

液环真空泵

Liquid Ring Vacuum Pump

NEV2系列

NEV2 Series



VAKUUM EXPERTEN



真空

里其乐 Elmo Rietschle

Elmo Rietschle代表着整个真空和压力技术领域的优异产品组合、应用经验和专业技术。拥有我们，您的生产过程将更快捷、更安全、更有效。

先进的品质

- 所有产品均在制造基地设计和生产
- 更短的响应时间
- 完善的物流系统

Elmo Rietschle stands for superior product portfolio, application experience and expertise in all vacuum and pressure technology areas. We make your process faster, safer and more cost-efficient.

Best quality

- All machines designed and produced inhouse
- Shortest response time
- Perfect logistic

Elmo生产出了液环真空泵。仅三年后，更小型的Elmo真空泵即应用于德国的真空吸尘器。

Elmo was granted the imperial patent for the world's first liquid ring vacuum pump: just three years later a smaller Elmo vacuum pump was used in Germany's first vacuum cleaner

侧流式鼓风机于1963年面世使真空和压力产品市场发生巨大变革。Elmo的一贯作风是强调敬业精神，注重设计和制造高品质的机器及提供工程支持。

The first side channel blower was introduced in 1963 and greatly revolutionized the vacuum and pressure market. Elmo had always been focusing on professionalism and dedication, as it designed and manufactured the highest-quality machine and provide engineering support

