

# NEW PRODUCT

**JONSN**  
PUMPS & TECHNOLOGY

THE MRV SERIES OF PRODUCTS ARE FULLY LAUNCHED ONLINE.  
IT HAS BEEN ELABORATELY CRAFTED BY THE JOHNSON R & D TEAM FOR THREE YEARS.

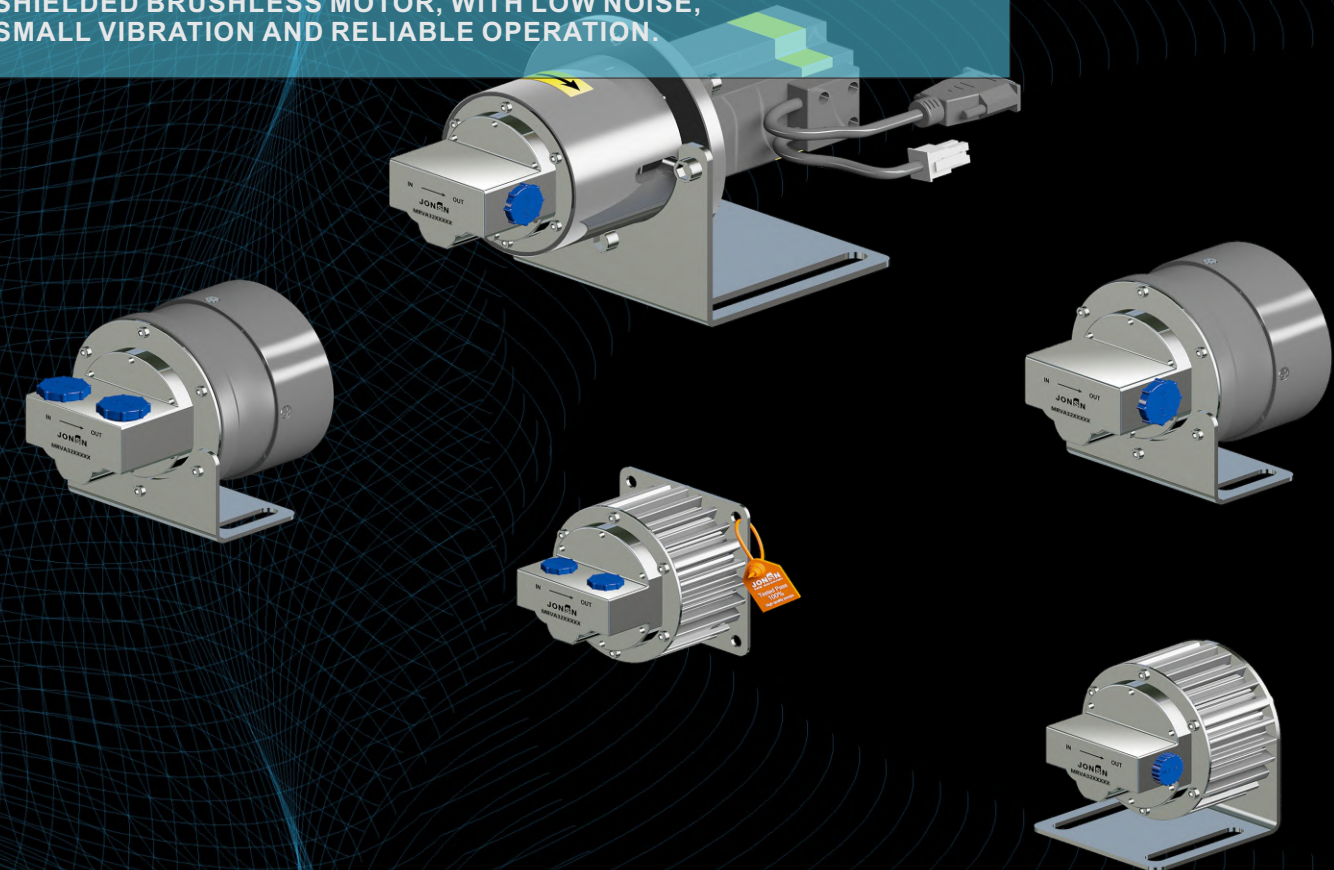
DEVOTE WITH PASSION!

INTEGRATED COMPACT DESIGN WITH SMALL VOLUME.

EFFICIENT GEAR PROFILE DESIGN EFFECTIVELY IMPROVES  
THE VOLUMETRIC EFFICIENCY OF THE PUMP.

SHIELDED BRUSHLESS MOTOR, WITH LOW NOISE,  
SMALL VIBRATION AND RELIABLE OPERATION.

**JONSN**  
MICRO GEAR PUMPS



Attentively focus on making each precision gear pump!

# MRV

## PRECISION MICRO GEAR PUMP

■ SHANGHAI JONSN FLUID EQUIPMENT CO.,LTD

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Tel: 021-34720020 Fax: 021-67689517  
Website: [www.jonsn.cn](http://www.jonsn.cn) Email: [lijun@jonsn.cn](mailto:lijun@jonsn.cn)

■ JONSN (GANZHOU) FLUID TECHNOLOGY CO., LTD

Address: Workshop 2, No. 6 Jingsan Rd,  
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Ganzhou City, Jiangxi Province, China  
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Email: [sales@jonsn.com](mailto:sales@jonsn.com) (International department)



# ENTERPRISE PROFILE

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 manufacturing 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 was 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.

# TECHNOLOGY PUMPS



# DEVELOPMENT PATH



## 2010

Shanghai Jonsn was established. The company's core management has dozens of years of experience of European and the American imported gear pumps, magnetic pumps, barrel pumps, diaphragm pump, and special pump for high temperature, high pressure and corrosive industry etc.

## 2011

Jonsn has established its own R&D center of precision gear pumps. Started ERP management system. Designed the whole series of Jonsn barrel pumps, passed test and obtained the CE certification.

## 2012

Shanghai Jonsn Fluid Equipment Co., Ltd. changed from a trade-oriented company to a production-oriented enterprise. In the same year, Jonsn barrel pump series products were put into production one by one and sold to foreign markets. Jonsn precision micro gear pump design was completed at the same year.

## 2013

Jonsn precision micro gear pump prototype has passed the verification. Its design life and process parameters far exceed similar products in Europe and America. The company fully focused on the R&D, design and production of high-precision gear pumps.

## 2014

Jonsn micro gear pumps achieved mass production. And we started the design of DX high viscosity gear pumps.

## 2015

The JONSN trademark has been registered successfully, and 2 invention patents and 7 utility model patents have been applied for. JONSN precision micro gear pump finalized mass production. Successfully applied and exported to European and American markets. Successfully signed Sinopec, CNOOC, Tianjin Jereh and many other enterprises.

## 2016

DX series high-viscosity gear pump finalized production. In the same year, the company's gear pump performance achieved an annual output value of more than 30 million.

## 2017

Import product code tracking and traceability system. Started 6S on-site management system.

## 2018

The strategic positioning of the enterprise has been upgraded to "reliable high-quality pump supplier". Focus on quality control, achieve 100% factory test pass and make trustworthy good products.

