

# 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	888
Material	-	PA, POM, EPDM, SS, NBR, PVC, HDPE
Noise level	dBA	70
Connection, compressed air	-	G 1/8"
Material foam	-	EPDM

## Technical data, monitoring

Description	Unit	Value
Fluid	-	Air/Non-corrosive gas/Non-flammable gas
Rated pressure range	kPa	0 to -101
Extension analog output range	kPa	10.1 to 0
Proof pressure	kPa	500
Power supply voltage effect	VDC	12 to 24 10 %, Ripple (p-p) 10 % or less (with reverse connection protection)
Current consumption	mA	15 or less
Output specifications	V	1 to 5 (within rated pressure range), 0.6 to 1 (within extension analogue output range)
Accuracy (Ambient temperature at 25 °C)	% F.S.	±2 (within rated pressure range), ±5 (within extension analogue output range)
Linearity	% F.S.	±0.4
Repeatability	% F.S.	±0.2
Power supply voltage effect	% F.S.	±0.8
Enclosure	-	IP40
Operating temperature range	°C	Operating: 0 to 50, Stored: -20 to 70 (No freezing or condensation)
Operating humidity range	%RH	Operating/Stored: 35 to 85 (No condensation)
Withstand voltage	VAC	1000 (in 50 / 60 Hz) for 1 minute between terminals and housing
Insulation resistance	MΩ	50 or more (500 V DC measured via megohmmeter) between terminals and housing
Temperature characteristics	% F.S.	±2 (25 °C reference)
Sensor cable	-	Oilproof heavy-duty vinyl cable (ellipse), 3 cores, 2.7 x 3.2, Conductor area: 0.15 mm <sup>2</sup> , Insulator O.D.: 0.9 mm
Standards	-	CE, UL/CSA (E216656), RoHS
Electrical connection	-	Connector, M8 3pin, Male

### 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 <sup>2</sup>	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
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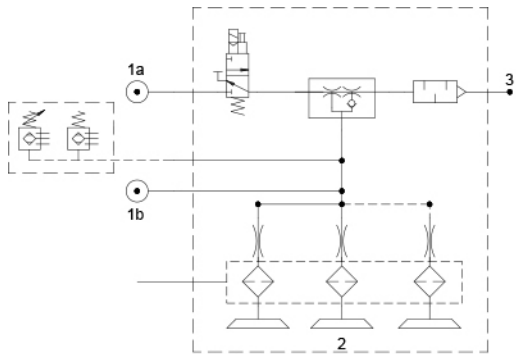
### Vacuum flow

Feed pressure pump / nozzle	Air Consumption per pump/nozzle	Vacuum flow (NI/s) at different vacuum levels (-kPa)									Max vacuum
MPa	NI/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

