

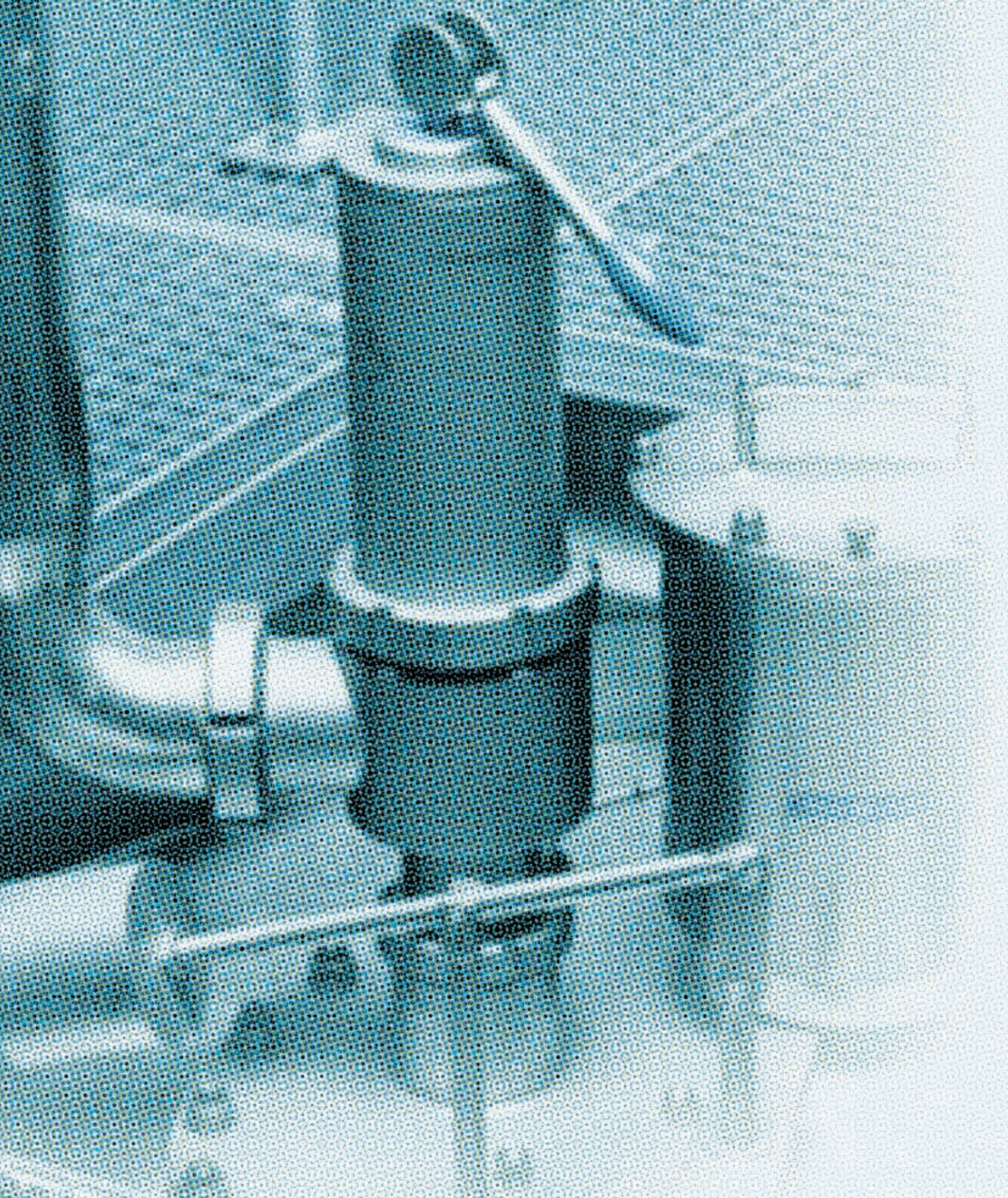
# RIBA-Proportional Regulators

Pressure regulators, position regulators, flow regulators



[www.specken-drumag.com](http://www.specken-drumag.com)  
[www.ribapneumatic.de](http://www.ribapneumatic.de)

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## Proportional technology

Proportional valves assume controlling tasks in all areas of industry using certain procedures with multiple repetition and placing high demands on pressure, temperature, speed, torque and force. These regulators are responsible for comparing and adjusting signals (signal of the actual value transmitter and a specified control signal). The proportional regulator assumes the task of adjusting actual values to control signals as quickly

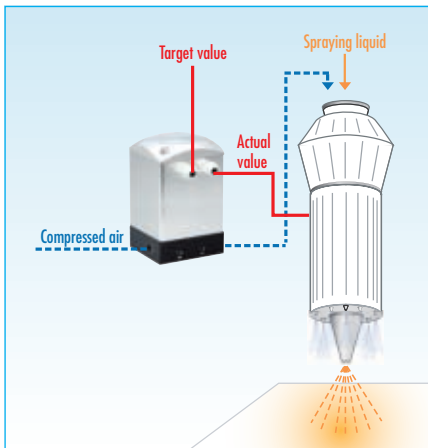
as possible so that the dynamic production procedure is not interrupted. Function is permanently controlled via the actual value transmitter (sensors) of proportional regulators. Today, they are of central importance in combination with intelligent electronics. Some application examples demonstrate the broad field in which RIBA proportional regulators are used.

# Applications

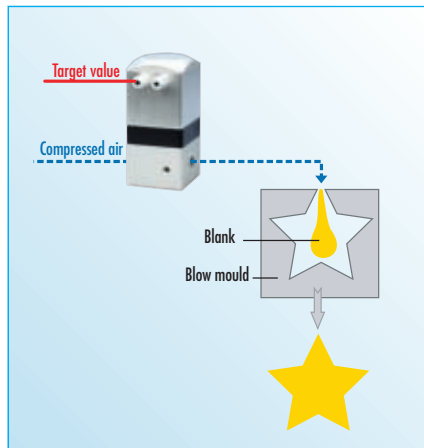
Work processes have to be automated in all areas of industry. And proportional regulators optimise production processes everywhere. RIBA proportional regulators of the RP and RM lines are pressure and vacuum regulators, those of the RS and RS lines are position regulators and the RF line comprises flow regulators. The applications are multifarious:

Band edge control, automotive engineering, brake pressure control, tensile stress control, actuating power control, screen printing machines, wood processing (glueing), foil coating, spraying plants, materials testing technology, steam pressure control, conveyor

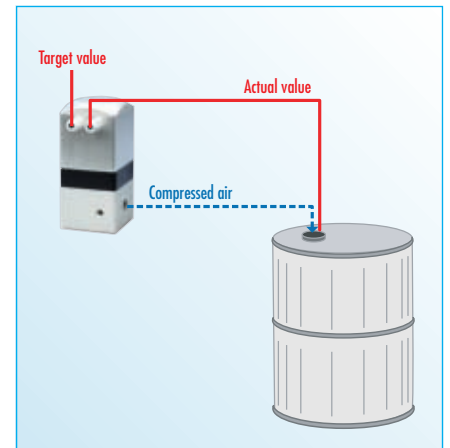
plants, metering control, control of liquid media, compensating roller controls, laboratory and testing field. RIBA regulators are used as positioners for industrial valves and fittings in mixing and metering technology, e.g. for flaps, distributing valves, ball valves, disk valves, angle valves and seating valves. RIBA regulators are also used in the the foods industry, gas pipelines, energy engineering, special valves and fittings, bulk solids industry. RIBA regulators are also employed in pneumatic drives: Rotary actuator, diaphragm actuators, cylinders, part-turn valve actuators.



