

tecno - Proportional Pressure Regulator

... fast, accurate, highly-dynamic



HOERBIGER
because performance counts



electro-pneumatic pressure valves (E/P-Converter)

The well proven Piezo technology from HOERBIGER provides real advantages for proportional pressure control applications:

Key user advantages

- ✓ No heat generation - safe
- ✓ Quiet operation allows for use in medical and laboratory applications
- ✓ Regulation from 0 bar provides exceptional control flexibility
- ✓ High regulation stability and resolution ensures improved output quality
- ✓ Rapid cycle capability provides for improved productivity
- ✓ Low power consumption enables battery operation
- ✓ Ease of installation and compact dimensions affords design flexibility
- ✓ Vacuum version available

Design and Function

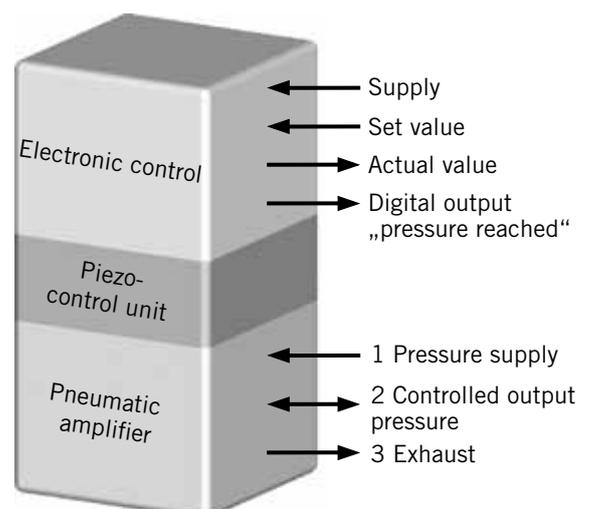
Proportional valves of the series *tecno* are piezo controlled pressure valves with electronic pressure control.

Piezo technology offers **highest dynamics** with **lowest power consumption**.

High venting and exhaust capacity supplies the main valve. The pressure sensor measures the active output pressure.

An integrated electronic automatic controller compares the sensor signal with the electrical set value and regulates the output pressure precisely on the given set value.

Schematic Illustration



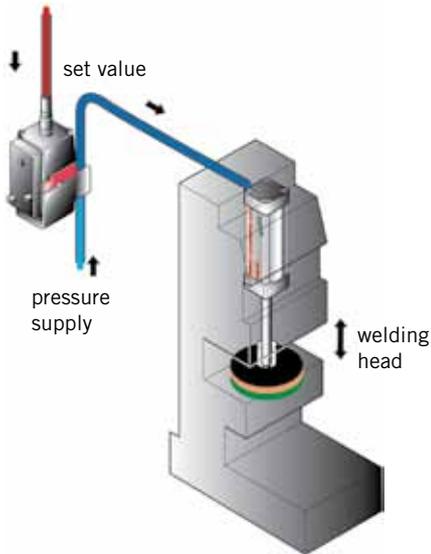
... High Performance
... High Quality



important technical data:	 <p style="text-align: center;">tecno basic</p>	 <p style="text-align: center;">tecno easy</p>	 <p style="text-align: center;">tecno plus</p>
Function	3-way-proportional pressure valve	3-way-proportional pressure valve	3-way-proportional pressure valve
Pneumatic connection	Flange	Flange	Flange
Flow capacity	up to 350 l/min.	up to 350 l/min.	up to 1.600 l/min.
Standard pressure ranges	0...8; 0...2; 0...0,2 bar	0...8 bar	0...10; 0...6; 0...2 bar vacuum -1...+1; -1...+6 bar
Accuracy	better 0,5 %	better 2,5 %	better 0,5 %
Reaction time	< 7 ms	< 20 ms	< 10 ms
Medium / Filtration	compressed air / 30 mm	compressed air / 30 mm	compressed air / 30 mm
Protection class	IP 30	IP 30	IP 65 ported exhaust air
Supply	24 V DC; 12 V DC; 4 mA	24 V DC	24 V DC
Electrical power consumption	max. 0,4 W	max. 0,4 W	max. 0,8 W
Set value input	0...10 V; 4...20 mA (two wire technology)	0...10 V	0...10 V; 4...20 mA
Actual value output	0...10 V	-	0...10 V
Digital output „pressure reached“	-	-	24 V DC
Diagnostic	-	-	indication for „activity“ and „pressure reached“ in the plug
Electrical connection	M8x1 DIN 43650 form C	M8x1	M12x1
Accessoires	mounting plate G1/8 connecting cable	mounting plate G1/8 connecting cable	mounting plate G1/4 connecting cable

