



**ROTAREX**  
FIRETEC



**200/300 BAR INERT GAS  
FIRE SUPPRESSION SYSTEMS**

JUNE 2017



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Rotarex Firetec system components are approved and certified compliant with recognized international norms. Certifications relate to individual products, and are clearly indicated on each respective product page.

In addition, all Rotarex manufacturing sites comply with ISO 9001 quality standards.



<sup>1</sup> Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

<sup>2</sup> According to the Pressure Equipment Directive (97/23/EC)

\*Marked products are part of a UL listed system when configured in accordance with NFPA 2001 and UL 2127

# ALL THE COMPONENTS FOR A COMPLETE INERT GAS SYSTEM

Rotarex offers all the components needed to configure a complete system for 200/300 bar inert gas extinguishing agent.

- **Components entirely compatible and interchangeable**
- **Easier and faster installation - No “bad surprises”**
- **System pre-tested and qualified**
- **Everything to the same high-specification**
- **Greater confidence in performance at the critical time**
- **Full warranty protection**
- **Simplicity of a single supplier**

Rotarex makes it easy for system engineers and installers to configure fixed suppression systems—choosing only select components—or using the entire system.

For maximum ease and certainty of performance, specify Rotarex components to configure the entire system.



A complete component solution		
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## SERIES B0480 VALVES AND ACCESSORIES



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200 bar and 300 bar

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**SERIES B0480**

Cylinder valve for 200/300 bar inert gas

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## ACTUATION DEVICES & ACCESSORIES



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# DISCHARGE HOSES, MANIFOLDS, NOZZLES & ACCESSORIES



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For pneumatic directional valves



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# VALVE TECHNOLOGIES

## PROVEN TECHNOLOGY

Rotarex is the world leader in high-performance cylinder valves for fixed extinguishing systems as well as Ultra High Purity, Medical, Cryogenic, Automotive and LPG applications. They leverage 90-year expertise, vast R&D infrastructure and global scale to provide the most technically advanced and dependable fire suppression valves in the market. Trust Rotarex valves to perform when it most counts.

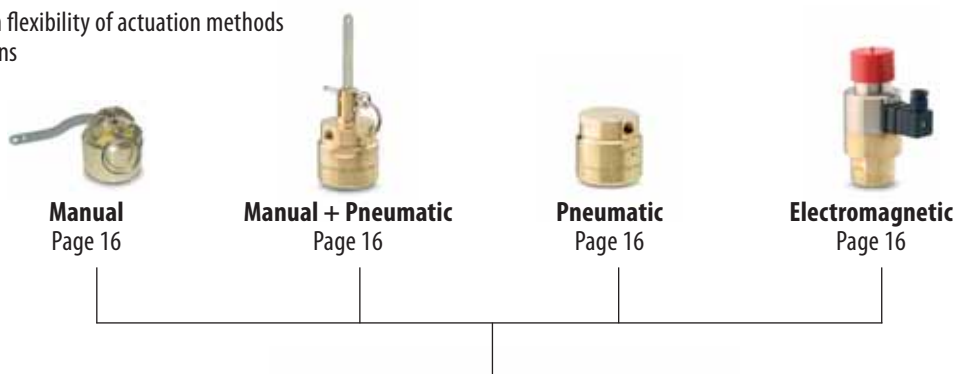
Rotarex recommends its high-performance Series B0480 valve technology for 200/300 bar inert gas systems. Over 200,000 valves are already in service.

The valve is specifically designed for high pressure inert gas applications. Technology: pressure differential piston type.



## SERIES B0480

200/300 bar valve with flexibility of actuation methods for inert gas applications



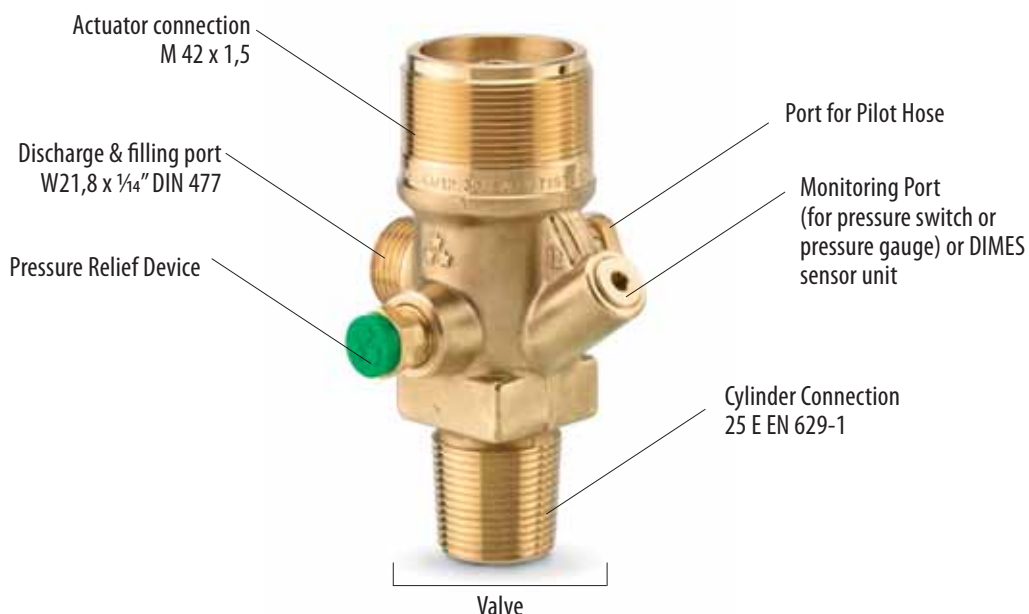
**Manual**  
Page 16

**Manual + Pneumatic**  
Page 16

**Pneumatic**  
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**Electromagnetic**  
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**CAN BE USED WITH A RANGE OF DIFFERENT ACTUATORS**



## SPECIFICATIONS

<b>Working pressure</b>	200 bar or 300 bar versions available	<b>Seat orifice size</b>	12 mm	<b>Temperature range</b>	-20°C to +60°C
<b>Valve body</b>	Brass	<b>Outlet orifice size</b>	12 mm		

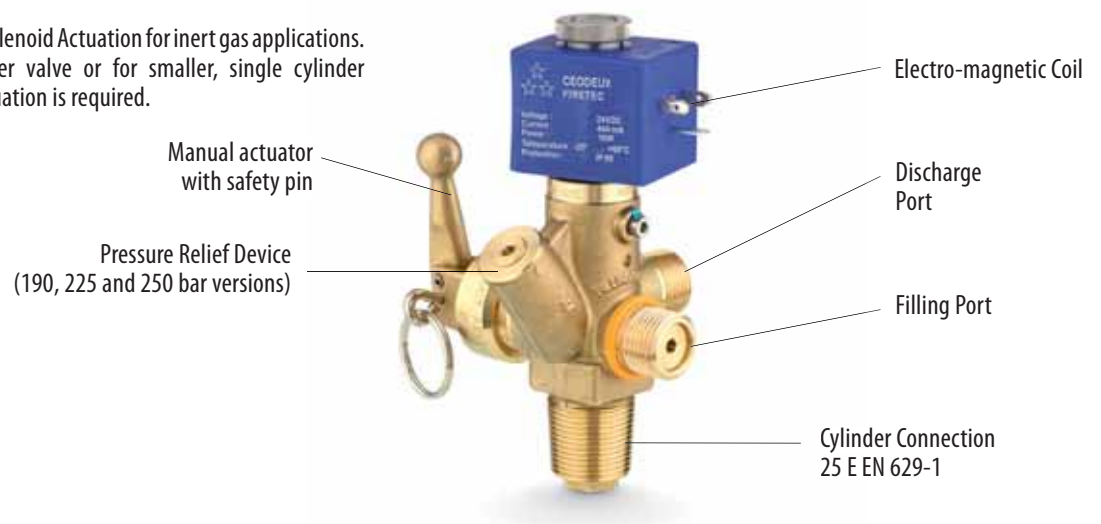
## VALVE TECHNOLOGIES (continued)



Multiple actuators can be used together in a series.

### SERIES B0439

200 bar valve with manual and Solenoid Actuation for inert gas applications. Can be used as a pilot cylinder valve or for smaller, single cylinder installations where solenoid actuation is required.



### Specifications

<b>Max working pressure</b>	200 bar	<b>Temperature range</b>	-20°C to +60°C	<b>Power consumption</b>	10 watt
<b>Valve body</b>	Brass	<b>Operating voltage</b>	24 VDC		
<b>Seat orifice size</b>	7 mm				

# PRESSURE REGULATOR TECHNOLOGY

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

**BETTER SAFETY:**

- Prevents explosive force of discharge

**SAVES TIME AND MONEY:**

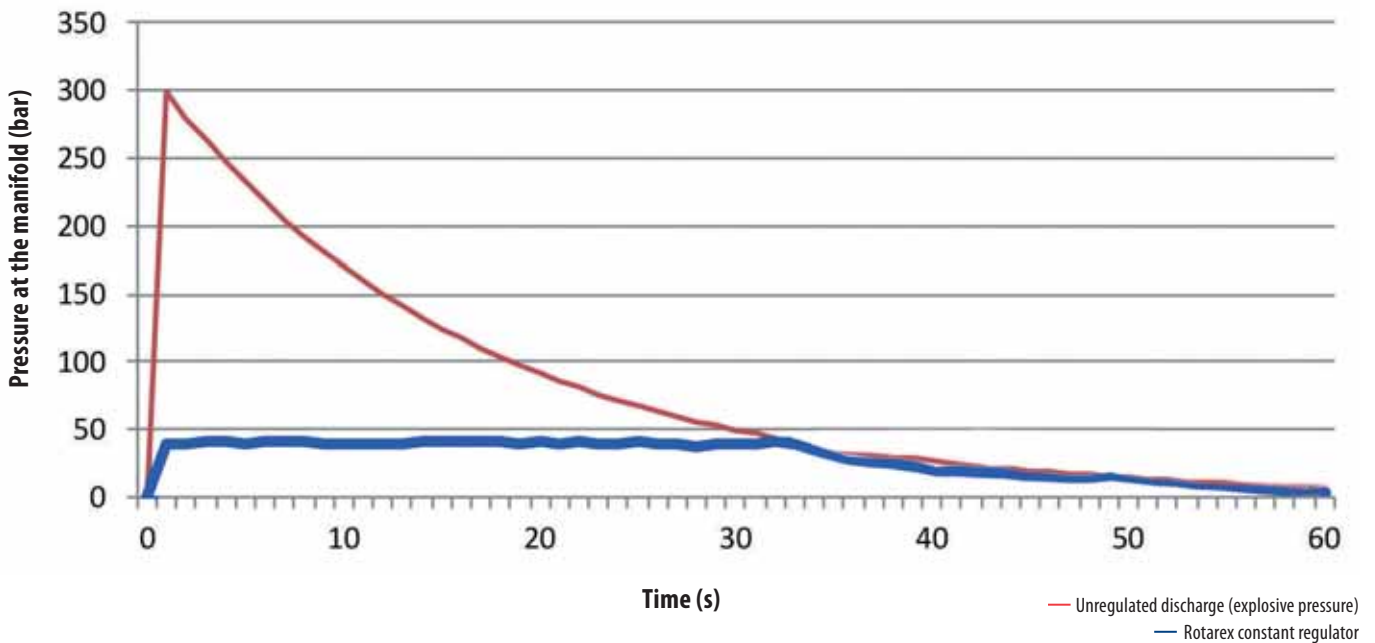
- Enables low pressure manifolds & pipework to be used - that are lower cost and easy to install
- Reduces the difficulty and cost of locating/fitting pressure vents in the protected space

**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



**Dynamic pressure comparison**  
Unregulated vs regulated discharge



**ROTAREX IS A PRESSURE REGULATOR SPECIALIST**

Rotarex adapts its pressure regulation technology from its proven 200 bar/300 bar laboratory, medical and ultra high purity applications to deliver innovative technology for inert gas fire extinguishing systems. The result: confident performance when it really counts.



**LABORATORY**



**MEDICAL**



**UHP**

## COMPATIBILITY WITH INERT GAS EXTINGUISHING AGENTS

### ADDITIONAL INFORMATION FOR GAS:

All Rotarex fixed system components are compatible for use with the most commonly used inert gas extinguishing agents at 200 or 300 bar cylinder pressure.

Inert gases are naturally present in the air, and have no impact on the environment. Inert gases are really efficient when extinguishing fire as they permit to reduce the oxygen of the area below the oxygen level required for combustion (15%).

### TYPE OF AGENT

IG 01	IG 100	IG 55	IG 541
100% Argon	100% Nitrogen	50% Argon 50% Nitrogen	50% Nitrogen 42% Argon 8% CO <sub>2</sub>
EN 15004-7	EN 15004-8	EN 15004-9	EN 15004-10
IG 01 is heavier density than air (1.38). Thus, Argon perfectly adapted to spaces where false floors have been installed because of low upper part insulation	IG 100 has a similar density to air (0.97). Thus, Nitrogen can disperse optimally in the room space and maintain a concentration for a long period.	As mixed gases, IG 55 and IG 541, enable to have different density and thus to disperse and cover the entire space area.	

## CERTIFICATION

Firetec system components are approved and certified compliant with recognized international norms. The UL logo indicates that associated components are part of a UL listed system when configured in accordance with NFPA 2001 and UL 2127.

In addition, all Rotarex manufacturing sites comply with ISO 9001 quality standards.



## SOFTWARE AVAILABILITY

Design Software is available to calculate fire suppression systems to ISO 14520, VdS 2380, and NFPA 2001.

