



MPG

# PRECISION MICRO GEAR PUMP

精密级微型齿轮泵

用心、专注做好每一台齿轮泵就是我们的创业初心

Attentively focusing on each high precision micro gear pumps is our initial aspiration

■ 上海琼森流体设备有限公司 (国内销售)  
SHANGHAI JONSN FLUID EQUIPMENT CO.,LTD

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■ 琼森 (赣州) 流体科技有限公司 (赣州工厂)  
JONSN (GANZHOU) FLUID TECHNOLOGY CO., LTD

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ENTERPRISE PROFILE  
企业简介

”

上海琼森流体设备有限公司成立于2010年，是一家以世界知名进口泵为技术背景的公司，设有两个事业部，分别为JONSN品牌泵事业部和进口泵贸易事业部，公司拥有一支优秀的研发创新团队，为客户提供集设计、生产、销售于一体的流体输送解决方案。

2019年上海琼森流体设备有限公司做出新的规划，在中部地区成立新工厂。2020年新工厂正式落户于赣州市国家级经济技术开发区。琼森逆势组建新的技术开发团队，与国外企业合作，采用国外先进的制造工艺和精益化管理，选用优质原材料,设计和制造符合高性价比、易安装维护、模块化设计精密级齿轮计量泵。

Shanghai JONSN Fluid Equipment Co.,Ltd. was established in 2010. It is a company with world-renowned imported pumps as its technical background. It has two business divisions, namely the JONSN brand pump division and the imported pump trading division. An excellent R&D and innovation team provides customers with fluid transportation solutions that integrate design, production and sales.

In 2019, Shanghai JONSN Fluid Equipment Co., Ltd. made a new plan to establish a new factory in the central region. In 2020, the new factory will be officially settled in Ganzhou National Economic and Technological Development Zone. JONSN bucked the trend and formed a new technology development team, cooperated with foreign companies, adopted foreign advanced manufacturing technology and lean management, selected high-quality raw materials, designed and manufactured precision gear metering pumps with high cost performance, easy installation and maintenance.

“



DEVELOPMENT PATH  
发展历程

2010

成立上海琼森流体设备有限公司  
公司核心管理层有泵行业外资企业多年的从业背景  
代理欧美进口齿轮泵、磁力泵、桶泵、隔膜泵  
及高温、高压、强腐蚀性工况特种泵

2011

成立 JONSN 精密级齿轮泵研发中心，启用ERP管理系统  
JONSN 全系列桶泵完成设计，测试通过  
获得桶泵专利证书，CE认证

2012

上海琼森流体设备有限公司由贸易型转为生产型企业  
同年 JONSN 桶泵系列产品陆续投产，并销往国外市场  
JONSN 精密级微型齿轮泵完成设计

2013

JONSN 精密级微型齿轮泵样机验证通过  
设计寿命、工艺参数远超欧美同类产品  
公司全面聚焦于高精密齿轮泵研发设计生产

2014

JONSN 精密级微型齿轮泵陆续下线小批量生产  
DX系列高粘度齿轮泵开启设计规划

2015

JONSN 琼森商标注册成功，申请发明专利2项，实用新型专利7项  
JONSN 精密级微型齿轮泵定型批量生产  
成功应用并出口欧美市场  
成功签约中石化，中海油，天津杰瑞等企业

2016

DX系列高粘度齿轮泵定型生产  
同年公司齿轮泵业绩实现年产值3000多万

2017

导入产品编码追踪溯源体系  
6S现场管理体系

2018

企业战略定位升级为“可信赖的优质泵供应商”  
专注把控质量，实现100%出厂测试合格，做值得信赖的好产品

2019

JONSN 精密级齿轮泵获CE认证成功，应用于造船业SCR尾气处理系统日本船级社工作人员实地验厂测试通过，获日本船级社《ClassNK》许可证成为新能源锂电行业流体控制系统解决方案供应商

2020

启动全新LOGO品牌标识和品牌理念  
专注高精密齿轮泵研发生产  
与英国勃朗兹集团成立合资公司，新工厂正式落户赣州  
公司启动DP系列高粘度齿轮计量泵研发

2021 至今

启动德国莱茵ISO9001质量管理体系认证工作  
DP系列高粘度齿轮计量泵首款样泵进入测试验证阶段



COOPERATIVE PARTNER  
合作伙伴



**MR系列**  
精密级磁力齿轮泵  
MR series precision magnetic gear pump

**DP系列**  
中高粘度精密级齿轮计量泵  
DP series medium and high viscosity precision gear metering pump

**DX系列**  
高温高粘度齿轮计量泵  
DX series high temperature and high viscosity gear metering pump

**代理**  
BRONTZ内啮合齿轮泵  
Acting as an agent for BRONTZ internal gear pumps

期待与您的合作  
Look forward to working with you  
\*\*\*\*\*

HONORARY PATENT  
荣誉资质

JONSN公司专注于精密齿轮泵的技术开发，从事着精密生产工作。熟练的技能和工艺是我们主要的工作的特征。每一台精密级齿轮泵的诞生都体现了工匠之美。他们对产品的严格要求，出色的表现为公司的发展做出了贡献。

公司先后获得了7项实用新型专利，2个发明专利，同时获得德国Tüv Rheinland ISO9001质量管理体系认证，CE认证、美国ABS船级社、法国BV船级社、日本船级社认证等。

We focus on the technical development of precision gear pumps. We are engaged in precision production. Skilled technology and craftsmanship are the main characteristics of our work. The birth of every Jonsn precision gear pump embodies the beauty of craftsmen. Their strict requirements for products and outstanding performance have contributed to the development of the company.

Jonsn company has successively obtained 7 utility model patents, 2 invention patents, meanwhile we have obtained the German TÜV Rheinland ISO9001 quality management system certification, CE certification, ABS certification, BV certification, Nippon Kaiji Kyokai certification, etc.

