



FIRE SPRINKLER SYSTEM & EQUIPMENT

An automatic sprinkler fire protection system is an active fire protection method of fighting fire with water. This method consists of a water supply system that provides sufficient pressure and flow rate of water via a system of pipes to the installed spray sprinklers.

A fire sprinkler system is cost-effective, reliable and simple to operate and maintain. The main components of the system are the sprinklers, sprinkler monitoring equipment, flow meter and an automatic alarm check valve. The fire sprinkler system reduces potential property losses and is one of the most efficient ways of controlling a fierce fire, even extinguishing it, until the fire fighters arrive.

UNIQUE Flow Meter and Vortex Inhibitor

UNIQUE Flow Meter

The UNIQUE Flow Meter is an essential part of an effective sprinkler system. Its function is to test the rate of flow of water in the system. The flow meter fits all hazard groups and is suitable for installation in both wet and dry sprinkler systems.



TECHNICAL DATA			
Code No.		Type	Orifice Size(mm)
Flow Meter	Gauge		
SFM-OH1	SFG-OH1	OH1	31.0
SFM-OH2	SFG-OH2	OH2	40.0
SFM-OH3	SFG-OH3	OH3	45.0
SFM-OH3S	SFG-OH3S	OH3 Special	50.0
SFM-XHH-10	SFG-XHH-10	XHH 10mm/min	62.0
SFM-XHH-7.5	SFG-XHH-7.5	XHH 7.5mm/min	58.5
SFM-XLH	SFG-XLH	XLH	21.0/18.5

Vortex Inhibitor

A vortex inhibitor is attached to pump section pipes installed in water storage tanks to get rid of any vortexes within the pump suction pipe. This prevents the pump from being damaged and ensures that the pump is working optimally at all times during operation.

A wide range of flange sizes is available to suit all standard applications.



TECHNICAL DATA		
Code No.	Size (B.S 10 Table E Flanges)	
	Internal Diameter (mm)	External Diameter (mm)
SVI-050	50 (2")	272
SVI-065	65 (2 1/2")	272
SVI-080	80 (3")	319
SVI-100	100 (4")	380
SVI-150	150 (6")	468
SVI-200	200 (8")	502
SVI-250	250 (10")	587
SVI-300	300 (12")	637

Sprinkler Monitoring Equipment

UNIQUE Control Pressure Switch

Monitoring the effectiveness of an automatic sprinkler system is essential in ensuring that the installed system is in full working condition at all times. This is done via two main components of the system: the control pressure switch and the water flow switch.



UNIQUE Control Pressure Switch monitors water pressure in the system. It can also be used to monitor fluorinated refrigerants and air.

- Allowable fluid temperature: -10°C to 120°C
- Micro switch ensures reliable switching
- In-built SPDT contact mechanism

TECHNICAL DATA			
Code No.	Use	Pressure(bar)	
		Min	Max
SPU-06B	Hose Reel Pump	0	6
SPU-10B	Sprinkler Pump	1	10
SPU-20B	Wet Riser & Hydrant Pump	5	20
SPU-30B	Hydrant Pump over 20 bar	5	30

UNIQUE Water Flow Switch



UNIQUE Water Flow Switch is used to monitor the start-stop flow of water in the system. For the sprinkler system to work optimally, there must be sufficient water flow. The switch is also used to shut equipment down to prevent damage to the system if the water flow drops to a pre-determined rate. The switch fits 1" NPT connections.

TECHNICAL DATA	
Code No.	SPU-FS
Operating Pressure	10 bar, 20 bar
Max Temperature	100°C
Power	15A 250V AC
Switch Acting	SPDT
Paddle	Stainless Steel
Cover	ABS, SUS, M.S

Accessories

Sprinkler Guard



TECHNICAL DATA	
Code No.	SR-SG
Material	Mild Steel
Finishing	Chorme Plated

Recessed Sprinkler Rosette (Recessed 2 pc Escutcheon)



