

Sensor

Piezoelectric Acceleration sensor



Features

- The acceleration pick characterizes small size, durable, high sensitivity and wide band due to the piezoelectric ceramics. This sensor is widely used from low frequency vibration acceleration to high acceleration, such as collision.

outline view					
type	small sized light weight type			multi purpose and high temperature type	
model	AEC-0402	AEC-2008	AEC-CT-50	AEC-5032	AEC-50H
features	super miniature light weight type	super miniature light weight type	light weight high sensitivity	multipurpose low coat	high temperature type
structure	compression type	compression type	bending type	compression type	compression type
voltage	[mV/m/s ²] 0.04 [mV/G] 0.4	0.2 2.0	3.5 35	5.0 50	5.0 50
resonance frequency [kHz]	60	40	35	40	25
operating frequency [kHz]	20	20	1	8	5
electric capacitance [pF]	300	700	2700	1000	1000
maximum acceleration	[m/s ²] 100000 [G] 10000	10000 1000	2000 200	16000 1600	5000 -
insulation resistance [MΩ]	10000	10000	1000	10000	10000
operating temperature [°C]	-20 to 110	-20 to 110	-20 to 80	-20 to 150	-20 to 250
weight [g]	0.2	0.8	1	32	35
materials	titanium	titanium	aluminum	SUS	SUS
fixing	adhension	adhension	adhension	M6 X 1	M6 X 1
cable	ø0.8 X 2m	HB-2C	ø1.2 X 2m	HB-2C	HB-2C

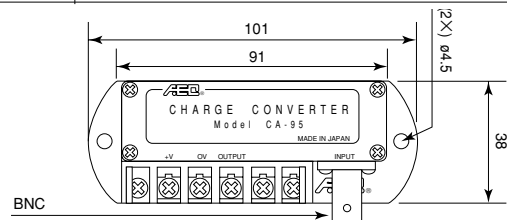
Application example

●The acceleration pick is generally used for vibration and acceleration measurements. For example: equipment diagnosis for rotary machines, durability test for bearings, research of vibration and noise source, acceleration measurement for impact tester, and detection against abnormal vibration of many machines.

Option

Charge amplifier (conversion charge into current)

model	CA-95
Input charge sensitivity	0.1 to 1100pC/G
frequency	2.5Hz to 20kHz
Input charge sensitivity	0.1 to 1100pC/G ± 3db
rated power	4-20mA/FS
operating voltage	DC+12V to +18V
operating temperature	-20°C to 60°C



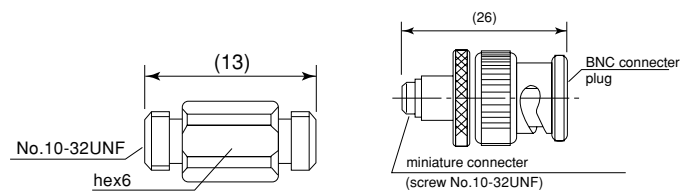
Magnet holder Insulation type (MH-20)



Connector

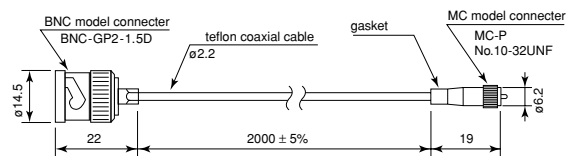
trunk connector (ZR-ZR)

conversion connector (BNCP-ZR)

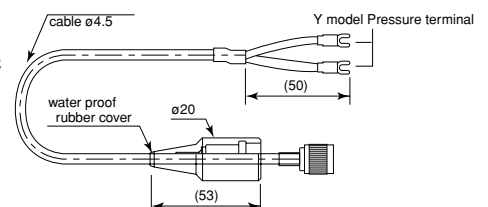


Sensor cable

HB-2C (normal 2m) thermal resistance : 200°C



CX-010AT (10m) thermal resistance 80°C



outline view		
type	built-in amplifier type	
model	AEC-122R AEC-AM-51	
features	insulation · waterproof miniature · light weight	
structure	share type compression type	
voltage	[mv/m/s ²]	10 5.0
	[mv/G]	100 50
resonance frequency [kHz]	20 35	
operating frequency [kHz]	0.003 to 6 0.003 to 12	
electric capacitance [pF]	- -	
maximum acceleration	[m/s ²]	350 500
	[G]	35 50
insulating resistance [MΩ]	10000 -	
operating temperature [°C]	-20 to 110 -20 to 110	
weight [g]	55 19	
materials	SUS SUS	
fixing	M6XP1 M6 X P1	
cable	CX-010AT HB-2C	