

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® 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

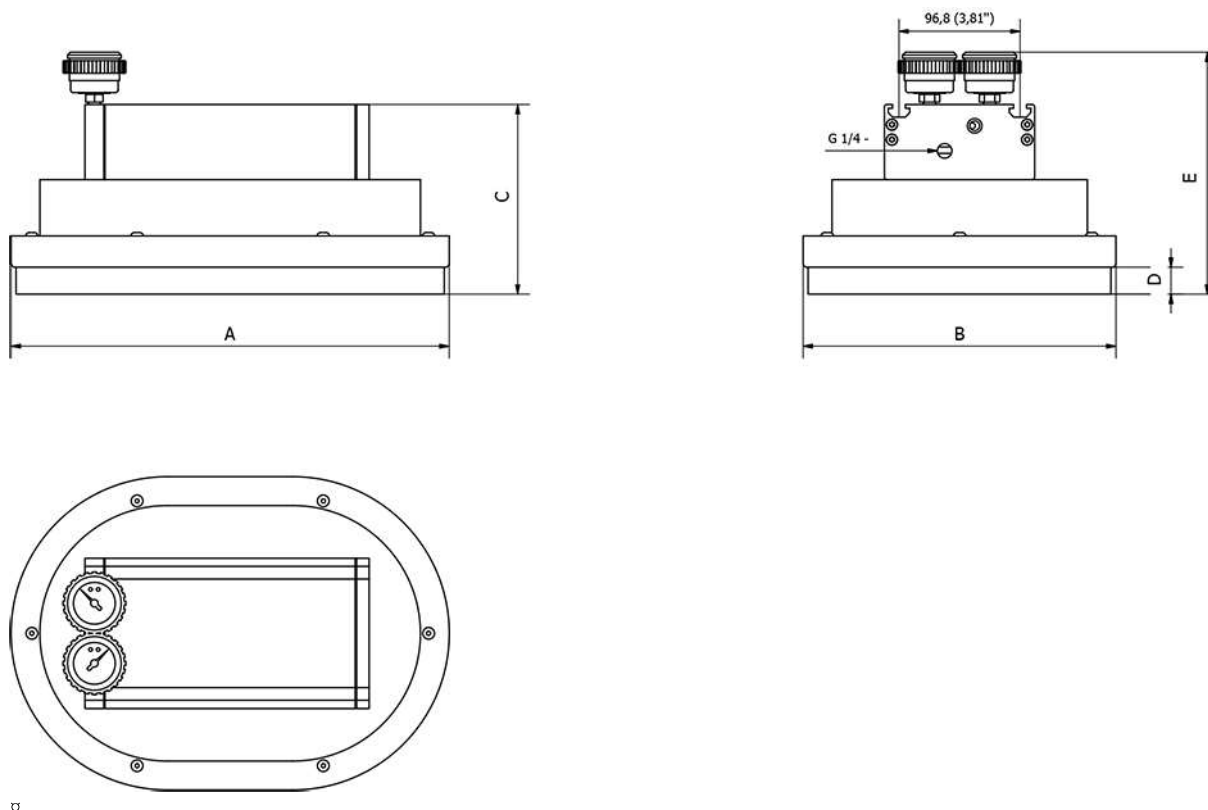
Feed pressure pump / nozzle MPa	Air consumption per pump NI/s	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum -kPa
		0	10	20	30	40	50	60	70	
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

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

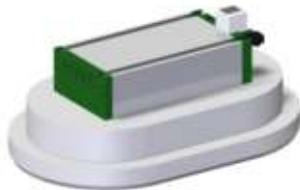
Ordering information

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

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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 suppressor	-	Diode
Indicator light		LED

Vacuum flow

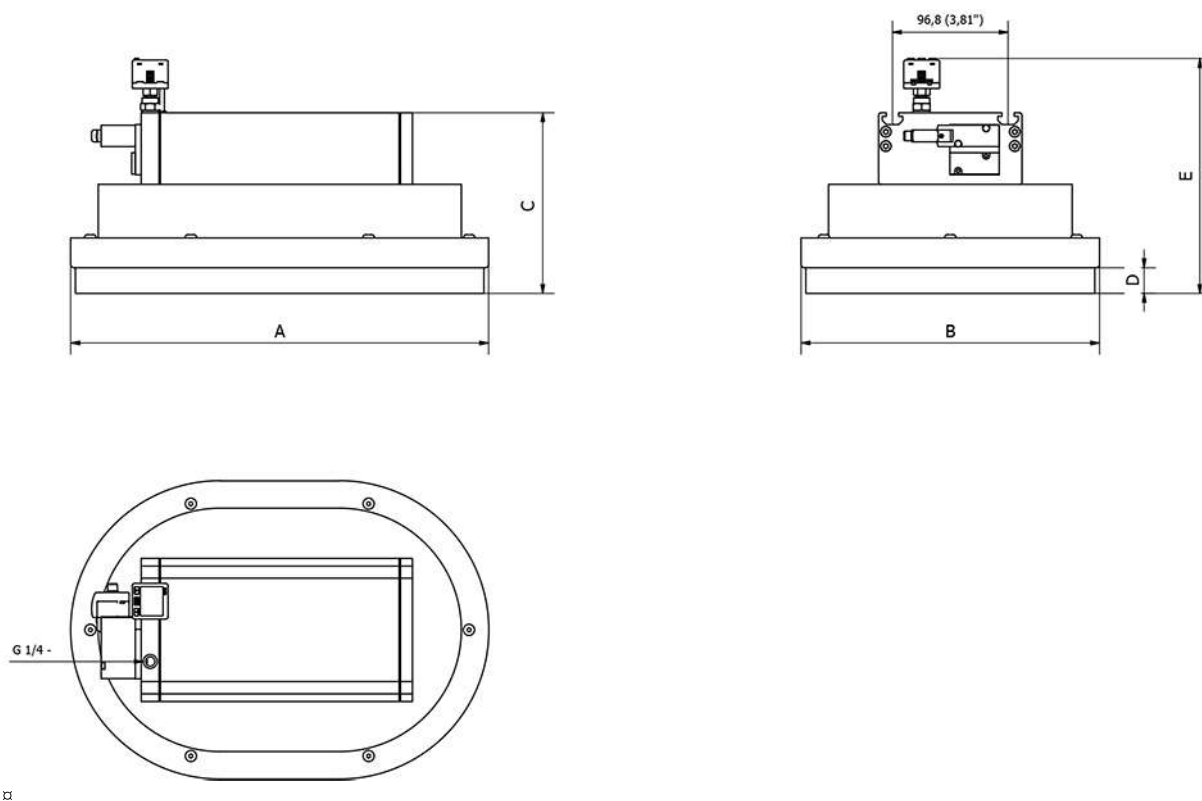
Feed pressure pump / nozzle	Air consumption per pump	Vacuum flow (NI/s) at different vacuum levels (-kPa)								Max vacuum
MPa	NI/s	0	10	20	30	40	50	60	70	-kPa
0.6	5.25	18	10.5	7.8	5.1	2.7	1.8	1.5	1.05	75

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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