# Kenos® KFG



- KFG series is a flexible solution for the handling or manipulation of products with different shapes and dimensions thanks to the use of a foam interface.
- Flow restrictor technology that is suitable when the gripper is fully covered with an even surface object. Works in any orientation and a good option if the handled object is non-leaking.
   Suitable for handling multiple lifting objects.
- 12mm thick EPDM foam used for flat surface objects where little compensation is needed.
- Two-stage COAX® cartridge MIDI with small mounting dimension for limited spaces. Large vacuum flow in relation to energy consumption. Suitable for high-volume evacuation when handling porous materials or if surface leakage is present.
- Plug&Play solution with UR cap for UR cobots.

#### Technical data

Description	Unit	Value
Feed pressure, max	MPa	0,7
Temperature range	°C	0-50
Weight	g	823
Materials (body and manifold)	-	AL, HDPE
Noise level range	dBA	73-83
Connection, compressed air	mm	6
Material foam	-	EPDM

### Vacuum flow

Feed pressure pump / nozzle	Air consumption		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	1.75	3.3	3.0	2.6	1.7	0.9	0.6	0.5	0.35	75

#### Evacuation time

Feed pressure pump / nozzle	Air consumption	I	Evacuation time (s/l) to reach different vacuum levels (-kPa)						Max vacuum
MPa	NI/s	10	20	30	40	50	60	70	-kPa
0.6	1.75	0.03	0.07	0.1	0.18	0.33	0.53	0.8	75

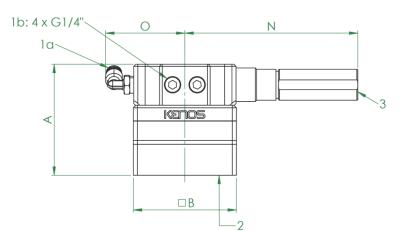
### Gripping force

Gripping force* at different vacuum levels, gripper with foam							
-kPa	10	20	30	40	50	60	70
Ν	20	39	59	79	98	118	137

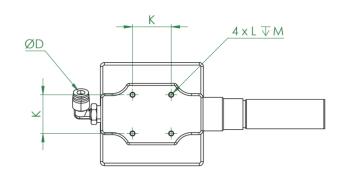
<sup>\*</sup>Theoretic gripping force at optimum feed pressure on rigid and stable surface with completely covered module, without safety factor.



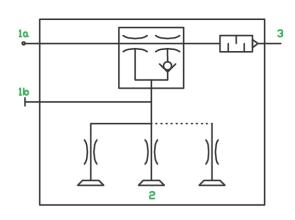
## Dimensional drawing



Description	Value mm [in]
А	59.1 [2.33"]
В	120 [4.72"]
D	6 [0.24"]
K	30 [1.18"]
L	M4
Μ	6 [0.24"]
N	134 [5.28"]
Ο	70 [2.76"]



# Pneumatic diagram



Pos.	Description
1a	Compressed air supply for vacuum
1b	Compressed air supply for blow-off / Vacuum sensing / Vacuum distribution
2	Vacuum
3	Exhaust

## Ordering information – Current configuration

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Description	Product code KFG.120.120.N121.FR08.S1.32-2.X
Dimensions	Square size 120x120mm
Foam type	Standard EPDM foam
Foam thickness	12mm foam
Step	Standard step
Technology	Flow reduction 0,8mm
Vacuum source	1 cartridge Si32-2
Options	Without fixing interface

## Ordering information, spare part foam

Description - Quantity: 3 pieces

Product code



FOAM.KFG.120.120.N121

# Values specified in this data sheet are tested at (unless otherwise stated): • Room temperature (20°C [68°F] ± 3°C [5.5°F]).

- Standard atmosphere (101.3 [29.9 in Hg]  $\pm$  1.0 kPa [0.3 in Hg]).
- Relative humidity 20-70%.
- Compressed air quality, DIN ISO 8573-1 class 4.

