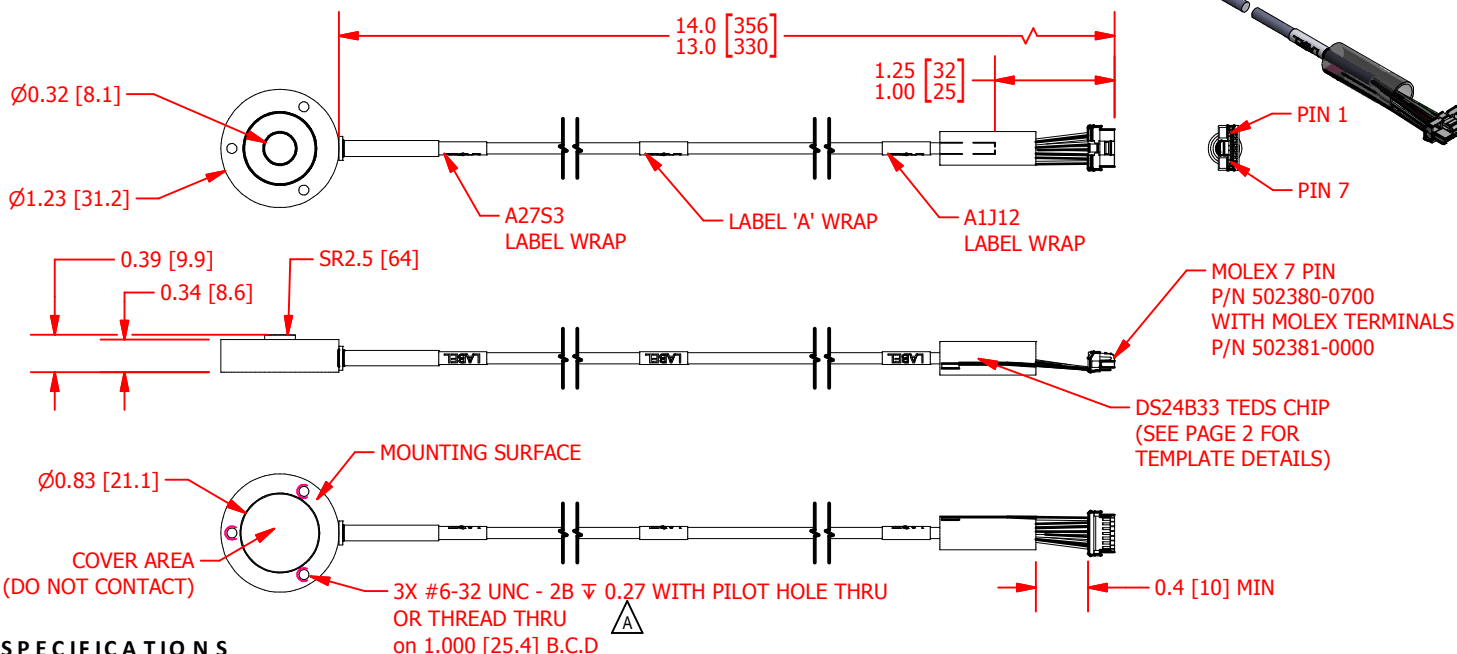
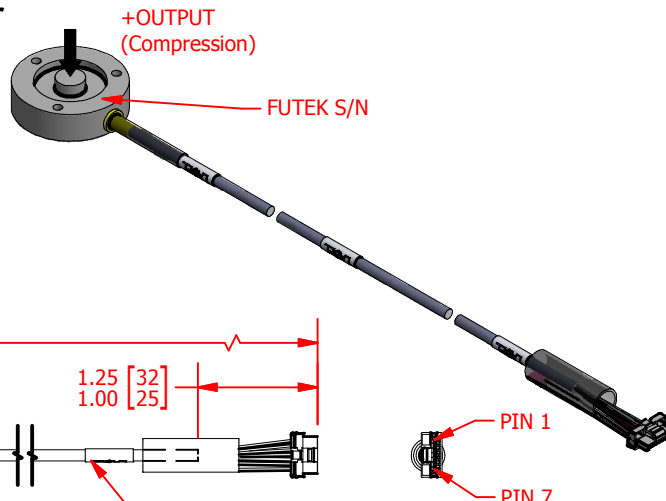


# FUTEK MODEL QLA367

ITEM NUMBER: See Chart

## Custom Load Button Load Cell with TEDS IEEE1451.4 and 7 Pin Clik-Mate Molex Connector

INCH [mm]		R.O. = Rated Output	
WIRING CODE			
+Excitation	-Excitation	+Signal	-Signal
RED (P4)	BLACK (P3)	GREEN (P1)	WHITE (P2)
Shield	TEDS DATA	TEDS GND	
Sensor Floating (P5)	(P6)	(P7)	



