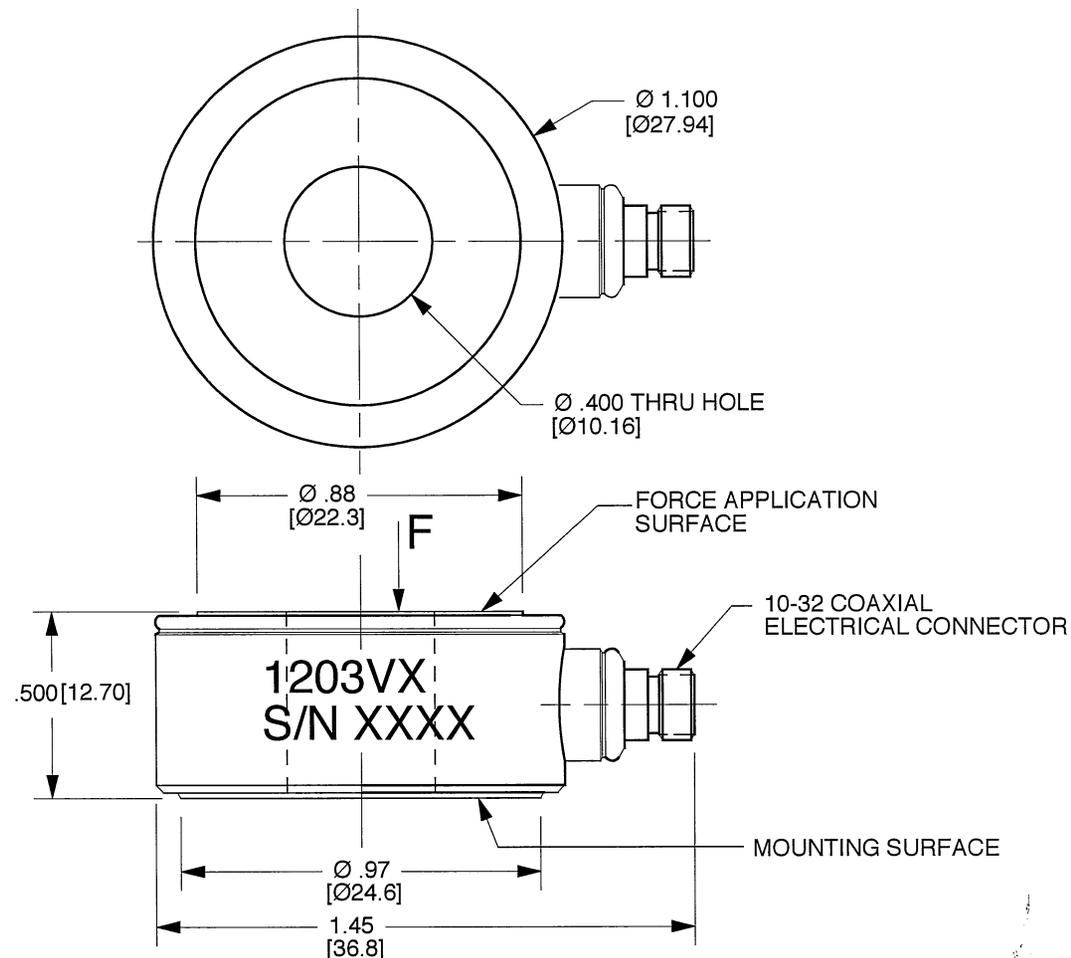


DYTRAN PROPRIETARY AND CONFIDENTIAL			
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MODEL	SENSITIVITY	TC (SEC)	RANGE F.S.
1203V1	50 mV/Lb	90	100 Lb
1203V2	10 mV/Lb	450	500 Lb
1203V3	5 mV/Lb	850	1000 Lb
1203V4	1 mV/Lb	1800	5000 Lb
1203V5	0.5 mV/Lb	1800	10,000 Lb

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8074	UPDATED FORMAT	RA, 11/17/11	JS	<i>[Signature]</i>



4. WEIGHT: 50 GRAMS.
3. ENVIRONMENTAL SEAL: HERMETIC.
2. MATERIAL: LOAD-BEARING SURFACES: HARDENED 17-4 PH STAINLESS STEEL. HOUSING AND CONNECTOR: 300 SERIES STAINLESS STEEL.
1. POLARITY: POSITIVE-GOING WITH COMPRESSION.

