

piSOFTGRIP®

Extending food automation – Cost effective solution for handling sensitive and delicate objects



PIAB IS PROUD TO INTRODUCE the new soft gripping tool piSOFTGRIP®, developed especially with food industry automation in mind. The vacuum-based soft gripper will grip sensitive and lightweight objects of odd geometries and/or an unusual surface. Bin-picking of small irregularly shaped objects, such as toys, is another potential application.

piSOFTGRIP® has three gripping fingers and a vacuum cavity, all made in one piece, resulting in a simple and robust product. As it is vacuum-driven, the gripping force is easily adjusted and controlled by the applied vacuum level.

Combined with Piab's end-of-arm vacuum tool piCOBOT®, the piSOFTGRIP® offers a powerful and flexible “plug and play” extension for collaborative robots. As both piCOBOT® and piSOFTGRIP® offer compressed air saving functionality (ES), virtually no energy is needed to perform a grip and release. The handy and application-friendly soft gripper is already UR certified for such use.

- Vacuum driven soft gripper with simple and robust design
- Cost effective solution for sensitive and difficult objects
- Intuitive and user-friendly design
- As easy to control and install as a suction cup
- Material is food compliant and detectable



piSOFTGRIP®

Main advantages



Easy to use and control

The soft gripping vacuum tool is as easy to control and install as a suction cup, and it uses the same fittings as Piab's piGRIP® suction cups. An optional stainless-steel fitting offers wash-down provision to assist cleaning. Its intuitive and user-friendly design makes piSOFTGRIP® easy to integrate into automated procedures, where it can help to secure the quality of products and increase overall productivity.



Food approved

Made in detectable silicone approved for direct contact with food (in accordance with FDA 21 CFR and EU 1935/2004 regulations), the piSOFTGRIP® vacuum gripper is the first of its kind. The food-compliant silicone gripper enables the food industry to extend their automated food handling to include a wider range of products. Unpackaged, fresh and delicate food items can be handled without risk of being spoiled due to crushing.



Great gripping solution for sensitive objects

The piSOFTGRIP® is an excellent and cost-effective solution for sensitive and difficult to grip objects. The gripping force can easily be controlled by simply adjusting the vacuum level. The soft gripper can grip objects with a diameter of up to 50mm [1.97"]. Larger models will be introduced at a later stage.

Description	Unit	Value
Building height	mm / [inch]	78 / [3.07] (with G3/8" male fitting)
Outer diameter	mm / [inch]	72 / [2.83]
Weight	g / [oz]	55 / [1.94] (with G3/8" male fitting)
Temperature range	C° / [F°]	-20-100 / [-4-212]
Recommended vacuum level	-kPa / [-inHg]	25-70 / [7.5-21]
Recommended object size	mm / [inch]	20-50 / [0.79-1.97]