

# Lacquer Pressure Regulator PRM-2015, mechanical

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#### 1. Introduction

The **APSON Lacquer Pressure Regulator PRM-2015** is a *mechanically* controllable pressure regulator for often changing aggressive media. It has 5 integrated outlets and keeps the media pressure at the oulets constant and independent of the pressure fluctuations of the medium supply system at the entrance of the regulator, if the input pressure is larger than the preset exit pressure.

The regulator is particularly optimized for good rinsing barness and small solvent consumption. Therefore it is particularly suitable to the employment in automatic systems for the processing of lacquers, solvents, caustic solutions, a.o.



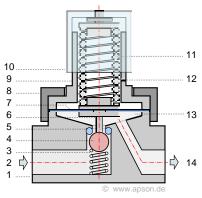
APSON Lacquer Pressure Regulator PRM-2015

#### 2. Features

- Environmental carefully due to short rinsing times.
- Very good rinsing barness and small solvent consumption.
- Small pressure losses.
- · Rational maintenance and spareparts holding.
- Very fast exchange of a defective diaphragm (2 minutes).
- Simplest handling at assembling, adjustment and maintenance.
- · Small, compact size.

#### 3. Structure and Function

The **APSON Lacquer Pressure Regulator PRM-2015** consists of a pressure chamber, which is separated from the main spring chamber by means of a solvent-resistant diaphragm. The diaphragm is subjected on one side with the pressure of the to be regulated medium and on the other side with the force of the manually adjustable main spring.



**Legend**: 1 = Lower casing part, 2 = Inlet, 3 = Recoil spring, 4 = Sealing ball, 5 = Sealing ring, 6 = Thrust piece, 7 = Diaphragm, 8 = Overthrow nut, 9 = Upper casing part, 10 = Adjustment nut, 11 = Main spring, 12 = Vent hole, 13 = Pressure chamber, 14 = Outlet/s.

The thrust piece connected with the diaphragm controls the medium quantity per time unit, flowing through the pressure regulator, via the throttle provided with the sealing ball. The regulation procedure is achieved through the equilibrium of the force between the main spring on one side, and on the other side by the resulting force due to the medium pressure together with the force of the recoil spring in the supply bore of the throttle.

The desired medium pressure at the outlet of the regulator is adjusted by manually rotating the adjustment nut of the regulator. For rinsing of the pressure regulator the adjustment nut must be set to a pre-determined value, so that the throttle is fully opened.

**Important:** The pressure regulator is to be operated normally in vertical position, to be effective cleaneable resp. when decantable media (e. g. metallic lacquers) are to be processed. An eventual manometer is always to be operated in vertical position, because of the gas column in the rising tube.

**Important:** When exchanging the diaphragm it is to be made certain that the Teflon<sup>TM</sup>-coated surface of the diaphragm points into the direction of the medium chamber.

## 4. Technical Data

Denomination: APSON Lacquer Pressure Regulator PRM-2015
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Media:	Lacquers, solvents, caustic solutions, a.o.	
Medium pressure input:	max. 10 bar	
Operating pressure output:	0 to 8 bar	
Outlets:	5	
Materials:	<ul> <li>Medium-touching sections made of inoxidable steel.</li> <li>Union nut and cover part from aluminum, hardcoated.</li> <li>Diaphragm from rubber with fabric proportion, Teflon<sup>TM</sup>-coated.</li> </ul>	
Medium links:	G1/4"	
Dimensions:	Diameter 57 mm, Height 130 mm	
Mass:	approx. 450 g	

# 5. Ordering Data

Denomination	Part-Nr.
APSON Lacquer Pressure Regulator PRM-2015	040-A021
APSON Lacquer Pressure Regulator Key (wrench width 54 mm)	100-0105

#### Options:

• All aluminum sections made of inoxidable steel

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