Piab Kenos®
Vacuum Gripping Systems

BONDY

INDUSTRIAL EQUIPMENT SUPPLIER

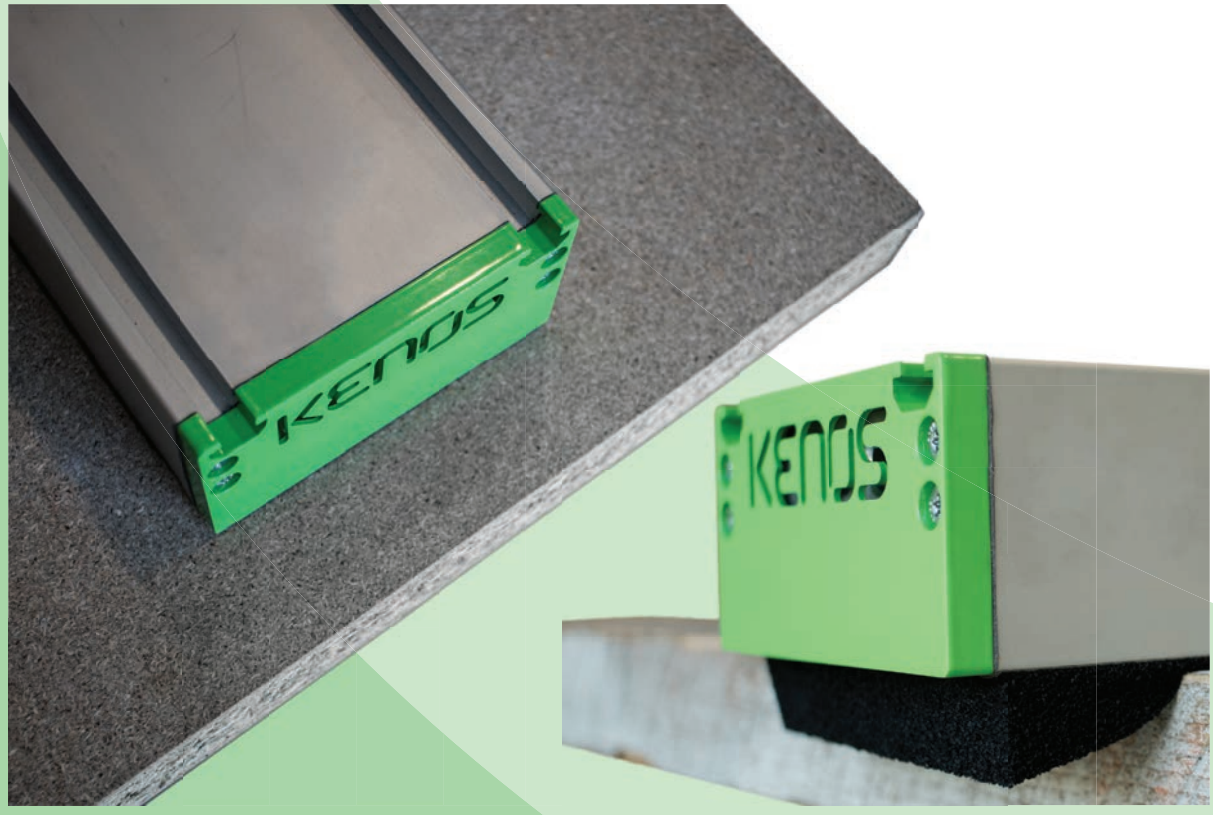
For ordering and questions call

(+45) 70 15 14 14

piab

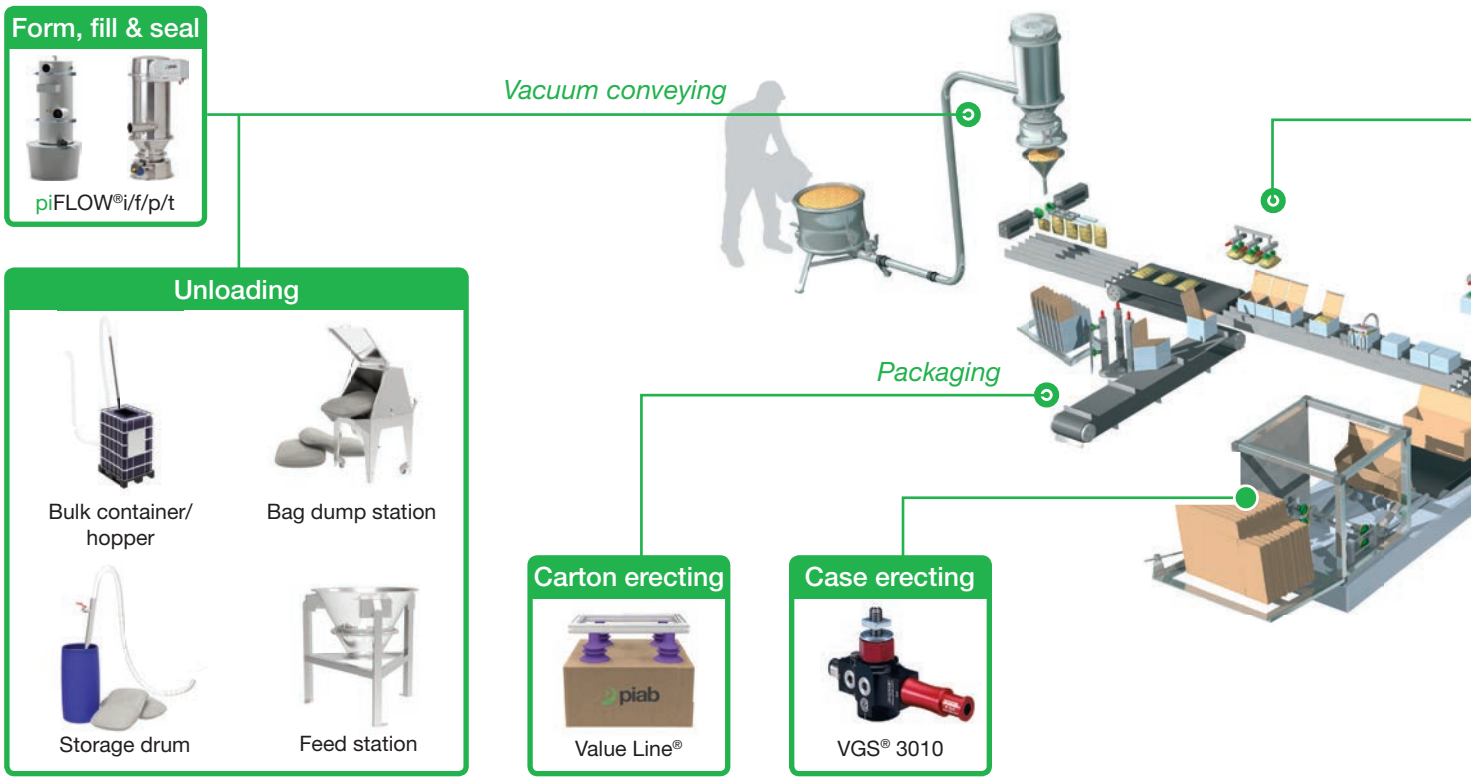
Kenos® Vacuum Gripping Systems

Realise productivity gains with innovative vacuum components



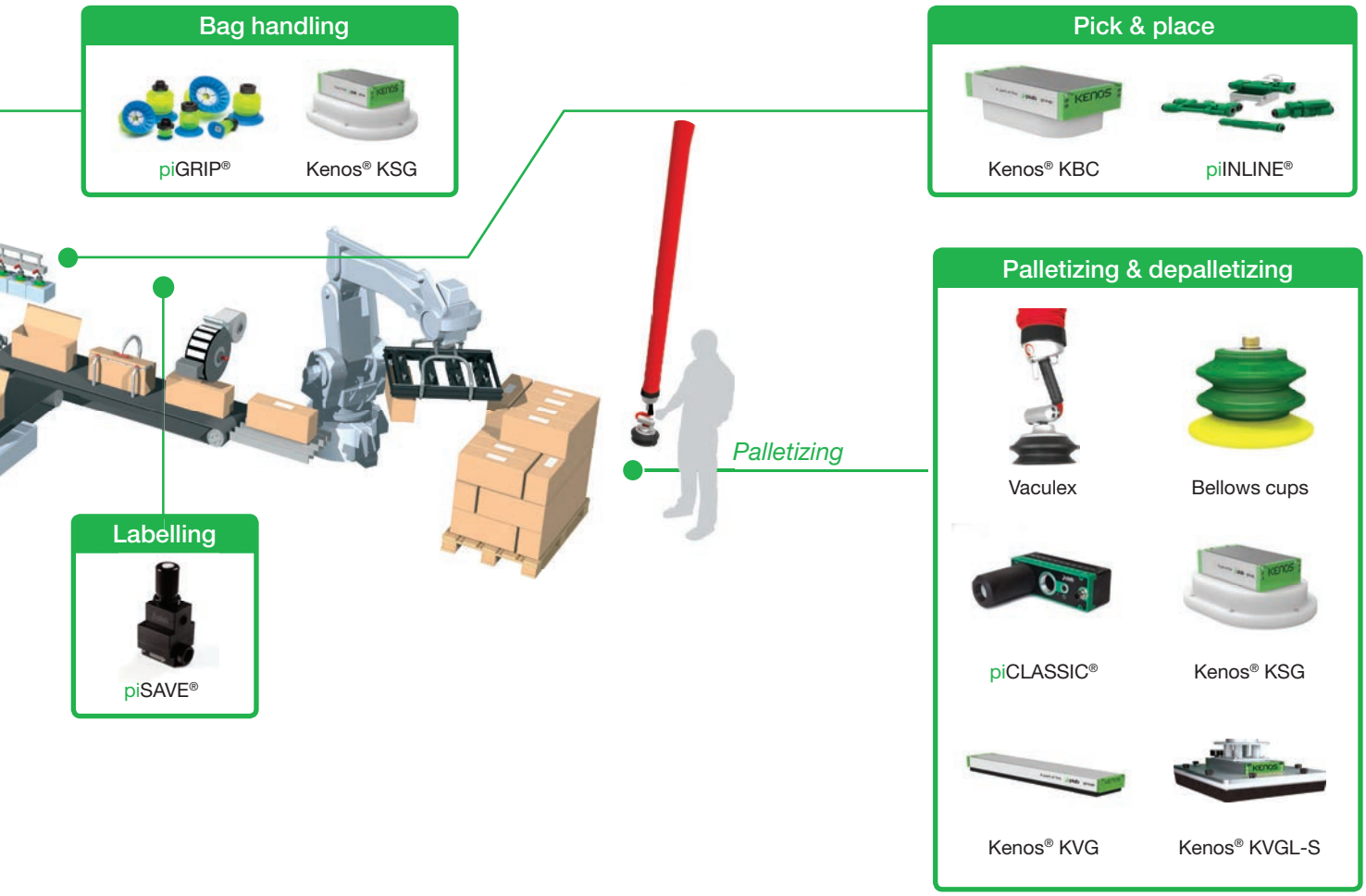
Your global supplier

Optimize your production line with Piab



We offer a wide range of products to better support different products in different applications. Over the years we have built up an amazing application know-how on a global level.

