

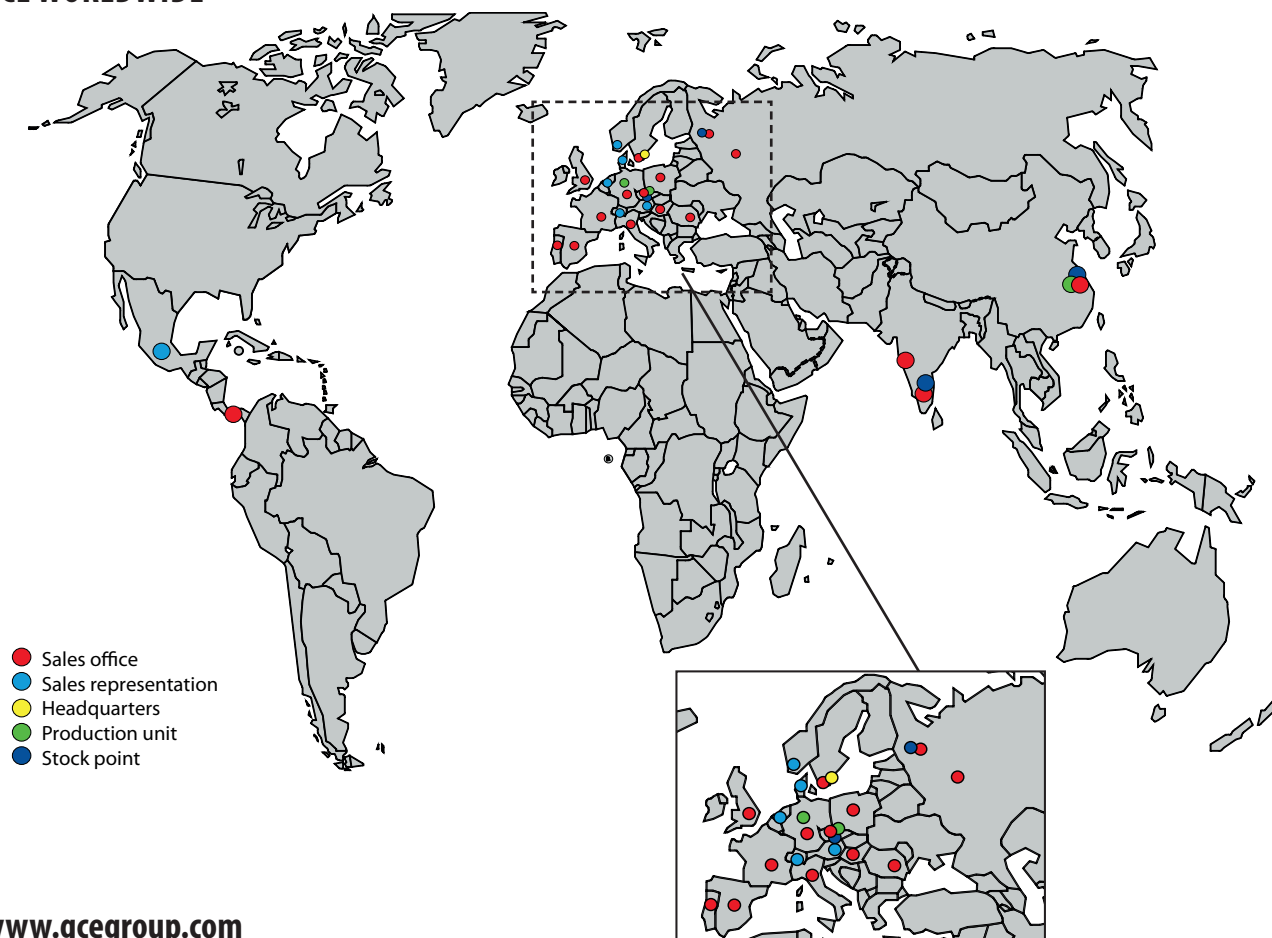
A photograph of an industrial gas system featuring yellow pipes, valves, and regulators. The system is mounted on a blue metal frame. A large vertical yellow pipe is on the right, with a horizontal yellow pipe connected to it. Various valves and regulators are visible along the pipes. A pressure gauge is visible on the right side. The background shows more industrial equipment and a concrete floor.

INDUSTRIAL REGULATORS

LPG, natural Gas, industrial Gas

EDITION 1/2015

GCE WORLDWIDE



www.gcegroup.com

THE GCE BUSINESS

GCE has almost 100 years of experience in the manufacture and supply of high pressure gas equipment. During this time the GCE product range has increased dramatically. Today's product portfolio fits a large variety of applications, from simple pressure regulators and blowpipes for cutting and welding to highly sophisticated gas supply systems for the medical, electronic, and analytical industries.

GCE GROUP INCLUDES FOUR BUSINESS AREAS:

- Cutting & Welding Technologies
- Valves
- Healthcare
- Druva

ORIGINS

The origins of GCE (Gas Control Equipment) go back to the start of the 20th century when Gas Welding was first invented. The GCE group was formed as an independent company in 1987 through the merging of two of the world's leading gas and welding companies into one independent unit. GCE has grown rapidly since its establishment and is leading the restructuring of the European gas equipment industry through mergers and acquisitions.

