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INTERSTATE COUNCIL FOR STANDARDIZATION, METROLOGY AND CERTIFICATION
(ISC)

19903
2015

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Федеральное агентство
по техническому регулированию
и метрологии

Федеральное агентство
по техническому регулированию
и метрологии

Федеральное агентство
по техническому регулированию
и метрологии

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	0.40; 0.45; 0.50; 0.55; 0.60; 0.63; 0.65; 0.70; 0.75; 0.80; 0.90:1.00; 1.20; 1.30:1.40; 1.5; 1.6; 1.8; 2.0; 2.2 : 2.5; 2.8; 3.0; 3.2; 3.5; 3.8; 3.9; 4.0; 4.5; 5.0; 5.5; 6.0; 6.5; 7.0; 7.5; 8.0; 8.5; 9.0; 9.5; 10.0; 10.5; 11.0; 11.5; 12.0; 12.5:13.0:13.5; 14.0; 14.5:15.0; 15.5; 16.0; 16.5; 17.0; 17.5; 18.0; 18.5; 19.0; 19.5; 20.0; 20.5; 21.0; 21.5; 22.0; 22.5; 23.0; 23.5; 24.0; 24.5; 25.0; 25.5; 26.0; 27.0; 28.0; 29.0: 30.0: 31.0; 32.0; 34.0; 36.0; 38.0; 40.0; 42.0: 45.0; 48.0: 50.0; 52.0; 55.0: 58.0; 60.0; 62.0; 65.0: 68.0; 70.0; 72.0; 75.0; 78.0: 80.0; 82.0; 85.0; 87.0; 90.0: 92.0; 95.0; 100.0; 105.0:110.0; 115.0; 120.0; 125.0; 130.0:135.0; 140.0; 145.0:150.0; 155.0; 160.0
	500: 510; 600: 650: 670: 700; 710; 750: 800: 850; 900; 950. 1000; 1100; 1250; 1400; 1420; 1500; 1600: 1700; 1800:1900: 2000; 2100:2200; 2300; 2400:2500; 2600; 2700; 2800; 2900; 3000; 3200: 3400: 3600; 3800; 4000:4200; 4400
	710; 1200; 1400; 1420; 1500; 1600; 1700; 1800: 1900: 2000; 2200; 2500; 2800; 3000; 3200; 3400.3500: 3600.4000; 4500; 5000; 5500:6000; 6500; 7000: 7500; 8000; 8200:8500. 9000: 10000: 11000; 12000

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500; 530; 600: 630; 1000:1100: 1250	1.2; 1.3; 1.4; 1.5: 1.6: 1.8; 2.0; 2.2: 2.5; 2.8; 3.0; 3.2; 3.5; 3.8; 3.9; 4.0: 4.5; 5.0; 5.3: 5.5; 6.0; 6.3; 7.0; 7.5: 8.0: 8.5; 9.0; 9.5; 10.0; 10.5; 11.0; 11.5; 12.0; 12.7; 13.0; 13.5; 14.0; 14.5: 15.0; 15.5; 16.0; 16.5: 17.0; 17.5; 18.0; 18.5: 19.0; 19.5; 20.0; 20.5: 21.0; 21.5; 22.0; 22.5: 23.0; 23.5; 24.0; 24.5; 25.0
550	1.2; 1.3; 1.4; 1.5; 1.6; 1.8; 2.0; 2.2; 2.5; 2.8; 3.0; 3.2 : 3.5: 3.8; 3.9; 4.0; 4.5: 5.0: 5.3; 5.5; 6.0; 6.3; 7.0:7.5; 8.0; 8.5; 9.0; 9.5; 10.0; 10.5; 11.5: 12.0; 12.7
650; 670; 700: (710); 750; 800: 850; 900: 950: 1400; (1420): 1500	1.5; 1.6; 1.8; 2.0; 2.2; 2.5; 2.8; 3.0; 3.2; 3.5; 3.8; 3.9; 4.0: 4.5; 5.0; 5.3; 5.5: 6.0: 6.3; 7.0; 7.5; 8.0; 8.5; 9.0; 9.5; 10.0; 10.5; 11.0; 11.5; 12.0: 12.7; 13.0: 13.5: 14.0; 14.5; 15.0; 15.5; 16.0; 16.5; 17.0; 17.5; 18.0; 18.5; 19.0; 19.5; 20.0: 20.5; 21.0; 21.5; 22.0: 22.5; 23.0; 23.5: 24.0; 24.5; 25.0
1600: 1700; 1800	3.0; 3.2; 3.5: 3.8; 3.9; 4.0; 4.5: 5.0; 5.3; 5.5; 6.0; 6.3; 7.0; 7.5; 8.0; 8.5; 9.0; 9.5; 10.0; 10.5; 11.0; 11.5; 12.0; 12.7; 13.0; 13.5; 14.0; 14.5; 15.0; 15.5: 16.0: 16.5; 17.0: 17.5: 18.0: 18.5; 19.0; 19.5: 20.0: 20.5; 21.0; 21.5; 22.0; 22.5; 23.0; 23.5: 24.0; 24.5; 25.0
1900:2000	6.0; 6.3; 7.0; 7.5; 8.0: 8.5:9.0: 9.5:10.0
2100;2200	7.0; 7.5:8.0; 8.5; 9.0; 9.5; 10.0

