

Data sheet

piSOFTGRIP® 50-3



- Cost effective, vacuum-driven soft gripping solution.
- Comes with two or three “silicone fingers” depending on model.
- Suitable for sensitive and lightweight objects of odd geometries and/or an unusual surface.
- Sealed vacuum cavity, making it dust safe.
- Quick start up - as easy to control and install as a suction cup. Pinch force adjusted by vacuum level.
- Adding little extra weight to application.
- Small size, perfect for multi-mode applications.
- The silicone material is detectable and approved for direct contact with food (in accordance with FDA 21 CFR and EU 1935/2004 regulations).
- Resistant to high and low temperatures.
- Compliant with regular Piab piGRIP® fittings.

Pinch force (object diameter 35mm)

Description	5,9 -inHg	11,8 -inHg	17,7 -inHg
Pinch forces	0.13 lbf	0.47 lbf	0.74 lbf

Technical data

Description	Unit	Value
Recommended maximum object size	in	2.44
Recommended maximum payload	oz	8.82
Number of fingers	-	3
Vacuum	-inHg	5.9-17.7
Weight	oz	1.94
Internal volume	in ³	1.20

Material specification

Description	Material	Colour	Temperature range	ShoreA	Detectable
Claw	Silicone	Blue	-40-392 °F	70	Yes
Support	TPE	Transparent	-4-140/212* °F	80	No
Fitting	AI, NBR	Black	-4-194 °F	-	No

*Max. temperature short term contact, <10 seconds and 50% intermittence, ambient temperature 15-30° C [59-86°F], mechanical properties will start to degrade.

Fitting specification

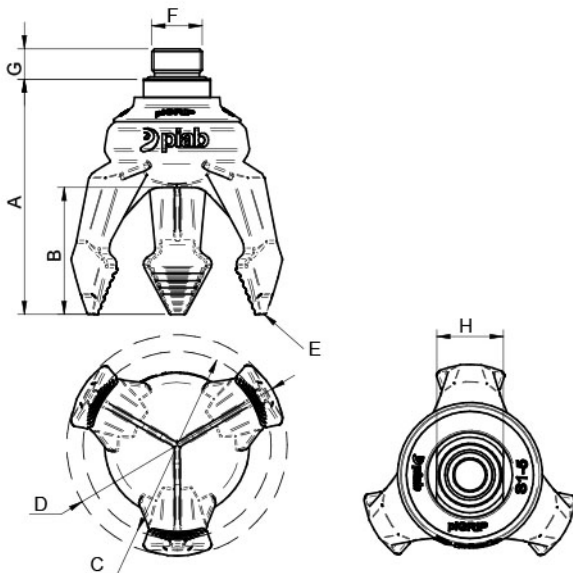
Description	Value

Fitting size	1/4"
Fitting style	Male
Fitting type	G-Thread
Fitting option	No Option

Material resistance – Silicone, SIL

Description	Value
Alcohol	Good
Concentrated acids	Poor
Ethanol	N/A
Hydrolysis	Good
Methanol	N/A
Oil	Fair
Oxidation	Excellent
Petrol	Fair
Wear resistance	Excellent
Weather & ozone	Excellent

Dimensional drawing



Pos.	Description	Unit	Value
A	Building height (including fitting)	mm [inch]	77.7 [3.06"]
B	Depth	mm [inch]	42 [1.65"]
C	Inner diameter	mm [inch]	62.0 [2.44"]
D	Max diameter of softgripper	mm [inch]	73.0 [2.87"]
E	Number of fingers	-	3
F	Thread	-	G1/4"
G	Thread/insert length	mm [inch]	10.0 [0.39"]
H	Key grip	mm	SW 22

Ordering information – Current configuration

Description piSOFTGRIP®	Product code SG.S53DS70.SDS70.F.G14M.00
Claw type	Solid, size 50 mm, 3 fingers
Claw material	Detectable Silicone 70° Shore A
Finger type	Short
Finger material	Detectable Silicone 70° Shore A
Fitting type	G-Thread
Fitting size	1/4"
Fitting style	Male

Ordering information, spare parts

Description	Art. No.
piSOFTGRIP 50-3 DS	0216632

Values specified in this data sheet are tested at (unless otherwise stated):

- Room temperature (20°C [68°F] ± 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.

Scan the QR code to find the mounting instruction videos:

