

# **SMALL-FLOWS REGULATOR type R503**



- \* Keeping of constant flow:
  - water in range 4...40 dm<sup>3</sup>/h
  - air in range 4...20 dm<sup>3</sup>/h
- \* Input pressure 0,6 or 2,5 MPa
- \* Max pressure 4 MPa
- \* Indicator graduated rotameter
- \* Optional: acid-proof vesrion

SMALL-FLOWS REGULATOR type R503 IS USED FOR CONSTANT MAINTAIN SETTING VALUE OF AIR OR WATER FLOW NOT DEPEND FROM INPUT AND OUTPUT PRESSURE FLUCTUATION. IT MIGHT BE USED IN MEASURING LEVEL SYSTEMS, PRESSURE DIFFERENCE AND PRESSURE OF AGGRESSIVE MEDIUMS, AS DEVICE WHICH DOSES PROTECTION FLUID FOR MEASURING CONDUCTOR.

### **TECHNICAL DATA**

working medium
 working temperature
 nominal input pressure
 minimal input pressure
 0,05 MPa

- setting flow rangers for:

air 4 ... 20 dm/h water 4 ... 40 dm/h

- accuracy working

change of pressure decrease on throttle valve under the influence of change voltage pressure or input pressure:

for air max 2 kPa for water max 3 kPa

- indicator scaled rotameter acc. to specified flow range

- acceptable pressure max to 4 MPa

- assembly in the board or bracket construction

(look at version's table)
 assembly position
 connectors
 look at version's table
 connector acc. to table

- mass:

 version A030-A033 and A040-A043
 2 kg

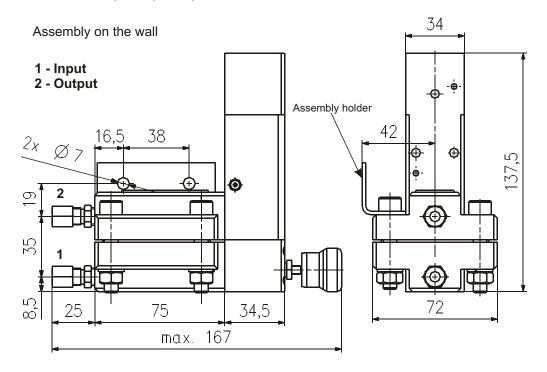
 version A007, A008 and A017, A018
 1,4 kg

 version A009, A010 and A019, A020
 1,3 kg



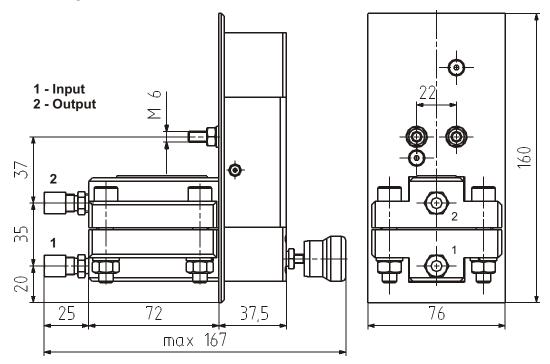
## **DIMENSION DRAWINGS**

## Versions No. A030, A031, A032, A033



# Versions No. A040, A041, A042, A043

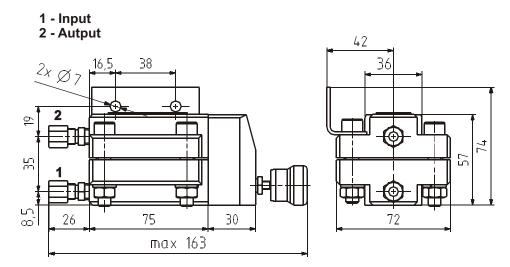
## **Building on the table**





#### Versions No. A007, A008, A017, A018

Assembly on the wall



### **WORKING RULES**

Regulator working is based on balance rule between the spring, which exerts determine force on membrane and pressures difference on the both sides of membrane. The constant drop on throttle valve is keeping in balance and the flow, which value depends on degree of open the throttle valve is keeping in balance, too.

Table No. 1

Working medium	Assembly	Using	Version	
			2,5MPa	0,6MPa
Air	On the wall	Pointing and flow regulationi	A030	A032
		Flow regulation (to cooperation with R503 indicator)	A007	A017
	On the table	Pointing and flow regulationi	A040	A042
Water	On the wall	Pointing and flow regulationi	A031	A033
		Flow regulation ( to cooperation with R503 indicator)	A008	A018
	On the table	Pointing and flow regulationi	A041	A043

The letter "K" on the end of type the regulator means acid-proof version

The regulator has connector for cooper pipes  $\phi 6$  (denotation R903), the regulator is monted in the holes with thread 1/8" NPT. Other connectors are possible after agreements with manufacturer.

#### **ORDERING METHOD**

In the order please specify: name ang type the product, version and special requirements.

#### Example of ordering:

Small-flows regulator with regulator for measuring air flow at input pressure to 2,5 MPa, pointing and regulating the flow, assembly on the wall, connectors for cooper pipe 6mm dia, has denotation: **R503-A030/R903** 

The right of introducing design changes in the product, without deteriorating of its operation parameters, is reserved.