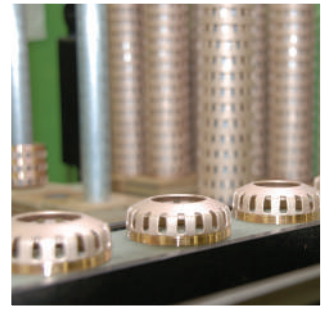
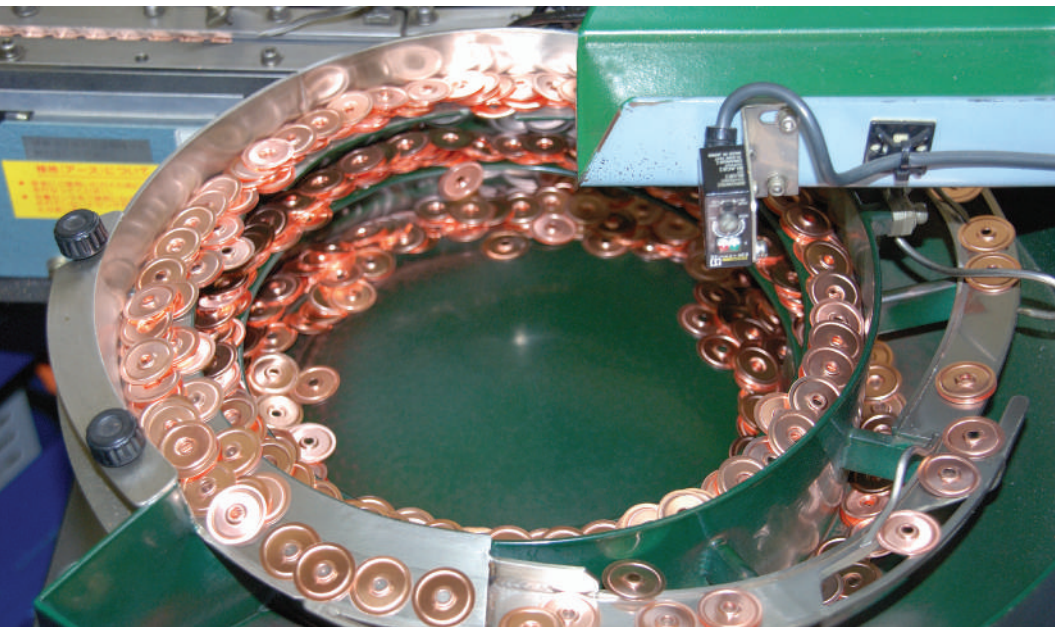




**SENJU**   
**SPRINKLER**

One Million Raindrops by Senju Sprinkler  
[www.senjuprunker.com](http://www.senjuprunker.com)

Product Brochure



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# Introduction

## Company

Senju Sprinkler has been manufacturing and supplying fire sprinkler heads and alarm valves in Japan since 1963. The company has expanded its manufacturing capabilities to meet customer demands at our ISO 14001 certified facilities.

Although Senju Sprinkler is relatively new to the North American market, it has been supplying to the biggest fire sprinkler manufacturers in the United States. In Japan, Senju Sprinkler is highly reputed as the top manufacturer of fire sprinklers, valves, and associated devices, currently holding an impressive 70% market share.

Senju Sprinkler also exports globally to many countries, and its products are listed by various fire protection approval authorities such as:



Senju Sprinkler produces solder type sprinklers for both residential and commercial applications, with a strong focus on both form and function. The company strives to develop new and innovative products to meet the demands and requirements of the industry.

