
PNCC0050OD1160	3/4	3 ft. STD	6	50	50	24,000	30,000	36,000	15-1/2	18
PNCC0050OE1160	1	3 ft. STD	6	50	50	24,000	30,000	36,000	15-1/2	18
PNCC0075OE1160	1	3 ft. STD	6	75	75	36,000	45,000	54,000	15-1/2	25-1/2
PNCC0075OE1260	1	3 ft. TWL	6	75	75	36,000	45,000	54,000	15-1/2	25-1/2
PNCC0100OE1160	1	3 ft. STD	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OF1160	1-1/2	3 ft. STD	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OF1260	1-1/2	3 ft. TWL	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OF2160	1-1/2 *	3 ft. STD	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OF2260	1-1/2 *	3 ft. TWL	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OO1160	1-1/2	3 ft. STD	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OO1260	1-1/2	3 ft. TWL	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OO2160	1-1/2*	3 ft. STD	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0100OO2260	1-1/2*	3 ft. TWL	6	100	100	48,000	60,000	72,000	15-1/2	33
PNCC0125OF1160	1-1/2	3 ft. STD	6	125	125	60,000	75,000	90,000	15-1/2	33
PNCC0150OF1160	1-1/2	3 ft. STD	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OF1260	1-1/2	3 ft. TWL	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OF2160	1-1/2 *	3 ft. STD	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OF2260	1-1/2 *	3 ft. TWL	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OP1160	2	3 ft. STD	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OP1260	2	3 ft. TWL	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OP2160	2*	3 ft. STD	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0150OP2260	2*	3 ft. TWL	6	150	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0175OF1160	1-1/2	3 ft. STD	6	175	150	72,000	90,000	108,000	15-1/2	40-1/2
PNCC0200OP1160	2	3 ft. STD	6	200	150	72,000	90,000	108,000	15-1/2	40-1/2
<b>ACCESSORIES</b>										
PNBKCCWROXXX0	Base Kit with pump to filter connection for Clean & Clear and Optiflo Pump									

### Dimensions and Performance

\* 2 Speed Pump.

<sup>1</sup> Integrated continuous High Flow internal air relief is operational only when there is unobstructed flow in the circulating system.

<sup>2</sup> Flow Rate and Turnover Capacity based on Filter.

Clean & Clear Filter



OptiFlo Pump



See pages 315–316 for replacement parts.

# PREDATOR™ II MINI-CELLULAR MEDIA FILTER SYSTEM

## ABOVEGROUND CARTRIDGE POOL SYSTEM

### Featured Highlights

- Predator II Mini-Cellular Media System for small aboveground pools
- Proven aboveground pump

The Predator II Mini-Cellular Media System offers a smaller 25 sq. ft. filter and 40 GPM pump without pot.



Predator II Mini-Cellular Media Filter System

CALIFORNIA PROPOSITION 65 WARNING

⚠️ **WARNING:** Cancer and Reproductive Harm.  
 ⚠️ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠️ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)      PR201714

### Ordering Information

Product	Tank Diameter (In.)	Effective Filtration Area (Sq. Ft.)	Flow Rate (GPM)	Turnover Capacity (In Gallons)			Carton Wt. (Lbs.)
				8 Hour	10 Hour	12 Hour	
PREDATOR II MINI-CELLULAR MEDIA FILTER SYSTEM							
56224800	15	25	40	19,200	24,000	28,800	50

### Dimensions and Performance



# PLM SERIES FILTER SYSTEMS

## ABOVEGROUND MODULAR MEDIA FILTER SYSTEM



PLM Series Systems shown with OptiFlo® Pump

Convenience and virtually maintenance-free operation make this aboveground system a smart choice. Featuring Sta-Rite's modular media technology, these systems handle dirt loads of up to 15 times more than sand filters of equivalent size. Available with rugged, large-capacity OptiFlo Series pump.

### Featured Highlights

- Typical Installation – Aboveground pools
- Compact Design – Fits easily in tight installations. Sleek-looking in matte black finish.
- Easy Access – The Posi-Lok™ Locking Ring is easy to use. Split-tank design permits rinse-in-place cleaning.
- Superior Dirt Loading – Flow-balanced tank hydraulics direct water through each side of filter module. Uniform dirt-loading prevents clogging.
- Easy Reading – Information panels and top-mounted pressure gauge are positioned for easy reading
- Power Options – 1 to 1-1/2 HP OptiFlo

CALIFORNIA PROPOSITION 65 WARNING

⚠️ **WARNING:** Cancer and Reproductive Harm.  
 ⚠️ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠️ **ADVERTENCIA:** Cáncer y Daño Reproductivo.

