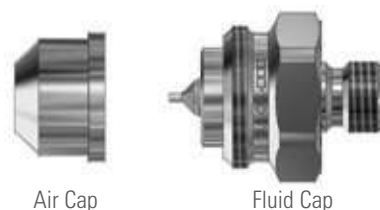


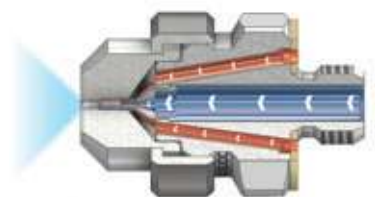
## OVERVIEW: AIR ATOMIZING SPRAY NOZZLE SET-UPS

- Each spray set-up – consisting of an air cap and a fluid cap – provides a specific spray pattern, flow rate and spray coverage
- Within each nozzle series, spray set-ups are interchangeable, for versatile performance
- Air and liquid can be externally or internally mixed to produce a completely atomized spray
- Drip Free™ spray set-ups are used for all nozzle assemblies containing shut-off or clean-out needles to ensure positive liquid shut-off



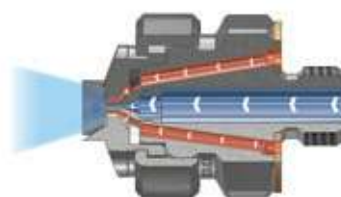
### Spray Set-Ups

Each spray set-up consists of an air cap and a fluid cap.



### Internal Mix Set-Ups

Liquid and air are mixed internally to produce an atomized spray. Liquid and gas streams are not independent – a change in air flow will affect the liquid flow.



### External Mix Set-Ups

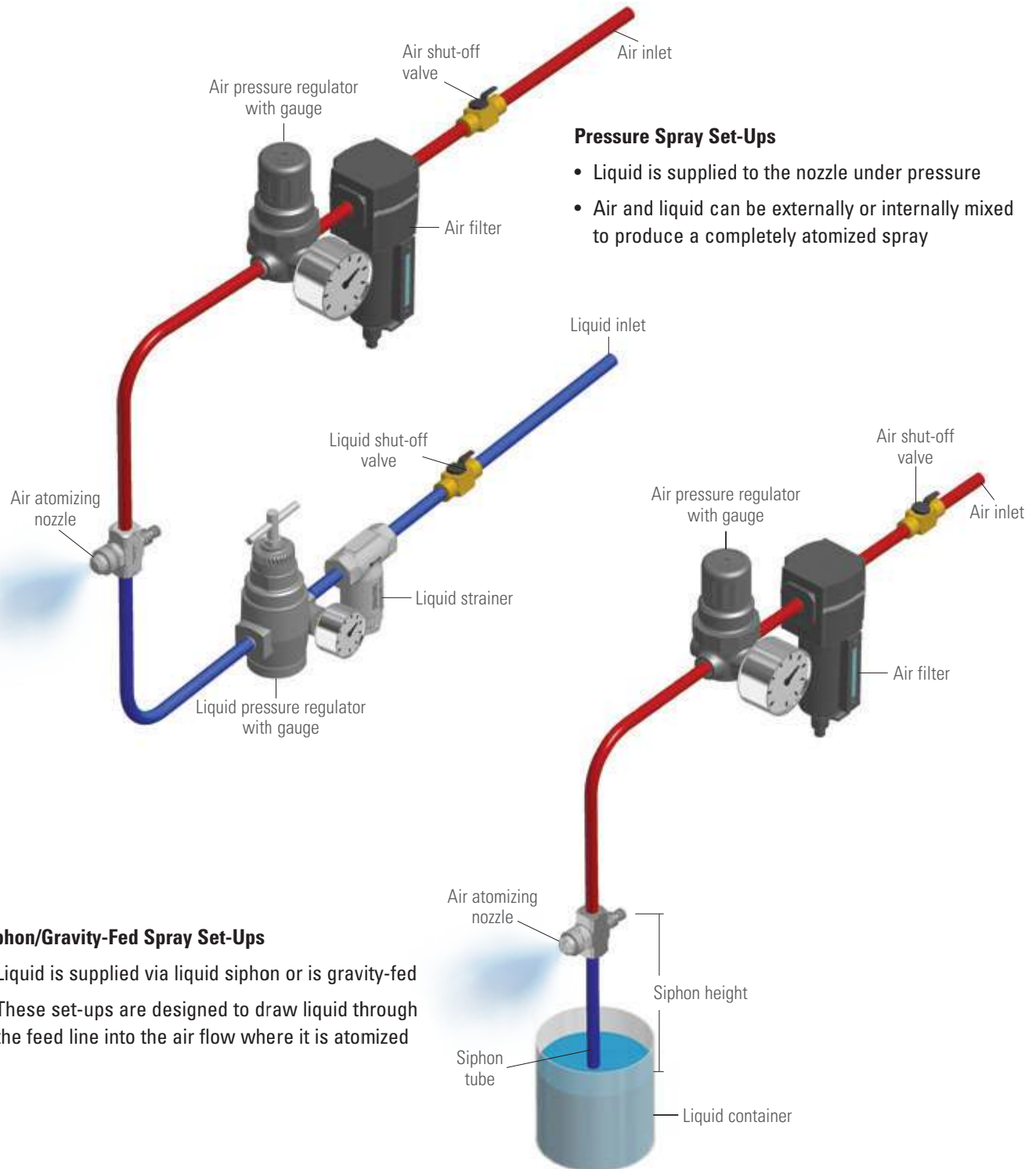
Liquid and air streams are mixed outside of the nozzle. Air and liquid flow can be controlled independently. Effective for higher viscosity liquids and abrasive suspensions.

