

The pneumatically powered elastic gripper system

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Looking for grippers that perfectly fit your industrial needs? Haven't heard about SoftGripping yet? Well, it's about time!

Assemble individual grippers or multi-actuator-systems with SoftGripping.

The pneumatically driven, elastic actuators allow simple, robust and lightweight designs. The soft and adaptive surfaces are ideal for robust gripping and safe collaboration with humans - an ideal basis for service-robotics and agile automation.

SoftGrippers are suitable especially for food handling and logistics applications for a diversity of products in changing conditions. They fit the requirements of ideal logistics gripper: universally applicable, simple and durable.

Build your own gripper for your application easily with SoftGripping.

We're happy to provide you with further information. Please feel free to contact us:

Mail: [info@soft-gripping.com](mailto:info@soft-gripping.com)

Web: [soft-gripping.com](http://soft-gripping.com) ; [soft-gripping.shop](http://soft-gripping.shop)

Let's find the perfect solution for your individual gripping needs.



SoftGripping offers three product lines for your needs:

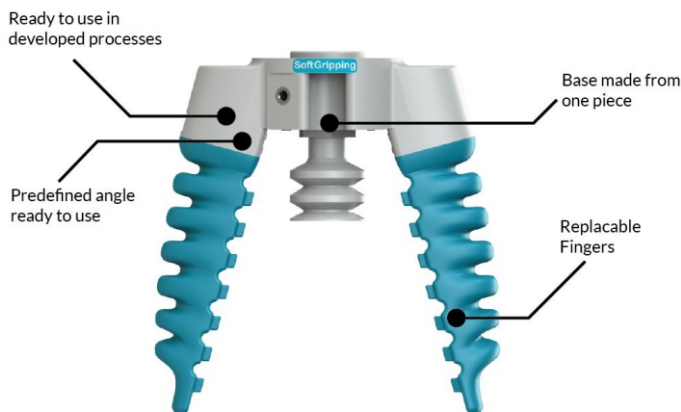
**SoftGripper** - Build from one piece, you can switch fingers and adapter for the specific robot. Angle and base remain unchangeable - made for selected gripping purpose.

**SoftGripper Developer** - For a wider range of different gripping products. Both angle adapters and connector to the robot can be rearranged. Made for experimentation or changing requirements

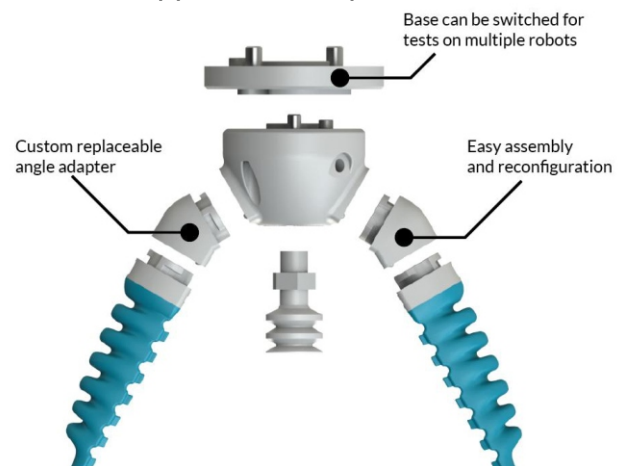
**SoftGripper EoAT** - You can easily use SoftGripping fingers directly in your EoAT setup. Use the special adapter and fingers separately or chose a complete EoAT-kit.

To control the grippers, you can use your accustomed setup, or our **Control Box** that can manage fingers and a suction cup separately.

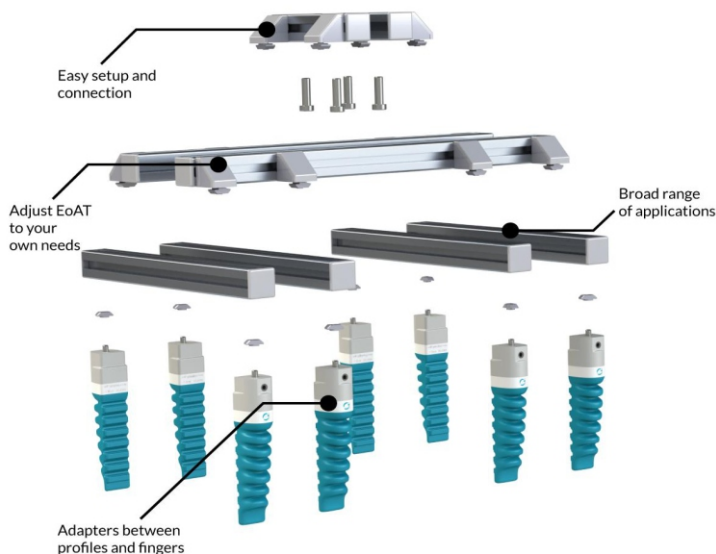
### SoftGripper



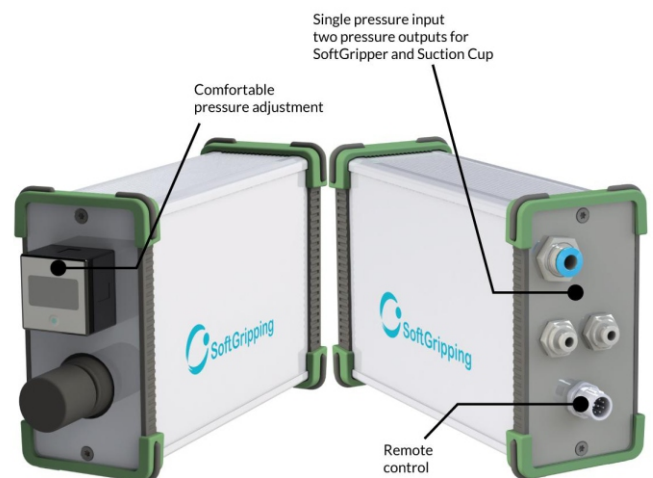
### SoftGripper - Developer Edition



### End Of Arm Tooling



### Control Box



## 2 Finger



60° cone angle  
Art.No.: SG.2P.60D.XX



75° cone angle  
Art.No.: SG.2P.75D.XX



90° cone angle  
Art.No.: SG.2P.90D.XX

## 4 Finger



60° cone angle  
Art.No.: SG.4P.60D.XX



75° cone angle  
Art.No.: SG.4P.75D.XX



90° cone angle  
Art.No.: SG.4P.90D.XX

## Specials



4 finger centric-parallel 75° cone angle  
Art.No.: SG.4CP.75D.XX



8 finger parallel 60° cone angle  
Art.No.: SG.8P.60D.XX

## 3 Finger



60° cone angle  
Art.No.: SG.3C.60D.XX



75° cone angle  
Art.No.: SG.3C.75D.XX



90° cone angle  
Art.No.: SG.3C.90D.XX

## 4 Finger



60° cone angle  
Art.No.: SG.4C.60D.XX



75° cone angle  
Art.No.: SG.4C.75D.XX



90° cone angle  
Art.No.: SG.4C.90D.XX

### Choose the right connector for your robot

For ISO 9409-50-4-M6	XX=50
For ISO 9409-40-4-M6	XX=40
For ISO 9409-31,5-4-M5	XX=31

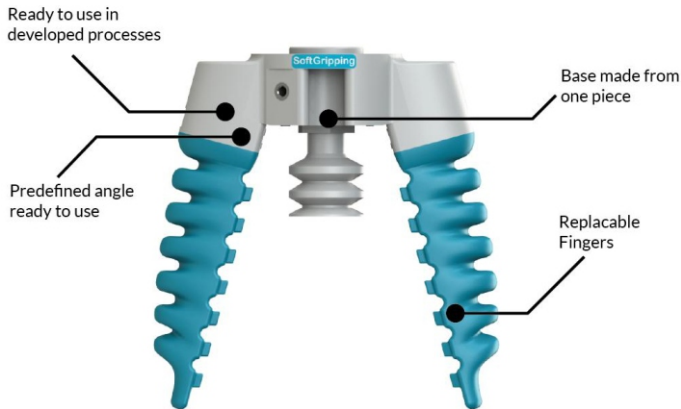


Every SoftGripper is optionally available with  
vacuum suction cups

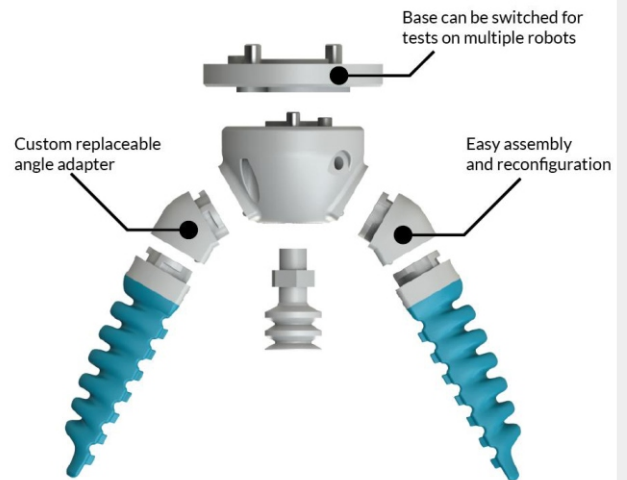


### What is the difference between a SoftGripper and a SoftGripper-Developer Edition?

SoftGripper



SoftGripper - Developer Edition



Using SoftGripper Developer Edition you can choose between centric grippers with 3 or 4 fingers and parallel grippers with 2, 4, or 6 fingers adapted to the size and weight of your gripping objects.

For all SoftGrippers of Developer Edition, angle adapters for 90° and 60° are available.

Fingers can be spread over a vacuum connection. Thus, SoftGripping is ideal both for your smallest and your largest gripping objects.

Connectors for different robot models are available, SoftGripping does also fit for your robot and can be easily installed.



## Bases for parallel grippers



2-Finger parallel gripper base

Art.No.:  
SG.GB.D.2F.30D



4-Finger parallel gripper base

Art.No.:  
SG.C.2B.31  
(You'll need 2 x SG.GB.D.2F.30D)

## Bases for centric grippers



3-Finger centric gripper base

Art.No.:  
SG.GB.D.3F.30D

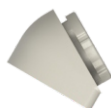


4-Finger centric gripper base

Art.No.:  
SG.GB.D.4F.30D

## Angle Adapter

(without an adapter you'll have 30 ° cone angle)



Angle adapter 60°

Art.No.:  
SG.WA.60D



Angle adapter 90°

Art.No.:  
SG.WA.90D

## Finger



Art.No.:  
SG.F.60S

## Robot connectors

(without a connector, the bases are suitable for ISO 9409-31.5-4-M5)



