Berechnung Zustandszahl

22 mbar

Vn	=	Volumen im Normzustand
Vb	=	Volumen im Betriebzustand
z	=	Zustandszahl
Tn	=	Normtemperatur
Teff	=	Abrechnungstemperatur
Pamb	=	Luftdruck
Peff	=	Effektivdruck
Pn	=	Normdruck
H	=	geographische Höhe

Tn	=	273,15 K	fester Wert
Teff	=	288,15 K	fester Wert
Pn	=	1.013,25 mbar	fester Wert
Peff	=	22 mbar	fester Wert
Luftdruck_1	=	1.014,8 mbar	fester Wert
Luftdruck_2	=	0,114 mbar	fester Wert

Formel:

$$Vn = Vb \times \left[\frac{Tn}{Teff} \times \frac{Pamb + Peff}{Pn} \right]$$

z-Zahl

$$Pamb = 1014{,}8\ \text{mbar} - 0{,}114\ \text{mbar/m} \times H$$

$$z\text{-Zahl} = \frac{Tn}{Teff} \times \frac{Pamb + Peff}{Pn}$$

Berechnung Zustandszahl

22 mbar

geogr. Höhe (H)	pamb	Zustandszahl
400 m	969,20 mbar	**0,9273**
401 m	969,09 mbar	**0,9272**
402 m	968,97 mbar	**0,9271**
403 m	968,86 mbar	**0,9270**
404 m	968,74 mbar	**0,9269**
405 m	968,63 mbar	**0,9268**
406 m	968,52 mbar	**0,9267**
407 m	968,40 mbar	**0,9266**
408 m	968,29 mbar	**0,9265**
409 m	968,17 mbar	**0,9264**
410 m	968,06 mbar	**0,9262**
411 m	967,95 mbar	**0,9261**
412 m	967,83 mbar	**0,9260**
413 m	967,72 mbar	**0,9259**
414 m	967,60 mbar	**0,9258**
415 m	967,49 mbar	**0,9257**
416 m	967,38 mbar	**0,9256**
417 m	967,26 mbar	**0,9255**
418 m	967,15 mbar	**0,9254**
419 m	967,03 mbar	**0,9253**
420 m	966,92 mbar	**0,9252**
421 m	966,81 mbar	**0,9251**
422 m	966,69 mbar	**0,9250**
423 m	966,58 mbar	**0,9249**
424 m	966,46 mbar	**0,9248**
425 m	966,35 mbar	**0,9246**
426 m	966,24 mbar	**0,9245**
427 m	966,12 mbar	**0,9244**
428 m	966,01 mbar	**0,9243**
429 m	965,89 mbar	**0,9242**
430 m	965,78 mbar	**0,9241**
431 m	965,67 mbar	**0,9240**
432 m	965,55 mbar	**0,9239**
433 m	965,44 mbar	**0,9238**
434 m	965,32 mbar	**0,9237**
435 m	965,21 mbar	**0,9236**
436 m	965,10 mbar	**0,9235**
437 m	964,98 mbar	**0,9234**
438 m	964,87 mbar	**0,9233**
439 m	964,75 mbar	**0,9232**
440 m	964,64 mbar	**0,9230**

geogr. Höhe (H)	pamb	Zustandszahl
441 m	964,53 mbar	**0,9229**
442 m	964,41 mbar	**0,9228**
443 m	964,30 mbar	**0,9227**
444 m	964,18 mbar	**0,9226**
445 m	964,07 mbar	**0,9225**
446 m	963,96 mbar	**0,9224**
447 m	963,84 mbar	**0,9223**
448 m	963,73 mbar	**0,9222**
449 m	963,61 mbar	**0,9221**
450 m	963,50 mbar	**0,9220**
451 m	963,39 mbar	**0,9219**
452 m	963,27 mbar	**0,9218**
453 m	963,16 mbar	**0,9217**
454 m	963,04 mbar	**0,9216**
455 m	962,93 mbar	**0,9214**
456 m	962,82 mbar	**0,9213**
457 m	962,70 mbar	**0,9212**
458 m	962,59 mbar	**0,9211**
459 m	962,47 mbar	**0,9210**
460 m	962,36 mbar	**0,9209**
461 m	962,25 mbar	**0,9208**
462 m	962,13 mbar	**0,9207**
463 m	962,02 mbar	**0,9206**
464 m	961,90 mbar	**0,9205**
465 m	961,79 mbar	**0,9204**
466 m	961,68 mbar	**0,9203**
467 m	961,56 mbar	**0,9202**
468 m	961,45 mbar	**0,9201**
469 m	961,33 mbar	**0,9200**
470 m	961,22 mbar	**0,9198**
471 m	961,11 mbar	**0,9197**
472 m	960,99 mbar	**0,9196**
473 m	960,88 mbar	**0,9195**
474 m	960,76 mbar	**0,9194**
475 m	960,65 mbar	**0,9193**
476 m	960,54 mbar	**0,9192**
477 m	960,42 mbar	**0,9191**
478 m	960,31 mbar	**0,9190**
479 m	960,19 mbar	**0,9189**
480 m	960,08 mbar	**0,9188**