## 2019

JONSN precision gear pump successfully obtained CE certification and applied to SCR exhaust gas treatment system in shipbuilding industry. Nippon Kaiji Kyokai staff passed the site inspection test, Jonsn obtained the ClassNK license from Nippon Kaiji Kyokai. Become a fluid control system solution provider for the new energy lithium battery industry.

## 2020

Launch a new LOGO brand identity and brand concept. Focus on R&D and production of high-precision gear pumps. The new factory joint with the British Brontz Group officially settled in Ganzhou. The company started the research and development of DP series high viscosity gear metering pump.

## 2021 to present

Started the TUV Rheinland ISO9001 quality management system certification work. The first sample pump of DP series high-viscosity gear metering pump enters the test verification stage.

# MRV SERIES

## CHARACTERISTIC

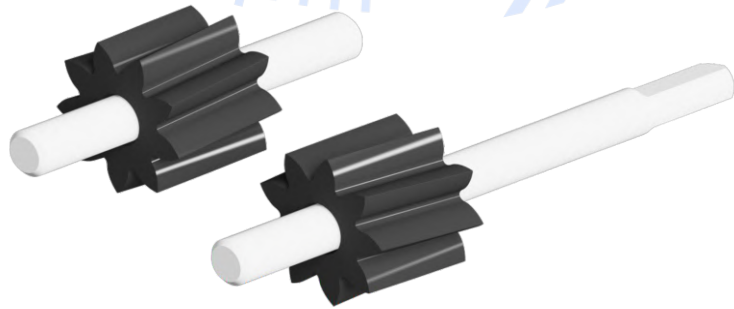
The MRV series is mainly designed for equipment matching and narrow installation space, with flexible pipeline installation.

By simplifying the internal structure, the pump body is integrally cast in steel, which is sturdy and durable. The gear shaft is precisely processed with a PEEK gear + zirconia ceramic shaft.



### DP GEAR PUMP VOLUMETRIC EFFICIENCY CURVE

- Pulsation-free precise conveying
- Strong vacuum suction high conveying pressure, stable
- No leakage
- Selection specialization
- Customize unique model and Logo for ancillary customers



### CONFIGURATION CODE

MRV	A	32	S	Z	K	L	F	N	N	A	0
Series No.						Static sealing ring					
						F	PTFE				
						M	FKM				
						E	EPDM				
						P	FFKM				
						L	CR				
						Type of shaft seal					
						N	Shielded magnetic drive				
						Magnet material					
						N	NdFeB				
						M	Sintered NdFeB.				
						Y	Ferrite				
						Installation plate					
						A	Type A pressure plate.				
						B	Type B pressure plate.				
						0	Standard configuration				
						Particular treatment					
						0	No special treatment.				
						1	DLC coating				
						2	Electrolysis				
						3	Welded joint				
						4	Electric heating				
						5	G thread				
						9	non-standard tailoring				

Import and export threads	
A	NPT1/8
B	NPT1/4
C	NPT3/8

Displacement	
032/065/080/125/175/220	
032= 0.32cc/r	

Pump body material	
S	316L

Gear shaft material	
Z	Gear PEEK + shaft nano-ceramic (standard)

Plain bearing	
K	PEEK

Import and export direction	
L	180° (standard)
B	90°& other

### Technical parameters

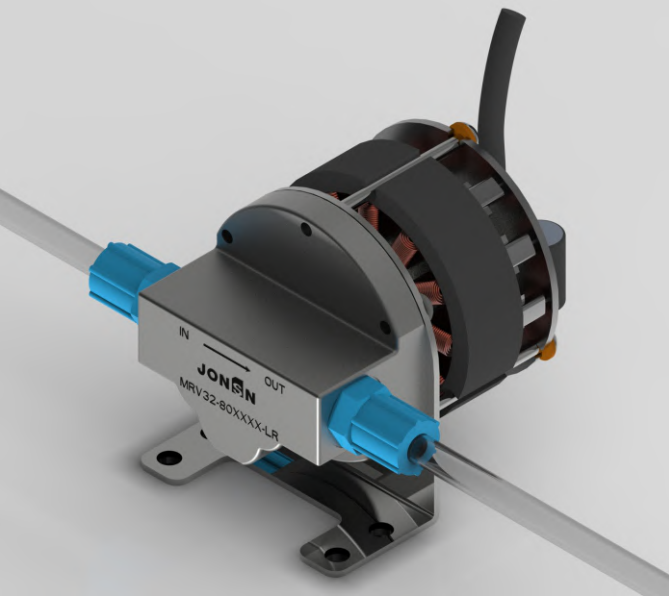
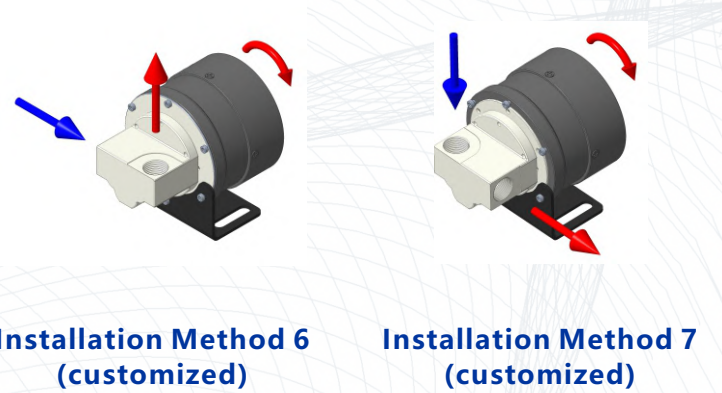
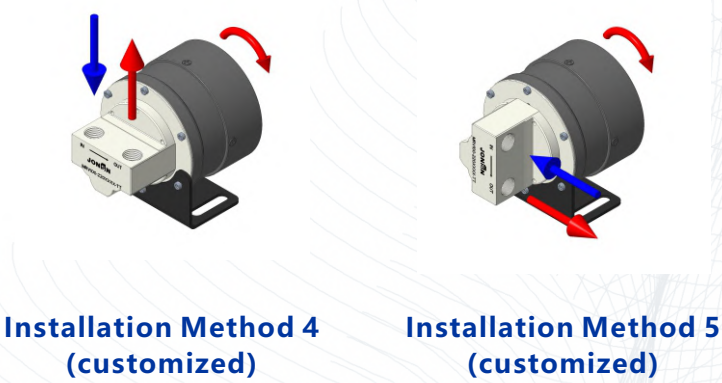
Displacement(cc/rev)	0.001-8 L/min
Inlet pressure	-0.98 - 25bar
Pressure difference	0.98bar - 10bar
Temperature	-60°C - 100 °C
Viscosity range	3000 mPas
Maximum density	1.8 g/cm³
Motor	DC brushed / brushless motor, stepper motor, AC motor.
Inlet and outlet threads	NPT1/8 NPT1/4 NPT3/8
Non-standard customization support.	



# MRV SERIES

## INSTALLATION METHOD

← Medium conveying direction.  
→ The synchronous rotation of the motor shaft and the gear pump.





