



NAFFCOInert®

Fire Suppression System

(IG01, IG100,
IG55, IG541)





AN INTRODUCTION TO NAFFCO

NAFFCO was founded in Dubai, UAE to become the world's leading producer and supplier of life safety solutions. By recognizing the importance and convenience of having easy access to multiple safety services, we became specialized by offering complete solutions under one roof for all types of high quality firefighting equipment, fire protection systems, fire alarms, addressable emergency systems, security systems, custom-made vehicles such as fire trucks, ambulances, mobile hospitals and airport rescue firefighting vehicles (ARFF).

With the most talented and dedicated employees from around the world, NAFFCO has over 500 passionate engineers and over 5 million square feet of manufacturing facilities. We are currently exporting to over 100 countries worldwide.

NAFFCO manufactures UL, FM, BSI & Global Mark approved products in our facility in consistent with International Standards" UL-DQS, BSI certifies for the Quality Management System against ISO 9001. Our Environmental (ISO 14001) & Occupational Health & Safety (OHSAS 18001) Management Systems have been certified by UL-DQS. Our Trucks & Vehicles division has been assessed & certified for Quality Management System requirement for Aviation, Space & Defense organization(AS 9100) by UL-DQS.

Our success is driven by our passion to protect; our vision is to become the world's number one provider of innovative solutions in protecting life, environment and property.



NAFFCO
OHSAS 18001 | ISO 14001 | ISO 9001
20002009

INERT GAS FIRE SUPPRESSION SYSTEM

NAFFCOInert® fire suppression system is an engineered system using with fixed nozzle agent and pipe network. **NAFFCOInert®** systems are designed in accordance with latest edition of NFPA 2001, Standard on "clean agent systems". This system shall be designed for Class A, Class B & Class C application, it extinguish fire by reducing residual oxygen concentration to a level will no longer support combustion.

The system can actuate by detection and control equipment for automatic operation along with providing local manual operation

BASIC USES:

NAFFCOInert® fire suppression system is particularly useful for suppressing fires in hazard areas where an electrically nonconductive medium is essential or desirable. Where the clean environment and the hazard obstructions require the use of a gaseous agent. It is an ideal replacement agent for Halon 1301 alternative.

- Telecommunication facilities
- Electrical and Electronics hazard areas
- Data Centers
- Control Rooms
- Museums / Archives
- Military Installations
- Libraries
- Medical facilities

PRESSURE REGULATOR TECHNOLOGY

Pressure Regulators modulate the discharge pressure to a constant 40-60 Bar which still delivers the design concentration up to 120 seconds, but with significant performance and cost benefits:

BETTER SAFETY

- Prevents discharge freeze-up
- Prevents explosive force of discharge

SAVES TIME AND MONEY

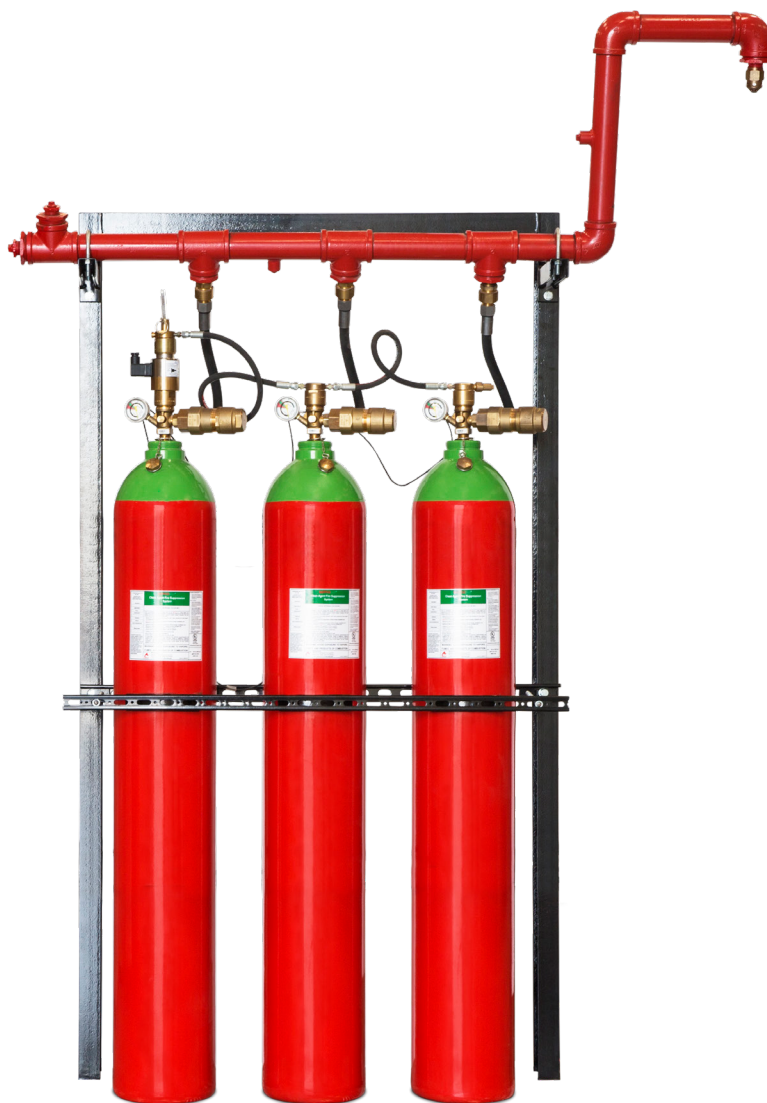
- Enables low pressure manifolds & pipework to be used that are of lower cost and easy to install
- Reduces the difficulty and cost of locating/fitting pressure vents in the protected space