Through its extensive Research and Development programs GCE has set standards that have become the benchmark for the whole industry.

GCE SERVICES

Company's main industrial customers are wholesalers and local distributors. However, in some markets GCE closely cooperates with the chief gas suppliers in terms of equipment distribution.

For these companies GCE provides both commercial and technical support. A significant part of the sales volume in this area also comes from key end user accounts such as shipyards, repair shops, OEM customers, and welding machine manufacturers.

A COMPLETE RANGE FOR CUTTING & WELDING

GCE Group is one of the world's leading producers of industrial regulators for cutting and welding. The range covers a broad spectrum of products, for different applications, that have been designed according to the requirements of most European standards such as DIN, Afnor, BSI, and Nordic.

The torch range includes products for heating, cutting, brazing, and flame cleaning applications designed in accordance with the preferences of individual markets and customers. Regulators, torches, nozzles and other products are also increasingly combined in sets and sold to users as an individual package.

GCE Group is a pioneer in the field of safety equipment and currently produces a comprehensive range of flashback arrestors and hose check valves. A range of nozzles, including the long-life Coolex® nozzle, completes GCE's Cutting & Welding range.

GCE Group's ranges include various types of gas equipment enabling safe handling of gases, extending from central gas supply systems and brewery equipment to machine cutting products. We offer cylinder valves and combination valves, pressure control units, gas manifolds, outlet points, shut-off valves, alarm and safety units, high-pressure flexible hoses and accessories for different applications, gases, pressures, and flow rates.

All products have to meet demanding requirements for strong durability, leak-proof sealing and overall safety. Uniquely qualified in this area, GCE stands at the forefront of international development of these products.

GLOBAL LEADER IN OXY-FUEL TECHNOLOGY

Since GCE Group is extensively experienced in the development and production of machine cutting torches and cutting nozzles, the company has become a global leader in the field of oxy-fuel cutting technology. The design of the products is based on GCE's profound knowledge and expertise in the oxy-fuel area.

CONTENTS

FIRST STAGE REGULATOR

| | |
|--|---|
| CELTIC Junior 74 - Direct Regulators. | 2 |
| CELTIC AML1, RGCL - Direct Regulators. | 3 |
| PROTÉE 431 - Regulator with Balanced Valve | 4 |

SECOND STAGE REGULATOR

| | |
|--|---|
| CELTIC AML2 - Direct Regulators. | 5 |
| PROTÉE 432 - Regulator with Balanced Valve | 6 |
| OMT - Low Pressure Regulator | 7 |

SECURITY DEVICE

| | |
|---|---|
| RD 05 - Release Security System | 8 |
|---|---|

PNEUMATIC LOADED REGULATOR

| | |
|------------------|---|
| DE 232 | 9 |
|------------------|---|

SPARE PARTS

| | |
|------------------|----|
| CELTIC | 10 |
| PROTÉE. | 10 |
| OMT. | 10 |
| DE 232 | 10 |

ACCESSORIES

| | |
|------------------|----|
| CELTIC | 11 |
| PROTÉE. | 11 |

TECHNICAL SPECIFICATION

12

FIRST STAGE REGULATOR

CELTIC JUNIOR 74 - DIRECT REGULATORS



Celtic Junior 74



Celtic Junior 74 Duo

The CELTIC range can be used for all common non-corrosive industrial gas. As for regulation, these products are very accurate.

APPLICATION

- Outlet pressure regulation at the outlet of an air gas vaporizer (JUNIOR 74 ES)
- First stage regulation for propane at the outlet of a cistern
- Pressure limiting device (JUNIOR 74 DUO)

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low pressure closing
- Stainless steel adjustment screw

CELTIC JUNIOR 74-A

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|----------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130301 | G3/4"F* | N,M,P | 20 (300) | 0,8-6 (12-90) | 30-170 | 80-260 |
| I130331 | G3/4"F* | O,N | 20 (300) | 0,8-6 (12-90) | 30-170 | NA |
| I130341 | G3/4"F* | P-liquid | 20 (300) | 0,8-6 (12-90) | 30-170 | NA |

CELTIC JUNIOR 74-A DUO

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130360 | G3/4"M* | N,M,P | 20 (300) | 0,8-6 (12-90) | 30-170 | 45-260 |

CELTIC JUNIOR 74-ES

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|---------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130325 | G3/4"F* | N,M,P,O | 20 (300) | 0,8-10 (12-145) | 30-250 | 45-260 |

CELTIC JUNIOR 74-B

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|----------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130302 | G3/4"F* | N,M,P | 8 (120) | 0,3-1,5 (4-20) | 35-70 | 54-109 |
| I130332 | G3/4"F* | O,N | 8 (120) | 0,3-1,5 (4-20) | 35-70 | NA |
| I130342 | G3/4"F* | P-liquid | 8 (120) | 0,3-1,5 (4-20) | 35-70 | NA |

CELTIC JUNIOR 74-C

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130303 | G3/4"F* | N,M,P | 4 (60) | 0,1-0,5 (2-7) | 5-45 | 30-60 |
| I130333 | G3/4"F* | O,N | 4 (60) | 0,1-0,5 (2-7) | 5-45 | NA |

* Versions with gauge

TECHNICAL DATA

Max. inlet pressure: 20 bar (A, ES, A DUO); 8 bar (B); 4 bar (C)