Connector ISO 9409-40-4-M6

Art.No.:  
SG.C.31.40



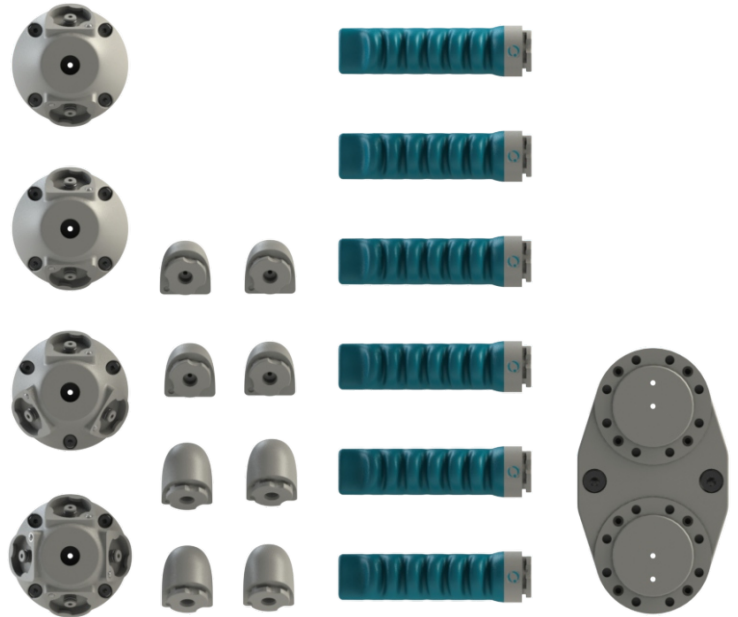
Connector ISO 9409-50-4-M6

Art.No.:  
SG.C.1B.50.2

## More room for experiments !

The SoftGripping Construction Kit includes all elements to assemble 12 different SoftGrippers. It is perfect to find the best gripper for your application in a playful way.

You may also rent this kit for your first gripping tests.



3-Finger centric  
90° cone angle



3-Finger centric  
60° cone angle



3-Finger centric  
30° cone angle



4-Finger centric  
90° cone angle



4-Finger centric  
60° cone angle



4-Finger centric  
30° cone angle



2-Finger parallel  
90° cone angle



2-Finger parallel  
60° cone angle



2-Finger parallel  
30° cone angle



4-Finger parallel  
90° cone angle



4-Finger parallel  
60° cone angle



4-Finger parallel  
30° cone angle





## The SoftGripping EoAT Series SoftGripper for your End of Arm

Use the SoftGripping Fingers for your End of Arm Tooling in combination with vacuum suction cups or conventional grippers. Our special connectors allow easy installation of the fingers and angel adapters. This connector fits to common 20 mm profiles.

Do you use other tooling systems? Please contact us. We deliver the right connector for your application.



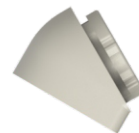
### The SoftGripper EoAT construction kit



