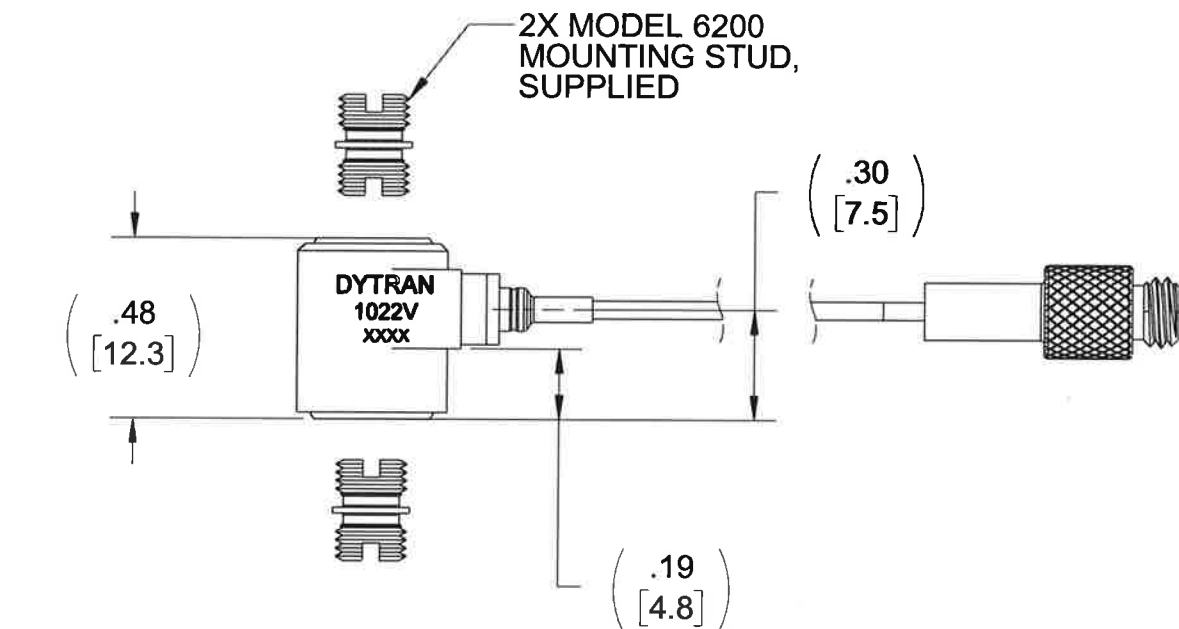
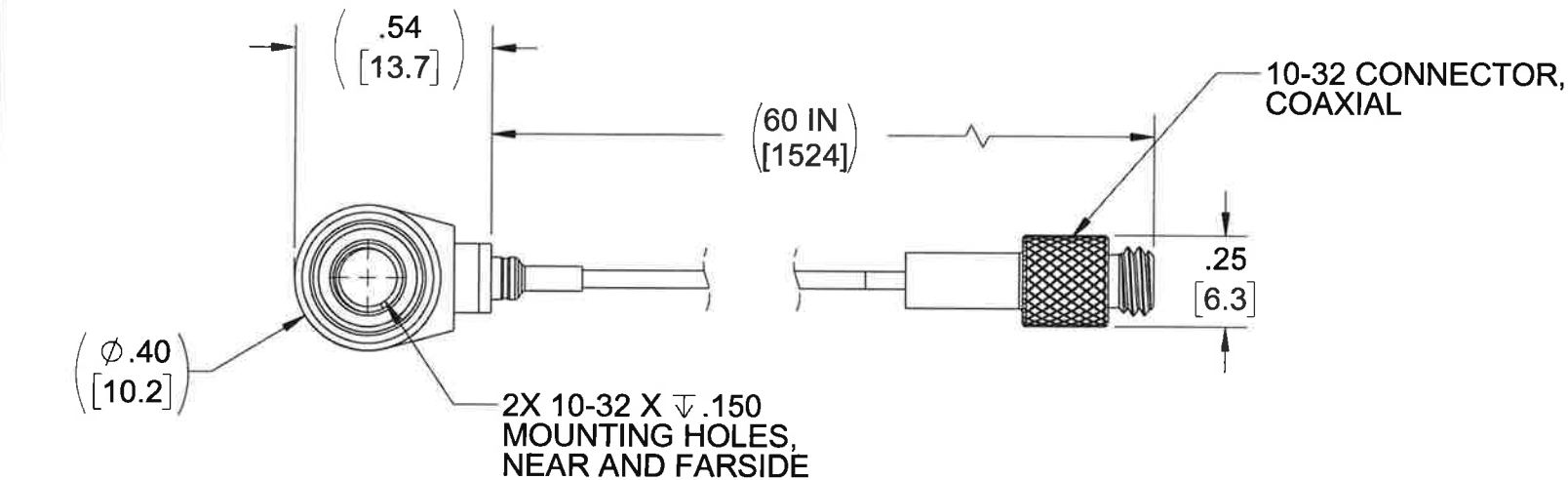