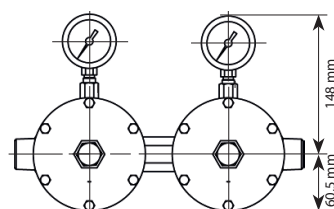
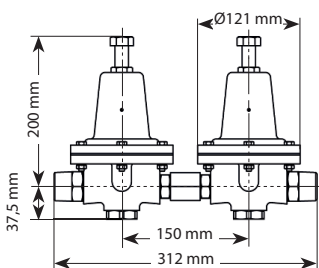
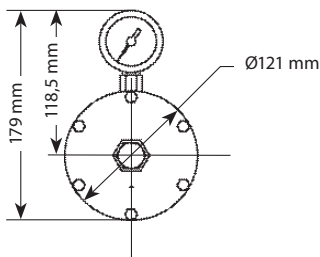
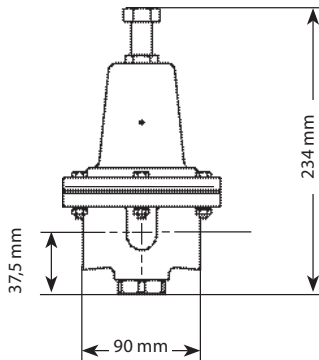
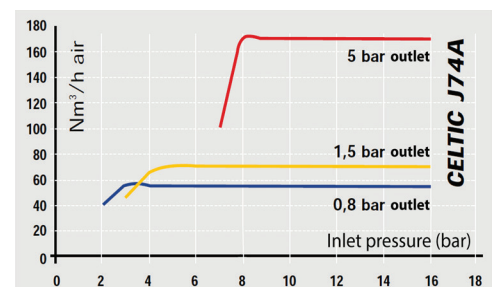
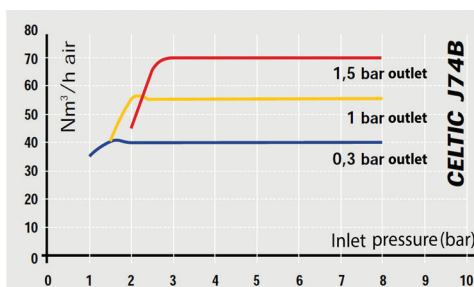
Material: Aluminium alloy body

Connection: G3/4" Female (A, B, C, ES)

G3/4" Male (A DUO)

Operating temperature range: from -20 to +60°C

FLOW RATES PERFORMANCE CURVES



CELATIC AML1, RGCL - DIRECT REGULATORS

The CELTIC range can be used with all common non-corrosive industrial gas. As for regulation, these products are very accurate.

APPLICATION

- First stage regulation for propane at the outlet of a cistern (RGCL-N)
- Pressure limiting device (AML1 with RD05)

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low pressure closing
- Stainless steel adjustment screw
- Flange with turning end-plate (for DN 50)



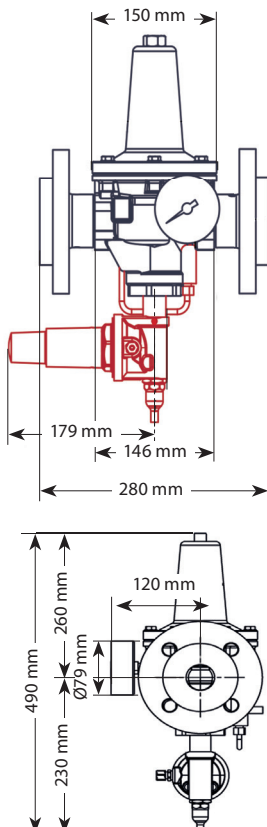
Celtic RGCL-N



Celtic AML1-N



Celtic AML1-S



CELATIC RGCL-N

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|-----------|----------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130420SL | Flanged DN 50* | N,M,P | 20 (300) | 0,8-5 (12-70) | 190-680 | 295-1050 |

CELATIC AML1-N

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|-----------|----------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130551SL | G1 1/2"F | N,M,P | 20 (300) | 0,8-5 (12-70) | 190-680 | 295-1050 |
| I130552SL | Flanged DN 50* | N,M,P | 20 (300) | 0,8-5 (12-70) | 190-680 | 295-1050 |
| I130553SL | G1 1/2"F | O | 20 (300) | 0,8-5 (12-70) | 190-680 | 295-1050 |

CELATIC AML1-S (AML1 WITH RD05)

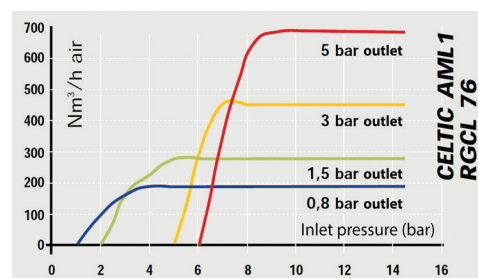
| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|-----------|----------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130561SL | G1 1/2"F | N,M,P | 20 (300) | 0,8-2 (12-30) | 190-350 | 295-540 |
| I130561SL | G1 1/2"F | N,M,P | 20 (300) | 1,3-5 (20-70) | 250-680 | 390-1050 |
| I130563SL | Flanged DN 50* | N,M,P | 20 (300) | 0,8-2 (12-30) | 190-350 | 295-540 |
| I130564SL | Flanged DN 50* | N,M,P | 20 (300) | 1,3-5 (20-70) | 250-680 | 390-1050 |
| I130565SL | G1 1/2"F | O | 20 (300) | 0,8-2 (12-30) | 190-350 | 295-540 |
| I130566SL | G1 1/2"F | O | 20 (300) | 1,3-5 (20-70) | 250-680 | 390-1050 |

* Versions with gauge

TECHNICAL DATA

| | |
|------------------------------|---|
| Max. inlet pressure: | 20 bar |
| Material: | Aluminium alloy body |
| Connection: | CELATIC AML 1 - RGCL-N : inlet and outlet with flange DN50 PN 40 or thread G1 1/2" (40x49) |
| Operating temperature range: | from -20 to + 60°C |

FLOW RATES PERFORMANCE CURVES



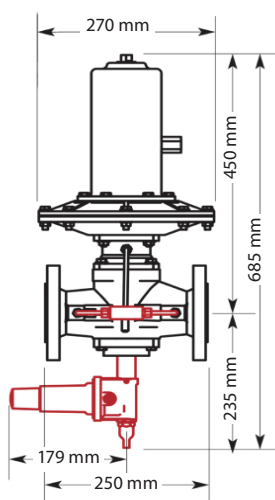
PROTÉE 431 - REGULATOR WITH BALANCED VALVE



PROTÉE 431 - N



PROTÉE 431 - S



PROTÉE 431-S

This regulator is designed for medium and low pressure. Thanks to their balanced valve, the PROTÉE are insensitive to the variations of the outlet pressure. They enable the distribution of all non-corrosive compressed gas (except oxygen: contact GCE).

APPLICATION

- First stage regulation for a propane cistern
- Gas distribution of medium pressure
- Supply gas for burners in medium pressure
- Oven inert
- Gas supply for safety devices
- Pressure limiting device (PROTÉE 431 with RD05)

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low closing pressure
- Removable encapsulated valve

PROTÉE 431-N

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|----------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I101349 | Flanged DN 50* | N,M,P | 20 (300) | 0,8-2,1 (12-30) | 400-1150 | 620-1750 |
| I101350 | Flanged DN 50* | N,M,P | 20 (300) | 2,1-3 (30-40) | 400-1450 | 620-2250 |
| I101351 | Flanged DN 50* | N,M,P | 20 (300) | 3-6,5 (40-90) | 400-2305 | 620-3570 |

PROTÉE 431-S (AML1 WITH RD05)

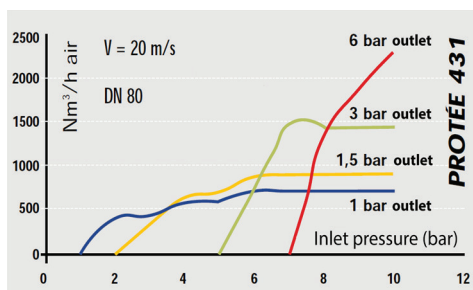
| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|----------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I101352 | Flanged DN 50* | N,M,P | 20 (300) | 0,8-2,1 (12-30) | 400-1150 | 620-1750 |
| I101353 | Flanged DN 50* | N,M,P | 20 (300) | 2,1-3 (30-40) | 400-1450 | 620-2250 |
| I101354 | Flanged DN 50* | N,M,P | 20 (300) | 3-6,5 (40-90) | 400-2305 | 620-3570 |

* Version with gauge

TECHNICAL DATA

| | |
|------------------------------|-------------------------------------|
| Max. inlet pressure: | 20 bar |
| Material: | Cast iron body |
| Connection: | Flanged DN50 PN 40 inlet and outlet |
| Operating temperature range: | from -20 to + 60°C |

FLOW RATES PERFORMANCE CURVES



SECOND STAGE REGULATOR

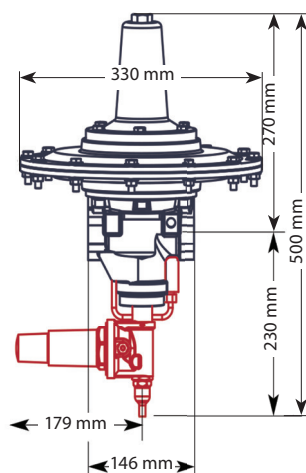
CELTIC AML2 - DIRECT REGULATORS



Celtic AML2-N



Celtic AML2-S



The CELTIC range can be used for all common non-corrosive industrial gas. As for regulation, these products are very accurate.

APPLICATION

- Second stage regulation to supply furnaces
- Inertness (cisterns, pipes)
- Pressure limiting device (AML2 with RD05 = „S“)

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low closing pressure

CELTIC AML2-N

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130621 | G1 1/2" F | N,M,P | 8 (120) | 0,1-0,8 (2-12) | 70-190 | 100-290 |

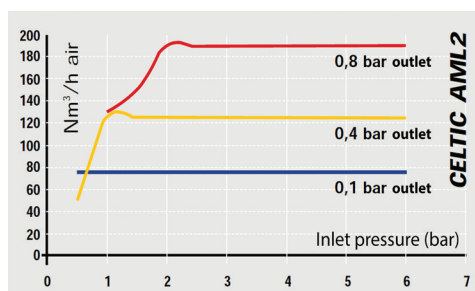
CELTIC AML2-S (AML1 WITH RD05)

