



Regtronic Pneumatic Transducers

Metal Work Regtronic Series electropneumatic transducers utilize two internal solenoid valves to convert an electronic signal from a PLC or other controller to a regulated precision linear pneumatic output pressure. Used in paper and paper converting, food and drug, petrochemical, HVAC, textile, and energy management industries, Regtronic Series transducers provide highly reliable and repeatable operation of pneumatic valve positioners, valve actuators, air cylinders, damper and louver actuators, web tensioners, clutches and brakes.

large volume pneumatic loads. Each Regtronic transducer includes a 0-10 VDC or 4-20 mA output signal, model dependent, representative of the output pressure and two digital output switches that can be set as alarm points at high or low output pressures. The integral digital display eliminates the need for external pressure gauges and the pushbuttons enable menu driven configuration of all operating parameters without requiring air pressure to be connected to the device. Additional settable performance parameters include regulation speed control to dampen overshoot of the output pressure, an analog input filter to prevent excessive internal solenoid valve cycling due to small changes in input signal, and noise dampening filter to eliminate unwanted pressure regulation due to input signal noise. Regtronic transducers can be easily panel mounted using the optional mounting bracket accessories, use an 8-pin, M12 quick disconnect cable, and have an environmental protection rating of IP65.

The Regtronic Series can be controlled from analog input signals of 4-20 mA, 0-5 V or 0-10 V, as well as, RS232 communication or the integral keypad. The minimum and maximum output pressure range can be configured up to a maximum pressure of 145 psig. Models are available with low flow and exhaust capacity for controlling small volume pneumatic loads without overshoot, and high flow and exhaust capacity for fast response time with



Part No. **5520500**



Part No. **5521500U**

Features

- Compact transducer housing
- 4-20 mA, 0-5 V, and 0-10 V input compatible with PLCs and other controllers
- Settable minimum and maximum pressure range up to a maximum of 145 psi applicable for industrial pneumatic and process control applications
- Models with low flow and exhaust capacity for controlling small volume pneumatic loads without overshoot, and high flow and exhaust capacity for fast response time with large volume pneumatic loads
- Internal dual solenoid design eliminates continuous supply air consumption
- Models with M5, 1/8 NPT, and 1/4 NPT female pneumatic connections available
- Integral digital display eliminates the need for external pressure gauges
- 4-20 mA or 0-10 VDC output and two switch outputs provided
- Operating parameter configuration is easily accomplished using the pushbuttons without needing air connected
- 8-pin M12 quick disconnect electrical connection
- Optional mounting brackets available
- IP65 environmental rating



See www.AutomationDirect.com for a wide variety of cable and fitting options



Click on the thumbnail or go to <https://www.automationdirect.com/VID-PR-0031> for a short video on Endress+Hauser Cerabar Pressure Transmitters

Metal Work Regtronic Pneumatic Transducers								
Part No.	Price	Weight (lbs)	Input	Output	Inlet(s)	Outlet(s)	Drawing Link	Manufacturer Manual
5520500	\$380.00	0.57	4-20 mA, 0-5 VDC, 0-10 VDC, RS232, or Keypad	0.05 to 10 bar adjustable output pressure, 0-10 VDC, switch (N.O./N.C.) PNP/NPN output	M5 x 0.8 female	M5 x 0.8 female	PDF	PDF
5540500	\$380.00	0.57		0.05 to 10 bar adjustable output pressure, 4-20 mA, switch (N.O./N.C.) PNP/NPN output			PDF	
5521500U	\$525.00	1.0		0.05 to 10 bar adjustable output pressure, 0-10 VDC, switch (N.O./N.C.) PNP/NPN output	1/8in female NPT	1/8in female NPT	PDF	
5541500U	\$525.00	1.0		0.05 to 10 bar adjustable output pressure, 4-20 mA, switch (N.O./N.C.) PNP/NPN output			PDF	
5522500U	\$525.00	1.0		0.05 to 10 bar adjustable output pressure, 0-10 VDC, switch (N.O./N.C.) PNP/NPN output	1/4in female NPT	1/4in female NPT	PDF	
5542500U	\$525.00	1.0		0.05 to 10 bar adjustable output pressure, 4-20 mA, switch (N.O./N.C.) PNP/NPN output			PDF	

For additional details see manufacturer's technical specifications, manuals and inserts (where applicable).





