

## Geophones and Hydrophones





## PRODUCTS FEATURED

DT-SOLO 10Hz (HP301V)  
 DT-SOLO 10Hz (HP301H)  
 DT-SOLO 5Hz (HP305V)  
 DT-SOLO 5Hz (HP305H)  
 DT-SOLO OMNI  
 DT-HP102  
 DT-HP103  
 DT-HP104  
 DT-HP201  
 DT-HP202  
 DT-HP206V  
 DT-HP206H  
 DT-20DX  
 DT-20DX-4.5Hz  
 Hydrophone  
 Dual Sensor

Dynamic Technology Canada Corporation "DTCC" has become a world class leader in manufacturing of Geophysical equipment for Seismic Contractors Worldwide with corporate headquarters in Calgary, Canada and Beijing, China. DTCC's world class manufacturing facility in Lang Fang, Hebei, China built in 2007 is state of the art. We offer the best available equipment with high emphasis on producing quality products using the best materials. Our emphasis on quality is defined by our extensive quality control procedures and equipment to fulfill our client's strict quality requirements.

Our product ranges from Geophones, Geophone Strings available in Land, Marsh, 3C, Hydrophones, Dual Component for transition and marine seismic. Digital cables for Land, Marsh and Transition Zone for the most widely used recording systems. Leader wire and connectors of all types used in seismic acquisition.



[www.dtcc.biz](http://www.dtcc.biz)

### International Sales

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 Unit 145, 3901-54 Ave. NE,  
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## Geophones and Hydrophones



Our capability to manufacture standard and custom built cables and connectors are extraordinary. Our capacity allows us to build over 1 million geophone elements and 500,000 geophone strings per year. We have ability to manufacture over 1 million geophysical connectors per year from standard to complete custom geophysical connectors. We have ability to manufacture 9 million meters of digital seismic cables for land, transition and marine applications for the most widely used systems.

We boast a 60,000 sq/ft state of the art R&D center in Shenzhen, China that includes over 20 in house engineers, an in house machine shop that allows us to rapidly produce both proto type and production tooling in order to respond quickly to customer demands. In house injection molding capability that allows us to test and perfect tooling before it is put into production.

All of these features allow DTCC to be a leader in the manufacturing of seismic equipment used by geophysical contractors worldwide. Together with our experienced sales force we are able to provide our customers with highest quality and most cost effective product in an expedient matter and this keeps DTCC customers coming back.



# DT-SOLO 10Hz (HP301V) (P/N:611600100)



## Geophone Element

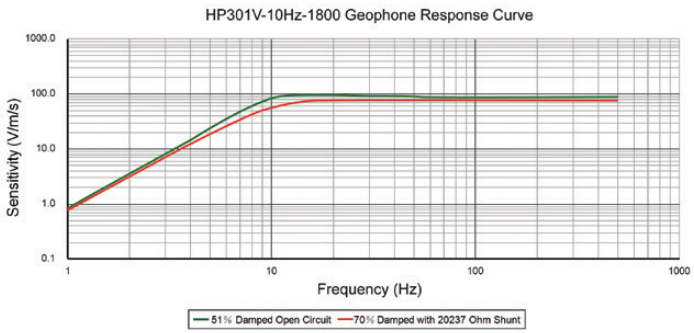
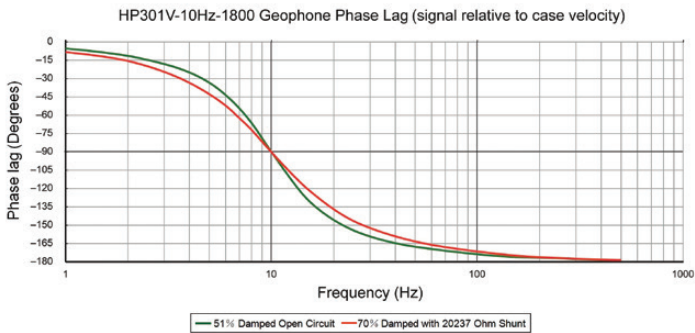
High quality, reliable and cost effective  
3 years limited warranty  
2-D and 3-D seismic application  
Suitable for land, transition zone, marsh and shallow water environments with different cases

## Specifications

(All parameters are specified at +25° C in the vertical position unless otherwise stated.)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 3.5%
	Spurious	> 240 Hz
Distortion	Distortion	< 0.1%
	Max. Tilt Angle for Distortion Specification	10°
	Distortion from Vertical to 20° Tilt	< 0.15% measured at 12 Hz with 0.7 in/s p-p
Damping	Open Circuit Damping	0.48 - 0.54
	Damping	0.7 TYP. with 20 KΩ
Coil Resistance	Standard	1800 ohm
	Tolerance	± 3.5%
Sensitivity	Open Circuit Intrinsic Voltage Sensitivity	85.8 V/m/s (2.18 V/in/s)
	Tolerance	± 3.5%
Physical Characteristics	Moving Mass	14 g (0.49 oz)
	Max. Coil Excursion p.p.	3.50 mm (0.138 in)
	Diameter	30.2 mm (1.19 in)
	Height	39.9 mm (1.57 in)
	Weight	130 g (4.6 oz)
	Operating Temperature Range	- 40° C ~ + 90° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



## Geophone Element

High quality, reliable and cost effective

3 years limited warranty

2-D and 3-D seismic application

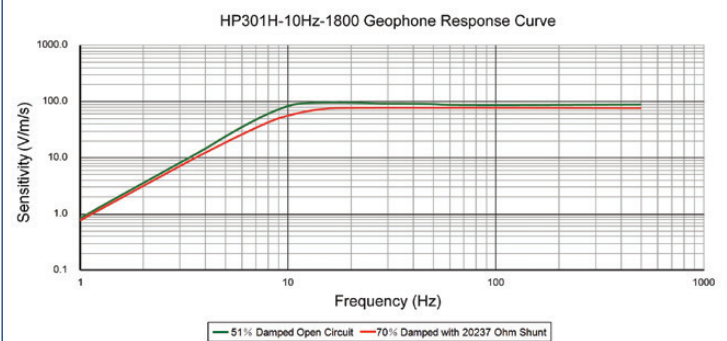
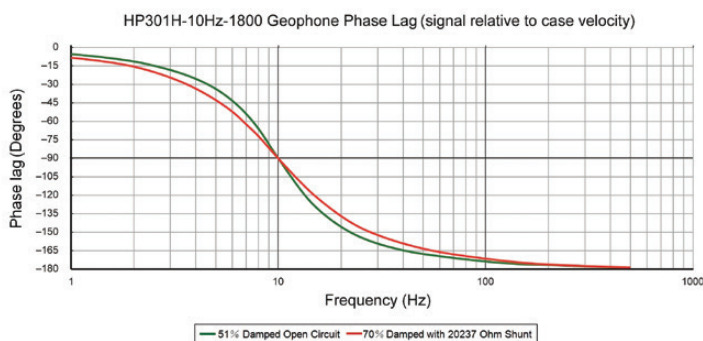
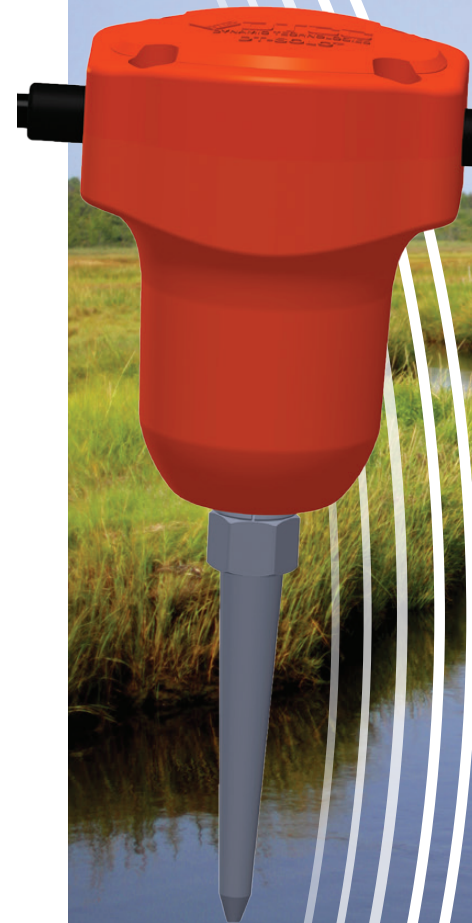
Suitable for land, transition zone, marsh and shallow water environments with different cases

## Specifications

(All parameters are specified at +25° C in the horizontal position unless otherwise stated.)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 3.5%
	Spurious	> 240 Hz
Distortion	Distortion	< 0.1%
	Distortion from Horizontal to 3° Tilt	< 0.15% measured at 12 Hz with 0.7 in/s p-p
Damping	Open Circuit Damping	0.48 - 0.54
	Damping	0.7 TYP. with 20 KΩ
Coil Resistance	Standard	1800 ohm
	Tolerance	± 5%
Sensitivity	Open Circuit Intrinsic Voltage Sensitivity	85.8 V/m/s (2.18 V/in/s)
	Tolerance	+5%, -3.5%
Physical Characteristics	Moving Mass	14 g (0.49 oz)
	Max. Coil Excursion p.p.	3.50 mm (0.138 in)
	Diameter	30.2 mm (1.19 in)
	Height	39.9 mm (1.57 in)
	Weight	130 g (4.6 oz)
	Operating Temperature Range	- 40° C ~ + 90° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



# DT-SOLO 5Hz (HP305V) (P/N:612200100)



## Geophone Element

High quality, reliable and cost effective

1 year limited warranty

2-D and 3-D seismic application

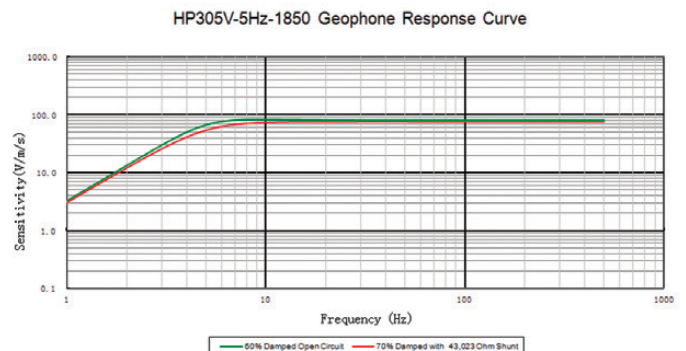
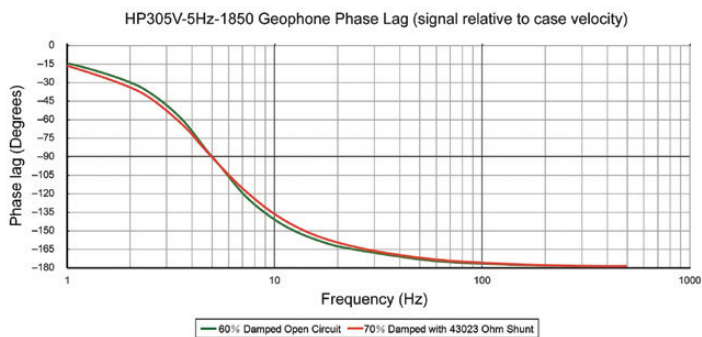
Suitable for land, transition zone, marsh and shallow water environments with different cases

## Specifications

(All parameters are specified at +22° C in the vertical position unless otherwise stated.)

Frequency	Natural Frequency (Fn)	5 Hz
	Tolerance	± 7.5%
	Spurious	> 170 Hz
Distortion	Distortion	<0.1%
	Tilt	0° ~ 10°
	Distortion Measurement Frequency	12 Hz
Damping	Open Circuit Damping	0.6
	Tolerance	± 7.5%
Coil Resistance	Standard	1850 ohm
	Tolerance	± 5%
Sensitivity	Open Circuit Intrinsic Voltage Sensitivity	80 V/m/s (2.03 V/in/s)
	Tolerance	± 5%
Physical Characteristics	Moving Mass	22.7 g (0.801 oz)
	Max. Coil Excursion p.p.	3.0 mm (0.118 in)
	Diameter	30.5 mm (1.20 in)
	Height	40.7 mm (1.60 in)
	Weight	138 g (4.87 oz)
	Operating Temperature Range	- 40° C ~ + 80° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



## Geophone Element

High quality, reliable and cost effective

1 year limited warranty

2-D and 3-D seismic application

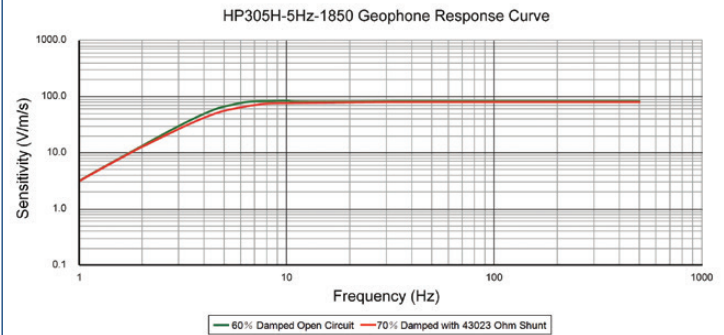
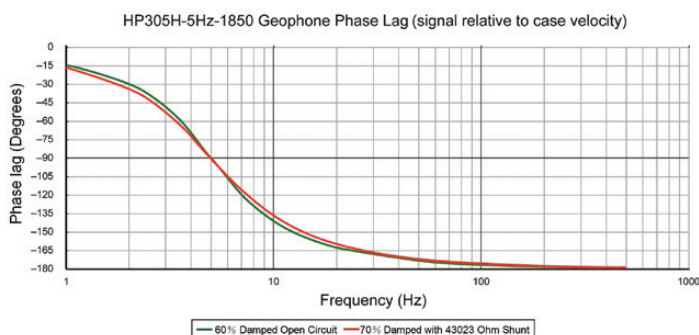
Suitable for land, transition zone, marsh and shallow water environments with different cases

## Specifications

(All parameters are specified at +22° C in the horizontal position unless otherwise stated.)

Frequency	Natural Frequency (Fn)	5 Hz
	Tolerance	± 7.5%
	Spurious	> 150 Hz
Distortion	Distortion	< 0.1%
	Distortion from Horizontal to 3° Tilt	< 0.15% Measured at 12 Hz with 0.7 in/s p-p
Damping	Open Circuit Damping	0.6
	Tolerance	± 7.5%
Coil Resistance	Standard	1850 ohm
	Tolerance	± 5%
Sensitivity	Open Circuit Intrinsic Voltage Sensitivity	80 V/m/s (2.03 V/in/s)
	Tolerance	± 5%
Physical Characteristics	Moving Mass	22.7 g (0.801 oz)
	Max. Coil Excursion p.p.	3.0 mm (0.118 in)
	Diameter	30.5 mm (1.20 in)
	Height	40.7 mm (1.60 in)
	Weight	138 g (4.87 oz)
	Operating Temperature Range	- 40° C ~ + 80° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



# DT-SOLO OMNI (HP315) (P/N:612600000)



## Geophone Element

High quality, reliable and cost effective

2-D and 3-D seismic application

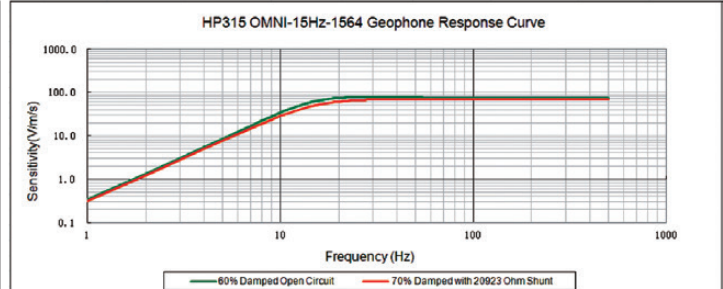
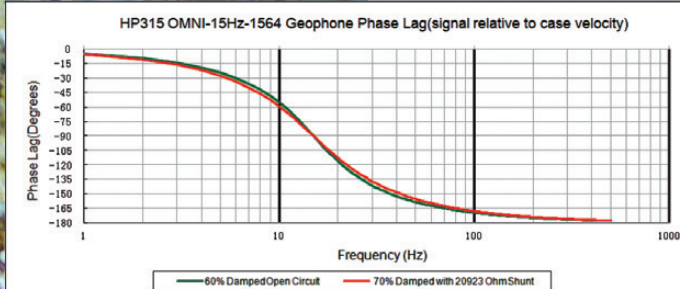
Suitable for multi-component, high resolution seismic exploration

## Specifications

(All parameters are specified at 25° C.)

Frequency	Natural Frequency (Fn)	15 Hz
	Tolerance	+ 10%, - 5%
	Spurious	> 240 Hz
Distortion	Distortion	< 0.2% (15 Hz with 0.2 in/s p-p) < 0.3% (15 Hz with 0.7 in/s p-p)
	Tilt	Horizontal to $\pm 90^\circ$
Damping	Open Circuit Damping	0.6
	Tolerance	$\pm 10\%$
	Damping	0.70 TYP. with 20 K $\Omega$
Coil Resistance	Standard	1564 ohm
	Tolerance	$\pm 5\%$
Sensitivity	Open Circuit Intrinsic Voltage Sensitivity	74.8 V/m/s (1.9 V/in/s)
	Tolerance	+ 5%, - 10%
Physical Characteristics	Moving Mass	13.2 g (0.47 oz)
	Max. Coil Excursion p-p	4.06 mm (0.16 in)
	Min. Coil Excursion p-p	1.02 mm (0.04 in)
	Diameter	30.5 mm (1.20 in)
	Height	40.7 mm (1.60 in)
	Weight	130 g (4.60 oz)
	Operating Temperature Range	- 40° C ~ + 90° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