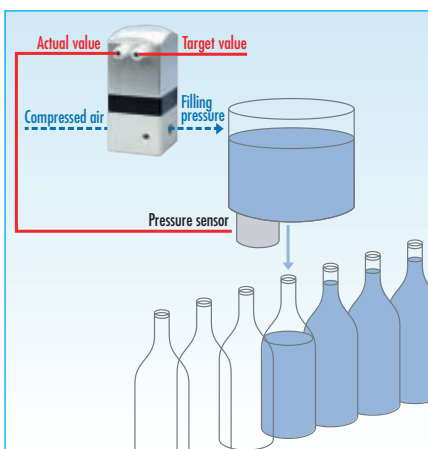
**Example: Spraying technology**  
Change of media application by controlled addition of blow air



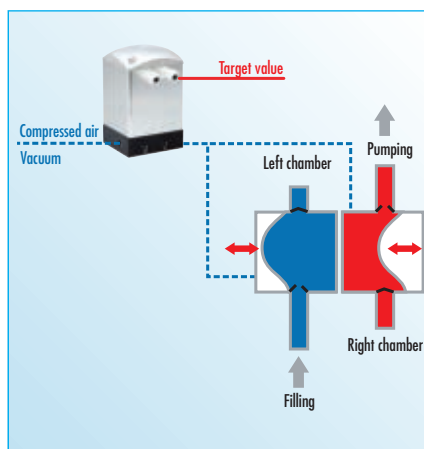
**Example: Blow air**  
Blowing a piece of material into its defined shape



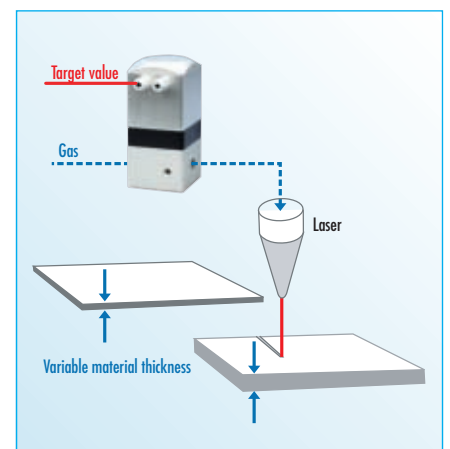
**Example: Tightness testing**  
Exact test pressure control in tightness testing using a proportional regulator



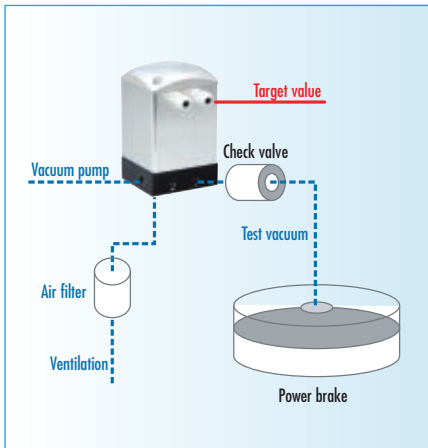
**Example: Filling pressure**  
Filling of media with even pressure, independent of the filling quantity of the delivered medium



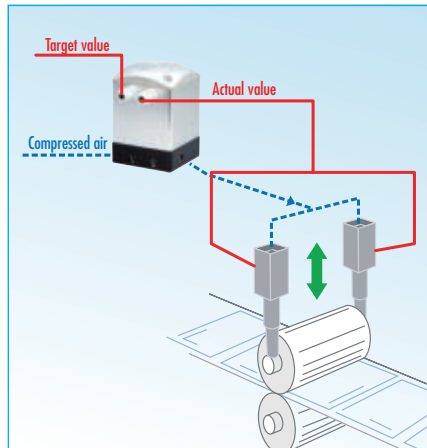
**Example: Artificial heart**  
Even infeed of blood alternating pressure and vacuum



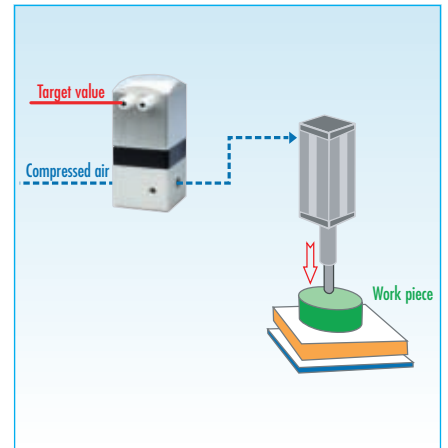
**Example: Laser cutting**  
Adjustment of gas pressure to different material thicknesses



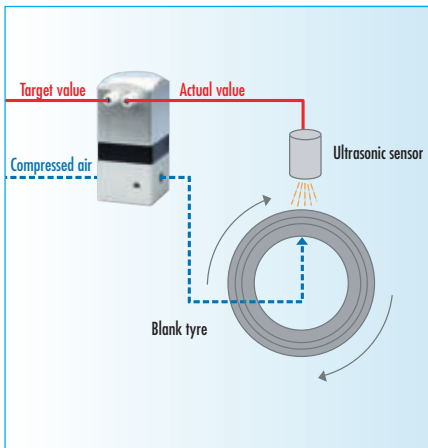
**Example: Power brake**  
Verification of target/actual value of a power brake



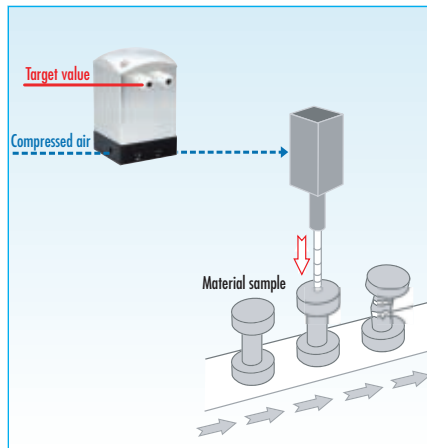
**Example: Thickness compensation**  
Compensation of different material thicknesses to maintain an even contact pressure of the roller



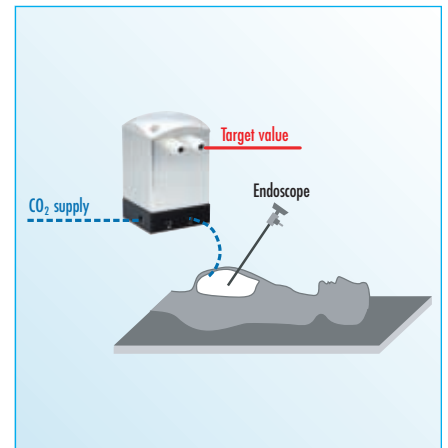
**Example: Ultrasonic welding**  
Friction pressure control in work piece welding



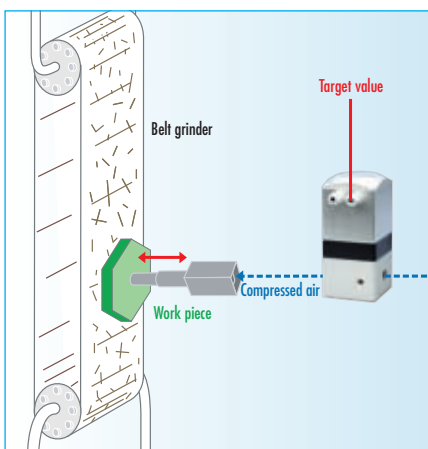
**Example: Tyre manufacturing**  
Even application of individual layers in tyre production



