

VBPV系列-斜轴式变量柱塞马达

VBPV Series - Bent axis variable displacement piston motor

- VBPV 系列属于变量马达，其斜轴式柱塞设计可满足开式和闭式回路的要求。
- 具有多种控制方式和输出轴连接方式的通用型设计。
- 融合球面配流盘、高质量组件和制造工艺的成熟设计使 VBPV 系列马达能适应任何工业和移动应用。



- VBPV series are a family of variable displacement motors, bent axis piston design for operation in both open and closed circuit.
- Versatile design includes a variety of control and shaft ends.
- A proven design that combines spherical plates, high-quality components and manufacturing processes makes the VBPV series motors to adapt any application both industrial and mobile.

VBPV1 (法兰版) For Flange Installation

兼容闭式系统和开式系统

Operation in both open and closed circuit.



双后部接口
和旁侧接口

Rear port or side port.

能够提供高达430bar的连续压力和480bar的峰值压力

Provide up to 430 bar continuous and 480 bar peak performance.

VBPV2 (插装版) For Gearbox Installation



适配到任何工业和运输应用

For installation in mechanical gearboxes such as track drive and winches gear boxes.

其他功能和优点 Other Features and advantages

该系列经过充分的实验室检测和现场测试，这些马达即便在极端条件下都能够提供最大效率和持久使用寿命。

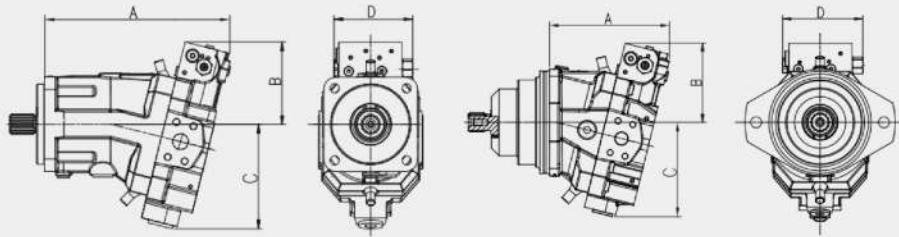
重型轴承允许高径向和轴向载荷。

Fully laboratory tested and field proven, these motors provide maximum efficiency and long life even at very bad filtering conditions.

Heavy duty bearings permit high radial and axial loads.

控制方式 Control Model

RPE	高压自动变量	Working pressure control
ROE	带100巴压力增量的高压自动变量	Working pressure control Δp 100 bar
2EE	带压力越权的两点式电气控制	Electric two positions control with pressure override
2EN	两点式电气控制	Electric two positions control
2IE	带压力越权的两点式液压控制	Hydraulic two positions control with pressure override
2IN	两点式液压控制	Hydraulic two positions control
REE	带压力越权的电比例控制	Electric proportional control with pressure override
RED	带两段压力越权的电比例控制	Electric proportional control with double step pressure override
REN	电比例控制	Electric proportional control
RIE	带压力越权的液比例控制	Hydraulic proportional control with pressure override
RID	带两段压力越权的液比例控制	Hydraulic proportional control with double step pressure override
RIN	液比例控制	Hydraulic proportional control
RPI	带液越权的高压自动变量	Working pressure control with hydraulic override
ROI	带液越权和100巴压力增量的高压自动变量	Working pressure control Δp 100 bar with hydraulic override
ROS	带电控越权和100巴压力增量的高压自动变量	Working pressure control Δp 100 bar with electric override
RPS	带电控越权的高压自动变量	Working pressure control with electric override



VBPV1 法兰版

VBPV2 插装版

	A		B	C	D
	VBPV1	VBPV2			
055cc	247.4 [9.74]	187.5 [7.38]	123.3 [4.85]	146.8 [5.78]	125.5 [4.94]
075cc	272.5 [10.73]	201.0 [7.91]	130.2 [5.13]	166.1 [6.54]	125.5 [4.94]
108cc	309.9 [12.2]	227.1 [8.94]	137.6 [5.42]	183.9 [7.24]	122 [4.81]
160cc	328.7 [12.94]	245.7 [9.67]	140.0 [5.51]	192.1 [7.56]	125.5 [4.94]
200cc	361.9 [14.25]	Under develop	161.7 [6.37]	221.9 [8.74]	132 [5.19]

输出轴 Shaft

		排量/Displacement				
		055	075	108	160	200
S20	花键 Spline 27T-16/32DP	/	/	●	●	/
S19	花键 Spline 15T-8/16DP	/	/	/	●	●
S15	花键 Spline 13T-8/16DP	/	/	●	●	●
S12	花键 Spline 14T-12/24DP	●	●	/	/	/
SAR	花键 Spline W50x2x30x24 DIN 5480	/	/	/	●	●
SAP	花键 Spline W45x2x30x21 DIN 5480	/	/	●	●	/
SAO	花键 Spline W40x2x30x18 DIN 5480	/	●	●	●	/
SAM	花键 Spline W35x2x30x14 DIN 5480	●	●	/	/	/
SAI	花键 Spline W30x2x30x14 DIN 5481	●	/	/	/	/
C18	平键 Parallel keyed Ø44.45mm	/	/	●	●	/
C17	平键 Parallel keyed Ø44.45mm	●	/	/	/	/
CAJ	平键 Parallel keyed Ø45mm	/	/	/	●	/
CAK	平键 Parallel keyed Ø40mm	/	/	●	/	/
CAY	平键 Parallel keyed Ø35mm 10x8x56	/	●	/	/	/
CAW	平键 Parallel keyed Ø30mm	●	/	/	/	/