Finger

Art.No.:  
SG.F.60S

EoAT finger base connector

Art.No.:  
SG.C.PR.20

60° angle adapter

Art.No.:  
SG.WA.60D

90 ° angle adapter

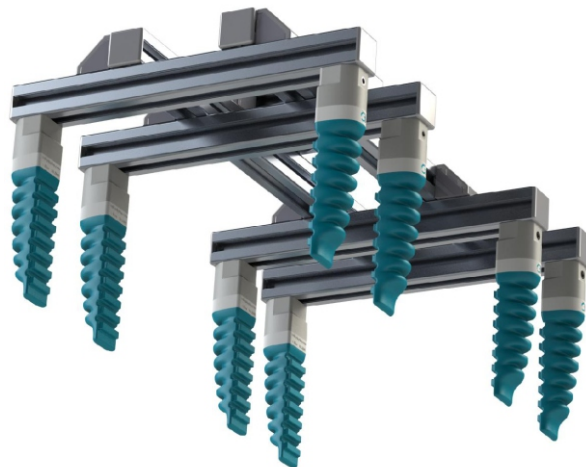
Art.No.:  
SG.WA.90D

## Bundle with 4 fingers



Art.No.:  
SG.BE.4F.01

## Bundle with 8 fingers

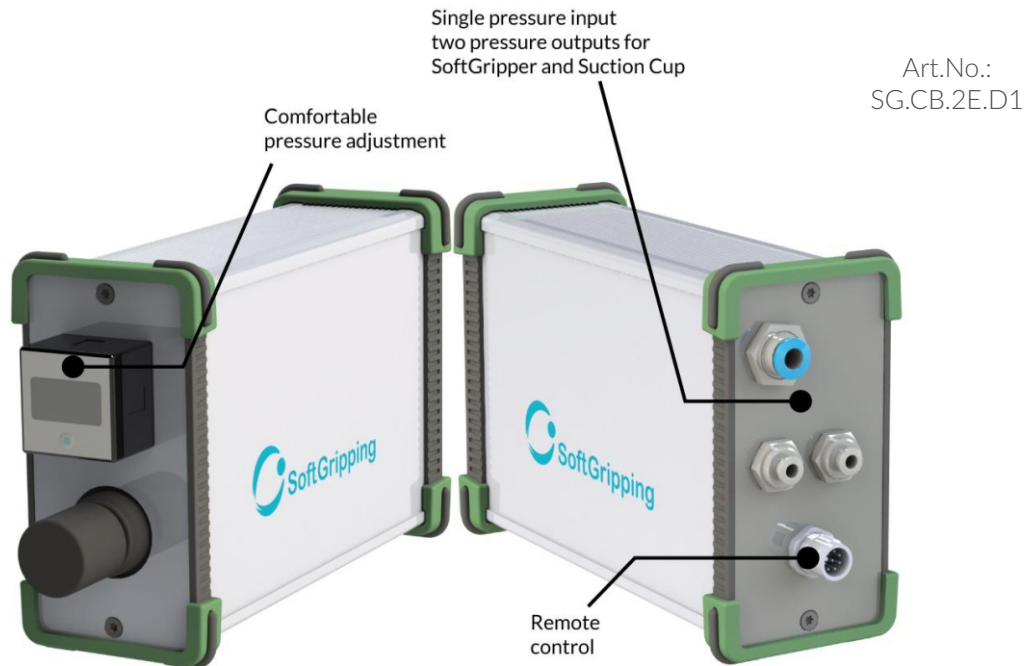


Art.No.:  
SG.BE.8F.02

Configure your own gripper with this EoAT basic kit. It includes all components to assemble a gripping system with up to four or eight fingers.

Distance and angle of fingers can be easily adjusted for a wide range of products according to your individual needs.





The Control Box can be used to operate any SoftGripper, End of Arm Tooling or suction cup. Hereby, the fingers and the suction cups can be operated separately. At the front panel, you can adjust the maximum output pressure according to your requirements and monitor the pressure output. On the back panel you will find the pressure input and two outputs. (e.g. fingers and suction cup).

With digital signals via the signal connector you can switch between three states for the fingers: grip, release or relaxed. The suction cup can be switched between grip and release. You can use your own familiar automation setup with the Control Box or an UR-Cap we provide.

#### Input Pressure

Tubing: outside diameter 6 mm  
Pressure range: 4 to 7 bar

#### Finger Output

4 mm outside Ø  
- 0.75 to 2.5 bar

#### Signal Connector

M12 connector IEC 61076-2-101  
Coding: A  
Digital Signal input: 21.6 to 26.4 V DC



#### Suction Cup Output

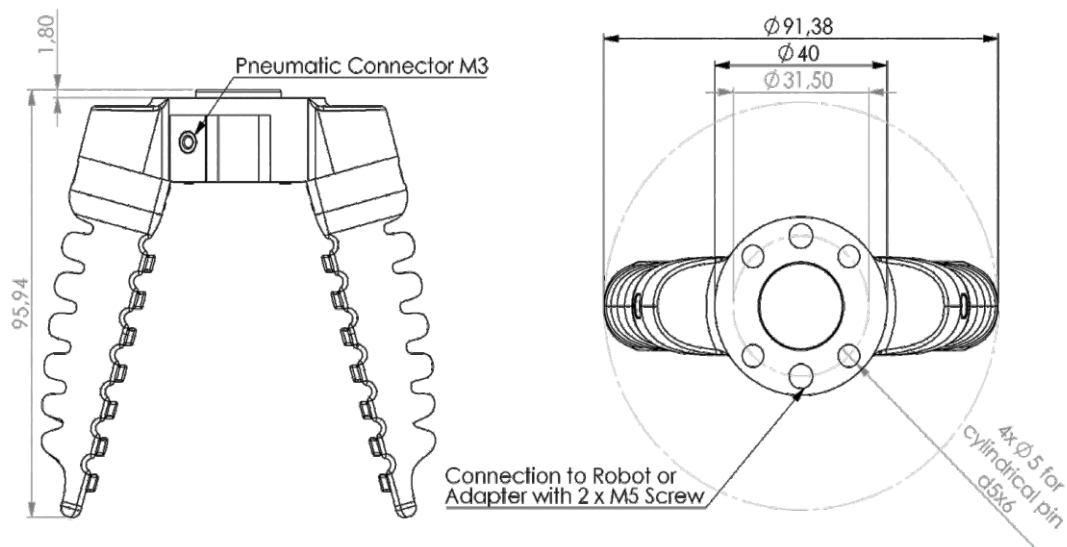
4 mm outside Ø  
- 0.75 to 0 bar





Product Code	Part	Amount
SG.2P.75D.31	Two Finger Parallel SoftGripper - 75° Cone Angle	1
SG.KT.P00001	Festo Solenoid valve MHE2M1H-3/2G-QS-4-K	1
SG.KT.P00003	AirCom pressure regulator 0,2-2,5 bar R307-01B	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00006	Festo 4 mm tubing PUN4X0,75 BL	5 m
SG.KT.P00005	Straight plug connector IQSM-M34-I	5

This package is intended to have your SoftGripper up and running in no time. It includes a pneumatic accessory kit for operating the SoftGripper with a Festo Solenoid valve and control the pressure via a pressure regulator. The solenoid valve can provide two positions: Grip and Relaxed. Of course, all necessary tubing, connectors and screws are provided as well. Keep in mind that the connector on the SoftGripper is ISO 9404-1-31.5-2-M5. Other connectors are available online.



