SRI

LEADING THE FIGHT AGAINST FIRE

KITCHEN SHIELD

LPCB

LOSS PREVENTION CERTIFICATION BOARD

Leading the Fight Against Fire

Established in 1974, Steel Recon Industries Sdn Bhd (SRI) is proudly a Malaysian company that offers a comprehensive range of firefighting products, equipment and technology solutions through a vast network of distributors worldwide.

Always at the forefront of Malaysian firefighting advances, SRI's products are certified by international standard boards such as VdS, LPCB, BSI, UL, FM and SAI Global, underlining our commitment to the provision of the most reliable firefighting solutions for local and global needs.

SRI's products are manufactured in our state-of-the-art facilities which allows us to produce quality products along with the flexibility to cater to specific needs and standards. As we progress into the future, the pioneering spirit that propelled SRI's success continues to drive us. We will lead the way with technology and cutting-edge research, backed by local expertise and 45 years of experience, to deliver unrivalled protection to your people and property.

Protecting Businesses

KitchenShield is SRI's automated fire extinguishing system for commercial kitchens that is designed to quickly detect and extinguish fires using an environmentally friendly wet chemical extinguishing agent. The agent is ideal for fighting Class A, B and F fires, and does not damage or contaminate kitchen equipment.

Available with three types of detection and a wide range of cylinders, Kitchenshield is the cost efficient solution designed to provide total coverage of your kitchen equipment through an overlapping discharge pattern by the nozzles. Post installation, this discharge pattern allows for owners to easily interchange kitchen configurations to suit changing business needs.

Backed by a team of system specialists, SRI will guide you through system specification and design as well as the easy installation process.

Features

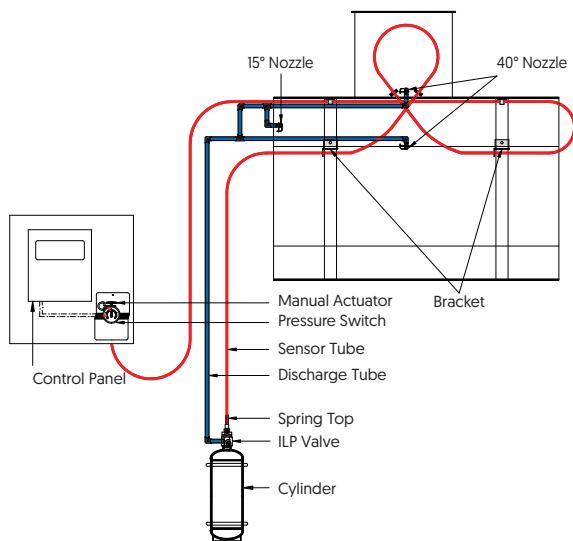| Rapid Fire Detection | Immediate Fire Supression | Design Flexibility | Easy Maintenance | 24 Hour Fire Protection | Quick Clean Up |

Types and Capacity of System

Type	1	2	3	4	5	6	7	8
Agent Volume	8 L	10 L	12 L	15 L	17 L	19 L	22 L	26 L
Cylinder Volume	12 L	15 L	20 L			30 L		35 L
Nozzle Quantity	3	3	5	6	7	8	9	11
Volume Per Nozzle	2.6 L	2.5 L	2.4 L	2.5 L	2.4 L	2.3 L	2.4 L	2.3 L
Hood Length	0.8 m	1.6 m	2.5 m	3.4 m	4 m	4.2 m	5.1 m	6 m
Heat Detector Quantity	2	3	4		5	5	6	7
Product Code	SPS-KS014-CYL-12L	SPS-KS014-CYL-15L	SPS-KS014-CYL-20L			SPS-KS014-CYL-30L		SPS-KS014-CYL-35L

Sensor Tube System

- 15° Nozzle
- 40° Nozzle
- Manual Actuator
- Pressure Switch
- Bracket
- Control Panel
- Sensor Tube
- Discharge Tube
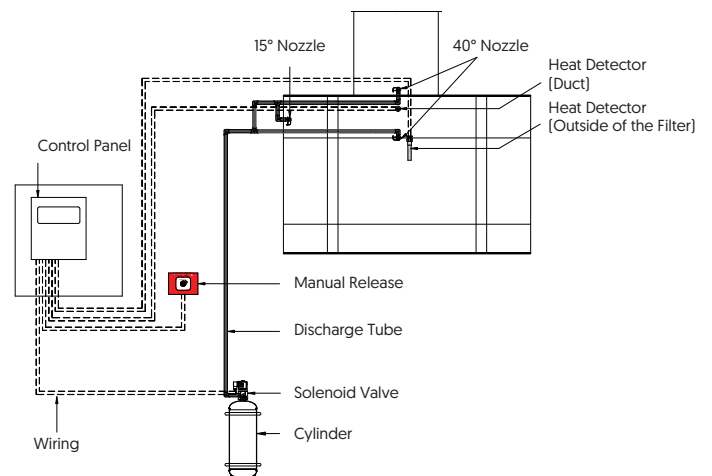- Spring Top
- ILP Valve
- Cylinder

