

# ESZ Type C-20-C

**t = 10 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:**

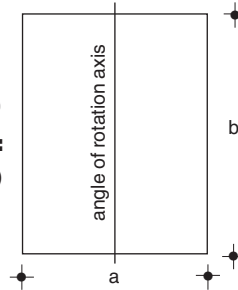
perm.  $\sigma_m$ :  
 2.50 < S ≤ 3.00: 17.5 N/mm<sup>2</sup>  
 3.00 < S: 20.0 N/mm<sup>2</sup>

**2. Torsion:**

perm.  $\alpha = 0.2 \times t/a$

**3. Displacement:**

perm.  $u = 0.6 \times (t-2)$



The shape factor S is calculated as follows:

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

$\frac{a}{b}$ mm/mm	100	110	120	130	140	150	160	170	180	190	200	230	250	300	330	350	400	450	500
100	175 20.0	193	210	228	245	300	320	340	360	380	400	460	500	600	660	700	800	900	1000
110	20.0	212 18.2	231	250	308	330	352	374	396	418	440	506	550	660	726	770	880	990	1100
120	20.0	18.2	288 16.7	312	336	360	384	408	432	456	480	552	600	720	792	840	960	1080	1200
130	20.0	18.2	16.7	338 15.4	364	390	416	442	466	494	520	598	650	780	858	910	1040	1170	1300
140	20.0	18.2	16.7	15.4	392 14.3	420	448	476	504	532	560	644	700	840	924	980	1120	1260	1400
150	20.0	18.2	16.7	15.4	14.3	450 13.3	480	510	540	570	600	690	750	900	990	1050	1200	1350	1500
160	20.0	18.2	16.7	15.4	14.3	13.3	512 12.5	544	576	608	640	736	800	960	1056	1120	1280	1440	1600
170	20.0	18.2	16.7	15.4	14.3	13.3	12.5	578 11.8	612	646	680	782	850	1020	1122	1190	1360	1530	1700
180	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	648 11.1	684	720	828	900	1080	1188	1260	1440	1620	1800
190	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	722 10.5	760	874	950	1140	1254	1330	1520	1710	1900
200	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	800 10.0	920	1000	1200	1320	1400	1600	1800	2000
230	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	1058 8.7	1150	1380	1518	1610	1840	2070	2300
250	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	1250 8.0	1500	1650	1750	2000	2250	2500
300	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	1800 6.7	1980	2100	2400	2700	3000
330	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	6.7	2178 6.1	2310	2640	2970	3300
350	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	6.7	6.1	2450 5.7	2800	3150	3500
400	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	6.7	6.1	5.7	3200 5.0	3600	4000
450	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	6.7	6.1	5.7	5.0	4050 4.4	4500
500	20.0	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10.5	10.0	8.7	8.0	6.7	6.1	5.7	5.0	4.4	5000 4.0

2000.4.03.SD

\* for mating faces in reinforced concrete and prestressed concrete