Pyrozone™

PYRODETEC

Pre-Engineered Automatic Fire Detection and Suppression System

FM APPROVED

Pyrozone Manufacturing Pte Ltd

PYROZONE BACKGROUND

Pyrozone Manufacturing Pte Ltd is the manufacturer of fixed carbon dioxide gaseous fire protection system.

'Pyrozone' was established in 1990 by Pyrozone Manufacturing Pty Ltd, a private independently owned company based in South East Queensland, Australia.

The system has since gained international acceptance with SSL and FM accreditations.

A new manufacturing facility was established in Singapore in September 2006.

Pyrozone Manufacturing Pte Ltd's expertise lies in the area of carbon dioxide technology.

With this experience of applying carbon dioxide in fire suppression, and over years of interaction with the fire protection industry, Pyrozone has decided to expand its product range with the introduction of

PyroDeTec, a Pre-Engineered Automatic Fire Detection and Suppression System.

What Is PyroDeTec ?

PyroDeTec is a Pre-Engineered Automatic Fire Detection System Automatic CO2 fire extinguisher that puts out fire when they start, where they start.

Uses Carbon Dioxide as It's Extinguishing Agent.

It is a system design for use and installation in enclosures, cabinets, machinery housing and inaccessible area.

Simple, self-activating fire extinguishing system.

Originally conceived as vehicle extinguisher.

FM APPROVED

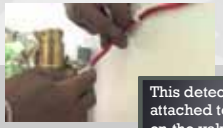
The PyroDeTec system is tested by FM Approvals in accordance to FM Approvals Standard for Carbon Dioxide Extinguishing Systems (Class Number 5420).

NFPA® NATIONAL FIRE PROTECTION ASSN.

PyroDeTec system is designed for total flooding applications, in accordance to NFPA 12: Standard on Carbon Dioxide Extinguishing Systems.

HOW IT WORKS???

The PyroDeTec system utilizes a unique flexible detection tubing.



This detection tubing is attached to the ball valve on the valve/cylinder assembly.

This tubing is installed within the protected equipment and is pressurized with nitrogen gas so as to keep the cylinder valve in the close position.

Carbon dioxide is discharged from the nozzle into the fire and killing the fire instantly.

Upon flame impingement, the tube melts and bursts, releasing the pressure in the tube, which in turn causes the cylinder valve to open.

Components of the System!

PyroDeTec System consist of the following major components

- Cylinder and Valve Assembly

Cylinder Capacity

- Model PDT – 5 (5kg or 10lb)
- Model PDT – 9 (9kg or 20lb)

Optional Cylinder Capacity

- Model PDT – 6 (6kg or 13lb)
- Model PDT – 45 (45kg or 100lb)

High Pressure Valve

In-Direct High Pressure Valves (IHP)

Direct High Pressure Valves (DHP)

Low Pressure Valve:

Direct Low Pressure Valves (DLP)

In-Direct Low Pressure Valves (ILP)

Components of the System!

- Detection and Actuation Tube

- End-of-line Adapter

- Discharge Nozzle

- Other Optional Components
  - Pressure Switch
  - Manual Release Mechanism
  - Electromagnetic Solenoid Valve
  - Pressure Gauge with Integrated Pressure Switch

System Operation!

Automatic Actuation via Flame Impingement

In-Direct Operation:

The detection tube triggers the cylinder valve when it detects a fire.

The extinguishing agent discharges through a conventional outlet port to the nozzle.

This is called In-direct System.

Direct Operation:

Detection tube triggers the cylinder valve to open when there's a fire

The extinguishing agent is carried through the detection tube and discharges at the burst point.

This is called the Direct System.

Manual Actuation

- Manual actuation can be achieved by fitting a manual release mechanism at the end of the tubing, instead of the usual end-of-line adapter.
- When fire occurs, pull to remove the safety ring and push the strike knob.
- This will cause a membrane inside the device to be pierced open to relief the pressure within the tubing.
- This loss in pressure will cause the extinguishing system to activate.
- The pierced membrane and safety ring needs to be replaced after use.

