

Change of The ACCELEROMETER JCSS calibration uncertainty

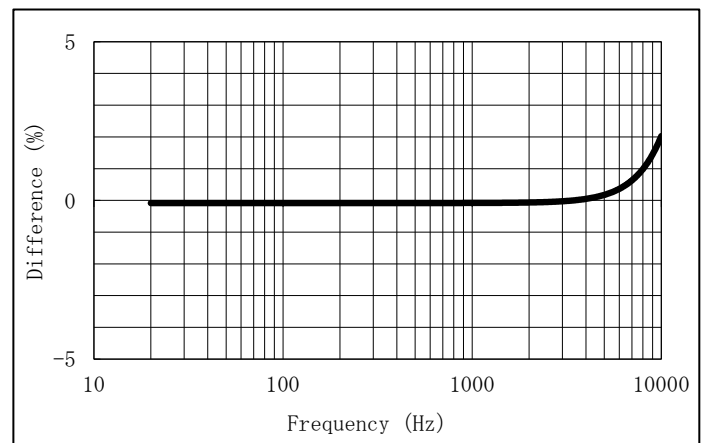
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RION CO., LTD.

We have changed the specified standard accelerometer in ACCELEROMETER JCSS calibration since the calibration request in November 2021. This has changed expanded uncertainty of calibration. Assignment charge sensitivity (calibrated value) at higher frequency also has changed. (It is now closer to the true value.) This has changed expanded uncertainty of calibration. Assignment charge sensitivity (calibrated value) at higher frequency also has changed. (It is now closer to the actual value.)

Expanded Uncertainty

| Frequency (Hz) | Before the change (%) | | | After the change (%) | |
|-------------------|--------------------------|--------------------------|--|-------------------------|--------------------------|
| | PV-03 | PV-85 PV-86 PV-90H | | PV-03 | PV-85 PV-86 PV-90H |
| 20 | 1.3 | 2.0 | | 1.2 | 2.5 |
| 25 | 1.8 | 2.3 | | 1.6 | 2.5 |
| 31.5 | 1.9 | 2.4 | | 1.7 | 2.5 |
| 40 | 1.3 | 1.6 | | 1.3 | 1.8 |
| 50 | 1.2 | 1.5 | | 1.3 | 1.8 |
| 63 | 1.3 | 1.5 | | 1.1 | 1.6 |
| 80 | 1.3 | 1.5 | | 1.2 | 1.6 |
| 100 | 2.0 | 2.4 | | 1.5 | 2.3 |
| 125 | 2.6 | 3.2 | | 1.9 | 3.0 |
| 160 | 1.4 | 1.6 | | 1.3 | 1.7 |
| 200 | 2.1 | 2.6 | | 1.6 | 2.5 |
| 250 | 1.4 | 1.7 | | 1.2 | 1.7 |
| 315 | 1.3 | 1.5 | | 1.1 | 1.5 |
| 400 | 3.0 | 3.8 | | 2.2 | 3.6 |
| 500 | 3.0 | 3.8 | | 2.4 | 3.7 |
| 630 | 1.2 | 1.3 | | 1.0 | 1.4 |
| 800 | 1.2 | 1.3 | | 1.0 | 1.3 |
| 1000 | 1.1 | 1.3 | | 1.0 | 1.4 |
| 1250 | 1.2 | 1.4 | | 1.0 | 1.5 |
| 1600 | 1.5 | 1.8 | | 1.4 | 1.9 |
| 2000 | 2.0 | 2.4 | | 1.6 | 2.5 |
| 2500 | 2.5 | 3.1 | | 1.9 | 3.0 |
| 3150 | 1.6 | 1.9 | | 1.6 | 2.1 |
| 4000 | 2.0 | 2.4 | | 1.6 | 2.4 |
| 5000 | 2.9 | 3.6 | | 2.1 | 3.5 |
| 6300 | 3.0 | 3.8 | | 2.3 | 3.9 |
| 8000 | 2.6 | 2.7 | | 2.3 | 3.0 |
| 10000 | 2.6 | 3.9 | | 1.9 | 4.6 |

Difference of assignment value (calibrated value) before and
after the change of specified standard accelerometer
(Representative value)



Example :

Assuming the assignment charge sensitivity (calibrated value) at 10 kHz of PV-90H (serial number 12345) is $0.3000 \text{ pC} \cdot \text{s}^2/\text{m}$, calibrated on October 1, 2021; the assignment charge sensitivity (calibrated value) at 10 kHz of PV-90H (serial number 12345) calibrated on December 27, 2021 is $0.3060 \text{ pC} \cdot \text{s}^2/\text{m}$. (Because difference at 10 kHz is about 2 %, $0.3000 \text{ pC} \cdot \text{s}^2/\text{m} + 0.3000 \text{ pC} \cdot \text{s}^2/\text{m} \times 2 \% = 0.3060 \text{ pC} \cdot \text{s}^2/\text{m}$.)

There is no difference in assignment charge sensitivity (calibrated value) at 80 kHz between October 1, 2021 and December 27, 2021. (Because difference at 80 Hz is 0 %.)