



# Product specification

The **DCSA3-R15H72P50** is an integrated structure composed of a piezoelectric ceramic stack, a flexible hinge support structure, and a housing structure. It can achieve a displacement of up to 50.0  $\mu\text{m}$ . The electrodes are led out through a coaxial shielded cable, and the moving cap end, fixed base, and connector can be customized.



## DCSA3-R15H72P50

### Performance Parameters

|                                     |                                      |                         |  |
|-------------------------------------|--------------------------------------|-------------------------|--|
| Drive Voltage Range                 | 0~150 V                              | Capacitance             | 7.5 $\mu\text{F}$ $\pm$ 15%                |
| Displacement (Free Stroke) at 150 V | 50.0 $\mu\text{m}$ $\pm$ 15%         | Dissipation Factor      | <5.0%                                      |
| Hysteresis                          | <15%                                 | Connection Cable        | RG-178                                     |
| Tensile Force                       | 40 N                                 | Blocking Force at 150 V | 1960N                                      |
| Curie Temperature                   | 230 $^{\circ}\text{C}$               | Operating Temperature   | -25 ~ 130 $^{\circ}\text{C}$               |
| Product Size                        | Outer Diameter:<br>15.0 $\pm$ 0.03mm | Customizable            | Connection cable, housing, connector, etc. |
|                                     | H: 72.0 $\pm$ 0.3mm                  |                         |  |

- All specifications are quoted at 25 $^{\circ}\text{C}$ , unless otherwise stated.
- The displacement may vary slightly for different loads, and the maximum displacement occurs when used with the recommended load.

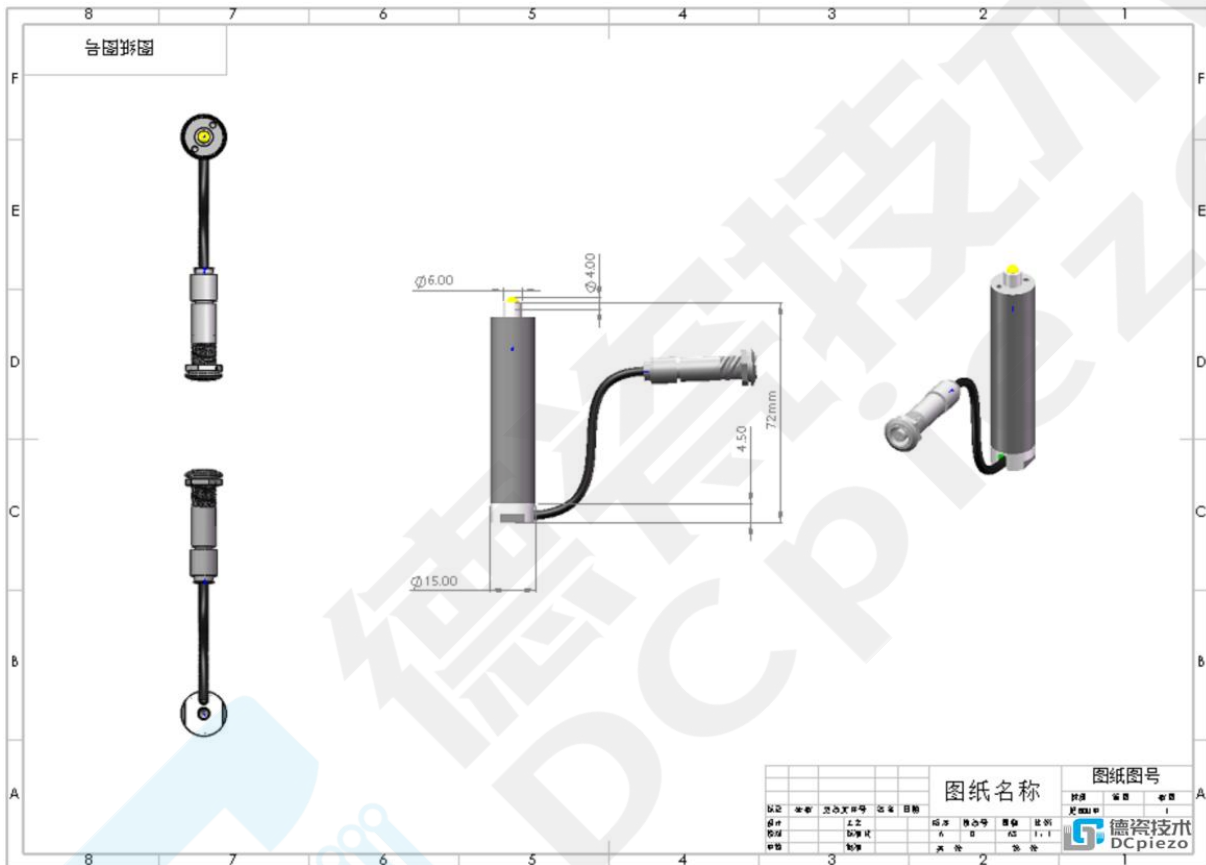
Guangdong DCpiezo Technology Co., Ltd.

<http://www.dc-piezo.com> Tel:+86 13798552005 WeChat:13798552005 Email:dcpiezo@163.com



# Product specification

## Product Size



## 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.

Guangdong DCpiezo Technology Co., Ltd.

<http://www.dc-piezo.com> Tel:+86 13798552005 WeChat:13798552005 Email:dcpiezo@163.com



# Product specification



## 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.