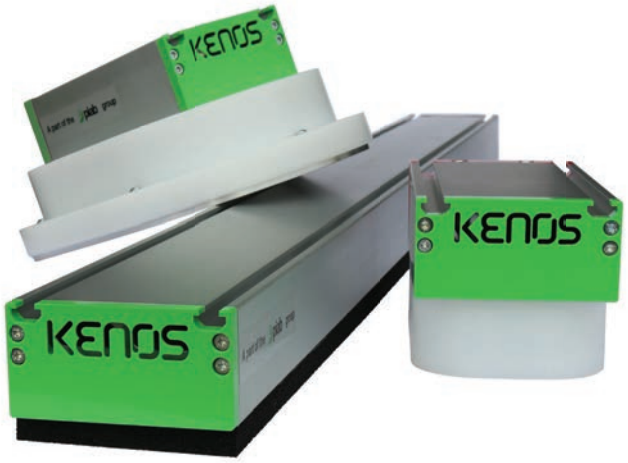
- Kenos® Vacuum grippers are available in different shapes and forms to meet the demands of different applications. They can lift packaging, wood, cans and jars and many other products. Available with FDA approved foam, different porosities and different foam materials to better meet customer demands.
- With the suction cups, you can lift everything from thin sheet paper to metal sheets. As it is proven to have significantly higher lifetime as compared to the competition, it will increase productivity in the application. Available in FDA and EU 1935/2004 approved material and as detectable food cups.



- The vacuum pumps are all based on COAX® cartridges. A vacuum system based on COAX® technology can provide you with three times more vacuum flow than conventional systems, allowing you to increase speed with high reliability while reducing energy consumption.
- The vacuum conveyors are also optimized by the application to prove the best solution within food, pharma and the chemical industries. With a small footprint, and an ability to contribute to an increase in uptime since the changeover time between different materials is kept to a minimum and the maintenance needed for the conveyor is very limited. ATEX, FDA and EU 1935/2004 certified.

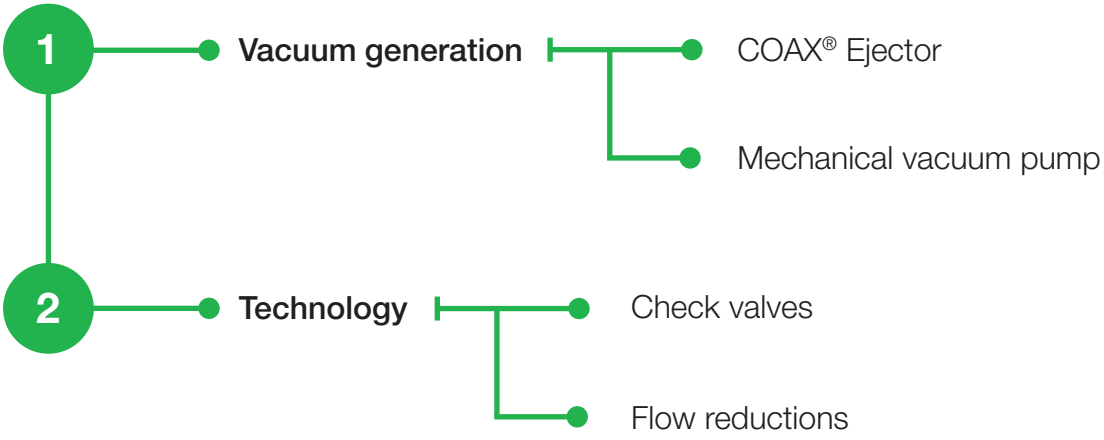
Vacuum grippers and their great benefits

Kenos® Vacuum grippers are available in different shapes and forms to meet the demands of different applications.



- Easy to obtain a vacuum gripper especially **optimized for your application**. Different product families are developed for different applications e.g. heavy duty, sack applications, packaging, cans and jars and many more.
- **Flexible solution** for handling several products with different shapes and dimensions.
- **Minimize maintenance time**, the foam only takes a few minutes to replace with new and ready to run in production again.
- Wide application span as there is **FDA approved foam** to choose on.
- **Minimize your design time** as you can, with the online configurator, build according to your own needs and receive all the documentation with a click.

How to build a Kenos® Vacuum gripping system

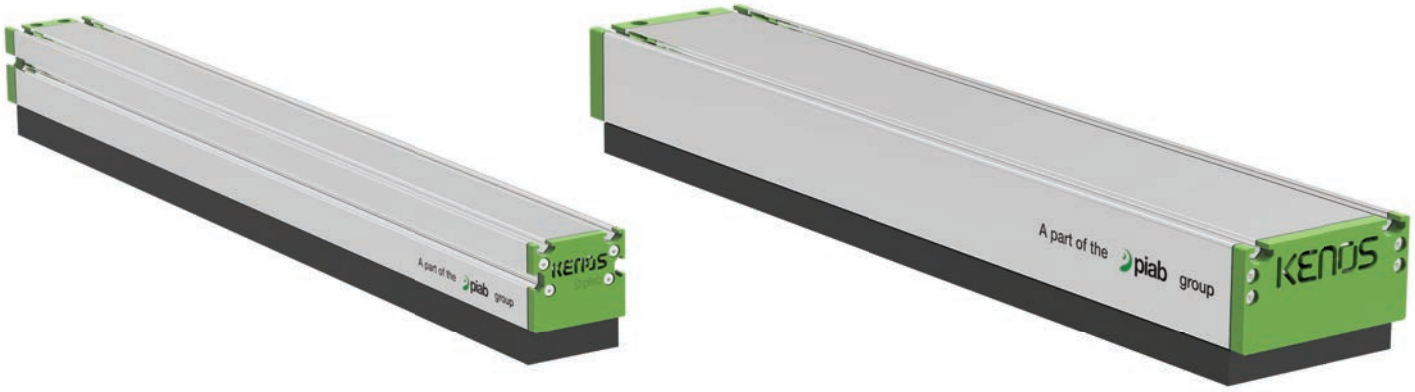


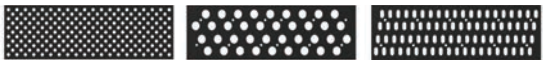
This illustrates the flexibility with the Kenos® Vacuum gripping system. You can choose between using the COAX® ejector to generate vacuum or a mechanical vacuum pump. The COAX® is integrated in the gripper and is a multi-stage COAX® ejector of easy maintenance. The multi-stage COAX® ejector offers the possibility to add cartridges in a very simple way even after the installation, if necessary. Then the choice is between which technology to use, check valves or flow reductions depending on the final application.

piab

Kenos® Vacuum Gripper – KVG

KVG series represents a flexible solution for the handling manipulation of several products with different shapes, dimensions and compactness due to the double technology available.