{			500		.750		.1000		.1500		.2000		2300		.2700	
		750 «		1000		1500		2000		2300		2700		3000		
0.40	0.50		10,05	±0.07	—	—	—	—	—	—	—	—	—	—	—	—
.0.50	0.60	»	±0.06	±0.08	—	—	—	—	—	—	—	—	—	—	—	—
» 0.60	» 0.75	»	±0.07	±0.09	±0.07	±0.09	—	—	—	—	—	—	—	—	—	—
» 0.75	0.90		±0.08	±0.10	±0.08	±0.10	±0.12	±0.15	—	—	—	—	—	—	—	—
0.90	» 1.10		±0.09	±0.11	±0.09	±0.12	±0.12	±0.15	—	—	—	—	—	—	—	—
» 1.10	» 1.20	»	±0.10	±0.12	±0.11	±0.13	±0.12	±0.15	—	—	—	—	—	—	—	—
1,20	» 1.30		±0.11	±0.13	±0.12	±0.14	±0.12	±0.15	—	—	—	—	—	—	—	—
» 1.30	» 1.40	»	±0.11	±0.14	±0.12	±0.15	±0.12	±0.16	—	—	—	—	—	—	—	—
» 1.40	» 1.60	»	±0.12	±0.15	±0.13	±0.15	±0.13	±0,16	—	—	—	—	—	—	—	—
* 1.60	1.00		±0.13	±0.15	±0.14	±0.17	±0,14	±0.18	—	—	—	—	—	—	—	—
» 1.00	» 2.00	»	±0.14	±0.16	±0.15	±0.17	±0.16	±0.16	±0.17	±0.20	—	—	—	—	—	—
» 2.00	» 2.20		±0,15	±0.17	±0.16	±0.16	±0.17	±0.19	±0.18	±0.20	—	—	—	—	—	—
» 2.20	2.50		±0.16	±0.18	±0,17	±0.19	±0.18	±0,20	±0.19	±0.21	—	—	—	—	—	—
» 2.50	» 3.00		±0.17	±0.19	±0.16	±0.20	±0.19	±0.21	±0.20	±0.22	±0.23	±0.25	—	—	—	—
3.00	3.50	»	±0.16	±0.20	±0.19	±0.21	±0.20	±0.22	±0.22	±0.24	±0.26	±0.29	—	—	—	—
3.50	3.90		±0.20	±0.22	±0.21	±0.23	±0.22	±0.24	±0.24	±0.26	±0.26	±0.31	—	—	—	—
» 3.90	» 5.50	»	0.10 -0.40	0.20 -0.40	0.15 -0.40	0.30 -0.40	0.10 -0.50	0.30 -0.50	0.20 -0.50	0.40 -0.50	0.25 -0.50	0.45 -0.50	—	—	—	—
5.50	7.50		*000 -050	0.10 -0.50	*0.10 -0.50	0.20 -0.60	0.10 -0.50	0.25 -0.60	0.20 -0.60	0.40 -0.60	0.25 -0.60	*0.45 -0.60	—	—	—	—
» 7.50	10.00		0.00 -000	0.10 -0.60	0.10 -0.60	0.20 -0.80	0.20 -0.60	0.30 -0.60	+0.20 -0.60	0.35 -0.60	0.25 -0.60	0.45 -0.60	0.50 -0.60	0.60 -0.60	—	—
» 10.00	» 12.70		0.00 -000	0.20 -0.00	0.10 -0.60	0.20 -0.60	0.20 -0.60	0.30 -0.60		0.40 -0.00	0.55 -0.60	0.50 -0.60	0.60 -0.60	0.70 -0.60	0.90 -0.60	1.00 -0.60
12.70	15.00		0.15 -000	0.20 -	*0.15 -0.60	0.25 -0.60	0.25 -0.60	0.35 -0.60	0.55 -0.60	0.40 -0.80	0.40 -0.60	0.55 -0.60	0.65 -0.60	±0.80	±0.90	*1.00 -0.90
» 15.00	» 25.00		+0.20 -0.90	+0.20 -0.90	0.20 -0.60	+0.25 -0.90	+0.25 -0.90	+0.35 -0.90	+0.55 -0.90	+0.45 -0.60	+0.50 -0.90	+0.60 -0.90	+0.70 -0.90	±0.90	±0.90	±1.00

