

GIELLE™

INDUSTRIES



200/300 BAR INERT GAS
FIRE SUPPRESSION SYSTEMS

TABLE OF CONTENTS

A COMPLETE COMPONENT SOLUTION	P.004
--------------------------------------	-------

PRODUCT RANGE OVERVIEW	P.006
-------------------------------	-------

TECHNOLOGY OVERVIEW	P.008
- Valve Technologies	P.008
- Pressure Regulator Technology	P.010
- Gas compatibility	P.011
- Certifications	P.011
- DIMES system	P.012

SERIES G0480 VALVES AND ACCESSORIES	P.014
- Cylinder/valve assemblies	P.014
- Valves	P.015
- Constant discharge regulator	P.015

ACTUATION DEVICES AND ACCESSORIES	P.016
- Manual and pneumatic actuators	P.016
- Electromagnetic actuators	P.016
- Actuator accessories	P.017
- Pilot Hoses	P.017
- DIMES system	P.018
- Pressure gauges	P.019

DISCHARGE HOSES, MANIFOLDS AND NOZZLES	P.020
- Discharge hoses	P.020
- Check valves	P.020
- Manifolds	P.021
- Manifolds accessories	P.022
- Electrical directional valves	P.023
- Pneumatic directional valves	P.023
- Nozzles	P.024

MOUNTING BRACKETS	P.026
- Single row	P.026
- Double row	P.026
- Manifold mounting brackets	P.027

LABELS	P.027
---------------	-------

SPECIAL APPLICATIONS	P.028
- Cylinder / valve assemblies	P.028
- Series G0439 valves	P.029

All Gielle Industries 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 Gielle manufacturing sites comply with ISO 9001 quality standards.



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

² 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

Gielle 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**

Gielle 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 Gielle components to configure the entire system.

A complete component solution		
1	Cylinder 80 L - 200/300 bar	Page 14
2	Valve 200/300 bar	Page 15
3	Discharge pressure regulator	Page 15
4	Manual release device	Page 16
5	Pneumatic release device	Page 16
6	Electromagnetic release device	Page 16
7	Pressure sensor	Page 18
8	Bleed valve	Page 17
9	Discharge hose	Page 20
10	Check valve	Page 20
11	Pilot hose	Page 17
12	Manifold	Page 21
13	Nozzle	Page 24
14	Support for Cylinder	Page 26
15	Wall Mounting Rail	Page 26
16	Bracket for manifold	Page 27
17	Clamp for manifold	Page 27
18	Label	Page 27



SERIES G0480 VALVES AND ACCESSORIES



CYLINDER-VALVE ASSEMBLIES
200 bar and 300 bar

P. 014



SERIES G0480

Cylinder valve for 200/300 bar inert gas

P. 015



DISCHARGE PRESSURE REGULATOR P. 015



DIMES SYSTEM

P. 018



PRESSURE GAUGE

P. 019

ACTUATION DEVICES & ACCESSORIES



MANUAL ACTUATOR

P. 016



MANUAL / PNEUMATIC ACTUATOR

P. 016



PNEUMATIC ACTUATOR

P. 016



ELECTROMAGNETIC ACTUATOR

P. 016



MONITORING SWITCH

P. 017



BLEED VALVE

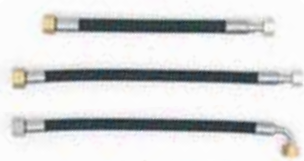
P. 017



PILOT HOSE

P. 017

DISCHARGE HOSES, MANIFOLDS, NOZZLES & ACCESSORIES



DISCHARGE HOSES P. 020



CHECK VALVE P. 020



MANIFOLDS P. 021



MANIFOLD CAPS AND CONNECTORS P. 022



PRESSURE GAUGE FOR MANIFOLD P. 022



RELIEF DEVICES P. 022



PRESSURE SWITCHES P. 022



ELECTRIC DIRECTIONAL VALVES P. 023



PNEUMATICAL DIRECTIONAL VALVES P. 023



NOZZLES P. 024

MOUNTING BRACKETS



SINGLE-ROW BRACKETS P. 026



DOUBLE -ROW BRACKETS P. 026



MANIFOLD BRACKETS P. 027

SPECIAL APPLICATIONS



VALVES FOR PILOT CYLINDERS P. 028

VALVE TECHNOLOGIES

PROVEN TECHNOLOGY

Gielle 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 Gielle valves to perform when it most counts.

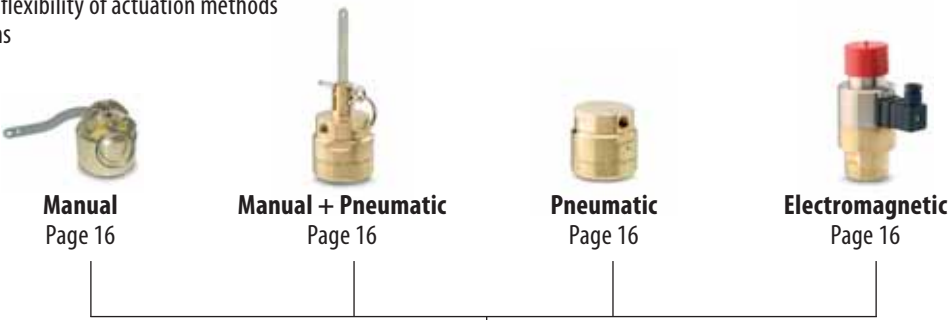
Gielle recommends its high-performance Series G0480 valve technology for 200/300 bar inert gas systems. Over 200,000 valves are already in service.

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

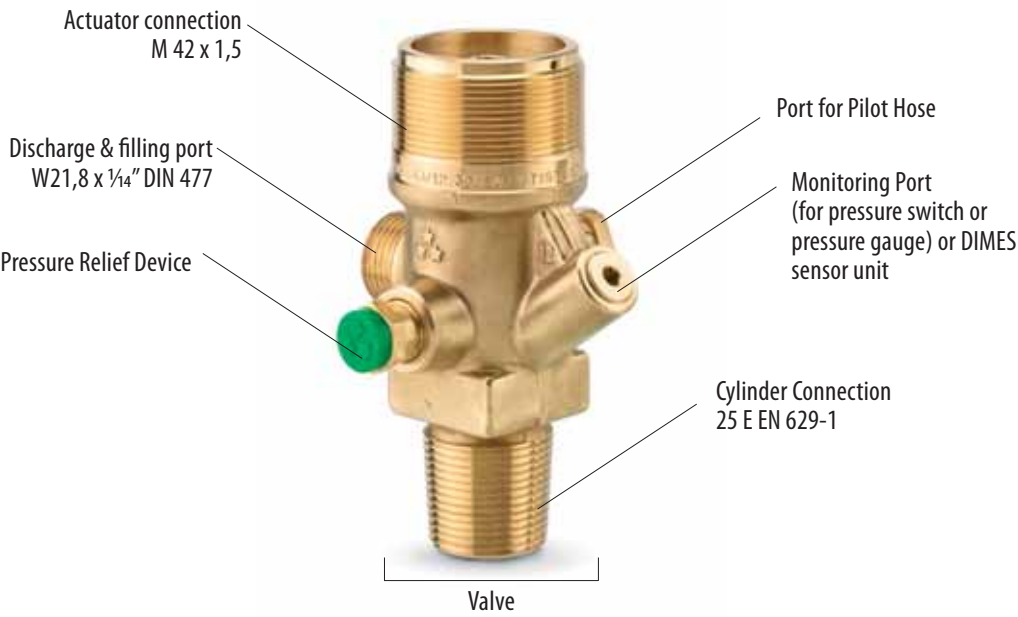


SERIES G0480

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



CAN BE USED WITH A RANGE OF DIFFERENT ACTUATORS



SPECIFICATIONS

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

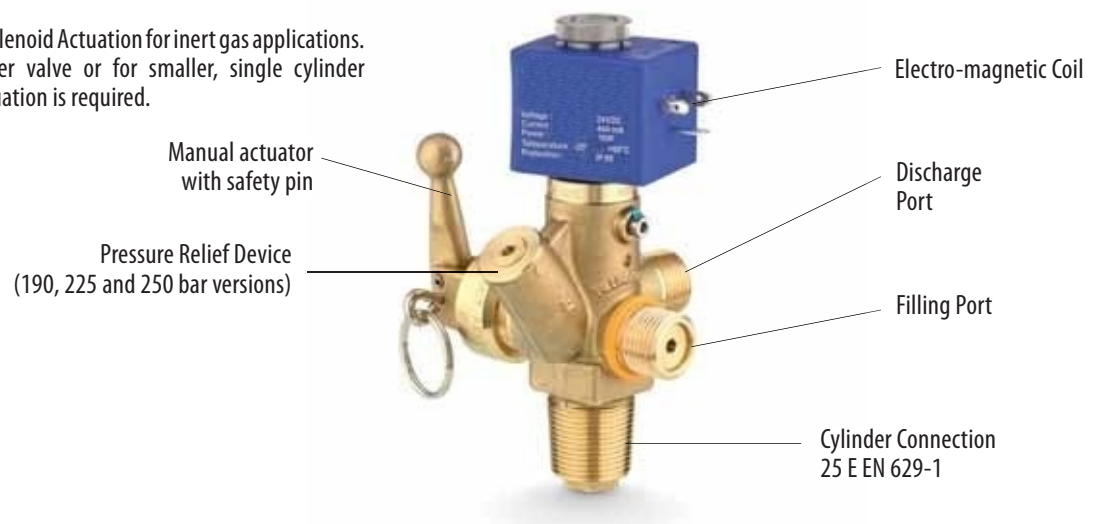
VALVE TECHNOLOGIES (continued)



Multiple actuators can be used together in a series.

