



varisco®

solid pumping solutions



INNOVATION & QUALITY

J-0904 Rev.07-CE

自吸式离心泵
*Self-priming
centrifugal pumps*



应用范围 APPLICATIONS

工业应用

- ▶ **输送:** 中性, 酸性或碱性的清洁或混浊的液体; 含有沙粒, 泥浆或含有固体悬浮颗粒的液体; 低粘度石油产品, 清洁或混浊的溶剂; 石灰乳, 苛性碱; 清洗, 冷却, 循环, 烟尘净化液。
- ▶ **污水处理:** 泵送有污染的, 热的, 或含有沙粒, 泥浆或有悬浮固体颗粒的带腐蚀性污水, 配送中和液; 泵送沉淀的污泥。
- ▶ **船舶:** 装载和卸载; 舱底排水; 冲洗, 消防, 清基 (剥离), 卫生清洁和循环。
- ▶ **农业:** 农田灌溉; 液体肥料氧化处理; 输送或喷洒液体肥料或化肥; 液体动物饲料的分送; 发酵前或发酵过程中的葡萄汁, 新酒的输送; 洗涤。

建筑工程

- ▶ **排泄,** 挖洞, 沟渠或池塘中的积水。
- ▶ **从排水沟排出地下水**
- ▶ **从井中或沟渠中提水**
- ▶ **混凝土及惰性建筑材料的冲洗**
- ▶ **膨润土和钻探泥浆的泵送循环。**

安全

- ▶ **洪水排涝**
- ▶ **事故备用:** 下水道临时抽排水; 消防; 危险液体的预防恢复。



INDUSTRY

- ▶ **Transfer :** clean or dirty neutral, acid or alkali liquids; liquids containing sand, mud or solids in suspension; clean or dirty low viscosity petroleum products or solvents; milk of lime, caustic soda; washing, cooling, circulation; smoke scrubbing
- ▶ **Treatment :** pumping polluted, hot or corrosive waste water containing sand, mud or solids in suspension; dosing neutralising liquids; pumping out settled sludge
- ▶ **Naval :** loading and unloading; bilge pumping; washing, fire fighting, stripping, sanitary duty and circulation
- ▶ **Agriculture :** surface irrigation; liquid manure oxygenation; transfer and spraying liquid manure or fertilizers; distribution of liquid animal feed; transfer of must; washing

CIVIL ENGINEERING

- ▶ **Drainage** of excavations, canals or ponds
- ▶ **Ground water dewatering** with drains
- ▶ **Water supply** from wells or canals
- ▶ **Washing** concrete castings and aggregate
- ▶ **Recirculation** of bentonite and drilling mud

SAFETY

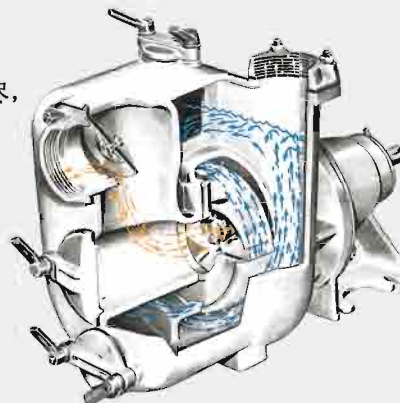
- ▶ **Flood drainage**
- ▶ **Emergency duty :** temporary sewage pumping; fire fighting; recovery of dangerous liquids

自吸原理 / Self-priming principle

气体 (黄色箭头) 由叶轮转动产生的真空吸入泵内, 与泵壳中的液体 (蓝色箭头) 混合。

混合后的含气液体被挤压到自吸腔内, 比重较轻的气体与液体分离从排液管排出。而比重较重的液体回落到泵腔底部, 被重新循环利用。当所有的气体从吸入管被排尽后, 泵的吸液和工作功能就与普通离心泵一样了。它也可以泵送气液混合物。

吸入口的止回阀有着双重的作用:
当泵停止工作时, 它可以防止泵体内液体从吸入管回流; 万一吸入管内的液体被排尽, 泵体中保留的液体仍能保证泵的自吸。排出管允许从吸入管吸入的气体从此排出。



The air (yellow arrows) is drawn into the pump due to the negative pressure created by the moving impeller and is emulsified with the liquid (blue arrows) contained in the pump body.