The software is easy to use and only by entering the overall project data (protected area space, type of gas, application...), the software enables users to have a precise overview of the given project thanks to:

- Calculation of the extinguishing agent's amount,
- Calculation of the equipment and components,
- Outline of the optimal installation design.



### IMPROVE SAFETY AND CERTAINTY WITH THE DIMES DIGITAL MEASUREMENT SYSTEM.

- Digitally measures cylinder pressure to determine the level of extinguishing agent in the cylinder – replaces standard pressure gauges
- Continually monitors and confirms that the system is fully charged and ready
- Proactively sends a warning signal in case of a pressure drop such as a leak or system discharge
- Connects to any alarm or control box
- Can actuate other electronic functions, such as cutting electricity or closing ventilation. No need for additional pressure switches.

### DIMES SENSOR UNIT BENEFITS:

- Takes into account gas type and temperature changes.
- Extremely resistant to vibration
- Visual indicators on captors
- Can retrofit already-installed valves
- Several cylinders can be controlled by a unique control box



Single cylinder



Multi-cylinder

### DIMES: HOW IT WORKS:

The DIMES Sensor unit replaces the standard pressure gauge on the valve port (M10x1 connection).

Built-in sensors continually monitor cylinder pressure and ambient temperature.

An integrated processor calculates the exact cylinder contents using the algorithm of the known relationship between pressure and temperature for each specific inert gas mixtures: IG100, IG01, IG55 and IG 541.

The system can be programmed to send a warning alarm when the pressure drops below a level that you determine – such as in the event of a leak or when the system discharges.

### STANDARD PRESSURE GAUGES



### DIMES SYSTEM



DIMES replaces passive pressure gauges for more accurate and pro-active monitoring as well as secondary functionalities.

# DIMES – DIGITAL MEASUREMENT SYSTEM

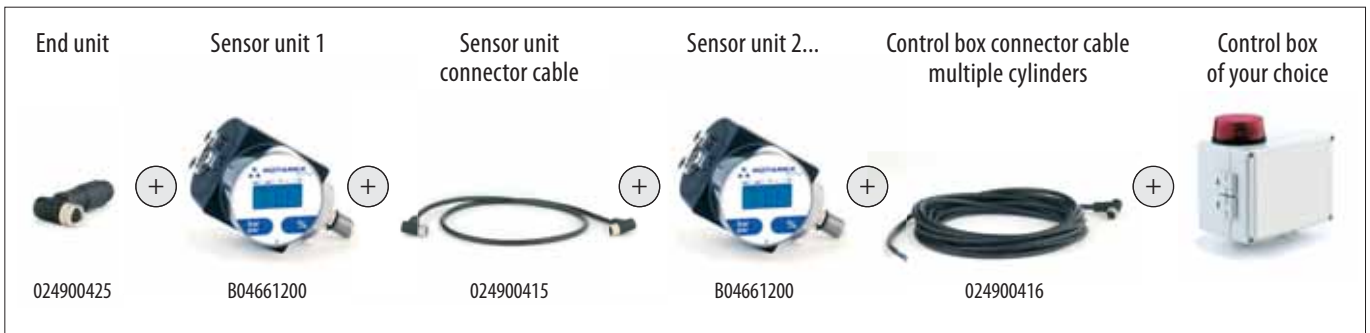
## FLEXIBLE CONFIGURATION OPTIONS

DIMES sensor units are available for single and multi-connection applications – connecting either a single cylinder or multiple cylinders in series. See page 18 for more details

### SINGLE CYLINDER



### MULTIPLE CYLINDERS



## MONITORING SOFTWARE + DATA TRANSMISSION INTERFACE:

Data can be sent to a special control box or computer for monitoring via the data interface cable



Optional cable available to connect with computer (USB)

# SERIES B0480 CYLINDER/VALVE ASSEMBLIES FOR 200/300 BAR INERT GAS

A complete cylinder/valve assembly.

- 80L cylinder for 200 or 300 bar inert gases
- B0480 cylinder valve
- Steel protection cap
- Filled or empty

### KEY FEATURES

- Improves productivity: cylinder/valves arrive pre-assembled
- Compliant with CE norms
- Cylinders can be delivered filled or unfilled
- Cylinders color-coded with green band
- UL-approved value burst discs have a higher flow according to CGA S1.1

SYSTEMS ARE AVAILABLE EITHER EMPTY OR PRE-FILLED FOR 200 OR 300 BAR

- IG 01
- IG 100
- IG 55
- IG 541



### 80L standard product code

### 80L UL-approved product code

### 140L standard product code

### 140L UL-approved product code

	200 bar		300 bar	
<b>Empty</b>	B04807000	B04808000	B04807002	B04808003
<b>Filled IG 01</b>	B04807100	B04808100	B04807102	B04808103
<b>Filled IG 100</b>	B04807200	B04808200	B04807202	B04808203
<b>Filled IG 55</b>	B04807300	B04808300	B04807302	B04808303
<b>Filled IG 541</b>	B04807400	B04808400	B04807402	B04808403

300 bar		300 bar	
	B04808004		B04808002
	B04808104		B04808102
	B04808204		B04808202
	B04808304		B04808302
	B04808404		B04808402

### SPECIFICATIONS

<b>Working pressure</b>	200 bar or 300 bar versions	<b>Max. pressure</b>	300 bar (200 bar) 450 bar (300 bar)	<b>Length with valve</b>	1770 ± 10mm (200 bar) 1850 ± 10mm (300 bar - 80L) 1755 ± 10mm (300 bar - 140L)
<b>Seamless Steel Cylinder</b>	Water volume 80L Water volume 140L	<b>Weight empty</b>	87 kg (80L - 200 bar) 111 kg (80L - 300 bar) 210 kg (140L - 300 bar)	<b>Diameter</b>	267 mm ± 1 (80L) 360 mm ± 1 (140L)
<b>Gas to be filled</b>	IG 01, IG 55, IG 100, IG 541				

# VALVES FOR 200/300 BAR INERT GAS

High Pressure cylinder valves for 200 bar or 300 bar inert gas fire suppression systems.



### KEY FEATURES

- Available in 200 bar and 300 bar versions
- Requires one of 4 actuator device options (see page 8)
- UL-approved value burst discs complies with CGA S1.1
- ATEX-approved versions available on demand
- ATEX versions not for use with electromagnetic actuators



VdS and LPCB approved version available B04801208 (200 bar) or B04802007 (300 bar)



UL-approved

200 bar	B04801218
300 bar	B04802020

### SPECIFICATIONS

<b>Working pressure p max.</b>	200 bar or 300 bar versions	<b>Valve body</b>	Brass	<b>Release device connection</b>	M 42 x 1,5
<b>Temperature range</b>	-20°C to +60°C	<b>Inlet connection</b>	25E EN-629-1	<b>Standard burst disc</b>	300 bar (B04801218) 450 bar (B04802020)
<b>Seat orifice size</b>	12 mm	<b>Outlet connection</b>	W21,8 x 1/4" DIN 477		
<b>Outlet orifice size</b>	12 mm	<b>Dip tube connection</b>	M 16 x 1		

# CONSTANT DISCHARGE PRESSURE REGULATOR

Pressure Regulator to create a constant flow during discharge.



