# Unique vacuum-based soft gripper for handling sensitive and delicate objects

#### **piSOFTGRIP**<sup>®</sup>





Smart solutions for the automated world<sup>™</sup> **2 piab** 

# piSOFTGRIP®

A cost-effective soft gripping tool that is developed especially with food industry automation in mind.

The unique piSOFTGRIP<sup>®</sup> has three gripping fingers and a vacuum cavity, all made in one piece, resulting in a simple and robust product. As it is vacuumdriven, the gripping force is easily adjusted and controlled by the applied vacuum level.

The 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\* is great for picking delicate objects and applications involving bin-picking.





#### First of its kind!

Made in detectable silicone approved for direct contact with food, in accordance with FDA 21 CFR and EU 1935/2004 regulations, the piSOFTGRIP<sup>®</sup> 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 and fragile objects

piSOFTGRIP<sup>®</sup> is an excellent and cost-effective solution for sensitive and fragile 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.





#### 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 popular piGRIP<sup>®</sup> suction cups. An optional stainlesssteel fitting offers wash-down provision to assist cleaning. Its intuitive and user-friendly design makes piSOFTGRIP<sup>®</sup> easy to integrate into automated procedures, where it can help to secure the quality of products and increase overall productivity.

The silicone-made piSOFTGRIP<sup>\*</sup> vacuum gripper is also a lightweight automation tool, which means that very little extra weight is added when fitted to robot arms. It has a building height of approximately 80 mm [3.15"], allowing it to be used even where space is limited.

Combined with Piab's end-of-arm vacuum tool piCOBOT<sup>®</sup>, the piSOFTGRIP<sup>®</sup> offers a powerful and flexible "plug and play" extension for collaborative robots. As both piCOBOT<sup>®</sup> and piSOFTGRIP<sup>®</sup> 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 delicate objects
- Intuitive and user-friendly design
- As easy to control and install as a suction cup
- Material is food compliant and detectable



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]
Recommended max payload	g / [lb]	250 / [0.55]



### Piab around the world

BRAZIL – Sao Paulo +55 11 4492 9050 info-brasil@piab.com

CANADA - Hingham MA (US) +1 781 337 7309 info-usa@piab.com

CHINA – Shanghai +86 21 5237 6545 info-china@piab.com

FRANCE – Lagny sur Marne +33 1 6430 8267 info-france@piab.com

GERMANY – Butzbach +49 6033 7960-0 info-germany@piab.com GERMANY – Schmallenberg Robotic Gripping +49 (0) 29 72/962 17-11 info-germany@piab.com

MEXICO - Hingham MA (US) +1 781 337 7309 info-mxca@piab.com

INDIA – Chennai +91 9444 25 36 48 info-india@piab.com

ITALY – Torino +39 011 226 36 66 info-italy@piab.com

JAPAN – Tokyo +81 3 6662 8118 info-japan@piab.com POLAND – Gdansk +48 58 785 08 50 info-poland@piab.com

SPAIN – Barcelona +34 93 6333876 info-spain@piab.com

SINGAPORE +65 6455 7006 info-singapore@piab.com

SWEDEN - Stockholm (HQ) +46 8 630 25 00 info-sweden@piab.com

SWEDEN – Mölndal Ergonomic Handling +46 31 67 01 00 info-sweden@piab.com

UNITED KINGDOM - Loughborough +44 1509 857 010 info-uk@piab.com

USA – Hingham (MA) +1 781 337 7309 info-usa@piab.com

USA – Xenia (OH) Robotic Gripping +1 888 727 3628 info-usa@piab.com

USA – Charlotte (NC) Ergonomic Handling +1 704 527 5052 info-usa@piab.com



Smart solutions for the automated world 2 piab