The air-liquid emulsion is forced into the priming chamber where the lighter air is separated and leaves through the discharge pipe; the heavier liquid drops back down into circulation. Once all of the air has been expelled from the suction pipe, the pump

is primed and works like a normal centrifugal pump. The pump can also work with an air-liquid **mixture**.

The non-return valve has a dual function: it prevents the suction pipe from emptying when the pump is off; in the event of accidental emptying of the suction pipe, this holds a sufficient amount of liquid in the pump body to prime the pump. The discharge pipe must be free to expel the air coming from the suction pipe.

优点 FEATURES

- ▶ **快速自吸:**
无须低阀, 泵壳一次装填满水即可自动完成自吸, 自吸高度可达7.5米。
- ▶ **结构简单:**
只有一个运动部件: 叶轮。
- ▶ **开式叶轮:**
允许输送较大直径的固体颗粒, 方便检测。
- ▶ **抗磨损性能高:**
带磨损盘便于更换。
- ▶ **外加润滑脂的机械密封:**
沿泵轴无液体和气体泄漏。
- ▶ **便于安装:**
只有吸液管浸没于液体中。泵可以安装在便于维修和操控的高处或干燥处。
- ▶ **使用寿命长:**
根据需要, 磨损部件可以很方便地多次更换, 以保证泵的额定性能。

- ▶ **Rapid self-priming**
without standing valve. Once filled with water, the pump is automatically primed to a height of 7.5 m.
- ▶ **Simple construction**
only one moving part: the impeller.
- ▶ **Open-blade impeller** allowing the passage of wide solid bodies and easy inspection
- ▶ **High resistance to abrasive liquids**
the wear plate is easily replaceable.
- ▶ **Axial mechanical seal lubricated from the outside:**
no leaks or infiltration of air along the shaft.
- ▶ **Easy to install:**
only the suction pipe needs to be immersed in the liquid.
The pump can be located above and in a dry place, in the most suitable location for service and control.
- ▶ **Long life:**
the parts subject to wear can be easily replaced, a number of times when necessary, restoring the original performance of the pump.



威尼斯的重建工程
Restoration work at Venice



清洗掘土机
Wheel washing units for earth-moving vehicles



向酿酒厂提供冷却水
Cooling water supply for a distillery



带发动机液压驱动的J 2-180, 用于捕鱼船
J 2-180 with hydraulic motor on a fishing boat





- ▶ 重载型泵外壳材质:铸铁, 青铜或不锈钢。
- ▶ 开启方便的注水口端盖, 排水口端盖和叶轮检查端盖。

- ▶ Heavy duty casing in cast iron, bronze or stainless steel.
- ▶ Easily opened priming, drain and impeller inspection covers.



- ▶ 球墨铸铁, 铝或不锈钢材质的开式叶轮, 可输送大直径的固体颗粒

- ▶ Ductile iron, aluminium bronze or stainless steel open impeller handling large diameter spherical solids



- ▶ 磨损盘便于更换, 带有抗油和抗磨损的橡胶涂层。

- ▶ Easily replaced cast iron, oil and abrasion resistant rubber faced cast iron, bronze or stainless steel wear plate(s).



- ▶ 机械密封带有外部油脂润滑注油器, 即使输送磨蚀性很高的液体, 也可在高真空度下正常运转。
- ▶ 碳化硅或碳化钨密封座 (输送石油产品时使用石墨材料)
- ▶ 如果需要, 可使用双机械密封或弹筒式密封。

- ▶ Externally lubricated mechanical seal. Can run dry on high vacuum even when pumping highly abrasive liquids.
- ▶ Silicon or tungsten carbide seats (graphite rotating seat for versions for petroleum products).
- ▶ On request, double or cartridge seals.