SERIES G0439

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

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

PRESSURE REGULATOR TECHNOLOGY

Gielle 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:

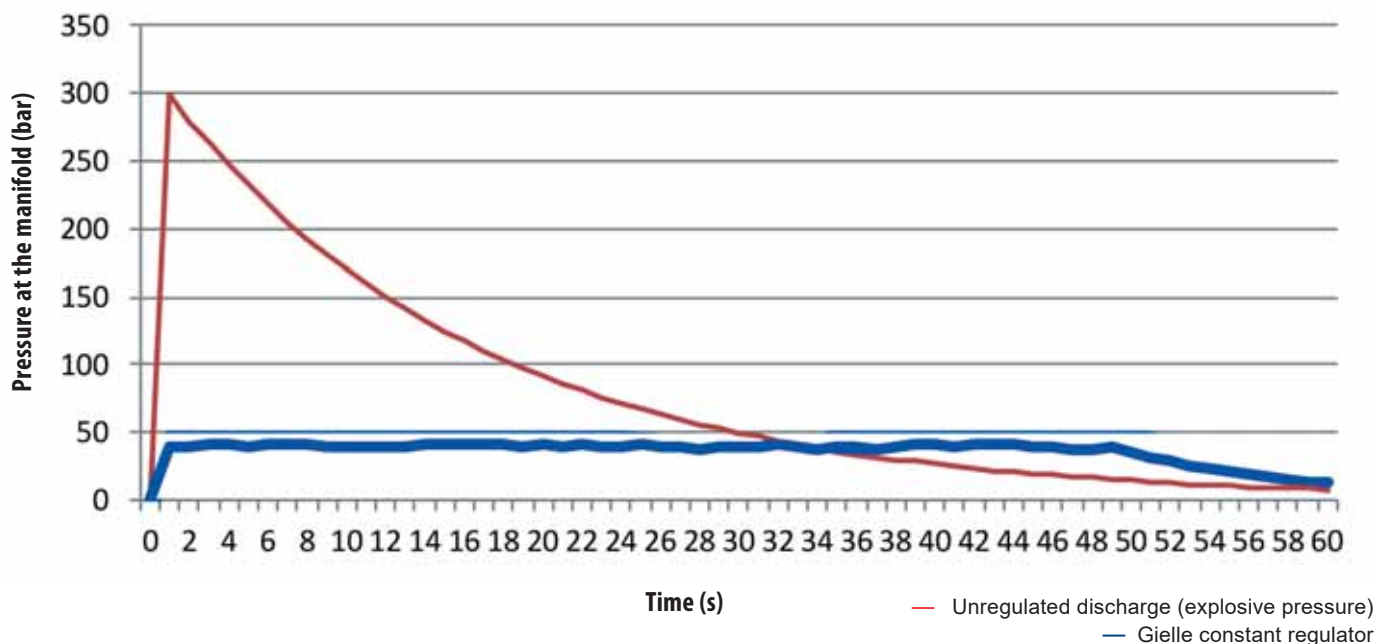
- Enables low pressure manifolds & pipework to be used - that are lower cost and easy to install
- Reduces the difficulty and cost of locating/fitting pressure vents in the protected space

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



GIELLE IS A PRESSURE REGULATOR SPECIALIST

Gielle 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 Gielle 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 ₂
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

Gielle system components are approved and certified compliant with recognized international norms. Marked components are part of a UL listed system when configured in accordance with NFPA 2001 and UL 2127.

In addition, all Gielle 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



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



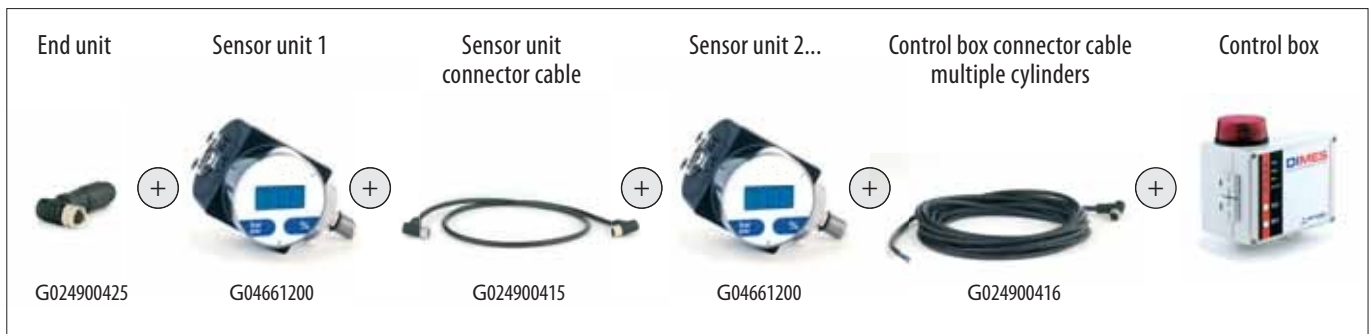
DIMES replaces passive pressure gauges for more accurate and pro-active monitoring as well as secondary functionalities.

