

VUS 3

$$V_{\text{max}} = 9200 \text{ rpm}$$

Rohrdurchmesser mit Hohlrad:

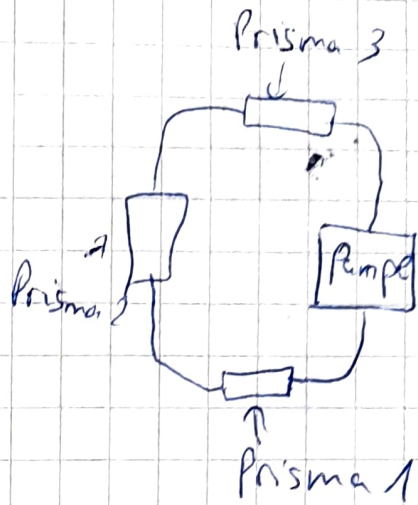
22 rpm: 2470 rpm

Bei:

$$30^\circ: f_{\text{max}}: 79 \text{ Hz} \quad f_{\text{mean}}: 49 \text{ Hz}$$

$$15^\circ: f_{\text{max}}: 0 \text{ Hz} \quad f_{\text{mean}}: 0 \text{ Hz}$$

$$45^\circ: f_{\text{max}}: 118 \text{ Hz} \quad f_{\text{mean}}: 79 \text{ Hz}$$



~~3700 rpm~~

$$3370 \text{ rpm: } 30^\circ: f_{\text{max}}: 141 \text{ Hz} \quad f_{\text{mean}}: 85 \text{ Hz}$$

$$15^\circ: f_{\text{max}}: 95 \text{ Hz} \quad f_{\text{mean}}: 61 \text{ Hz}$$

$$45^\circ: f_{\text{max}}: 214 \text{ Hz} \quad f_{\text{mean}}: 134 \text{ Hz}$$

$$4060 \text{ rpm: } 30^\circ: f_{\text{max}}: 193 \text{ Hz} \quad f_{\text{mean}}: 110 \text{ Hz}$$

$$15^\circ: f_{\text{max}}: 121 \text{ Hz} \quad f_{\text{mean}}: 73 \text{ Hz}$$

$$45^\circ: f_{\text{max}}: 330 \text{ Hz} \quad f_{\text{mean}}: 195 \text{ Hz}$$

$$5080 \text{ rpm: } 30^\circ: f_{\text{max}}: 311 \text{ Hz} \quad f_{\text{mean}}: 171 \text{ Hz}$$

$$15^\circ: f_{\text{max}}: 206 \text{ Hz} \quad f_{\text{mean}}: 110 \text{ Hz}$$

$$45^\circ: f_{\text{max}}: 527 \text{ Hz} \quad f_{\text{mean}}: 317 \text{ Hz}$$

$$6000 \text{ rpm: } 30^\circ: f_{\text{max}}: 477 \text{ Hz} \quad f_{\text{mean}}: 269 \text{ Hz}$$

$$15^\circ: f_{\text{max}}: 275 \text{ Hz} \quad f_{\text{mean}}: 146 \text{ Hz}$$

$$45^\circ: f_{\text{max}}: 783 \text{ Hz} \quad f_{\text{mean}}: 464 \text{ Hz}$$

Laminar Rohr:

	30°	15°	45°
3280 rpm			
f_{\max} in Hz	284	167	466
f_{mean} in Hz	159	98	283 281
4030 rpm			
f_{\max} in Hz	415	232	703
f_{mean} in Hz	220	134	639
5010 rpm			
f_{\max} in Hz	655	373	1074
f_{mean} in Hz	342	195	647
6000 rpm			
f_{\max} in Hz	937 937	572	1755
f_{mean} in Hz	507	293	1050
5510			
f_{\max} in Hz	882	558	1478
f_{mean} in Hz	464	269	879

großes Rohr

	30°	15°	45°
2930 rpm			
f _{max} in Hz	68	0	95
f _{mean} in Hz	49	0	61
4030			
"	106	81	162
"	73	49	110
5000 rpm			
"	163	104	253
"	98	61	159
6000 rpm			
"	251	138	382
"	146	85	232
6600			
"	309	171	471
"	183	98	293

Messung 2:

70% vom max rpm (real 6400 rpm)

$\text{Loss} \text{ in } \mu\text{s}$ Loss in μs	$F_{\text{max in } \mu\text{s}}$	$F_{\text{mean in } \mu\text{s}}$	$V \text{ in } \frac{\text{cm}}{\text{s}}$	$L \text{ in } \frac{\text{m}^2}{\text{s}}$
12	0	0	0	810
12,5	0	0	0	1823
13	312*	159 159	34,5	2742
13,5	395	208	45,1	77 61
14	446	256	53,1	71
14,5	494	281	63,7	80
15	509	305	66,3	87
15,5	498	293	63,7	101
16	461	269	58,4	115
16,5	404	214	47,8	137
17	349	183	37,1	122
17,5	302	146	31,8	83
18	255	110	26,5	62
18,5	0	0	0	16
19	0	0	0	12
19,5	0	0	0	11

65% vom Maxrpm (real: 6110 rpm)

Messhöhe in μs	f_{max} in Hz	f_{mean} in Hz	v in $\frac{\text{cm}}{\text{s}}$	l in $\text{h} \frac{\text{V}^2}{\text{s}}$
12	0	0	0	/
12,5	0	0	0	/
13	0	0	0	/
13,5	174	104	21,2	61
14	182	110	23,9	50
14,5	190	110	23,9	64
15	197	122	25,2	72
15,5	183	110	23,9	80
16	161	98	21,2	68
16,5	144	85	18,6	53
17	141	85	18,9	49
17,5	0	0	0	/
18	0	0	0	/
18,5	0	0	0	/
19	0	0	0	/
19,5	0	0	0	/

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