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5. OPERATIONAL TEMPERATURE OF SENSOR: -100°F [-73°C] TO 250°F [121°C]

4. SEE TABLE FOR CABLE SPECIFICATIONS.

3. WEIGHT: LESS CABLE, 4.5 GRAMS MAX

2. NOMINAL SENSITIVITY: 100mV/Lb. COMPRESSION PRODUCES POSITIVE-GOING OUTPUT VOLTAGE

1. HOUSING AND LOAD BEARING SURFACES ARE TITANIUM ALLOY.

NOTES: UNLESS OTHERWISE SPECIFIED

DWG NO 127-1022V

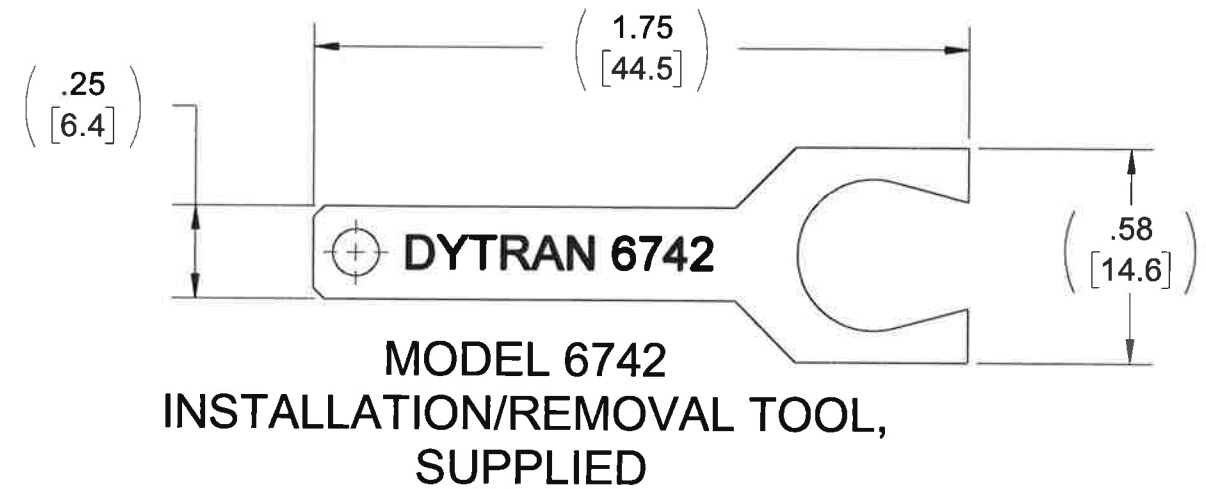
REV C

2

1

REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	13251	REDRAWN ON SOLIDWORKS WITH CHANGES	RA, 02/08/17	LA	LW



4 COAX, LOW NOISE, LOW OUT GASSING	
TEMPERATURE RATING	-90°C TO +200°C [-130°F TO +392°F]
JACKET	OUTER WRAPPED AND SINTERED PTFE
DIAMETER, INNER CONDUCTOR	0.189mm [.007in] NOM
CABLE DIAMETER	1.22mm±0.10mm [.048 ±.004]
INNER CONDUCTOR	STRANDED SILVER PLATED COPPER ALLOY, AWG34 OR 7 X 0.063mm [.002in] NOM.
OUTER CONDUCTOR	SILVER PLATED COPPER BRAIDED SHIELD. STRAND DIAMETER: 0.063mm [.002 in] NOM. COVERAGE: 90% NOM.
CROSS SECTION	0.022mm² [.0009 in] NOM
RESISTANCE	98 OHMS/100M NOM @20°C [68°F]
DIELECTRIC	EXTRUDED PTFE DIELECTRIC WITH GRAPHITE LAYER. DIAMETER: 0.52mm [.02 in] NOM
COLOR	ORANGE
COATING	TETRA ETCH
APPROX WEIGHT	3.60G/M [.042 OZ/FT]
IMPEDANCE	50 OHMS NOM
CAPACITANCE	97 pF/m NOM.
LOW OUTGASSING	MEETS ASTM E 595-88/84/90, TML <1.0%, CVCM < 0.10%