NOTES: UNLESS OTHERWISE SPECIFIED

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. THD 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 RADI .005 TO .015. WELDING SYMBOLS PER AWS A2.4 ABBREVIATIONS PER MIL-STD-12

CONTRACT NO		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [ ] ARE IN MILLIMETERS. TOLERANCES ARE:		
INCHES	METRIC	ANGLES
.XX ±.03	.X ± 0.8	± 1°
.XXX ±.010	.XX ± 0.25	
FINISH		
DO NOT SCALE DRAWING		

CHATS WORTH, CA.

# MASTER ONLY IF IN RED

SCALE 2X	DESIGN NC	DATE 10-10-07		
DRAWN NC	DATE 12/17/01	PART NO. MODEL SERIES 1203V		
CHECKED R.A.	DATE 08/01/06	MAT'L -		REV A
APPROVED N.C.	DATE 08/01/06	NEXT ASSEMBLY -	USED ON SERIES 1203V	
TITLE			DWG NO.	
<b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 1203V FORCE SENSORS</b>			<b>127-1203V</b>	
			SHEET 1 OF 1	



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

**PHYSICAL**

Weight, Max. Connector [1]  
 Housing  
 Sensing Element

Type  
 Material  
 Material  
 Isolation  
 Material  
 Mode

ENGLISH		SI	
1.75	oz	50	grams
10-32		10-32	
Stainless steel		Stainless steel	
Stainless steel		Stainless steel	
Case grounded		Case grounded	
Quartz		Quartz	
Compression		Compression	

**PERFORMANCE**

Sensitivity, ± 10 %  
 Compression Range  
 Maximum Compression  
 Discharge Time Constant  
 Broadband Resolution  
 Maximum Unloaded Shock  
 Maximum Unloaded Vibration  
 Linearity [2]  
 Resonant Frequency  
 Stiffness

5	mV/Lb	1.24	mV/N
1,000	Lb Force	4.45	kN
5,000	Lb Force	22.24	kN
850	Seconds	850	Seconds
0.00014	Lb, rms	6.23E-07	kN, rms
10,000	g's	98,100	m/s <sup>2</sup>
5,000	g's, Peak	49,050	m/s <sup>2</sup> Peak
± 1	% Full Scale	± 1	% Full Scale
>75	kHz	>75	kHz
20	Lb/µin	3.46	kN/µm

**ENVIRONMENTAL**

Coefficient Of Thermal Sensitivity  
 Operating Temperature  
 Environmental Seal

0.03	%/°F	0.05	%/°C
-100 to +250	°F	-73 to +121	°C
Hermetic		Hermetic	

**ELECTRICAL**

Supply current  
 Voltage Range [3]  
 Full Scale Output Voltage  
 Output Impedence  
 Bias Voltage

2 to 20	mA	2 to 20	mA
18 to 30	VDC	18 to 30	VDC
5	Volts	5	Volts
<100	Ω	<100	Ω
7.5 to 9.5	VDC	7.5 to 9.5	VDC

**This family also includes:**

Model	Sensitivity (mV/Lb)	Range (Lbs.Force)	Max.Force (Lbs.Force)	Discharge T.C. (sec)
1203V1	50	100	200	90
1203V2	10	500	1,000	450
1203V4	1	5,000	10,000	1800
1203V5	0.5	10,000	15,000	1800

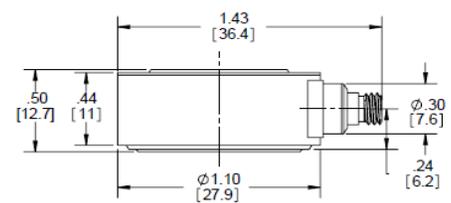
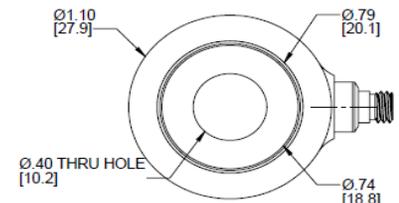
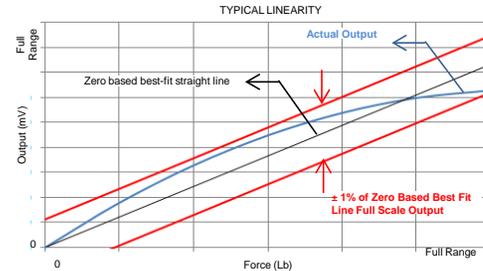
Please refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)

**Notes:**

- [1] Radially mounted with 10-32 receptacle micro coaxial connector
- [2] Percent of full scale or any lesser range, Zero based best-fit straight line method.
- [3] Power these instruments only with constant current type power units. Do not connect to a source of voltage without current limiting. This will destroy the integral IC amplifier.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1203V for more information.