EASY MAINTENANCE

- After a system discharge, simply remove the regulator, recharge, and reconnect. No reconditioning necessary
- Functional tests are possible even while the system is armed.

when needed. Accessories are used to provide alarms, ventilation control, door closures or other auxiliary shutdown or functions. Two or more hazard areas can be protected with a single group of agent cylinders by means of directional or selector valve.

NAFFCOInert® fire suppression system offers IG01, IG100, IG55 and IG541 gases. It is available as 200 Bar and 300 Bar system which provides optimum design options to the protected hazard.



INERT EXTINGUISHANT AGENT

Inert Gas is a colorless, odorless, electrically non-conductive gas with a density approximately the same as air. (See Physical Properties for additional information).

Inert Gas is stored as pressurized gas within the cylinder assembly. It is available at storage pressures of 200 Bar and 300 Bar.

When discharged into a protected space, it is clear and does not obscure vision. It leaves no residue and has zero ozone depleting potential and zero global warming potential.

FEATURES & BENEFITS

- Natural gas present in the atmosphere
- Suitable for occupied areas
- Non Toxic and Non Corrosive
- Colorless, odourless and compressed gas
- Stored and discharge as gas
- Fogging does not occur when agent is discharged
- Electrically non – conductive
- Leaves no residue
- Zero Ozone Depletion
- Zero Global warming
- Zero Atmospheric Life Time

USE AND LIMITATIONS

Inert Gas extinguishes a fire by reducing the residual oxygen concentration to a level that will no longer support combustion.

System shall be used on the following Class of Hazards:

Class A & C : Electrical and Electronic Hazards, Telecommunication Facilities. High Value assets where the associated down time be costly

Class B : Flammable liquid and Gases

System shall **“NOT”** be used on fires involving the following materials:

- Chemical or mixtures of chemical that are capable of rapid oxidation in the absence of air. (Example include: Cellulose Nitrate and Gunpowder)
- Reactive metal such as lithium, sodium, potassium, magnesium, Titanium, Zirconium, Uranium and plutonium.
- Metal Hydrides such as sodium hydride and lithium aluminum hydride.
- Chemical capable of undergoing auto-thermal decomposition (Example: Organic Peroxide and Hydrazine).

EXPOSURE LIMITATION

Hazard Type	Design Concentration/Oxygen Levels	Maximum Human Expose time
Normally Occupied Space	Up to 43% / 12% minimum	5 Min
	43% to 52% / 12% to 10%	3 Min
Normally Un-Occupied Space	52% to 62% / Minimum 8%	30 Sec
	Above 62% / 8% or lower	0 Sec (Personal CANNOT be exposed)

NOTES: EN 15005, ISO 14520 & NFPA 2001 does not allow Clean Agent Systems to be used in any occupiable spaces where the design concentration required is above 52% unless provided with supervised system lockout valve, pneumatic pre-discharge alarm, pneumatic time delay and warning signs. NAFFCO does not recommend **NAFFCOInert®** systems to be used in normally occupied spaces where the design concentration required is above 52%.