TECHNICAL DATA	
Code No.	SR2-CH
Material	Mild Steel
Finishing	Chorme Plated

Plain Sprinkler Rosette



TECHNICAL DATA		
Code No.	15mm (1/2")	20mm (3/4")
Size (mm)	SR-CH-15	SR-CH-20
Material	Mild Steel/ Stainless Steel	
Finishing	Chrome Plated	

Sprinkler Box



TECHNICAL DATA	
Code No.	CAB-SB-15
Size (mm)	355 (W) x 110 (D) x 180 (H)
Material	Mild Steel
Finishing	Epoxy Powder Red

PLATON Fire Sprinkler Flow Meter

The Shunt Gapmeter is a fire sprinkler flow meter that monitors and tests the water flow in fire sprinkler systems. The flow meter has in-line filters, isolation valves and a safety housed indicator unit. The rate of water flow can be directly read and the unit can be installed on either horizontal or vertical pipes.



Features

- Easy installation between pipe flanges
- Instantaneous reading
- Simple water flow measurement
- No electrical power needed
- Isolation valves for tube replacement and cleaning
- Approved and listed by LPCB and equivalent organisations worldwide

PLATON offers two models of flow meters: Model SGUV Mark 1 and Model LPCB (Mark 2 is an improved version of Mark 1).

TECHNICAL DATA				
Model	SGUV Mark 1		LPCB (SGUV Mark 2)	
Code No.	SPFM-100	SPFM-150	SPFM-100-F	SPFM-150-F
Size (mm)	100	150	100	150
Orifice Plate	Stainless Steel mounted on a 25mm-thick red polyester-coated steel carrier ring		Stainless Steel mounted on a 38mm-thick red polyester-coated steel carrier ring	
Accuracy	± 2.5% FSD		± 5% at various test flows specified by LPCB	
Measuring Tube	Borosilicate Glass with 100mm fused-in ceramic scale			
Float	Stainless Steel			
'O' Seals	Nitrile			
Indicator Housing	Die-cast Aluminium with white polyester coating, black bezel and Perspex window			
Impulse Pipe	Copper with plated brass connection		Bright nickel-plated cooper with plated brass connection	
Isolating Valves	N/a		Full bore (8mm) brass ball valves bright nikel-plated	
Drain Bleedvalves	N/a		Brass, bright nikel-plated with PTFE seat	
Rodding Device	N/a		Brass body, 316 Stainless Steel rod	
Filter Unit	N/a		316 Stainless Steel element with 1.55mm perforation, TPX tube, plated Brass connection and Nitrile 'O' Seals	
Temperature Limitation	N/a		80 °C	
Pressure Limitation	N/a		12 bar @ 20°C	
Pressure Test	250psi		30 bar hydraulic	
Pressure Drop	At max flow rate 65% of the orifice pressure loss of 354" WG is recovered			



CD Automatic Sprinkler

A CD (Chang Der) Model A automatic sprinkler has an in-built 5mm diameter heat-sensitive glass bulb that shatters when a pre-determined amount of heat from a fire reaches it. Once broken, the orifice seal is released and water is discharged from the sprinkler in a spray pattern to douse the fire.

CD sprinkler models comply with UL 199 standard for automatic sprinklers for fire protection and is BOMBA approved.

CD Pendent Sprinkler



TECHNICAL DATA	
Code No.	SHC-P-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

CD Upright Sprinkler



TECHNICAL DATA	
Code No.	SHC-U-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

CD Horizontal Sidewall Sprinkler



TECHNICAL DATA	
Code No.	SHC-S-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

CD Conventional Sprinkler



TECHNICAL DATA	
Code No.	SHC-C-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

CD WaterFlow Alarm Valve System and Concealed Sprinkler

CD Waterflow Alarm Valve System

The CD Waterflow Alarm Valve System is installed in a sprinkler system to actuate a fire alarm when the flow of water from the sprinkler system is more than that of a single sprinkler. The water supply pressure causes an alarm valve clapper to open and the resultant water flow into the alarm line activates the alarm.

Fluctuations and surges in water mains supply pressure is prevented by a separate bypass connection and by first routing the water through a retard chamber.



TECHNICAL DATA		
Code No.	SAV-CD-100(Alarm Valve) SAG-CD (Alarm Gong)	SAV-CD-150(Alarm Valve) SAG-CD (Alarm Gong)
Size (mm)	100mm(4")	150mm(6")
Standard	UL 193 Alarm Valves for Fire Protection Service	
Material	Cast Iron ASTM A48 Class No 35	
Rated Pressure	175 psi	
Test Pressure	350 psi	
Installation	Vertical 1/2" NPT (PT) Thread Female Inlet 3/4" NPT (PT) Thread Female Outlet 1/2" NPT (PT) Thread Female Drain	

CD Concealed Pendent Fire Protection Sprinkler

The CD Concealed Pendent Fire Protection Sprinkler is so named because, for aesthetic reasons, an external plate hides the pendent from view. The plate is soldered in three places to the sprinkler's special upper support assembly. Sufficient heat from a fire will cause the release of the plate. The exposed pendent spray sprinkler then discharges water in a hemispherical pattern to extinguish the flames.



TECHNICAL DATA	
Code No.	SHC-CH-15 (Sprinkler Head) SHC-CC-15 (Cover)
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

VIKING Automatic Sprinkler

VIKING water sprinklers are suitable for water/foam deluge systems, pre-action systems, dry systems and wet systems. The different types of sprinklers have various finishes and temperature ratings. Choose from a wide range that includes conventional sprinklers, concealed sprinklers with cover plates, horizontal sidewall sprinklers and pendent sprinklers.

VIKING Conventional Sprinkler Head



TECHNICAL DATA	
Code No.	SHV-C-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

VIKING Pendent Sprinkler Head



TECHNICAL DATA	
Code No.	SHV-P-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

VIKING Horizontal Sidewall Sprinkler Head



TECHNICAL DATA	
Code No.	SHV-S-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

VIKING Upright Sprinkler Head



TECHNICAL DATA	
Code No.	SHV-U-68C-15
Size (mm)	15 (1/2")
Activation Temperature	68°C
Finishing	Chrome Finished

VIKING Alarm Check Valve with Water Motor Alarm

The VIKING Alarm Check Valve works together with the VIKING Water Motor Alarm to sound a continuous alarm when a water sprinkler is actuated. The check valve traps the pressurised water above the clapper and prevents reverse flow from sprinkler piping. The valve will also trigger the Water Motor Alarm, a mechanical device which is actuated by a flow of water, during sustained water flow, such as when a sprinkler is in operation.



TECHNICAL DATA			
Code No.	SAV-VK-100(Alarm Valve) SAG-VK (Alarm Gong)	SAV-VK-150(Alarm Valve) SAG-VK (Alarm Gong)	SAV-VK-200(Alarm Valve) SAG-VK (Alarm Gong)
Size (mm)	100mm(4")	150mm(6")	200mm(8")
Friction Loss (equivalent length)	4.0m	6.0m	7.0m
Working Pressure	12 bar (175 psi)		
Hydrostatics Test Pressure	24 bar (350 psi)		
Flange Connections	ANSI B16.42 Class 150		

VIKING Standard Response Pendent Concealed Sprinkler



TECHNICAL DATA	
Code No.	SHV-CCH13503-68C-15 (Sprinkler Head) SHV-CCF-13504-57W-15 (Cover)
Size (mm)	15 (1/2")
Activation Temperature	68°C, 79°C, 93°C
Finishing	White

System Sensor Detector and Switch

SYSTEM SENSOR Water Flow Detector



TECHNICAL DATA						
Model No.	WFD20	WFD25	WFD30-2	WFD40	WFD60	WFD80
Code No.	SWD-050	SWD-065	SWD-080	SWD-100	SWD-150	SWD-200
Size	2"	2 1/2"	3"	4"	6"	8"
Static Pressure Rating	450 psi					
Operating Temperature	0° to 49°C					
Compatible Pipe	Steel water pipe, Sch 10 to 40					
Enclosure Rating	NEMA 4 - Suitable for indoor/outdoor use					

SYSTEM SENSOR Supervisory Switch



OSY2

TECHNICAL DATA	
Model No.	OSY2
Code No.	SWD-OSY
Overall Switch Dimension	146mm(H) x 89mm(W) x 82mm(D)
Bracket Span	57mm(H) x 171mm(W) x 25mm(D)
Operating Temperature Range	0° to 49°C
Enclosure Rating	NEMA 3R mounted with the actuator vertical

PIBV2

TECHNICAL DATA	
Model No.	PIBV2
Overall Switch Dimension	108mm(H) x 89mm(W) x 82mm(D)
Mounting	1/2" NPT Nipple
Operating Temperature Range	-40°C to 49°C
Enclosure Rating	NEMA 3R mounted with the actuator vertical

SYSTEM SENSOR Alarm Pressure Switch



TECHNICAL DATA		
Model No.	EPS 10-1	EPS 10-2
Code No.	SWD-APS-10-1	SWD-APS-10-2
Maximum Operating Pressure	250 psi	
Maximum Adjustment Pressure	4-20 psi	
Factory Setting	Operates at rising pressure 4 to 8 psi	
Dimension	130mm(H) x 84mm(W) x 108mm(L)	
Operating Temperature Range	-40°C to 71°C	
Enclosure Rating	NEMA 4 for indoor and outdoor use	

HD Medium Velocity Water Spray Nozzle



Use HD's non-automatic Medium Velocity (MV) water spray nozzles in deluge water spray systems to give special hazard fire protection. Small droplets of water are discharged via an external deflector in a solid cone shaped pattern that uniformly covers the surfaces to be protected. This action cools the surfaces (whether vertical, horizontal, curved or irregular), prevents excessive heat absorption from fire and averts structural damage or spread of fire.

To suit different water spray systems, MV nozzles are available in several combinations of orifice sizes and spray angles.

TECHNICAL DATA		
Model No.	MV-A without strainer, MV-AS with Strainer	
Code No.	SSN-SNI-15	
Maximum Working Pressure	12 bar (175 psi)	
Effective Working Pressure	1.4 to 3.5 bar (20 to 50 psi)	
End Connection	1/2" BSPT (1/2" NPT Optional)	
Included Water Spray Angle for Each K-factor	140°, 120°, 110°, 100°, 90°, 80° and 65°	
Orifice Size and K-factor	(mm) (Inch)	Metric (US)
	6.3 (0.248)	- K18 (1.26)
	6.0 (0.236)	- K22 (1.54)
	7.0 (0.275)	- K30 (2.10)
	7.5 (0.295)	- K35 (2.45)
	8.0 (0.314)	- K41 (2.87)
	9.0 (0.354)	- K51 (3.57)
	10.0 (0.393)	- K64 (4.48)
	11.0 (0.433)	- K79 (5.53)
	12.0 (0.472)	- K91 (6.37)
12.5 (0.492)	- K102 (7.14)	
	<ul style="list-style-type: none"> Only K-Factors K18, K22, K30, K35 and K41 are available with strainer in Model MV-AS. K18 nozzle is with square edge orifice; others with tapered bore. 	
Weight	0.115kg (approx.)	
Finishing	Natural brass finish, chrome plated brass, electroless nickel plated & epoxy powder coated.	
Approval	UL Listed	
Ordering Information	Specify K-Factor, spray angle, finish, model and end connection.	
CONSTRUCTION MATERIAL		
Component	Model MV-A	Model MV-AS
Housing	Forged Brass, IS:291, GR.-1 (Equivalent to ASTM B21)	Forged Brass, IS:291, GR.-1 (Equivalent to ASTM B21)
Pin	Brass IS:291, GR.-1 (Equivalent to ASTM B21)	Brass IS:291, GR.-1 (Equivalent to ASTM B21)
Deflector	Brass IS:2768 (Equivalent to ASTM B36)	Brass IS:2768 (Equivalent to ASTM B36)
Strainer	N/a	Copper

A detailed catalogue of this product is available upon request.

