

SPECTROTILT™ II

Dual Axis Inclinometer



The SPECTROTILT™ II family of Dual Axis Inclinometers combine the SP 5000 Series sensor with CMOS or custom designed hybrid signal conditioning circuitry. The result is a high performance / low cost dual axis inclinometer which can tackle the most demanding applications. All models are temperature compensated to the full industrial range, and feature null and scale adjustments (factory set). The open architecture construction makes them ideal for OEM applications, and for easy installation into custom enclosures. An optional flame retardant, molded ABS plastic enclosure is available for the SSY0090P and SSY0091P models (*see note below).



CHARACTERISTICS	MODEL							
	SSY0090	SSY0091	SSY0090C	SSY0091C	SSY0090P	SSY0091P	SSY0091D	SSY0091C-D
Range (degrees)	+/- 45	+/- 20	+/- 45	+/- 20	+/- 45	+/- 20	+/- 20	+/- 20
Output (Vdc, referenced to input common)	+/-7	+/-7	+1 to +4	+1 to +4	+1 to +4	+/-7	+1 to +4	+1 to +4
Input Voltage (Vdc, unregulated)	+/-11 to +/-16	+/-11 to +/-16	+5, +/-5%	+5, +/-5%	+4.85 to +16	+4.85 to +16	+/-11 to +/-16	+5, +/-5%
Input Current (mA)	12	12	1.5	1.5	1	1	15	7
Resolution (arc degrees)	0.02	0.005	0.01	0.01	0.01	0.01	0.005	0.01
Repeatability (arc degrees)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Output Ripple								
% of signal value	0.2	0.2	0.2	0.2	-	-	-	-
mV RMS	-	-	-	-	0.5	0.5	-	-
Accuracy (arc degrees)								
at 10 degrees	-	+/-0.06	-	+/-0.06	-	+/-0.06	+/-0.05	+/-0.05
at 20 degrees	-	+/-0.6	-	+/-0.6	-	+/-0.6	+/-0.2	+/-0.2
at 30 degrees	+/-2	-	+/-2	-	+/-1	-	-	-
at 45 degrees	+/-5	-	+/-5	-	+/-5	-	-	-
Setting Time (mSec@ 20 degrees C)	500						50	
Temperature Range (degrees C)								
Operating	-40 to +80							
Storage	-40 to +80							
Temp. Coefficient of Null (arc seconds / deg.C)	20	10	20	10	20	20	10	10
Temp. Coefficient of Scale (%/deg. C typ.)	0.1	0.1	0.1	0.1	0.1	0.1	0.02	0.02
Null Adjustment Range	+/-1	+/-1	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-1	+/-0.2
Weight (grams/approx.)	36	34	36	34	15	15	24	24

Note: Part numbers for available models with ABS plastic housing are as follows
SSY0090P w/housing = p/n SSY0194
SSY0091P w/housing = p/n SSY0195

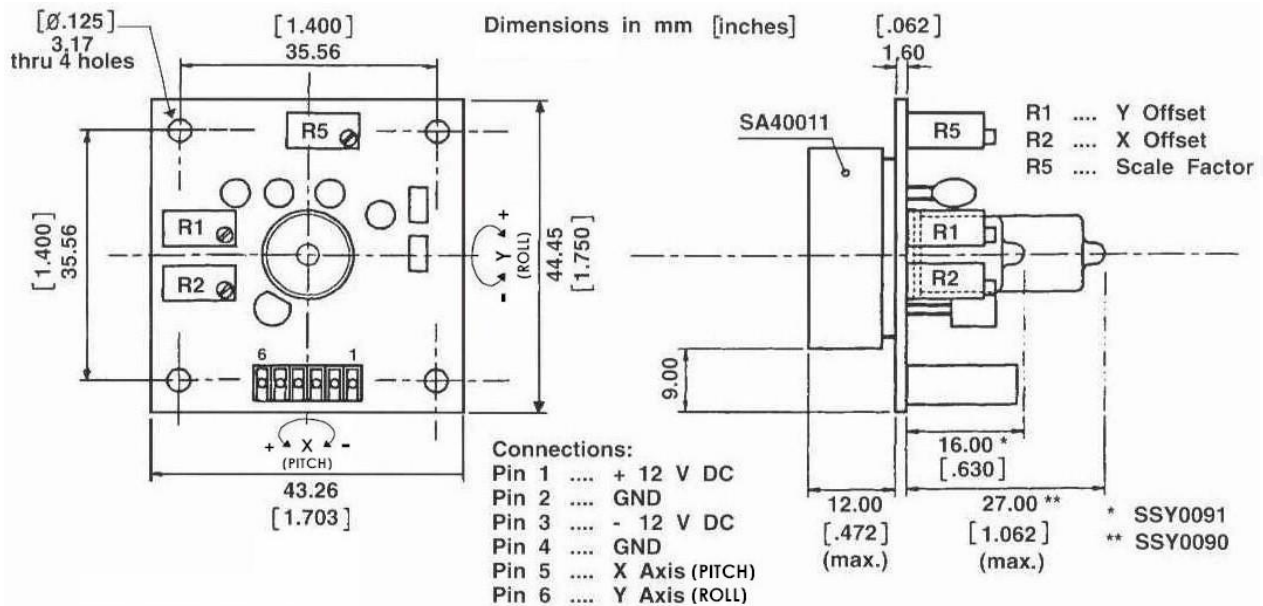
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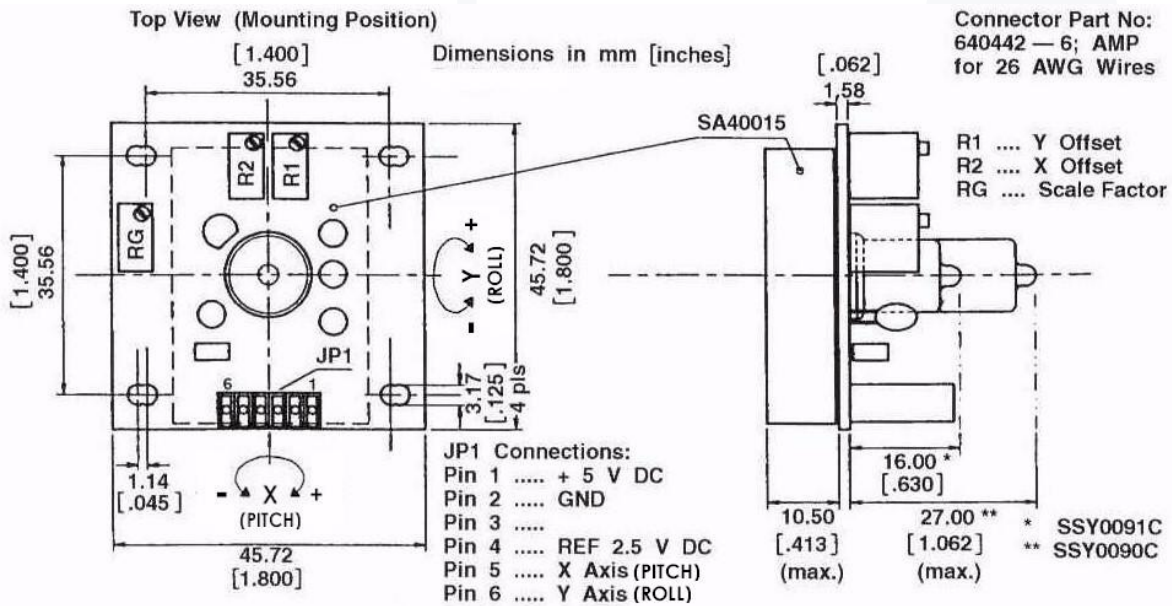


DIMENSIONS, ELECTRICAL CONNECTIONS AND ADJUSTMENTS

SSY0090 and SSY0091



SSY0090C and SSY0091C

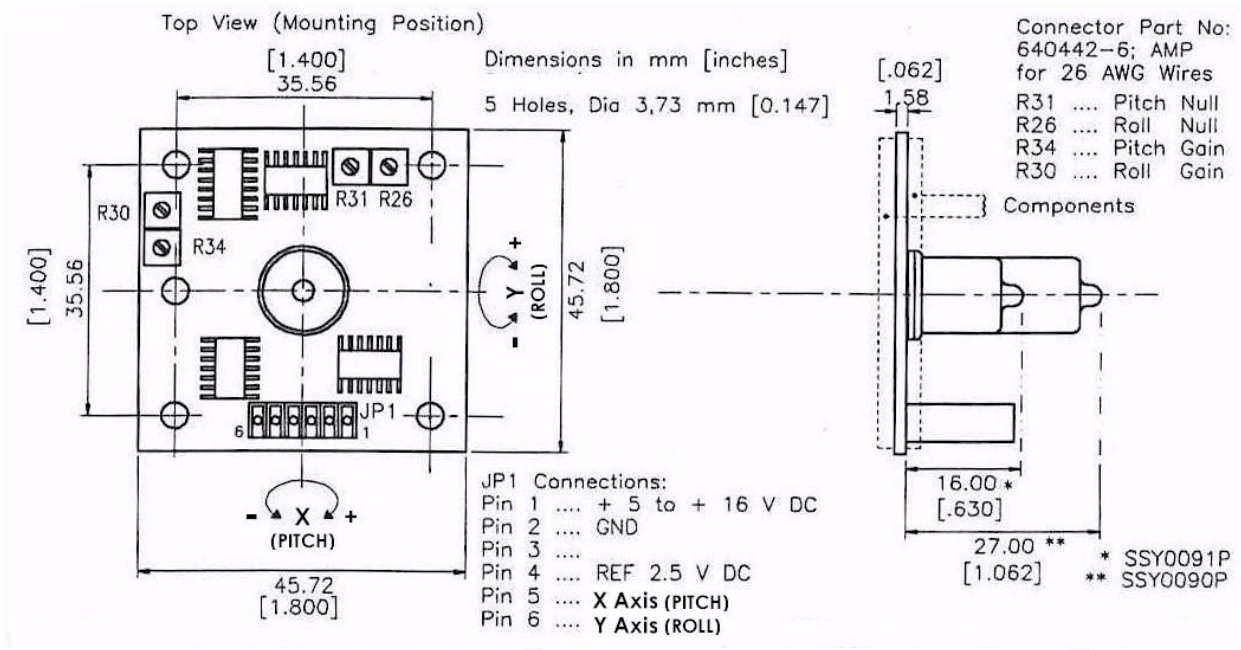


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SSY0090P and SSY0091P



ABS Plastic Housing Version