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

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



G024900419



Optional cable available to connect with computer (USB)

SERIES G0480 CYLINDER/VALVE ASSEMBLY FOR 200/300 BAR INERT GAS

A complete cylinder/valve assembly.

- 80L cylinder for 200 or 300 bar inert gases
- G0480 cylinder valve
- Steel protection cap
- Filled or empty



* Part of a UL approved system only when configured in a complete system compliant with NFPA 2001 & UL 2127



For UL label included for filled cylinders label need to be ordered separately for unfilled cylinder (p.27)

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 valve 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



Standard product code

UL-approved product code

	200 bar	300 bar	200 bar	300 bar
Empty	G04807000	G04808000	G04807002	G04808003
Filled IG 01	G04807100	G04808100	G04807102	G04808103
Filled IG 100	G04807200	G04808200	G04807202	G04808203
Filled IG 55	G04807300	G04808300	G04807302	G04808303
Filled IG 541	G04807400	G04808400	G04807402	G04808403

SPECIFICATIONS

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

RELEASE DEVICES

Devices to actuate the release of extinguishing agent

For use with Series G0481, G0482 and G0480 Valves



	Manual	Manual / Pneumatic		Pneumatic	
Product code	G04420100	G04420065	G04420116	G04420066	G04420076
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	-	G 1/8"	G 1/8"	G 1/8"	G 1/8"
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 G0481, G0482 and G0480 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



G04425146



G04425147



G04425131



G04425132



G04425109



G04425129



WITH BLOCKING DEVICE.

To temporarily unarm the system during maintenance

	With diode	Without diode	With diode	Without diode
Valve connection	M42 x 1,5	M42 x 1,5	M42 x 1,5	M42 x 1,5
Nominal voltage	24 VDC	24 VDC	24 VDC	24 VDC
Electrical connection	-	-	PG 9	PG 9
Nominal current	0,5 A	0,5 A	0,5 A	0,5 A
Protection Class	IP65	IP65	IP65	IP65
Height	135 mm	135 mm	135 mm	135 mm
Diameter	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.



Product code	G029210064
Connection	M 42 x 1,5
Material	Brass



Safety cap included



Screws into the base of G04425XXX electromagnetic release device

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
- Approvals: UL Approval pending



Product code	G029905200
Description	Mounted on G0480 valve

BLEED VALVE

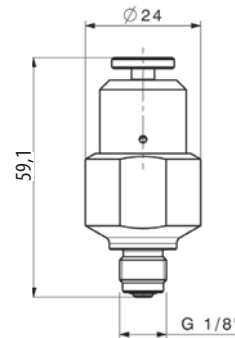
To vent overpressure and prevent false system discharge in the event of a small pressure leak from the cylinders into the pneumatic actuators.



tested



Product code	G029730040
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

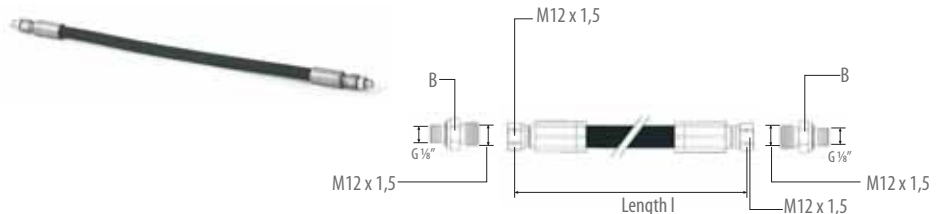
Hose to connect multiple cylinders in a series.

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



Adapter must be ordered separately.
2 per hose.

