

# Standard Series







# Standard grippers

### Powered by vacuum technology

UniGripper offers a wide range of standard vacuum grippers, designed for use in a vast variety of applications. It is a well-proven concept that we are proud to present in this folder. Our standard product range includes the Standard Module System (SMS); the UniGripper Basic series; the UniGripper Co/Light -Collaborative and Lightweight grippers; and the UniGripper Foam Cup Gripper - our versatile solution for uneven surfaces.

The modular component principle of the standard gripper product range offers great flexibility in combining tools, vacuum sources, and accessories to meet your specific needs. It is, without a doubt, your true smorgasbord of success in vacuum handling. These grippers are based on off-the-shelf components, allowing for short delivery times at attractive price levels.



Order process		03	Vacuum sources
ordioi process		05	UniGripper Co/Light
Standard grippers	Estimated 1-2 Weeks	07	Standard Module Sytem
When ordering a standard grippe	er — simply contact ou	<b>27</b>	SMS Customization
sales department at sales@unig assist you every step of the proc		29	UniGripper Basic
assist you every step of the proc	ess.	36	Foam Cup Gripper
Price list >> Order >> As	sembly Delivery	39	Accessories

### **Spare parts**

Estimated 1 Week

Ordering spare parts with UniGripper is a simple process. Send us a request with the serial number of your gripper and what needs to be replaced, and we'll send you an offer.

If you are unsure of what you need to replace, contact our Spare Parts  $\label{lem:com.department} \mbox{department at } \textbf{spares@unigripper.com.}$ 

Production Request Offer Order Delivery





### Vacuum sources

### **Ejectors**

Ejectors are vacuum generators using compressed air and the Venturi principle. Ejectors benefit from being easy to install as well as having lower investment cost for small to mid-size gripper, provided a compressor is already available in the factory. UniGripper ejectors are assembled into housings in three different sizes, which in turn can be configured with one or more active Venturi cartridges.

### **Ejector solution examples**



#### -ES - Silent Power

Exhaust with extra silencing for environments where low operating sound level is key.



#### -EB - Basic

Compact and simple vacuum pump in a single configuration.



#### -ER - Reversing

Exhaust with integrated reverse blow function for efficient cleaning of the gripper and the ejector itself.



#### UVR-E30

Single cartridge ejector for smaller grippers or space constraints. Provides several mounting options to allow the ejector fit into smaller spaces.



#### -E - Cost Effective

Cost-effective exhaust for applications without extra silencing or cleansing needs.

#### **Electric Power Supplies**

Side channel blowers are a common solution we use for grippers using an electric power supply. A side channel blower uses an impeller to remove air from the inlet and push the air out at the exhaust, thus creating vacuum in a gripper connected to the inlet. Compared to other blower kinds, side channel blowers are cost-effective blowers that generate high vacuum flows from atmospheric pressure to medium-deep vacuum levels, which is the ideal depth for most gripper applications. Side channel blowers are mainly beneficial for mid-size to large grippers where the running costs with a side channel blower can be many times lower than if vacuum is generated using ejectors.

UniGripper works with leading manufacturers of electric power supplies to provide high quality blowers & pumps in different sizes depending on application. At UniGripper we always optimize our vacuum source for the demands of the application, therefore we us a variety of expert suppliers and types of vacuum sources.

In addition to supplying the electric power supply, the UniGripper program also includes a variety of components that make the installation of the vacuum system smooth and easy. Several of these components are listed below, but there are other smart accessories like relief valves included, which automatically helps to protect the blower from overheating.

#### Power supply examples



#### **Side Channel Blower**

Side channel blowers use an impeller to remove air from the inlet and push the air out at the exhaust. Available in one or twostage.



#### **Rotary Vane Pump**

Rotary vane pumps compresses air to create a void where vacuum is created.



# **UniGripper Co/Light**

UniGripper Co/LIght is the next generation of UniGripper LightWeight targeted towards low-payload robots in general and collaborative robots in particular.

UniGripper Co/Light is designed without sharp edges to enable gentle collaboration combined with impressive vacuum force and ultra-low weight.

UniGripper Co/Light is available in three different sizes. Regular, Mini and Maxi. Regular and Maxi come with two different valve pitches, to be selected based on the size of objects to be handled and the object's porosity.

Installation on robots is very easy as UniGripper Co/Light is equipped with a sleek snap-in connection, which makes it possible to slide the Co/Light on and off from the robot.

### **UniGripper Control box**

UniGripper Co/Light can be ordered with a control box that includes all pneumatic functions need for controlling the gripper a pneumatic valve and a vacuum sensor.

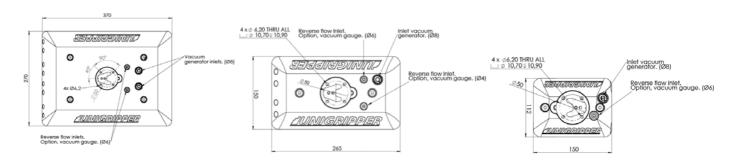
For installations in a Universal Robot environment, a UR Cap is available for donwload on the UniGripper website which makes integration of a UniGripper Co/Light with the UniGripper Control box extra easy. Learn more at www.unigripper.com



Technical data	Control box
Length	230 mm
Width	145 mm
Height	27 mm
Weight	1 kg

Item name	Item no.
Control box	300 000 030





Technical Data	Mini	Regular 15/15	Regular 30/30	Maxi 20/20	Maxi 30/30
Length	150 mm	265 mm	265 mm	370 mm	370 mm
Width	112 mm	150 mm	150 mm	270 mm	270 mm
Height	99 mm	101 mm	101 mm	106 mm	106 mm
Weight	0.9 kg	1.8 kg	1.8 kg	4.0 kg	3.9 kg
Number of valves	54	128	32	204	88
Lifting Force*					
@200mBar	41 N	98 N	201 N	461 N	552 N
@400mBar	83 N	197 N	402 N	922 N	1105 N
@600mBar	124 N	295 N	603 N	1384 N	1658 N
@800mBar	166 N	394 N	804 N	1845 N	2211 N
Air consumption	210 N	420 N	105 N	630 NI/min	315 NI/min

stLifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

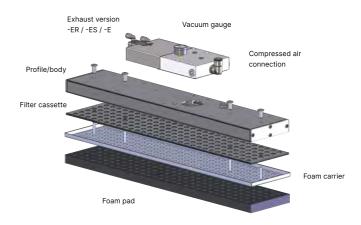
Spare Parts	Mini	Regular 15/15	Regular 30/30	Maxi 20/20	Maxi 30/30
	300 000 020	300 000 010	300 000 011	300 000 040	300 000 041

Spare Parts	Mini	Regular 15/15	Regular 30/30	Maxi 20/20	Maxi 30/30
Foam pad	330 000 020	330 000 010	330 000 012	330 000 040	330 000 042
Gasket	330 000 021	330 000 011	330 000 013	330 000 041	330 000 043
Foam Carrier	320 000 020	320 000 010	320 000 011	320 000 040	320 000 041



### Standard Module System

UniGripper's Standard Module System (SMS) offers a premium and remarkably versatile range of foam grippers, perfectly suited for diverse automation needs. Available in practical 80mm and 120mm widths and standard lengths ranging from 200mm to 1400mm. SMS grippers provide a truly customizable foundation for any vacuum handling solution.



At the heart of the SMS series lies UniGripper's intelligent valve technology. This core technology intelligently focuses vacuum flow precisely where lifted objects are positioned, granting SMS grippers the ability to handle a vast array of different products and materials with ease and reliability. Furthermore, the ingenious modular design of the SMS system not only offers multiple flexible options for vacuum sources but also allows modules to be effortlessly assembled side-by-side.

This clever design enables the creation of easily scalable gripper widths, starting from 80, 120, 160mm and expanding as needed for your application. From a maintenance perspective, the SMS series also excels. The foam pad is thoughtfully attached to a foam carrier plate that can be swiftly and simply removed from the gripper base. This user-friendly design provides immediate access to a filter cassette located between the foam carrier and the gripper base. This filter cassette can be easily cleaned, effectively preventing dust and debris from entering the gripper base and vacuum generators, ultimately ensuring optimal performance and longevity.

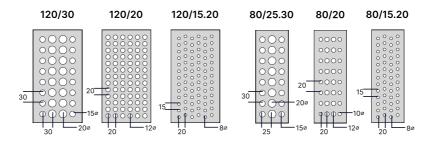
Finally, the SMS series also incorporates SMS Mini versions. These short, compact grippers, where the length is equal to or less than the width, offer an excellent alternative to traditional suction cups in many scenarios. SMS Mini grippers, leveraging UniGripper valves and a specialized foam pad, excel at handling uneven objects and products that are not entirely solid, expanding the versatility of the SMS family even further.

SMS / 120 / 400 / 15.20 / 20 -ER

### **Technical information**

Each SMS 120 series and SMS 80 series length is available in three standard valve configurations. The valve configurations are suitable for different kinds of products and the vacuum sources differ in size for the different configurations, from the 30.30 pitch for most boxes and other large object and wide stripes, through the 20.20 pitch that can handle smaller objects and more leakage to the 15.20 pitch targeted for thin stripes and other products that require a very dense distribution of valves. Each valve pitch is associated with a standard foam pad design, as detailed below.

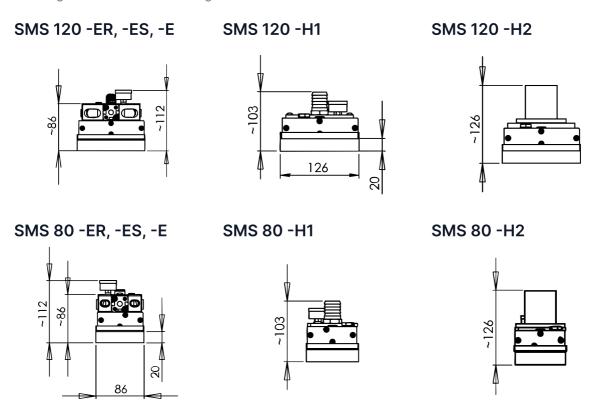
#### Valve configuration

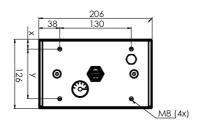


For the SMS Mini grippers, the exact valve configuration and hole size is varying somewhat between each version and is presented on pages 23-24.

#### Height and side dimensions

The diagrams below show the height and side dimensions of different SMS 120 and SMS 80 models.







x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30

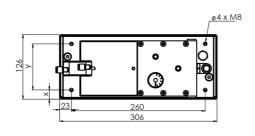
Technical Data	SMS 120/200/15.20/20	SMS 120/200/20/20	SMS 120/200/30/20
Length	206 mm	206 mm	206 mm
Width	126 mm	126 mm	126 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ hose connection	1.3 kg	1.3 kg	1.3 kg
Number of valves	69	54	24
Lifting Force*			
@200mBar	69 N	122 N	117 N
@400mBar	138 N	244 N	235 N
@600mBar	208 N	366 N	353 N
@800mBar	277 N	488 N	471 N

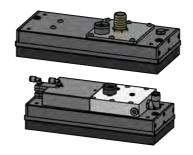
<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material.

For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/200/15.20/20	SMS 120/200/20/20	SMS 120/200/30/20
-H1	300 200 110	300 200 210	300 200 310

Spare Parts	SMS 120/200/15.20/20	SMS 120/200/20/20	SMS 120/200/30/20
Foam Pad	330 200 112	330 200 212	330 200 312
Filter Cassette	330 200 119	330 200 219	330 200 319
Foam Carrier incl. Cassette	320 200 113	320 200 213	320 200 313
Foam Carrier excl. Cassette	320 200 114	320 200 214	320 200 314





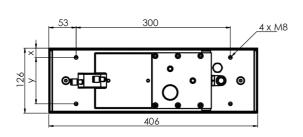
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=1000mm for SMS 120

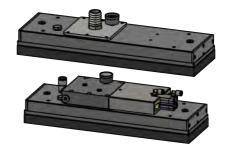
Technical Data	SMS 120/300/15.20/20	SMS 120/300/20/20	SMS 120/300/30/20
Length	306 mm	306 mm	306 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	2.8 kg	2.8 kg	2.8 kg
Weight w/ hose connection	1.9 kg	1.9 kg	1.9 kg
Number of valves	108	84	40
Lifting Force*			
@200mBar	108 N	190 N	196 N
@400mBar	217 N	380 N	392 N
@600mBar	325 N	570 N	589 N
@800mBar	434 N	760 N	785 N
Ejectors on gripper	1	1	1
Air consumption	420 NI/min	315 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/300/15.20/20	SMS 120/300/20/20	SMS 120/300/30/20
-H1	300 300 110	300 300 210	300 300 310
-E	300 300 112	300 300 212	300 300 312
-ES	300 300 113	300 300 213	300 300 313
-ER	300 300 111	300300 211	300 300 311

Spare Parts	SMS 120/300/15.20/20	SMS 120/300/20/20	SMS 120/300/30/20
Foam Pad	330 300 112	330 300 212	330 300 312
Filter Cassette	330 300 119	330 300 219	330 300 319
Foam Carrier incl. Cassette	320 300 113	320 300 213	320 300 313
Foam Carrier excl. Cassette	320 300 114	320 300 214	320 300 314





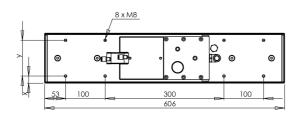
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30

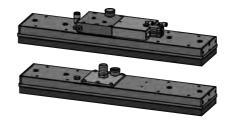
Technical Data	SMS 120/400/15.20/20	SMS 120/400/20/20	SMS 120/400/30/20
Length	406 mm	406 mm	406 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	3.5 kg	3.5 kg	3.5 kg
Weight w/ hose connection	2.6 kg	2.6 kg	2.6 kg
Number of valves	150	114	52
Lifting Force*			
@200mBar	150 N	257 N	255 N
@400mBar	301 N	515 N	510 N
@600mBar	452 N	773 N	765 N
@800mBar	603 N	1031 N	1021 N
Ejectors on gripper	1	1	1
Air consumption	420 NI/min	420 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/400/15.20/20	SMS 120/400/20/20	SMS 120/400/30/20
-H1	300 400 110	300 400 210	300 400 310
-H2	300 400 114	300 400 214	300 400 314
-E	300 400 112	300 400 212	300 400 312
-ES	300 400 113	300 400 213	300 400 313
-ER	300 400 111	300 400 211	300 400 311

Spare Parts	SMS 120/400/15.20/20	SMS 120/400/20/20	SMS 120/400/30/20
Foam Pad	330 400 112	330 400 212	330 400 312
Filter Cassette	330 400 119	330 400 219	330 400 319
Foam Carrier incl. Cassette	320 400 113	320 400 213	320 400 313
Foam Carrier excl. Cassette	320 400 114	320 400 214	320 400 314





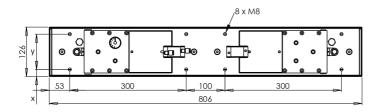
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=1000mm f

Technical Data	SMS 120/600/15.20/20	SMS 120/600/20/20	SMS 120/600/30/20
Length	606 mm	606 mm	606 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	142 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	5.4 kg	4.5 kg	4.5 kg
Weight w/ hose connection	3.6 kg	3.6 kg	3.6 kg
Number of valves	228	174	76
Lifting Force*			
@200mBar	229 N	393 N	373 N
@400mBar	458 N	787 N	746 N
@600mBar	687 N	1180 N	1119 N
@800mBar	916 N	1574 N	1492 N
Ejectors on gripper	2	1	1
Air consumption	735 NI/min	420 NI/min	315 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/600/15.20/20	SMS 120/600/20/20	SMS 120/600/30/20
-H1	300 600 110	300 600 210	300 600 310
-H2	300 600 114	300 600 214	300 600 314
-E	300 600 112	300 600 212	300 600 312
-ES	300 600 113	300 600 213	300 600 313
-ER	300 600 111	300 600 211	300 600 311

Spare Parts	SMS 120/600/15.20/20	SMS 120/600/20/20	SMS 120/600/30/20
Foam Pad	330 600 112	330 600 212	330 600 312
Filter Cassette	330 600 119	330 600 219	330 600 319
Foam Carrier incl. Cassette	320 600 113	320 600 213	320 600 313
Foam Carrier excl. Cassette	320 600 114	320 600 214	320 600 314





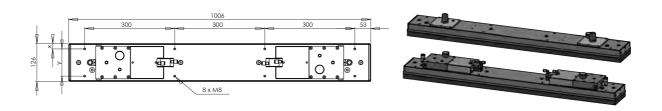
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Technical Data	SMS 120/800/15.20/20	SMS 120/800/20/20	SMS 120/800/30/20
Length	806 mm	806 mm	806 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	6.6 kg	6.6 kg	5.7 kg
Weight w/ hose connection	4.8 kg	4.8 kg	4.8 kg
Number of valves	312	234	100
Lifting Force*			
@200mBar	313 N	529 N	490 N
@400mBar	627 N	1058 N	981 N
@600mBar	940 N	1587 N	1472 N
@800mBar	1254 N	2117 N	1963 N
Ejectors on gripper	2	2	1
Air consumption	840 NI/min	735 NI/min	315 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/800/15.20/20	SMS 120/800/20/20	SMS 120/800/30/20
-H1	300 800 110	300 800 210	300 800 310
-H2	300 800 114	300 800 214	300 800 314
-E	300 800 112	300 800 212	300 800 312
-ES	300 800 113	300 800 213	300 800 313
-ER	300 800 111	300 800 211	300 800 311

Spare Parts	SMS 120/800/15.20/20	SMS 120/800/20/20	SMS 120/800/30/20
Foam Pad	330 800 112	330 800 212	330 800 312
Filter Cassette	330 800 119	330 800 219	330 800 319
Foam Carrier incl. Cassette	320 800 113	320 800 213	320 800 313
Foam Carrier excl. Cassette	320 800 114	320 800 214	320 800 314



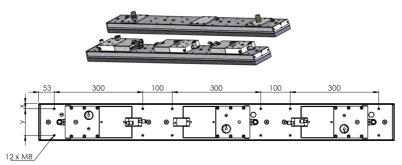
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30 y=1000mm f

Technical Data	SMS 120/1000/15.20/20	SMS 120/1000/20/20	SMS 120/1000/30/20
Length	1006 mm	1006 mm	1006 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	8.0 kg	8.0 kg	7.1 kg
Weight w/ hose connection	6.2 kg	6.2 kg	6.2 kg
Number of valves	384	294	132
Lifting Force*			
@200mBar	386 N	665 N	647 N
@400mBar	772 N	1330 N	1295 N
@600mBar	1158 N	1995 N	1943 N
@800mBar	1544 N	2660 N	2591 N
Ejectors on gripper	2	2	1
Air consumption	840 NI/min	840 NI/min	420 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/1000/15.20/20	SMS 120/1000/20/20	SMS 120/1000/30/20
-H1	301 000 110	301 000 210	301 000 310
-H2	301 000 114	301 000 214	301 000 314
-E	301 000 112	301 000 212	301 000 312
-ES	301 000 113	301 000 213	301 000 313
-ER	301 000 111	301 000 211	301 000 311

Spare Parts	SMS 120/1000/15.20/20	SMS 120/1000/20/20	SMS 120/1000/30/20
Foam Pad	331 000 112	331 000 212	331 000 312
Filter Cassette	331 000 119	331 000 219	331 000 319
Foam Carrier incl. Cassette	321 000 113	321 000 213	321 000 313
Foam Carrier excl. Cassette	321 000 114	321 000 214	321 000 314



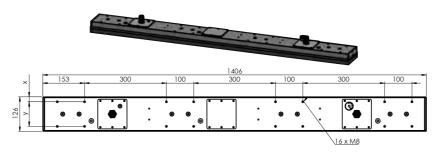
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30

Technical Data	SMS 120/1200/15.20/20	SMS 120/1200/20/20	SMS 120/1200/30/20
Length	1206 mm	1206 mm	1206 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	142 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	10.5 kg	9.6 kg	8.7 kg
Weight w/ hose connection	6.9 kg	6.9 kg	6.9 kg
Number of valves	465	354	156
Lifting Force*			
@200mBar	467 N	800 N	765 N
@400mBar	934 N	1601 N	1531 N
@600mBar	1402 N	2402 N	2297 N
@800mBar	1869 N	3202 N	3063 N
Ejectors on gripper	4	3	2
Air consumption	1365 NI/min	1050 NI/min	525 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/1200/15.20/20	SMS 120/1200/20/20	SMS 120/1200/30/20
-H1	301 200 110	301 200 210	301 200 310
-H2	301 200 114	301 200 214	301 200 314
-Е	301 200 112	301 200 212	301 200 312
-ES	301 200 113	301 200 213	301 200 313
-ER	301 200 111	301 200 211	301 200 311

Spare Parts	SMS 120/1200/15.20/20	SMS 120/1200/20/20	SMS 120/1200/30/20
Foam Pad	331 200 112	331 200 212	331 200 312
Filter Cassette	331 200 119	331 200 219	331 200 319
Foam Carrier incl. Cassette	321 200 113	321 200 213	321 200 313
Foam Carrier excl. Cassette	321 200 114	321 200 214	321 200 314



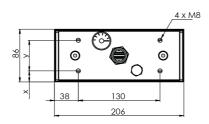
x=18mm for SMS 120/15.20 and 120/20 , x=13mm for SMS 120/30 y=90mm for SMS 120/15.20 and 120/20, y=100mm for SMS 120/30

Technical Data	SMS 120/1400/15.20/20	SMS 120/1400/20/20	SMS 120/1400/30/20
Length	1406 mm	1406 mm	1406 mm
Width	126 mm	126 mm	126 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors			10.4 kg
Weight w/ hose connection	8.6 kg	8.6 kg	8.6 kg
Number of valves	543	414	184
Lifting Force*			
@200mBar	545 N	936 N	903 N
@400mBar	1091 N	1872 N	1806 N
@600mBar	1637 N	2809 N	2709 N
@800mBar	2183 N	3745 N	3612 N
Ejectors on gripper			2
Air consumption			630 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 120/1200/15.20/20	SMS 120/1200/20/20	SMS 120/1200/30/20
-H1	301 400 110	301 400 210	301 400 310
-H2	301 400 114	301 400 214	301 400 314
-E			301 400 312
-ES			301 400 313
-ER			301 400 311

Spare Parts	SMS 120/1400/15.20/20	SMS 120/1400/20/20	SMS 120/1400/30/20
Foam Pad	331 400 112	331 400 212	331 400 312
Filter Cassette	331 400 119	331 400 219	331 400 319
Foam Carrier incl. Cassette	321 400 113	321 400 213	321 400 313
Foam Carrier excl. Cassette	321 400 114	321 400 214	321 400 314





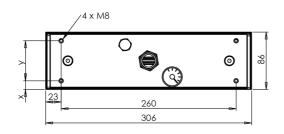
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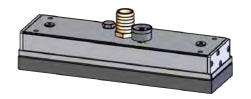
Technical Data	SMS 80/200/15.20/20	SMS 80/200/20/20	SMS 80/200/30.25/20
Length	206 mm	206 mm	206 mm
Width	86 mm	86 mm	86 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ hose connection	1.0 kg	1.0 kg	1.0 kg
Number of valves	44	36	18
Lifting Force*			
@200mBar	44 N	68 N	80 N
@400mBar	88 N	137 N	160 N
@600mBar	132 N	206 N	240 N
@800mBar	176 N	275 N	320 N

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/200/15.20/20	SMS 80/200/20/20	SMS 80/200/30.25/20
-H1	300 200 150	300 200 250	300 200 350

Spare Parts	SMS 80/200/15.20/20	SMS 80/200/20/20	SMS 80/200/30.25/20
Foam Pad	330 200 152	330 200 252	330 200 352
Filter Cassette	330 200 159	330 200 259	330 200 359
Foam Carrier incl. Cassette	320 200 153	320 200 253	320 200 353
Foam Carrier excl. Cassette	320 200 154	320 200 254	320 200 354





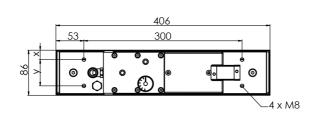
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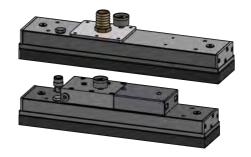
Technical Data	SMS 80/300/15.20/20	SMS 80/300/20/20	SMS 80/300/30.25/20
Length	306 mm	306 mm	306 mm
Width	86 mm	86 mm	86 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ hose connection	1.4 kg	1.4 kg	1.4 kg
Number of valves	70	56	30
Lifting Force*			
@200mBar	70 N	107 N	133 N
@400mBar	140 N	214 N	267 N
@600mBar	211 N	321 N	400 N
@800mBar	281 N	429 N	534 N

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/300/15.20/20	SMS 80/300/20/20	SMS 80/300/30.25/20
-H1	300 300 150	300 300 250	300 300 350

Spare Parts	SMS 80/300/15.20/20	SMS 80/300/20/20	SMS 80/300/30.25/20
Foam Pad	330 300 152	330 300 252	330 300 352
Filter Cassette	330 300 159	330 300 259	330 300 359
Foam Carrier incl. Cassette	320 300 153	320 300 253	320 300 353
Foam Carrier excl. Cassette	320 300 154	320 300 254	320 300 354





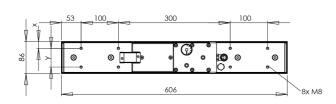
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Technical Data	SMS 80/400/15.20/20	SMS 80/400/20/20	SMS 80/400/30/20
Length	406 mm	406 mm	406 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	2.7 kg	2.7 kg	2.7 kg
Weight w/ hose connection	2.0 kg	2.0 kg	2.0 kg
Number of valves	100	76	39
Lifting Force*			
@200mBar	100 N	145 N	173 N
@400mBar	201 N	291 N	347 N
@600mBar	301 N	436 N	520 N
@800mBar	402 N	582 N	694 N
Ejectors on gripper	1	1	1
Air consumption	315 NI/min	315 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/400/15.20/20	SMS 80/400/20/20	SMS 80/400/30/20
-H1	300 400 150	300 400 250	300 400 350
-H2	300 400 154	300 400 254	300 400 354
-E	300 400 152	300 400 252	300 400 352
-ES	300 400 153	300 400 253	300 400 353
-ER	300 400 151	300 400 251	300 400 351

Spare Parts	SMS 80/400/15.20/20	SMS 80/400/20/20	SMS 80/400/30/20
Foam Pad	330 400 152	330 400 252	330 400 352
Filter Cassette	330 400 159	330 400 259	330 400 359
Foam Carrier incl. Cassette	320 400 153	320 400 253	320 400 353
Foam Carrier excl. Cassette	320 400 154	320 400 254	320 400 354





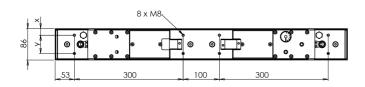
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Technical Data	SMS 80/600/15.20/20	SMS 80/600/20/20	SMS 80/600/30/20
Length	606 mm	606 mm	606 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	142 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	4.3 kg	3.6 kg	3.6 kg
Weight w/ hose connection	2.9 kg	2.9 kg	2.9 kg
Number of valves	154	116	60
Lifting Force*			
@200mBar	154 N	222 N	267 N
@400mBar	309 N	444 N	534 N
@600mBar	464 N	666 N	801 N
@800mBar	619 N	889 N	1068 N
Ejectors on gripper	2	1	1
Air consumption	525 NI/min	315 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/600/15.20/20	SMS 80/600/20/20	SMS 80/600/30/20
-H1	300 600 150	300 600 250	300 600 350
-H2	300 600 154	300 600 254	300 600 354
-E	300 600 152	300 600 252	300 600 352
-ES	300 600 153	300 600 253	300 600 353
-ER	300 600 151	300 600 251	300 600 351

Spare Parts	SMS 80/600/15.20/20	SMS 80/600/20/20	SMS 80/600/30/20
Foam Pad	330 600 152	330 600 252	330 600 352
Filter Cassette	330 600 159	330 600 259	330 600 359
Foam Carrier incl. Cassette	320 600 153	320 600 253	320 600 353
Foam Carrier excl. Cassette	320 600 154	320 600 254	320 600 354





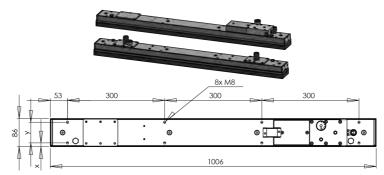
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Technical Data	SMS 80/800/15.20/20	SMS 80/800/20/20	SMS 80/800/30/20
Length	806 mm	806 mm	806 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	5.6 kg	5.6 kg	4.9 kg
Weight w/ hose connection	4.2 kg	4.2 kg	4.2 kg
Number of valves	208	156	78
Lifting Force*			
@200mBar	209 N	298 N	347 N
@400mBar	418 N	597 N	694 N
@600mBar	627 N	896 N	1041 N
@800mBar	836 N	1195 N	1388 N
Ejectors on gripper	2	2	1
Air consumption	630 NI/min	525 NI/min	315 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/800/15.20/20	SMS 80/800/20/20	SMS 80/800/30/20
-H1	300 800 150	300 800 250	300 800 350
-H2	300 800 154	300 800 254	300 800 354
-E	300 800 152	300 800 252	300 800 352
-ES	300 800 153	300 800 253	300 800 353
-ER	300 800 151	300 800 251	300 800 351

Spare Parts	SMS 80/800/15.20/20	SMS 80/800/20/20	SMS 80/800/30/20
Foam Pad	330 800 152	330 800 252	330 800 352
Filter Cassette	330 800 159	330 800 259	330 800 359
Foam Carrier incl. Cassette	320 800 153	320 800 253	320 800 353
Foam Carrier excl. Cassette	320 800 154	320 800 254	320 800 354



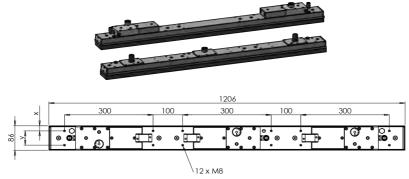
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Technical Data	SMS 80/1000/15.20/20	SMS 80/1000/20/20	SMS 80/1000/30/20
Length	1006 mm	1006 mm	1006 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	142 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	7.3 kg	6.6 kg	5.9 kg
Weight w/ hose connection	5.2 kg	5.2 kg	5.2 kg
Number of valves	260	196	99
Lifting Force*			
@200mBar	261 N	375 N	440 N
@400mBar	522 N	751 N	881 N
@600mBar	784 N	1126 N	1321 N
@800mBar	1045 N	1502 N	1762 N
Ejectors on gripper	3	2	1
Air consumption	840 NI/min	630 NI/min	315 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/1000/15.20/20	SMS 80/1000/20/20	SMS 80/1000/30/20
-H1	301 000 150	301 000 250	301 000 350
-H2	301 000 154	301 000 254	301 000 354
-E	301 000 152	301 000 252	301 000 352
-ES	301 000 153	301 000 253	301 000 353
-ER	301 000 151	301 000 251	301 000 351

Spare Parts	SMS 80/1000/15.20/20	SMS 80/1000/20/20	SMS 80/1000/30/20
Foam Pad	331 000 152	331 000 252	331 000 352
Filter Cassette	331 000 159	331 000 259	331 000 359
Foam Carrier incl. Cassette	321 000 153	321 000 253	321 000 353
Foam Carrier excl. Cassette	321 000 154	321 000 254	321 000 354



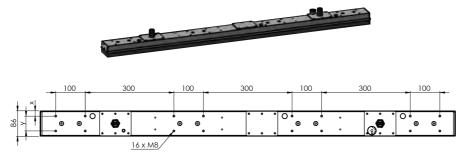
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Technical Data	SMS 80/1200/15.20/20	SMS 80/1200/20/20	SMS 80/1200/30/20
Length	1206 mm	1206 mm	1206 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors	8.4 kg	8.4 kg	7.7 kg
Weight w/ hose connection	6.3 kg	6.3 kg	6.3 kg
Number of valves	314	236	117
Lifting Force*			
@200mBar	315 N	452 N	520 N
@400mBar	631 N	904 N	1041 N
@600mBar	947 N	1356 N	1562 N
@800mBar	1262 N	1809 N	2082 N
Ejectors on gripper	3	3	2
Air consumption	945 NI/min	735 NI/min	420 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/1200/15.20/20	SMS 80/1200/20/20	SMS 80/1200/30/20
-H1	301 200 150	301 200 250	301 200 350
-H2	301 200 154	301 200 254	301 200 354
-E	301 200 152	301 200 252	301 200 352
-ES	301 200 153	301 200 253	301 200 353
-ER	301 200 151	301 200 251	301 200 351

Spare Parts	SMS 80/1200/15.20/20	SMS 80/1200/20/20	SMS 80/1200/30/20
Foam Pad	331 200 152	331 200 252	331 200 352
Filter Cassette	331 200 159	331 200 259	331 200 359
Foam Carrier incl. Cassette	321 200 153	321 200 253	321 200 353
Foam Carrier excl. Cassette	321 200 154	321 200 254	321 200 354



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Technical Data	SMS 80/1400/15.20/20	SMS 80/1400/20/20	SMS 80/1400/30/20
Length	1406 mm	1406 mm	1406 mm
Width	86 mm	86 mm	86 mm
Height w/ ejectors	112 mm	112 mm	112 mm
Height w/ hose connection	103 mm	103 mm	103 mm
Weight w/ ejectors			7.7 kg
Weight w/ hose connection	6.6 kg	6.6 kg	6.6 kg
Number of valves	366	276	138
Lifting Force*			
@200mBar	367 N	528 N	614 N
@400mBar	735 N	1057 N	1228 N
@600mBar	1103 N	1586 N	1842 N
@800mBar	1471 N	2115 N	2456 N
Ejectors on gripper			2
Air consumption			525 NI/min

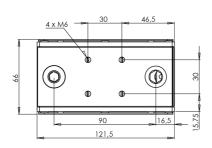
<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	SMS 80/1400/15.20/20	SMS 80/1400/20/20	SMS 80/1400/30/20
-H1	301 400 150	301 400 250	301 400 350
-H2	301 400 154	301 400 254	301 400 354
-E			301 400 352
-ES			301 400 353
-ER			301 400 351

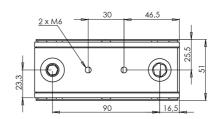
Spare Parts	SMS 80/1400/15.20/20	SMS 80/1400/20/20	SMS 80/1400/30/20
Foam Pad	331 400 152	331 400 252	331 400 352
Filter Cassette	331 400 159	331 400 259	331 400 359
Foam Carrier incl. Cassette	321 400 153	321 400 253	321 400 353
Foam Carrier excl. Cassette	321 400 154	321 400 254	321 400 354

# SMS Mini 120/45 & 120/60









Technical Data	120/45/20/10	120/60/15.20/15	120/60/20/15	
Length	51 mm	66 mm	66 mm	
Width	121.5 mm	121.5 mm	121.5 mm	
Height w/ hose connection	64 mm	64 mm	64 mm	
Weight w/ hose connection	0.35 kg	0.4 kg	0.4 kg	
Default hose connection	Push-in, 12 mm	Push-in, 12 mm	Push-in, 12 mm	
Number of valves	12	18	12	
Lifting Force*				
@200mBar	24 N	18 N	24 N	
@400mBar	48 N	36 N	48 N	
@600mBar	73 N	54 N	73 N	
@800mBar	97 N	72 N	97 N	

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

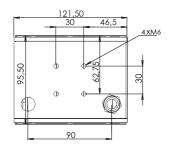
Product Numbers	120/45/20/10	120/60/15.20/15	120/60/20/15
With default hose connection	300 045 210	300 060 110	300 060 210

Spare Parts	120/45/20/10	120/60/15.20/15	120/60/20/15
Foam Pad	330 045 211	330 060 111	330 060 211
Gasket	330 045 218	330 060 118	330 060 218
Foam Carrier assembly	320 045 211	320 060 111	330 060 211

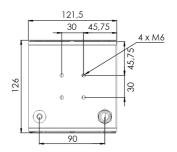


### SMS Mini 120/90 & 120/120









Technical Data	120/90/15.20/15	120/90/20/15	120/120/15.20/15	120/120/20/15
Length	96 mm	96 mm	126 mm	126 mm
Width	121.5 mm	121.5 mm	121.5 mm	121.5 mm
Height w/ hose connection	80 mm	80 mm	80 mm	80 mm
Weight w/ hose connection	0.45 kg	0.45 kg	0.6 kg	0.6 kg
Default hose connection	18 mm	18 mm	18 mm	18 mm
Number of valves	27	24	39	30
Lifting Force*				
@200mBar	54 N	48 N	79 N	60 N
@400mBar	108 N	96 N	156 N	120 N
@600mBar	164 N	146 N	237 N	182 N
@800mBar	219 N	195 N	316 N	243 N

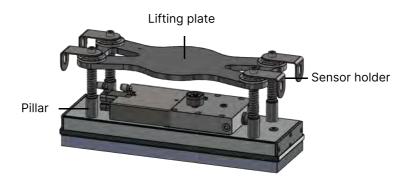
<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/90/15.20/15	120/90/20/15	120/120/15.20/15	120/120/20/15
With default hose connection	300 090 110	300 090 210	300 120 110	300 120 210

Spare Parts	120/90/15.20/15	120/90/20/15	120/120/15.20/15	120/120/20/15
Foam Pad	330 090 111	330 090 111	330 120 111	330 120 211
Gasket	330 090 118	330 118 118	330 120 118	330 120 218
Foam Carrier assembly	320 090 111	320 060 111	320 120 111	320 120 211



### Floating attachment



The floating attachment is a popular accessory available for all SMS 80 and SMS 120 grippers. The floating attachment consists of four pillars, along which a lifting plate can slide up and down.

The floating attachment allows the SMS unit to move vertically relative to the robot, gantry or similar device to which it is attached. This means that the SMS unit can be aligned with the object to be lifted, even if the object is not aligned with the device. The floating attachment also helps to get good compression of the foam pad before activating vacuum to lift an object.

The floating attachment is equipped with four sensor holders, which, if equipped with sensors give a signal when the gripper is properly placed on the object and thus provides and indication when it is time to activate the vacuum.

#### Item numbers

SMS Profile Length	120/X/15.20 or 20	120/X/30	80/X/15.20 or 20	80/X/30.25
200 mm	340 341 209	340 341 208	340 341 230	340 341 229
300 mm	340 341 205	340 341 204	340 341 228	340 341 227
800 mm	340 341 201	340 341 200	340 341 226	340 341 225
400-1400 mm	340 341 203	340 341 202	340 341 232	340 341 231
Accessories				
Pillar Assembly	79750 002			
Inductive sensor		340 34	1 207	

### **Customizing the SMS**

The Standard Module System opens up for many kinds of customization, which may be needed for getting the right function of the SMS unit. Making customization quickly and efficiently is a core competence of the UniGripper organization and the customization possibilities range from minor changes as in foam pad design, to modifications of the SMS profile and further on to lifting systems integrating multiple SMS units. Below are the most common customization.

#### Foam pad thickness

For objects with large height variation, a thicker foam may be necessary. For other applications a foam thinner than 20 mm might be the best option.

#### Foam pad hole design

By modifying the design of the suction holes the SMS gripper can get new abilities, like handling empty jars or lighter/ heavier objects and more.

#### **Gripper length**

Sometimes the standard lengths of the SMS are not what is required. The length can be customized anywhere between 30-6000 mm.

# UniGripper offers a broad range of foam

Foam pad material

materials for different specific needs. From extra wear resistance to foams designed for food application.

#### Foam carrier

Broadening the foam carrier plate allows wider distribution of the vacuum and can increase the lifting force on an object.

#### Valve configuration

The standard valve configuration is suitable for almost any scenario but sometimes other configurations may be more beneficial.

### Specialized solutions

The SMS grippers are excellent to use as components in more complex lifting devices. UniGripper have long experienced in designing such specialized solutions that we can supply anything from grippers alone to turn-key solutions that just need to be installed and connected to a robot or gantry system.



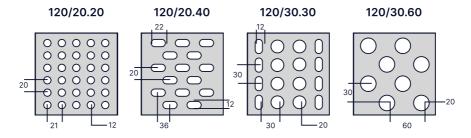
### **UniGripper Basic**

UniGripper Basic is a series of foam grippers with focus on cost-effectiveness and simplicity. UniGripper Basic is primarily intended for handling of low-porosity materials with high coverage of the product. The gripper consists of a profile which distributes the vacuum over the surface. The profile does not include the UniGripper valves, so there is no focusing of the vacuum flow to where objects are located. The foam pad is glued directly to the gripper profile with an easy-to-remove tape.

UniGripper Basic is available in lengths of 400, 600, 850, 1000, 1250 and 1400 mm. The grippers can either be equipped with integrated vacuum generators (Ejector-EB) or with hose connections for connection of an external vacuum source.

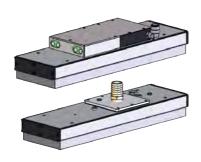
### Hole configurations

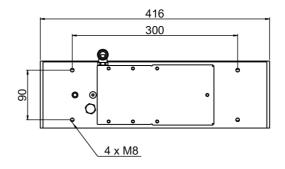
Each basic gripper length is available in either two or four hole configurations, as shown below. The 20.40 configuration is typically used for long, thin objects. The 30.60 is typically used for large plates. The 30.30 configuration is able to handle many boxes of high cardboard quality and the 20.20 configuration is the most generic configuration enabling handling of relatively small objects.



#### Floating attachment

The floating attachment is a standard option for UniGripper Basic, which allows the gripper to move vertically relative to the machine that integrates the gripper. The same floating attachment fits all UniGripper Basic variants. The floating attachment comes with four floating attachment pillars and a lifting plate. Optionally, the floating attachment can be equipped with up to four sensor holders and inductive sensors.



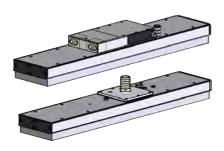


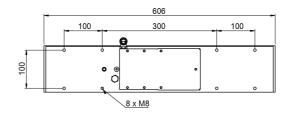
Technical Data	120/400/20.20/20	120/400/20.40/20	120/400/30.30/20	120/400/30.60/20
Length	416 mm	416 mm	416 mm	416 mm
Width	121.5 mm	121.5 mm	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm	99 mm	99 mm
Weight w/ ejectors	2.3 kg	2.3 kg	2.3 kg	2.3 kg
Weight w/ hose connection	1.9 kg	1.9 kg	1.9 kg	1.9 kg
Number of suction holes	95	48	52	26
Lifting force*				
@200mBar	214 N	223 N	271 N	235 N
@400mBar	429 N	447 N	543 N	470 N
@600mBar	644 N	671 N	815 N	705 N
@800mBar	859 N	894 N	1087 N	940 N
Ejectors on gripper	1	1	1	1
Air consumption	315 NI/min	210 NI/min	210 NI/min	105 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/400/20.20/20	120/400/20.40/20	120/400/30.30/20	120/400/30.60/20
-H1	310 400 015	310 400 016	310 400 017	310 400 018
-H2	310 400 210	310 400 211	310 400 212	310 400 213
-EB	310 400 010	310 400 011	310 400 012	310 400 013

Spare Parts	120/400/20.20/20	120/400/20.40/20	120/400/30.30/20	120/400/30.60/20
Foam Pad	330 400 210	330 400 220	330 400 310	330 400 320



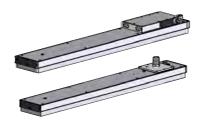


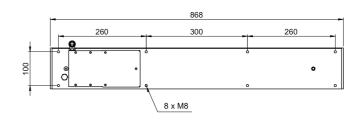
Technical Data	120/600/20.20/20	120/600/20.40/20	120/600/30.30/20	120/600/30.60/20
Length	606 mm	606 mm	606 mm	606 mm
Width	121.5 mm	121.5 mm	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm	99 mm	99 mm
Weight w/ ejectors	3.2 kg	3.2 kg	3.2 kg	3.2 kg
Weight w/ hose connection	2.8 kg	2.8 kg	2.8 kg	2.8 kg
Number of suction holes	145	73	76	38
Lifting force*				
@200mBar	327 N	340 N	397 N	343 N
@400mBar	655 N	680 N	795 N	687 N
@600mBar	983 N	1020 N	1192 N	1031 N
@800mBar	1311 N	1360 N	1590 N	1375 N
Ejectors on gripper	1	1	1	1
Air consumption	420 NI/min	210 NI/min	210 NI/min	105 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/600/20.20/20	120/600/20.40/20	120/600/30.30/20	120/600/30.60/20
-H1	310 600 015	310 600 016	310 600 017	310 600 018
-H2	310 600 210	310 600 211	310 600 212	310 600 213
-EB	310 600 010	310 600 011	310 600 012	310 600 013

Spare Parts	120/600/20.20/20	120/600/20.40/20	120/600/30.30/20	120/600/30.60/20
Foam Pad	330 600 210	330 600 220	330 600 310	330 600 320



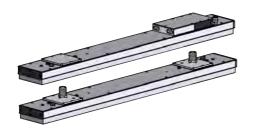


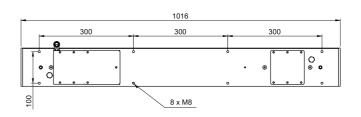
Technical Data	120/850/30.30/20	120/850/30.60/20
Length	868 mm	868 mm
Width	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm
Weight w/ ejectors	4.2 kg	4.2 kg
Weight w/ hose connection	3.8 kg	3.8 kg
Number of suction holes	112	56
Lifting force*		
@200mBar	585 N	506 N
@400mBar	1171 N	1013 N
@600mBar	1757 N	1520 N
@800mBar	2343 N	2026 N
Ejectors on gripper	1	1
Air consumption	210 NI/min	105 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/850/30.30/20	120/850/30.60/20
-H1	310 800 017	310 800 018
-H2	310 800 212	310 800 213
-EB	310 800 012	310 800 013

Spare Parts	120/850/30.30/20	120/850/30.60/20
Foam Pad	330 800 310	330 800 320



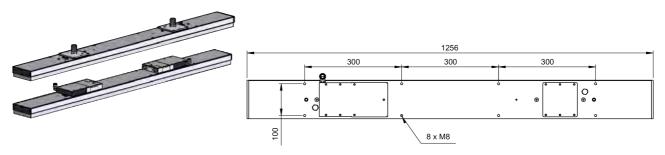


Technical Data	120/1000/30.30/20	120/1000/30.60/20
Length	1016 mm	1016 mm
Width	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm
Weight w/ ejectors	4.8 kg	4.8 kg
Weight w/ hose connection	4.4 kg	4.4 kg
Number of suction holes	132	66
Lifting force*		
@200mBar	690 N	597 N
@400mBar	1380 N	1194 N
@600mBar	2071 N	1791 N
@800mBar	2761 N	2388 N
Ejectors on gripper	1	1
Air consumption	420 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/1000/30.30/20	120/1000/30.60/20
-H1	311 000 017	311 000 018
-H2	311 000 212	311 000 213
-EB	311 000 012	311 000 013

