

Longterm-nominal ringstiffness (SN) in N/m²



Brandenburger

$$SN = \frac{E * s_L^3}{12 * d_m^3}$$

s_L = Total wall thickness without non-bearing layers
d_m = Medium pipe diameters, calculated from nominal values of inner and outer diameter and wall thickness

Modulus of elasticity, longterm [N/mm ²]:		11.180	13.288	SN 2	SN 4	SN 8																
Wallthickness [mm]	3,0	3,5	4,2	4,9	5,6	6,3	7,0	7,7	8,4	9,1	9,8	10,5	11,2	11,9	12,6	13,3	14,0	14,7	15,4	16,1	16,8	17,5
Circular profile																						
DN 150	7.919	12.704																				
DN 200	3.290	5.265	9.195																			
DN 225	2.299	3.676	6.412	10.280																		
DN 250	1.669	2.667	4.648	7.444	11.208																	
DN 300	960	1.532	2.667	4.265	6.412	9.195	12.704															
DN 350	602	960	1.669	2.667	4.005	5.738	7.919	10.605														
DN 400	402	641	1.113	1.777	2.667	3.818	5.265	7.045	9.195													
DN 450	282	449	779	1.243	1.864	2.667	3.676	4.916	6.412	8.192	10.280											
DN 500	205	326	566	903	1.354	1.936	2.667	3.565	4.648	5.935	7.444	9.195	11.208	13.501								
DN 600		188	326	520	779	1.113	1.532	2.047	2.667	3.403	4.265	5.265	6.412	7.719	9.195	10.853	12.704					
DN 700			205	326	489	698	960	1.282	1.669	2.129	2.667	3.290	4.005	4.819	5.738	6.769	7.919	9.195	10.605			
DN 800				218	326	466	641	855	1.113	1.419	1.777	2.192	2.667	3.207	3.818	4.502	5.265	6.111	7.045	8.072	9.195	10.421
DN 900				182	272	388	533	712	926	1.180	1.477	1.821	2.216	2.664	3.170	3.737	4.369	5.069	5.843	6.692	7.621	8.635
DN 1000						282	388	517	673	858	1.073	1.323	1.609	1.934	2.301	2.712	3.170	3.677	4.237	4.852	5.524	6.257
DN 1100						212	291	388	505	643	804	991	1.205	1.448	1.723	2.030	2.372	2.752	3.170	3.629	4.131	4.679
DN 1200							224	298	388	494	618	762	926	1.113	1.323	1.559	1.821	2.112	2.433	2.785	3.170	3.589
DN 1300								234	305	388	485	598	727	873	1.038	1.223	1.429	1.657	1.908	2.184	2.485	2.813
DN 1400									244	310	388	478	581	698	829	977	1.141	1.323	1.524	1.744	1.984	2.246
DN 1500										252	315	388	471	566	673	793	926	1.073	1.236	1.414	1.609	1.821
DN 1600																	762	883	1.016	1.163	1.323	1.497
Oval profile	<i>Calculation basis: equivalent circular DN = H*1,2</i>																					
DN 200/300	553	882	1.532	2.448	3.676	5.265	7.265	9.727	12.704													
DN 250/375	282	449	779	1.243	1.864	2.667	3.676	4.916	6.412	8.192	10.280	12.704										
DN 300/450	162	259	449	715	1.072	1.532	2.110	2.820	3.676	4.692	5.883	7.265	8.852	10.660	12.704	-						
DN 350/525	102	162	282	449	672	960	1.322	1.765	2.299	2.933	3.676	4.536	5.524	6.649	7.919	9.345	10.937					
DN 400/600		109	188	300	449	641	882	1.177	1.532	1.954	2.448	3.020	3.676	4.422	5.265	6.210	7.265	8.435	9.727	11.148	12.704	14.402
DN 500/750			96	153	229	326	449	599	779	993	1.243	1.532	1.864	2.241	2.667	3.144	3.676	4.265	4.916	5.630	6.412	7.265
DN 600/900				88	132	188	259	345	449	572	715	882	1.072	1.288	1.532	1.806	2.110	2.448	2.820	3.229	3.676	4.163
DN 700/1050					99	141	193	257	335	426	533	657	799	960	1.141	1.344	1.571	1.821	2.098	2.401	2.733	3.094
DN 800/1200						94	129	172	224	285	356	439	533	641	762	897	1.048	1.215	1.399	1.601	1.821	2.062
DN 900/1350								121	157	200	250	307	374	449	533	628	734	850	979	1.120	1.274	1.442
DN 1000/1500									88	114	145	182	224	272	326	388	457	533	618	712	814	926
DN 1200/1800																		307	356	410	469	533

Further calculations and different wall thickness on request