# MRV SERIES

## APPLICATION

THE MRV SERIES PRECISION MICRO MAGNETIC GEAR PUMP CAN BE USED IN: TRACE TRANSPORTATION, ADDITION, LUBRICATION, SPRAYING, DISPENSING, SAMPLING, MARKING, PRESSURIZATION, CIRCULATION, COATING, SPRAYING, METERING AND OTHER TRANSPORTATION SYSTEMS OF LIQUIDS.

### BE WIDELY APPLIED TO:

Automation and process control systems, trace transportation systems, circulation pressurization systems, automatic feeding (medication) systems, waste heat recovery systems, sampling equipment (including vacuum suction), chip processing equipment, laboratory equipment, cooling systems (refrigerant circulation pumps), foundry machinery, packaging machinery, cleaning systems, auxiliaries filling systems, chemical metering systems, small-scale/testing devices, and other occasions requiring small flow, no pulse, high linearity, high pressure difference, no leakage, precise measurement, and stable flow transportation.

## MRV SERIES



Pharmaceutical Industry



High Power Liquid Cooled Super Charging Pile



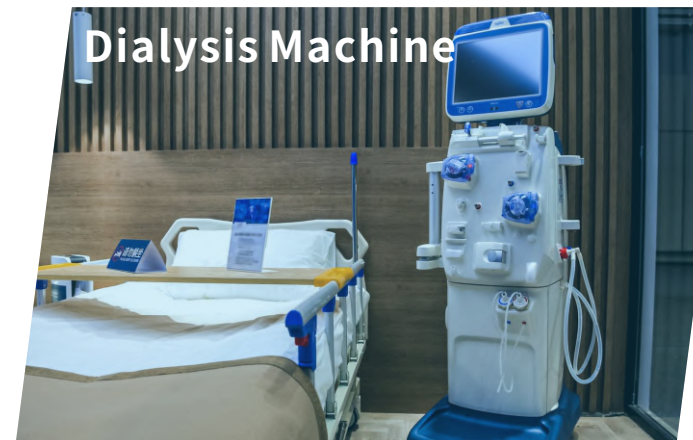