### KEY FEATURES

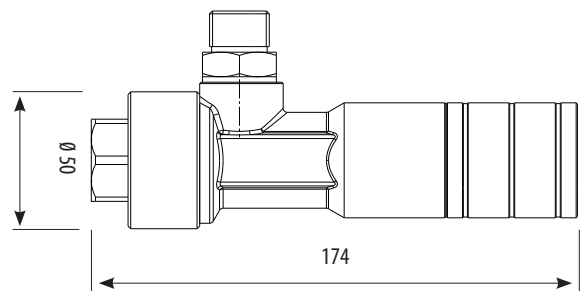
- Reduces discharge pressure to a pre-set pressure (60 bar)
- Attaches to the valve discharge port
- Helps prevent blockage due to line freezing
- Helps reduce pressure blow-outs and venting requirements



B08400003  
VdS and LPCB approved version available



Product code B08401000



### SPECIFICATIONS

<b>Nominal inlet pressure</b>	300 bar	<b>Inlet connection</b>	W21,8 x 1/4" DIN 477	<b>Dynamic outlet pressure</b>	see chart page 10
<b>Max inlet pressure</b>	360 bar	<b>Outlet connection*</b>	W21.8 x 1/4" DIN 477	<b>Static outlet pressure</b>	60 bar
<b>Inlet orifice size</b>	12 mm				

\*Special thread options available on request

1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

## RELEASE DEVICES

Devices to actuate the release of extinguishing agent

For use with Series B0481, B0482 and B0480 Valves



	Manual	Manual / Pneumatic		Pneumatic	
<b>Product code</b>	B04420100	B04420065	B04420116	B04420066	B04420076
<b>Technology</b>	single piston	single piston	double piston	single piston	double piston
<b>Max. pressure</b>	300 bar	300 bar	300 bar	300 bar	300 bar
<b>Valve connection</b>	M 42 x 1,5	M 42 x 1,5	M 42 x 1,5	M 42 x 1,5	M 42 x 1,5
<b>Pneumatic connection</b>	-	G1/8"	G1/8"	G1/8"	G1/8"
<b>Actuation force / pressure</b>	< 150 N	< 150 N / 20 bar	< 150 N / 10 bar	20 bar	10 bar
<b>Body material</b>	Brass	Brass	Brass	Brass	Brass
<b>Height</b>	54	136,5	156,5	50	71
<b>Diameter</b>	Ø50	Ø50	Ø50	Ø50	Ø50

## ELECTROMAGNETIC RELEASE DEVICE

Device to electrically actuate the release of extinguishing agent.

For use with Series B0481, B0482 and B0480 Valves.



### KEY FEATURES

- Most commonly used as a master valve to actuate the system electronically, such as with connection to a smoke or heat detection device
- Electronically actuates the release of extinguishing agent

### WITH BLOCKING DEVICE.

To temporarily unarm the system during maintenance



	With diode		Without diode	
<b>Valve connection</b>	M42 x 1,5	M42 x 1,5	M42 x 1,5	M42 x 1,5
<b>Nominal voltage</b>	24 VDC	24 VDC	24 VDC	24 VDC
<b>Electrical connection</b>	-	-	PG 9	PG 9
<b>Nominal current</b>	0,5 A	0,5 A	0,5 A	0,5 A
<b>Protection Class</b>	IP65	IP65	IP65	IP65
<b>Height</b>	135 mm	135 mm	135 mm	135 mm
<b>Diameter</b>	Ø 65 mm	Ø 65 mm	Ø 80 mm	Ø 80 mm

1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

## RESET TOOL FOR ELECTROMAGNETIC ACTUATOR

Used to reset the electromagnetic actuator piston when putting the system back in active service after system discharge.



<b>Product code</b>	029210064
<b>Connection</b>	M 42 x 1,5
<b>Material</b>	Brass



Screws into the base of B04425XXX electromagnetic release device

## BLEED VALVE

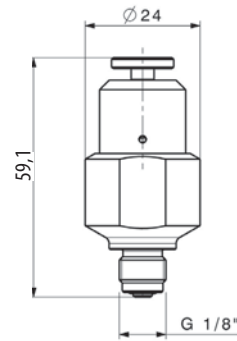
To vent overpressure and prevent false system discharge in the event of a small pressure leak from the cylinders into the pneumatic actuators.



tested



Product code	029730040
Pneumatic connection	G 1/8"
Closing pressure	between 0,7 to 1,5 bar
Flow at p=0.6 bar	6 liters/min



Mounts on all pneumatic release devices

## PILOT HOSES

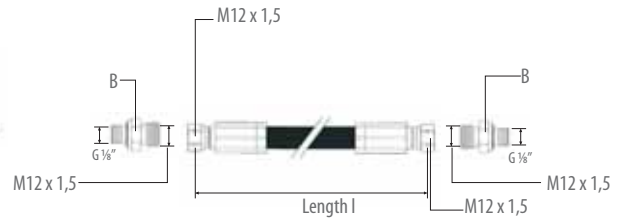
Hose to connect multiple cylinders in a series.

Connects a master valve or a pneumatic actuator with another pneumatic actuator.



Adapter must be ordered separately.  
2 per hose.

### STRAIGHT PILOT HOSE FOR B0480



- Both ends have a straight fitting
- 400 bar working pressure
- With O-rings

	Product code	Length l	Connection	Bending radius
A1	B06920211	400 mm	2 x M12 x 1,5	75 mm
A2	B06920212	700 mm	2 x M12 x 1,5	75 mm
A3	B06920213	500 mm	2 x M12 x 1,5	75 mm
Adapter B	029510006		M12 x 1,5 / G 1/8"	

### SPECIFICATIONS

<b>Working pressure</b>	400 bar	<b>Temperature Range</b>	-40°C to 100°C	<b>Interior diameter</b>	1/8"
<b>Burst pressure</b>	1600 bar	<b>Material</b>	Synthetic rubber oil resistant	<b>Norm</b>	EN 857 2 SC
<b>Torque</b>	20-25 Nm				

1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

## MONITORING SWITCH

Monitors that the actuator is properly in place to actuate the system

Connects to the alarm box

Mandatory according to NFPA 2001 Standard on Clean Agent Extinguishing systems – 2015 edition – (applicable for inert gas system)

### KEY FEATURES

- Compact design: remains in the cylinder diameter
- Easy installation: simply clamps around the valve base
- Retrofit of existing installations possible



Product code	029905200
Description	Mounted on B0480 valve



## RELEASING CIRCUIT DISABLE SWITCH

Wall-mounted disable switch for UL-approved actuator monitor switches

Indoor use only



### KEY FEATURES

- Contains a stainless steel faceplate, green and amber LED indicators, and a switch assembly
- Designed to mount on a standard single gang electrical enclosure or handy box
- Secure key locking mechanism

