

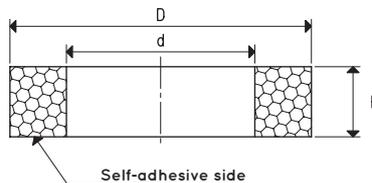
ROUND FLAT FOAM RUBBER VACUUM CUPS WITH SUPPORTS

These foam rubber cups are made with a special compound called GERANIUM, with a density that allows them to grip even uneven and very rough surfaces maintaining their elasticity also after many working cycles. They are provided with self-adhesive side for a quick fixing to their support. This series of cups has been designed for handling loads with raw or very rough surfaces (sawn, bush-hammered or flamed marble, textured, non-slip or profiled metal sheets, striped Plexiglass, raw cement manufactures, garden tiles with fret, etc.) and in all those cases in which traditional cups cannot be used.

In case of lubricated gripping surfaces, we recommend using NF neoprene foam rubber. The working temperature range is between -40°C and +80°C for OF GERANIUM foam rubber and between -20°C and +80°C for NF neoprene.

Their supports are made with anodised aluminium and are provided with a threaded hole in the centre for fastening them to the automation. The larger ones, on the other hand, have a side threaded hole for vacuum connection.

For the spare part, all you have to do is request the self-adhesive foam rubber cup indicated in the table in the required compound.

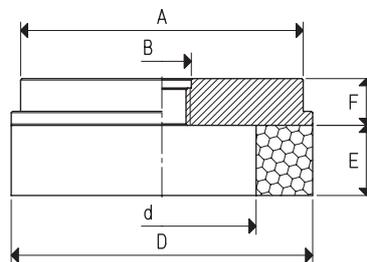
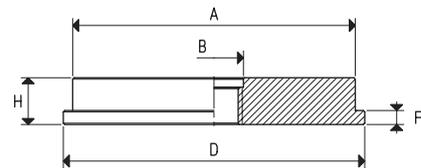


VACUUM CUPS

Item	Force Kg	Compounds available	Volume cm ³	D Ø	d Ø	E
01 42 15 *	0.78		4.7	40	20	15
01 64 15 *	3.14		18.8	64	40	15
01 92 15 *	8.5		48.2	92	64	15

SUPPORTS

Item	A Ø	B Ø	D Ø	F	H	Support material	For vacuum cup Weight item	g
00 08 147	40	M12	40	--	10	aluminium	01 42 15	32.8
00 08 118	40	G1/4"	40	--	10	aluminium	01 42 15	32.8
00 08 32	60	M12	64	3	10	aluminium	01 64 15	80.6
00 08 424	60	G1/4"	64	3	10	aluminium	01 64 15	80.6
00 08 33	88	M12	92	3	11	aluminium	01 92 15	188.9
00 08 123	88	G3/8"	92	3	11	aluminium	01 92 15	186.1



VACUUM CUPS WITH SUPPORT

Item	Force Kg	Compounds available	A Ø	B Ø	D Ø	d Ø	E	F	Vacuum cup item	Support item	Weight g
08 42 15 *	0.78		40	M12	40	20	15	10	01 42 15	00 08 147	35.6
08 42 15 1/4" *	0.78		40	G1/4"	40	20	15	10	01 42 15	00 08 118	35.6
08 64 15 *	3.14		60	M12	64	40	15	10	01 64 15	00 08 32	86.5
08 64 15 1/4" *	3.14		60	G1/4"	64	40	15	10	01 64 15	00 08 424	86.5
08 92 15 *	8.5		88	M12	92	64	15	11	01 92 15	00 08 33	199.1
08 92 15 3/8" *	8.5		88	G3/8"	92	64	15	11	01 92 15	00 08 123	196.3

* Complete the code indicating the compound: = geranium foam rubber; = neoprene foam rubber

Note: Cups in special compounds, listed on page 31 can be provided upon specific request in minimum quantities to be defined in the order.

The force of the vacuum cups indicated in the table represents 1/3 of the value of the theoretical force calculated at a level of vacuum of -75 KPa and a factor of safety 3.

