ROTAREX
MEDITEC

CENTRAL GAS SUPPLY SYSTEMS
COMPONENTS AND ACCESSORIES

Handelsonderneming PD
GASAPPENDAGES - GASMENGERS

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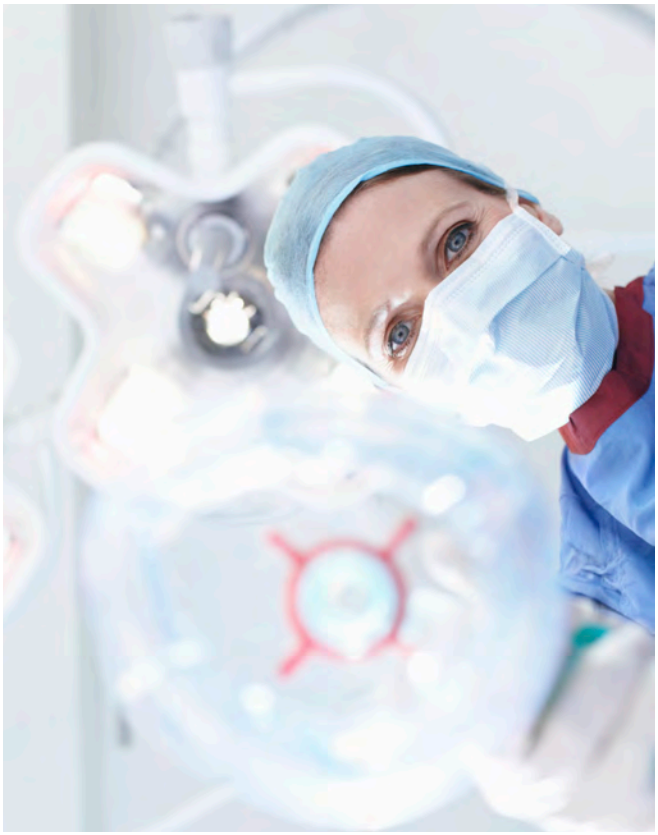
CE 0476

ISO 13485 QUALITY ASSURANCE

All Rotarex regulators are produced in Europe in accordance with international standards (ISO; CGA....) and are guaranteed to provide safe and reliable performance in operation. All locations are ISO 13485.

ROTAREX MEDITEC COMPLETE PIPELINE SYSTEM

Patient therapy and safety is our main focus in the design, installation, commissioning and operation of medical gas pipeline systems



QUANTITY OF SUPPLY

Pipeline systems are designed in such a way sufficient medical gas capacity can be ensured in order to provide the required flows of gases for the intended number of patients to be treated at any time.

IDENTITY OF SUPPLY

All products included in our medical gas supply system are designed, produced and controlled for a specific medical gas. All points to which the user or technical staff can connect are gas specified. There is no risk of misconnection.

CONTINUITY OF SUPPLY

This is achieved by installing, as a minimum, duplex components and providing additional means of supply provision in the event of failure of the primary and secondary supply systems.
Means for connection of ultimate external and transportable sources are also considered at different stages..

QUALITY OF SUPPLY

Our pipeline distribution systems maintain quality of supplied medical gases thanks to appropriate selection of material, components cleanliness and internal filtration equipment.
Products designs ensure safe supply by minimizing ignition risks, by avoiding patient poisoning risks and by guaranteeing very good performances for accurate therapies.

QUALITY FIRST...

Rotarex Meditec products are designed, validated, produced and controlled during their whole lifetime according to a very stringent quality system which exceeds requirements of EN ISO 13485 standard.

DESIGN

All our products comply with local and international standards. Some reference standards:

Medical gas pipeline systems	EN ISO 7396-1	Medical gas pipeline systems Part 1: Pipelines for compressed medical gases and vacuum
Products design and validation	EN ISO 10524-1	Pressure regulators for use with medical gases - Part 1: Pressure regulators and pressure regulators with flow-metering devices
	EN ISO 10524-2	Pressure regulators for use with medical gases - Part 2: Manifold and line regulators
	EN ISO 10524-4	Pressure regulators for use with medical gases - Part 4: Low pressure regulators
Materials selection and cleanliness	EN ISO 15001	Anesthetic and respiratory equipment. - Compatibility with oxygen

Product design is done through a risk assessment process and is combining proven technologies and innovation to reach the best performance levels.

VALIDATION

Product validation process guarantees that products are developed and produced to withstand the complete lifecycle (installation, commissioning, normal service and maintenance)

PRODUCTION

All products are produced in a controlled environment in order to maintain cleanliness
An individual traceability is ensured with individual serial number
Products are individually controlled and data are recorded for a perfect product management.

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THE MAIN MEDICAL GASES IN PIPELINE SYSTEMS…

Symbol	Name	Application	Source Type
O_2	Oxygen	Oxygen is one of the most extensively used gases for respiratory therapy and life-support and is additionally used in anesthetic procedures.	- Compressed gas cylinder - Liquid tank - Concentrator
Air	Air	Medical air is mainly used in respiratory therapy as a power source for patient ventilators, and for blending with oxygen. It is also used as the driving gas for nebulized drugs and chemotherapy agents.	- Compressor - Compressed gas cylinder
N_2O	Nitrous Oxide	Nitrous oxide is used for anesthetic and analgesic purposes, being mixed with air, oxygen, and nebulized agents.	- Liquefied gas cylinder
CO_2	Carbon Dioxide	Carbon dioxide is used less commonly now as a respiratory stimulant, and for insufflation during surgery.	- Liquefied gas cylinder
Air	Surgical Air	Surgical air (of medical air quality) is also used, at a higher pressure, to power a variety of surgical tools and other devices such as tourniquets.	- Compressor - Compressed gas cylinder
N_2	Nitrogen	As an alternative, nitrogen can be used for the same purpose as surgical air.	- Compressed gas cylinder

SOME DEFINITIONS OF OUR CORE BUSINESS

3 main categories of pressure regulators have to be considered into a medical gas supply systems.

1. MANIFOLD PRESSURE REGULATORS

Manifold pressure regulators are used to reduce high cylinder pressure to a lower pressure within a source of supply of a medical gas pipeline system. They are mainly integrated into supply and switchover boards.

2. LINE PRESSURE REGULATORS

Line pressure regulators are used to reduce the pressure supplied by manifold pressure regulators or by cryogenic vessels to the lower pressure required at the terminal units of medical gas pipeline systems. They are intended to be used for inlet pressure up to 30bar.

3. CYLINDER PRESSURE REGULATORS

A cylinder pressure regulator is used to reduce high cylinder pressure to a lower pressure suitable for use with medical equipment or for delivery of gas directly to a patient.

It is often coupled to a device which controls the flow, such as a flow control valve or a fixed orifice.

Cylinder pressure regulators are also used in pipeline systems as transportable source for maintenance purpose or ultimate source supply.

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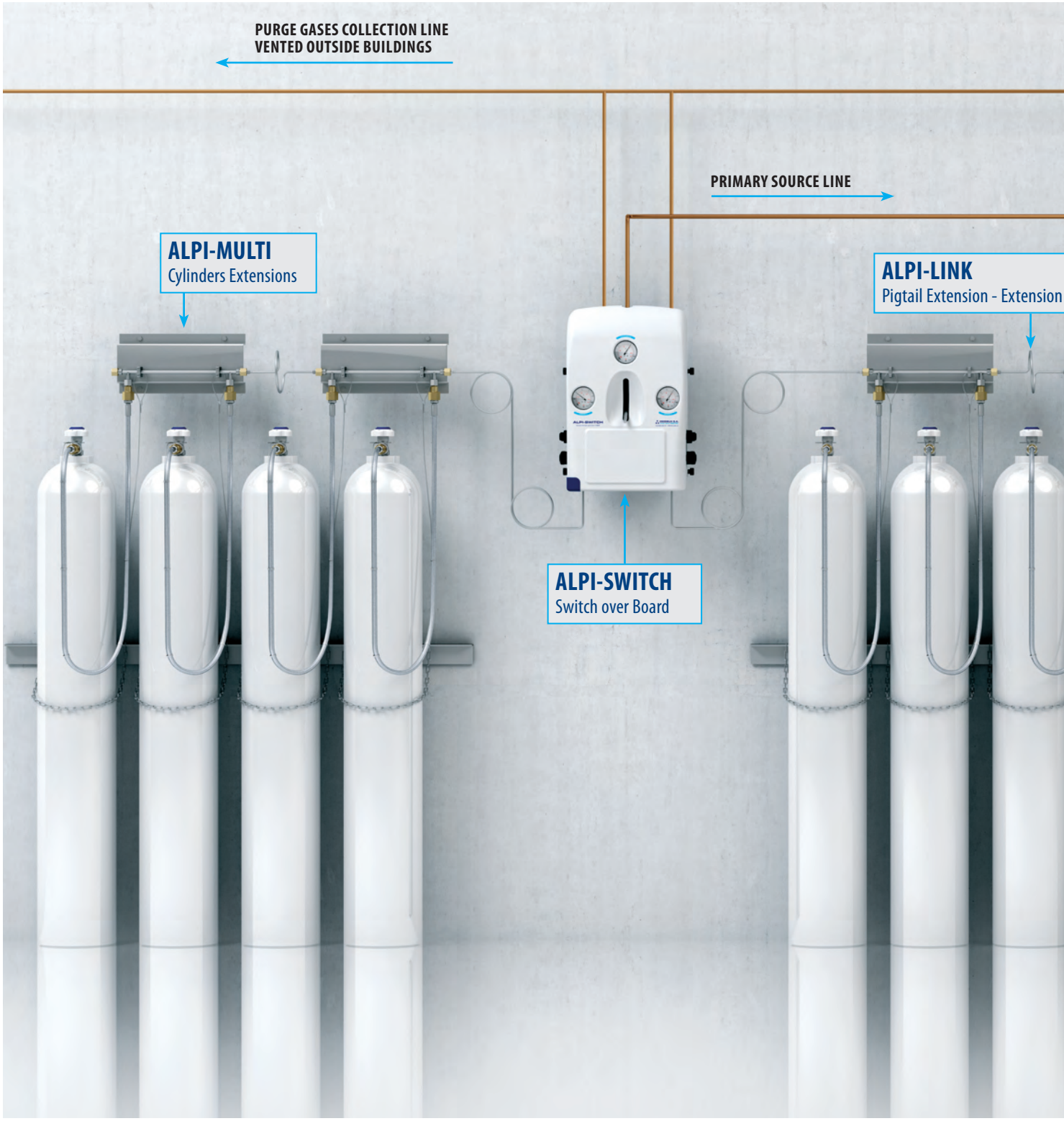
ALPI-LINE
MEDICAL GAS SUPPLY SYSTEMS



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I.E: According to ISO 7396-1
Double stage pipeline system

DISTRIBUTION LINE
- Toward ALPI-REG Line Pressure Regulator Double-stage distribution systems
- Toward ALPI-DIST Area Shut-Off Valve Single-stage distribution systems

EMERGENCY SOURCE LINE

ALPI-NRV
LP Non-return Valve

ALPI-SAFE
Emergency Module

ALPI-NRV AF 10
HP Non-return Valve

ALPI-MSV
Main Section Valve

ALPI-LINK
Pigtail Manifold - Extension

Flexible Hose
Connection Cylinder - Extension

Cylinder Holder
Cylinder fixation

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SWITCH OVER BOARD

AUTOMATIC VERSION

	ALPI-SWITCH M826 P. 019	ALPI-SWITCH M825 P. 019	ALPI-SWITCH M820 P. 020	ALPI-CEN P. 022
Type	Double stage line regulator	Single stage line regulator	Basic version	Single stage
Inlet Pressure	200 bar / 2900 psig	200 bar / 2900 psig	200 bar / 2900 psig	200 bar / 2900 psig
Outlet Pressure	9 / 4,5 bar	10 / 5 bar	10 bar	10 bar
Flow Rate	100 / 70 Nm^3/h (N_2)	80 / 50 Nm^3/h (N_2)	50 Nm^3/h (N_2)	70 Nm^3/h (N_2)
Material	Raw Brass Plastic Protection Cover	Raw Brass Plastic Protection Cover	Raw Brass Plastic Protection Cover	Raw Brass

MANUAL VERSION

	ALPI-SWITCH MAN P. 020	ALPI-CEN MAN P. 022
Type	Basic version	Single stage
Inlet Pressure	200 bar / 2900 psig	200 bar / 2900 psig
Outlet Pressure	7 bar	10 bar
Flow Rate	50 Nm^3/h (N_2)	50 Nm^3/h (N_2)
Material	Raw Brass Plastic Protection Cover	Raw Brass

SUPPLY BOARDS - EMERGENCY MODULES

	ALPI-SAFE M830 P. 024	ALPI-SAFE M831 P. 024	ALPI-MOD P. 026
Type	Single stage	Single stage	Single stage
Inlet Pressure	200 bar / 2900 psig	200 bar / 2900 psig	200 bar / 2900 psig
Outlet Pressure	7 bar	7 bar	10 bar
Flow Rate	50 Nm^3/h (N_2)	50 Nm^3/h (N_2)	70 Nm^3/h (N_2)
Material	Raw Brass Plastic Protection Cover	Raw Brass Plastic Protection Cover	Raw Brass

HIGH PRESSURE REGULATORS

	BSC 290/390 P. 028	DM200 GD P. 030	DM200 TGD P. 031
Type	Diaphragm - Cartridge	Diaphragm - Single stage	Diaphragm - Single stage
Inlet Pressure	200/300 bar 2900/4350 psig	200 bar / 2900 psig	200 bar / 2900 psig
Outlet Pressure	4 /8 / 10 bar 58 / 116 psig	10 bar	20 bar
Flow Rate	7 / 25 / 30 Nm^3/h (N_2)	100 Nm^3/h (N_2)	250 Nm^3/h (N_2)
Material	Chrome Plated Brass	Raw Brass	Raw Brass

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LINE PRESSURE REGULATORS

	ALPI-REG 1 P. 032	ALPI-REG 2 P. 034	ALPI-REG P. 036	DM20 / DM20 GD P. 037
Type	Single second stage	Dual second stage	Diaphragm	Diaphragm
Inlet Pressure	10 bar / 145 psig	10 bar / 145 psig	30 bar / 435 psig	20 bar / 290 psig
Outlet Pressure	4 bar / 58 psig 8 bar / 116 psig	4 bar / 58 psig 8 bar / 116 psig	4 bar / 88 psig 9 bar /130 psig	10 bar / 145 psig GD : 12 bar / 290 psig
Flow Rate	50 Nm3/h (N_2)	50 Nm^3/h (N_2)	30/250 Nm^3/h (N_2)	98 Nm^3/h (N_2) GD : 124 Nm^3/h (N_2)
Material	Chrome Plated Brass	Chrome Plated Brass	Raw Brass	Raw Brass

SECTION VALVES

	ALPI-MSV P. 038	ALPI-DIST P. 040
Working Pressure	10 bar 145 psig	10 bar 145 psig
Cv	0.35	0.35
Material	Ext: Chrome Plated Brass Int: Raw Brass	Ext: Chrome Plated Brass Int: Raw Brass
Type	3x Ball Valves	1x Ball Valve
Handwheel	¼ turn	¼ turn

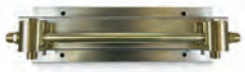
NON RETURN VALVES

	ALPI-NRV M855 P. 042	ALPI-NRV AF10 P. 043
Working Pressure	25 bar / 362 psig max.	200 bar / 2900 psig max.
Material	Raw Brass	Raw Brass

TERMINAL UNITS

ALPICONNECT P. 044

CONNECTIONS



ALPI-MULTI CYLINDER EXTENSION P. 054

ALPI-LINK INTERMEDIATE PIGTAIL P. 056

CYLINDER PIGTAIL P. 058

CYLINDER FLEXIBLE HOSE P. 059

CONTACT GAUGE P. 062

BA12 ALARM BOX P. 063

GAS CYLINDER HOLDER P. 064

PROTECTION COVER KIT P. 065

OMEGA PLATE FIXING ELEMENT P. 066

MAINTENANCE TOOL CASE P. 067

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TECHNOLOGY OVERVIEW

SUPPLY BOARDS

A **supply board** is used in a central gas supply system in order to reduce the cylinder pressure to an appointed secondary pressure. The supply board will then supply a stable pressure to line regulators or points of use.

A supply board can be considered like a simplified switch over board (without the continuous gas supply from several high-pressure sources).

Most of our supply boards have 3 common inlets available. This avoids installation of extensions and increases safety of the installation.

PRODUCT FINDER

Alpi-Safe	P. 020
Alpi-Mod	P. 022

SWITCH OVER BOARDS

SAFETY FIRST

- DUOBLOC: 6 cylinders (2x3) connections possible w/o extension – to improve the global system tightness and reduce leakage points. Also, with DUOBLOC concept you can purge independently each side. The purge can be collected.
- Fitted with a safety relief valve in case of over pressure which can be collected
- Shut-off valves design approved for 300 bar for a higher safety factor
- Automatic switch for a continuous gas supply
- Dedicated HP and LP pressure gauges for a permanent indication. Contact gauges can also be used to connect to an alarm box
- With a gas monitoring system, you can easily check gas consumption and sources status from your desk
- Protected with an inviolable plastic cover

HIGH PERFORMANCE

- Outlet pressure and flow stability thanks to its Balances-Valve Technology
- Internal mechanical forces reduced for a longer lifetime and a lower ownership cost
- 2 levels of pressure regulation for a higher flow and a much better stability
- Smart choice of material in conformance with EN ISO 15001

EASE OF HANDLING AND INSTALLATION

- Easy access of purging and isolation valves
- Easy installation with all components pre-mounted on an Omega plate
- Easy access to all functions
- Easy access to all components submitted to maintenance

LOWER OPERATING COSTS

- A continuous gas supply for a better cylinders change productivity
- Easy and quick maintenance operations
- Product design for a long service lifetime
- Multiple large cylinders connection to reduce cylinders quantity and associated rental, transportation and handling costs
- A complete and compact system for a surface saving in hospital technical areas

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TECHNOLOGY OVERVIEW (continued)

AUTOMATIC SWITCH OVER BOARDS WITH MANUAL RESET

An **automatic switch over board with manual reset** is a system which provides a continuous gas supply to the piping system. One source of gas is used as the primary source, while a second source is held in reserve.

When the primary source reaches a predetermined pressure, the reserve supply automatically begins to supply gas to the system.

Once the switch over occurs and primary source is replaced, the switch over board is reset, such that the reserve supply supplying gas is now designated as primary source and the secondary source is now held in reserve. The empty cylinder can be replaced without interrupting the gas flow.

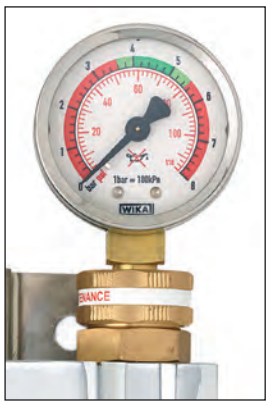
PRODUCT FINDER

Alpi-Switch	P. 016
Alpi-Cen	P. 018

SPECIAL FEATURES

MAINTENANCE SYSTEM

For serviceable components, our maintenance systems can be selected for your maintenance operations.



- Enable easy, quick and effective maintenance operations on pressure gauge, pressure sensor and safety relief valve
- Manual operation without any tool
- O-ring sealing for an easily manageable tightness
- Enable maintenance operations under pressure without interrupting medical gas supply into the hospital
- No gas leaks during maintenance operations for as safe replacement without being exposed to pressurized gas flow

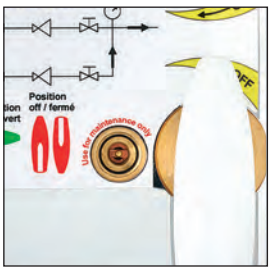
When selected for second stage regulators maintenance system gives installer much more flexibility and enables easy product reversibility on site

PRODUCT FINDER

Alpi-MSV	P. 034
Alpi-Dist	P. 036
Alpi-Reg 1	P. 028
Alpi-Reg 2	P. 030

PURGING AND SETTING DEVICE

Special device integrated on second stage regulators for effective maintenance operations and setting purpose.



- Enable a safe pressure regulator dismantling by an easy and appropriate venting when isolated
- After your maintenance operation effectively set the regulator as it is done in our production line
- Enable settings in static and dynamic conditions in order to properly set pressure and flow according to hospital alarm levels
- Specific tooling available

PRODUCT FINDER

Alpi-Reg 1	P. 028
Alpi-Reg 2	P. 030

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TECHNOLOGY OVERVIEW (continued)

PRESSURE REGULATOR TECHNOLOGIES

Rotarex Supply Panels and Switch over Panels use 3 main pressure regulator technologies to achieve a stable and reliable pressure regulation:

BALANCED VALVE

- Best-in-class pressure stability
- Minimizes the effect of inlet pressure fluctuations on outlet pressure
- Increases regulator lifetime and reduces cost of ownership by reducing seat effort
- Diaphragm technology only

DIAPHRAGM

- Our most-used technology (cylinder regulation, line, supply panel...)
- Compact design
- Good precision

CARTRIDGE

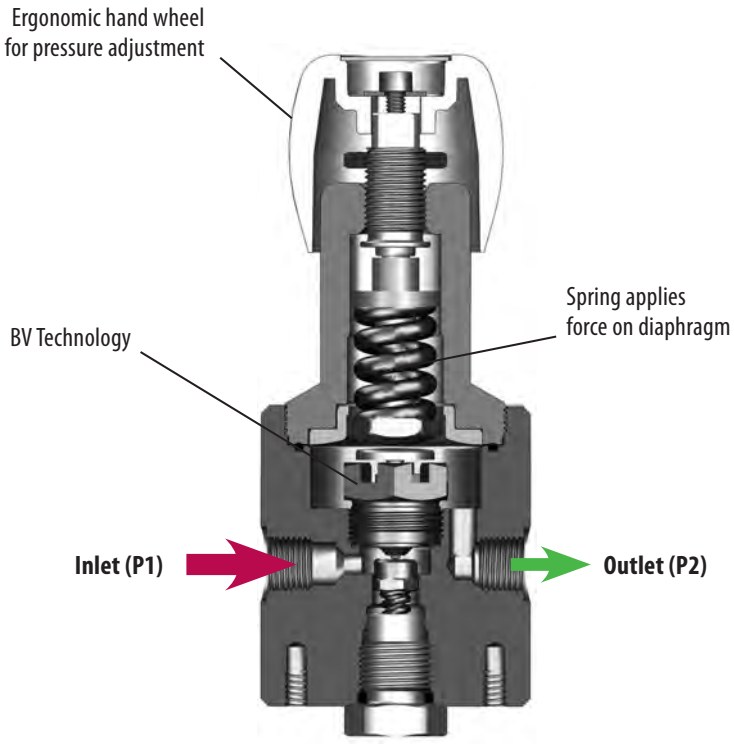
- High outlet pressure stability
- Compact design
- Long product life = very resistant technology

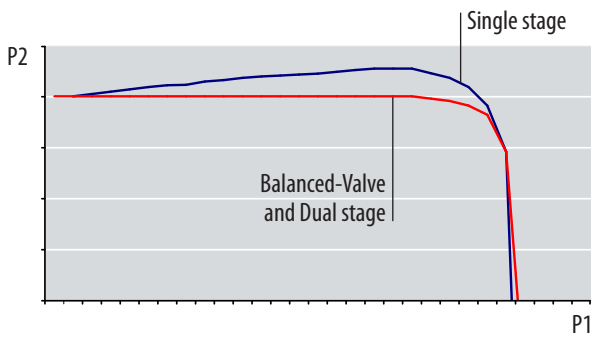
BALANCED VALVE TECHNOLOGY

Our **Balanced-Valve Technology regulator** gives you dual stage regulator performance in a single stage design. Due to its proprietary design, it is able to balance the internal forces within the regulator and compensates for the pressure fluctuation on the inlet. It provides a constant outlet pressure like a dual stage regulator but with a lower total ownership cost.