Solenoid Actuation

- The way of solenoid actuation is achieved using the electromagnetic release mechanism (a solenoid actuator).
- This work similar to the manual release mechanism, except that there will be no strike knob.
- An electrical contact is provided instead, for connection to any FM Approved smoke detection fire alarm system.
- When a smoke detector in the system signals an alarm, an electrical voltage pulse is sent to the solenoid actuator.
- This causes pressure within the tube pressure to be released.
- The pressure loss activates the extinguishing system.

Interlocking Functions – Pressure Switch

- For purposes of signaling a system activation, triggering a ventilation shutdown and the like, a pressure switch is available.
- This pressure switch basically provides an electrical contact to any monitoring system or fire control panel to achieve the desired interlocking function.
- A pressure drop in the tubing closes the normally open circuit.

These are the systems that has predetermined flow rates, nozzle placement and quantities of carbon dioxide and that incorporates specific nozzles and methods of application that can be differ from those detailed elsewhere in this standard and those testing laboratory. The hazard protected by these systems are specifically limited as to size and type.

Volume Coverage

MODEL	WEIGHT	IHP @ 50% CO2 CONCENTRATION	DHP @ 50% CO2 CONCENTRATION
PDT - 5	5 kg (10 lb)	Protected Volume ≤ 2 m³	Protected Volume ≤ 1.5 m³
PDT - 9	9 kg (20 lb)	2 m³ ≤ Protected Volume ≤ 4 m³	1.5 m³ ≤ Protected Volume ≤ 3 m³

Detection Tube and Discharge Pipe Requirement

PDT SYSTEM	Max Allowable Length of Detection Tube	Max Allowable Length of Discharge Pipe and Fittings
DHP	10 Meters	N/A
IHP	18 Meters	10 meters

Legend:
DHP - Direct Hi Pressure
IHP - In-direct High Pressure

Product Engineered System

(OPTIONAL)

These are systems that requiring individual calculation and design to determine the flow rates, nozzle pressures, pipe sizes, area or volume protected by each nozzles, quantity of agent, and the number of type nozzles and their placement in a specific system.

MODEL	WEIGHT	EXTINGUISHING AGENT	SYSTEM
DLP 6	6 kg (13 lb)	FM-200	Engineered
ILP 6	6 kg (13 lb)	FM-200	Engineered
DLP 9	9 kg (20 lb)	FM-200	Engineered
ILP 9	9 kg (20 lb)	FM-200	Engineered
IHP 45	45 kg (100 lb)	CO2	Engineered

Legend:
DHP - Direct Hi Pressure
IHP - In-direct High Pressure
DLP - Direct Low Pressure
Ilp - In-Direct Low Pressure

ADVANTAGES!!!

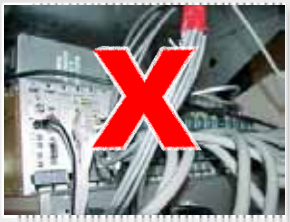
SIMPLE!, EFFECTIVE! AND RELIABLE! SYSTEM

3 sec small fire begins

6 sec tube ruptures Releasing gas, Extinguishing fire

10 sec the fire is OUT!!!

Automatic function, NO! Electricity Required!



Minimum Maintenance!

Schedule	Maintenance Required
Monthly	Visual Inspection of system components
6 - Monthly	Weighing of Cylinder
5 - Yearly	Hydrostatic test for cylinder Replace Detection Tube

24/7 Detection and Readiness!

FM APPROVED!

FM APPROVED

ADVANTAGES!!!

Quick and Simple Installation

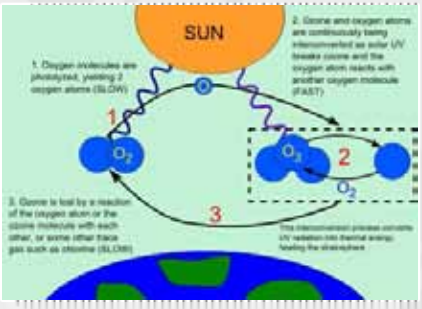



Can be used in every Environment!