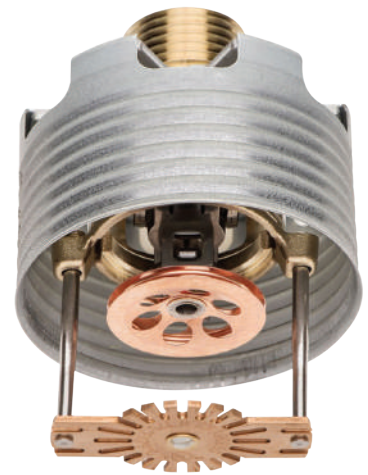


## Flat Concealed Pendent Sprinkler

RC-RES 3.0K (SS8361)

### Technical Data

|                     |  |
|---------------------|--|
| Approvals           | cULus Listed,<br>NSF-61 / Annex G Certified  |
| K Factor            | K= 3.0 (43.2)  |
| Thread Size         | NPT1/2"  |
| Temperature         | 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate |
| Vertical Adjustment | 1/2 inch (12.8 mm)   |
| Standard Finish     | White, Ivory, Beige, Black, Brown, Nickel and Wood Grain   |



### Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.
- Standard cover plate is 3-1/4" (83mm) in diameter.
- Smaller 2-5/8" (68mm) cover plate and 2-5/8" (68mm) square cover plate are also available.
- Cover plates are available in twelve standard finishes and unlimited custom color and pattern finishes.
- Can be used for multipurpose and stand alone residential sprinkler systems.
- Can be installed in fewer steps and less time.

Minimum Flow and Pressure  
For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate | Intermediate Temp. Rating<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate | Deflector to Ceiling                 | Installation Type          | Minimum Spacing |
|----------------------------|---|---|--------------------------------------|----------------------------|-----------------|
| 12' x 12'<br>(3.7m x 3.7m) | 9GPM (34.0 LPM)<br>9.0psi (0.62 bar)  | 9GPM (34.0 LPM)<br>9.0psi (0.62 bar)  | 3/8 to 7/8 inches<br>(9.5 to 22.2mm) | Concealed With Cover Plate | 8'<br>(2.4m)    |
| 14' x 14'<br>(4.3m x 4.3m) | 11GPM (41.6 LPM)<br>13.4psi (0.92 bar)  | 12GPM (45.4 LPM)<br>16.0psi (1.10 bar)  |                                      |                            |                 |

Required Wrench Socket: NR-H





## Flat Concealed Pendent Sprinkler

RC-RES 3.7K (SS8261)

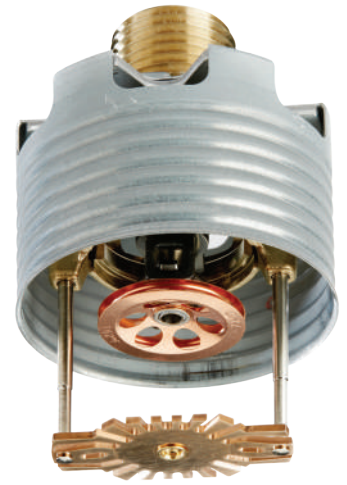
### Technical Data

|                     |  |
|---------------------|--|
| Approvals           | cULus Listed,<br>NSF-61 / Annex G Certified  |
| K Factor            | K= 3.7 (53.3)  |
| Thread Size         | NPT1/2"  |
| Temperature         | 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate |
| Vertical Adjustment | 1/2 inch (12.8 mm)   |
| Standard Finish     | White, Ivory, Beige, Black, Brown, Nickel and Wood Grain   |

#### Minimum Flow and Pressure

For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate | Intermediate Temp. Rating<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate | Deflector to Ceiling                 | Installation Type          | Minimum Spacing |
|----------------------------|---|---|--------------------------------------|----------------------------|-----------------|
| 12' x 12'<br>(3.7m x 3.7m) | 10GPM (37.8 LPM)<br>7.3psi (0.50 bar)   | 11GPM (41.6 LPM)<br>8.8psi (0.60 bar)   | 3/8 to 7/8 inches<br>(9.5 to 22.2mm) | Concealed With Cover Plate | 8'<br>(2.4m)    |
| 14' x 14'<br>(4.3m x 4.3m) | 10GPM (37.8 LPM)<br>7.3psi (0.50 bar)   | 11GPM (41.6 LPM)<br>8.8psi (0.60 bar)   |                                      |                            |                 |



### Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.
- Standard cover plate is 3-1/4" (83mm) in diameter.
- Smaller 2-5/8" (68mm) cover plate and 2-5/8" (68mm) square cover plate are also available.
- Cover plates are available in twelve standard finishes and unlimited custom color and pattern finishes.
- Can be used for multipurpose and stand alone residential sprinkler systems.
- Can be installed in fewer steps and less time.