Spare Parts	120/1000/30.30/20	120/1000/30.60/20
Foam Pad	331 000 310	331 000 320

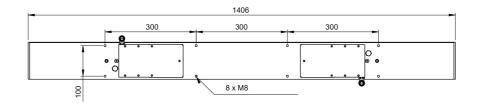


Technical Data	120/1250/20.20/20	120/1250/20.40/20	120/1250/30.30/20	120/1250/30.60/20
Length	1256 mm	1256 mm	1256 mm	1256 mm
Width	121.5 mm	121.5 mm	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm	99 mm	99 mm
Weight w/ ejectors	5.9 kg	5.5 kg	5.5 kg	5.5 kg
Weight w/ hose connection	5.1 kg	5.1 kg	5.1 kg	5.1 kg
Number of suction holes	305	153	164	82
Lifting force*				
@200mBar	689 N	713 N	857 N	741 N
@400mBar	1379 N	1426 N	1715 N	1483 N
@600mBar	2069 N	2139 N	2573 N	2225 N
@800mBar	2759 N	2852 N	3431 N	2967 N
Ejectors on gripper	2	1	1	1
Air consumption	840 NI/min	420 NI/min	420 NI/min	210 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/1250/20.20/20	120/1250/20.40/20	120/1250/30.30/20	120/1250/30.60/20
-H1	311 250 015	311 250 016	311 250 017	311 250 018
-H2	311 250 210	311 250 211	311 250 212	311 250 213
-EB	311 250 010	311 250 011	311 250 012	311 250 013

Spare Parts	120/1250/20.20/20	120/1250/20.40/20	120/1250/30.30/20	120/1250/30.60/20
Foam Pad	331 250 210	331 250 220	331 250 310	331 250 320



Technical Data	120/1400/30.30/20	120/1400/30.60/20
Length	1406 mm	1406 mm
Width	121.5 mm	121.5 mm
Height w/ ejectors	77 mm	77 mm
Height w/ hose connection	99 mm	99 mm
Weight w/ ejectors	6.7 kg	6.3 kg
Weight w/ hose connection	5.9 kg	5.9 kg
Number of suction holes	184	92
Lifting force*		
@200mBar	962 N	832 N
@400mBar	1924 N	1664 N
@600mBar	2887 N	2497 N
@800mBar	3849 N	3329 N
Ejectors on gripper	2	1
Air consumption	525 NI/min	315 NI/min

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com

Product Numbers	120/1400/30.30/20	120/1400/30.60/20
-H1	311 400 017	311 400 018
-H2	311 400 212	311 400 213
-EB	311 400 012	311 400 013

Spare Parts	120/1400/30.30/20	120/1400/30.60/20
Foam Pad	331 400 310	331 400 320

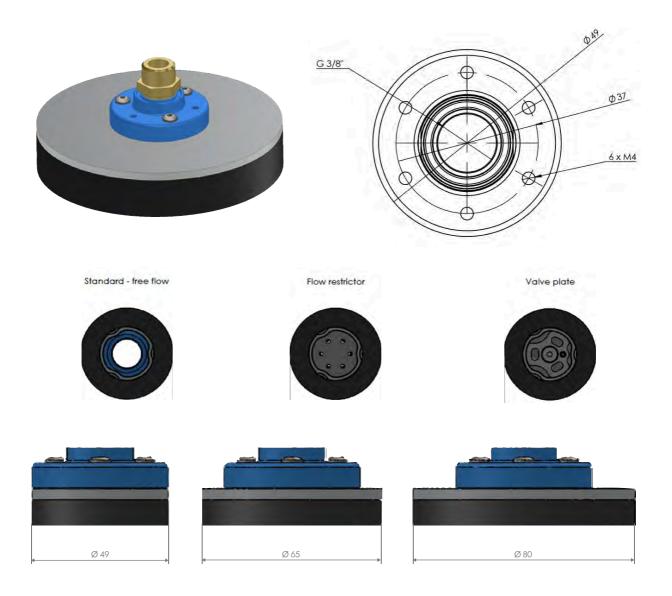






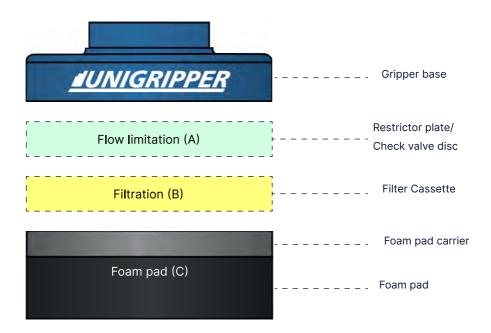
# **Foam Cup Gripper**

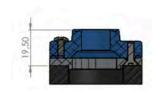
The Foam Cup Gripper combines the flexibility of foam lips with reliable vacuum performance, making it ideal for uneven, rough, or textured surfaces where standard suction cups fall short. Available in multiple sizes with options for flow limitation, filtration, and level compensation, it integrates easily into EOAT setups—even in tight spaces. Its foam interface ensures consistent grip and better handling of size variation and imperfect seals, making it a smart choice for demanding automation environments.

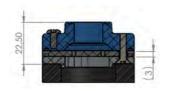


#### Customization

There are some customization options for the foam cup gripper to make it more suitable for your situation.









A. Flow limitation			
Α0	No limitation		
A1	Restrictor plate		
A2	UniGripper Check Valves		
B. Filtra	B. Filtration		
В0	No filtration		
B1	Filter cassette		
C. Foar	C. Foam diameter		
C0	Ø49 mm		
C1	Ø65 mm		
C2	Ø80 mm		







### Level compensator

Stroke: 50 mm Weight: ~210 g

Item number: 300 012 000

#### Level compensator

Stroke: 50 mm Weight: ~175 g

Item number: 300 012 001

#### Vacuum generator

Model: UVR-E30

Air consumption: 105 NI/min Pressure: 4-7 bar (6 bar optimal) Item number: 340 341 190

### **Foam Cup Gripper Technical Data**

Vacuum level	49 mm	65 mm	80 mm
200 mBar	13 N	31 N	56 N
400 mBar	26 N	63 N	113 N
600 mBar	39 N	95 N	169 N
800 mBar	52 N	127 N	226 N



Item Number	Configuration	Height	Weight
Diameter 49 mm			
300 010 000	Free Flow, No Filtration	34 mm	20 g
300 010 010	Free Flow, Filter Cassette	36 mm	22 g
300 010 100	Restrictor Plate, No Filtration	37 mm	35 g
300 010 110	Restrictor Plate, Filter Cassette	39 mm	37 g
300 010 200	UniGripper Check Valves, No Filtration	46 mm	82 g
300 010 210	UniGripper Check Valves, Filter Cassette	48 mm	84 g
Diameter 65 mm			
300 010 001	Free Flow, No Filtration	34 mm	30 g
300 010 011	Free Flow, Filter Cassette	36 mm	32 g
300 010 101	Restrictor Plate, No Filtration	37 mm	45 g
300 010 111	Restrictor Plate, Filter Cassette	39 mm	47 g
300 010 201	UniGripper Check Valves, No Filtration	46 mm	92 g
300 010 211	UniGripper Check Valves, Filter Cassette	48 mm	94 g
Diameter 80 mm			
300 010 001	Free Flow, No Filtration	34 mm	50 g
300 010 011	Free Flow, Filter Cassette	36 mm	52 g
300 010 101	Restrictor Plate, No Filtration	37 mm	65 g
300 010 111	Restrictor Plate, Filter Cassette	39 mm	67 g
300 010 201	UniGripper Check Valves, No Filtration	46 mm	112 g
300 010 211	UniGripper Check Valves, Filter Cassette	48 mm	114 g

<sup>\*</sup>Lifting force is theoretical and made with the assumption that the gripper has full coverage of the material. For imperial measurements visit www.unigripper.com



### **Accessories**

#### Vacuum indicators/switches

Vacuum indicators give the operator a feedback of the vacuum level in the gripper. A digital version can also be connected to a control system.

