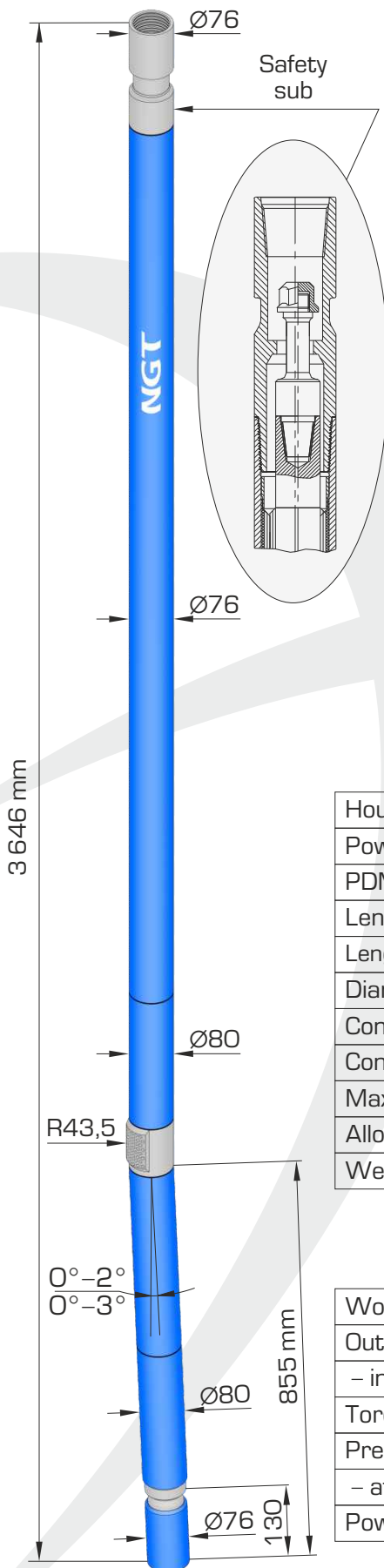


## DR-76.NGT.4/5.20.M2



PDM DR-76.NGT.4/5.20.M2 is a new universal hydraulic downhole motor used for:

- drilling of oil and gas wells with 83,0–98,4 mm bits,
- well reconstruction by sidetracking with rock bits, PDC bits, including bicentric ones;
- well workover operations.

An adjustable bent sub is placed between bearing section and power section. The adjustment range is between 0° and 2° or between 0° and 3°.

Bearing section has axial multi-row rolling bearing and radial hard alloy bearings. Due to a very short shoulder up to the point of axes misalignment (only 855 mm) drillers can:

- perform tripping without significant pressing of a bit to internal walls in the production string;
- perform sidetracking of complex profile where it is required to alternate deviated intervals of more than 5°/10 m built rate and stabilization intervals with rotation of a drill string without the assembly tripping-out to replace the bend angle;
- minimize risk of leaving the motor parts in the well, as all the threads are screwed applying 3M glue, and each motor is complete with safety sub;
- do a large volume of work with one motor (it is especially important for hard-to-reach regions) as the overhaul life reaches approximately 200 hrs.

### Technical specification

|   |           |
|---|-----------|
| Housing OD, mm  | 76/80     |
| Power section lobe configuration                      | 4/5       |
| PDM length, mm  | 3 646     |
| Length of stator rubber lining, mm                    | 2 000     |
| Length of bearing section up to a curvature point, mm | 855       |
| Diameter of bits used, mm                             | 83,0–98,4 |
| Connecting thread to drill pipes                      | 2 3/8 Reg |
| Connecting thread to bits                             | 2 3/8 Reg |
| Maximum density of drilling mud, g/cm <sup>3</sup>    | 1,6       |
| Allowed axial load, kN                                | 45        |
| Weight, kg  | 97        |

### Power specification

|                               |         |
|-------------------------------|---------|
| Working fluid flow rate, l/s  | 3–5     |
| Output shaft rotation speed:  |         |
| - in no-load conditions, RPM  | 240–396 |
| Torque at maximum power, kN*m | 0,6–0,8 |
| Pressure drop:                |         |
| - at maximum power, MPa       | 8–10    |
| Power, kW                     | 11–25   |