

ESZ Type 200 - 25

t= 10mm

Unreinforced elastomer bearing for use in accordance with DIN 4141 Part 3, bearing class 2
 General Building Authority Approved Test Certificate no. A 15-BvL-2004, Technical University of Munich



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Design table*

orange table: perm. F = kN

blue table: perm. $\sigma = N / mm^2$

grey table: perm. $\alpha = \%$ in radian measure (perpendicular to smaller bearing side)

Permissible loads:

1. Compressive stress:

perm. σ m:

1,50 ≤ S < 2,50: 10,0 N/mm²

2,50 ≤ S < 3,50: 20,0 N/mm²

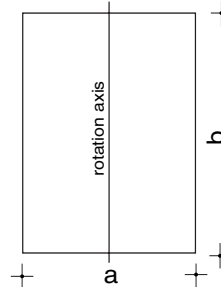
3,50 ≤ S: 25,0 N/mm²

2. Torsion:

perm. $\alpha = 0,2 \times t/a \times \left(1 + \frac{\sigma_{perm} - \sigma_{actual}}{\sigma_{perm}}\right)$

3. Displacement:

perm. u = 0.6 x (t-2)



The shape factor S is calculated as follows:

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

	a	50	80	100	110	120	130	140	150	160	170	180	190	200	250	300	350	400	500		
b	α_a α_b	40,0	25,0	20,0	18,2	16,7	15,4	14,3	13,3	12,5	11,8	11,1	10,5	10,0	8,0	6,7	5,7	5,0	4,0		
100	20,0	50 10	80	200	220	240	260	280	300	320	340	360	380	400	625	750	875	1000	1250		
110	18,2	10	88 10	220	242	264	286	308	330	352	374	396	418	550	688	825	963	1100	1375		
120	16,7	10	10	240 20	264	288	312	336	360	384	510	540	570	600	750	900	1050	1200	1500		
130	15,4	10	10	20	286 20	312	338	364	390	520	553	585	618	650	813	975	1138	1300	1625		
140	14,3	10	20	20	20	336 20	364	490	525	560	595	630	665	700	875	1050	1225	1400	1750		
150	13,3	10	20	20	20	20	390 20	525	563	600	638	675	713	750	938	1125	1313	1500	1875		
160	12,5	10	20	20	20	20	25	560 25	600	640	680	720	760	800	1000	1200	1400	1600	2000		
170	11,8	10	20	20	20	25	25	25	638 25	680	723	765	808	850	1063	1275	1488	1700	2125		
180	11,1	10	20	20	20	25	25	25	25	720 25	765	810	855	900	1125	1350	1575	1800	2250		
190	10,5	10	20	20	20	25	25	25	25	25	808 25	855	903	950	1188	1425	1663	1900	2375		
200	10,0	10	20	20	25	25	25	25	25	25	25	900 25	950	1000	1250	1500	1750	2000	2500		
250	8,0	10	20	25	25	25	25	25	25	25	25	25	1188 25	1250	1563	1875	2188	2500	3125		
300	6,7	10	20	25	25	25	25	25	25	25	25	25	25	1500 25	1875	2250	2625	3000	3750		
350	5,7	10	20	25	25	25	25	25	25	25	25	25	25	25	2188 25	2625					
400	5,0	10	20	25	25	25	25	25	25	25	25	25	25	25	3000 25						
500	4,0	10	20	25	25	25	25	25	25	25	25	25	25	25	25						
800	2,5	10	25	25	25	25	25	25	25	25	25	25	25	25	25						
1000	2,0	10	25	25	25	25	25	25	25	25	25	25	25	25	25						

* for mating faces made out of reinforced and prestressed concrete