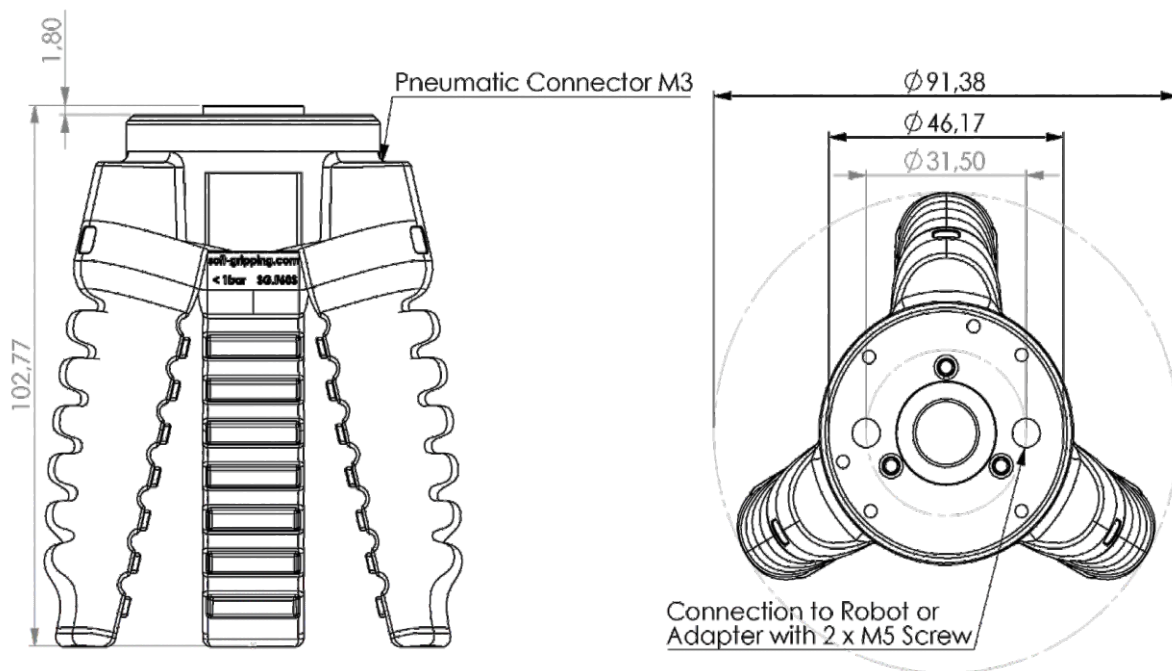
Finger Material	Silicone
Operating Pressure	- 0.5 to 1.0 bar
Grip Force per Finger	3,5 N
Durability	> 1 Mio. Cycles @1.0 bar, 0.5 Hz
Connector	ISO 9404-1-31.5-2-M5
Air Pressure Connection	2 x M3
Total Height 75°	95,94 mm
Total Diameter 75°	91,38 mm
Mass	143 g
Typical Gripping Objects	Rectangular or Cubic Feed size 10 mm -90 mm Weight < 200 g



Product Code	Part	Amount
SG.3C.75D.31	Three Finger Centric SoftGripper - 75° Cone Angle	1
SG.CB.2V	SoftGripping Control Box	1
SG.KT.E00003	M12 connector IEC 61076-2-101 8 Pins male with 0,5 m cable	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00005	Straight plug connector IQSM-M34-I	4
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	4 m
SG.KT.P00007	Festo 6 mm tubing PUN-4X1 BL	1 m



This package is intended to have your SoftGripper up and running in no time. It includes a SoftGripping Control Box allowing for three positions of the SoftGripper: Grip, Release and Relaxed. If you decide to extend your SoftGripper with a suction cup, you can use the box to operate both the SoftGripper and the suction cup separately. Here, the suction cup can have two positions: Grip and Relaxed. You can operate the Control Box via your own setup or an UR-Cap. You can find the pinout as well as additional information on how to control the box in the appropriate data sheet. Of course, all necessary tubing, connectors and screws are provided as well. Keep in mind that the connector on the SoftGripper is ISO 9404-1-31.5-2-M5. Other connectors are available online.



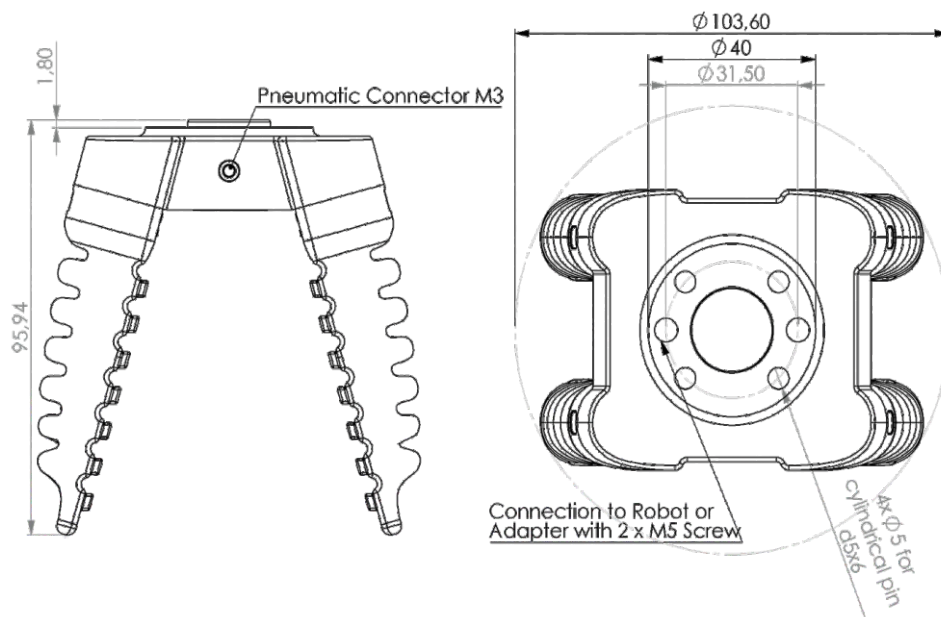
Finger Material	Silicone
Operating Pressure	- 0.5 to 1.0 bar
Grip Force per Finger	3,5 N
Durability	> 1 Mio. Cycles @1.0 bar, 0.5 Hz
Connector	ISO 9404-1-31.5-2-M5
Air Pressure Connection	2 x M3
Total Height 75°	102,77 mm
Total Diameter 75°	91,38 mm
Mass	242 g
Typical Gripping Objects	<ul style="list-style-type: none"> <li>• Rectangular or Cubic</li> <li>• Feed size 10 mm – 90 mm</li> <li>• Weight &lt; 300 g</li> </ul>