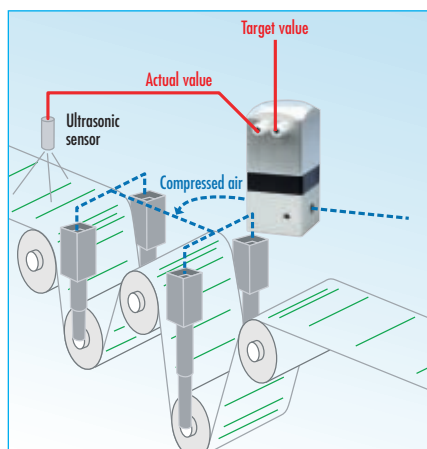
**Example: Materials testing**  
Continuous pressure increase to test material solidity



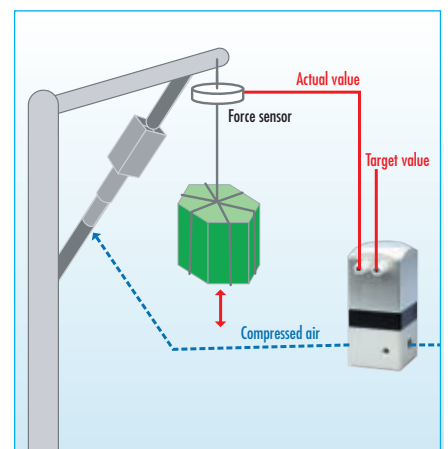
**Example: Endoscopes**  
Change of CO<sub>2</sub> supply in endoscopic operations to adjust the operation field



**Example: Belt grinder or pneumatic press**  
Contact pressure control of tools



**Example: Reeling machine**  
Compensation of different material lengths and control of tension



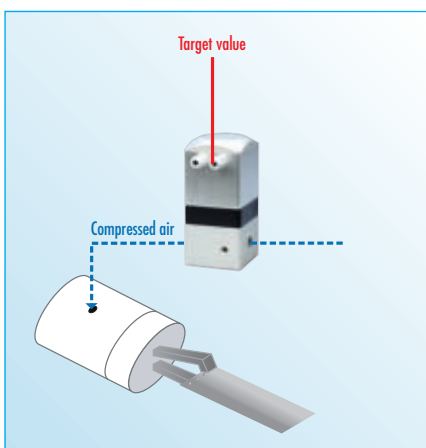
**Example: Load-bearing beam**  
Pneumatic weight compensation via cylinder pressure

# Pressure/vacuum regulators

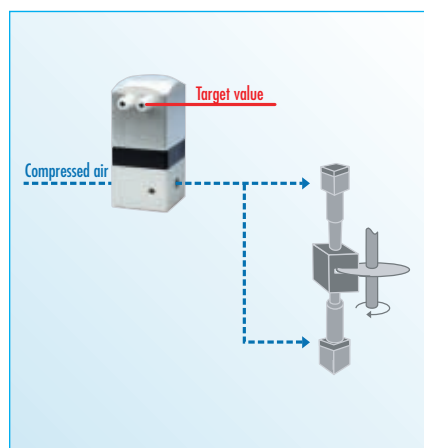
Our broad range of pressure and vacuum regulators offers a solution for every application, volumetric flow rates of 5 l/min to 45.000 l/min, pressures of -1 to 70 bar are possible depending on the model. Each device controls the output pressure precisely and quickly by means of a sensor situated in the output area. Deviations between target and actual value are compensated promptly. Compressed air and neutral gasses are suitable materials, other gasses on request.

- One device to control vacuum to overcontrol ranges
- No continuous air consumption
- Different fail-safe options
- Pressure control up to 70 bar
- Rugged design
- Special customer-specific solutions and systems
- Actuation and response via analog signals
- Connection of external sensors with analog signals is standard for all devices
- Can be used as 3/2 way valve
- Defined exhaust via threaded connection
- Media: Compressed air and neutral gasses, other gasses on request
- Electronic soft start
- Minimum requirements of air filters
- Also available with **Ex protection**

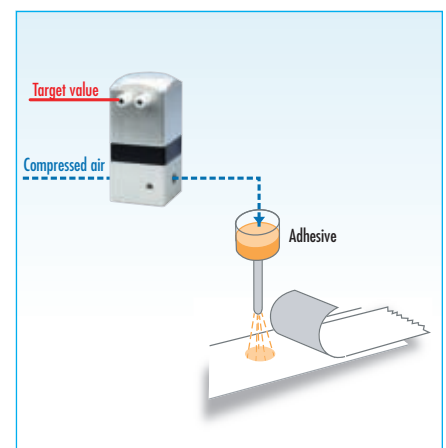
## Applications



**Example: Welding tongs**  
Different contact pressure depending on material and thickness



**Example: Brake pressure**  
Smooth and even braking according to a defined profile



**Example: Metering of adhesives**  
Exact metering of applied adhesive

# Type RM100



## Technical data

Voltage	24 VDC $\pm$ 10 %
Power consumption, electrical	4.5 W max.
Connection, electrical	cable gland or connector
Pressure supply	25 bar max., dependent of control range
Control range, selectable from	0 to 24 bar
Medium	compressed air, oiled, on-oiled, neutral gasses, filtered 50 $\mu$ m
Air consumption	no permanent air consumption
Connection thread	See below (flow)
Ingress protection	IP 67
Operating temperature range	-5 to +50 °C
Hysteresis	< 0.2 % of the corresponding range
Repeatability	< 0.2 % of the corresponding range
Dimensions	see page 8
Weight	see page 8

**For detailed information visit:**  
[www.ribapneumatic.de](http://www.ribapneumatic.de)

## Master proportional regulator 1/8" or 3/4" to 2" connections with booster

The RM100 serves for regulating static pressures or as a master controller for our boosters. The boosters are available in various sizes. They enable precise control of volume flows up to 2700 m<sup>3</sup>/h.

In spite of its high performance in combination with the booster, the RM100 forms a compact unit in a small-sized housing.

## Flow

### Regulator

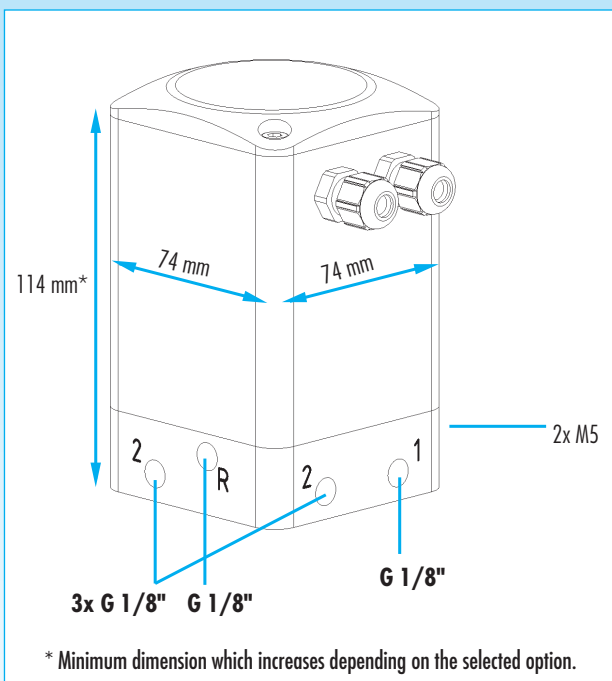
Connections

G 1/8"	28 l/min
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### Regulator

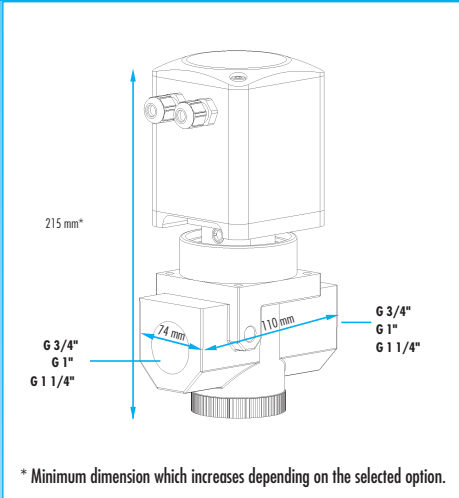
Connections with booster

G 3/4"	11300 l/min (680 m <sup>3</sup> /h)
G 1"	18300 l/min (1100 m <sup>3</sup> /h)
G 1 1/4"	19600 l/min (1180 m <sup>3</sup> /h)
G 1 1/2" and 2"	45000 l/min (2700 m <sup>3</sup> /h)