Vacuum indicators	Item number
Analogue 1/8" thread (Ø30mm)	340 346 610
Digital 1/8" thread, 2m cable (3 wires)	340 346 620

### **UniGripper Silent Power**

Silent power is UniGripper's sound enclosure for side channel blowers, providing premium noise reduction for blowers of all sizes. The Silent Power sound cabinets come in a compact design which makes them easy to ship and install. The cabinet also integrates a reverse blow unit and thus only requires a hose to be routed to the gripper.

#### **Pneumatic valves**

Pneumatic valves for controlling the compressed air flow to grippers with ejectors. A 5/3 valve allows the compressed air to either be used for vacuum generation, reverse blowing as well as being switched off.





#### **Small Valve**

Type: 5/3 valve, closed mid

Voltage: 24V DC

Connection: DIN Connector Recommended for: <630 NI/min Item Number: 340 346 640



#### **Large Valve**

Type: 5/3 valve, closed mid

Voltage: 24V DC

Connection: DIN Connector Recommended for: <1365 NI/min Item Number: 340 346 641

### Hose dividers and vacuum distribution



In case more than one gripper are used with a common vacuum source, the vacuum needs to be distributed to all grippers. UniGripper keep the hose dividers presented below as standard times. In addition, other hose dividers as well as distribution pies are available on request. The distribution pipes consist of a multiple inlet and outlet hose connections, which are spread out over the length of a pipe and thus facilitates the distribution of vacuum when the grippers are spread out over many meters.

Hose dividers	Item number	
Hose Divider	340 346 380	
51-51-51 mm / 2"-2"-2"	340 346 380	
Hose Divider	340 346 386	
63-51-51 mm / 2.5"-2"-2"	340 346 386	
Hose Divider	340 346 381	
63-63-63 mm / 2.5"-2.5"-2.5"	340 346 381	
Hose Divider	340 346 387	
76-51-51 mm / 3"-2"-2"	340 346 387	
Hose Divider	340 346 388	
76-63-63 mm / 3"-2.5"-2.5"	340 346 388	
Hose Divider	340 346 382	
76-76-76 mm / 3"-3"-3"	340 346 382	
Hose Divider	340 346 384	
101-63-63 mm / 4"-2.5"-2.5"	340 340 364	
Hose Divider	340 346 385	
101-76-76 mm / 4"-3"-3"	340 340 385	
Hose Divider	340 346 383	
101-76-76 mm / 4"-4"-4"	340 340 383	

### **Ejector vacuum generators**

SMS 120 Ejectors		-E	-ES	-ER
LP30	105 NI/min	340 341 131	340 341 132	340 341 130
LP60	210 NI/min	340 341 121	340 341 122	340 341 120
LP90	315 NI/min	340 341 111	340 341 112	340 341 110
LP120	420 NI/min	340 341 101	340 341 102	340 341 100
LP150-D	525 NI/min	340 341 151		340 341 150
LP180-D	630 NI/min	340 341 161		340 341 160
LP210-D	735 NI/min	340 341 171		340 341 170
LP240-D	840 NI/min	340 341 181		340 341 180
Mounting Plate			340 341 140	

SMS 80 Ejectors		-E	-ES	-ER
LP30	105 NI/min	340 341 021	340 341 022	340 341 020
LP60	210 NI/min	340 341 011	340 341 012	340 341 010
LP90	315 NI/min	340 341 001	340 341 002	340 341 000
LP120-D	420 NI/min	340 341 031		340 341 030
LP150-D	525 NI/min	340 341 051		340 341 050
LP180-D	630 NI/min	340 341 061		340 341 060
Mounting Plate			340 341 040	

Basic Ejectors		-EB
LP30	105 NI/min	340 341 331
LP60 210 NI/min 340 341 321		340 341 321
LP90	315 NI/min	340 341 311
LP120 420 NI/min 340 341 301		340 341 301
Mounting Plate		340 341 140

Basic Accessories	Item no.	
Floating attachment	340 341 210	
Sensor bracket	340 341 206	
Inductive sensor with cable, 2m	340 341 207	



### Rotary vane pumps

UniGripper also offer rotary vane pumps in cases where and ejector vacuum generator may be the more natural choice for vacuum generation, but there is shortage of compressed air. Rotary vane pumps are typically able to reach deeper vacuum flow levels than side channel blowers.

#### Reverse blow unit

Reverse blow units are used to switch the vacuum hose between the inlet and the outlet of the side channel blower. UniGripper offers three sizes of reverse blow units, supporting different vacuum flow levels, and which can either be mounted standalone or directly on the side channel blower (when applicable).



Reverse blow unit size	Hose connection	Blower mounted	Standalone
Small	50 mm / 2"	340 345 021	340 345 022
	63 mm / 2.5"	340 345 023	340 345 024
Large	50 mm / 2"	340 345 011	340 345 012
	63 mm / 2.5"	340 345 013	340 345 014
	76 mm / 3"	340 345 015	340 345 016
	101 mm / 4"	340 345 017	340 345 018
X-Large	127 mm / 5"	340 345 002	340 345 003

#### Slide Valve and Pre-loader

For vacuum on/off, or for zone control, the UniGripper accessories Slide Valve and Pre-loader is a good option. There is also a benefit with the possibility to load vacuum in the hose to reduce the cycle time with instant grip. Both accesories are possible to retrofit since the mounting is identical to the hose connection fastening.

The **Slide Valve** is designed for optimum flow and has a low height.

The **Pre-loader** is designed for minimal footprint.

	Slide Valve	Pre-loader	
50 mm / 2"	797501111	797501073	
63 mm / 2.5"	797501116	797501062	
76 mm / 3"	797501121	797501051	
101 mm / 4"	797501093	797501040	
125 mm / 5"	797501093	N/A	



#### Vacuum hose

Distributing vacuum in hoses puts special requirements on the hose to achieve good durability. We supply selected vacuum hose qualities as per below. Hose clamps are needed to firmly attach the hose to hose connections.

Vacuum hose	Item number	Hose Clamps	
Hose 16 mm	340 346 016	340 346 250	
Hose 25 mm / 1"	340 346 025	340 346 260	
Hose 50 mm / 2"	340 346 050	340 346 200	
Hose 63 mm / 2.5"	340 346 063	340 346 210	
Hose 76 mm / 3"	340 346 076	340 346 220	
Hose 101 mm / 4"	340 346 101	340 346 230	
Hose 127 mm / 5"	340 346 127	340 346 240	

### **Swiveling hose connections**

Swiveling hose connections are ideal for vacuum hose twisting points. Swivel joints are available base-mounted (for gripper mounting) and hosemounted (with hose connections on both ends).

Swivel joints	Base mounted	Hose mounted	
50 mm / 2"	340 344 020	340 344 021	
63 mm / 2.5"	340 344 030	340 344 031	
76 mm / 3"	340 344 040	340 344 041	
101 mm / 4"	340 344 050	340 344 051	
127 mm / 5"	340 344 050	340 344 050	

#### **Hose connections**

Connections for vacuum hoses are available in straight, 45 degrees and 90 degree angles.

Hose connections	Straight	45°	90°
25 mm / 1"	340 344 020	340 344 021	340 344 021
50 mm / 2"	340 344 030	340 344 031	340 344 031
63 mm / 2.5"	340 344 040	340 344 041	340 344 041
76 mm / 3"	340 344 050	340 344 051	340 344 051
101 mm / 4"	340 344 050	340 344 051	340 344 051
127 mm / 5"	340 344 050	340 344 051	340 344 051

### Available worldwide

UniGripper has partners and distributors spanning 6 continents and over 30 countries.

Find your closest UniGripper distributor on www.unigripper.com.





For more information and STEP/PDF Downloads, please visit www.unigripper.com

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