TÜV Rheinland ISO9001  
quality management certification

BV certification

ABS certification

2 invention patents  
7 utility model patents

RoHS Test Report

CE certification



MPG SERIES MICRO GEAR PUMPS  
MPG系列精密级齿轮泵特点

1 无脉动精确输送 Pulsation-free precise conveying

正位移容积泵，通过齿轮来提供持续的精确的流体输送,配合伺服或步进电机使用, 能够实现极高精度的流量输送。

Positive displacement pumps provide continuous and accurate fluid delivery through gears, and can be used with servo or stepper motors to achieve extremely high-precision flow delivery.

2 真空吸料强、输送压力高、平稳 Strong vacuum suction high conveying pressure, stable

可以实现低粘度液体中高压输送  
Can realize low-viscosity liquid medium and high-pressure transportation.

3 无泄漏 No leakage

磁力驱动和静态O型圈密封可保证泵内介质与外界隔离。  
Magnetic drive and static O-ring seal can ensure that the medium in the pump is isolated from the outside world.

4 做工精良、模块化设计 Excellent workmanship, modular design

齿轮轴采用特种改性PEEK材质+热处理工艺+高强度氧化锆陶瓷制成，轴承采用特种改性PEEK复合纳米级陶瓷配方和专用的加工成型工艺,经测试验证：在极端工况空转（干运转）2小时后，流量依然保持高线性度。

The whole series of gear shafts adopt special modified PEEK material + heat treatment process + high-strength zirconia ceramics. It has been tested and verified to maintain high linearity after 2 hours of idling (dry running) under extreme conditions.

5 选型专业化 Selection specialization

数万台微型齿轮泵运用经验，积累了大量实验数据，专业化的选型评估，为您制定解决方案，降低风险。

Thousands of micro gear pumps have experience in the application, accumulated a large amount of experimental data, and professional selection and evaluation, to formulate solutions for you to reduce risks.

琼森齿轮泵技术沉淀多年  
已经成为高端制造行业在线输送关键性控制设备



性能参数  
Performance parameter

流量范围	Flow range	1-320ml/min	
入口压力	Inlet pressure	-0.95~20bar	
压差	Differential pressure	0~25bar	取决于物料粘度 Depends on material viscosity
耐压	Pressure resistance	PTFE密封圈 3Mpa ,橡胶密封4Mpa	for PTFE O-ring is 3 Mpa, for Viton O-ring is 4 Mpa
温度	Temperature	常规温度-20~80 ,低温-40, 高温160可定制	Other temperatures can be customized
粘度范围	Viscosity range	0.4-3000cps	
最大密度	Maximum density	1.8	
电机可配	Motor can be equipped	交流电机、直流无刷、伺服、变频防爆电机	AC motors, Brushless DC, Servo Frequency conversion explosion-proof motor
进出口螺纹	Import and export thread	NPT1/8、G1/8	
非标定制	Non-standard customization	OEM机械设备配套、伺服系统定制	OEM mechanical equipment matching servo system customization



流量理论  
Theoretical flow

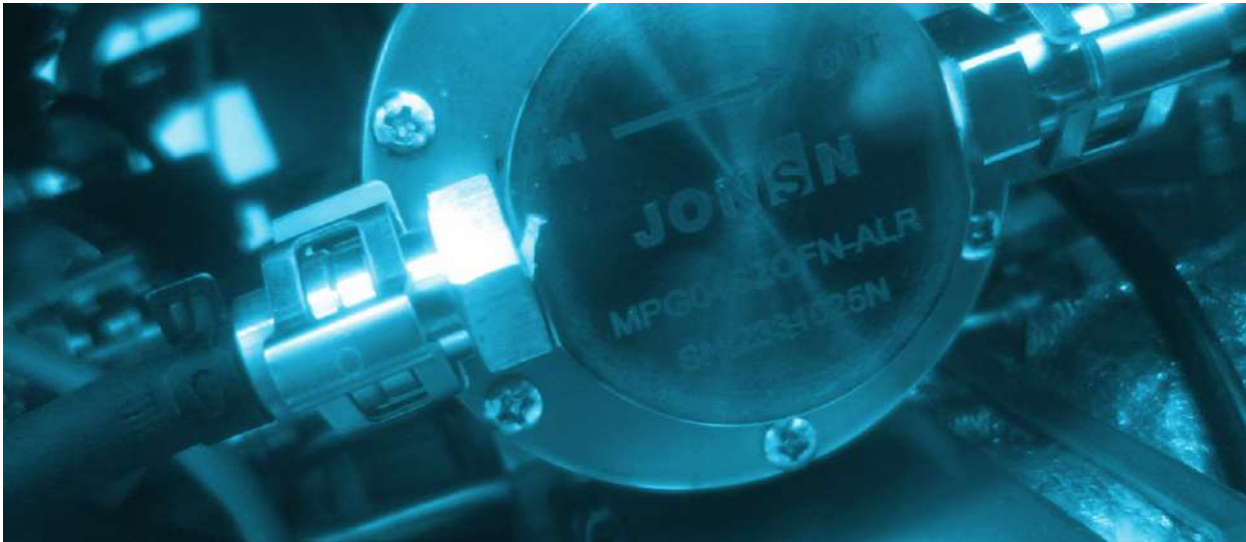
精密齿轮泵 Pump		电机转速 Motor speed (rpm)				
订货号 Order No	口径 Size	100	750	1450	2850	4000
MPG04	1/8	4	30	58	114	160
MPG08		8	60	116	228	320

泵理论流量 Theoretical flow(ml/min)