[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov) PK 201714A

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>1</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>1</sup>			Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour		
<b>PLM SERIES FILTER SYSTEMS</b>										
SRPLM100OE1160	1	3 ft. STD	6	100	100	48,000	60,000	72,000	15	28
SRPLM100OE1260	1	3 ft. TWL	6	100	100	48,000	60,000	72,000	15	28
SRPLM100OF1160	1-1/2	3 ft. STD	6	100	100	48,000	60,000	72,000	15	28
SRPLM100OF1260	1-1/2	3 ft. TWL	6	100	100	48,000	60,000	72,000	15	28
SRPLM150OE1160	1	3 ft. STD	6	150	150	72,000	90,000	108,000	15	28
SRPLM150OE1260	1	3 ft. TWL	6	150	150	72,000	90,000	108,000	15	28
SRPLM150OF1160	1-1/2	3 ft. STD	6	150	150	72,000	90,000	108,000	15	28
SRPLM100OE13X0	1	25 ft. STD	N/A	100	100	48,000	60,000	72,000	15	28
SRPLM150OF13X0	1-1/2	25 ft. STD	N/A	150	150	72,000	90,000	108,000	15	28
SRPLM200OP2260	2	3 ft. TWL	6	200	200	72,000	90,000	108,000	15	28

<sup>1</sup> Flow Rate and Turnover Capacity based on Filter.

Note: Operating Limits – designed for maximum continual working pressure of 50 PSI. Water temperature maximum 104°F (40°C).

### Dimensions and Performance

OptiFlo Pump



OptiFlo Pump



PLM Filter



Certified to NSF/ANSI Standard 50

See page 322–323 for replacement parts.

# PLD SERIES FILTER SYSTEMS

## ABOVEGROUND MODULAR D.E. FILTER SYSTEM



### Featured Highlights

- Typical Installation – For aboveground pools
- Easy-Open Convenience – The Posi-Lok™ Locking Ring provides easy access for seasonal cleaning. Simply unscrew the ring and lift.
- Holds More Dirt – The modular-design filters incorporate a balanced-flow tank design that directs water through both sides of the modules, using every inch of its pleated surface
- Ready to Go – Complete system includes the Mod D.E. filter and a performance-matched pump that's ready for easy assembly on a tool-free platform



PLD Series Systems shown with OptiFlo® Pump

Sta-Rite combines outstanding water purity and carefree operation in a system package. Evolution of the proven modular media technology delivers D.E. filtration in a simple, one-piece module design. Available with rugged, large-capacity OptiFlo Series pump.

CALIFORNIA PROPOSITION 65 WARNING

⚠ **WARNING:** Cancer and Reproductive Harm.  
 ⚠ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠ **ADVERTENCIA:** Cáncer y Daño Reproductivo.

www.p65warnings.ca.gov. PH201714

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>1</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>1</sup>			D.E. Required (Lbs.)	Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour			
<b>PLD SERIES FILTER SYSTEMS</b>											
SRPLD050OE1160	1	3 ft. STD	6	30	60	29,000	36,000	43,000	6	15	28
SRPLD050OE1260	1	3 ft. TWL	6	30	60	29,000	36,000	43,000	6	15	28
SRPLD050OF2161	1-1/2	3 ft. STD	6	30	90	45,200	54,000	64,800	6	15	28

<sup>1</sup> Flow Rate and Turnover Capacity based on Filter.

Note: Operating Limits – designed for maximum continual working pressure of 50 PSI. Water temperature maximum 104°F (40°C). D.E. required: 6 lbs.

### Dimensions and Performance

PLD Filter      OptiFlo Pump



Certified to NSF/ANSI Standard 50



# EASYSYSTEM™ D.E. FILTER SYSTEMS

## ABOVEGROUND D.E. POOL SYSTEMS



EasyClean D.E. Filter System

The EasyClean D.E. Filter System pairs the OptiFlo® Pump with the EasyClean D.E. Filter to create this high performance system for aboveground pools. Rugged, efficient and simple to operate. The EasyClean D.E. Filter System comes in a variety of sizes and horsepowers to suit any aboveground pool configuration.

