

Flexible gripper finger

FESTO



Gentle gripping

Highlights

- Adapts to the workpiece contour
- Tweezer-like gripping
- Can be integrated into human/robot collaboration concepts
- Various diameters can be gripped

The flexible and sensitive gripper finger offers gentle gripping, low-vibration transport and impact-free placement. Based on a motion principle found in nature, this innovative gripper jaw provides an ideal solution for all delicate surfaces and sensitive materials.

The FinRay® principle

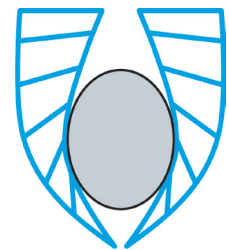
When viewed in cross section, the gripper's ribs and edges form a mesh type structure. The sturdy connection of the joints produce a wave-like shape when a force is applied to them that is ideal for a positive engagement during gripping.

This motion principle, based on that of a fishtail, was the subject of a bionics study. This objective of this research project is to transfer proven solutions from nature to technology models that can be used in industry.

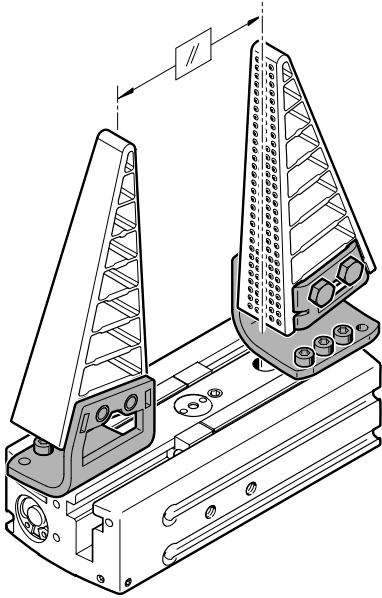
The benefits for you

The moving elements combine the principles of positive and friction-based gripping, while simultaneously providing a large contact area for contoured surfaces.

You can now have one product with two gripping principles for gentle, yet safe gripping.



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To make the most of the advantages of the blue gripper finger, it is recommended to install it on a long-stroke gripper using a mounting kit.

The gripper finger can be cleaned with a hot steam jet, particularly after gripping wetted objects, provided the gripper mechanism is appropriately protected.

Festo offers the following grippers in its product range that are suitable for this application:

The gripper finger is made from polyurethane. The material is FDA listed.

- HGPL-...-B

Technical data

	DHAS-GF-...	Length (A) [mm]	Width (B) [mm]	Thickness (C) [mm]	Total weight of gripper finger with fixture [g]
	60	61.5	26	18	39
	80	94.5	37.5	21.3	70
	120	134.5	50	25	118

Technical data

	Ambient temperature [°C]	+10 ... +50
	Corrosion resistance class	CRC 2
	Free of paint-wetting impairment substances	PWIS-free
	Free of copper, PTFE and silicone	CT-compliant
	Storage temperature [°C]	+10 ... +50
	RoHS compliance	RoHS-compliant
	Gripper principle	Frictional and positive locking