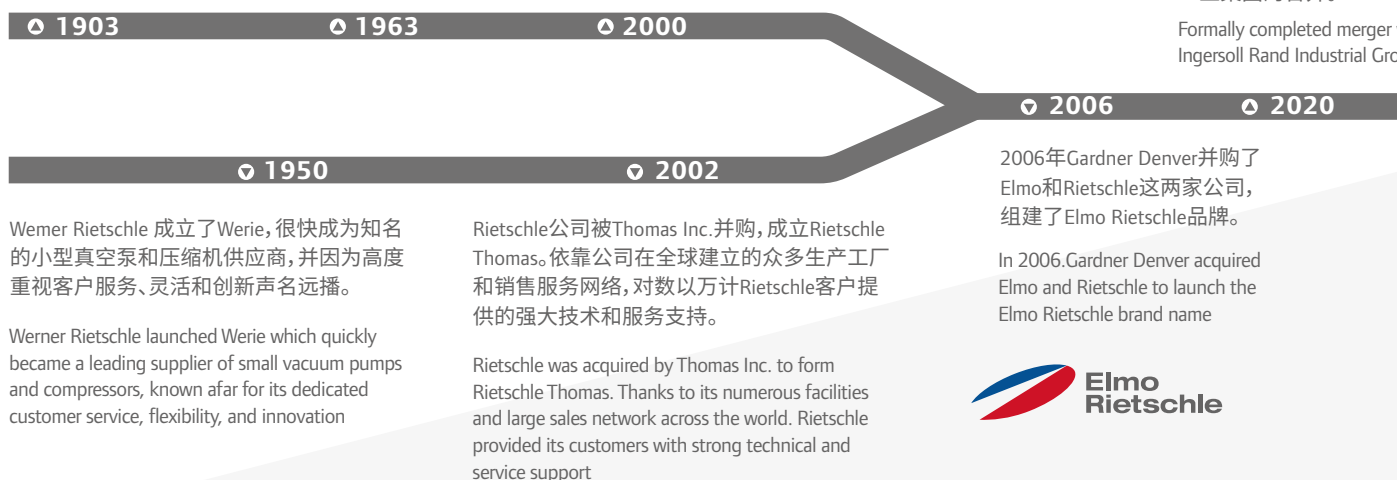
Elmo从西门子脱离后，加入Nash Inc. 合并成立Nash_Elmo。

After splitting from Siemens. Elmo joined Nash Inc. to form Nash Elmo



正式完成与英格索兰工业集团的合并。

Formally completed merger with Ingersoll Rand Industrial Group





无油



真空



压力

NEV2系列液环真空泵

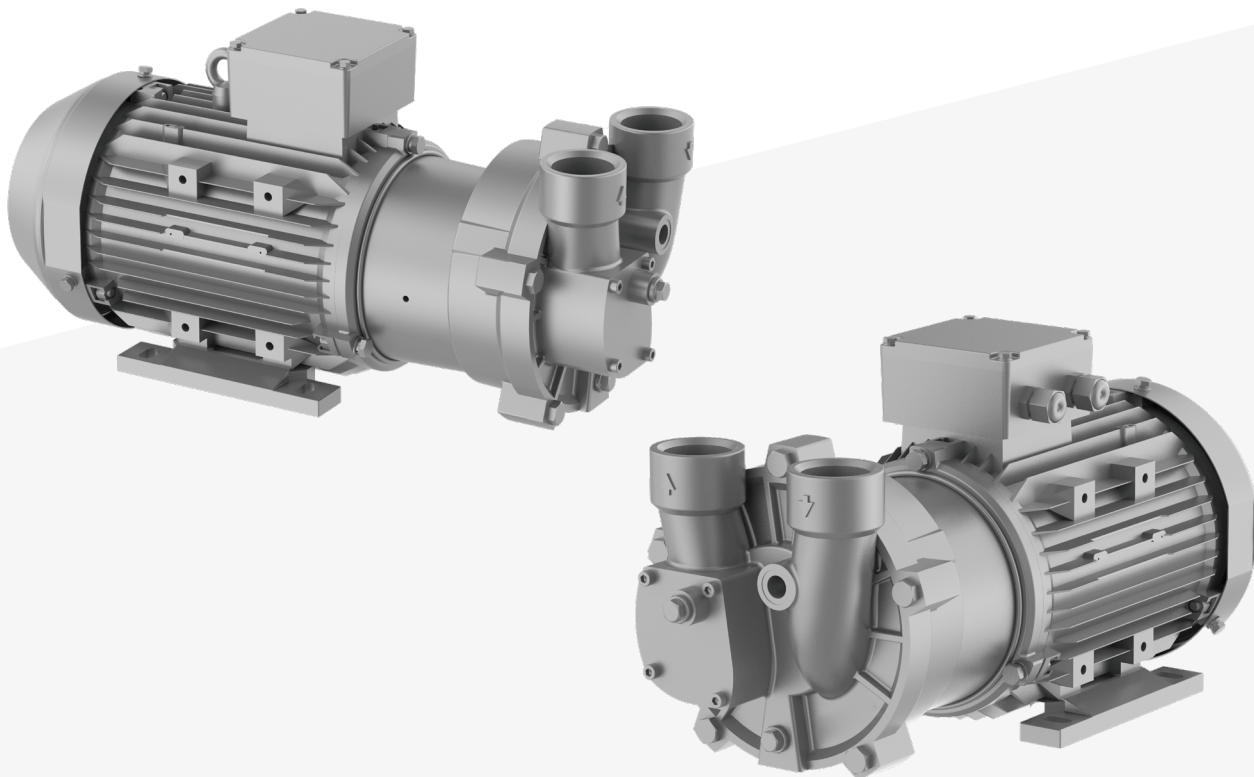
NEV2系列是在2BV2系列产品上的全新升级。更适用于抽出气体、水蒸气及含有杂质的介质。吸气压力可到27mbarA(97% 真空度)。当真空泵在吸气压力低于80mbarA的状态下长期工作时,应链接汽蚀保护管以对泵进行保护。如配置大气喷射器吸气压力可达10mbarA。喷射器可直接安装在真空泵上。

NEV2系列采用了集成化设计(防护等级IP55),以其精巧的外观、简化的结构、便捷的检修窗口设计以及卓越的性能表现,满足了用户对设备高品质、高效率、高稳定性的期待。

NEV2 Series Liquid Ring Vacuum Pump

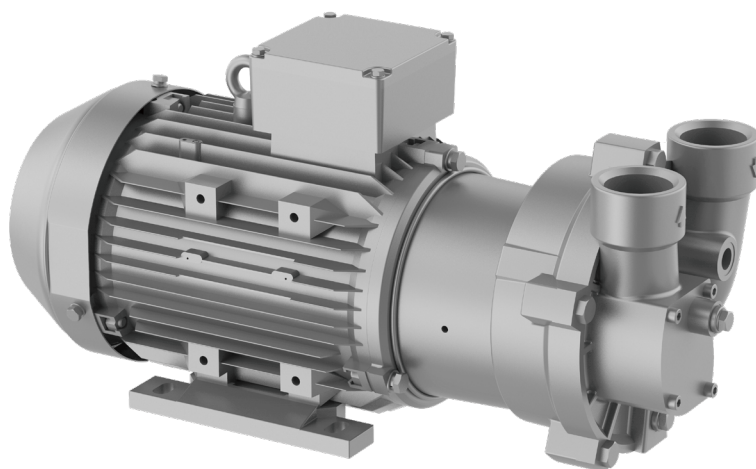
NEV2 series liquid ring vacuum pumps is an evolution over the 2BV2 series, more suitable for extracting gas, water vapor and media containing impurities down to inlet pressures of 27 mbarA (97% vacuum). All these vacuum pumps are supplied with built-in cavitation protection. For long-term operation below 80 mbarA the cavitation protection should be connected for protecting the pump. An inlet pressure of 10 mbarA can be achieved by connecting a gas ejector. The gas ejector can be mounted directly onto the vacuum pump.

NEV2 series adopts integrated design (protection level IP55), with its exquisite appearance, simplified structure, convenient maintenance window design and excellent performance, to meet the user's expectations of high quality, high efficiency and high stability of the equipment.