PHYSICAL PROPERTIES OF IG-01

Chemical Name	Ar (Argon)
Molecular Weight	39.90 g/mole
Boiling Point at 1.013 Bar	-185.9°C
Critical Pressure	4903 Kpa
Critical Temperature	-122.3°C
NOAEL	43%
LOAEL	52%

PHYSICAL PROPERTIES OF IG - 100

Chemical Name	N ₂ (Nitrogen)
Molecular Weight	28.02 g/mole
Boiling Point at 1.013 Bar	-196°C
Critical Pressure	3399 Kpa
Critical Temperature	-146.95°C
NOAEL	43%
LOAEL	52%

PHYSICAL PROPERTIES OF IG - 55

Chemical Name	N ₂ /Ar
Molecular Weight	33.95 g/mole
Boiling Point at 1.013 bar	-196.00°C
Critical Pressure	4150 Kpa
Critical Temperature	-134.7°C
NOAEL	43%
LOAEL	52%

PHYSICAL PROPERTIES OF IG - 541

Chemical Name	N ₂ /Ar/CO ₂
Molecular Weight	34.00 g/mole
Boiling Point at 1.013 Bar	-196°C
Critical Pressure	N/A
Critical Temperature	N/A
NOAEL	43%
LOAEL	52%

CYLINDER /VALVE ASSEMBLY

NAFFCOInert® cylinders shall be High Pressure Seamless Cylinder available in different capacities (i.e. 67, 80 & 140 Ltrs).

The Cylinder filling pressure shall be either 200 Bar or 300 Bar to meet suitable system requirement. Cylinders arrives with valves pre-assembled.

SPECIFICATION

Working Pressure	200 Bar	300 Bar
Test Pressure	300 Bar	450 Bar
Material	34CrMO4 EN10 083	
Colour	RAL 3000	
Thread Connection	W28.8 x 1/14" - BS EN ISO 11363-1	
Conformity	ISO 9809 Part 1&2/TUV+UN	
Mounting	Vertical	
Cylinder Actuation	Electric/Pneumatic - Input from Control Panel Manual/ Pneumatic - Input from Push Knob	
Cylinder Storage Temperature	-20°C to +65°C	



CYLINDER DIMENSIONS

	67 Litres	67 Litres	80 Litres	80 Litres	140 Litres	140 Litres
Working Pressure	200 Bar	300 Bar	200 Bar	300 Bar	200 Bar	300 Bar
Diameter	267/360 mm	267/360 mm	267/360 mm	267/360 mm	360 mm	360 mm
Height	1470/900 mm	1526/900 mm	1710/1025 mm	1780/1090 mm	1690 mm	1760 mm
Model Number (IG01)	NFIG01-200-067A/B	NFIG01-300-067A/B	NFIG01-200-080A/B	NFIG01-300-080A/B	NFIG01-200-140	NFIG01-300-140
Model Number (IG100)	NFIG100-200-067A/B	NFIG100-300-067A/B	NFIG100-200-080A/B	NFIG100-300-080A/B	NFIG100-200-140	NFIG100-300-140
Model Nutmber (IG55)	NFIG55-200-067A/B	NFIG55-300-067A/B	NFIG55-200-080A/B	NFIG55-300-080A/B	NFIG55-200-140	NFIG55-300-140
Model Number (IG541)	NFIG541-200-067A/B	NF IG541-300-067A/B	NFIG541-200-080A/B	NFIG541-300-080A/B	NFIG541-200-140	NFIG541-300-140

Approval: TPED (π Mark)

In line with NAFFCO policy for continuous product development, NAFFCO has the right to change specifications without prior notice.

DISCHARGE VALVES FOR INERT GAS CYLINDERS

NAFFCOInert® cylinder head valve shall be pressure seat type valve. The head valve is available in two different working pressure 200 Bar / 300 Bar to meet the suitable system requirement.

The head valve can be operated by electric actuator, pneumatic actuator or pneumatic /manual actuator. The head valve is equipped with pressure gauge / pressure switch to monitor the cylinder pressure.

Model No.	B04801218-NF	B04802020-NF
Operating Pressure @ 15°	200 Bar	300 Bar
Test Pressure	300 Bar	450 Bar
Material	Brass	
Discharge Port	W21.8 x 1/14"	
Inlet Connection	W28.8 x 14TPI (25E ENISO 113631 - 1)	
Connection for Release Device	M42 x 1.5	
Port for Pilot Hose	G 1/8"	
Monitoring Port	M10 x 1	
Orifice Size	Ø12mm	
Flow Rate	Kv= 2.66; Cv= 3.09	



CONSTANT FLOW & PRESSURE DISCHARGE REGULATOR

The pressure regulator modulates the discharge pressure to a constant pressure, which still delivers the extinguishing agent up to 120 seconds, but with significant performance and cost benefits. It prevents discharge freeze-up and explosive force of discharge. Low-pressure manifolds and pipework can be used - that means lower costs.

After a system discharge, no reconditioning of the pressure regulator is necessary. Functional tests are possible even while the system is armed. The pressure regulator is screwed with a gasket on the discharge port of the valve.