OUTDOOR

INDOOR

CO2 is safe to Human and Environment



PROJECT REFERENCE

INTERPLEX INDUSTRIES COMPANY SINGAPORE




PSA Tanjong Pagar SINGAPORE

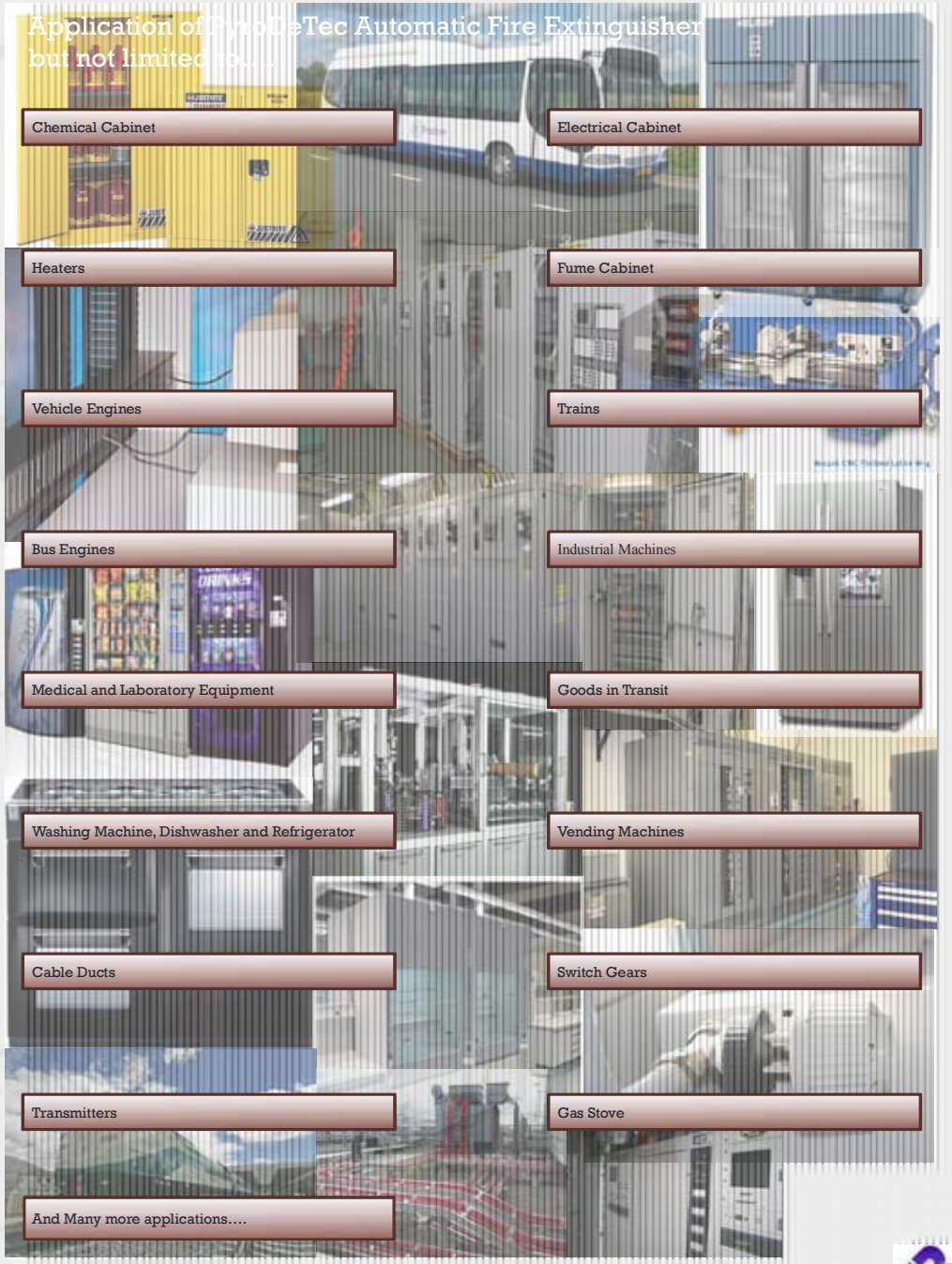


PROJECT REFERENCE

NANYANG TECHNOLOGICAL UNIVERSITY (NTU) SINGAPORE

GLOBAL FOUNDRIES

APPLICATIONS!!!