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I130623 | G1 1/2" F | N,M,P | 8 (120) | 0,3-0,8 (4-12) | 70-190 | 100-290 |

TECHNICAL DATA

| | |
|------------------------------|--|
| Max. inlet pressure: | 8 bar |
| Material: | Aluminium alloy body |
| Connection: | Threaded inlet and outlet G 1 1/2" F (40x49) |
| Operating temperature range: | from -20 to + 60°C |

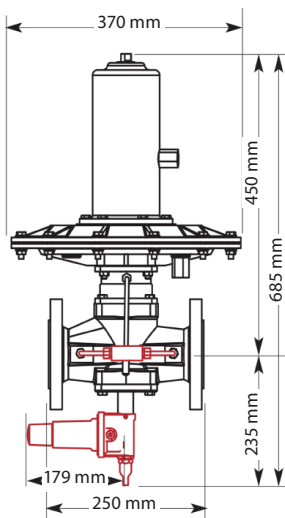
FLOW RATES PERFORMANCE CURVES



PROTÉE 432 - REGULATOR WITH BALANCED VALVE



PROTÉE 432-N



Regulator for medium and low pressure. Thanks to their balance valve the PROTÉE are insensitive to the variations of the outlet pressure. They enable the distribution of all non corrosive gas (except oxygen: contact GCE).

APPLICATION

- Second stage regulation for a propane cistern
- Medium pressure network supply
- Medium pressure burner supply
- Oven inert
- Security network

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low closing pressure
- Low pressure balanced valve
- Removable encapsulated valve

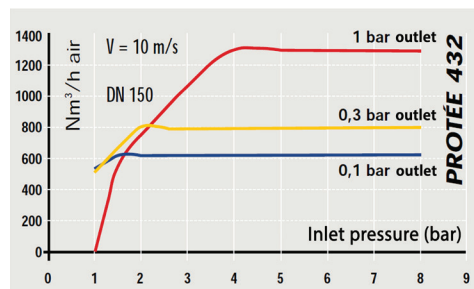
PROTÉE 432-N

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm ³ /h | Flow propane kg/h |
|----------|---------------|-------|----------------------------------|------------------------------|--------------------------------|----------------------|
| I101303 | Flanged DN 50 | N,M,P | 8 (120) | 0,25-0,35 (4-5) | 750-820 | 1160-1270 |
| I101324 | Flanged DN 50 | N,M,P | 8 (120) | 0,1-0,3 (2-4) | 600-800 | 930-1240 |
| I101325 | Flanged DN 50 | N,M,P | 8 (120) | 0,3-0,5 (4-7) | 800-950 | 1240-1470 |
| I101326 | Flanged DN 50 | N,M,P | 8 (120) | 0,5-1 (7-15) | 950-1300 | 1470-2015 |

TECHNICAL DATA

| | |
|------------------------------|--|
| Max. inlet pressure: | 8 bar |
| Material: | Cast iron body |
| Connection: | Inlet and outlet with flange DN 50 PN 40 |
| Operating temperature range: | from -20 to + 60°C |

FLOW RATES PERFORMANCE CURVES



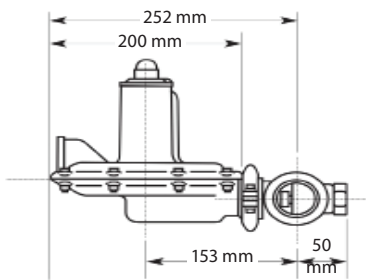
OMT - LOW PRESSURE REGULATOR



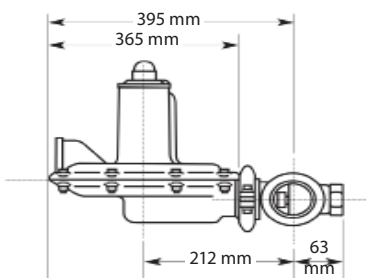
OMT B242



OMT A102 AP



OMT B242



OMT A102

The OMT range comprises of very accurate low pressure regulators developed for burning gas (LPG, natural gas) and commonly for non-corrosive gas as well.

APPLICATION

- To inert network and tanks
- Last regulation before burners
- Second stage regulation for propane
- To compress space
- Low pressure and big flow.

PRODUCT ADVANTAGES

- Watertightness in case of bad weather
- All components comfortably accessible
- Easy and fast dismantling
- Simple and heavy-duty
- Low closing pressure
- Low pressure balanced valve

OMT B242

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm³/h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|-------------------|----------------------|
| I120121 | G1 1/2" F | N,M,P | 5 (75) | 13-22 (0,195-0,33) | 10-200 | NA |
| I120122 | G1 1/2" F | N,M,P | 5 (75) | 20-29 (0,3-0,435) | 10-200 | NA |
| I120123 | G1 1/2" F | N,M,P | 5 (75) | 29-42 (0,435-0,63) | 10-200 | NA |
| I120124 | G1 1/2" F | N,M,P | 5 (75) | 40-58 (0,6-0,87) | 10-200 | NA |
| I120125 | G1 1/2" F | N,M,P | 5 (75) | 56-80 (0,84-1,2) | 10-200 | NA |

OMT B242 AP (DELIVERED WITH 2 REGULATING SPRINGS)