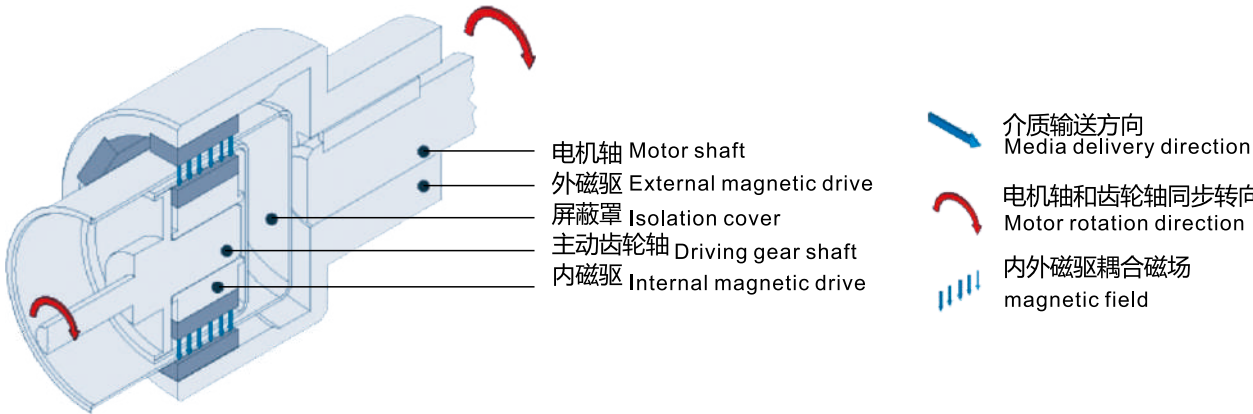
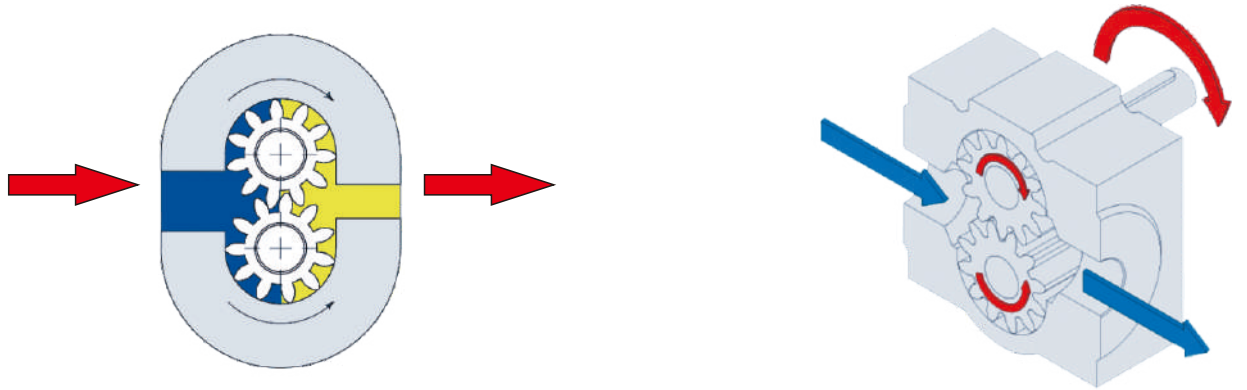


■ 注：以上流量数据是基于水为介质，泵出口无压力的情况测试，由于齿轮转动流量会有间隙损失，实际流量变化会根据介质粘度、压力和电机转速情况会有变化，测试数据告诉我们：介质粘度、进出口压差不变、只要电机转速是稳定，流量就是稳定的，流量的大小取决于电机输出转速和出口压力，所以选用一款高效稳定的电机至关重要。初次使用精密齿轮泵的用户，可下载我司选型数据表，将有关参数通过电话或邮件方式告知我们，我们拥有专业的泵和电机选型软件和数万台泵的应用经验，为你提供泵的详细的选型报告，可以为你制定专业系统解决方案，详情咨询销售人员。

■ Note: The above flow data is based on the fact that water is the medium and there is no pressure at the pump outlet. Since there is a gap loss due to the rotating flow of the gear, the actual flow rate changes according to the viscosity and pressure of the medium.And the motor speed will change, the test data tells us: medium viscosity, inlet and outlet pressure difference is unchanged, as long as the motor speed is stable, the flow is stable, the flow depends on the size, For the motor output speed and outlet pressure, it is important to choose an efficient and stable motor. For the users who use precision gear pumps the first time, you can download our selection data sheet and call or email us refer to the relevant parameters. We have professional pump and motor selection software and thousands of pumps application experience, we can provide you detailed pump performance curves and make specialized system solutions for you, please consult our sales for the details.



COMPLETELY SOLVE THE MEDIUM LEAKAGE MAGNETIC GEAR PUMPS  
彻底解决介质泄漏的磁力驱动齿轮泵



配置编码  
Configuration code

MPG	A	004	S	Z	0	L	F	N	N	A	0
系列 Series No.	进出口螺纹 Inlet & outlet thread A:NPT1/8		泵体材质 Pump material S:316L P:PPS H:HC276 K:PEEK		滑动轴承 Sliding bearing 0:无		静密封圈 Static seal F:PTFE E:EPDM M:FKM P:FFKM E:CR		磁铁材质 Material of Internal magnet N:钕铁硼 Y:铁氧体		特殊处理 Special treating 0:无 1:DLC涂层 2:电解 3:焊接头 4:电加热 5:G螺纹 9:非标定制
	排量 Displacement 004 008 毫升/转 cc/r 例如: 004=0.04cc/r		齿轮轴材质 Gear shaft material Z:齿轮PEEK+轴纳米陶瓷 (标准)		进出口方向 Structure (Inlet and outlet direction) L:180° B:90°&其他		轴封类型 Shaft seal type N:屏蔽式磁力传动		安装板 Mounting plate A:A型压板 B:B型压板 0:标准配置		

# MPG

## MICRO FLOW TYPE GEAR PUMP

MPG系列微型齿轮泵流量稳定精确，  
体积小，广泛应用于医疗、生化仪器、  
燃料电池、肾透析、喷码印刷、实验分析仪等行业。

MPG series micro gear pump flow is stable and accurate with small size,  
it is widely used in medical, biochemical instruments, fuel cells, kidney dialysis,  
inkjet printing, experimental analyzer and many other industries.