- ▶ 带有重载轴承的轴承箱, 适合直接启动或通过V形皮带驱动。
- ▶ 标准尺寸的轴的延长部分, 带有螺纹孔和楔形孔, 可方便地与联轴器或皮带轮相连。

- ▶ Bearing housing with heavy duty bearings suitable for direct or V-belt drive.
- ▶ Standard diameter shaft extension bored and tapped to facilitate the assembly of couplings or pulleys.

特殊型号

SPECIAL VERSIONS

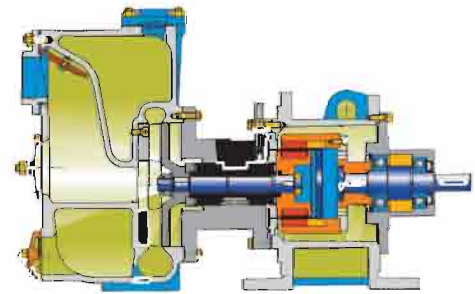
- ▶ 关于材质，处理方式和配件如有特殊应用方面的要求，请与我们的销售部门联系。
- ▶ For the availability of materials, treatments and accessories for specific applications, please contact our Sales Office.
- ▶ 可以按ATEX认证标准（防爆）
- ▶ The pumps can be certified in accordance with the ATEX standards.



磁力驱动泵

MAGNETIC DRIVE (TRM)

- ▶ 磁力驱动泵：液体完全被封闭在泵内，无泄漏和随之带来的环境污染
- ▶ Magnetic drive pump. The liquid is completely contained in the pump to avoid leaks and consequent pollution of the environment.
- ▶ 各种型号的详细资料，请与我们的销售部门联系
- ▶ For details on models available, contact our Sales Department.



发动机驱动泵

ENGINE DRIVEN PUMPS

- 可配装：
- ▶ 推车或拖车（燃料箱装在发动机上）
 - ▶ 重载场所使用的拖车（燃料箱安装于车体上，并带吊架，拖钩，拖杆和可折叠支撑脚）
 - ▶ 公路拖车
 - ▶ 滑橇底座
 - ▶ 如需要可加隔音罩
- Arrangement on:
- ▶ Trolley or trailer (fuel tank on engine)
 - ▶ Heavy duty site trailer (fuel tank in frame, lifting hook, tow bar, folding foot)
 - ▶ Road tow trailer
 - ▶ Skid base
 - ▶ Versions with soundproof canopies available on request.

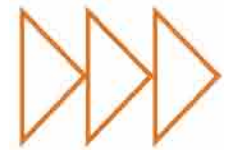
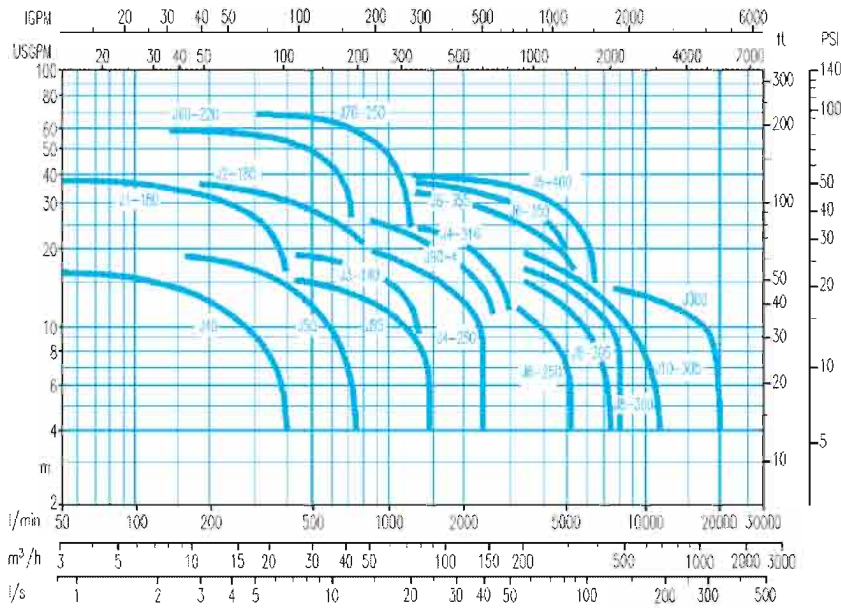


电机驱动建筑工地用泵(+WE)

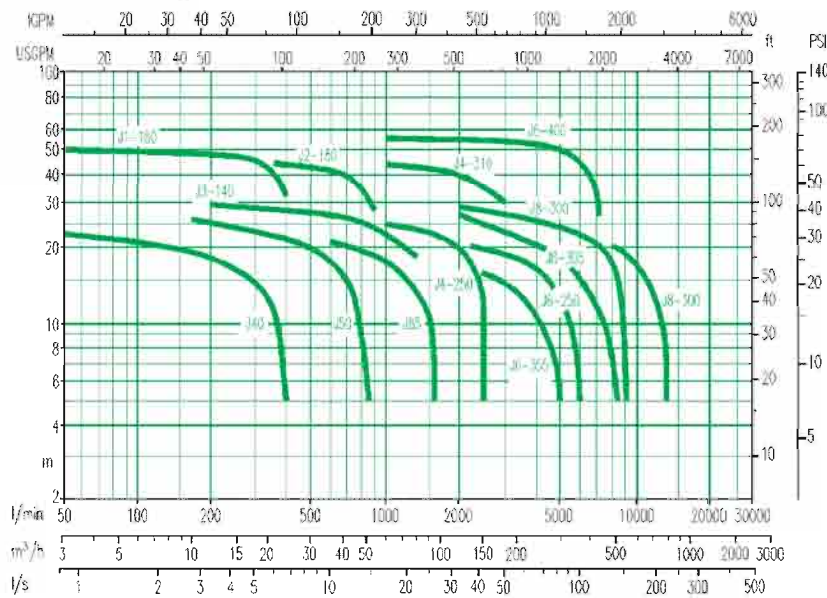
ELECTRICALLY DRIVEN CONTRACTORS PUMPS (+WE)

- ▶ 泵的推车或拖车上配有：符合IP55标准的防水控制箱，有CE认证，带星/三角启动装置，电机带电磁热保护，紧急制动按钮
- ▶ On trolley or trailer with IP 55 waterproof control box to CE standards with star/delta starter, magnetohermic motor protection, door interlock main switch, emergency stop button.