Regtronic Pneumatic Transducers

Metal Work Regtronic Pneumatic Transducer Specifications							
Part No.		<u>5520500</u>	<u>5540500</u>	<u>5521500U</u>	<u>5541500U</u>	<u>5522500U</u>	<u>5542500U</u>
Media	Filtered, unlubricated air						
Inlet and Outlet Port Size	M5 x 0.8 female		1/8in female NPT		1/4in female NPT		
Minimum Inlet Pressure	Regulation pressure + 1 bar						
Maximum Inlet Pressure	11 bar						
Temp Range	0 to 50°C						
Pressure Regulation Range	0.05 to 10 bar, adjustable						
Flow Rate at 6.3 bar ΔP 0.5	10 NI/min		1300 NI/min		1500 NI/min		
Flow Rate at 6.3 bar ΔP 1	10 NI/min		1450 NI/min		1700 NI/min		
Exhaust flow rate at 6.3 bar with 0.1 bar Overpressure	2 NI/min		600 NI/min		1300 NI/min		
Exhaust flow rate at 6.3 bar with 0.5 bar Overpressure	9 NI/min		1000 NI/min		1500 NI/min		
Response Time with ΔP = 1 bar	Volume	100cc		100/1000cc		100/1000cc	
	From 6 to 7 bar	0.5s		0.1s/0.15s		0.1s/0.15s	
	From 7 to 6 bar	0.55s		0.1s/0.15s		0.1s/0.15s	
Class of Protection	IP65						
Supply Voltage Range	10.8 to 31.2 VDC						
Maximum Admissible Voltage	32VDC (Note: Voltage greater than 32VDC will damage the unit irreparably.)						
Current Absorption	Max 220mA at 12VDC						
Input Signal (Input Impedance)	Voltage	0 to 5 VDC, 0 to 10 VDC (approx. 6.3KΩ)					
	Current	4 to 20 mA (approx. 100Ω)					
Communication	RS232						
Output Signal	Voltage	0 to 10 VDC (1 VDC = 1 bar) - 1mA max	N/A	0 to 10 VDC (1 VDC = 1 bar) - 1mA max	N/A	0 to 10 VDC (1 VDC = 1 bar) - 1mA max	N/A
	Current	N/A	4 to 20 mA (4mA = 0 bar, 20mA = 10bar)	N/A	4 to 20 mA (4mA = 0 bar, 20mA = 10bar)	N/A	4 to 20 mA (4mA = 0 bar, 20mA = 10bar)
	Digital	PNP open collector output: max 24VDC, 60mA NPN open collector output: max 24VDC, 60mA					
Hysteresis	± 0.2% (full scale)						
Repeatability	± 0.2% (full scale)						
Sensitivity / Dead-band	Setting range 10 to 300 mbar						
Display Accuracy	± 0.3% (full scale)						
Display Unit of Measurement	Bar, MPa, psi, selectable						
Display Minimum Resolution	0.01 bar - 0.001 MPa - 0.01 psi						
Analog Output Accuracy	± 0.1% of the reading						
Temperature Characteristics	Max 2mbar / °C						
Installation Position	Any position						
Electrical Connection	8-pin M12 quick disconnect						



Regtronic Pneumatic Transducer Accessories

Metal Work Regtronic Pneumatic Transducer Accessories						
Item Photo	Part No.	Price	Weight (lbs)	Description	Drawing Link	Manufacturer Manual
	9200711	\$3.00	0.04	Metal Work mounting bracket, for use with Regtronic pneumatic transducers with M5 ports.	PDF	PDF
	9200710	\$12.00	0.06	Metal Work mounting bracket, for use with Regtronic pneumatic transducers with NPT ports.	PDF	