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LAREIC	DUJO	

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.















SPECIAL APPLICATIONS\_

- Cylinder / valve assemblies\_

- Series B0439 valves\_

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

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

<sup>\*</sup>Marked products are part of a UL / FM listed system when configured in accordance with NFPA 2001, UL 2127 and FM 5600

# 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 interchangable
- 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**



# **ACTUATION DEVICES & ACCESSORIES**





# **DISCHARGE HOSES, MANIFOLDS, NOZZLES & ACCESSORIES**





# **MOUNTING BRACKETS**



# **SPECIAL APPLICATIONS**



# **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.





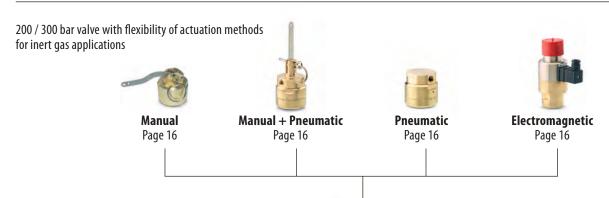




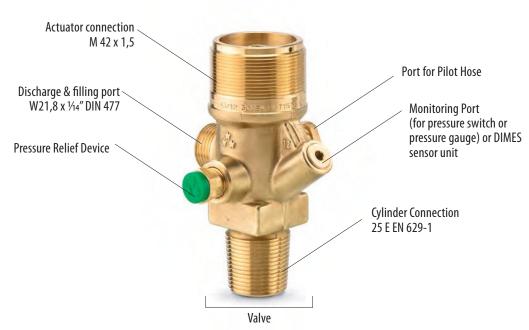




### **SERIES B0480**



### **CAN BE USED WITH A RANGE OF DIFFERENT ACTUATORS**



**SPECIFICATIONS** 

200 bar or 300 bar versions available

Valve body Brass

Seat orifice size 12 mm

Outlet orifice size 12 mm

**Temperature range**  $-20^{\circ}\text{C to } +60^{\circ}\text{C}$ 

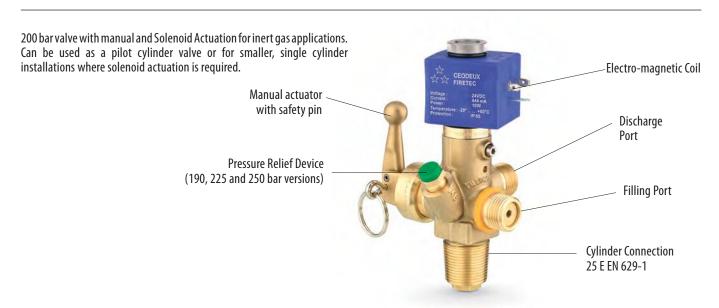


# **VALVE TECHNOLOGIES** (continued)



Multiple actuators can be used together in a series.

### **SERIES B0439**



### **SPECIFICATIONS**

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

# PRESSURE REGULATOR TECHNOLOGY

Rotarex Pressure Regulators modulate the discharge pressure to a constant 40-60 bar which still delivers the design concentration within 60 or 120 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, refill, and reconnect. No reconditioning necessary
- Functional tests are possible even while the system is armed



### Dynamic pressure comparison Unregulated vs regulated discharge 350 300 Pressure at the manifold (bar) 250 200 150 100 50 0 0 10 20 30 40 50 60 Time (s) Unregulated discharge (explosive pressure) Rotarex constant regulator

### **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**

IG01	IG100	IG55	IG541
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	IG100 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 IG541, enable to and cover the e	

### CERTIFICATION

Firetec system components are approved and certified compliant with recognized international norms. The UL and FM logos indicate that associated components are part of a UL/FM listed system when configured in accordance with NFPA 2001, UL 2127 and FM 5600.

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,
- $\hbox{- Outline of the optimal installation design.}\\$





# 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 IG541.

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.





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



# **DIMES – DIGITAL MEASUREMENT SYSTEM**

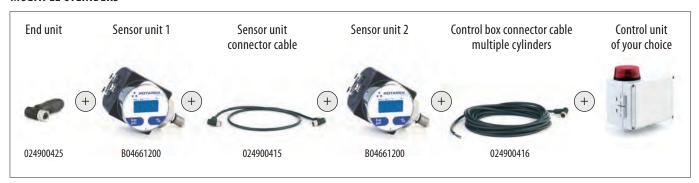
### **FLEXIBLE CONFIGURATION OPTIONS**

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**



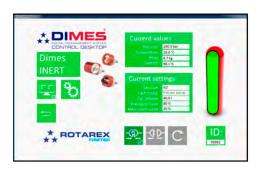
### **MULTIPLE CYLINDERS**



### 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.

- 80-140L cylinder for 200 or 300 bar inert gases
- B0480 cylinder valve
- Steel protection cap
- Filled or empty







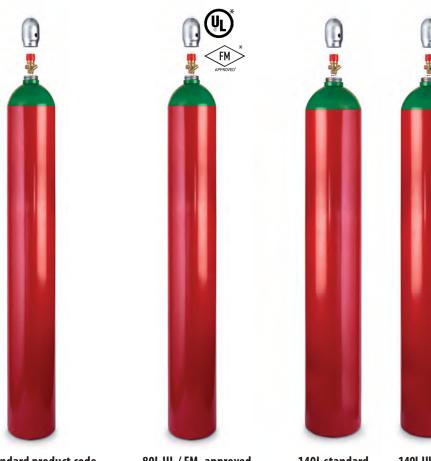
For FM / UL: label included for filled cylinders only. Label needs to be ordered separately for unfilled FM / UL cylinder (p.28)

### **KEY FEATURES**

- Improves productivity: cylinder/valves arrivé pre-assembled
- Compliant with CE norms
- Cylinders can be delivered filled or unfilled
- Cylinders color-coded with green band
- UL / FM 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

- IG01
- IG100
- IG55
- IG541



80L standa	rd proc	luct	code

80L UL / FM- approved product code

140L standard product code

140L UL/FM-approved product code

	200 bar	300 bar	200 bar	300 bar	300 bar	300 bar
Empty	B04807000	B04808000	B04807002	B04808003	B04808004	B04808002
Filled IG 01	B04807100	B04808100	B04807102	B04808103	B04808104	B04808102
Filled IG100	B04807200	B04808200	B04807202	B04808203	B04808204	B04808202
Filled IG 55	B04807300	B04808300	B04807302	B04808303	B04808304	B04808302
Filled IG541	B04807400	B04808400	B04807402	B04808403	B04808404	B04808402

### **SPECIFICATIONS**

Seamless Steel	200 bar or 300 bar versions Water volume 80L	Max. pressure	300 bar (200 bar) 450 bar (300 bar)	Length with valve	1770 ± 10mm (200 bar) 1850 ± 10mm (300 bar - 80L) 1755 ± 10mm (300 bar - 140L)
Cylinder	Water volume 140L	Weight empty	87 kg (80L - 200 bar)	Diameter	267 mm ± 1 (80L)
Gas to be filled	IG01, IG55, IG100, IG541		111 kg (80L - 300 bar) 210 kg (140L - 300 bar)		$360 \text{ mm} \pm 1 (140 \text{L})$



# **VALVES FOR 200/300 BAR INERT GAS**

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







n request







### **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**

Working pressure p max.	200 bar or 300 bar versions
Temperature range	-20°C to +60°C
Seat orifice size	12 mm
Outlet orifice size	12 mm

Valve body	Brass
Inlet connection	25E EN-629-1
Outlet connection	W21,8 x 1/14" DIN 477
Dip tube connection	M 16 x 1

 Release device connection
 M 42 x 1,5

 Standard burst disc
 300 bar (B04801218) 450 bar (B04802020)

# **CONSTANT DISCHARGE PRESSURE REGULATOR**

Pressure Regulator to create a constant flow during discharge.

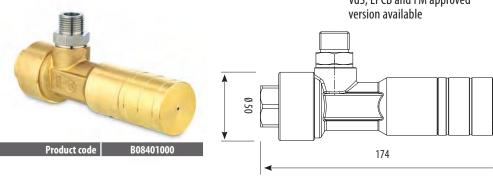


### **KEY FEATURES**

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



B08400003 VdS, LPCB and FM approved version available



### **SPECIFICATIONS**

Nominal inlet pressure	300 bar
Max inlet pressure	360 bar
Inlet orifice size	12 mm

\*Special thread options available on request

Inlet connection	W21,8 x 1/14" DIN 477
Outlet connection*	W21.8 x 1/14" DIN 477

Dynamic outlet pressure see chart page 10

Static outlet pressure 60 bar

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



# **RELEASE DEVICES**

Devices to actuate the release of extinguishing agent.

