

# General Purpose Triaxial Vibration Transducers

## VTI38, VTI80, VTI81

### Destination:

- Simultaneous measuring of triaxial-oriented vibration and shock accelerations in portative diagnostic systems and during laboratory studies.

### Features:

- Three shear sensing elements design.
- One-piece three-core antivibration cable.
- Combination of small overall dimensions and acceptable sensitivity.



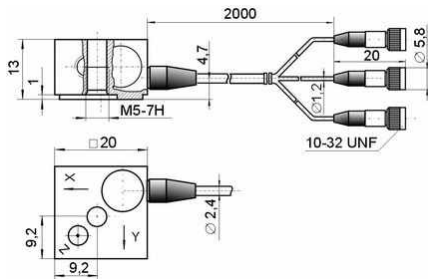
Parameter	Unit	VTI38	VTI80	VTI81
Axial sensitivity ( $\pm 20\%$ ).....	pC/g <sup>*1</sup>	10	2	10
Relative transverse sensitivity.....	%	< 5	< 5	< 5
Amplitude range.....	g <sup>*1</sup>	$\pm 5000$	$\pm 2500$	$\pm 2000$
Max.shock limit (peak value).....	g <sup>*1</sup>	$\pm 10000$	$\pm 5000$	$\pm 5000$
Operating temperature range.....	° C	-60...+150	-60...+150	-60...+150
Frequency range (ripple $\pm 1$ dB).....	Hz	0.5...10000	0.5...20000	0.5...10000
Self-resonant frequency in attached condition.....	kHz	> 35	> 55	> 35
Strain sensitivity.....	g • m/ $\mu$ m	< 0.02	< 0.005	< 0.02
Capacitance.....	pF	900...1200	1000	900...1200
Insulation resistance in normal conditions.....	MOhm	> 10000	> 10000	> 10000
Design.....	-	Shear	Shear	Shear
Bottom insulation.....	-	no	no	no
Built-in cable length.....	m	2 <sup>*2</sup>	2 <sup>*2</sup>	2 <sup>*2</sup>
Housing material.....	-	titanium alloy	titanium alloy	titanium alloy
Weight (without connector and cable).....	gram	26 (38)	6 (9)	21 (32)

Address:1599 Maritime St. Oakland, Ca 94607, USA

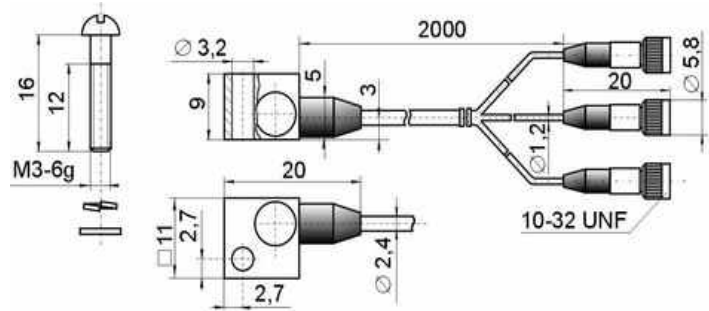
Tel:001-6042885745 Fax:001-510-839-5888 Cell:001-7788299768

Website: [www.vti-test.com](http://www.vti-test.com) Email:info@vti-test.com

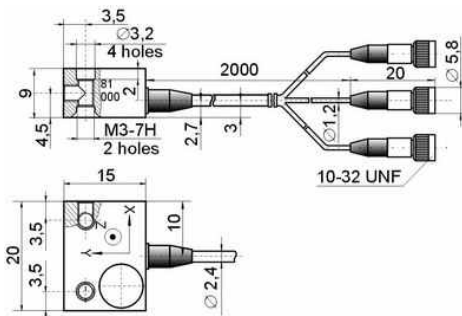
## General view of VTI38



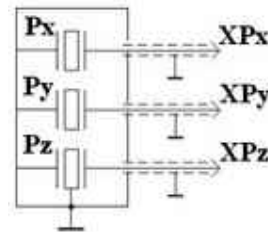
## General view of VTI80



## General view of VTI81



## The typical electrical circuit of VTI38, VTI80, VTI81



## Additional order accessories:

- calibrators VTIT01m (VTIT01m-01), VTIT02;
- charge amplifiers VTI5000, VTIQ02, VTIQ05;
- measuring amplifiers VTI5100, VTI5200;
- adapter box VTIG01 (in set with charge amplifier VTI5000);
- cables VTIK01, VTIK02, VTIK03, VTIK04, VTIK05, VTIK07, VTIK08, VTIK09, VTIK10, VTIK11;
- connector adapters VTIR01, VTIR04;
- wax for mounting VTIW01;
- stud VTIH0805;
- insulating stud VTIH1005.

\*1 -  $1g = 9.807 \text{ m} \cdot \text{s}^{-2}$  or  $10 \text{ m} \cdot \text{s}^{-2} = 1.02 \text{ g}$ ;

\*2 - to be determined when making out an order;

\*3 - has been entered in State list of measuring means.

Address:1599 Maritime St. Oakland, Ca 94607, USA

Tel:001-6042885745 Fax:001-510-839-5888 Cell:001-7788299768

Website: [www.vti-test.com](http://www.vti-test.com) Email:info@vti-test.com