Model No	B08400003-NF B08401000-NF
Material	Brass
Inlet Pressure	200 / 300 Bar
Maximum Inlet Pressure	360 Bar
Orifice diameter	12 mm
Inlet Connection	W21.8 x 1/14" DIN 477
Outlet Connection	W21.8 x 1/14" DIN 477
Static outlet pressure	60 Bar



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ELECTROMAGNETIC RELEASE DEVICES

The electromagnetic release device is used to actuate the system electrically. It is mounted on top of the master valve and is operated by an electrical signal from a fire detection system. In order to actuate the electromagnetic release device a constant DC voltage of 24V is required.

The electromagnetic release device can be combined with the manual/pneumatic release device.

Model No	B04425146-NF	B04425147-NF
	with Diode	without Diode
Nominal Voltage	24 VDC	
Material	Brass and stainless steel Plastic protection cap	
Nominal Current	0.5A	
Protection class	IP 65	
Valve Connection	M42 x 1.5	



MONITORING SWITCH FOR ELECTROMAGNETIC RELEASE DEVICES

The Monitoring switch for electromagnetic release device monitors that the electromagnetic actuator is properly in place to actuate the system. It is connected to the alarm box.

It is a compact design remains in the cylinder and simply clamps around the valve base. Also it is easy to retrofit with the existing installation set up.

APPLICATION

- Specifying a physical switch to disconnect the release circuit in place of a software controlled disconnect
- Creating a supervisory condition on the associated release panel

**Note: Pin from switch needs to be pushed in at least 3mm after installation.*

Part Number	02990520 0 - NF
Artical Code	B0480
Dimensions	W x H x D: 11,8 cm x 9,1 cm x 6,6 cm
Contact	NO or NF (Cables Included)
Temperature Range	-30° C to 60°C (-22° F to 140° F)

** Only UL Listed*



MANUAL/PNEUMATIC RELEASE DEVICE

The manual/pneumatic release device allows manual or pneumatic actuation of several system components. This release device is used for pneumatic actuation of multiple cylinders in series, which are connected to the master cylinder by a pilot hose. Manual actuation is accomplished by pulling the hand lever on the manual/pneumatic release device. In the closed position the manual/pneumatic release device is secured with a safety pin. By removing the safety pin, the hand lever can be manually pressed down to activate the valve so that inert gas is released

Model No	B04420065-NF
Material	Brass & Stainless Steel
Working Pressure	300 Bar
Valve Connection	M 42 x 1.5
Pneumatic Connection	G 1/8"
Actuation Force	<150N
Actuation Force/Pressure	200 Bar System: P Min = 15 Bar; P Max = 240 Bar 300 Bar System: P Min = 21 Bar; P Max = 360 Bar



PNEUMATIC RELEASE DEVICE

This release device is used for pneumatic actuation of multiple cylinders in series, which are connected to the master cylinder by a pilot hose. Cylinders equipped with the pneumatic release device serve as slave cylinders.

Model No	B04420066-NF
Material	Brass
Working Pressure	300 Bar
Valve Connection	M 42 x 1.5
Pneumatic Connection	G 1/8"
Actuation Force/Pressure	200 Bar System: P Min = 15 Bar; P Max = 240 Bar 300 Bar System: P Min = 21 Bar; P Max = 360 Bar



PRESSURE GAUGES

The pressure gauge measures the pressure in the cylinder. It is equipped with an integrated pressure switch to supervise the loss of pressure in the cylinder. A separate 200 Bar or 300 Bar pressure gauge is used for each inert gas.

Each valve must be equipped with a pressure gauge. The pressure gauge is connected to the monitoring port of the valve.



Working Pressure	200 Bar	300 Bar
Connection	M10 x 1	M10 x 1
Model Number(IG01)	029720221-NF	029720217-NF
Model Number(IG100)	029720219-NF	029720215-NF
Model Number(IG55)	029720220-NF	029720216-NF
Model Number(IG541)	029720222-NF	029720218-NF

PILOT HOSE

The pilot hose is used to build up the pilot line, e.g. for the connection of several release devices and/or for the connection of the valve to the release device.

The pilot hose may only be used in accordance with component approval in stationary inert gases fire extinguishing systems. Several cylinders, equipped with valves, can be connected with pilot hoses.



Model No.	B06920211-NF	B06920212-NF	B06920213-NF
Length	400 mm	700 mm	500 mm
Connection	2 x M12 x 1.5		
Bending Radius	75 mm		
Nominal Diameter	DN 6		
Working Pressure	400 Bar		
Burst Pressure	1600 Bar		
Material	• Connection - Galvanised steel • Hose inner layer - Oil resistant synthetic rubber • Hose insert - Two high tensile steel wire braided inserts • Hose outer layer - Oil resistant and weatherproof synthetic rubber		

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DISCHARGE HOSE

The discharge hose is used for the connection of the pressure regulator to the check valve. The W21.8 x 1/14" nut with the inserted gasket is installed on the pressure regulator. The G3/4" nut with the inserted gasket is connected to a check valve.



Model No.	B06920224-NF	B06920225-NF
Length	400 mm	400 mm
Connection	W21.8 x 1/14" • G3/4"	W21.8 x 1/14" • G3/4"
Bending Radius	130 mm	180 mm
Nominal Diameter	DN 12	DN 16
Max. Working Pressure	380 Bar	350 Bar
Burst Pressure	1520 Bar	1400 Bar
Material	• Connection - Galvanised steel • Hose inner layer - Oil resistant synthetic rubber • Hose insert - Two high tensile steel wire braided inserts • Hose outer layer - Oil resistant and weatherproof synthetic rubber	

MANIFOLD CHECK VALVE

The check valve prevents a back-flow of the extinguishing agent into the cylinder. The check valve is provided with a connection thread R1" DIN EN 10226-1 for the connection to the manifold and a connection thread G3/4" DIN ISO 228-1 for the connection to the discharge hose.

Model No	B04600008-NF
Material	• Housing - Brass • Ball - Stainless Steel • Sealing - Thermoplastic
Connection Thread Inlet	G3/4" DIN ISO 228-1
Connection Thread Outlet	R1" DIN EN 10226-1
Nominal Diameter	DN 12
Working Pressure	300 Bar
Pressure to Open	<0.1 Bar



BLEED VALVE

The bleed valve is a part of the pilot line. The device must be mounted at the end of each pilot line at the last pneumatic release device. This device is a security part, which protects the system from unwanted tripping when a cylinder has a leak and the pressure would increase in the pilot line. It allows a bleeding till the pressure in the pilot line is under 0.7 Bar. The bleed valve prevents an accidental system release.

Model No	029730040-NF
Material	Brass
Working Pressure	300 Bar
Connection Thread	G1/8" ISO 228-1
Closing Pressure	0.7 - 1.5 Bar



DISCHARGE NOZZLE

Discharge nozzles are made of brass in four different sizes, for different application. Nozzles are available with a connection thread R1½", R1", R½" and R¾" and can be screwed into every fitting corresponding to the pressure stage and the thread. Orifice design to particular requirement with computer aided calculation to assure the effectiveness of extinguishing agent and reliable system design.

The nozzle is used to discharge the agent from the cylinder through piping network to the enclosed hazard volume. The nozzle selection depends on the hazard and location to be protected. The nozzle has to be mounted at the ceiling level with the orifice tip pointed vertically down. The nozzle outlet must point downwards to distribute the extinguishing agent effectively and to prevent pollution. The discharge pattern of the nozzle shall be 360°.

The nozzle distributes the extinguishing agent evenly in the extinguishing zone in the calculated flooding time. Nozzles are designed to direct the discharge of inert gas using the stored pressure from the cylinders.



Model No.	N 360***15	N 360***20	N 360***25	N 360***40
Size	R½"	R¾"	R1"	R1½"
Thread	EN 10226-1			
Orifice Diameter	Ø3-Ø9.5 mm	Ø7-Ø13.5 mm	Ø10-Ø17.5 mm	Ø15-Ø25.5 mm
Material	Brass			
Working Pressure	60 Bar			

The orifice diameter is defined with flow calculation software

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PRESSURE & FLOW DETECTOR SWITCH

Used to send a signal that the system is discharging. Sends a signal to a control panel or alarm box at the earliest phase of discharge.

The pressure and flow detector switch is connected to the manifold and to a power supply. It reacts in the earliest stage of extinguishing agent discharge at 2 Bar pressure and energises or de-energises electrically operated equipment.

Model No	028250050-NF
Operating Pressure	2 Bar
Connection	G1½" or G¾"
Power Source	400 VAC/3A or 24 VAC/10A
IP Rating	IP65



SELECTOR VALVE (MULTI-ZONE DISTRIBUTION)

Selector Valve allow a single agent supply to be utilized for protection of multiple zones by using the same number of cylinders. It is necessary to use the selector valve to utilize the multiple cylinders to protect the multiple zones. Selector Valves direct the extinguishing agent to the appropriate flooding zone and reduces the total amount of agent and number of cylinders required.

The Selector Valve body is available in carbon steel. Selector valve is a ball valve that control the flow of Inert gas through the piping network until the valve is activated either by manually or electrically. The actuation pressure for the selector valve is 8-10 bar pressure. Each Selector Valve is equipped with the monitoring device which shows the valve Position (Open or Closed) that provides a visual indication of the valve status.

SPECIFICATION

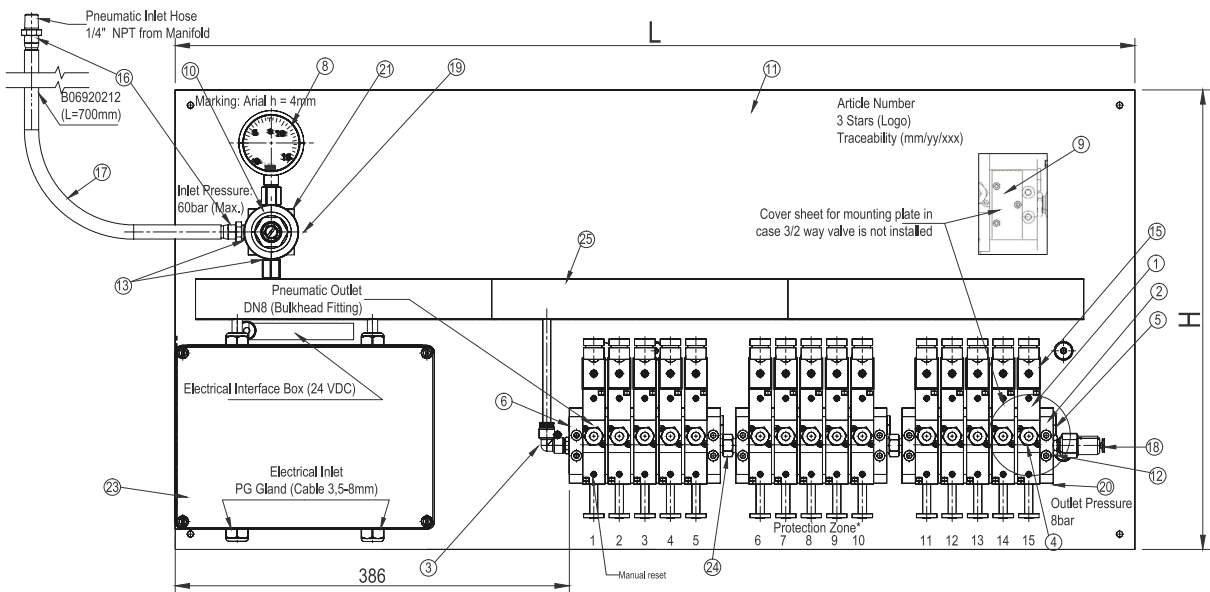
Part Number	B05511 050-NF	B05511 150-NF	B05511 250-NF	B05511 350-NF	B05511 450-NF
Diamater	G1" (DN25)	G1½" (DN40)	G2" (DN50)	G2½" (DN65)	G3" (DN80)
Working Pressure	140 Bar				
Actuation Pressure	8 - 10 Bar				
Material	Carbon Steel				



PNEUMATIC CONTROL PANEL

(MULTI-ZONE DISTRIBUTION)

The pneumatic control panel is made of several individual components, which are fixed on a support of control panel arrangement.



SPECIFICATION

S. No.	DESCRIPTION	S. No.	DESCRIPTION
1	3/2Way Valve / Electro Pneumatic / 24 DC / UL-Coil / G3/8 / Bistable / 1-10bar / DN5 / Temp. -10 to +60°C	13	Reducing, Brass, G 1/4" I, 1/4" NPT O, WP 16 Bar, WS17
2	Mounting plate for 3/2-way Valve Connection G 1/8	14	Fixation "Normafix" K, Size 1, Clamp Size 63-80mm
3	L-fitting (Blue Series), Rotatable, R1/4a., for tube outside-Ø8 mm, WP max. 15bar, Plastic/MS vern.	15	Connector Type B / IP 65 / Contacts 2 + Grounding / Cable Inlet PG / Ø6-8mm1
4	Fitting Straight, R 1/8 a, tube outside -Ø8 mm, WP max. 315 bar, WS117, WS214, Steel Zinc Coated	16	Screw in Fitting AGN 1/4" CEL06
5	Plug, Hex 6mm, G1/4, O-Ring, WP Max. 60 Bar, WT max. 80°C, Brass Nickel Coated	17	HP Tube 2SC DN 6 / B06920212
6	Silencer Sintered, Flat, G1/4a., WP Max. 10 Bar, WT-10°C bis 250°C	18	Bleed Valve 029730040
7	Hose Clamp, Steel Coated (W1), Clamp Size 60,0 - 80,0mm, B 20,0 mm	19	Plug with Hex / 1/4"NPT / Type Straight / Steel Calv. Coated / Thread Sealed
8	Manometer Typ 111.1, Ø2.5", G 1/4" Bottom Radial, 0-16 Bar, UL252	20	Distance Sheet, Aluminium, 56 x 15 x 7 mm
9	Cover Sheet for Mounting Plate G1/4 for Connection G1/8	21	Distance Sheet, Aluminium, 45 x 45 x 8 mm
10	HP Regulator / 1/4" / NPT / 5-125 psig (0,3 to 3,5 Bar) / without Manometer	22	Screw Hex M8 x 20
11	Mounting Plate Aluminium / 450(H) x 1000(L) x 6(D) mm	23	Electrical Interface Box Rittal PK9521.050
12	Reducing Nipple, G 1/4a., G 1/8i., WS 17, WP Max. 60 Bar, WT Max. 150°C, Brass Zinc Coated	24	Connector
		25	Cable Trunking

PNEUMATIC CONTROL PANEL SIZE

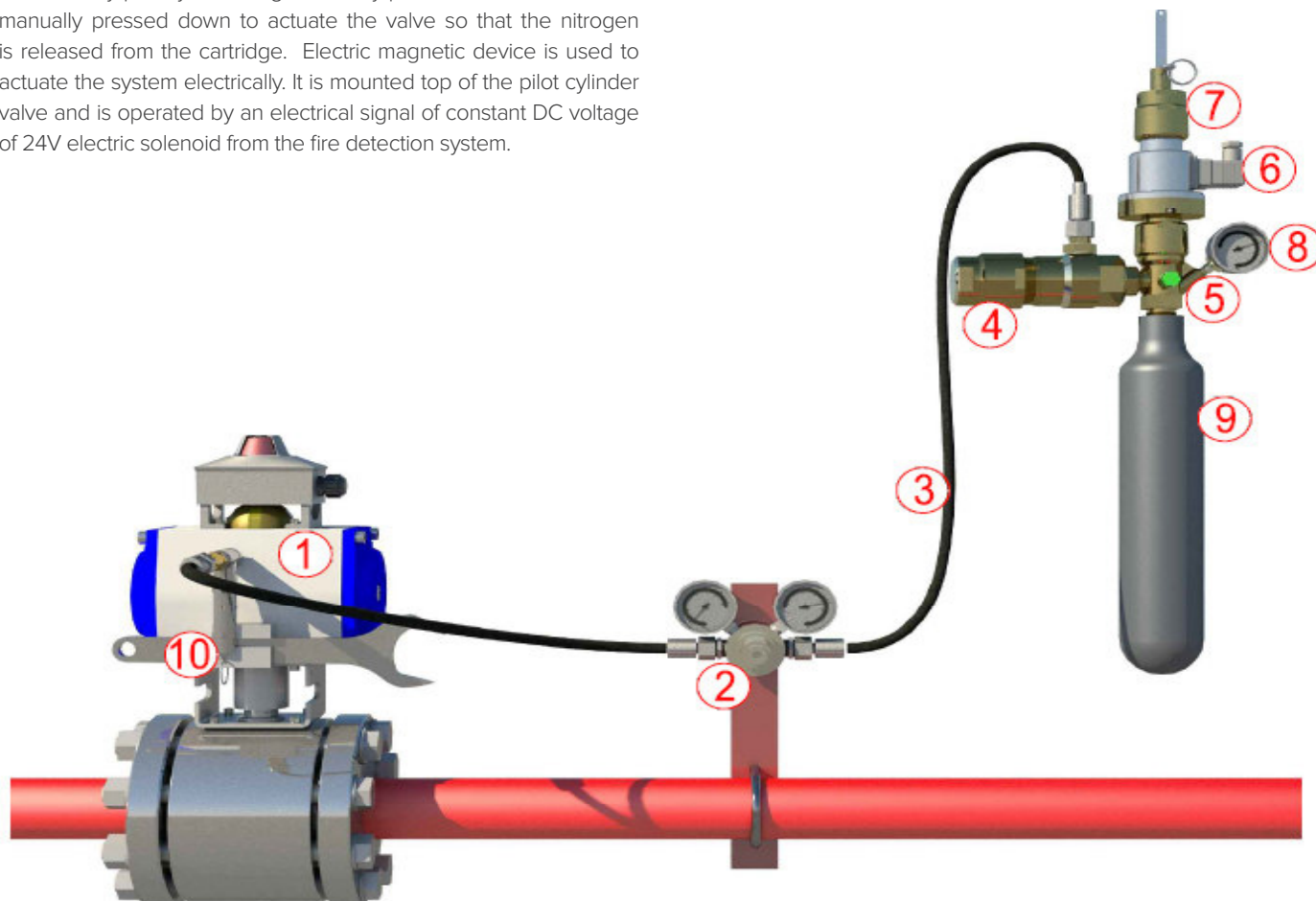
PART NO.	NAME	ZONES	LENGTH (mm)	HEIGHT (mm)	DEPTH (mm)
NF-SVCB02	Control panel with different configurations (zones)	2 Zones	470	450	6
NF-SVCB03		3 Zones	470	450	6
NF-SVCB04		4 Zones	470	450	6
NF-SVCB05		5 Zones	470	450	6
NF-SVCB06		6 Zones	700	450	6
NF-SVCB07		7 Zones	700	450	6
NF-SVCB08		8 Zones	700	450	6
NF-SVCB09		9 Zones	700	450	6
NF-SVCB10		10 Zones	700	450	6
NF-SVCB11		11 Zones	1000	450	6
NF-SVCB12		12 Zones	1000	450	6
NF-SVCB13		13 Zones	1000	450	6
NF-SVCB14		14 Zones	1000	450	6
NF-SVCB15		15 Zones	1000	450	6

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SELECTOR VALVE WITH PILOT - CYLINDER ASSEMBLY (MULTI-ZONE DISTRIBUTION)

Pilot cylinder assembly for selector valve actuation consists of Manual / Pneumatic release device which allows manual or pneumatic actuation of the selector valve for the individual zones for system operation. Manual actuation is accomplished by pulling the hand lever on the manual/pneumatic release device is secured with a safety pin. By removing the safety pin, the hand lever can be manually pressed down to actuate the valve so that the nitrogen is released from the cartridge. Electric magnetic device is used to actuate the system electrically. It is mounted top of the pilot cylinder valve and is operated by an electrical signal of constant DC voltage of 24V electric solenoid from the fire detection system.

Both of these actuation methods result in the opening of a nitrogen pilot cylinder that pneumatically opens the Selector Valve. Each Selector Valve is equipped with the monitoring device which shows the valve Position (Open or Closed) that provides a visual indication of the valve status. Pop Off Valve is used to reset the Selector Valve after the system discharge.



1. Selector Valve
2. High Pressure Primary Regulator (Set Pressure 6 to 10 Bar)
UL Listed
3. 1/4" High Pressure Pilot Hose (Max. Length 1.5Mtr)
4. Constant Flow & Pressure Discharge Regulator, Part
number: B8400003-NF
5. Discharge Valve, Part number: B04801218-NF
6. Electromagnetic Release Device Part number:
B04425146-NF

7. Manual/Pneumatic Release Device Part number:
B04420065-NF
8. Pressure Gauge, Patt number: 029720221-NF
9. Pilot Cylinder, W28.8x14TPI Threaded to 25E EN ISO
113631-1
10. Pop off Valve, Set Pressure 175 Psi

PRESSURE RELIEF DEVICE FOR MANIFOLD

The pressure relief device for manifold is a safety device to prevent overpressure during discharge.

Model No	029730037-NF
Set Pressure	66 bar at 20°C / 957 psi at 68°F
Connection Thread	G½"



MANIFOLD

Manifolds are used to connect several cylinders at 100 bar pressure. They can only be used with valves with pressure regulators it available in 1 row and 2 row arrangement to connect 2 to 20 cylinders.

Manifold Description	267 Dia. Cylinder	360 Dia. Cylinder
2 Cylinder Manifold	NFIG-267-SRM2	NFIG-360-SRM2
3 Cylinder Manifold	NFIG-267-SRM3	NFIG-360-SRM3
4 Cylinder Manifold	NFIG-267-SRM4	NFIG-360-SRM4
5 Cylinder Manifold	NFIG-267-SRM5	NFIG-360-SRM5



CYLINDER MOUNTING PARTS

Galvanised steel wall mounting rails and clamps are used to mount the cylinders in a vertical position to the wall for single &

double row arrangement with metal bracket. For floor mounting, channels are used to mount the cylinders.

CYLINDER MOUNTING PARTS SINGLE & DOUBLE ROW ARRANGEMENT



NOTE: Steel Brackets Available Upon Request

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WARNING SIGN

Model No.: 02800318-NF

GAS STORAGE AREA

The purpose of this sign is to warn the personal that the room is stored inert gas cylinders. Attach warning signs to all entrance doors of the gas storage room.



Model No.: 02800319-NF

WARNING

The purpose of this sign is to warn the personal that the room is protected by inert gas system and to leave the room upon system activation. Attach warning signs to all entrance doors of the protected enclosures



Model No.: 02800320-NF

UPON SYSTEM ACTIVATION

The purpose of this sign is to warn the personal that to leave the room upon system activation is stored inert gas cylinders. Attach warning signs to all exit doors of the protected enclosures





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