

ESZ Type C-20-C

t = 15 mm

Non-reinforced elastomer bearing for use according to DIN 4141 part 3, bearing class 2
 General supervisory test certificate no. P-22-MPANRW-1988-2 by MPA Dortmund



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Design table*

orange table: perm. F = kN

blue table: perm. α = % in radian measure

Permissible stresses:

(at right angles to bearing side a)

1. Compressive stress:

2. Torsion:

3. Displacement:

perm. σ_m:

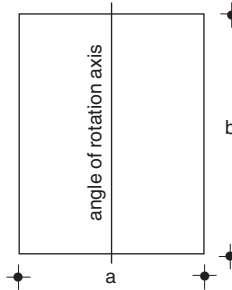
perm. α = 0.2 x t/a

perm. u = 0.6 x (t-2)

1.00 < S ≤ 1.25: 7.5 N/mm²

1.25 < S ≤ 1.50: 10.0 N/mm²

1.50 < S: 15.0 N/mm²



The shape factor S is calculated as follows:

$$S = \frac{ab}{2t(a+b)} \quad a/b/t = \text{width/length/thickness of the unloaded bearing in mm}$$

a = mm b = mm	100	110	120	130	140	150	160	170	180	190	200	230	250	300	330	350	400	450	500	
100	150	30.0	165	180	195	210	225	240	255	270	285	300	345	375	450	495	525	600	675	750
110	182	27.3	198	215	231	248	264	281	297	314	330	380	413	495	545	578	660	743	825	
120	216	25.0	234	252	275	282	306	324	342	360	414	450	540	594	630	720	810	900		
130	254	23.1	273	293	312	332	351	371	390	449	488	585	644	683	780	878	975			
140	294	21.4	315	336	357	378	399	420	483	525	630	693	735	840	945	1050				
150	338	20.0	360	383	405	428	450	518	563	675	743	788	900	1013	1125					
160	384	18.8	408	432	456	480	552	600	720	792	840	960	1080	1200						
170	434	17.6	459	485	510	587	638	765	842	893	1020	1148	1275							
180	486	16.7	513	540	621	675	810	891	945	1080	1215	1350								
190	542	15.8	570	656	713	855	941	998	1140	1283	1425									
200	600	15.0	690	750	900	990	1050	1200	1350	1500										
230	794	13.0	863	1035	1139	1208	1380	1553	1725											
250	938	12.0	1125	1238	1313	1500	1688	1875												
300	1350	10.0	1485	1575	1800	2025	2250													
330	1634	9.1	1733	1980	2228	2475														
350	1838	8.6	2100	2363	2625															
400	2400	7.5	2700	3000																
450	3038	6.7	3375																	
500	3750	6.0																		

2000.4.03.SD

* for mating faces in reinforced concrete and prestressed concrete