Product Code	Part	Amount
SG.4P.75D.31	Four Finger Parallel SoftGripper - 75° Cone Angle	1
SG.CB.2V	SoftGripping Control Box	1
SG.KT.E00003	M12 connector IEC 61076-2-101 8 Pins male with 0,5 m cable	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00005	Straight plug connector IQSM-M34-I	4
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	4 m
SG.KT.P00007	Festo 6 mm tubing PUN-4X1 BL	1 m

This package is intended to have your SoftGripper up and running in no time. It includes a SoftGripping Control Box allowing for three positions of the SoftGripper: Grip, Release and Relaxed. If you decide to extend your SoftGripper with a suction cup, you can use the box to operate both the SoftGripper and the suction cup separately. Here, the suction cup can have two positions: Grip and Relaxed. You can operate the Control Box via your own setup or an UR-Cap. You can find the pinout as well as additional information on how to control the box in the appropriate data sheet. Of course, all necessary tubing, connectors and screws are provided as well. Keep in mind that the connector on the SoftGripper is ISO 9404-1-31.5-2-M5. Other connectors are available online.

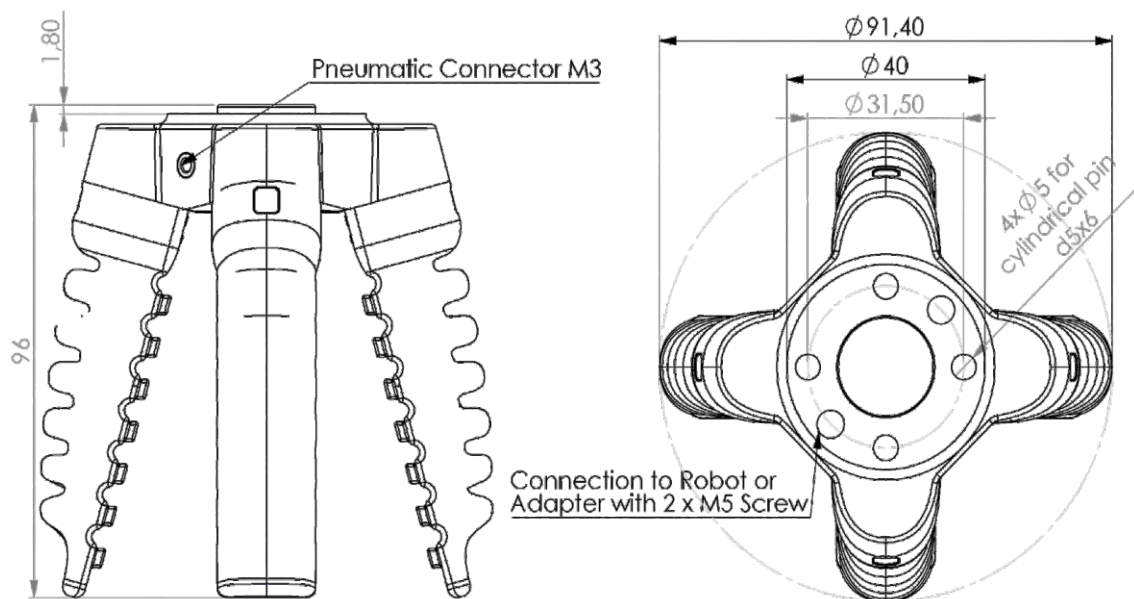


Finger Material	Silicone
Operating Pressure	- 0.5 to 1.0 bar
Grip Force per Finger	3,5 N
Durability	> 1 Mio. Cycles @1.0 bar, 0.5 Hz
Connector	ISO 9404-1-31.5-2-M5
Air Pressure Connection	2 x M3
Total Height 75°	95,94 mm
Total Diameter 75°	103,60 mm
Mass	383 g
Typical Gripping Objects	Rectangular or Cubic Feed size 10 mm –90 mm Weight < 400 g