可选配置 Options

转速传感器 Speed sensor



TZ/TW



TZ/TW



TS

冲洗阀 Flushing Valve

集成式

法兰式



VBPV1 108-160

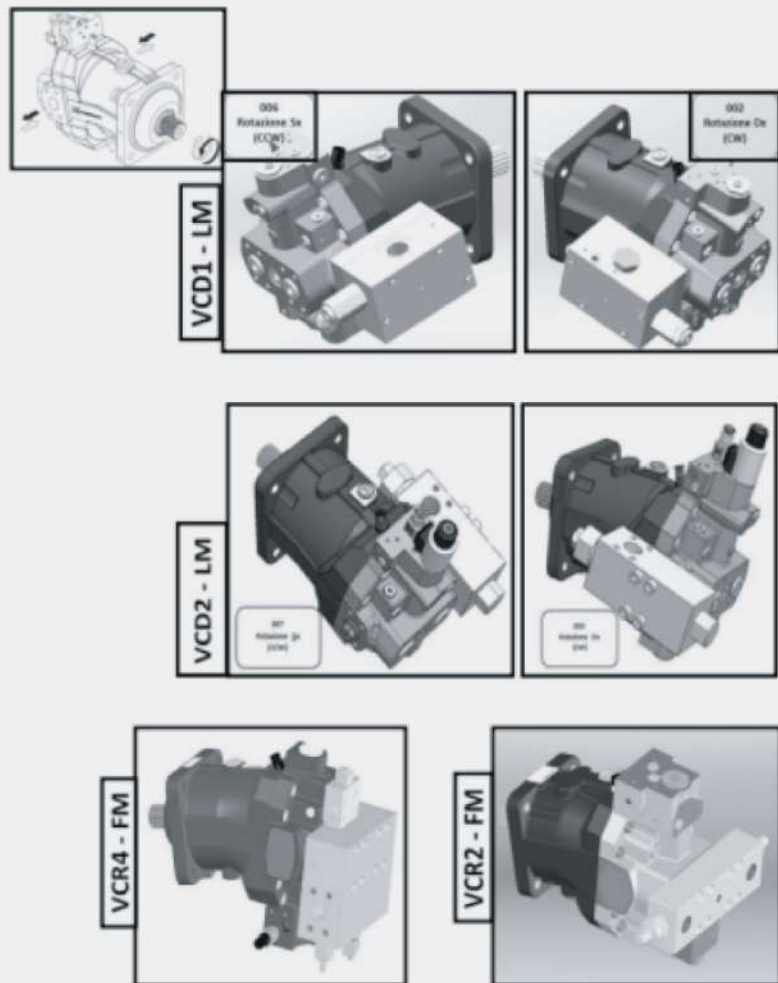


VBPV1 200



VBPV1 55-75

平衡阀 Balance Valve



性能参数 Specification

		技术参数 Technical Data						
尺寸 Size			055	075	108	160	200	
排量 Displacement		Vg	cm ³ /rev [in ³ /rev]	61 [3.72]	80.58 [4.91]	112.5 [6.86]	160.8 [9.81]	216 [13.176]
	标准 Standard	Vg _{min}	cm ³ /rev [in ³ /rev]	30 [1.83]	40 [2.44]	56 [3.416]	80 [4.88]	108 [6.59]
	最小可能值 Minimum possible	Vg _{min}	cm ³ /rev [in ³ /rev]	12.2 [0.74]	16 [0.97]	22 [1.34]	32.2 [1.96]	43 [2.62]
	可选 Optional	Vg _o	cm ³ /rev [in ³ /rev]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]
最大压力 Max pressure	连续 cont.	p _{nom}	bar [psi]	430 [6235]	430 [6235]	430 [6235]	430 [6235]	430 [6235]
	峰值 peak	p _{max}	bar [psi]	480 [6960]	480 [6960]	480 [6960]	480 [6960]	480 [6960]
最大流量 Max flow		q _{max}	l/min [U.S.gpm]	271 [71.5]	322 [85]	400 [105.6]	500 [132]	626 [165.37]
最大排量下的最大转速 Max. speed at Vg _{max} and q _{max}		n _{0 max}	rpm	4450	4000	3550	3100	2900
Vg<Vg _{max} 时最大转速 Max. speed at Vg<Vg _{max}		n _{0 max lim}	rpm	7000	6150	5600	5000	4600
最小排量下的最大转速 Max. speed at Vg _o		n _{0 max lim}	rpm	8350	7350	6300	5500	5100
最大排量下的扭矩常数 Torque constant Vg _{max}		T _k	Nm/bar [lbf.ft/psi]	0.97 [0.04]	1.28 [0.06]	1.79 [0.09]	2.56 [0.13]	3.44 [0.17]
最大排量下的最大功率 Max power at q _{max} and p _{nom}		P _{max}	kW [hp]	194 [259.9]	231 [309.5]	273 [365.8]	330 [442.2]	449 [602.1]
最大排量下的最大扭矩 Max torque at Vg max	连续 cont.	T _{nom}	Nm/bar [lbf.ft]	418 [308]	552 [406.8]	770 [567.5]	1101 [811.4]	1479 [1090]
	峰值 peak	T _{max}	Nm/bar [lbf.ft]	466 [343.4]	616 [453.9]	859 [633]	1230 [906.5]	1651 [1216]
转动惯量 Moment of inertia		J	kg·m ² [lbf.ft ²]	0.005 [0.12]	0.009 [0.22]	0.0124 [0.31]	0.026 [0.616]	0.035 [0.829]
重量 Weight		m	kg [lbs]	28 [61.7]	36 [79.3]	47 [103.6]	63 [138.4]	82 [180.7]
泄流量 Drain flow		q _d	l/min [U.S.gpm]	3 [0.79]	4 [1.05]	5 [1.32]	5 [1.32]	5 [1.32]

产品应用 Application

