



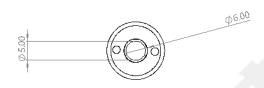
# Product specification

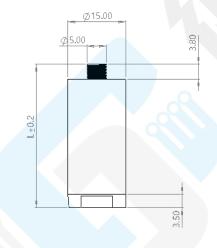
The DCSA3-R15 is an integrated structure composed of a piezoelectric ceramic stack, a flexible hinge support structure, and a housing. The coaxial shielded wire leads out the electrodes, and the moving cap end, fixed base, and connector can all be customized.



DCSA3-R15









型号	长度 L (mm)	行程	
R15H37P15	37	15	
R15H55P30	55	30	
R15H73P45	73	45	
R15H91P60	91	60	
R15H127P90	127	90	





# Product specification

## **Performance Parameters**

Model Name	Tolerance Range	R15H37P15	R15H55P30	R15H73P45	R15H91P60	R15H127P90			
	Motion Mode								
Motion Direction	/	Z	Z	Z	Z	Z			
Displacement (0-150V) (μm)	± 15%	15	30	45	60	90			
	Positioning Method								
Z-axis Fixed End	±15%	M4↓ 4							
	Drive Performance								
Drive Method	/	Piezo Controller	Piezo Controller	Piezo Controller	Piezo Controller	Piezo Controller			
Capacitance (µF)	± 15%	3.4	5	9.5	12	20			
Hysteresis	/	<15%	<15%	<15%	<15%	<15%			
		Mech	anical Proper	ties					
Stiffness	1	117	58	39	29	19			
Resonant Frequency (kHz)	1	52	35	24	19	11			
Z-axis Thrust (N)	/	1760	1760	1760	1760	1760			
Z-axis Tension (N)	/	200	200	200	200	200			
Material	//	Stainless Steel (304)							
Outer Diameter	±0.05	∮ 15	∮ 15	∮ 15	∮ 15	<b>∮</b> 15			
Length (mm)	±0.3	37	55	73	91	127			
			Other	,	1	1			
Operating Temperature  Range (°C)	/	<b>-25</b> ∼ 130	<b>-25</b> ∼ 130	-25 ~ 130	-25 ~ 130	-25 ~ 130			
Cable	/	RG-178	RG-178	RG-178	RG-178	RG-178			
Connector Model	1	PFG.0B.302.GLLD30Z							
Cable Length (mm)	1	>350	>350	>350	>350	>350			

- All specifications are quoted at 25°C, unless otherwise stated.
- The displacement may vary slightly for different loads, and the maximum displacement

occurs when used with the recommended load.





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#### **Performance Curve**

(The performance curve is based on actual measurements. The performance curve for customized products will be updated after production is completed.)

• These temperature rises were measured after applying a sine-wave drive voltage ranging from 0 to 150V at the specified frequency for 10 minutes.

### **Matters Needing Attention**

- 1. The piezoelectric actuator contains a piezoelectric stack inside, and the electrodes of the piezoelectric stack are led out through a coaxial shielded cable. The connector is a LEMO connector.
- 2. The piezoelectric ceramic actuator should be stored in vacuum packaging, and the discharge resistor should remain connected during storage.
- 3.Do not immerse the piezoelectric stack in organic solvents or expose it to flammable gases or liquids.
- 4.Do not disassemble the piezoelectric actuator.
- 5. Handle with care to avoid dropping, as the piezoelectric ceramic actuator is prone to breaking.