Application of PyroDeTec Automatic Fire Extinguisher but not limited to...

- Chemical Cabinet
- Electrical Cabinet
- Heaters
- Fume Cabinet
- Vehicle Engines
- Trains
- Bus Engines
- Industrial Machines
- Medical and Laboratory Equipment
- Goods in Transit
- Washing Machine, Dishwasher and Refrigerator
- Vending Machines
- Cable Ducts
- Switch Gears
- Transmitters
- Gas Stove
- And Many more applications....

PRODUCT SPECIFICATION

PYRODETEC CONNECTORS

Standard Version

Product Range

- Nickel Plated surface
- Use to connects PyroDeTec Tubing
- Quick and easy to install and remove
- Highest tightness requirements

General Product Description

SPECIFICATION	RANGE
Optimal Filling Pressure	18 Bar
Max. Permissible Pressure PS	23.3 Bar at 15°C (max. 28 bar at Tmax)
Temperature Range TS	-20°C to +60°C
Types of Gas and Extinguishing Agents	CO2, FM-200
Materials	Brass, (Nickel-plated) elastomeric seal
External Diameter of the Tube	6 mm

PRODUCT SPECIFICATION

PYRODETEC DISCHARGE NOZZLES

Standard Version

Product Range

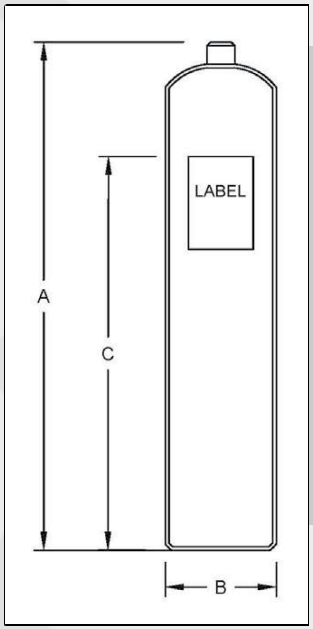
- 3 hole nozzle
- Use to discharge Fire agent
- Extinguishing Agent: CO2 / FM-200
- Required for In-direct system

General Product Description

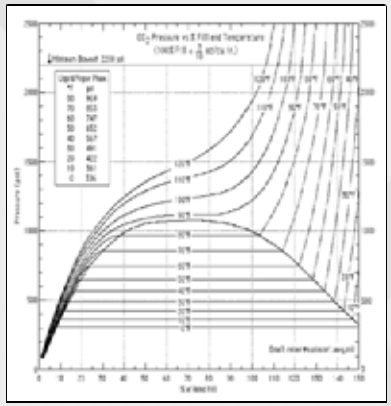
SPECIFICATION	RANGE
Hole Diameter	2 mm
Connection thread	G 1/4”
Temperature Range	-20°C to +60°C
Max. Permissible Pressure PS	23.3 Bar at 15°C (max. 28 bar at Tmax)
Temperature Range	-20°C to +60°C
Materials	Brass, (Nickel-plated)

HI PRESSURE CYLINDER

Product Specification



- Design Complies with:
  IS7285 (Part1) : 2004
  SS232 : 1999
  BS5045 (Part 1)
  DOT-3AA-2175
  MS1539 (Part1) : 2002
- Min Wall Thickness: 3.6 mm
- Hydrostatic Test Pressure: 3626 psi (25 Mpa)
- Min Bursting Pressure: > 5000 psi (35 Mpa)
- DOT Test Reports to be submitted for all shipments to U.S.A.