## QUICK REFERENCE GUIDE

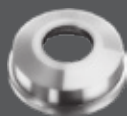
| Spray Set-Up               | Liquid Supply                        | Internal / External Mix | Spray Patterns                                                                                                                                                                         | Max Flow                | Page Number |
|----------------------------|--------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------|
| <b>1/4J Series</b>         | Pressure Feed<br>Siphon/Gravity Feed | Both                    | <ul style="list-style-type: none"> <li>• Flat Spray</li> <li>• Deflected Flat Spray</li> <li>• Round Spray</li> <li>• Wide Angle Round Spray</li> <li>• 360° Circular Spray</li> </ul> | 72 gph<br>(272.5 lph)   | D24         |
| <b>1/8JJ Series</b>        | Pressure Feed<br>Siphon/Gravity Feed | Both                    | <ul style="list-style-type: none"> <li>• Flat Spray</li> <li>• Round Spray</li> <li>• Wide Angle Round Spray</li> <li>• 360° Circular Spray</li> </ul>                                 | 33.2 gph<br>(126 lph)   | D35         |
| <b>1/2J Series</b>         | Pressure Feed<br>Siphon/Gravity Feed | Both                    | <ul style="list-style-type: none"> <li>• Flat Spray</li> <li>• Round Spray</li> <li>• Wide Angle Round Spray</li> </ul>                                                                | 306 gph<br>(1158 lph)   | D43         |
| <b>1J Series</b>           | Pressure Feed<br>Siphon/Gravity Feed | Both                    | <ul style="list-style-type: none"> <li>• Flat Spray</li> <li>• Round Spray</li> <li>• Wide Angle Round Spray</li> </ul>                                                                | 29 gpm<br>(110 lpm)     | D49         |
| <b>QuickMist® Series</b>   | Pressure Feed<br>Siphon/Gravity Feed | Internal Mix Only       | <ul style="list-style-type: none"> <li>• Flat Spray</li> <li>• Round Spray</li> <li>• Wide Angle Round Spray</li> </ul>                                                                | 26 gpm<br>(98 lpm)      | D54         |
| <b>SUV and SUVM Series</b> | Pressure Feed Only                   | External Mix Only       | <ul style="list-style-type: none"> <li>• Variable</li> </ul>                                                                                                                           | 49.8 gph<br>(188.5 lph) | D59 & D62   |

**OVERVIEW: AIR ATOMIZING SPRAY FEED SET-UPS**

- Liquid can be supplied to the nozzle under pressure or it can be supplied through a liquid siphon or gravity feed
- Filtration and pressure regulation are recommended on both the liquid and air line

**Siphon/Gravity-Fed Spray Set-Ups**

- Liquid is supplied via liquid siphon or is gravity-fed
- These set-ups are designed to draw liquid through the feed line into the air flow where it is atomized



PERFORMANCE DATA:  
SIPHON/GRAVITY SPRAY SET-UPS | EXTERNAL MIX | ROUND SPRAY

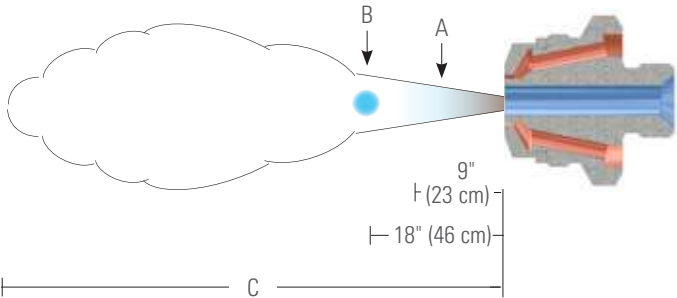
For a round spray pattern, “A” and “B” are the pattern widths at distances from the nozzle.

The total distance of spray projection from the nozzle to the maximum dispersal point is represented by “C”.

Liquid is supplied to this spray set-up by either a liquid siphon or a gravity-feed. The liquid drawn through the feed line into the air flow where it is atomized.

When ordering only a spray set-up, 5713 retainer ring must be ordered separately. This component is included in a complete air atomizing nozzle assembly.

**Please contact your sales engineer for more information.**



| Spray Set-up No. | Spray Set-up Consists of Fluid and Air Cap Combination | Atomizing Air |                   | Liquid Capacity (gallons per hour)* |      |      |                     |      |      |      | Spray Dimensions at 8" Siphon Height |         |         |
|------------------|--------------------------------------------------------|---------------|-------------------|-------------------------------------|------|------|---------------------|------|------|------|--------------------------------------|---------|---------|
|                  |                                                        | Air Press.    | Air Capacity scfm | Gravity Head (in.)                  |      |      | Siphon Height (in.) |      |      |      | A (in.)                              | B (ft.) | C (ft.) |
|                  |                                                        |               |                   | 18                                  | 12   | 6    | 4                   | 8    | 12   | 24   |                                      |         |         |
| SU70             | Fluid Cap 250375 + Air Cap 437                         | 10.0          | 12.7              | —                                   | —    | —    | 10.7                | —    | —    | —    | 9                                    | 8       | 20 - 35 |
|                  |                                                        | 20            | 18.5              | —                                   | —    | —    | 22.8                | 13.9 | —    | —    |                                      |         |         |
|                  |                                                        | 30            | 24                | —                                   | —    | —    | 32.4                | 24.8 | 13.8 | —    |                                      |         |         |
|                  |                                                        | 40            | 29.2              | —                                   | 67.6 | 58.8 | 38.8                | 31.2 | 22.7 | —    |                                      |         |         |
|                  |                                                        | 50            | 34.8              | 79.8                                | 70.5 | 62.8 | 43                  | 35.2 | 27.6 | —    |                                      |         |         |
|                  |                                                        | 60            | 40.1              | 81.9                                | 72.1 | 63.5 | 45.4                | 38.3 | 30.5 | 9.5  |                                      |         |         |
|                  |                                                        | 70            | 46.1              | 83.2                                | 74.5 | 66.0 | 48                  | 41.4 | 33.9 | 13.8 |                                      |         |         |
|                  |                                                        | 80            | 51.0              | 84.6                                | 76.2 | 67.6 | 49.8                | 43.2 | 36   | 16.5 |                                      |         |         |

\*At the stated pressure in psi.

## NUMBERING SYSTEM FOR AIR CAPS AND FLUID CAPS

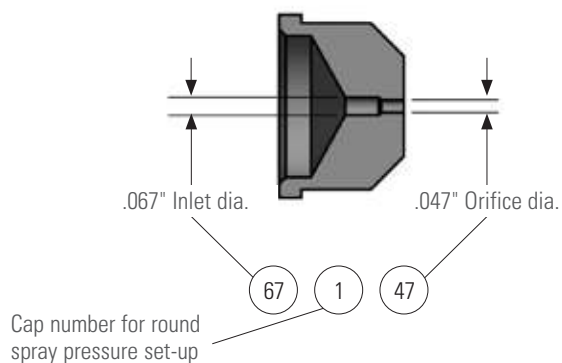
The drawings below illustrate the measurements used in the Spray Performance Data charts.

### AIR CAPS

#### PRESSURE SET-UPS (INTERNAL MIX)

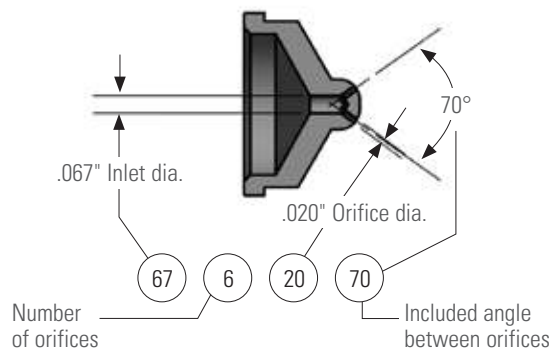
##### Round Spray Pattern

Example: Air Cap No. PA67147



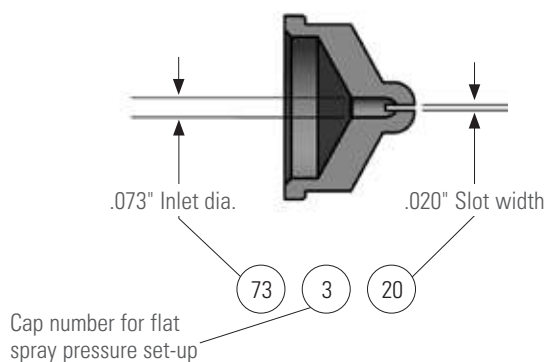
##### Wide Angle Round Spray Pattern

Example: Air Cap No. PA67-6-20-70



##### Flat Spray Pattern

Example: Air Cap No. PA73320



Dimensions shown are nominal and subject to manufacturing tolerances.

### PLACING YOUR ORDER

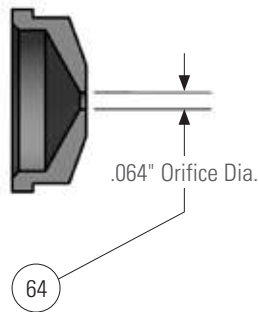
**Call 1.800.95.SPRAY for application assistance  
or to place an order.**

### AIR CAPS

#### SIPHON/GRAVITY FEED SET-UPS (EXTERNAL MIX)

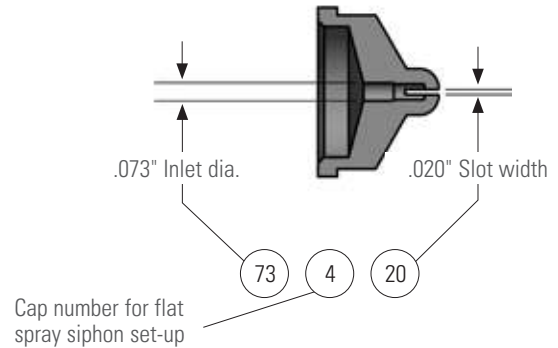
##### Round Spray Pattern

Example: Air Cap No. PA64



##### Flat Round Spray Pattern

Example: Air Cap No. PA73420

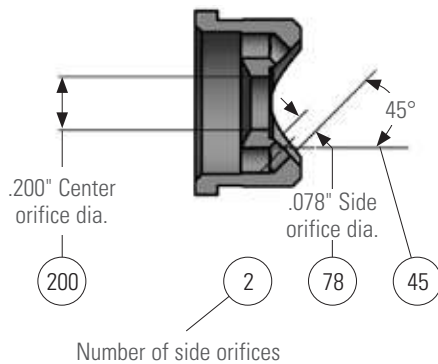


### AIR CAPS

#### PRESSURE SET-UPS (EXTERNAL MIX)

##### Flat Spray Pattern

Example: Air Cap No. PA200278-45

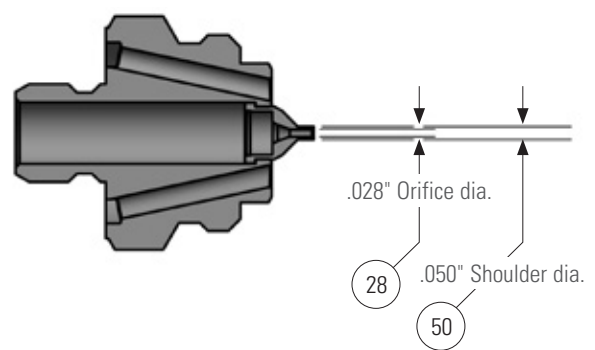


### FLUID CAP

#### FOR USE WITH ALL SET-UPS

##### Fluid Cap

Example: Fluid Cap No. PF2850



Dimensions shown are nominal and subject to manufacturing tolerances.