<b>Product code</b>	024900443
<b>Description</b>	2 3/4" x 4 1/2" x 2" 6,98 cm x 11,43cm x 5,08cm
<b>Contact rating</b>	1 AMP at 40 VDC
<b>Power requirements</b>	24 VDC, 10 mA
<b>Temperature range</b>	-30° C to 60° C



## DIMES – DIGITAL MEASUREMENT SYSTEM

Digital Measurement System for Inert Gas Suppression Systems

### SINGLE-CYLINDER



	SENSOR UNIT WITH DIGITAL DISPLAY	CONNECTOR CABLE TO CONTROL BOX	SINGLE CYLINDER DATA INTERFACE CABLE
<b>Product code</b>	B04661100	029900088	024900419
<b>Max. working pressure</b>	300 bar	-	8-pin to USB
<b>Connection type</b>	8-pin	8-pin	-
<b>Length</b>	-	2 m	2 m

### MULTIPLE-CYLINDERS



	SENSOR UNIT WITH DIGITAL DISPLAY	CONNECTOR CABLE CONNECTS SENSOR UNITS
<b>Product code</b>	B04661200	024900415
<b>Max. working pressure</b>	300 bar	-
<b>Connection type</b>	4-pin	4-pin
<b>Length</b>	-	0,7 m



	END CONNECTION	CONNECTOR CABLE TO CONTROL BOX	DATA INTERFACE CABLE
<b>Product code</b>	024900425	024900416	024900420
<b>Connection type</b>	4-pin	4-pin	4-pin to USB
<b>Length</b>	-	5 m	2 m

## PRESSURE GAUGES – CE/VDS APPROVED

Measures and displays the cylinder pressure for confirmation that the system is properly charged and ready.

Integrated pressure switch.



### KEY FEATURES

- Available with or without integrated pressure switch
- Available in 200 or 300 bar versions.

#### GAUGE WITH PRESSURE SWITCH



#### GAUGE WITHOUT PRESSURE SWITCH - 300 BAR



Product code	029720234	029720083	029720092	029720059
Mounting	Radial	Radial	Radial	Rear
Connection	M 10 x 1	M 10 x 1	M 10 x 1	M 10 x 1
Scale	0-315 bar	0-400 bar	0-360 bar	0-360 bar
Switch pressure	180 bar	270 bar	None	None
Position	NO	NO	-	-
Certifications	CE - Vds	CE - Vds	CE	CE

## PRESSURE GAUGES FOR UL APPROVED SYSTEMS

Measures and displays the cylinder pressure for confirmation that the system is properly charged and ready.  
Integrated pressure switch



### KEY FEATURES

- Integrated pressure switch
- Available in 200 or 300 bar versions.

#### 200 BAR / 2900 PSI



#### 300 BAR / 4350 PSI



	IG 100	IG 55	IG 01	IG 541	IG 100	IG 55	IG 01	IG 541
Product code	029720219	029720220	029720221	029720222	029720215	029720216	029720217	029720218
Mounting	Radial	Radial	Radial	Radial	Radial	Radial	Radial	Radial
Connection	M10 x 1	M10 x 1	M10 x 1	M10 x 1	M10 x 1	M10 x 1	M10 x 1	M10 x 1
Scale	0-4351 psi	0-4351 psi	0-4351 psi	0-4351 psi	0-6100 psi	0-6100 psi	0-6100 psi	0-6100 psi
Switch pressure	2455 psi	2402 psi	2357 psi	2415 psi	3743 psi	3765 psi	3611 psi	3693 psi
Position	NO	NO	NO	NO	NO	NO	NO	NO
Poles	2 x 3	2 x 3	2 x 3	2 x 3	2 x 3	2 x 3	2 x 3	2 x 3

1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

2 According to the Pressure Equipment Directive (97/23/EC)

# DISCHARGE HOSES

Hose to connect the cylinder valve to the manifold in fixed fire suppression systems.

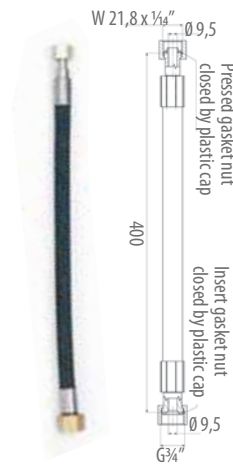


### DN 16

For 140 L cylinders

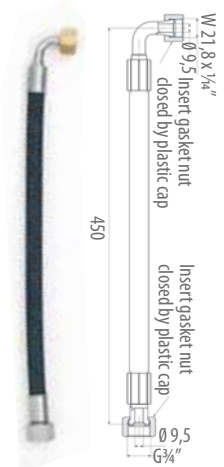


### DN 12 STRAIGHT



### DN 12 90° ELBOW

When no regulator is used



Product code

B06920225

B06920224

B06920226

## SPECIFICATIONS

<b>Working pressure</b>	350 bar for 16DN 380 bar for 12DN	<b>Material</b>	Synthetic rubber oil resistant	<b>To manifold connection (outlet)</b>	G $\frac{3}{4}$ "
<b>Burst pressure</b>	1400 bar for 16DN 1520 bar for 12DN	<b>Norm</b>	EN 853 2 SN	<b>Bending radius</b>	180 mm for DN16 130 mm for DN12
<b>Temperature range</b>	-40°C to 100°C	<b>Valve connection (inlet)</b>	W 21,8 x $\frac{1}{4}$ " DIN 477	<b>Length</b>	400 mm for DN16 & DN12 straight 450 mm for DN12 Elbow
<b>Torque</b>	38-42 Nm				

## CHECK VALVE

Prevents backflow into the cylinder.

Required for each hose attachment to the discharge manifold.



<b>Product code</b>	B04600008
<b>Max. working pressure</b>	360 bar
<b>Test pressure</b>	150 bar
<b>Gases</b>	IG 01, IG 55, IG 100, IG 541
<b>Material</b>	Brass
<b>Hose connection</b>	G $\frac{3}{4}$ "
<b>Manifold connection</b>	R1"

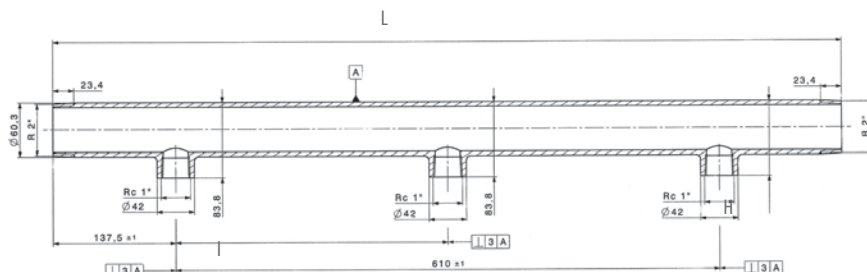
1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

## MANIFOLD FOR INERT GAS – 1 ROW

Manifolds to connect from 2 to 5 cylinders (80L cylinders only). Single row configuration.