CYLINDER SIZE		A	B	C	VOLUME
5 KG	1	570 mm	152 mm	450 mm	6.8 L
	2	610 mm	143 mm	450 mm	6.8 L
9 KG	1	840 mm	169 mm	650 mm	13.6 L
	2	1100 mm	140 mm	800 mm	13.5 L
45 KG	1	1491 mm	268 mm	1200 mm	68 L

PRODUCT SPECIFICATION

DIRECT HIGH PRESSURE VALVE - DHP

Standard Version

Product Range

- Working Pressure up to 250 Bar
- Temperature Range -20°C to +60°C
- High - Flow Capacity
- Integrated Ball Valve
- Integrated position control for ball valve: open / closed
- Integrated position control for valve: activated / not activated
- Extinguishing Agent: CO2

General Product Description

SPECIFICATION	RANGE
Cylinder Thread	25E - DIN EN629 - 1
Filling Connection	W21,8x1/4, filling connection = pressure gauge connection
Connection Pressure Gauge	M12x1, Filling connection = pressure gauge connection
Connection Dip Tube	M16x1.5
Connection Detecting Tube	Plug in connector for PyroDeTec detecting tube 4x6
Seat Diameter	Ø 4 mm
Burst Disc Safety Device	250 Bar
Low pressure	15 Bar to 20 Bar
Spring Loaded Safety Device	30 Bar
Temperature Range	-20°C to +60°C
Working Pressure	CO2: Filling ratio CO2 cylinders = max. 0.75 kg/liter
Material Valve Body	Brass

PRODUCT SPECIFICATION

IN-DIRECT HIGH PRESSURE VALVE - IHP

Standard Version

Product Range

- Filling - easy and safe via the valve outlet
- Working Pressure up to 250 Bar
- Temperature Range -20°C to +60°C
- High - Flow Capacity
- Integrated Ball Valve
- Integrated position control for ball valve: open / closed
- Integrated position control for valve: activated / not activated
- Extinguishing Agent: CO2

General Product Description

SPECIFICATION	RANGE
Cylinder Thread	25E - DIN EN629 - 1
Filling Connection	W21,8x1/4, filling connection = pressure gauge connection
Connection Pressure Gauge	M12x1, Filling connection = pressure gauge connection
Connection Dip Tube	M16x1.5
Connection Detecting Tube	Plug in connector for PyroDeTec detecting tube 4x6
Seat Diameter	Ø 8 mm
Burst Disc Safety Device	190 Bar
Low pressure	15 Bar to 20 Bar
Spring Loaded Safety Device	30 Bar
Temperature Range	-20°C to +60°C
Working Pressure	CO2: Filling ratio CO2 cylinders = max. 0.75 kg/liter
Material Valve Body	Brass

PRODUCT SPECIFICATION

DIRECT LOW PRESSURE VALVE - DLP

Standard Version

Product Range

- Working pressure 23.3 Bar at 15°C (Maximum permissible pressure 28 bar at Tmax)
- Extinguishing Agent: FM-200

General Product Description

SPECIFICATION	RANGE
Pressure Gauge Connection	M10X1 (including non return valve)
Cylinder Thread	M30X1.5
Filling Connection	Filling: via connection sensor tube
Connection Dip Tube	M16x1.5
Connection Detecting Tube	Plug in connector for PyroDeTec detecting tube 4x6
Temperature Range	-20°C to +60°C
Pressure Gauge	0 - 27 Bar
Working Pressure PW	23.3 Bar at 15°C (max. permissible pressure 28 bar at Tmax
Material Valve Body	Brass nickel plated
Spring Loaded Safety Device	30 Bar

PRODUCT SPECIFICATION

IN-DIRECT LOW PRESSURE VALVE - ILP

Standard Version

Product Range

- Working pressure 23.3 Bar at 15°C (Maximum permissible pressure 28 bar at Tmax)
- Extinguishing Agent: FM-200
- Optimal filling pressure: 18 bar
- No pressure drop across the sensor tube during discharge

General Product Description

SPECIFICATION	RANGE
Pressure Gauge Connection	M10X1 (including non return valve)
Cylinder Thread	M30X1.5
Valve Outlet	G1/4"
Filling Connection	Filling: via connection sensor tube
Connection Dip Tube	M16x1.5
Connection Detecting Tube	Plug in connector for PyroDeTec detecting tube 4x6
Temperature Range	-20°C to +60°C
Optimal filling pressure	18 bar
Pressure Gauge	0 - 27 Bar
Working Pressure PW	23.3 Bar at 15°C (max. permissible pressure 28 bar at Tmax
Material Valve Body	Brass nickel plated
Spring Loaded Safety Device	30 Bar