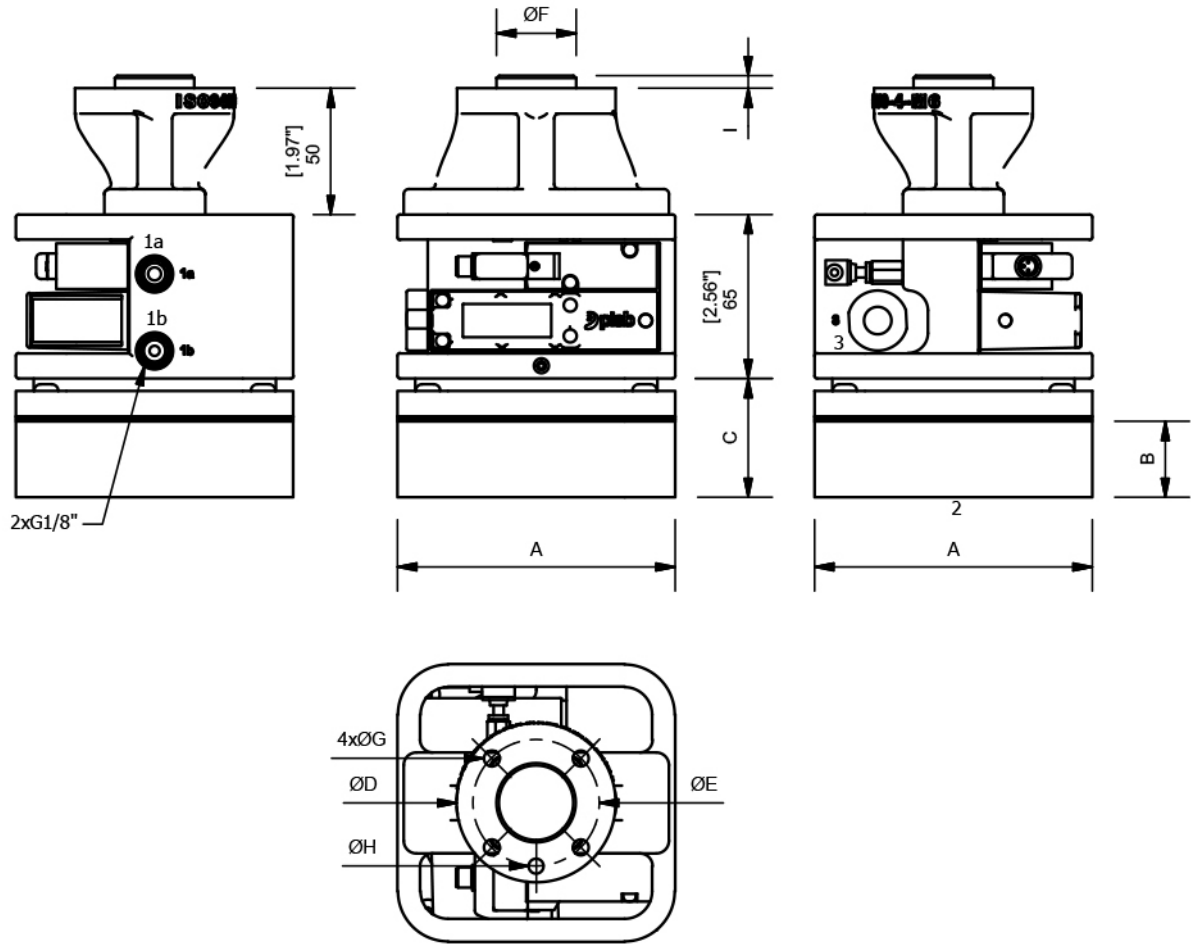
Force, N, at different vacuum levels (-kPa)						
30	40	50	60	70	80	90
81	109	136	163	190	217	244

Dimensional drawing

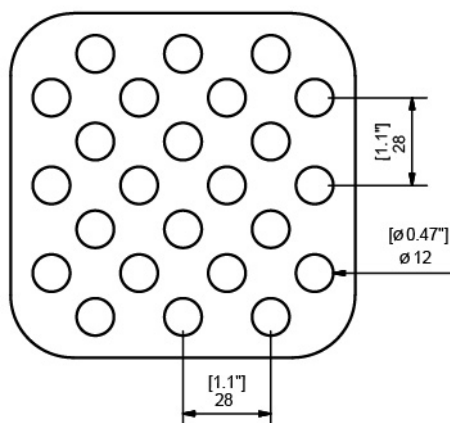


A	110 [4,33"]
B	30 [1,18"]
C	47 [1,85"]
D	63 [2,48"]
E	50 [1,97"]
F	31,5 [1,24"]
G	6,4 [0,25"]
H	6 [0,24"]
I	5 [0,20"]

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



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### 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., Analog 1-5V sensor, ISO 9409-1-50-M6	KCS.U1.Q110.N301.110.FR6.SX421.V1.M A.50

### 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.
Y cable UR-KCS M8 8p V1/V3-MA 250mm (included in UR config)	0212281