

1 T  
TABLICA 3.1  
Osnovne tolerancije (u mikrometrima)

Kvalitet	Grupe nominalnih mera [mm]													$\alpha$
	1	3	6	10	18	30	50	80	120	180	250	315	400	
	do 3	do 6	do 10	do 18	do 30	do 50	do 80	do 120	do 180	do 250	do 315	do 400	do 500	
1	0,8	1	1	1,2	1,5	1,5	2	2,5	3,5	4,5	6	7	8	
2	1,2	1,5	1,5	2	2,5	2,5	3	4	5	7	8	9	10	
3	2	2,5	2,5	3	4	4	5	6	8	10	12	13	15	
4	3	4	4	5	6	7	8	10	12	14	16	18	20	
5	4	5	6	8	9	11	13	15	18	20	23	25	27	7
6	6	8	9	11	13	16	19	22	25	29	32	36	40	10
7	10	12	15	18	21	25	30	35	40	46	52	57	63	16
8	14	18	22	27	33	39	46	54	63	72	81	89	97	25
9	25	30	36	43	52	62	74	87	100	115	130	140	155	40
10	40	48	58	70	84	100	120	140	160	185	210	230	250	64
11	60	75	90	110	130	160	190	220	250	290	320	360	400	100
12	90	120	150	180	210	250	300	350	400	460	520	570	630	160
13	140	180	220	270	330	390	460	540	630	720	810	890	970	250
14	250	300	360	430	520	620	740	870	1000	1150	1300	1400	1550	400
15	400	480	580	700	840	1000	1200	1400	1600	1850	2100	2300	2500	640
16	600	750	900	1100	1300	1600	1900	2200	2500	2900	3200	3600	4000	1000
17	900	1200	1500	1800	2100	2500	3000	3500	4000	4600	5200	5700	6300	1600
18	1400	1800	2200	2700	3300	3900	4600	5400	6300	7200	8100	8900	9700	2500
$i [\mu]$	0,6	0,75	0,9	1,1	1,3	1,6	1,9	2,2	2,5	2,9	3,2	3,6	4,0	

Napomene uz tablicu 3.1:

1. Podaci o osnovnim tolerancijama su u skladu sa JUS M. A1.120/1955.
2. Za svaku grupu mera raspon cifara obuhvata vrednosti preko ... do, npr. mera 3 pripada prvoj grupi  $1 \div 3$ , a mera 3,1 pripada susednoj grupi  $3 \div 6$ . Ovo pravilo važi i za sve ostale tablice.
3. Osnovna tolerancija za određeni kvalitet i grupu mera dobija se množenjem faktora  $\alpha$  i jedinice tolerancije  $i$ ; npr. osnovna tolerancija IT6 za grupu mera  $10 \div 18$  mm je 11 mikrona jer je  $\alpha \cdot i = 10 \cdot 1,1 = 11 \mu\text{m}$ .

*Gornja i donja granična odstupanja za osovine u  $\mu\text{m}$ , za mere do 500 mm*

[illegible]

Tablica 7.19.b

Gornja i donja granična odstupanja za rupe u  $\mu\text{m}$ , za nazivne mere do 500 mm