For use with Series B0480







	Manual	Manual/I	Pneumatic	Pneu	matic
Product code	B04420100	B04420065	B04420116	B04420066	B04420076
Technology	single piston	single piston	double piston	single piston	double piston
Max. pressure	300 bar	300 bar	300 bar	300 bar	300 bar
Valve connection	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
Pneumatic connection	-	G1⁄8″	G1⁄8″	G%"	G%"
Actuation force / pressure	< 150 N	< 150 N / 20 bar	< 150 N / 10 bar	20 bar	10 bar
Body material	Brass	Brass	Brass	Brass	Brass
Height	54	136,5	156,5	50	71
Diameter	Ø50	Ø50	Ø50	Ø50	Ø50

# **ELECTROMAGNETIC RELEASE DEVICE**

Device to electrically actuate the release of extinguishing agent.

For use with Series 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

- UL / FM version delivered with 1 meter cable



To temporarily unarm the system during maintenance



B04425109

B04425129

VdS

Valve connection **Nominal voltag Electrical connection Nominal curren Protection Class** Heigh Diamete

	With diode	Without diode	With diode	Without diode
on	M42 x 1,5	M42 x 1,5	M42 x 1,5	M42 x 1,5
ge	24 VDČ	24 VDĆ	24 VDC	24 VDĆ
on	-	-	PG 9	PG 9
nt	0,5 A	0,5 A	0,5 A	0,5 A
ass	IP65	IP65	IP65	IP65
ht	135 mm	135 mm	135 mm	135 mm
ter	Ø 65 mm	Ø 65 mm	Ø 80 mm	Ø 80 mm

B04425132

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

# RESET TOOL FOR ELECTROMAGNETIC ACTUATOR

B04425146

B04425131 VdS

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



Product code	029210064
Connection	M 42 x 1,5
Material	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.

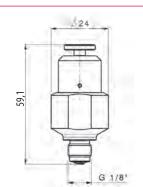








Product code 029730040		
Pneumatic connection	G 1/8"	
Closing pressure	between 0,7 to 1,5 bar	
Flow at p=0.6 bar	6 liters/min	





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 an other pneumatic actuator.

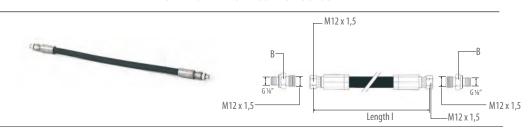




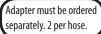




### **STRAIGHT PILOT HOSE FOR B0480**







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

	Product code	Length I	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 / G1/8	

### **SPECIFICATIONS**

Working pressure	400 bar	Temperature Range	-40°C to 100°C	Interior diameter	1/8"
Burst pressure	1600 bar	Makadal		N	EN 057.2.66
Torque	20-25 Nm	Material	Synthetic rubber oil resistant	Norm	EN 857 2 SC

<sup>1</sup> 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	029905206
Description	Mounted on B0480 valve	Mounted on B0480 valve
Cable	No	1,3m



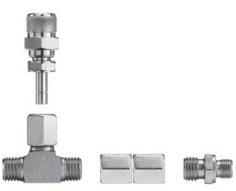


# **PILOT LINE VENTING TOOL**

Used to vent pressure in the pilot line

### **KEY FEATURES**

- All items need to be ordered separately



Product code	02900001	026300335	026300334	026600001
Description	Venting tool	Fitting straight	Fitting straight	Fitting tee
Connection	-	G¼" to M12 x 1,5	2 x M12 x 1,5	Ø6mm
Material	Inox	Galvanized steel	Galvanized steel	Galvanized steel

# **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
Product code	B04661100	029900088	024900419
Max. working pressure	300 bar	-	8-pin to USB
Connection type	8-pin	8-pin	-
Length	-	2 m	2 m

### **MULTIPLE-CYLINDERS**





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





	END CONNECTION	CONNECTOR CABLE TO CONTROL BOX	DATA INTERFACE CABLE
Product code	024900425	024900416	024900420
Connection type	4-pin	4-pin	4-pin to USB
Length	-	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			
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 / FM 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



