

Piezo applications product group

● Langevin ultrasonic transducer

This ultrasonic transducer, the piezoelectric element in between the metal block is nipped, is the ultrasonic vibrator of integral structure. Since it was invented by P. Langevin (France), it has been called a Langevin type vibrator.

Many of these, by tightening a ring-shaped piezoelectric elements with bolts, it is made integral structure. That means also known as the bolted Langevin type vibrators.

Can be driven at high power and high amplitude, it has become one of the power-driven uses of ultrasonic.

Maximum input 100 W, and 200 W types are lineup.

Features of the Langevin type ultrasonic vibrator

- High mechanical Q
- High-strength, robust
- Horn or tool mounting easy
- Easy mounts to the equipments
- High-efficiency, low heat generation
- Linearity of the input and output characteristics



Typical Applications

- Ultrasonic washing machines
- Wire bonding machines
- Plastic welding machines
- Ultrasonic cutting machines
- Atomizing pumps
- Medical ultrasonic scalpels
- Fish finder, Underwater sonar



Typical varieties & specifications

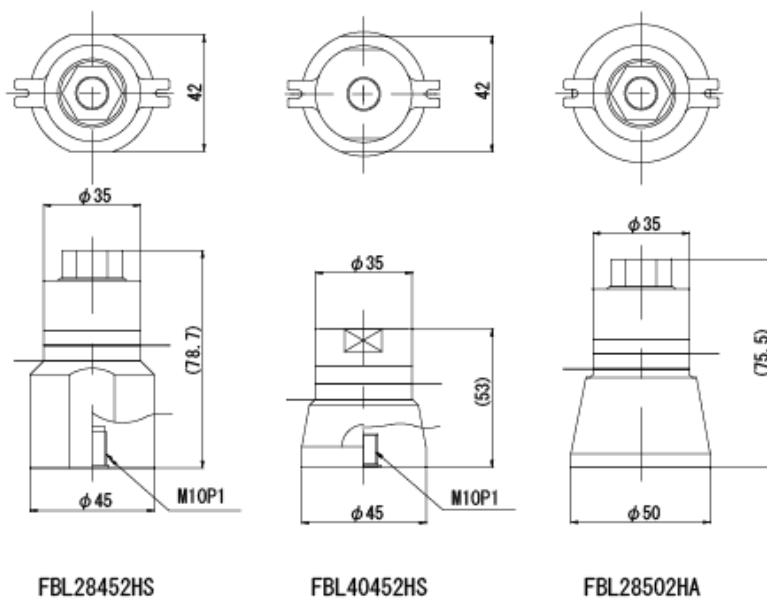
Types		Sizes		Characteristic Specifications				Mounting method
		OD	Height	Frequency	Admittance	Capacitance	Max. input	
		(mm)		(kHz)	(ms)	(μ F)	(W)	
for Washing machines	FBL28452HS	45	79	28	20	3800	70	Stud bolt
	FBL40452HS	45	53	40	15	3800	70	Stud bolt
	FBL28502HA	50	76	28	20	3800	70	Glueing
for Processing machines	FBL28302SSF-FC	30	(91)	27.9	30	3000	200	Flange fixing
	FBL28252SSF-FC	25	(94)	27.9	30	2300	100	Flange fixing
	FBL40152SSF-FC	15	66	39.5	9	900	25	Flange fixing
	FBL60152SS	15	42	60	9	900	25	—
	FBL50152H-FC	15	55	50	9	900	25	Flange fixing

NEW

Types		Sizes		Characteristic Specifications				Mounting method
		OD	Height	Frequency	Admittance	Capacitance	Max. input	
		(mm)		(kHz)	(ms)	(μ F)	(W)	
for Processing machines	FBL15604SS-FC	60	167	15	100	11500	2400	Stud bolt
	FBL20504SS-FC2	50	126	20	150	13000	2000	Stud bolt
	FBL40304SS-FC2	30	62	40	100	8800	200	Stud bolt

Dimensions of the typical varieties

- Washing machine vibrators



- Processing machine vibrators

