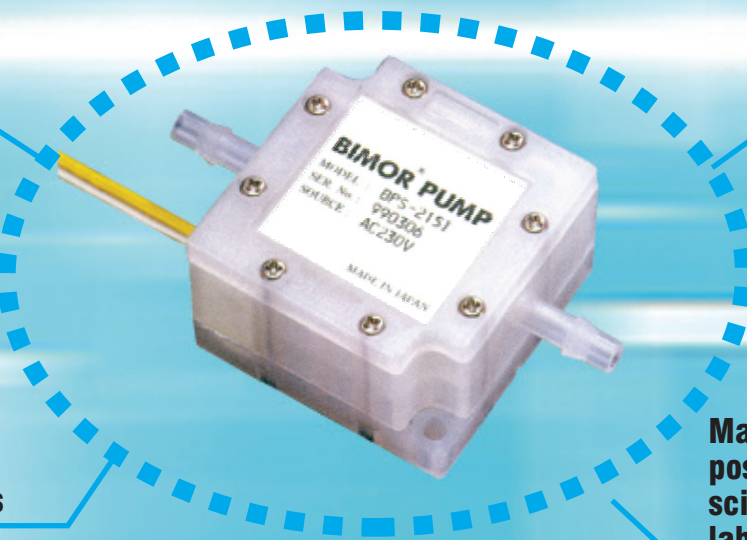


BIMOR

the miniature pump revolution



Pumps any liquids or gases

No motor, no shaft, or moving parts

Compact dimensions

Simple to install and control

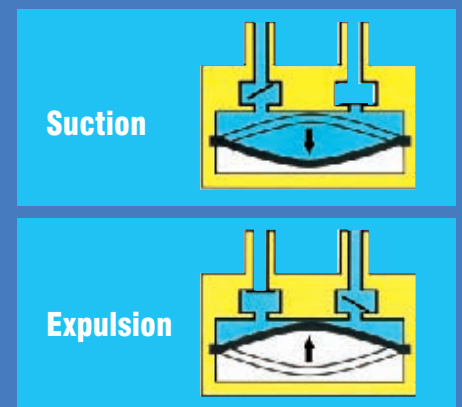
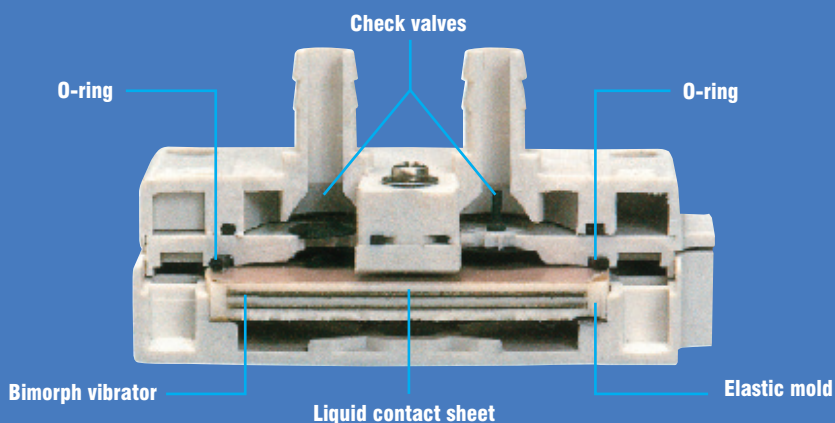
Silent

Manifold application possibilities, such as medical, scientific, printing, chemical, laboratory

The Next Step in Japanese Miniaturization

— Revolutionary piezoelectric bimorph technology —

The Bimors driving force, the bimorph, comprises two parallel piezoelectric wafers. Their nature is to expand or contract depending on the direction of the voltage. Therefore when an alternating current is applied, one wafer expands then contracts while the other contracts then expands, causing the bimorph to bend. Repeating the cycle creates a pumping action.



Compact, lightweight, durable & quiet

As the bimorph also acts as a diaphragm, the Bimor has no motors or shafts or other intricate mechanisms, and thus minimal vibrations and fewer breakdowns. The Bimor is lighter, quieter and more durable than traditional pumps.

Low power consumption & electromagnetic noise

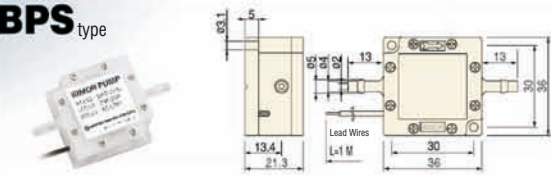
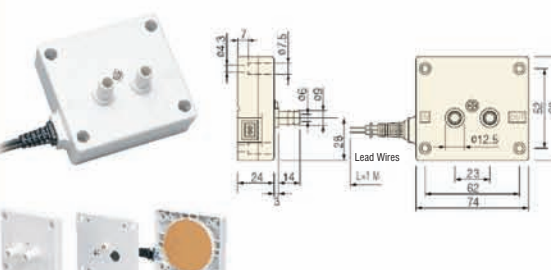
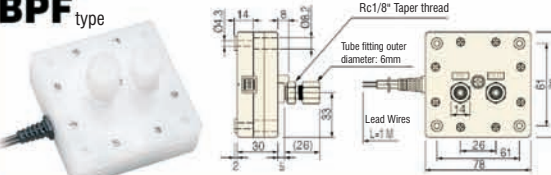
The Bimor is driven by low energy consuming piezoelectric elements. Consequently it costs very little to run and emits virtually no electromagnetic noise.

Simple flow rate adjustment

As the flow rate of the Bimor Pump is proportional to the voltage and frequency, adjusting the flow rate is as simple as adjusting either one.

Application Versatility

The parts can be made with several different materials, so you can select the material appropriate to your needs, be it a liquid or gas application. The Bimor is currently employed in a variety of different fields including medicine, scientific research, and the PC and chemical industries.

Specifications*	Dimensions	Voltage AC 120V 60 Hz							Voltage AC 230V 50 Hz									
		Model	current (mA)	self-priming height (cm)	flow rate (ml/min.)	maximum pressure (mbar)	housing	Bimorph	valve / O-ring	Weight (g)	suitable liquids	current (mA)	self-priming height (cm)	flow rate (ml/min.)	maximum pressure (mbar)	Model		
BPS type 		BPS-215I	3	30	30	150	PP	PP	IIR	40	chlorinated detergents	4	4	10	100	BPS-215I		
		BPS-235G	4	15	30	150	POM	PTFE	FKM	40	alcohols, hydrochlorid acids, sulphuric acids, lubricating oils	4	4	10	100	BPS-235G		
BPH type 		BPH-214I	15	80	350	180	PP	PP	IIR	140	chlorinated detergents	15	80	220	180	BPH-214I		
		BPH-214D							VMQ		water, alcohols, weak alkalines					BPH-214D		
		BPH-214E							EPDM		potash, caustic sodas, hydrochloric acids					BPH-214E		
		BPH-214G	70	170	PTFE	FKM		sodium hydrochlorite, hydrochloric acids, sulphuric acids, luring oils	70	170	BPH-214G							
		BPH-414I	30	120	500	350		PP	PP	IIR	140	chlorinated detergents	15	70	250	350	BPH-274G	
		BPH-414D								VMQ		water, alcohols, weak alkalines						BPH-274P
		BPH-414E								EPDM		potash, caustic sodas, hydrochloric acids						
		BPH-414G	450	320	FKM	sodium hydrochlorite, hydrochloric acids, sulphuric acids, luring oils		170	hydrochloric acids, sulphuric acids, lubricating oils	15	70	250	350	BPH-274P				
		BPH-474G	100	400	350	PPS			FFKM						strong acids, strong alkalines, polar solvents			
BPH-474P																		
BPF type 		BPF-465P	30	100	400	350	PFA	PTFE	FFKM	350	strong acids, strong alkalines, polar solvents	15	70	250	350	BPF-265P		
											350	strong acids, strong alkalines, polar solvents	15	70	250	350	BPF-265P	



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- * the reference data is based on water at 25°C under no-load conditions
- * the ambient temperature range is from 5° to maximum 50°C, the ambient operating humidity is from 25 to 85%
- * when the liquid temperature is low, the valves will harden. As a result the flow rate might decrease
- * the supply of frozen liquids is not possible
- * particles or additives in the liquid can block the function of the valves; crystallizing liquid should be avoided
- * when reducing the voltage the performance may alter
- * damage may be caused by voltage variations & spikes. It is therefore recommended to use an isolation transformer

It is the responsibility of the user to select the right model for the application. If damage is caused as a result, we can not take any responsibility

Material description:

- EPDM Ethylene Propylene Rubber
- FEP Fluoroethylene Propylene
- FFKM Fluorine Rubber (Perfluoro)
- FKM Fluorine Rubber
- IIR Butyl Rubber
- POM Polyacetal
- PFA Fluoresin (Perfluoroalkoxy)
- PP Polypropylene
- PPS Polyphenylene Sulphide
- PTFE Tetrafluoresin (Polytetrafluoroethylene)
- VMQ Dimethyl Silicon Rubber

Durability

Longevity test