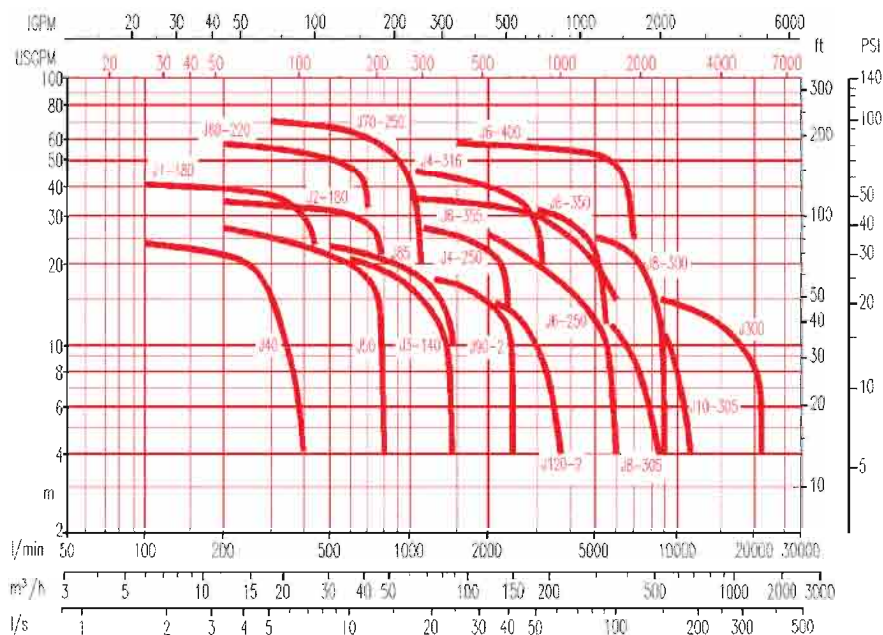




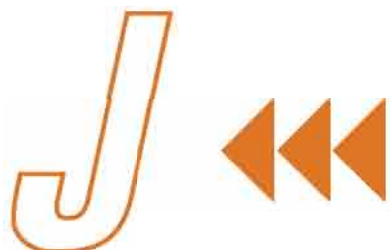
50Hz



60Hz



发动机驱动泵
Engine driven pumps



Electrically-driven pumps / 电机驱动泵

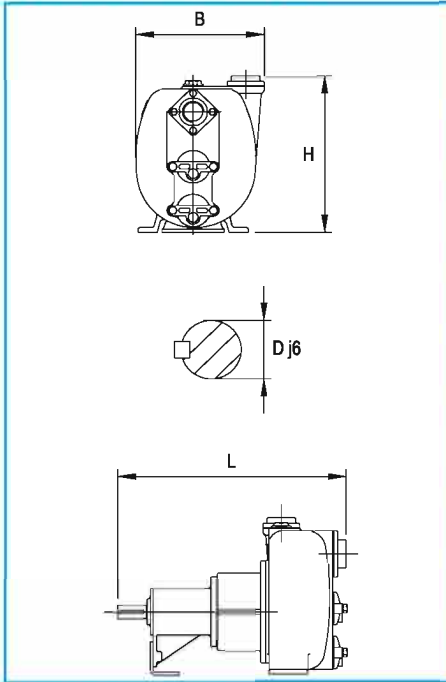
型号 Model	口径 Size		固体颗粒 直径 Solids ø mm	50 HZ							60 HZ								
	mm	in		流量 Capacity m³/h			扬程 Head m			转速 RPM	功率 Motor k W	流量 Capacity m³/h			扬程 Head m			转速 RPM	功率 Motor k W
J40	40	1½"	20	22	15	5	5,5	11	15	2900	1,1	24	15	5	5	18	21,5	3450	2,2
J1-180	40	1½"	11	25	15	6	22	32	34	2900	4	25	15	6	34	48	48	3450	5,5
J50	50	2"	25	44	30	10	5	12	18	2900	2,2	48	30	10	9,5	20	25	3450	4
J2-180	50	2"	15	50	30	10	20	30	34	2900	5,5	50	30	10	34	44	48	3450	11
J60-220	50	2"	12	42	28	10	42	52	58	2900	11	-	-	-	-	-	-	-	-
J3-140	80	3"	28	70	40	20	13	18	20	2900	4	70	40	20	21	26	28,5	3450	7,5
J85	80	3"	40	80	45	20	7	13	15	1450	4	90	45	20	12	19,5	22	1750	7,5
J70-250	80	3"	12	65	42	15	45	60	67	2900	18,5	-	-	-	-	-	-	-	-
J90-4	100	4"	45	150	100	40	12	22	24	2900	11	-	-	-	-	-	-	-	-
J4-250	100	4"	50	150	80	40	7	15	18	1450	7,5	150	80	40	14	24	26,5	1750	15
J4-316	100	4"	38	180	110	60	16	26	29	1450	18,5	180	110	60	30	40	43	1750	30
J6-250	150	6"	76	300	200	80	5	11	15	1450	11	340	200	80	8	18	22	1750	22
J6-350	150	6"	37	300	180	80	19	30	33	1450	30	-	-	-	-	-	-	-	-
J6-355	150	6"	47	330	200	90	14	26	32	1450	30	280	200	90	7	15	20	1150	15
J6-400	150	6"	50	380	200	80	18	36	38	1450	45	380	200	100	42	54	55	1750	75
J8-300	200	8"	60	480	320	120	8	15	20	1450	22	480	320	120	15	25	28,5	1750	45
J8-305	200	8"	76	420	200	100	5	13	17	1450	18,5	480	200	100	10	20	27	1750	30
J10-305	250	10"	76	600	400	200	6	15	18,5	1450	30	600	400	200	17	23,5	28	1750	45
J300	300	12"	70	1200	720	300	8	12	15	975	55	-	-	-	-	-	-	-	-

Engine-driven pumps / 发动机驱动泵

型号 Model	口径 Size		固体颗粒直径 Solids ø mm	流量 Capacity m³/h	扬程 Head m	转速 RPM
	mm	in				
J40	40	1½"	20	26	25	3600
J1-180	40	1½"	11	26	47	3200
J50	50	2"	25	48	31	3600
J2-180	50	2"	15	50	37	3000
J60-220	50	2"	12	41	60	3000
J3-140	80	3"	28	80	25	3000
J70-250	80	3"	12	65	71	3000
J85	80	3"	40	90	23	1800
J90-2	100	4"	45	170	23	2500
J4-250	100	4"	45	160	32	1800
J4-316	100	4"	38	170	49	1800
J120-2	125	5"	60	230	17	2000
J6-250	150	6"	76	340	24	1800
J6-350	150	6"	37	300	37	1500
J6-355	150	6"	47	340	35	1500
J6-400	150	6"	45	400	60	1800
J8-300	200	8"	60	550	27	1600
J8-305	200	8"	76	530	28	1600
J10-305	250	10"	75	700	24	1500
J300	300	12"	70	1300	20	1000

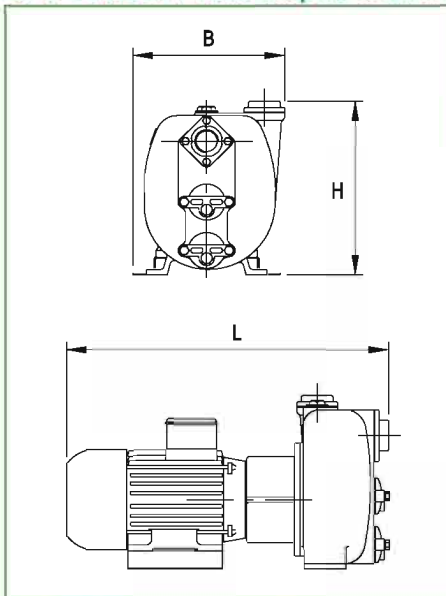
外部尺寸和重量 DIMENSIONS AND WEIGHTS

带支撑座 / Pedestal version



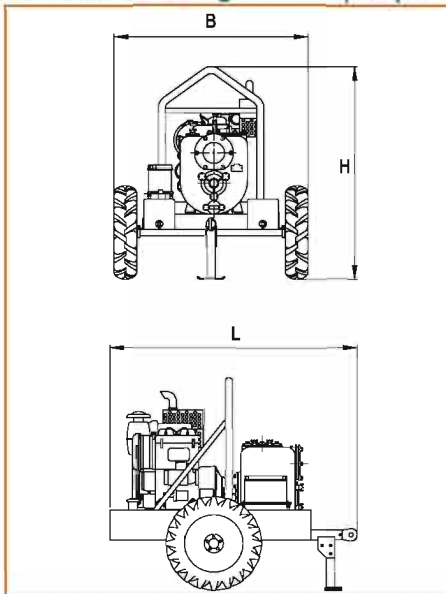
型号 Model	口径 Size		B mm	H mm	L mm	Dj6 mm	重量 Weight kg
	in	mm					
J 40	1 1/2"	40	171	227	364	19	15
J 40 K	1 1/2"	40	179	220	349	19	18
J 1-180	1 1/2"	40	268,5	328	494,5	28	44
J 50	2"	50	188	328	428,5	19	24,5
J 50 K	2"	50	219	285,5	406,5	19	27
J 2-180	2"	50	298	388	554	28	60
J 60-220	2"	50	401,5	405	556	28	55,5
J 3-140	3"	80	264	400	548,5	28	42
J 3-140 B	3"	80	278	412	531,5	28	43
J 70-250	3"	80	539,5	485	677,5	32	91,5
J 85	3"	80	316	419	629	28	75
J 90-2/4	4"	100	299	474	626,5	28	75
J 4-250	4"	100	421	497	758,5	32	130
J 4-316	4"	100	531	585	883	42	172
J 4-316 K	4"	100	535	650	927,5	42	218
J 6-250	6"	150	475	619	872	32	203
J 6-350 - J 6-355	6"	150	578	684	895	40	280
J 6-400	6"	150	730	821	1095	55	406
J 8-300 - J 8-305	8"	200	591	734	1088,5	42	296
J 10-305	10"	250	758	942	1291,5	55	550
J 300	12"	300	920	1200	1169,5	60	710