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

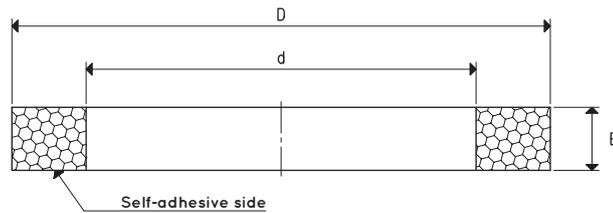
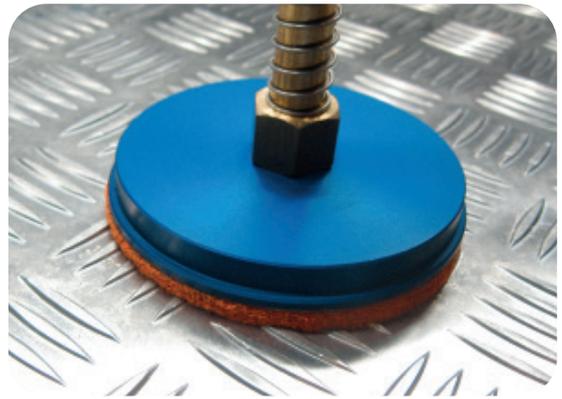
inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.134



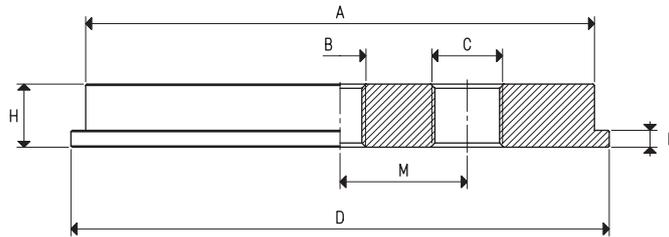
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3D drawings are available on vuotecnica.net



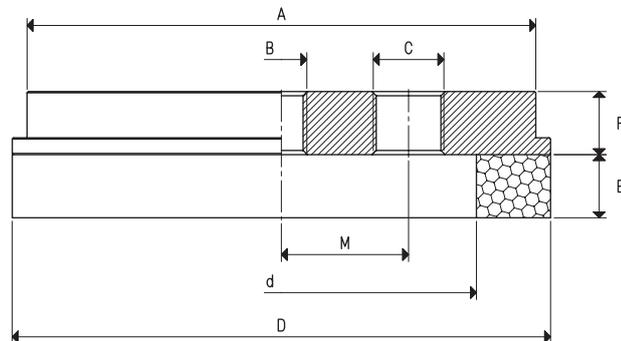
VACUUM CUPS

Item	Force Kg	Compounds available	Volume cm ³	D Ø	d Ø	E
01 127 15 *	16,61	OF/NF	99.6	127	92	15
01 180 15 *	38.50	OF/NF	230.7	180	140	15
01 220 15 *	63.60	OF/NF	381.5	220	180	15



SUPPORT

Item	A Ø	B Ø	C Ø	D Ø	F	H	M	Support material	For vacuum cup item	Weight Kg
00 08 107	120	M12	G3/8"	127	4	15	30	aluminium	01 127 15	0.48
00 08 58	160	M12	G3/8"	180	5	12	60	aluminium	01 180 15	0.74



VACUUM CUPS WITH SUPPORT

Item	Force Kg	Compounds available	A Ø	B Ø	C Ø	D Ø	d Ø	E	F	M	Vacuum cup item	Support item	Weight Kg
08 127 15 *	17.5	OF/NF	120	M12	G3/8"	127	92	15	15	30	01 127 15	00 08 107	0.49
08 180 15 *	38.5	OF/NF	160	M12	G3/8"	180	140	15	12	60	01 180 15	00 08 58	0.78

* Complete the code indicating the compound: **OF** = geranium foam rubber; **NF** = neoprene foam rubber

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Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