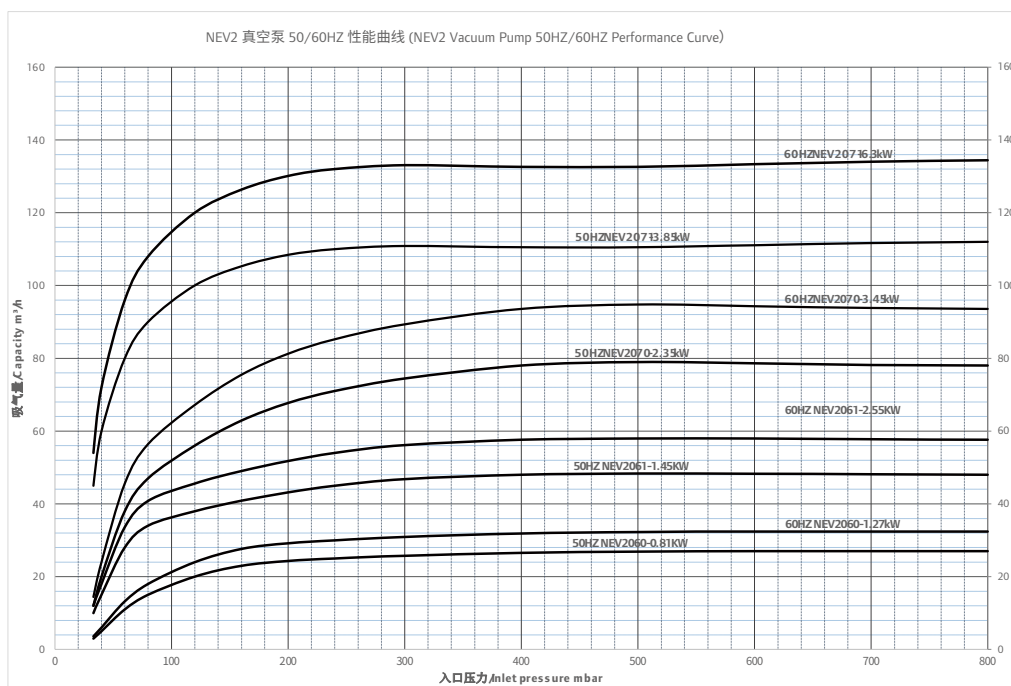
NEV2系列液环真空泵

NEV2 Series Liquid Ring Vacuum Pump



**NEV2 060/061
/070/071**

性能曲线 / Performance curve



性能曲线是在下列条件下得出的: 气体为20°C的饱和空气, 排气压力为1013mbarA, 工作液温度15°C, 性能允许误差为 ±10%。

The characteristic curves are based on the evacuation of 100% saturated air with a temperature of 20°C . Discharge pressure is 1013mbarA, and the operating liquid is water with a temperature of 15°C , tolerance ±10%.





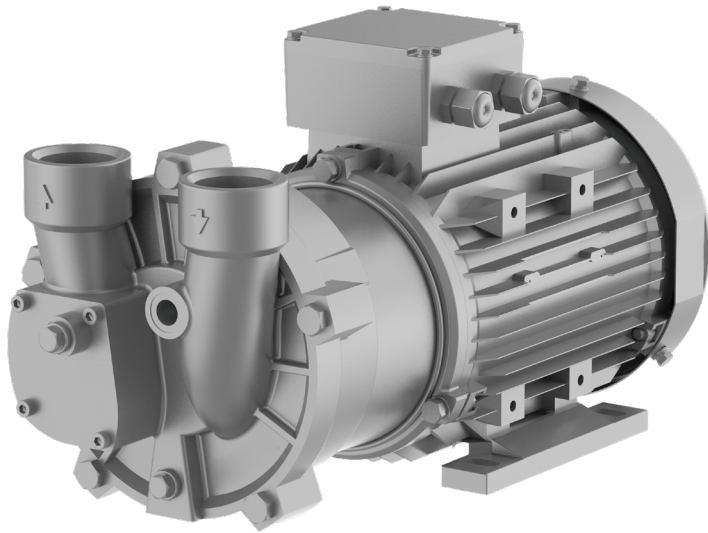
无油



真空



压力



**NEV2 060/061
/070/071**

产品特点

- 更高的真空、更低的水耗、性能更卓越。
- 紧凑型设计, 部件数量更少, 尺寸更小。
- 100% 无油设计。
- 特殊的 Lobe purge接口设计。
- 独特的外置开放式检修窗口。
- 多种材质可选。
- 多种真空泵附件可选, 包括汽蚀保护阀, 工作液恒流阀和吸排气口快速接头。

用户收益

- 在压力从 27mbar.A到大气压之间宽区间可以高效而稳定地运行。
- 结构更简单, 占地面积更少。
- 更环保, 保证工艺介质干净无油污染。
- 满足在运行工况下泵自清理需求, 清理更容易, 且延长了泵使用寿命。
- 检修更便捷, 不用拆解泵即可更换阀板。
- 适合多种苛刻的工况条件。
- 附件让泵的安装和使用更简单且更稳定。

Product Feature

- Higher vacuum, lower water consumption and better performance.
- Compact design, fewer parts, smaller size.
- 100% oil-free design.
- Special Lobe purge interface design.
- Unique external open inspection window.
- A variety of materials are available.
- A variety of vacuum pump accessories are available, including cavitation protection valves, constant flow valves for operating liquid and suction and quick connections on suction and discharge.

