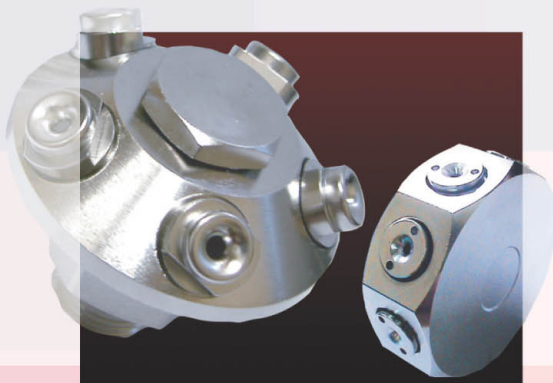




Water Spray System

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Water Spray System



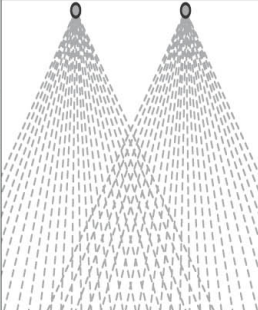
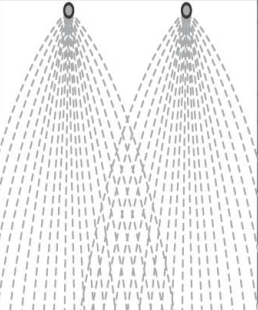
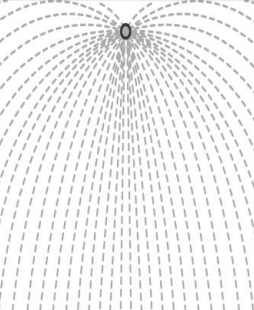
Water Spray Head for Underground Passage and Tunnel (Water Spray System)

Paradise water spray head protects evacuees from smoke, heat, and poisonous gas in a fire in underground passages and tunnels, secures their sight to help them to evacuate from the dangerous area, and also prevents the spread of fire.

Comparison with Ordinary Products

Division	Regular Fire Extinguisher Nozzle	Water Spray Nozzle	Remarks
Spray Particle	700-900 μ m	150-450 μ m	
Spray Volume	80-90 l/min	30-40 l/min	
Spray Angle	90-140°	130-180°	

Comparison of Spray Method with Existing Nozzle

Division	Flat Type Nozzle	Fullcone Type Nozzle	Water Spray Nozzle
Actual Spraying Performance			
Conceptual Drawing of Spraying Design (Overlapping)			

Features of Water Spray Nozzle

Paradise water spray nozzle sprays water into small particles through many injection nozzles to effectively remove smoke or gas generated during fire.



PWB SN-A Type



PWB SN-B Type

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PWB SN-C Type



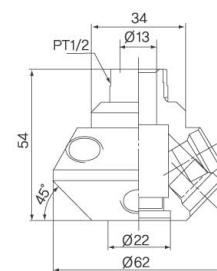
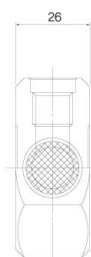
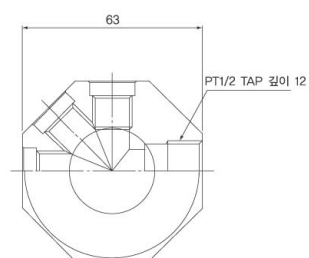
PWB SN-D Type

Specification

Model No	PWB SN-A5	PWB SN-A8	PWB SN-B5	PWB SN-B7
Connection Screw Size	PT1/2"	PT1/2"	PT1/2"	PT1/2"
Flow Rate(0.35MPa)	31ℓ /min	45ℓ /min	27ℓ /min	38ℓ /min
Spray Pattern	Complex type	Complex type	Complex type	Complex type
Flow Angle	180°	235°	180°	305°
Nozzle Size	Ø2.5mm/Ø3.4mm	Ø2.5mm	Ø2.5mm	Ø2.5mm
Material	Brass	Brass	Brass	Brass
Surface Finishing	Nickel+ Chrome	Nickel+ Chrome	Nickel+ Chrome	Nickel+ Chrome
Nozzle Qty	5	8	5	7
Use Area	Subway Platform, Transfer Passage, Utility- pipe conduit	Tunnel, Utility-pipe conduit	Subway Platform, stair	Subway Platform, stair

