

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.



Features of the Langevin type ultrasonic vibrator

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

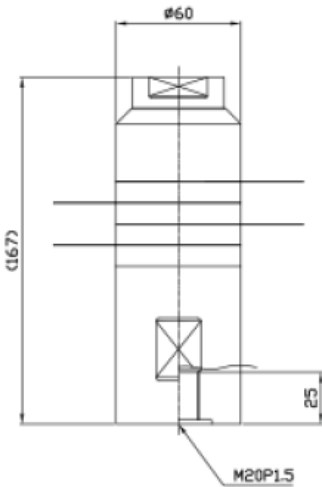
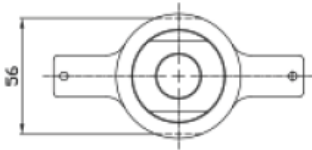
Typical Applications

- Wire Bonding machines
- Plastic welding machines
- Ultrasonic cutting machines
- Medical ultrasonic scalpels
- Fish finder, Underwater sonar

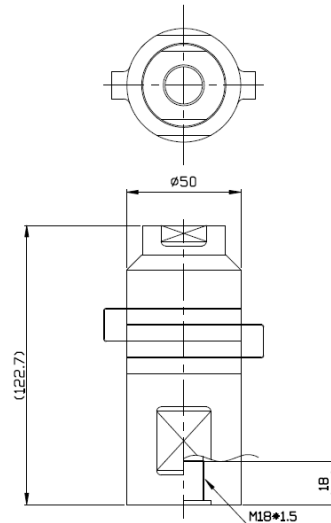
Typical varieties & specifications

Types	Sizes		Specifications				Mounting method to horn
	OD	Height	Frequency	Admittance	Capacitance	Max.Input	
	mm		kHz	mS	pF	W	
FBL15604SS-FC	60	(167)	15	100	11500	2400	Bolt clamping
FBL20504SS-FC5	50	(122.7)	20	150	13000	2000	Bolt clamping
FBL28302SSF-FC	30	(91)	27.9	30	3000	200	Bolt clamping
FBL28252SSF-FC	25	(93.4)	27.9	30	2300	100	Bolt clamping
FBL40304SS-FC4	30	(57.6)	39.5	100	8500	200	Bolt clamping
FBL40152SSF-FC	15	(64.6)	40	12	900	25	Bolt clamping
FBL50152H-FC	15	(55)	50	9	900	20	Integrated model
FBL60152SS	15	(42)	60	9	900	15	Bolt clamping

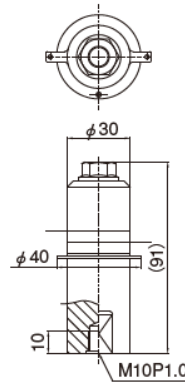
Dimensions of the typical varieties



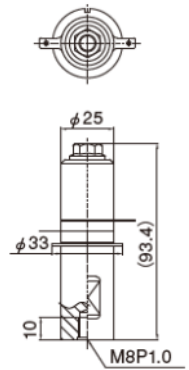
FBL15604SS-FC



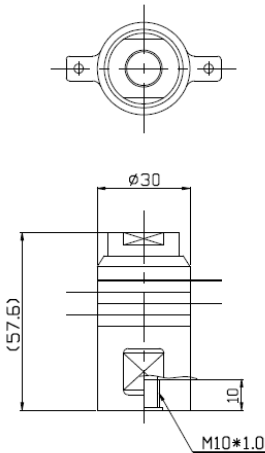
FBL20504SS-FC5



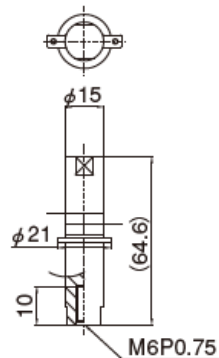
FBL28302SSF-FC



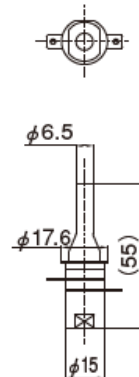
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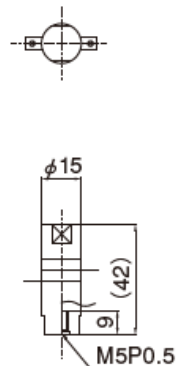
FBL40304SS-FC4



FBL40152SSF-FC



FBL50152H-FC



FBL60152SS