## High Precision, Low Distortion Geophone Element

Low distortion and close tolerance geophone

High quality, reliable and cost effective

3 years limited warranty

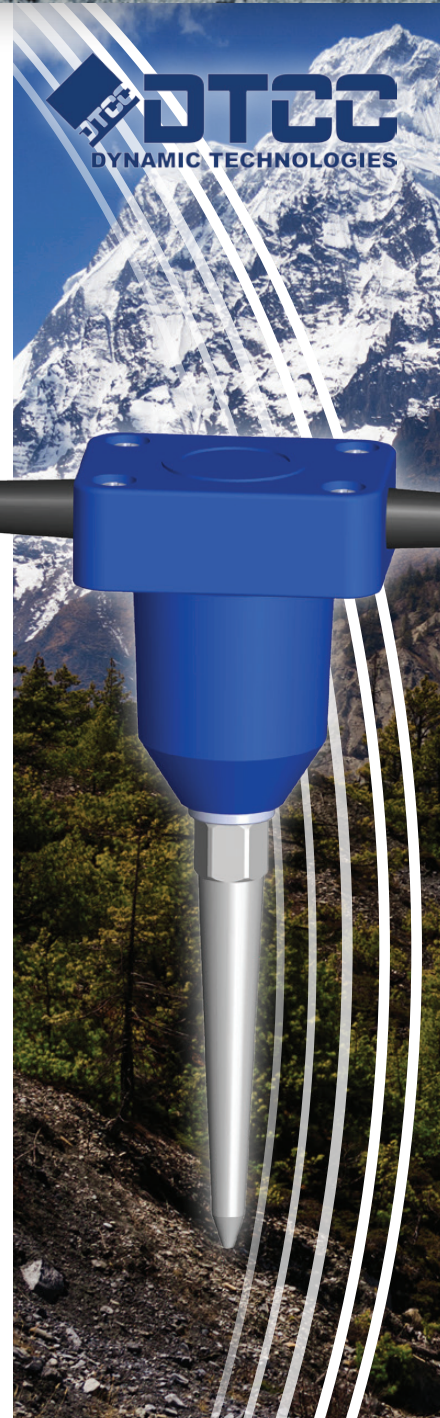
2-D and 3-D seismic application

Suitable for land, transition zone, marsh and shallow water environments with different cases

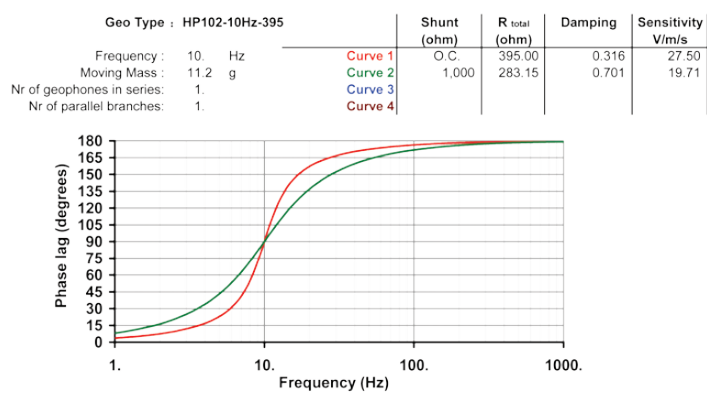
### Specifications (all parameters are specified at + 25° C)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 2.5%
	Max. Tilt Angle for Specified (Fn)	20°
	Typical Spurious Frequency	>250 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	<0.10%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	10°
	Typical Distortion (string of 12 geophones in series damped 0.70, measured at 12 Hz)	≤0.03%
Damping	Typical Open Circuit Damping	0.316
	Damping Calibration-Shunt Resistance	1,000 ohm
	Damping with Calibration-Shunt	0.7
	Tolerance with Calibration-Shunt	± 2.5%
Coil Resistance	Standard	395 ohm
	Tolerance	± 2.5%
Sensitivity	Sensitivity without Shunt Resistor	27.5 V/m/s (0.698 V/in/s)
	Sensitivity with 1000 ohm Shunt Resistor	19.7 V/m/s (0.500 V/in/s)
	Tolerance	± 2.5%
Physical Characteristics	Moving Mass	11.2 g (0.395 oz)
	Maximum Coil Excursion p.p.	1.52 mm (0.060 in)
	Diameter	25.4 mm (1 in)
	Height	33.0 mm (1.30 in)
	Weight	86 g (3.03 oz)
	Operating Temperature Range	-40° C to +100° C

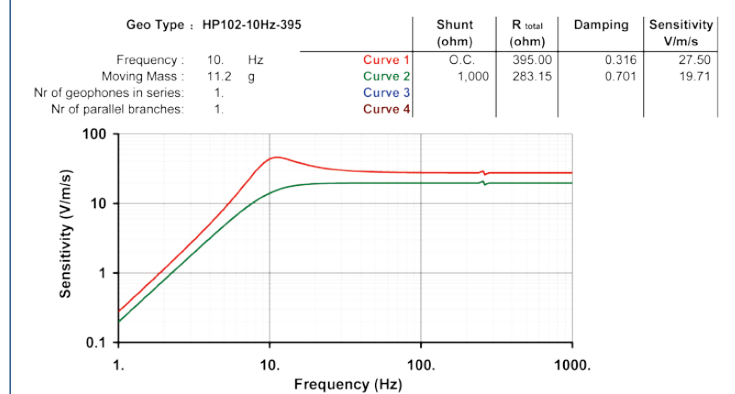
Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve





## High Precision, Low Distortion Geophone Element

Low distortion and close tolerance geophone

High quality, reliable and cost effective

3 years limited warranty

2-D and 3-D seismic application

Suitable for land, transition zone, marsh and shallow water environments with different cases

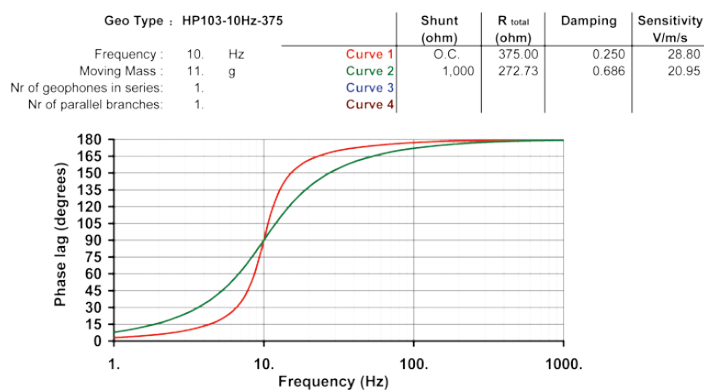
### Specifications (all parameters are specified at + 20° C)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 2.5%
	Max. Tilt Angle for Specified (Fn)	10°
	Typical Spurious Frequency	>240 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	<0.10%
	Distortion Measurement Frequency	12 Hz
	Tilt Angle for Distortion Specification	10°
	Typical Distortion (string of 12 geophones in series, measured at 12 Hz)	≤0.03%
Damping	Typical Open Circuit Damping	0.25
	Damping with Calibration-Shunt 1,000 ohm	0.686
	Tolerance with Calibration-Shunt	+5% - 0%
Coil Resistance	Standard	375 ohm
	Tolerance	± 2.5%
Sensitivity	Sensitivity	28.8 V/m/s (0.73 V/in/s)
	Sensitivity with Shunt 1,339 ohm	22.5 V/m/s
	Sensitivity with Shunt 1,000 ohm	20.9 V/m/s
	Tolerance	± 2.5%
Physical Characteristics	Moving Mass	11 g (0.38 oz)
	Maximum Coil Excursion p.p.	2 mm (0.08 in)
	Diameter	25.4 mm (1 in)
	Height	32.0 mm (1.26 in)
	Weight	85 g (3.0 oz)
	Operating Temperature Range	-40° C to +100° C

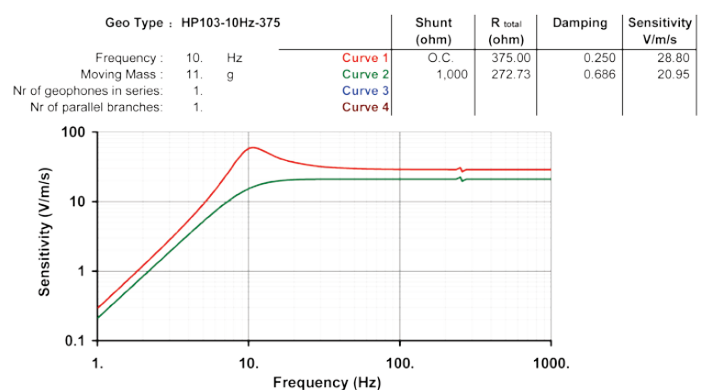
Warranty excludes damage caused by high voltage and physical damage to the element case.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve



## Geophone Element

High quality, reliable and cost effective

3 years limited warranty

2-D and 3-D seismic application

Suitable for land, transition zone, marsh and shallow water environments with different cases