MRI Industry



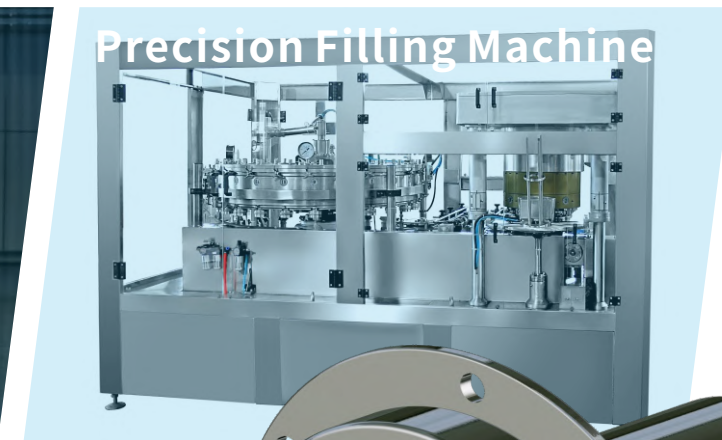
Refrigeration Industry



Dialysis Machine



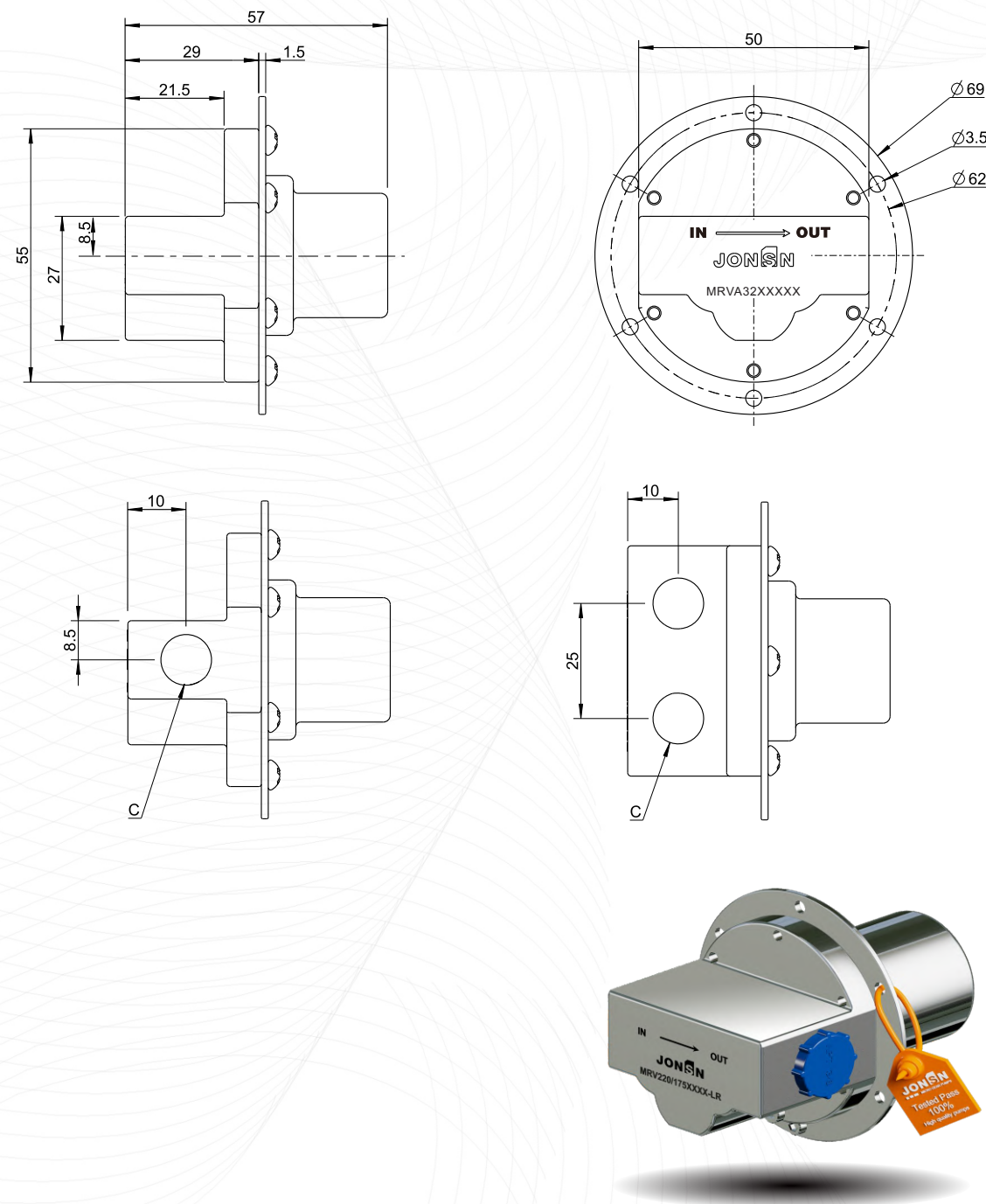
Precision Filling Machine





# MRV

## PRECISION GEAR METERING PUMP 32-80 cc

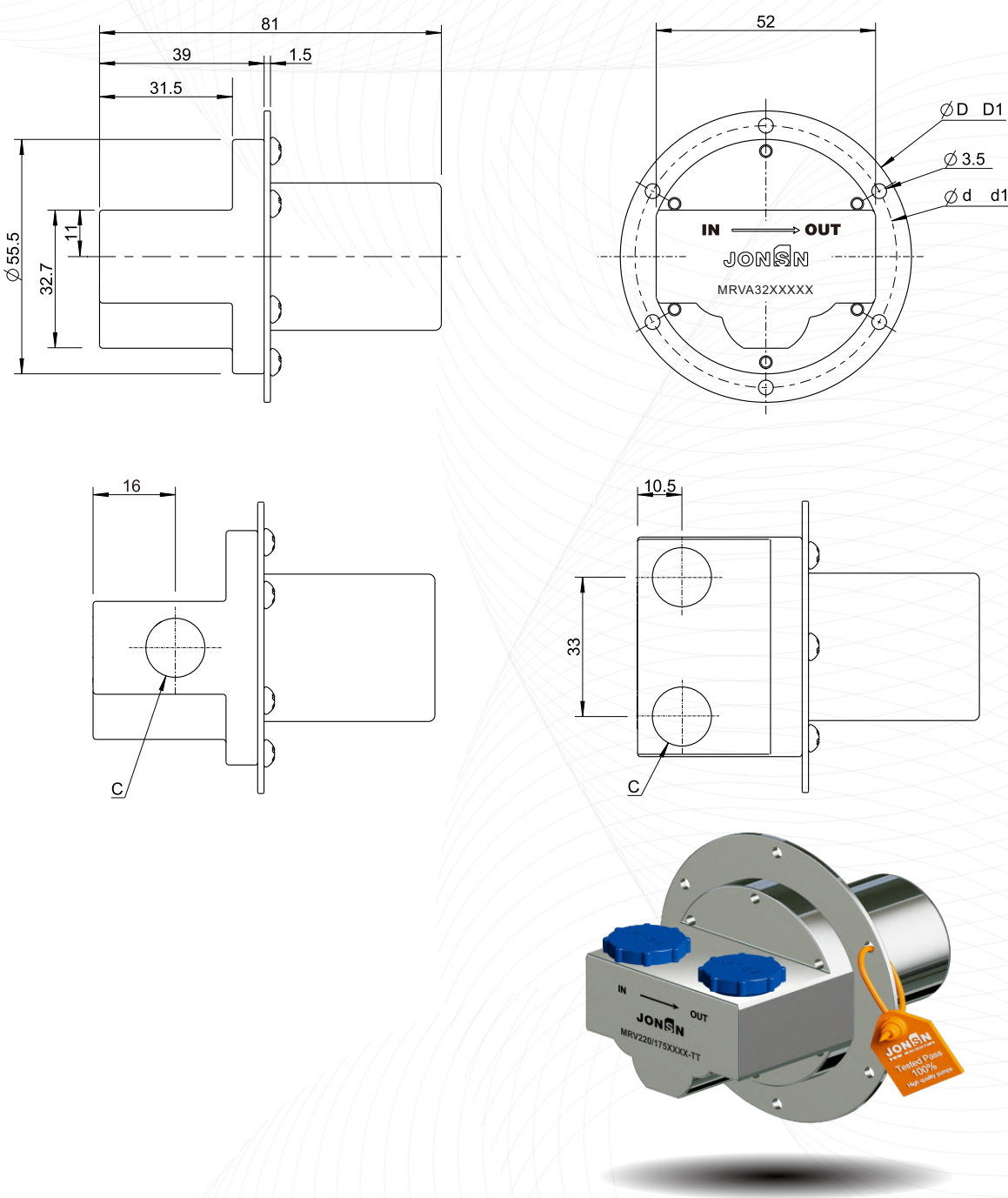


Note: We can provide you with detailed selection data solutions/dimensional drawing /STEP drawing

Pump model	inlet and outlet direction "C"	
	L	B
MRVA32	NPT1/8 or NPT 1/4	
MRVA65		
MRVA80		

# MRV

## PRECISION GEAR METERING PUMP 125-220 cc



Note: We can provide you with detailed selection data solutions/dimensional drawing /STEP drawing

Pump model	inlet and outlet direction "C"		The size of the motor connection flange.			
			Big mounting plate		Small mounting plate	
	L	B	D	d	D1	d1
MRVA125	NPT1/4 or NPT 3/8		79.5	74	69	62
MRVA175						
MRVA220						

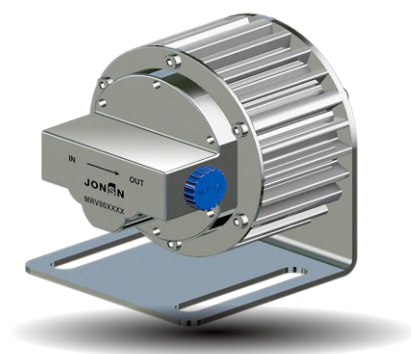


# MRV SERIES

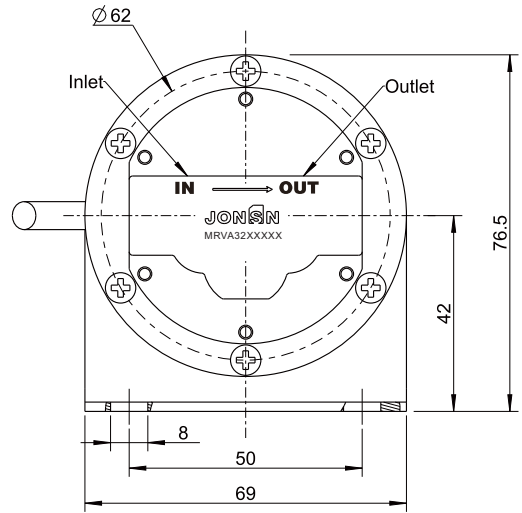
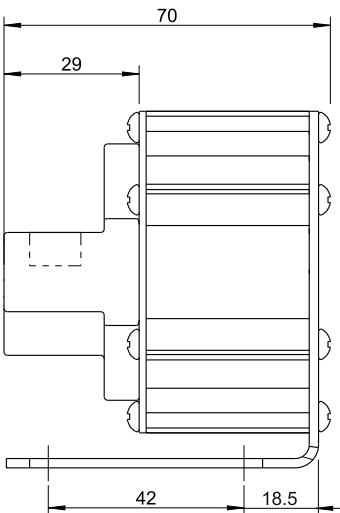
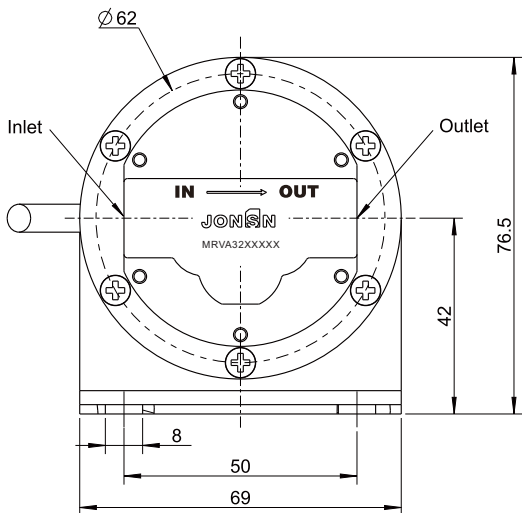
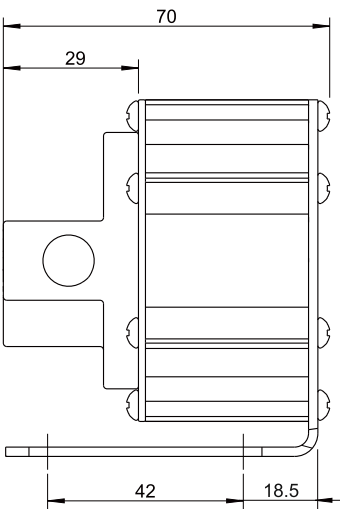
## PUMP SIZE DRAWING