## AIR ATOMIZING SET-UP COMPATIBILITY

Use the chart that follows to determine which spray set-ups can be used with our atomizing nozzles. The chart also includes the part number for the air cap and fluid cap that are required for each spray set-up.

| Set-up No. | Spray Pattern    | Fluid Cap No. | Air Cap No.      |
|------------|------------------|---------------|------------------|
| SU11       | Round            | PF2050        | PA67147          |
| SU12A      | Round            | PF2050        | PA73160          |
| SU12       | Round            | PF2850        | PA73160          |
| SU22B      | Round            | PF40100       | PA1401110        |
| SU22       | Round            | PF60100       | PA1401110        |
| SU42       | Round            | PF100150      | PA1891125        |
| SU16       | Wide Angle Round | PF2050        | PA67-6-20-70     |
| SU26B      | Wide Angle Round | PF40100       | PA140-6-37-70    |
| SU26       | Wide Angle Round | PF60100       | PA140-6-37-70    |
| SU29       | Wide Angle Round | PF60100       | PA140-6-52-70    |
| SU30       | Wide Angle Round | PF40100       | PA120-6-35-60    |
| SU46       | Wide Angle Round | PF100150      | PA189-6-62-70    |
| SU340C     | 360° Circular    | PF60150       | PA189-6-62-160HC |
| SU13A      | Flat             | PF2050        | PA73328          |
| SU13       | Flat             | PF2850        | PA73328          |
| SUN13      | Flat             | PF2850        | PA73335          |
| SU14       | Flat             | PF2850        | PA73320          |
| SUN23      | Flat             | PF60100       | PA125340         |
| SU23B      | Flat             | PF40100       | PA125328         |
| SU23       | Flat             | PF60100       | PA125328         |
| SU43       | Flat             | PF100150      | PA189351         |
| SU240E     | Deflected Flat   | PF28150       | PA189110-75      |
| SUE15B     | Flat             | PF1650        | PA67228-45       |

| Set-up No. | Spray Pattern | Fluid Cap No. | Air Cap No. |
|------------|---------------|---------------|-------------|
| SUE18B     | Flat          | PF1650        | PA62240-60  |
| SUE15A     | Flat          | PF2050        | PA67228-45  |
| SUE18A     | Flat          | PF2050        | PA62240-60  |
| SUE15      | Flat          | PF2850        | PA67228-45  |
| SUE18      | Flat          | PF2850        | PA62240-60  |
| SUE25B     | Flat          | PF35100       | PA134255-45 |
| SUE28B     | Flat          | PF35100       | PA122281-60 |
| SUE25A     | Flat          | PF40100       | PA134255-45 |
| SUE28A     | Flat          | PF40100       | PA122281-60 |
| SUE28      | Flat          | PF60100       | PA122281-60 |
| SUE25      | Flat          | PF60100       | PA134255-45 |
| SUE45B     | Flat          | PF60150       | PA200278-45 |
| SUE45A     | Flat          | PF80150       | PA200278-45 |
| SUE45      | Flat          | PF100150      | PA200278-45 |
| SUF1       | Flat          | PF2850        | PA73420     |
| SUF2C      | Flat          | PF35100       | PA120432    |
| SUF3B      | Flat          | PF40100       | PA122435    |
| SUF4B      | Flat          | PF40100       | PA122440    |
| SU1A       | Round         | PF1650        | PA64        |
| SU1        | Round         | PF2050        | PA64        |
| SU2A       | Round         | PF2050        | PA70        |
| SU2        | Round         | PF2850        | PA70        |
| SU4        | Round         | PF60100       | PA120       |