### Featured Highlights

- Removable cartridge-style D.E. element for quick, convenient cleaning
- Automatically regenerates D.E. media during off cycle and start-up
- High Flow™ Manual Air Relief valve and continuous internal air relief work together to help eliminate air accumulation and maintain optimum filtration efficiency in single and two-speed models <sup>1</sup>
- Filter lock ring allows for quick and easy servicing

**CALIFORNIA PROPOSITION 65 WARNING**

⚠ **WARNING:** Cancer and Reproductive Harm.  
 ⚠ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>1</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>2</sup>			D.E. Required (Lbs.)	Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour			
<b>EASYSYSTEM FILTER SYSTEMS</b>											
PNEC0060OE1160	1	3 ft. STD	6	15	60	28,800	36,000	43,200	1-1/2	15-1/2	25-1/2
PNEC0060OE1260	1	3 ft. TWL	6	15	60	28,800	36,000	43,200	1-1/2	15-1/2	25-1/2
PNEC0060OE2160	1 *	3 ft. STD	6	15	60	28,800	36,000	43,200	1-1/2	15-1/2	25-1/2
PNEC0060OE2260	1 *	3 ft. TWL	6	15	60	28,800	36,000	43,200	1-1/2	15-1/2	25-1/2
PNEC0090OF1160	1-1/2	3 ft. STD	6	30	90	43,200	54,000	64,800	3	15-1/2	40-1/2
PNEC0090OF1260	1-1/2	3 ft. TWL	6	30	90	43,200	54,000	64,800	3	15-1/2	40-1/2
PNEC0090OF2160	1-1/2 *	3 ft. STD	6	30	90	43,200	54,000	64,800	3	15-1/2	40-1/2
PNEC0090OF2260	1-1/2 *	3 ft. TWL	6	30	90	43,200	54,000	64,800	3	15-1/2	40-1/2

\* 2 Speed Pump.

<sup>1</sup> Integrated continuous High Flow internal air relief is operational only when there is unobstructed flow in the circulating system.

<sup>2</sup> Flow Rate and Turnover Capacity based on Filter.

### Dimensions and Performance

OptiFlo Pump



See page 326 for replacement parts.

# SAND DOLLAR® FILTER SYSTEMS

## SAND FILTER SYSTEM WITH BLOW-MOLDED TANK

### Featured Highlights

- Six-position 1-1/2 in. multiport valve
- Self-priming Dynamo® Pumps in 3/4, 1, 1-1/2 and 2 HP ratings
- Our innovative process creates a one-piece, non-corrosive tank of superior strength and durability even in the most demanding of applications
- Combination water and sand drain makes servicing and winterizing fast and easy
- Unionized Pump to Filter connection



Sand Dollar Filter System

Our blow-molded process creates a one piece, non-corrosive tank of unequaled strength and durability. This pump and filter system provides excellent performance at an affordable price.

CALIFORNIA PROPOSITION 65 WARNING  
 ⚠️ **WARNING:** Cancer and Reproductive Harm.  
 ⚠️ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠️ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>1</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>1</sup>			Sand Required (Lbs.)	Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour			
<b>SAND DOLLAR FILTER SYSTEMS</b>											
PNSD0035DD1160	3/4	3 ft. STD	6	1.4	35	16,800	21,000	25,200	100	16	28-1/2
PNSD0035DD11X0	3/4	3 ft. STD	N/A	1.4	35	16,800	21,000	25,200	100	16	28-1/2
PNSD0035DE1160	1	3 ft. STD	6	1.4	35	16,800	21,000	25,200	100	16	28-1/2
PNSD0035DE2160	1 *	3 ft. STD	6	1.4	35	16,800	21,000	25,200	100	16	28-1/2
PNSD0040DE1160	1	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DE11X0	1	3 ft. STD	N/A	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DE1260	1	3 ft. TWL	6	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DO1160	1-1/2	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DO11X0	1-1/2	3 ft. STD	N/A	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DO1260	1-1/2	3 ft. TWL	6	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0040DO2160	1-1/2 *	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
PNSD0060DO1160	1-1/2	3 ft. STD	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
PNSD0060DO11X0	1-1/2	3 ft. STD	N/A	2.3	60	28,800	36,000	43,200	250	22	35-1/2
PNSD0060DO1260	1-1/2	3 ft. TWL	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
PNSD0060DO2260	1-1/2 *	3 ft. TWL	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
PNSD0060DP1160	2	3 ft. STD	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
PNSD0060DP2160	2*	3 ft. STD	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2

\* 2 Speed Pump.

<sup>1</sup> Flow Rate and Turnover Capacity based on Filter.

### Dimensions and Performance



See pages 331–332 for replacement parts.