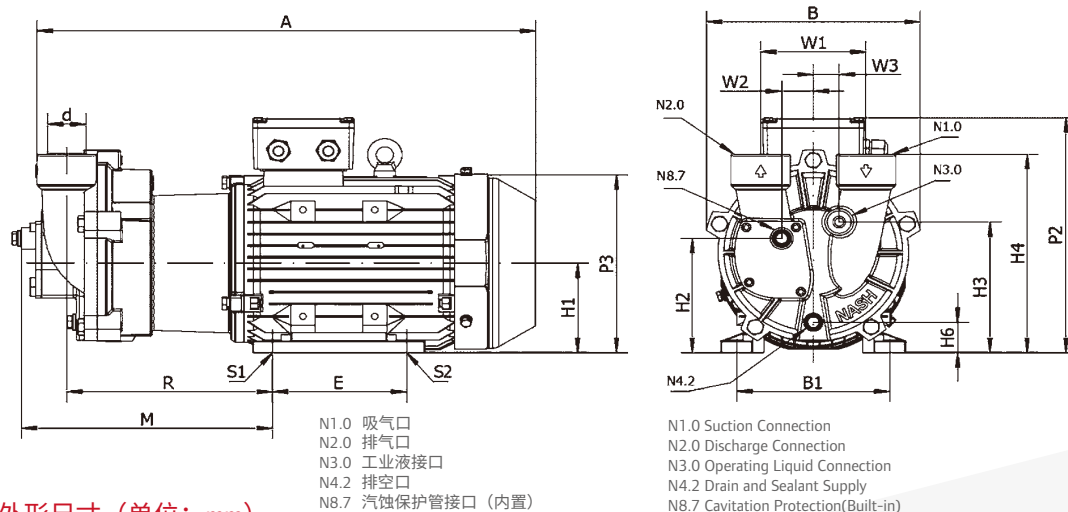
Benefits

- It can operate efficiently and stably over a wide range of pressures from 27mbar.a to atmospheric pressure
- Simpler structure and less footprint.
- More environmentally friendly, to ensure that the process medium clean without oil pollutions.
- To meet the needs of self-cleaning pump under operating conditions, cleaning is easier and prolongs the service life of the pumps.
- It is easier to repair and replace the valve plate without disassembling the pump.
- Suitable for a variety of harsh working conditions.
- Accessories make pump installation and use easier and more reliable.

NEV2 性能参数 / Performance Parameter

型号 Model	最大气量 Capacity Max. m ³ /h	结构材料 1) 泵体 / 泵盖 / 叶轮 Material of construction Casing/cover/impeller	电机额定功率 (千瓦) Motor Rated output kW	额定电压 (伏) Rated voltage V	额定电流 (安培) Rated current A	噪音 2) (分贝) Sound pressure level Db(A)	订购号 Order No.	重量 (公斤) Weight approx. Kg
整体设计的NEV系列真空泵, 50HZ, IE3, IP55 NEV series vacuum pumps in monoblock design, 50Hz, IE3, IP55								
NEV2 060	27	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	0.81	220 △ /380Y	5.0 △ /2.9Y	62	ENEV20600NC002P	24
NEV2 061	48	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	1.45	220 △ /380Y	6.6 △ /3.8Y	65	ENEV20610NC022P	25
NEV2 070	80	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	2.35	220 △ /380Y	12.1 △ /7Y	66	ENEV20700NC002P	43.2
NEV2 071	110	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	3.85	380 △ /660Y	9.4 △ /5.4Y	72	ENEV20710NC037P	53
整体设计的NEV系列真空泵, 60HZ, IE3, IP55 NEV series vacuum pumps in monoblock design, 60Hz, IE3, IP55								
NEV2 060	34	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	1.27	220 △ 380Y	5.5 △ 3.2Y	65	ENEV20600NF074P	24
NEV2 061	60	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	2.55	220 △ 380Y	10.5 △ 6.1Y	69	ENEV20610NF074P	26
NEV2 070	94	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	3.45	220 △ 380Y	13.7 △ 7.9Y	71	ENEV20700NF076P	45.2
NEV2 071	140	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	6.3	380 △ /660Y	14.1 △ /8.1Y	76	ENEV20710NF077P	76
1) 参阅材料结构说明, 并且 1.4581 不锈钢泵可选。 See materials of construction, and 1.4581 SS pumps are optional. 2) 噪音是在进气压力 (80 毫巴) 和管路已连接好的情况下距其 1 米处测量。根据 DIN45635, 第 13 部分。 Measuring-surface sound-pressure level in acc.with DIN 45635, Part 13, measured at 1 m distance at medium inlet pressure (80mbarA) and with pipes connected.								