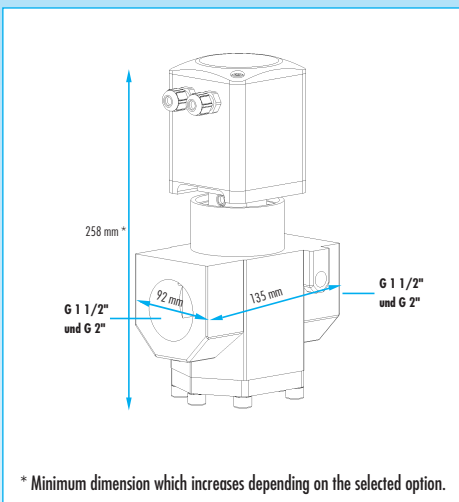


**RM100**  
 Weight: 0.7 kg

# Type RM100



**RM100 (versions B1-B3)**  
Weight: 2.5 kg



**RM100 (versions B4 and B5)**  
Weight: 4.8 kg



## Type key

### Sample order

RM100 with a control range of 0 to 8 bar, control signal 0-10 V, with booster 1" connection, analog circuit board (version C), Fail Safe = maintenance of pressure, no options

**Order code:** **RM100/0-8/1/B2/C/1/N**

### Control range

Control range 0 to 24 bar

### Set value input (Control signal)

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing

### Version

- B0 Without booster 1/8"
- B1 Booster 3/4"
- B2 Booster 1"
- B3 Booster 1-1/4"
- B4 Booster 1-1/2"
- B5 Booster 2"

### Version

- C Index of version

### Fail Safe (in case of power failure)

- 1 Pressure maintenance
- 2 Pressureless
- 3 Full pressure at the outlet

### Options

- N No option
- B Connector instead of cable gland
- D Display outlet pressure
- E Actual value input E1 = 0-10 V, E2 = 0-20 mA, E3 = 4-20 mA
- K Switching output
- S Soft start after EMERGENCY OFF (3 secs.)

### Actual Value Output

The response signal corresponds always to the control signal.  
Other areas on request.

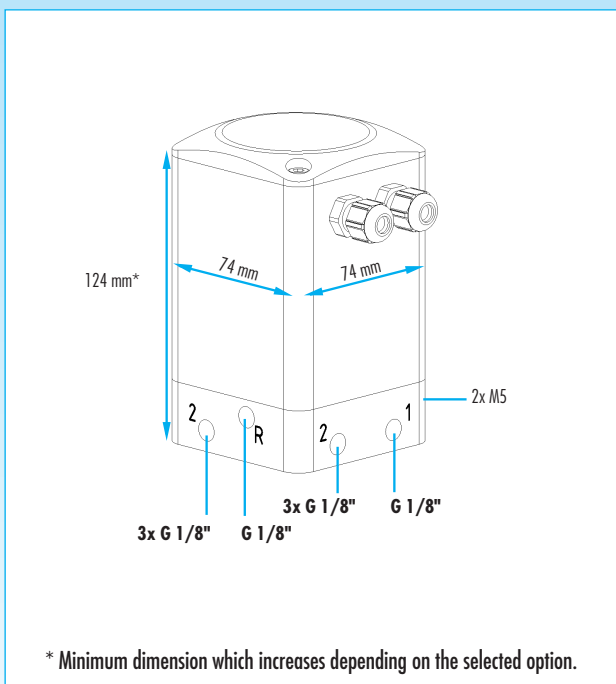


# Type RP200



## Proportional pressure regulator 1/8" connection

RP200 serves flow control up to 300 l/min. The large control range from vacuum to 70 bar overpressure of this regulator facilitates a broad spectrum of applications.



\* Minimum dimension which increases depending on the selected option.

## Technical data

Voltage	24 VDC ±10 %
Power consumption, electrical	24.5 W max.
Connection, electrical	cable gland or connector
Pressure supply	80 bar max., dependent of control range
Control range	-1 to 70 bar
Medium	compressed air, oiled, on-oiled, neutral gasses, filtered 50 µm
Air consumption	no permanent air consumption
Flow	< 300 l/min at an input pressure of 6 bar
Connection thread	G 1/8"
Ingress protection	IP 67
Operating temperature range	-5 to +70 °C
Hysteresis	< 0.2 % of the corresponding range
Repeatability	< 0.2 % of the corresponding range
Weight	0.8 kg

For detailed information visit:  
[www.ribapneumatic.de](http://www.ribapneumatic.de)

## Type key

### Sample order

RP200 with a control range of 0 to -1 bar, control signal 4-20 mA, analog circuit board (version C), Fail Safe with pressure maintenance, no options

**Order code:** **RP200/0-(-1)/3/C/1/N**

### Control range

Control range -1 to 70 bar

### Set value input (Control signal)

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing

### Version

C Index of version

### Fail Safe (in case of power failure)

- 1 Pressure maintenance
- 2 Pressureless
- 3 Full pressure at the outlet

### Options

- N No option
- B Connector instead of cable gland
- D Display outletpressure
- E Actual value input E1 = 0-10 V, E2 = 0-20 mA, E3 = 4-20 mA
- K Switching output
- S Soft start after EMERGENCY OFF (3 secs.)

### Actual value output

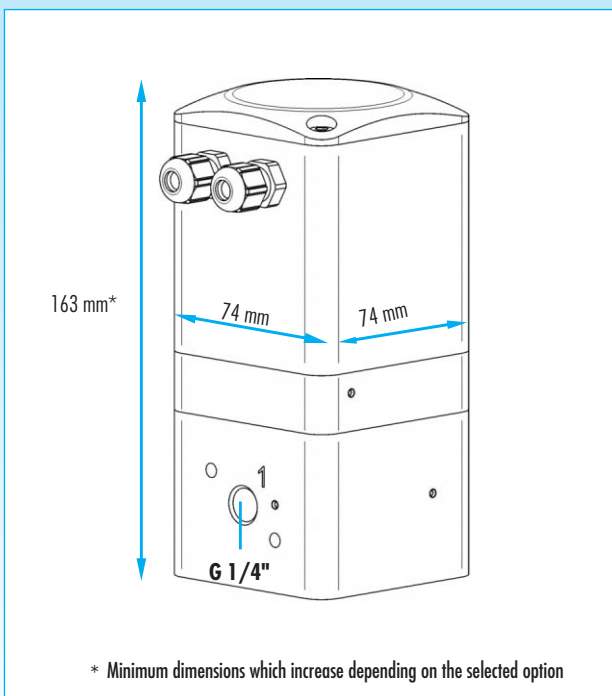
The response signal corresponds to the range of the control signal. Other ranges on request.

# Type RP300



## Proportional pressure regulator 1/4" Connection

The RP300 is a proportional pressure regulator with a high throughput capacity. Differences between the set and actual values are compensated quickly and precisely, and as the cross-section of the secondary venting system is identical, the set-point is rapidly reached even in the event of a drop in pressure.