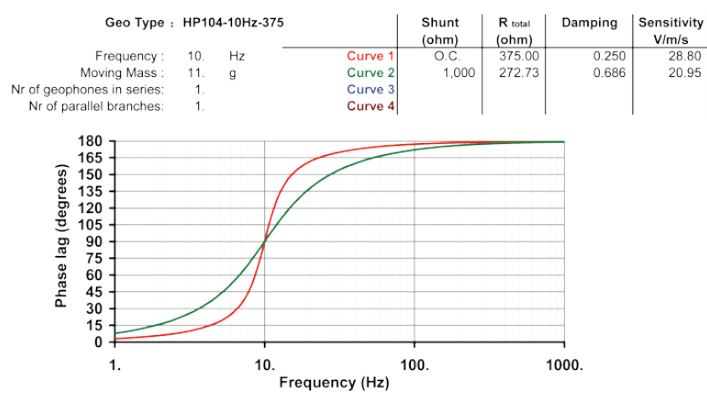
### Specifications (all parameters are specified at + 20° C)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 5%
	Max. Tilt Angle for Specified (Fn)	10°
	Typical Spurious Frequency	>240 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	<0.2%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	10°
Damping	Typical Open Circuit Damping	0.25
	Damping with Calibration-Shunt 1,000 ohm	0.686
	Tolerance with Calibration-Shunt	± 5%
Coil Resistance	Standard	375 ohm
	Tolerance	± 5%
Sensitivity	Sensitivity	28.8 V/m/s (0.73 V/in/s)
	Sensitivity with Shunt 1,000 ohm	20.9 V/m/s
	Tolerance	± 5%
Physical Characteristics	Moving Mass	11 g (0.38 oz)
	Maximum Coil Excursion p.p.	2 mm (0.08 in)
	Diameter	25.4 mm (1 in)
	Height	32.0 mm (1.26 in)
	Weight	85 g (3.0 oz)
	Operating Temperature Range	-40° C to +100° C

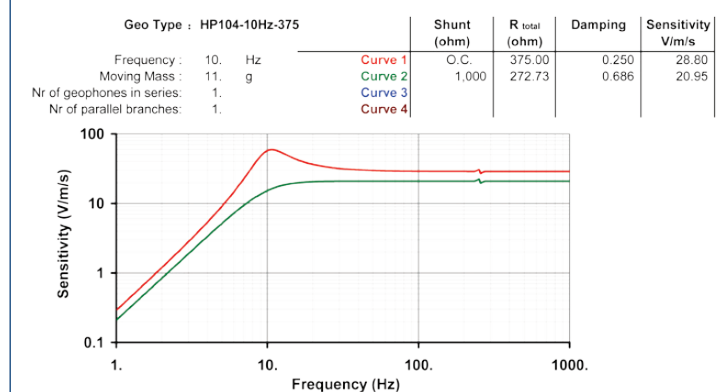
Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve





## Geophone Element

High quality, reliable and cost effective

3 years limited warranty

2-D and 3-D seismic application

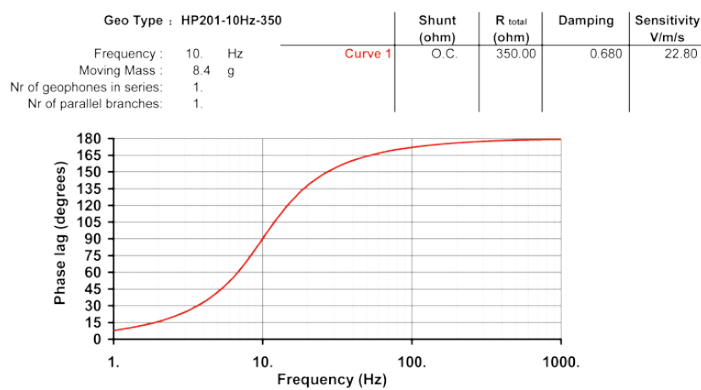
Suitable for land, transition zone, marsh and shallow water environments with different cases

### Specifications (all parameters are specified at + 20° C)

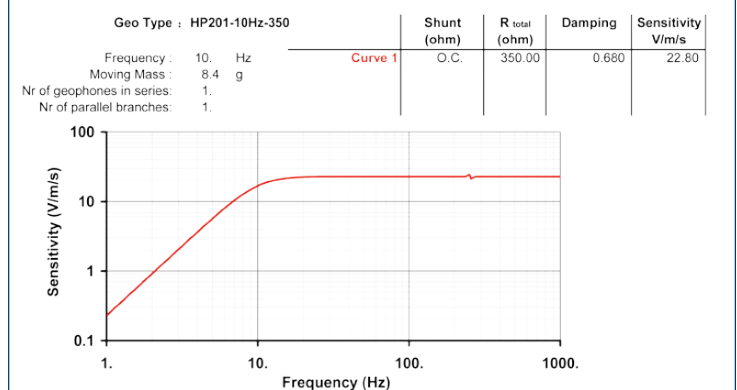
Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 2.5%
	Max. Tilt Angle for Specified (Fn)	15°
	Typical Spurious Frequency	>240 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	<0.075%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	15°
Damping	Typical Open Circuit Damping	0.68
	Tolerance	± 5%
Coil Resistance	Standard	350 ohm
	Tolerance	± 3.5%
Sensitivity	Sensitivity	22.8 V/m/s
	Tolerance	± 2.5%
Physical Characteristics	Moving Mass	8.4 g
	Maximum Coil Excursion p.p.	1.78 mm
	Diameter	27.4 mm
	Height	30.15 mm
	Weight	78 g
	Operating Temperature Range	-40° C to +90° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve



## Geophone Element

High quality, reliable and cost effective

2-D and 3-D seismic application

3 years limited warranty

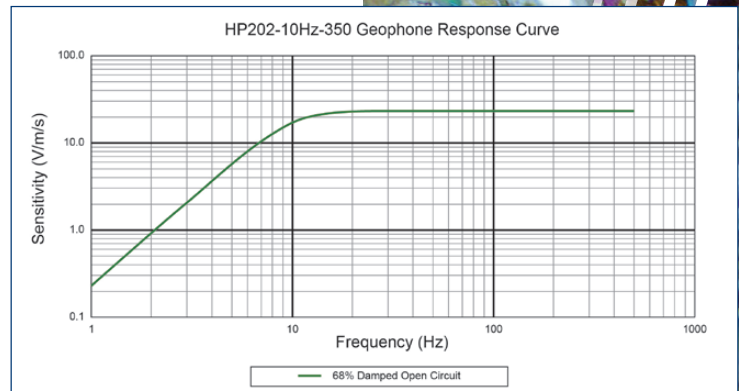
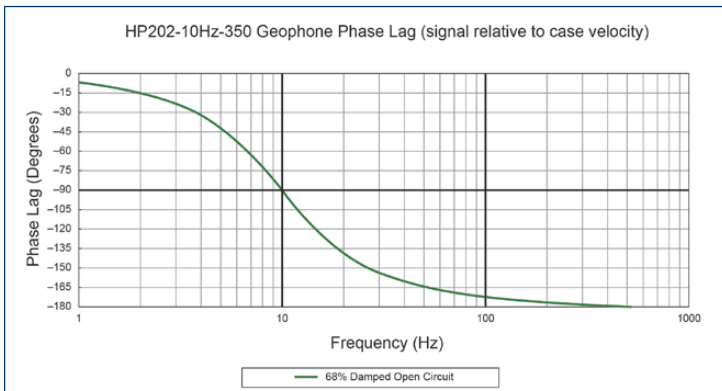
Suitable for multi-component, high resolution seismic exploration

## Specifications

(All parameters are specified at 20° C.)

Frequency	Natural Frequency (Fn)	10 Hz
	Tolerance	± 2.5%
	Max. Tilt Angle for Specified (Fn)	15°
	Typical Spurious Frequency	> 260 Hz
Distortion	Distortion with 0.7 in/s p-p Coil to Case Velocity	< 0.075%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	15°
Damping	Typical Open Circuit Damping	0.68
	Tolerance	± 5%
Coil Resistance	Standard	350 ohm
	Tolerance	± 2.5%
Sensitivity	Sensitivity	22.8 V/m/s
	Tolerance	± 2.5%
Physical Characteristics	Moving Mass	8.4 g (0.3 oz)
	Max. Coil Excursion p-p	1.78 mm (0.07 in)
	Diameter	25.4 mm (1.0 in)
	Height	32 mm (1.26 in)
	Weight	73 g (2.57 oz)
	Operating Temperature Range	- 40° C ~ + 90° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



# DT-HP206V-4.5Hz-375 (P/N:611500100)



## Geophone Element

High quality, reliable and cost effective

1 year limited warranty

2-D and 3-D seismic application

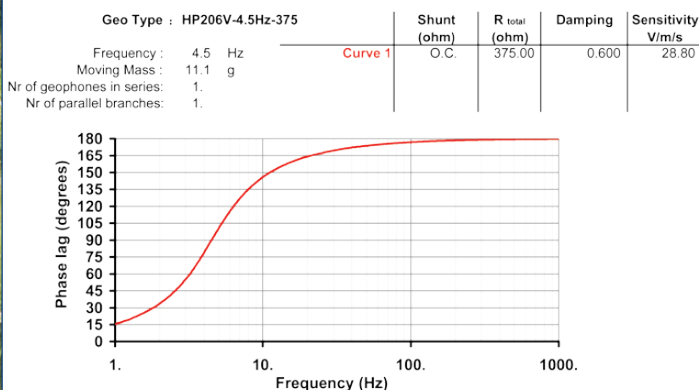
Suitable for land, transition zone, marsh and shallow water environments with different cases

