## NEW DEVELOPMENTS

### 7.2. THE CORING DEVICE UKBS-185/100

The coring device UKBS-185/ 100 is designed for sections. The basic design of the device is intended drilling boreholes of 0 212.7...311.2 mm and taking to take unsealed core samples. If it is necessary to a core of 100 mm . The device
consists of the take a sealed core sample, the device is equipped body, the core receiver, an axial bearing, and the with the proper number of fiber glass or aluminum core sampler. It may have one, two, three, and four core tubes.


UKBS-185/100

MAIN PARAMETERS:
The housing OD, mm 185
Core diameter, mm 100
Upper thread connection 3-133
Lower thread connection6a 3-133

| Number of sections | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Length, $m$ | 10,1 | 18,7 | 27,3 | 35,9 |
| Core receiving part, $m$ | 8,9 | 17,5 | 26,1 | 34,7 |

### 7.3. FLUSHING AND MUDDING DEVICE

The Flushing and Mudding Device of multiple use is a circulation valve, which is able to redirect the fluid flow from inside the drilling string into the annular space, bypassing all the BHA elements located downstream of this device.

FMD is activated through the activation ball while pumping the drilling mud. When the ball sits down on the seat, all the BHA elements located downstream of the FMD are cut from the flushing fluid flow. The list of tasks that can be solved by the FMD without tripping operations:

- Injection of all types of mud and plugging materials to the lost circulation zones.
- Improvement of the borehole cleaning by
increasing the flushing flow rate (in particular, while drilling a substantial vertical deviation and horizontal wells).
- Mud parameters recovery.
- Replacing the technical fluids in the process
of borehole development, completion, and workover.
The FMD has a unique feature - the circulation ports of the activated FMD are closed when the drilling pump is stopped, thus preventing the flushing fluid backflow from the annular space into the drilling string.
The number of FMD activation/deactivation cycles depends on the volume of the ball catcher basket and can be increased by the customer's request.


FMD-120

