The well head serves the purpose of closing off the top of the well. It supports the weight of the riser pipe and prevents intrusion of contaminants into the well. Well heads in the standard BBT product range are dimensioned in conformance with DIN and are available in nominal diameters of DN150 and larger.

## Sleeve Pipe

The sleeve pipe is installed around the well casing and fixed in place by embedment in a concrete base. The sleeve pipe should be at least 100 mm larger in diameter than the casing; the annular void between the two can be sealed off if necessary. The upper end of the sleeve pipe incorporates a flange mount for the cover. The lower end of the sleeve pipe incorporates either a $360^{\circ}$ lip or edge anchors for secure embedment in the concrete base.

## Cover

The cover provides the closure for the upper side of the well. The outlet pipe, located in the centre of the cover, incorporates a connector on its lower end for the riser pipe and a loose flange on its upper end. In addition, the cover has leadthroughs for the pump cable, sensor cable and water level standpipe. The cover normally should be constructed without reinforcing ribs. The weight of the riser pipe is supported centrally by the


Full well head assembly including cover and sleeve pipe

Another means of fixing the sleeve pipe in place is by means of a base flange which is screw-mounted on anchor plugs inserted in an existing concrete base.
cover. The cover thicknesses given in the table overleaf are sufficiently sturdy to support riser pipes up to 150 m in length with an integrated submersible pump. The cover does not incorporate hoisting lugs; lifting is done using a hoisting flange which provides more uniform support than lugs do in terms of the statics involved.

# Data Sheet / Well Head 

Well Heads / Standard BBT Product Range

|  | DN | 150 | 200 | 250 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sleeve pipe | pipe | 168.3 | 219.1 | 273.0 | 323.9 | 406.4 | 508.0 | 609.6 | 711.0 | 813.0 | 914.0 | 1016.0 |
|  | wall thickness | 3.0 | 4.0 |  |  |  | 5.0 |  |  |  |  |  |
|  | height | 400 |  |  |  | 500 |  |  |  |  |  |  |
| Cover | outer diameter | 240 | 290 | 345 | 396 | 498 | 600 | 702 | 803 | 905 | 1006 | 1108 |
|  | thickness | 10 |  |  |  | 15 |  | 20 |  |  |  |  |
| Bolt holes | bolt-hole circle | 210 | 260 | 315 | 356 | 458 | 560 | 662 | 763 | 865 | 966 | 1068 |
|  | no. of bolt holes | 8 |  |  |  | 12 |  | 16 |  | 20 |  |  |
|  | diameter | 14.5 |  |  |  | 19 |  |  |  |  |  |  |
| Screws | w/o insulation | M12 $\times 50$ |  |  |  | M16 $\times 65$ |  |  |  |  |  |  |
|  | w/ insulation | M12 $\times 60$ |  |  |  | M16 $\times 80$ |  |  |  |  |  |  |

 Standard BBT well heads are not watertight to pressurized water (i.e. as found in artesian wells).
Custom-made designs in accordance with customer specifications / drawings are also available on All dimensions given in mm

## Cable glands

External threading
Cable diameter range
Spanner size
4-core cable (H07RN-F)