### MRV

32/65/80+BLDC  
24V 40W

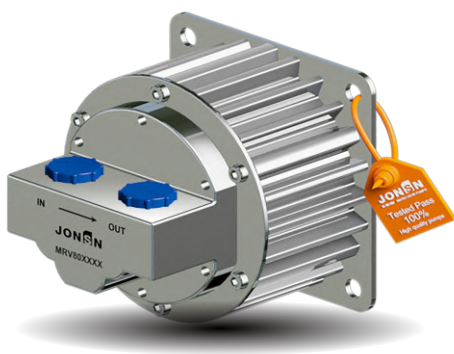


### Floorboard installation.

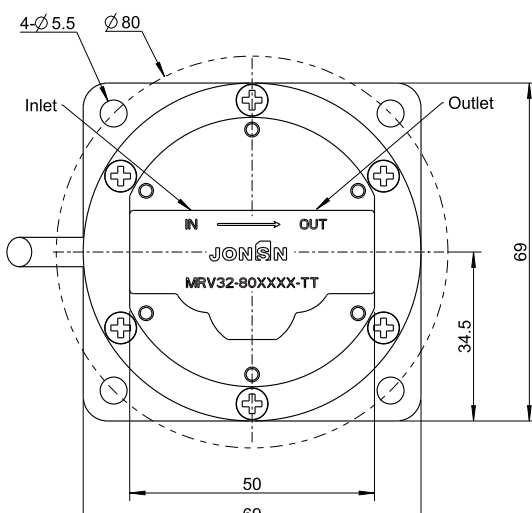
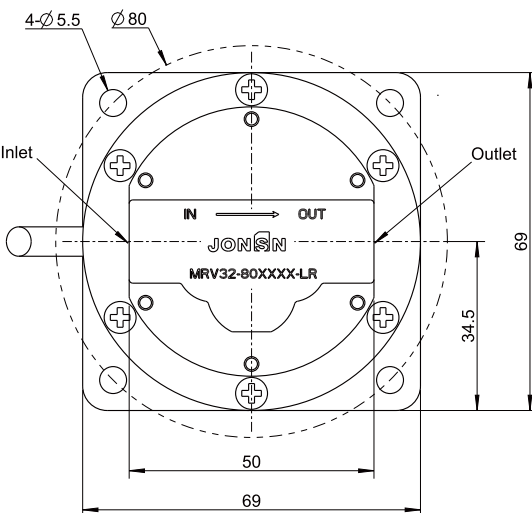
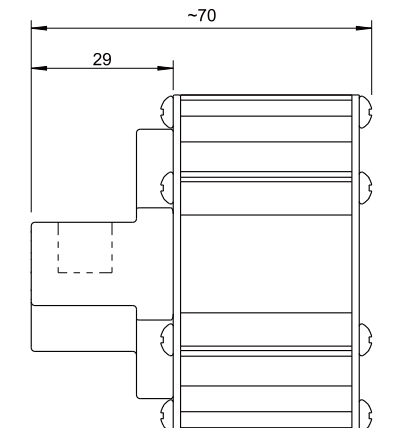
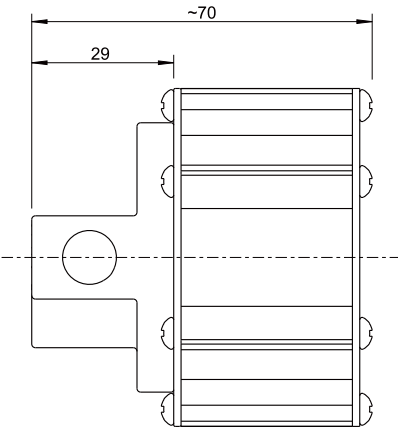


### MRV

32/65/80+BLDC  
24V 40W



### Mounting plate

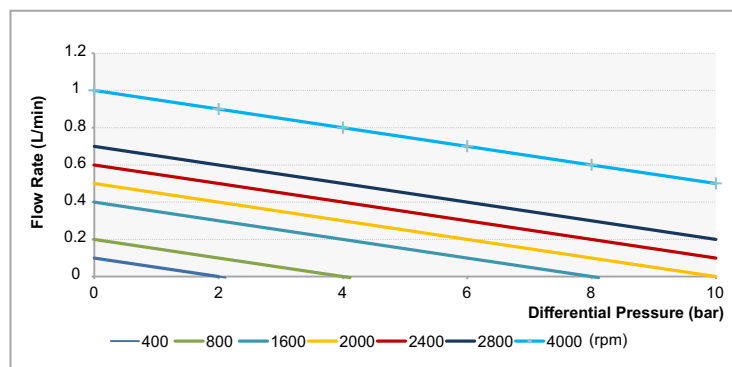




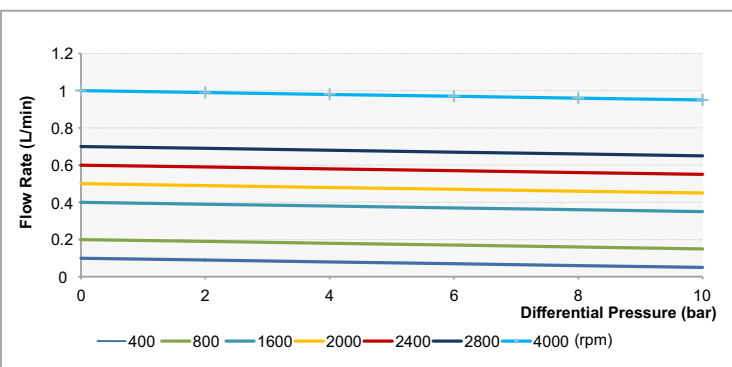
# MRV SERIES

## PERFORMANCE CURVE

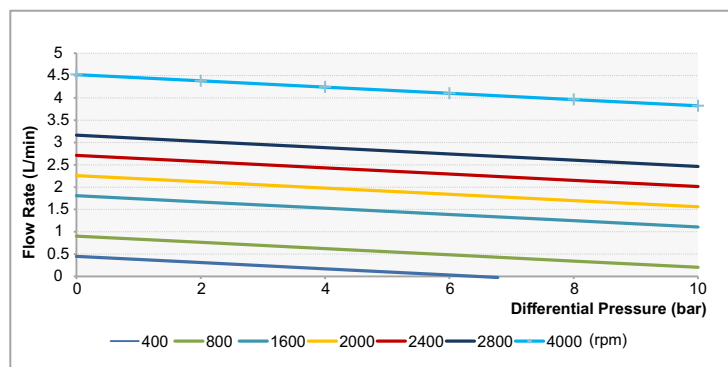
**Pump Head MRVA32**  
Measured with water 1mPas