Specifications

Propellant	Nitrogen
Cylinder Volume	9 liters, 12 liters, 20 liters, 30 liters, 35 liters
Filling Pressure	20 bar
Sensor Tube Burst Temperature	170°C
Linear Heat Detector Activation Temperature	180°C / 230°C
Heat Detector Activation Temperature	230°C
Operating Pressure Range	15 - 20 bar
Actuation	Manual / Automatic
Extinguishing Agents	Wet Chemical

Linear Heat Detector System

- 15° Nozzle
- 40° Nozzle
- Control Panel
- Manual Release
- Bracket
- Linear Heat Detector
- Discharge Tube
- Control Unit
- Solenoid Valve
- Cylinder
- Wiring

Heat Detector System

- 15° Nozzle
- 40° Nozzle
- Heat Detector (Duct)
- Heat Detector (Outside of the Filter)
- Control Panel
- Manual Release
- Discharge Tube
- Solenoid Valve
- Cylinder
- Wiring
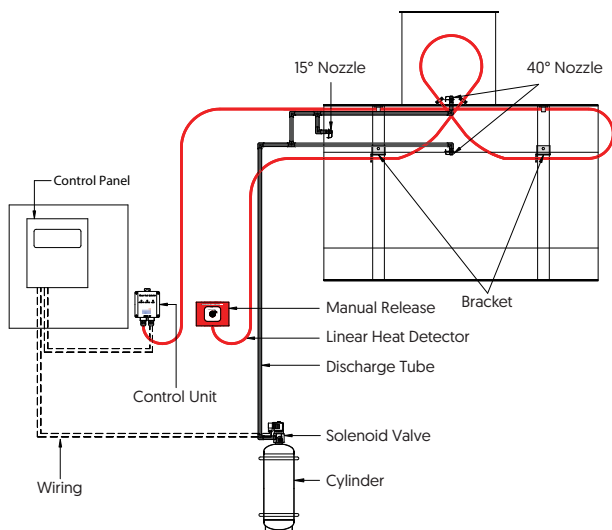
KitchenShield Components

Cylinder

Part Number	Cylinder Size (L)	Agent Volume (L)	Diameter (mm)	Height (mm)	Material
FEC004-MS-12LT-KS	12	8	180	545	Mild Steel
FEC004-SS-12LT-KS	12	8	180	545	Stainless Steel
FEC004-MS-15LT-KS	15	10	180	650	Mild Steel
FEC004-SS-15LT-KS	15	10	180	650	Stainless Steel
FEC004-MS-20LT-KS	20	12/15	255	572	Mild Steel
FEC004-SS-20LT-KS	20	12/15	255	572	Stainless Steel
FEC004-MS-30LT-KS	30	17/19/22	255	724	Mild Steel
FEC004-SS-30LT-KS	30	17/19/22	255	724	Stainless Steel
FEC004-MS-35LT-KS	35	24/26	255	800	Mild Steel
FEC004-SS-35LT-KS	35	24/26	255	800	Stainless Steel

ILP Valve

Part Number	SPS-KS002-402-23
Material	Brass nickel-plated
Pressure Gauge Connection	M10X1
Sensor Tube Connection	Sensor Tube OD 6mm
Dip Tube Thread	M16 x 1.5mm
Valve Outlet	G1/4"

* For Sensor Tube System Only

Solenoid Valve

Part Number	SPS-KS002-420-12
Material	Brass nickel-plated
Voltage	24V DC
Power Consumption	12 Watt
Pressure Gauge Connection	M10X1
Valve Outlet	G1/4"

* For Linear Heat Detector & Heat Detector System

Manual Actuator

Part Number	SPS-KS003-110-MA
Material	Brass nickel-plated
Pressure Gauge Connection	M10X1
Sensor Tube Connection	Sensor Tube OD 6mm

* For Sensor Tube System Only

Pressure Gauge with Switch

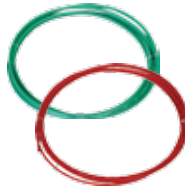| Part Number	SPS-KS005-051-NC
Range	0 to 40bar
Connection	M10X1
Leakage Monitoring	17bar
Activation Monitoring	5bar

* For Sensor Tube System Only

KitchenShield Components

Sensor Tube

Part Number	SPS-KS001-XXX-BK
Permeability	10-4 mbar l / sec (Helium)
Dimensions	Ø6 x 1mm (inner Ø - 4mm)
Recommended Bending Radius	150mm (min. 100mm)
Material	PVC
Burst Temperature	Approximately 170°C

Heat Detector

Part Number	SPS-KS001-THERMAC
Contacts	Normally open, close on temperature rise
Applied Voltage AC @ 0.25A	32V max
Applied Voltage DC @ 0.25A	32V max
Operating Current	0.25A max
Operating Temperature Range	232°C
Ambient Temperature Range	-40°C to +180°C
Relative Humidity	100 %
Weight	150 gram
IP Rating	IP 67
Sensitivity & Accuracy	+/-5% or 5 degrees
Mounting Screw Threads	10 Kgm torque max

Nozzle

Part Number	SPS-KS007-NOZ-15 SPS-KS007-NOZ-14
Spray cone diameter @ 1000mm height	1100mm for Nozzle 40°, 500mm for Nozzle 15°
Spray form	Full cone

Linear Heat Detector

Part Number	SPS-KS038-LHD-185 (180°C) & SPS-KS038-LHD-230 (230°C)
Conductor	Tinned copper-covered steel
Insulation	Temperature-sensitive thermoplastic
Bandage	Polycarbonate
Jacket	Thermoplastic strip braid
Operating Voltage	24V DC
Allowed voltage range	16V DC - 28V DC
Standby current	≤ 20mA
Alarm current	≤ 30mA
Fault current	≤ 25mA
Max. relative humidity	90%-98%
IP rating	IP66
Detection temperature	180°C / 230°C
Min/Max Working temperature	-40°C / 125°C & -40°C / 170°C

Linear Heat Detector Control Unit

Part Number	SPS-KS038-CTL-XX
Operating Voltage	24V DC
Operating Voltage Range	16V DC - 28V DC
Operating Current	Standby: ≤ 20 mA Fire: ≤ 30 mA Fault: ≤ 25 mA
Operating Environment	Temperature: -55°C to 60°C Relative Humidity: 95%
IP Rating	IP 66
Dimension	90mm (L) x 85mm (H) x 52mm (W)

Optional Accessories

Remote Electromagnetic Actuator

Part Number	SPS-KS003-111-EA
Solenoid Actuator Voltage	24 VDC + 10%, Consumption: 12 W, Connection plug: DIN EN175301-803 type A
Pressure Gauge Connection	M10X1
Sensor Tube Connection	Sensor Tube OD 6mm

* For Sensor Tube System Only

Alarm Bell

Part Number	FAS194-LA-150-KW
Size	150mm
Voltage	24V DC
Current	30mA
Colour	Red

Strobe Light

Part Number	FAS251-24VDC-WP
Voltage	24V DC
Current	40mA

Clip

Part Number	SPS-KS039-CLP-SS304
Material	SS304 / Rubber

* For Sensor Tube and Linear Heat Detector Systems

Nozzle Laser Pointer

Part Number	SPS-KS020-LSR-RED
Material	SS304 / Brass

Actuator Sensor Tube Gripping Tool

Part Number	SPS-KS034-GRP-XX
Diameter	75mm
Material	Rubber

* For Sensor Tube System Only

Refilling Cartridge

Part Number	SPS-KS013-MCX-XX
Capacity	1kg
Filling Pressure	25 bar

* For Sensor Tube System Only

Manual Release

Part Number	FAS260-PS-28V-RD
Dimension (mm)	110mm (W) x 80mm (H) x 47mm (D)

Gas Shut Off Valve

Part Number	SPS-KS030-VLV-SO
Diameter	25mm
Voltage	24V DC 19W
Temperature Ambient	-15 +60°C
Ingress Protection	IP65

Cylinder Bracket

Part Number	SPS-KS037-180-MS SPS-KS037-255-MS
Material	Mild Steel
Capacity	9 liters - 35 liters

Optional Accessories

Control Panel

Part Number	SPS-KS017-004-DEMCO*	SPS-KS017-002-DEMCO
Brand	Context Plus	Demco
Main supply voltage	230V AC, 50/60Hz	230V AC, 50/60Hz
Internal Power Supply	19V – 28.5V	19V – 28.5V
Total output current limited to	1.5A @ 230V AC (ImaxA=146mA)	1.5A @ 230V AC (ImaxA=146mA)
Battery requirement	2 x 12V 7AH	2 x 12V 7AH
Cable Type	Fire resistant screened cable, minimum conductor size 1mm²	PVC / Screen / Firerated cable
Maximum detectors per zone	32	32
Number of sounder circuits	4	4
Maximum no. of bells @ 25 mA	32	32
Maximum no. of electronic sounders @ 20 mA	40	40
Dimension	380 x 235 x 96mm	325mm x 325mm x 80mm
Weight	1.75kg (without batteries)	3kg (without batteries)

* LPCB Approved

Modular System

Part Number	SPS-KS001-CAB
Material	Mild Steel

* Other materials available upon request

Sensor Tube Fittings

Part Number	SPS-KS008-TFT-RO	SPS-KS031-ELP-RO	SPS-KS010-EOL-RO
Type	Tee Fitting	End of Line Plug	End of Line Plug with Check Valve
Fitting Connection	Ø 6mm	Ø 6mm	Ø 6mm M10X1
Material	Stainless Steel	Stainless Steel	Stainless Steel

Sensor Tube Cutter

Part Number	SPS-KS021-TC-XX

Disclaimer

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