| Set-up No.              | Spray Pattern    | Fluid Cap No.                                | Air Cap No.       |
|-------------------------|------------------|----------------------------------------------|-------------------|
| SU5                     | Round            | PF100150                                     | PA180             |
| D-SU1A-W<br>D-SU1A-W-CO | Wide Angle Round | Fluid caps and air caps not sold separately. |                   |
| D-SU1-W<br>D-SU1-W-CO   | Wide Angle Round |                                              |                   |
| D-SU2A-W<br>D-SU2A-W-CO | Wide Angle Round |                                              |                   |
| D-SU2-W<br>D-SU2-W-CO   | Wide Angle Round |                                              |                   |
| D-SU4-W<br>D-SU4-W-CO   | Wide Angle Round |                                              |                   |
| D-SU5-W<br>D-SU5-W-CO   | Wide Angle Round |                                              |                   |
| SUJ11                   | Round            | PFJ2050                                      | PAJ67147          |
| SUJ12A                  | Round            | PFJ2050                                      | PAJ73160          |
| SUJ12                   | Round            | PFJ2850                                      | PAJ73160          |
| SUJ22B                  | Round            | PFJ40100                                     | PAJ1401110        |
| SUJ22                   | Round            | PFJ60100                                     | PAJ1401110        |
| SUJ340C                 | 360° Circular    | PFJ60100                                     | PAJ150-6-62-160HC |
| SUJ16                   | Wide Angle Round | PFJ2050                                      | PAJ67-6-20-70     |
| SUJ26B                  | Wide Angle Round | PFJ40100                                     | PAJ140-6-37-70    |
| SUJ26                   | Wide Angle Round | PFJ60100                                     | PAJ140-6-37-70    |
| SUJ29                   | Wide Angle Round | PFJ60100                                     | PAJ140-6-52-70    |
| SUJ30                   | Wide Angle Round | PFJ40100                                     | PAJ120-6-35-60    |
| SUJ13A                  | Flat             | PFJ2050                                      | PAJ73328          |
| SUJ13                   | Flat             | PFJ2850                                      | PAJ73328          |
| SUJ14                   | Flat             | PFJ2850                                      | PAJ73320          |
| SUJ23B                  | Flat             | PFJ40100                                     | PAJ125328         |
| SUJ23                   | Flat             | PFJ60100                                     | PAJ125328         |
| SUJE416-50              | Flat             | PFJ1650                                      | PAJ105-50         |
| SUJE417-50              | Flat             | PFJ2050                                      | PAJ105-50         |

| Set-up No. | Spray Pattern | Fluid Cap No. | Air Cap No. |
|------------|---------------|---------------|-------------|
| SUJE418-50 | Flat          | PFJ2850       | PAJ105-50   |
| SUJE420-50 | Flat          | PFJ40100      | PAJ135-50   |
| SUJE416-65 | Flat          | PFJ1650       | PAJ080-65   |
| SUJE417-65 | Flat          | PFJ2050       | PAJ080-65   |
| SUJE418-65 | Flat          | PFJ2850       | PAJ080-65   |
| SUJE420-65 | Flat          | PFJ40100      | PAJ125-65   |
| SUJE421-65 | Flat          | PFJ60100      | PAJ-125-65  |
| SUJE416-90 | Flat          | PFJ1650       | PAJ075-90   |
| SUJE417-90 | Flat          | PFJ2050       | PAJ075-90   |
| SUJE418-90 | Flat          | PFJ2850       | PAJ075-90   |
| SUJE420-90 | Flat          | PFJ40100      | PAJ115-90   |
| SUJE421-90 | Flat          | PFJ60100      | PAJ115-90   |
| SUJ1A      | Round         | PFJ1650       | PAJ64       |
| SUJ1       | Round         | PFJ2050       | PAJ64       |
| SUJ2A      | Round         | PFJ2050       | PAJ70       |
| SUJ2       | Round         | PFJ2850       | PAJ70       |
| SUJ3       | Round         | PFJ2850       | PAJ64-5     |
| SUJ4B      | Round         | PFJ40100      | PAJ120      |
| SUJ4       | Round         | PFJ60100      | PAJ120      |
| SUJF1      | Flat          | PFJ2850       | PAJ73420    |
| SUJF2C     | Flat          | PFJ35100      | PAJ120432   |
| SUJF3B     | Flat          | PFJ40100      | PAJ122435   |
| SUJF4B     | Flat          | PFJ40100      | PAJ122440   |
| SU70       | Round         | PF250375      | PA437       |
| SU75       | Flat          | PF250375      | PA4533102   |