Stepen preciznosti	Nazivne mere u mm	B11	B9	C11	C9	D9	D11	E8	F7	G6	H6	H9	H12	H13	J6	J7	K6	K7	M6	M7	N6	N7	P6	P7	R6	R7	S6	S7	T6	T7	U6	U7	X7	Z7	Z8	ZA7	ZA8	ZB8	ZB9	ZC8	ZC9	
		A11																																								
3	330 +270	+200 +140	+165 +140	+170 +140	+85 +60	+45 +20	+20 +20	+80 +60	+20 +6	+39 +14	+16 +2	+10 +2	+14 +2	+25 +6	+60 +100	+140 +140	+2 +4	+4 +6	0 -6	0 -10	-2 -12	-4 -10	-4 -12	-6 -16	-10 -20	-14 -20	-14 -25			-18 -24	-18 -28	-20 -30	-26 -36	-26 -40	-32 -42		-40 -54	-40 -65	-60 -74	-60 -85		
3...6	+345 +270	+215 +170	+170 +140	+145 +100	+60 +30	+78 +30	+105 +30	+28 +10	+50 +20	+22 +10	+28 +14	+16 +4	+8 +4	+12 +4	+18 +30	+75 +120	+180 +180	+5 +6	+6 +2	0 -3	0 -6	-2 -9	-4 -12	-4 -16	-6 -20	-10 -23	-14 -24	-17 -27			-20 -28	-19 -31	-24 -36	-31 -43	-35 -51	-38 -54	-50 -68	-80 -98	-110 -130			
6...10	+370 +270	+240 +186	+186 +140	+170 +116	+76 +30	+98 +30	+130 +30	+35 +10	+61 +20	+25 +10	+35 +14	+20 +9	+15 +12	+22 +36	+90 +150	+220 +55	+5 +2	+2 +8	0 -3	0 -7	-2 -10	-4 -12	-4 -16	-6 -20	-10 -23	-14 -24	-17 -27			-25 -34	-22 -37	-28 -43	-36 -51	-42 -61	-46 -67	-52 -74	-67 -89	-97 -119	-97 -133			
10...18	+400 +290	+260 +193	+205 +135	+138 +93	+93 +20	+120 +60	+160 +40	+43 +16	+75 +32	+34 +16	+43 +6	+17 +7	+24 +0	+11 +0	+18 +0	+27 +0	+43 +0	+110 +180	+180 +270	+20 +5	+10 +2	+6 +4	+4 +0	-4 -8	-9 -12	-15 -18	-20 -23	-26 -29	-31 -31	-36 -36	-39 -39	-41 -41	-44 -44	-48 -48	-56 -56	-71 -71	-87 -87	-104 -104	-135 -135	-151 -151	-177 -177	-193 -193
18...30	+430 +300	+260 +160	+212 +160	+240 +110	+162 +110	+117 +65	+149 +65	+195 +65	+53 +20	+92 +40	+41 +7	+53 +7	+20 +0	+28 +7	+13 +0	+21 +0	+33 +0	+52 +0	+130 +210	+210 +330	+330 +8	+12 +2	+6 +4	-4 -8	-4 -11	-15 -21	-24 -31	-35 -37	-37 -41	-44 -44	-48 -48	-56 -56	-71 -71	-87 -87	-104 -104	-135 -135	-151 -151	-177 -177	-193 -193	-219 -219	-270 -270	
30...40	+470 +310	+330 +170	+232 +170	+280 +120	+182 +120	+142 +80	+180 +80	+240 +80	+64 +25	+112 +34	+50 +16	+64 +25	+34 +16	+25 +39	+62 +160	+250 +390	+10 +14	+14 +3	+3 +7	-4 -4	0 0	-12 -8	-8 -21	-17 -17	-29 -29	-25 -25	-43 -43	-39 -39	-59 -59	-64 -64	-71 -71	-101 -101	-112 -112	-118 -118	-200 -200	-200 -200	-274 -274	-336 -336				
40...50	+480 +320	+340 +180	+242 +180	+290 +130	+192 +130	+80 +80	+80 +80	+25 +25	+50 +25	+25 +25	+9 +9	0 0	0 0	0 0	0 0	0 0	-6 -11	-13 -13	-18 -18	-20 -20	-25 -25	-28 -28	-33 -33	-37 -37	-42 -42	-45 -45	-50 -50	-59 -59	-63 -63	-70 -70	-85 -85	-101 -101	-117 -117	-133 -133	-148 -148	-242 -242	-242 -242	-325 -325	-387 -387			
50...65	+530 +340	+380 +190	+264 +140	+330 +140	+214 +140	+174 +140	+220 +140	+290 +140	+76 +30	+134 +60	+60 +30	+76 +30	+29 +10	+40 +10	+19 +30	+30 +460	+13 +18	+4 +9	-5 -5	0 0	-14 -14	-9 -9	-26 -26	-21 -21	-35 -35	-30 -30	-42 -42	-60 -60	-55 -55	-66 -66	-79 -79	-85 -85	-106 -106	-141 -141	-172 -172	-180 -180	-300 -300	-405 -405	-479 -479			
65...80	+550 +360	+390 +200	+274 +200	+340 +150	+224 +150	+100 +100	+100 +100	+30 +30	+60 +30	+30 +30	+10 +10	0 0	0 0	0 0	0 0	0 0	-6 -12	-15 -15	-21 -21	-24 -24	-30 -30	-33 -33	-39 -39	-45 -45	-51 -51																	
80...100	+600 +380	+440 +220	+307 +220	+390 +170	+257 +170	+207 +260	+340 +340	+90 +90	+159 +71	+71 +90	+34 +34	+47 +47	+22 +22	+35 +35	+54 +54	+87 +87	+220 +220	+350 +350	+540 +540	+16 +16	+22 +22	+4 +4	+10 +10	-6 -6	0 0	-16 -16	-10 -10	-30 -30	-24 -24													
