I/P & E/P

Product Line Summary

Electro-Pneumatic Transducers











SPECIFICATION CHARACTERISTIC	TYPE 1000 SERIES	TYPE 1000 SERIES EXTENDED RANGE	TYPE 1001 SERIES	TYPE 1500 SERIES	TYPE 1500 SERIES ZERO BASED	TYPE 2000 SERIES	SPC 1R, 2R, 4R	TYPE 3110 [3111]	TYPE 3200 SERIES	TYPE 3500 SERIES	SPECIFICATION CHARACTERISTIC
Electrical Specifications											Electrical Specifications
E/P Supply Requirements	loop-powered	loop-powered	9-28 (I/S), 9-40 VDC (<20mA)	loop-powered	loop-powered	5-28 VDC	15-24 VDC (80-325 mA)	15-24 VDC (80-250 mA) [24 VDC or 24 VAC]	15-24 VDC (80-325 mA)	15± 10% VDC, 24± 10% VDC (80-325 mA)	E/P Supply Requirements
I/P Supply Requirements	loop-powered	loop-powered	loop-powered	loop-powered	loop-powered	loop-powered	15-24 VDC (80-325 mA)	15-24 VDC (80-250 mA) [24 vdc or 24 VAC]	15-24 VDC (80-325 mA)	15-24 VDC (80-325 mA)	I/P Supply Requirements
Voltage Input Ranges (DC)	0-5, 1-9, 0-10, 1-5	0-5, 0-10	0-5, 1-5, 1-9, 0-10, 1-10	0-5, 1-9, 1-10, 0-10, 1-5	0-5, 1-9, 1-10, 0-10, 1-5	0-5, 1-5, 1-9, 1-10, 0-10	0-10	0-10 [0-5, 0-10, 0-15]	0-10	0-10	Voltage Input Ranges (DC)
Impedance Voltage (ohms)	530-985	500-805	>6 K	250	250	1.75 K	10 K	10 K [2K - 100K]	10 K	2 K - 8 K	Impedance Voltage (ohms)
Current Input Ranges (mA)	4-20, 10-50	4-20, 0-60	4-20, 10-50	4-20	4-20	4-20	4-20	4-20 [0-20]	4-20	0-20, 4-20	Current Input Ranges (mA)
Impedance Current (ohms)	70-220	220-260	240-500	250	250	195 @ 20 mA DC	250	250	250	250	Impedance Current (ohms)
Analog Monitor Output	no	no	no	no	no	no	option	yes	yes	yes	Analog Monitor Output
Logic Output	no	no	no	no	no	no	option	yes [no]	yes	option	Logic Output
Internal Feedback (closed loop)	no	no	yes	no	no	yes	yes	yes	yes	yes	Internal Feedback (closed loop)
External Feedback	no	no	no	no	no	no	yes	option [no]	option	option	External Feedback
Reverse Acting	yes	yes	no	yes	yes	yes	yes	option	option	yes	Reverse Acting
Performance Specifications											Performance Specifications
Minimum Supply Pressure (psi)	3 psig above output	5 above output	see product literature	5 above output	10 above output	5 psi above output or 40 psi	100% of output	100% of output	100% of output	100% of output	Minimum Supply Pressure (psi)
Maximum Supply Pressure (psi)	100	150	see product literature	120	150	140	110% of output	See product literature	See product literature	See product literature	Maximum Supply Pressure (psi)
Output Pressure Range(s) (psi)	3-9, 9-15, 3-15, 3-27, 6-30, 1-17, psi and 0.2-1.0 BAR	2-60, 2-120, 3-120	0-5, 0-15, 0-30, 0-60, 0-100, 1-17, 3-15, 3-27, 6-30, 3-9, 9-15, 0-2, 0-120	3-15, 3-27, 6-30	0-15, 0-30, 0-60, 0-120	0-2, 0-5, 0-15, 3-15, 1-17, 0-30, 6-30, 3-27, 0-60, 0-100, 0-120	0-1, 0-5, 0-15, 0-30, 0-100, 0-150, 0-300, 0-600	0-1, 0-5, 0-15, 0-30, 0-100, 0-150, (0-300, 0-600 in T3110 only)	0-1, 0-5, 0-15, 0-30, 0-100, 0-150, (0-300, 0-600 in T3210 only)	0-1, 0-5, 0-15, 0-30, 0-100, 0-150, (0-300, 0-600 in T3510 only)	Output Pressure Range(s) (psi)
Flow Rate (scfm)	12	24	14	6.5	9	21	1.2	1.2	1.2, 12, 50	1.2, 12, 50	Flow Rate (scfm)
@ supply (psi)=	100	150	100	120	150	140	110				@ supply (psi)=
@ output (psi)=	midrange	midrange	9	15	15	60	80				@ output (psi)=
