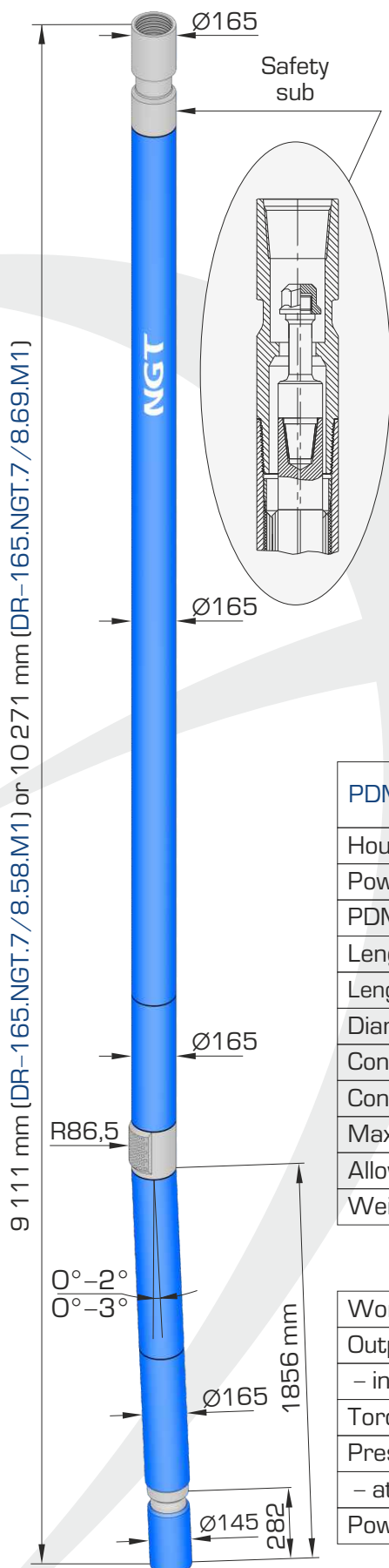


DR-165.NGT.7/8.58.M1 and DR-165.NGT.7/8.69.M1



PDM's DR-165.NGT.7/8.58.M1 and DR-165.NGT.7/8.69.M1 are new universal hydraulic downhole motors used for drilling of oil and gas wells with 190,5 – 250,8 mm rock and PDC bits.

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 multi-row thrust ball bearing of enhanced load-carrying capacity and radial hard alloy bearings. The PDM is completed with imported extended power sections with enhanced operation life. Due to a very short shoulder up to the point of axes misalignment (only 1800 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 Loctite glue, and each motor is completed 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

PDM model	DR-165.NGT.7/8.58.M1	DR-165.NGT.7/8.69.M1
Housing OD, mm	165	165
Power section lobe configuration	7/8	7/8
PDM length, mm	9 111	10 271
Length of stator rubber lining, mm	5 720	6 880
Length of bearing section up to a curvature point, mm	1 856	1 856
Diameter of bits used, mm	190,5–250,8	190,5–250,8
Connecting thread to drill pipes	NC 50	NC 50
Connecting thread to bits	4 1/2 Reg	4 1/2 Reg
Maximum density of drilling mud, g/cm ³	1,9	1,9
Allowed axial load, kN	250	250
Weight, kg	1 138	1 283

Power specification

Working fluid flow rate, l/s	17–38	17–38
Output shaft rotation speed:		
- in no-load conditions, RPM	71–160	71–160
Torque at maximum power, kN*m	10,9	13,1
Pressure drop:		
- at maximum power, MPa	7	7
Power, kW	164	197