NEV2 外形尺寸图 / Outline Drawing



外形尺寸 (单位: mm)

型号 MODEL	A	B	B1	E	H1	H2	H3	H4	H6	M	P2	P3	R	S2	W1	W2	W3	d(N1.0&N2.0)	N3.0	N4.2	N8.7
NEV2 060 50/60HZ	456	186	140	100	90	118	126	195	33	260	240	178	217	φ10	110	25.5	21	G1"x20	G3/8"x12	G1/4"x12	G1/4"x12
NEV2 061 50HZ	474	186	140	100	90	118	126	195	33	279	240	178	236	φ10	110	25.5	21	G1"x20	G3/8"x12	G1/4"x12	G1/4"x12
NEV2 061 60HZ	500	186	140	100	90	118	126	195	33	279	240	178	236	φ10	110	25.5	21	G1"x20	G3/8"x12	G1/4"x12	G1/4"x12
NEV2 070 50/60HZ	530	225	160	140	100	128	146	222	33	300	265	200	252	φ12	110	33	27	G1 1/2"x22	G3/8"x12	G1/4"x12	G1/4"x12
NEV2 071 50HZ	574	225	190	140	112	140	158	234	45	325	300	220	278	φ12	110	33	27	G1 1/2"x22	G3/8"x12	G1/4"x12	G1/4"x12
NEV2 071 60HZ	578	225	216	140	132	160	178	254	65	325	326	260	278	φ12	110	33	27	G1 1/2"x22	G3/8"x12	G1/4"x12	G1/4"x12





无油



真空

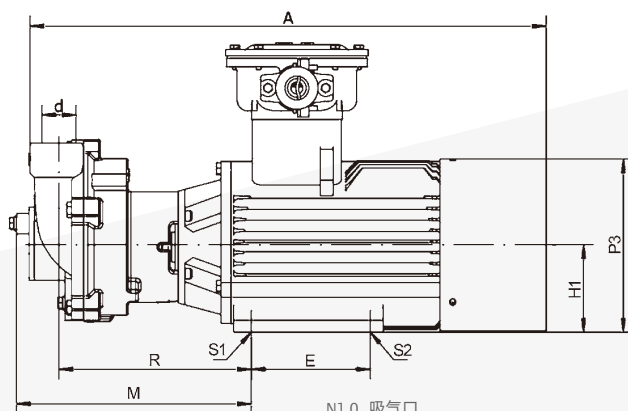


压力

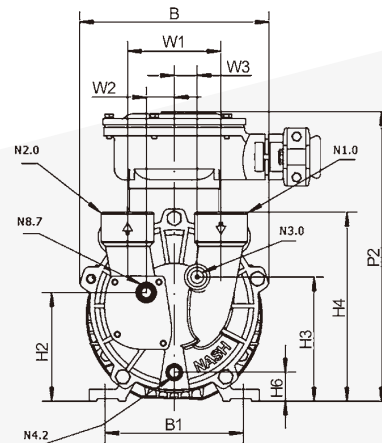
NEV2 防爆电机性能 50HZ / Performance Parameter

型号 Model	最大气量 Capacity Max. m³/h	结构材料 1) 泵体 / 泵盖 / 叶轮 Material of construction Casing/cover/impeller	电机额定功率 (千瓦) Motor Rated output kW	额定电压 (伏) Rated voltage V	额定电流 (安培) Rated current A	噪音 2) (分贝) Sound pressure level Db(A)	订购号 Order No.	重量 (公斤) Weight approx. Kg
整体设计的NEV-Exd 真空泵, 50HZ, DIIBT4 NEV-Exd vacuum pumps in monoblock design, 50Hz, DIIBT4								
NEV2 060	27	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	0.81	220 △ /380Y	5.0 △ /2.9Y	62	ENEV20600NE002P	34
NEV2 061	48	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	1.45	220 △ /380Y	6.6 △ /3.8Y	65	ENEV20610NE022P	35
NEV2 070	80	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	3	220 △ /380Y	10.4 △ /6Y	66	ENEV20700NE002P	55
NEV2 071	110	铸铁 / 铸铁 / 铝青铜 Cast iron/cast iron/bronze	4	380 △ /660Y	7.8 △ /4.5Y	72	ENEV20710NE037P	65
整体设计的NEV-Exd 不锈钢真空泵, 50HZ, DIIBT4 NEV-Exd stainless steel vacuum pumps in monoblock design, 50Hz, DIIBT4								
NEV2 060	27	不锈钢 / 不锈钢 / 不锈钢 CrNi steel/CrNi steel/CrNi steel	0.81	220 △ /380Y	5.0 △ /2.9Y	62	ENEV20600HE002P	40
NEV2 061	48	不锈钢 / 不锈钢 / 不锈钢 CrNi steel/CrNi steel/CrNi steel	1.45	220 △ /380Y	6.6 △ /3.8Y	65	ENEV20610HE022P	45
NEV2 070	80	不锈钢 / 不锈钢 / 不锈钢 CrNi steel/CrNi steel/CrNi steel	3	220 △ /380Y	10.4 △ /6Y	66	ENEV20700HE002P	60
NEV2 071	110	不锈钢 / 不锈钢 / 不锈钢 CrNi steel/CrNi steel/CrNi steel	4	380 △ /660Y	7.8 △ /4.5Y	72	ENEV20710HE037P	70
1) 参阅材料结构说明。 See materials of construction. 2) 噪音是在进气压力 (100 毫巴) 和管路已连接好的情况下距其 1 米处测量。根据 DIN45635, 第 13 部分。 Measuring-surface sound-pressure level in acc.with DIN 45635, Part 13, measured at 1 m distance at medium inlet pressure (100mbarA) and with pipes connected. 3) 防爆机型接线方式默认 380Y, 选择 220 △ 接线方式需要订单中注明。 Standard wiring method of Exd model is 380Y, optional 220 △ wiring mode needs to be indicated in the order.								

