General Characteristics

※ Without electricity, explosion–proof, can convey flammable fluid.
※ No dynamic seals, even dry running without damage to the pump.
※ No impeller, low shear, will not damage the material structure of fluid.
※ Submersible, mobile, flexible installation, easy maintenance.
※ Can convey high–thick, high–viscosity fluid.
※ Can convey acid, alkali, strong organic solvents and other fluid.
※ Changing the inlet air and pressure, to adjust the flow rate and head.

Pump Characteristics



※ Full plastic pneumatic diaphragm pump.
※ One–piece design PP center block, Strong and excellent corrosion resistance.
※ Modular air valve, built–out design, on–line maintenance.
※ High roundness valve ball, good sealing.
※ One–piece design diaphragm plate, built–in metal block, excellent pressure resistance.
※ Manifold be three section design, center port, and low pulsation.
※ Four bolts connection design, strong and durable.
※ Diaphragm with center O–ring design, good sealing and longer life time.

Operating temperature limitation

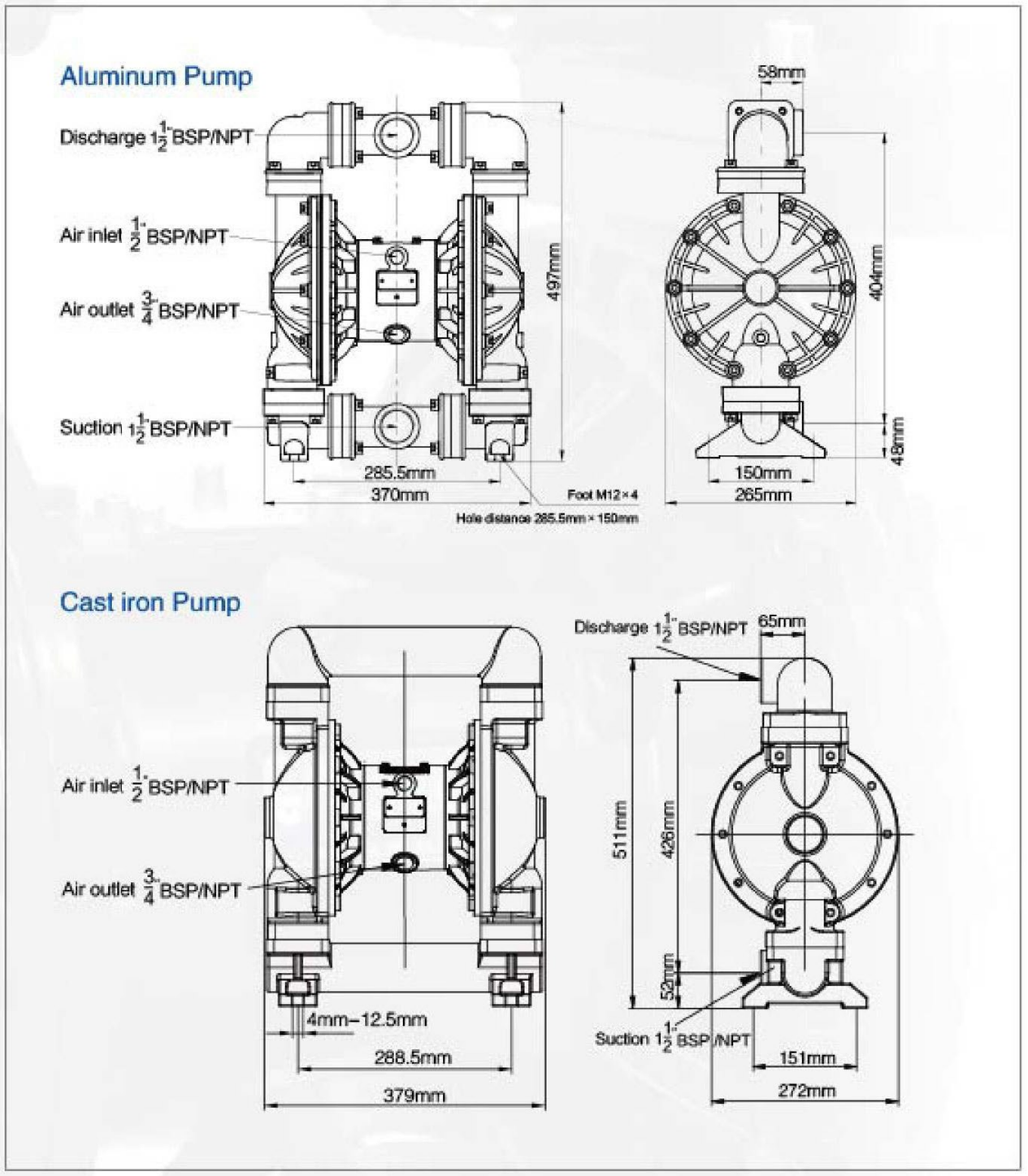
Diaphragm Material	Maximum	Minimum
Viton:excellent corrosion resistance, resistance to various acids (including the medianconcentration of oxidizing acid),alkali, salt, petroleum products, hydrocarbons, etc.	250℉ 121℃	-40℉ -40℃
PTFE(Teflon): excellen corrosion resistance, almost resistant to all chemical media (including concentrated nitric acid and aqua regia). Except melting of lithium, potassium,sodium, chlorine trifluoride, high-temperature oxygen trifluoride, sulfur-speed liquid fluorine.	220℉ 104℃	40℉ 4.4℃
Santoprene: good abrasion resistance, chemical resistance and heat resistance, suitable for general acid and alkali, not suitable solvent. Can replace the EPDM/EPR material.	180℉ 82℃	-40℉ -40℃
Hytrel:good abrasion resistance, used in most of the neutral fluid. Can replace Bune-N materials.	180℉ 82℃	-20℉ -29℃
EPDM:abrasion resistance, aging resistance, ozone resistance , suitable for general acid and alkali.	180℉ 82℃	10℉ -12℃
Buna-N: widely used in gasoline and other oil products. Suitable for use at room temperature.	180℉ 82℃	10℉ -12℃
GE: better abrasion resistance than Hytrel, the same chemical resistance as Buna-N.	180℉ 82℃	-40℉ - 40℃
Pumpbody material	**Maximum**	**Minimum**
PP: Medium abrasion resistance, good chemical resistance, good versatility, especially for common acid-base.	150℉ 65.5℃	32℉ 0℃
POM: good solvent resistance, abrasion resistance. Low friction, low moisture absorption.	150℉ 65.5℃	32℉ 0℃
PVDF: strong chemical resistance, crush resistance, abrasion resistance. good corrosion resistance for acid,alkali and variety of organic solvents.	225℉ 107℃	10℉ -12℃

Note: The maximum and minimum temperature is the limited operating temperature of these materials. Temperature and pressure will affect the diaphragm life. Operating under the maximum or minimum temperature, can not achieve maximum life

Aluminum /cast iron pump **MK40**



Installation size



Technical parameters		
Suction lift[mwc]	dry	5
	wet	8
Max particle diameter[mm]		5
Suction and discharge size[in]		1 1/2
Air inlet size[in]		1/2
Max flow[l/min]		358
Max head[m]		84
Max air inlet presure[bar]		8.4

material quality

Pumpbody: Aluminum, Cast iron

Diaphragm: Santoprene, Hytrel, Teflon, Viton, EPDM, Buna–N

Valve ball: Santoprene, Hytrel, Teflon, Viton, Stainless steel, Ceramic

Valve seat: Santoprene, Hytrel, Teflon, Viton, Stainless steel

Center block: PP, Aluminum, Stainless steel

Weight

Aluminum pump: 20 Kgs

Cast iron pump: 50 Kgs

Performance curve

