tomography crosshole downhole surface seismic

geotomographie

manufacturer of seismic borehole equipment

BGK3/7 | Borehole Geophone

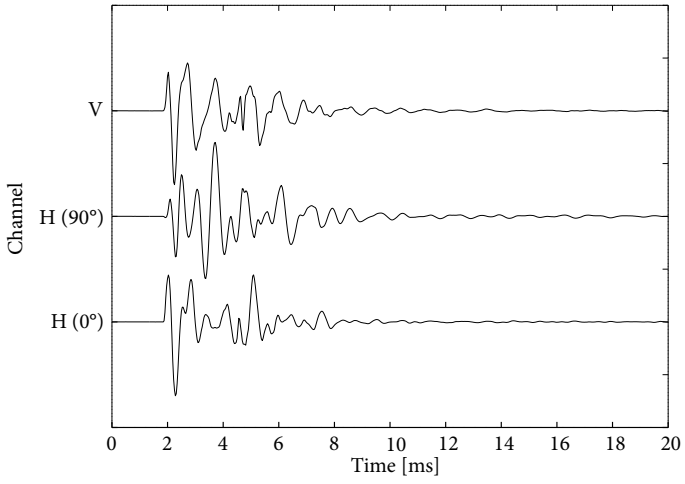
The borehole geophone BGK series is used to receive P- and S-waves in dry or water filled boreholes. The borehole geophone BGK3 consists of a tri-axial sensor whereas the BGK7 consists of six horizontal sensors, separated by 30° intervals, and one vertical sensor. The geophone is coupled to the borehole wall by a pneumatic clamping system (inflatable bladder). Air is supplied to the BGK through an electro-pneumatic hybrid cable with a Kevlar tension string. A magnetic compass shows azimuthal deviation to North and can be used to get the orientation of the geophone in the borehole. The cable is terminated by a connector to the seismograph.

Borehole geophone BGK with cable drum, pneumatic clamping mechanism using an inflatable bladder and a standard bicycle pump and magnetic compass display.

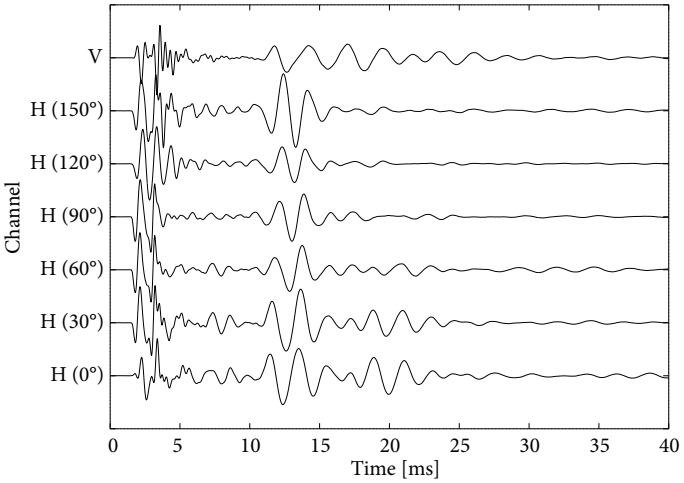
Technical Details

Natural sensor frequency: 10 Hz
(others on request)
Sensor arrangement: Tri-axial (BGK3)
or 6 horizontal (30°)/1 vertical (BGK7)
Operational depth: Up to 100 m
Receiver length: 705 mm
Receiver weight: 3 kg
Cable weight per metre: 145 g
Cable strength: 2150 N
Borehole diameter: 75 mm
(or larger if spacers are used)
Clamping system: Inflatable bladder
Orientation: Magnetic compass (+/-2.5°)
Depth indicator: Cable marking every 2 m
Connector: To any seismograph
Storage: On drum

Data Example BGK3



Data Example BGK7



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