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm³/h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|-------------------|----------------------|
| I120221 | G1 1/2" F | N,M,P | 5 (75) | 78-200 (1,17-3) | 20-240 | NA |
| I120225 | G1 1/2" F | N,M,P | 5 (75) | 140-320 (2,1-4,8) | 20-240 | NA |

OMT A102

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm³/h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|-------------------|----------------------|
| I120625 | G2" F | N,M,P | 4 (60) | 20-45 (0,3-0,675) | 20-120 | NA |
| I120632P | G2" F | N,M,P | 4 (60) | 5,5-12,5 (0,082-0,188) | 20-120 | NA |
| I120633 | G2" F | N,M,P | 4 (60) | 9-18 (0,135-0,27) | 20-120 | NA |
| I120635 | G2" F | N,M,P | 4 (60) | 36-75 (0,54-1,125) | 20-200 | NA |

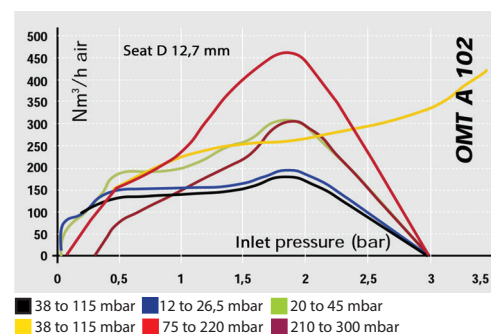
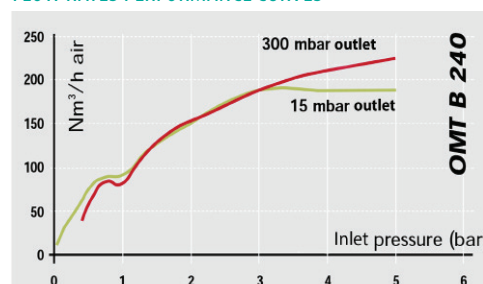
OMT A102 AP

| Art. Nr. | Connection | Gas | Max. inlet pressure bar (psi) | Outlet pressure bar (psi) | Flow air Nm³/h | Flow propane kg/h |
|----------|------------|-------|----------------------------------|------------------------------|-------------------|----------------------|
| I120725 | G2" F | N,M,P | 4 (60) | 150-300 (2,25-4,5) | 30-400 | NA |
| I120732 | G2" F | N,M,P | 4 (60) | 60-168 (0,9-2,52) | 30-400 | NA |

TECHNICAL DATA

| | |
|------------------------------|--------------------------------|
| Max. inlet pressure: | 4 bar (A102), 5 bar (B242) |
| Material: | Cast iron body |
| Connection: | G1 1/2" F (A102), G2" F (B242) |
| Operating temperature range: | from -20 to +60°C |

FLOW RATES PERFORMANCE CURVES



SECURITY DEVICE

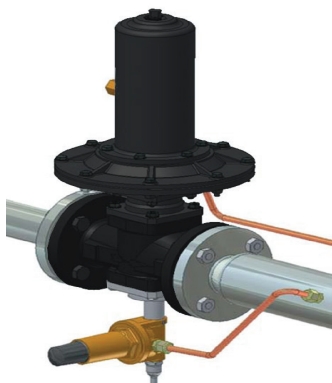
RD 05 - RELEASE SECURITY SYSTEM



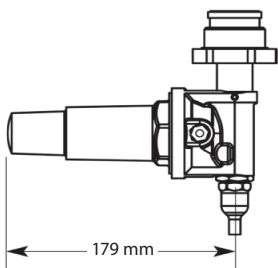
RD 05



AML1-S



PROTÉE 431-S



179 mm

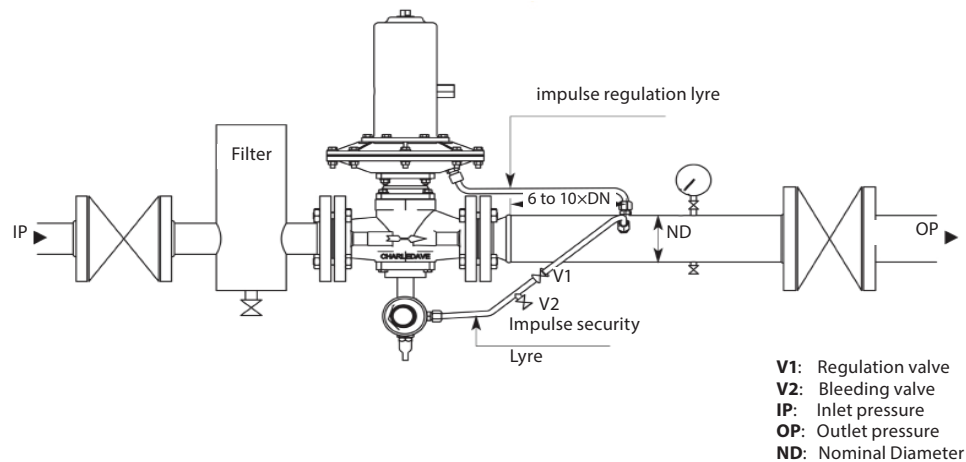
Because some fluid in a network can be dangerous, GCE has developed an efficient security device that will act on the flow when the outlet pressure will be very high or very low.