### Specifications (all parameters are specified at + 20° C)

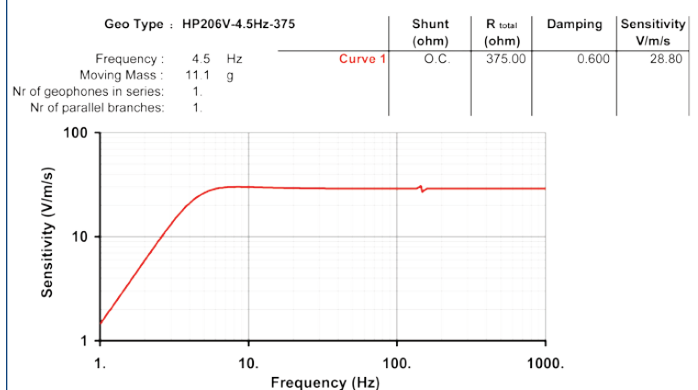
Frequency	Natural Frequency (Fn)	4.5 Hz
	Tolerance	± 0.5 Hz
	Max. Tilt Angle for Specified (Fn)	0°
	Typical Spurious Frequency	>140 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	≤0.2%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	0°
Damping	Typical Open Circuit Damping	0.6
	Tolerance	± 5%
Coil Resistance	Standard	375 ohm
	Tolerance	± 5%
Sensitivity	Sensitivity	28.8 V/m/s
	Tolerance	± 5%
	$R_t B_c F_n$ (ohm Hz)	6000
Physical Characteristics	Moving Mass	11.1 g
	Maximum Coil Excursion p.p.	4.0 mm
	Diameter	25.4 mm
	Height	36.0 mm
	Weight	81 g
	Operating Temperature Range	-40° C ~ +100° C

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve



## Geophone Element

High quality, reliable and cost effective

1 year limited warranty

2-D and 3-D seismic application

Suitable for land, transition zone, marsh and shallow water environments with different cases

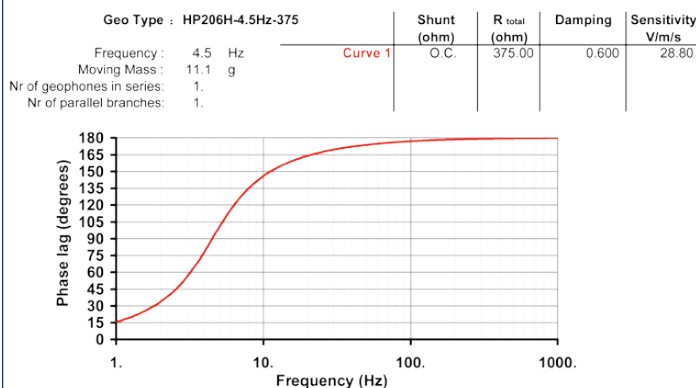
### Specifications (all parameters are specified at + 20° C)

Frequency	Natural Frequency (Fn)	4.5 Hz
	Tolerance	± 0.5 Hz
	Max. Tilt Angle for Specified (Fn)	0°
	Typical Spurious Frequency	>140 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	≤0.2%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	0°
Damping	Typical Open Circuit Damping	0.6
	Tolerance	± 5%
Coil Resistance	Standard	375 ohm
	Tolerance	± 5%
Sensitivity	Sensitivity	28.8 V/m/s
	Tolerance	± 5%
	$R_{tC} F_n$ (ohm Hz)	6000
Physical Characteristics	Moving Mass	11.1 g
	Maximum Coil Excursion p.p.	4.0 mm
	Diameter	25.4 mm
	Height	36.0 mm
	Weight	81 g
	Operating Temperature Range	-40° C ~ +100° C

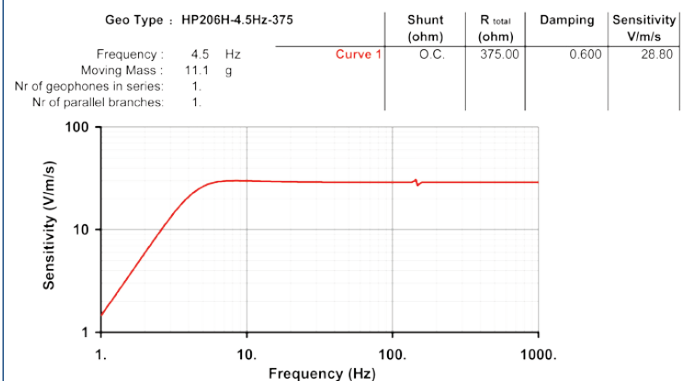
Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve



## Geophone Element

High quality, reliable and cost effective

3 years limited warranty

2-D and 3-D seismic application

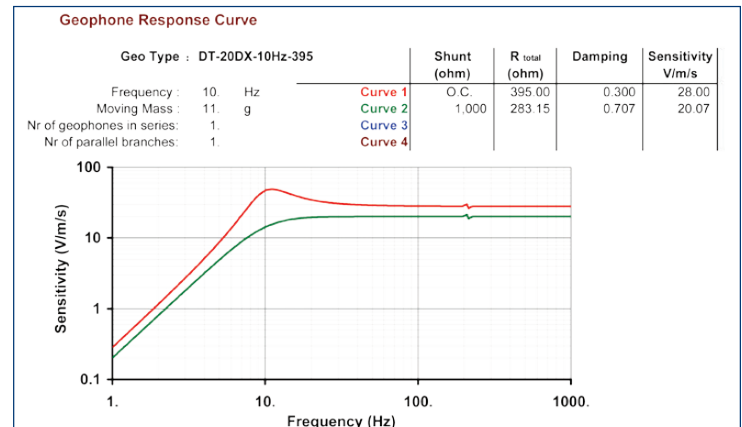
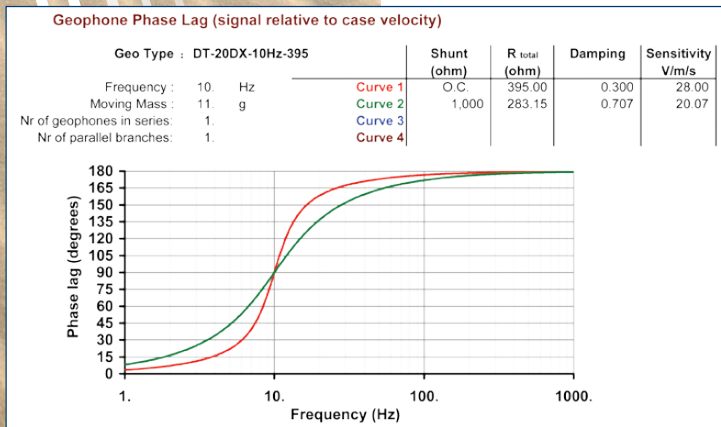
Suitable for land, transition zone, marsh and shallow water environments with different cases

## Specifications (all parameters are specified at + 22° C)

P/N	610100100	610200100	610300100	610400000	610600000	610700000
Type	20DX-8 Hz	20DX-10 Hz	20DX-14 Hz	20DX-28 Hz	20DX-35 Hz	20DX-40 Hz
Natural Frequency (Hz)	8 ± 5%	10 ± 5%	14 ± 5%	28 ± 5%	35 ± 5%	40 ± 5%
Open Circuit Damping	0.38	0.30	0.22	0.27	0.39	0.37
Shunt Resistor: Damping - 1k ohm	0.71 ± 5%	0.70 ± 5%	0.51 ± 5%	0.552 ± 5%	—	—
Damping - 1500 ohm	—	—	—	—	0.612 ± 5%	0.576 ± 5%
Open Circuit Intrinsic Voltage Sensitivity (V/m/s)	28	28	28	39	41	42
Sensitivity with Shunt Resistor (V/m/s)	23 ± 5%	20 ± 5%	20.1 ± 5%	28 ± 5%	29.6 ± 5%	30.4 ± 5%
Coil Resistance (Ohm)	395 ± 5%	395 ± 5%	395 ± 5%	395 ± 5%	575 ± 5%	575 ± 5%
Harmonic Distortion (%)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Typical Spurious Frequency (Hz)	>180	>200	>240	>350	>350	>380
Moving Mass (g)	11				8.2	8.2
Typical Case to Coil Motion (p-p) (mm)	1.5 (p-p)					
Allowable Tilt	20°	20°	20°	90°	90°	90°
Unit Diameter (mm)	25.4			27.0		
Unit Height (mm)	33.3					
Unit Mass (g)	86			95	97	95
Operating Temperature (°C)	-40° C to +100° C		-40° C to +70° C	-40° C to +100° C		

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

If you would like to receive any of the other Geophone Phase or Response curve please contact sales.



