CUPS BASED ON BERNOULLI'S THEOREM

Bernoulli's theorem explains many phenomena, such as the lifting of a plane's wing or of a light disc in front of a tube end from which air flows out quickly.

This apparently paradoxical phenomenon is exploited for manufacturing vacuum gripping systems (vacuum cups) and handling, with no contact, fragile objects, such as semiconductor plates, silica discs, solar cells, precious metal foils, films and whatever needs to be handled with the greatest care.

Our cups based on Bernoulli's principle are made with anodised aluminium, with stainless steel centre thrust disc.

The antistatic silicon spacers, located on the cup gripping plane, prevent transverse movements of the gripped object.

The compressed air supply connections can be axial and radial and the quick coupler for the flexible pipe is included in the package.
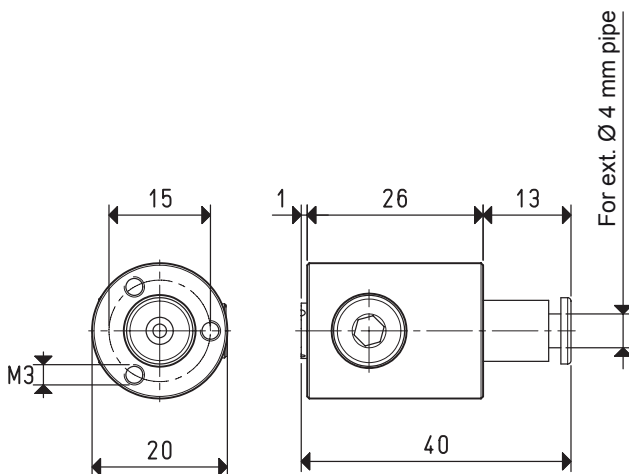
The unused holes are closed with brass threaded caps.

On the rear part of the cup there are 3 or 4 threaded holes for fixing it to the machine.
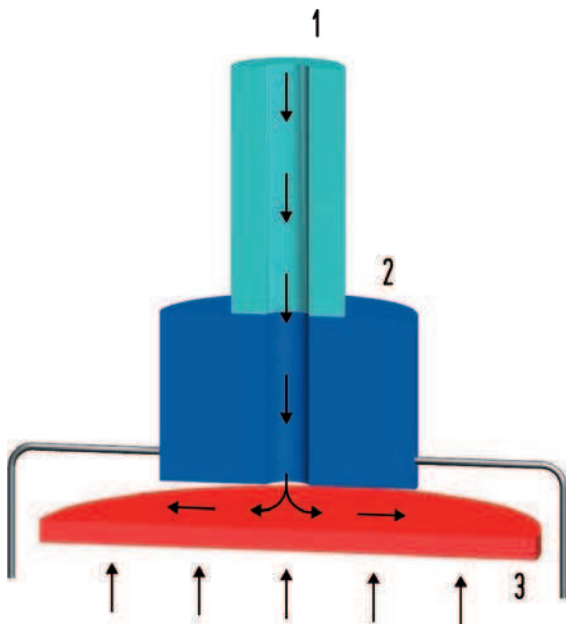
BERNOULLI'S THEOREM
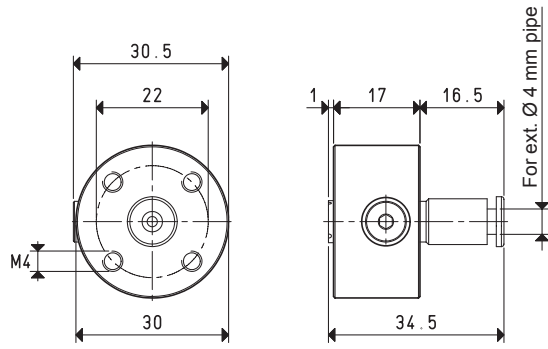Lifting of a light disc in front of a tube end from which air flows out at high speed:
**1)** Air duct
2) Body of the device
3) Disc to be lifted

Art.	max. Force	Transversal Force	Operating pressure	Air consumption	Noise level	Weight	Included coupler	Spare spacer
	g	g	bar (g)	Nl/s	dB(A)	g	art.	art.
BEC 20	220	145	5	2.3	66	21	00 BEC 13	00 BEC 10

Conversion ratio: inch = $\dfrac{mm}{25.4}$; pounds = $\dfrac{g}{453.6} = \dfrac{Kg}{0.4536}$
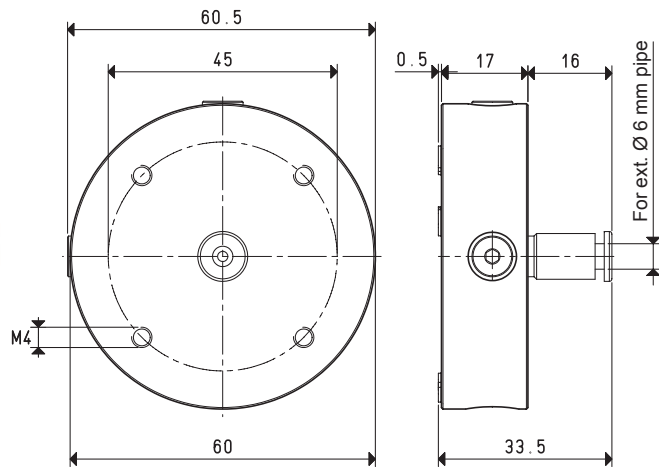
3D drawings available at www.vuototecnica.net

CUPS BASED ON BERNOULLI'S THEOREM

Art.	max. Force	Transversal Force	Operating pressure	Air consumption	Noise level	Weight	Included coupler	Spare spacer
	g	g	bar (g)	Nl/s	dB(A)	g	art.	art.
BEC 30	380	250	5	2.5	72	31	00 BEC 13	00 BEC 10
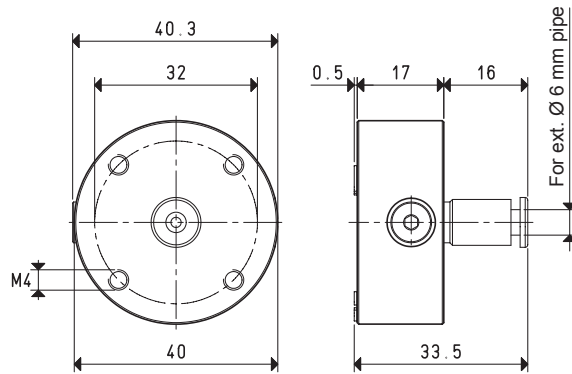
Art.	max. Force	Transversal Force	Operating pressure	Air consumption	Noise level	Weight	Included coupler	Spare space
	g	g	bar (g)	Nl/s	dB(A)	g	art.	art.
BEC 40	680	450	5	3.0	74	51	00 BEC 14	00 BEC 09

Art.	max. Force	Transversal Force	Operating pressure	Air consumption	Noise level	Weight	Included coupler	Spare space
	g	g	bar (g)	Nl/s	dB(A)	g	art.	art.
BEC 60	900	600	5	4.4	75	121	00 BEC 14	00 BEC 09

Conversion ratio: inch = $\dfrac{mm}{25.4}$; pounds $= \dfrac{g}{453.6} = \dfrac{Kg}{0.4536}$