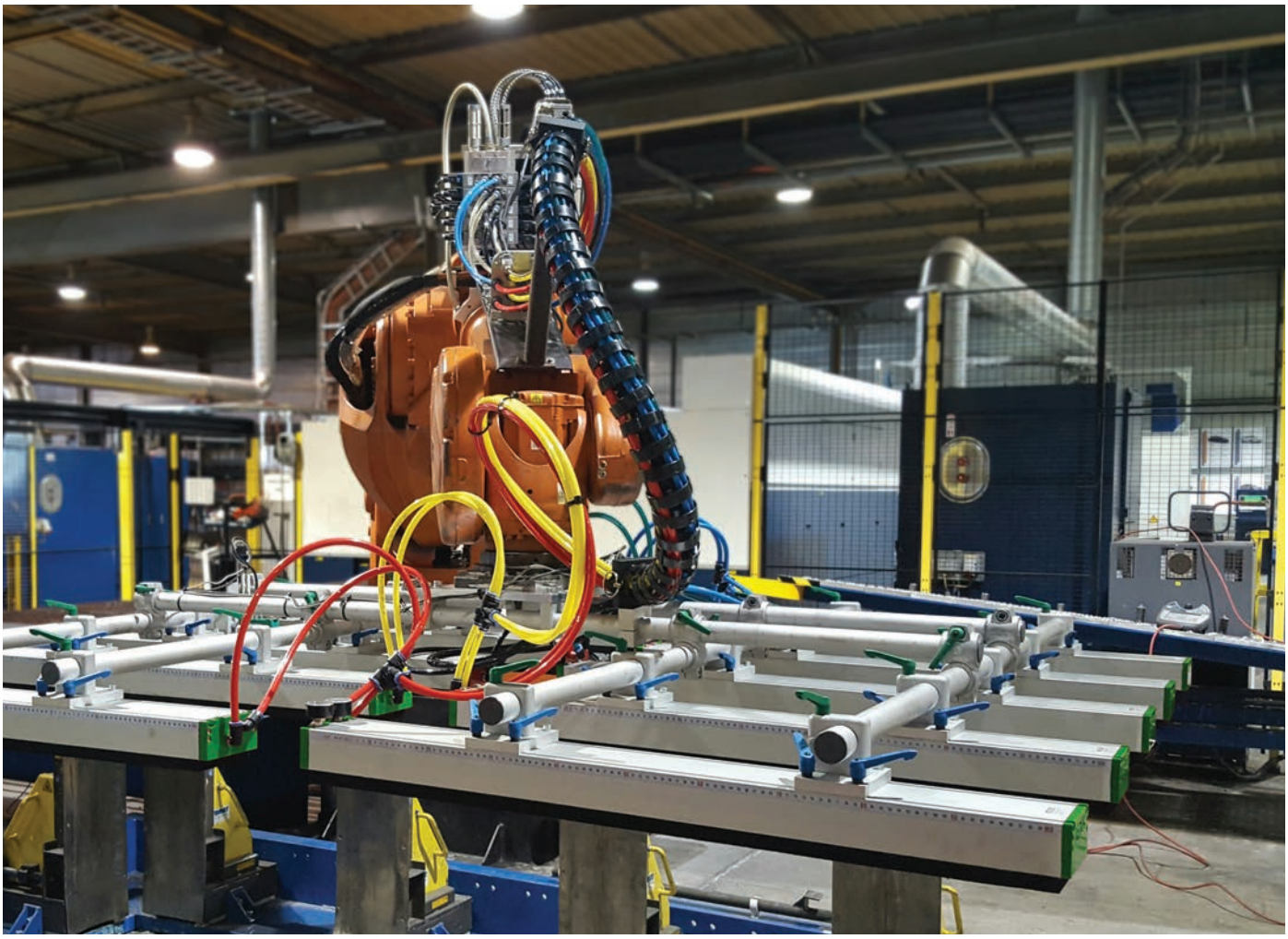




Different type of patterns of the foam

- Check valves or flow reducers can fulfil the needs of many industrial sector applications. The KVG gripping system can be equipped with integrated vacuum generation or suitable for separated vacuum generation (Pump or Side channel blower).
- The integrated vacuum generator is a multi-stage COAX® ejector of easy maintenance. The multi-stage COAX® ejector used offers the possibility to be simply increased even after the installation if necessary.
- The technical foam is made with different material, opening patterns and thicknesses. There is EPDM foam as a good closed cell sponge rubber material or Silicone foam engineered for high performance applications with high durability.
- The KVG gripping system is made of a technical foam (FDA mat approved available), with different pitch patterns, thickness or with suction cups.
- There are three different pitches available. See picture above.
- Configurable on **www.piab.com** with all documentation available at your hands (Datasheet, manual and CAD).

Typical applications are palletizing, wood, metal sheets and packaging with irregular surfaces.

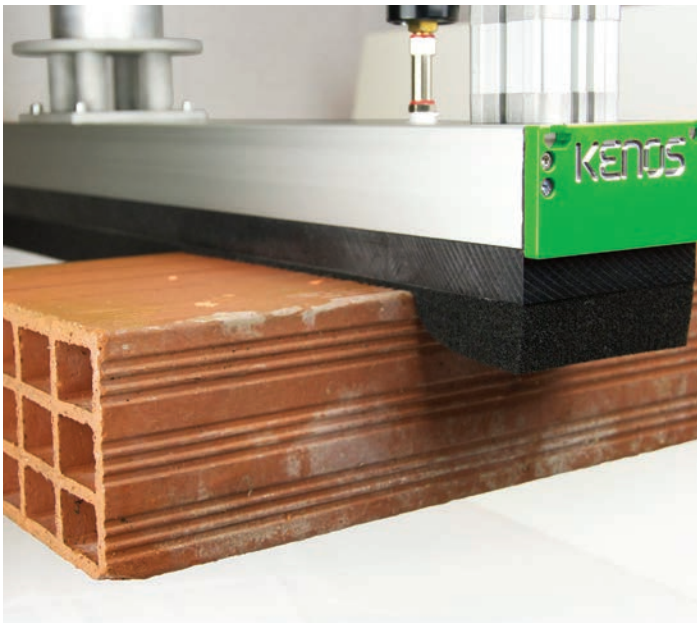


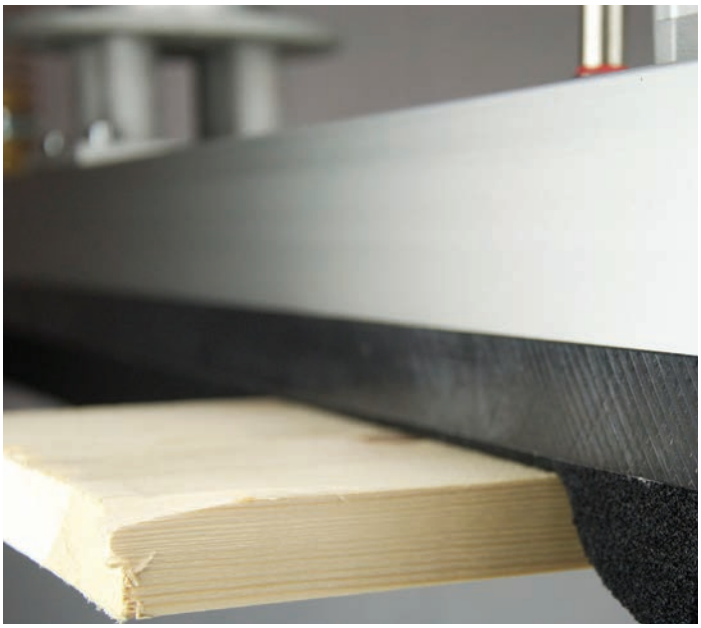
Kenos® Heavy Vacuum Gripper – KHVG

KHVG series products, Kenos® Heavy Vacuum Gripper, are designed for heavy duty applications in the wood and stone industries.

- The KHVG system can be used with side channel blowers as external vacuum generator.
- Provided with shutter check valve technology with low sensibility to the dust.
- Configurable on **www.piab.com** with all documentation available at your hands (Datasheet, manual and CAD).

KHVG gripping systems are suitable for handling normally complete layers of sawn timber, heavy planking, raw wood and materials for building, such as bricks. They are also useful to handle very long and arcuate workpieces.





Kenos® Sack Gripper – KSG

The specific know-how in this segment has led to a system dedicated to all the different applications of sack handling. Are suitable to handle sacks up to 50Kg (110 lb.)

- The integrated vacuum generator is a multi-stage COAX® ejector of easy maintenance. The multi-stage COAX® ejector used offers the possibility to be simply increased even after the installation if necessary.
- As an alternative, the KSG system can be used with external vacuum generation with side channel blower.
- Configurable on **www.piab.com** with all documentation available at your hands (Datasheet, manual and CAD).

Typical applications, sacks with different quality and content.

Kenos® Bag Cup – KBC

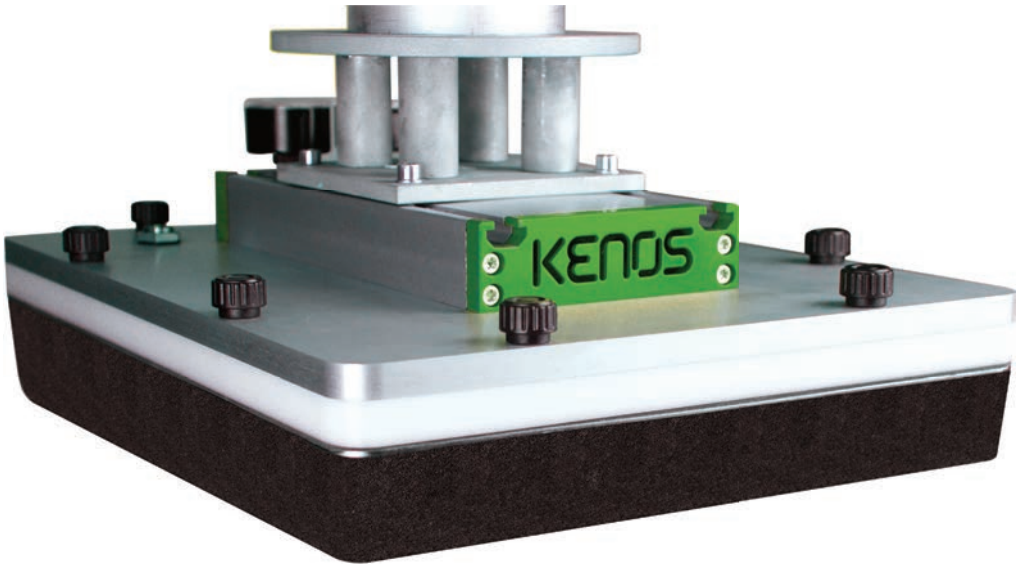
KBC series products, Kenos® Bag Cup, born from the need of handling in the food industry and handling liquid bags. KBC is also suitable with flow pack applications.

- Integrated COAX® vacuum cartridge gives the module flexibility.
- A version for external vacuum generation is available.
- A side channel blower is used when the application condition suggests it.
- Unique characteristic of KBC is the absence of any rubber sealing lip that offers a great advantage to customer: No spare parts needed! No machine stop for maintenance!
- Configurable on **www.piab.com** with all documentation available at your hands (Datasheet, manual and CAD).

Kenos® Bag Cup series is suitable for liquid bags such as infusion bags, wine, sauces and flow packs.

Kenos® Vacuum Gripper Layer – KVGL-S

Developed for the world of packaging and line automation.

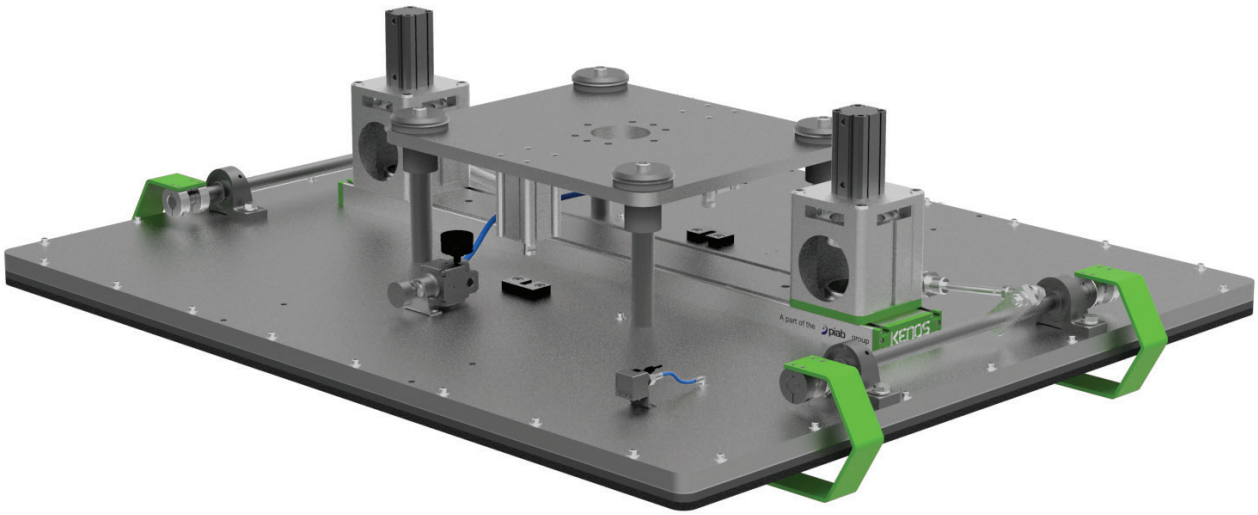


- Adjustable check valve technology and the technical foam is availabe in 10, 20, 30 and 40mm thickness which allows for superior gripping on different kind of boxes, wrap around packaging and primary ones.
- The large availability of standard dimensioning and the modularity, make this series highly effective.
- Configurable on **www.piab.com** with all documentation available at your hands (Datasheet, manual and CAD).

Kenos® Vacuum Gripper Layer – KVGL-S is suitable for different kind of boxes, wrap around packaging and primary ones.

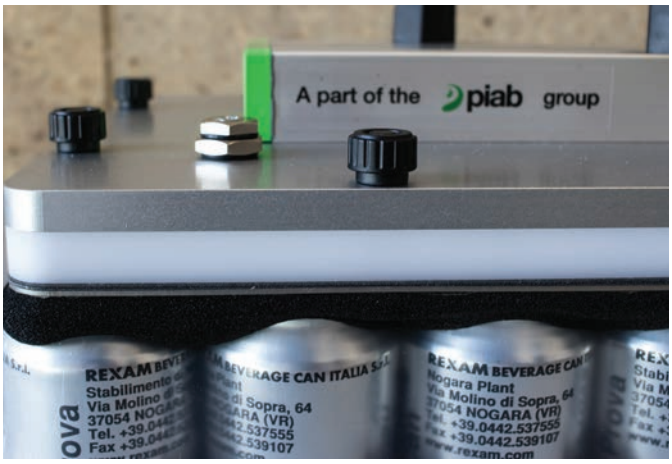
Kenos® Vacuum Gripper Layer-Cans/Jars – KVGL-CJ

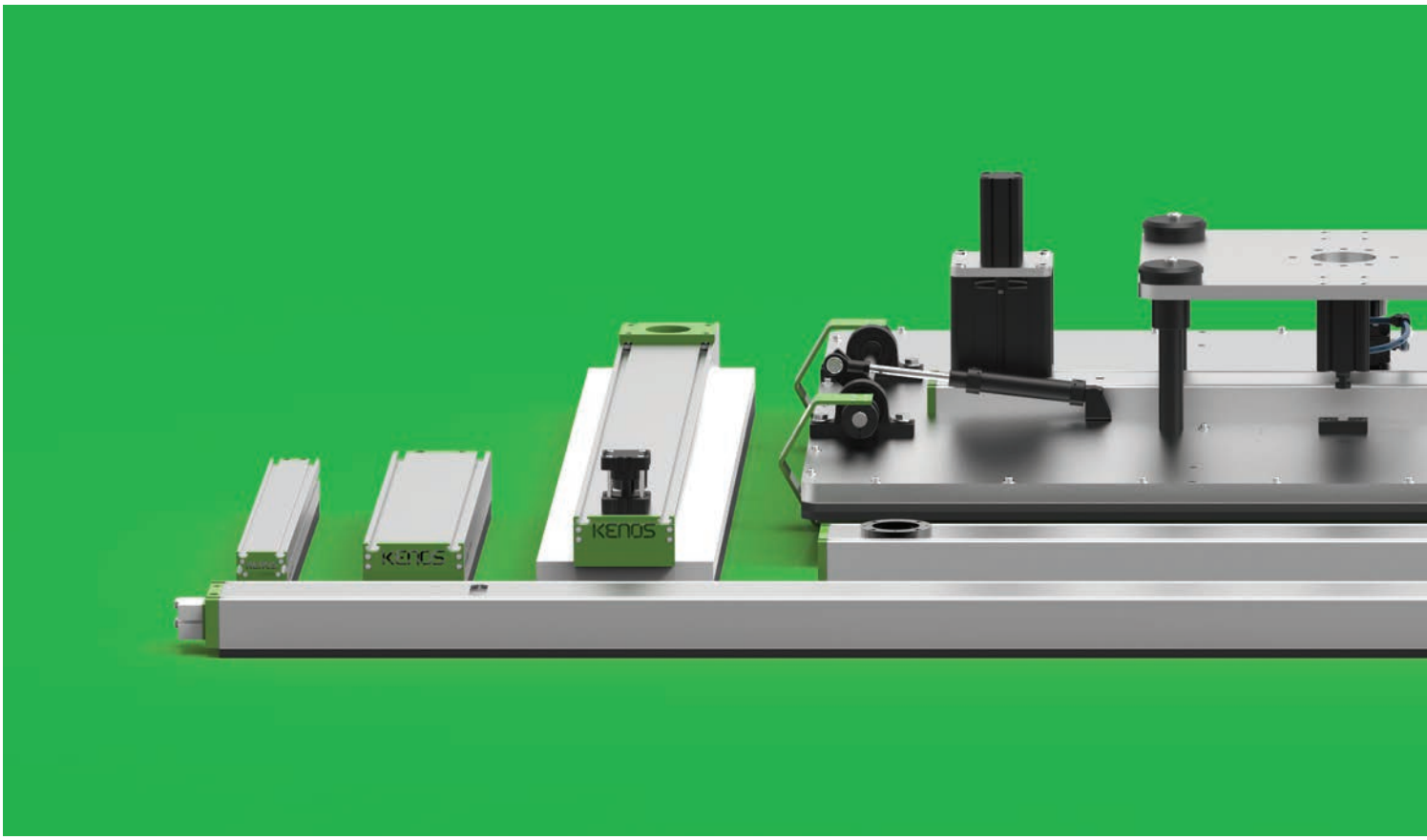
KVGL-CJ series, Kenos® Vacuum Layer – Cans Jars, born for the need to handle the complete layer of cans and jars that can be open or covered on the gripping area.

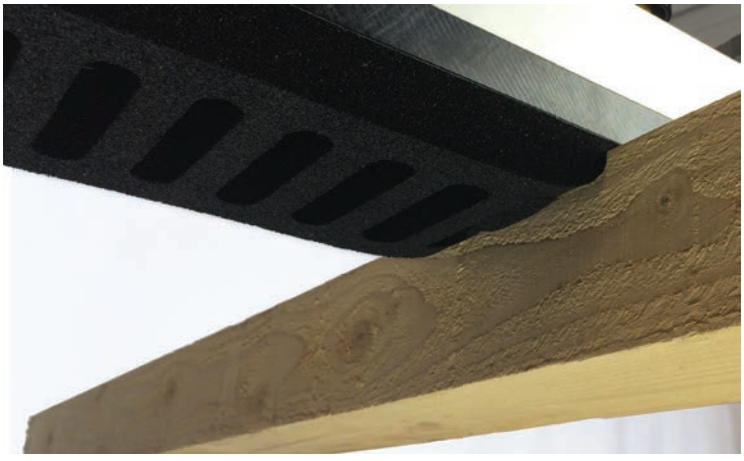


- Typical industrial segments involved are palletizing or de-palletizing in packaging, beverage and food.

