

The tri-axial accelerometers AP81, AP2081 and AP2083 are intended for use inside the rubber seat pads for Whole Body vibration measurements. AP2081 is available with 10 mV/g and 100 mV/g sensitivity. AP2083 has a miniature multipin connector at the side allowing simple replacement of damaged cables and the use of cables with different connectors (BNC or Lemo)

### Triaxial seat accelerometers

AP81



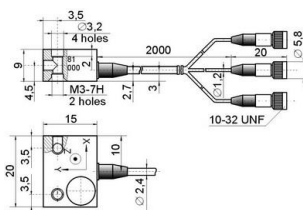
AP2081(-100)



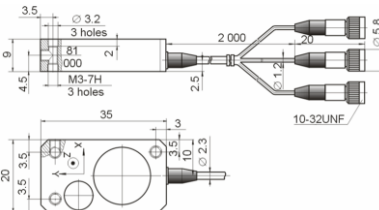
AP2083



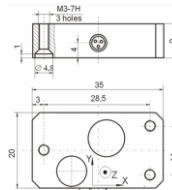
Parameter	Unit	AP81	AP2081(-100)		AP2083
Charge sensitivity (+/- 10%)	pC/g	10	-	-	-
	pC/ms <sup>2</sup>	1.02	-	-	-
Voltage sensitivity (+/- 10%)	mV/g	-	10	100	10
	mV/ms <sup>2</sup>	-	1.02	10.2	1.02
Amplitude range	g rms	2,000	500	50	500
Resolution (1 Hz to 10 kHz)	g rms	-	0.0005	0.0003	0.0003
Mechanical shock limit	g peak	5,000	500		700
Frequency range (+/- 1 dB)	Hz	0.5 to 10,000	0.5 to 10,000		0.5 to 10,000
Resonant frequency	kHz	> 35	> 30		> 30
Transverse sensitivity	%	<5	<5		<5
Base strain sensitivity	g/μm	< 0.02	< 0.02		< 0.02
Temperature range	°C	-60 to +150	-40 to +125	-40 to +80	-40 to +125
Insulation resistance	MΩ	> 10,000	-		-
Capacitance	pF	900 to 1,200	-		-
Isolated base		No	No		No
Excitation voltage	Volt DC	-	+15 to +30	+18 to +30	+15 to +30
Constant current	mA	-	2 to 20		2 to 20
Output impedance	Ω	-	<500		<500
Output bias voltage	Volt DC	-	8 to 11	11 to 14	8 to 11
Settling time	second	-	4		4
Construction		Shear	Shear		Shear
Piezo material		ZTP19	ZTP19		ZTP19
Sensor connector		-	-		Miniature 3-pin
Integral cable length	meter	2	2		-
Connecting cable		-	-		AK21
Cable connector		3x 10-32 UNF	3x BNC		3x BNC
Side/Top connection		Side	Side		Side
Mounting method		2x M3 bold	3x M3 bold		3x M3 bold
Housing material		Titanium	Titanium		Titanium
Weight without cable	gram	21	34		34
Notes		Used inside AP5011	Used inside AP5211		Used inside AP5213



AP81



AP2081(-100)



AP2083