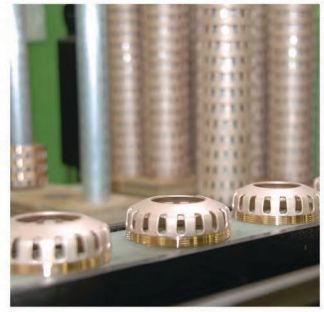
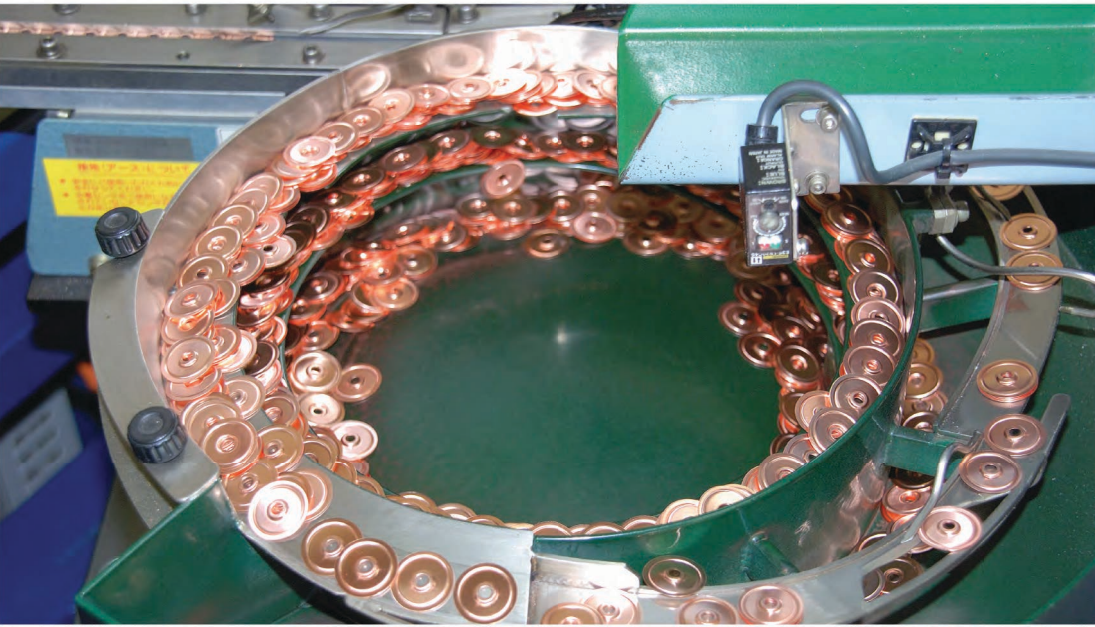




**SENJU**   
**SPRINKLER**

One Million Raindrops by Senju Sprinkler

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:

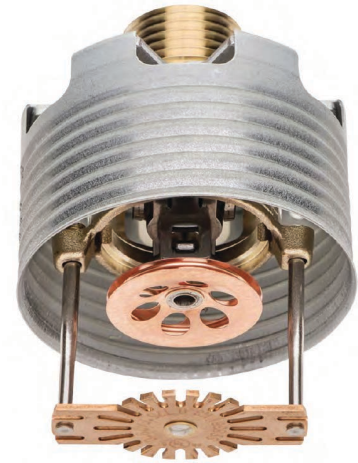


Senju Sprinkler produces solder type sprinklers for both residential and commercial applications, with a strong focus on both form and function. The company strives to develop new and innovative products to meet the demands and requirements of the industry.



## Flat Concealed Pendant Sprinkler

RC-RES 3.0K (SS8361)



### Technical Data

Approvals	cULus Listed, 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 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, Copper, 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 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate	Intermediate Temp. Rating 175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate	Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	9GPM (34.0 LPM) 9.0psi (0.62 bar)	9GPM (34.0 LPM) 9.0psi (0.62 bar)	3/8 to 7/8 inches (9.5 to 22.2mm)	Concealed With Cover Plate	8' (2.4m)
14' x 14' (4.3m x 4.3m)	11GPM (41.6 LPM) 13.4psi (0.92 bar)	12GPM (45.4 LPM) 16.0psi (1.10 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 fourteen 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 3.7K (SS8261)

### Technical Data

Approvals	cULus Listed, 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 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, Copper, 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 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate	Intermediate Temp. Rating 175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate	Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	10GPM(37.8 LPM) 7.3psi (0.50 bar)	11GPM(41.6 LPM) 8.8psi (0.60 bar)	3/8 to 7/8 inches  (9.5 to 22.2mm)	Concealed With Cover Plate	8' (2.4m)
14' x 14' (4.3m x 4.3m)	10GPM(37.8 LPM) 7.3psi (0.50 bar)	11GPM(41.6 LPM) 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 fourteen 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