100...120	+630 +410	+460 +240	+327 +240	+400 +180	+267 +180	+207 +260	+340 +340	+90 +90	+159 +71	+71 +90	+34 +34	+47 +47	+22 +22	+35 +35	+54 +54	+87 +87	+220 +220	+350 +350	+540 +540	+16 +16	+22 +22	+4 +4	+10 +10	-6 -6	0 0	-16 -16	-10 -10	-30 -30	-24 -24													
120...140	+710 +460	+510 +260	+360 +260	+450 +260	+300 +260	+240 +300	+390 +390	+106 +106	+186 +86	+86 +106	+39 +39	+54 +54	+25 +25	+40 +40	+63 +63	+100 +250	+400 +400	+630 +630	+18 +18	+26 +26	+4 +4	+12 +12	-8 -8	0 0	-20 -20	-12 -12	-36 -36	-28 -28														
140...160	+770 +520	+530 +380	+380 +280	+460 +210	+310 +210	+240 +310	+400 +400	+106 +106	+186 +86	+86 +106	+39 +39	+54 +54	+25 +25	+40 +40	+63 +63	+100 +250	+400 +400	+630 +630	+18 +18	+26 +26	+4 +4	+12 +12	-8 -8	0 0	-20 -20	-12 -12	-36 -36	-28 -28														
160...180	+830 +580	+560 +310	+410 +210	+480 +230	+330 +230	+270 +330	+420 +420	+116 +116	+206 +106	+106 +206	+44 +44	+60 +60	+30 +30	+44 +44	+66 +66	+110 +260	+410 +410	+660 +660	+20 +20	+28 +28	+4 +4	+14 +14	-10 -10	0 0	-22 -22	-14 -14	-40 -40	-32 -32														
180...200	+950 +660	+630 +340	+445 +240	+530 +355	+355 +260	+285 +355	+460 +460	+122 +122	+215 +96	+96 +122	+44 +44	+61 +61	+29 +29	+46 +46	+72 +72	+115 +290	+460 +460	+720 +720	+22 +22	+30 +30	+5 +5	+13 +13	-8 -8	0 0	-22 -22	-14 -14	-40 -40	-32 -32														
200...225	+1030 +740	+670 +380	+495 +260	+550 +260	+375 +260	+305 +305	+480 +480	+132 +132	+225 +100	+100 +132	+48 +48	+65 +65	+31 +31	+48 +48	+76 +76	+125 +290	+480 +480	+760 +760	+22 +22	+30 +30	+5 +5	+13 +13	-8 -8	0 0	-22 -22	-14 -14	-40 -40	-32 -32														
225...250	+1110 +820	+710 +420	+535 +260	+570 +260	+395 +260	+325 +325	+500 +500	+142 +142	+245 +110	+110 +142	+50 +50	+67 +67	+34 +34	+50 +50	+76 +76	+135 +290	+510 +510	+840 +840	+22 +22	+30 +30	+5 +5	+13 +13	-8 -8	0 0	-22 -22	-14 -14	-40 -40	-32 -32														
250...280	+1240 +970	+800 +480	+610 +300	+620 +300	+430 +300	+360 +360	+540 +540	+152 +152	+265 +110	+110 +152	+54 +54	+71 +71	+36 +36	+54 +54	+80 +80	+140 +320	+520 +520	+810 +810	+25 +25	+36 +36	+5 +5	+16 +16	-9 -9	0 0	-25 -25	-14 -14	-47 -47	-36 -36														
280...315	+1370 +1050	+860 +540	+670 +330	+680 +330	+450 +330	+380 +380	+560 +560	+162 +162	+275 +110	+110 +162	+58 +58	+75 +75	+38 +38	+58 +58	+84 +84	+155 +320	+530 +530	+840 +840	+22 +22	+30 +30	+5 +5	+13 +13	-8 -8	0 0	-22 -22	-14 -14	-47 -47	-36 -36														
315...335	+1560 +1200	+960 +600	+740 +600	+750 +600	+500 +600	+430 +430	+610 +610	+172 +172	+285 +110	+110 +172	+60 +60	+77 +77	+40 +40	+60 +60	+86 +86	+165 +360	+520 +520	+860 +860	+22 +22	+30 +30	+5 +5	+13 +13	-8 -8	0 0	-22 -22	-14 -14	-47 -47	-36 -36														
335...400	+1710 +1100	+1040 +620	+820 +360	+830 +360	+540 +360	+470 +470	+650 +650	+182 +182	+295 +110	+110 +182	+64 +64	+81 +81	+42 +42	+64 +64	+90 +90	+175 +360	+570 +570	+890 +890	+29 +29	+39 +39	+7 +7	+17 +17	-10 -10	0 0	-26 -26	-16 -16	-51 -51	-41 -41														
400...450	+1900 +1500	+1160 +760	+915 +440	+920 +440	+595 +440	+520 +440	+700 +700	+192 +192	+305 +110	+110 +305	+62 +62	+62 +62	+18 +18	+18 +18	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
450...500	+2050 +1650	+1240 +840	+995 +480	+880 +480	+635 +480	+560 +480	+740 +740	+192 +192	+305 +110	+110 +305	+62 +62	+62 +62	+18 +18	+18 +18	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0