## MPG系列





# MPG

## MICRO GEAR PUMPS

### 微小流量型 Micro flow type

#### 可解决工况

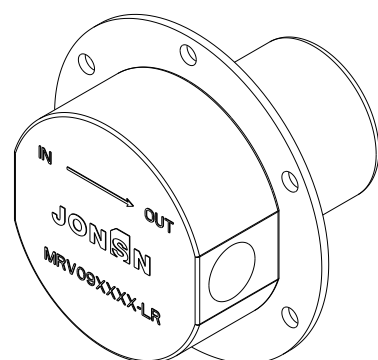
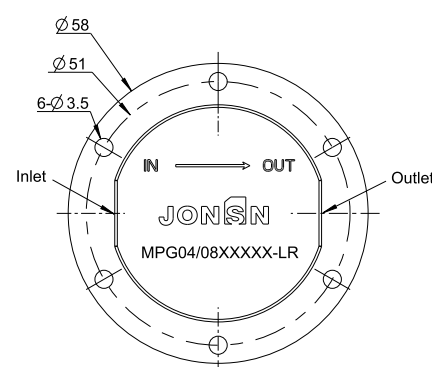
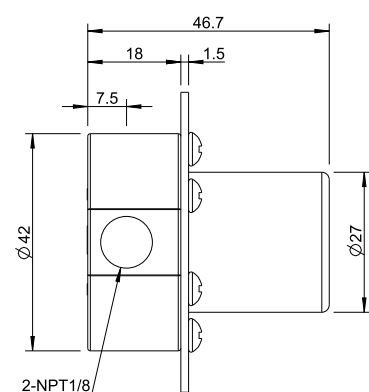
MPG04 排量每转42  $\mu\text{l}/\text{rev}$  微升/转, 可解决流量 1-135ml/min, 具有微小流量调节范围广等特性, 工作压差 2 bar。

MPG08 排量每转86  $\mu\text{l}/\text{rev}$  微升/转, 可解决流量 22-280ml/min, 具有微小流量调节范围广等特性, 工作压差 5 bar。

#### Resolvable working conditions

The displacement of MPG04 is 42  $\mu\text{l}/\text{rev}$  (ul per revolution), and it can solve the flow rate of 1-135ml/min. It has the characteristics of a wide range of micro-flow adjustment, and the working pressure difference is 2 bar.

MPG08 has a displacement of 86  $\mu\text{l}/\text{rev}$  per revolution, can solve the flow rate of 22-280ml/min, has the characteristics of a wide range of micro-flow adjustment, and has a working pressure difference of 5 bar.

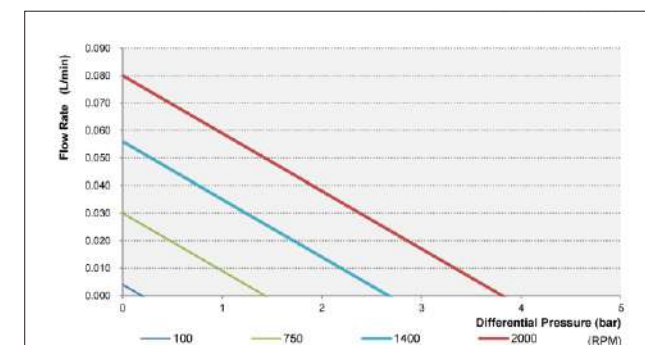


Pumps order NO.	
MPG04	外形尺寸统一 head uniform dimensions
MPG08	

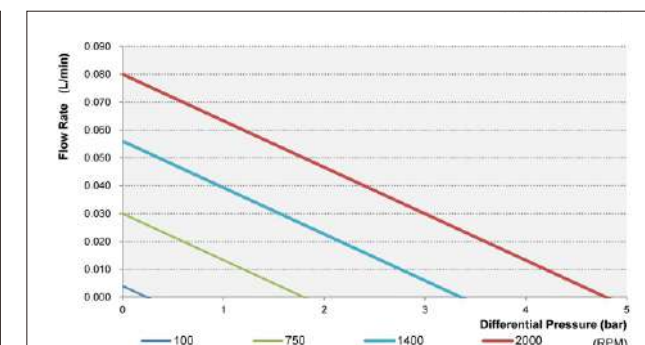
### 性能曲线

#### Performance Curve

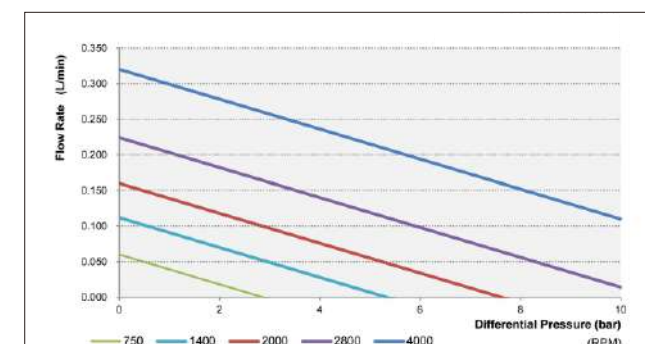
Pump Head MPG04  
Measured with water 1 mPas



