

Electromagnetic Eddy Current Brake

CNPC develop and produce DS type wind / water cooling magnetic eddy current brake, which covers a full range of drill rigs provided in SY/T5609 industry standard specification. The design and production level is in a leading position in china. It is an ideal auxiliary brake suitable for 1000-9000m depth petroleum drilling rigs of onshore and offshore, and it could provide auxiliary brake torque of 23kN ~ 110kN for 500m~9000m rigs. Its working temperature is $-30^{\circ}\text{C} \sim 55^{\circ}\text{C}$.



Technical features

The electromagnetic eddy current brake makes zero wear brake by taking advantage of electromagnetic induction principle and, having the features of large torque, without replacement parts, long lifetime, simple operation and maintenance. It includes air blast cooled (DSF) and water cooled (DSW) Series. DSF is featured by compact construction, small weight, convenient maintenance; DSW is featured by high output power, slowly warming, powerful adaptive capacity to environment.

Technical parameter:

Basic parameter	Model				
	DS(F)30	DS(F)40	DS(F)50	DS(F)70	DS(F)90
Rated brake torque, kN•m	23	33	55	98	110
The depth of well, m	3000	4000	5000	7000	9000
Max. no-load speed, r/min	500	500	500	500	500
Max. exciting power, kW	9	10	12	23	25
Flow of cooling water, l/min	150	190	285	560	600
Cooling Wind rate, m ³ /h	4000	6000	12000	15000	18000
Highest outlet water (wind) temperature, °C	72 (70)	72 (70)	72 (70)	72 (70)	72
Highest inlet water (wind) temperature, °C	42 (40)	42 (40)	42 (40)	42 (40)	42