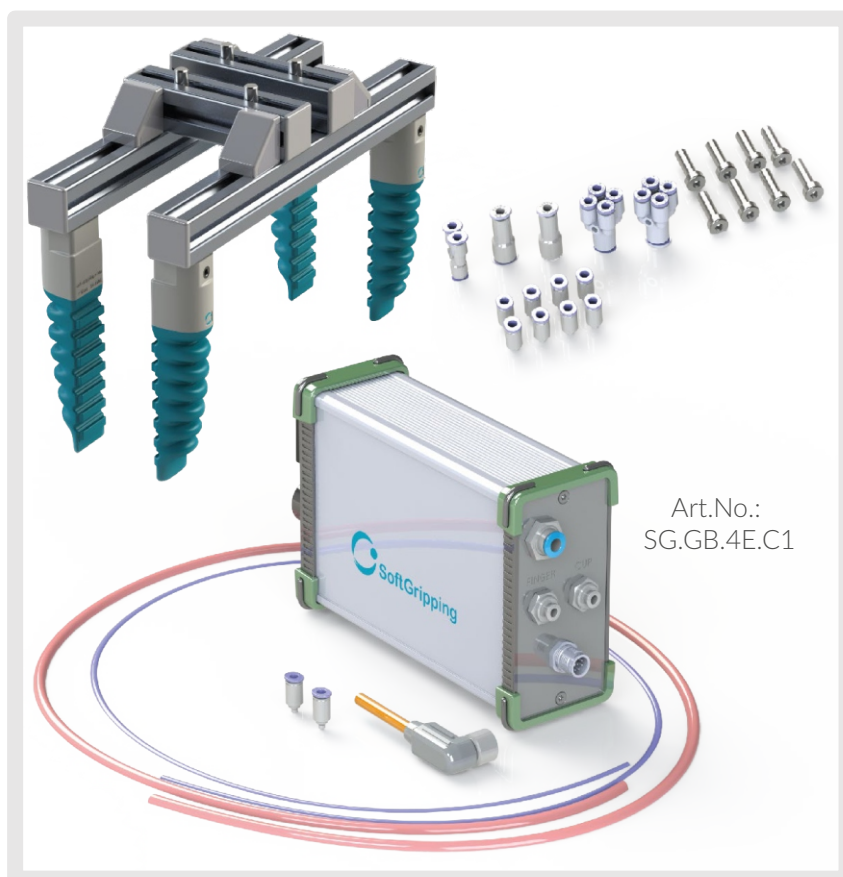


Product Code	Part	Amount
SG.4C.75D.31	Four Finger Centric SoftGripper - 75° Cone Angle	1
SG.CB.2V	SoftGripping Control Box	1
SG.KT.E00003	M12 connector IEC 61076-2-101 8 Pins male with 0,5 m cable	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00005	Straight plug connector IQSM-M34-I	4
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	4 m
SG.KT.P00007	Festo 6 mm tubing PUN-4X1 BL	1 m

This package is intended to have your SoftGripper up and running in no time. It includes a SoftGripping Control Box allowing for three positions of the SoftGripper: Grip, Release and Relaxed. If you decide to extend your SoftGripper with a suction cup you can use the box to operate both the SoftGripper and the suction cup separately. Here, the suction cup can have two positions: Grip and Relaxed. You can operate the Control Box via your own setup or an UR-Cap. You can find the pinout as well as additional information on how to control the box in the appropriate data sheet. Of course, all necessary tubing, connectors and screws are provided as well. Keep in mind that the connector on the SoftGripper is ISO 9404-1-31.5-2-M5. Other connectors are available online.



Finger Material	Silicone
Operating Pressure	- 0.5 to 1.0 bar
Grip Force per Finger	3,5 N
Durability	> 1 Mio. Cycles @1.0 bar, 0.5 Hz
Connector	ISO 9404-1-31.5-2-M5
Air Pressure Connection	2 x M3
Total Height 75°	96 mm
Total Diameter 75°	91,4 mm
Mass	383 g
Typical Gripping Objects	Rectangular or Cubic Feed size 10 mm -90 mm Weight < 400 g

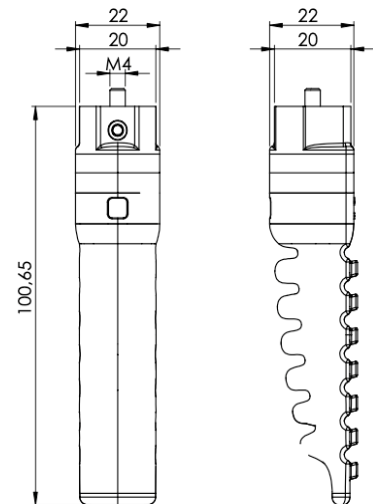


Product Code	Part	Amount
SG.BE.4F.01	EoAT Basic Kit - 4 Fingers	1
SG.CB.2V	SoftGripping Control Box	1
SG.KT.E00003	M12 connector IEC 61076-2-101 8 Pins male with 0,5 m cable	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	12 m
SG.KT.P00007	Festo 6 mm tubing PUN-4X1 BL	2 m
SG.KT.P00005	Straight plug connector IQSM-M34-I	4
SG.KT.Z00010	Cylinder head screw DIN 7984 M6x20 A2	8
SG.KT.P00010	Plug connection - multidistributor 6mm-4mm, IQSQ 6040	2
SG.KT.P00011	Straight plug connector 6mm-4mm, IQSG 6040	2
SG.KT.P00009	Y- plug connector 4mm-4mm IQSMY 40	1

This package is intended to have your End of Arm Tooling up and running in no time. It includes an EoAT Basic Kit with 4 Fingers for a large range of applications. The position of the fingers can be adjusted to your liking and controlled with the SoftGripping Control Box allowing for three positions of the Fingers: Grip, Release and Relaxed. If you decide to extend the EoAT with suction cups later, you can use the box to operate both the Fingers and the suction cups separately. Here, the suction cup can have two positions: Grip and Relaxed. You can operate the Control Box via your own setup or an UR-Cap. You can find the pinout as well as additional information on how to control the box in the appropriate data sheet. Of course, all necessary tubing, connectors and screws are provided as well.