## Low Frequency Geophone Element

High quality, reliable and cost effective

1 year limited warranty

2-D and 3-D seismic application

Suitable for land, transition zone, marsh and shallow water environments with different cases

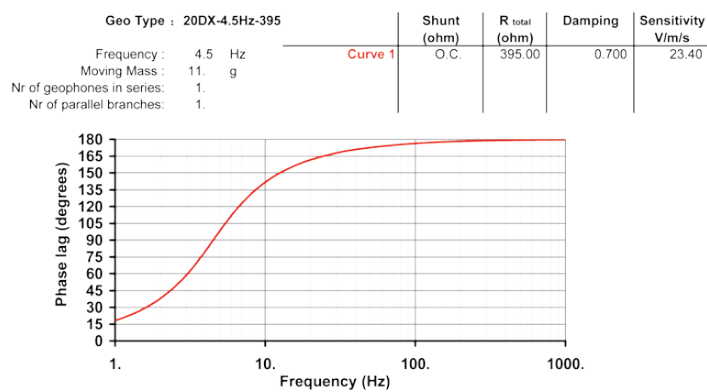
### Specifications (all parameters are specified at + 22° C)

Frequency	Natural Frequency (Fn)	4.5 Hz
	Tolerance	± 0.5 Hz
	Max. Tilt Angle for Specified (Fn)	0°
	Typical Spurious Frequency	>160 Hz
Distortion	Distortion with 0.7 in/s p.p. Coil to Case Velocity	<0.3%
	Distortion Measurement Frequency	12 Hz
	Max. Tilt Angle for Distortion Specification	0°
Damping	Typical Open Circuit Damping	0.7
	Tolerance	± 10%
Coil Resistance	Standard	395 ohm
	Tolerance	± 5%
Sensitivity	Sensitivity	23.4 V/m/s (0.594 V/in/s)
	Tolerance	± 10%
Physical Characteristics	Moving Mass	11 g (0.395 oz)
	Maximum Coil Excursion p.p.	1.5 mm (0.060 in)
	Diameter	25.4 mm (1 in)
	Height	33.0 mm (1.26 in)
	Weight	89 g (3.14 oz)
	Operating Temperature Range	-40° C to +100° C

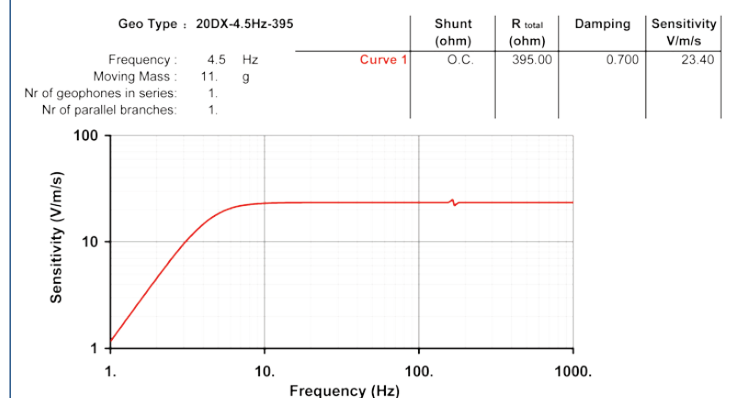
Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



Geophone Phase Lag (signal relative to case velocity)



Geophone Response Curve





**Pressure Sensitive Detector for Geophysical Exploration**

High quality, reliable sensor technology, and cost effective

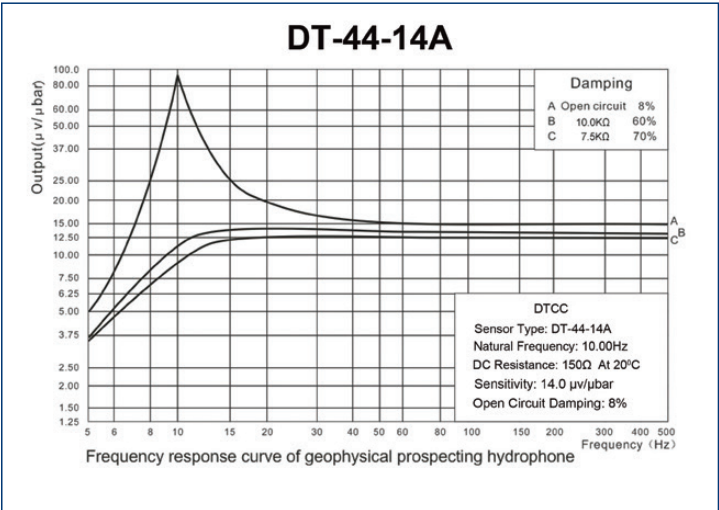
1 year limited warranty

2-D and 3-D seismic application

Suitable for transition zone, marsh and shallow water operations

Natural Frequency ( $\pm 15\%$ )	10 Hz
Voltage Sensitivity ( $\pm 1.5\text{ dB}$ )	14 volts/bar
DC Resistance ( $\pm 10\%$ )	150 ohms
Operating Temperature	0°C to 35°C
Operational Depth	0.3 - 75m
Standard Cable Sizes	0.310 in (0.79 cm)
Polarity	SEG
Dimensions (without outer case)	
Length	12.4 cm
Diameter	5.3 cm
Weight	400 g (with one meter cable)

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



# DT-25-11A (P/N:611700100) and DT-25-14A (P/N:611700200)

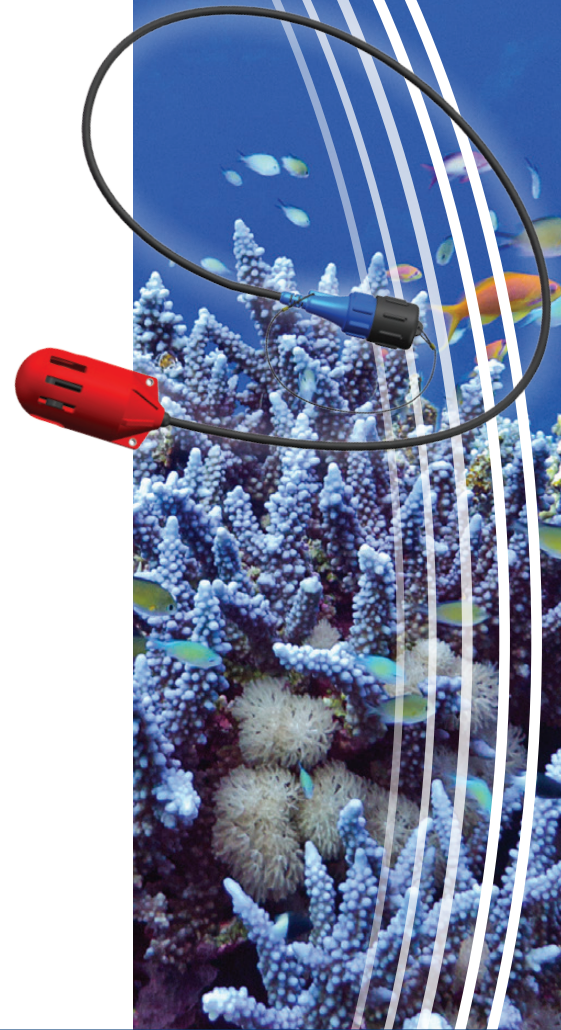
## Pressure Sensitive Detector for Geophysical Exploration

High quality, reliable sensor technology, and cost effective

1 year limited warranty

2-D and 3-D seismic application

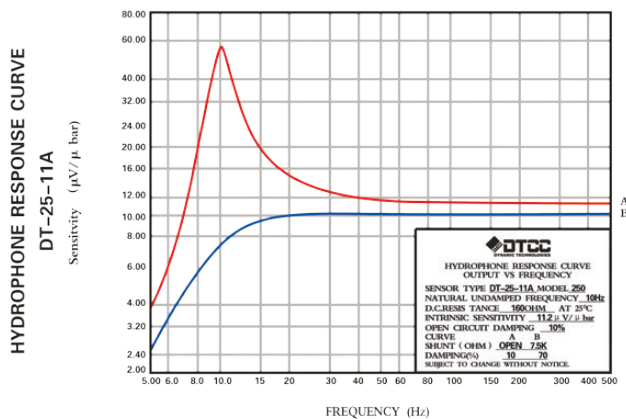
Suitable for transition zone, marsh and shallow water operations



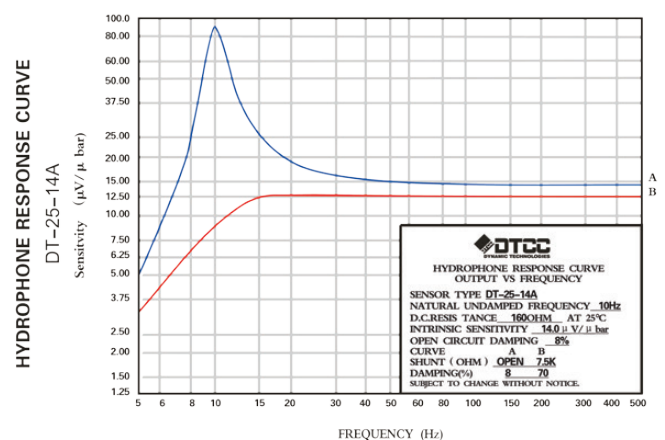
Natural Frequency (±15 %)	10 Hz	
Voltage Sensitivity (±1.5 dB)	11.2 volts/bar	14 volts/bar
DC Resistance (±10%)	160 ohms	
Operating Temperature	0°C to 35°C	
Operational Depth	0.3 - 75m	
Standard Cable Sizes	0.310 in (0.79 cm)	
Polarity	SEG	
Dimensions (without outer case)		
Length	12.4 cm	
Diameter	5.3 cm	
Weight	400 g (with one meter cable)	

