



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.

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

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.



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	\$,-:05!ft:	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	\$,:05!fn:	0.57		0.05 to 10 bar adjustable output pressure, 4-20 mA, switch (N.O./N.C.) PNP/NPN output			PDF	
5521500U	\$,:05!fo:	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	\$,:05!fp:	1.0		0.05 to 10 bar adjustable output pressure, 4-20 mA, switch (N.O./N.C.) PNP/NPN output			PDF	
5522500U	\$,:05!fq:	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	\$,:05!fu:	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.		5520500	5540500	5521500U	5541500U	5522500U	5542500U
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	\$,;5!fs:	0.04	Metal Work mounting bracket, for use with Regtronic pneumatic transducers with M5 ports.	PDF	PDF
	9200710	\$,;:5!ft:	0.06	Metal Work mounting bracket, for use with Regtronic pneumatic transducers with NPT ports.	PDF	