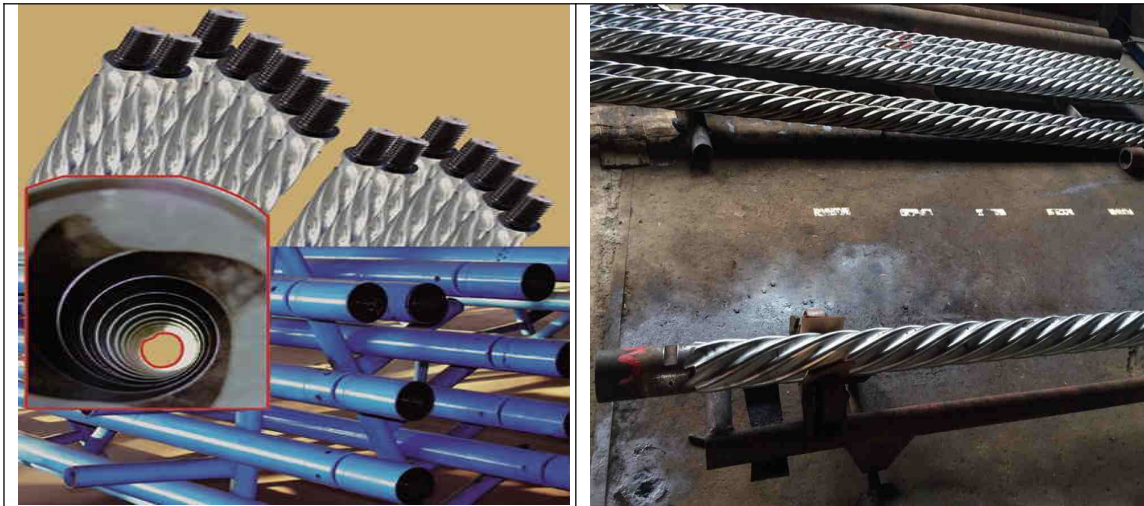


Downhole Motor

Downhole motor is a kind of downhole dynamic drilling tool upon the power of drilling mud. Mud stream from the outlet of mud pump flows through a by-pass valve into the motor. This stream produces pressure loss at both inlet and outlet of the pump, to push the rotor into rotating, and to transmit the torque and speed onto the bit. The downhole motor property mainly depends upon its property parameters. Downhole motor can be configured to answer specific downhole conditions or well designs. Using the latest available technology and materials a wide variety of possible configurations permits the use of downhole motors in an extensive range of drilling applications.

General Features



LZ series Downhole Motors are positive-displacement motors. Suitable for onshore or offshore drilling operations.

Details

The LZ series downhole motors were developed to provide the market with more reliable technology and more hoisting performance. Widely used in drilling, kick-off, azimuth control, coring, reaming, and work over for directional wells, horizontal wells, of oilfields and coal mines.. Included but not limited by the advantages mentioned, LZ series downhole motors as a [downhole tools](#) might be your best choice.

General Features

- Suitable for cold area and desert environment
- Suitable for onshore or offshore rigs
- Various size available for different operation requirement

Main aramaters

Hole Size: 3-1/8" – 17-1/2" (79.375 mm – 444.5 mm)

Rated Power: 5.8 hp – 340 hp (4.2 kW – 249 kW)

Motor Type	LZ-73×7	LZ-89×7	LZ-95×7	LZ-120×7	LZ-120II×7	LZ-165×7	LZ-165×71V	LZ-165×7V
Hole size(In)	3-1/8~4-3/4	4-1/2~6	4-5/8~6	5-7/8~7-7/8	5-7/8~7-7/8	8-3/8~9-7/8	8-3/8~9-7/8	8-3/8~9-7/8
Flow rate range (L/S)	2~4	3~8	8~13	9~14	9~16	20~28	20~28	20~28
Rotation Speed (Rpm)	125~220	95~200	80~165	95~200	95~200	90~160	90~160	90~160
Pressure fall of motor (Mpa)	2.4	2.4	2.4	2.4	2.4	2.4	3.2	4
Operating Torque (N.m)	320	560	1200	1350	1700	3300	4500	5600
Stall torque (N.m)	560	980	2100	2360	2950	5775	7875	9800
Output power (Kw)	4.2~7.4	5.6~11.7	10~20.7	13.4~28.3	16.9~35.6	31.1~55.3	42.4~75.4	52.8~93.8
Bit diff. pressure (Mpa)	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7
Recommended W.O.B. T	1.5	2	2.5	3	3	6	8	10
Max. W.O.B. T	2	3	5	5	5	16	16	16
Connection	Upper box	2-3/8TBG	2-3/8	2-7/8	3-1/2	3-1/2	4-1/2	4-1/2
	lower box	2-3/8	2-3/8	2-7/8	3-1/2	3-1/2	4-1/2	4-1/2
Vertical	3670	2700	4035	3385	4555	5860	6770	7665
Tool length (mm)	Single-bent		4035	3900	4555	5860	6770	7665
	Double-bent		4185	4060	4715	6110	7020	7915
Vertical	85	83	140	200	265	668	730	810
Tool WT (kg)	Single-bent		145	248	270	688	750	830
	Double-bent		150	258	280	714	776	856

Parameters:

Motor Type	LZ-72×7IV	LZ-172×7V	LZ-197×7.0V	LZ-197×7.0VI	LZ-203×7.0	LZ-203×7.0V	LZ-215×7	LZ-244×7.0
Hole size(In)	8-3/8~9-7/8	8-3/8~9-7/8	9-7/8~12-1/4	9-7/8~12-1/4	9-7/8~12-1/4	9-7/8~12-1/4	12-1/4~15-1/4	12-1/4~17-1/2
Flow rate range (L/S)	25~35	25~35	30~50/60	30~50/60	30~50/60	30~50/60	30~50	50~75
Rotation Speed (Rpm)	90~160	90~160	90~160	90~160	90~160	90~160	100~160	85~140
Pressure fall of motor (Mpa)	3.2	4	4	4.8	3.2	4	3.2	3.2
Operating Torque (N.m)	5300	6600	8800	10000	8500	10000	11000	17000
Stall torque (N.m)	9275	11550	12180	14000	11900	14000	19250	24650
Output power (Kw)	49.9~88.8	62.2~110.6	83~145	94~167	80~142	94~165	115.2~184.3	151~249
Bit diff. pressure (Mpa)	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7	1.4~7
Recommended W.O.B. T	8	10	17	18	16	17	17	22
Max. W.O.B. T	16	16	25	26	24	25	28	33

Connection	Upper box	4-1/2	4-1/2	5-1/2	5-1/2	5-1/2	5-1/2	5-1/2	6-5/8
	lower box	4-1/2	4-1/2	6-5/8	6-5/8	6-5/8	6-5/8	6-5/8	6(7)-5/8
Vertical			7630	9050	10200	7900	9050	8480	9510
Tool length (mm)	Single-bent		7630	9050	10200	7900	9050	8480	9510
	Double-bent	6980	7880	9350	10500	8200	9350	8780	9810
Vertical			913	1395	1646	1262	1512	1440	1830
Tool WT (kg)	Single-bent	830	934	433	1689	1300	1550	1473	1930
	Double-bent		962	1478		1345	1595	1528	2005