STRAIGHT PILOT HOSE FOR G0480



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

	Product code	Length l	Connection	Bending radius
A1	G06920211	400 mm	2 x M12 x 1,5	75 mm
A2	G06920212	700 mm	2 x M12 x 1,5	75 mm
A3	G06920213	500 mm	2 x M12 x 1,5	75 mm
Adapter B	G029510006		M12 x 1,5 / G 1/8	

SPECIFICATIONS

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

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

ALL RIGHTS OF CHANGE RESERVED

GIELLE
INDUSTRIES

DIMES – DIGITAL MEASUREMENT SYSTEM

Digital Measurement System
for Inert Gas Suppression
Systems



	SENSOR UNIT WITH DIGITAL DISPLAY	CONNECTOR CABLE CONNECTS SENSOR UNITS
Product code	G04661200	G024900415
Max. working pressure	300 bar	-
Connection type	4-pin	4-pin



	END CONNECTION	CONNECTOR CABLE TO CONTROL BOX
Product code	G024900425	G024900416
Connection type	4-pin	4-pin



	DATA INTERFACE CABLE
Product code	G024900420
Connection type	4-pin to USB

MULTIPLE CYLINDERS

End unit	Sensor unit 1	Sensor unit connector cable	Sensor unit 2...	Control box connector cable multiple cylinders	Control box
					
G024900425	G04661200	G024900415	G04661200	G024900416	

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.

M 10 X 1 WITH PRESSURE SWITCH



M 10 X 1



Product code	G029720234	G029720083	G029720092	G029720059
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	G029720219	G029720220	G029720221	G029720222	G029720215	G029720216	G029720217	G029720218
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
Certifications	UL	UL	UL	UL	UL	UL	UL	UL
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)

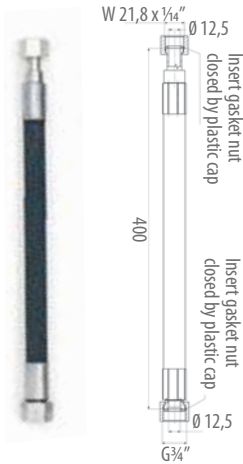
DISCHARGE HOSES

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

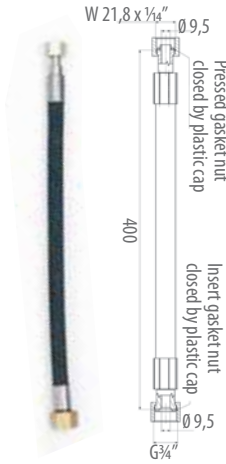


DN 16

For 140 L cylinders

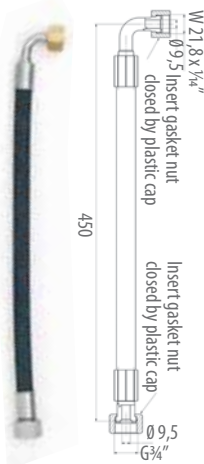


DN 12 STRAIGHT



DN 12 90° ELBOW

When no regulator is used



Product code	G06920225	G06920224	G06920226
--------------	-----------	-----------	-----------

SPECIFICATIONS

Working pressure	350 bar for 16DN 380 bar for 12DN	Material	Synthetic rubber oil resistant	To manifold connection (outlet)	G3/4"
Burst pressure	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	Valve connection (inlet)	W 21,8 x 1/4" DIN 477	Length	400 mm for DN16 & DN12 straight 450 mm for DN12 Elbow
Torque	38-42 Nm				

CHECK VALVE

Prevents backflow into the cylinder.

Required for each hose attachment to the discharge manifold.



Product code	G04600008
Max. working pressure	360 bar
Test pressure	150 bar
Gases	IG 01, IG 55, IG 100, IG 541
Material	Brass
Hose connection	G3/4"
Manifold connection	R1"

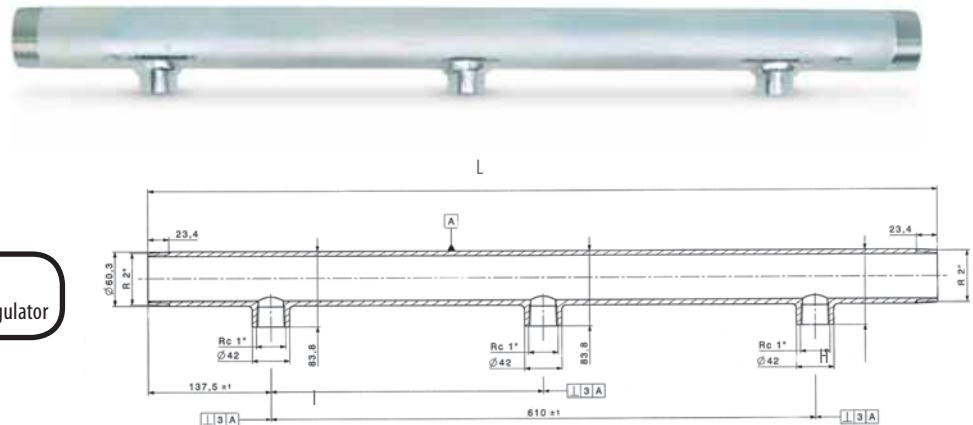
1 Compliant with the Construction Products Regulation (CPR) V3 Oct. 2014