Max working pressure: 100 bar  
Not to be used without pressure regulator



Inlets: Rc 1"	Product code	Length L	Length l	Height H
2 cylinders	B05800013	580 mm	305 mm	83,8 mm
3 cylinders	B05800014	885 mm	305 mm	83,8 mm
5 cylinders	B05800015	1495 mm	305 mm	83,8 mm

### SPECIFICATIONS

<b>Working pressure</b>	Max 100 bar	<b>Gases</b>	IG 01, IG 55, IG 100, IG 541	<b>Connection</b>	Rc1"
<b>Test pressure</b>	150 bar	<b>Surface</b>	Hot dip galvanized steel	<b>Outlet Connection</b>	R2"

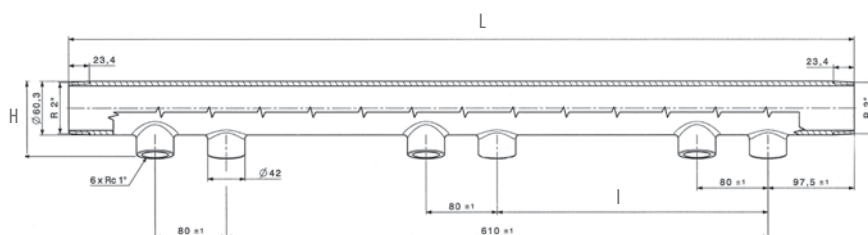
## MANIFOLD FOR INERT GAS – 2 ROWS

Manifolds to connect from 4 to 10 cylinders at 100 bar pressure. Double row configuration (80L cylinders only).

Only for use with valves with pressure regulators.



Max working pressure: 100 bar  
Not to be used without pressure regulator



Inlets: Rc 1"	Product code	Length L	Length l	Height H
4 cylinders	B05800016	580 mm	305 mm	83,8 mm
6 cylinders	B05800017	885 mm	305 mm	83,8 mm
10 cylinders	B05800018	1495 mm	305 mm	83,8 mm

### SPECIFICATIONS

<b>Working pressure</b>	Max 100 bar	<b>Gases</b>	IG 01, IG 55, IG 100, IG 541	<b>Connection</b>	Rc1"
<b>Test pressure</b>	150 bar	<b>Surface</b>	Hot dip galvanized steel	<b>Outlet Connection</b>	R2"

2 According to the Pressure Equipment Directive (97/23/EC)

## MANIFOLD CONNECTORS AND CAPS

- Fittings to connect or seal Firetec manifolds.
- Respects standards ISO 49 and EN 10242.
- Red dot confirms testing up to 300 bar.

### MANIFOLDS CONNECTOR



### END CAP



Product code	026300500	023400100
Working pressure	100 bar	100 bar
Test pressure	300 bar	300 bar
Surface	Hot dip galvanized steel	Hot dip galvanized steel
Connection	G2"	G2"

## PRESSURE GAUGE FOR MANIFOLD

Optional pressure gauge to monitor discharge pressure. Mandatory when using directional valves - multiple zone protection.

With glycerine filling.



Product code	028200231
Diameter	80 mm
Connection	G½ - 14
Gauge range	0 - 400 bar
Quality Class	1.6



## PRESSURE SAFETY VALVE FOR MANIFOLD

Safety device to prevent over pressure during discharge.



Product code	029730037	029730042
Relief pressure	66 bar at 20°C 957 psi at 68°F	66 bar at 20°C 957 psi at 68°F
Connection	G ½"	G ½"

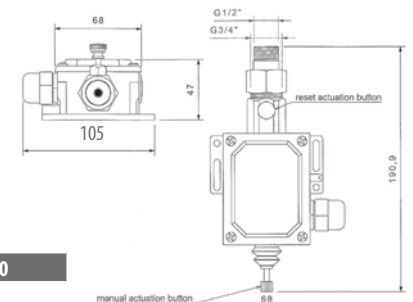
## PRESSURE & FLOW DETECTOR SWITCH

Used to send a signal when the system is discharging.

Pressure Activated.

### KEY FEATURES

- Sends a signal to a control panel or alarm box at the earliest phase of discharge
- Actuated at 2 bar pressure
- Flexible Voltage/Amp power source



Product code	028250050
Opening Pressure	2 bar
Design Pressure	200 bar
Test pressure	300 bar
Connection	G ½"
Power source	400 VAC / 3A or 24VDC / 10 A
Protection	IP65

2 According to the Pressure Equipment Directive (97/23/EC)

## ELECTRIC DIRECTIONAL VALVE

Valve and actuator assembly to isolate separate protection zones from the same cylinder rack.

Includes valve + bracket + motor

Permits discharge only in the zone with the fire.



### KEY FEATURES

- Available in Carbon Steel or Stainless Steel versions
- Choice of 5 diameters: 1"/1,5"/2"/2,5"/3"
- 2-way ball valve
- User-defined installation position and flow-direction
- Output of 2 limit switches
- Electronic over-torque protection
- LED status indication
- Plugs with ISO440 and C192
- IP 65



Product code - Carbon steel	B05511000	B05511100	B05511200	B05511300	B05511400
Product code - Stainless Steel	B05511001	B05511101	B05511201	B05511301	B05511401
Size	1"	1,5"	2"	2,5"	3"
DN	25	40	50	65	80
Unit nominal pressure (@20°C)	300 bar	300 bar	300 bar	300 bar	300 bar
Voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
Consumption at max. torque	914 mA/22W	1491 mA/36W	1491 mA/36W	1428 mA/34W	1428 mA/34W
Operating time 90°	12 sec	12 sec	12 sec	16 sec	16 sec
Duty rate	75%	75%	75%	75%	75%
Temperature range carbon steel	-20° C to 100° C	-20° C to 100° C	-20° C to 100° C	-20° C to 100° C	-20° C to 100° C
Temperature range stainless steel	-30° C to 100° C	-30° C to 100° C	-30° C to 100° C	-30° C to 100° C	-30° C to 100° C
Weight	7,8 kg	11,8 kg	13 kg	39,5 kg	49,5 kg
Seal material	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR
Length	207 mm	196mm	200mm	225 mm	204 mm
Height	292 mm	323 mm	329 mm	440,5 mm	456 mm
Width	110 mm	116 mm	122 mm	187 mm	241 mm
Pipe Connector length	168 mm	167 mm	175 mm	212 mm	239 mm

2 According to the Pressure Equipment Directive (97/23/EC)

## PNEUMATIC DIRECTIONAL VALVE

Pneumatic or manual actuation

Valve and actuator assembly to isolate separate protection zones from the same cylinder rack

Includes valve + bracket + pneumatic actuator + manual wrench

Permits discharge only in the zone with the fire



### KEY FEATURES

- Choice of 5 diameters: 1"/1,5"/2"/2,5"/3"
- 2-way ball valve
- User-defined installation position and flow-direction
- Stainless steel ball valve with steel housing
- Status indication
- IP 67