PRODUCT SPECIFICATION

PYRODETEC DETECTION TUBING - RED

Standard Version

Product Range

- Linear monitoring and detection
- Flexible installation in property / hazard area
- Suitable for all PyroDeTec connection quick and easy installation
- Low susceptibility

General Product Description

SPECIFICATION	RANGE
Color	RED (RAL 3000)
Operating Temperature	Optimal temperature for long term use is -20 to 50°C. Higher Temperature can lead to a reduce a reduction in service life.
UV	
Life Time	Normal industrial environmental conditions are permissible as generally known for PA materials which are suitable for long term use. Low humidity could cause brittle fracture which should be considered during maintenance and relocating.
Dimensions	Inner diameter: 4 mm / Outer diameter: 6 mm
Tube Length	100 meter
Material	Special modified polyamide
Melting Point	Approx. +220°C when heating up to 10 K/minute
Working Pressure	Recommended between 11 bar and 23 bar within whole temperature range.
Burst Pressure	At 20°C at approx. 100 bar ± 20
Bursting Temperature	CO2: Filling ratio CO2 cylinders = max. 0.75 kg/liter
Marking	PyroDeTec by Pyrozone Automatic Fire Detection Tube week/year of production, do not cut, kink, crush

PRODUCT SPECIFICATION

PYRODETEC DETECTION TUBING - BLACK

Standard Version

Product Range

- Linear monitoring and detection
- Flexible installation in property / hazard area
- Suitable for all PyroDeTec connection quick and easy installation
- Low susceptibility

General Product Description

SPECIFICATION	RANGE
Color	BLACK
Operating Temperature	Optimal temperature for long term use is -20 to 60°C. Higher Temperature can lead to a reduce a reduction in service life. Steady load to max. 80°C have been tested.
UV	UV - stabilized
Life Time	Normal industrial environmental conditions are permissible as generally known for PA materials which are suitable for long term use. Low humidity could cause brittle fracture which should be considered during maintenance and relocating.
Dimensions	Inner diameter: 4 mm / Outer diameter: 6 mm
Tube Length	100 meter
Material	Special modified polyamide
Melting Point	Approx. +220°C when heating up to 10 K/minute
Working Pressure	Recommended between 11 bar and 23 bar within whole temperature range.
Burst Pressure	At 20°C at approx. 100 bar ± 20
Bursting Temperature	CO2: Filling ratio CO2 cylinders = max. 0.75 kg/liter
Marking	PyroDeTec by Pyrozone Automatic Fire Detection Tube week/year of production, do not cut, kink, crush

PRODUCT SPECIFICATION

PYRODETEC DETECTION TUBING

Chemical Resistance List

(at Room Temperature)

	Medium (aq = in aqueous solution)	PA (Nylon)
1	Acetic acid	4
2	Acetic acid anhydride	1
3	Acetone	1
4	Aluminum salts, aq	1
5	Alums, aq	1
6	Aminobenzoic acid	2
7	Ammonia, aq	1
8	Ammonia, g	1
9	Ammonium acetate, aq	1
10	Ammonium carbonate, aq	1
11	Ammonium chloride, aq	1
12	Ammonium nitrate, aq	1
13	Ammonium phosphate, aq	1
14	Ammonium sulfate, aq	
15	Amylalcohol	1
16	Antifreeze	1
17	Barium salts	1
18	Battery acids	3
19	Beef tallow	1
20	Beer	1
21	Benzaldehyde	1
22	Benzoic acid	1
23	Benzoic acid, aq	1
24	Bone fat	1
25	Boric acid	1
26	Brake fluid	1
27	Bromine, aq	4
28	Bromine, l	4
29	Butane, g	1
30	Butane, l	1
31	n-Butanol	1
32	n-Butyl aclohol	4
33	Butylacetate (acetic acid butyl ester	1
34	Butylacetate	1
35	Calcium chloride, aq	1