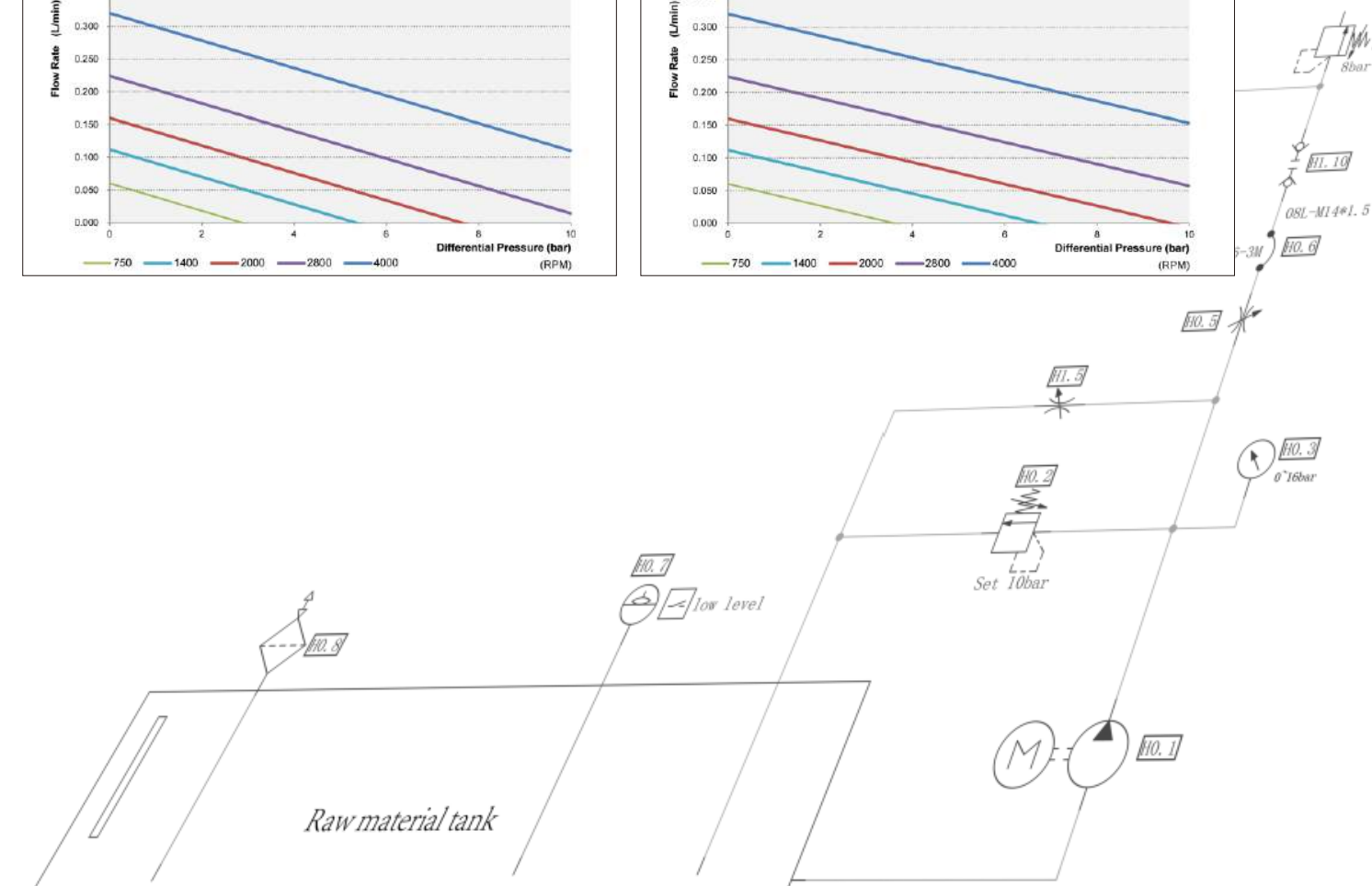
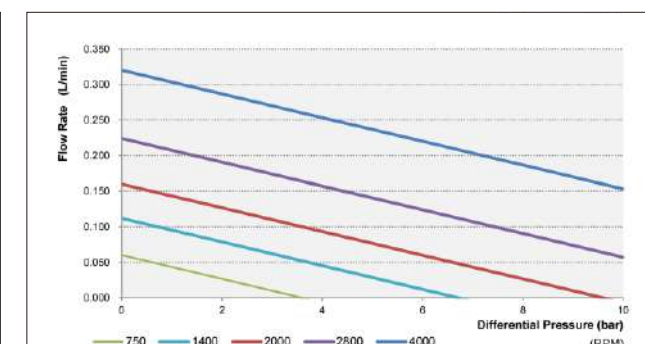
Pump Head MPG04  
Measured with oil 100 mPas



