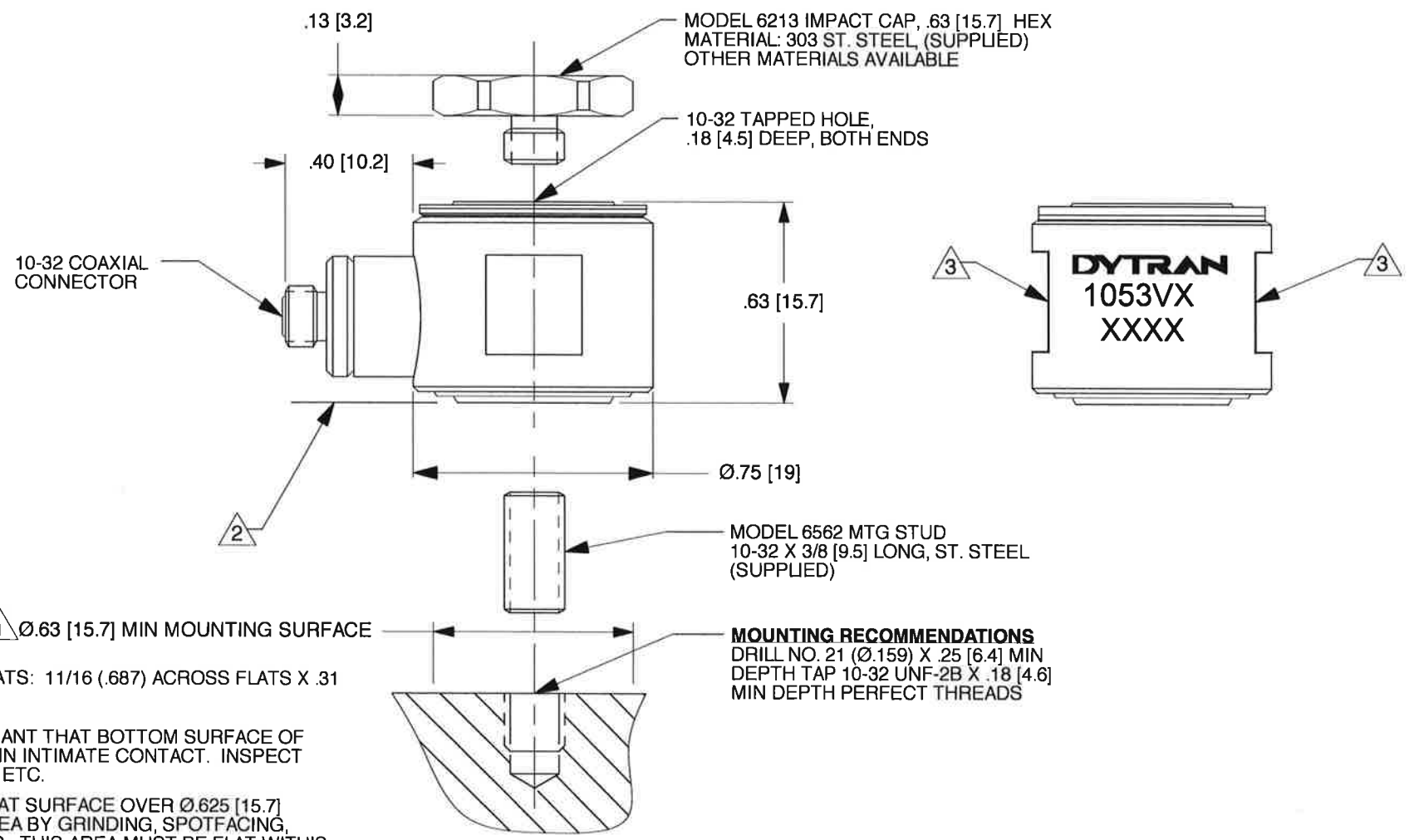


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REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	11429	ADDED DIMENSION DIA .750	LA 11/05/14	JS	LN
B	13356	SEE ECN	RA 03/20/17	LA	LN



USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	

UNLESS OTHERWISE SPECIFIED:
 INTERPRET DIM & TOL PER ASME
 Y14.5M-1994 REMOVE BURRS
 COUNTERSINKS INTERNAL THDS 90°
 TO MAJOR DIA CHAM EXT THDS 45°
 TO MAJOR DIA THD LENGTHS AND
 DEPTHS ARE FOR THDS PER MIL-S-
 7742
 DIMENSIONS APPLY AFTER
 FINISHING.

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE:		
INCHES .XX ± .03 XXX ± .010	METRIC X ± 0.8 .XX ± 0.25	ANGLES ± 1°
MATERIAL		
FINISH		
DO NOT SCALE DRAWING		

CONTRACT NO.		
APPROVALS		DATE
ORIG	N.C.	1/15/01
CHK	N.C.	1/15/01
APP	LN.	11/19/14
APP		

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DYTRAN INSTRUMENTS, INC.
 CHATSWORTH, CA.

TITLE: **OUTLINE/INSTALLATION DRAWING,
 MODEL SERIES 1053V**

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-1053V	B
SCALE:	2X	ASHLAR GRAPHITE	SHEET 1 OF 1

Model Number 1053V4	PERFORMANCE SPECIFICATION	DOC NO PS1053V4
	DYNAMIC FORCE SENSOR	REV A, ECN 11034, 06/25/14



- COMPRESSIVE & TENSILE LOADINGS
- EXCELLENT LINEARITY

PHYSICAL
Weight, Max.
Connector
Material
Sensing Element

ENGLISH		SI	
1.0	oz	28	grams
10-32		10-32	
Stainless Steel		Stainless Steel	
Quartz		Quartz	
Compression		Compression	

PERFORMANCE
Sensitivity, ± 10 %
Compression Range
Maximum Compression
Tension Range
Maximum Tension [1]
Resolution
Linearity [2]
Resonant Frequency, Unloaded
Stiffness, Force Sensor

10	mV/lbf	2.2	mV/N
500	lbf	2.22	kN
10,000		44.5	kN
200	lbf	890	N
200	lbf	890	N
0.007	lbf, rms	0.031	N
±1	% Full Scale	±1	% Full Scale
75	kHz	75	kHz
11.4	lbf/μin	2.0	kN/μm

ENVIROMENTAL
Maximum Shock, Unloaded
Maximum Vibration, Unloaded
Temperature Range
Thermal Coefficient
Seal

10,000	g pk	98100	m/s ²
5,000	g pk	49050	m/s ²
-100 to +250	°F	-73 to +121	°C
0.03	%/°F	0.05	%/°C
Epoxy		Epoxy	

ELECTRICAL
Output Voltage F.S
Output Impedance
Bias Voltage
Compliance Voltage Range
Supply Current Range [3]
Discharge Time Constant, Nom

±5	V	±5	V
<100	Ω	<100	Ω
7.5 to 9.5	VDC	7.5 to 9.5	VDC
18 to 30	VDC	18 to 30	VDC
2 to 20	mA	2 to 20	mA
2000	Sec	2000	Sec

This family also includes:

Model	Sens. (mV/lbf)	Compression Range (lbf)	Max. Compression (lbf)	Tension Range (lbf)	Max. Tension (lbf)	T.C. (sec)	Resolution (lbf, RMS)
1053V1	500	10	200	10	200	50	0.00014
1053V2	100	50	1,000	50	200	100	0.0007
1053V3	50	100	2,000	100	200	500	0.0014
1053V5	5	1,000	15,000	200	200	2,000	0.014
1053V6	1	5,000	15,000	200	200	2,000	0.07

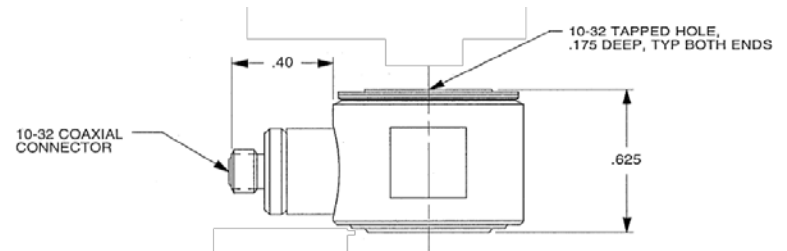
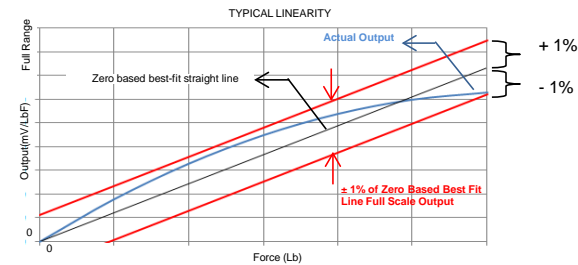
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6213 steel impact cap, Model 6562 10-32 mounting stud

Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, Zero based best-fit straight line method.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1053V for more information.



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