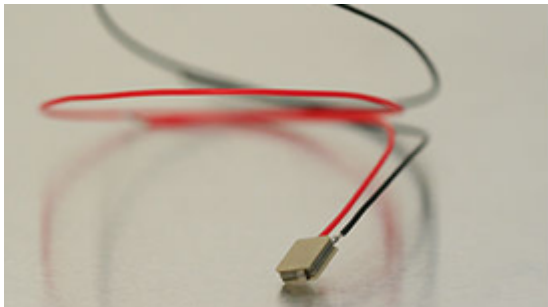


NAC2902-H4

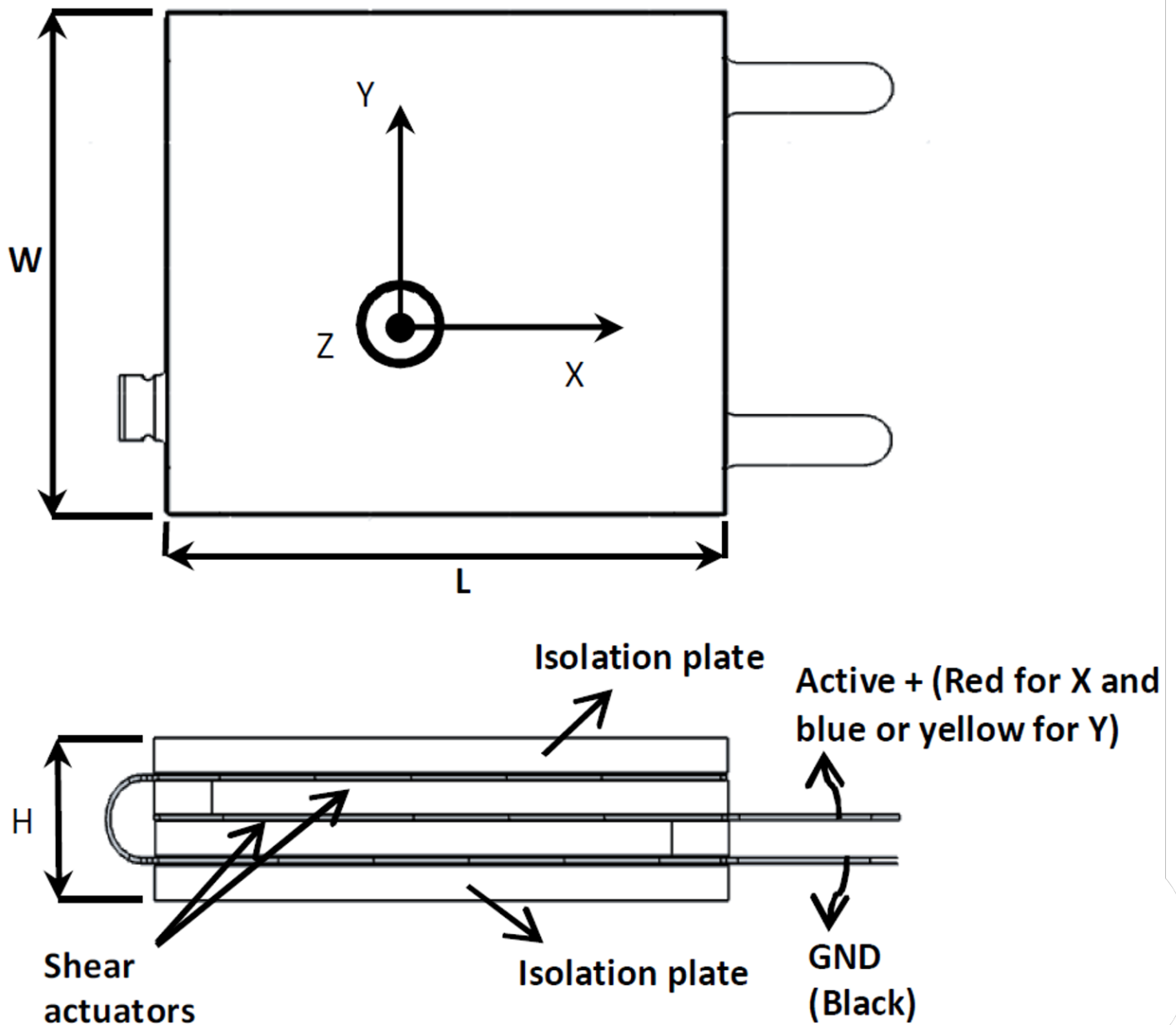


The Noliac shear stack NAC2902-H4 features shear motion on the X/Y-axis. This product is ideal for stick-slip and nanopositioning applications. NAC2902-H4 measures 5x5 mm with a height of 4 mm and provides a free stroke of 3/3 μm and a capacitance of 1.7/1.7 nF. End plates on top and bottom are included. The shear stack has ultra thin electrodes made of standard steel as standard.

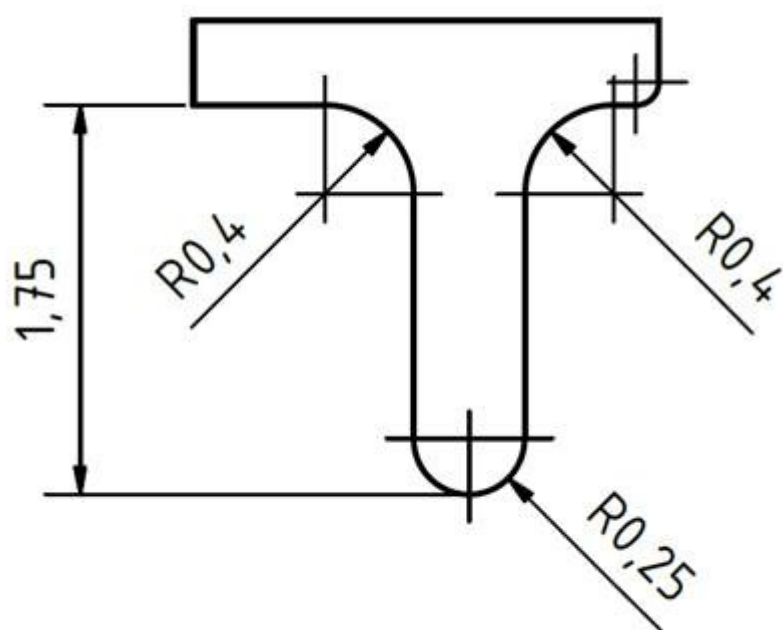
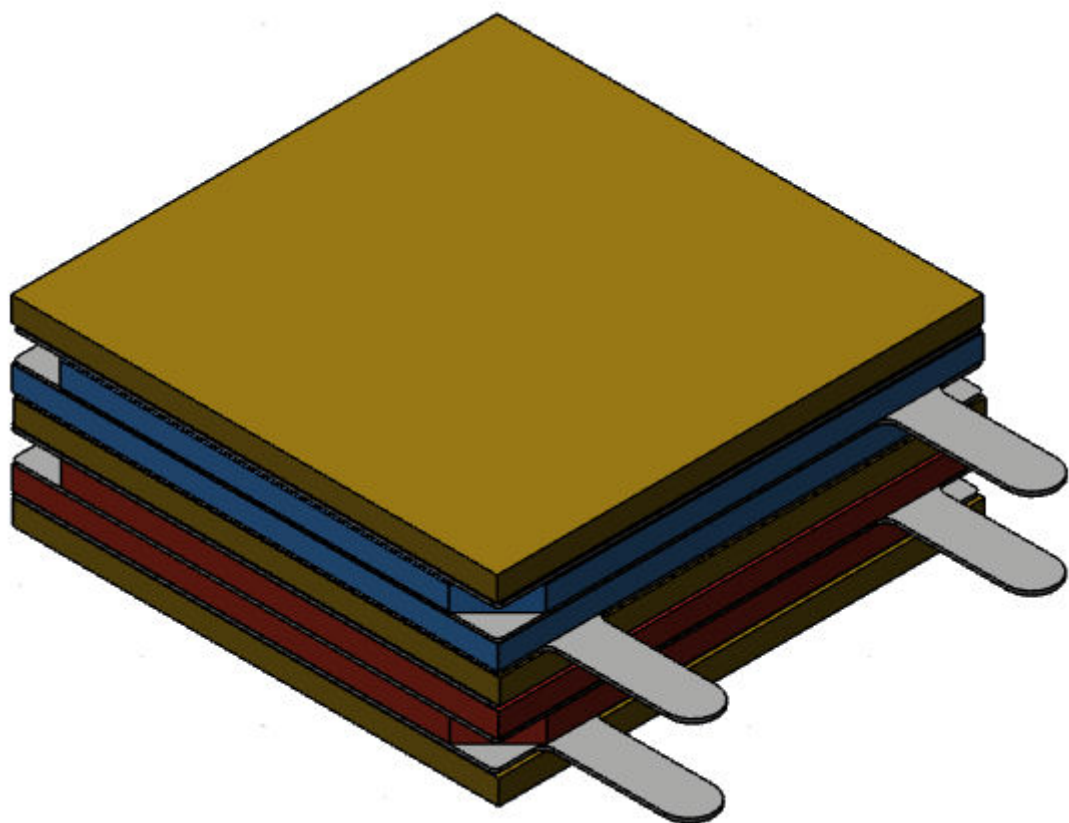
SPECIFICATIONS

Attributes	Value	Tolerance
Chamfers	X/Y 0.00	
Length / outer diameter	5 mm	+/-0.20 mm
Width / inner diameter	5 mm	+/-0.20 mm
Height	4 mm	Whichever is largest: 2% or +/-0.2 mm
Operating voltage, max.	$\pm 320\text{ V}$	
Free stroke, from -Vmax to +Vmax	3 μm	+/- 20%
Capacitance	1.70 nF	+/- 20%
Maximum operating temperature	150 $^{\circ}\text{C}$	
Material	NCE51	
Unloaded resonance frequency	220/ 220 kHz	
Electrodes	-	
Remarks	-	

Shear stack principle



3D drawing



WIRES

As standard, the shear stacks are delivered with these wires:

- BS 3G 210 TYPE A, 28 AWG (red for X-motion and blue or yellow for Y-motion).

The types and colours of the wires can be changed upon request.

Please contact us for other wiring options.

Colour code

- Isolation plate: yellow
- Shear plate actuators X-motion: red
- Shear plate actuators Y-motion: blue
- Electrodes: grey

End plates

As standard, the shear stacks are enclosed with 2 isolation end plates made from non-polarized piezoelectric material.

Please contact us for other options. Read more about [Noliac end plates](#).

Electrodes

As standard, the shear stacks are delivered with with these electrodes:

- Stainless steel 1.4301

Please contact us for other electrode options.