### SPECIFICATIONS

RATED OUTPUT	2 mV/V nom.
CAPACITY	100 lb [0.445kN]
SAFE OVERLOAD	150% of R.O.
ZERO BALANCE	± 3% of R.O.
EXCITATION (VDC OR VAC)	18 MAX
BRIDGE RESISTANCE	700 Ω nom
NONLINEARITY	± 0.15% of R.O.
HYSTERESIS	± 0.15% of R.O.
NONREPEATABILITY	± 0.05% of R.O.
TEMP. SHIFT ZERO	± 0.01% of R.O./°F (± 0.018 of R.O./°C)
TEMP. SHIFT SPAN	± 0.02% of LOAD/°F (± 0.036 of LOAD/°C)
COMPENSATED TEMP.	60 to 160 °F (16 to 71 °C)
OPERATING TEMP	-40 to 185 °F (-40 to 85 °C)
MATERIAL	17-4ph S.S. (Flexure)
CABLE: 28 AWG, 4 Conductor Braided Shielded PVC Cable with 7 Pin Clik-Mate Molex Connector	
CALIBRATION / SHUNT	Calibration Compression 5pt (4, 10, 16, 21.9, 100 lb) / 100 Kohm
ROHS	YES per Customer Document 908-0000-031
CE	YES
ISO 13485 COMPLIANCE	YES
IPC/WHMA-A-620 COMPLIANCE	YES (Cable and Connector Assembly)
TEDS IEEE 1451.4	YES (Includes Temp Shift Zero, Span and Shunt Cal Info-Details page 2)
IP RATING	IP 65 (Sensor Side only)
EXTENDED WARRANTY	5 yrs

ITEM#	Gage Type	Label A
QSH01674	Conventional	215-3231-001 'X' W150
QSH01632	Custom Integrated Circuit	215-3059-001 'X' W150

'X' = Customer Drawing Revision

CUSTOMER APPROVAL- COMPANY:

CUSTOMER APPROVAL- NAME / DATE:

REVISIONS: (Refer to dwg # revision sheet)

A	6-14-13
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## OUTLINE DRAWING

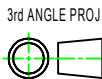
STANDARD NOTES: (Unless Otherwise Specified)

ALL DIMENSIONS ARE IN INCHES  
DRAWING INTERPRETATION DIMS. PER ASME-Y14.5M  
REMOVE BURRS AND BREAK SHARP EDGES .005 - .015  
THREADS PER HANDBOOK H-28  
DIMENSIONS ARE SHOWN AFTER PLATING

ANGLE:  
± 1/2°

CHAMFER:  
± 5°

TOLERANCE:  
.X ± 0.1"  
.XX ± 0.01"  
.XXX ± 0.005"



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**FUTEK**  
ADVANCED SENSOR TECHNOLOGY, INC.  
10 THOMAS, IRVINE, CA 92618 USA  
Phone: (949) 465-0900  
Fax: (949) 465-0905

MODEL: <b>QLA367</b>	DWG No.: <b>FO1351-A</b>
DRAWN BY: R. Walker	CREATED DATE: 5/30/2013
APPROVED BY: J. Mokhberly	APPROVED DATE: 6/3/2013
CHECKED BY:	CAGE: 1X8M6 SHEET: 1 OF 2

# FUTEK MODEL QLA367

Custom Load Button Load Cell with TEDS  
IEEE1451.4 and 7 Pin Clik-Mate Molex  
Connector

ITEM NUMBER: See Chart


INCH [mm] | R.O.= Rated Output

ISO/IEC/IEEE 21451-4							
FUTEK Basic TEDS summary							
Function	Select	Property/Command	Description	Access	Bits	Data type (and range)	Units
Basic TEDS	—	—	Manufacturer ID	CAL	14	Integer (17–16381) FUTEK = 55	—
	—	—	Product Type	CAL	5	Chr5 (A–Z)	—
	—	—	Product Category	CAL	10	Chr5 (A–Z)	—
	—	—	Product Series	CAL	11	Integer (0–999) 1000–2047 are unused	—
	—	—	Serial number	CAL	24	Integer (0–16777215)	—
					Total bits required for TEDS (range): 64 bits		

