

The **SILI QBY** pump is a diaphragm pump (also known as a Membrane pump, **Air Operated Double Diaphragm Pump**, AODD pump or Pneumatic Diaphragm Pump) is a positive displacement pump that uses a combination of the reciprocating action of a rubber, thermoplastic or teflon diaphragm and suitable valves either side of the diaphragm (check valve, butterfly valves, flap valves, or any other form of shut-off valves) to pump a fluid.

They are driven with compressed air without the need of electric power. Widely used for leak proof applications in industries like petrochemical chemical metallurgy and ceramics etc. Applicable to liquids of leaky corrosive inflammable and explosive & hazardous properties.

Design Features

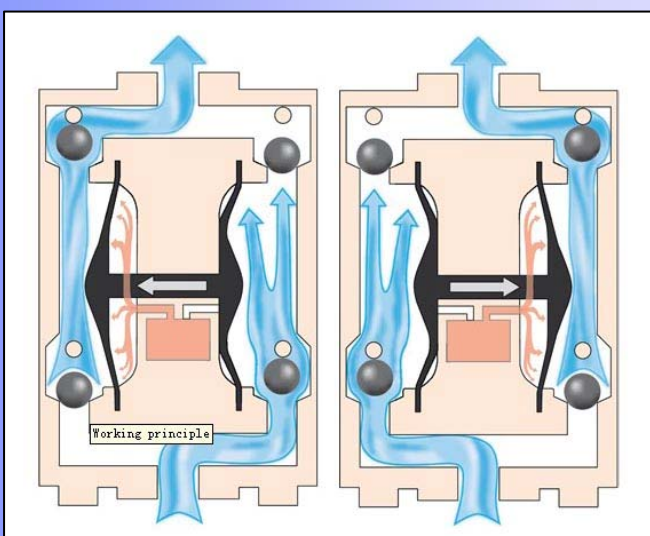
- No need to fill in priming water, maximum suction head up to 7m, head lift up to 50m.
- Spacious flow and sound throughput performance, maximum permissible particle diameter up to 10mm, when handling slurry and impurity.
- Head lift and flow rate under steepless regulation through the opening regulation of valve (air pressure regulated between 1-7kgf/cm²).
- This pump has no rotating elements and shaft seal. Diaphragm makes the media handled completely separated from moving elements and working media, so that the media cannot leak out, hardly causing any environmental pollution and personal safety threat when handling toxic volatile or corrosive media.



- It doesn't use electricity to perform safe and reliable service in inflammable and explosive conditions.
- It can work when being submerged into media.
- Easy operation and dependable service. It is started or stopped simply by opening or closing the air valve. Even under longtime no-media running or sudden stop due to unexpected circumstances, pump is not likely to be damaged therefore.
- Simple structure and less wearing parts. Provided with simple structure, easy installation and maintenance, the media handled cannot get in touch with the moving elements such as distributing valve, link rod, etc.,
- It is capable of handling relatively viscous liquid. (viscosity below 10,000 centipoises).

Principle

When the volume of a chamber of either type of pump is increased (the diaphragm moving up), the pressure decreases, and fluid is drawn into the chamber. When the chamber pressure later increases from decreased volume (the diaphragm moving down), the fluid previously drawn in is forced out. Finally, the diaphragm moving up once again draws fluid into the chamber, completing the cycle. This action is similar to that of the cylinder in an internal combustion engine.



Brief Performance Parameters

Model	Flow rate	Head lift	Discharge Pressure	Suction head	Max. particle Diameter	Max. air consumption	Type connection			
	(m3/l)	(m)	(kgf/cm2)	(m)	(mm)	(m3/min)	NPT	BSPT	ANSI	DIN
QBY-10	0 - 0.8	0 - 50	6	0 - 5	1	0.3	★	★	/	/
QBY-15	0 - 1	0 - 50	6	0 - 5	1	0.3	★	★	/	/
QBY-25	0 - 2.4	0 - 50	6	0 - 7	2.5	0.6	★	★	/	/
QBY-40	0 - 8	0 - 50	6	0 - 7	4.5	0.6	★	★	/	/
QBY-50	0 - 12	0 - 50	6	0 - 7	8	0.9	/	/	★	★
QBY-65	0 - 16	0 - 50	6	0 - 7	8	0.9	/	/	★	★
QBY-80	0 - 24	0 - 50	6	0 - 7	10	1.5	/	/	★	★
QBY-100	0 - 30	0 - 50	6	0 - 7	10	1.4	/	/	★	★

Material for pump body and diaphragm

Model	Material for the pump body						Material for the diaphragm				
	Aluminum	S.S.	Cast iron	PP	PVDF	F46 lined	Buna-N	Neoprene	EPDM	Viton	Teflon
QBY-10	★	★	★	★	★	/	★	★	★	★	★
QBY-15	★	★	★	★	★	/	★	★	★	★	★
QBY-25	★	★	★	★	★	★	★	★	★	★	★
QBY-40	★	★	★	★	★	★	★	★	★	★	★
QBY-50	★	★	★	★	/	★	★	★	★	★	★
QBY-65	★	★	★	/	/	/	★	★	★	★	★
QBY-80	★	★	★	/	/	/	★	★	★	★	★
QBY-100	★	★	★	/	/	/	★	★	★	★	★

a. ANSI&DIN is flange connection type. All pump connection can be both in middle or in one side of the pump.

b. S.S.--stainless steel, it can be in SS304,SS316,SS316L., PP--reinforced polypropylene, PVDF--polyvinylidene fluoride, F46--fluorinated ethylene-propylene.

c. contact us freely for the pump size and performance drawing.

SILI PUMP, Your reliable one-stop supplier of marine pumps.

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