## Technical data

Voltage	24 V DC $\pm 10\%$
Power consumption	4.5 W max.
Connection, electrical	cable gland or connector
Pressure supply	25 bar max., dependent of control range
Control range	0 to 24 bar
Medium	compressed air, oiled, unoled, neutral gases, filtered 50 $\mu\text{m}$
Air consumption	no permanent air consumption
Flow	1800 l/min with 6 bar input pressure
Connection thread	G 1/4" (1 + 2)
Ingress protection	IP 67
Operating temperature range	-5 to +50 °C
Hysteresis	< 0.2 % of the corresponding range
Repeatability	< 0.2 % of the corresponding range
Weight	1.2 kg

For detailed information visit:  
[www.ribapneumatic.de](http://www.ribapneumatic.de)

## Type key

### Sample order:

RP300, control range 0-10 bar, control signal 0-10 V, analog board, fail-safe = unpressurized, with actual value input for external sensor 0-10 V

**Order code:** **RP300/0-10/1/C/2/E1**

### Control range

Control range 0 to 24 bar

### Set value input (Control signal)

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing

### Version

C Index of version

### Fail Safe (in case of power failure)

- 1 Pressure maintenance
- 2 Pressureless
- 3 Full pressure at the outlet

### Options

- N No option
- B Connector instead of cable gland
- D Display outletpressure
- E Actual value input E1 = 0-10 V, E2 = 0-20 mA, E3 = 4-20 mA
- K Switching output
- S Soft start after EMERGENCY OFF (3 secs.)

### Actual value output

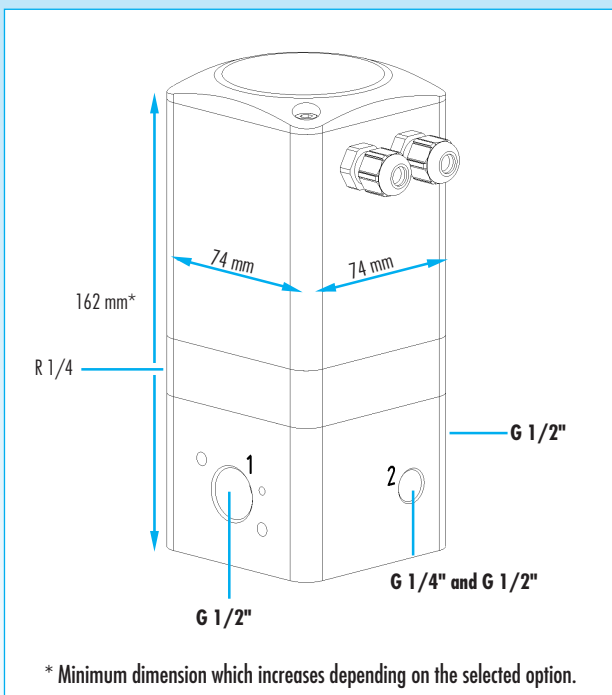
The response signal signal corresponds to the range of the control signal. Other ranges on request.

# Type RP500



## Proportional pressure regulator 1/2" connection

This pressure controller serves to control high flow rates of up to 250 m<sup>3</sup>/h at 6 bar. The large cross-section of the secondary vent also ensures fast evacuation or adaptation of the secondary pressure, also for large volumes. A sensor in the outlet section monitors the discharge pressure which is constantly compared with the set value. Deviations are adjusted quickly and accurately.



## Technical data

Voltage	24 VDC ±10 %
Power consumption, electrical	4.5 W max.
Connection, electrical	cable gland or connector
Pressure supply	25 bar max., dependent of control range
Control range	0 to 24 bar
Medium	compressed air, oiled, on-oiled, neutral gasses, filtered 50 µm
Air consumption	no permanent air consumption
Flow	4100 l/min at an input pressure of 6 bar
Connection thread	G 1/2" (1 + 2)
Connection thread, manometer	G 1/4" (2)
Ingress protection	IP 67
Operating temperature range	-5 to +50 °C
Hysteresis	< 0.2 % of the corresponding range
Repeatability	< 0.2 % of the corresponding range
Weight	1.2 kg

## Type key

### Sample order

RP500 with a control range of 0 to 10 bar, control signal 0-10 V, analog circuit board (version C), Fail Safe = pressureless, with external sensor 4-20mA

**Order code:** **RP500/0-10/1/C/2/E3**

### Control range

Control range 0 to 24 bar

### Set value input (Control signal)

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing  
(free of potential on request, other analog areas on request)

### Version

- C Index of version

### Fail Safe (in case of power failure)

- 1 Pressure maintenance
- 2 Pressureless
- 3 Full pressure at the outlet

### Options

- N No option
- B Connector instead of cable gland
- D Display outletpressure
- E Actual value input E1 = 0-10 V, E2 = 0-20 mA, E3 = 4-20 mA
- K Switching output
- S Soft start after EMERGENCY OFF (3 secs.)

### Actual value output

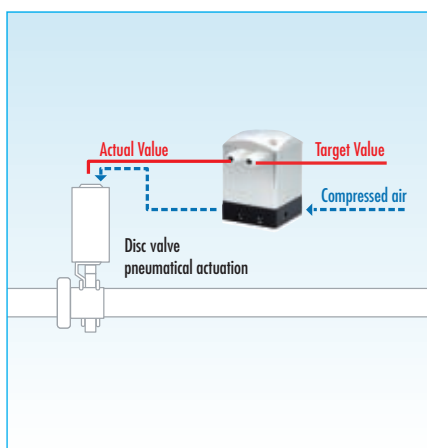
The response signal corresponds to the range of the control signal. Other ranges on request.

# Position regulators

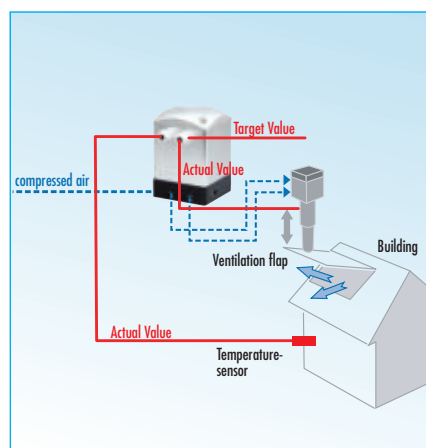
The position regulator series RS are highly flexible. They can control any pneumatic drive, be it rotary or linear, be it single or double action. There are not any control range limitations with this position regulator. Actual value deviations from the control signal are settled precisely. Devices with integrated actual value transmitter are designed for installation on rotary actuators with corresponding connections according to VDI/VDE 3845. Since drives and position sensors vary we recommend consulting one of our technical advisors to ensure a smooth application.

- Every pneumatic drive can be controlled
- No continuous air consumption
- Position maintenance or final position in case of power failure
- Connection of external sensors is standard for all devices, extensive options of analog signals
- Simple connection to rotary actuators according to VDI/VDE 3845 (NAMUR) in case of integrated actual value transmitter
- Installation kit available for all Drumag GmbH rotary actuator
- Special customer-specific solutions and systems
- Media: Compressed air and neutral gasses, other gasses on request
- Minimum requirements of air filters
- Also available with **Ex protection**

