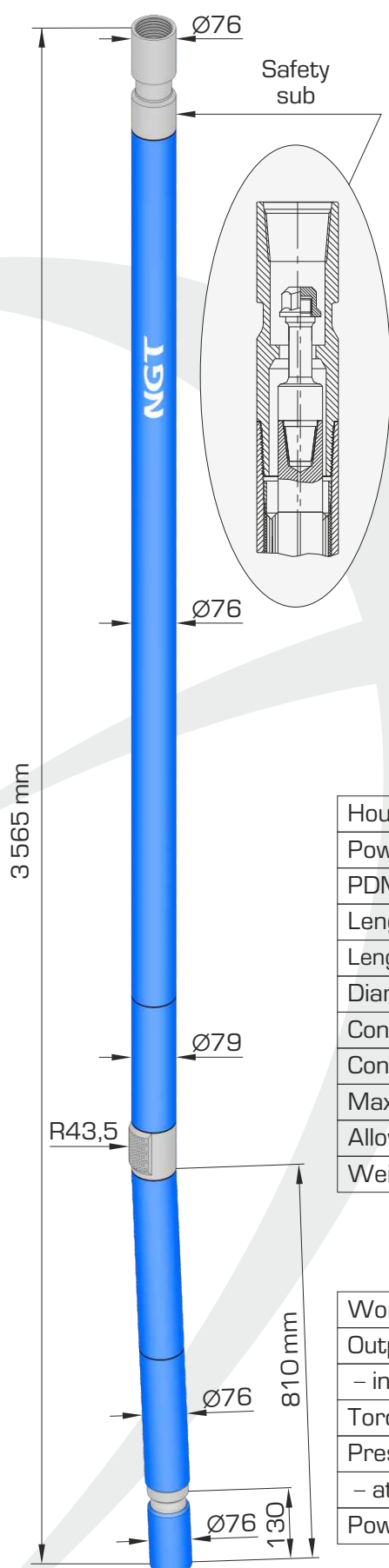


## DO-76.NGT.4/5.20.M1



PDM DO-76.NGT.4/5.20.M1 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.

A rigid bent sub is placed between bearing section and power section.

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 810 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	76/79
Power section lobe configuration	4/5
PDM length, mm	3 565
Length of stator rubber lining, mm	2 000
Length of bearing section up to a curvature point, mm	810
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	25
Weight, kg	94

### 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