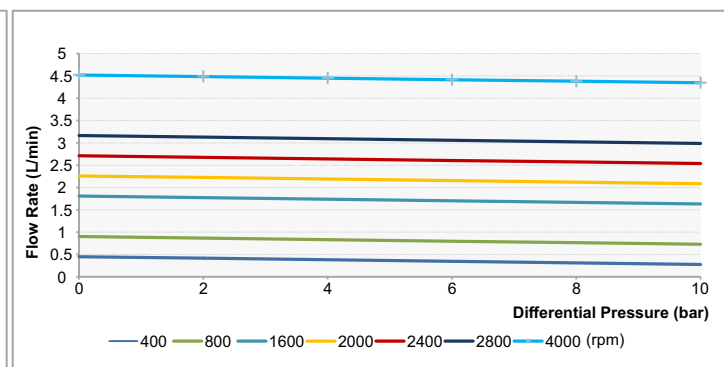
**Pump Head MRVA32**  
Measured with oil 100mPas



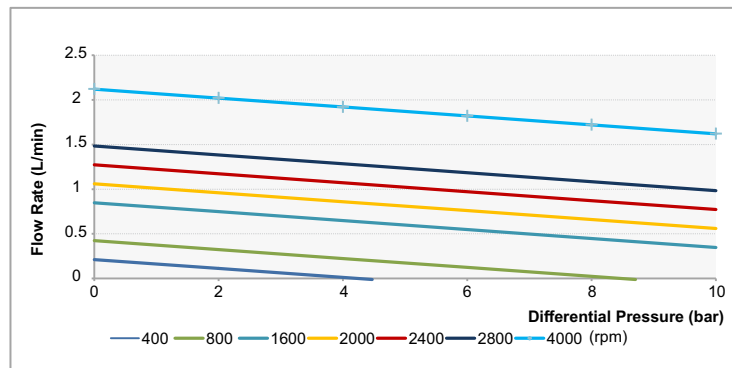
**Pump Head MRVB125**  
Measured with water 1 mPas



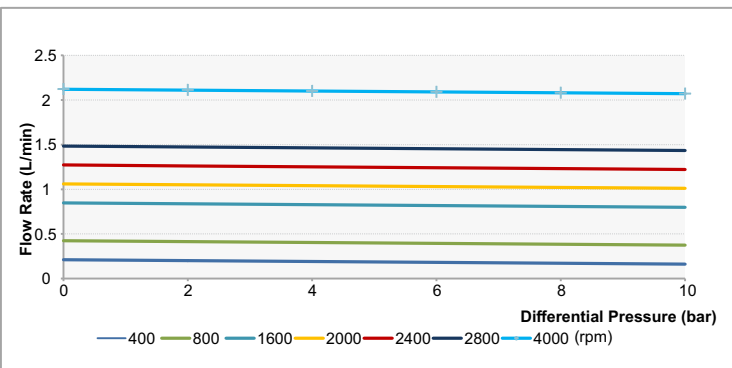
**Pump Head MRVB125**  
Measured with oil 100 mPas



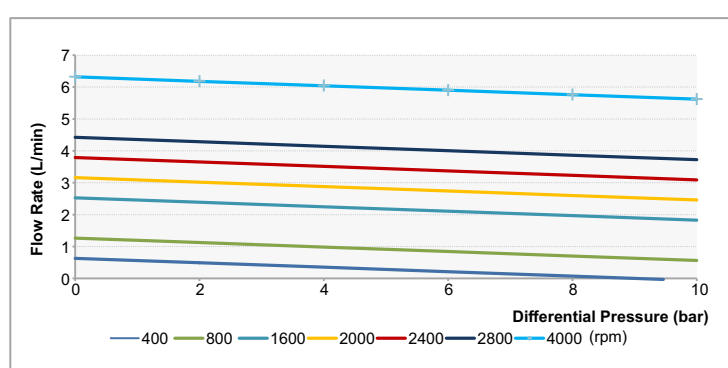
**Pump Head MRVA65**  
Measured with water 1 mPas



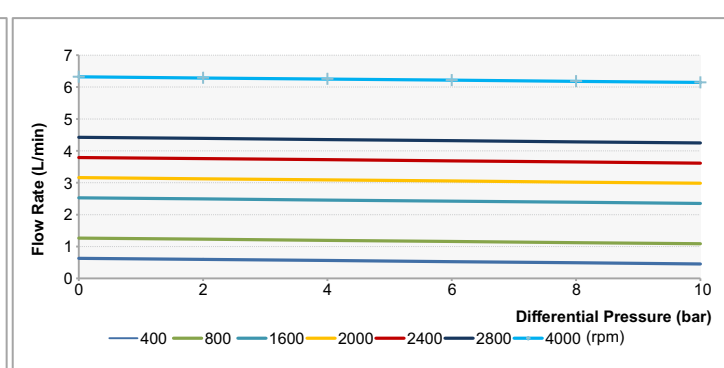
**Pump Head MRVA65**  
Measured with oil 100mPas



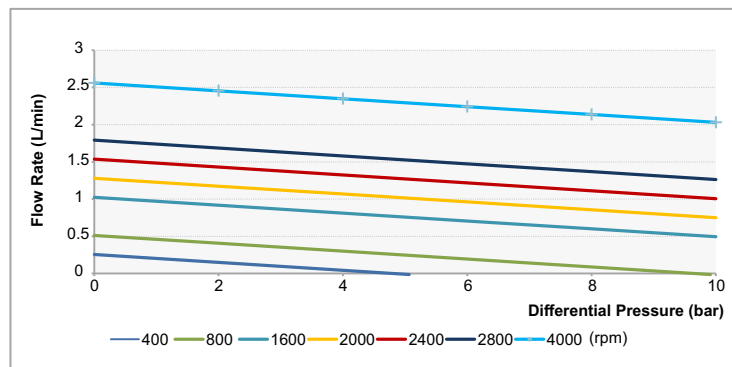
**Pump Head MRVB175**  
Measured with water 1 mPas