Pump Head MPG08  
Measured with water 1 mPas

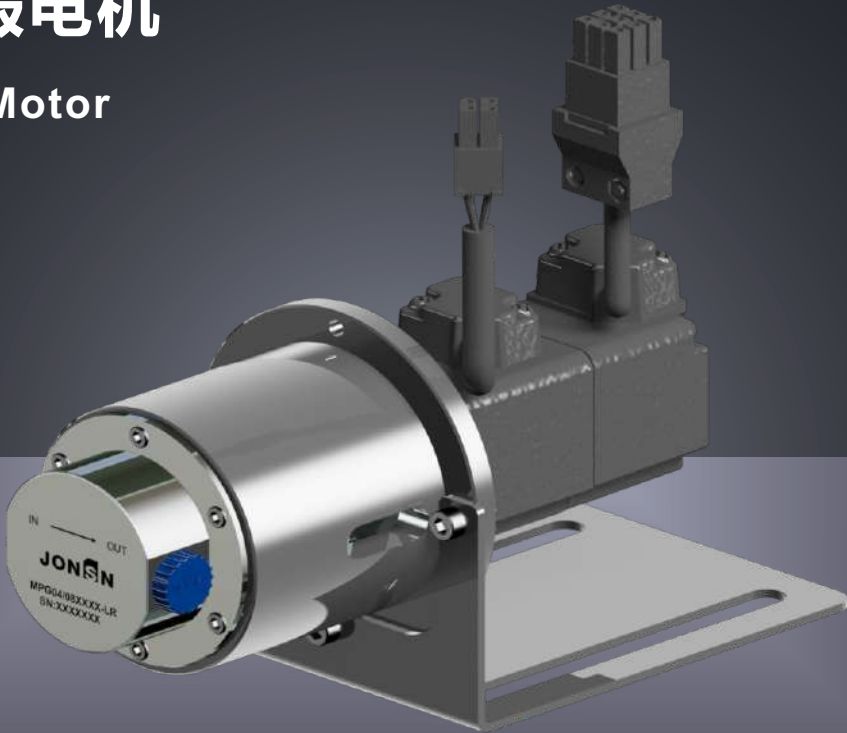


Pump Head MPG08  
Measured with oil 100 mPas



# MPG伺服电机

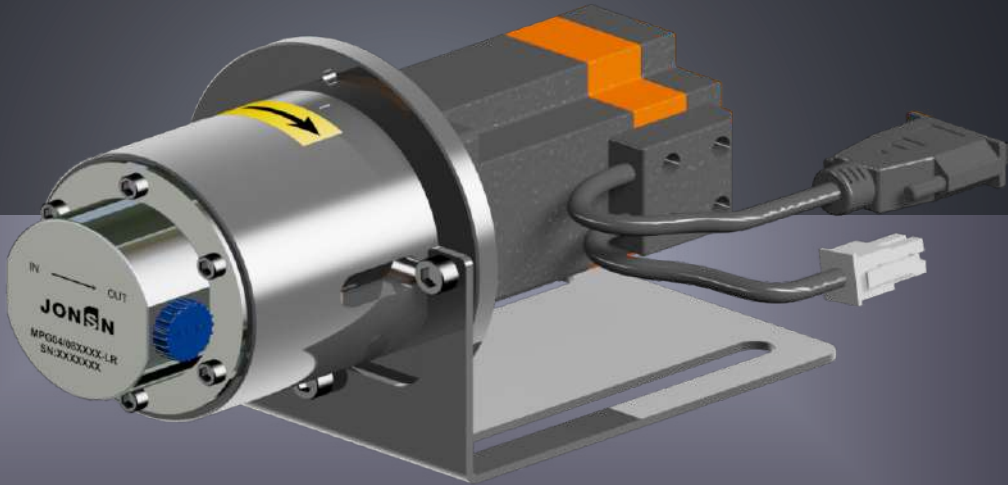
MPG Servo Motor  
220V/110V  
40机座



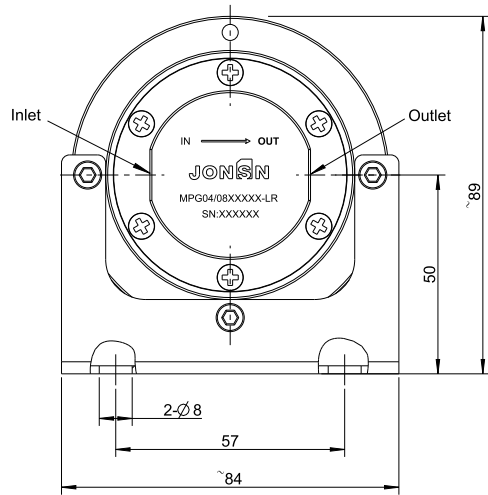
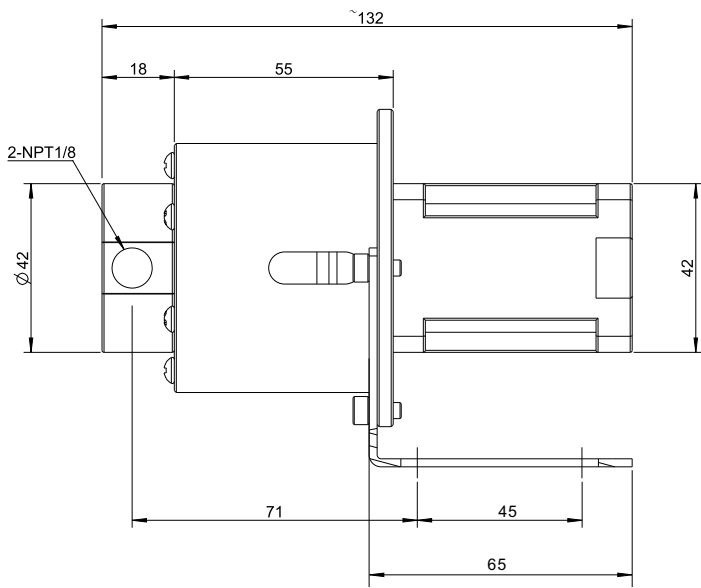
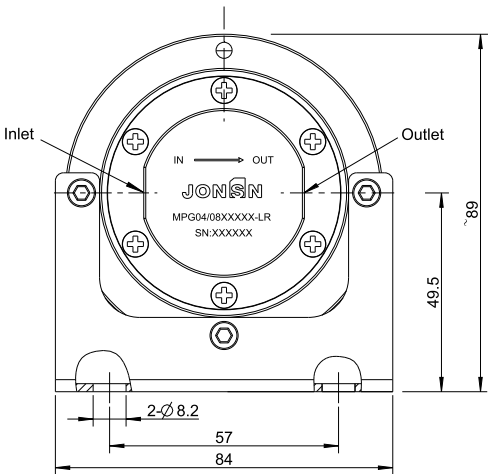
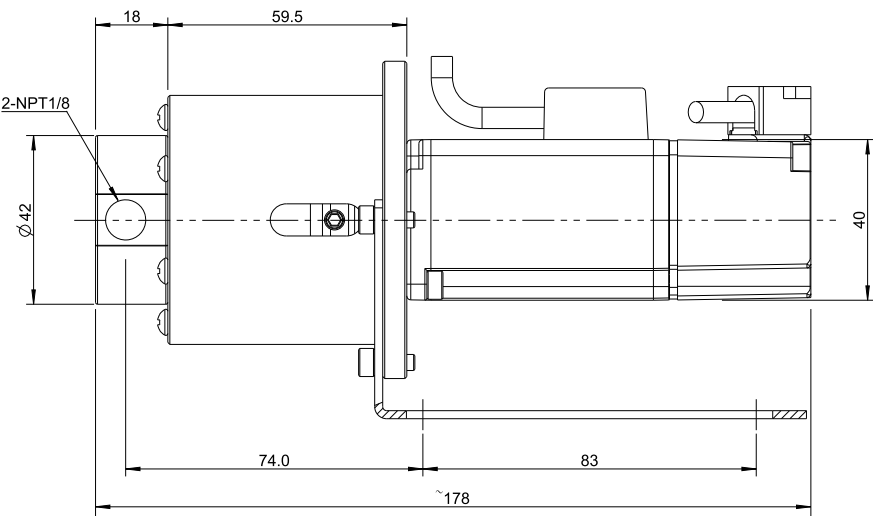
标配：台达  
选配：西门子、松下、三菱、安川  
其它特种电机可由用户采购，琼森负责安装

