

Data Sheet of 20DX Series Geophones

Type	ST-20DX 8hz	ST-20DX 10hz	ST-20DX 14hz	ST-20DX 28hz	ST-20DX 40hz	ST-20DX 60hz	ST-20DX 100hz
Natural frequency (Hz)	8±5%	10±5%	14±5%	28±5%	40±5%	60±5%	100±5%
Open circuit damping	0.38±5%	0.30±5%	0.22±5%	0.27±5%	0.37±5%	0.52±5%	0.45±5%
Damping with Shunt Resistor	0.71±5%	0.70±5%	0.51±5%	0.552±5%	0.576±5%	0.60±5%	\
Calibration Shunt Resistance(ohms)	1800	1000	1000	1000	1500	1500	\
Open Circuit Intrinsic Voltage Sensitivity(V/m/s)	28.0±5%	28.0±5%	28.0±5%	39.0±5%	42.0±5%	39.0±5%	23.0±5%
Sensitivity with Shunt Resistor(V/m/s)	23.0±5%	20.0±5%	20.0±5%	28.0±5%	30.4±5%	27.0±5%	\
Coil Resistance (ohms)	395±5%	395±5%	395±5%	395±5%	575±5%	668±5%	570±5%
Harmonic Distortion (%)	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
Typical Spurious Frequency (Hz)	≥180	≥200	≥250	≥350	≥380	≥400	≥600
Moving Mass (g)	11.0	11.0	11.0	11.0	8.20	6.5	5.0
Max.coil excursion p-p (mm)	1.5	1.5	1.5	1.5	1.50	1.5	1.5
Max.tilt angle	20°	20°	20°	20°	20°	20°	20°
Element Diameter (mm)	25.4	25.4	25.4	27.0	27.0	27.0	27.0
Element Height (mm)	33.50	33.50	33.50	33.50	33.50	33.5	33.5
Element Weight (g)	87.0	87.0	87.0	100.0	95.0	95.0	95.0
Operating Temperature(°C)	-45°C to + 80°C	45°C to + 80°C	45°C to + 80°C	45°C to + 80°C	45°C to + 80°C	45°C to + 80°C	45°C to + 80°C

- All parameters specified herein are rated at a temperature 20°C±2°C.
- 3-year limited warranty exclusive of high voltage, lightning and physical abuse.