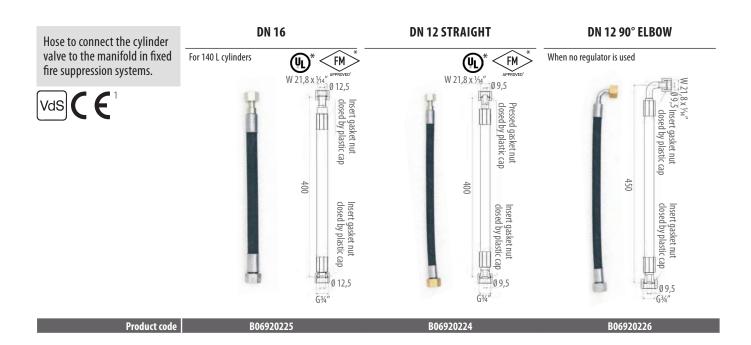


	IG100	IG55	IG01	IG541	IG100	IG55	IG01	IG541
Product code	029720219	029720220	029720221	029720222	029720215	029720216	029720217	029720218
Mounting	Radial							
Connection	M10 x 1							
Scale	0-4351 psi	0-4351 psi	0-4351 psi	0-4351 psi	0-6100 psi	0-6100 psi	0-6100 psi	0-6100 psi
Switch pressure	2455 psi	2402 psi	2357 psi	2415 psi	3743 psi	3765 psi	3611 psi	3693 psi
Position	NO							
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**



### **SPECIFICATIONS**

Working pressure	380 bar for 12DN	Material	Synthetic rubber oil resistant	To manifold connection (outlet)	G¾"
·	1400 bar for 16DN 1520 bar for 12DN	Norm	EN 853 2 SN	Bending radius	180 mm for DN16 130 mm for DN12
Temperature range	-40°C to 100°C	W.I	W 24 0 1/ "BIN 477	Length	400 mm for DN16 & DN12
Torque	38-42 Nm	Valve connection (inlet)	W 21,8 x 1/14" DIN 477		straight 450 mm for DN12 Elbow

# **CHECK VALVE**

Prevents backflow into the cylinder.

Required for each hose attachment to the discharge manifold.







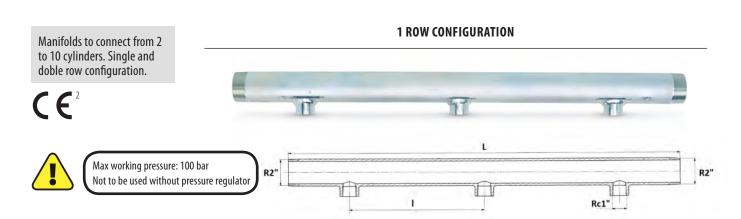




Product code	B04600008
Max. working pressure	360 bar
Test pressure	150 bar
Gases	IG01, IG55, IG100, IG541
Material	Brass
Hose connection	G¾"
Manifold connection	R1"



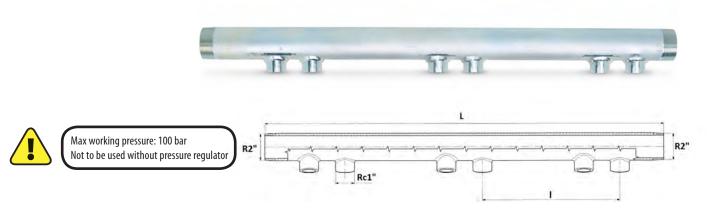
# **MANIFOLD FOR INERT GAS - DN 50**



FOR 80L CYLINDER		Product code	Length L	Length I
	2 cylinders	B05800013	580 mm	305 mm
	3 cylinders	B05800014	885 mm	305mm
	5 cylinders	B05800015	1495 mm	305 mm

FOR 140L CYLINDER		Product code	Length L	Length I
	2 cylinders	B05800020	790 mm	410 mm
	3 cylinders	B05800021	1200 mm	410 mm
	5 cylinders	B05800022	2046 mm	410 mm