# MPG直流步进电机

MPG Stepper Motor  
24V  
42机座



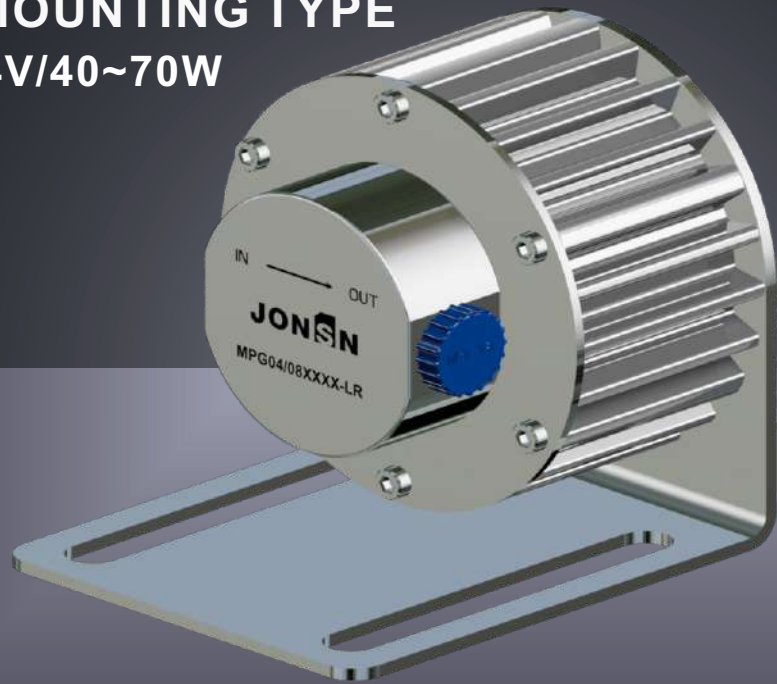
标配：琼森定制款  
选配：42、57、60、86机座





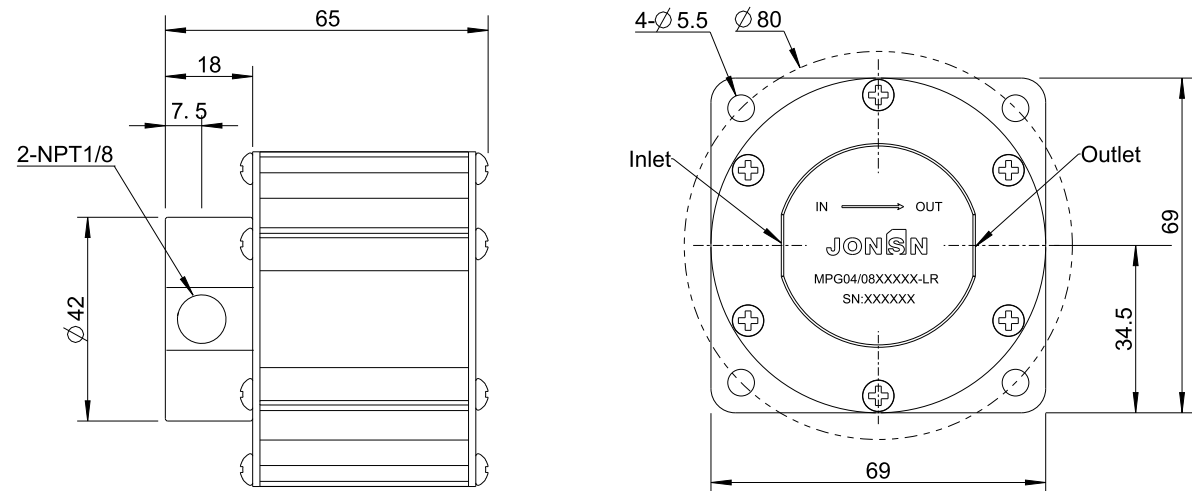
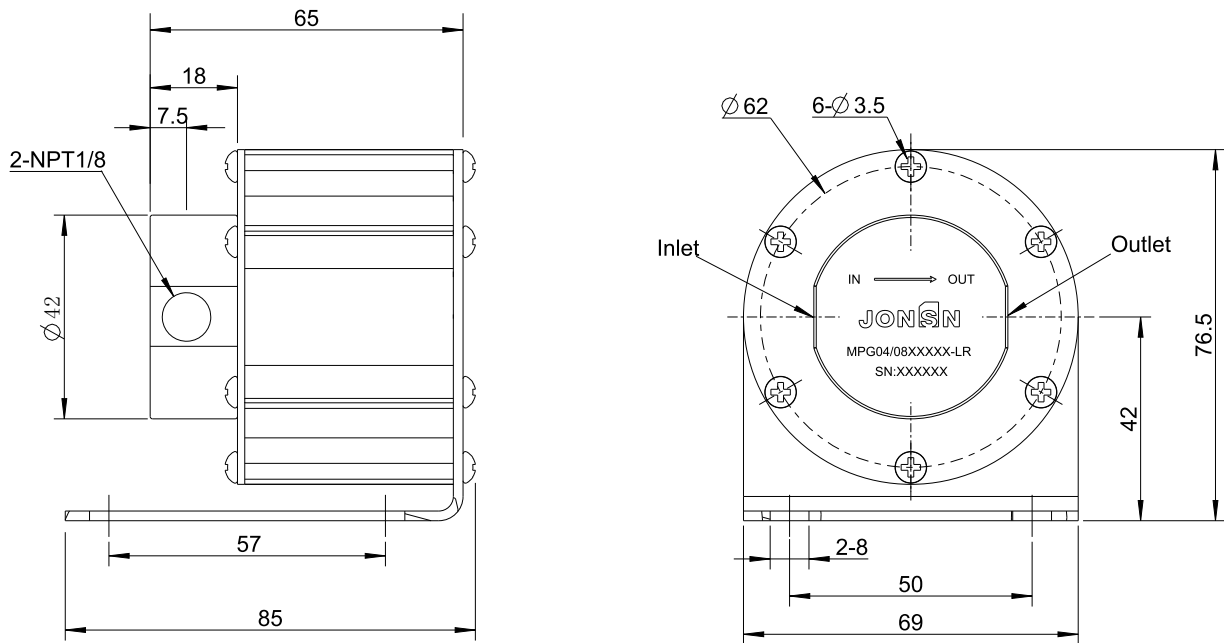
# MPG底板安装方式