Model No	PWB SN-C3	PWB SN-D3	PWB SN-D5
Connection Screw Size	PT1/2"	PT1/2"	PT1/2"
Flow Rate(0.35MPa)	250ℓ /min	19ℓ /min	31ℓ /min
Spray Pattern	Complex type	Complex type	Complex type
Flow Angle	80°, 100°, 90°	100°	180°
Nozzle Size	Ø8.5mm/Ø7.2mm/Ø9.6mm	Ø2.5mm/Ø3.4mm	Ø2.5mm/Ø3.4mm
Material	Brass	Brass	Brass
Surface Finishing	Nickel+ Chrome	Nickel+ Chrome	Nickel+ Chrome
Nozzle Qty	3	3	5
Use Area	Tunnel, Railroad tunnel	Subway Platform, stair	Subway Platform, stair

Assembly Diagram

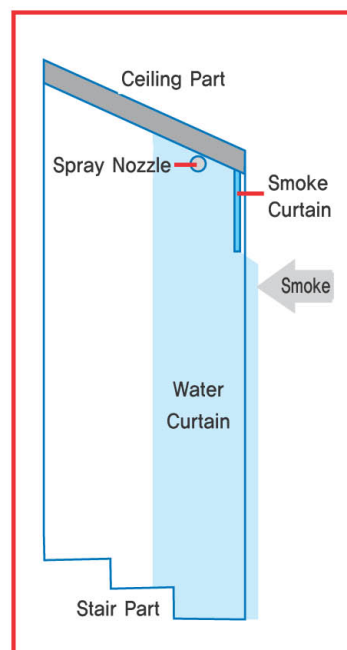
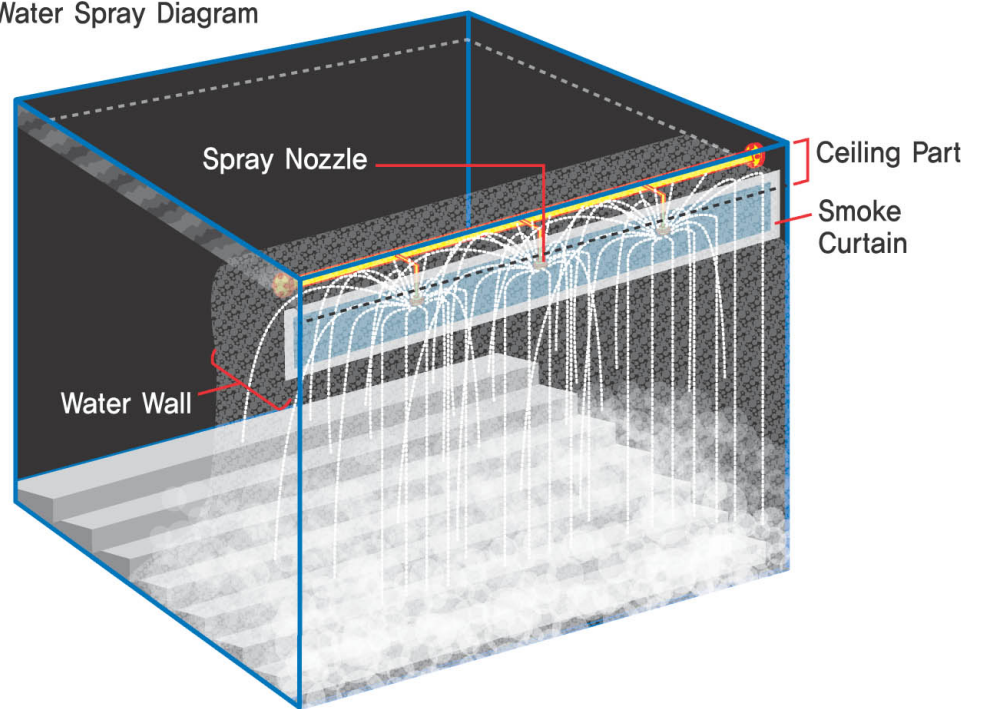


Water Spray System



Water Spray Head for Underground Passage and Tunnel (Water Spray System)

Water Spray Diagram



Installation in Underground Tunnel



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Water Spray Nozzle

Paradise water spray nozzle will be an ideal solution for fire suppression and expansion prevention for the dangerous material storage, fuel storage, chemical plant, special industrial facility and etc.