The GCE security device is used only with selected regulators of the range. The security valve cut the inlet gas flow, if the outlet pressure is out of the pressure slot that has been previously adjusted.

TECHNICAL DATA

| | | |
|------------------------------|---|----------------|
| Spring pressure slot: | | |
| | RD05 C: 0,3-0,8 bar | I290813 |
| | Mini adjustment 0,2 to 0,4 bar | |
| | Maxi adjustment 0,3 to 1,2 bar | |
| | RD05 B1: 0,5 to 2 bar | I290814 |
| | Mini adjustment 0,3 to 1,3 bar | |
| | Maxi adjustment 0,7 to 3 bar | |
| | RD05 B2: 0,5 to 2 bar | I290816 |
| | Maxi adjustment 0,7 to 3 bar | |
| | RD05 A: 1,3 to 5 bar | I290815 |
| | Mini adjustment 0,6 to 3 bar | |
| | Maxi adjustment 1,6 to 6,7 bar | |
| Valve reaction time: | < 1 second (norm < 2 seconds) | |
| Release precision: | Class AG 5 for pressure < 0,5 bar | |
| | Class AG 2,5 for pressure between 0,5 and 6 bar | |
| Definition: | | |
| Class of precision: | AG 2,5 means that as soon as the security is adjusted at 1 bar, it is released between 0,975-1,025 bar. (± 2,5%). It is the same for AG 5 class (± 5%). | |
| Operating temperature range: | from -20 to + 60°C | |

INSTALLATION EXAMPLE



VARIABLE WITH

- CELTIC AML1-S (see page 3)
- PROTÉE 431-S (see page 4)
- CELTIC AML2-S (see page 5)

PNEUMATIC LOADED REGULATOR

DE 232



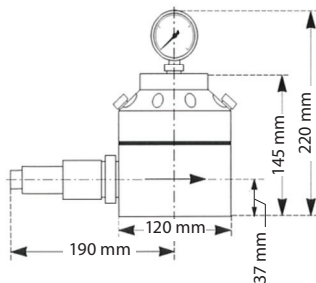
High pressure, high flow regulator for inert gas application. Regulator provides constant and stable flow.

APPLICATION

- Inertisation in various processes
- Chemical industries
- Vessel pressurising

PRODUCT ADVANTAGES

- Adjustable with or without pilot regulator (pilot regulator on request)
- Inlet pressure up to 250 bar
- Outlet pressure adjustable up to 200 bar
- Flow capacity up to 3000 Nm³/h



| Art. Nr. | Gas | Max. inlet pressure (bar) | Inlet connection | Max. outlet pressure (bar) | Outlet connection | Note |
|----------|-----------|---------------------------|------------------|----------------------------|-------------------|---------------|
| I110408 | N (Inert) | 250 | W21,8×1/14"F | 200 | G1" | without gauge |
| I110410 | N (Inert) | 250 | W21,8×1/14"F | 200 | G1" | with gauge |

TECHNICAL DATA

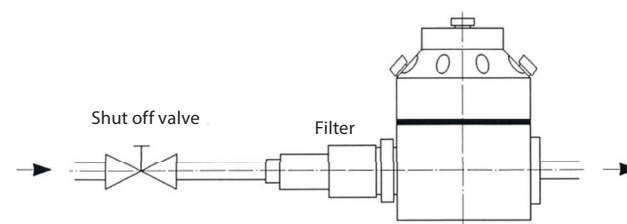
| | |
|------------------------------------|-------------------------|
| Body and bonnet material: | Machined brass |
| Surface screws material: | Stainless steel |
| Diaphragm material: | NBR |
| Seat sealing material: | PA |
| Inlet filter material: | Bronze |
| Inlet outlet connections material: | Brass |
| Maximal inlet pressure: | 250 bar |
| Maximal outlet pressure: | 200 bar |
| Maximal flow capacity: | 3000 Nm ³ /h |
| Weight: | 11 kg |
| Ambient temperature range: | from -20 to + 60°C |

FLOW CHART

| | | Inlet pressure (bar) | | | | | |
|------------------------|-----|----------------------|-----|------|------|------|------|
| Working pressure (bar) | | 10 | 30 | 50 | 150 | 200 | 250 |
| | 5 | 165 | 165 | 165 | 165 | 165 | 165 |
| | 15 | – | 465 | 465 | 465 | 465 | 465 |
| | 30 | – | – | 745 | 745 | 745 | 745 |
| | 60 | – | – | 1480 | 1480 | 1480 | 1480 |
| | 100 | – | – | – | 2130 | 2130 | 2130 |
| | 150 | – | – | – | – | 2605 | 2605 |
| | 200 | – | – | – | – | – | 3000 |

Performance in Nm³/h Air with an outlet gas speed of 30 m/s.