PRODUCT FINDER

Alpi-Switch	P. 016
Alpi-Cen	P. 018
Alpi-Safe	P. 020
Alpi-Mod	P. 022





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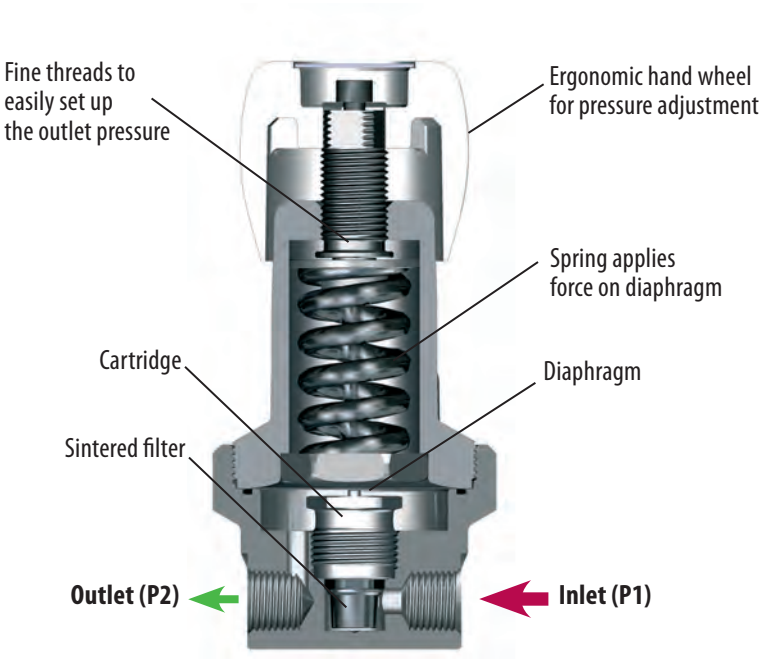
TECHNOLOGY OVERVIEW (continued)

CARTRIDGE REGULATOR

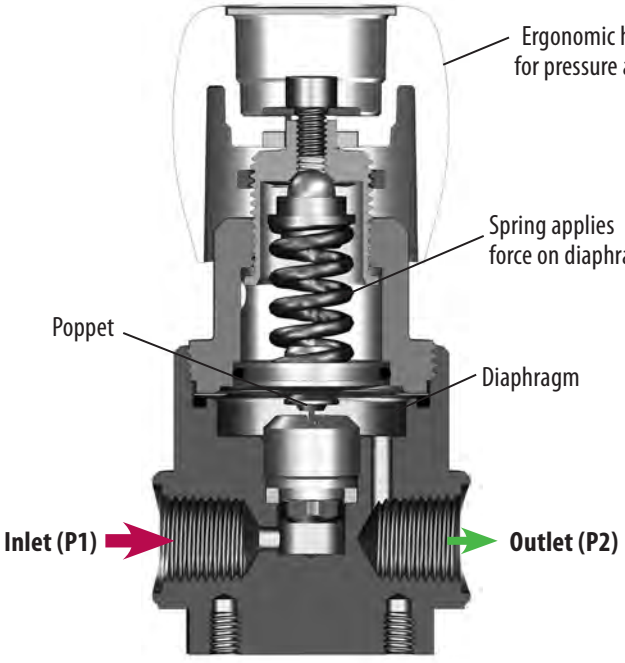
Superior technical performance with cartridge technology:
- Better outlet pressure stability due to the cartridge design. Outlet pressure remains stable despite any fluctuation of inlet pressure.
- Longer product life due to less impingement on the diaphragm.
- Compact design with reduction of dead volume (minimal purge requirements)
- Sintered inlet filter provides better filtration without restricting flow.

PRODUCT FINDER

SCL 290 MED	P. 024
Alpi-Reg 1	P. 028
Alpi-Reg 2	P. 030



DIAPHRAGM REGULATOR



PRODUCT FINDER

DM200 GD	P. 026
DM200 TGD	P. 027
DM20	
DM20 GD	P. 033
DC50	P. 032

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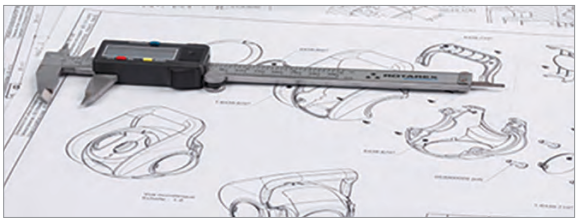
ROTAREX MEDITEC SERVICES

SYSTEMS PRE - ENGINEERING

We pre-engineer total solution from source to point of use regarding the standard, the performances and the type of source you are considering

INSTALLATION / SERVICE SUPPORT

We can provide you installation support in order to easily and effectively implement our equipments in hospitals or clinics.
We can offer you service kits, instructions and tooling in order to make our equipments easily serviceable



PRODUCTS TRAININGS

We suggest trainings for installers and hospital technical staff and documentation support in order to teach how to manipulate and service our equipments

TECHNICAL SUPPORT

With our experience, expertise, analysis and testing equipments, we are able to give you strong technical assistance and help you to solve problems

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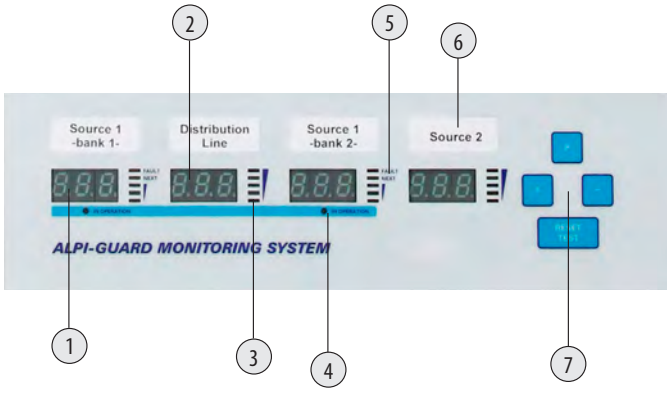
ELECTRONIC SOLUTIONS …GAS MONITORING SYSTEM

KEY FEATURES

Switch over boards with integrated electronic panel	Contact gauge	Pressure sensor	Pressure switch	Gas Source Monitoring
Pneumatic Control with Electronic Monitoring	Contact pressure gauges for ROTAREX regulators, points of use, supply boards or switch over boards	The pressure sensor precisely measures pressure of gas in use. It acts as a transducer; it generates a signal as a function of the pressure imposed.	The pressure switch is a device which indicates when a certain set pressure has been reached on its input. The switch may be designed to make contact either on pressure rise or on pressure fall.	Complete Gas Source Monitoring And possible reports in different requested locations

DISPLAY DETAILS



1. **HP CYLINDER PRESSURE**
2. **LINE PRESSURE IN BAR**
3. **LINE PRESSSURE BARGRAPH**
   Color coding (Green, Yellow, Red) based on defined tolerances
4. **SOURCE STATUS**
   In Operation or in Reserve (Reset Option)
5. **SOURCE STATUS AND INFORMATION**
   - Empty to be replaced
   - Set as next source in service
   - Failure Mode alarms
6. **SINGLE SOURCE**
   Primary Liquid Source or Emergency Gas Source
7. **SETTING AND CONTROL INTERFACE**
   - Values
   - Units
   - Tolerances
   - Alarm levels

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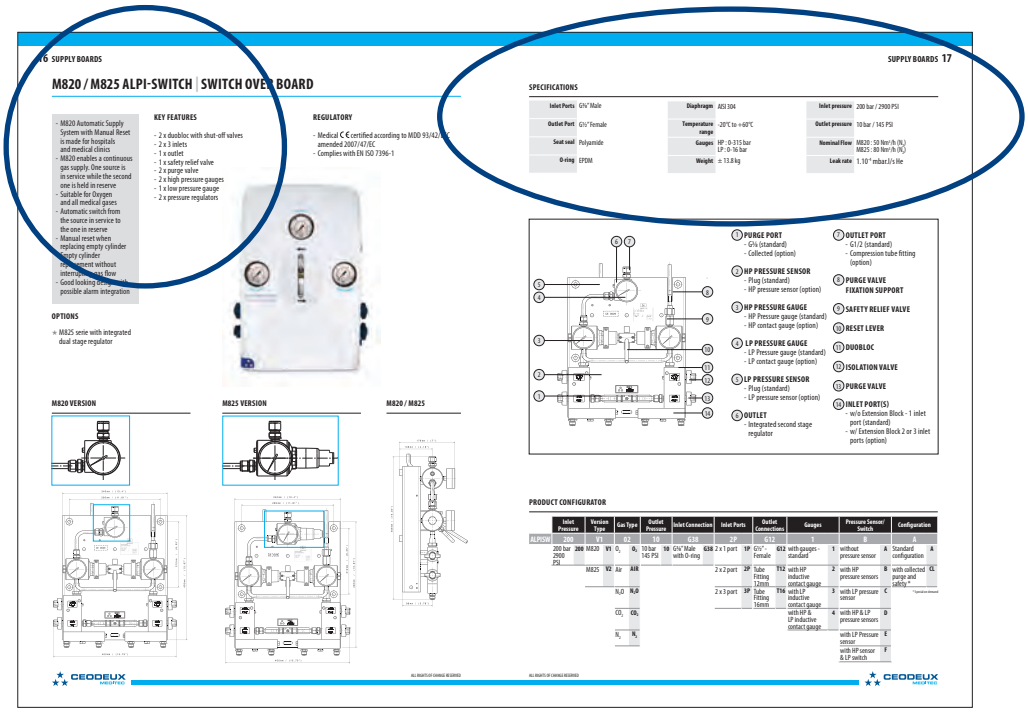
SELECTING THE RIGHT SUPPLY SYSTEM

To choose the right supply solution for your application and get the best results, you should identify the following technical parameters:

TECHNICAL PARAMETER	EXAMPLE
Product	Supply board, switchover board, manifold regulator, line regulator, cylinder regulator, valve,...
Gas type	O_2 , Air, N_2O, CO_2
Type of source	Compressed cylinder, liquid tank,...
Nominal inlet pressure	Bar or psig
Nominal outlet pressure	Bar or psig
Outlet pressure limits	lower and upper alarm levels
Nominal flow (N2)	Nm^3/h, Nlpm, Slpm or SCFM
Material	Raw brass, chrome plated brass, stainless steel
Inlet connection	Ports quantity and type
Outlet connection	Ports quantity and type
Gauges	Pressure range and type (bourdon tube, inductive contact, sliding contact)
Pressure sensor	yes/no, pressure range and location/ output signal : 4-20mA
Pressure switch	yes/no
Temperature range	-20°C to +60°C / -4° F to +140°F
Outdoor or indoor use	Environment
Product applicable standards	ISO 10524-1 for cylinder pressure regulators ISO 10524-2 for manifold and line pressure regulator ISO 10524-4 for low pressure regulator
Medical gas supply system standard	ISO 7396-1, HTM 02-01, NFPA 99, ABNT NBR 12188,...
Certification / Approval / Registration	CE marked - 93/42/EEC European Medical Device Directive, FDA 510(k) – USA, TGA (Therapeutic Goods Administration) - Australia, Health Canada, HSA (Health Sciences Authority) – Singapore, ANVISA – Brasil

Each product page is designed to provide you the essential technical information at a glance:



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NOTES

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M820 / M825 /M826 ALPI-SWITCH | SWITCH OVER BOARD

- M820 Automatic Supply System with Manual Reset is made for hospitals and medical clinics
- M820 enables a continuous gas supply. One source is in service while the second one is held in reserve
- Suitable for Oxygen and all medical gases
- Automatic switch from the source in service to the one in reserve
- Manual reset when replacing empty cylinder
- Empty cylinder replacement without interrupting gas flow
- Good looking design with possible alarm integration

KEY FEATURES

- 2 x duobloc with shut-off valves
- 2 x 3 inlets
- 1 x outlet
- 1 x safety relief valve
- 2 x purge valve
- 2 x high pressure gauges
- 1 x low pressure gauge
- 2 x pressure regulators

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1

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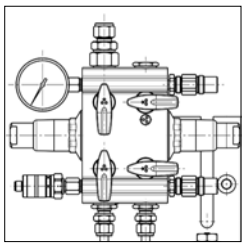
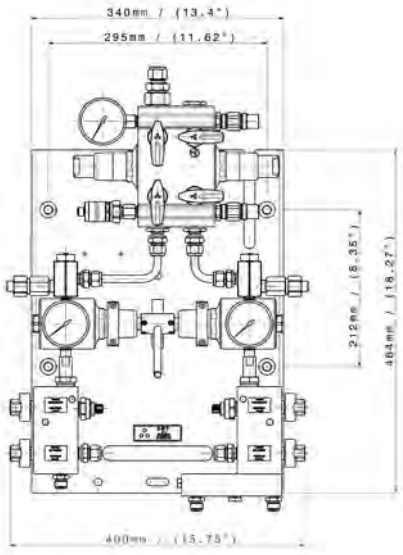
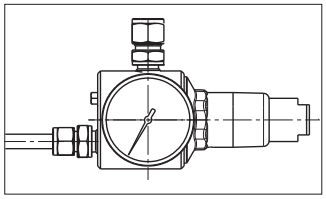
M826 VERSION



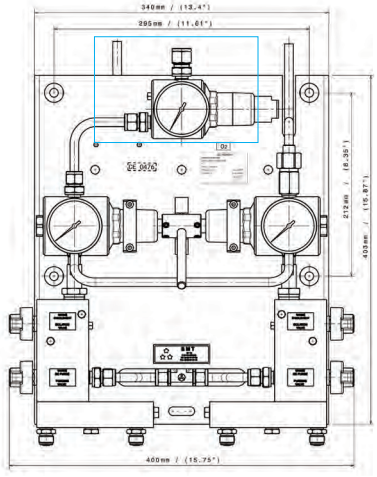
Dual stage line regulator



M825 VERSION



Single stage line regulator



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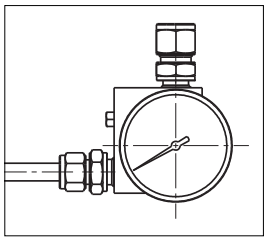
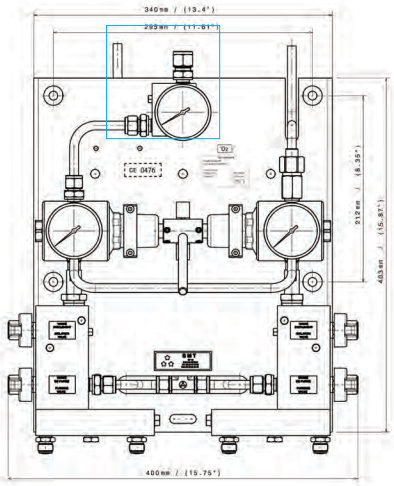
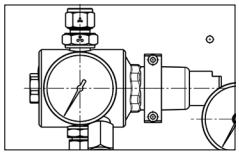
M820 VERSION



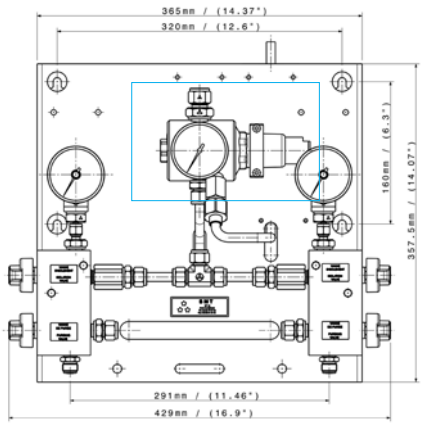
No line regulator



M815 VERSION



Single stage line regulator



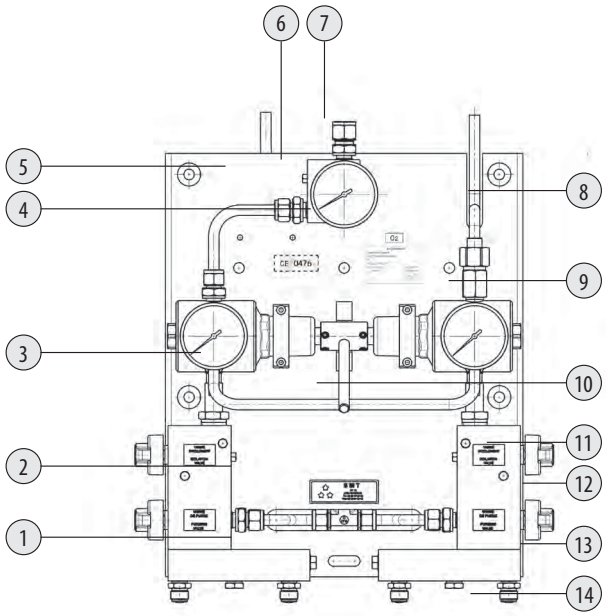
ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet Ports	G⅜" Male
Outlet Port	G½" Female
Seat seal	Polyamide
O-ring	EPDM

Diaphragm	AISI 304
Temperature range	-20°C to +60°C
Gauges	HP : 0-315 bar LP : 0-16 bar
Weight	± 13.8 kg

Inlet pressure	200 bar / 2900 psig
Outlet pressure	10 bar / 145 psig
Nominal Flow	M820 : 50 Nm^3/h (N_2) M825 : 80 Nm^3/h (N_2) M826 : 70 Nm^3/h (N_2)
Leak rate	1.10^{-4} mbar.l/s He



1. **PURGE PORT**
   - G⅜ (standard)
   - Collected (option)
2. **HP PRESSURE SENSOR**
   - Plug (standard)
   - HP pressure sensor (option)
3. **HP PRESSURE GAUGE**
   - HP Pressure gauge (standard)
   - HP contact gauge (option)
4. **LP PRESSURE GAUGE**
   - LP Pressure gauge (standard)
   - LP contact gauge (option)
5. **LP PRESSURE SENSOR**
   - Plug (standard)
   - LP pressure sensor (option)
6. **OUTLET**
   - Integrated dual stage regulator, or single stage, or without line regulator
7. **OUTLET PORT**
   - G1/2 (standard)
   - Compression tube fitting (option)
8. **PURGE VALVE FIXATION SUPPORT**
9. **SAFETY RELIEF VALVE**
10. **RESET LEVER**
11. **DUOBLOC**
12. **ISOLATION VALVE**
13. **PURGE VALVE**
14. **INLET PORT(S)**
    - w/o Extension Block - 1 inlet port (standard)
    - w/ Extension Block 2 or 3 inlet ports (option)

PRODUCT CONFIGURATOR

	Inlet Pressure		Version Type		Gas Type		Outlet Pressure		Inlet Connection		Inlet Ports		Outlet Connections		Gauges		Pressure Sensor/ Switch		Configuration	
ALPISW	200		V1		02		10		G38		1P		G12		1		A		A	
	200 bar 2900 psig	200	M820	V1	O_2	O_2	10 bar 145 psig	10	G⅜" Male with O-ring	G38	2 x 1 port	1P	G½" - Female	G12	with gauges - standard	1	without pressure sensor	A	Standard configuration	A
			M825	V2	Air	AIR	5 bar 72,5 psig	5			2 x 2 port	2P	Tube Fitting 12mm	T12	with HP inductive contact gauge	2	with HP pressure sensors	B	with collected purge and safety *	CL
			M826	V3	N_2O	N_2O					2 x 3 port	3P	Tube Fitting 16mm	T16	with LP inductive contact gauge	3	with LP pressure sensor	C		
			M815	V4	CO_2	CO_2									with HP & LP inductive contact gauge	4	with HP & LP pressure sensors	D		
					N_2	N_2											with LP Pressure switch	E		
																	with HP sensor & LP switch	F		

* Special on demand

ALL RIGHTS OF CHANGE RESERVED

ALPI-CEN | SWITCH OVER BOARD

- Automatic Switch Over Board with Manual Reset for hospitals and medical clinics
- Enables a continuous gas supply. One source is in service while the second one is held in reserve
- Automatically switches from the source in service to the one in reserve
- Manual reset when replacing empty cylinder
- Allows replacement of empty cylinders without interrupting gas flow

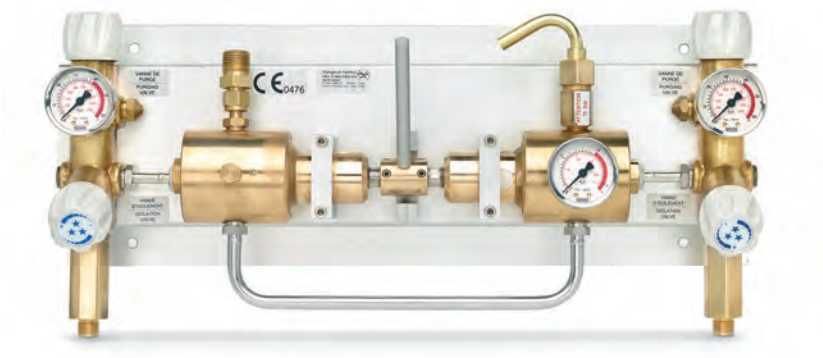
KEY FEATURES

- 2 x duobloc with shut-off valves
- 2 x 2 inlets (one with non-whipping filter)
- 1 x outlet
- 1 x safety relief valve
- 2 x purge valve
- 2 x high pressure gauges
- 1 x low pressure gauge

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1

CEN Automatic version



CEN Manual version

KEY ADVANTAGES

SAFETY FIRST

- DUOBLOC: 6 cylinders (2x3) connections possible w/o extension – to improve global system tightness and reduce leakage points. Also, with DUOBLOC concept you can purge independently each side. The purge can be collected.
- Fitted with a safety relief valve in case of over pressure which can be collected
- Automatic switch for a continuous gas supply
- Dedicated HP and LP pressure gauges for a permanent indication. Contact gauges can also be used to connect to an alarm box
- With a gas monitoring system, you can easily check gas consumption and source status from your desk.

