Model Number 1903-01C

Preliminary STRAIN GAGE SIDE FORCE LOAD CELL

Revision: NR ECN #: 53592

1903-010					
Performance	ENGLISH	SI			
Measurement Range	15 lbf	66.7 N	[1]		
Sensitivity(10 %)	1.35 mV/V	1.35 mV/V	[2]		
Non-Linearity	≤ 0.10 % FS	≤ 0.10 % FS			
Hysteresis	≤ 0.10 % FS	≤ 0.10 % FS			
Non-Repeatability	≤ 0.02 %RO	≤ 0.02 %RO			
Environmental					
Overload Limit	23 lbf	100 N			
Temperature Range(Operating)	-65 to +200 °F	-54 to +93 °C			
Temperature Range(Compensated)	+70 to +170 °F	+21 to +77 °C			
Temperature Effect on Output(Maximum)	± 0.002 %Reading/°F	± 0.0036 %Reading/°C	[3]		
Temperature Effect on Zero	± 0.001 %FS/°F	± 0.0018 %FS/°C	[3]		
Balance(Maximum)					
Electrical					
Bridge Resistance	2,000 Ohm	2,000 Ohm	[4]		
Excitation Voltage(Recommended)	10 VDC	10 VDC	[5]		
Insulation Resistance	> 5x10 ¹⁰ Ohm	> 5x10 ¹⁰ Ohm			
Zero Balance	≤ 1 % FS	≤ 1 % FS			
Output Polarity	Positive	Positive			
Physical					
Size (Height x Diameter)	1.25 in x 1.50 in	31.75 mm x 38.1 mm	[6]		
Weight	0.30 lb	0.13 kg			
Mounting Thread	#4-40 Female	No Metric Equivalent			
Housing Material	Aluminum	Aluminum			
Sensing Element	Strain Gage	Strain Gage			
Deflection at Full Scale Capacity	0.004 in	0.12 mm			
Electrical Connector	pigtail ends	pigtail ends			
Electrical Connection Position	Bottom	Bottom			

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

[1]FS - Full Scale.

[2]RO - Rated Output.

[3]Over compensated operating temperature range.

[4]Nomina

[5] Calibrated at 10 VDC, usable 3 to 20 VDC or VAC RMS.

[6]See Outline Drawing 74950 for Complete Dimensions

Entered: ND	Engineer: PE	Sales: KWW	Approved: JM	Spec Number:
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All specifications are at room temperature unless otherwise specified. This specification requires customer approval prior to any changes.