



Longterm-nominal ringstiffness (SN)

Brandenburger Liner BB^{2.5}

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

S_L = Total wall thickness without non-bearing layers
 d_m^3 = Medium pipe diameters, calculated from nominal values of inner and outer diameter and wall thickness

Modulus of elasticity, longterm [N/mm ²]:		11.180		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					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 1000						237	326	435	566	722	903	1.113	1.354	1.627	1.936	2.282	2.667	3.094	3.565	4.082	4.648	5.265			
DN 1100							178	245	326	425	541	677	834	1.014	1.219	1.449	1.708	1.996	2.315	2.667	3.053	3.476	3.936		
DN 1200								188	251	326	416	520	641	779	936	1.113	1.312	1.532	1.777	2.047	2.343	2.667	3.020		
DN 1300									197	256	326	408	503	611	735	873	1.029	1.202	1.394	1.605	1.837	2.091	2.367		
DN 1400										205	261	326	402	489	587	698	822	960	1.113	1.282	1.467	1.669	1.890		
DN 1500											212	265	326	397	476	566	667	779	903	1.040	1.190	1.354	1.532		
DN 1600																	641	743	855	978	1.113	1.260			
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					83	118	162	217	282	359	449	553	672	808	960	1.131	1.322	1.532	1.765	2.020	2.299	2.603			
DN 800/1200						79	109	145	188	240	300	369	449	539	641	755	882	1.022	1.177	1.347	1.532	1.735			
DN 900/1350								101	132	168	210	259	314	378	449	528	617	715	824	942	1.072	1.213			
DN 1000/1500									74	96	122	153	188	229	275	326	384	449	520	599	685	779	882		
DN 1200/1800											71	88	109	132	158	188	222	259	300	345	395	449	508		

Further calculations and different wall thickness on request