MANIFOLD FOR INERT GAS – 1 ROW

Manifolds to connect from 2 to 5 cylinders.
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	G05800013	580 mm	305 mm	83,8 mm
3 cylinders	G05800014	885 mm	305 mm	83,8 mm
5 cylinders	G05800015	1495 mm	305 mm	83,8 mm

SPECIFICATIONS

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

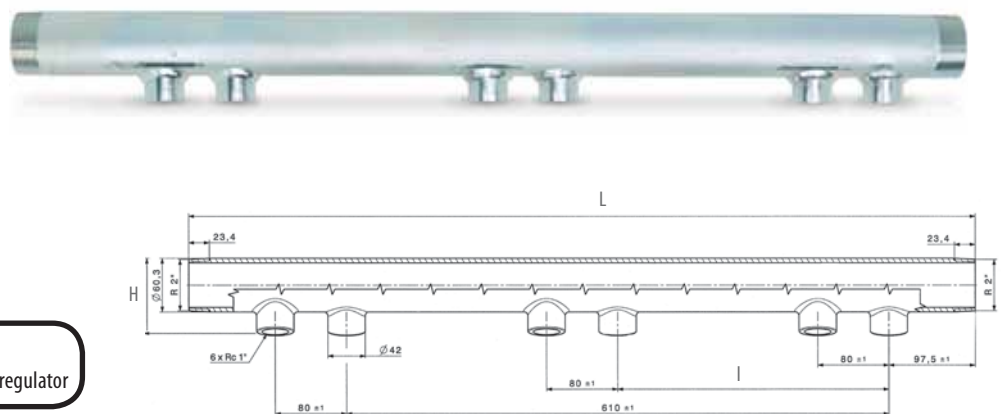
MANIFOLD INERT GAS – 2 ROWS

Manifolds to connect from 4 to 10 cylinders at 100 bar pressure. Double row configuration.

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	G05800016	580 mm	305 mm	83,8 mm
6 cylinders	G05800017	885 mm	305 mm	83,8 mm
10 cylinders	G05800018	1495 mm	305 mm	83,8 mm

SPECIFICATIONS

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

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

ALL RIGHTS OF CHANGE RESERVED

GIELLE
INDUSTRIES

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	G026300500	G023400100
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	G028200231
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.

SPRING LOADED



Product code	G029730037
Relief pressure	66 bar at 20°C 957 psi at 68°F
Connection	G ½"



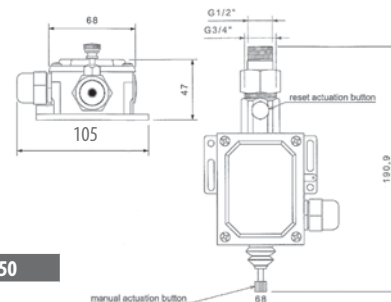
PRESSURE & FLOW DETECTOR SWITCH

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	G028250050
Opening Pressure	2 bar
Design Pressure	200 bar
Test pressure	300 bar
Connection	G ½"
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



Product code - Carbon steel	G05511000	G05511100	G05511200	G05511300	G05511400
Product code - Stainless Steel	G05511001	G05511101	G05511201	G05511301	G05511401
Size	1"	1,5"	2"	2,5"	3"
Unit nominal pressure (@20°C)	300 bar	300 bar	300 bar	300 bar	300 bar
Operating Torque	20 Nm	35 Nm	35 Nm	55 Nm	55 Nm
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
Status Indicator	LED	LED	LED	LED	LED
IP rating	IP 65	IP 65	IP 65	IP 65	IP 65
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

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

- VdS-approved
- 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



Product code - Stainless steel	G05511050	G05511150	G05511250	G05511350	G05511450
Size	1"	1,5"	2"	2,5"	3"
DN	25	40	50	65	80
Nominal pressure	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 ₂	N ₂	N ₂	N ₂	N ₂
Temperature range	-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
Length	209 mm	221 mm	221 mm	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
Seal material	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR	POM (greased), NBR

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

DISCHARGE NOZZLES | PRE-ASSEMBLED

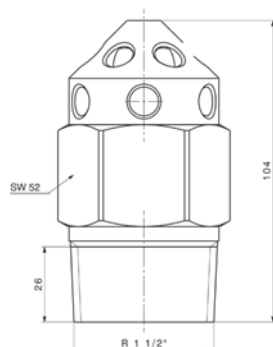
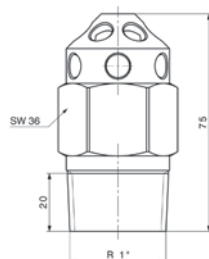
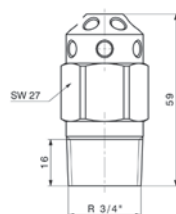
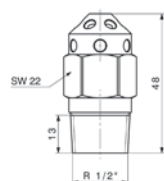
Pre-bored and fully assembled discharge nozzles for inert gas systems.

