Poles and Zeroes

All poles and zeroes in radians/sec

Contents:

STS2 - 'Generic': 5 poles 2 zeros (what we used till 2008 when we found out there were 3 generations of STS-2 responses; the differences only affect the high frequency corner)
STS2 Generation 1: 9 poles 5 zeros
STS2 Generation 2: 14 poles 9 zeros
STS2 Generation 3: 11 poles 6 zeros
CMG 3T: 120sec corner, 5 poles 2 zeros
CMG3 ESP 30sec corner: 5 poles 2 zeros
CMG 40T 30sec corner: 5 poles 2 zeros
CMG 40-1: 6 poles 2 zeros
Trillium 240 Gen 1 (serial numbers 0-399): 7 poles 5 zeros
Trillium 240 Gen 2 (serial numbers 400+): 7 poles 5 zeros
Trillium 120PA: 7 poles 5 zeros
Trillium 40: 7 poles 5 zeros
Compact Trillium 7 poles 3 zeros
L-22-3D: 2 poles 2 zeros
L-28-3D: 2 poles 2 zeros
Y-28-3D: 2 poles 2 zeros
GS11: 2 poles 2 zeros
L40: 2 poles 2 zeros
L4C: 2 poles 2 zeros
S13: 2 poles 2 zeros

- IRIS DMC Library of Nominal Responses for Seismic Instruments

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Get STS2 Generation from Serial Number
Document Describing STS2 Generations

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| -1.813E-02     | -1.803E-02    |
| -1.249E+02     | 0.00E+00      |
| -1.975E+02     | 2.561E+02     |
| -1.975E+02     | -2.561E+02    |
| -5.69E+02      | 11.50E+02     |
| -5.69E+02      | -11.50E+02    |
| 5              | Zeros         |
| 0.00E+00       | 0.00E+00      |
| 0.00E+00       | 0.00E+00      |
| -0.90E+02      | 0.00E+00      |
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**Trillium**

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| -1.770E-02     | -1.760E-02    |
| -1.267E+02     | 0.00E+00      |
| -1.92E+02 | 2.591E+02 |
| -1.92E+02 | -2.591E+02 |
| -5.577E+02 | 11.43E+02 |
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| 5 | Zeros |
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| 0.00E+00 | 0.00E+00 |
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Return to Sensor Comparison Chart

Related categories:  Convert Data from Counts to Motion  Sensors

Source URL:  https://www.passcal.nmt.edu/content/instrumentation/sensors/sensor-comparison-chart/poles-and-zeros