UNLESS OTHERWISE SPECIFIED:
INTERPRET DIM & TOL PER
ASME Y14.5M - 1994.
REMOVE BURRS.
COUNTERSINK INTERNAL THDS
90° TO MAJOR DIA.
CHAM EXT THDS 45° TO MINOR DIA.
THD LENGTHS AND DEPTHS ARE FOR
MIN FULL THDS.
DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES:
TOTAL RUNOUT WITHIN .005.
BREAK SHARP EDGES .005 TO .010.
MACHINED FILLET RADII .005 TO .015.
WELDING SYMBOLS PER AWS A2.4.
ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS IN BRACKETS () ARE IN MILLIMETERS TOLERANCES ARE:	
DECIMALS	METRIC
.XX ±.03	.X ±.8
.XXX ±.010	.XX ±0.25
ANGLES	±1°
APPROVALS	DATE
ORIG NC	07/22/09
CHK EP	10/29/10
APP DV	11/01/10
DO NOT SCALE DRAWING	THIRD ANGLE PROJECTION

DYTRAN INSTRUMENTS, INC. Chatsworth, CA	
TITLE: OUTLINE/INSTALLTION DRAWING, MODEL 1022V IEPE FORCE SENSOR	
SIZE B	CAGE CODE 2W033
DWG NO 127-1022V	REV C
SCALE: 2:1	SHEET 1 OF 1

Model Number 1022V		PERFORMANCE SPECIFICATION				Doc No PS1022V	
		MINIATURE LOW MASS IEPE FORCE SENSORS				REV C, ECN 11370 , 10/20/14	
		• MINIATURE DYNAMIC FORCE SENSOR • LOW MASS • EXCELLENT LINEARITY					
		ENGLISH		SI			
PHYSICAL							
Weight (less cable)		0.16		oz		4.50	
Size Height X Diameter		0.49 x 0.40		Inches		12.44 x 10.16	
Connector [1]		10-32				10-32	
Housing		Ti 6Al-4V				Ti 6Al-4V	
Material		Ti 6Al-4V				Ti 6Al-4V	
Isolation		Case grounded				Case grounded	
Mounting Provision		[2]				[2]	
Sensing Element		Quartz				Quartz	
Material Mode		Compression				Compression	
PERFORMANCE							
Sensitivity, ± 10 %		100		mV/LbF		22.5	
Range, Full Scale		± 50		LbF		± 222	
Stiffness		26		Lb/μin		2039	
Linearity [3]		± 1		% Full Scale		± 1	
Max Shock, Unloaded		5000		g's		5000	
Max Vibration, Unloaded		± 2500		g's		± 2500	
Mounted Resonant Frequency, Unloaded		50		kHz		50	
Noise Resolution		0.0004		LbF rms		0.0018	
Strain Sensitivity @250/μs		0.006		LbF/με		0.027	
Transverse Sensitivity, Max		5		%		5	
ELECTRICAL							
Supply Current Range [4]		2 to 20		mA		2 to 20	
Compliance Voltage Range		18 to 30		Volts		18 to 30	
Output Impedence, Typ		150		Ω		150	
Bias Voltage		+7.5 to +9.5		VDC		+7.5 to +9.5	
Discharge Time Constant		>100		Sec		>100	
F.S.Output Voltage, Nom		5		Volts, peak		5	
Output Signal Polarity		Positive				Positive	
Compression Tension		Negative				Negative	
ENVIRONMENTAL							
Operating Temperature		-100 to +250		°F		-73 to +121	
Environmental Seal		Welded/Epoxy				Welded/Epoxy	