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
1/2" BSP	G04611100	3 mm	G04611108	3,5 mm
	G04611101	4 mm	G04611109	4,5 mm
	G04611102	5 mm	G04611110	5,5 mm
	G04611103	6 mm	G04611111	6,5 mm
	G04611104	7 mm	G04611112	7,5 mm
	G04611105	8 mm	G04611113	8,5 mm
3/4" BSP	G04611106	9 mm	G04611114	9,5 mm
	G04611200	7 mm	G04611208	7,5 mm
	G04611201	8 mm	G04611209	8,5 mm
	G04611202	9 mm	G04611210	9,5 mm
	G04611203	10 mm	G04611211	10,5 mm
	G04611204	11 mm	G04611212	11,5 mm
1" BSP	G04611205	12 mm	G04611213	12,5 mm
	G04611206	13 mm	G04611214	13,5 mm
	G04611300	10 mm	G04611309	10,5 mm
	G04611301	11 mm	G04611310	11,5 mm
	G04611302	12 mm	G04611311	12,5 mm
	G04611303	13 mm	G04611312	13,5 mm
1 1/2" BSP	G04611304	14 mm	G04611313	14,5 mm
	G04611305	15 mm	G04611314	15,5 mm
	G04611306	16 mm	G04611315	16,5 mm
	G04611307	17 mm	G04611316	17,5 mm
	G04611400	15 mm	G04611412	15,5 mm
	G04611401	16 mm	G04611413	16,5 mm
	G04611402	17 mm	G04611414	17,5 mm
	G04611403	18 mm	G04611415	18,5 mm
	G04611404	19 mm	G04611416	19,5 mm
	G04611405	20 mm	G04611417	20,5 mm
	G04611406	21 mm	G04611418	21,5 mm
	G04611407	22 mm	G04611419	22,5 mm
	G04611408	23 mm	G04611420	23,5 mm
	G04611409	24 mm	G04611421	24,5 mm
	G04611410	25 mm	G04611422	25,5 mm

DISCHARGE NOZZLES | SELF-ASSEMBLY KIT

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

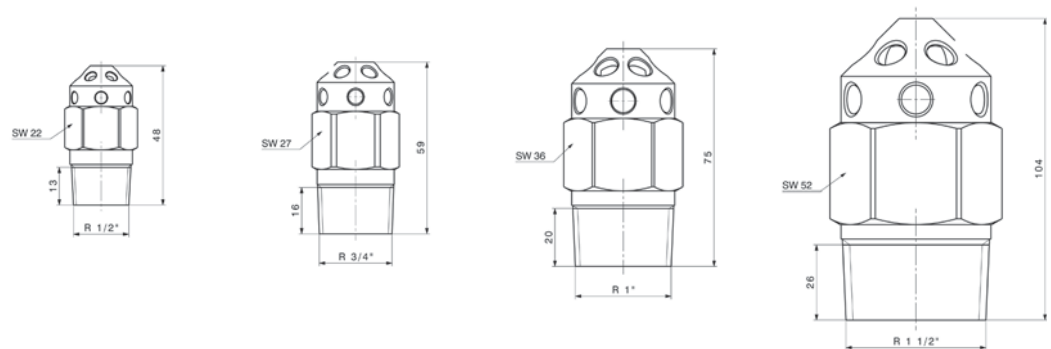
Easier to stock. A more economical alternative.

KEY FEATURES

- Max. working pressure 300 bar
- Material: brass



Size of thread	Product code	Orifice Diameter	Maximum bore diameter
1/2" BSP	G04610100	3	up to 9,5 mm
3/4" BSP	G04610200	7	up to 13,5 mm
1" BSP	G04610300	10	up to 17,5 mm
1 1/2" BSP	G04610400	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	G024900311
2 cylinders	645 mm	G024900312
3 cylinders	940 mm	G024900313
4 cylinders	1240 mm	G024900314
5 cylinders	1535 mm	G024900315