Warranty excludes damage caused by high voltage and physical damage to the element case.  
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### DT-25 11.2 volts/bar



### DT-25 14 volts/bar





Dual Sensor

Unique Quad Spring Contact Design, Greatly improves signal transmission and reliability

New rotation mechanism and optimized damping formula reduces internal noise interference

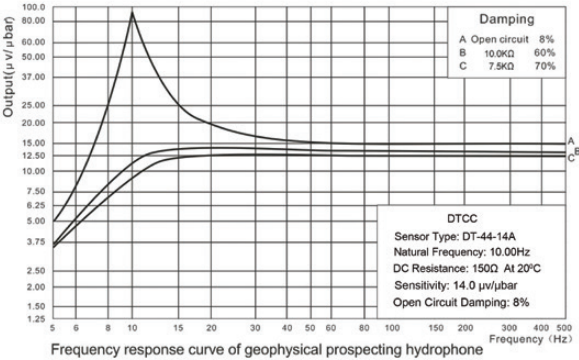
Field Repairable, Helps reduce TZ operation costs

Optimized case shape, helps improve signal coupling

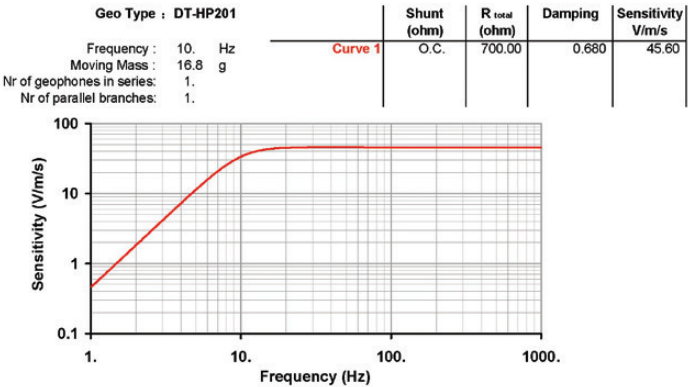
GEOPHONE	
Type	DT-HP201 (Equivalent to SG10)
Natural Frequency	10 Hz (± 2.5%)
Resistance	700 ohm (± 3.5%)
Sensitivity	45.6 V/m/s (± 2.5%)
All Parameters are Specified at 20° C	
HYDROPHONE	
Type	DT-44-14A
Natural Frequency	10 Hz (± 10%)
Resistance	150 ohm (± 10%)
Sensitivity	14 V/bar (± 1.5 dB)
All Parameters are Specified at 20° C	
Depth Limit	0.3 - 75 m
Operating Temperature	0° C to +35° C
Length	355 mm (13.97 in)
Diameter	55 mm (2.16 in)
Weight of the Dual Sensor with Connector and 1.2 m Cable	3.6 kg (7.94 lbs)

Warranty excludes damage caused by high voltage and physical damage to the element case. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

DT-44-14A



Geophone Response Curve



Dual Sensor

Unique Quad Spring Contact Design, Greatly improves signal transmission and reliability

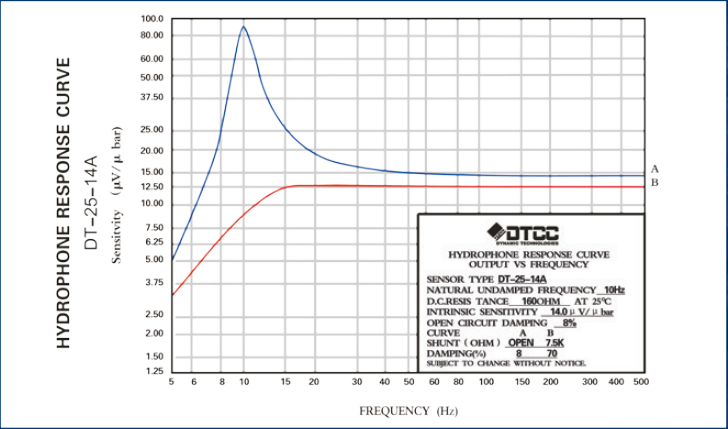
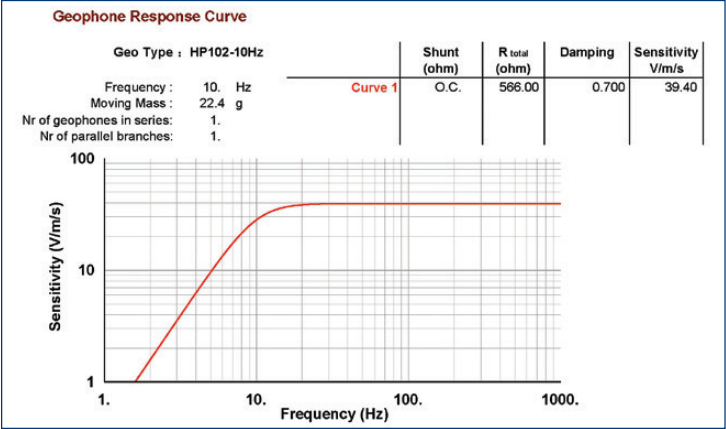
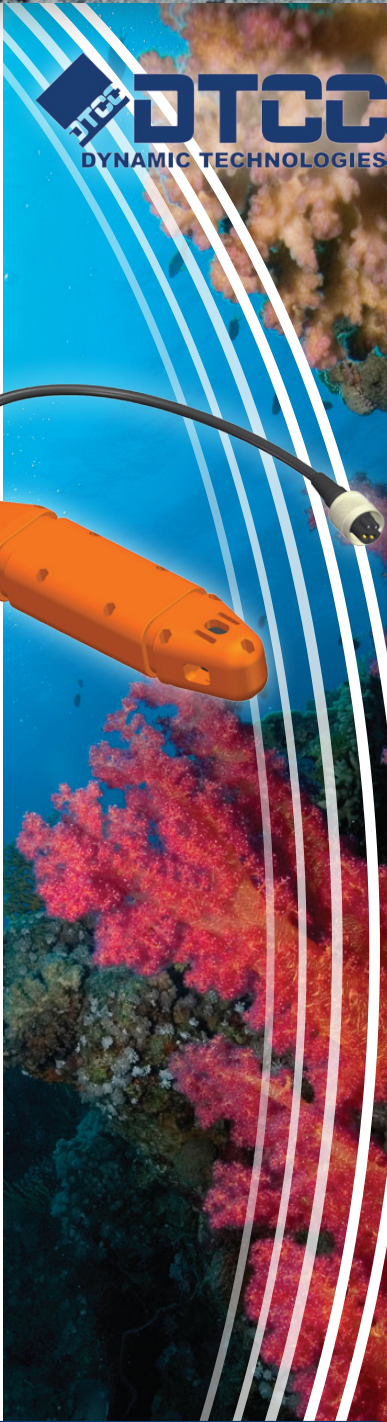
New rotation mechanism and optimized damping formula reduces internal noise interference

Field Repairable, Helps reduce TZ operation costs

Optimized case shape, helps improve signal coupling

GEOPHONE	
Type	DT-HP102 (Equivalent to 32CT)
Natural Frequency	10 Hz (± 2.5%)
Resistance	566 ohm (± 2.5%)
Sensitivity	39.4 V/m/s (± 2.5%)
All Parameters are Specified at 25° C	
HYDROPHONE	
Type	DT-25-14A
Natural Frequency	10 Hz (± 10%)
Resistance	160 ohm (± 10%)
Sensitivity	14 V/bar (± 1.5 dB)
All Parameters are Specified at 25° C	
Depth Limit	0.3 - 75 m
Operating Temperature	0° C to +35° C
Length	355 mm (13.97 in)
Diameter	55 mm (2.16 in)
Weight of the Dual Sensor with Connector and 1.2 m Cable	3.6 kg (7.94 lbs)

Warranty excludes damage caused by high voltage and physical damage to the element case. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

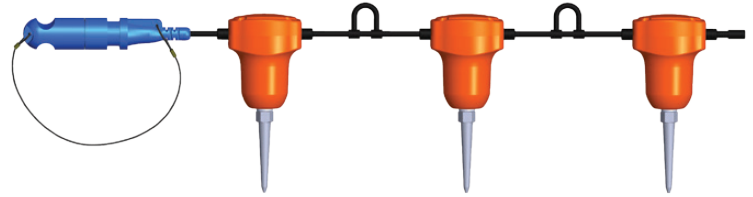


# GEPHONE STRING OPTIONS

## String Configurations

### Standard (male) -

A standard geophone string with one connector is manufactured for a specific configuration



### Reversible (male/female) -

A reversible geophone string gives the crew the ability to connect from either connector and providing greater flexibility during deployment



### Extension (male/female) -

An extension geophone string enables the crew to connect two or more geophone strings to each other for a unique array configuration



With the diverse and extreme conditions seismic contractors find themselves in, DTCC has the ability to provide the correct configuration each and every time. We will customize the string configuration that best meets the customer requirement for their initial prospect and beyond for many years of continued service. Our products are designed and manufactured to meet the toughest and diverse terrains from Land (Urban, Desert to Arctic) to Transition Zone/Marsh Zones to Marine environments. We use the best primary base materials in order to build the best quality products possible, this allows our equipment to function properly in all conditions and terrains for many years of exceptional service.

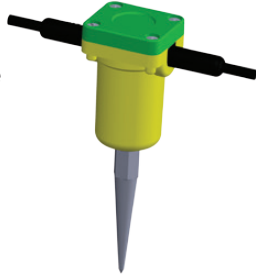
# GEOPHONE STRING OPTIONS

## Geophone Case Types

**Product Name:**  
DLC1 Land Case

**Part Number:**  
622400000

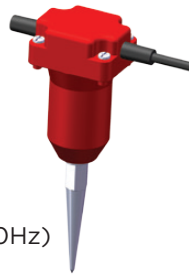
**Used With:**  
HP103, HP104,  
HP204, HP202



**Product Name:**  
DLC2 Land Case

**Part Number:**  
620100000

**Used With:**  
20 DX Series (4.5Hz,  
10Hz, 28Hz, 40Hz, 100Hz)



**Product Name:**  
DLC9 Land Case

**Part Number:**  
620600000

**Used With:**  
HP-102



**Product Name:**  
DLC10 Land Case

**Part Number:**  
620700000

**Used With:**  
HP201



**Product Name:**  
DMC10 Marsh Case

**Part Number:**  
621600000

**Used With:**  
HP201



**Product Name:**  
DMC3 Marsh Case

**Part Number:**  
621100000

**Used With:**  
HP-102, 20DX-10HZ  
HP103, HP104



**Product Name:**  
DMC8 Marsh Case with  
Aluminum Protector

**Part Number:**  
621400200

**Used With:**  
SOLO Series



**Product Name:**  
DLC6 Land Case

**Part Number:**  
620400000

**Used With:**  
SOLO Series



**Product Name:**  
DMC8 Marsh Case

**Part Number:**  
621400000

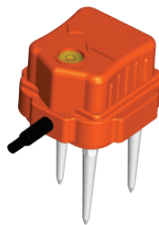
**Used With:**  
SOLO Series



**Product Name:**  
Horizontal 3C Case  
D3C-H1-01

**Part Number:**  
621700000

**Used With:**  
HP-102  
20DX-4.5Hz  
20DX-10Hz



**Product Name:**  
Vertical 3C Case  
D3C-V1-02

**Part Number:**  
622200000

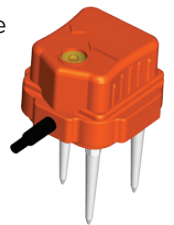
**Used With:**  
HP204



**Product Name:**  
Horizontal 3C Case  
D3C-H1-02

**Part Number:**  
621800000

**Used With:**  
HP204  
HP103



**Product Name:**  
Vertical 3C Case  
D3C-V1-01

**Part Number:**  
622100000

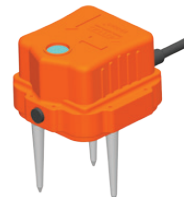
**Used With:**  
HP-102  
20DX-4.5Hz  
20DX-10Hz



**Product Name:**  
Horizontal 3C Case  
D3C-H3

**Part Number:**  
622000000

**Used With:**  
SOLO Series



**Product Name:**  
Vertical 3C Case  
D3C-V3

**Part Number:**  
622300000

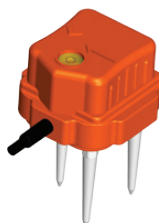
**Used With:**  
SOLO Series



**Product Name:**  
Horizontal 3C Case  
D3C-H2

**Part Number:**  
621900000

**Used With:**  
HP206



# GEOPHONE STRING OPTIONS

## Connector Types

DCK Waterproof

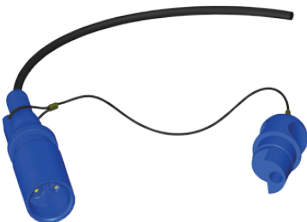


Female  
Part Number: 810100000



Male  
Part Number: 811000000

DCK Wetproof



Female  
Part Number: 810300000



Male  
Part Number: 810200000

DCL Wetproof



Female  
Part Number: 810800000

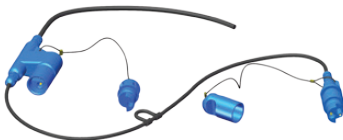


Male  
Part Number: 810700000

Dual Connector



DCK Male-Female  
Waterproof Connector  
Part Number: 810400000

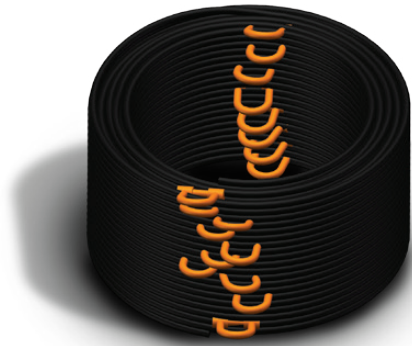


DCK Male-Female  
Wetproof Connector  
Part Number: 810500000



DCL Double End  
Wetproof Connector  
Part Number: 810900000

## DTCC Leader Wires (DLW)



DLW - 2 - 70 - 180 - F  
1      2      3      4      5

1. Manufacturer brand
2. Number of conductors - typical number of conductor: 2, 3,
3. Break strength per conductor lbs - typical break strength of each conductor: 70 lbs, 100 lbs, 225 lbs
4. Wire O.D - wire outside diameter in inches - typically: 0.180, 0.210, 0.250, 0.310
5. Indicates gel filled - "F" indicates the wire is filled with water blocking gel

Type Number	O.D.		Break Strength		Weight		ohms	
	in	mm	lbs	kg	lb/mft	kg/km	mft	km
DLW-2-70-180	0.180	4.57	140	63.5	16.0	23.8	35.1	115
DLW-2-70-180 F	0.180	4.57	140	63.5	15.7	23.4	35.1	115
DLW-3-70-180	0.180	4.57	210	95.3	17.7	26.3	35.1	115
DLW-3-70-180 F	0.180	4.57	210	95.3	17.5	26.0	35.1	115
DLW-2-70-210	0.210	5.33	140	63.5	20.0	29.8	35.1	115
DLW-2-70-210 F	0.210	5.33	140	63.5	19.8	29.5	35.1	115
DLW-3-70-210	0.210	5.33	210	95.3	21.8	32.4	35.1	115
DLW-3-70-210 F	0.210	5.33	210	95.3	21.6	32.1	35.1	115
DLW-2-70-250	0.250	6.35	140	63.5	27.7	41.2	35.1	115
DLW-2-70-250 F	0.250	6.35	140	63.5	27.4	40.8	35.1	115
DLW-3-70-250	0.250	6.35	210	95.3	29.4	43.7	35.1	115
DLW-3-70-250 F	0.250	6.35	210	95.3	29.2	43.4	35.1	115
DLW-2-100-180	0.180	4.57	200	90.7	18.1	26.9	24.1	79
DLW-2-100-180 F	0.180	4.57	200	90.7	17.7	26.4	24.1	79
DLW-2-100-210	0.210	5.33	200	90.7	22.2	33.0	24.1	79
DLW-2-100-210 F	0.210	5.33	200	90.7	21.8	32.5	24.1	79
DLW-3-100-210	0.210	5.33	300	136.1	25.0	37.2	24.1	79
DLW-3-100-210 F	0.210	5.33	300	136.1	24.7	36.7	24.1	79
DLW-2-100-225	0.225	5.71	200	90.7	24.8	36.9	24.1	79
DLW-2-100-225 F	0.225	5.71	200	90.7	24.4	36.3	24.1	79
DLW-3-100-225	0.225	5.71	300	136.1	27.6	41.1	24.1	79
DLW-3-100-225F	0.225	5.71	300	136.1	27.3	40.6	24.1	79
DLW-2-100-250	0.250	6.35	200	90.7	29.8	44.3	24.1	79
DLW-2-100-250F	0.250	6.35	200	90.7	29.4	43.8	24.1	79
DLW-3-100-250	0.250	6.35	300	136.1	32.6	48.5	24.1	79
DLW-3-100-250F	0.250	6.35	300	136.1	32.3	48.0	24.1	79
DLW-2-100-310	0.310	7.87	200	90.7	41.5	61.8	24.1	79
DLW-2-100-310F	0.310	7.87	200	90.7	41.2	61.3	24.1	79
DLW-3-100-310	0.310	7.87	300	136.1	44.4	66.0	24.1	79
DLW-3-100-310F	0.310	7.87	300	136.1	44.0	65.5	24.1	79
DLW-2-225-310F	0.310	7.87	450	204.1	48.4	71.98	8.8	29







[www.dtcc.biz](http://www.dtcc.biz)

### **International Sales**

Dynamic Technologies (Canada) Corp.  
Unit 145, 3901-54 Ave. NE,  
Calgary, Alberta T3J 3W5, Canada

t: 403.701.8398  
f: 403.398.1450  
e: [sales@dtcc.biz](mailto:sales@dtcc.biz)

### **China Manufacturing**

Langfang Dynamic Technologies Co., Ltd.  
NO.31, 1st Road, Langfang Development Zone,  
Hebei, China. 065001

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t: +86-316-5918842  
f: +86-316-5918832  
e: [info@dtcc.biz](mailto:info@dtcc.biz)