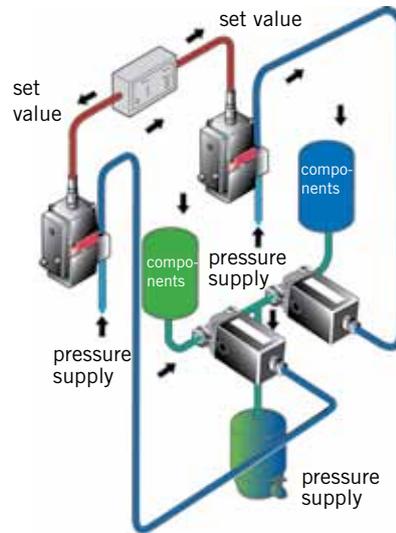
Pressure regulation for specific applications ... also in your application

Ultrasonic Welding



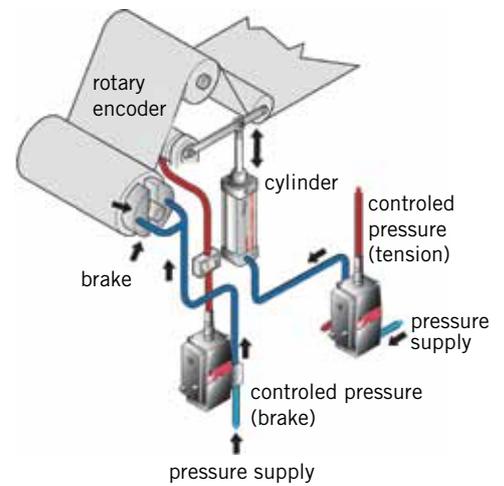
tecno controls the contact pressure of the welding head at the welding procedure.

Dosing



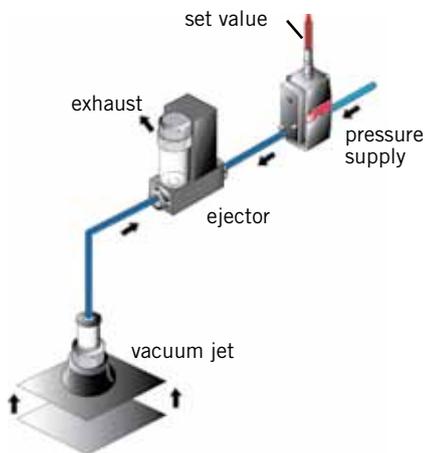
When proportioning adhesives, sealing compounds or other viscous materials, **tecno** controls the dosing quantity or the mixing proportion.

Winding



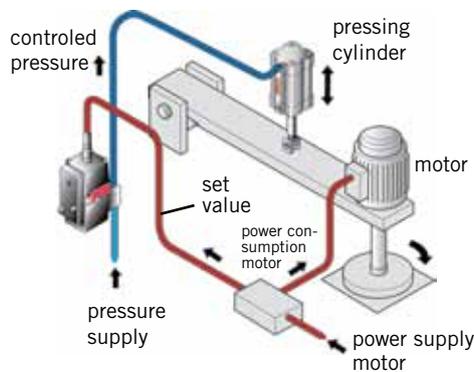
With all winding procedures the tension of a compensating roller control is adapted to the winding yarn and the winding diameter. **tecno** controls the tension via light run cylinders or pneumatic brakes.

Vacuum Generation



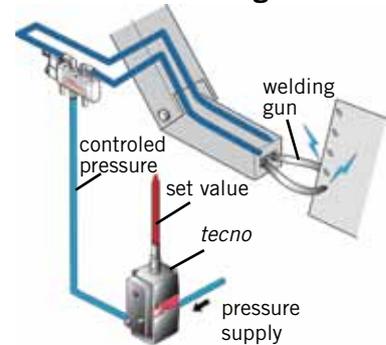
Over ejectors produced vacuum can be changed by regulation of the input pressure. **tecno** makes an accurate and efficient vacuum possible.

Grinding and Polishing



According to the material which can be worked on as well as its geometric, **tecno** realizes a continuous adjustment of the response pressure is possible.

Resistance Welding



tecno controls the contact pressure of the welding electrodes according to the material thickness and material condition.

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