

# Borehole Deviation Verticality probe BDV 42 & BDV 42G




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Upper ballast  
weight

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Gamma ray  
Crystal position

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Power supplies and  
communication (optional)

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Upper ballast weight

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Lower ballast weight

The **BDV 42** probe is used whenever accurate information on the precise location of underground features intersected by a borehole is required. It can also be employed to ascertain that a well has been drilled according to predefined verticality criteria.

The sonde is based on a highprecision combination magnetometer and accelerometer sensor providing a continuous measurement of borehole inclination and azimuth. Azimuth information is not available in steel cased wells.

Processing software permits the exact xyz coordinates of any point within the borehole to be determined. The calculated borehole trajectory can be represented graphically in the form of vertical sections, viewed from above, threedimensionally or any combination of these possibilities.

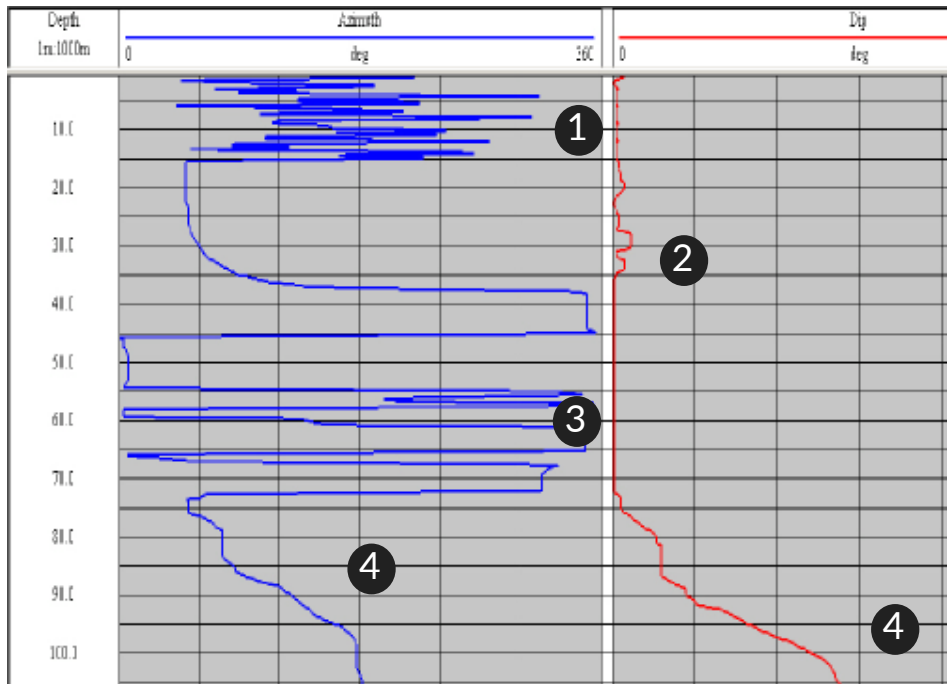
## SPECIFICATIONS :

- Diameter : 42.2 mm
- Length : 1800 mm
- Length (with ballasts weights) : 2070 mm
- Weight : 7 Kg
- Weight (with ballasts weights) : 11 Kg
- Max. Temp / Pressure : 70°C / 200 bar
- Measurement resolution  
Azimuth : 0.1 & Inclination : 0.1
- Measurement accuracy  
Azimuth : 0.5 & Inclination : 0.2

## OPTIONS ACCESSORIES :

- Gamma ray sensor
- Bowspring centralisers, centraliser locking collars, supplementary sinker weight, upper tool ballast weight, lower tool ballast weight, transport case

### Examples



1

The magnetometer is influenced by the surface steel casing.

2

The borehole is vertical

3

Azimuth values vary erratically. This is a normal effect in a vertical borehole.

4

The borehole begins to deviate towards the South. The inclination increases from 0 to 5°.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Labels	Length	Az(°REEL)	Incl(°)	InclZ	Depth	Depth	TVD	DevX	DevY	X	Y	Z	Z
1	0	0	184.17	88.8	0.0000	0.0000	0.0000	0.00	0.00	0.00	423674.80	155468.88	131.40	
2	0.03	184.27	88.8	0.0007	-0.0022	-0.0299	0.00	0.00	-0.03	-0.03	423674.79	155468.85	131.40	
3	0.83	184.27	88.80	0.0184	-0.0592	-0.7936	0.02	-0.06	-0.82	-0.82	423674.73	155468.06	131.38	
4	0.88	184.67	89.90	0.0001	-0.0041	-0.0468	0.02	-0.07	-0.87	-0.87	423674.73	155468.01	131.38	
5	0.93	186.37	88.20	0.0016	-0.0055	-0.0467	0.02	-0.07	-0.82	-0.82	423674.72	155468.98	131.38	
6	0.98	182.77	88.50	0.0013	-0.0024	-0.0469	0.02	-0.07	-0.87	-0.87	423674.72	155468.91	131.38	
7	1.03	183.37	88.20	0.0016	-0.0029	-0.0469	0.02	-0.08	-1.02	-1.02	423674.72	155468.86	131.37	
8	1.08	188.47	88.20	0.0016	-0.0074	-0.0464	0.03	-0.08	-1.07	-1.07	423674.71	155468.81	131.37	
9	1.13	181.87	88.80	0.0037	-0.0016	-0.0468	0.03	-0.09	-1.12	-1.12	423674.71	155468.76	131.37	
10	1.18	186.27	88.30	0.0015	-0.0055	-0.0467	0.03	-0.09	-1.17	-1.17	423674.70	155468.71	131.37	
11	1.23	182.77	88.80	0.0037	-0.0024	-0.0468	0.04	-0.09	-1.22	-1.22	423674.70	155468.66	131.36	
12	1.28	183.37	89.10	0.0008	-0.0029	-0.0469	0.04	-0.10	-1.27	-1.27	423674.70	155468.61	131.36	
13	1.33	187.87	87.30	0.0024	-0.0068	-0.0465	0.04	-0.10	-1.32	-1.32	423674.69	155468.56	131.36	
14	1.38	185.37	87.50	0.0022	-0.0050	-0.0467	0.04	-0.11	-1.37	-1.37	423674.69	155468.51	131.36	
15	1.43	185.37	87.50	0.0022	-0.0047	-0.0467	0.04	-0.11	-1.42	-1.42	423674.68	155468.46	131.36	
16	1.48	185.47	87.90	0.0019	-0.0048	-0.0467	0.04	-0.12	-1.47	-1.47	423674.68	155468.41	131.35	
17	1.53	181.67	88.20	0.0042	-0.0015	-0.0468	0.05	-0.12	-1.52	-1.52	423674.68	155468.36	131.35	
18	1.58	187.27	87.10	0.0025	-0.0063	-0.0465	0.05	-0.13	-1.57	-1.57	423674.67	155468.31	131.35	
19	1.63	186.37	87.70	0.0020	-0.0055	-0.0467	0.05	-0.13	-1.62	-1.62	423674.66	155468.26	131.35	
20	1.68	188.87	88.00	0.0017	-0.0077	-0.0464	0.05	-0.14	-1.67	-1.67	423674.66	155468.21	131.34	
21	1.73	187.37	88.40	0.0031	-0.0064	-0.0465	0.06	-0.14	-1.72	-1.72	423674.65	155468.16	131.34	
22	1.78	182.67	88.50	0.0013	-0.0101	-0.0469	0.06	-0.16	-1.77	-1.77	423674.64	155468.11	131.34	
23	1.83	183.97	88.60	0.0030	-0.0120	-0.0464	0.06	-0.17	-1.82	-1.82	423674.63	155468.06	131.34	
24	1.88	181.07	87.20	0.0024	-0.0096	-0.0460	0.06	-0.18	-1.86	-1.86	423674.62	155468.02	131.33	
25	1.93	186.27	87.90	0.0018	-0.0140	-0.0480	0.07	-0.19	-1.91	-1.91	423674.60	155467.97	131.33	
26	1.98	189.37	87.90	0.0018	-0.0081	-0.0463	0.07	-0.20	-1.96	-1.96	423674.60	155467.92	131.33	
27	2.03	184.67	87.10	0.0025	-0.0128	-0.0483	0.07	-0.21	-2.01	-2.01	423674.58	155467.87	131.33	
28	2.08	182.27	88.50	0.0039	-0.0106	-0.0467	0.07	-0.22	-2.06	-2.06	423674.57	155467.82	131.32	
29	2.13	182.77	89.00	0.0010	-0.0110	-0.0468	0.08	-0.23	-2.11	-2.11	423674.56	155467.77	131.32	
30	2.18	180.17	89.50	0.0004	-0.0088	-0.0462	0.08	-0.24	-2.16	-2.16	423674.55	155467.72	131.32	
31	2.23	183.27	87.80	0.0019	-0.0115	-0.0468	0.08	-0.25	-2.21	-2.21	423674.54	155467.67	131.32	
32	2.28	187.67	87.80	0.0019	-0.0067	-0.0465	0.08	-0.26	-2.26	-2.26	423674.54	155467.63	131.32	
33	2.33	189.77	88.50	0.0013	-0.0095	-0.0463	0.08	-0.27	-2.30	-2.30	423674.53	155467.58	131.32	
34	2.38	188.87	88.50	0.0013	-0.0078	-0.0466	0.08	-0.28	-2.35	-2.35	423674.52	155467.53	131.32	
35	2.43	187.67	88.20	0.0016	-0.0067	-0.0465	0.08	-0.29	-2.40	-2.40	423674.51	155467.48	131.31	
36	2.48	180.77	88.60	0.0012	-0.0093	-0.0461	0.09	-0.29	-2.45	-2.45	423674.50	155467.43	131.31	
37	2.53	187.07	88.60	0.0012	-0.0062	-0.0466	0.09	-0.30	-2.50	-2.50	423674.50	155467.38	131.31	
38	2.58	187.67	89.30	0.0006	-0.0066	-0.0466	0.09	-0.31	-2.55	-2.55	423674.49	155467.33	131.31	
39	2.63	187.97	89.00	0.0009	-0.0069	-0.0465	0.09	-0.31	-2.60	-2.60	423674.48	155467.28	131.31	
40	2.68	188.67	88.50	0.0013	-0.0058	-0.0466	0.09	-0.32	-2.65	-2.65	423674.48	155467.23	131.31	
41	2.73	188.27	88.80	0.0010	-0.0072	-0.0465	0.09	-0.32	-2.70	-2.70	423674.47	155467.18	131.31	
42	2.78	180.57	89.10	0.0008	-0.0092	-0.0461	0.09	-0.33	-2.75	-2.75	423674.46	155467.13	131.31	
43	2.83	181.47	87.60	0.0021	-0.0099	-0.0460	0.09	-0.34	-2.80	-2.80	423674.45	155467.08	131.31	