INSTALLATION EXAMPLE



SPARE PARTS

Maintenance kit for models with spring used with non-corrosive gas

CELTIC

| Art. Nr. | Model | Contents |
|----------|---------------------|---|
| I291261 | CELTIC JUNIOR 74-A | 1 diaphragm, 2 O-rings (plug), 1 complete regulating valve, 1 valve stem |
| I291262 | CELTIC JUNIOR 74-B | 1 diaphragm, 2 O-rings (plug), 1 complete regulating valve, 1 valve stem |
| I291281 | CELTIC AML1, RGCL-N | 1 diaphragm, 1 diaphragm washer (for AML2), 1 complete regulating valve, 3 washers (plug, valve), 1 blind nut |
| I291282 | CELTIC AML2-N | 1 diaphragm, 1 diaphragm washer (for AML2), 1 complete regulating valve, 3 washers (plug, valve), 1 blind nut |
| I291288 | CELTIC AML1, RGCL-N | Flanges (2x) + Neck (2x) |
| I303348P | CELTIC AML1, RGCL-N | Pressure gauge 6 bar |
| I291205 | CELTIC AML1, RGCL-N | Counter flange (1x) + DN 50 + Bolts (4x) + Washer |

PREVIOUS MODEL

| Art. Nr. | Model | Contents |
|----------|---------------------|--|
| I291263 | CELTIC AML1, RGCL-N | 1 diaphragm, 1 diaphragm washer (for AML2), 1 complete regulating valve, 3 washers (plug and valve), 1 blind nut |
| I291264 | CELTIC AML1, RGCL-N | 1 diaphragm, 1 diaphragm washer (for AML2), 1 complete regulating valve, 3 washers (plug and valve), 1 blind nut |

PROTÉE

| Art. Nr. | Model | Contents |
|----------|--------------|--|
| I291283 | PROTÉE 431-N | 1 diaphragm, 1 diaphragm washer (for AML2), 1 complete regulating valve, 3 washers (plug and valve), 1 blind nut |
| I291286 | PROTÉE 432-N | O-rings, 1 main diaphragm, 1 encapsulated valve, 2 diaphragms and clip rings for event hole |

PREVIOUS MODEL

| Art. Nr. | Model | Contents |
|----------|---------------------|--|
| I291270 | CELTIC AML1, RGCL-N | washers, 1 diaphragm, 1 complete regulating valve, 1 valve axis |
| I291256 | CELTIC AML1, RGCL-N | complete regulating valves, 1 main diaphragm, 2 diaphragms and clip rings for event hole, 1 encapsulated valve |

OMT

| Art. Nr. | Model | Contents |
|----------|-------|----------------------------------|
| I291265 | B242 | 1 diaphragm, 5 O-rings, 1 gasket |
| 2200077P | A102 | 1 diaphragm, 5 O-rings, 1 gasket |

DE 232

| Art. Nr. | Model | Contents |
|----------|--------|---|
| I291271 | DE 232 | valve, seat, filter, diaphragm, and O-rings |

ACCESSORIES

Outlet security kit for N-models not having outlet security device, GCE propose a security kit

CELTIC

| Art. Nr. | Model | Outlet pressure | Name |
|----------|---------------|-----------------|------------------|
| I291300 | CELTIC AML1 | 0,3 to 0,8 bar | Kit RD05 - C AML |
| I291302 | CELTIC AML1 | 0,5 to 2 bar | Kit RD05 - B AML |
| I291301 | CELTIC AML1 | 1,3 to 5 bar | Kit RD05 - A AML |
| I291303 | CELTIC AML2-N | 0,3 to 0,8 bar | Kit RD05 - C AML |

The installation of the security device has to be done in our workshop.

CELTIC

| Art. Nr. | Model | Outlet pressure | Name |
|----------|--------------|-------------------------|-------------------------|
| I291308 | PROTÉE 431-N | 0,8 to 2,1 bar | Kit RD05 - B PROTÉE 431 |
| I291307 | PROTÉE 431-N | 2,1 to 3 bar; 3 - 5 bar | Kit RD05 - A PROTÉE 431 |

The installation of the security device has to be done in our workshop.

TECHNICAL SPECIFICATION

GAS DESIGNATION

| TYPE OF GAS | CODE LETTER |
|--------------------------|-------------|
| Acetylene | A |
| Oxygen | O |
| Hydrogen | H |
| Compressed air | D |
| LPG | P |
| MPS | Y |
| Natural gas | M |
| CO2, nitrogen, inert gas | N |

PRODUCT DESIGNATION

- S REGULATOR WITH SAFETY DEVICE

| CELTIC AML1-S | |
|---------------|------------|
| Art. Nr. | Connection |
| I130561SL | G1"1/2F* |
| I130562SL | G1"1/2F* |

- CELTIC AML1-S (see page 3)
- PROTÉE 431-S (see page 4)
- CELTIC AML2-S (see page 5)

- N REGULATOR WITHOUT SAFETY DEVICE

| CELTIC AML1-N | |
|---------------|------------|
| Art. Nr. | Connection |
| I130420SL | Flanged DN |
| I130551SL | G1"1/2F |

- CELTIC RGCL-N (see page 3)
- CELTIC AML1-N (see page 3)
- PROTÉE 431-N (see page 4)
- CELTIC AML2-N (see page 5)
- PROTÉE 432-N (see page 6)

GCE Group is one of the world's leading companies in the field of gas control equipment. The headquarters are in Malmö, Sweden, and the two major supply units are located in Europe and Asia. The company operates 15 subsidiaries around the world and employs more than 900 people. GCE Group includes four business areas – Cutting&Welding technology, Valves, Healthcare and Druva. Today's product portfolio corresponds to a large variety of applications, from single pressure regulators and blowpipes for cutting and welding to sophisticated gas supply systems for medical and electronics industry applications.

