

311,1 (12 1/4) AIRJ722

AirJet bit with open bearing. Design of the bit, air flushings and bit bearing ensures reliable cooling of bit bearing during drilling operation. AirJet bits provides high performance result, low cost per meter due to high ROP and bearing reliability. Applied for drilling in very hard formations.

SPECIFICATION

Diameter, mm (in)	311,1 (12 1/4)
IADC	722Y
Seal	none
Total number of inserts/teeth (inner/outer)	171 (114/57)
Total number of rows of inserts/teeth (inner/outer)	13 (10/3)
Number and diameter of nozzles*	3x17
Thread	Pin 6 5/8 Reg
Weight net/gross, kg	90 / 95,1

DRILLING MODES RECOMMENDED**

Make-up torque, kN·m	38-43
RPM	90-50
WOB, t (lbs)	17-38,6 (37000-85000)

DESIGN FEATURES



Open roller bearing with rollers in large and small roller race. Absence of seal allows to place maximum size of the rollers, which increases the bearing capacity.



Conical and spheroconical shaped TCI are applied for cutting and chipping action, have higher wear-resistance when used in medium-hard, hard and extra hard brittle formations.



TCI on the cones gage are applied to calibrate the wellbore, protect cone body against erosion wear.



To protect leg body and prevent bit wear, shirttail and leading edge are reinforced with TCI and additionally hardfaced.

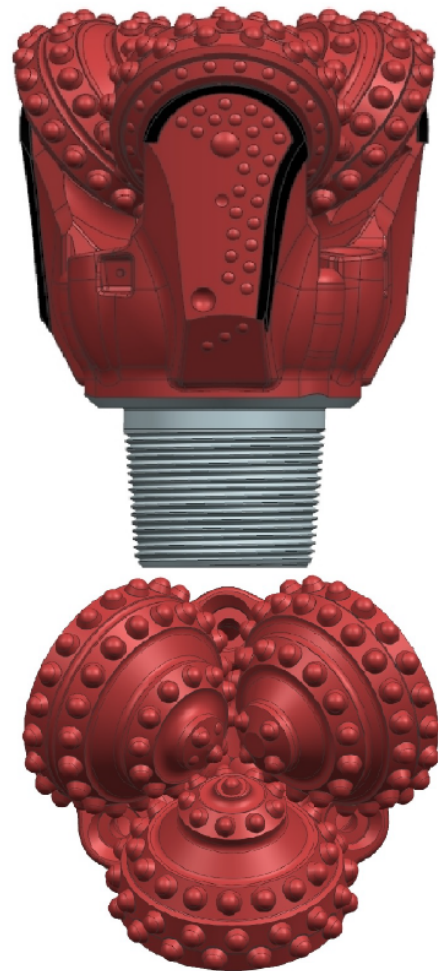
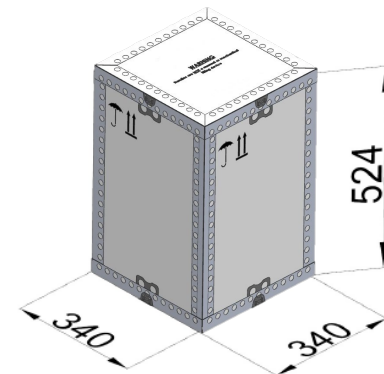


Side air flushing is applied.



Back pressure valve is made to protect air passages and bearings as well as drill pipe bodies against cuttings during operational or emergency shutdowns.

PACKAGE DESIGN



* Standard specification may be changed on customer request.

** The specified ranges of WOB and RPM represent typical drilling modes, adherence to them will not necessarily result in optimal bit life or minimum drilling costs. It is not recommended to apply both WOB and RPM upper limits at once. For the purpose of performance improvement, minor changes of the bit design may be introduced without prior customer notification.