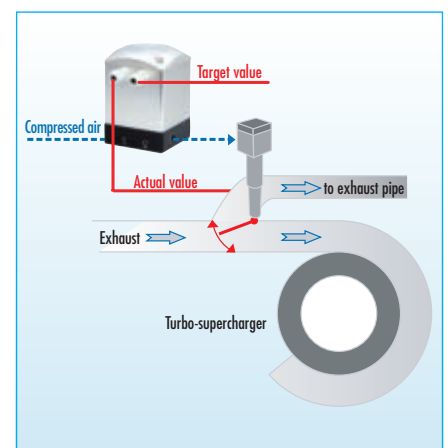
## Applications



**Example: Flow control**  
Infinitely variable flow control of liquids and bulk solids



**Example: Temperature control**  
Constant temperature control in buildings by means of ventilation flaps



**Example: Turbo-supercharger**  
Maintaining constant charging pressure in turbo-superchargers

# Type RS100



## Proportional position regulator

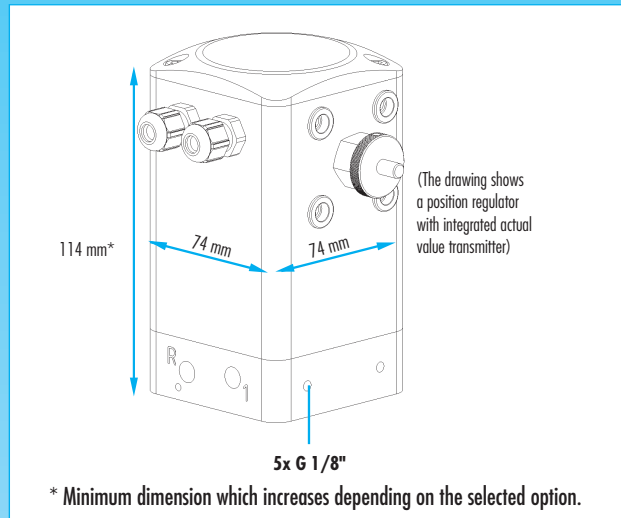
The proportional position regulator RS100 is characterised by high performance, accuracy, stability and great flexibility. The control signal is constantly compared to the actual value, deviations are settled quickly and precisely. Actual value either comes from an integrated potentiometer or an external position sensor connected to the regulator.

## Technical data

Voltage	24 VDC ±10 %
Power consumption, electrical	9 W max.
Connection, electrical	cable gland or connector
Pressure supply	8 bar max.
Control range	depends on the drive or position sensor
Medium	compressed air, neutral gasses, oiled, non-oiled, filtered 50 µm
Air consumption	no permanent air consumption
Connection thread	G 1/8"
Nominal flow	28 l/min at 6 bar input pressure
Ingress protection	IP 67
Operating temperature range	-5 to +50 °C
Hysteresis	< 1 % of the corresponding range
Repeatability	< 0.5 %
Weight	0.75 kg

### Actual value output

The response signal corresponds to the range of the control signal.  
Other ranges on request.



## Type key

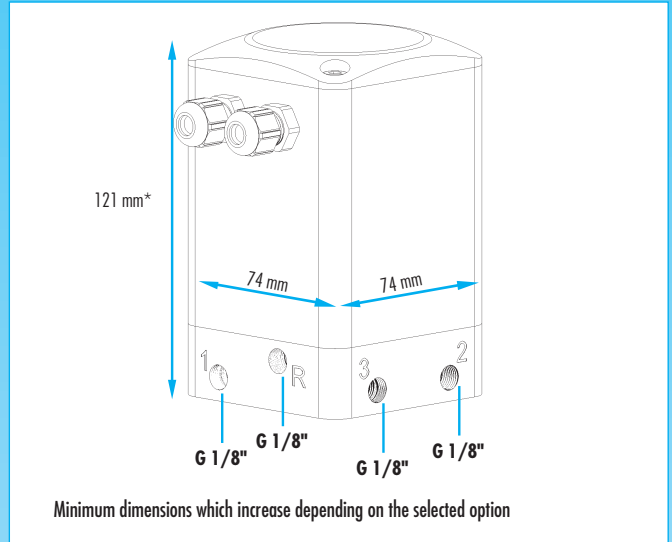
### Sample order

RS100, double-action, incl. actual value transmitter, control signal 0-10 V, Control range 0-180°, analog circuit board (version C), Fail Safe = End position 100 %, no options

**Order code:** RS100/0/1/1/0-180°/A/2/N

<b>Function</b>	0	Double-acting
	1	Single-acting
<b>Actual value transmitter/input</b>	1	Incl. actual value transmitter f. rot. actuator (VDI/VDE 3845)
	2	0-10 V
	3	0-20 mA
	4	4-20 mA
	5	connect. f. actual value potentiometer
<b>Set value input (Control signal)</b>	1	0-10 V
	2	0-20 mA
	3	4-20 mA
	T	Set-point potentiometer on the housing
<b>Control range</b>		Rotation 0-350° and higher
		Linear distance in mm
<b>Version</b>	C	Index of version
<b>Fail Safe (in case of power failure)</b>	1	Position maintenance
	2	End position 100%
	3	End position 0%
<b>Options</b>	N	No options
	B	Connector instead of cable gland
	C	CCW rotation (only with integrated actual value encoder)
	K	Switching output

# Type RS200



Minimum dimensions which increase depending on the selected option

## Proportional position regulator

The function of the proportional position regulator type RS200 is the same as that of the RS100. Due to its larger nominal width it is suitable for larger drives.

## Technical Data

Voltage	24 V DC $\pm 10\%$
Power consumption, (version-dependent)	max. 12.5 W, 24.5 W or 48.5 W
Connection, electric	cable gland or connector
Pressure supply	max. 8 bar
Control range	depending on drive or path measuring system, resp.
Medium	Compressed air, oiled, unoled, neutral gases, filtered 50 $\mu\text{m}$
Air consumption	no continuous air consumption
Connection thread	G 1/8"
Nominal flow	250 l/min with 6 bar input pressure
Ingress protection	IP 67
Operating temperature range	-5 to +50 °C
Hysteresis	< 1 % of the corresponding range
Repeatability	< 0.5 %
Weight	0.9 kg

### Actual value output

The response signal corresponds to the range of the control signal. Other ranges on request.

## Type key

### Sample order

RS200, double-acting, with actual value encoder, control signal 0-10 V, control range 0-180°, analog circuit board (version C), fail safe = end position 0%, no options

**Order code:** **RS200/0/1/1/0-180°/A/3/N**

### Function

- 0 Double-acting
- 1 Single-acting

### Act. value encoder or actual value input

- 1 Incl. actual value transmitter f. rot. actuator
- 2 0-10 V
- 3 0-20 mA
- 4 4-20 mA
- 5 Connect. f. actual value potentiometer 10 k $\Omega$

### Set value input (Control signal)

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing

### Control range

- Rotation 0-350° and higher
- Linear path in mm

### Version

- C Index of version

### Fail Safe (in case of power failure)

- 1 Position retention
- 2 End position 100%
- 3 End position 0%

### Options

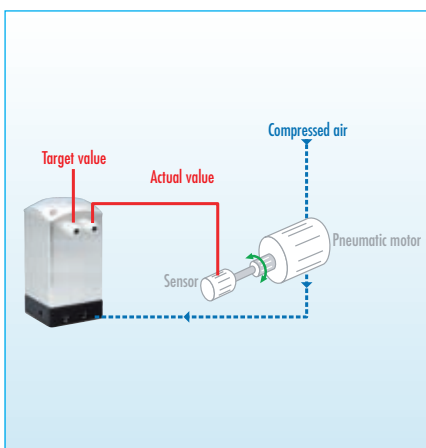
- N No option
- B Connector instead of cable gland
- C CCW rotation (only with integrated actual value encoder)
- K Switching output

# Flow regulator

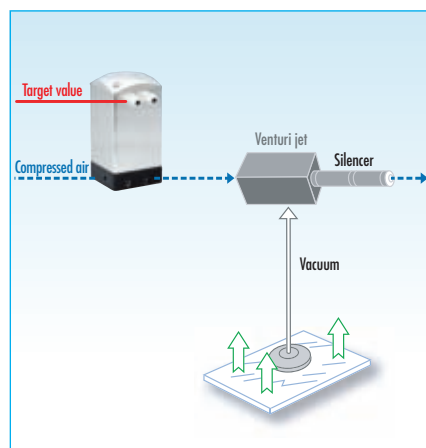
The RIBA flow regulator is a precision proportional valve electronically controlled via microprocessor. It is characterised by high performance, accuracy, linearisation, stability and a rugged and operationally safe design. Pneumatic control is effected via a microprocessor in which the desired control signal is specified as an analog or digital signal. A differential pressure sensor (PE converter) measures differential pressure at an orifice gauge and sends a permanent signal as an actual value to the electronics for comparison. The latter then actuates a proportional solenoid valve to achieve a very fast, precise and proportional flow linearised with the control signal.