Product code - Stainless steel	B05511050	B05511150	B05511250	B05511350	B05511450
Size	1"	1,5"	2"	2,5"	3"
DN	25	40	50	65	80
Unit nominal pressure (@20°C)	140 bar	140 bar	140 bar	140 bar	140 bar
Actuation pressure	8 bar +/- 2 bar	8 bar +/- 2 bar	8 bar +/- 2 bar	8 bar +/- 2 bar	8 bar +/- 2 bar
Actuation medium	N <sub>2</sub>	N <sub>2</sub>	N <sub>2</sub>	N <sub>2</sub>	N <sub>2</sub>
Pilot pressure	6-10 bar	6-10 bar	6-10 bar	6-10 bar	6-10 bar
Temperature range stainless steel	-20° C to 50° C	-20° C to 50° C	-20° C to 50° C	-20° C to 50° C	-20° C to 50° C
Weight	7 kg	12 kg	14 kg	70 kg	88 kg
Seal material	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR
Length	209 mm	221mm	221mm	298 mm	298 mm
Height	371,5 mm	433 mm	447 mm	583,5 mm	600 mm
Width	110,5 mm	120 mm	120 mm	137 mm	137 mm
Pipe Connector length	113 mm	130 mm	140 mm	220 mm	226 mm

2 According to the Pressure Equipment Directive (97/23/EC)

## CONTROL PANEL FOR PNEUMATIC DIRECTIONAL VALVES

Wall-mounted switching panel to control directional valve position. Sends a signal to open the directional valve in the zone with a fire



### KEY FEATURES

- Available in multiple versions from 2 to 15 zone protection
- For UL, tamper evident seal 028000358 must be used to seal the electrical control box after installation (to be ordered separately)

Protection Zones	Product code
2	B055200200
3	B055200300
4	B055200400
5	B055200500
6	B055200600
7	B055200700
8	B055200800
9	B055200900
10	B055201000
11	B055201100
12	B055201200
13	B055201300
14	B055201400
15	B055201500



### SPECIFICATIONS

<b>Connection thread</b>	G 1/4"	<b>Outlet operating pressure</b>	8 bar	<b>Inlet connection for hi-flex hose</b>	1/4"
<b>Maximum inlet pressure</b>	207 bar	<b>Operating temperature</b>	-34°C to 60°C	<b>Nominal voltage</b>	24 VDC

## BLOCKING DEVICE FOR PNEUMATIC DIRECTIONAL VALVES

To avoid unintentional operation of directional valves during maintenance.

Mandatory for VdS installations

VdS

### KEY FEATURES

- Easily installs between control panel and directional valve
- Can be locked with a padlock to prevent unintentional
- Two easy-to-read switch positions (open or closed)
- One for each directional valve

<b>Product code</b>	B05512000
<b>Max operating pressure</b>	10 bar
<b>Material</b>	24HA
<b>Outlet thread</b>	G 1/2"
<b>Voltage</b>	G 1/4" / DN6 24 VDC



With padlock

## DISCHARGE NOZZLES | PRE-ASSEMBLED

Pre-bored and fully assembled discharge nozzles for CO<sub>2</sub> systems

For faster and easier installation



### KEY FEATURES

- Max. working pressure 300 bar
- Material: brass
- Special orifice diameters available on request



Size of thread	Product code	Orifice Diameter	Product code	Orifice Diameter
½" BSP	B04611100	3 mm	B04611108	3,5 mm
	B04611101	4 mm	B04611109	4,5 mm
	B04611102	5 mm	B04611110	5,5 mm
	B04611103	6 mm	B04611111	6,5 mm
	B04611104	7 mm	B04611112	7,5 mm
	B04611105	8 mm	B04611113	8,5 mm
¾" BSP	B04611106	9 mm	B04611114	9,5 mm
	B04611200	7 mm	B04611208	7,5 mm
	B04611201	8 mm	B04611209	8,5 mm
	B04611202	9 mm	B04611210	9,5 mm
	B04611203	10 mm	B04611211	10,5 mm
	B04611204	11 mm	B04611212	11,5 mm
1" BSP	B04611205	12 mm	B04611213	12,5 mm
	B04611206	13 mm	B04611214	13,5 mm
	B04611300	10 mm	B04611309	10,5 mm
	B04611301	11 mm	B04611310	11,5 mm
	B04611302	12 mm	B04611311	12,5 mm
	B04611303	13 mm	B04611312	13,5 mm
1 ½" BSP	B04611304	14 mm	B04611313	14,5 mm
	B04611305	15 mm	B04611314	15,5 mm
	B04611306	16 mm	B04611315	16,5 mm
	B04611307	17 mm	B04611316	17,5 mm
	B04611400	15 mm	B04611412	15,5 mm
	B04611401	16 mm	B04611413	16,5 mm
	B04611402	17 mm	B04611414	17,5 mm
	B04611403	18 mm	B04611415	18,5 mm
	B04611404	19 mm	B04611416	19,5 mm
	B04611405	20 mm	B04611417	20,5 mm
B04611406	21 mm	B04611418	21,5 mm	
B04611407	22 mm	B04611419	22,5 mm	
B04611408	23 mm	B04611420	23,5 mm	
B04611409	24 mm	B04611421	24,5 mm	
B04611410	25 mm	B04611422	25,5 mm	

## DISCHARGE NOZZLES | SELF-ASSEMBLY KIT

Discharge nozzles where you drill the orifice to your required orifice diameter and assemble yourself.

Easier to stock. A more economical alternative.

### KEY FEATURES

- Max. working pressure 300 bar
- Material: brass



Size of thread	Product code	Orifice Diameter	Maximum bore diameter
½" BSP	B04610100	3	up to 9,5 mm
¾" BSP	B04610200	7	up to 13,5 mm
1" BSP	B04610300	10	up to 17,5 mm
1 ½" BSP	B04610400	15	up to 25,5 mm

## 80 L CYLINDER MOUNTING BRACKETS - SINGLE ROW

Wall mounting rail, cylinder clamps and end caps parts to mount 80L cylinders to the wall.