Required Wrench Socket: NR-H

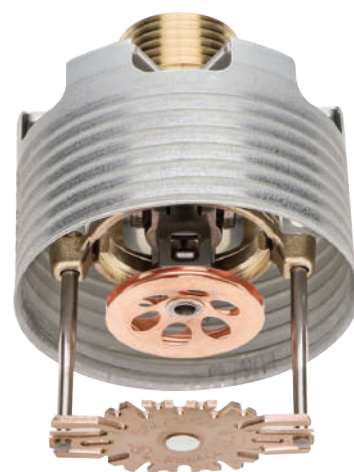


## Flat Concealed Pendent Sprinkler

RC-RES 4.9K (SS8464)

### Technical Data

|                     |  |
|---------------------|--|
| Approvals           | cULus Listed,<br>NSF-61 / Annex G Certified  |
| K Factor            | K= 4.9 (70.6)  |
| Thread Size         | NPT1/2"  |
| Temperature         | 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate |
| Vertical Adjustment | 1/2 inch (12.8 mm)   |
| Standard Finish     | White, Ivory, Beige, Black, Brown, Nickel and Wood Grain   |



### Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.
- Standard cover plate is 3-1/4" (83mm) in diameter.
- Smaller 2-5/8" (68mm) cover plate and 2-5/8" (68mm) square cover plate are also available.
- Cover plates are available in twelve standard finishes and unlimited custom color and pattern finishes.
- Can be used for multipurpose and stand alone residential sprinkler systems.
- Can be installed in fewer steps and less time.

Required Wrench Socket: NR-H

#### Minimum Flow and Pressure

For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate | Intermediate Temp. Rating<br>175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate | Deflector to Ceiling                     | Installation Type          | Minimum Spacing |
|----------------------------|---|---|--|----------------------------|-----------------|
| 12' x 12'<br>(3.7m x 3.7m) | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   | 3/8 to 7/8 inches<br><br>(9.5 to 22.2mm) | Concealed with Cover Plate | 8'<br>(2.4m)    |
| 14' x 14'<br>(4.3m x 4.3m) | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   |  |                            |                 |
| 16' x 16'<br>(4.9m x 4.9m) | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   | 14GPM (53.0 LPM)<br>8.2psi (0.57 bar)   |  |                            |                 |
| 18' x 18'<br>(5.5m x 5.5m) | 17GPM (64.3 LPM)<br>12.0psi (0.83 bar)  | 18GPM (68.1 LPM)<br>13.5psi (0.93 bar)  |  |                            |                 |
| 20' x 20'<br>(6.1m x 6.1m) | 21GPM (79.5 LPM)<br>18.4psi (1.27 bar)  |   |  |                            |                 |





## Flat Concealed Pendent Sprinkler

CN-RES 4.9K (SS8421)

### Technical Data

|                     |   |
|---------------------|---|
| Approvals           | cULus Listed  |
| K Factor            | K= 4.9 (70.6)   |
| Thread Size         | NPT1/2"   |
| Temperature         | 162°F / 72°C Sprinkler with<br>140°F / 60°C Cover Plate     |
| Vertical Adjustment | 3/8 inch (9.5 mm)   |
| Standard Finish     | White, Ivory, Beige, Black,<br>Brown, Nickel and Wood Grain |

### Minimum Flow and Pressure

For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C Sprinkler<br>with 140°F / 60°C<br>Cover Plate | Heat Collector<br>to Ceiling                      | Installation<br>Type                | Minimum<br>Spacing |
|----------------------------|---|---|-------------------------------------|--------------------|
| 12' x 12'<br>(3.7m x 3.7m) | 13GPM (49.2 LPM)<br>7.0psi (0.48 bar)   | -3/16 to 3/16<br>inches<br><br>(-4.8 to<br>4.8mm) | Concealed<br>with<br>Cover<br>Plate | 8'<br>(2.4m)       |
| 14' x 14'<br>(4.3m x 4.3m) | 14GPM (53.0 LPM)<br>8.2psi (0.56 bar)   |   |                                     |                    |
| 16' x 16'<br>(4.9m x 4.9m) | 15GPM (56.8 LPM)<br>9.4psi (0.65 bar)   |   |                                     |                    |
| 18' x 18'<br>(5.5m x 5.5m) | 19GPM (71.9 LPM)<br>15.0GPM (1.03 bar)  |   |                                     |                    |

### Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.
- Industry's smallest cover plate, just 2-3/8" (60mm) in diameter.
- Cover plates are available in nine standard finishes and unlimited custom color and pattern finishes.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

## Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.
- Approved for special applications with beamed ceilings.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

## Technical Data

|                     |                                     |
|---------------------|-------------------------------------|
| Approvals           | cULus Listed                        |
| K Factor            | K= 4.2 (60.5)                       |
| Thread Size         | NPT1/2"                             |
| Temperature         | 162°F / 72°C,<br>175°F / 79°C       |
| Vertical Adjustment | 3/8 inch (9.5 mm)                   |
| Standard Finish     | White, Chrome,<br>Black, Dark Brown |

## Flush Pendent Sprinkler

ZN-RES 4.2K (SS4421)



### Minimum Flow and Pressure

For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C  | Intermediate Temp. Rating<br>175°F / 79°C | Heat Collector to Ceiling                      | Installation Type     | Minimum Spacing |
|----------------------------|--|---|--|-----------------------|-----------------|
| 12' x 12'<br>(3.7m x 3.7m) | 13GPM (49.2 LPM)<br>9.6psi (0.66 bar)  | 13GPM (49.2 LPM)<br>9.6psi (0.66 bar)     | 23/32 to 1-3/32 inches<br><br>(18.3 to 27.8mm) | Flush with Escutcheon | 8'<br>(2.4m)    |
| 14' x 14'<br>(4.3m x 4.3m) | 13GPM (49.2 LPM)<br>9.6psi (0.66 bar)  | 14GPM (53.0 LPM)<br>11.1psi (0.77 bar)    |  |                       |                 |
| 16' x 16'<br>(4.9m x 4.9m) | 14GPM (53.0 LPM)<br>11.1psi (0.77 bar) | 14GPM (53.0 LPM)<br>11.1psi (0.77 bar)    |  |                       |                 |
| 18' x 18'<br>(5.5m x 5.5m) | 18GPM (68.1 LPM)<br>18.4psi (1.27 bar) | 19GPM (71.9 LPM)<br>20.5psi (1.41 bar)    |  |                       |                 |
| 20' x 20'<br>(6.1m x 6.1m) | 22GPM (83.3 LPM)<br>27.4psi (1.89 bar) |   |  |                       |                 |

## Residential Sprinklers

## Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems as per NFPA 13D, 13R, and 13.
- Can be installed in fewer steps and less time.

Required Wrench Socket: HF-H

## Technical Data

|                       |                                     |
|-----------------------|-------------------------------------|
| Approvals             | cULus Listed                        |
| K Factor              | K= 4.2 (60.5)                       |
| Thread Size           | NPT1/2"                             |
| Temperature           | 162°F / 72°C                        |
| Horizontal Adjustment | 3/16 inch (4.7 mm)                  |
| Standard Finish       | White, Chrome,<br>Black, Dark Brown |

## Flush Horizontal Sidewall Sprinkler

HF-RES 4.2K (SS4423)



### Minimum Flow and Pressure

For Ceiling types refer to 2013 Edition of NFPA 13D, 13R, or 13

| Maximum Coverage Area      | Ordinary Temp. Rating<br>162°F / 72°C  | Top of Deflector to Ceiling         | Installation Type     | Minimum Spacing |
|----------------------------|--|-------------------------------------|-----------------------|-----------------|
| 12' x 12'<br>(3.7m x 3.7m) | 13GPM (49.2 LPM)<br>9.6psi (0.66 bar)  | 4 to 6 inches<br><br>(101 to 152mm) | Flush with Escutcheon | 8'<br>(2.4m)    |
| 14' x 14'<br>(4.3m x 4.3m) | 16GPM (60.6 LPM)<br>14.5psi (1.00 bar) |                                     |                       |                 |
| 16' x 16'<br>(4.9m x 4.9m) | 20GPM (75.7 LPM)<br>22.7psi (1.56 bar) |                                     |                       |                 |



