INSTINCT 12S - INSTINCT 52 - INSTINCT 52 WHITE - INSTINCT 52 SHE DIVES - OCTOPUS INSTINCT

⚠ WARNING

This pamphlet is an integral part of the Mares regulator user's manual and should be stored with it.

CE CERTIFICATION

The Mares regulators described in this manual have been tested and certified by Registered Test Centre No. 0426 - Italcert - Viale Sarca 336, Milan - I, in compliance with EC directive 89/686/EEC of 21 December 1989. The test procedures were conducted according to the EN 250: 2000 standard, in conformance with the aforesaid directive, which sets out the conditions for marketing and essential safety requirements for Category III Personal Protective Equipment (PPE).
The certification testing results are as follows:

Model	Warm water (Temp. = > 10°C (50°F))	Cold waters (Temp. < 10°C (50°F))	Marking	Position
Instinct 12S	approved	approved	CE 0426	on the first stage
Instinct 52	approved	approved	CE 0426	on the first stage
Instinct 52 White	approved	approved	CE 0426	on the first stage
Instinct 52 She Dives	approved	approved	CE 0426	on the first stage
Octopus Instinct	approved	approved	CE 0426	on the second stage

The CE markings indicate that the product is compliant with the essential health and safety requirements (Att. (DE 89/686/EEC Annex II). The suffix 0426 after the letters "CE" indicates the Italcert Registered Test Center in charge of monitoring the production under Art. 11B DE 89/686/EEC.

MR12S^T FIRST STAGE

The Instinct 12S is equipped with the new MR12S^T first stage.
New first stage, with a nickel- and chrome-plated brass body, stands out from previous versions because of its size and its lower weight. This was made possible thanks to innovative technical solutions that still maintain the same internal components. Diaphragm technology with the DFC system and replaceable high-pressure seat connector. The high-pressure valve, manufactured in "tri-materials" allows for improved durability and security. These advances have made it possible to include conical filters with better filtering power in both the INT and the DIN versions. It features a preferential intermediate-pressure DFC port for the main second stage hose, as well as three other LP service ports and two ports for high pressure. All ports have been rearranged in order to offer better positions for the hoses and the transmitting unit for integrated dive computers.

MR52^T FIRST STAGE

Unique performance from this compact, balanced diaphragm first stage. Made of nickel- and chrome-plated brass with protections and shockproof caps, the MR52 features all the general characteristics of the best latest-generation Mares diaphragm first stages, introducing innovative technical solutions. The two DFC ports deliver a constant flow of air when breathing from the main second stage or from the octopus. The NCC system, combined with the special water recirculation system built corresponding to the diaphragm, makes it possible to achieve the very best performance in cold water. The "Tri-Material" high pressure valve is made of three different materials, helping it last longer and offer maximum reliability. The four pre-oriented low pressure ports make it possible to arrange the hoses perfectly, in any configuration. The two high pressure ports are for connecting the pressure gauge or console and the transmitter of an integrated computer, when used.

DUAL DFC

All the characteristics of the DFC system are now available in the port intended for the second stage octopus! The dual DFC ensures a constant flow of air when breathing through the main second stage as well as the octopus, even when diving deep!

INSTINCT SECOND STAGE / INSTINCT WHITE / INSTINCT SHE DIVES

The revolutionary and innovative design of this second stage introduces numerous benefits for divers, in terms of both performance and comfort. The leading characteristic is the special angle of the hose compared to the second stage. This solution allows the diver to choose a shorter hose, reducing the risk of entanglement and making the equipment lighter weight.

The small size, achieved through the use of special internal components with specially designed shapes and sizes, and the backward shift of the center of gravity in the second stage (closer to the diver's mouth), help noticeably reduce jaw fatigue, even after prolonged periods of use.

Another Mares innovation, specially designed for the Instinct second stage, is the position of the inhalation diaphragm. In fact, differently from traditional membranes, which are positioned vertically, and in some cases horizontally (with respect to the diver's vertical), in the Instinct second stage the diaphragm is angled at 45°. Along with the integrated VAD, this solution guarantees advanced performance when breathing in all dive positions.

The angled lateral port dramatically reduces the presence of bubbles in front of the mask to ensure perfect visibility.

The conical shape created inside the second stage makes clearing easier in the various dive positions.

The openings on the cover, intended to allow water to flow over the diaphragm, are positioned in the rear section of the second stage; this solution prevents freeflow, even in the presence of strong currents.

Thanks to the special hydrodynamic shape, the materials used, and the choice of the Superflex hose, the Instinct second stage is incredibly lightweight, for maximum comfort throughout the dive.

INSTINCT OCTOPUS

The second stage of the Octopus version is equipped with a hose of considerable length (100 cm (39 in)).
It is yellow, making it immediately identifiable in any situation.

Technical characteristics **FIRST STAGE**

	MR12S[T]	MR52[T]
Operation	- Balanced diaphragm design - DFC system - "Tri-material" valve	- Balanced diaphragm design - DFC system - "Tri-material" valve
Materials		
Metal parts	- Chrome- and nickel-plated brass - Stainless steel	- High-resistance, nickel- and chrome-plated moulded brass - Stainless steel
Non-metal parts	- High impact technopolymers	- High impact technopolymers
Seals and membranes	- Nitryl rubbers - Silicone rubbers	- Nitryl rubbers - Silicone rubbers
Capacity (pressure 180 bar)	- 4800 l/min	- 4800 l/min
Intermediate pressure		
Inlet pressure 200 bar	- from 9.8 to 10.2 bar	- from 9.8 to 10.2 bar
Inlet pressure 30 bar	- from 9.8 to 10.2 bar	- from 9.8 to 10.2 bar
First stage ports		
High pressure	- 2 7/16" UNF	- 2 7/16" UNF
DFC	- 1 3/8" UNF (primary)	- 2 3/8" UNF (primary and octopus)
Intermediate pressure	- 3 3/8" UNF	- 2 3/8" UNF
Weight		
INT	- 674 g	- 687 g
DIN	- 574 g	- 513 g

Technical characteristics **SECOND STAGE**

	INSTINCT	OCTOPUS INSTINCT
Operation	- VAD system - Mesh Grid cover	- VAD system - Mesh Grid cover
Materials		
Metal parts	- Chrome- and nickel-plated brass - Stainless steel	- Chrome- and nickel-plated brass - Stainless steel
Non-metal parts	- High impact technopolymers	- High impact technopolymers
Seals and membranes	- Nitryl rubbers - Silicone rubbers	- Nitryl rubbers - Silicone rubbers
Capacity (pressure 180 bar)	- 2400 l/min	- 2400 l/min
Hose Type		
Standard	- Superflex 3/8"	- Superflex 3/8"
Hose length		
Standard	- 65 cm	- 100 cm
Weight	- 150 g	- 150 g

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