FSNS Series



FSNA-E Series



FSNI Series



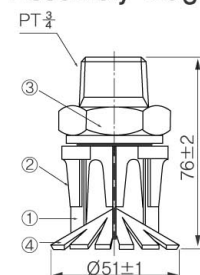
FWC Series

Specification

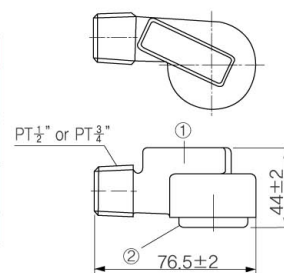
Model No.	Spray Type	Angle	Thread	Nozzle K Value	Flow Rate at 0.35MPa(l / min)
FSNS50	Full Cone	120°	PT 3/4"	—	50
		140°	PT 3/4"	—	50
FSNS100	Full Cone	120°	PT 3/4"	—	100
FSNA	Full Cone	90°	PT 1/2"	21	40
		120°	PT 1/2"	21	40
FSNAX	Full Cone	90°	PT 1/2"	27	50
		120°	PT 1/2"	27	50
FSNB	Full Cone	90°	PT 1/2"	37	70
		120°	PT 1/2"	37	70
FSNC	Full Cone	90°	PT 1/2"	53	100
		120°	PT 1/2"	53	100
FSND	Full Cone	90°	PT 1/2"	70	130
		120°	PT 1/2"	70	130
FSNE	Full Cone	140°	PT 3/4"	91	170
FSNI 70	Full Cone	90°	PT1/2", PT1"	—	70
FSNI 100	Full Cone	90°	PT 1"	—	100
FSNI 130	Full Cone	90°	PT 1"	—	130

Model No.	Spray Type	Angle (Adjustable)	Thread	0.8MPa	
				Flow Rate (l / min)	Height (M)
FWC A	Flat	0~180°	PT1½", NPT1½"	530	15
FWC B	Flat	0~180°	PT1½", NPT1½"	1350	15

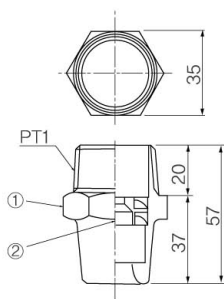
Assembly Diagram



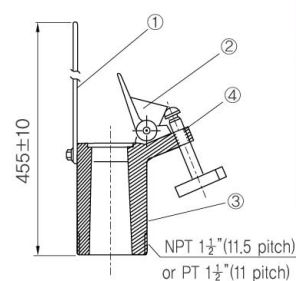
No.	Part	Material
1	Deflector Support	STS
2	Frame	Forged Brass
3	Deflector Fix.	Brass
4	Deflector	Brass



No.	Part	Material
1	Body	Cast Bronze
2	Insert	Brass



No.	Part	Material
1	Body	Brass
2	Spiral	Brass



No.	Part	Material
1	Deflector	STS
2	Flapper	Cast Bronze
3	Body	Cast Bronze
4	Cont. Valve	Brass

Water Spray System



Siamese Connection

Paradise siamese spray nozzle is suitable for the siamese water spray connection facilities at the basement shopping floors and building basements. In case of fire, water is supplied through water piping of connected sprinkler from fire pump to spray water directly from head, making it more efficient in extinguishing fire.

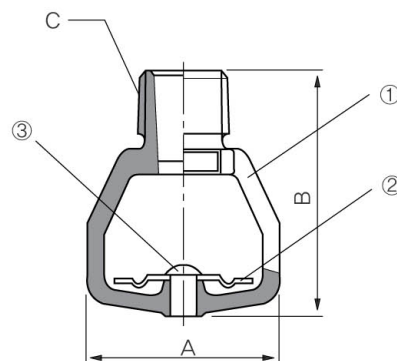


Spray Nozzle

Specification

Model	FFSN-15	FFSN-20
Connection	PT1/2"	PT3/4"
Weight	61.5g	83.5g
Direction	Daunward(Pendent)	
Flow Rate	180ℓ/min-0.5MPa	
Pressure Test	1.4MPa	
Heat Resistyant temp	1000℃	
Packing(Ea)	100	

Assembly Diagram

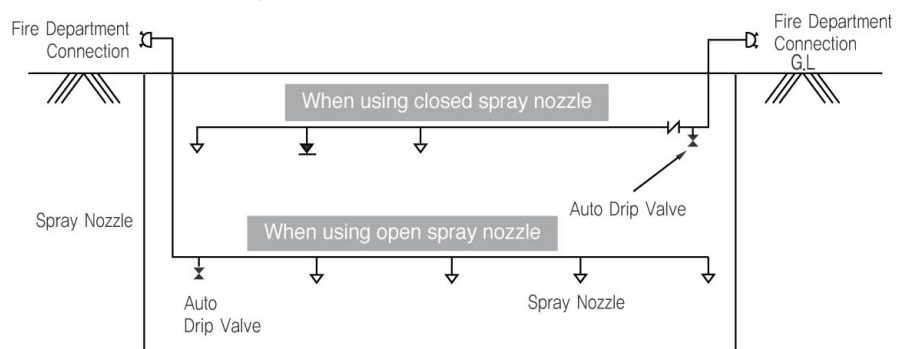


Dimension

Model No.	A	B	C
FFSN-15	45	57	PT1/2"
FFSN-20	45	57	PT3/4"