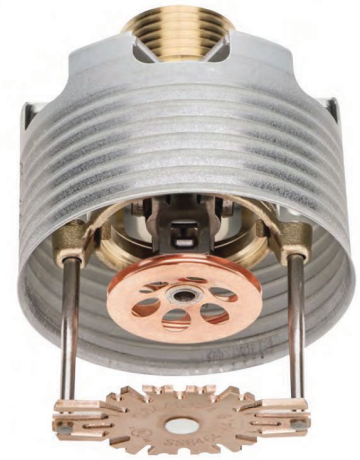


## Flat Concealed Pendent Sprinkler

RC-RES 4.9K (SS8464)

### Technical Data

Approvals	cULus Listed, 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 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, Copper, 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 fourteen 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 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate	Intermediate Temp. Rating 175°F / 79°C Sprinkler with 162°F / 72°C Cover Plate	Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM (49.2 LPM) 7.0psi (0.48 bar)	13GPM (49.2 LPM) 7.0psi (0.48 bar)	3/8 to 7/8 inches  (9.5 to 22.2mm)	Concealed with Cover Plate	8' (2.4m)
14' x 14' (4.3m x 4.3m)	13GPM (49.2 LPM) 7.0psi (0.48 bar)	13GPM (49.2 LPM) 7.0psi (0.48 bar)			
16' x 16' (4.9m x 4.9m)	13GPM (49.2 LPM) 7.0psi (0.48 bar)	14GPM (53.0 LPM) 8.2psi (0.57 bar)			
18' x 18' (5.5m x 5.5m)	17GPM (64.3 LPM) 12.0psi (0.83 bar)	18GPM (68.1 LPM) 13.5psi (0.93 bar)			
20' x 20' (6.1m x 6.1m)	21GPM (79.5 LPM) 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 140°F / 60°C Cover Plate
Vertical Adjustment	3/8 inch (9.5 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 162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate	Heat Collector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM (49.2 LPM) 7.0psi (0.48 bar)	-3/16 to 3/16 inches  (-4.8 to 4.8mm)	Concealed with Cover Plate	8' (2.4m)
14' x 14' (4.3m x 4.3m)	14GPM (53.0 LPM) 8.2psi (0.56 bar)			
16' x 16' (4.9m x 4.9m)	15GPM (56.8 LPM) 9.4psi (0.65 bar)			
18' x 18' (5.5m x 5.5m)	19GPM (71.9 LPM) 15.0psi (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 eleven 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, 175°F / 79°C
Vertical Adjustment	3/8 inch (9.5 mm)
Standard Finish	White, Chrome, 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 162°F / 72°C	Intermediate Temp. Rating 175°F / 79°C	Heat Collector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM (49.2 LPM) 9.6psi (0.66 bar)	13GPM (49.2 LPM) 9.6psi (0.66 bar)	23/32 to 1-3/32 inches  (18.3 to 27.8mm)	Flush with Escutcheon	8' (2.4m)
14' x 14' (4.3m x 4.3m)	13GPM (49.2 LPM) 9.6psi (0.66 bar)	14GPM (53.0 LPM) 11.1psi (0.77 bar)			
16' x 16' (4.9m x 4.9m)	14GPM (53.0 LPM) 11.1psi (0.77 bar)	14GPM (53.0 LPM) 11.1psi (0.77 bar)			
18' x 18' (5.5m x 5.5m)	18GPM (68.1 LPM) 18.4psi (1.27 bar)	19GPM (71.9 LPM) 20.5psi (1.41 bar)			
20' x 20' (6.1m x 6.1m)	22GPM (83.3 LPM) 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, 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 162°F / 72°C	Top of Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM (49.2 LPM) 9.6psi (0.66 bar)	4 to 6 inches  (101 to 152mm)	Flush with Escutcheon	8' (2.4m)
14' x 14' (4.3m x 4.3m)	16GPM (60.6 LPM) 14.5psi (1.00 bar)			
16' x 16' (4.9m x 4.9m)	20GPM (75.7 LPM) 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 fourteen 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, 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
Vertical Adjustment	1/2 inch (12.8 mm)
Standard Finish	White, Ivory, Beige, Black, Brown, Copper, 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 eleven 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, 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 205°F / 96°C Sprinkler with 162°F / 72°C Cover Plate (cULus listed only)
Vertical Adjustment	3/8 inch (9.5 mm)
Standard Finish	White, Ivory, Beige, Black, Brown, Nickel and Wood Grain



# Flat Concealed Pendent Sprinkler

RC-QR-EC 5.6K (SS3561)