## Flat Concealed Pendent Sprinkler

RC-QR 5.6K (SS9561)

### Features

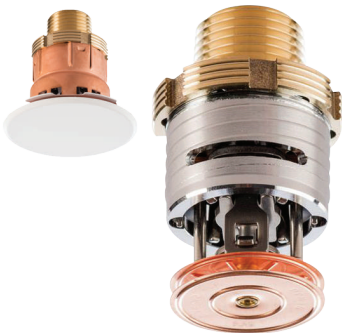
- Quick and standard response, standard coverage.
- Solder type.
- Standard cover plate is 3-1/4" (83mm) in diameter.
- Smaller 2-5/8" (68mm) cover plate also available.
- Cover plates are available in twelve standard finishes and unlimited custom color and pattern finishes.
- Can be installed in fewer steps and less time.

Required Wrench Socket: NR-H

### Technical Data

|                     |   |
|---------------------|---|
| Approvals           | cULus Listed,<br>FM Approved                                |
| K Factor            | K= 5.6 (80.6)   |
| Thread Size         | NPT1/2"   |
| Temperature         | 162°F / 72°C Sprinkler with<br>140°F / 60°C Cover Plate     |
| Vertical Adjustment | 1/2 inch (12.8 mm)  |
| Standard Finish     | White, Ivory, Beige, Black, Brown,<br>Nickel and Wood Grain |

## Commercial Sprinklers



## Flat Concealed Pendent Sprinkler

CN-QR 5.6K (SS9521)

### Features

- Quick and standard response, standard coverage.
- Solder type.
- Industry's smallest cover plate, just 2-3/8" (60mm) in diameter.
- Cover Plates are available in nine standard finishes unlimited custom color and pattern finishes.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

### Technical Data

|                     |   |
|---------------------|---|
| Approvals           | cULus Listed,<br>FM Approved  |
| K Factor            | K= 5.6 (80.6)   |
| Thread Size         | NPT1/2"   |
| Temperature         | 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate<br>205°F / 96°C Sprinkler with 162°F / 72°C Cover Plate<br>(cULus listed only) |
| Vertical Adjustment | 3/8 inch (9.5 mm)   |
| Standard Finish     | White, Ivory, Beige, Black, Brown,<br>Nickel and Wood Grain   |



# Flat Concealed Pendent Sprinkler

RC-QR-EC 5.6K (SS3561)



## Technical Data

|                     |  |
|---------------------|--|
| Approvals           | cULus Listed,  |
| K Factor            | K= 5.6 (80.6)  |
| Thread Size         | NPT1/2"  |
| Temperature         | 162°F / 72°C Sprinkler with<br>140°F / 60°C Cover Plate    |
| Vertical Adjustment | 1/2 inch (12.8 mm)   |
| Standard Finish     | White, Ivory, Beige, Black, Brown<br>Nickel and Wood Grain |

| Maximum Coverage Area      | Minimum Flow and Pressure               |
|----------------------------|---|
| 16' x 16'<br>(4.9m x 4.9m) | 26GPM (98.4 LPM)<br>21.6psi (1.49 bar)  |
| 18' x 18'<br>(5.5m x 5.5m) | 33GPM (124.9 LPM)<br>34.7psi (2.39 bar) |
| 20' x 20'<br>(6.1m x 6.1m) | 40GPM (151.4 LPM)<br>51.0psi (3.52 bar) |

## Features

- Quick response, extended coverage.
- Solder type.
- Standard cover plate is 3-1/4" (83mm) in diameter.
- Smaller 2-5/8" (68mm) cover plate also available.
- Cover plates are available in twelve standard finishes and unlimited custom color and pattern finishes.
- Can be installed in fewer steps and less time.

