

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

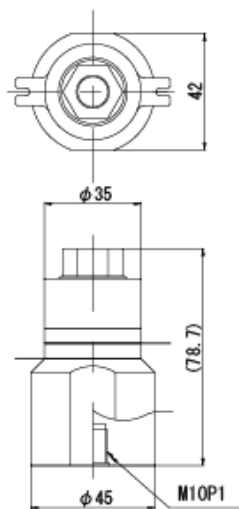
Typical Applications

- Ultrasonic cleaning machines
- Fish finder and sonar
- Atomizing pumps

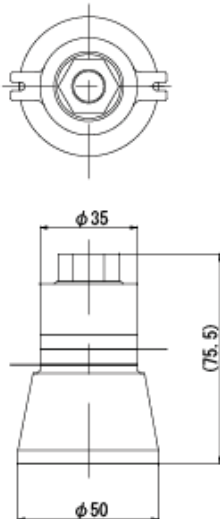
Typical varieties & specifications

Types	Sizes		Specifications				Mounting method to tank
	OD	Height	Frequency	Admittance	Capacitance	Max.Input	
	mm		kHz	mS	pF	W	
FBL28452HS	45	(79.1)	28	30	3800	70	Bolt clamping
FBL28452HA-FC	45	(79)	28	30	3800	75	Bonding
FBL28502HA	50	(75.5)	28	30	3800	75	Bonding
FBL28602HA-FC	60	(70.2)	27.5	30	3500	75	Bonding
FBL40452HS	45	(53)	40	15	3800	70	Bolt clamping
FBL40452HA-FC	45	(52.8)	40	15	3500	75	Bonding

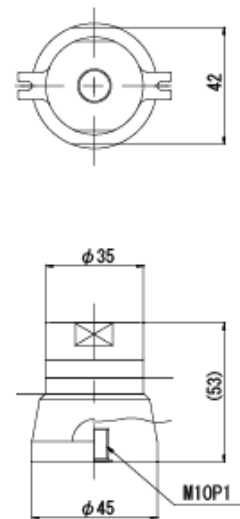
Dimensions of the typical varieties



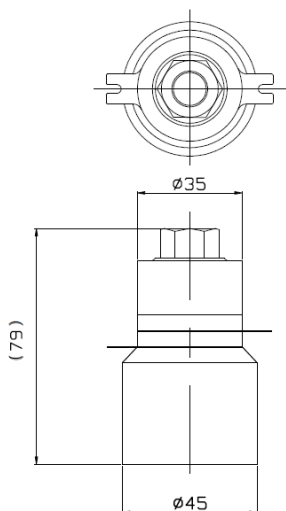
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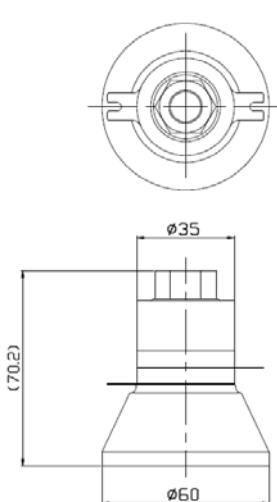
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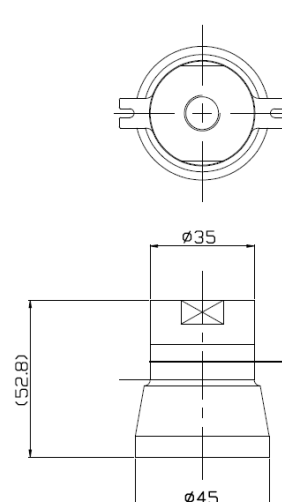
FBL40452HS



FBL28452HA-FC



FBL28602HA-FC



FBL40452HA-FC