NEV2防爆电机尺寸 / Outline Drawing



N1.0 吸气口
N2.0 排气口
N3.0 工业液接口
N4.2 排空口
N8.7 汽蚀保护接口 (内置)



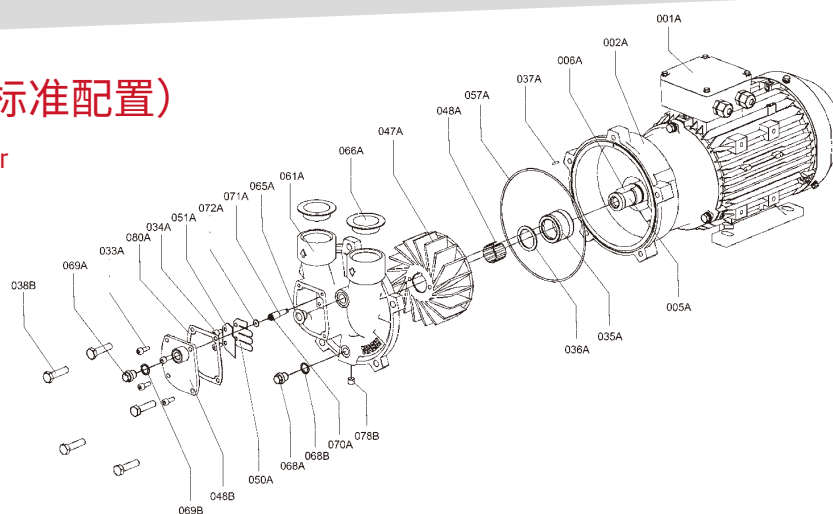
N1.0 Suction Connection
N2.0 Discharge Connection
N3.0 Operating Liquid Connection
N4.2 Drain and Sealant Supply
N8.7 Cavitation Protection (Built-in)

外形尺寸 (单位: mm)

型号 MODEL	A	B	B1	E	H1	H2	H3	H4	H6	M	P2	P3	R	S2	W1	W2	W3	d (N1.0 & N2.0)	N3.0	N4.2	N8.7
NEV2 060	493	186	140	100	90	118	126	195	33	260	314	182	217	Φ10	110	25.5	21	G1"×20	G3/8"×12	G1/4"×12	G1/4"×12
NEV2 061	512	186	140	100	90	118	126	195	33	279	314	182	236	Φ10	110	25.5	21	G1"×20	G3/8"×12	G1/4"×12	G1/4"×12
NEV2 070	608	223	160	140	100	128	146	222	33	279	340	203	232	Φ12	110	33	27	G1 1/2"×22	G3/8"×12	G1/4"×12	G1/4"×12
NEV2 071	655	223	190	140	112	140	158	234	45	305	373	220	258	Φ12	110	33	27	G1 1/2"×22	G3/8"×12	G1/4"×12	G1/4"×12

NEV2 结构材料（标准配置）

Materials of construction for
NEV2 (Standard)



零件号 Part No.	名称 Name	材料 灰口铸铁 / 灰口铸铁 / 铝青铜	Material ⁽²⁾ Cast iron/Cast iron/Bronze
002A	泵体 Casing	灰口铸铁 GB/T 9439-2010-HT200	Grey cast iron ASTM A48/A48M-2003/CLASS30B
005A	电机轴 Motor shaft	不锈钢 GB/T 1220-2007-20Cr13	Chrome steel ASTM A276/A276M-17 420
006A	键 Feather key	不锈钢	Chrome steel
033A	内六角螺钉 Bolt	钢	Steel
034A	内六角螺钉 Bolt	不锈钢	Chrome-nickel steel
035A	机械密封 ⁽¹⁾ Mechanical sea	石墨 / 陶瓷 / 氟橡胶 / 不锈钢	Carbon/ceramic/fluorine-caotchouc/chrome-nickel steel
036A	垫圈 Washer	不锈钢	Chrome-nickel steel
037A	定位销 Pin	钢	Steel
038B	螺栓 Bolt	钢	Steel
047A	叶轮 Impeller	铝青铜 EN 1982-CC333G	Cast aluminium bronze ASTM B148-14/C95500
048A	叶轮间隙环 Tolerance ring for impeller	不锈钢 EN 10088-1.4310	Chrome-nickel steel EN 10088-1.4310
048B	盖板 Plate	灰口铸铁电泳	Grey cast iron E-coating
050A	阀片 Valve plate	聚四氟乙烯	Teflon
051A	阀片挡板 Intercepting plate	不锈钢	Chrome-nickel steel
057A	O 型圈 O-ring	丁腈橡胶	NBR
061A	泵盖 Pump cover	灰口铸铁电泳 GB/T 9439-2010-HT200	Grey cast iron E-coating ASTM A48/A48M-2003/CLASS30B
065A	锥形管塞 Tapered cap	塑料	Plastic
066A	防尘盖 Shipping cover	塑料	Plastic
068A	丝堵 Plug screw	钢	Steel
068B	密封环 Sealing ring	聚四氟乙烯	Teflon
069A	丝堵 Plug screw	尼龙 / 钢	Nylon/Steel
069B	气蚀垫定位环 Locating ring	不锈钢 / PTFE	Chrome-nickel steel/PTFE sealing
071A	气蚀保护管 Pipe for cavitation protection	不锈钢	Chrome-nickel steel
070A	O 型圈 O-ring	丁腈橡胶	NBR
072A	气蚀保护垫 Washer for cavitation protection	不锈钢	Chrome-nickel steel
078B	丝堵 Plug screw	钢	Steel
080A	盖板垫片 Gasket	聚四氟乙烯	Teflon

