



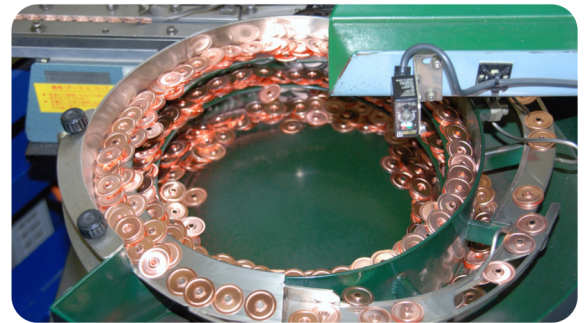
Senju Sprinkler

Product Brochure

Quality Done Right

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Introduction

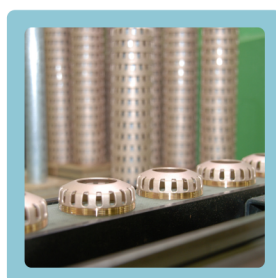
Company

Senju Sprinkler is a Japanese fire suppression manufacturer with almost 60 years of experience in designing reliable automatic fire sprinklers and holds an impressive 75% market share in Japan. Combined using its exclusive solder materials and customization capabilities, Senju Sprinkler ensures high-quality fire sprinklers which are extremely durable and aesthetically appealing. Senju Sprinkler prides itself on providing exceptional service to all customers.

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



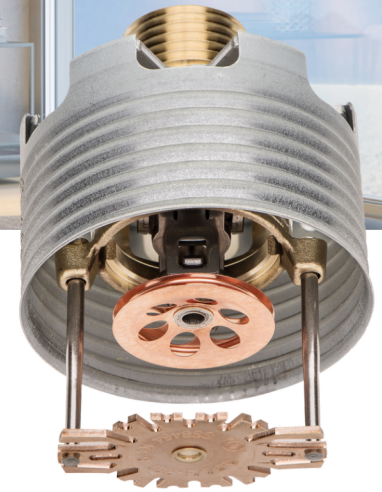
Today, Senju Sprinkler has branded itself by providing high-end quality sprinklers for both residential and commercial applications. Senju Sprinkler strives to develop new and innovative products to match the needs of its customers and marketplace in the Fire Sprinkler Industry.



Residential Sprinklers



Flat Concealed Pendent Sprinkler RC-RES 4.9K (SS8464)



Technical data

Approvals	cULus Listed, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372
K Factor	K= 4.9 (70.6)
Thread Size	1/2" NPT
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
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 NFPA 13D, 13R, or 13

Maximum Coverage Area	Ordinary and Intermediate Temp. Rating		Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM 7.0psi	(49.2 LPM) (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 7.0psi	(49.2 LPM) (0.48 bar)			
16' x 16' (4.9m x 4.9m)	13GPM 7.0psi	(49.2 LPM) (0.48 bar)			
18' x 18' (5.5m x 5.5m)	17GPM 12.0psi	(64.4 LPM) (0.83 bar)			
20' x 20' (6.1m x 6.1m)	21GPM 18.4psi	(79.5 LPM) (1.27 bar)			

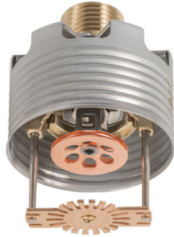
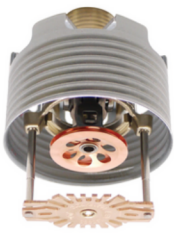
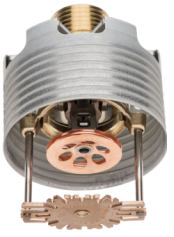
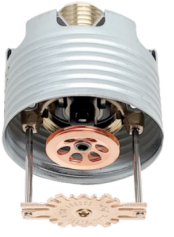
Features

- 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 Sprinkler Line for Residential

