

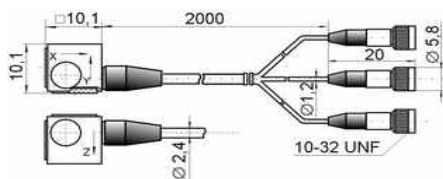


Miniature Triaxial Vibration Transducers  
NTIP20, NTIP21, NTIP22, NTIP23

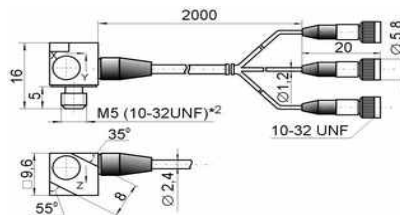


Parameter	Unit	NTIP20	NTIP21	NTIP22	NTIP23
Axial sensitivity (± 20 %)	pC/g <sup>*1</sup>	2	2	1	0.2 - 0.3
Relative transverse sensitivity	%	< 5	< 5	< 5	< 5
Amplitude range	g <sup>*1</sup>	±5000	±10000	±25000	± 20000
Max. shock limit (peak value)	g <sup>*1</sup>	±10000	±20000	±50000	±50 000
Operating temperature range	° C	-60...+150	-60...+150	-60...+150	-60...+150
Frequency range (ripple ± 1dB)	Hz	0.5...18000	0.5...20000	0.5...22000	0.5...30000
Self-resonant frequency in attached condition	kHz	> 50	> 55	> 80	> 80
Strainsensitivity	g • m/μm	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Capacitance	pF	600...900	600...900	500...700	400...700
Insulation resistance in normal conditions	MΩ	> 10 000	> 10 000	> 10 000	> 1 000
Design	-	Shear	Shear	Shear	Shear
Housing material	-	titanium alloy (st./steel) <sup>*2</sup>	titanium alloy (st./steel) <sup>*2</sup>	titanium alloy (st./steel) <sup>*2</sup>	titanium alloy
Built-in cable length	m	2 <sup>*2</sup>	2 <sup>*2</sup>	2 <sup>*2</sup>	2 <sup>*2</sup>
Bottom insulation	-	yes	no	no	no
Weight (without connector and cable)	gram	5 (8)	5 (8)	4 (6)	3.1

General view of NTIP20

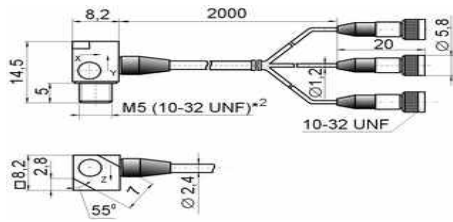


General view of NTIP21

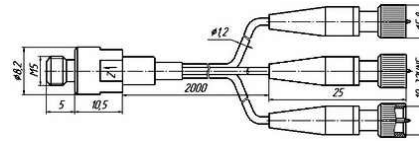




General view of NTIP22



General view of NTIP23



The typical electrical circuit of NTIP20,NTIP21,NTIP22,NTIP23