备注：(1) 机封可选材质 - 石墨 / 碳化硅 / 包氟橡胶 + 全氟醚 / 不锈钢
Note: Machine seal optional material- Carbon/SiC/PTFE encapsulated FKM + FFKM/Chrome-nickel steel
(2) 或等同材料 Or comparable material





无油



真空

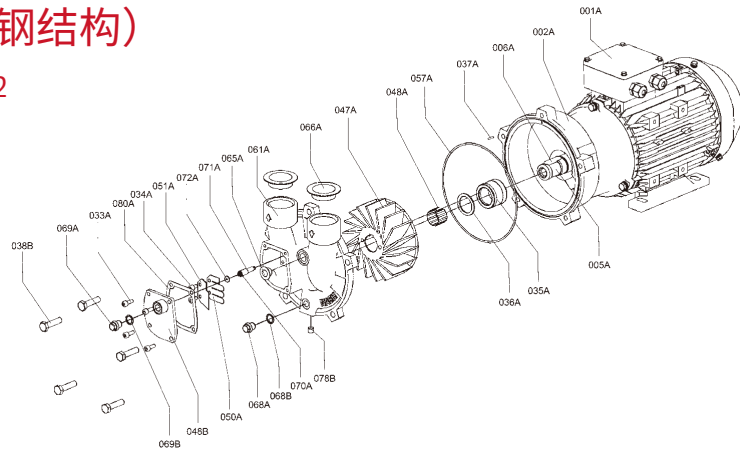


压力

NEV2 结构材料（不锈钢结构）

Materials of construction for NEV2

(Stainless steel version)



零件号 Part No.	名称 Name	材料 不锈钢	Material ⁽²⁾ CrNi steel/CrNi steel/CrNi steel
002A	泵体 Casing	不锈钢 BS EN 10283-2010 1.4581	Cast chrome-nickel steel ASTM A351/A351M-2016/CF3M
005A	电机轴 Motor shaft	不锈钢 GB/T 1220-2007-022Cr17Ni12Mo2	Chrome-nickel steel ASTM A276/A276M-17/316L
006A	键 Feather key	不锈钢	Chrome-nickel steel
033A	内六角螺钉 Bolt	不锈钢	Chrome-nickel steel
034A	内六角螺钉 Bolt	不锈钢	Chrome-nickel steel
035A	机械密封 ⁽¹⁾ Mechanical seal	石墨 / 碳化硅 / 全氟醚 - PTFE 包烧氟橡胶 / 不锈钢	Carbon/SiC/FFKM-FKM.PTFE/Chrome-nickel steel
036A	垫圈 Washer	不锈钢	Chrome-nickel steel
037A	定位销 Pin	不锈钢	Chrome-nickel steel
038B	螺栓 Bolt	不锈钢	Chrome-nickel steel
047A	叶轮 Impeller	不锈钢 BS EN 10283-2010 1.4581	Cast chrome-nickel steel ASTM A351/A351M-2016/CF3M
048A	叶轮间隙环 Tolerance ring for impeller	不锈钢 EN 10088-1.4310	Chrome-nickel steel EN 10088-1.4310
048B	盖板 Plate	不锈钢	Chrome-nickel steel
050A	阀片 Valve plate	聚四氟乙烯	Teflon
051A	阀片挡板 Intercepting plate	不锈钢	Chrome-nickel steel
057A	O 型圈 O-ring	氟橡胶	FKM
061A	泵盖 Pump cover	不锈钢 BS EN 10283-2010 1.4581	Cast chrome-nickel steel ASTM A351/A351M-2016/CF3M
065A	锥形管塞 Tapered cap	塑料	Plastic
066A	防尘盖 Shipping cover	塑料	Plastic
068A	丝堵 Plug screw	不锈钢	Chrome-nickel steel
068B	密封环 Sealing ring	聚四氟乙烯	Teflon
069A	丝堵 Plug screw	尼龙 / 不锈钢	Nylon/ Chrome-nickel steel
069B	气蚀垫定位环 Locating ring	不锈钢 / PTFE	Chrome-nickel steel/ PTFE seal
071A	气蚀保护管 Pipe for cavitation protection	不锈钢	Chrome-nickel steel
070A	O 型圈 O-ring	氟橡胶	FKM
072A	气蚀保护垫 Washer for cavitation protection	不锈钢	Chrome-nickel steel
078B	丝堵 Plug screw	不锈钢	Chrome-nickel steel
080A	盖板垫片 Gasket	聚四氟乙烯	PTFE