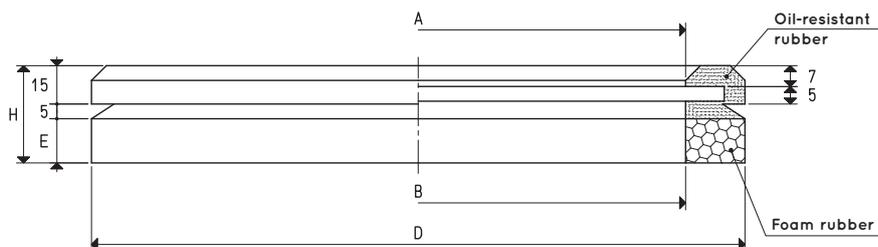
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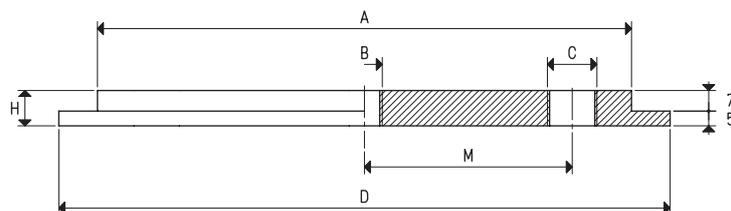
The detail that sets these cups apart from the previously described cups is its lip, made of nitrile rubber, combined with foam rubber in the GERANIUM compound or neoprene compound. This shape allows for gripping on very rough or even grooved surfaces. They are especially suitable for gripping and handling cement objects with surfaces finished with fret, marble and bush-hammered or flamed granites.

The working temperature range is between -40°C and +80°C for OF GERANIUM foam rubber and between -20°C and +80°C for NF neoprene. The support is made with anodised aluminium and is provided with a threaded hole in the centre for fastening them to the automation, and a side threaded hole for vacuum connection. The cup is cold fitted on it without the use of adhesives. To replace, simply request the single vacuum cup indicated in the table in the desired compound.



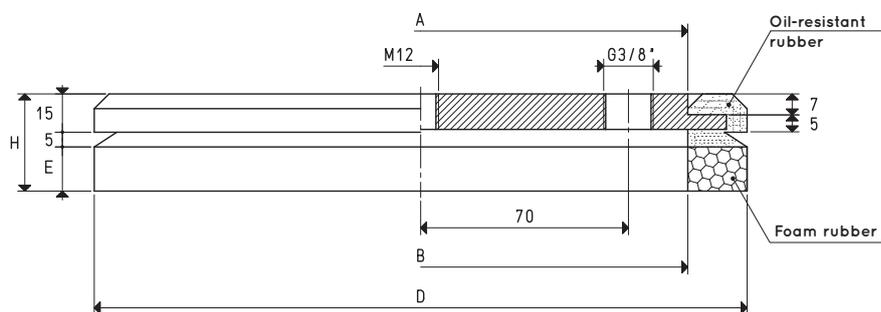
VACUUM CUPS

Item	Force Kg	Compound	Volume cm ³	A Ø	B Ø	D Ø	E	H
01 220 10 OF	63.6	⊕A + ⊕OF	585.0	180	180	220	15	35
01 220 10 NF	63.6	⊕A + ⊕NF	585.0	180	180	220	15	35
01 220 10 A	63.6	⊕A	203.4	180	180	220	---	20



SUPPORT

Item	A Ø	B Ø	C Ø	D Ø	H	M	Support material	For vacuum cup item	Weight Kg
00 08 37	180	M12	G3/8"	206	12	70	aluminium	01 220 10	0.95



VACUUM CUPS WITH SUPPORT

Item	Force Kg	Compound	A Ø	B Ø	D Ø	E	H	Vacuum cup item	Support item	Weight Kg
08 220 10 OF	63.6	⊕A + ⊕OF	180	180	220	15	35	01 220 10 OF	00 08 37	0.98
08 220 10 NF	63.6	⊕A + ⊕NF	180	180	220	15	35	01 220 10 NF	00 08 37	0.97
08 220 10 A	63.6	⊕A	180	180	220	---	20	01 220 10 A	00 08 37	0.96

Compound: ⊕A + ⊕OF = oil-resistant rubber + geranium foam rubber; ⊕A + ⊕NF = oil-resistant rubber + neoprene foam rubber; ⊕A = oil-resistant rubber

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Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch = $\frac{\text{mm}}{25.4}$; pounds = $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

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