

Tabelle über Hebekraft

Table of lifting force

Saugerhebekraft in Abhängigkeit von Vakuumhöhe und Saugerdurchmesser

Lifting force of vacuum cups depending on vacuum degree and cup diameter

*Effektiver Sauger-Ø Effective cup-Ø	10%	20%	30%	40%	50%	60%	70%	75%	80%	90%	100%
5	0,020	0,039	0,059	0,079	0,098	0,118	0,137	0,147	0,157	0,177	0,196
10	0,079	0,157	0,236	0,314	0,393	0,471	0,550	0,589	0,628	0,707	0,785
15	0,177	0,353	0,530	0,707	0,884	1,060	1,237	1,325	1,414	1,590	1,767
20	0,314	0,628	0,942	1,257	1,571	1,885	2,199	2,356	2,513	2,827	3,142
25	0,491	0,982	1,473	1,963	2,454	2,945	3,436	3,682	3,927	4,418	4,909
30	0,707	1,414	2,121	2,827	3,534	4,241	4,948	5,301	5,655	6,362	7,069
35	0,962	1,924	2,886	3,848	4,811	5,773	6,735	7,216	7,697	8,659	9,621
40	1,257	2,513	3,770	5,027	6,283	7,540	8,796	9,425	10,053	11,310	12,566
45	1,590	3,181	4,771	6,362	7,952	9,543	11,133	11,928	12,723	14,314	15,904
50	1,963	3,927	5,890	7,854	9,817	11,781	13,744	14,726	15,708	17,671	19,635
55	2,376	4,752	7,127	9,503	11,879	14,255	16,631	17,819	19,007	21,382	23,758
60	2,827	5,655	8,482	11,310	14,137	16,965	19,792	21,206	22,619	25,447	28,274
65	3,318	6,637	9,955	13,273	16,592	19,910	23,228	24,887	26,546	29,865	33,183
70	3,848	7,697	11,545	15,394	19,242	23,091	26,939	28,863	30,788	34,636	38,485
75	4,418	8,836	13,254	17,671	22,089	26,507	30,925	33,134	35,343	39,761	44,179
80	5,027	10,053	15,080	20,106	25,133	30,159	35,186	37,699	40,212	45,239	50,265
85	5,675	11,349	17,024	22,698	28,373	34,047	39,722	42,559	45,396	51,071	56,745
90	6,362	12,723	19,085	25,447	31,809	38,170	44,532	47,713	50,894	57,256	63,617
95	7,088	14,176	21,265	28,353	35,441	42,529	49,618	53,162	56,706	63,794	70,882
100	7,854	15,708	23,562	31,416	39,270	47,124	54,978	58,905	62,832	70,686	78,540
105	8,659	17,318	25,977	34,636	43,295	51,954	60,613	64,943	69,272	77,931	86,590
110	9,503	19,007	28,510	38,013	47,517	57,020	66,523	71,275	76,027	85,530	95,033
115	10,387	20,774	31,161	41,548	51,934	62,321	72,708	77,902	83,095	93,482	103,869
120	11,310	22,619	33,929	45,239	56,549	67,858	79,168	84,823	90,478	101,788	113,097
125	12,272	24,544	36,816	49,087	61,359	73,631	85,903	92,039	98,175	110,447	122,718
130	13,273	26,546	39,820	53,093	66,366	79,639	92,913	99,549	106,186	119,459	132,732
135	14,314	28,628	42,942	57,256	71,569	85,883	100,197	107,354	114,511	128,825	143,139
140	15,394	30,788	46,181	61,575	76,969	92,363	107,757	115,454	123,150	138,544	153,938
145	16,513	33,026	49,539	66,052	82,565	99,078	115,591	123,847	132,104	148,617	165,130
150	17,671	35,343	53,014	70,686	88,357	106,029	123,700	132,536	141,372	159,043	176,715
155	18,869	37,738	56,608	75,477	94,346	113,215	132,084	141,519	150,954	169,823	188,692
160	20,106	40,212	60,319	80,425	100,531	120,637	140,743	150,796	160,850	180,956	201,062
165	21,382	42,765	64,147	85,530	106,912	128,295	149,677	160,368	171,060	192,442	213,825
170	22,698	45,396	68,094	90,792	113,490	136,188	158,886	170,235	181,584	204,282	226,980
175	24,053	48,106	72,158	96,211	120,264	144,317	168,370	180,396	192,423	216,475	240,528
180	25,447	50,894	76,341	101,788	127,235	152,681	178,128	190,852	203,575	229,022	254,469
185	26,880	53,761	80,641	107,521	134,401	161,282	188,162	201,602	215,042	241,922	268,803
190	28,353	56,706	85,059	113,411	141,764	170,117	198,470	212,647	226,823	255,176	283,529
195	29,865	59,730	89,594	119,459	149,324	179,189	209,053	223,986	238,918	268,783	298,648
200	31,416	62,832	94,248	125,664	157,080	188,496	219,911	235,619	251,327	282,743	314,159
210	34,636	69,272	103,908	138,544	173,180	207,816	242,452	259,770	277,088	311,725	346,361
220	38,013	76,027	114,040	152,053	190,066	228,080	266,093	285,100	304,106	342,119	380,133
230	41,548	83,095	124,643	166,190	207,738	249,285	290,833	311,607	332,381	373,928	415,476
240	45,239	90,478	135,717	180,956	226,195	271,434	316,673	339,292	361,911	407,150	452,389
250	49,087	98,175	147,262	196,350	245,437	294,524	343,612	368,155	392,699	441,786	490,874
260	53,093	106,186	159,279	212,372	265,465	318,557	371,650	398,197	424,743	477,836	530,929
270	57,256	114,511	171,767	229,022	286,278	343,533	400,789	429,416	458,044	515,300	572,555
280	61,575	123,150	184,726	246,301	307,876	369,451	431,027	461,814	492,602	554,177	615,752
290	66,052	132,104	198,156	264,208	330,260	396,312	462,364	495,390	528,416	594,468	660,520
300	70,686	141,372	212,058	282,743	353,429	424,115	494,801	530,144	565,487	636,173	706,858



Hinweise:

- Der effektive Saugerdurchmesser ist kleiner als der Lippendurchmesser!
- Tabellenwerte in kg entsprechen der theoretischen Abreißkraft.
- Mindestsicherheit ist 2fach, also kg dividiert durch 2 ergibt die Tragkraft pro Sauger.

- The effective cup diameter is smaller than the lip diameter!
- Table values in kg corresponds the theoretical pull-off strength.
- Minimum level is twice, this means that kg divided by factor 2 results the lifting per vacuum cup.

Notes: