

Shortterm-nominal ringstiffness (SN) in N/m<sup>2</sup>



Brandenburger

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

S<sub>L</sub> = Total wall thickness without non-bearing layers  
d<sub>m</sub> = Medium pipe diameters, calculated from nominal values of inner and outer diameter and wall thickness

Modulus of elasticity, shortterm (N/mm <sup>2</sup> ):		14.200	16.875	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	
<b>Circular profile</b>																							
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					345	493	677	904	1.176	1.499	1.876	2.313	2.814	3.383	4.025	4.746	5.548	6.438	7.420	8.498	9.679	10.966	
DN 1000						358	493	657	855	1.089	1.363	1.680	2.044	2.456	2.922	3.444	4.025	4.670	5.381	6.162	7.016	7.947	
DN 1100						269	369	493	641	816	1.021	1.259	1.531	1.839	2.188	2.578	3.013	3.494	4.025	4.609	5.246	5.941	
DN 1200							284	379	493	627	785	967	1.176	1.413	1.680	1.980	2.313	2.682	3.090	3.537	4.025	4.558	
DN 1300								297	387	493	616	759	923	1.109	1.318	1.553	1.814	2.104	2.423	2.773	3.156	3.573	
DN 1400									309	394	493	607	738	886	1.053	1.241	1.449	1.680	1.935	2.214	2.520	2.852	
DN 1500										320	400	493	599	719	855	1.007	1.176	1.363	1.570	1.796	2.044	2.313	
DN 1600																	967	1.121	1.291	1.477	1.680	1.902	
<b>Oval profile</b>	<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					125	178	245	327	425	541	677	834	1.014	1.219	1.449	1.707	1.995	2.313	2.664	3.049	3.470	3.929	
DN 800/1200						119	164	218	284	362	452	557	677	814	967	1.139	1.331	1.543	1.776	2.033	2.313	2.618	
DN 900/1350								153	199	254	317	390	474	570	677	798	932	1.080	1.243	1.422	1.618	1.831	
DN 1000/1500									112	145	184	231	284	345	415	493	580	677	785	904	1.034	1.176	1.331
DN 1200/1800										0	106	133	164	199	239	284	334	390	452	521	596	677	766

Further calculations and different wall thickness on request