Required Wrench Socket: NR-H



## Commercial Sprinklers

# Flush Pendent Sprinkler

ZN-QR 5.6K (SS2521)



## Technical Data

|                     |                               |
|---------------------|-------------------------------|
| Approvals           | cULus Listed,<br>NYC Approved |
| K Factor            | K= 5.6 (80.6)                 |
| Thread Size         | NPT 1/2"                      |
| Temperature         | 162°F / 72°C, 205°F / 96°C    |
| Vertical Adjustment | 3/8 inch (9.5 mm)             |
| Standard Finish     | White, Chrome, Black          |

## Features

- Quick response, standard coverage.
- Solder type.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H



## Flush Pendent Sprinkler

ZN-UF 5.6K (SS2531)

### Features

- Standard response, standard coverage.
- Solder type.
- Smooth, aesthetic ceiling profile.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

### Technical Data

|                     |  |
|---------------------|--|
| Approvals           | cULus Listed,<br>FM Approved,<br>NYC Approved                    |
| K Factor            | K= 5.6 (80.6)  |
| Thread Size         | NPT1/2"  |
| Temperature         | 162°F / 72°C, 205°F / 96°C,<br>282°F / 139°C (cULus listed only) |
| Vertical Adjustment | 3/8 inch (9.5 mm)  |
| Standard Finish     | White, Chrome, Black   |

Commercial Sprinklers



## Flush Pendent Sprinkler

ZN-QR EU 5.6K (SS7521)

### Features

- Quick response, standard coverage.
- Solder type.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

### Technical Data

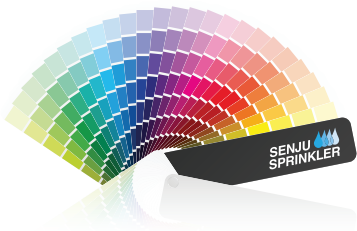
|                     |                                  |
|---------------------|----------------------------------|
| Approvals           | LPCB and CE Approved             |
| K Factor            | K= 80.6 LPM / bar <sup>1/2</sup> |
| Thread Size         | NPT 1/2"                         |
| Temperature         | 72°C / 96°C                      |
| Vertical Adjustment | 9.5 mm                           |
| Standard Finish     | White (RAL9003), Chrome          |

# Cover Plate Finishes - Standard Finish



Due to printing limitations, the colors and patterns shown here may differ slightly from the actual covers. All twelve standard finishes are available for 3-1/4" RC cover plate only.

# Custom Finish - Available in unlimited custom colors and patterns



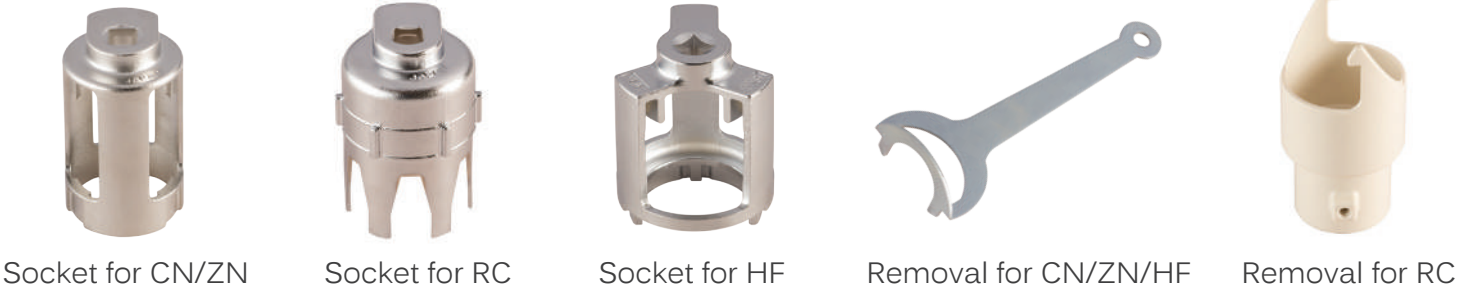
## Custom Color

- 10 days turnaround time
- Choose from any paint manufacturer

## Custom Pattern

- Senju Sprinkler exclusive
- Final draft samples are available
- Replicate any pattern or material

# Tools



Socket for CN/ZN

Socket for RC

Socket for HF

Removal for CN/ZN/HF

Removal for RC





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