

The piezo electric force transducers AC20, AC21 and AC22 have been developed for measurement of dynamic forces. AC21 is a special version of AC20 to be used with the impulse hammers AU01 or AU02. The miniature version AC22 can only be used for measurement of compression forces.

## Force sensors

**AC20**



**AC21**



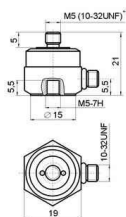
**AC22**



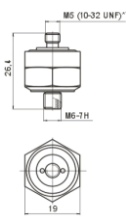
**AC23**



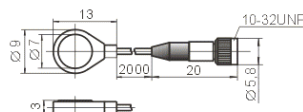
Parameter	Unit	AC20	AC21	AC22	AC23
Charge sensitivity (+/- 10%)	pC/N	2	2	4	4
Force range	N	-1,000 to +5,000	-1,000 to +5,000	+500 to +5,000	-1000 to +5000
Transverse sensitivity	%	<5	<5	<3	<5
Resonant frequency	kHz	>20	>20	>100	25
Effective mass (upper/lower)	gram	5/17	5/17	0.3/1.3	5/17
Base strain sensitivity	Nm/um	<0.05	<0.05	<0.1	<0.03
Temperature range	oC	-60 to +200	-60 to +200	-60 to +150	-60 to +200
Temperature sensitivity	N/oC	<0.05	<0.05	<0.1	<0.05
Insulation resistance	Mohm	>1,000	>1,000	>1,000	>1,000
Capacitance without cable	pF	20 to 35	20 to 35	200 to 350	10 to 14
Sensor connector		10-32 UNF	M6	-	10-32 UNF
Integral cable length	meter	-	-	2	-
Connecting cable		AK04	-	-	AK04
Cable connector		10-32 UNF	-	10-32 UNF	-
Side/Top connection		Side	Top	Side	Side
Mounting method		M5 stud/hole	M5 stud	Adhesive	M5 stud/hole
Housing material		Stainless steel	Stainless steel	Stainless steel	S. steel
Weight without cable	gram	23	23	1.6	25
Notes			Only for use with Impulse hammer AU01 or AU02	Only for compression type of forces	



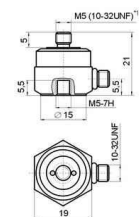
**AC20**



**AC21**



**AC22**



**AC23**