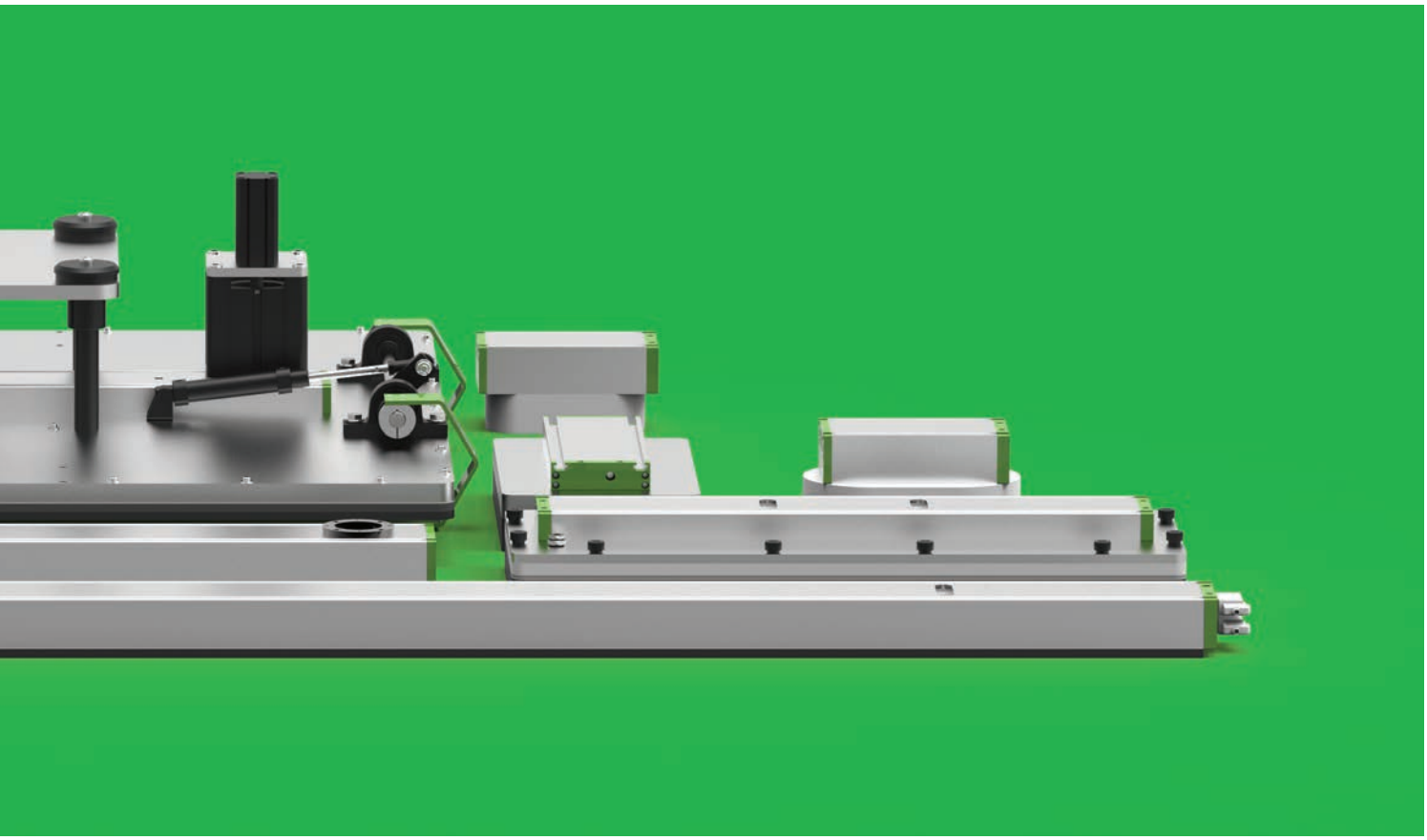
Kenos® Vacuum Gripper Layer-Cans/Jars – KVGL-CJ is suitable for different kind of boxes, wrap around packaging and primary ones.



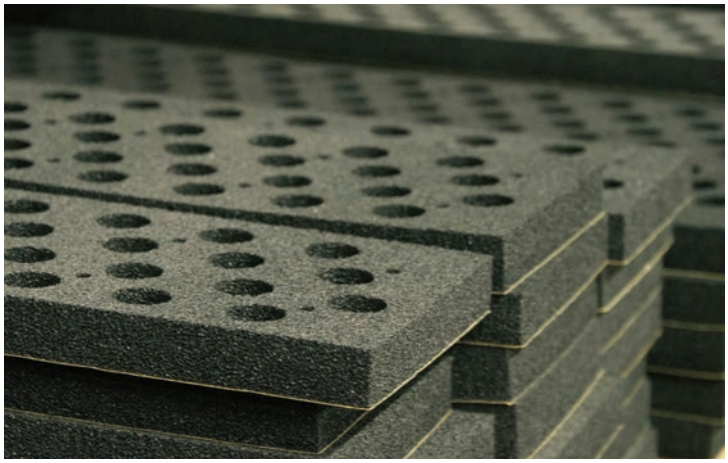




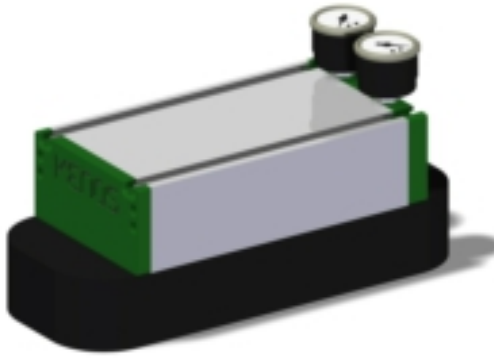

KENOS




A part of the piab group



KENOS® KBC



- Capable to handle bags filled with liquid and other difficult to grasp bags in high speeds and g-forces.
- The KBC (Kenos Bag Cup gripper) can be equipped with integrated COAX® cartridges or connector for external vacuum source.
- Applications flow pack, bags and small sacks
- No spare part needed due to the unique design of the KBC.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	2-3
Material	-	Al, PEHD, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Vacuum flow

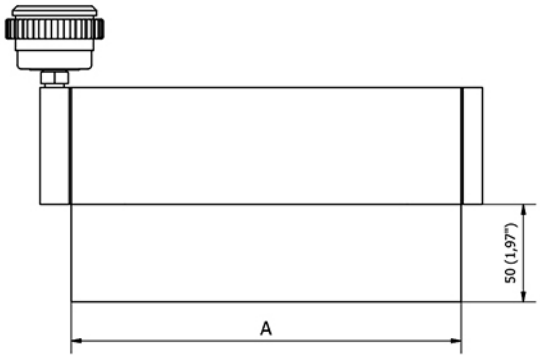
Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

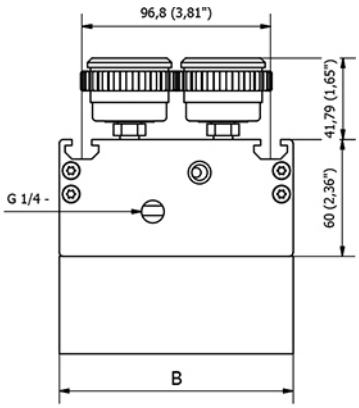
Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

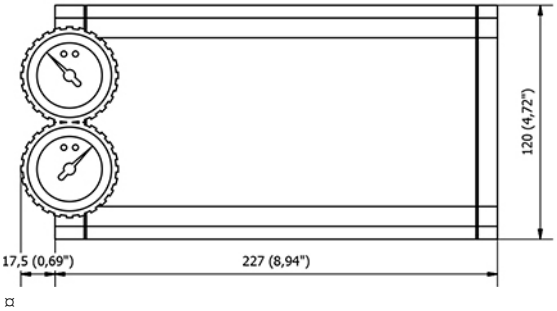
Values specified in data sheet are tested at:

- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}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.

Dimensional drawing







	mm [in]
A	300 [11.81"]
B	120 [4.72"]

Pneumatic diagram

Ordering information

Description	Product code
KENOS®KBC 200 mm, 300 mm, 120 mm, 3 cartridge Si32-3, Without control, Vacuum and pressure gauge	KBC.200.300.120.S3.X.M1

piab Smart solutions for the automated world™

Kenos® KCS

- The KCS (Kenos collaborative small gripper) gripping system is equipped with integrated COAX® SX cartridges.
- The quick change system of KCS allows the gripper to move from one application to another very quickly.
- The KCS is equipped with a flow restrictor suitable for handling different sized sealed or leaking objects with the same lifting device even if the total foam area is not covered, the KCS will still maintain enough vacuum level to lift the object.
- The COAX®SX cartridges- providing high performance even at low or fluctuating feed pressures. The KCS can be equipped with 1 or 2 COAX®SX cartridges.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	g	697
Material	-	PA, POM, EPDM, SS, NBR, PVC, HDPE
Noice level	dBA	70
Connection, compressed air	-	G 1/8"
Material foam	-	EPDM

Technical data, solenoid valve

Description	Unit	Value
Fluid	-	Air
Operating pressure range	MPa	0.15-0.7
Operating temperature range	°C	-10 +50 (No freezing)
Manual override	-	Push-turn locking slotted type
Lubrication	-	Not required
Impact / Vibration resistance	m/s^2	150/30
Electrical connection	-	Connector M8 3 pin male
Coil rated voltage	Vcc	24
Allowable voltage	% rated voltage	± 10
Current consumption	mA	17
Surge voltage supressor	-	Diode
Indicator light	-	LED

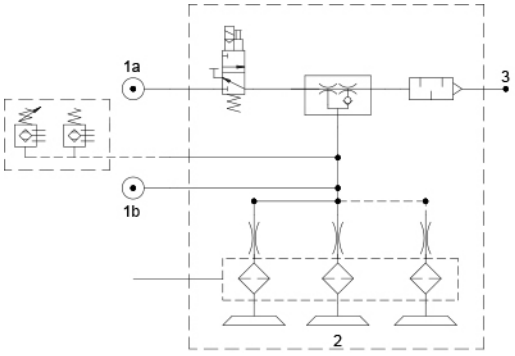
Vacuum flow

Feed pressure pump / nozzle	Air Consumption per pump/nozzle	Vacuum flow (Nl/s) at different vacuum levels (-kPa)									Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	80	-kPa
0.47 / 0.43	2.21	3.46	3.02	2.41	1.70	1.02	0.61	0.47	0.28	0.10	90

Gripping force data

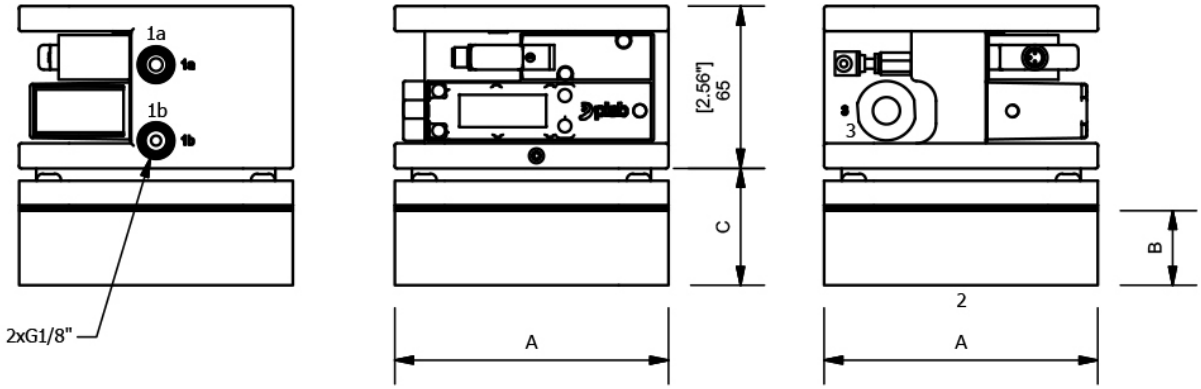
Force, N, at different vacuum levels (-kPa)						
30	40	50	60	70	80	90
81	109	136	163	190	217	244