泵与电机直联 / Close-coupled to electric motor



型号 Model	口径 Size		B mm	H mm	L mm	重量 Weight kg
	in	mm				
J 40	1 1/2"	40	171	227	463,3	21,5
J 40 K	1 1/2"	40	179	220	448,3	24
J 1-180	1 1/2"	40	288,5	328	615	61
J 50	2"	50	193	328	559,5	36,5
J 50 K	2"	50	219	285,5	537,5	42
J 2-180	2"	50	320	388	675	86
J 60-220	2"	50	401,5	405	700	105
J 3-140	3"	80	283	400	683,5	65
J 3-140 B	3"	80	294	412	666,5	65
J 85	3"	80	316	419	690	95
J 90-4	4"	100	299	474	767,5	110
J 4-250	4"	100	421	497	863,5	184
J 4-316	4"	100	531	585	1065,5	349
J 4-316 K	4"	100	535	650	1097	347
J 6-250	6"	150	475	619	994	237
J 6-350 - J 6-355	6"	150	578	684	1094,5	275
J 8-300 - J 8-305	8"	200	591	734	1238	427
J 10-305	10"	250	768	942	1481	780

发动机驱动泵 / Engine driven pumps



型号 Model	口径 Size		B mm	H mm	L mm	重量 Weight kg
	in	mm				
J 40	1 1/2"	40	610	700	700	80
J 1-180	1 1/2"	40	610	700	700	110
J 50	2"	50	610	700	700	85
J 2-180	2"	50	720	1100	920	125
J 60-220	2"	50	800	950	1250	220
J 3-140	3"	80	720	1100	920	130
J 70-250	3"	80	960	1270	1735	370
J 85	3"	80	780	1150	1270	270
J 90-2	4"	100	780	1170	1150	230
J 4-250	4"	100	1468	1605	1845	610
J 4-316	4"	100	1368	1490	2128	745
J 120-2	5"	125	1468	1247	1450	345
J 6-250	6"	150	1368	1587	1753	710
J 6-350 - J 6-355	6"	150	1460	1632	2528	955
J 6-400	6"	150	1604	1706	2828	1450
J 8-300 - J 8-305	8"	200	1468	1632	1853	920
J 10-305	10"	250	1604	1677	2933	1340
J 300	12"	300	1814	1720	2933	2060

尺寸与重量取决于发动机
Dimensions and weights depend on the engine



用于洪水排泄的自动应急泵系统
Automatic emergency unit for storm water drainage



发动机驱动J300排水泵
J 300 engine driven pump for sewage by-pass



带真空辅助J系列水泵
Vacuum prime pumps with J series water pumps



低噪音柴油发动机驱动工程抢险泵
Emergency pump with silenced diesel engine



电机驱动带拖车的J6-400泵
Electrically driven J 6-400 pump on trailer



J50直流电机驱动泵
J 50 with DC electric motor



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 **varisco**
solid pumping solutions

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公司已通过ISO9001: 2000
质量体系认证

COMPANY WITH ISO 9001:2000
CERTIFIED QUALITY
MANAGEMENT SYSTEM