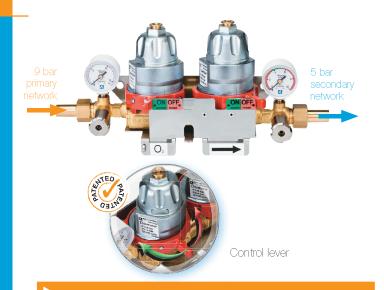
## Damao pressure regulator



amao is an essential device for double stage network standard.

This pressure regulator allows the safe pressure reduction of medical gases from medium to low pressure and the network back-up in case of an emergency.

It is available with a single or double pressure reducer, for greater safety.



### High performance for gas network

- Intuitive use: 3 gas flow configurations for continuous supply to the network
- Maintenance is facilitated by the control levers
- Safety plate: prevents forgetting and mistakes

### Optimum safety

- Safety plate: continuous supply, a network shut-off is impossible
- 2 pressure gauges: 1 upstream and 1 downstream, colour-coded to facilitate pressure control
- Ihe cover protects against chock and dust
- Quick and easy action in case of emergency

### Unrivalled simplicity

- On/Off in just one action
- Compatible with all gases
- Easy and foolproof reversal of gas flow direction
- Optimised space: compact, lightweight with simplified installation

### Easier maintenance

- Control lever for fast action in a single motion
- Interchangeable pressure reduction module, positioned vertically, no risk of falling
- Continuous gas distribution because modules can be maintained separately

### Specifications

Available gases	O <sub>21</sub> Air, N <sub>2</sub> O, OO <sub>21</sub> N <sub>21</sub> Air-800
Gas inlet standards	NF and on request DIN, BS, UNI
Supply pressure	5.5 to 10 bar
Downstream pressure	Preset to 4 bar (8 bar for Air-800), adjustable from 0 to 10 bar
Maximum flow rate	40 Nm³/h
Network connection	Ready-to-braze copper tube, diameter 10x12 mm
Sensor connection	M10 x 100
Weight of double pressure reducer	3,95 kg (cover not included)
Weight of single pressure reducer	2,91 kg (cover not included)
Mass of cover	0,3 kg
Mass of magnetic materials	Single Damao: 80 g / Double Damao: 145 g
Dimensions of double pressure reducer	157,5 mm (H) x 259 mm (L) x 107 mm (l)
Dimensions of cover	216 mm (H) x 303 mm (L) x 120 mm (I)
Upstream pressure gauge	0 to 16 bar
Downstream pressure gauge	0 to 10 bar (0 to 16 bar for the Air-800)
Pressure gauge precision	$\pm$ 2.5% of full scale
Regulatory compliance	Class IIb medical device with €0459 marking, manufactured by Air Liquide Medical
	Systems S.A. ISO 10524-2 / ISO 7396-1 standards. Read the user manual carefully.
Life time	10 years

# nrougnout the network

## Optimum pressure reduction









On/On

Off/On

Thanks to this innovation, the Off/Off position is impossible.

### References

Designation	Reference	Gas
Damao single regulator 4 bar	BB023100	02
Damao single regulator 4 bar	BB023300	Air
Damao single regulator 4 bar	BB023200	N <sub>2</sub> 0
Damao single regulator 4 bar	BB023700	CO <sub>2</sub>
Damao single regulator 4 bar	BB023500	$N_2$
Damao single regulator 8 bar	BB023400	Air-800
Damao double regulator 4 bar	BB022100	02
Damao double regulator 4 bar	BB022300	Air
Damao double regulator 4 bar	BB022200	N <sub>2</sub> 0
Damao double regulator 4 bar	BB022700	CO <sub>2</sub>
Damao double regulator 4 bar	BB022500	$N_2$
Damao double regulator 8 bar	BB022400	Air-800

2 brazing connectors are included in each reference.



Damao 4 or 8 bar single pressure reducer

Damao double regulator: enhanced safety.



Damao 4 or 8 bar double pressure reducer

### Accessories

Designation	Reference
Protective cover (x5)	BB022000
Seal in white plastic with AL logo 185mm (x10)	YA014700
Seal in red plastic with writing zone 225mm (x10)	YA011100
lo monitor pressure	
Analogue sensor 4-20 mA / 0-16 bar / M10 x 100	AF004000
Flat gasket (x10) for pressure sensor mounting	BY008700
Vigi alarm systems	page 43
lo connect a cylinder	
Emboufix 3m NF O <sub>2</sub>	BF030200
Protal II O <sub>2</sub> NF type F	CD080100

For any other reference, please contact us.

#### Did you know?

The standard (§7 ISO 7396-1) imposes two pressure reducers working in parallel.

Advantages of the Damao double pressure reducer:

- Safe pressure reduction with 2 pressure reducers
- 1 backup pressure reducer is permanently available
- For maintenance: no need to shut off the network or external supply



Design protective cover

### Tools

Designation	Reference
Valve key for Damao regulation module	CY011800
Reversibility kit (x5) Elastic pins (x12), arrow labels (x5), diabolo gasket for (x10)	manometer BB021900