HIGH PERFORMANCE

- Exceptionally stable outlet pressure and flow thanks to Balanced-Valve Technology
- Reduces internal mechanical forces for a longer lifetime and a lower ownership cost

EASE OF HANDLING AND INSTALLATION

- Easy access of purging and isolation valves
- Easy installation with all components pre-mounted on an Omega plate
- Easy access to all components submitted to maintenance

LOWER OPERATING COSTS

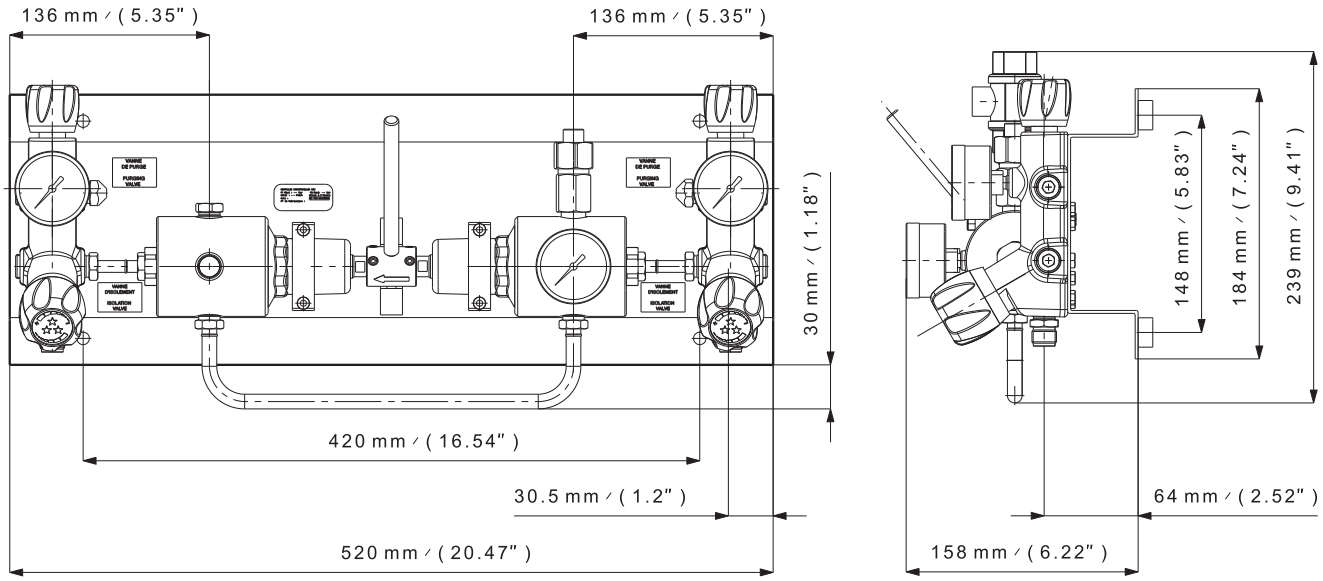
- A continuous gas supply for better cylinder change-over productivity
- Reduces cylinder quantity and associated rental, transportation and handling costs
- A complete and compact system for better space efficiency in hospital technical areas

ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Female ports	G ⅜" (inlet) G ½" (outlet)	**Leak rate**	1.10^{-4} mbar ℓ/s He	**Inlet pressure**	200 bar / 2900 psig
Seat seal	Polyamide	**Temperature range**	-20°C to + 60°C	**Outlet pressure**	10 bar / 145 psig
O-ring	EPDM	**Gauges**	High and low pressure (M10 x 1 or G ¼")	**Nominal Flow**	70 Nm^3/h (N_2)
Diaphragm	AISI 304	**Weight**	± 13.8 kg	**Setting**	8 bar / 10 bar

CEN Automatic version



PRODUCT CONFIGURATOR

	Inlet Pressure		Version type		Outlet Pressure		Body Material		End Connections		O-ring Material	Gauges		Outlet Valve		Configurations	
CEN	200		SEMI		10		LB		G		EPDM	1		NV		A	
	200 bar 2900 psig	200	Automatic	SEMI	10 bar 145 psig	10	Raw Brass	LB	In: G ⅜ Out: G ½ - Female	G	EPDM - standard	with gauges - standard	1	without outlet shut-off valve (standard)	NV	Standard configuration	A
			Manual	MAN								with HP inductive contact gauge	2				

Others versions and possibilities available upon request

ALL RIGHTS OF CHANGE RESERVED

M830 /M831 ALPI-SAFE | SAFETY SUPPLY BOARD

- Safety Supply System for hospitals and medical clinics
- Enables gas supply continuity if both primary and secondary sources are unable to supply the gas pipelines or for maintenance purpose
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, N_2O)
- Permanently connected with an automatic activation
- Attractive design thanks to its protective plastic cover

KEY FEATURES

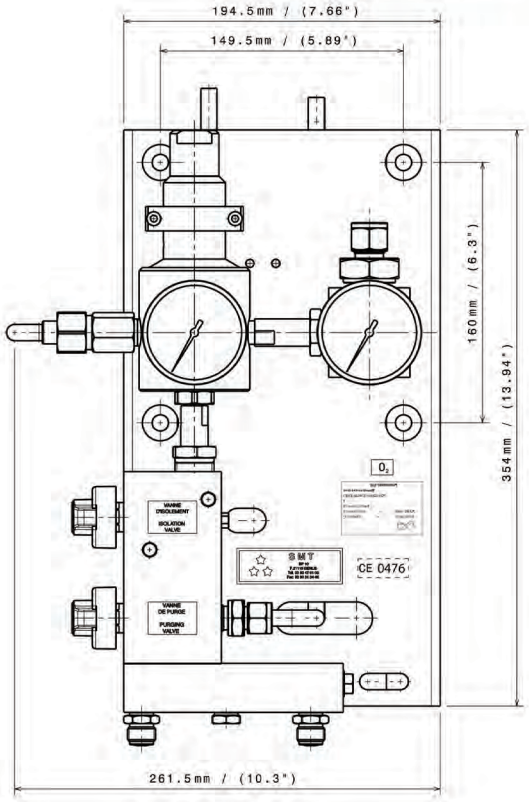
- 1 x duobloc with shut-off valves
- 3 x inlet connections
- 1 x outlet connection
- 1 x safety relief valve
- 1 x purge valve
- 1 x high pressure gauges
- 1 x low pressure gauge
- 1 x Pressure regulators

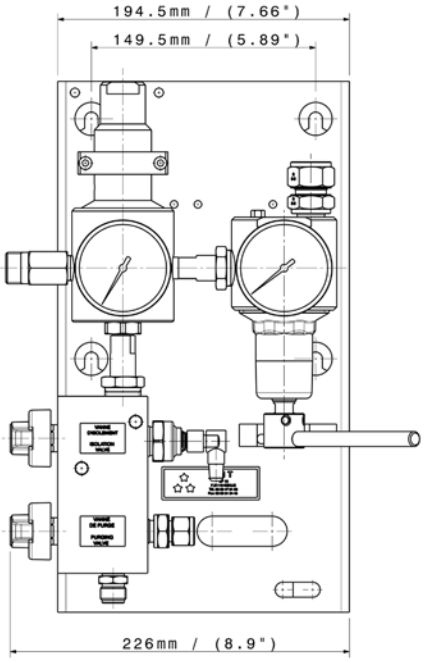
REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1

M830: no line regulator

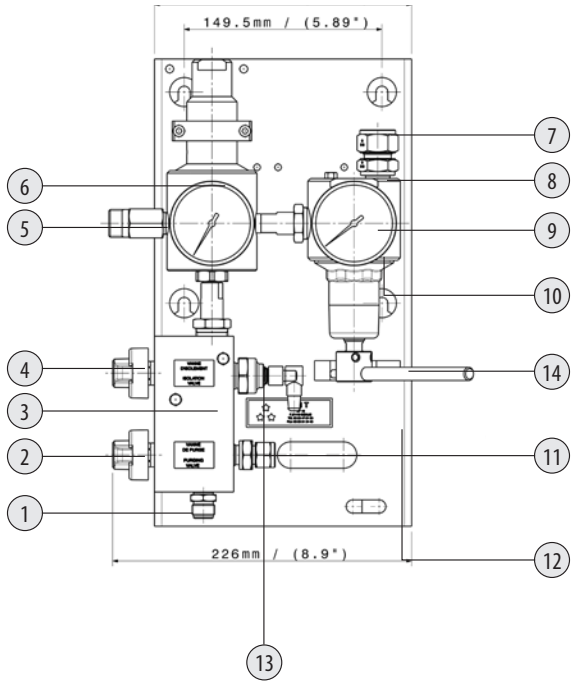
M831: line regulator (with optional reset lever)





ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS



1 INLET PORT(S)
- w/o Extension Block - 1 inlet port (standard)
- w/ Extension Block 2 or 3 inlet port(s) (option)

2 PURGE VALVE

3 DUOBLOC

4 ISOLATION VALVE

5 SAFETY RELIEF VALVE

6 HP PRESSURE GAUGE
- Bourdon tube 0-315 bar (standard)
- Inductive contact gauge (option)

7 OUTLET PORT
- G1/2 (standard)
- Compression tube fitting (option)

8 OUTLET
- Outlet block (standard)
- Integrated second stage regulator (for M831)

9 LP PRESSURE GAUGE
- Bourdon tube 0-16 bar (standard)
- Inductive contact gauge (option)

10 LP PRESSURE SENSOR
- Plug (standard)
- 0-16 bar / 4-20 mA (option)

11 PURGE PORT
- G3/8 (standard)
- Collected (option)

12 FIXATION SUPPORT

13 HP PRESSURE SENSOR
- Plug (standard)
- 0-250 bar / 4-20 mA (option)

14 RESET LEVER (OPTIONAL)
- Plug (standard)
- 0-250 bar / 4-20 mA (option)

PRODUCT CONFIGURATOR

	Inlet Pressure	Version type	Gas Type	Outlet Pressure	Inlet Connection	Inlet Port	Outlet Connections	Gauges	Pressure Sensor	Configuration
ALPISAFE	200	V1	02	7	G38	1P	G12	4	1	A
	200 bar 2900 psig **200**	M830 **V1**	O_2 **O_2**	7 bar 101.5 psig **7**	G⅜" Male with O-ring **G38**	1 port **1P**	G½" - Female **G12**	with gauges - standard **1**	without pressure sensor **A**	Standard configuration **A**
		M831 **V2**	Air **AIR**			2 port **2P**	Tube Fitting 12mm **T12**	with HP inductive contact gauge **2**	with HP pressure sensors **B**	with collected purge and safety * **CL**
		M831 with reset lever **V3**	N_2O **N_2O**			3 port **3P**	Tube Fitting 16mm **T16**	with LP inductive contact gauge **3**	with LP pressure sensor **C**	* Special on demand
			CO_2 **CO_2**					with HP & LP inductive contact gauge **4**	with HP & LP pressure sensors **D**	
			N_2 **N_2**							

ALL RIGHTS OF CHANGE RESERVED

ALPI-MOD | SUPPLY BOARD

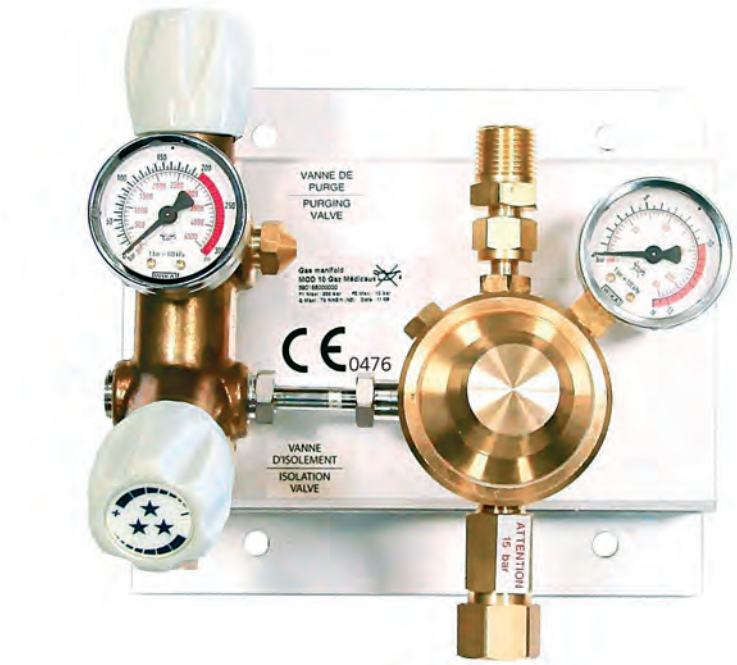
- Safety Supply System for hospitals and medical clinics
- Enables gas supply continuity if both primary and secondary sources are unable to supply the gas pipelines or for maintenance purpose
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, Ar, N_2O)

APPLICATIONS

- Used in combination with a switch over board for the regulation of the emergency source during maintenance on the principal source. This avoids installing extensions and reduces the amount of leaking points.
- Suitable for the high flow supply of industrial gases except toxic and corrosive gases.

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1



KEY FEATURES

- Possible to connect 3 gas cylinders and a gas for purging operation (up to 3 cylinders without any extension - without using the purge line).
- Ready to install: all components are pre-mounted on a board.
- Best-of-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure are minimized. Balanced-Valve Technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- Can be connected to an alarm box using contact gauges.

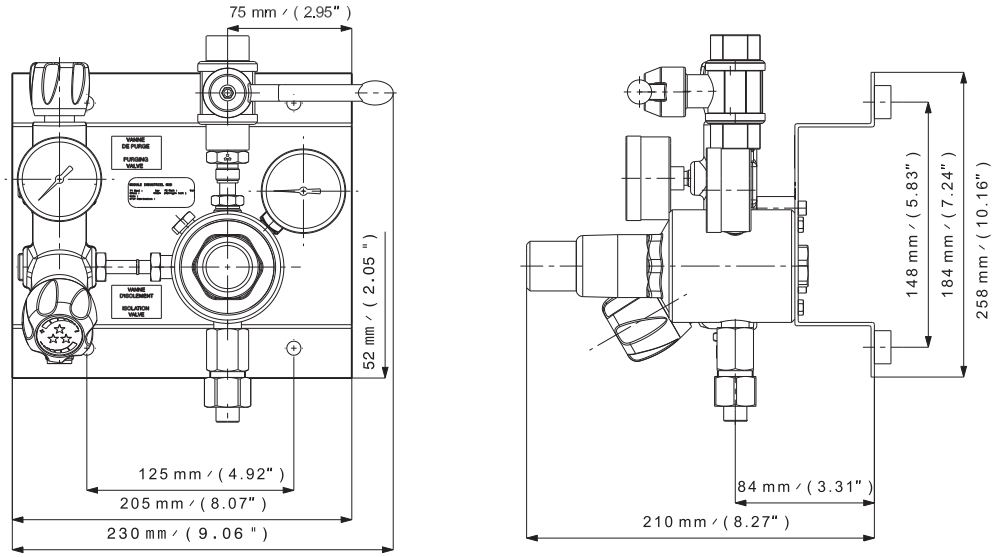
ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Female ports	In: G ⅜ - Out: G ½
Seat seal	Polyamide
O-ring	EPDM
Diaphragm (regulator)	AISI 304
Weight	± 6,0 kg ± 13.0 lbs

Leak rate	1.10^{-4} mbar ℓ/s He
Temperature range	-20°C to + 60°C
Gauges	High and low pressure (M10 x 1 or G ¼)

Inlet pressure	200 bar 2900 psig
Outlet pressure	10 bar 145psig
Nominal Flow	7s0 Nm^3/h (N_2)



PRODUCT CONFIGURATOR

	Inlet pressure		Outlet		Body Material		End Connections		O-ring Material	Gauges		Fix or adjustable Outlet Pressure		Oulet valve		Configuration	
ALPIMOD	200		16		LB		G		EPDM	1		FX		N		A	
	200 bar 2900 psig	200	10 bar 145 psig	10	Raw brass	LB	In: G ⅜ Out: G ½ Female	G	EPDM - Standard	With gauges - standard	1	With fixed P2	FX	Without outlet shut-off valve	NV	Standard configuration	A
										With HP inductive contact gauge	2						

ALL RIGHTS OF CHANGE RESERVED

SERIES BSC 290/390 | HP CYLINDER PRESSURE REGULATOR

- Ultimate and/or Maintenance source of supply for hospitals and medical clinics
- It enables gas supply continuity if primary, secondary and emergency sources are unable to supply the gas pipelines or for maintenance purpose
- Much higher safety level for the complete gas supply system
- Suitable for Oxygen and all medical gases (Breathing Air, CO2, N20)
- To be connected on medical cylinder valve

INCLUDED FUNCTIONS

- Inlet port
- Outlet port
- Pressure regulator
- Safety relief valve
- High pressure measurement
- Low pressure measurement

REGULATORY

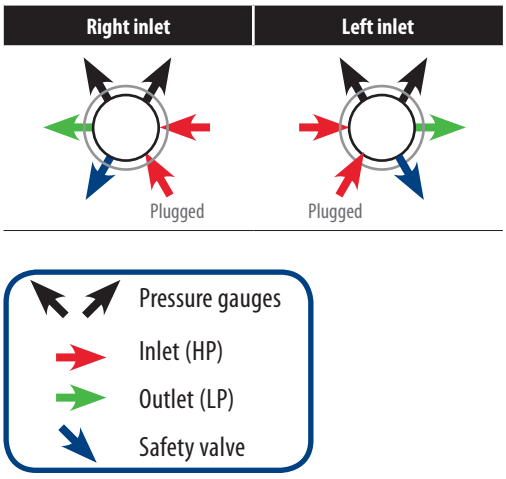
- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 10524-1

KEY ADVANTAGES

SAFETY FIRST
- Fitted with a safety relief valve in case of over pressure which can be collected
- Dedicated HP and LP pressure gauges for a permanent indication
- Compatible materials with Oxygen and medical applications
- No gas contamination due to a metal-metal sealing

HIGH PERFORMANCE
- Proven Cartridge Seat Technology
- Better outlet pressure and flow stability
- Smart choice of material in conformance with EN ISO 15001

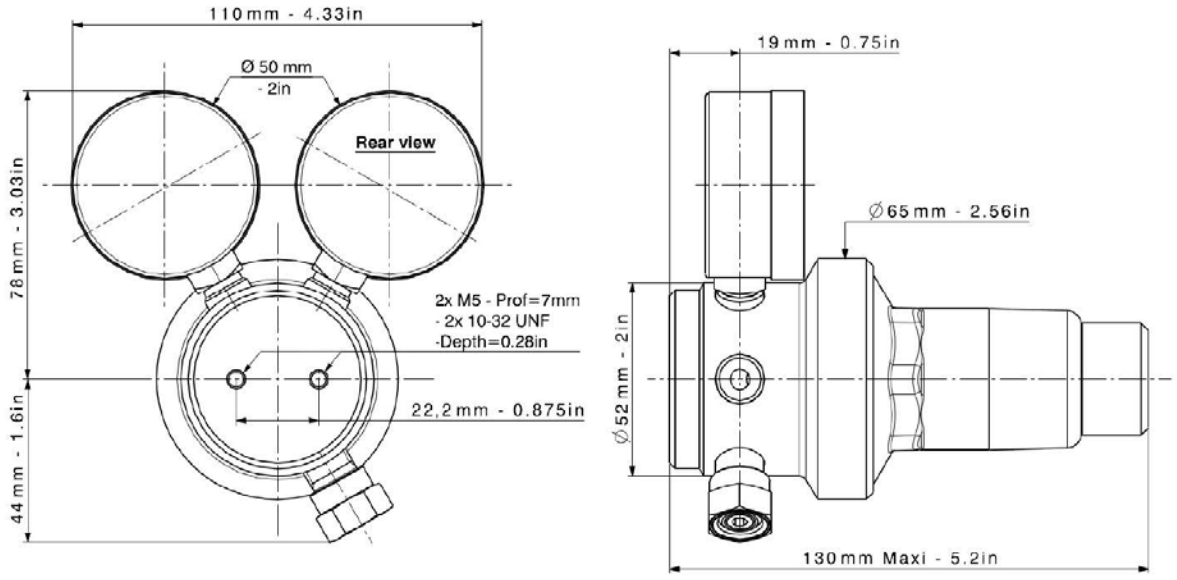
LOWER OPERATING COSTS
- Compact and lightweight design for an easy handling and storage
- Longer product life thanks to less impingement on the diaphragm
- Easy maintenance operations thanks to Cartridge Technology



ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Body	Chrome plated brass	**Inlet Connection**	Cylinder connection	**Inlet pressure**	200 / 300 bar 2900 / 4350 psig
Seat seal	Polyamide	**Outlet Connection**	Hose Barb or Medical connector	**Outlet pressure**	4 / 8 /10 bar 58 / 116 / 145 psig
O-ring	EPDM	**Leak rate**	10^{-8} mbar l/s He	**Nominal Flow**	7 / 25 / 30 Nm^3/h (N_2)
Diaphragm	Hastelloy®	**Weight**	± 1.4 kg	**Temperature range**	-40°C to +60°C



PRODUCT CONFIGURATOR

	Material		Inlet Pressure		Port Configuration		Outlet pressure		Inlet Connection		Outlet connection		Pressure sensor		Gas Type	
BSC	L		290		R		4		NF		NIST		B		O_2	
	Chrome plated brass	L	200 bar 2900 psig	290	Right inlet	R	4 bar 58 psig	4	NF 29-650	NF	Hose Barb 6 mm	HB	without pressure sensor	A	O_2	O_2
			300 bar 4350 psig	390	Left inlet	L	8 bar 116 psig	8	DIN 477-1	DIN	AFNOR Medical Connector	NF	with HP pressure sensors	B	Air	AIR
							10 bar 145 psig	10	BS 341-3	BS	DIN Medical Connector	DIN	with LP pressure sensor	C	N_2O	N_2O
									NEN 3268	NEN	NIST Medical Connector	NIST	with HP & LP pressure sensors	D	CO_2	CO_2
									UNI 11144	UNI					N_2	N_2
									CGA V1	CGA						

ALL RIGHTS OF CHANGE RESERVED

DM200 GD | MANIFOLD REGULATOR

- Diaphragm single stage
- Purity up to 5.5
- Inlet pressure: 200 bar (2900 psig)
- Outlet pressure: 10 bar (145psig)

TO ORDER

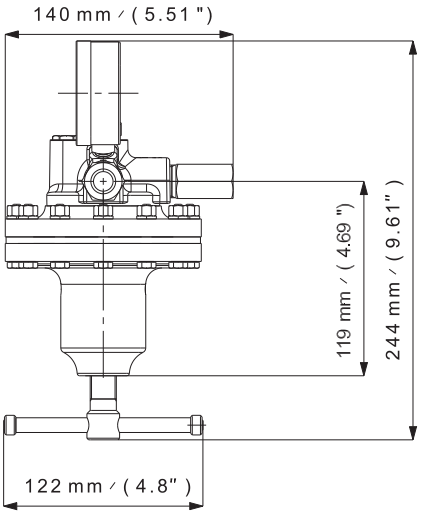
★ HP pressure gauge: 290043000000
★ HP & LP pressure gauge: 290044000000

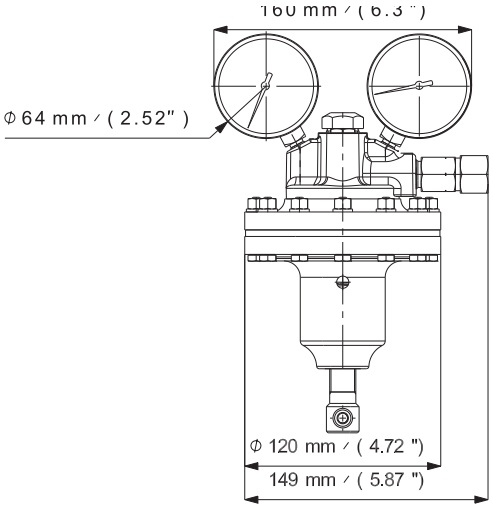
APPLICATIONS

- Designed for cylinder regulator applications.
- Ideally used in industrial applications requiring high flow - particulary to supply gas to welding machines.

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 10524-2





SPECIFICATIONS

Ports	inlet: M20 x 1.5 (Male) outlet: M20 x 1,5 (Male)	**Weight**	± 4,6 kg ± 10.1 lbs	**Inlet pressure**	200 bar (2900 psig)
Seat seal	PA 6.6	**Leak rate**	10^{-3} mbar ℓ/s He	**Outlet pressure**	10 bar / 145 psig
Diaphragm	Butyl	**Temperature range**	- 20°C to + 60°C - 4°F to + 140°F	**Nominal Flow**	100 Nm^3/h (N_2)
Body Material	Raw brass	**Gauges**	High and low pressure (M10 x 1)		

ALL RIGHTS OF CHANGE RESERVED

DM200 TGD ALPI-LINE | LINE REGULATOR

- Diaphragm single stage
- Purity up to 5.5
- Inlet pressure: 200 bar (2900 psig)
- Outlet pressure: 20 bar (290psig)

★ High flow regulator
★ 1 inlet / 1 outlet
★ O_2 application compatible
★ Inlet/outlet pressure gauges

Special requirements on request

TO ORDER

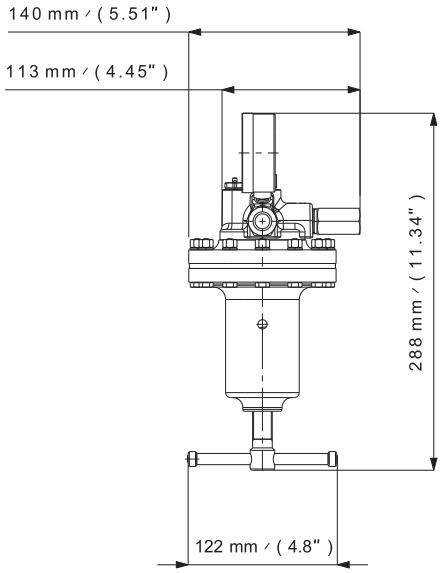
★ With HP pressure gauge: 295004000000
★ With HP & LP pressure gauge: 295006000000

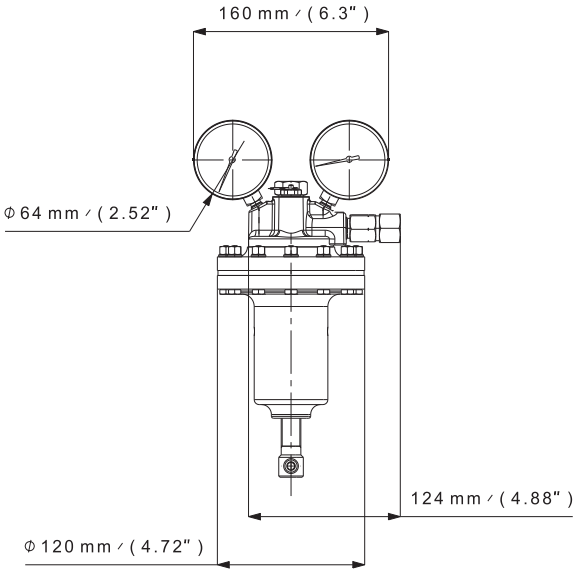
APPLICATIONS

- Ideally suited for distribution of medical gases in hospital applications requiring very high flow

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 10524-2





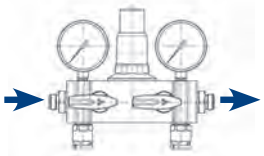
SPECIFICATIONS

Ports	inlet: M33 x 2 (Male) outlet: M20 x 1,5 (Male)	**Weight**	± 4,6 kg ± 10.1 lbs	**Inlet pressure**	200 bar 2900 psig
Seat seal	PA 6.6	**Leak rate**	10^{-3} mbar ℓ/s He	**Outlet pressure**	20 bar 290 psig
Diaphragm	Butyl	**Temperature range**	- 20°C to + 60°C - 4°F to + 140°F	**Nominal Flow**	250 Nm^3/h (N_2)
Body Material	Raw brass	**Gauges**	High and low pressure (M10 x 1)		

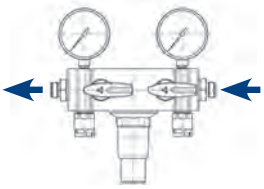
ALL RIGHTS OF CHANGE RESERVED

M845 / M846 ALPI-REG1 | SINGLE LINE PRESSURE REGULATOR

- Single Line Pressure Regulator for hospitals and medical clinics
- Mainly used in double-stage pipeline systems where pressure reduction from the supply system is required in order to provide the nominal distribution pressure to the terminal units
- Enables supply to several hospital or clinic floors and can be easily integrated in interior design thanks to its good looking design
- Maintain gas supply during maintenance and/or emergencies thanks to two quick connectors that bypass the pressure regulator
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, N_2O)



Left Inlet Side Configuration



Reversed Configuration

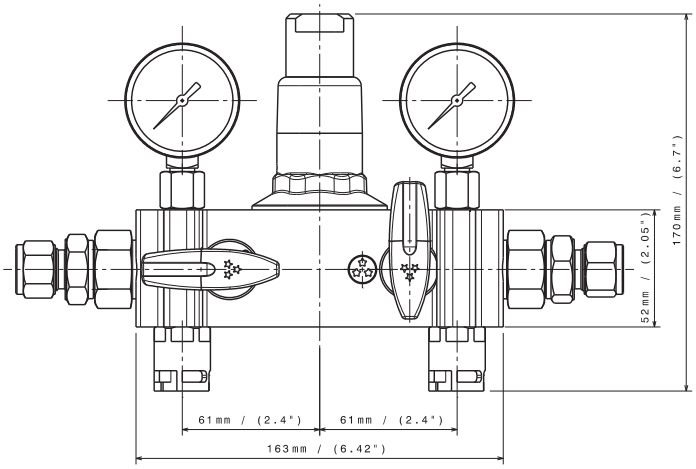
Turn it at 180° and exchange pressure gauges and quick connectors and you will easily get a right inlet side pressure regulator

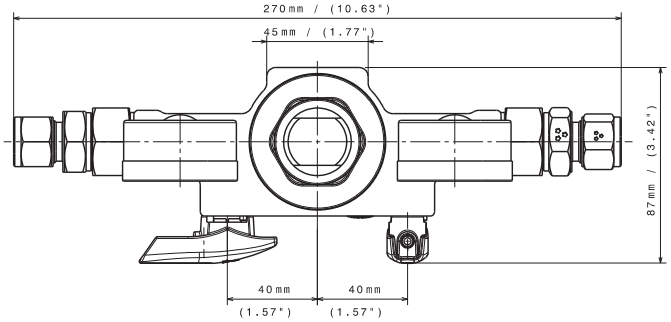
KEY FEATURES

- 1 x pressure regulator
- 1 x inlet connections
- 1 x outlet connection
- 1 x first stage pressure gauge
- 1 x second stage pressure gauge
- 2 x quick connector / pressure sensor

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1

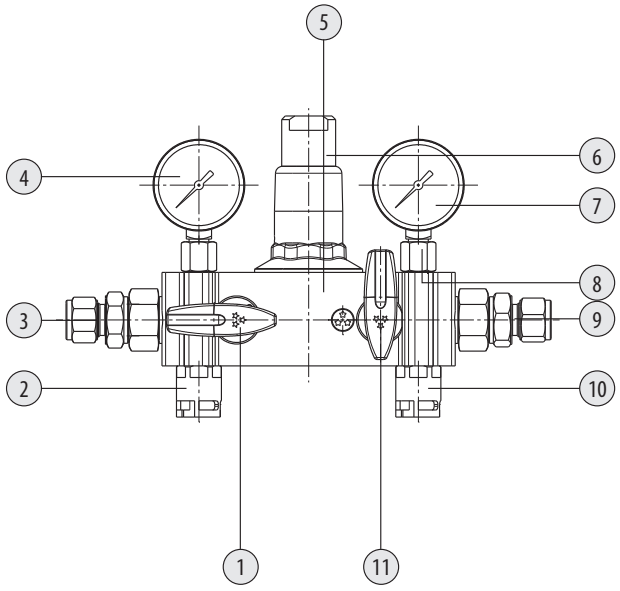




ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet Ports	G½" female Tube fitting	**Leak rate**	10^{-3} mbar l/s He	**Inlet pressure**	10 bar / 145 psig
Outlet Port	G½" female Tube fitting	**Temperature range**	+10°C to +40°C	**Outlet pressure**	4 bar / 58 psig (M845) 8 bar / 116 psig (M846)
Other Ports	Plug G⅜"	**Weight**	4.0 Kg	**Nominal Flow**	50 Nm^3/h (N_2)



1. **INLET ISOLATION VALVE**
2. **SERVICE CONNECTION**
   - Plug G⅜" (standard)
   - Medical connector (option)
3. **INLET CONNECTION**
   - G½" female(standard)
   - Compression tube fitting (option)
4. **INLET PRESSURE GAUGE (MP)**
   - Bourdon tube 0-16 bar (standard)
   - Inductive contact gauge (option)
5. **PURGING & SETTING DEVICES**
6. **CARTRIDGE PRESSURE REGULATOR**
7. **OUTLET PRESSURE REGULATOR**
8. **PRESSURE GAUGE CONNECTION**
   - G¼" (standard)
   - w/maintenance system (option)
9. **OUTLET CONNECTION**
   - G½" female(standard)
   - Compression tube fitting (option)
10. **SERVICE CONNECTION**
    - Plug G⅜" (standard)
    - Medical connector (option)
11. **OUTLET ISOLATION VALVE**

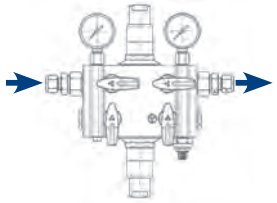
PRODUCT CONFIGURATOR

	Inlet Pressure		Gas Type		Outlet Pressure		End Connections		Service Connection		Gauges		Maintenance System		Configuration	
ALPIR1	10		02		4		G12		PG		1		SS		L	
	10 bar 145 psig	10	O_2	O_2	4 bar 58 psig	4	G½" - Female	G12	Plug G⅜"	PG	with gauges - standard	1	without maintenance system	SS	Left inlet (standard)	L
			Air	AIR	8 bar 116 psig	8	Tube Fitting 12mm	T12	AFNOR Medical Connector	NF	with MP inductive contact gauge	2	with maintenance system	MS	Right inlet	R
			N_2O	N_2O			Tube Fitting 16mm	T16	DIN Medical Connector	DIN						
			CO_2	CO_2												
			N_2	N_2												

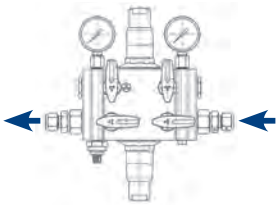
ALL RIGHTS OF CHANGE RESERVED

M840 / M841 ALPI-REG2 | DOUBLE LINE PRESSURE REGULATOR

- Double Line Pressure Regulator for hospitals and medical clinics
- Mainly used in double-stage pipeline systems where pressure reduction from the supply system is required in order to provide the nominal distribution pressure to the terminal units
- Enables to supply several hospital or clinic floors and can be easily integrated in interior architecture thanks to its good looking design
- Gas supply continuity during maintenance and/ or emergency thanks to its triple safety level
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, N_2O)



Left Inlet Side Configuration



Reversed Configuration

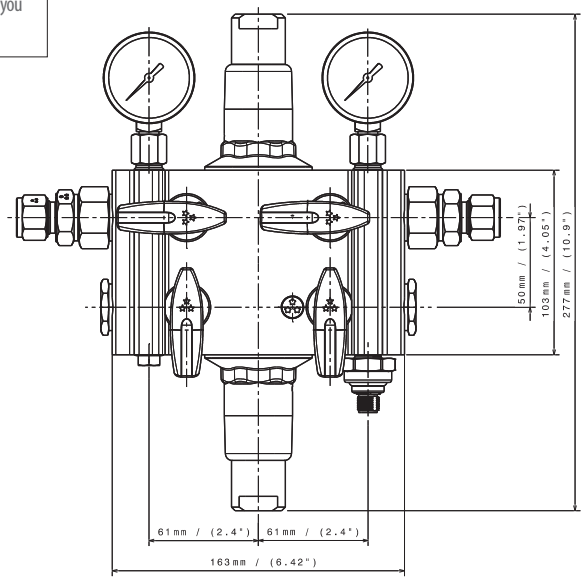
Turn it 180° and exchange pressure gauges and quick connectors/nuts/sensors and you will easily get a right inlet side product

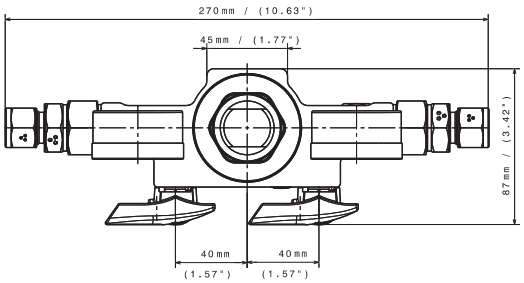
KEY FEATURES

- 2 x pressure regulator
- 1 x inlet connections
- 1 x outlet connection
- 1 x first stage pressure gauge
- 1 x second stage pressure gauge
- 2 x quick connector
- 2 x pressure sensor

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1

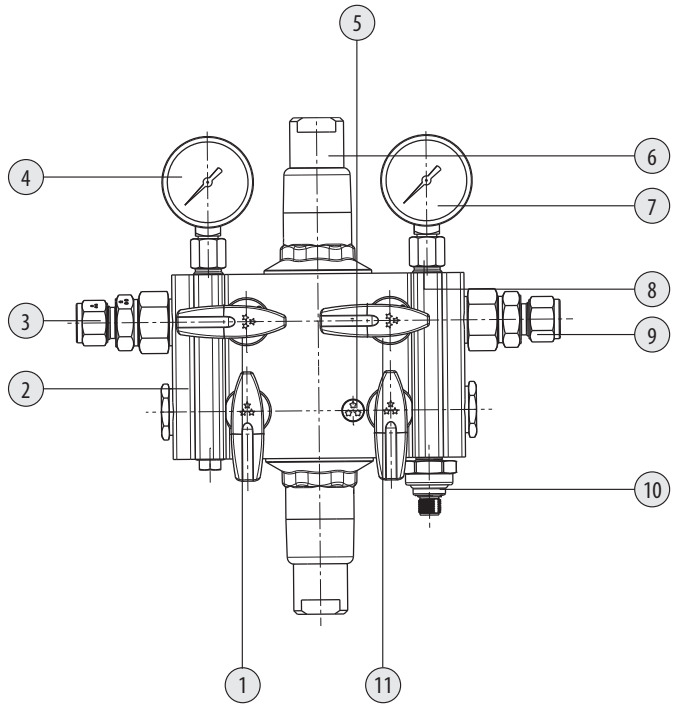




ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet Ports	- G ½" female - RDB tube fitting Ø12mm	**Leak rate**	10^{-3} mbar l/s He	**Inlet pressure**	8 to 10 bar max.
Outlet Port	- G ½" female - RDB tube fitting Ø12mm	**Temperature range**	+10°C to +40°C	**Outlet pressure**	4 bar 0/+1 bar (M840) 8 bar / 116 psig (M841)
Other Ports 2x first stage +2x second stage	- G⅜" - Quick connector according to national standards	**Weight**	8.0 Kg	**Nominal Flow**	50 Nm^3/h (N_2)



1. **INLET ISOLATION VALVE**
2. **SERVICE CONNECTION**
   - Plug G⅜" (standard)
   - Medical connector (option)
3. **INLET CONNECTION**
   - G½" female(standard)
   - Compression tube fitting (option)
4. **INLET PRESSURE GAUGE (MP)**
   - Bourdon tube 0-16 bar (standard)
   - Inductive contact gauge (option)
5. **PURGING & SETTING DEVICES**
6. **CARTRIDGE PRESSURE REGULATOR**
7. **OUTLET PRESSURE GAUGE**
8. **PRESSURE GAUGE CONNECTION**
   - G¼" (standard)
   - w/maintenance system (option)
9. **OUTLET CONNECTION**
   - G½" female(standard)
   - Compression tube fitting (option)
10. **PRESSURE SENSOR CONNECTION**
    - Plug G⅜" (standard)
    - Medical connector (option)
11. **OUTLET ISOLATION VALVE**

PRODUCT CONFIGURATOR

	Inlet Pressure		Gas Type		Outlet Pressure		End Connections		Service connection		Gauges		Pressure Sensor		Maintenance System		Configuration	
ALPIR2	10		N20		4		G12		NF		1		A		MS		L	
	10 bar 145 psig	**10**	O_2	**O_2**	4 bar 58 psig	**4**	G½" - Female	**G12**	G⅜" Female	**G38**	with gauges - standard	**1**	without pressure sensor	**A**	without maintenance system	**SS**	Left inlet	**L**
			Air	**AIR**	8 bar 116 psig	**8**	Tube Fitting 12mm	**T12**	AFNOR Medical Connector	**NF**	with MP inductive contact gauge	**2**	with MP pressure sensor	**B**	with maintenance system	**MS**	Right inlet	**R**
			N_2O	**N_2O**			Tube Fitting 16mm	**T16**	DIN Medical Connector	**DIN**			with LP pressure sensor	**C**				
			CO_2	**CO_2**									with LP & MP pressure sensors	**D**				
			N_2	**N_2**														

ALL RIGHTS OF CHANGE RESERVED

M847 ALPI-REG | LINE PRESSURE REGULATOR

- Diaphragm single stage
- Balanced-Valve Technology
- Inlet pressure:
  30 bar
- Outlet pressure:
  4 / 9 bar
  58 / 130 psig

★ 1 inlet / 1 outlet
★ Rear thread for panel mounting
★ O_2 application compatible
★ High flow

Special requirements on request

APPLICATIONS

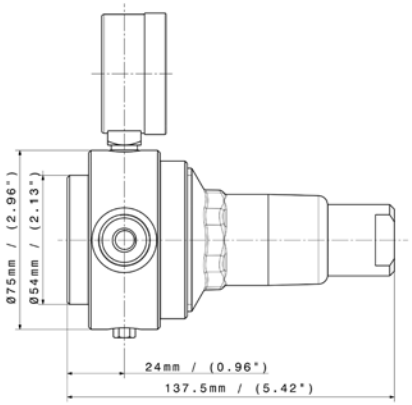
- For all applications requiring a low pressure with high flow.
- Ideally suited as line regulator in combination either with supply board or switch over board.

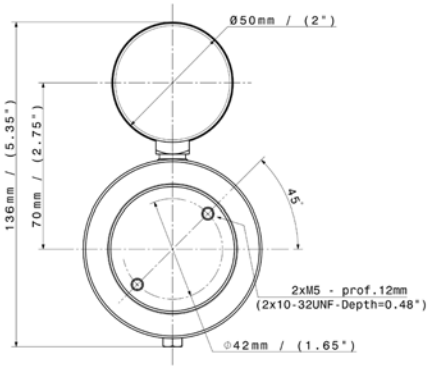
KEY FEATURES

- Low pressure regulator with high flow, without vibration.
- Best-in-class pressure stability with Balanced-Valve Technology: the effect of inlet pressure fluctuations on outlet pressure is minimized. BV-technology enables the delivery of a very stable outlet pressure and flow even with high flow line regulators.
- reduced strain on the seat increases regulator life and reduces the ownership cost.

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 10524-2





SPECIFICATIONS

Female ports	G ½ (inlet/outlet)
Seat seal	EPDM
O-ring	EPDM
Diaphragm	EPDM

Weight	± 1,4 kg ± 3.1 lbs
Leak rate	10^{-4} mbar ℓ/s He
Temperature range	- 20°C to + 60°C - 4°F to + 140°F
Gauges	Low pressure

Inlet pressure	30 bar / 435 psig
Outlet pressure	4 / 9 bar 58 / 130 psig
Nominal Flow	30 / 150 Nm^3/h (N_2)
Oxygen use	OK

PRODUCT CONFIGURATOR

	Inlet pressure	Gas		Outlet Pressure		End Connections		O-ring Material	Body Material		Gauges	
ALPI-REG M847	30	02		4		G		EPDM	L		1	
		O_2	O_2	4 bar	4	G ½ - G ½	G	EPDM - Standard	Chrome plated	L	With	1
		Air	AIR	9 bar	9				Raw brass	LB		
		N_2O	N_2O									
		CO_2	CO_2									
		N_2	N_2									

ALL RIGHTS OF CHANGE RESERVED

DM20 / DM20GD | LINE PRESSURE REGULATOR

- Medical line regulator
- Low pressure gauge
- Inlet and outlet connections

APPLICATIONS

- This regulator is the ultimate solution for the
- transportation of your medical gases.

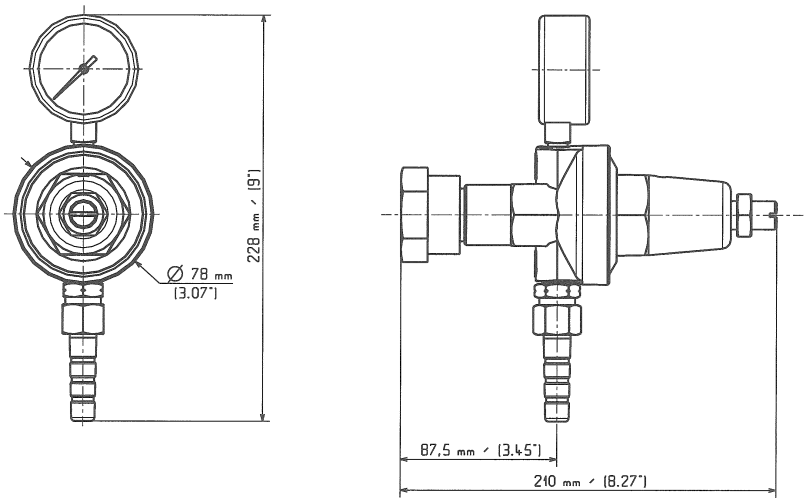
REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 10524-2

PART NUMBER

★ DM20 type: 293520000000
★ DM20 GD: 295304000000

Special requirements on request



SPECIFICATIONS

Body	Raw brass	**Inlet Connection**	G⅜"F GD : G1"F	**Inlet pressure**	20 bar / 290 psig
Seat seal	Polyamide	**Outlet Connection (Hose barb)**	Hose barb Ø8-10mm GD : HB Ø13mm	**Max. Outlet pressure**	10 bar / 145psig GD : 12bar / 174psig
O-ring	EPDM	**Leak rate**	10^{-8} mbar.l/s He	**Nominal Flow**	98 Nm^3/h (N_2) GD : 124 Nm^3/h (N_2)
Diaphragm	NBR	**Weight**	± 1.6 kg GD : ± 2.3 kg	**Temperature range**	-20°C to +60°C

ALL RIGHTS OF CHANGE RESERVED

M850 ALPI-MSV | SECTION VALVE

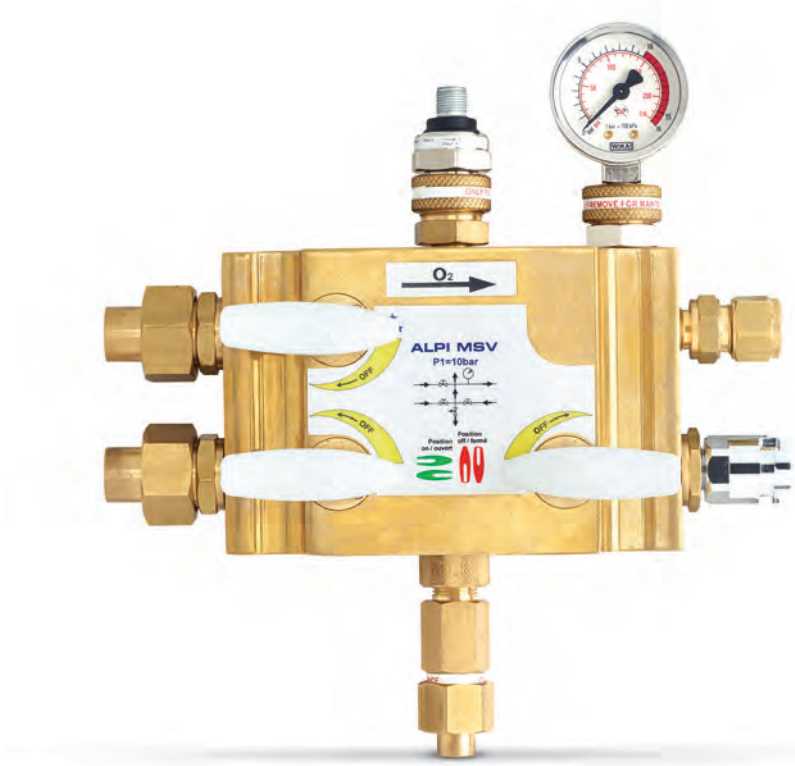
- Main Section Valve for hospitals and medical clinics gas supply system
- Connects ALPI-SWITCH, ALPI-SAFE and Ultimate / Maintenance sources together in order to get one single outlet whatever the source in service
- Enables isolation and/or selection of a specific source
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, N_2O)

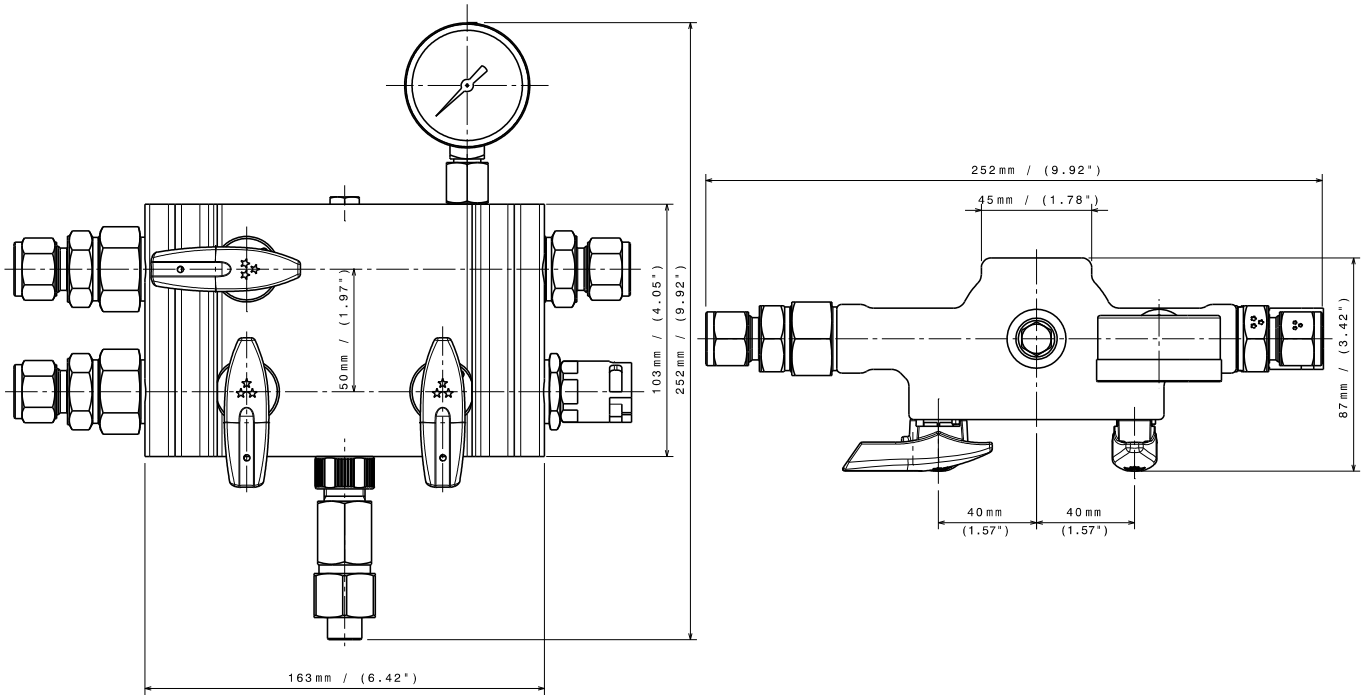
KEY FEATURES

- 1 x brass bloc body
- 3 x ball valves
- 1 x safety relief valve
- 3 x inlet connections
- 1 x outlet connection
- 1 x pressure gauge
- 1 x pressure sensor (optional)

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1





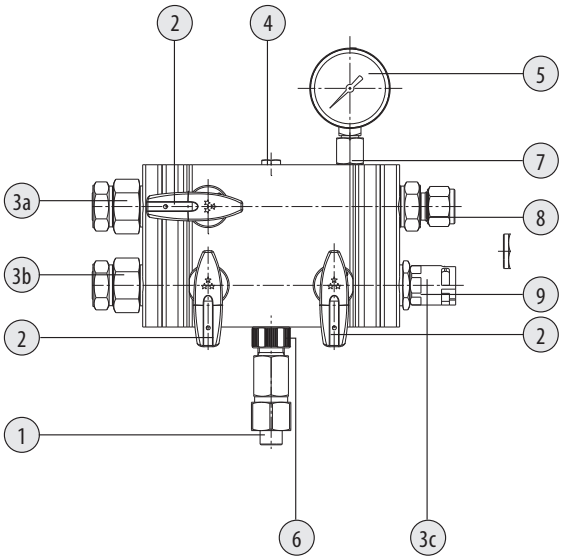
ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet Ports 1,2,3	G½" Female Tube fitting
Outlet Port (Top right)	G½" Female Tube fitting

Gauge	0-16 bar
Weight	4.3 Kg
Working Pressure	10 bar max.

Office size	Ø10mm
Temperature range	-20°C to +60°C



1 SAFETY RELIEF VALVE

2 ISOLATION VALVE

3 INLET CONNECTION PORT 1, 2 & 3
a. Port 1 /b. Port 2/ c. Port 3
- G½" Female (standard)
- CTF (option)
- Medical connector (option)

4 PRESSURE SENSOR CONNECTION
- G¼" (standard)
- w/ Maintenance system (option)
- Plug G⅜" (standard)
- 0-10 bar 7 4-20 mA

5 PRESSURE GAUGE
- Bourdon tube 0-10 bar (standard)
- Inductive contact gauge (option)

6 MAINTENANCE SYSTEM UNDER PRESSURE FOR RELIEF VALVE

7 PRESSURE GAUGE CONNECTION
- G¼" (standard)
- w/ Maintenance system (option)

8 OUTLET CONNECTION
- G½" (standard)
- Compression tube fitting (option)

9 INLET PORT 3
- G½" Female (standard)
- CTF (option)
- Medical connector (option)

KEY ADVANTAGES

SAFETY FIRST
- Made in one single brass bloc, ALPI-MSV improves global system tightness and reduces potential leakage points.
- Fitted with a safety relief valve in case of over-pressure
- Dedicated pressure gauge and sensor for a permanent visual indication and signal control.
- Available with a transparent plastic cover

HIGH PERFORMANCE
- Innovative and proven ball valve technology with compensation
- Smart choice of material conforming to EN ISO 15001

EASE OF HANDLING AND INSTALLATION
- Easy access of isolation valves
- Easy installation with all components mounted on an Omega plate
- Flexible product. Select the most appropriate inlet port regarding your configuration

LOWER OPERATING COSTS
- Easy and quick maintenance operations
- Designed for a long service lifetime
- A complete and compact system for a better space efficiency in hospital technical areas

PRODUCT CONFIGURATOR

	Working Pressure		Gas Type		Inlet port 1		Inlet port 2		Inlet port 3		Outlet Port		Gauges		Pressure Sensor		Maintenance System	
ALPIMSV	10		N20		G12		G12		G12		G12		1		A		SS	
	10 bar 145 psig	10	O_2	O_2	G½" - Female	G12	G½" - Female	G12	G½" - Female	G12	G½" - Female	G12	with gauge - standard	1	without pressure sensor	A	without maintenance sytem	SS
			Air	AIR	Tube Fitting 12mm	T12	Tube Fitting 12mm	T12	Tube Fitting 12mm	T12	Tube Fitting 12mm	T12	with inductive contact gauge	2	with pressure sensor	B	with maintenance system	MS
			N_2O	N_2O	Tube Fitting 16mm	T16	Tube Fitting 16mm	T16	Tube Fitting 16mm	T16	Tube Fitting 16mm	T16						
			CO_2	CO_2	AFNOR Medical Connector	NF	AFNOR Medical Connector	NF	AFNOR Medical Connector	NF								
			N_2	N_2	DIN Medical Connector	DIN	DIN Medical Connector	DIN	DIN Medical Connector	DIN								

ALL RIGHTS OF CHANGE RESERVED

M852 ALPI-DIST | SECTION VALVE

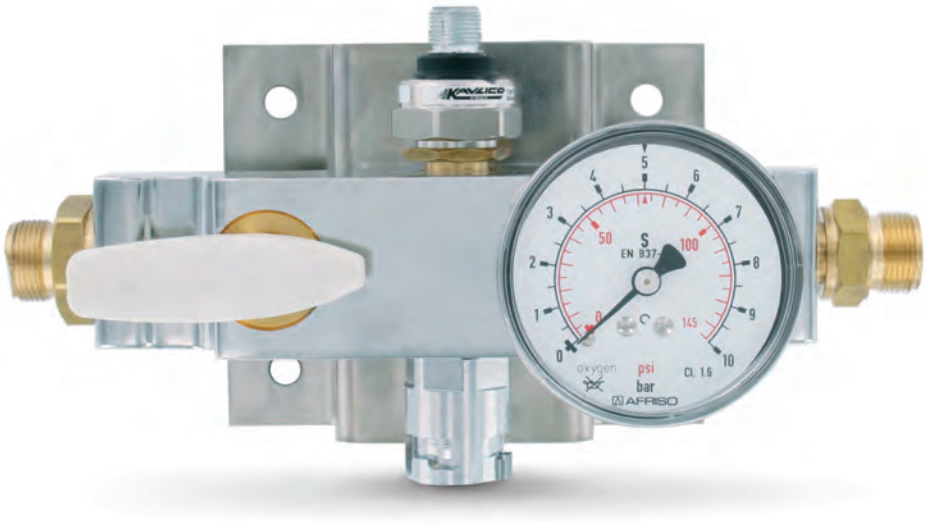
- Distribution Manifold for hospitals and medical clinics gas supply system
- The manifold is made to isolate a low pressure line into the hospital facility in case of emergency and/or maintenance operations
- With the emergency/ maintenance inlet port, possibility of supplying gas only in the isolate line
- Suitable for Oxygen and all medical gases (Breathing Air, CO_2, N_2O)

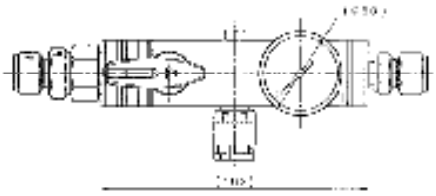
KEY FEATURES

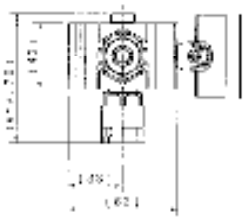
- 1 x brass bloc body
- 1 x ball valves
- 1 x inlet connections
- 1 x outlet connection
- 1 x pressure gauge
- 1 x pressure sensor (optional)

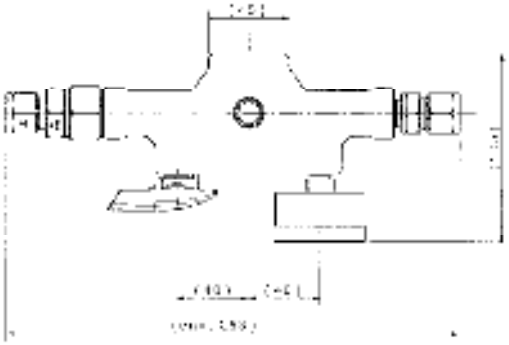
REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Complies with EN ISO 7396-1









KEY ADVANTAGES

SAFETY FIRST
- Made in one single brass bloc, ALPI-MSV improves global system tightness and minimizes potential leakage points.
- Dedicated pressure gauge and sensor for a permanent visual indication and signal control.

HIGH PERFORMANCE
- Innovative and proven ball valve technology with compensation
- Smart choice of material in conformance with EN ISO 15001

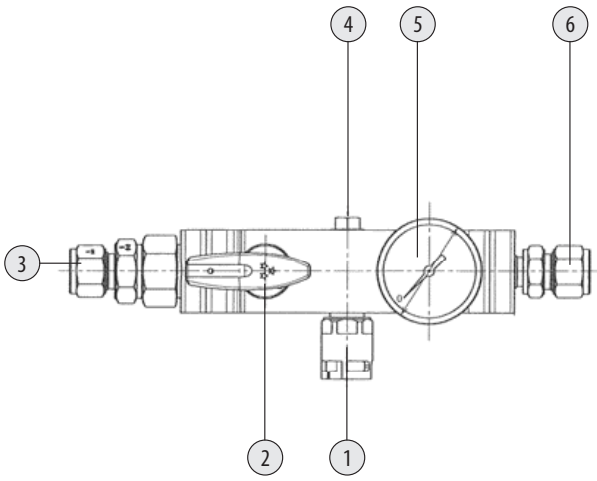
EASE OF HANDLING AND INSTALLATION
- Easy access of isolation valves
- Easy installation with all components mounted on an Omega plate

LOWER OPERATING COSTS
- Easy and quick maintenance operations
- Designed for a long service lifetime
- A complete and compact system for better space efficiency in hospital technical areas

ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet Ports	G ½" Female	**Leak rate**	10^{-3} mbar l/s He	**Working Pressure**	10 bar max.
Outlet Port	G ½" Female	**Weight**	± 2.8 kg	**Orifice size**	Ø10mm
Service port	Plug G⅜"	**Gauge**	0-16 bar	**Temperature range**	-20°C to +60°C



1 **MEDICAL CONNECTOR**
- Plug G⅜" (standard)

2 **ISOLATION VALVE**

3 **INLET CONNECTION**
- G½" (standard)
- Compression tube fitting (option)

4 **SERVICE CONNECTION**
- Plug G⅜" (standard)
- Pressure sensor 0-16 bar 4-20 mA

5 **PRESSURE GAUGE**
- G¼" (standard)

6 **OUTLET CONNECTION**
- G½" (standard)
- Compression tube fitting (option)

PRODUCT CONFIGURATOR

	Working Pressure		Gas Type		End Connections		Service Connection		Gauges		Pressure Sensor		Maintenance System	
ALPIDIST	5		02		G12		NF		1		A		SS	
	10 bar 145 psig	**10**	O_2	**O_2**	G½" - Female	**G12**	AFNOR Medical Connector	**NF**	with gauge - standard	**1**	without pressure sensor	**A**	without maintenance sytem	**SS**
			Air	**AIR**	Tube Fitting 12mm	**T12**	DIN Medical Connector	**DIN**	with inductive contact gauge	**2**	with pressure sensor	**B**		
			N_2O	**N_2O**	Tube Fitting 16mm	**T16**	NIST Medical Connector	**NIST**						
			CO_2	**CO_2**										
			N_2	**N_2**										

ALL RIGHTS OF CHANGE RESERVED

M855 ALPI – NRV LP | LOW PRESSURE NON RETURN VALVE

Low pressure non-return valve for medical gas distribution systems
- For all medical gases
- Soft sealing
- Spring loaded
- No vibration

APPLICATIONS

- Used to prevent back feeding from one source to another one
- Avoid reverse flow to disturb pressure level monitoring on sources (different pressure settings)
- Used for automatic activation of the emergency source

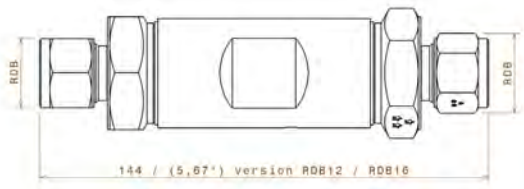
KEY FEATURES

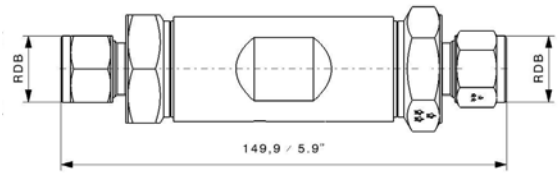
- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 7396-1

KEY ADVANTAGES

Safety First
- Smart choice of materials in conformance with ISO 15001 and the most restrictive additional requirements
- Low pressure drop for a very limited impact on your installation performances
- Suitable for all types of medical gases
- Soft sealing for a proper tightness level

Installation and Operating Costs
- In-line design for a perfect integration into the medical pipeline
- Spring loaded design – No orientation impact
- Flexible – Identical design for all medical gases
- Product design for a long service lifetime without maintenance





SPECIFICATIONS

End Connection (Inlet/Outlet)	G¾" Female	**Leak rate**	< 1.7 X 10^{-3} mbar.l/s He	**Max. working Pressure**	25 bar / 362.5 psig
Seat	EPDM	**Temperature range**	-20°C to +65°C	**Opening Pressure**	< 0,1 bar / 1.45 psig
Cartrige	PA 6.6	**Dimensions**	Ø35 x 68 mm	**Orifice size**	13.4 mm
Spring	CuSn 6	**Weight**	± 0.350 kg	**Cv**	3.0

OPTIONS

Tube fitting
Double ring tube
fittings Ø12 mm and Ø16mm

PRODUCT REFERENCES

Ref.	End Connections	
M85500007	G34	
M85500007	G¾" - Female	G34
M85500009	Tube Fitting 12mm	T12
M85500006	Tube Fitting 16mm	T16

ALL RIGHTS OF CHANGE RESERVED

ALPI-NRV HP | HIGH PRESSURE NON-RETURN VALVE

High pressure non-return valve for medical gas distribution systems
- For all medical gases
- Metal-Metal Sealing
- Integrated filter
- No vibration

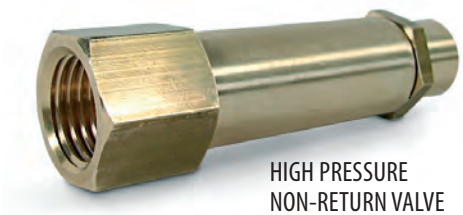
Regional version
standard version

KEY FEATURES

- Used to prevent any high pressure exposure in case of flexible hose or pigtail failure
- Flexible product able to be connected on switchover board directly or cylinder extension
- Resistant to Oxygen adiabatic compression
- Integrated filter for a proper protection against contamination

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 7396-1

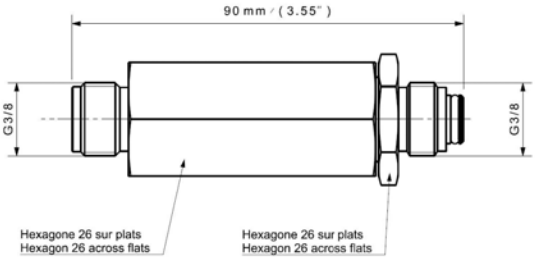


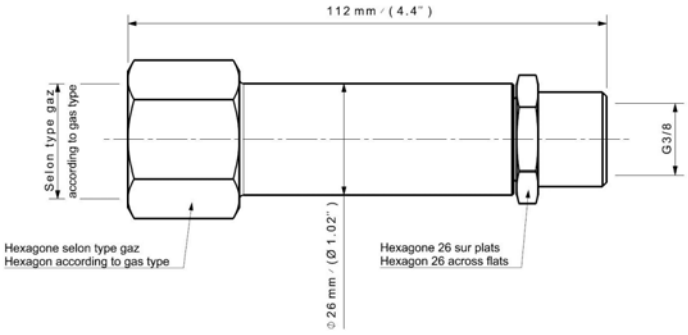
HIGH PRESSURE
NON-RETURN VALVE

KEY ADVANTAGES

Safety First
- Smart choice of materials in conformance with ISO 15001 and the most
- restrictive additional requirements
- Suitable for all types of medical gases
- Resistant to Oxygen adiabatic compression
- Integrated filter for a proper protection against contamination

Installation and Operating Costs
- Ready-to-install elements
- O-ring sealing connection, Only a simple wrench requested to install
- Flexible thanks to its universal design whatever the configuration is





SPECIFICATIONS

Material	Brass	**External leak rate**	$< 10^{-4}$ mbar.l/s He	**Outlet connections**	G ⅜" M G ⅜" F
Filter	Bronze	**Temperature range**	-20°C to +60°C	**CV (acc. versions)**	0.74 (Ø6mm) 0.43 (Ø4mm)
Internal leak rate (closed)	< 2 Lpm	**Inlet connection**	G ⅜" Male or regional standard	**Weight**	± 0.3kg

PRODUCT REFERENCES

Ref.
202571000005

202571000005

*Other versions available upon request

ALL RIGHTS OF CHANGE RESERVED

ALPICONNECT

- ALPICONNECT is CEODEUX MEDITEC's new innovative terminal unit for medical gas pipeline systems in healthcare facilities
- Integrated into hospital environments such as Operating Rooms (OR), Intensive Care Units (ICU) or Recovery Rooms (RR)
- Enables connection and disconnection with external medical devices such as flowmeters, respiratory ventilator, vacuum or regulator
- Supplies Medical Gas directly or indirectly to patients for medical therapy administration
- Includes vacuum supply for suction operations
- Comes with air motor and nitrogen versions for surgical tool driving

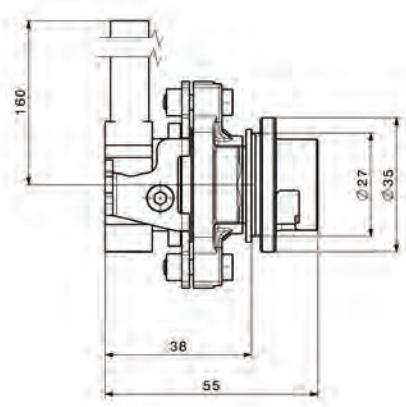
KEY FEATURES

- Made of bi-bloc with independent socket and base block
- Socket manufactured according to national standards and specific gas types
- Universal base bloc is compatible with all national sockets and specific gas types and is available with multiple configurations to accommodate assembly requirements
- Fitted with maintenance check valve to enable servicing without shutting down

REGULATORY COMPLIANCE

- Designed according to national standards
  - · AFNOR – NFS 90-116 /FDS 90-119
  - · DIN – DIN13260-2
  - · BS – BS5682
  - · and others
- Tested, validated and approved according to ISO 9170-1 standard
- CE certified according to MDD 93/42/EEC amended 2007/47/EC

AFNOR



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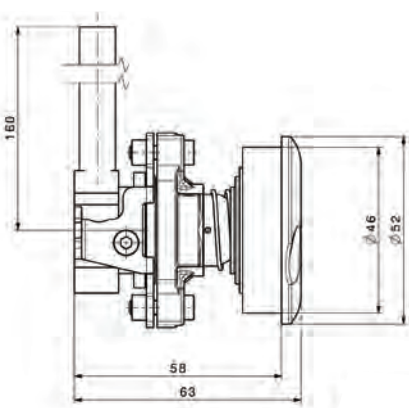
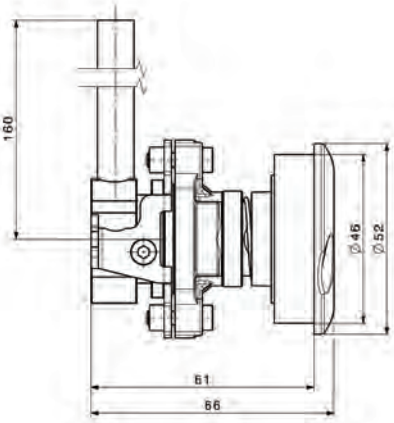


BS



ALL RIGHTS OF CHANGE RESERVED

KEY FIGURES

LIFETIME
15 years

RECOMMENDED MAINTENANCE FREQUENCY
3 years for intensive use areas
5 years for standard use areas

MAINTENANCE OPERATION DURATION
30 seconds

OVERALL WIDTH
55 to 66 mm

POSSIBLE ORIENTATION
7 (every 60°+ back entry)

POSSIBLE CONNECTION TYPES
3 (with different possible sizes)

TECHNICAL SPECIFICATIONS

Body	BB : raw brass SO : chrome plated brass
Internal components	Raw brass
Spring	CuBe2 and Stainless steel (VAC)
O-ring	EPDM

Filter	Nylon
Gas	O_2 / Air / Vacuum / N_2O / CO_2 / N_2 / Air motor
Max . Working Pressure	10 bar
Temperature range	-20°C to +60°C

Filtration	60µm (compressed gas) 350µm (vacuum)
Inlet connexion	- Cu pipe (Ø8/10) – L150mm - Hose barb - NIST
Inlet orientation	Lateral or Rear side
Outlet connexion	According to national standards

TERMINAL UNIT DESCRIPTION

ALPICONNECT is made of 3 sub-assemblies that are selected according to the gas type , the national standard and the mounting requirements

BASE BLOCK
Selected according to:
- Gas type
- Mounting requirements

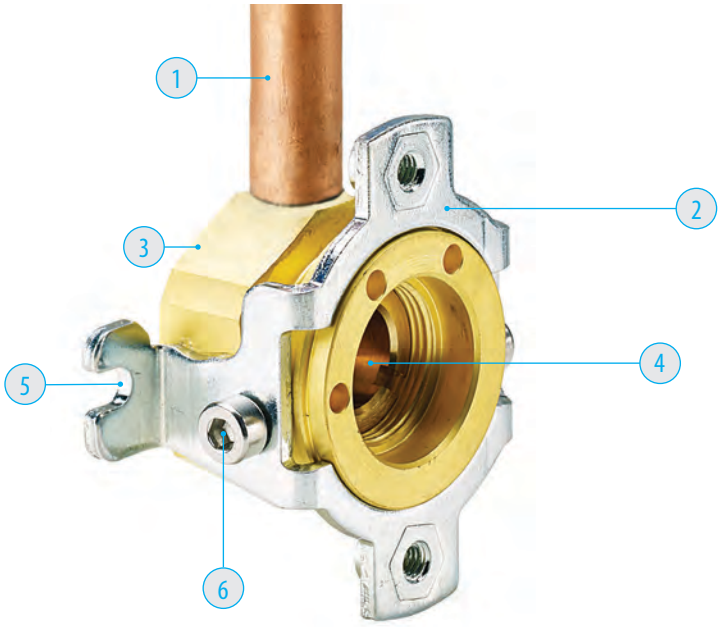
SOCKET
Selected according to:
- National standard
- Gas type

INSTALLATION KIT
If needed, selected according to:
- Standard
- Integration environnement

ALL RIGHTS OF CHANGE RESERVED

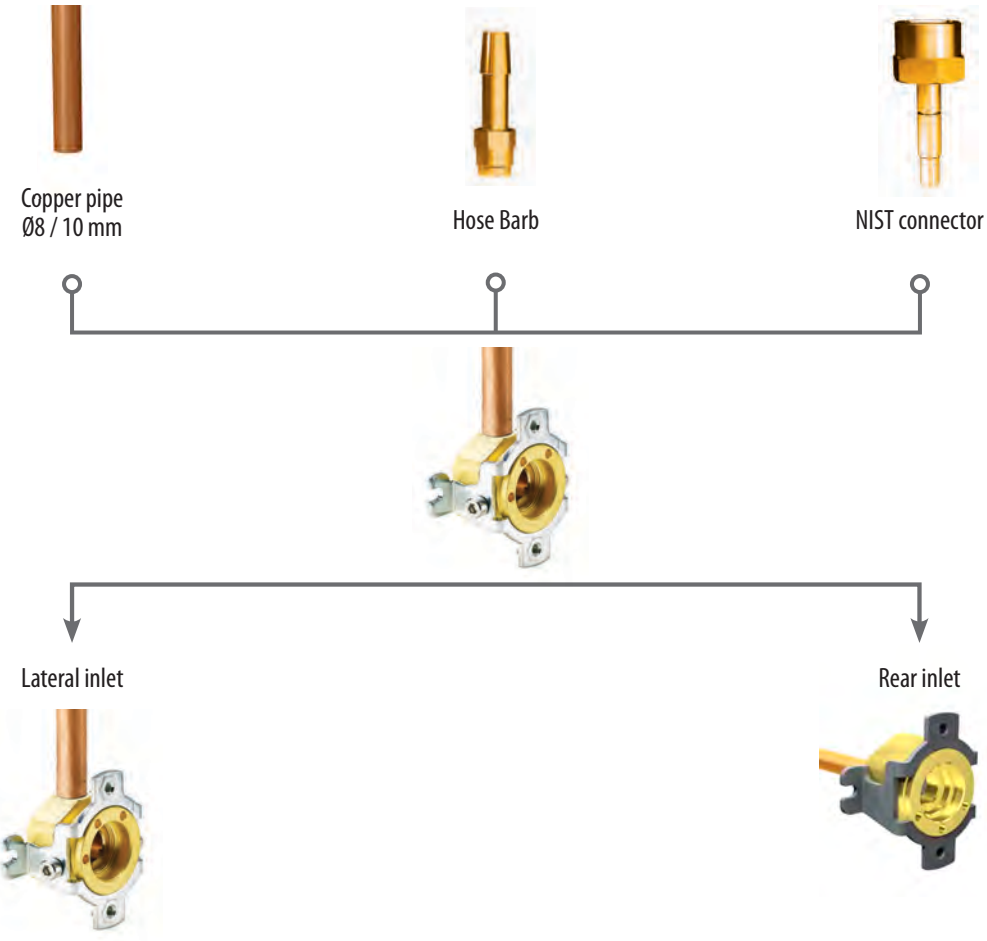
ALPICONNECT | M692 BASE BLOCKS

BASE BLOCK DESCRIPTION



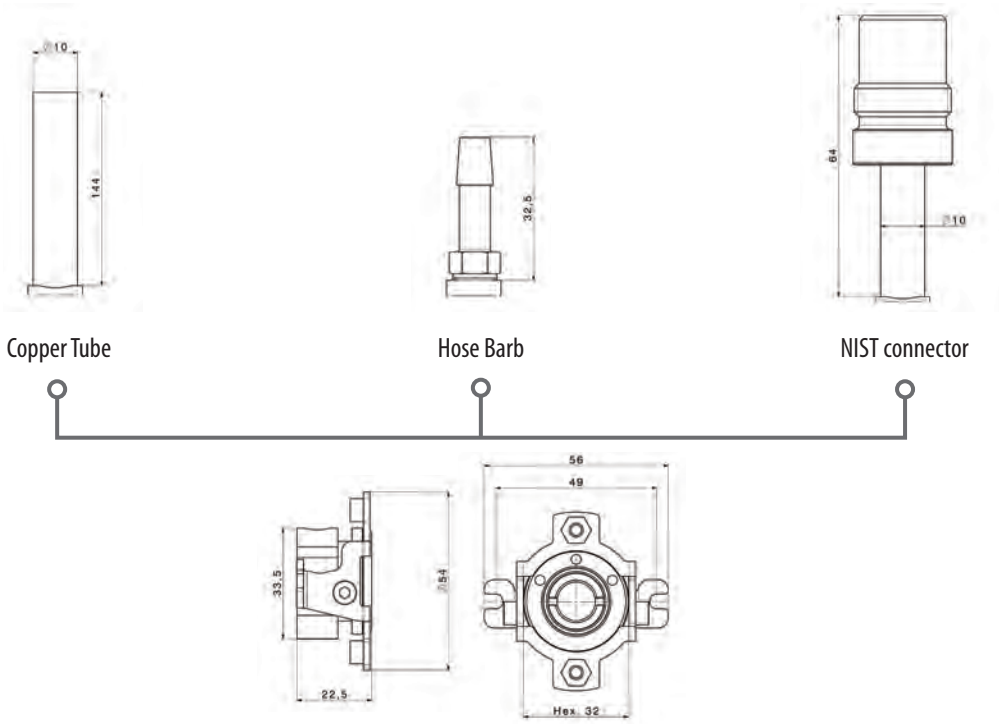
1. INLET CONNECTION
2. SOCKET - BASE BLOCK INTERFACE
3. BODY TRACEABILITY LASER MARKED
4. INTEGRATED MAINTENANCE CHECK VALVE
5. FIXING SUPPORT
6. LOCKING SCREW

BASE BLOCK VERSIONS

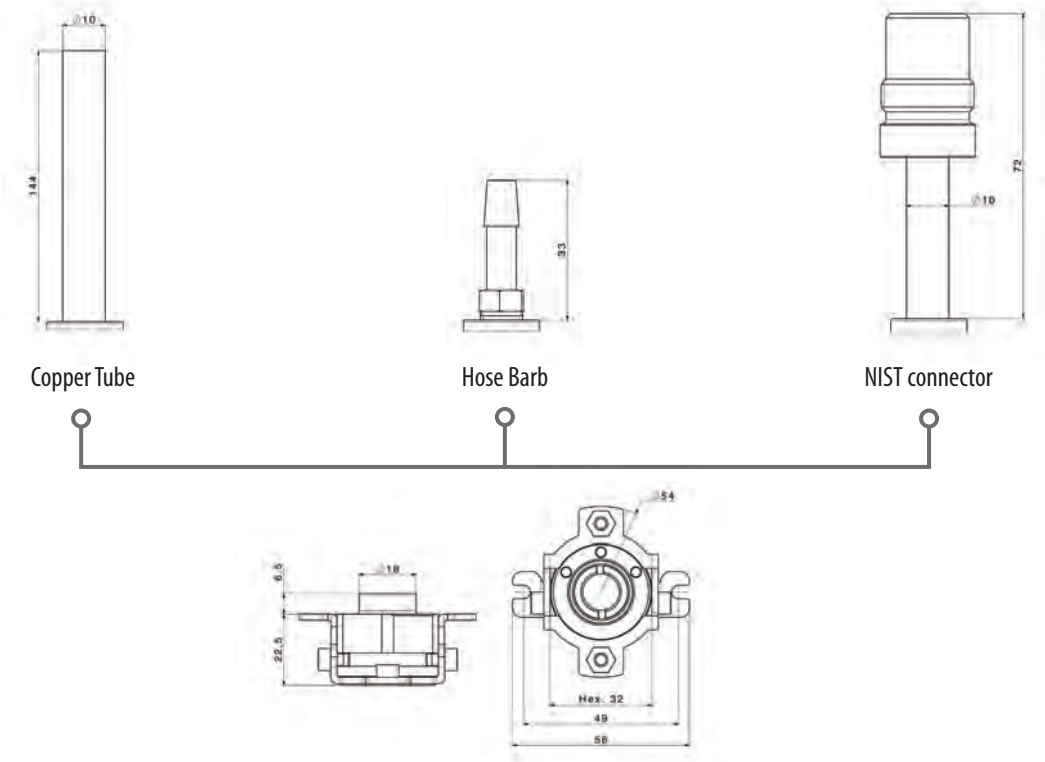


ALL RIGHTS OF CHANGE RESERVED

BASE BLOCK - LATERAL VERSION



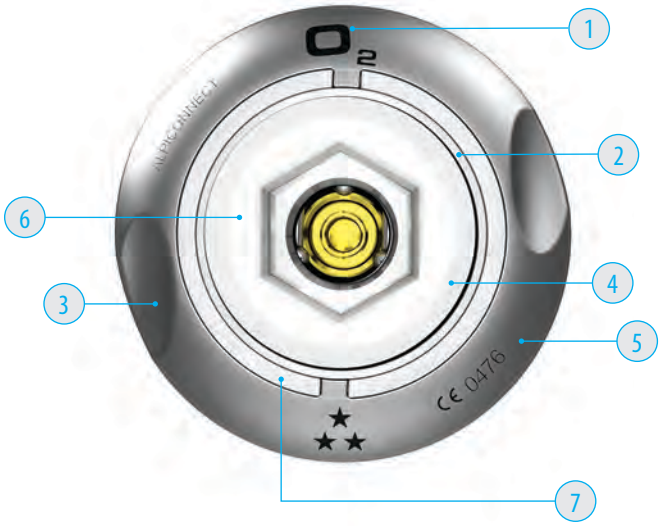
BASE BLOCK – REAR VERSION



ALL RIGHTS OF CHANGE RESERVED

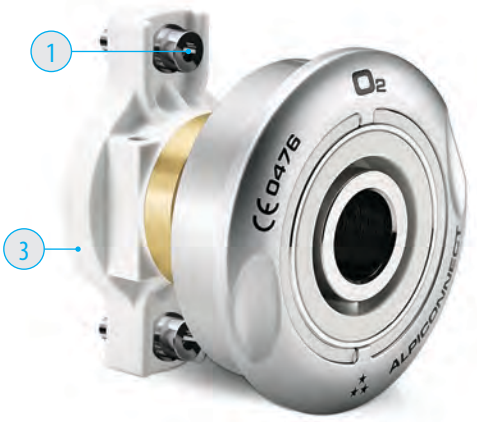
ALPICONNECT | M692 SOCKETS

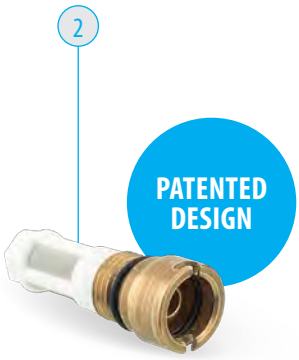
SOCKET DESCRIPTION



1. MARKING INCLUDING GAS / CE MARKING / 3 STARS LOGO / ALPICONNECT
2. CHROME PLATED BRASS COLLAR (IN BETWEEN 2 RINGS)
3. ROTAREX-OWNED "DROP SHAPE" DESIGN
4. INTERNAL RING – GAS SPECIFIC VISUAL IDENTIFICATION INDICATION - COLOR CODE 2
5. PUSH BUTTON – ACTUATION
6. TRACEABILITY MARKING AREA
7. EXTERNAL RING – GAS VISUAL INDICATION - COLOR CODE 1

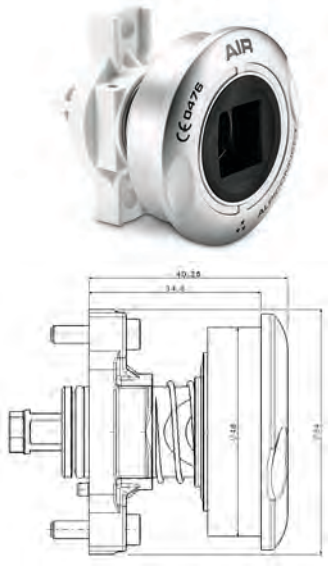
1. 2 ASSEMBLY SCREWS
2. INTERNAL ALL-IN-ONE CARTRIDGE
3. GAS SPECIFIC INTERFACE



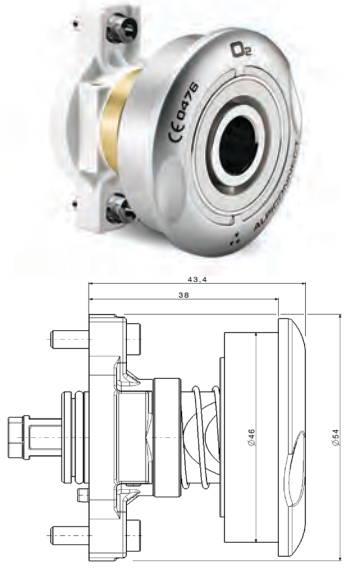


SOCKET VERSIONS / DIMENSIONS

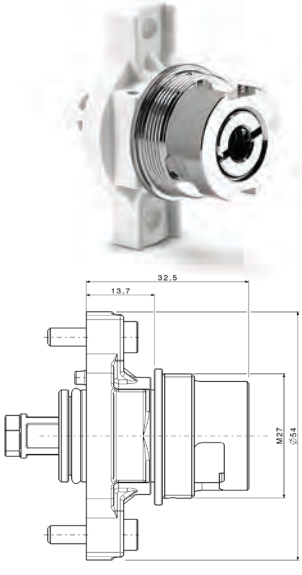
DIN 13260-2 - standard



BS 5682: 2015 - standard



AFNOR NF S90-116 - standard



ALL RIGHTS OF CHANGE RESERVED

ALPICONNECT | M692 INSTALLATION KITS

FOR AFNOR MODELS

WALL MOUNTED KIT – WM

Including :
- Wall fixing plate
- Box
- Cover
- Internal & external gas type labels
- Locking nut

* Kit dedicated to specific gas type
** Wall fixing screws not included

PANEL MOUNTED – PAN

Including :
- Panel fixing box
- Front plate
- Cover
- Internal & external gas type labels
- Locking nut

* Kit dedicated to specific gas type
** Panel fixing screws not included

BED HEAD UNIT 1 – BHU1

Including :
- Cover
- Internal & external gas type labels
- Locking nut

* Kit dedicated to specific gas type

BED HEAD UNIT 2 – BHU2 (cover not provided)

Including :
- Locking nut

* Kit universal for all gas types

CEILING PENDANT – CP

Including :
- Gas type label
- Locking nut

* Kit dedicated to specific gas type

FOR DIN & BS MODELS

WALL MOUNTED KIT – WM

Including :
- Wall fixing plate
- Box

* Kit universal for all gas types
** Wall fixing screws not included

PANEL MOUNTED – PAN

Including :
- Panel fixing box
- Front plate

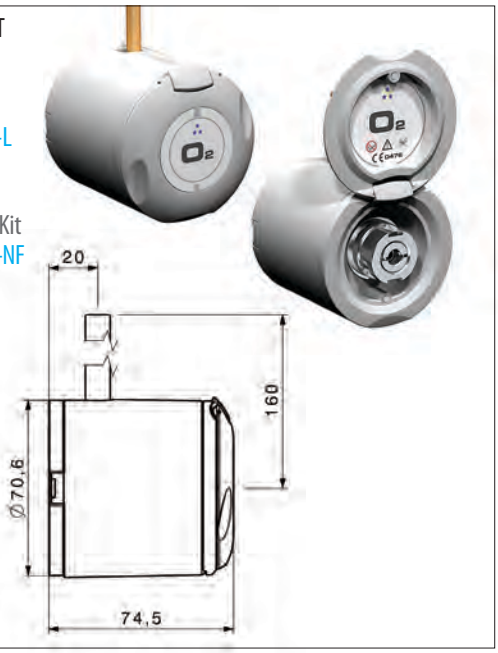
* Kit universal for all gas types
** Wall fixing screws not included

ALL RIGHTS OF CHANGE RESERVED

AFNOR MODELS

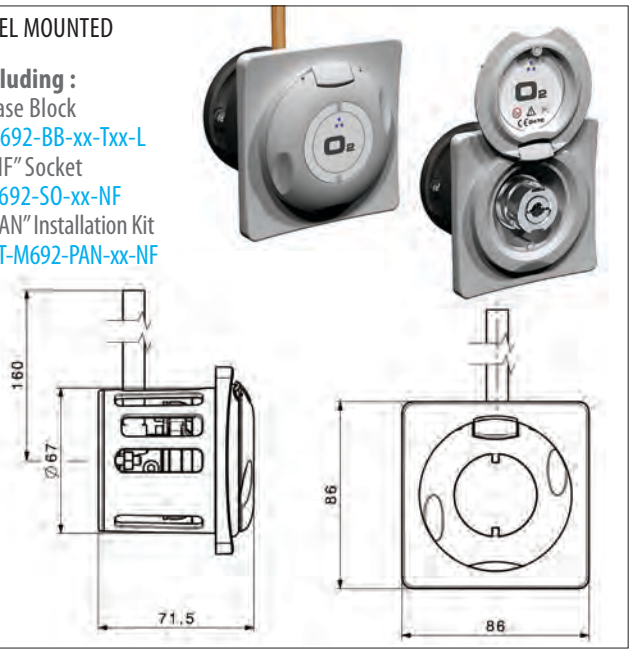
WALL MOUNTED KIT

Including :
- Base Block
  M692-BB-xx-Txx-L
- "NF" Socket
  M692-SO-xx-NF
- "WM" Installation Kit
  KIT-M692-WM-xx-NF



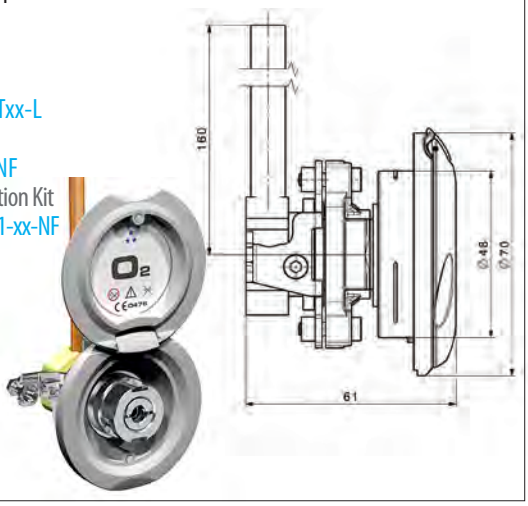
PANEL MOUNTED

Including :
- Base Block
  M692-BB-xx-Txx-L
- "NF" Socket
  M692-SO-xx-NF
- "PAN" Installation Kit
  KIT-M692-PAN-xx-NF



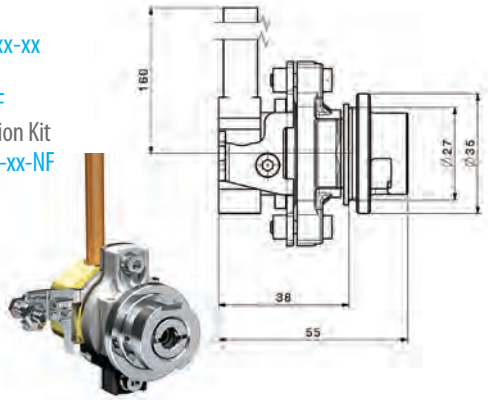
BED HEAD UNIT 1

Including :
- Base Block
  M692-BB-xx-Txx-L
- "NF" Socket
  M692-SO-xx-NF
- "BHU1" Installation Kit
  KIT-M692-BHU1-xx-NF



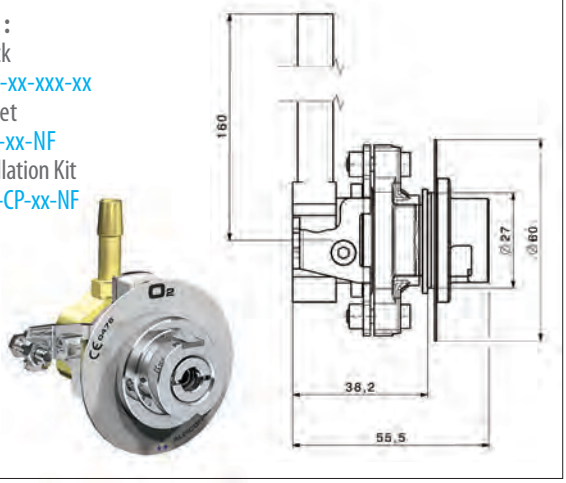
BED HEAD UNIT 2 (COVER NOT PROVIDED)

Including :
- Base Block
  M692-BB-xx-xxx-xx
- "NF" Socket
  M692-SO-xx-NF
- "BHU2" Installation Kit
  KIT-M692-BHU2-xx-NF



CEILING PENDANT

Including :
- Base Block
  M692-BB-xx-xxx-xx
- "NF" Socket
  M692-SO-xx-NF
- "CP" Installation Kit
  KIT-M692-CP-xx-NF

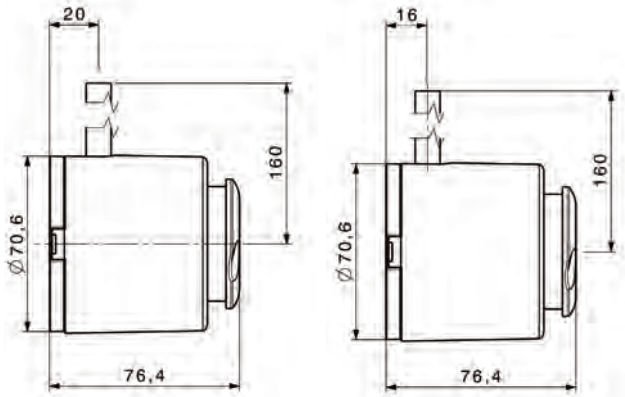


ALL RIGHTS OF CHANGE RESERVED

DIN & BS MODELS

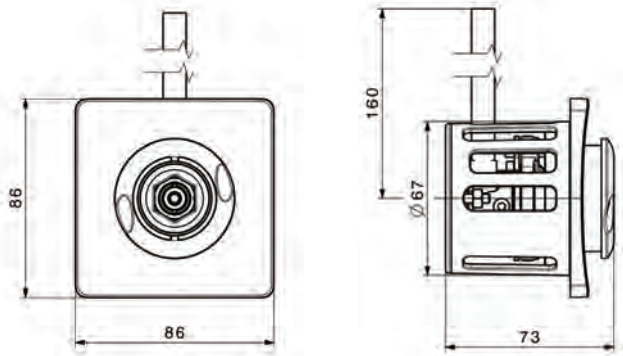
WALL MOUNTED KIT

Including :
- Base Block
  M692-BB-xx-xxx-xx
- DIN or BS Socket
  M692-SO-xx-DIN or
  M692-SO-xx-BS
- "WM" Installation Kit
  KIT-M692-WM-T-DIN/BS



PANEL MOUNTED

Including :
- Base Block
  M692-BB-xx-xxx-xx
- DIN or BS Socket
  M692-SO-xx-DIN or
  M692-SO-xx-BS
- "WM" Installation Kit
  KIT-M692-WM-T-DIN/BS



ALL RIGHTS OF CHANGE RESERVED

PRODUCT CONFIGURATORS

CEODEUX MEDITEC offers 2 different possibilities for ALPICONNECT Terminal Units configuration and ordering process.

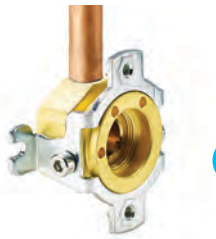
ALPICONNECT M692 Series

★ STAND ALONE terminal unit sub-assemblies (base block, sockets and installation kits)
★ Configure & Manage your combinations yourself (types and quantities)
★ Every sub-assembly packed and delivered SEPARETLY

ALPICONNECT M693 Series

★ ALL-IN-ONE complete terminal unit
★ Configure your version and we take care of everything (combinations, compatibilities)
★ Everything packed and delivered TOGETHER

STAND ALONE



BASE BLOCK
M692-BB-xxxx

+

SOCKET
M692-SO-xxxx

+

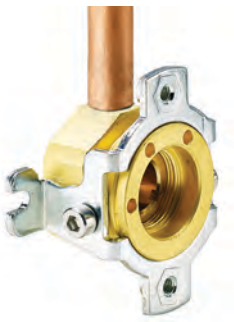
INSTALLATION KIT
05xxxxxxx

ALL - IN - ONE

COMPLETE TERMINAL UNIT
M693-xxxxx

CONFIGURATIONS – STAND ALONE PRODUCTS

Base block



	Type		Gas		Inlet Type		Inlet Side	
M692	BB		O_2		T10		LA	
	Base Block	BB	Oxygen	O2	Ø8 mm	D8	Lateral	LA
			Air 4 bar	A4	Piped Ø8mm - 150mm	T8	Rear	RE
			Air 8 bar	A8	Ø10 mm	D10		
			Nitrous Oxide	N2O	Piped Ø10mm - 150mm	T10		
			Vacuum	VAC	Hose Barb	HB		
			Carbon Dioxide	CO2	NIST	NIST		
			Nitrogen	N2				

Socket

	Type		Gas		Standard	
M692	SO		O_2		NF	
	Socket	SO	Oxygen	O2	NFS 90-116/119	NF
			Air 4 bar	A4	DIN 13260-2	DIN
			Air 8 bar	A8	BS 5682	BS
			Nitrous Oxide	N2O		
			Vacuum	VAC		
			Carbon Dioxide	CO2		
			Nitrogen	N2		

ALL RIGHTS OF CHANGE RESERVED

CONFIGURATIONS – STAND ALONE PRODUCTS (continued)

Installation kit

	Type		Gas		Standard	
KIT - M692	WM		O_2		NF	
	Wall Mounted	WM	All (no gas indication)	T	NFS 90-116 / 119	NF
	Panel Mounted	PAN	Oxygen	O2	DIN 13260-2	DIN
	Bed Head Unit – V1	BHU1	Air 4 bar	A4	BS 5682	BS
	Bed Head Unit – V2 – with NF cover	BHU2	Air 8 bar	A8		
	Ceiling Pendant	CP	Nitrous Oxide	N2O		
			Vacuum	VAC		
			Carbon Dioxide	CO2		
			Nitrogen	N2		

CONFIGURATIONS – ALL-IN-ONE PRODUCTS

All-in one version

	Standard		Gas		Inlet Type		Inlet Side		Type	
M693	NF		O_2		T10		LA		WM	
	NFS 90-116/119	O2	Oxygen	O2	Ø8 mm	D8	Lateral	LA	Wall Mounted	WM
	DIN 13260-2	A4	Air 4 bar	A4	Piped Ø8mm - 150mm	T8	Rear	RE	Panel Mounted	PAN
	BS 5682	A8	Air 8 bar	A8	Ø10 mm	D10			Bed Head Unit – V1	BHU1
			Nitrous Oxide	N2O	Piped Ø10mm - 150mm	T10			Bed Head Unit – V2	BHU2
			Vacuum	VAC	Hose Barb	HB			Ceiling Pendant	CP
			Carbon Dioxide	CO2	NIST	NIST				
			Nitrogen	N2						

ALL RIGHTS OF CHANGE RESERVED

M861 ALPI | MULTI CYLINDER EXTENSIONS

Left or right, 2 or 3 cylinders extension for medical gas and switch over boards and emergency modules

EXTENSIONS

★ 2 or 3 cylinders version
★ Non-return valve installed at each manifold inlet connection

Special requirements on request

Also available

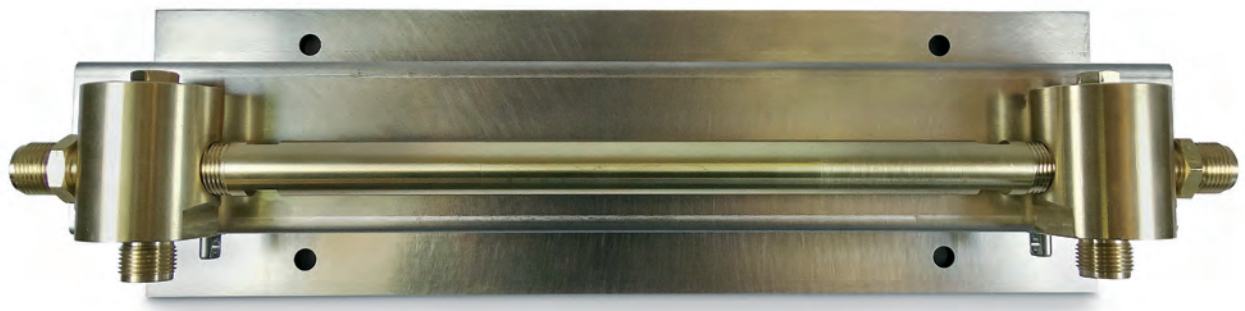
KEY FEATURES

- High pressure header to connect cylinder batteries available for various gases
- Resistant to Oxygen adiabatic compression
- Standard G3/8" F connections inlet/outlet
- 2 or 3 cylinder version
- Delivered with plate support

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 21969

CYLINDER EXTENSION



KEY ADVANTAGES

SAFETY AND PERFORMANCE

- Smart choice of materials in conformance with ISO 15001 and the most restrictive additional requirements
- Suitable for all types of medical gases
- Resistant to Oxygen adiabatic compression
- O-ring sealing for a proper tightness level
- Integration of hole at each inlet for safety cable fixation

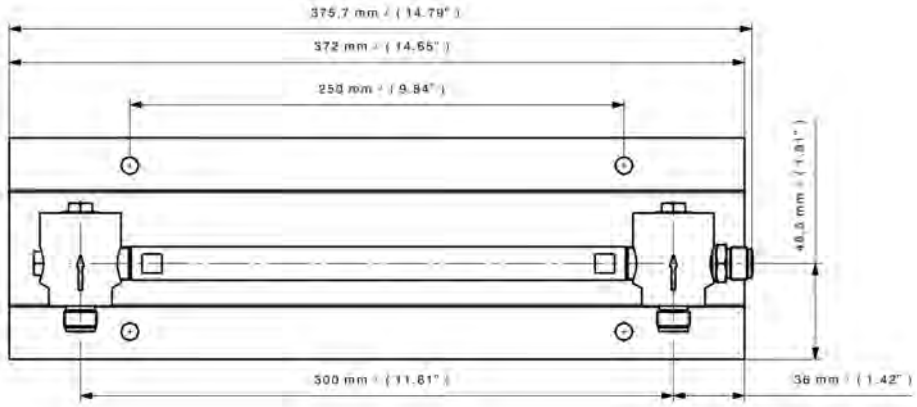
INSTALLATION AND OPERATING COSTS

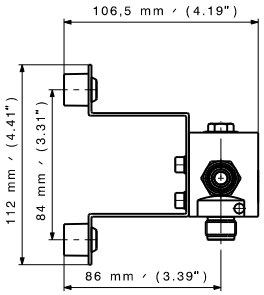
- Ready-to-install elements
- Only a simple wrench requested to install
- Flexible thanks to its universal design whatever the configuration is
- 2 and 3 cylinders versions can be easily combined together to use required number of cylinders

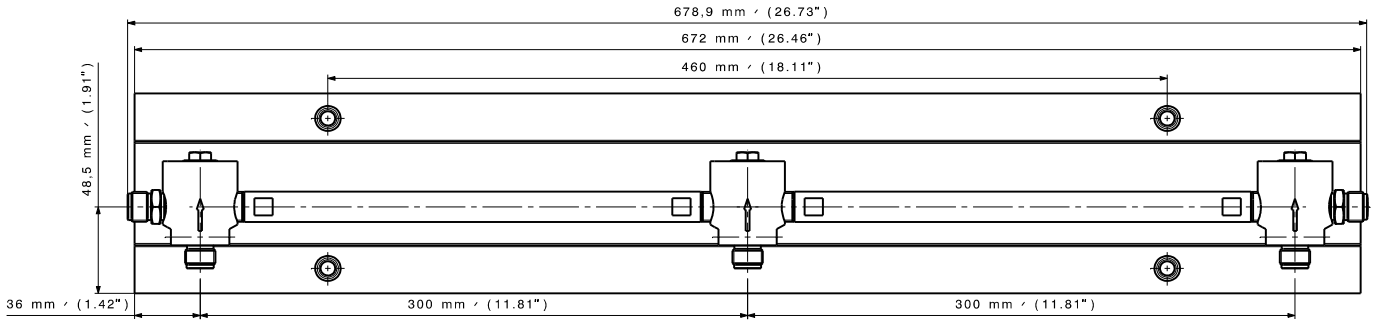
ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Material	Brass/copper	**Temperature range**	-20°C to +60°C	**End connections**	G ⅜" Male
O-ring	EPDM	**Internal diameter**	Ø4 mm	**Plate**	Stainless steel
Leak rate	< 10^{-7} mbar.l/s He	**Connections**	2 or 3 cylinders	**Weight**	± 1.6 kg (2C) ± 2.8 kg (3C)







PRODUCT REFERENCES

		Material		Type		End Connections	
REF	**ALPIMULTI**	**B**		**2C**		**G38**	
M86100000		Brass	**B**	2 Cylinders	**2C**	G⅜" Male	**G38**
M86100013				3 Cylinders	**3C**		

ALL RIGHTS OF CHANGE RESERVED

M860 ALPI-LINK CONNECTION PIGTAILS

Straight or elbow pigtail ideally suited to connect ALPI-SWITCH / ALPI-SAFE to extensions or extensions together in order to connect more gas cylinders

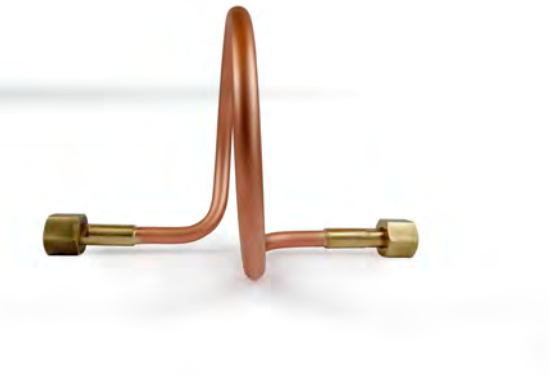
APPLICATIONS

- Pre-defined dimensions for a perfect positioning
- Resistant to Oxygen adiabatic compression
- Standard G⅜" F connection

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 21969

PIGTAIL MANIFOLD-EXTENSION



PIGTAIL EXTENSION-EXTENSION

KEY ADVANTAGES

SAFETY AND PERFORMANCE

- Smart choice of materials in conformance with ISO 15001 and the most restrictive additional requirements
- Suitable for all types of medical gases
- Resistant to Oxygen adiabatic compression

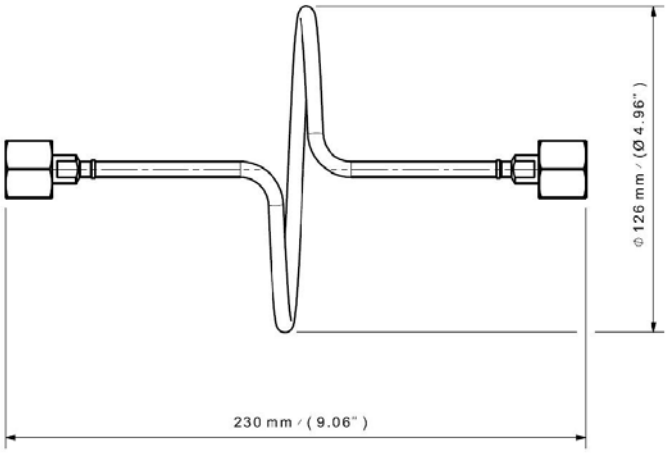
INSTALLATION AND OPERATING COSTS

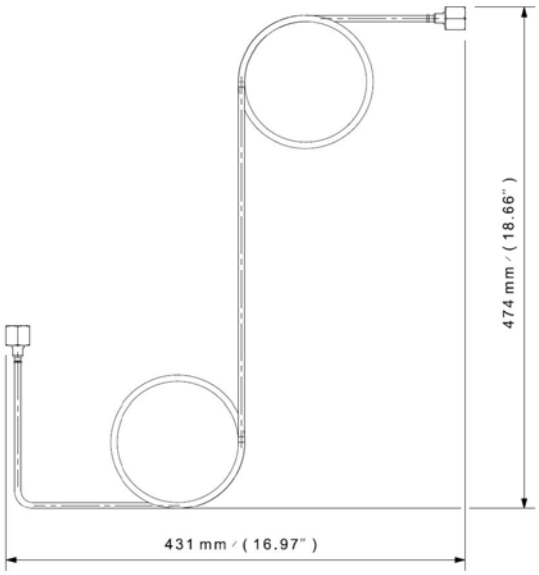
- Ready-to-install elements
- Only a simple wrench requested to install
- Flexible thanks to its universal design whatever the configuration is

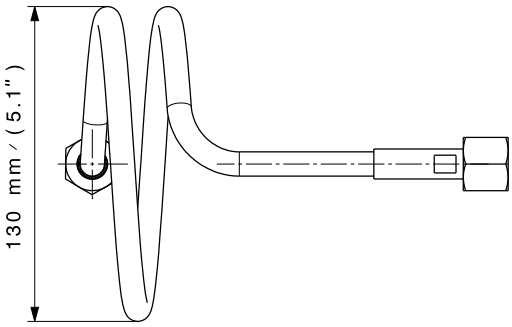
ALL RIGHTS OF CHANGE RESERVED

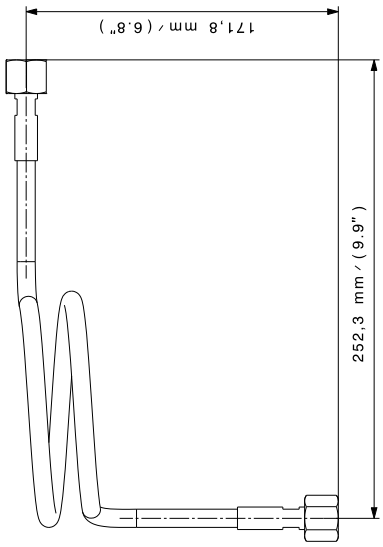
SPECIFICATIONS

End Connection (Inlet/Outlet)	G⅜" Female	**Temperature range**	-20°C to +60°C	**Tube size**	Diameter 10x2,5
Leak rate	< 10^{-7} mbar.l/s He	**Max. working Pressure**	200 bar 2900 psig		
Material	Copper brass	**Weight**	± 0.165kg (EE) ± 0.295 kg (ME)		









PRODUCT REFERENCES

		Material		Type		End Connections	
REF	**ALPILINK**	**CU**		**EE**		**G38**	
M86000001		Cooper	**CU**	Extension-Extension	**EE**	G⅜" Female	**G38**
M86000000				Manifold-Extension	**ME**		
M86000002				Extension corner	**EC**		

ALL RIGHTS OF CHANGE RESERVED

M858 / M860 CYLINDER PIGTAILS

Straight or elbow pigtail ideally suited to connect supply boards or switch over boards to gas cylinders

PIGTAILS

★ high pressure
★ straight

Special requirements on request

KEY FEATURES

- Cylinder connector according the following standard:
- AFNOR, DIN, NEN, UNI,...
- Other connections: on demand
- Outlet connections: G ⅜ - Female
- Material: stainless steel, electro polished or copper

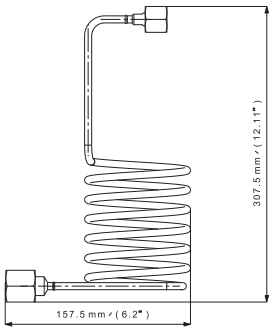
REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 21969

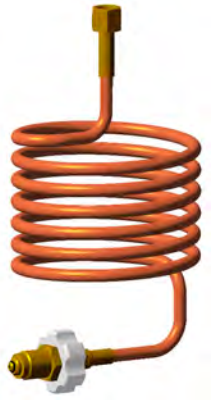
OPTIONS

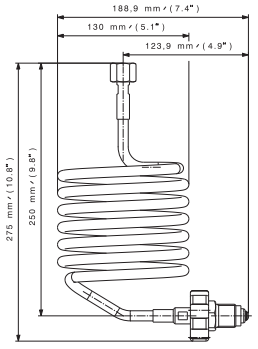
- Different intlet connection

STRAIGHT STAINLESS STEEL VERSION - M858



STRAIGHT COPPER VERSION M860





PRODUCT CONFIGURATOR

	Gas Type		Cylinder Connection		Outlet connection		Material		Version	
MED PIGTAIL	O2		NF		G6		SS		S	
	O_2	O_2	NF 29-650	NF	G⅜" - Female w/ rotating nut	G6	Stainless steel	SS	Straight version	S
	Air	AIR	DIN 477-1	DIN			Copper	CU		
	N_2O	N_2O	BS 341-3	BS						
	CO_2	CO_2	NEN 3268	NEN						
	N_2	N_2	UNI 11144	UNI						
			CGA V1	CGA						

ALL RIGHTS OF CHANGE RESERVED

M854 ALPI-FLEX | CYLINDER FLEXIBLE HOSES

Flexible hoses for various pressures used for connecting supply boards, switch over boards and other equipment at the source of gas supply

FLEXIBLE HOSES

★ high pressure
★ stainless steel

Special requirements on request

KEY FEATURES

- Stainless steel hose
- Compatible with medical gases according to the hose type.
- The hose is composed of a stainless steel double braid, a stainless steel and end connections.
- The hose is standardly equipped with a stainless steel safety cable as a safety best practice.

REGULATORY

- Medical CE certified according to MDD 93/42/EEC amended 2007/47/EC
- Product complies with EN ISO 21969

(1) **FLEXIBLE ROSE**

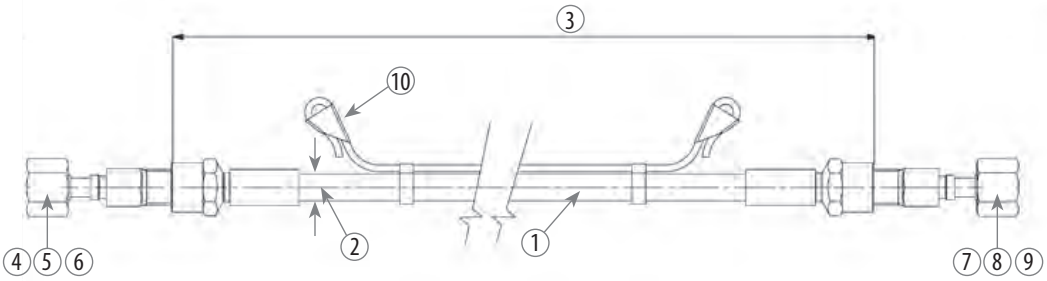
(2) **INNER DIAMETER**
- G¼"

(3) **LENGTH**
- 1500 mm

(4)(5)(6) **CYLINDER CONNECTION**

(7)(8)(9) **OUTLET CONNECTION**

(10) **OPTIONS**
- Elbow on cylinder side and safety cable



PRODUCT CONFIGURATOR

	Inner Diameter		Length		Gas Type		Cylinder Connection		Outlet connection		Options	
ALPIFX	DN6		1500		O2		NF		G6		C	
	¼"	DN ¼	1500 mm	1500	O_2	O_2	NF 29-650	NF	G3/8" - Female w/ rotating nut	G6	Elbow on cylinder side and safety cable	B
					Air	AIR	DIN 477-1	DIN				
					N_2O	N_2O	BS 341-3	BS				
					CO_2	CO_2	NEN 3268	NEN				
					N_2	N_2	UNI 11144	UNI				
							CGA V1	CGA				

ALL RIGHTS OF CHANGE RESERVED

PRESSURE SENSOR

- Thin film pressure transducer

KEY FEATURES

- Total error band includes linearity, repeatability, hysteresis and temperature errors in temperature range -30°C to 100°C.
- Response time: 5 ms max to 63% of full scale pressure with step change on input
- Vibration: iec 60068-2-6 fc vibrating (sinusoidal) 20g
- Operating life: 1 million full pressure cycles min
- Media: all class II fluids and gases compatable with stainless steel
- Temperature range limited to -15°C to +85°C by use of mating connector
- M12 - 4 pole
- Sensor meets ROHS requirements.
- CE-conformity according to EMC directive 2004/108/eg emission and immunity

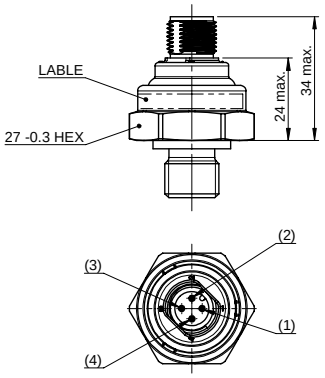
OPTIONS

- Pressure Input pressure range: 10 / 16 / 250 barG

M12 CONNECTOR MODEL SHOWN

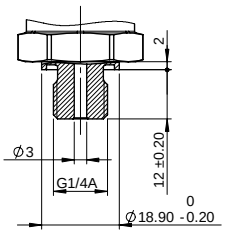
BUILT-IN ELECTRICAL CONNECTOR

M12 - 4 POLE



PRESSURE CONNECTION PORT

G1/4A DIN 3852-E



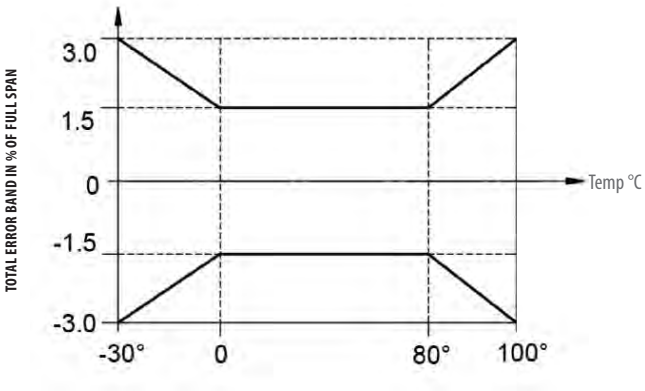
M12 PIN CALL OUTS				
OUTPUT	PIN 1	PIN 2	PIN 3	PIN 4
4-20 mA	Vsup	N/C	Iout	N/C

ALL RIGHTS OF CHANGE RESERVED

SPECIFICATIONS

Inlet pressure max.	10 / 16 / 250 bar
Operating temperature range	-30°C to 100°C
Storage temperature range	-30°C to 100°C
Calibrated output signal	4-20mA (Linear) vs applied pressure(0...100%)
Operating supply	8-30 VDC
External O-Ring	Flourocarbon fkm (viton®)
Inlet connection	G¼A
Protection class	M12: IP67

FIGURE 1: TOTAL ERROR BAND



PRODUCT CONFIGURATOR

	Pressure Range		Output		External O-Ring		Pressure connection port		Built in electrical connector*	
PTE 5000	010		1		B		1		A	
	0-10 barG	010	4-20 mA	1	Flourocarbon fkm (viton®)	B	G¼A DIN 3852-E	1	DIN 175301-803 A (18 mm)	A
	0-16 barG	016								
	0-250 barG	250								

*Mating connector to be ordered separatly

ALL RIGHTS OF CHANGE RESERVED

CONTACT PRESSURE GAUGES

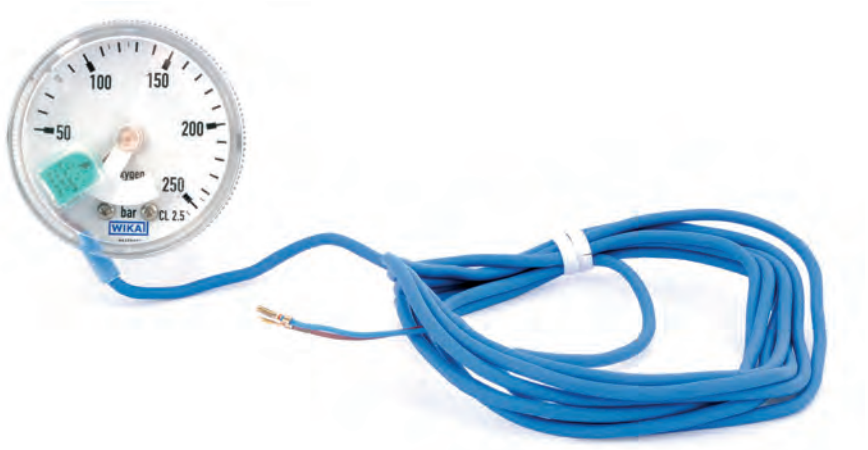
Contact pressure gauges for ROTAREX regulators, points of use, supply boards or switch over boards

KEY FEATURES

- Vertical (6 o'clock) or rear mounting
- Connections:
  M10 x 1 - Male
- Many pressure ranges available
- Material: cuprous alloy
- Nominal diameter: Ø50 mm

Sliding contact gauge
- Normally Open (NO)
- Accuracy class: 2,5
- Adjustment of switching point with a key
- Contact load ≤10 Watt / 10 VA.
- Switching current min. 20 mA, max. 500 mA.
- Cable length 2 m, cable outlet left-hand
- Cannot be used with explosive or combustive gases

Inductive contact gauge
- Normally Open (NO)
- Accuracy class: 2,5
- Adjustment by twisting of contact hood
- Contact-free "contact release" without wear
- Cable length 2 m, cable outlet right-hand
- Compatible with explosive or combustive gases



Available with vertical or rear mounting connections (normally open)

NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 M10 X 1 MALE VERTICAL CONNECTION

Diameter	Scale	Material	Connection	Male thread	Contact	KIT part number
Ø50	0 + 16 bar	Cuprous alloy	Vertical	M10 x 1	Inductive	On demand
Ø50	0 + 300 + 400 bar	Cuprous alloy	Vertical	M10 x 1	Inductive	360021990001
Ø50	0 + 400 bar	Cuprous alloy	Vertical	M10 x 1	Sliding	On demand

NORMALLY OPEN CONTACT PRESSURE GAUGE, Ø50 M10 X 1 MALE REAR CONNECTION

Diameter	Scale	Material	Connection	Male thread	Contact	KIT part number
Ø50	0 + 16 bar	Cuprous alloy	Rear	M10 x 1	Inductive	390001990004
Ø50	0 + 40 bar	Cuprous alloy	Rear	M10 x 1	Inductive	299178990028
Ø50	0 + 100 bar	Cuprous alloy	Rear	M10 x 1	Inductive	On demand
Ø50	0 + 100 bar	Cuprous alloy	Rear	M10 x 1	Sliding	On demand
Ø50	0 + 250 bar	Cuprous alloy	Rear	M10 x 1	Sliding	390000990011
Ø50	0 + 250 bar	Cuprous alloy	Rear	M10 x 1	Inductive	390000990012
Ø50	0 + 400 bar	Cuprous alloy	Rear	M10 x 1	Inductive	390003990002
Ø50	0 + 400 bar	Cuprous alloy	Rear	M10 x 1	Sliding	On demand

ALL RIGHTS OF CHANGE RESERVED

BA 12 | ALARM BOX

- Signal sent automatically for notifying gas shortage. The message is visual and acoustic
- Optional EX protection (installation outside Ex-area)
- Devices available in three versions: For 2, 6 and 10 pressure gauge

ALARM BOXES

★ 2/6/10 contacts
★ Ex Version

Special requirements on request

KEY FEATURES

- Detecting a drop in pressure when the gas bottle is empty
- Messages are displayed visually by LEDs and audibly buzzer
- Remote message with potential free contacts possible
- Inputs for magnetic spring contact and inductive contact pressure gauge are suitable. Only NC contacts for safety!
- Plastic case with IP65 seal for wall and panel mounting
- Cage clamp connection and pluggable
- Easy to configure when the device is closed

OPTIONS

- Intrinsically safe barrier for Ex environment (Isolating switching amplifier)
- 230V AC or 115V AC power supply

KEY ADVANTAGES

- Product flexibility : three versions available according to your process(2, 6 or 10 contacts)
- Potential-free output as change-over contact
- Group message and New value message
- Integrated LED allow visual information
- Integrated Buzzer for acoustic alarm

BA 12-02

BA 12-06

BA 12-10

SPECIFICATIONS

Voltage	230 VAC/50 Hz 115 VAC/60 Hz
Power	< 3VA

Type 1	Potential free relay contact
Rating	8A/230 VAC w/ resistive load
Function	Group Message
Type 2	For external horn or lamp
Rating	8A/230 VAC w/ resistive load

Connection	2-storey cage clamps
Terminal voltage	10 VDC/10mA (unstabilized) 0.9
Material	ABS
Protection	IP 65
Dimension (W x H x D)	200 x 120 x 75 (mm)
Temperature range	0°C to 55°C 32°F to 131°F

PRODUCT CONFIGURATOR

	Contacts		Voltage		Ex protection	
BA12	02		230		0	
	2 contacts	**02**	230 VAC	**230**	Without	**0**
	6 contacts	**06**	115 VAC	**115**	With	**EX**
	10 contacts	**10**				

Others versions and possibilities available upon request

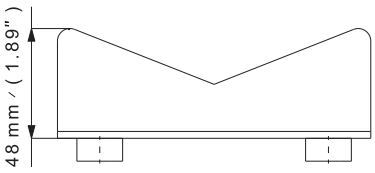
ALL RIGHTS OF CHANGE RESERVED

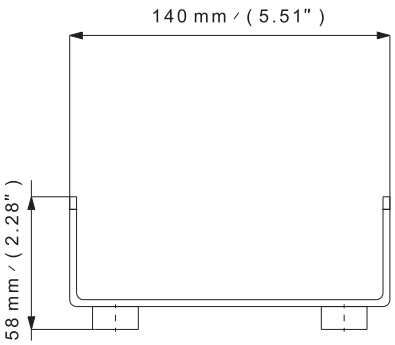
GAS CYLINDER HOLDERS

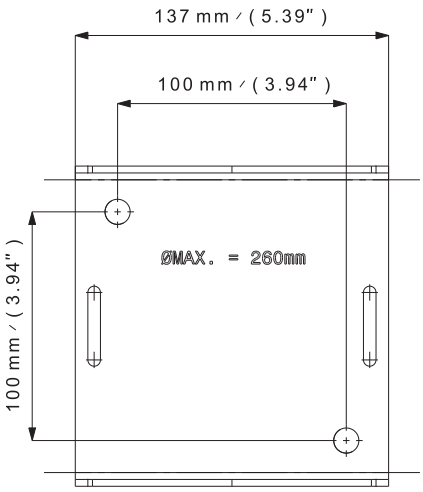
Designed for the storage of one or large number of gas cylinders in an appropriate area

- ★ Can be fixed permanently to the wall
- ★ Securely holds cylinder in place
- ★ Allows permanent designation of appropriate cylinder storage area
- ★ Delivered with a fixing belt
- ★ Many cylinder holders can be used together, side by side
- ★ Part number: 202500000007

Special requirements on request







Rear view

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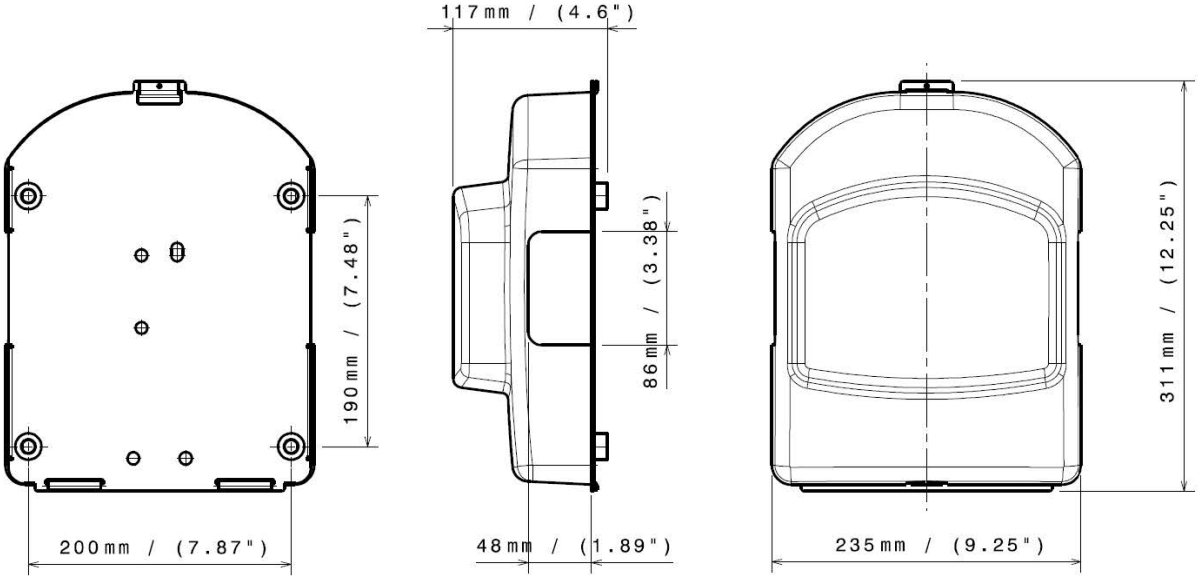
PROTECTION COVER KIT

Universal protection cover kit for :
- ALPI-REG 1
- ALPI-REG 2
- ALPI- MSV

★ Securely hold equipment in place with 4 fixation point on a robust plate
★ Avoids access for non-allowed people
★ Guarantees clear and quick visibility of the product status (on/off)
★ Protection cover assembling/ dismantling without any tool
★ Part number : 059900454

KEY FEATURES

- PETG transparent plastic cover
- Stainless steel wall fixation
- Rubber elements to fit wall ruggedness

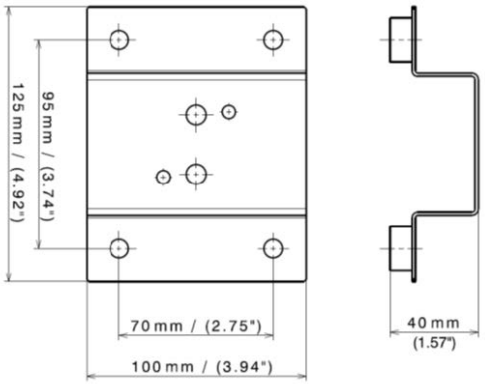


ALL RIGHTS OF CHANGE RESERVED

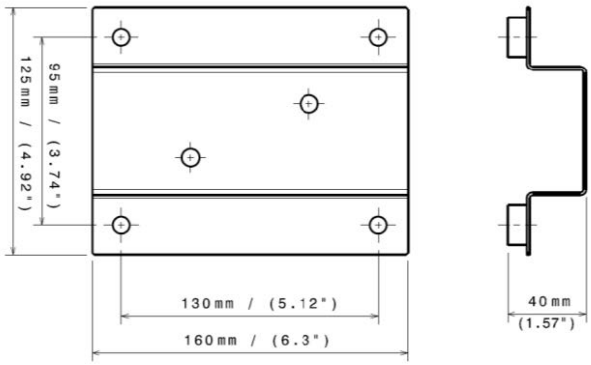
OMEGA PLATE

- Wall Fixation support for :
  - ALPI-REG 1
  - ALPI-REG 2
  - ALPI- MSV
  - ALPI-DIST
- Supplied with rubber elements to fit wall ruggedness
- Securely hold equipment in place
- 2 existing dimensions
  - 100 mm height
  - 160 mm height
- Made of stainless steel

OMEGA Plate 100 mm
Ref. 059900476



OMEGA Plate 160 mm
Ref. 059900477



COMPATIBILITY TABLE

	ALPI-REG 1	ALPI-REG 2	ALPI-MSV	ALPI-DIST
OMEGA Plat 100 mm	X			X
OMEGA Plat 160 mm		X	X	

ALL RIGHTS OF CHANGE RESERVED

MAINTENANCE TOOL CASE

- Maintenance tool case for the complete ALPI-LINE product range maintenance operations

★ Easily transportable
★ All components properly positioned and integrated in foam and case and properly identified
★ Quick and more effective maintenance operations
★ Part number : 294500000000

KEY FEATURES

- Tool case
- Preformed integration foam
- Pressure gauge 16 bar for M825
- Special keys
- Medical oxygen compatible leak detector
- Purging and setting device for ALPI-REG

ALL RIGHTS OF CHANGE RESERVED

NOTES

ALL RIGHTS OF CHANGE RESERVED

NOTES

ALL RIGHTS OF CHANGE RESERVED

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/SRG** | **MEDITEC**

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ULTRA HIGH PURITY VALVES

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PRESSURE REGULATORS

SUPPLY & SWITCH OVER BOARDS

LINE VALVES

FITTINGS & ADAPTORS

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OBJECT FIRE SUPPRESSION SYSTEMS

AUTOMOTIVE VALVES & REGULATORS

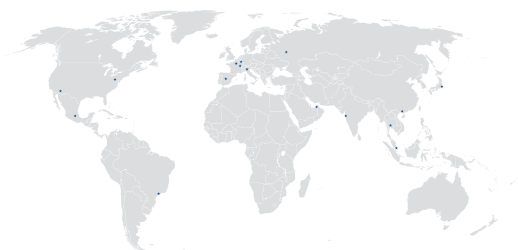
WATER CARBONATION

LPG TANK VALVES & REGULATORS

LPG CYLINDER VALVES & REGULATORS

DIGITAL MEASUREMENT SYSTEMS

PLASTIC INJECTION MOULDING



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