

Diaphragm Air Pump



APN designs offer maximum application flexibility, with the option of using the suction side as a vacuum pump, or the discharge side as a compressor. Using diaphragm technology, the pumps can feed clean air free of oil, carbon or other impurities. Compact, light and efficient, the APN series is suitable for integration into a wide range of applications such as gas analyzers, medical diagnostic systems and industrial equipment.

- **Broad Selection** - Standard single head or two head designs allow for series or parallel operation and offer a variety of plumbing options.
- **Superior Durability** - The robust, reinforced diaphragm, heavy duty bearing system and enhanced connecting rods employed by the APN series allows for continuous operation and greatly extend the pump life.
- **High Efficiency Design** - High power motors improve the starting characteristics and the use of molded components enhance pump performance and efficiency.
- **Various Material Composition** - With a wide variety of material options it is possible to handle many types of gas.
- **Clean air transfer** - The motor driven diaphragm pump is oil/carbon free making it ideal for medical sampling or equipment where air cleanliness is required.



Technical Specifications

Model	Max Capacity	Max Discharge Pressure		Max Vacuum		Connection Size	Motor		Mass	
	L/min@60 Hz	PSI	MPa	kPa	in Hg	In/Out	Power Source	Rated Output	kg	lbs
031	1.5	3.92	0.027	74.66	22.05	Hose, 5mm	DC12/24V	0.68W	0.07	0.15
085	5 - 12	11.6	0.08	61.32	18.11	Hose, 8mm, Rc 1/4, G1/4	AC220/240V/50Hz or 115V/60Hz or DC 24V	10W-15W	1.9 - 2.6	4.18 - 5.73
(P)110	14 - 28	14.5	0.1	23.99	7.08	Hose, 8mm, Rc 1/4		10W-25W	2.5 - 3.8	5.51 - 8.37
215	18 - 36	29.0	0.2	39.99	11.80	Hose, 9mm, G1/8	AC220/240V/50Hz or 115V/60Hz	30W-45W	3.5 - 5.2	7.71 - 11.46
240	34 - 72	29.0	0.2	41.32	12.20	Hose, 14mm, Rc 1/4, G1/4		60W-90W	7.0 - 10.0	15.43 - 22.04
450	60 - 110	14.5	0.1	13.33	3.94	Hose, 12mm, Rc 1/4		200W	14.1 - 17.3	31.0 - 38.1

Construction Materials

Model	052		085			110			215N		215C		215M		240	450	
Material & Marks	V	E	V	E	N	V	E	N	V	E	V	E	V	E	----	AT	ST
Pump Head	GFRPP		GFRPP			GFRPP			GFRPA		ADC12		GFRPP		ADC12	ADC12	SUS304
Diaphragm	PTFE & EPDM	EPDM	FKM	EPDM	NBR	FKM	EPDM	NBR	FKM	EPDM	FKM	EPDM	FKM	EPDM	NBR	PTFE & EPDM	
Valve	FKM	EPDM	FKM	EPDM	NBR	FKM	EPDM	NBR	FKM	EPDM	FKM	EPDM	FKM	EPDM	FKM	SUS631 - CSP	
Valve Seat	GFRPP		GFRPP			GFRPP			GFRPPS						ADC12	-----	

EPDM	Ethylene propylene diene monomer	PTFE	Polytetrafluoroethylene
FKM	Fluoroelastomer	NBR	Nitrile Rubber
GFRPP	Glass fiber reinforced polypropylene	ADC12	Aluminum Diecast
GFRPPS	Glass fiber reinforced polypropylene sulfide	SUS304	304 Stainless Steel
GFRPA	Glass fiber reinforced polypropylene resin	SUS631-CSP	Stainelss Steel (strip steel for spring)