	Medium (aq = in aqueous solution)	PA (Nylon)
36	Calcium nitrate, aq	1
37	Carbon disulfide	1
38	Carbon tetrachloride	1
39	Carnation oil	1
40	Chlorine, g	4
41	Chlorine, l	4
42	Chlorobenzoic acid	3
43	Chloroform	3
44	Chlorosulfonic acid	4
45	Chrome bath	4
46	Chromic acid	4
47	Chromosulfuric acid	4
48	Chromium salts	1
49	Citric acid	1
50	Cleaner	1
51	Coca-Cola	1
52	Cocoa	1
53	Coconut oil	1
54	Cod-liver oil	1
55	Coffee	1
56	Cocking oil, animal	1
57	Cocking oil, vegetable	1
58	Corn oil	1
59	Cresol	4
60	Cresol, aq	3
61	Cyclohexane	1
62	Cyclohexanol	1
63	Cyclohexanone	1
64	Decalin	1
65	Detergent	1
66	Dibutyl phtalate	1
67	Diesel fuel	1
68	Dimethylether	1
69	Dimethylformamide	1
70	1,4-Dioxane	1
71	Engine oil	1

Legend:
1 - Resistant
2 - Largely Resistant
3 - Fairly Resistant
4 - Non - Resistant
5 - Liable to Dissolve

PRODUCT SPECIFICATION

PYRODETEC DETECTION TUBING

Chemical Resistance List

(at Room Temperature)

	Medium (aq = in aqueous solution)	PA (Nylon)
72	Ethanol	1
73	Ether	1
74	Ethyl acetate	1
75	Ethylene chloride	3
76	Ethylhexanol	1
77	Ferric salts	1
78	Fizzy drink	1
79	Formaldehyde, aq	3
80	Formaline	3
81	Formic acid	4
82	Fruit juice	1
83	Fuel	1
84	Fuel oil	1
85	Gin	1
86	Glycerine	1
87	Glycol	1
88	Heptane	1
89	Hexane	1
90	Honey	1
91	Hydrochloric acid(up to 20%)	4
92	Hydrochloride, g	4
93	Hydrogen peroxide, aq	2
94	Ink	1
95	Isooctane	1
96	Isopropanol	1
97	Jelly	1
98	Lactic acid	2
99	Lanolin	1
100	Lemon juice	1
101	Linseed oil	1
102	Liquors	1
103	Magnesium salts, aq	1
104	Margarine	1
105	Mercury	1
106	Merucy salts, aq	1
107	Methanol	1

	Medium (aq = in aqueous solution)	PA (Nylon)
108	Methyl ethyl ketone	1
109	Methylene chloride	3
110	Milk	1
111	Mustard	1
112	Nail varnish	1
113	Nail varnish remover	1
114	Naphthalin	1
115	Nickel salts, aq	1
116	Nitric acid (up to 25%)	4
117	Nitrobenzoic acid	2
118	Octane	1
119	Oil no. 3 (ASTM D390-59)	1
120	Oleic acid	2
121	Olive oil	1
122	Oxalic acid, aq	2
123	Ozone (<0,5ppm)	1
124	Palm oil	1
125	Paraffin	1
126	Paraffin ether	1
127	Paraffin oil	1
128	Paraffin oil (petroleum jelly)	1
129	Pectin	1
130	Pepper	1
131	Peppermint oil	1
132	Perfume	1
133	Phenol	4
134	Phosphoric acid	4
135	Phosphorus pentoxide	3
136	Pine needle oil	1
137	Potassium carbonate	1
138	Potassium chlorate, aq	2
139	Potassium chloride, aq	1
140	Potassium chromate, aq	3
141	Potassium hydroxide, aq	1
142	Potassium iodine, aq	1
143	Potassium nitrate, aq	1

Legend:
1 - Resistant
2 - Largely Resistant
3 - Fairly Resistant
4 - Non - Resistant
5 - Liable to Dissolve

PRODUCT SPECIFICATION

PYRODETEC DETECTION TUBING

Chemical Resistance List

(at Room Temperature)

	Medium (aq = in aqueous solution)	PA (Nylon)
144	Potassium permanganese, aq	3
145	Potassium sulfate	1
146	Propane, g	1
147	Propane, l	1
148	Pyridine	1
149	Rum	1
150	Sea water	1
151	Shampoo	1
152	Silicon oil	1
153	Silver salts, aq	1
154	Soapy water	1
155	Soda	1
156	Sodium bicarbonate, aq	1
157	Sodium bisulfite, aq	1
158	Sodium carbonate (borax), aq	1
159	Sodium carbonate, aq	1
160	Sodium chlorate	2
161	Sodium chloride, aq	1
162	Sodium hydroxide (caustic soda)	1
163	Sodium hydroxide, aq	1
164	Sodium hypochlorite	3
165	Sodium nitrate, aq	1
166	Sodium nitrite, aq	2
167	Sodium perborate, aq	1
168	Sodium phosphate, aq	1
169	Sodium silicate	1
170	Sodium sulfate, aq	1
171	Sodium sulfide, aq	1
172	Sodium sulfite, aq	1
173	Sodium thiosulfate	1
174	Sodium thiosulfate (antichlor), aq	1
175	Soybean oil	1
176	Spruce needle oil	1
177	Starch	1
178	Stearic acid	2
179	Sugar, aq	1

	Medium (aq = in aqueous solution)	PA (Nylon)
180	Sulfur	1
181	Sulfuric acid (concentrated)	4
182	Sulfuric acid (up to 50%)	4
183	Sulfuric dioxide, g	1
184	Tar (hot tar)	1
185	Tartaric acid, aq	1
186	Tea	1
187	Tetrahydrofuran	1
188	Tetralin (tetrahydronaphthalene)	1
189	Tin dichloride	1
190	Toluene	1
191	Trichloroethylene	2
192	Turpentine (oil of)	1
193	Urea, aq	1
194	Vanilla	1
195	Vaseline	1
196	White spirit	1
197	Wine	1
198	Xylene	1

Legend:
1 - Resistant
2 - Largely Resistant
3 - Fairly Resistant
4 - Non - Resistant
5 - Liable to Dissolve

PRODUCT SPECIFICATION

MANUAL RELEASE MECHANISM

Standard Version

Product Range

- Easy and Secure attachment
- Use to activate Indirect Valves
- Pressure reading in operating direction
- Nickel plated surface

General Product Description

SPECIFICATION	RANGE
Optimal Filling Pressure	18 Bar
Max. Permissible Pressure PS	23.3 Bar at 15°C (max. 28 bar at Tmax)
Temperature Range TS	-20°C to +60°C
Types of Gas and Extinguishing Agents	CO2, FM-200
Materials	Brass, Nickel-plated brass, Stainless steel
External Diameter of the Tube	6 mm

PRODUCT SPECIFICATION

END OF LINE ADAPTER (w/pressure gauge)

Standard Version

Product Range

- To seal the far end of the tubing
- Provide connection allowing the
- Tubing to be pressurized
- Comes with a pressure gauge

General Product Description

SPECIFICATION	RANGE
Optimal Filling Pressure	18 Bar
Max. Permissible Pressure PS	23.3 Bar at 15°C (max. 28 bar at Tmax)
Temperature Range TS	-20°C to +60°C
Types of Gas and Extinguishing Agents	CO2, FM-200
Materials	Brass, Nickel-plated brass, Stainless steel
External Diameter of the Tube	6 mm

PRODUCT SPECIFICATION

SOLENOID ACTUATOR

Standard Version

Product Range

- Easy and Secure Mounting
- For Actuating all indirect valves
- Pressure gauge
- Nickel Plated Surface

General Product Description

SPECIFICATION	RANGE
Optimal Filling Pressure	18 Bar
Max. Permissible Pressure PS	23.3 Bar at 15°C (max. 28 bar at Tmax)
Temperature Range TS	-20°C to +60°C
Gases and Extinguishing Agents	CO2, FM-200
Materials	Brass (nickel plated/plated), stainless steel,
Voltage	24VDC (±10%)
Power Consumption	12 Watt
Power Supply	On-duration
Protection Class	IP65 with cable plug
Installation Position	As required, preferably solenoid actuator up right
Electrical Connection	DIN EN 175301-803, Form A

Pyrozone Group Contacts

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