- Various bus systems are available
- Rugged design
- Special customer-specific solutions and systems
- Connection of external sensors is standard for all devices, extensive options of analog signals
- Target value and Actual value via analog and digital signals
- Media: Compressed air and neutral gasses, other gasses on request
- Also available with **Ex protection**

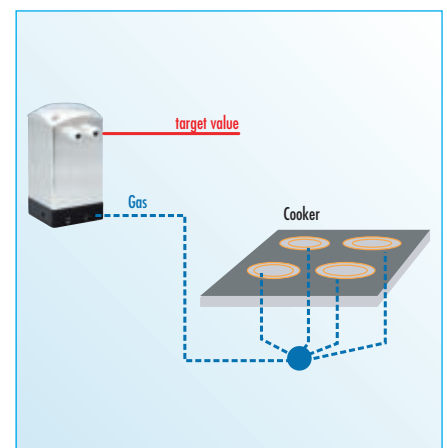
## Applications



**Example: Torque control**  
Revolutions and torque control by change of actuating pressure



**Example: Vacuum generator**  
Exact adjustment of vacuum pressure by change of flow



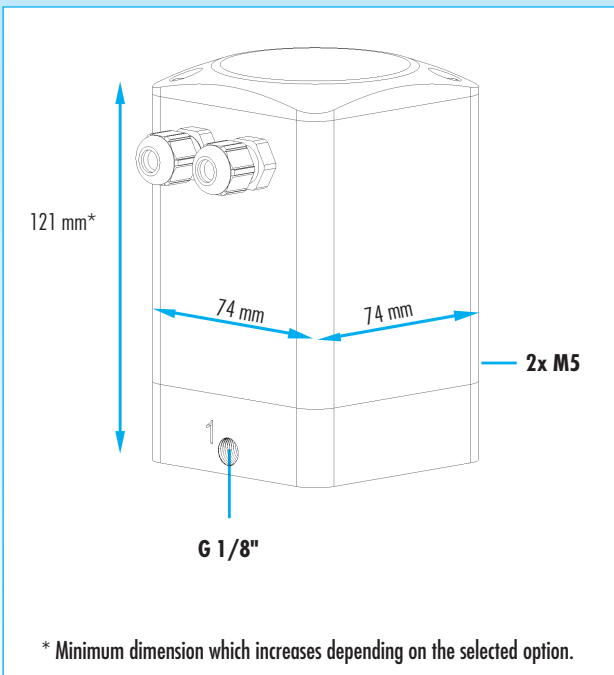
**Example: Gas control**  
Gas supply control for four burners of a gas stove

# Type RF020



## Proportional flow regulator 1/8" connection

With its integrated measuring system the compact controller RF020 ensures fast flow adjustment without requiring an additional sensor.



## Technical Data

Voltage	24 VDC ± 10 %
Power consumption, electric	max. 12.5 W
Connection, electrical	cable gland or connector
Pressure supply	max. 8 bar
Medium	compressed air, oiled, unoled, neutral gases, filtered 50 µm
Air consumption	variable air consumption
Flow freely flowing off	0-500 l/min at 6 bar
Connection thread	G 1/8"
Ingress protection	IP 67
Temperature range	-5 to +70 °C
Hysteresis	< 1 % of the corresponding range
Repeatability	< 0.5 %
Weight	0.75 kg

## Type key

### Sample order

RF020 flow regulator, flow rates up to 100 l/min, operating pressure 4 bar, with control signal 0-10 V, without options

**Order code:** RF020/0-100/4/1/N

<b>Flow rate</b>	0-500 l/min with operating pressure
<b>Operating pressure</b>	1-8 bar
<b>Set-point input (control signal)</b>	1 0-10 V 2 0-20 mA 3 4-20 mA T Set-point potentiometer on the housing

<b>Options</b>	N No option B Connector instead of cable gland E Actual value input E1 = 0-10 V, E2 = 0-20 mA or E3 = 4-20 mA K Switching output
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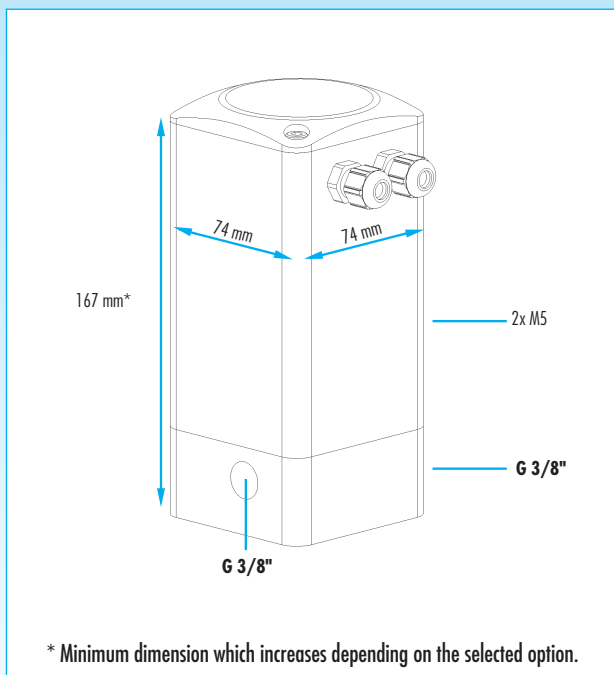


# Type RF100



## Proportional flow regulator 3/8" connection

The RF100 has the same functionality as the RF020 but has a greater flow range and connection size.



## Technical data

Voltage	24 VDC ±10 %
Power consumption, electrical	24.5 W max.
Connection, electrical	cable gland or connector
Pressure supply	8 bar max.
Medium	compressed air, oiled, on-oiled, neutral gasses, filtered 50 µm
Air consumption	no permanent air consumption
Flow	0-2000 l/min at 6 bar
Connection thread	G 3/8"
Ingress protection	IP 67
Temperature range	-5 to +70°C
Hysteresis	< 1 % of the corresponding range
Repeatability	< 0.5 %
Weight	0.75 kg

## Type key

### Sample order

RF100 flow regulator with a flow range up to 500 l/min, operating pressure 4 bar, control signal of 0-10 V, no options

**Order code:** RF100/0-500/4/1/N

**Flow range** 0-2000 l/min. at 6 bar

**Operating pressure** 1-8 bar

**Set value input (Control signal)**

- 1 0-10 V
- 2 0-20 mA
- 3 4-20 mA
- T Set-point potentiometer on the housing

### Options

- N No options
- B Connector instead of cable gland
- E Actual value input E1 = 0-10 V, E2 = 0-20 mA, E3 = 4-20 mA
- K Switching output

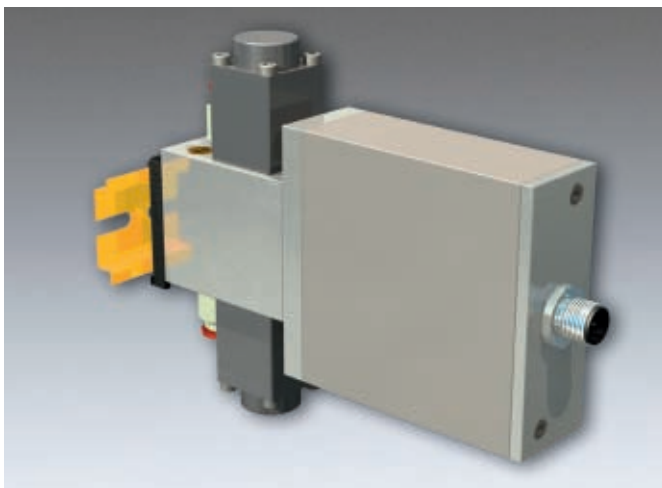
# Systems

The development and production of sophisticated assemblies and systems in fluid and drive technology constitutes a focus of the Specken-Drumag group. Our longstanding experience in pneumatics and hydraulics is an advantage for customers seeking solutions off the beaten track. We have developed systems offering a competitive edge in engineering and productivity in close cooperation with our customers. This is particularly true for our pneumatic proportional technology and its broad field

of application. Anyone looking for a solution to change a position variable via control signals should turn to us. Our vast range of pneumatic drives, valves and accessories and our experienced development department enable us to find an effective solution to every problem.



