

## Speed Regulator

Innovative solution to equalize air-motor speed fluctuations

A speed regulator is suitable for all applications where a constant speed at changing loads is needed.

- universal usability because of free parameter-setting
- large speed-range up to 80,000 rpm
- high-resolution and accurate control



# DEPRAG Speed Regulators

## Universal usability because of free parameter-setting

The Speed regulator can be adjusted to fit different applications. With some applications, the speed adjustability is the main focus. Other applications however, require a high rate of speed accuracy. The DEPRAG speed regulators allow a free parameter-setting that can accommodate both cases and they are therefore universally usable.

Application Example: Agitator, ADVANCED LINE Air-Motor Model No. 67-028R  
Required regulator characteristics: a definite need for a constant speed and a short reaction time when load changes.

Solution:  
Speed Regulator with a consistency of  $\pm 5$  rotations/min,  
reaction time of maximum 2 seconds when load changes.

## Large Speed-Range – up to 80,000 rpm

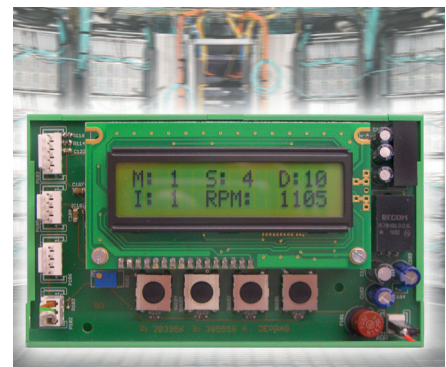
The full range of the DEPRAG air motors is covered with this speed regulator. So, even a motor with a very low speed can be regulated. The speed can be measured and controlled, starting at a whole revolution down to a 1/32<sup>nd</sup> of a revolution.

## High-Resolution and Accurate Control

An air-motor with a low speed range can be regulated with utmost processing reliability. The speed ranging from a full-revolution to a 1/32<sup>nd</sup> of a revolution can be acquired and adjusted to the nominal speed. Even air-motors with high speeds can be accurately actuated and controlled by the proportional-valve. The output signal for the control of the valve amounts to 0 - 10 V; the resolution of the control voltage is therefore 2.5 mV.

## Design and Function

The DEPRAG speed regulator consists of a non-contacting speed sensor that is directly integrated into the air-motor between the actual vane-motor and the gearing. The sensor acquires the actual speed and relays a digital signal to the regulator. The regulator “knows” the required nominal value, which can easily be input into the LC-display of the control. The control module is ready for the simple DIN-rail installation into the customer’s control box. The required speed can easily be input into the operator-friendly LC-display. A proportional-valve that regulates the air-flow of the air-motor is actuated, when deviations occur.



**Do you want to learn more about the speed regulators and are you looking for a solution?  
Our technical advisors are ready to help!**

# DEPRAG

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