### KEY FEATURES

- Galvanized steel components for solid support and a long service lifetime
- Wall mounting rail available in multiple lengths to accommodate between 1 – 5 cylinders
- Multiple brackets may be used for more than 5 cylinders



1

### WALL MOUNTING RAIL

Input	Length L	Product code
1 cylinder	400 mm	024900311
2 cylinders	645 mm	024900312
3 cylinders	940 mm	024900313
4 cylinders	1240 mm	024900314
5 cylinders	1535 mm	024900315

2

### CLAMP FOR CYLINDER

Diameter	Product code
263-276 mm	024900321

3

### END CAP FOR MOUNTING RAIL AND BRACKET

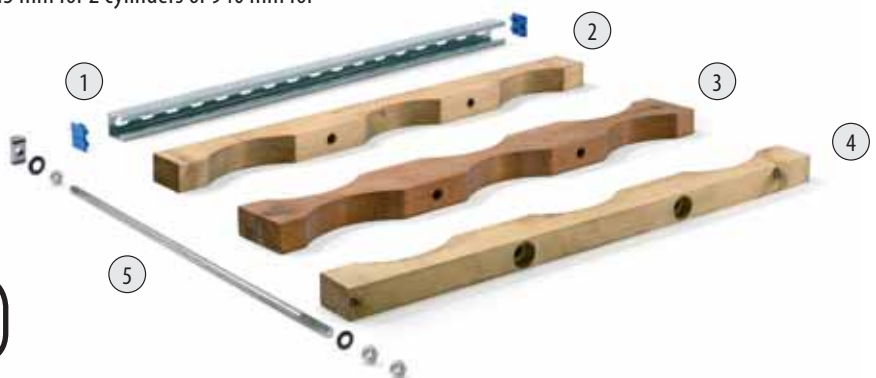
Product code
024900322

## 80L CYLINDER MOUNTING BRACKETS - DOUBLE ROW

Brackets to secure a double-row of 80L cylinders

### KEY FEATURES

- Available in two sizes for 2 or 3 cylinders
- Bracket length: 645 mm for 2 cylinders or 940 mm for 3 cylinders



Order 1 bolt & nuts kit for 2 - cylinder configurations and 2 kits for 3 cylinders.

1

### WALL MOUNTING RAIL

2

### RAIL BRACKET

3

### MIDDLE BRACKET

4

### OUTER BRACKET

5

### BOLTS & NUTS KIT

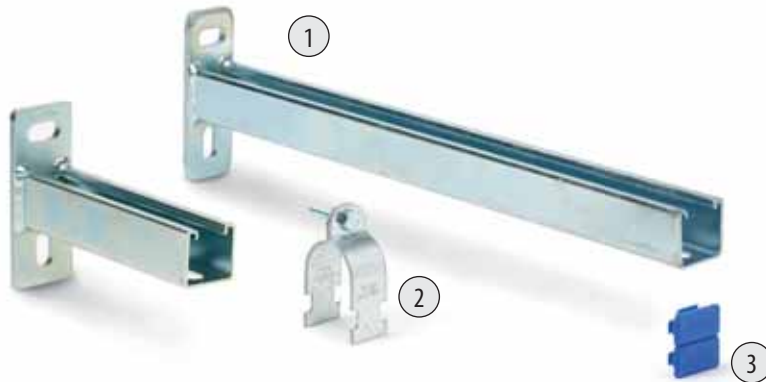
Product code		Product code		Product code		Product code		Product code	
2 cylinders	024900312	2 cylinders	024900323	2 cylinders	024900324	2 cylinders	024900325	Mounting kit	024900329
3 cylinders	024900313	3 cylinders	024900326	3 cylinders	024900327	3 cylinders	024900328		

# MANIFOLD MOUNTING BRACKETS

System of brackets, clamps and end caps to mount manifolds to the wall.

### KEY FEATURES

- Galvanized steel components for solid support and a long service lifetime
- Wall mounting rail available in 305 mm for single row cylinder configurations, or 610 mm for double-row configurations.
- Manifold clamps available in 2" diameters.



1  
**BRACKET FOR MANIFOLD**

	Length A	Product code
<b>Single row</b>	205 mm	B05805000
<b>Double row</b>	505 mm	B05805001

2  
**CLAMP FOR MANIFOLD**

Diameter	Product code
2"	B05805004

3  
**END CAP FOR MOUNTING RAIL AND BRACKET**

Product code
024900322

# LABELS FOR UL-APPROVED SYSTEMS

UL-approved cylinder labels for 80L cylinders

A mandatory part of a complete UL-approved system.

Different labels for each cylinder size, pressure and gas type



Not included with cylinder / valve assemblies. Must be ordered separately

80L

140L



Product Codes	200 bar	300 bar	300 bar
<b>IG 01</b>	028000307	028000311	028000321
<b>IG 100</b>	028000308	028000312	028000322
<b>IG 55</b>	028000309	028000313	028000323
<b>IG 541</b>	028000310	028000314	028000324

## B0439 CYLINDER/VALVE ASSEMBLIES

A complete cylinder/valve assembly. Includes:

- π - marked steel cylinder
- B0439 cylinder valve (ATEX)
- Metallic protection cap

Often used as a pilot cylinder for liquid based systems or for smaller installations using a single cylinder.

### KEY FEATURES

- Improves productivity: cylinder/valves arrive pre-assembled and ready-to-fill
- Compliant with TPED directive
- Cylinders are standardly delivered unfilled. Filled on request.
- Color coded with green band
- Valve specification on p.29
- ATEX - approved valve

π



Product code unfilled	B04397001
Product code filled	On request
Working pressure	200 bar
Length w/ cap	661 mm
Diameter	Ø 105 mm
Cylinder volume	2,7 L
Operating temperature	-20°C to 60°C

## SERIES B0439 VALVES FOR 200 BAR INERT GAS

Solenoid-actuated cylinder valve for 200-bar Inert Gas installations.

Often used as a pilot cylinder for liquid based systems or for smaller installations using a single cylinder.

- Available in standard or ATEX versions
- Port configuration for gauge only or gauge+safety valve
- Cylinder / valve assemblies also available

Π



GAUGE



GAUGE+ SAFETY VALVE



ATEX

Product code	B04390306	B04390350	B04390316
Max working Pressure	200 bar	200 bar	200 bar
Orifice Size	7 mm	7 mm	7 mm
Inlet Connection	25E EN-629-1	25E EN-629-1	25E EN-629-1
Outlet Connection	W21,8 x 1/4" DIN 477	W21,8 x 1/4" DIN 477	W21,8 x 1/4" DIN 477
Dip tube connection	M10 x 0,75	M10 x 0,75	M10 x 0,75
Operating voltage	24 V DC	24 V DC	24 V DC
Power consumption	10 watt	10 watt	11,4 watt
Burst-disc pressure	-	270 bar	-
Valve body	Brass	Brass	Brass
Type	Total discharge	Total discharge	Total discharge

# A FULL LINE OF GAS CONTROL SOLUTIONS



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**EQUIPMENT**

**FIRETEC**

**AUTOMOTIVE**

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**AUTOMOTIVE VALVES  
& REGULATORS**



**WATER CARBONATION**



**LPG TANK VALVES  
& REGULATORS**



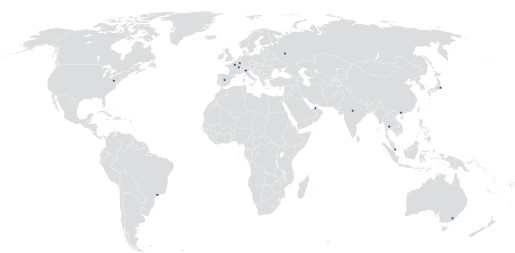
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