备注：(1) 机封可选材质 - 石墨 / 碳化硅 / 全氟醚 + 全氟醚 / 不锈钢
 Note: Machine seal optional material - Carbon/SiC/PTFE encapsulated FKM + FFKM/Chrome-nickel steel
 (2) 或材料等同 Or comparable material

NEV2 附件和订购数据

Selection and ordering data accessories for NEV2

		材质 Material	泵型号 For type	订购号 Order No.	重量 Weight approx. kg
	汽水分离器 带内循环管路 和汽蚀保护管 Discharge liquid separator including recirculation pipe and cavitation protection pipe	钢 Steel	NEV2 060-ON... NEV2 061-ON... NEV2 070-ON... NEV2 071-ON...	E2BX1061005 E2BX1062007	7 7
		不锈钢 Chrome-nickel steel	NEV2 060-OH... NEV2 061-OH... NEV2 070-ON... NEV2 071-ON...	E2BX1061006 E2BX1062008	10 10
	止回阀 (对夹式) 垂直安装 Non-return valve (between flanges) for vertical mounting	钢 Steel	NEV2 060-ON... NEV2 061-ON... NEV2 070-ON... NEV2 071-ON...	E2BY69030BX08001 E2BY69040BX08001	0.7 0.7
		不锈钢 Chrome-nickel steel	NEV2 060-OH... NEV2 061-OH... NEV2 070-ON... NEV2 071-ON...	E2BY69030HX08002 E2BY69040HX08002	0.8 0.8
	安装配件 用于将止回阀直接安装在泵上 Mounting accessory for direct mounting of the non-return valve onto the pump 包括一套法兰, 螺栓和垫片 consisting of 1 set of flanges, fixing screws and gaskets	铸铁 Cast iron	NEV2 060-0... NEV2 061-0... NEV2 070-ON... NEV2 071-ON...	已包含于相应的 止回阀内 Included in the no-return valve	1.5 1.9
		不锈钢 Chrome-nickel steel			
	大气喷射器 Gas ejector				
	Mains frequency 50 Hz and 60Hz 频率 50Hz/60Hz				
	曲线 编号 Curve No. 70V + 270V 71V + 271V	大气阀体, 扩压器, 喷嘴 Head; diffuser; nozzle 铸铁, 黄铜, 黄铜 Cast iron; brass; brass	NEV2 060-0... NEV2 061-0... NEV2 070-ON... NEV2 071-ON...	E2AP20601N001 E2AP20611N001 E2AP20701N001 E2AP20711N001	3 4
	动态压差平衡电动开关阀 带直行程热电动执行器 Constant flow valve with thermoelectric actuator	铜 Copper	NEV2 060-ON... NEV2 061-OH... NEV2 070-ON... NEV2 071-ON...	E273504015000	0.634 0.634
	卫生级快装端头 带快装卡箍、密封圈和快装堵头 Quick joint with clamp, sealing ring and blind plate	不锈钢 Chrome-nickel steel	NEV2 060-ON... NEV2 061-OH... NEV2 070-ON... NEV2 071-ON...	E1429025200	0.7 0.7
	气蚀保护阀 Cavitation protection valve	铜 Copper	NEV2 060-ON... NEV2 061-OH... NEV2 070-ON... NEV2 071-ON...	E2710008009	0.044 0.044





无油



真空

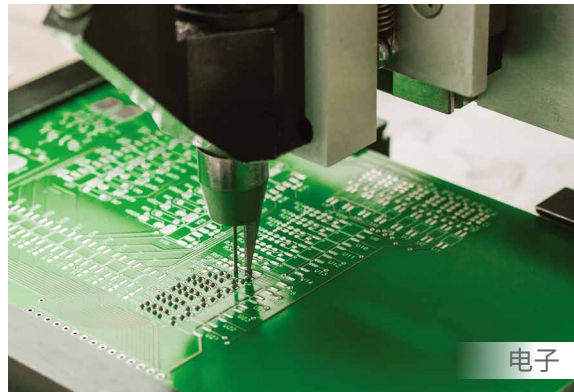


压力

应用行业 / Applications



医疗



电子



制药



食品饮料



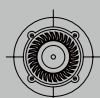
环保



塑料

医疗，电子，化工，制药，食品，饮料，环保等行业及碳氢清洗，塑料挤出，包装机械等各种应用场景。

Medical, electronic, chemical, pharmaceutical, food, beverage, environmental protection and other industries and hydrocarbon cleaning, plastic extrusion, packaging machinery and other application scenarios.



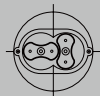
G-Series Side Channel / 侧流式风机



L-Series Liquid Ring / 液环式真空泵



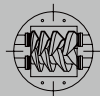
V-Series Rotary Vane / 旋片泵



R-Series Roots / 罗茨泵



C-Series Claw / 爪式泵



S-Series Screw / 螺杆式真空泵



X-Series Syetems / 真空系统



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