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Hard copy product catalogues, and CDRoms have been published describing Kuhnke Pneumatics, Solenoids, Relays and Electronics; some divided into different books. A list of current publications is available on this web site or from our sales offices. Some may be available for download, but as substantially larger files.

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### Important Note

The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.

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# Regulators

## Series 50 Miniature Regulator

Kuhnke System Logic Devices

### Sub - Miniature Pressure Regulator



Regulator with optional Knob

The sub-miniature Series 50 regulator provides regulation of air pressure from 0 to 8 bar. Available in both relieving and non-relieving versions, the unit's size and shape makes it ideally suited for mounting in dental, medical and laboratory equipment where close regulation and fine adjustments are necessary.

The regulator is supplied with a panel nut for mounting in a 1/2 inch diameter hole. It can be screw driver adjusted, and set with a locking nut, or with the use of a control knob can be continuously adjusted. Ports (2) have M5 threads and are 180° apart on the side of the regulator body. The housing is nickel plated brass.

Several adjustment ranges are available for close regulation in most applications. Special designs are available.



### Technical Specifications

**Op. Pressure:**

0-10 bar.

**Regulator Range:**

0-8 bar.

**Porting:**

M5

**Flow Rate:**

Dependent on regulator model. See charts.

**Media:**

All neutral liquid and gaseous media. Consult factory before use on liquids.

**Types:**

Relieving or non-relieving. Single stage, diaphragm/spring construction.

**Response Time:**

(Dependent on secondary volume).  
Response average: 75ms at 20% loss of secondary air pressure;  
1 sec at 50% loss of secondary air pressure.

**Adjustment:**

Screw driver (or knob accessory). Equipped with locking nut to prevent tampering after setting is made

**Materials:**

Brass housing (nickel plated), stainless and brass interior parts, Buna N seals.

**Operating Ambient:**

-10°C to +60°C

**Dimensions:**

Height – 46mm  
Width – 16mm Hex Body  
Weight – 6 gr.

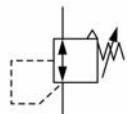
**Drilling Plan:**

Mounts in 12mm dia. hole. Equipped with mounting nut. Behind panel depth – 28mm.

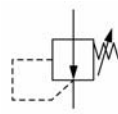
### Selection Chart

Secondary Pressure Regulation Range	Catalogue Number	
	Relieving Type	Non- Relieving Type
8 Bar	50880-00-80-00	50880-00-80-10
4 Bar	50880-00-40-00	50880-00-40-10
2 Bar	50880-00-20-00	50880-00-20-10

### Diagrams



Relieving



Non- Relieving

### Accessories

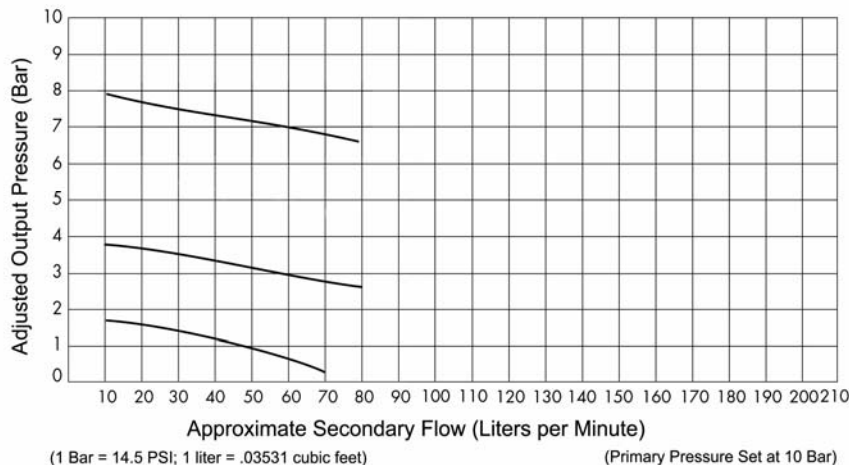
The standard regulator is supplied with a slotted shaft for screwdriver adjustment. A plastic knob catalogue number **50883-00** can be added for easy adjustment.

A flat mounting flange catalogue number **43010-1** or an 'L' bracket catalogue number **43010-2** can be used to mount the regulator on a surface. Brackets have (2) 3mm dia. fastening holes and approximate dimensions are 40mm wide x 26mm high.

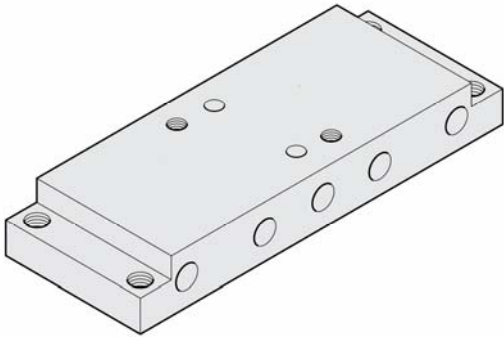
### Operation

Relieving type regulators allow excessive pressure on the secondary side of the regulator to bleed off to the atmosphere, helping maintain steady pressure. Non-relieving types are used where pressure build up is not a concern as in air motors, or air gun applications etc.

### Flow Chart



### Manifold Section for Regulators



#### 50800

Aluminum base is used for mounting manifold type regulators on Kuhnke Series 84 manifold systems to regulate supply pressure to downstream valves. Base connects air supply to regulator input. Output sends lowered air pressure to the manifold valves on the secondary side. With the addition of a header kit (Cat. no. 84465), the section can be used as a mounting base for regulators. See Series 84 valves for details on the manifold system.