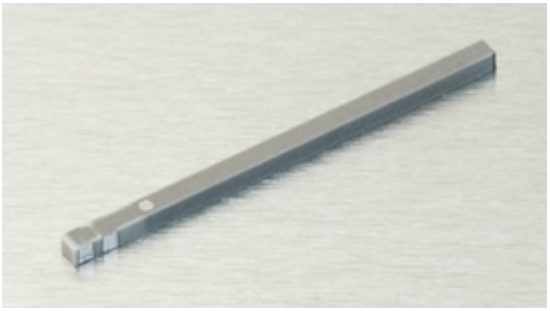
NAC2710



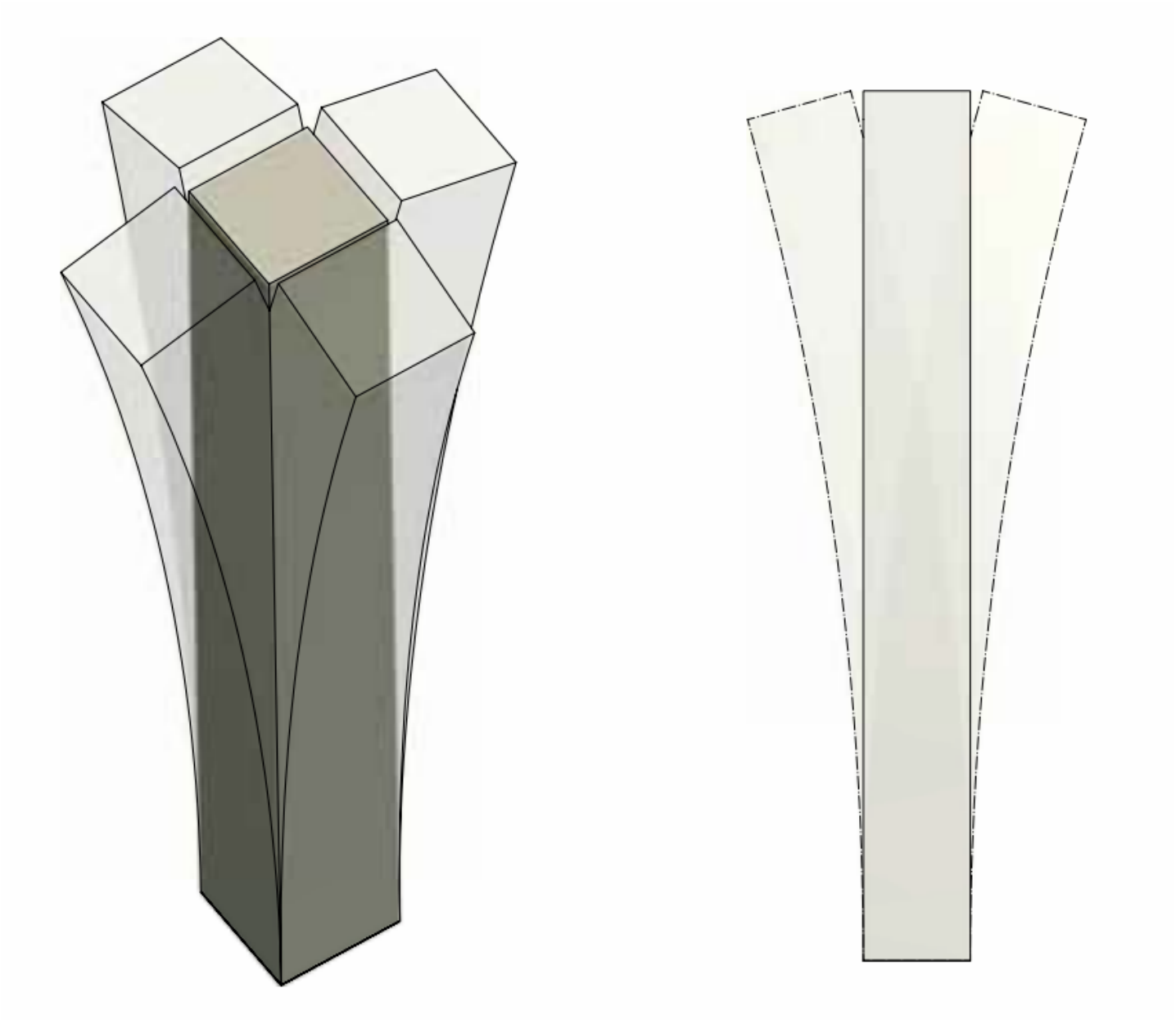
The 2D bender NAC2710 offers movement in two directions (X and Y) with the same component. The bender measures 36.5x1.75x1.75 mm and provides a stroke of +/- 90 µm and blocking force of 0.35 N. The design is scalable in terms of stiffness, displacement and dimensions.

SPECIFICATIONS

Attributes	Value	Tolerance
Length / outer diameter	36.5 mm	+/-0.75 mm
Width / inner diameter	1.75 mm	+/-0.10 mm
Height	1.75 mm	+/-0.10 mm
Operating voltage, max.	60 V	
Free stroke, max.	± 90 µm	+/- 15%
Blocking force, max.	0.35 N	+/-20%
Capacitance	X=700. Y=1300 nF	+/- 15%
Maximum operating temperature	200 °C	
Material	0.00	
Electrodes	-	
Remarks	-	

DRAWINGS

Displacement principle of NAC2710



MOUNT AND CONNECT

Mount and connect

The NAC2710 is built like two plate benders put together, with the red wires and the black wires connected together.

Operation

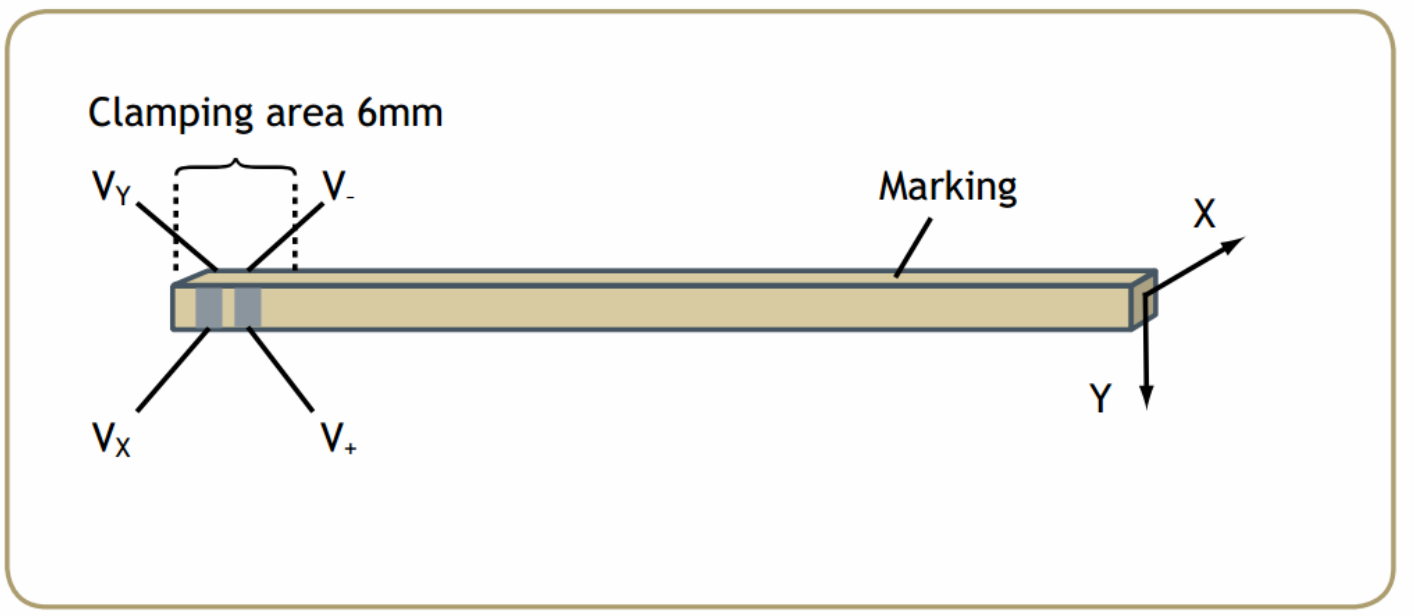
The usual way of operating is to supply two constant voltages (bias voltages) to the following two input cables:

- V+=+30
- V-=-30

The two other inputs (Vx and Vy) control the position in each direction and can be driven from -30V to +30V:

- When 0<Vx<+30 V, the actuator bends in direction "X" in the positive direction.
- When -30<Vx<0 V, the actuator bends in direction "X" with the negative direction.

The same logic applies for the other voltage, Vy, which controls bending on the “Y” direction.



WIRES

Noliac attaches these wires as standard to our NAC27XX benders:

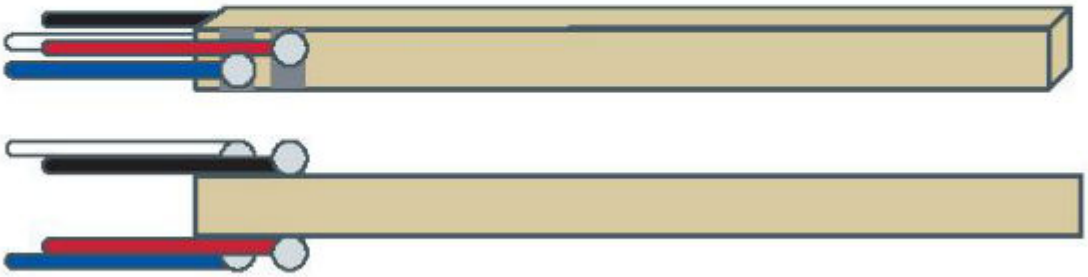
- 28 AWG Teflon wires to products with a thickness equal to or thicker than 1.2 mm.
- 30 AWG Teflon Wire Wrap to products thinner than 1.2 mm and thicker than 0.5 mm.

On products thinner than 0.5 mm we recommend the customer to glue the wire onto the terminals using conductive glue e.g. EPO-TEK®H27D.

We solder red wires to the positive electrode, black to the negative and blue to the control terminal (“X” axis in the case of 2D benders) on benders. For NAC27XX, we solder a white wire to the second control terminal (“Y” axis).

	Option A01	Option A02	Option C
Type	28/30 AWG Teflon	28 AWG Teflon	Custom
Length	200 +/- 10mm	200 +/- 10mm	To be defined
Position	Middle of the component	Middle of the component	To be defined
Direction	Perpendicular to the height	Toward top	To be defined

Type A01



Type A02