

潜油直驱螺杆泵

ELECTRIC SUBMERSIBLE DIRECT DRIVE PROGRESSIVE CAVITY PUMPS

QZLB 系列潜油直驱螺杆泵采用新型多级永磁电机系统，通过柔性轴直接联接井下螺杆泵，驱动螺杆泵旋转将原油举升到地面。较传统潜油螺杆泵省去了减速器等部件，具有输出转速低，扭矩大，供电电压低等特点，具有系统效率高，使用寿命长，节能降耗等特点，特别适合稠油含砂井、大斜度井，丛式井、水平井以及煤层气排水采气的开采，适应常规区块、城区油田及海洋平台等特殊开采条件。QZLB series electric submersible direct drive progressive cavity pump adopts new multistage permanent magnet motor system, which is directly connected to underground screw pump by flexible shaft, and drives the screw pump to rotate and lift the crude oil to the ground. Compared with traditional submersible screw pump, QZLB series dispenses reducer etc. parts, resulting low output rotational speed, high torque, low power supply voltage, featuring high system efficiency, long lifetime, energy saving etc. It is especially suitable for heavy oil sand wells, highly deviated wells, cluster wells, horizontal Wells, and drainage gas recovery of coal-bed methane, adaptable to conventional blocks, urban oilfield and offshore platform etc. special production conditions.

相比传统机采方式的优势：

- 结构简化，省去减速器等结构，可靠性提高；
- 地面要求电压低，在部分油井能省去变压器等投资，同时对电缆的要求也降低；
- 启动扭矩大，初期启动扭矩最高可达额定扭矩的1.8~2倍，可带载启动；
- 系统效率高，节能效果显著：相比常规传统异步电机的机采设备，用电量可节省30%~50%以上，极大降低了采油成本；
- 采用永磁同步潜油电机，配置专用变频柜，具有操作简便，自动化程度高，功率因数高等特点；
- 适应性强，可适用于含砂、高含水、高粘稠的油气井，以及大斜度井及水平井；
- 占地面积小，无噪音、无泄漏污染，适用于海洋平台及城区油田使用，安全性能高。



Advantages Over Traditional Artificial Lift:

- Simple structure dispensed reducer etc. for improved reliability;
- Low voltage on the ground spares transformer in some oil wells resulting less investment and low requirement of the cable;
- High torque at start, torque at the first stage up to 1.8 ~ 2 times the rated torque, start up with load is ok ;
- High system efficiency and remarkable energy saving such as power saving up to 30% ~ 50%, compared with the conventional asynchronous motor artificial lift equipment;
- Permanent magnet synchronous submersible motor completes with special variable frequency cabinet for easy operation, high automation, high power factor, etc;
- Good adaptability for sand, high water cut, high viscous oil and gas wells as well as highly deviated wells and horizontal Wells;
- Small footprint, no noise emission and no leakage thus applicable for offshore platform and urban oil field application with high safety.

潜油直驱螺杆泵规格参数

Specifications for Electric Submersible Direct Drive Progressive Cavity Pumps

型号 Model	螺杆泵型号 PCP Model	电机型号 Motor Model	推荐转速 Recommended Speed,rpm	理论排量 Theoretic Displacement,m ³ /d			额定扬程 Rated Head,m
				100rpm	150rpm	200rpm	
QZLB40/42-116/11	LB40-42	QYT116-11X	150	5.76	8.64	11..52	1900
QZLB75/40-116/11	LB75-40	QYT116-11X	150	10.8	16.2	21.6	1800
QZLB120/36-116/15	LB120-36	QYT116-15X	150	17.28	25.92	34.56	1500
QZLB190/33-116/18	LB190-33	QYT116-18X	150	27.36	41.04	54.72	1450
QZLB300/33-116/18	LB300-27	QYT116-18X	150	43.2	64.8	86.4	1200
QZLB400/33-116/22	LB400-21	QYT116-22X	150	57.6	86.4	115.2	940
QZLB500/33-138/30	LB500-21	QYT138-30X	150	72	108	144	940
QZLB600/33-138/30	LB600-16	QYT138-30X	150	86.4	129.6	172.8	720