Finger Material	Silicone
Operating Pressure	- 0.5 to 1.0 bar
Grip Force per Finger	3,5 N
Durability	> 1 Mio. Cycles @1.0 bar, 0.5 Hz
Air Pressure Connection	M3





Art.No.:  
SG.BP.1V.01

Product Code	Part	Amount
SG.KT.P00001	Festo Solenoid valve MHE2-M1H-3/2G-QS-4-K	1
SG.KT.P00003	AirCom pressure regulator 0,2-2,5 bar R307-01B	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00005	Straight plug connector IQSM-M34-I	1
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	3 m

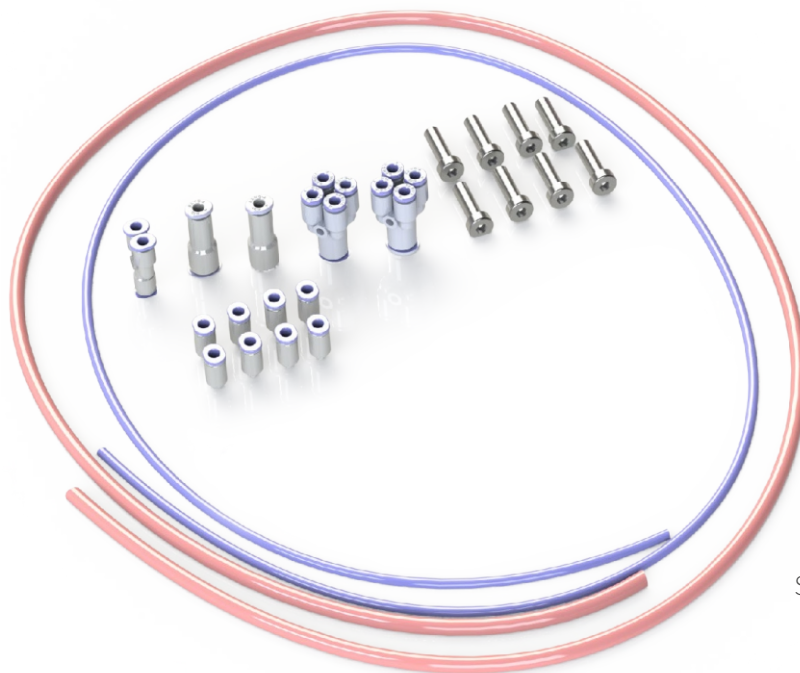




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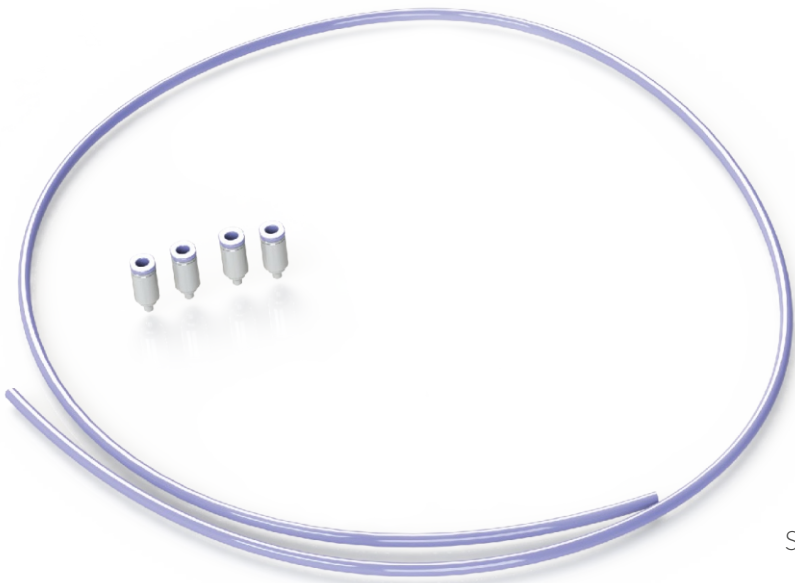
Product Code	Part	Amount
SG.KT.P00001	Festo Solenoid valve MHE2-M1H-3/2G-QS-4-K	1
SG.KT.P00003	AirCom pressure regulator 0,2-2,5 bar R307-01B	1
SG.KT.P00002	Festo vacuum ejector nozzle OVEL-5-H-10-PQ-VQ4-UA-C-A-H3	1
SG.KT.P00009	Y plug connector 4mm-4mm IQSMY 40	1
SG.KT.P00008	Straight plug connector R1/8-4mm IQSG-184-I	2
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	5 m





Art.No.:  
SG.BZ.ET.01

Product Code	Part	Amount
SG.KT.P00005	Straight plug connector IQSM-M34-I	8
SG.KT.Z00010	Cylinder head screw DIN 7984 M6x20 A2	8
SG.KT.P00010	Plug connector for multiple distribution 6mm-4mm, IQSQ 6040	2
SG.KT.P00011	Straight plug connector 6mm-4mm, IQSG 6040	2
SG.KT.P00009	Y plug connector 4mm-4mm IQSMY 40	1
SG.KT.P00007	Festo 6mm tubing PUN-4X1-BL	1 m
SG.KT.P00006	Festo 4mm tubing PUN-4X0,75 BL	10 m



Art.No.:  
SG.BZ.GT.01

Product Code	Part	Amount
SG.KT.P00005	Straight plug connector IQSM-M34-I	4
SG.KT.P00006	Festo 4 mm tubing PUN-4X0,75 BL	2 m



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