BASE MOUNTING TYPE  
BLDC 24V/40~70W



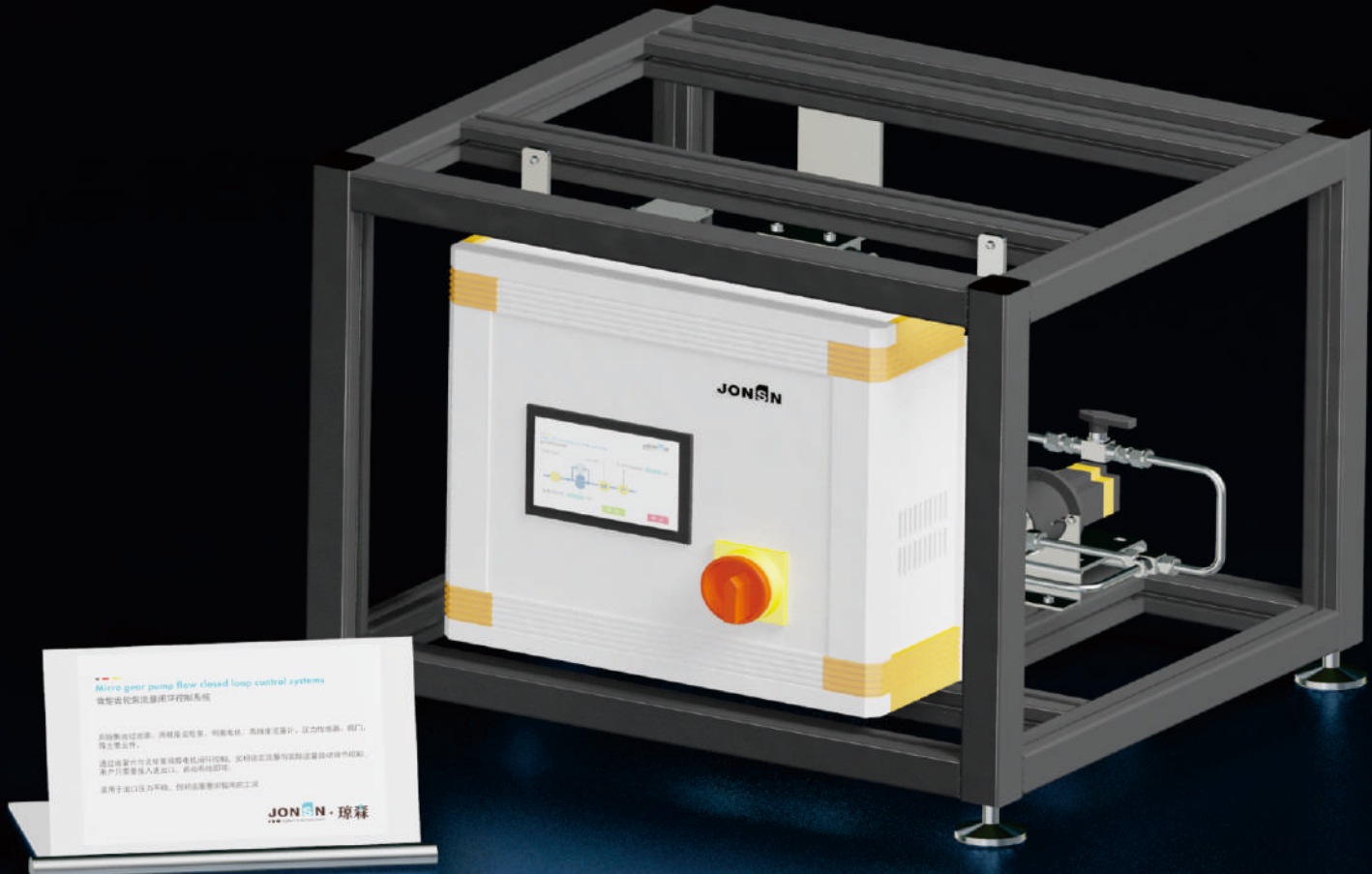
# MPG法兰安装方式

FLANGE MOUNTING TYPE  
BLDC 24V/40~70W



我们深耕微小流量在线精密输送领域

服务于国内外重点实验室、科研院所、企事业单位等机构，  
精密级微型齿轮泵应用于半导体、核工业、特种材料制备、精细化工。



我们具有丰富的流体控制专业知识，  
能为您提供专业的微小流量解决方案！

SELECTION PARAMETERS  
选型参数

客户编码:  
Customer code

公司:  
company

姓名:  
Name

部门:  
Department

地址:  
Address

电话/分机:  
Extension

传真:  
Fax

邮箱:  
E-Mail

介质 Medium

名称:  
Name

应用领域:  
Application areas

浓度:  
Concentration

是否易燃易爆:  
Whether explosive

密度:  
Density

粘度:  
Viscosity

介质温度:  
Medium temperature

环境温度:  
Ambient temperature

固体含量:  
Solid content

介质状态:  
Media status

☐是  
Yes

☐否  
No

☐是  
Yes

☐否  
No

☐软  
Soft

☐硬  
Hard

☐流动性  
Fluidity

☐触变的  
Thixotropy

☐粘稠  
Sticky

☐固化  
Curing

操作条件 Operating conditions

需要的流量:  
flow

入口压力: 正压  
Inlet pressure

真空度:  
Vacuum

L/min或  
L/h

正压  
Positive pressure or

Kpa

自吸高度  
Suction

M

Kpa

出口压力(含管道阻力):  
Outlet pressure

工作频率:  
Working frequency

☐连续工作  
Continuous

☐间歇工作  
Intermittent

驱动马达 Drive motor

☐单相普通电机  
Single phase

☐三相普通/防爆/变频调速电机  
Three phase

☐24V直流无刷电机  
24V BLDC motor

☐24V步进/220V伺服电机  
24V Stepper motor / 220 Servo motor

应用工况 Application conditions

☐无脉动输送  
No pulsation in the mouth

☐增压  
Pressurization

☐计量喷雾  
Metering spray

☐循环  
Circulation

☐冷却  
Cool down

☐润滑  
Lubricating

☐冲洗  
Wash

☐其它  
Other

您的要求 Your requirements

在这请描述您的运用或写下您的备注:  
Please describe your application here or write down your remarks: