



Gas and Liquid Transfer Pumps &  
Air Pumps Catalog

**APN/APN-W**

**wide range**  
**Wide variation**  
**For every need**

**DC**  
MOTOR



The Heart of Industry

# Wide range, wide variety

## We respond to all needs.

Iwaki gas-liquid transfer pumps and air pumps are most appropriate for built-in applications. They are widely used in analyzers and medical equipment for which high quality is required, as well as in laboratory instruments, industrial machines, and other devices.



### Analyzers

Medical analyzers (biochemical analyzers [for medical waste liquor/washings collection]), environmental analyzers (spectral photometers [for material adsorption], leak testers, dust counters)

### Medical equipment

Aspirators, nebulizers, low-frequency therapy equipment, blood-pressure gauges, endoscopes, X-ray film adsorption/transfer equipment, gas sterilizers, tappers, artificial respirators, interferential current therapy equipment, normal saline solution sprays, massagers, pressurization/vacuum sources for various devices

### Physics and chemistry instruments

Aspirators, liquid chromatography, particle counters, leak testers, sprays, culture apparatus, aseptic baths



# Lineup

## APN-W Gas and liquid transfer pumps

05

10

20

P. 7 8

Motor

Brushed/Brushless

Pump head

Single

10/20  
Brushed motor10/20  
Brushless motor

30

60

P. 9 10



30/60 Brushed motor



30/60 Brushless motor



60 Dual-head type

085

P. 11 12

Brushed/Brushless  
Single/DualBrushed  
Single

## APN Diaphragm air pumps

S041

P. 13 14

Brushless  
Dual

031

P. 15 16

Brushed  
Single

051

P. 15 16

Brushless  
Single

085

P. 17 18

Brushed  
Single

110

P. 19 20



110



P110

Brushless  
Single/Dual

# Specifications

## APN-W (Gas and liquid transfer pumps)

Model	Gas-liquid Max. capacity	Gas Max. flow			30.0 L/min	Max. Vacuum		101.32 kPa 26.66 79.98	Max. Discharge pressure		
		1.0	10.0	30.0		0.02	0.06		0.02	0.06	0.10 MPa
05	Brushed motor				0.05 0.1	87.99					0.01
10	Brushed motor				0.1 0.2	74.66					0.03
	Brushless motor				0.18 0.2	74.66					Note1 0.03
20	Brushed motor				0.2 0.2	74.66					0.03
	Brushless motor				0.26 0.2	74.66					Note1 0.03
30	Brushed motor				0.3 1.2	47.99					0.08
	Brushless motor				0.3 1.0	47.99					0.08
60	Brushed motor				0.6 1.2	47.99					0.08
	Brushless motor				0.6 1.0	47.99					0.08
P60	Brushless motor				1.0 2.4	47.99					Note2 0.08
085	Brushed motor				0.5 4.0	34.66					0.05

Note1: Max. discharge pressure of the gas-liquid transfer is 0.1MPa.

Note2: Max. discharge pressure of the gas-liquid transfer is 0.05MPa.

## APN (Diaphragm air pumps)

Model	Gas Max. flow	Gas Max. flow			30.0 L/min	Max. Vacuum		101.32 kPa 26.66 79.98	Max. Discharge pressure		
		1.0	10.0	30.0		0.02	0.06		0.02	0.06	0.10 MPa
S041	Brushless motor				0.8	9.33					0
031	Brushed motor				1.5	74.66					0.027
051	Brushless motor				1.0	61.32					0.05
085	Brushed motor				6.0	61.32					0.08
110	Brushless motor				14.0	23.99					0.10
P110	Brushless motor				28.0	23.99					0.10

Model		Power consumption (W) DC12/24	Rated current (A) DC12/24	Rated voltage (V)	Connection size IN/OUT (mm)	Mass (kg)	Handling gas temp. (°C)	Handling liquid temp. (°C)	Limit cold start temperature (°C)
<b>05</b>	Brushed motor	4.8/4.8	0.4/0.2	DC12/24	Hose Ø4.5	0.11	5 to 40	10 to 40	5
<b>10</b>	Brushed motor					0.2			
<b>20</b>	Brushless motor		-/7.2		Hose Ø5	0.11			
<b>30</b>	Brushed motor		-/4.8			0.2			
<b>60</b>	Brushless motor		-/7.2		Hose Ø5.5	0.21			
<b>P60</b>	Brushless motor		-/11.5			0.24			
<b>085</b>	Brushed motor	-/14.4	-/0.48			0.21			
<b>085</b>	Brushless motor	-/14.4	-/0.6			0.24			
<b>P60</b>	Brushless motor	-/20.6	-/0.86			0.24			
<b>085</b>	Brushed motor	19/19	1.6/0.8	DC12/24	Thread Rc1/8	2.5	0 to 40	5 to 40	FKM: 10 EPDM: 5

Liquid temperature 20°C

Model		Power consumption (W) DC12/24	Rated current (A) DC12/24	Rated voltage (V)	Connection size IN/OUT (mm)	Mass (kg)	Handling gas temp. (°C)	Ambient temp. (°C)	Limit cold start temperature (°C)	
<b>S041</b>	Brushless motor	-/6	-/0.25 or less	DC24	Hose Ø4.5	0.4	0 to 40	0 to 40	0	
<b>031</b>	Brushed motor	-/2.4	-/0.1	DC24	Hose Ø5	0.07				
<b>051</b>	Brushless motor	-/6	-/0.25	DC24	Hose Ø8, Thread Rc1/8	0.5	5 to 40	5 to 40	5	
<b>085</b>	Brushed motor	19/19	1.6/0.8	DC12/24	Hose Ø8, Thread Rc1/4, G1/4	1.1	0 to 40	0 to 40	10	
<b>110</b>	Brushless motor	-/33.6	-/1.4	DC24		1.4		5 to 40	5	
<b>P110</b>	Brushless motor	-/55.2	-/2.3			3.3				

# Feature

## APN-W (Gas and liquid transfer pumps)

### Compact and lightweight

A compact and lightweight design is used that is most appropriate for built-in applications and for waste liquid collection; and a structure with high corrosion resistance and enhanced reliability/durability enables continuous operation for an extended period of time and ensures long life.

### Hygienic oil-free design, self-priming pumps without use of priming water

The motor-driven diaphragm pumps are oil-free and are most suitable for usage requiring clean liquid relay. A wide variety of models is available for various usage. Self-priming pumps require no priming water and realize gas-liquid transfer.

### V-type valve for high sealing performance and for preventing foreign matter intrusion

A V-type valve is adopted. Pressing the valve enhances sealing performance, even when the valve is not in operation. In case of the intrusion of foreign matter into the transferred liquid, as a measure against the self-priming defect caused by weakened sealing performance due to the attachment of foreign matter to the valve, a groove is formed at the part to which the valve is fixed to prevent foreign matter intrusion. This keeps foreign matter out.

## APN (Diaphragm air pumps)

### Clean air transfer

The motor-driven diaphragm pumps are oil-/carbon-free and are highly airtight. Most suitable in medical or sampling equipment where air cleanliness is required.

### Long-life design

Fiber reinforced diaphragms, enlarged bearings and enhanced con rods have further improved reliability and durability in order for the pump to run over an extended time period in a continuous operation.

### Easy maintenance

The pump head consists of only a few parts and can easily be dismantled and assembled.

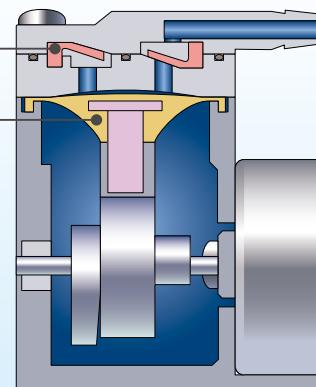
- Except for some products.

## Pressure-withstanding diaphragm

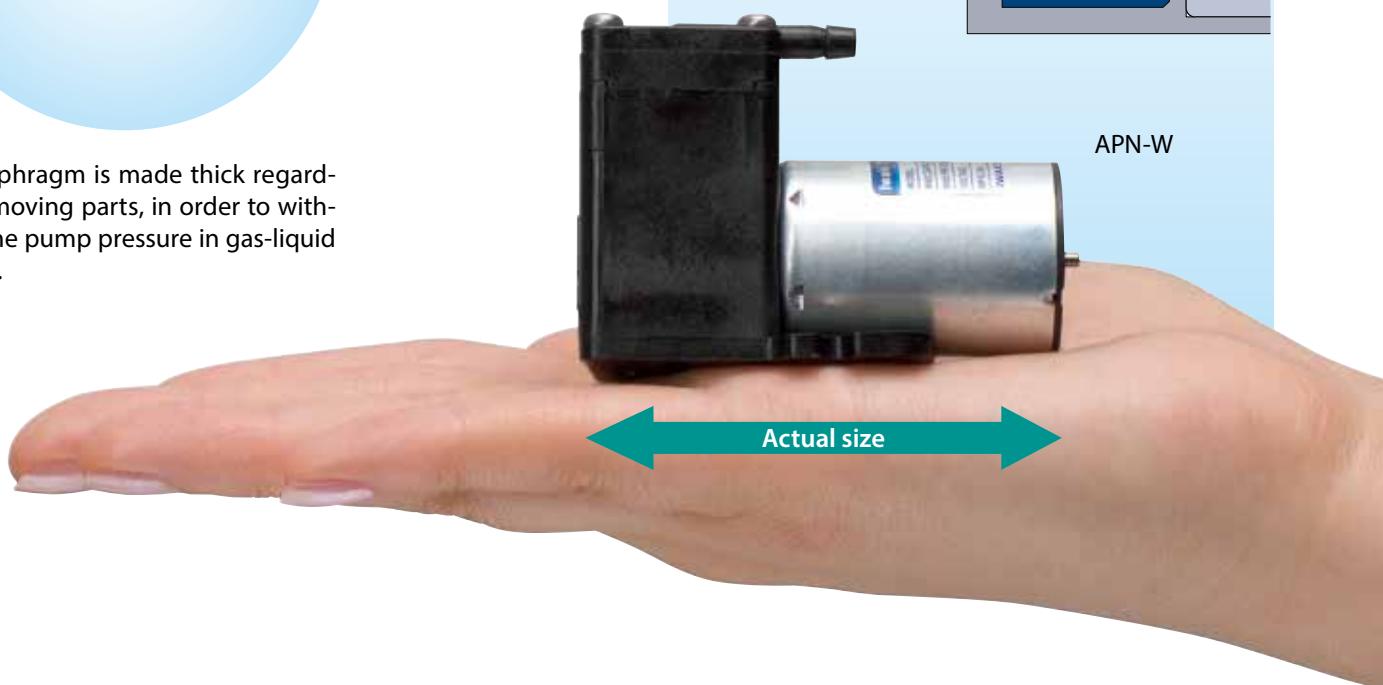
The diaphragm is made thick regarding its moving parts, in order to withstand the pump pressure in gas-liquid transfer.

Valve

Diaphragm



APN-W



APN-085



APN-110

# APN-05/10/20-W

## Gas and liquid transfer pumps

<b>Max. capacity (Gas-liquid)</b>	<b>0.05 to 0.26 L/min</b>	
<b>Max. flow (Gas)</b>	<b>0.1 to 0.2 L/min</b>	
<b>Max. vacuum</b>	<b>74.66 to 87.99 kPa(abs.)</b>	10 Brushed motor type
<b>Max. discharge pressure</b>	<b>0.03 MPa</b>	10 Brushless motor type

Adjustment valve of fluid, please to be installed on the suction side of the pump.

## Specifications

Model	Motor	Gas-liquid Max. capacity (L/min)	Gas Max. flow (L/min)	Max. vacuum (kPa[abs.])	Max. discharge pressure (MPa)	Power consumption (W) DC12/24	Rated current (A) DC12/24	Rated voltage (V)
<b>APN-05-W</b>		0.05	0.1	87.99	0.01	4.8/4.8	0.4/0.2	DC12/24
<b>APN-10-W</b>	Brushed	0.1	0.2	74.66	0.03	-/7.2	-/0.3	DC24
	Brushless	0.18			0.03 <sup>Note</sup>			
<b>APN-20-W</b>	Brushed	0.2			0.03	-/4.8	-/0.2	DC24
	Brushless	0.26			0.03 <sup>Note</sup>			

Connection size IN/OUT ..... APN-05/10-W: Hose barb Ø4.5mm, APN-20-W: Hose barb Ø5mm

Mass ..... Brushed type: 0.11kg, Brushless type: 0.2kg

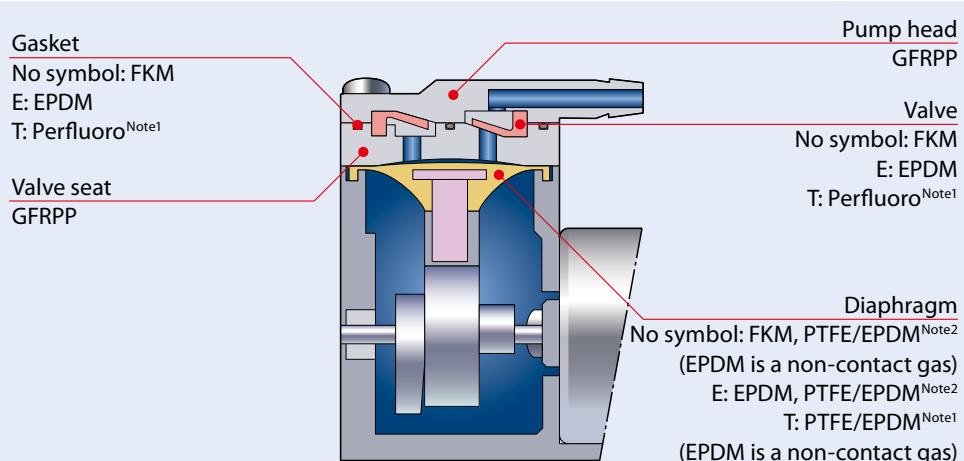
Handling gas temp. ..... 5 to 40°C

Handling liquid temp. ..... 10 to 40°C

Minimum starting temperature ... 5°C

Note: Max. discharge pressure of the gas-liquid transfer is 0.1MPa.

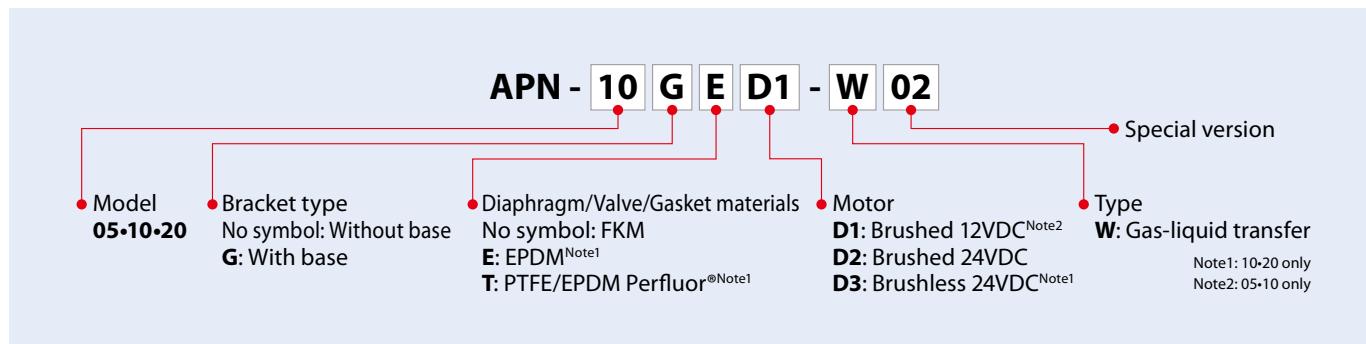
## Construction and materials



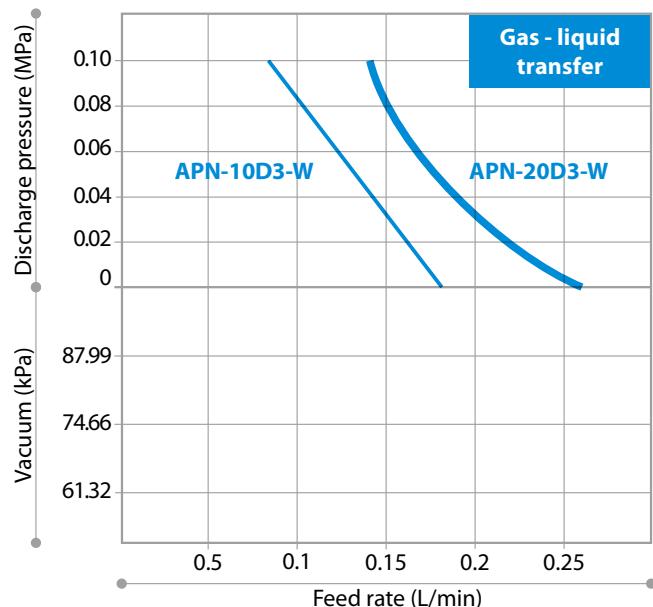
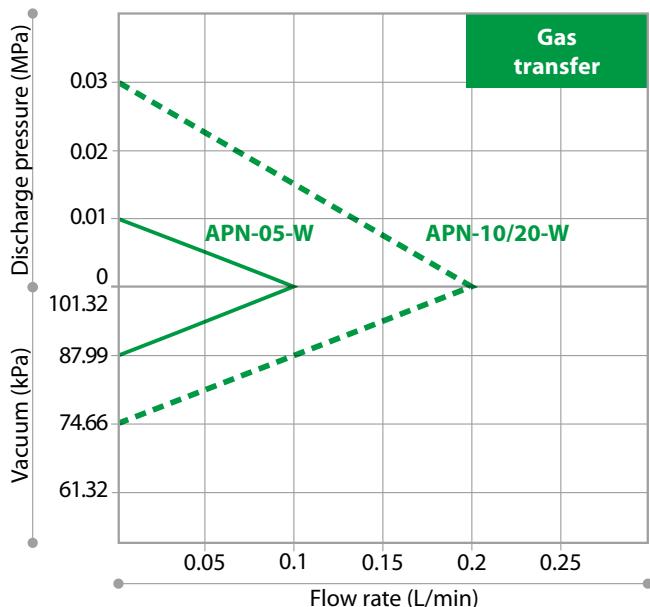
Note1: Special order on APN-10/20-W.

Note2: Diaphragm of APN-10 / 20D3-W is the PTFE / EPDM.

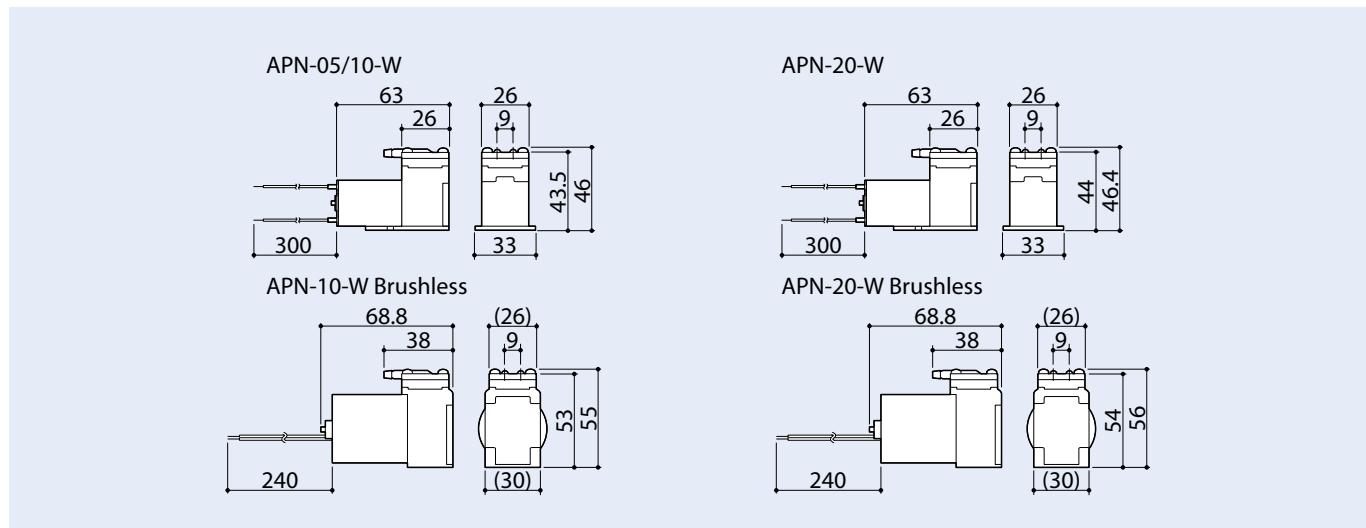
## Pump identification



## Performance curves



## Dimensions in mm



# APN-30/60-W

## Gas and liquid transfer pumps



## Specifications

Model	Motor	Gas-liquid Max. capacity (L/min)	Gas Max. flow (L/min)	Max. vacuum (kPa[abs.])	Max. discharge pressure (MPa)	Power consumption (W)	Rated current (A)	Rated voltage (V)
APN-30-W	Brushed	0.3	1.2	47.99	0.08	11.5	0.48	DC24
	Brushless		1.0			14.4	0.6	
APN-60-W	Brushed	0.6	1.2			11.5	0.48	
	Brushless		1.0			14.4	0.6	
APN-P60-W		1.0	2.4		0.08 <sup>Note</sup>	20.6	0.86	

Connection size IN/OUT .....Hose barb Ø5.5mm

Mass .....30/60 Brushed type: 0.21kg, 30/60 Brushless type / P60: 0.24kg

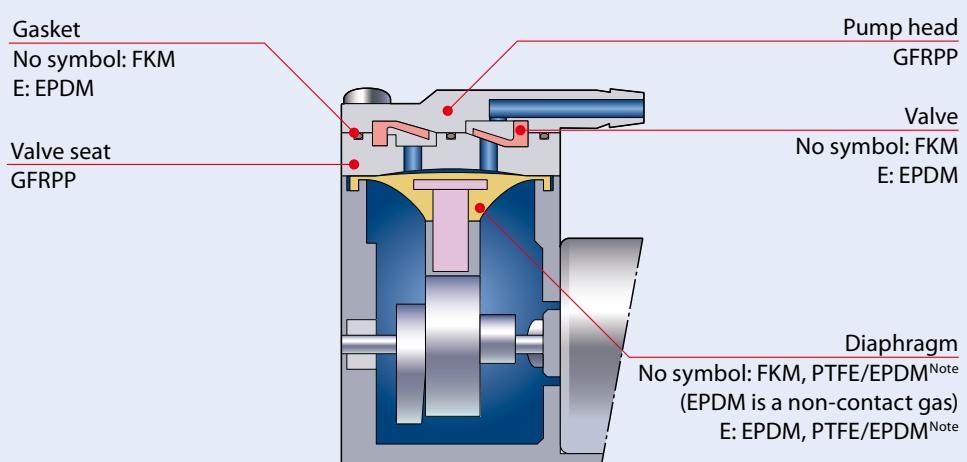
Handling gas temp. ....5 to 40°C

Handling liquid temp. ....10 to 40°C

Minimum starting temperature ...5°C

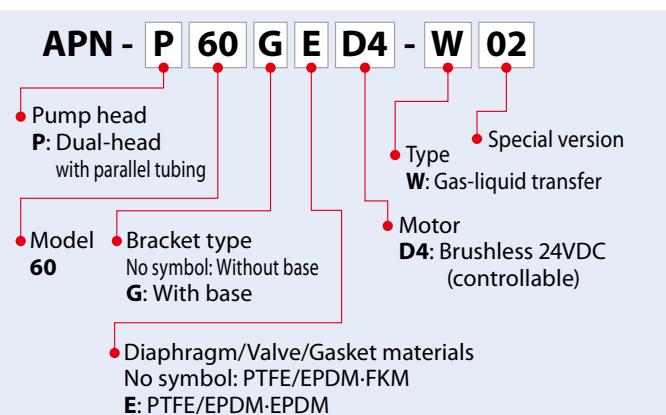
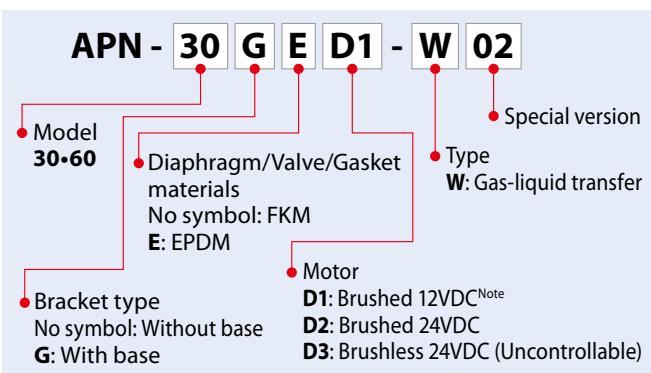
Note: Max. discharge pressure of the gas-liquid transfer is 0.05MPa.

## Construction and materials



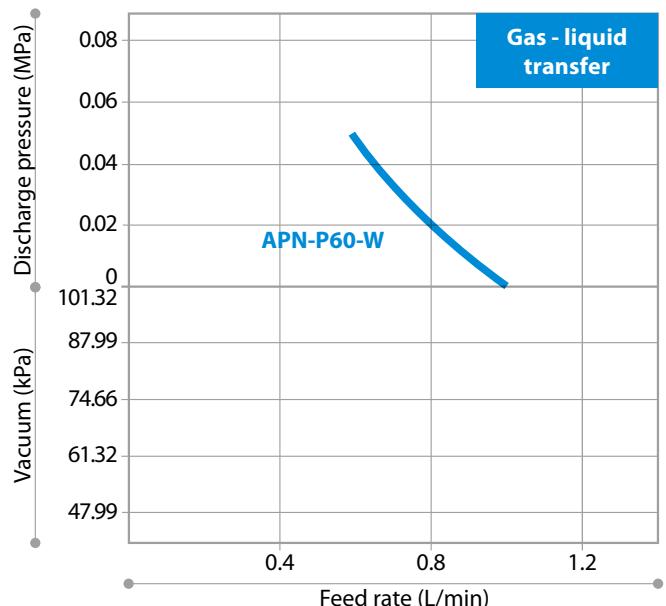
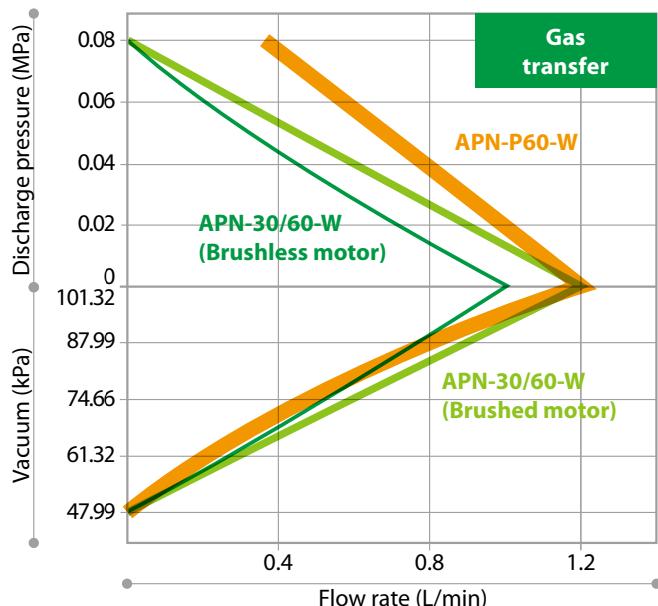
Note: Diaphragm only APN-P60 will PTFE / EPDM.

## Pump identification

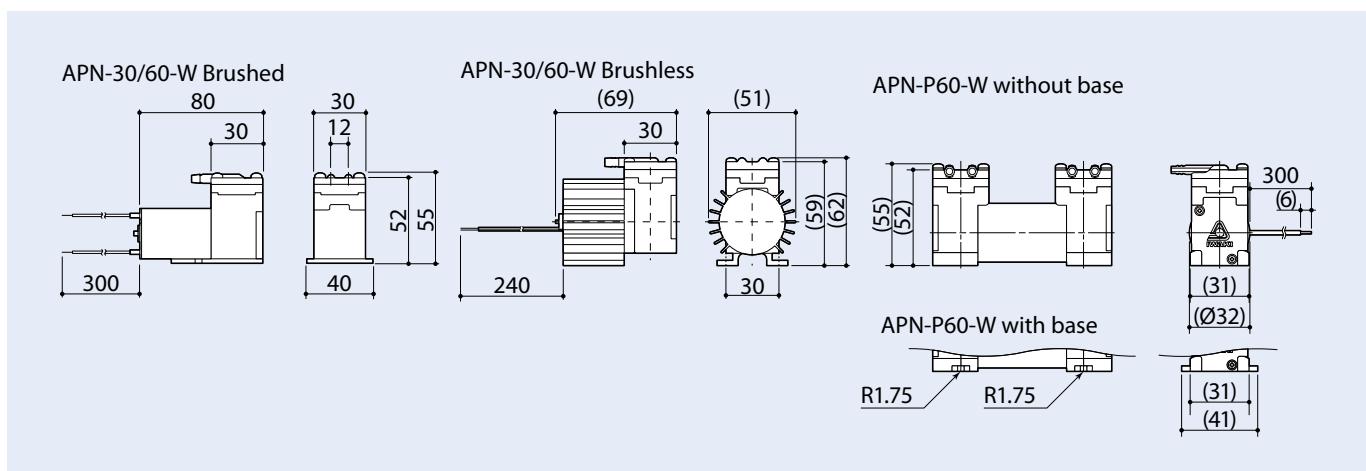


Note: Please contact us for details about brushed 12VDC products.

## Performance curves



## Dimensions in mm



# APN-085-W

Gas and liquid transfer pumps



## Specifications

Model	Gas-liquid Max. capacity (L/ min)	Gas Max. flow (L/min)	Max. vacuum (kPa[abs.])	Max. discharge pressure (MPa)	Power consump- tion (W) DC12/24	Rated current (A) DC12/24	Rated voltage (V) DC12/24
APN-085-W	EX type	0.5	4.0	34.66	19/19	1.6/0.8	DC12/24
				37.33			

Connection size IN/OUT ..... Thread Rc1/8

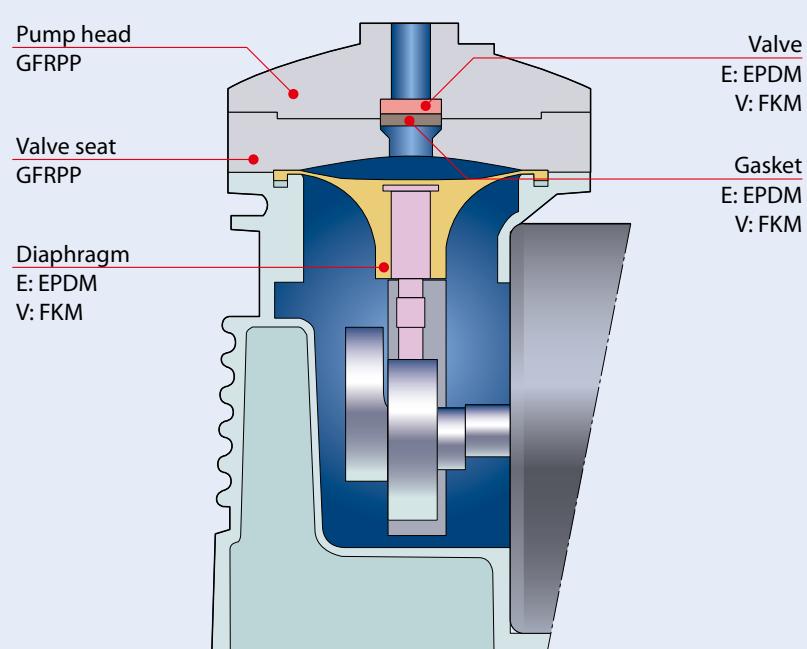
Mass ..... 2.5kg

Handling gas temp. .... 0 to 40°C

Handling liquid temp. .... 5 to 40°C

Minimum starting temperature ...FKM: 10°C, EPDM: 5°C

## Construction and materials

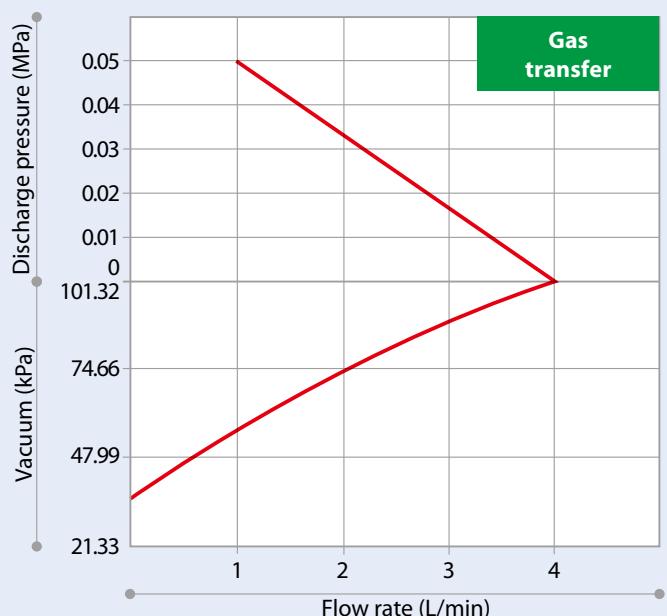


## Pump identification

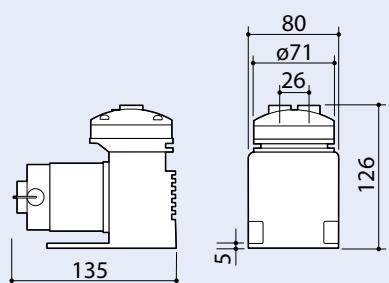
APN - **085** **E** **X** - **D1** - **W** **02**

- Model **085**
- Diaphragm (Valve) materials **E**: EPDM  
**V**: FKM
- Connection size **X**: Thread (Rc1/8)
- Motor **D1**: Brushed 12VDC  
**D2**: Brushed 24VDC
- Type **W**: Gas-liquid transfer
- Special version

## Performance curves



## Dimensions in mm



# APN-S041

**Max. flow** 0.8 L/min

**Max. vacuum** 9.33 kPa(abs.)



Observe the maximum allowable discharge pressure of 0.0MPa.

## Specifications

Model	Max. flow (L/min)	Max. vacuum (kPa[abs.])	Power consumption (W)	Rated current (A)	Rated voltage (V)
APN-S041ME-D3 *	0.8	9.33	6.0	0.25 or less	DC24
APN-S041ME-D4 *					

Connection size IN/OUT .....Hose barb Ø4.5mm

Mass .....0.4kg

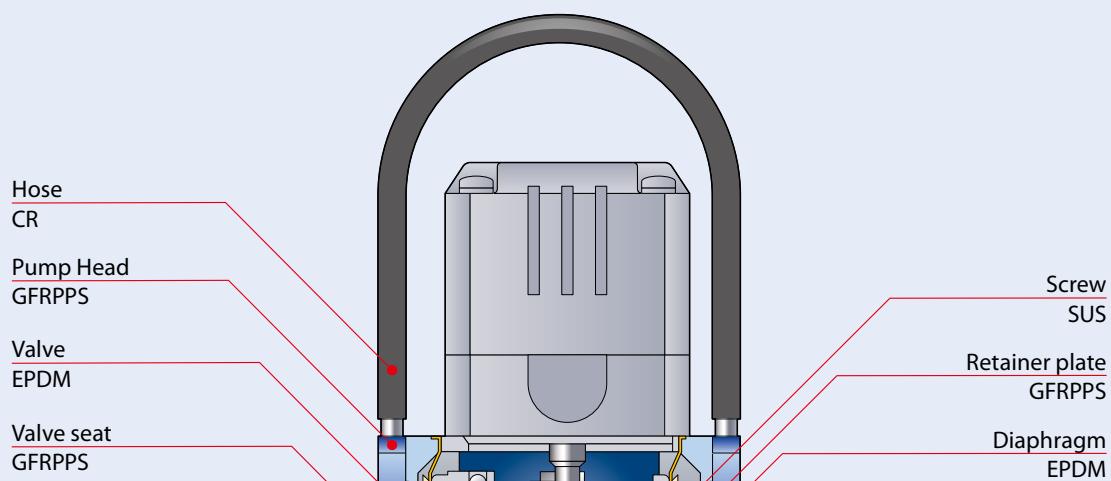
Handling gas temp.....0 to 40°C

Ambient temp.....0 to 40°C

Minimum starting temperature ...0°C

\* D3: 2 wire, D4: 4 wire

## Construction and materials

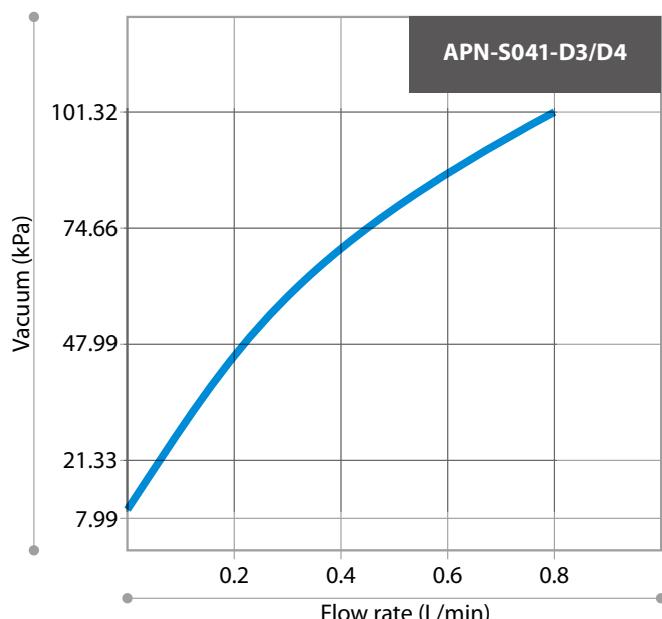


## Pump identification

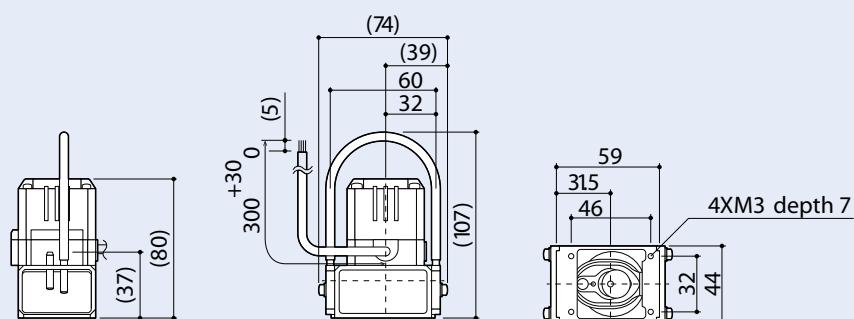
APN - **S** 041 **M** **E** - **D4** - **01**

- Pump head
- S:** Dual-head with in-line tubing
- Model 041**
- Type
- M:** Vacuum
- Diaphragm/Valve materials
- E:** EPDM
- Pump connection
- No symble: Hose barb ( $\varnothing 4.5$ )
- Motor
- D3:** Brushless 24VDC (without speed control)
- D4:** Brushless 24VDC (with Variable speed control)
- Special version

## Performance curves



## Dimensions in mm



# APN-031/051

## Diaphragm air pumps



## Specifications

Model	Max. flow (L/min)	Max. vacuum (kPa[abs.])	Max. discharge pres- sure (MPa)	Power consumption (W) DC24	Rated current (A) DC24	Rated voltage (V)
<b>APN-031</b>	1.5	74.66	0.027	2.4	0.1	DC24
<b>APN-051</b>	1.0	61.32	0.05	6	0.25	DC24

Connection size IN/OUT .....031: Hose barb Ø5mm, 051/052: Hose barb Ø5mm, Ø8mm, Thread Rc1/8

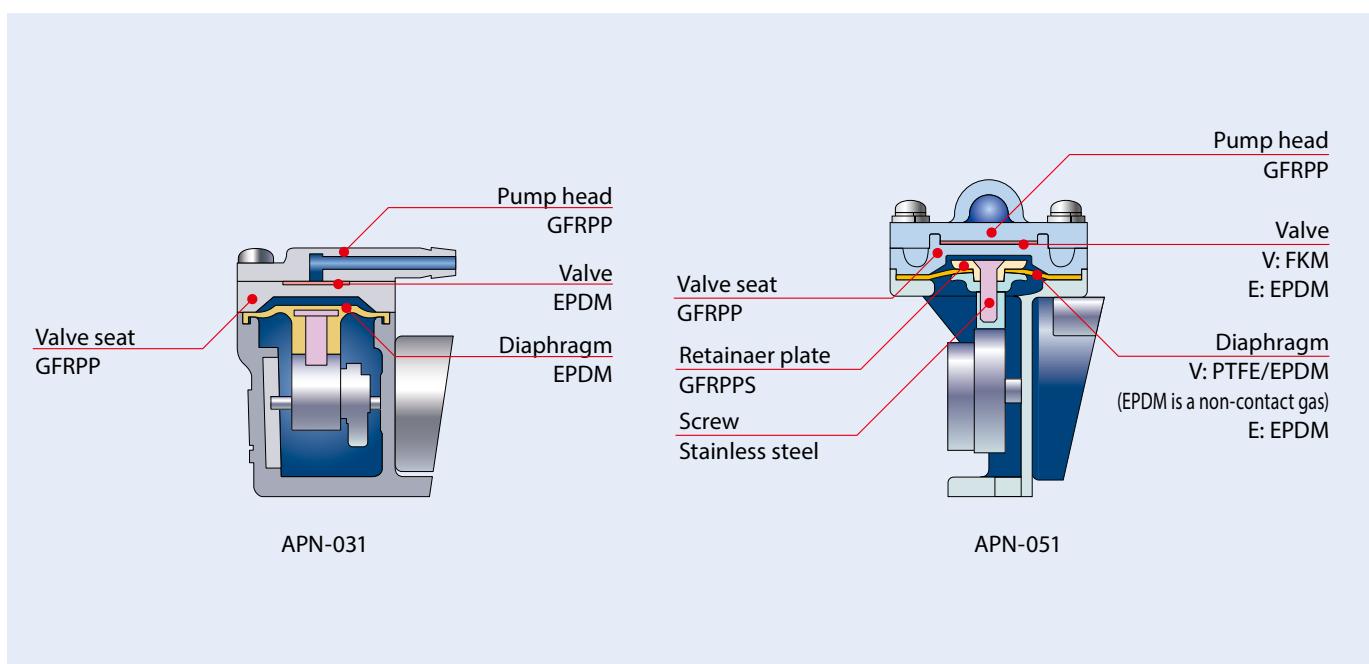
Mass .....031: 0.07kg, 051: 0.5kg, 052: 0.4kg

Handling gas temp.....0 to 40°C

Ambient temp.....0 to 40°C

Minimum starting temperature ...031: 0°C, 051: 5°C

## Construction and materials



## Pump identification

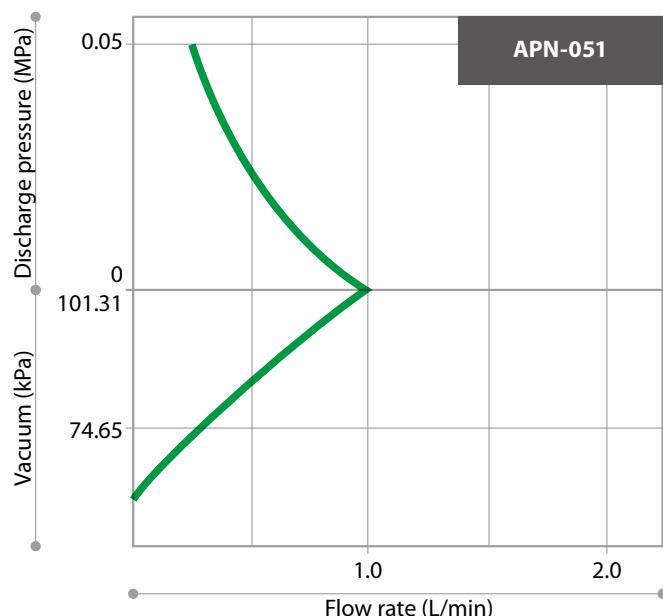
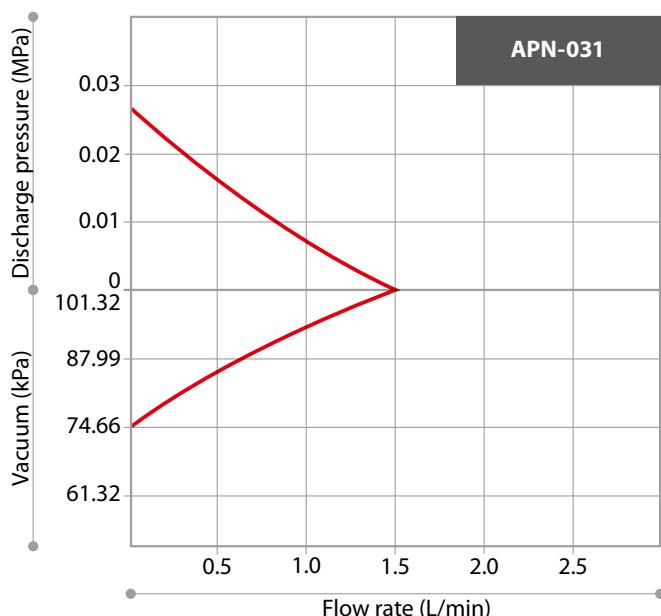
**APN - 031 D2 - 01**

- Model 031
- Motor D2: 24VDC
- Special version

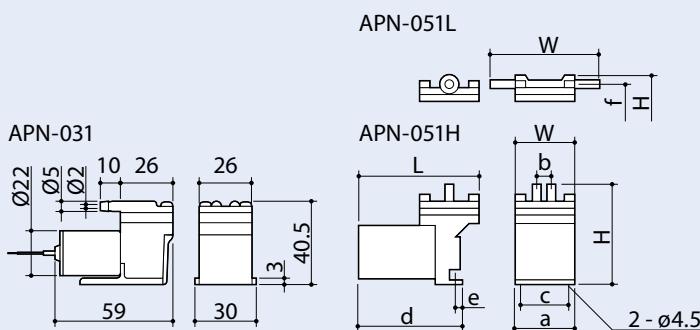
**APN - 051 L E X - D3 - 01**

- Model 051
- Pump head
  - L: Horizontally oriented
  - H: Vertically oriented
- Diaphragm/Valve materials
  - V: PTFE/EPDM • FKM
  - E: EPDM • EPDM
- Pump connection
  - No symbol: Hose barb (Ø8)
  - X: Thread (Rc1/8)
- Motor D3: Brushless 24VDC (Uncontrollable) (Only 051)
- Special version

## Performance curves



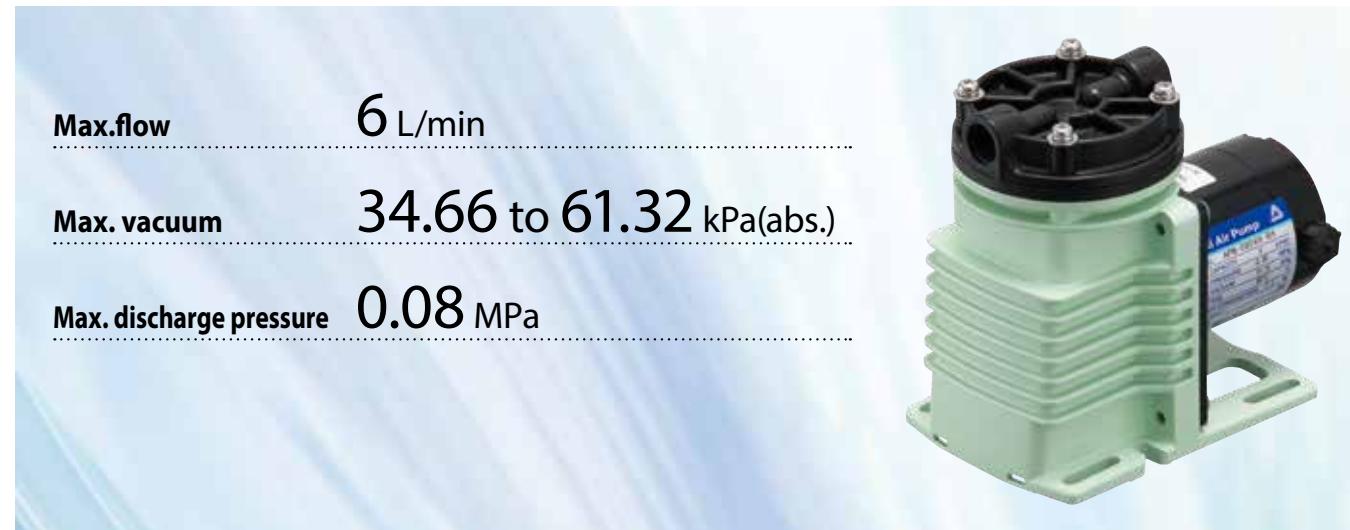
## Dimensions in mm



Model	W	H	L	a	b	c	d	e	f
APN-051L	86	(75)	(90)	46	—	32	(76)	6.5	(67)
APN-051H	46	(78)	—	46	13	—	—	—	—

# APN-085

Diaphragm air pumps



## Specifications

Model	Max. flow (L/min)	Max. vacuum (kPa)	Max. discharge pres- sure (MPa)	Power consumption (W) DC12/24	Rated current (A) DC12/24	Rated voltage (V)
APN-085-D1/D2	6	61.32	0.08	19/19	1.6/0.8	DC12/24
APN-085L/H-D1/D2		34.66				

Connection size IN/OUT ..... Hose Ø8mm, Thread Rc1/4, G1/4

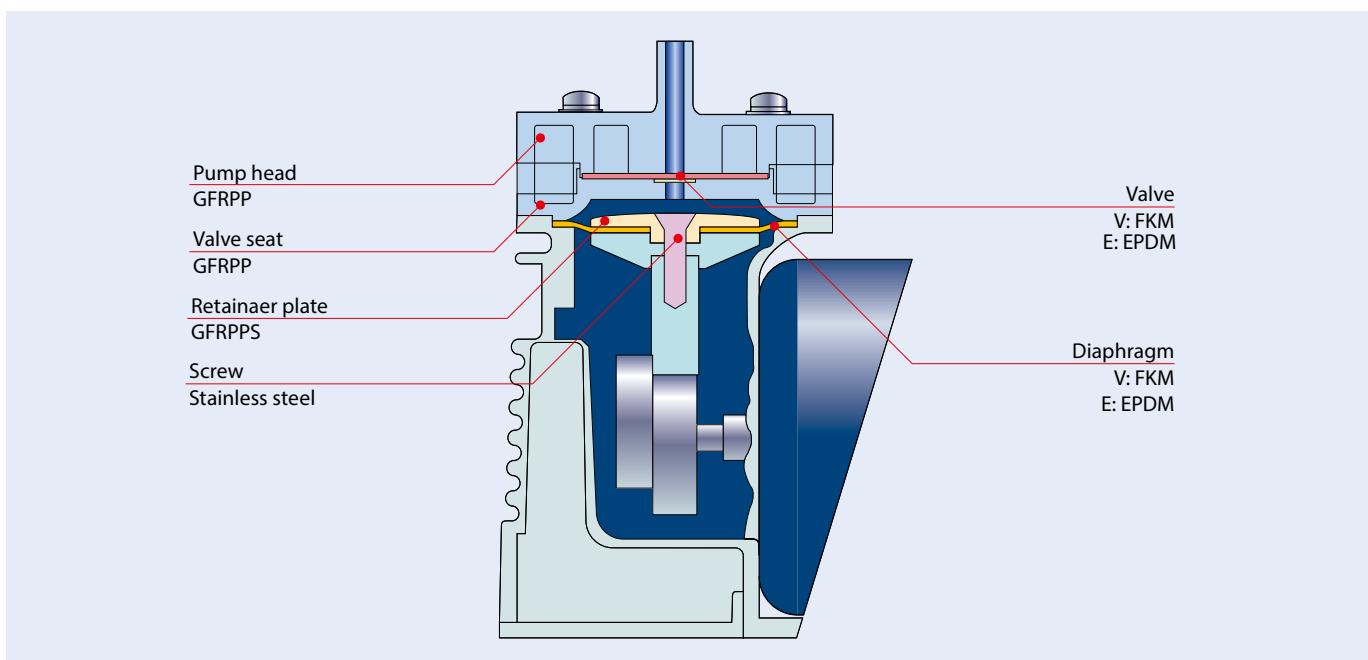
Mass ..... 1.1kg

Handling gas temp. .... 0 to 40°C

Ambient temp. .... 0 to 40°C

Minimum starting temperature ...10°C

## Construction and materials

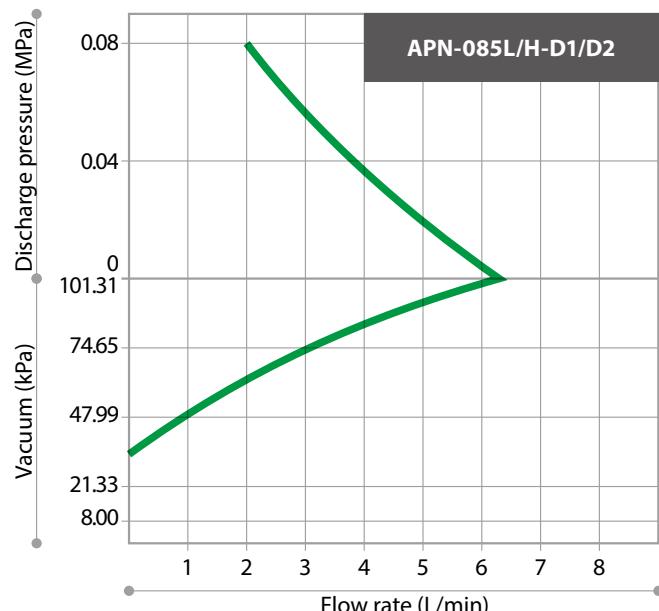
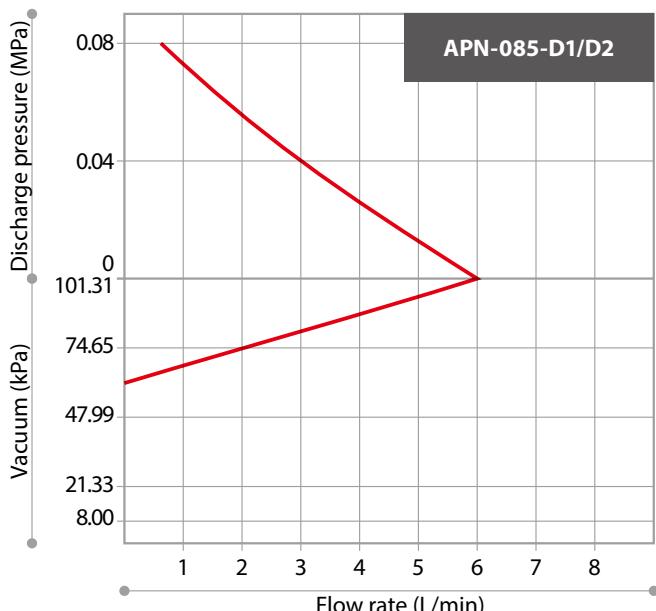


## Pump identification

APN - 085 L V X - D2 - 01

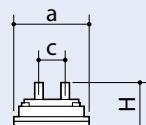
- Model 085
- Pump head No symble: Corrosion resistant L: Horizontally oriented H: Vertically oriented
- Diaphragm/Valve materials E: EPDM V: FKM
- Pump connection No symble: Tube (ø8) X: Thread (Rc1/4) X1: Thread (G1/4)
- Motor D1: Brushed 12VDC D2: Brushed 24VDC
- Special version

## Performance curves

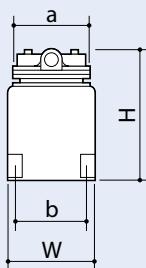
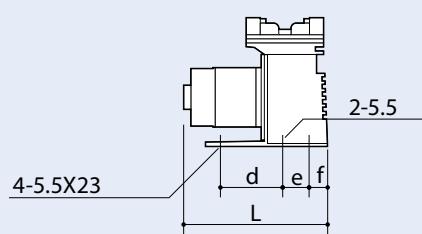


## Dimensions in mm

APN-085-D1/D2



APN-085L-D1/D2



Model	W	H	L	a	b	c	d	e	f
APN-085-D1/2	80	(136) (121)	(135)	71	66	24	57	21.5	18.5
APN-085L/H-D1/2	72	—	56.5	—	—	—	—	—	—

# APN-110

## Diaphragm air pumps



## Specifications

Model	Max. flow (L/min)	Max. vacuum (kPa[abs.])	Max. discharge pressure (MPa)	Power consumption (W)	Rated current (A)	Rated voltage (V)
APN-110K/L-D4	14	23.99	0.1	33.6	1.4	DC24
APN-P110L-D4	28	23.99	0.1	55.2	2.3	DC24

Connection size IN/OUT .....Hose barb Ø8mm, 110: Thread Rc1/4, G1/4, P110: Thread Rc1/4

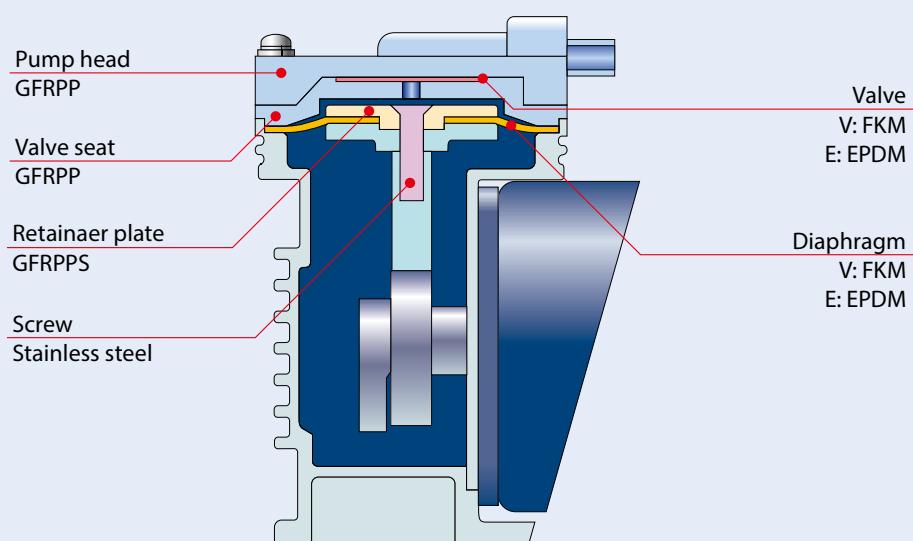
Mass .....110: 1.4kg, P110: 3.3kg

Handling gas temp.....0 to 40°C

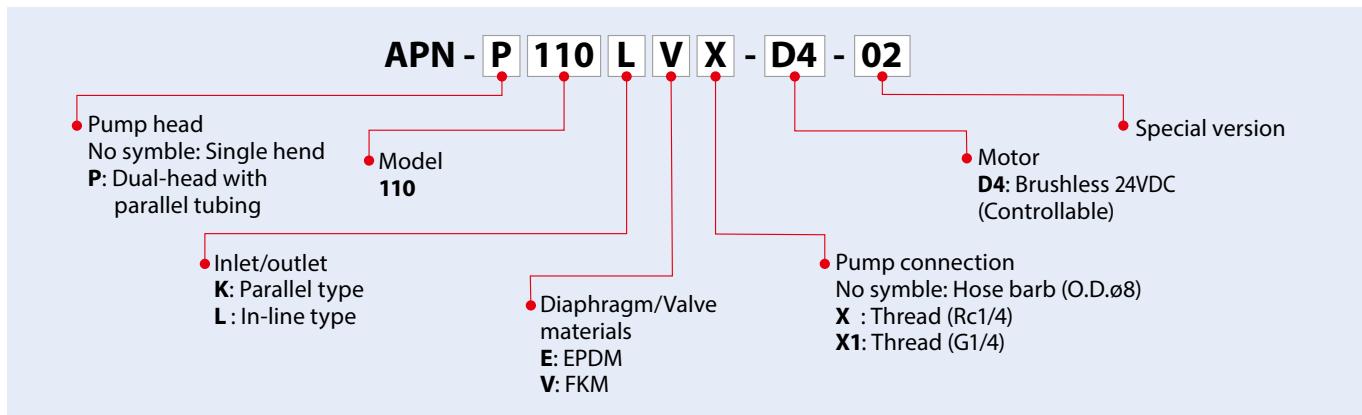
Ambient temp.....5 to 40°C

Minimum starting temperature ...5°C

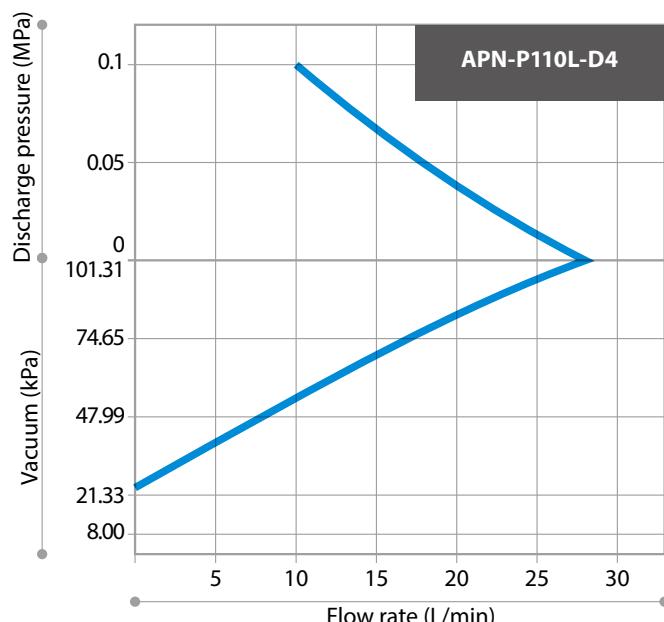
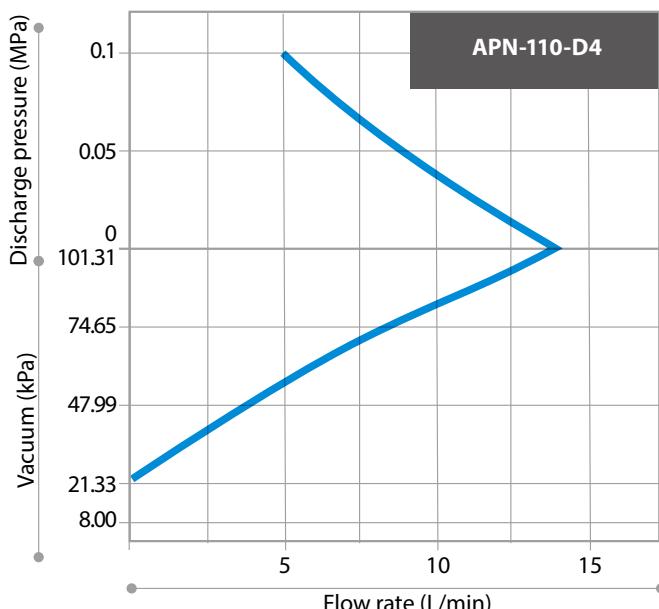
## Construction and materials



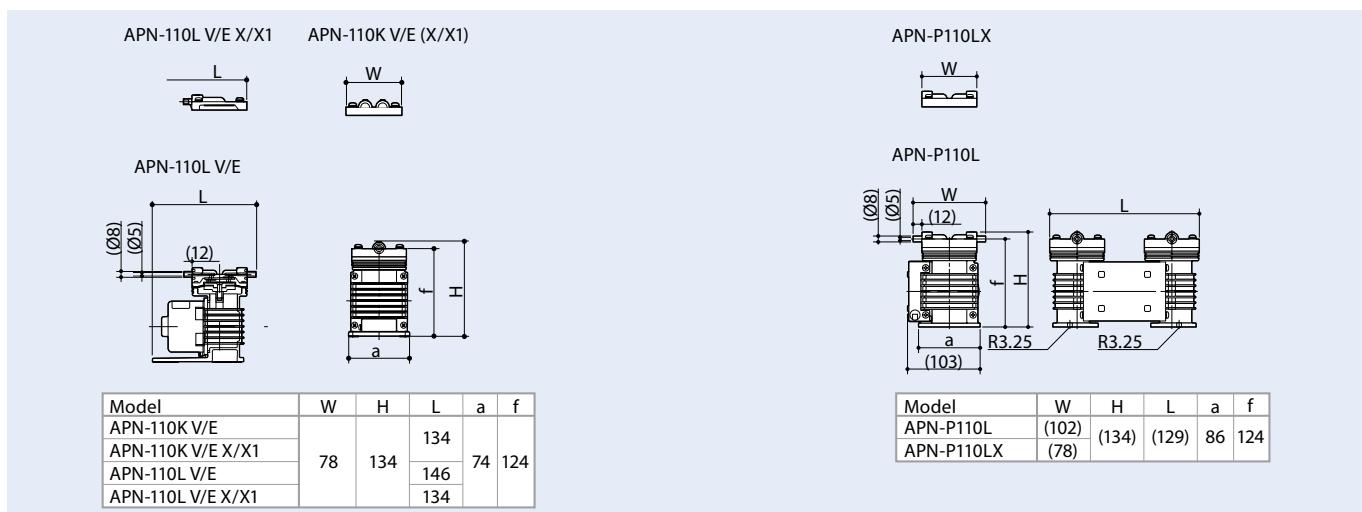
## Pump identification



## Performance curves



## Dimensions in mm



## Optional accessory

### Filter and Muffler (APN series)

To be used as muffler when installed at discharge side and also as filter when installed at suction side. (Check valve incorporated filter is available as option)



AF - 2 V - 1 C

Materials

V: FKM  
E: EPDM  
N: CR / NBR

Connection diameter  
1: G1/8 (APN-215)  
2: G1/4 (APN-085)

Options  
C: with check valve incorporated

Main body material: PC alloy

Filter material: Melamine for V and E, urethane for N

This may not be usable for some pump types and pump head shapes.  
When installed, performance will be affected.

## List of Available Materials

Symbol of Material	Name
GFRPP	Glass-fiber-reinforced polypropylene
GFRPPS	Glass-fiber-reinforced polyphenylene sulfide resin
GFRPA	Glass-fiber-reinforced polyamide resin
GFRPPE	Glass-fiber-reinforced polyphenyl ether resin
PTFE	Tetra-fluoroethylene resin
PCTFE	Polychlorotrifluoroethylene
FKM	Fluorocarbon rubber
EPDM	Ethylene propylene rubber
NBR	Nitrile butadiene rubber
CR	Chloroprene rubber
ADC12	Aluminum diecast
SUS304	Stainless steel 304
SUS316	Stainless steel 316
SUS631-CSP	Stainless steel (strip steel for spring)
AM350	Precipitation-hardening stainless steel (steel plates for springs)
AC2A	aluminum casting alloy

## Unit of vacuum pressure

In the new Measurement Act, the following are used as the SI unit: "Pa (pascal)," "N/m<sup>2</sup> (newton per square meter)," and "bar (bar)." As well, the non-SI unit, "Torr" (Torr), is admitted for the pressure within an organism, and "mmHg" (millimeter of mercury) is admitted for blood pressure.

There are two methods of vacuum pressure notation, as below.

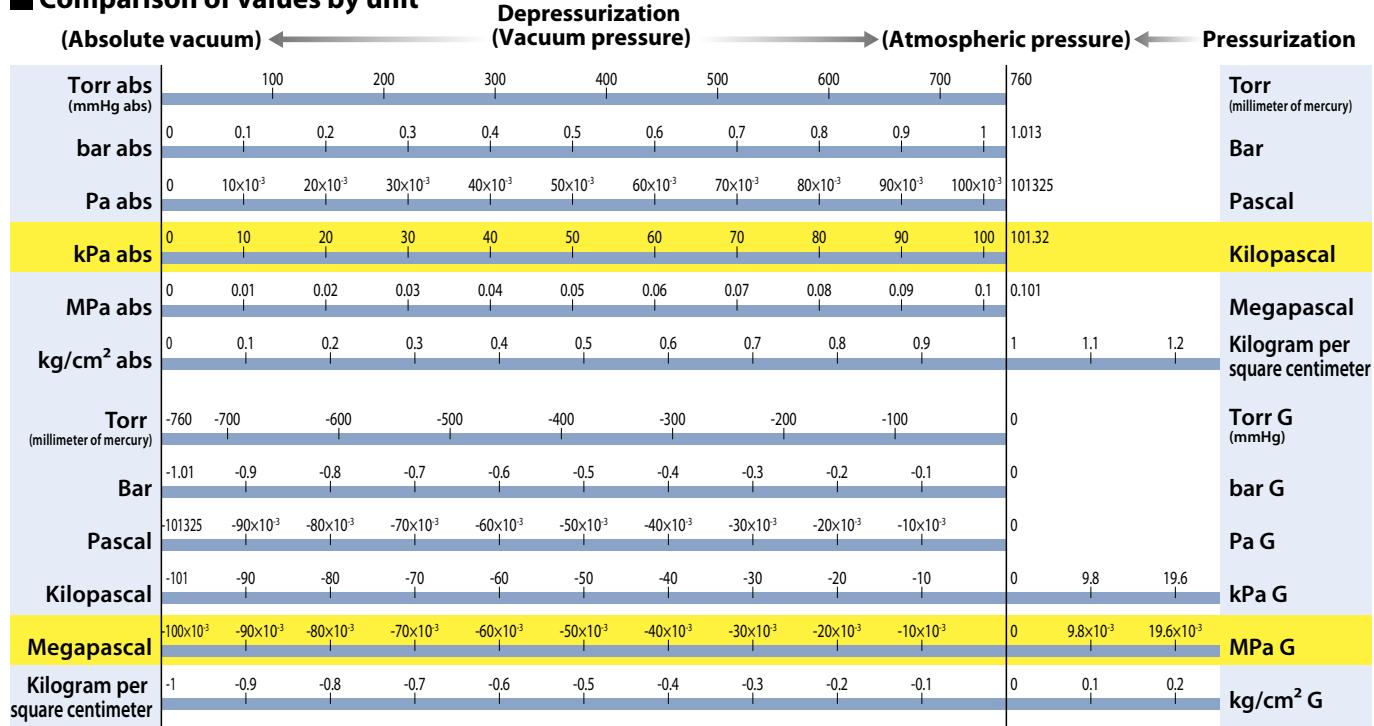
In the vacuum industry, absolute pressure is used. In other industries, however, gauge pressure is used in many cases. Thus, when viewing materials or catalogues, you need to check which method is used for the notation of pressure.

1. **Absolute pressure by setting the absolute vacuum equal to 0 (zero)**  
"a" or "abs" is notated after the unit notation (often omitted).
2. **Gauge pressure by setting the atmospheric pressure equal to 0 (zero)**  
"G" or "Gauge" is notated after the unit notation (often omitted).

## ■ Values of atmospheric pressure by each unit of pressure

Unit	Pronunciation	Values by absolute pressure notation			Values by gauge pressure notation		
		Atmospheric pressure	Range of vacuum pressure	Absolute vacuum	Atmospheric pressure	Range of vacuum pressure	Absolute vacuum
Pa (N/m <sup>2</sup> )	Pascal (newton per square meter)	101325	↔↔	0	0	↔↔	-101325
kPa	Kilopascal	101.3	↔↔	0	0	↔↔	-101.3
MPa	Megapascal	0.101	↔↔	0	0	↔↔	-0.101
bar	Bar	1.013	↔↔	0	0	↔↔	-1.013
mbar	Millibar	1013	↔↔	0	0	↔↔	-1013
Torr	Torr	760	↔↔	0	0	↔↔	-760
mmHg	Millimeter of mercury	760	↔↔	0	0	↔↔	-760
mmH <sub>2</sub> O (Aq)	Millimeter of water (Aqua)	10342	↔↔	0	0	↔↔	-10342
atm	Atmosphere	1	↔↔	0	0	↔↔	-1
psi (lbf/in <sup>2</sup> )	Pound-force per square inch	14.696	↔↔	0	0	↔↔	-14.696
kgf/cm <sup>2</sup>	Kilogram-force per square centimeter	1.0332	↔↔	0	0	↔↔	-1.0332

## ■ Comparison of values by unit

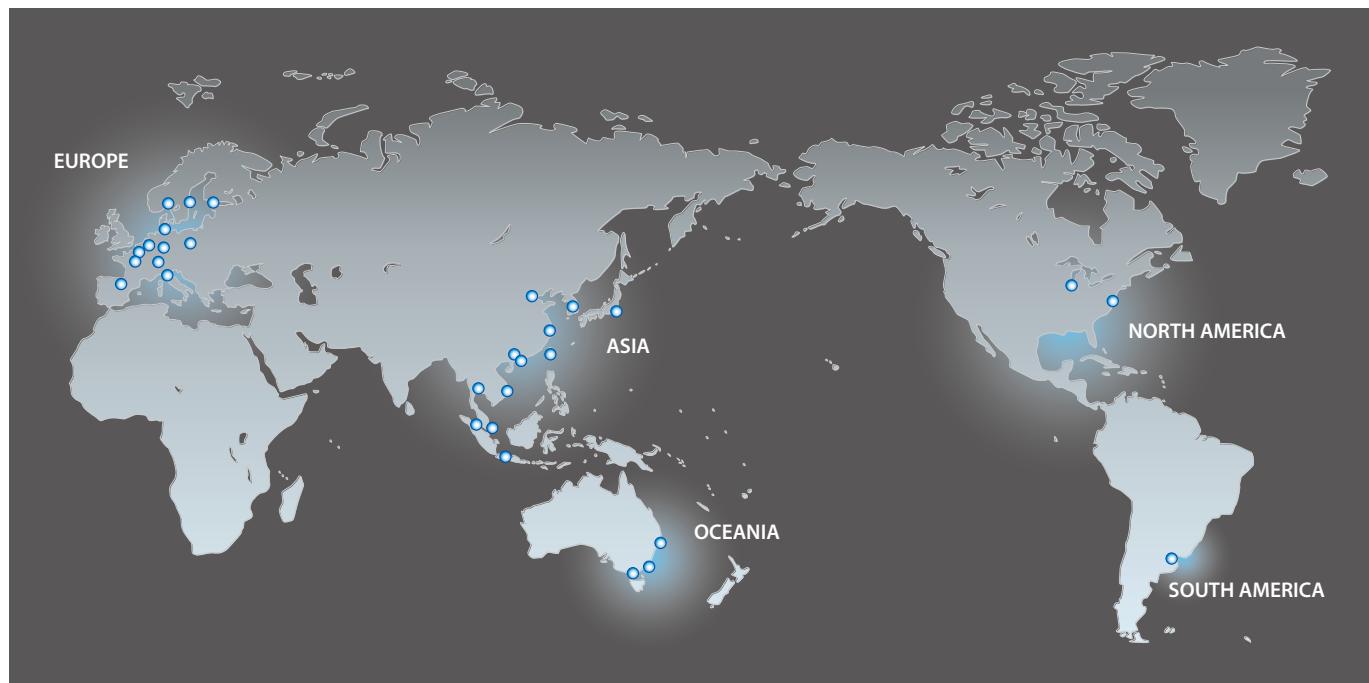


## ■ Unit conversion table

	Pa (N/m <sup>2</sup> )	Torr (mmHg)	atm	mbar	psi (bf/in <sup>2</sup> )	kgf/cm <sup>2</sup>	mH <sub>2</sub> O
1 Pa (N/m <sup>2</sup> )	1	$7.50 \times 10^{-3}$	$9.87 \times 10^{-6}$	$10^{-2}$	$1.45 \times 10^{-4}$	$1.02 \times 10^{-5}$	$1.02 \times 10^{-4}$
1 Torr (mmHg)	133.32	1	$1.316 \times 10^{-3}$	1.33	$1.93 \times 10^{-2}$	$1.359 \times 10^{-3}$	$1.36 \times 10^{-2}$
1 atm	$1.013 \times 10^5$	760	1	$1.013 \times 10^3$	14.696	1.033	10.34
1 mbar	100	0.750	$9.87 \times 10^{-4}$	1	$1.45 \times 10^{-2}$	$1.02 \times 10^{-3}$	$10.206 \times 10^{-3}$
1 psi (bf/in <sup>2</sup> )	$6.89 \times 10^3$	51.71	$6.8 \times 10^{-2}$	6.89	1	$7.031 \times 10^{-2}$	0.703
1 kgf/cm <sup>2</sup>	$9.8 \times 10^4$	735.56	0.968	$9.81 \times 10^2$	14.223	1	10
1 mH <sub>2</sub> O	$9.8 \times 10^3$	73.49	$9.68 \times 10^{-2}$	98.0	1.421	0.1	1

## IWAKI World Wide Network

Our subsidiary in Germany and other joint companies throughout the world provide high-level support for our customers. We feel that "real service" means not only to merely provide products but to also organically combine the information collected via our worldwide network and our special knowledge based on our long years of experience, all to deliver value to customers.



European office	IWAKI Europe GmbH	TEL: (49)2154 9254 0	FAX: 2154 9254 48
Germany	IWAKI Europe GmbH	TEL: (49)2154 9254 50	FAX: 2154 9254 55
Holland	IWAKI Europe GmbH (Netherlands Branch)	TEL: (31)74 2420011	FAX: (49)2154 925448
Italy	IWAKI Europe GmbH (Italy Branch)	TEL: (39)0444 371115	FAX: 0444 335350
Spain	IWAKI Europe GmbH (Spain Branch)	TEL: (34)93 37 70 198	FAX: 93 47 40 991
Belgium	IWAKI Belgium N.V.	TEL: (32)13 67 02 00	FAX: 13 67 20 30
Denmark	IWAKI Nordic A/S	TEL: (45)48 24 2345	
Finland	IWAKI Suomi Oy	TEL: (358)10 201 0490	
France	IWAKI France S.A.	TEL: (33)1 69 63 33 70	FAX: 1 64 49 92 73
Norway	IWAKI Norge AS	TEL: (47)23 38 49 00	
Sweden	IWAKI Sverige AB	TEL: (46)8 511 72900	
U.S.A.	IWAKI America Inc.	TEL: (1)508 429 1440	FAX: 508 429 1386
Argentina	IWAKI America Inc. (Argentina Branch)	TEL: (54)11 4745 4116	
Brazil	IWAKI Do Brasil Comercio De Bombas Hidraulicas LTDA.	TEL: +55 19 3244 5900	FAX: +55 19 3244 5900
Singapore	IWAKI Singapore Pte Ltd.	TEL: (65)6316 2028	FAX: 6316 3221
Indonesia	IWAKI Singapore (Indonesia Branch)	TEL: (62)21 6906606	FAX: 21 6906612
Malaysia	IWAKIm Sdn. Bhd.	TEL: (60)3 7803 8807	FAX: 3 7803 4800
Australia	IWAKI Pumps Australia Pty Ltd.	TEL: (61)2 9899 2411	FAX: 2 9899 2421
China(Hong Kong)	IWAKI Pumps Co., Ltd.	TEL: (852)2607 1168	FAX: 2607 1000
China(Guangzhou)	GFTZ IWAKI Engineering & Trading Co., Ltd.	TEL: (86)20 84350603	FAX: 20 84359181
China	IWAKI Pumps (Shanghai) Co., Ltd.	TEL: (86)21 6272 7502	FAX: 21 6272 6929
Korea	IWAKI Korea Co.,Ltd.	TEL: (82)2 2630 4800	FAX: 2 2630 4801
Taiwan	IWAKI Pumps Taiwan Co., Ltd.	TEL: (886)2 8227 6900	FAX: 2 8227 6818
Thailand	IWAKI (Thailand) Co.,Ltd.	TEL: (66)2 322 2471	FAX: 2 322 2477

( )Country codes

## IWAKI feels that “production systems” are “quality assurance systems.”

IWAKI “positions all production processes as processes of quality control,” and for the entire processes of development/design, procurement, and production, through to shipment, we strictly check each process based on quality assurance standards by observing ISO9001 and by using state-of-the-art test devices. We aim to attain a “zero failure rate.” We have also obtained ISO14001 environmental management system certification. We have been promoting activities taking into consideration impact on the environment.



Saitama Plant

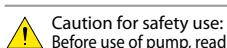


Miharu Plant

## Regarding compliance with RoHS Directive/CE Marking

The RoHS Directive is a restriction related to chemicals contained in electric/electronic devices issued by the EU (European Union). Currently, it has been replaced with the RoHS Recast Directive, and the RoHS Recast Directive is now being applied. CE Marking applied to a product is a manufacturer's or importer's declaration of product conformity to the EC Directive issued by the EU (European Union) and ensures free distribution within the EU area.

IWAKI has been promoting the switching of parts to those compliant with RoHS, and has been taking measures for the EC Directive one after another. Contact us for details on products compliant with RoHS and the EC Directive.

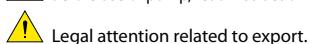


**Caution for safety use:**

Before use of pump, read instruction manual carefully to use the product correctly.

Actual pumps may differ from the photos.

Specifications and dimensions are subject to change without prior notice. For further details please contact us.



!

Legal attention related to export.

Our products and/or parts of products fall in the category of goods contained in control list of international regime for export control. Please be reminded that export license could be required when products are exported due to export control regulations of countries.

The posting and copying from this catalogue without permission is not accepted firmly.