RP1000 Pressure controller for high-pressure applications with a connection size of 2" and a nominal width of 40mm. The controller's unique secondary relief of 1 1/4 " enables fast venting of the secondary side. Areas of use include stretch blow machines for the production of PET bottles.



Customized designs of all regulators possible. See on the left side a small construction of the RP200. The technical data is the same as the standard version. The regulator is designed for snap-on rail mounting.

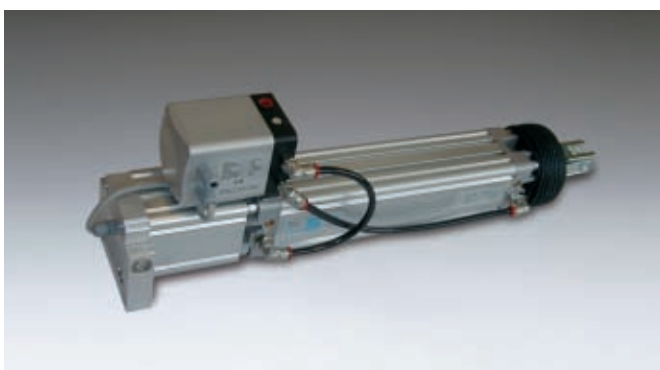
# Systems



Speed control of an air motor. Speed is recorded directly on the motor and serves as the actual value for the controller. Changes of load on the output shaft with resulting speed changes are recorded as deviations from the setpoint value and compensated by the controller. The motor maintains the speed specified by the setpoint.



System consisting of the position controller RS100, a ball valve with double-acting drive and the external actual-value encoder RG100. The lever enables closing of the ball valve even in the case of failure of the compressed air supply. "The ball valve closed" position is monitored via a switch. The system is used for product-dependent dosing in process engineering.



Positioning system consisting of a cylinder with an integrated magnetostrictive path measuring system and the attached position controller RS100. Bellow protects the piston rod from dust. The system is used for adjusting guide vanes in large ventilators.

# Quality products for highest demands

We guarantee top quality in system construction and offer solutions for special customer applications in cylinders, rotary actuators, in system engineering, hydropneumatics and in pressure driers. Profit from products produced by us or our broad variety of fluid engineering merchandise. For your satisfaction is our most important concern in advising you and in selecting the right products.



## Application-related system engineering

We are flexible in designing and implementing fluid engineering systems. Both in the area of pressure generation and processing and in the areas of driving, controlling and moving.



## Proportional controller

This series features pressure controllers with connections ranging from G 1/8" to G2" and pressures ranging from vacuum to 70 bar, positioners for universal applications with pneumatic linear and rotating actuators and also flow controllers with an integrated flowmeter system. All controllers are of robust design and cover a wide range of analogue and digital communication requirements. Please visit [www.ribapneumatic.de](http://www.ribapneumatic.de) for more information.



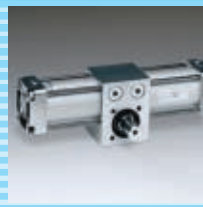
## Silencer

Different adaptable systems reduce noise, high-frequency range sound level values and extend the discharge options of oil particles without impairing flow performance capacity or control circuit reaction. Small silencers also fulfil the requirements of small consumers in an optimum fashion.



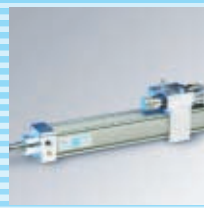
## Cylinders

for pneumatic and hydraulic drives are designed, tested and manufactured in cost-effective standard lines and customer-specific special versions. A high level of technology combined with great production flexibility results in optimum solutions even in case of extreme demands.



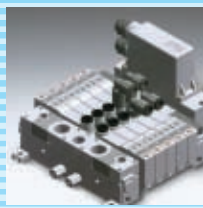
## Rotary actuators

are used in a vast array of machine and apparatus applications due to their compact and rugged design, their high efficiency and long lifecycle while requiring little maintenance work during operation. Adaptable design and purpose-oriented accessories characterise these devices.



## Hydropneumatic systems

Pressure intensifiers, air-oil actuators, flow control valves and hydropneumatic cylinders offer a maximum of movement sequences. The HPE hydropneumatic feed unit sets special standards as an integrated, individually controllable and regulatable drive element for tool and packaging machines and in process and handling engineering.



## Valves

actuated manually, pneumatically and electrically are characterised by high flow performance, compact design, long lifecycle and high function safety also in extreme conditions. Flow control and pressure valves complete the control valve program.



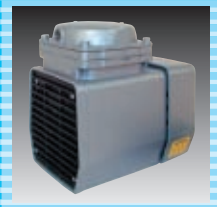
## Air motors

provide a cost-effective solutions for difficult drive problems. They can be operated reversingly in any position. The adaptable 8-lamella air motor, the simple geometry of individual parts and the safe energy supply guarantee high operational safety and low maintenance costs.



## Compressed air processing

The standard-conforming, compact DRUMAG modular pressure processing devices feature good control properties, excellent flow characteristics and high safety. They can be combined, easily installed and maintained without any tools. A great variety of accessories is available.



## Compressors

Compressors of Specken-Drumag meet highest demands in the generation of oil-free compressed air and are designed as piston or diaphragm-type compressors for small volume flows. They are extremely compact, requiring little maintenance work and are suitable for continuous operation. The devices are also available mounted on a pressure vessel for fully automated operation.

Drumag GmbH  
D-79702 Bad Säckingen  
Phone +49 (0) 7761 55 05 0  
Fax +49 (0) 7761 55 05 70

Hydaira AG  
CH-8902 Urdorf  
Phone +41 (0) 44 735 39 10  
Fax +41 (0) 44 735 15 80

EPH elektronik  
D-74354 Besigheim-Ottmarshaim  
Phone +49 (0) 7143 81 52 0  
Fax +49 (0) 7143 81 52 50

Specken AG  
CH-8902 Urdorf  
Phone +41 (0) 44 735 39 00  
Fax +41 (0) 44 735 39 01

# DRUMAG

# SPECKEN

[info@specken-drumag.com](mailto:info@specken-drumag.com)

■ [www.specken-drumag.com](http://www.specken-drumag.com)  
■ [www.ribapneumatic.de](http://www.ribapneumatic.de)

[info@hydaira.ch](mailto:info@hydaira.ch)  
■ [www.hydaira.ch](http://www.hydaira.ch)

[info@eph-elektronik.de](mailto:info@eph-elektronik.de)  
■ [www.eph-elektronik.de](http://www.eph-elektronik.de)

[info@specken.ch](mailto:info@specken.ch)  
■ [www.specken.ch](http://www.specken.ch)