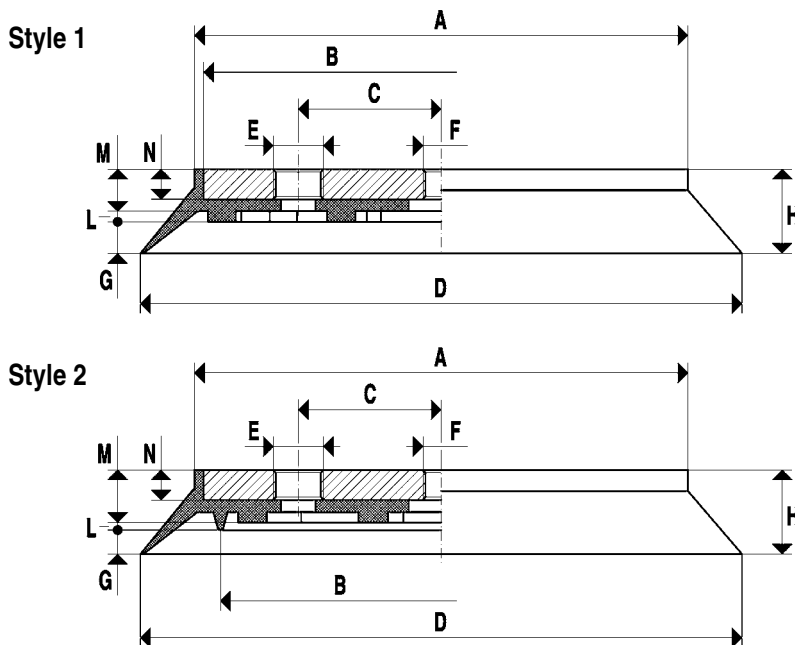


# Vacuum cups, vulcanised - for heavy loads



This series of cups has been developed for lifting and handling big loads.

They are vulcanized on a steel support, and have a central threaded hole for the fastening to the machine; moreover they have a side hole for the connection to vacuum.

They have a labyrinth graved face made in the same compound as the cup itself, which allows also the grip of glasses, marbles or thin and breakable plates in general, without bending in the grip point.

The shape of their lip and the choice of the different compounds which they are made with, enables the grip on irregular and corrugated surfaces.

The vacuum cups style 2 besides having the same features as the aforementioned cups, also has an internal upright lip which enables the grip also on particularly rough surfaces such as embossed plates or plates with fret, sawn marbles and granites, rough wood boards, concrete prefabricated etc.

## Rubber materials:

- NBR** 60°Shore (+80°C)
- Natural Rubber** 45°Shore (+60°C)
- Silicone** 45°Shore (+250°C)

## Holding forces

Holding forces have been calculated in kg for 75% vacuum (-750 mbars) and triple safety

Art.	Force	A	B	C	D	E	F	G	L	M	N	H
Style 1	Kg.	Ø	Ø	Ø	Ø	Ø	Ø					
13.110.046	23.7	74	70	26.0	110	1/4"	M12	10	2	14	10	26
13.150.047	45.0	115	110	40.0	150	3/8"	M12	10	2	14	10	26
13.200.048	78.5	164	160	47.5	200	3/8"	M12	11	3	14	10	28
13.250.049	122.6	214	210	72.5	250	3/8"	M12	11	3	14	10	28
13.300.050	176.6	266	260	89.0	300	1/2"	M16	11	5	15	10	31
13.350.051	240.4	316	310	89.0	350	1/2"	M16	11	5	15	10	31
Style 2												
13.110.040	15.5	74	68	26.0	110	1/4"	M 12	7	3	16	10	26
13.150.041	22.8	115	105	40.0	150	3/8"	M 12	7	3	16	10	26
13.200.042	45.0	164	148	47.5	200	3/8"	M 12	8	3	17	10	28
13.250.043	78.5	214	196	72.5	250	3/8"	M 12	8	3	17	10	28
13.300.044	122.6	266	248	89.0	300	1/2"	M 16	10	3	18	10	31
13.350.045	176.6	316	298	89.0	350	1/2"	M 16	10	3	18	10	31

# FSV.01



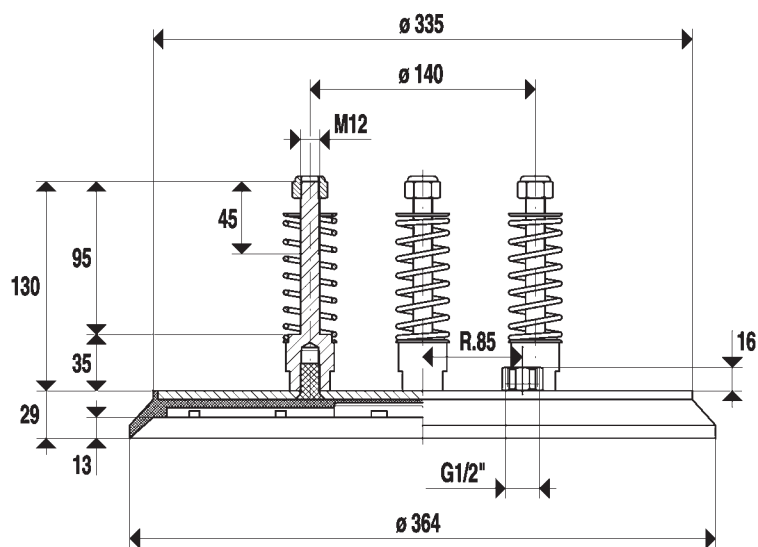
Morali Produktionstechnik GmbH

Schwarzwaldstraße 4/2  
D-78628 Rottweil

Telefon +49 741- 17 52 60- 0  
Telefax +49 741- 17 52 60- 29

e-Mail: [info@morali-gmbh.de](mailto:info@morali-gmbh.de)  
WEB: [www.morali-gmbh.de](http://www.morali-gmbh.de)

# Vacuum cups, vulcanised - for heavy loads



This cup is suitable to handle extremely heavy loads.

It is vulcanized on a steel support; it has a labyrinth graded face made in the same compound as the cup itself.

Four steel pins are integral to the support, these pins are equipped with four self-locking nuts which guide and fasten the cup to the machine, moreover they have a threaded sleeve for the connection to vacuum.

This cup is also equipped with four springs, to cushion the impact of the cup with the load to be lifted.

Also this cup is available in different compounds and in different grades of hardness, as the ones previously described.

Art.	Force Kg.
15.364.036	254.3

## Holding forces

Holding forces have been calculated in kg for 75% vacuum (-750 mbars) and triple safety