### **2 ROWS CONFIGURATION**



FOR 80L CYLINDER		Product code	Length L	Length l
	4 cylinders	B05800016	580 mm	305 mm
	6 cylinders	B05800017	885 mm	305 mm
	10 cylinders	B05800018	1495 mm	305 mm
FOR 140L CYLINDER		Product code	Length L	Length I
	4 cylinders	B05800023	790 mm	410 mm
	6 cylinders	B05800024	1200 mm	410 mm
	10 cylinders	B05800025	2046 mm	410 mm

### **SPECIFICATIONS**

Working pressure	Max 100 bar	Gases	IG01, IG55, IG100, IG541	Connection	Rc1"
Test pressure	150 bar	Surface	Hot dip galvanized steel	Outlet Connection	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.







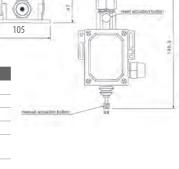


## **KEY FEATURES**

- 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 1/2"
Power source	400 VAC / 3A or 24 VDC / 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 67



Can only operate without pressure load



Product code - Carbon steel	B05511000	B05511100	B05511200	B05511300	B05511400	B05511500
Product code - Stainless Steel	B05511001	B05511101	B05511201	B05511301	B05511401	B05511501
Size	1″	1,5"	2"	2,5"	3"	4" (flange)
DN	25	40	50	65	80	100
Unit nominal pressure (@20°C)	300 bar	300 bar				
Voltage	24 V DC	24 V DC				
Consumption at max. torque	800 mA/19W	1200 mA/28W	1200 mA/28W	1210 mA/29W	1210 mA/29W	1780 mA/43W
Operating time 90°	10 sec	10 sec	10 sec	14 sec	14 sec	34 sec
Duty rate	75%	75%	75%	75%	75%	75%
Temperature range carbon steel	-20° C to 100° C	-20° C to 100° C				
Temperature range stainless steel	-30° C to 100° C	-30° C to 100° C				
Weight	8 kg	11,9 kg	13,1 kg	38,9 kg	48,9 kg	75,2 kg
Seal material	POM (greased), NBR	POM (greased), NBR				
Length	207 mm	196mm	200mm	225 mm	204 mm	258 mm
Height	292 mm	323 mm	329 mm	440,5 mm	456 mm	555 mm
Width	110 mm	116 mm	122 mm	187 mm	241 mm	200 mm
Pipe Connector length	168 mm	167 mm	175 mm	212 mm	239 mm	200 mm
				2 / 4	anudina da dha Dunanuun Faui	

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 carbon steel housing
- Status indication
- IP 67

















Product code - Carbon 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				
Actuation pressure	8 bar +/- 2 bar				
Actuation medium	$N_2$	$N_2$	$N_2$	$N_2$	$N_2$
Pilot pressure	6-10 bar				
Temperature range stainless steel	-20° C to 50° C				
Weight	7 kg	12 kg	14 kg	70 kg	88 kg
Seal material	POM (greased), NBR				
Length	Ž09 mm	221mm	221mm	Ž98 mm	Ž98 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

1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014 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)
- Hose B06920212 included

Protection Zones	Product code	Dimensions (LxH)
2	B05520200	470 x 450
3	B05520300	470 x 450
4	B05520400	470 x 450
5	B05520500	470 x 450
6	B05520600	470 x 450
7	B05520700	700 x 450
8	B05520800	700 x 450
9	B05520900	700 x 450
10	B05521000	700 x 450
11	B05521100	700 x 450
12	B05521200	940 x 450
13	B05521300	940 x 450
14	B05521400	940 x 450
15	B05521500	940 x 450



### **SPECIFICATIONS**

Connection thread	G¼"
Maximum inlet pressure	60 bar
Outlet operating pressure	8 bar

Operating temperature	-20°C to 50°C
Inlet connection for hi-flex hose	1/4"

Nominal voltage 24 VDC

Operating medium IG01, IG100, IG55, IG541

# **BLOCKING DEVICE FOR PNEUMATIC DIRECTIONAL VALVES**

To avoid unintentional operation of directional valves during maintenance.

Mandatory for VdS installations.



### **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 directionnal valve





With included padlock

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



# 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
		B04611100	3 mm	B04611108	3,5 mm
1000		B04611101	4 mm	B04611109	4,5 mm
		B04611102	5 mm	B04611110	5,5 mm
80.0	R½"	B04611103	6 mm	B04611111	6,5 mm
=		B04611104	7 mm	B04611112	7,5 mm
JE AIR		B04611105	8 mm	B04611113	8,5 mm
		B04611106	9 mm	B04611114	9,5 mm
		B04611200	7 mm	B04611208	7,5 mm
000		B04611201	8 mm	B04611209	8,5 mm
		B04611202	9 mm	B04611210	9,5 mm
mu   =	R¾″	B04611203	10 mm	B04611211	10,5 mm
		B04611204	11 mm	B04611212	11,5 mm
		B04611205	12 mm	B04611213	12,5 mm
2.44.4		B04611206	13 mm	B04611214	13,5 mm
63		B04611300	10 mm	B04611309	10,5 mm
600		B04611301	11 mm	B04611310	11,5 mm
L O U		B04611302	12 mm	B04611311	12,5 mm
BOX.	R1"	B04611303	13 mm	B04611312	13,5 mm
1		B04611304	14 mm	B04611313	14,5 mm
5		B04611305	15 mm	B04611314	15,5 mm
a tr		B04611306	16 mm	B04611315	16,5 mm
		B04611307	17 mm	B04611316	17,5 mm
		B04611400	15 mm	B04611412	15,5 mm
62		B04611401	16 mm	B04611413	16,5 mm
100		B04611402	17 mm	B04611414	17,5 mm
0 0 0		B04611403	18 mm	B04611415	18,5 mm
	,	B04611404	19 mm B04611416	19,5 mm	
wa.	R1 ½"	B04611405	20 mm	B04611417	20,5 mm
		B04611406	21 mm	B04611418	21,5 mm
5		B04611407	22 mm	B04611419	22,5 mm
	,	B04611408	23 mm	B04611420	23,5 mm
F187		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
R½"	B04610100	3 mm	up to 9,5 mm
R34"	B04610200	7 mm	up to 13,5 mm
R1"	B04610300	10 mm	up to 17,5 mm
R1 ½"	B04610400	15 mm	up to 25,5 mm



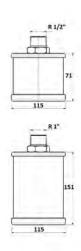
# **DISCHARGE NOZZLES - INERT GAS - SILENT / PRE - ASSEMBLED**

Pre-bored and fully assembled silent discharge nozzle for use in data centers

### **KEY FEATURES**

- Efficient noise reduction: under 103 dBA at 1 meter
- Available in 1" or ½"
- Homogeneous agent repartition: 360° Diffusion
- Ultra compact design





Size of thread	Product code	Orifice Diameter	Product code	Orifice Diameter
	B04613101	Ø 3 mm	B04613109	Ø 7 mm
	B04613102	Ø 3,5 mm	B04613110	Ø 7,5 mm
	B04613103	Ø 4 mm	B04613111	Ø 8 mm
R½"	B04613104	Ø 4,5 mm	B04613112	Ø 8,5 mm
	B04613105	Ø 5 mm	B04613113	Ø 9 mm
	B04613106	Ø 5,5 mm	B04613114	Ø 9,5 mm
	B04613107	Ø 6 mm	B04613115	Ø 10 mm
	B04613108	Ø 6,5 mm		
	B04613001	Ø 9 mm	B04613011	Ø 14 mm
	B04613002	Ø 9,5 mm	B04613012	Ø 14,5 mm
	B04613003	Ø 10 mm	B04613013	Ø 15 mm
	B04613004	Ø 10,5 mm	B04613014	Ø 15,5 mm
R1"	B04613005	Ø 11 mm	B04613015	Ø 16 mm
IN I	B04613006	Ø 11,5 mm	B04613016	Ø 16,5 mm
	B04613007	Ø 12 mm	B04613017	Ø 17 mm
	B04613008	Ø 12,5 mm	B04613018	Ø 17,5 mm
	B04613009	Ø 13 mm	B04613019	Ø 18 mm
	B04613010	Ø 13,5 mm		

# **DISCHARGE NOZZLES | INERT GAS - SILENT - SELF - ASSEMBLY KIT**

Silent discharge nozzles where you drill your required orifice diameter and assemble yourself



Size of thread	Product code	Orifice Diameter	Maximum bore diameter
R½"	B04610500	3 mm	up to 10 mm
R1"	B04610600	9 mm	up to 18 mm

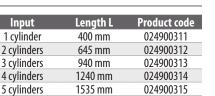


# **80 L CYLINDER MOUNTING BRACKETS - SINGLE ROW**

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







Diameter	Product code
263-276 mm	024900321
360-364 mm	024900445



**END CAP FOR MOUNTING RAIL AND BRACKET** 

Product code
024900322

# **80 L CYLINDER MOUNTING BRACKETS - DOUBLE ROW**

Brackets to secure a doublerow 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.

**WALL MOUNTING RAIL** 



(3





MIDDLE BRACKET **BOLTS & NUTS KIT** RAIL BRACKET **OUTER BRACKET** 

	Product code		Product code		Product code		Product code		Product code
2 cylinders	024900312	2 cylinders	024900323	2 cylinders	024900324	2 cylinders	024900325	Mauntinakit	024000220
3 cylinders	024900313	3 cylinders	024900326	3 cylinders	024900327	3 cylinders	024900328	— Mounting kit	024900329

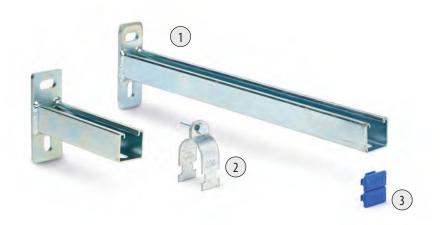
# MANIFOLD MOUNTING BRACKETS

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
- Manifold clamps available in 2" diameters.





Length A

205 mm

505 mm





Diameter	Product code
2"	B05805004



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

Product code	
024900322	

# LABELS FOR UL / FM-APPROVED SYSTEMS

FM / UL-approved cylinder labels for 80L or 140L cylinders.

Single row Double row

A mandatory part of a complete FM / UL-approved system.

Different labels for each cylinder size, pressure and gas type



Not included with empty cylinder / valve assemblies.



Labels only valid for cylinders filled at Rotarex UL-listed filling stations

80L

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140L

Product code	200 bar	300 bar	300 bar
IG 01	028000307	028000311	028000321
IG100	028000308	028000312	028000322
IG 55	028000309	028000313	028000323
IG541	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



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



GAUGE



**GAUGE+ SAFETY VALVE** 



ATEX

B04390306	B04390350	B04390316
200 bar	200 bar	200 bar
7 mm	7 mm	7 mm
25E EN-629-1	25E EN-629-1	25E EN-629-1
W21,8 x 1/14" DIN 477	W21,8 x 1/14" DIN 477	W21,8 x 1/14" DIN 477
M10 x 0,75	M10 x 0,75	M10 x 0,75
24 V DC	24 V DC	24 V DC
10 watt	10 watt	11,4 watt
-	270 bar	-
Brass	Brass	Brass
Total discharge	Total discharge	Total discharge
	200 bar 7 mm 25E EN-629-1 W21,8 x 1/14" DIN 477 M10 x 0,75 24 V DC 10 watt - Brass	200 bar         200 bar           7 mm         7 mm           25E EN-629-1         25E EN-629-1           W21,8 x ¼4" DIN 477         W21,8 x ¼4" DIN 477           M10 x 0,75         M10 x 0,75           24 V DC         24 V DC           10 watt         10 watt           -         270 bar           Brass         Brass

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



# A FULL LINE OF GAS CONTROL SOLUTIONS



# COMPLETE SOLUTIONS FROM SOURCE TO PROCESS.

ROTAREX is helping engineers worldwide to get better gas results: from ultra high purity production and medical care facilities to industrial and LPG applications, as well as alternative energy vehicles, fire suppression, diving, aerospace, cryogenics, laboratory, petro-chemical and welding. ROTAREX applies over 90 years of know-how and experience to custom design, develop and manufacture the high performance valves, regulators and fittings to suit your needs, all in one hand. Discover the difference ROTAREX can make in your world.

CYLINDER VALVES EQUIPMENT FIRETEC AUTOMOTIVE LPG/SRC	MEDITEC
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Fax: +352 32 78 32-854 E-mail: firetec@rotarex.com



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**SOUTH AMERICA** 

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Rotarex Brazil Ltda

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**CENTRAL AMERICA** 

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### MIDDLE EAST

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