Exhaust Capacity (scfm) @ 5 psid	2 (7 on HR version)	2	4.6	>1.0	>1.0	3.0	1.2	1.2	T3210 - 1.2, T3211 - 10 & T3212 - 15	T3510 - 1.2, T3511- 10 & T3512 - 15	Exhaust Capacity (scfm) @ 5 psid
Exhaust Capture	option	option	option	option	option	option	yes	yes	option	option	Exhaust Capture
Air Consumption (scfh) @ midrange	6	4.2	4.2	3	18 (max. output)	4	negligible	negligible	negligible	negligible	Air Consumption (scfh) @ midrange
Repeatability (% of span, typ.)	0.5	0.5	0.1	<0.5	<0.5	0.1	0.2	0.2	0.2	0.1 to 0.2	Repeatability (% of span, typ.)
Independent Linearity (% of span, typ)	1.0	1.5-2.0		<0.75	<1.0		0.1	0.2	0.2	0.1 to 0.2	Independent Linearity (% of span, typ)
Hysteresis (% of span, typ.)	1.0	0.5	0.1	<0.75	<1.0	0.1	0.5	0.5	0.5	0.1 to 0.5	Hysteresis (% of span, typ.)
Accuracy (% of span, typ.)			0.1			0.1	0.5	0.5	0.5	0.1 to 0.5	Accuracy (% of span, typ.)
Operating Temp (°C)	-29° to 60°	-29° to 60°	-29° to 71°	-28° to 66°	-28° to 66°	-28° to 71°	0° to 50°	0° to 60°	0° to 60°	0° to 60°	Operating Temp (°C)
Output Gauge Port	yes	yes	yes	yes	yes	yes	no	no	yes	yes	Output Gauge Port
Weight (lbs.)	2.1	2.1	1.0	1.3	1.6	1.4	1.9	0.5	T3210 - 1.2, T3211 - 1.4, T 3212 - 2.0	T351 - 1.2, T3511 - 1.4, T3512 - 2.0	Weight (lbs.)
Physical Specifications											Physical Specifications
Width (in.) – Depth (in.) – Height (in.)	2"• – 2"• – 4"	2"• – 2"• – 4	1.9" – 3.5" – 4"	1.5"– 3.2" – 3.7"	1.5" – 3.2" – 5.2"	2.3" – 2.9" – 4.9"	3" – 3" – 4.4"	2.2" – 2.0" – 2.8"	2.3" – 2.3" – 5" max.	2.3" – 2.3" – 5" max.	Width (in.) – Depth (in.) – Height (in.)
Supply Port	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/8" NPT Female	1/8" NPT	1/8", 1/4", 3/8" NPT	1/8", 1/4", 3/8" NPT	Supply Port
Output Port	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT Male & 1/8" NPT Female	1/8" NPT	1/8", 1/4", 3/8" NPT	1/8", 1/4", 3/8" NPT	Output Port
Tapped Exhaust Port	option	option	option	option	option	option	1/8" NPT Female	1/8" NPT	No. 10-32 UNF-2B	No. 10-32 UNF-2B	Tapped Exhaust Port
Electrical Port (STD)	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT	Micro-Style	Terminal Block	micro style 6 pin micro	micro style 6 pin micro	Electrical Port (STD)
Electrical Connections (option)	Terminal Block, Din 43650-A	Terminal Block, Din 43650-A	Din 43650-A	DIN 43 650-A, Term Blk, 1/2" BSPT	DIN 43 650-A, Term Blk, 1/2" BSPT	DIN 43 650-A, Term Blk	DIN 43 650-A, Amphenol				Electrical Connections (option)
Mounting Options	Pipe, Panel, Bracket or DIN-rail	Pipe, Panel, Bracket or DIN-rail	Pipe, Panel, bracket, valve, DIN-rail	Inline, pipe, panel, DIN-rail, manifold	Inline, pipe, panel, DIN-rail, manifold	Pipe, panel, bracket, valve, DIN-rail, manifold	Bracket or Air-piloted Regulator	DIN-rail, Panel, Manifold	Pipe, Panel, Bracket (3211 - manifold)	Pipe, Panel, Bracket (3511 - Manifold)	Mounting Options
Mounting Orientation Insensitivity	some	some	excellent	some	some	excellent	excellent	excellent	excellent	excellent	Mounting Orientation Insensitivity
Vibration / Shock Insensitivity	some	some	excellent	good	good	excellent	excellent	excellent	excellent	excellent	Vibration / Shock Insensitivity
External Span / Zero Adjustment	yes	yes	no	yes	yes	no	no	yes	no	yes (electronic)	External Span / Zero Adjustment

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