## Technical Data

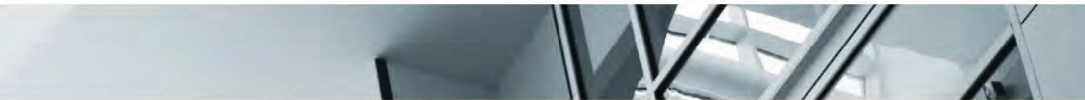
Approvals	cULus Listed,
K Factor	K= 5.6 (80.6)
Thread Size	NPT1/2"
Temperature	162°F / 72°C Sprinkler with 140°F / 60°C Cover Plate
Vertical Adjustment	1/2 inch (12.8 mm)
Standard Finish	White, Ivory, Beige, Black, Brown Copper, Nickel and Wood Grain

## 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 fourteen standard finishes and unlimited custom color and pattern finishes.
- Can be installed in fewer steps and less time.

Required Wrench Socket: NR-H

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



## Commercial Sprinklers

# Flush Pendent Sprinkler

ZN-QR 5.6K (SS2521)



## Technical Data

Approvals	cULus Listed, 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

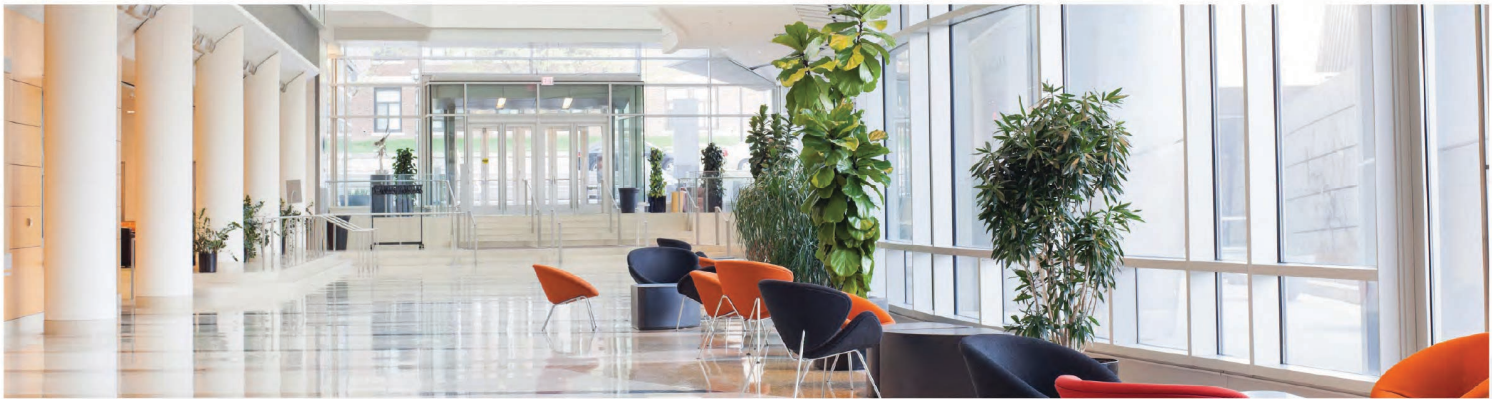
- Standard response, standard coverage.
- Solder type.
- Smooth, aesthetic ceiling profile.
- Can be installed in fewer steps and less time.

Required Wrench Socket: VC-H

### Technical Data

Approvals	cULus Listed, FM Approved, NYC Approved
K Factor	K= 5.6 (80.6)
Thread Size	NPT1/2"
Temperature	162°F / 72°C, 205°F / 96°C, 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

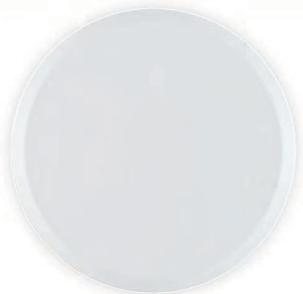
- Quick response, standard coverage.
- Solder type.
- Can be installed in fewer steps and less time.

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



White



Ivory



Beige



Brown



Black



Nickel  
Mirror Finish



Nickel  
Brushed Finish



Copper  
Mirror Finish



Square Shape  
Also Available



Wood Grain  
Douglas Fir



Wood Grain  
Yellow Birch



Wood Grain  
Golden Oak



Wood Grain  
Cherry Chestnut



Wood Grain  
Dark Walnut

Due to printing limitations, the colors and patterns shown here may differ slightly from the actual covers. All fourteen 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 HF



Socket for RC



Plastic Wrench  
for RC



Magnetic  
Cover Plate  
Installation Tool  
for RC/CN



Cap Removal Tool  
for RC



Cap Removal Tool  
for CN/ZN/HF



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