# CRISTAL-FLO™ II FILTER SYSTEMS

## ABOVEGROUND SAND FILTER SYSTEM



Cristal-Flo II Filter System shown with Dynamo® Pump

Easy-maintenance sand filter system with the rugged, large capacity Dynamo Series pump. Blow-molded polyethylene filter tanks are weather resistant. Low maintenance and simple installation make this system the choice for many applications.

### Featured Highlights

- Less Maintenance – Enjoy greater time between cleanings. The tank’s sophisticated design distributes water evenly to maximize efficiency throughout filtration media.
- No Mess, No Fuss – The filter tank requires minimum maintenance. A simple turn of the multi-port valve lever accomplishes routine backwashing.
- Fast, Easy Set-up – The complete system includes a one-piece sand filter and a performance-matched pump that’s ready for assembly on a compact, heavy-duty platform.
- Unionized Pump to Filter connection

#### CALIFORNIA PROPOSITION 65 WARNING

⚠ **WARNING:** Cancer and Reproductive Harm.  
 ⚠ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

### Ordering Information

Product	Pump HP	Pump Cord	Hose Kit (Ft.)	Effective Filtration Area (Sq. Ft.)	Flow <sup>1</sup> Rate (GPM)	Turnover Capacity (In Gallons) <sup>1</sup>			Sand Required (Lbs.)	Tank Diameter (In.)	Tank Height (In.)
						8 Hour	10 Hour	12 Hour			
<b>CRISTAL-FLO II FILTER SYSTEMS</b>											
SRCF2016DN1160	1	3 ft. STD	6	1.4	35	16,800	21,000	25,200	100	16	28-1/2
SRCF2019DD1260	3/4	3 ft. TWL	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2019DE1160	1	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2019DE1260	1	3 ft. TWL	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2019DN1160	1	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2019DO1160	1-1/2	3 ft. STD	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2019DO1260	1-1/2	3 ft. TWL	6	1.8	40	19,200	24,000	28,800	150	19	34
SRCF2022DE1260	1	3 ft. TWL	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
SRCF2022DF1260	1-1/2	3 ft. TWL	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
SRCF2022DO1160	1-1/2	3 ft. STD	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
SRCF2022DO1260	1-1/2	3 ft. TWL	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2
SRCF2022DO2160	1-1/2*	3 ft. STD	6	2.3	60	28,800	36,000	43,200	250	22	35-1/2

\* 2 Speed Pump.

<sup>1</sup> Flow Rate and Turnover Capacity based on Filter.

Note: Operating Limits – designed for maximum continual working pressure of 35 PSI.

### Dimensions and Performance

Dynamo Pump





# ACCESSORIES

## FOR ABOVEGROUND SYSTEMS

We recommend the use of GFCI with all aboveground systems equipment.



AquaLuminator 98600000



3 ft. Twist Lock cord 155234



6 ft. Hose Kit 155151  
12 ft. Hose Kit 155005



Sand Vac 542090

Product	Description
<b>ACCESSORIES</b>	
79137800	3 ft. Standard cord
155234	3 ft. cord with twist lock
155151	1-1/2 in. x 6 ft. hose kit, (to and from pool)
155005	1-1/2 in. x 12 ft. hose kit, (to and from pool)
150046	Hose adapter 1-1/2 in. NPT with Chlorinator connector
542413	Aboveground wall fitting 1-1/2 THD x 1-1/2 THD-white
542414	Aboveground wall fitting 1-1/2 THD x 1-1/2 socket-white
98600000	AquaLuminator aboveground light
98610002	AquaLuminator aboveground light - (Canada CSA) certified
K50600	Kreepy Krauly E-Z Vac Pool Cleaner
360100	Kreepy Krauly 'Lil Shark Pool Cleaner
360321	Kreepy Krauly 910 Robotic Aboveground Cleaner
542090	Sand Vac - empties a sand filter in 10 min for repair, refilling or removal
R171016	300 Series Off-Line Chlorinator Feeder
98605300	Quasar Non-Return Light
79203100	Adapter to connect AquaLuminator to cleaner
79100000Z	Fountain attachment, fits all AquaLuminator models
79202900	Hard plumbing adapter

300 Series Chlorinator/Feeder R171016

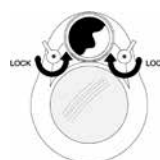


CALIFORNIA PROPOSITION 65 WARNING  
 ⚠️ **WARNING:** Cancer and Reproductive Harm.  
 ⚠️ **AVERTISSEMENT:** Peut Causer le Cancer et des Dommages au Système Reproducteur.  
 ⚠️ **ADVERTENCIA:** Cáncer y Daño Reproductivo.  
[www.p65warnings.ca.gov](http://www.p65warnings.ca.gov) P182017A

Quasar Non-return light for Aboveground Pools 98605300



Hard Plumbing Adapter



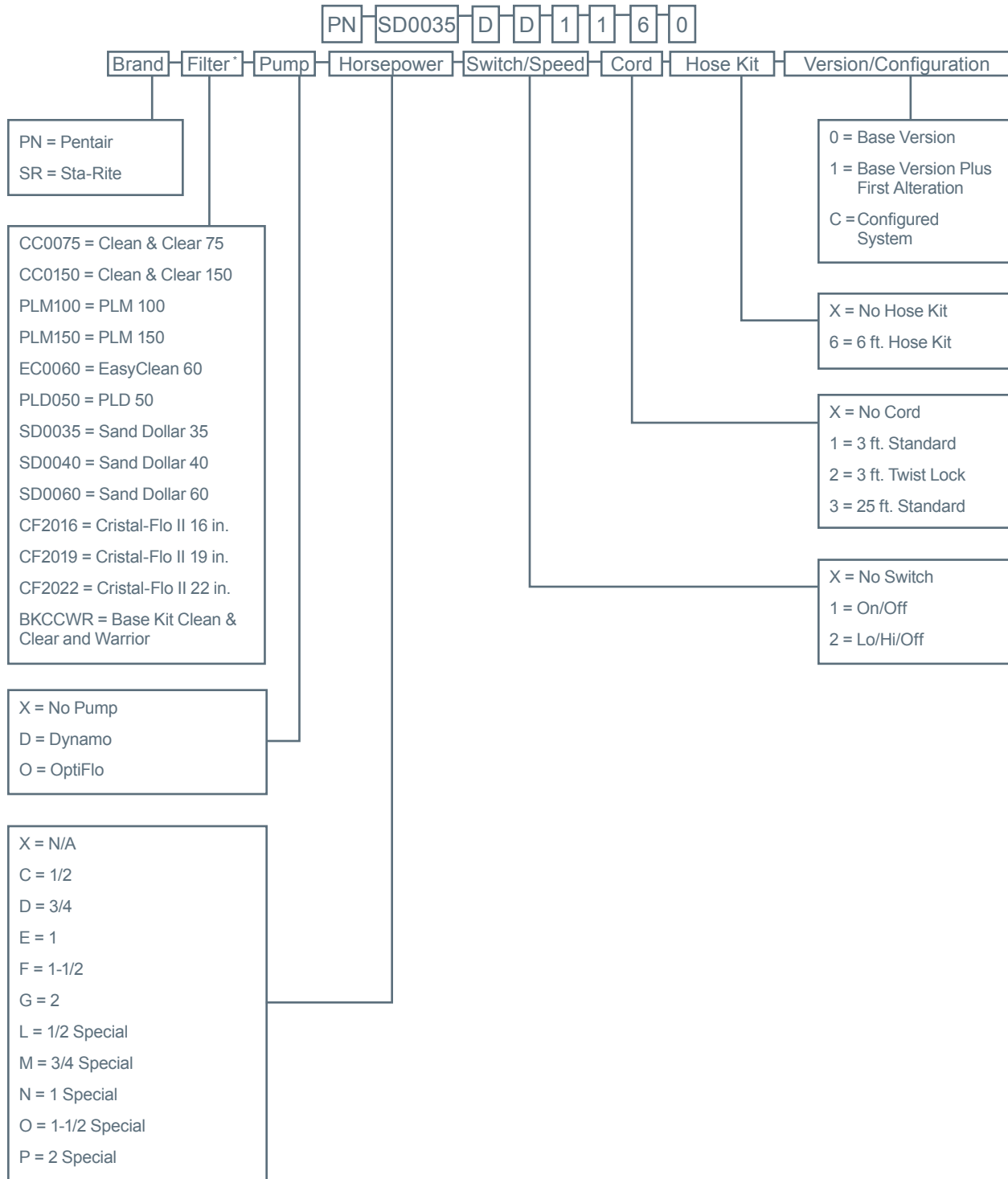
Pressure Cleaner Adapter



Fountain Attachment

# PART NUMBERING SCHEME FOR ABOVEGROUND SYSTEMS

ex. PNSD0035DD1160



\* Filter list may not represent all available types and sizes.