| Set-up No. | Spray Pattern    | Fluid Cap No. | Air Cap No.       |
|------------|------------------|---------------|-------------------|
| SU380C     | 360° Circular    | PF251376      | PA469-6-130-160HC |
| SU85       | Flat             | PF251376      | PA4693102         |
| SU77       | Wide Angle Round | PF250375      | PA422-6-73-70     |
| SU78       | Wide Angle Round | PF250375      | PA422-6-94-70     |
| SU79       | Wide Angle Round | PF250375      | PA469-6-125-70    |
| SU89       | Wide Angle Round | PF251376      | PA469-6-130-70    |
| SU72       | Round            | PF250375      | PA4221250         |
| SU82       | Round            | PF251376      | PA4691312         |
| SUE75      | Flat             | PF250375      | PA14356           |
| SU159      | Wide Angle Round | PF4371000     | PA1109-6-224-70   |
| SU152      | Round            | PF4371000     | PA11091547        |
| SU172      | Round            | PF6251000     | PA11251625        |
| SU155      | Flat             | PF4371000     | PA11093187        |
| SUE175B    | Flat             | PF625780      | PA12116           |
| SU170      | Round            | PF6251000     | PA1125            |
| SUQR-220B  | Round            | PFQ40         | PAQR95            |
| SUQW-260B  | Wide Angle Round | PFQ30         | PAQW37-60         |
| SUQW-260   | Wide Angle Round | PFQ60         | PAQW37-60         |
| SUQW-290   | Wide Angle Round | PFQ60         | PAQW52-60         |
| SUQF-130   | Flat             | PFQ20         | PAQF28            |
| SUQF-N130  | Flat             | PFQ30         | PAQF28            |
| SUQF-230B  | Flat             | PFQ30         | PAQF35            |
| SUQF-230   | Flat             | PFQ40         | PAQF40            |
| SUQR-200   | Round            | PFQ5028       | PAQR070           |
| SUQR-300   | Round            | PFQ10060      | PAQR120           |
| SUQF-200C  | Flat             | PFQ10035      | PAQF450121        |
| SUQF-300B  | Flat             | PFQ10040      | PAQF450121        |

| Set-up No. | Spray Pattern | Fluid Cap No. | Air Cap No.   |
|------------|---------------|---------------|---------------|
| SUQF-300   | Flat          | PFQ10060      | PAQF450121    |
| SUVM67B    | Variable      | VMF1650       | VMA67255-60   |
| SUVM67A    | Variable      | VMF2050       | VMA67255-60   |
| SUVM67     | Variable      | VMF2850       | VMA67255-60   |
| SUVM113A   | Variable      | VMF3578       | VMA113289-60  |
| SUVM113    | Variable      | VMF4078       | VMA113289-60  |
| SUVM128    | Variable      | VMF60100      | VMA1282100-60 |
| SUVM152    | Variable      | VMF80125      | VMA1522110-60 |
| SUV67B     | Variable      | VF1650        | VA67255-60    |
| SUV67A     | Variable      | VF2050        | VA67255-60    |
| SUV67      | Variable      | VF2850        | VA67255-60    |
| SUV113A    | Variable      | VF3578        | VA113293-60   |
| SUV113     | Variable      | VF4078        | VA113293-60   |
| SUV128     | Variable      | VF60100       | VA1282125-60  |
| SUV152     | Variable      | VF80125       | VA1522125-60  |
| SUVXE1A    | Flat          | PFX16         | PAVX140A      |
| SUVXE2C    | Flat          | PFX16         | PAVX156A      |
| SUVXE1     | Flat          | PFX20         | PAVX140A      |
| SUVXE2B    | Flat          | PFX20         | PAVX156A      |
| SUVXE2A    | Flat          | PFX28         | PAVX156A      |
| SUVXE3B    | Flat          | PFX28         | PAVX180A      |
| SUVXE2     | Flat          | PFX40         | PAVX156A      |
| SUVXE3A    | Flat          | PFX40         | PAVX180A      |
| SUVXE3     | Flat          | PFX60         | PAVX180A      |
| SUVXE4B    | Flat          | PFX60         | PAVX200A      |
| SUVXE4A    | Flat          | PFX80         | PAVX200A      |
| SUVXE4     | Flat          | PFX100        | PAVX200A      |