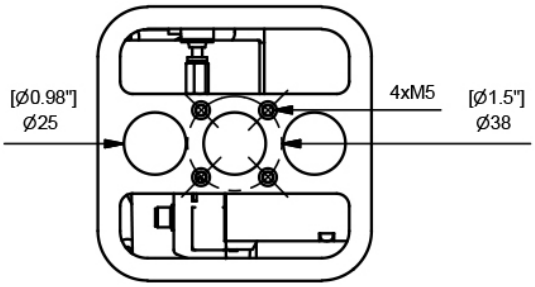
Dimensional drawing



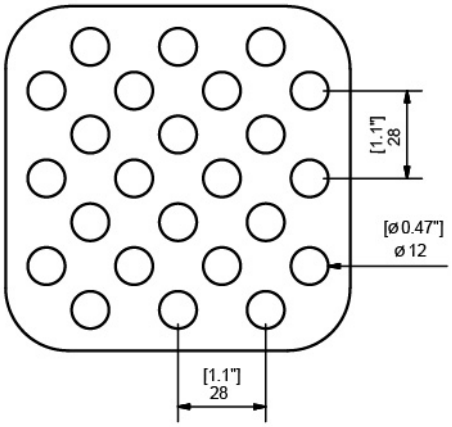
A	110 [4.33'']
B	30 [1.18'']
C	47 [1.85'']

Note: The filter, the monitoring and the valves are optional depending on your configuration.





Note: The monitoring and the valves are optional depending on your configuration.



Ordering information

Description	Product code
KCS 110x110mm, Foam, Foam EPDM, Foam 30mm, Without filter, Fine step, 110x110mm, Flow Reduction 0,6 mm (standard), Ejector pump, 1 x SX42, EV vacuum N.C., Without vacuum switch or sensor, Without fixing interface	KCS.Q110.N301.110.FR6.SX421.V1.X.X

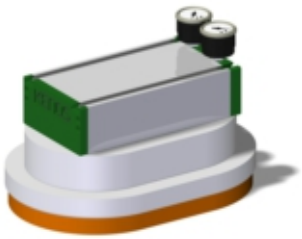
Ordering information, spare part foam

Description	Product code
Foam EPDM, Foam 30mm, Without filter, Fine step, 110x110mm	FOAM.KCS.Q110.N301.110

Ordering information, accessories

Description	Art. No.
Cable M8 3-pin female L=2m	0108141

KENOS®KSG



- The KSG (Kenos Sack Gripper) can be equipped with integrated COAX® cartridges or connector for external vacuum source.
- The KSG is designed and capable to handle heavy sacks in different material, shapes and weight.
- Options with foam sealing foam or metal sealing ring for longer life.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	4-5
Material	-	Al, NR, SS, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Vacuum flow

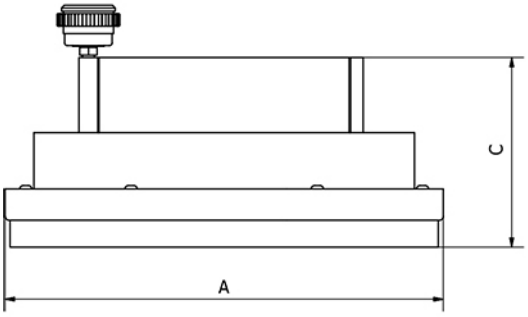
Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

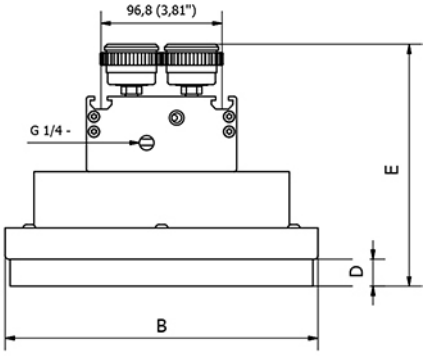
Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

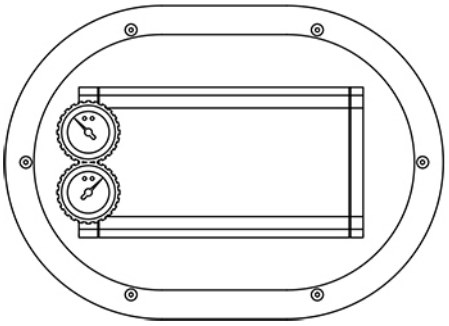
Values specified in data sheet are tested at:

- 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.

Dimensional drawing







¤

	mm [in]
A	310 [12.20"]
B	210 [8.27"]
C	152 [5.98"]
D	22 [0.87"]
E	194 [7.64"]

Pneumatic diagram

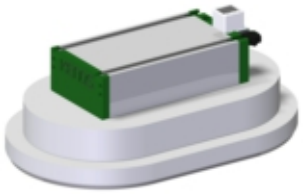
Ordering information

Description	Product code
KENOS®KSG With sealing ring, 310-210 mm, NR sealing ring, 3 cartridge Si32-3, Without control, Vacuum and pressure gauge	KSG.E.310-210.G1.S3.X.M1

Ordering information, spare part foam

Description	Art. No.
NR Foam incl. Mounting plate-ATC-310x210	NR Foam incl. Mounting plate-ATC-310x210
NR Foam-G1-310x210	NR Foam-G1-310x210

KENOS®KSG



- The KSG (Kenos Sack Gripper) can be equipped with integrated COAX® cartridges or connector for external vacuum source.
- The KSG is designed and capable to handle heavy sacks in different material, shapes and weight.
- Options with foam sealing foam or metal sealing ring for longer life.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	6-7
Material	-	Al, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Technical data, digital vacuum switch

Description	Unit	Value
Shock resistant, 3x XYZ value	G	10
Current consumption	mA	40
Supply voltage	VDC	24
Humidity	%RH	35-85
Insulation at 500 VDC	MΩ	50
Cable specification	-	With connector 150mm
Electrical connection	-	M8 4 pole male connector
Current, max	mA	125
Display		7 segments, LCD 3 color display (red/green/orange)
High voltage resistance	VAC	1000
Vibration resistance	-	10-150-10 scan for 1 min Hz (1.5mm or 10G, 2h in XYZ direction)
Hysteresis	-	Adjustable, 1-8 kPa
Signal range		0-101.3
Valve function	-	PNP NO/NC (2x)

Technical data, electrical solenoid valve

Description	Unit	Value
Operating pressure range	MPa	0.15-0.7
Current consumption	mA	17
Supply voltage	VDC	24
Electrical connection	-	M8 3 pole male connector
Allowable voltage	-	± 10% rated voltage
Manual override	-	Push-locking slotted style
Impact / Vibration resistance	m/s^2	150/30
Coil rated voltage	Vcc	Coil rated voltage
Surge voltage supressor	-	Diode
Indicator light		LED

Vacuum flow

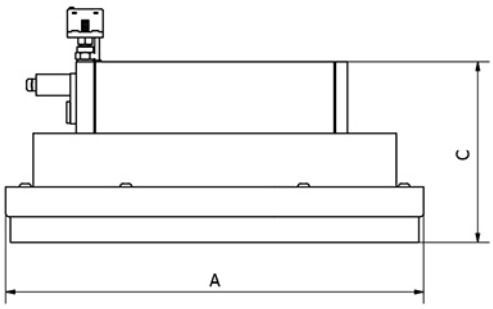
Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

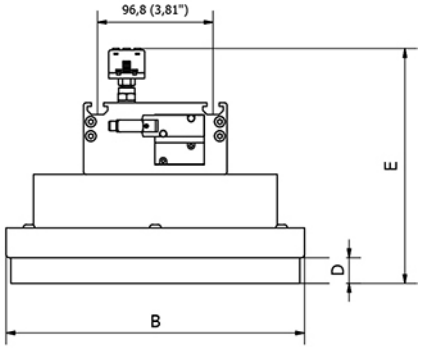
Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

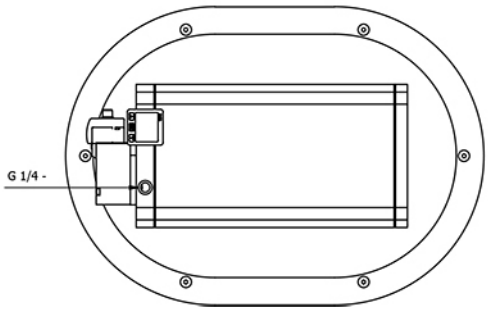
Values specified in data sheet are tested at:

- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}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.