No	Part	Material
1	Frame	STS
2	Deflector	STS
3	Rivet	STS

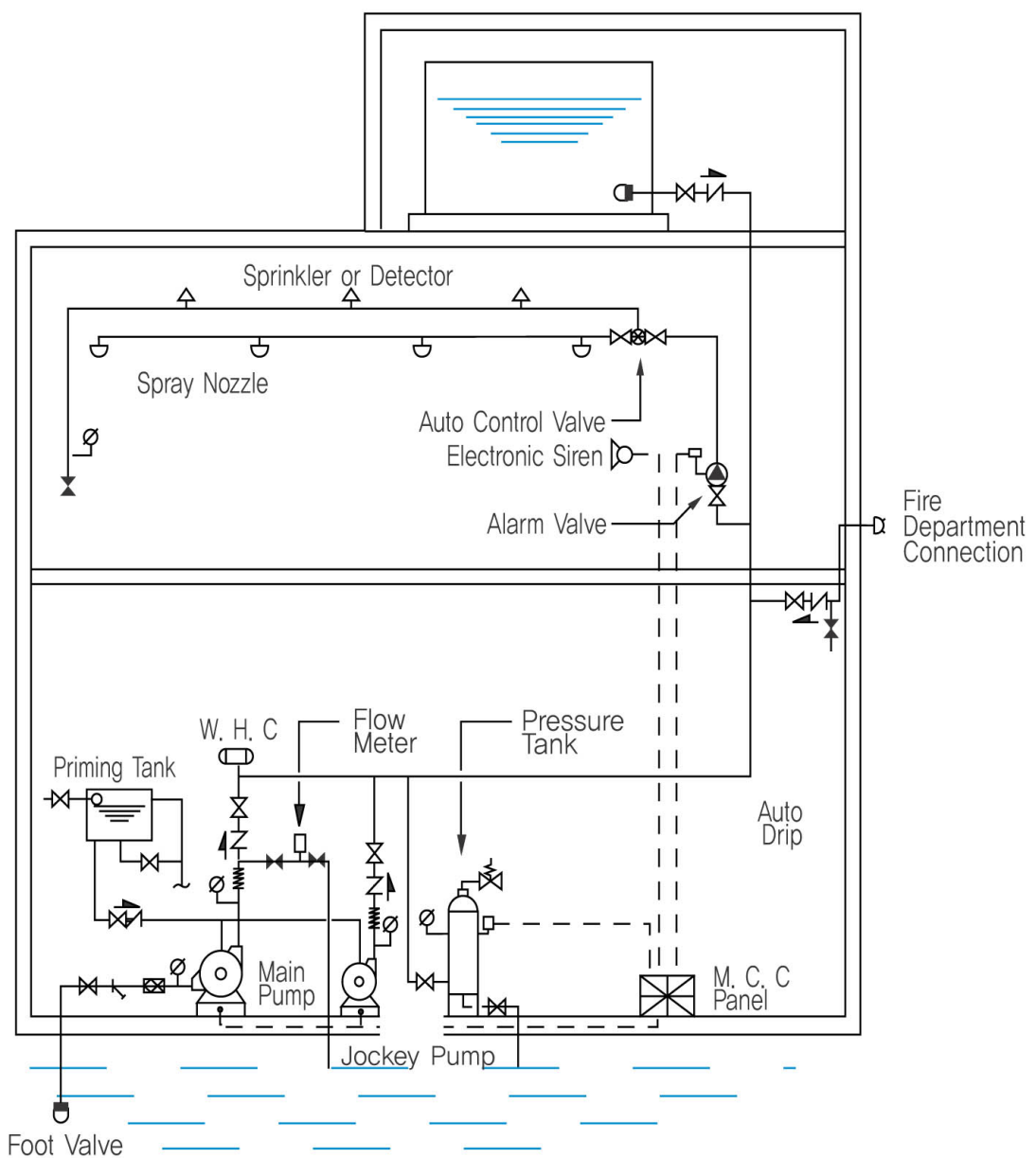
Siamese Connection System





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Water Spray System





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