

JAW LIP TGC-JL-XX [NON/CB]



The lip is made in an elastic material and has two opposite symmetric jaws to grasp, designed with bionic compliance, to morph to the shape of the workpiece. The jaws are steel rod reinforced, enabling them to conform around and still provide controlled contact force to a workpiece gently distributed between the jaw-teeth compliantly. The concave shape of the contact teeth's, secures a grip on hard smooth surfaces and generates friction on slippery. The lip can be fitted with control bands for additional compliance or left hollow with room for larger workpieces.

The Jaw Lip is inherently well suited for organic inputs and has a wide capability span. With the right configuration, it will successfully handle workpieces varying from fractal glass bulbs, bananas, cucumbers, crap-claws, poultry, lattes, etc etc..

Designed for the "COMPLIANT SEFL-ALIGNING" grasp

The teeth-row design and the two opposite clamp legs are topologic optimized to match a targeted variety of object in respective dimensional ranges. The leg steel rod inserts serves to constrain the deflection so you achieve adequate clamping force and still unique deflection of the teeth row to balance gentleness and firmness of the grasp. The overall bionic structure of the belts are FEM optimized to ensure a natural grasp hold and release motion that fulfills a number of requirements such as

- Positioning tolerance
- Size- and shape tolerance
- Secure grasp
- Controlled release /placement
- even mounting with self-compliance
- minimum clearance requirements
- longevity and durability, even when crashed unintended

The release capability

When releasing the grasped item, the gripping process is reversed meaning the time in not "just" released but gently and controlled opening. The optional Control Band inside the cavity between the legs serves to stabilize the workpiece during grasp and transport. Its also have the capability the provide a downward force when releasing the workpiece so ensure stable and control placement of the workpiece.

Low clearance requirements

Products may be presented in a dense collection even in a bin in multiple layers. Also when placement may often require a thigh-fit the

Best in class Total cost of ownership, saves up to 90% energy.

Save up to 90% energy compared to your standard suction cup. Make your own consumption savings calculation - link

Long lifetime

Save up to 90% energy compared to your standard suction cup. Make your own consumption savings calculation – link . The Jaw lip, as it counts for all TGC lips are intensively FEM simulated and durability tested to ensure the optimum functionality and long lifetime. Our safety margin (stress, tensile and tear strength level) are carefully optimized in a balanced by applying our industry leading FEM and topologic optimization.

Safely and ease of use and handling

As our grippers reflects bionic design its intuitively easy to get a basic idea about how our grippers works.

Compliant Any-mount and actuators

The Jaw Lip is optimized to be actuated with our 20-30 mm stroke air actuators. The platform shared Quick Coupling Lip to Actuator attachment is also used for this lip and compliant with the other lips/actuators in our program. Selection of actuator stroke depends on two major factors size of workpiece (see above) and desired clamping force. Taken your workpiece sixes within 50mm+/-20mm and you want to limit the clamping force best possible, still operating with as high actuation response time as possible you want to select your 20 mm stoke Actuator compliant to our [Compact Any Mount Assembly](#)..

Typical workpieces

Poultry



Bakery

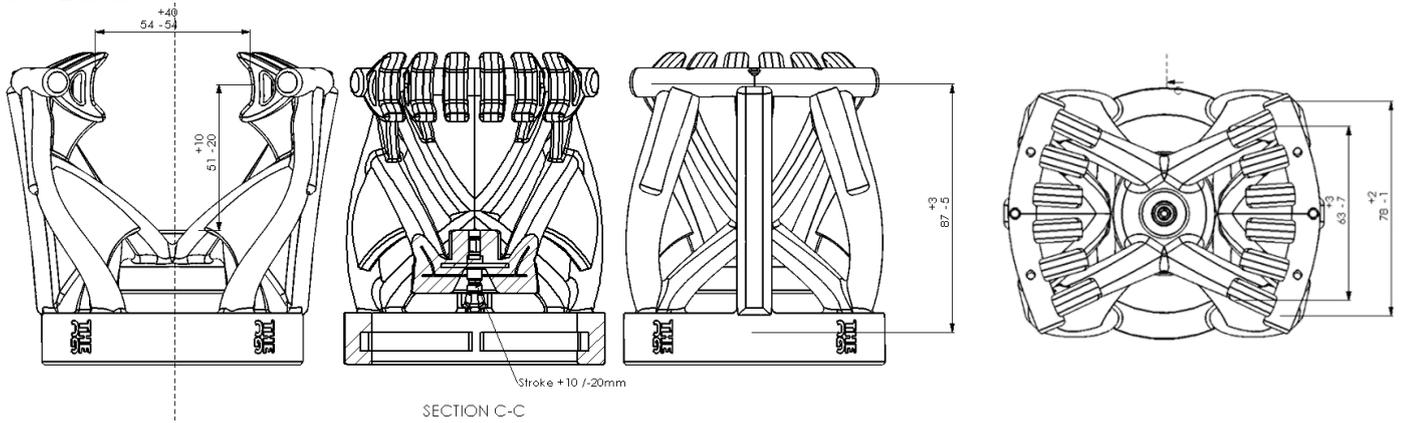


JaW – Lip

SKU	Lip color	core	Max Pull (N)	Max push [N]	Actuator stroke [mm]	Min/Max. items size ³	Esp. MTBF [mill]	Weight ⁴	Food Grade
TG-JL -NON-A3	Green	open	80	100	30	13-95	5	220g	Yes
TGC-JL -CB-A3	Green	Cntrl lbelt	80	100	30	0.3-5	3	284g	Yes

- 4) Cross width between jaws, length not relevant trials would have to validate the case specific feasibility
- 5) Low Excl. reinforcement steel rods. High incl stel rod and core reinforcement belt.

TGC-SFG-JL-H +x



TGC-B-MDPI-SR