Dimensional drawing







¤

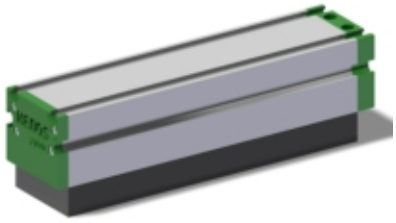
	mm [in]
A	400 [15.75'']
B	250 [9.84'']
C	135 [5.31'']
D	5 [0.20'']
E	180 [7.09'']

Pneumatic diagram

Ordering information

Description	Product code
KENOS®KSG With sealing ring, 400-250 mm, Metal ring, 3 cartridge Si32-3, EV vacuum N.C., Digital vacuum switch	KSG.E.400-250.G3.S3.V1.M2

KENOS® KVG60



- The KVG (Kenos vacuum gripper) gripping system can be equipped with integrated COAX® cartridges or connector for external vacuum source.
- The KVG is available with different hole pattern and thickness of foam depending of the application requirements.
- Check valves require smaller vacuum pump and still maintain the vacuum level even if the whole surface of the gripper is not covered. Different recommended check valves for different porosities of handled material.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.
- FDA approved foam in silicone available as an option.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	1-2
Material	-	Al, EPDM, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/8"

Technical data, foam

Description	Unit	Value
Material	-	EPDM

Vacuum flow

Feed pressure	Air	Vacuum flow (Nl/s) at different vacuum levels (-kPa)	Max vacuum

pump / nozzle MPa	consumption per pump Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	1.75	6.0	3.5	2.6	1.7	0.9	0.6	0.5	0.35	75

Gripping force data

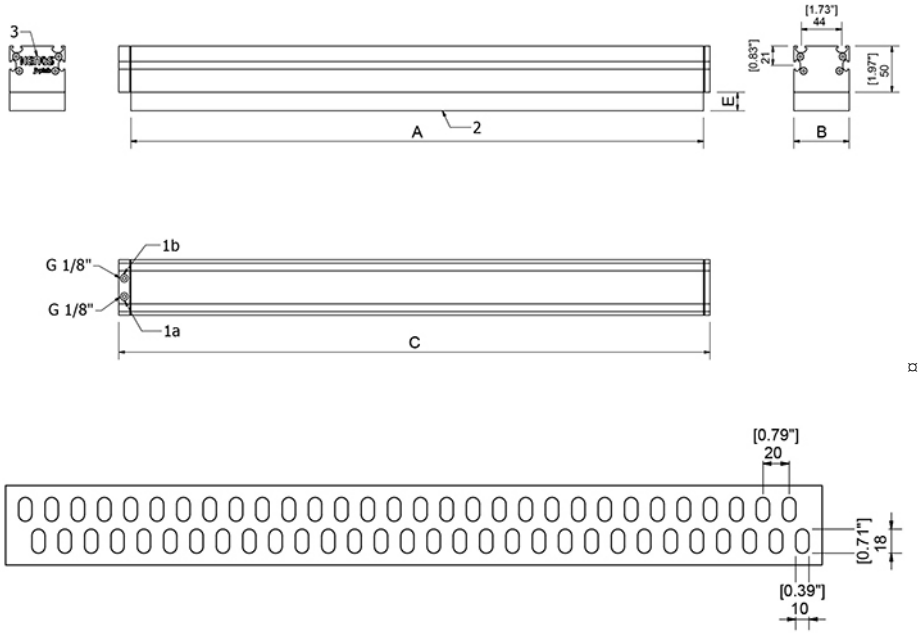
Force, N, at different vacuum levels (-kPa) , gripper with foam				
30	40	50	60	70
94	126	157	188	220

Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

Values specified in data sheet are tested at:

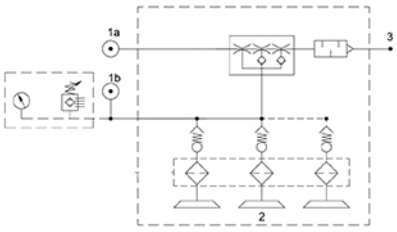
- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.

Dimensional drawing



	mm [in]
A	220 [8.66'']
B	60 [2.36'']
C	240 [9.45'']
E	20 [0.79'']

Pneumatic diagram



Please note that manometer and digital vacuum switch is optional and that the filter is only valid for KVG60 version comprising foam with filter.

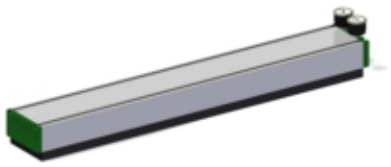
Ordering information

Description	Product code
KENOS®KVG60 200 mm, 60 mm, Foam, 20 mm, Without filter, Fine step, Check Valves Low flow, 1 cartridge Si32-3	KVG.200.60.N201.CVL.S1

Ordering information, spare part foam

Description	Product code
FOAM KVG 200 mm, 60 mm, Foam, 20 mm, Without filter, Fine step	FOAM.KVG.200.60.N201

KENOS® KVG120



- The KVG (Kenos vacuum gripper) gripping system can be equipped with integrated COAX® cartridges or connector for external vacuum source.
- The KVG is available with different hole pattern and thickness of foam depending of the application requirements.
- Check valves require smaller vacuum pump and still maintain the vacuum level even if the whole surface of the gripper is not covered. Different recommended check valves for different porosities of handled material.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.
- FDA approved foam in silicone available as an option.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	8-9
Material	-	Al, EPDM, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Technical data, foam

Description	Unit	Value
Material	-	EPDM

Vacuum flow

Feed pressure	Air	Vacuum flow (Nl/s) at different vacuum levels (-kPa)	Max vacuum

pump / nozzle MPa	consumption per pump Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	7	24	14	10.4	6.8	3.6	2.4	2	1.4	75

Gripping force data

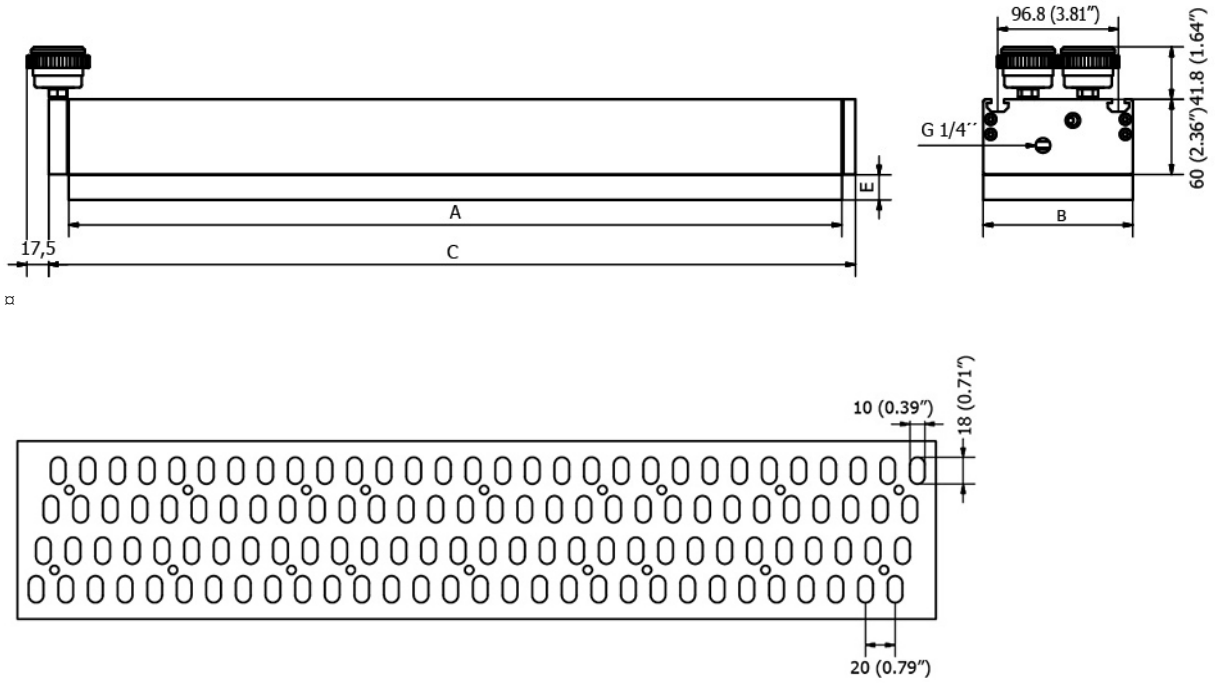
Force, N, at different vacuum levels (-kPa) , gripper with foam				
30	40	50	60	70
735	980	1225	1470	1714

Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

Values specified in data sheet are tested at:

- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}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.

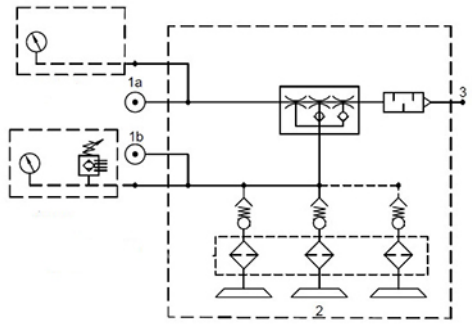
Dimensional drawing



¤

	mm [in]
A	820 [32.28"]
B	120 [4.72"]
C	847 [33.35"]
E	20 [0.79"]

Pneumatic diagram



Please note that manometer and digital vacuum switch is optional and that the filter is only valid for KVG60 version comprising foam with filter.

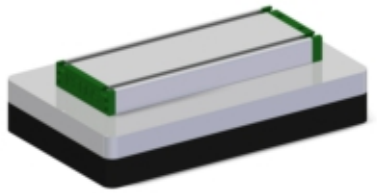
Ordering information

Description	Product code
KENOS®KVG 800 mm, 120 mm, Foam, 20 mm, Without filter, Fine step, Check Valves Low flow, 4 cartridge Si32-3, Without control, Vacuum and pressure gauge	KVG.800.120.N201.CVL.S4.X.M1

Ordering information, spare part foam

Description	Product code
FOAM KVG 800 mm, 120 mm, Foam, 20 mm, Without filter, Fine step	FOAM.KVG.800.120.N201

KENOS® KVGL



- The KVGL-S (Kenos Vacuum Gripper for Layers) gripping system can be equipped with integrated COAX cartridges or connector for external vacuum source.
- Fast change system for the foam.
- Fast change system for the foam with the help of a releasable plate
- Available in several dimension combinations to suite layers to be gripped-
- Special vacuum sensing port(s) connected to the handled object. Adding a vacuum switch and the port can be used for good-to-go signal for PLC or robot controller.
- Check valves require smaller vacuum pump and still maintain the vacuum level even if the whole surface of the gripper is not covered.
- Different recommended check valves for different porosities of handled material.
- Applications: end of line packaging, palletizing of boxes and packages.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.
- FDA approved foam in silicone available as an option.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	7-8
Material	-	Al, EPDM, SS, POM, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Technical data, foam

Description	Unit	Value
Material	-	EPDM

Vacuum flow

Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

Gripping force data

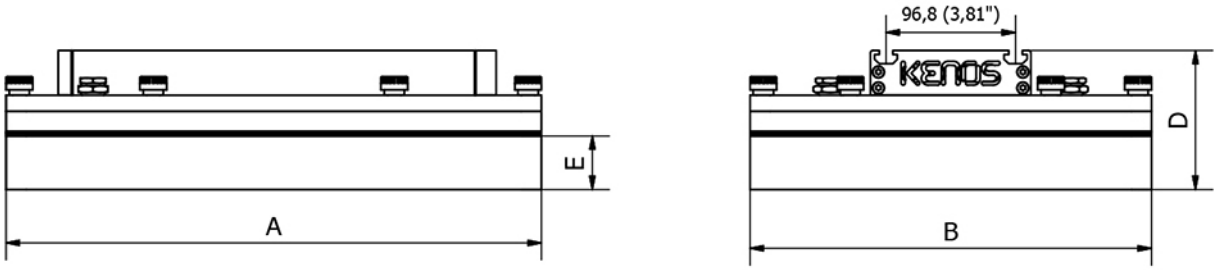
Force, N, at different vacuum levels (-kPa) , gripper with foam				
30	40	50	60	70
791	1055	1319	1583	1846

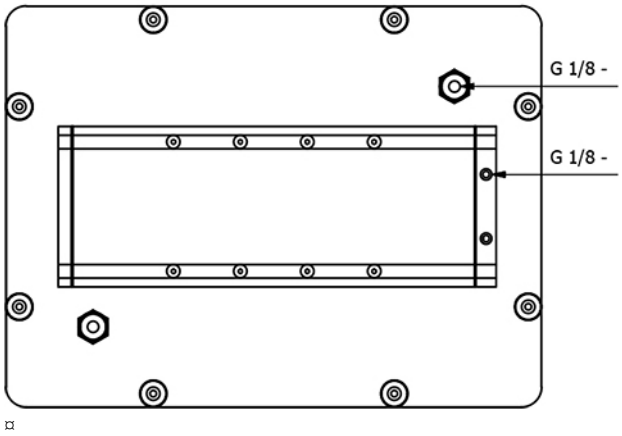
Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

Values specified in data sheet are tested at:

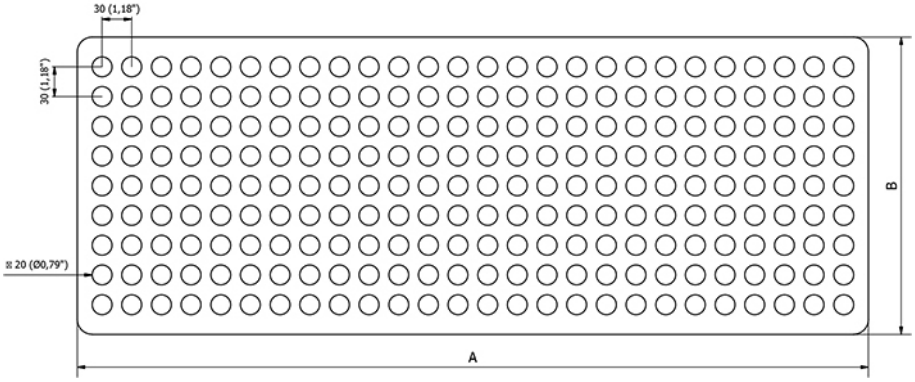
- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.

Dimensional drawing





¤



	mm [in]
A	400 [15.75'']
B	240 [9.45'']
D	104 [4.09'']
E	40 [1.57'']

Pneumatic diagram

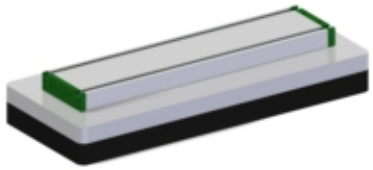
Ordering information

Description	Product code
KENOS®KVGL 400 mm, 240 mm, Foam, 40 mm, Without filter, Step 30 mm, Check Valves Low flow, 3 cartridge Si32-3,	KVGL.400.240.N405.CVL.S3

Ordering information, spare part foam

Description	Product code
FOAM KVGL 400 mm, 240 mm, Foam, 40 mm, Without filter, Step 30 mm, incl. mounting plate	FOAM.KVGL.400.240.N405.MP

KENOS® KVGL



- The KVGL-S (Kenos Vacuum Gripper for Layers) gripping system can be equipped with integrated COAX cartridges or connector for external vacuum source.
- Fast change system for the foam.
- Fast change system for the foam with the help of a releasable plate
- Available in several dimension combinations to suite layers to be gripped-
- Special vacuum sensing port(s) connected to the handled object. Adding a vacuum switch and the port can be used for good-to-go signal for PLC or robot controller.
- Check valves require smaller vacuum pump and still maintain the vacuum level even if the whole surface of the gripper is not covered.
- Different recommended check valves for different porosities of handled material.
- Applications: end of line packaging, palletizing of boxes and packages.
- Three-stage COAX® cartridge - MIDI - with extra high initial vacuum flow. Large vacuum flow in relation to energy consumption. State-of-the-art ejector technology inside.
- FDA approved foam in silicone available as an option.

Technical data

Description	Unit	Value
Feed pressure, max.	MPa	0.7
Temperature range	°C	0-50
Weight	kg	11-13
Material	-	Al, EPDM, SS, POM, NBR
Noise level	dBA	70
Connection, compressed air	-	G 1/4"

Technical data, foam

Description	Unit	Value
Material	-	EPDM

Vacuum flow

Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (Nl/s) at different vacuum levels (-kPa)								Max vacuum
MPa	Nl/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

Gripping force data

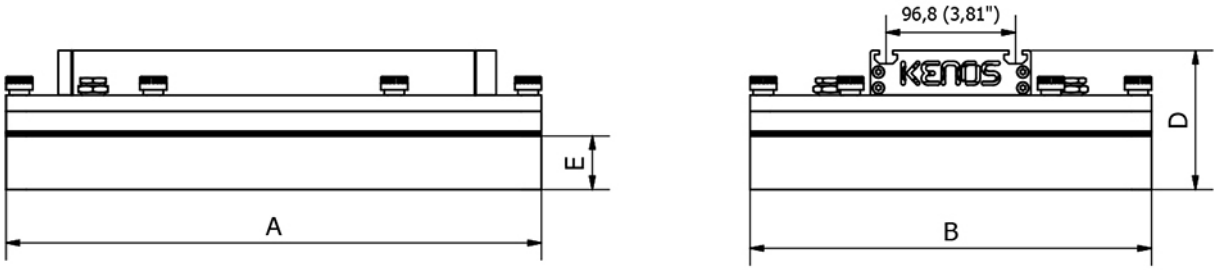
Force, N, at different vacuum levels (-kPa) , gripper with foam				
30	40	50	60	70
1253	1670	2088	2506	2923

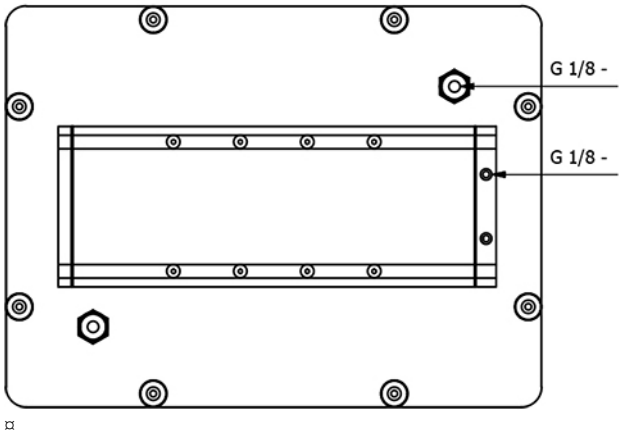
Theoretic gripping force on rigid and stable surface with completely covered module, without safety factor.

Values specified in data sheet are tested at:

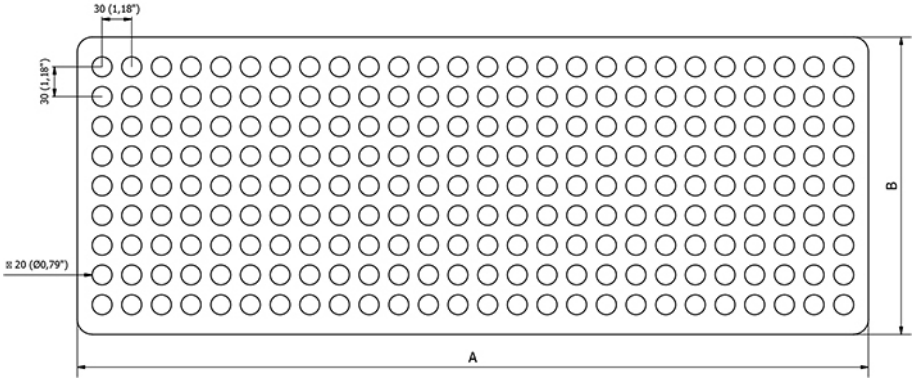
- Room temperature (20^{0}C [68^{0}F] ± 3^{0}C [5.5^{0}F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.

Dimensional drawing





¤



	mm [in]
A	600 [23.62"]
B	240 [9.45"]
D	104 [4.09"]
E	40 [1.57"]

Pneumatic diagram

Ordering information

Description	Product code
KENOS®KVGL 600 mm, 240 mm, Foam, 40 mm, Without filter, Step 30 mm, Check Valves Low flow, 3 cartridge Si32-3,	KVGL.600.240.N405.CVL.S3

Ordering information, spare part foam

Description	Product code
FOAM KVGL 600 mm, 240 mm, Foam, 40 mm, Without filter, Step 30 mm, incl. mounting plate	FOAM.KVGL.600.240.N405.MP

BONDY

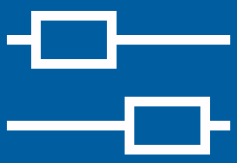
INDUSTRIAL EQUIPMENT SUPPLIER

Transmission

Handling

Motor & Gear

Vacuum Conveying



Linear

Support

See our products and solutions at

www.bondy.dk

For ordering and questions call (+45) 70 15 14 14