2
CLAMP FOR CYLINDER

Diameter	Product code
263-276 mm	G024900321

3
END CAP FOR MOUNTING RAIL AND BRACKET

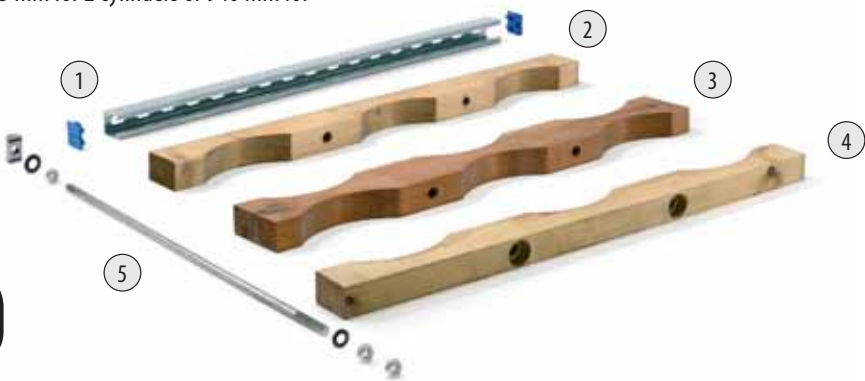
Product code
G024900322

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



1
WALL MOUNTING RAIL

Product code
2 cylinders G024900312
3 cylinders G024900313

2
RAIL BRACKET

Product code
2 cylinders G024900323
3 cylinders G024900326

3
MIDDLE BRACKET

Product code
2 cylinders G024900324
3 cylinders G024900327

4
OUTER BRACKET

Product code
2 cylinders G024900325
3 cylinders G024900328

5
BOLTS & NUTS KIT

Product code
Mounting kit G024900329



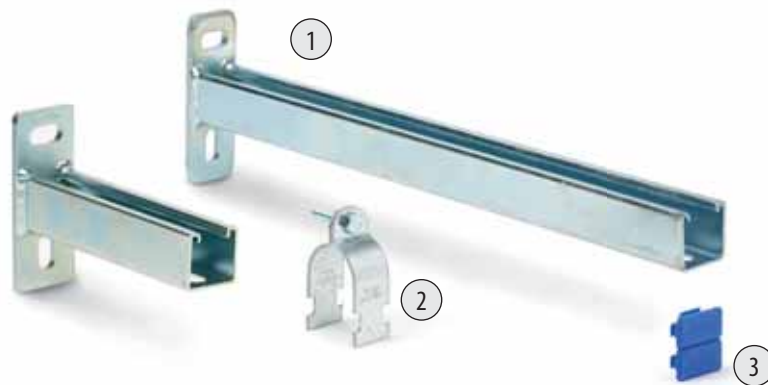
Order 1 bolt & nuts kit for 2 - cylinder configurations and 2 kits for 3 cylinders.

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.



BRACKET FOR MANIFOLD

	Length A	Product code
Single row	205 mm	G05805000
Double row	505 mm	G05805001

CLAMP FOR MANIFOLD

Diameter	Product code
2"	G05805004

END CAP FOR MOUNTING RAIL AND BRACKET

Product code
G024900322

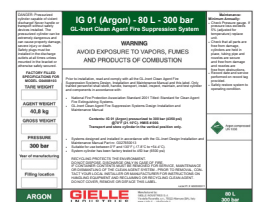
LABELS FOR UL-APPROVED SYSTEMS

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

80L



Product Codes	200 bar	300 bar
IG 01	G028000307	G028000311
IG 100	G028000308	G028000312
IG 55	G028000309	G028000313
IG 541	G028000310	G028000314

G0439 CYLINDER/VALVE ASSEMBLIES

A complete cylinder/valve assembly. Includes:

- G0439 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	G04397001
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 G0439 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

Product code	G04390306	G04390350	G04390316
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

GIELLE INDUSTRIES

www.gielle.it

WORLDWIDE HEADQUARTERS

Gielle - [Headquarters]

Via Ferri Rocco, 32 Z.I. Italia
70022 - Altamura (BA)
Tel.: +39 080 3118998
Fax: +39 080 3101309
info@gielle.it



Gielle Lazio

Via Orvieto, 132 - 134
00040 - Pomezia (RM)
roma@gielle.it

Gielle Toscana

Via Galileo Ferraris, 150A
52100 - Arezzo
arezzo@gielle.it

Gielle Offshore

Via B. Buoizzi, 61
48213 - Ravenna
ravenna@gielle.it

Gielle Trentino

Via Resia, 26
39100 - Bolzano
bolzano@gielle.it

Gielle Lombardia

Via Bruno Buoizzi, 37
20097 - S. Donato Milanese (MI)
milano@gielle.it

Gielle Piemonte

Via Torino, 79
10040 - Druento (TO)
torino@gielle.it

Gielle Emilia Romagna

Via G. Verga, 14 - 18
41016 - Novi di Modena (MO)
modena@gielle.it



GIELLE INDUSTRIES

Italian Plants



FOLLOW US:

