REGULATORS

ELLIPSE BALANCED MC9

ELLIPSE BALANCED MC9-SC

ELLIPSE BLACK BALANCED MC9

ELLIPSE TITANIUM MC9

ELLIPSE BLACK MC5

ELLIPSE BLACK AC2

XS2 AC2

XS COMPACT MC9

XS COMPACT MC5

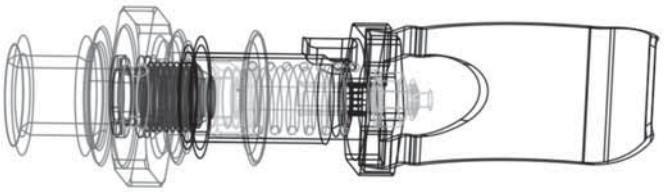
XS COMPACT AC2

OCTOPUS XS COMPACT

OCTOPUS ELLIPSE

OCTOPUS XS

XS COMPACT + OCTOPUS XS + AC2



ELLIPSE BALANCED MC9 - ELLIPSE BALANCED MC9-SC

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm (**seal chamber for MC9SC**)
- 2 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- **Aisi 316 removable nozzle**
- **Hyper-balancing**
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 4500 l/min
- Yoke version weight: 590 gr (650 gr MC9SC)
- Din version weight: 450 gr (510 gr MC9SC)

2ND STAGE
- **Pneumatically balanced**
- **Indipendent adjusting for venturi and craking effort**
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- Venturi effect **without injector**
- **Adjustment knob with double OR**
- Laser engraved titanium cover
- **Internal heat exchanger**
- **Cam-lock**
- **No resonance** material for the body
- Removable exhaust tee without tools
- Removable mechanism
- Weight without hose : 170 gr

COMBINATION PERFORMANCE
- **Average Cracking effort 3.5 mbar**
- Average breathing effort **0.6 J/l**

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000 for cold water

1ST stage **MC9**
2ND stage **ELLIPSE BALANCED**
INT: HX 820500
DIN 300 BAR: HX 820600

1ST stage **MC9-SC**
2ND stage **ELLIPSE BALANCED**
INT: HX 820000
DIN 300 BAR: HX 820100

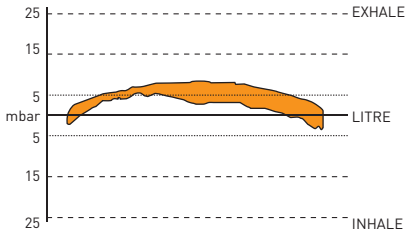
TOTAL WEIGHT

ELLIPSE BALANCED MC9 INT hose included: **913 gr**
ELLIPSE BALANCED MC9 DIN hose included: **773 gr**

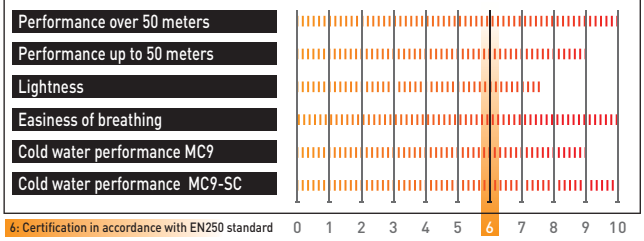
ELLIPSE BALANCED MC9-SC INT hose included: **973 gr**
ELLIPSE BALANCED MC9-SC DIN hose included: **833 gr**

1ST stage **MC9**
INT: HZ 820097
DIN 300 BAR: HZ 820098

Results: inhale pressure, exhale pressure and ext work of breathing



ELLIPSE BALANCED MC9 - ELLIPSE BALANCED MC9-SC



ELLIPSE BLACK BALANCED MC9

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm
- 2 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- **Aisi 316 removable nozzle**
- **Hyper-balancing**
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 4500 l/min
- Yoke version weight: 590 gr
- Din version weight: 450 gr

2ND STAGE
- **Pneumatically balanced**
- **Adjustable venturi** effect
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- Venturi effect **without injector**
- Stealth cover laser engraved
- **Internal heat exchanger**
- **Cam-lock**
- **No resonance** material for the body
- Removable exhaust tee without tools
- Removable mechanism
- Weight without hose : 179 gr

COMBINATION PERFORMANCE
- Average cracking effort 4.8 mbar
- Average breathing effort 0.7 J/l

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000 for cold water

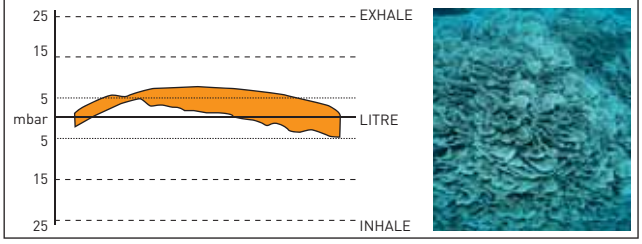
1ST stage **MC9**
2ND stage **ELLIPSE BLACK BALANCED**
INT: HX 819500
DIN 300 BAR: HX 819600

TOTAL WEIGHT

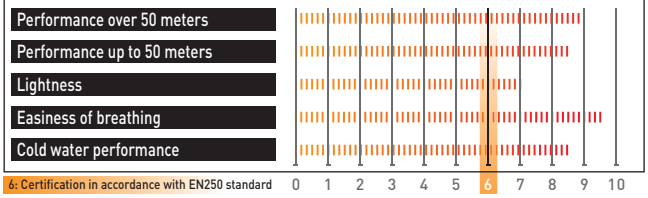
ELLIPSE BLACK BALANCED MC9 INT hose included: **922 gr**
ELLIPSE BLACK BALANCED MC9 DIN hose included: **782 gr**

1ST stage **MC9**
INT: HZ 820097
DIN 300 BAR: HZ 820098

Results: inhale pressure, exhale pressure and ext work of breathing



ELLIPSE BLACK BALANCED MC9



ELLIPSE TITANIUM MC9

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm
- 2 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body Electroless Nickel plated
- High capacity conical filter **electroless nickel plated**
- **Aisi 316 removable nozzle**
- **Hyper-balancing**
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 4500 l/min
- Yoke version weight: 590 gr
- Din version weight: 450 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- **Swinging valve shaft** with **sealing washer**
- Laser engraved titanium cover
- **No resonance** material for the body
- **Cam-lock**
- Weight without hose :158 gr

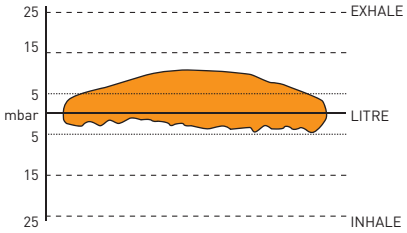
COMBINATION PERFORMANCE
- Average cracking effort **5 mbar**
- Average breathing effort **1,05 J/l**
- **Jacketed hose** extremely light and flexible weight: 153 gr
- Certification: EN250/2000 for cold water

1ST stage **MC9**
2ND stage **ELLIPSE TITANIUM**
INT: HX 821500
DIN 300 BAR: HX 821600

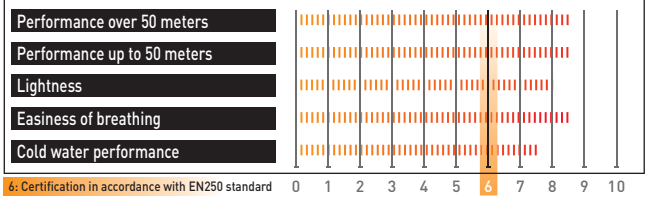
1ST stage **MC9**
INT: HZ 820097
DIN 300 BAR: HZ 820098

TOTAL WEIGHT
ELLIPSE TITANIUM MC9 INT hose included: **901 gr**
ELLIPSE TITANIUM MC9 DIN hose included: **761 gr**

Results: inhale pressure, exhale pressure and ext work of breathing



ELLIPSE TITANIUM MC9



ELLIPSE BLACK MC5

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm
- 1 outlets HP 7/16 UNF
- 3 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 3000 l/min
- Yoke version weight: 450 gr
- Din version weight: 350 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- **Swinging valve shaft** with **sealing washer**
- Big purge button
- **No resonance** material for the body
- **Cam-lock**
- Weight without hose :160 gr

COMBINATION PERFORMANCE
- Average cracking effort **5.4 mbar**
- Average breathing effort **1.15 J/l**
- **Jacketed hose** extremely light and flexible weight: 153 gr

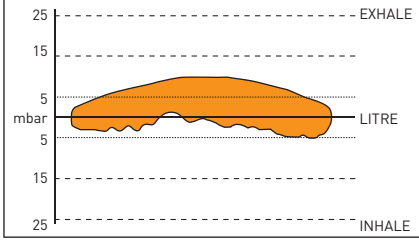
Certification: EN250/2000 for cold water

1ST stage **MC5**
2ND stage **ELLIPSE BLACK**
INT: HX 814500
DIN 300 BAR: HX 814600

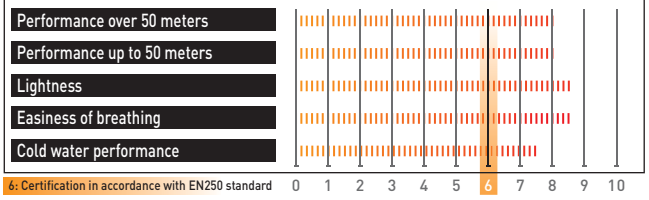
1ST stage **MC5**
INT: HZ 800098
DIN 300 BAR: HZ 800099

TOTAL WEIGHT
ELLIPSE BLACK MC5 INT hose included: **763 gr**
ELLIPSE BLACK MC5 DIN hose included: **663 gr**

Results: inhale pressure, exhale pressure and ext work of breathing



ELLIPSE BLACK MC5



ELLIPSE BLACK AC2

IDEAL FOR RENTAL RENT!

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Piston design
- 1 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 9,5-10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- Aisi 316 long lasting piston
- Adjustable without take a part
- Stainless steel spring
- Flow rate: 2100 l/min
- Yoke version weight: 635 gr
- Din version weight: 495 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- **Swinging valve shaft** with **sealing washer**
- Big purge button
- **No resonance** material for the body
- **Cam-lock**
- Weight without hose :160 gr

COMBINATION PERFORMANCE
- Average cracking effort **8 mbar**
- Average breathing effort **1.3 J/l**

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000 for cold water

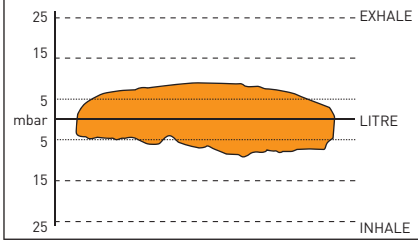
1ST stage **AC2**
2ND stage **ELLIPSE BLACK**
INT: HX 815000
DIN 300 BAR: HX 816100

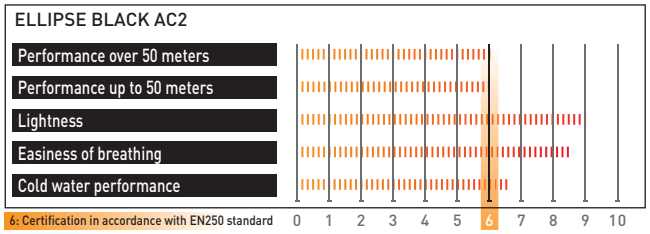
1ST stage **AC2**
INT: HZ 780097
DIN 300 BAR: HZ 780098

TOTAL WEIGHT

ELLIPSE BLACK AC2 INT hose included: **948 gr**
ELLIPSE BLACK AC2 DIN hose included: **808 gr**

Results: inhale pressure, exhale pressure and ext work of breathing





XS2 AC2

IDEAL FOR RENTAL RENT!

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Piston design
- 1 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 9,5-10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- Aisi 316 long lasting piston
- Adjustable without take a part
- Stainless steel spring
- Flow rate: 2100 l/min
- Yoke version weight: 635 gr
- Din version weight: 495 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- Easy maintenance
- Weight without hose :206 gr

- **Jacketed hose** extremely light and flexible weight: 153 gr

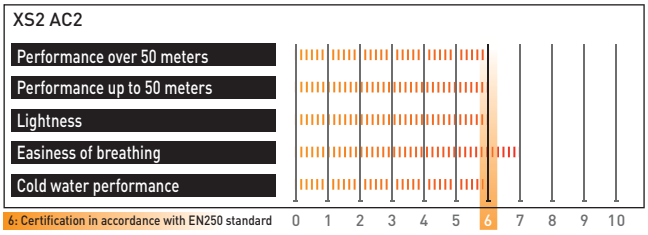
Certification: EN250/2000 for cold water

1ST stage **AC2**
2ND stage **XS2**
INT: HX 780000
DIN 300 BAR: HX 781100

1ST stage **AC2**
INT: HZ 780097
DIN 300 BAR: HZ 780098

TOTAL WEIGHT

XS2 AC2 INT hose included: **994 gr**
XS2 AC2 DIN hose included: **854 gr**



XS COMPACT MC9

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm
- 2 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- **Aisi 316 removable nozzle**
- **Hyper-balancing**
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 4500 l/min
- Yoke version weight: 590 gr
- Din version weight: 450 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented antifriction lever**
- Big purge button
- Anti-scratch surface
- Bayonet-type cap holder with security lock
- Removable exhaust tee without tools
- Weight without hose :135 gr

COMBINATION PERFORMANCE
- Average cracking effort **6 mbar**
- Average breathing effort **1 J/l**

- **Jacketed hose** extremely light and flexible weight: 153 gr

- Certification: EN250/2000

1ST stage **MC9**
2ND stage **XS COMPACT**
WHITE
INT: HX 783030
DIN 300 BAR: HX 784030

1ST stage **MC9**
2ND stage **XS COMPACT**
SILVER
INT: HX 783051
DIN 300 BAR: HX 784051

1ST stage **MC9**
INT: HZ 820097
DIN 300 BAR: HZ 820098

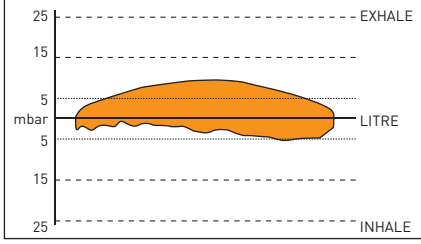
NEW

XS COMPACT COVER
- SILVER HZ 780067
- WHITE HZ 780064
- PINK HZ 780065

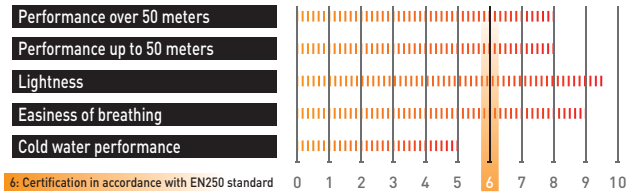
TOTAL WEIGHT

XS COMPACT MC9 INT hose included: **878 gr**
XS COMPACT MC9 DIN hose included: **738 gr**

Results: inhale pressure, exhale pressure and ext work of breathing



XS COMPACT MC9



XS COMPACT MC5

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Balanced diaphragm
- 1 outlets HP 7/16 UNF
- 3 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- **Anti-pressure drop pneumatic spring**
- Setting spring: stainless steel with **micropeening treatment**
- **Replaceable cylinder with anti-friction and anti-corrosion properties**
- **Elastomer protector**
- Flow rate: 3000 l/min
- Yoke version weight: 450 gr
- Din version weight: 350 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented antifriction lever**
- Big purge button
- Anti-scratch surface
- Bayonet-type cap holder with security lock
- Removable exhaust tee without tools
- Weight without hose :135 gr

COMBINATION PERFORMANCE
- Average cracking effort **6.5 mbar**
- Average breathing effort **1.1 J/l**

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000

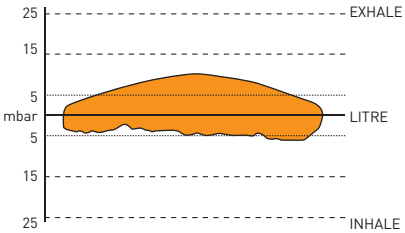
1ST stage **MC5**
2ND stage **XS COMPACT**
INT: HX 785051
DIN 300 BAR: HX 786051

1ST stage **MC5**
INT: HZ 800098
DIN 300 BAR: HZ 800099

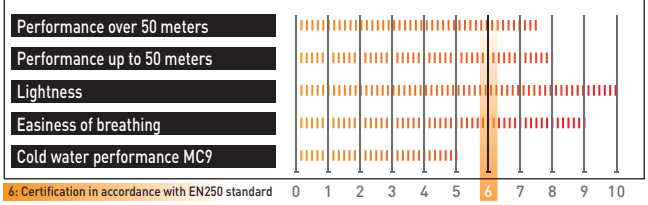
TOTAL WEIGHT
XS COMPACT MC5 INT
hose included: **738 gr**
XS COMPACT MC5 DIN
hose included: **638 gr**

NEW
XS COMPACT COVER
- SILVER HZ 780067
- WHITE HZ 780064
- PINK HZ 780065

Results: inhale pressure, exhale pressure and ext work of breathing



XS COMPACT MC5



XS COMPACT AC2

IDEAL FOR RENTAL
RENT!

MADE IN ITALY

TECHNICAL FEATURES

1ST STAGE
- Piston design
- 1 outlets HP 7/16 UNF
- 4 outlets MP 3/8 UNF
- Service pressure: 300 bar (4350 psi) DIN version, 232 bar (3365 psi) Yoke version
- Calibration pressure: 9,5-10 Bar
- Brass body **Electroless Nickel plated**
- High capacity conical filter electroless nickel plated
- Aisi 316 long lasting piston
- Adjustable without take a part
- Stainless steel spring
- Flow rate: 2100 l/min
- Yoke version weight: 635 gr
- Din version weight: 495 gr

2ND STAGE
- Downstream system
- **Adjustable venturi** effect
- **Patented antifriction lever**
- Big purge button
- Anti-scratch surface
- Bayonet-type cap holder with security lock
- Removable exhaust tee without tools
- Weight without hose :135 gr

COMBINATION PERFORMANCE
- Average cracking effort **9.5 mbar**
- Average breathing effort **1.35 J/l**

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000

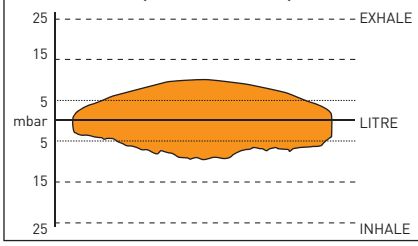
1ST stage **AC2**
2ND stage **XS COMPACT**
INT: HX 787051
DIN 300 BAR: HX 788051

1ST stage **AC2**
INT: HZ 780097
DIN 300 BAR: HZ 780098

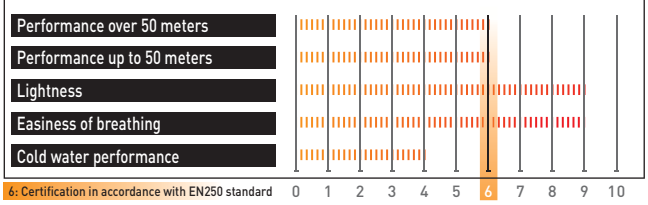
TOTAL WEIGHT
XS COMPACT AC2 INT
hose included: **923 gr**
XS COMPACT AC2 DIN
hose included: **783 gr**

NEW
XS COMPACT COVER
- SILVER HZ 780067
- WHITE HZ 780064
- PINK HZ 780065

Results: inhale pressure, exhale pressure and ext work of breathing



XS COMPACT AC2



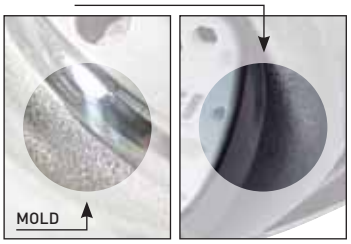
Style

Dimensions
- 15% vs Ellipse
- 25% vs Xs/2

Weight 135 gr
-10% vs Ellipse
-70% vs XS/2

A large soft button

A 3D photo-engraving
This surface increases both grip and resistance to scratches and scrapes



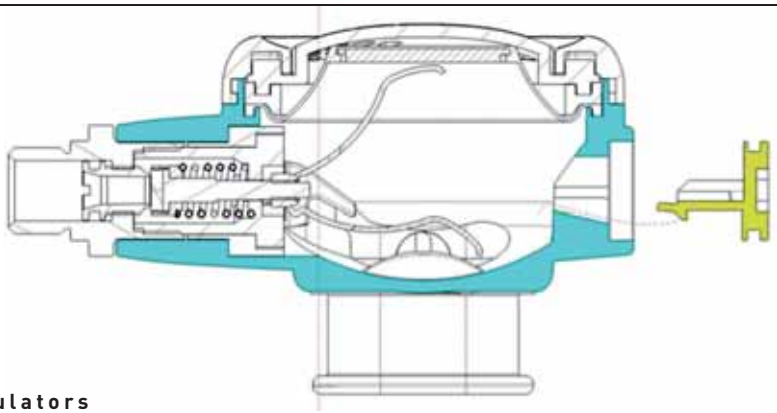
SIMPLICITY

A Bayonet-type cap holder with security lock

Eliminates cross-threading and keeps the front cover aligned properly

Upper mask

That insert guarantees the regulator to be safely and precisely locked



Spring cap

Another way to simplify: we designed a revolutionary patented cap on the device side, which avoids using a threaded coupling. The valve as well can be serviced and set in an extremely easy way guaranteeing the second stage utmost performance and perfect tightness.

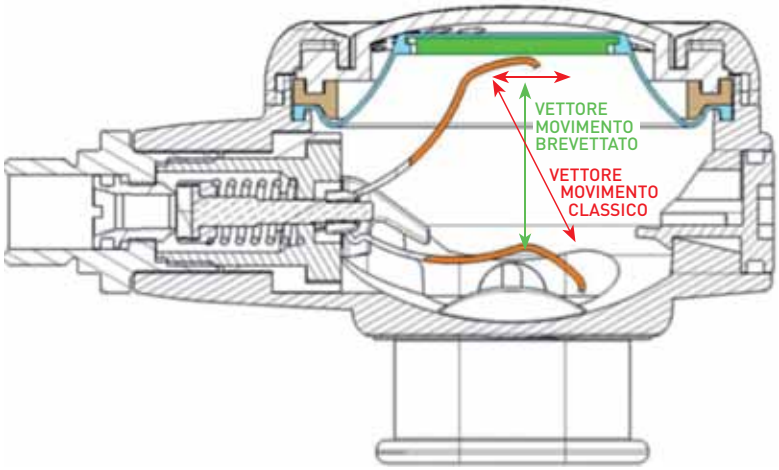
MADE IN ITALY

SIMPLICITY

The Exhaust valve slides into the guide

The Flow deviator DIVE, PRE-DIVE

PERFORMANCE

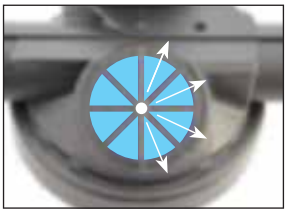


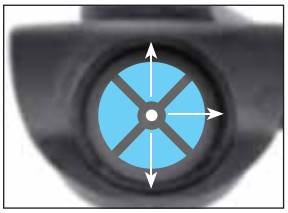
A patented lever

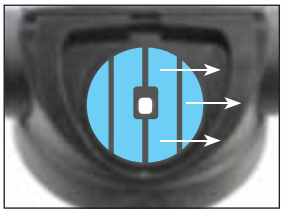
One of the reasons
for the increase in breathing effort
is the friction between
the lever and diaphragm,
Cressi sub with its patent changed
from sliding friction
into rolling friction
with a large reduction value
from a coefficent
of 0,2 to 0,001

The Exhaust valve

The exhaust effort depends on the shape of the exhaust valve retainer
and on the form of the baffle. In the xs-compact, similar to the ellipse balanced,
the air flow is parallel to the exhaust baffle thanks to the special retainer.
In this way it produces a strong ventury effect.

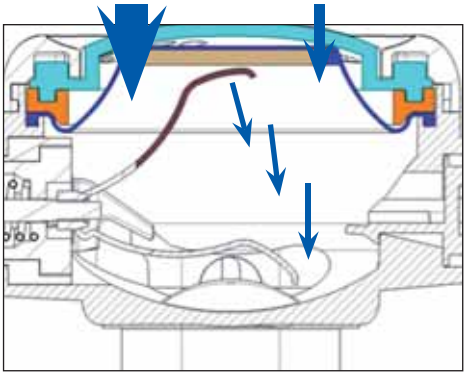






Asymmetrical holes

flows of water start to push the diaphgram in an anticlockwise
direction so the lever is always pushed in the right
way regardless of the enviroment.



OCTOPUS XS COMPACT

2ND stage
OCTOPUS XS COMPACT
HX 789000

TECHNICAL FEATURES
- Downstream system
- **Adjustable venturi** effect
- **Patented antifriction lever**
- Big purge button
- Anti-scratch surface
- Bayonet-type cap holder with security lock
- Removable exhaust tee without tools
- Weight without hose :135 gr

- **Jacketed hose** extremely light and flexible weight: 153 gr

- Certification: EN250/2000

OCTOPUS ELLIPSE

2ND stage
OCTOPUS ELLIPSE
HX 817000

TECHNICAL FEATURES
- Downstream system
- **Adjustable venturi** effect
- **Patented elliptical diaphragm**
- **Patented antifriction lever**
- **Swinging valve shaft** with **sealing washer**
- Big purge button
- **No resonance** material for the body
- **Cam-lock**
- Weight without hose :160 gr

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000 for cold water

OCTOPUS XS

2ND stage
OCTOPUS XS
HX 770098

TECHNICAL FEATURES
- Downstream system
- **Adjustable venturi** effect
- Easy maintenance
- Weight without hose :206 gr

- **Jacketed hose** extremely light and flexible weight: 153 gr

Certification: EN250/2000 for cold water

XS COMPACT + OCTOPUS XS + AC2

NEW PRODUCT 2013

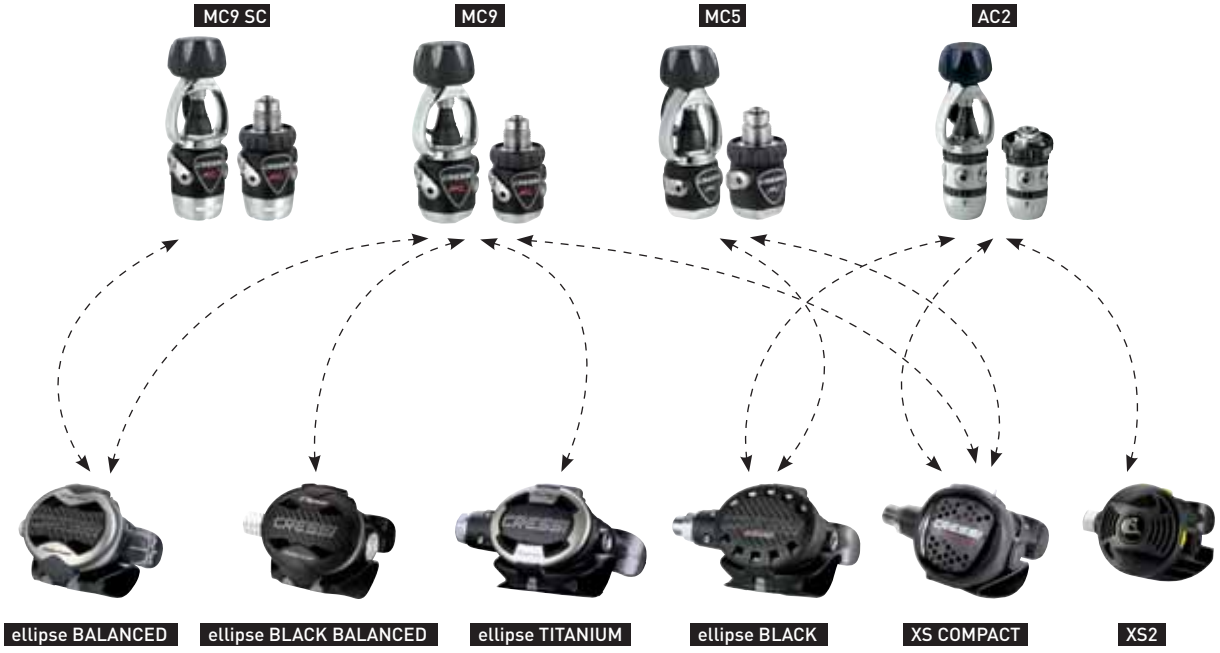
MADE IN ITALY

IDEAL FOR RENTAL RENT!

1ST stage **AC2**
2ND stage **XS COMPACT** SILVER
2ND stage **OCTOPUS XS COMPACT**
INT: HY 787051
DIN 300 BAR: HY 788051

1ST stage **AC2**
INT: HZ 780097
DIN 300 BAR: HZ 780098

REG'S COMBINATION



1ST STAGE technical features

	MC9-SC	MC9	MC5	AC2
Diaphragm Hyper- Balanced	●	●		
Diaphragm Balanced			●	
With Unbalanced Piston				●
Anti-pressure Drop Pneumatic Spring	●	●	●	
LP/HP Pressure Outlet	4/2	4/2	3/1	4/1
High Capacity Filter	●	●	●	
Seal Chamber System	●			
Replaceable 316 Stainless Steel Nozzle	●	●		

2ND STAGE technical features

	Ellipse Balanced	Ellipse Black Balanced	Ellipse Titanium	Ellipse Black	XS Compact	XS2	Octopus XS Compact	Octopus Ellipse	Octopus XS
Pneumatic Balancing	●	●							
Adjustment of Breathing Effort	●								
Adjustment of Venturi Effect	●	●	●	●	●	●	●	●	●
Low Noise Semi-Rigid Case	●	●	●	●				●	
Case Closure with Cam-lock (patented)	●	●	●	●				●	
Internal Heat Exchanger (patented)	●	●							
Lever with Low Coefficient of Friction	●	●	●	●	●		●	●	
Anti-friction Diaphragm Plate	●	●			●		●		
Elliptic Diaphragm	●	●	●	●				●	
Designed for Use in Cold Waters	●	●	●	●				●	
Average Breathing Effort	0,75 J/L	0,80 J/L	0,95 J/L	MC5: 1,1 J/L AC2: 1,4 J/L	MC9: 0,95 J/L MC5: 1,1 J/L AC2: 1,4 J/L	1,5 J/L			

TECHNICAL GLOSSARY

SEAL CHAMBER: The Seal Chamber' s task is to make MC9 balanced diaphragm first stage perfectly watertight, preventing water from seeping inside or on the diaphragm and the main spring: it works as an air chamber above the regulator and its components, like a real thermal barrier. It avoids any problem caused by contact with suspension, sand, mineral salts rich water and with cold water, which might eventually cause the regulator to freeze, especially at temperature lower than 10° C/50° F.

ELECTROLESS NICKEL PLATED: Electroless nickel plating is an auto-catalytic reaction used to deposit a coating of nickel on a substrate. Unlike electroplating it provides a regular deposit regardless workpiece geometry.

AISI 316 REMOVABLE NOZZLE: The HP seat is made of 316 stainless steel and is interchangeable, in order to make the maintenance of the 1st stage easier

HYPER-BALANCING: The intermediate pressure rise up when the cylinder pressure go down to prevent a lowering of performance when the dive is going to finish and we need the best performance

ANTI-PRESSURE DROP PNEUMATIC SPRING: Refers to the fact that all of the MP outlets are supplied by a common chamber which is a pressure accumulator. This accumulator supplies MP outlets with a very low pressure drop and without any preferable port for the main regulator.

MICROPEENING TREATMENT: When micropeening® a surface, it is being hammered by pure round glass beads, under very precisely controlled process conditions. The complete surface is treated till saturation. Depending on chosen process conditions the resulting surface is cleaned, smoothened and hardened, while in a thin surface layer compressive stresses are built up. Adhesion of material to the metal surface is diminished, heat transfer is improved while the sensitivity to corrosion, especially stress corrosion cracking decreases considerably.

REPLACEABLE CYLINDER WITH ANTI-FRICTION AND ANTI-CORROSION PROPERTIES: The high pressure piston sliding inside a special self lubricating cylinder in a special thermoplastic material. The cylinder' s inner surface is completely free of oxidation, reduces any friction dramatically and makes the valve slide in an extremely easy and precise way, guaranteeing the highest breathing comfort.

ELASTOMER PROTECTOR: A specially formulated elastomer prevent 1st stage body from scratching and damage

PNEUMATICALLY BALANCED: In pneumatically balanced design, the pressure on the second stage valve is "balanced" by allowing medium pressure air to pass through to the opposite side of the valve to help counteract the force of the spring. This reduces the inhalation effort required to open the second stage valve and substantially improves the overall ease of breathing in all diving conditions

VENTURI EFFECT: Our regulator are designed to produce a controlled venturi effect that create a vacuum against the diaphragm that help the user to open the valve to obtain air. That decrease a lot the work of breathing

PATENTED ELLIPTICAL DIAPHRAGM: The elliptical diaphragm allow the designer to achieve a big diaphragm surface (that is an essential parameter to offer performance) without increase the regulator dimension

ADJUSTMENT KNOB WITH DOUBLE OR: A double Oring protect thread from salt and sand so the softness is lifetime guarantee

WITHOUT INJECTOR: We found the way to produce venturi effect without any injector that generally concentrate air in one singular flux in that way we can offer a more natural breathing

INTERNAL HEAT EXCHANGER: Allows the cold temperature , caused by gas expansion, to dissipate into the interior of the body regulator where the ambient is warm thanks to the exhalation gas

CAM-LOCK: Any thread to lock cover and exhaust tee, cam-lock fix everything together with aeronautical specification

NO RESONANCE: A special material lowers the resonance frequency of the body so the regulator is noiseless in comparison with metal regulator

JACKETED HOSE: Our designer believe that the interior of a regulator hose must be protected against environment so they have studied a new type of hose really light and flexible without any compromise in terms of lifespan

SEALING WASHER AND SWINGING VALVE SHAFT: A "valve guiding" bush made of a special thermoplastic rubber, placed inside the valve, performs the following two functions: guides the spindle motion, reducing friction between the mechanic elements each time the valve opens, and protects the regulator in case the valve starts freezing at its most crucial point. In this way, all the air required by the diver is only fed inside the injector, thus avoiding any air loss in the connection of spindle and valve-housing. Such loss would interfere with the diaphragm bending, therefore causing the breathing effort to increase

PATENTED ANTIFRICTION LEVER : The diaphragm when it is sucked in towards the inside, causes the central plate to touch the lever which has a new revolutionary shape, designed to optimize and reduce dramatically the friction between lever and diaphragm, concentrating it onto a single spot of the plate. The friction between lever and plate, as happens in other regulators, is therefore avoided, along with the consequent reduction of the regulator' s performance.

ANTI-SCRATCH SURFACE: A 3D photo-incision anti-scratch treatment protect plastic from shocks and abrasions and guarantee its utmost resistance