



Shortterm-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_m³ = Medium pipe diameters, calculated from nominal values of inner and outer diameter and wall thickness

Modulus of elasticity, shortterm (N/mm ²):	14.200		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	10.058	16.136																						
DN 200	4.179	6.687																						
DN 225	2.920	4.669	8.144																					
DN 250	2.120	3.387	5.903	9.455																				
DN 300	1.220	1.946	3.387	5.417	8.144	11.679																		
DN 350	765	1.220	2.120	3.387	5.087	7.288	10.058																	
DN 400	511	814	1.414	2.257	3.387	4.849	6.687	8.948																
DN 450	358	570	990	1.579	2.368	3.387	4.669	6.244	8.144	10.404														
DN 500	260	415	719	1.147	1.720	2.459	3.387	4.528	5.903	7.538	9.455	11.679												
DN 600		239	415	661	990	1.414	1.946	2.600	3.387	4.322	5.417	6.687	8.144	9.804	11.679									
DN 700			260	415	621	886	1.220	1.628	2.120	2.704	3.387	4.179	5.087	6.121	7.288	8.597	10.058	11.679						
DN 800				277	415	592	814	1.086	1.414	1.802	2.257	2.784	3.387	4.074	4.849	5.718	6.687	7.762	8.948	10.252				
DN 900					290	415	570	760	990	1.261	1.579	1.946	2.368	2.847	3.387	3.993	4.669	5.417	6.244	7.151	8.144	9.227		
DN 1000						302	415	553	719	917	1.147	1.414	1.720	2.067	2.459	2.898	3.387	3.930	4.528	5.185	5.903	6.687		
DN 1100							226	311	415	539	687	860	1.059	1.288	1.548	1.841	2.169	2.535	2.940	3.387	3.878	4.415	5.000	
DN 1200								239	319	415	528	661	814	990	1.189	1.414	1.666	1.946	2.257	2.600	2.976	3.387	3.835	
DN 1300									250	326	415	519	639	777	933	1.109	1.307	1.527	1.770	2.039	2.333	2.656	3.006	
DN 1400										260	331	415	511	621	746	886	1.044	1.220	1.414	1.628	1.863	2.120	2.400	
DN 1500											269	337	415	504	605	719	847	990	1.147	1.321	1.511	1.720	1.946	
DN 1600																	814	943	1.086	1.243	1.414	1.600		
Oval profile																								
	<i>Calculation basis: equivalent circular DN = H*1,2</i>																							
DN 200/300	702	1.120	1.946	3.109	4.669	6.687	9.227	12.355																
DN 250/375	358	570	990	1.579	2.368	3.387	4.669	6.244	8.144	10.404	13.057													
DN 300/450	206	329	570	909	1.362	1.946	2.681	3.582	4.669	5.959	7.473	9.227	11.243	13.539										
DN 350/525	130	206	358	570	854	1.220	1.679	2.242	2.920	3.725	4.669	5.762	7.016	8.444	10.058	11.870	13.891							
DN 400/600		138	239	381	570	814	1.120	1.495	1.946	2.482	3.109	3.835	4.669	5.616	6.687	7.888	9.227	10.714	12.355	14.160				
DN 500/750			122	194	290	415	570	760	990	1.261	1.579	1.946	2.368	2.847	3.387	3.993	4.669	5.417	6.244	7.151	8.144	9.227		
DN 600/900				112	168	239	329	438	570	726	909	1.120	1.362	1.636	1.946	2.294	2.681	3.109	3.582	4.101	4.669	5.287		
DN 700/1050					105	150	206	275	358	456	570	702	854	1.026	1.220	1.437	1.679	1.946	2.242	2.566	2.920	3.306		
DN 800/1200						100	138	184	239	304	381	469	570	685	814	959	1.120	1.298	1.495	1.711	1.946	2.203		
DN 900/1350								129	168	213	267	329	399	480	570	671	784	909	1.046	1.197	1.362	1.541		
DN 1000/1500									94	122	155	194	239	290	349	415	488	570	661	760	870	990	1.120	
DN 1200/1800											90	112	138	168	201	239	281	329	381	438	501	570	645	

Further calculations and different wall thickness on request