Bridge sensors template (ID = 33) summary								
Function	Select	Property/Command	Description	Access	Bits	Data type (and range)	Units	
ID	—	TEMPLATE	Template ID	—	8	Integer (value = 33)	—	
Measurement	Select Case— Physical Measurand				6	Select Case	—	
	Cases 0-45	%MinPhysVal	Minimum physical value	CAL	32	Single	Various	
		%MaxPhysVal	Maximum physical value	CAL	32	Single	Various	
Electrical signal output	—	%ElecSigType	Transducer Electrical Signal Type	ID	—	Assign = 3, "Bridge Sensor"	—	
	Select Case— Full-Scale Electrical Value Precision				2	Select Case	—	
	Case 2	%MinElecVal	Minimum electrical output	CAL	32	Single	V/V	
		%MaxElecVal	Maximum electrical output	CAL	32	Single	V/V	
	—	%MapMeth	Mapping Method	ID	—	Assign = 0, "Linear"	—	
	—	%BridgeType	Bridge Type	ID	2	Enumeration: Quarter   Half   Full	—	
	—	%SensorImped	Bridge element impedance	ID	18	ConRes (1 to 26.2k, step 0.1)	Ω	
	—	%RespTime	Response Time	ID	6	ConRelRes (1E-6 to 7.9, ±15%)	s	
	Excitation supply	—	%ExciteAmplNom	Excitation level, nominal	ID	9	ConRes (0.1 to 51.1, step 0.1)	V
		—	%ExciteAmplMin	Excitation level, min.	ID	9	ConRes (0.1 to 51.1, step 0.1)	V
—		%ExciteAmplMax	Excitation level, max	ID	9	ConRes (0.1 to 51.1, step 0.1)	V	
Calibration information	—	%CalDate	Calibration Date	CAL	16	DATE	—	
	—	%CalInitials	Calibration initials	CAL	15	CHR5	—	
	—	%CalPeriod	Calibration period	CAL	12	UNINT	days	
Misc.	—	%MeasID	Measurement location ID	USR	11	UNINT	—	
					Total bits required for TEDS (range): 209 to 251 bits			

Calibration table template (ID = 40) summary							
Function	Property/Command	Description	Access	Bits	Data type (and range)	Units	
ID	TEMPLATE	Template ID	—	8	Integer (value = 40)	—	
Table data	%CalTable_Domain	Domain parameter	CAL	1	Enumeration: Electrical   Physical	—	
	STRUCTARRAY CalTable	Number of data sets	CAL	7	Dimension size of 1 to 127	—	
	%CalPoint_DomainValue	Domain Calibration Point (% of full span)	CAL	16	ConRes (0 to 100, step 0.0015)	%	
	%CalPoint_RangeValue	Range Calibration Deviation (% of full span)	CAL	21	ConRes (–100 to 100, step 0.0001)	%	
					Total bits required for TEDS (range): 16 to 4715 bits		

User data summary							
Function	Select	Property/Command	Description	Access	Bits	Data type (and range)	Units
User data	—	—	Temperature Shift Zero	CAL	32	Single	% of R.O./°F
	—	—	Temperature Shift Span	CAL	32	Single	% of Load/°F
	—	—	Initial Zero Balance	CAL	32	Single	V/V
	—	—	Shunted Output	CAL	32	Single	V/V
					Total bits required for TEDS (range): 128 bits		

CUSTOMER APPROVAL- COMPANY:	<h2 style="color: green;">OUTLINE DRAWING</h2> <p>STANDARD NOTES: (Unless Otherwise Specified)</p> <p>ALL DIMENSIONS ARE IN INCHES</p> <p>DRAWING INTERPRETATION DIMS. PER ASME-Y14.5M</p> <p>REMOVE BURRS AND BREAK SHARP EDGES .005 - .015</p> <p>THREADS PER HANDBOOK H-28</p> <p>DIMENSIONS ARE SHOWN AFTER PLATING</p> <p style="text-align: right;">3rd ANGLE PROJ.</p>  <p style="text-align: right;"> <b>ANGLE:</b> ± 1/2°  <b>CHAMFER:</b> ± 5°  <b>TOLERANCE:</b>  .X ± 0.1"  .XX ± 0.01"  .XXX ± 0.005" </p>	<p><i>This drawing is submitted solely for the information and exclusive use of the original addressee. It is not to be divulged in whole or in part, by any firm or individual without written permission from:</i></p> <p style="text-align: right;"><b>FUTEK</b> ADVANCED SENSOR TECHNOLOGY, INC. 10 THOMAS, IRVINE, CA 92618 USA Phone: (949) 465-0900 Fax: (949) 465-0905</p>
CUSTOMER APPROVAL- NAME / DATE:		
REVISIONS: (Refer to dwg # revision sheet)		