Presenting Our Complete RC-RES Series

RC-RES Series Available K-factors				
	RC-RES 3.0K (SS8361)	RC-RES 3.7K (SS8261)	RC-RES 4.9K (SS8464)	RC-RES 5.8K (SS8561)
Max coverage Area (feet)	162°F (72°C) 205°F (96°C)	162°F (72°C) 205°F (96°C)	162°F (72°C) 205°F (96°C)	162°F (72°C) 205°F (96°C)
12 x 12	9 GPM 9.0 PSI	10 GPM 7.3 PSI	13 GPM 7.0 PSI	16 GPM 7.6 PSI
14 x 14	11 GPM 13.4 PSI	10 GPM 7.3 PSI	13 GPM 7.0 PSI	16 GPM 7.6 PSI
15 x 15		12 GPM 10.5 PSI	13 GPM 7.0 PSI	16 GPM 7.6 PSI
16 x 16		13 GPM 12.3 PSI	13 GPM 7.0 PSI	16 GPM 7.6 PSI
18 x 18			17 GPM 12.0 PSI	17 GPM 8.6 PSI
20 x 20			21 GPM 18.4 PSI	20 GPM 11.9 PSI

Senju's expanded product line has every NFPA 13D and 13R application covered. We have the perfectly engineered sprinkler for each coverage area.

Residential Sprinklers



Flat Concealed Pendent Sprinkler CN-RES 4.9K (SS8421)

Technical data

Approvals	cULus Listed
K Factor	K= 4.9 (70.6)
Thread Size	1/2" NPT
Temperature	162°F (72°C) Sprinkler with 140°F (60°C) Cover Plate
Vertical Adjustment	3/8 inch (9.0 mm)
Standard Finish	White, Ivory, Beige, Black, Brown, Nickel and Wood Grain

Minimum Flow and Pressure For ceiling types refer to NFPA 13D, 13R, or 13

Maximum Coverage Area	Ordinary Temp. Rating 162°F / 72°C Sprinkler	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



Flush Pendent Sprinkler

ZN-RES 4.2K (SS4421)

Minimum Flow and Pressure
For ceiling types refer to 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)				

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	1/2" NPT
Temperature	162°F (72°C) 175°F (79°C)
Vertical Adjustment	3/8 inch (9.5 mm)
Standard Finish	White, Chrome, Black, Dark Brown

Residential Sprinklers



Flush Horizontal Sidewall Sprinkler

HF-RES 4.2K (SS4423)

Minimum Flow and Pressure
For ceiling types refer to NFPA 13D, 13R, or 13

Maximum Coverage Area	Ordinary Temp. Rating 162°F / 72°C	Top Sub 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)			

Features

- Solder type.
- Ideal for use in wet pipe residential sprinkler systems 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	1/2" NPT
Temperature	162°F (72°C)
Horizontal Adjustment	3/16 inch (4.7 mm)
Standard Finish	White, Chrome, Black, Dark Brown

Residential Sprinklers



Pendent and Recessed Pendent Sprinkler

FR-RES 4.9K (SS4451)

Technical data

Approvals	cULus Listed
K Factor	K= 4.9 (70.6)
Thread Size	1/2" NPT
Temperature	162°F (72°C) 205°F (96°C)
Vertical Adjustment	1/2 inch (12.7 mm) with D1* and D3* Recessed Escutcheon
Standard Finish	Brass, White, Black, Chrome

*D1 Recessed Escutcheon is only compatible with 162°F.

*D3 Recessed Escutcheon is compatible with 162°F and 205°F.

Minimum Flow and Pressure For ceiling types refer to NFPA 13D, 13R, or 13

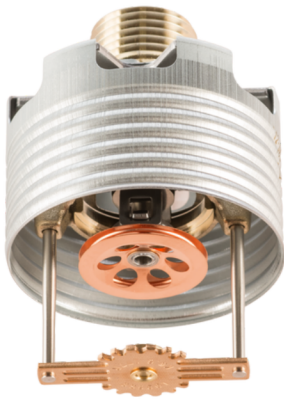
Maximum Coverage Area	Ordinary and Intermediate Temp. Rating		Deflector to Ceiling	Installation Type	Minimum Spacing
12' x 12' (3.7m x 3.7m)	13GPM 7.0psi	(49.2 LPM) (0.48 bar)	1-1/16 to 4 inches (27.0 to 101.6mm)	Pendent or Recessed Pendent	8' (2.4m)
14' x 14' (4.3m x 4.3m)	13GPM 7.0psi	(49.2 LPM) (0.48 bar)			
16' x 16' (4.9m x 4.9m)	13GPM 7.0psi	(49.2 LPM) (0.48 bar)			
18' x 18' (5.5m x 5.5m)	17GPM 12.0psi	(64.4 LPM) (0.83 bar)			
20' x 20' (6.1m x 6.1m)	20GPM 16.7psi	(75.7 LPM) (1.15 bar)			



Features

- Solder link type.
- More durable than glass bulb sprinklers.
- Tapered end allows for easy installation into sprinkler head adapters without cutting into the gasket.
- Ideal for use in wet pipe residential sprinkler systems per NFPA 13D, 13R, and 13.

Required Wrench:
FR-H Socket / FR-S Spanner



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	1/2" NPT
Temperature	162°F (72°C) Sprinkler with 140°F (60°C) Cover Plate 205°F (96°C) Sprinkler with 140°F (60°C) Cover Plate 205°F (96°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

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	1/2" NPT
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 (9.0 mm)
Standard Finish	White, Ivory, Beige, Black, Brown, Nickel, and Wood Grain

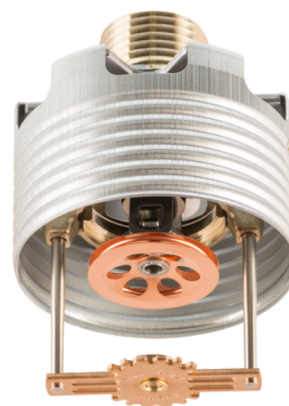
Flat Concealed Pendent Sprinkler

RC-QR-EC 5.6K (SS3561)

Technical data

Approvals	cULus Listed
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
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

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)



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

Commercial Sprinklers

Flush Pendent Sprinkler

ZN-UF 5.6K (SS2531)

Technical data

Approvals	cULus Listed, FM Approved, NYC Approved
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
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



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



Flush Pendent Sprinkler

NF-QR 5.6K (SS2524)

Features

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

Technical data

Approvals	cULus Listed, FM Approved
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
Temperature	165°F (74°C), 205°F (96°C)
Vertical Adjustment	1/2 inch (12.7mm)
Standard Finish	White, Black, Chrome

Required Wrench Socket: VC-H

Commercial Sprinklers



Pendent Sprinkler

FR-QR 5.6K (SS2551)

Features

- Quick response, standard coverage.
- Solder link type.
- More durable than glass bulb sprinklers.
- Designed for use in light and ordinary hazard commercial occupancies.
- Laser etched lot number on frame.

Technical data

Approvals	cULus Listed, FM Approved (Excluding 3/4" adjustment and 286°F with 1/2" adjustment)
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
Temperature	162°F (72°C), 205°F (96°C), 286°F (141°C)
Vertical Adjustment	1/2 inch (12.7mm) with D1 Recessed Escutcheon 3/4 inch (19.1mm) with D2 Recessed Escutcheon
Standard Finish	Brass, White, Black, Chrome

Required Wrench: FR-H, FR-H II Socket/FR-S Spanner

Horizontal Sidewall Sprinkler

FR-QR 5.6K (SS2553)

Technical data

Approvals	cULus Listed, FM Approved* *Excluding 3/4" adjustment and 286°F with 1/2" adjustment
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
Temperature	162°F (72°C), 205°F (96°C) 286°F (141°C)
Horizontal Adjustment	1/2 inch (12.7mm) with D1 Recessed Escutcheon 3/4 inch (19.1mm) with D2 Recessed Escutcheon
Standard Finish	Brass, White, Black, Chrome



Features

- Quick response, standard coverage.
- Solder link type.
- More durable than glass bulb sprinklers.
- Designed for use in light and ordinary hazard commercial occupancies.
- Laser etched lot number on frame.

Required Wrench: FR-H, FRH II Socket/FR-S Spanner

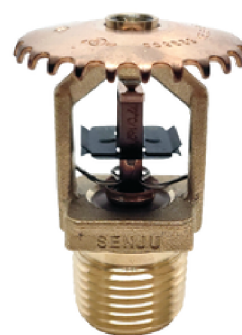


Upright Sprinkler

FR-QR 5.6K (SS2552)

Technical data

Approvals	cULus Listed, FM Approved
K Factor	K= 5.6 (80.6)
Thread Size	1/2" NPT
Temperature	162°F (72°C) 205°F (96°C) 286°F (141°C)
Standard Finish	Brass, White, Black, Chrome



Features

- Quick response, standard coverage.
- Solder link type.
- More durable than glass bulb sprinklers.
- Designed for use in light and ordinary hazard commercial occupancies.
- Laser etched lot number on frame.

Required Wrench: FR-S Spanner

-The RC Series-

Three-Step Easy Installation Process



Step 1

Install Our Residential and Commercial RC Model Sprinkler Heads with Protective Cap Still on

Step 2

Cap Removal Tool Easily Removes the Sprinkler's Protective Cap



Step 3

Install Cover Plate Up to 3-1/4" with Our Magnetic Cover Plate Installation Tool

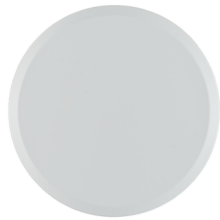
Step 2 & 3 Can Be Used with a 1" CPVC Pipe



NF-QR sprinkler
Installation Video
Scan the QR code



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 & Patterns



Custom Color

- 10 business days turnaround time
- Choose from any paint manufacturer

Custom Pattern

- Senju Sprinkler exclusive
- 15-20 business days turnaround time
- Final draft samples are available
- Replicate any pattern or material

Accessories



Wrench Socket
NR-H



Wrench Socket
VC-H



Wrench Socket
HF-H



Wrench Socket
FR-H



Wrench Socket
FR-H II



Wrench Spanner
FR-S



Plastic Wrench
Socket for RC



Cap Removal Tool
for ZN/CN/HF/NF



Cap Removal Tool
for RC



Magnetic Cover Plate
Installation Tool



Protective cap for FR
Red LDPE

System Components

Access Panels

- Dry Wall Access Panel - 18 Gauge Galvanized Steel.
White 12" x 18", 14" x 14", 14" x 24", 14" x 30"
- Dry Wall Access Panel - High Impact ABS Plastic,
White 14" x 14"
- Dry Wall Access Panel- Galvanized Steel, Prime Coat
Various sizes available
- Metal Lash Access door- Galvanized Steel, Prime Coat
Various sizes available
- Plastered Wall Access Door - Galvanized Steel, Prime
Coat Various sizes available



Size Chart for Dry Wall Access Panel

Panel Size W X H (IN)	Wall/Ceiling Opening (IN)	# of Latches	Weight (LB)
12 X 18	12- $\frac{1}{4}$ X 18- $\frac{1}{4}$	1	6.5
14 X 14	14- $\frac{1}{4}$ X 14- $\frac{1}{4}$	1	5.8
14 X 24	14- $\frac{1}{4}$ X 24- $\frac{1}{4}$	3	9.2
14 x 30	14- $\frac{1}{4}$ X 30- $\frac{1}{4}$	3	11.3

System Components

Senju Sprinkler Pressure Gauges

- 2" 300PSI 1/4"NPT Lower Mount
- 3.5" 300PSI 1/2"NPT Lower Mount
- 3.5" 300PSI 1/4"NPT Lower Mount, UL/FM



Valves

■ Lead Free Bronze In-Line Check Valve

Size	D (IN)	H (IN)	Weight (LB)
1"	1.77	3.23	0.81
1-1/4"	2.13	3.62	1.27
1-1/2"	2.36	4.04	1.47
2"	3.03	5.04	2.53



■ Hose Bibb

Size	L (IN)	D (IN)	H (IN)	Weight (LB)
1/2" MIP X 3/4" MHT	-	1.9	1.4	0.14
1/2" FIP X 3/4" MHT	2.4	2.2	2.8	0.2
Loose Key for Hose Bibb	2.17	0.39	0.16	0.01



Hose Bibb with Butterfly Handle (1/2" MIP x 3/4" MHT)



Hose Bibb Loose Key (1/2" FIP X 3/4" MHT)

■ Pressure Relief Valve



Size : 1/2" x 1/2" (175PSI)

■ Watts Residential Dual Check Valve Backflow Preventer



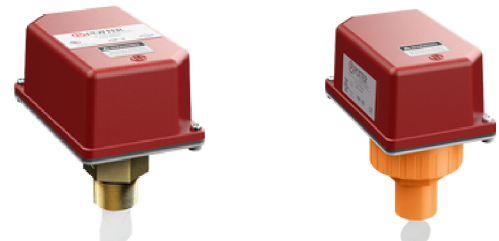
LF07S
Comes in 1", 1-1/4", 1-1/2", and 2"



LF007
Comes in 1", 1-1/4", 1-1/2", and 2"

Potter Water Flow Switch

- POTTER VSR-S Water Flow Switch 1"-2" Threaded Brass w/Retard
- POTTER VSR-SG Water Flow Switch w/Retard and Glue-in Union





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Powered by SMIC Group

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