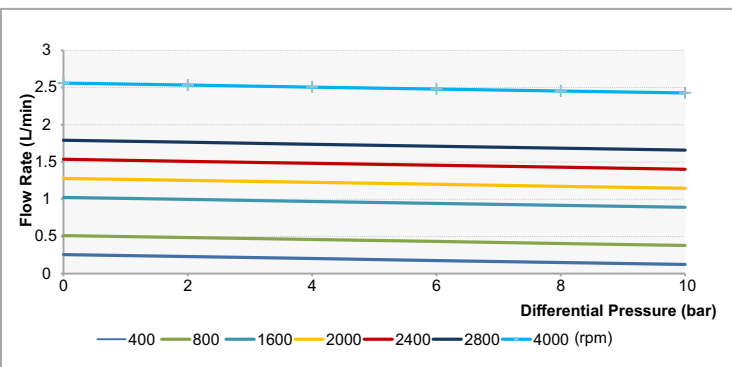
**Pump Head MRVB175**  
Measured with oil 100 mPas



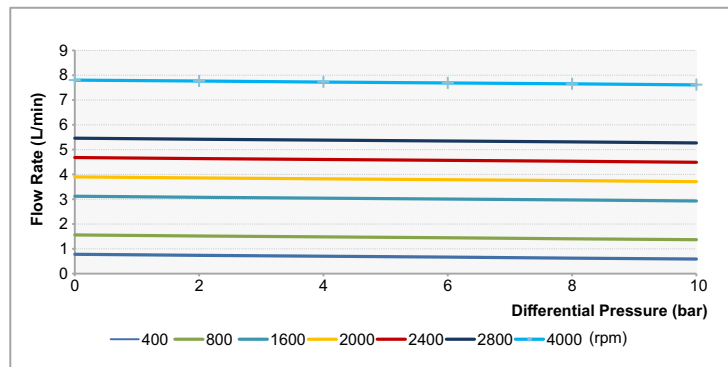
**Pump Head MRVA80**  
Measured with water 1 mPas



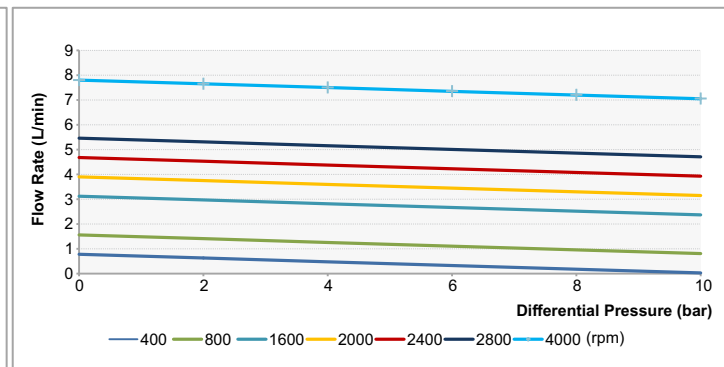
**Pump Head MRVA80**  
Measured with oil 100 mPas



**Pump Head MRVC220**  
Measured with oil 100 mPas



**Pump Head MRVC220**  
Measured with water 1 mPas





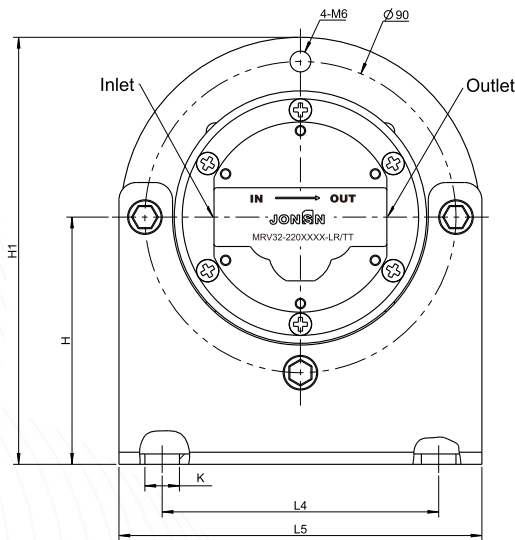
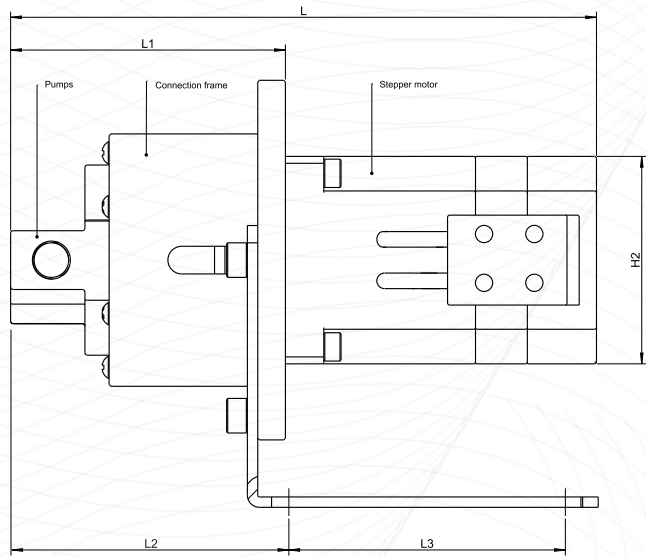
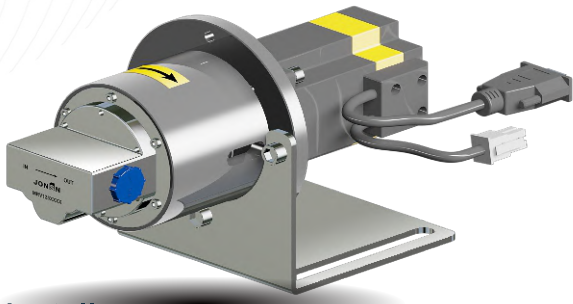
MRV SERIES

MOTOR CONFIGURATION

MRV + Servo Motor

220V/110V  
40/60 Frame

Standard: Delta  
Optional: Siemens, Panasonic, Mitsubishi, Yaskawa  
Others motor can be offered by client, Jonsn will help to install.

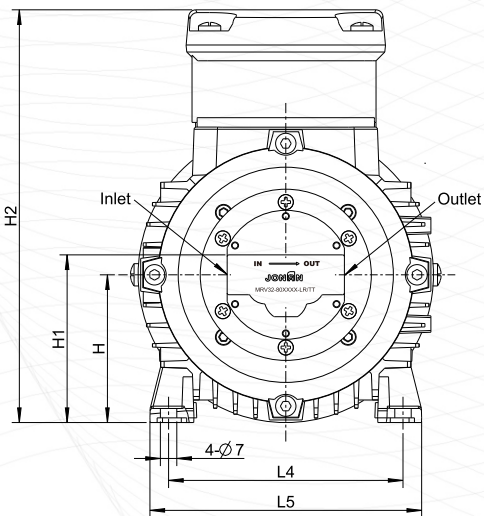
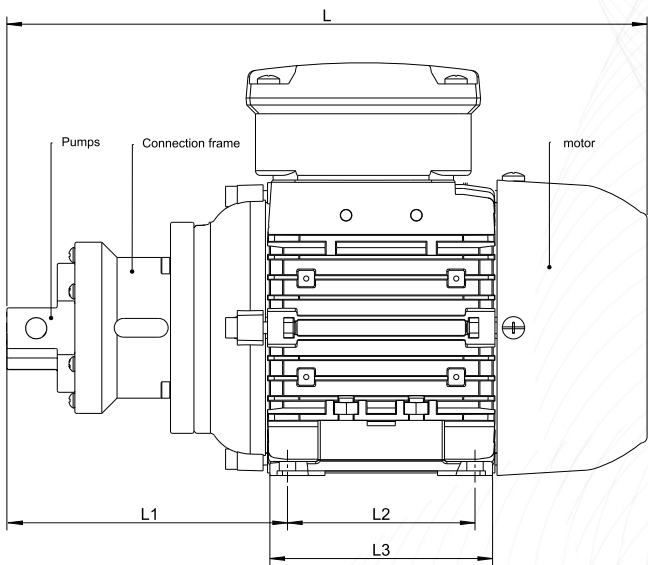
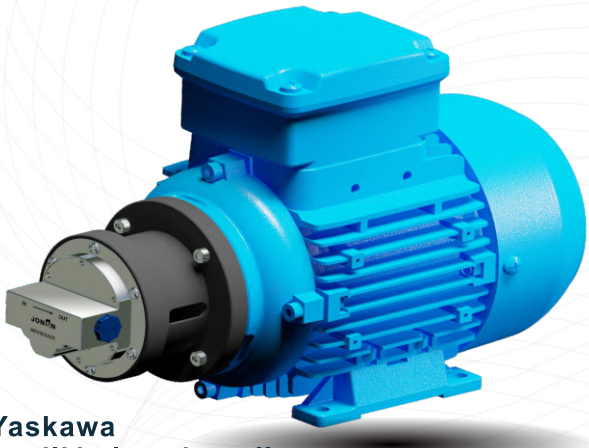


Pumps order NO.	L	L1	L2	L3	L4	L5	H	H1	H2	K
MRV32/65/80 & 42	~139	80	45	76	58	76	50	~86.5	40	6
MRV32/65/80 & 60	~170	80	80.5	80	80	105	71.5	~124	60	10
MRV100/125/175/220 & 40	~164.3	104.8	55	76	58	76	50	~86.5	40	6
MRV100/125/175/220 & 60	~194.8	104.8	105.8	80	80	105	71.5	~124	60	10

MRV + IEC Motor

220V/110V  
63/71 Frame

Standard: Delta  
Optional: Siemens, Panasonic, Mitsubishi, Yaskawa  
Others motor can be offered by client, Jonsn will help to install.



Pumps order NO.	L	L1	L2	L3	L4	L5	H	H1	H2
MRV32/65/80 & 63	~273	120	80	95	100	116	63	71.5	~176
MRV32/65/80 & 71	~299	133	90	108	112	135	63	71.5	~176
MRV125/175/220 & 63	~308	146	80	95	100	116	71	82	~190
MRV100/125/175/220 & 71	~334	159	90	108	112	135	71	82	~190

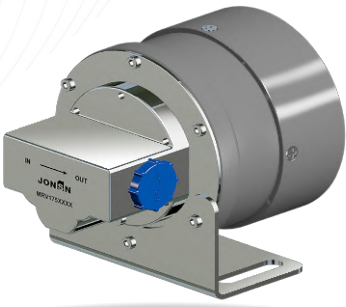


MRV SERIES

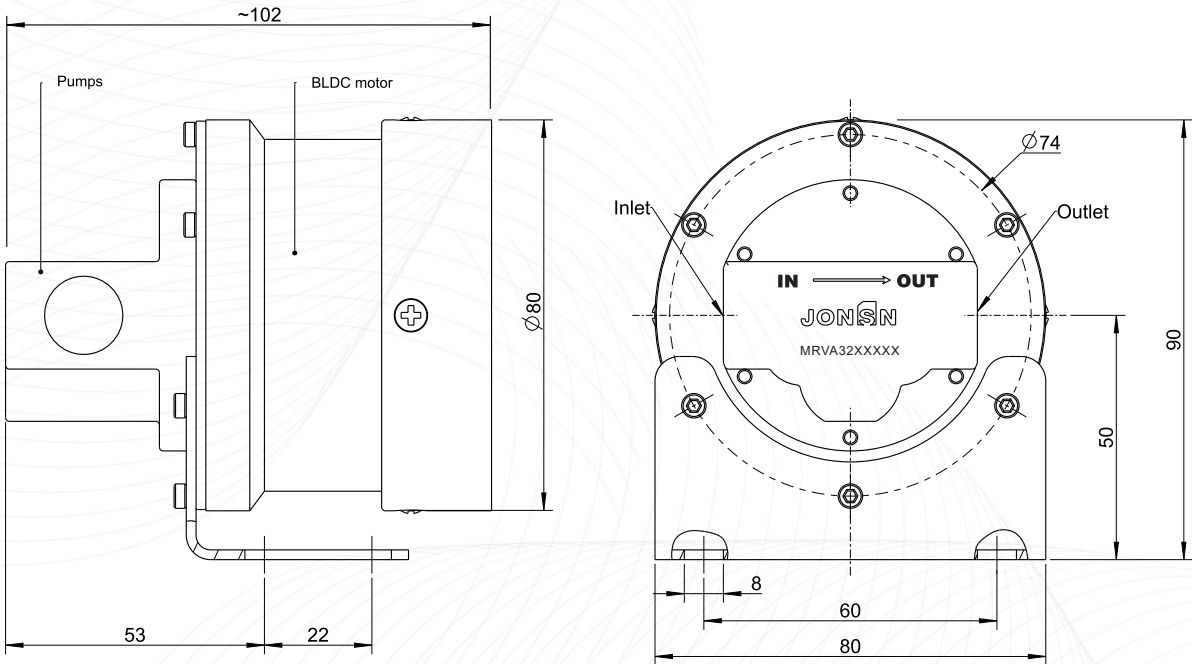
MOTOR CONFIGURATION

MRV + BLDC Motor

24V 150W



Standard: Delta  
Optional: Siemens, Panasonic, Mitsubishi, Yaskawa  
Others motor can be offered by client, Jonsn will help to install.



SELECTION PARAMETERS

Customer code

Address

company

Extension

Name

Fax

Department

E-Mail

Medium

Name

Viscosity

cps

Application areas

Medium temperature

°C

Concentration

%

Ambient temperature

°C

Whether explosive

☐ Yes ☐ No

Solid content

☐ Yes ☐ No ☐ Soft ☐ Hard

Density

Media status

☐ Fluidity ☐ Thixotropy ☐ Sticky ☐ Curing

Operating conditions

flow

L/min or

L/h

Outlet pressure

bar

Inlet pressure

kpa

M

Working frequency

☐ Continuous Intermittent ☐ Intermittent

Vacuum

Kpa

Drive motor

☐ Three phase

☐ 220 Servo motor

Application conditions

☐ No pulsation in the mouth

☐ Metering

☐ Coating

☐ Other

☐ Pressurization

☐ Circulation

☐ Lubricating

☐

Your requirements

Please describe your application here or write down your remarks: