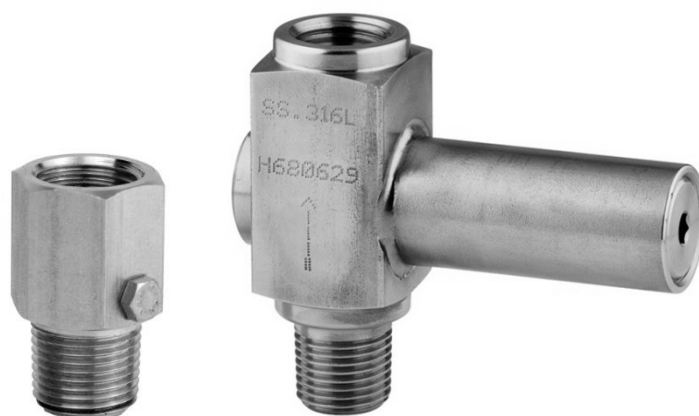


# User Guide

## ADJUSTABLE OVERLOAD PROTECTION DEVICE



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ADJUSTABLE OVERLOAD PROTECTION DEVIDE

## 1. Important information

This manual contains important information about the use and the installation of the pressure restrictor in safety conditions. Working safely requires that all safety instructions are observed. All components are subject to stringent quality and traceability criteria. The quality management system is certified according to the ISO 9001 standards.

The instrument works in safe conditions when correctly selected and installed in the system and when the rules concerning the product as well as the maintenance procedures established by the manufacturer are respected.

The staff charged with the selection, installation and maintenance of the instrument must be able to recognize the conditions that may negatively affect the instrument's ability to work and which may lead to premature breakage. The staff must therefore be technically qualified and properly trained, and must carry out the procedures called for in the plant regulations.

## 2. Safety Standards



- The manufacturer disclaims all responsibility in case of damages caused by the improper use of the product and by the non-respect of the instructions reported in this manual
- Follow carefully the specific safety rules in case of measuring oxygen pressure, acetylene, inflammable or toxic gas or liquids.
- Disconnect the instruments only after depressurization of the system.
- The process fluids residuals in the disassembled gauges could affect people, the environment and the system. It is highly recommended to take proper precautions.



- Before installation be sure that the right instrument has been selected following the working conditions and in particular the range, the working temperature and the compatibility between the material used and the process fluid.
- The product warranty is no longer valid in case of non-authorized modifications and of wrong use of the product.
- The user is totally responsible for the instrument installation and maintenance.
- Instruments used for toxic or inflammable measurement must be handled and stocked carefully.

In order to verify the working and manufacturing features of the instruments read the catalogue sheets in the most up-dated edition available on line on [www.nuovafima.com](http://www.nuovafima.com)

## 3. Intended use

The adjustable overload protection device is used to protect the instrument from pressure levels exceeding the instrument's scale range preventing the inner components from any damage and /or from pressure loss.

## 4. Installation

The adjustable overload protection device must be mounted right under the pressure gauge. For this operation as well as for the process connection a proper wrench has to be used forcing on the squared part of the protection device itself. As for cylindrical threading process connections a proper head gasket compatible to the fluid characteristics has to be used. If the connection threading is conic additional sealing materials are used in order to reach the requested tightness level (PTFE tape). Do not use ptf. tape on cylindrical threading.

## 5. Adjustment

### 5.1 Assembled adjustable overload protection device (for MP4/9L – MP4/9H model)

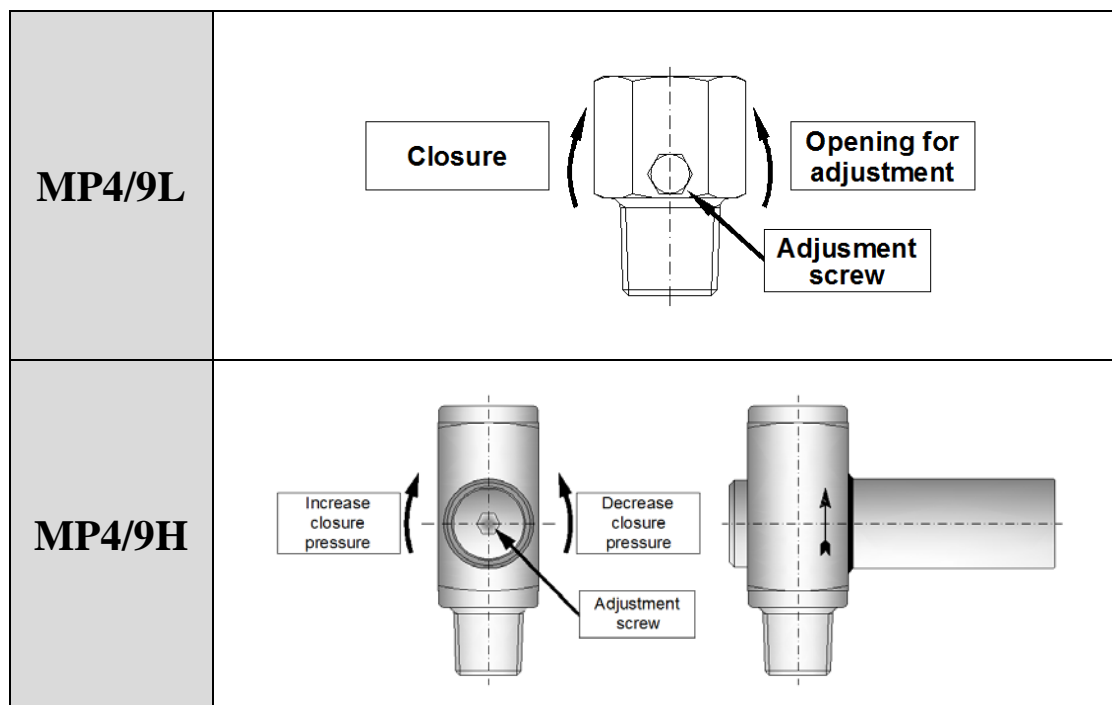
The adjustable overload protection device assembled to an instrument is calibrated for an operation at a maximum pressure value equal to 130% of the instrument's range. It will be possible to recalibrate the instrument only in the laboratory by qualified personnel. But it is important to consider two important limitations before making a recalibration:

- The device cannot be calibrated for a top closure to 130% of full scale of the pressure gauge as an excess of this limit could damage the measuring instrument (see note 1)
- The device can be calibrated with a point of operation lower than 130% but always higher than the full scale value of the instrument, as the reading of the scale value must always be free according to the international regulations.

## 5.1 Not-assembled adjustable overload protection device (for MP4/9H model)

The adjustable overload protection device is adjusted from the manufacturer on the minimum value of its full adjustment range. When the device is assembled to an instrument it is calibrated on a maximum pressure operating value of 110% of the instrument scale range. In order to calibrate a device assembled to a pressure gauge proceed as follows:

- Connect the adjustable overload protection device to a pressure source equipped with an instrument showing the supplied pressure and with a device for the adjustment of the pressure itself.
- Increase the pressure gradually. If the 110% of the full scale range of the instrument equipped with the protection device is reached, reset the pressure to zero and operate on the protection device turning the adjustment screw 90°counterclockwise (see FIGURE).
- Repeat the pressure increase and verify again if the pressure indication stops at 110% of the full scale range. If this does not occur decrease the pressure to zero and operate again on the protection device turning the adjustment screw 90°counterclockwise.
- Repeat this operation through small screw rotations until the protection device goes in action and the instrument on which the protection device is mounted does not show the pressure value anymore.
- If the protection device operates at a pressure value which is too low after the pressure to zero, turn the adjustment screw 90° clockwise then verify the protection device operation again. Repeat this operation through small screw rotations until the protection device goes in action and the instrument on which the protection device is mounted does not show the pressure value anymore.



**Failure to observe the prescriptions regarding the limits of intervention may result in the product warranty conditions being nullified.**



**Note 1 - In the presence of external reset or block on the dial at 6 o'clock, the max calibration limit for the device is 115% of full scale range.**

## 6. Disposal

Dispose of instrument components and packaging material in an environmental compatible way and in accordance with the country-specific waste disposal regulations.