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	00		1200		1500		1700		1800		2000		2300		
	1200 «	00	1500	02	1700	03	1800	04	2000 «	05	2300 «	07	2500	08	
. 12,7 25.0 .	+0.15	00	+0,15	0.2	0,25	+0.3	0.35	0.4	0.5	+0,6	0.7	±0.8	0.7	±08	
-000	-0.8	-0.60	-08	-0.80	-0.8	-0.80	-0.8	-0.8	-0.8	-0.8	-0.8	±0.8	-08	±08	
» 250 » 30.0 »	+0.15	*02	0.15	+0.2	+0.25	0.3	+0.35	+0.4	0.5	+0.6	+0.7	+08	08	±09	
-0.90	-0.9	-0.90	-0.9	-0.90	-0.9	-0.90	-0.9	-0.9	-0.8	-0.9	-0.9	-0.9	-0.9	±09	
» 30,0 » 34.0 »	+0.15	02	0.25	0.3	0.25	0.3	0.35	0.4	0.5	0.5	0.7	08	08	+0.9	
-100	-1.0	-1.00	-1.0	-1.0	-1.00	-1.0	-0.90	-1.0	-1.0	-1.0	-1.0	-1.0	-0.9	-10	
» 340 » 40.0 »	0.20	08	+0.30	0.4	+0.40	+0.5	0.50	0.6	0.6	0.7	0.8	0.9	0.9	1.0	
-1.10	-1.1	-1.10	-1.1	-1.10	-1.1	-1.10	-1.1	-1.10	-1.1	-1.10	-1.1	-1.1	-1.1	-1.1	
» 400 » 500 »	0.30	0.4	0.40	0.5	0.50	0.6	0.60	0.7	0.7	0.8	0.9	1.0	10	1.1	
-120	-1.2	-1.20	-1.20	-1.2	-1.20	-1.2	-1.20	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-12	
» 50,0 » 600 »	+0.50	0.6	0.50	0.6	0.60	0.7	0.70	0.8	0.7	0.9	0.9	1.0	10	1.1	
-100	-1.3	-1.30	-1.30	-1.0	-1.30	-1.3	-1.30	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-18	
600 » 700 »	—	—	+0.50	0.7	+0.50	+0.8	0.50	0.9	0.5	1.0	1.0	1.1	10	1.2	
-1.50	-1.6	-1.50	-1.6	-1.50	-1.6	-1.50	-1.6	-1.6	-1.5	-1.6	-1.4	-1.6	-1.4	-1.6	
» 700 * 800 *	—	—	*1.00	0.7	*1.00	0.8	*1.00	0.9	*1.0	1.0	1.0	1.1	1.0	1.2	
-22	-2.2	-1.80	-2.5	-1.80	-2.5	-1.80	-2.5	-1.80	-2.5	-1.8	-2.5	-2.2	-2.5	-22	
» 60.0 » 900 »	—	—	1.00	0.8	1.00	0.9	1.00	1.0	1.0	1.1	1.0	1.2	1.0	1.3	
-1.80	-2.5	-1.80	-2.5	-1.80	-2.5	-1.80	-2.5	-1.80	-2.5	-1.8	-2.5	-2.2	-2.5	-22	
» 900 »100.0 »	—	—	1.00	0.9	1.00	1.0	1.00	1.1	1.0	1.2	1,0	18	1.0	1.4	
-1.80	-2.7	-1.80	-2.7	-1.80	-2.7	-1.80	-2.7	-1.80	-2.7	-1.8	-2.7	-2.2	-2.7	-22	
*100,0 »115.0 »	—	—	1.00	1.1	1.00	1.2	1.00	1.3	1.0	1.4	1.0	16	1.0	1.6	
-1.80	-3.1	-1.80	-3.1	-1.80	-3.1	-1.80	-3.1	-1.80	-3.1	-1.8	-3.1	-2.2	-3.1	-22	
» 115.0 » 125.0 »	—	—	1.00	1.4	1.00	1.5	1.00	1.6	1.0	1.7	1.0	18	1.0	1.9	
-1.80	-35	-1.80	-3.5	-1.80	-3.5	-1.80	-3.5	-1.80	-3.5	-1.8	-3.5	-2.2	-3.5	-22	
» 125.0 if 1400 »	—	—	1.00	1.6	1.00	1.7	1.00	1.8	1.0	1.9	1,0	2.0		2.1	
-2.20	-38	-2.20	-3.8	-2.20	-3.8	-2.20	-3.8	-2.20	-3.8	-2.2	-3.8	-2.2	-3.8	-22	
» 1400 if 160.0 if	—	—	1.00	1.9	1.00	2.0	1.00	2.1	1.0	2.2	1,0	28	1.0	2.4	
-2.20	-42	-2.20	-4.2	-2.20	-4.2	-2.20	-4.2	-2.20	-4.2	-2.2	-4.2	-2.2	-4.2	-22	

{} *	2500		2600		2600		3000		3200		3400		3600		3600	
	2600		2600		3000		3200		3400		3600		3600		4400	
. 12.7 25.0 .	0.9 -08	1.0 -0.8	0.9 -0.8	1.1 -0.8	0.9 -0.8	12 -0.8	0.9 -0.8	13 -0.8	0.9 -0.8	*1.4 -0.8	—	—	—	—	—	1.4 -0.8
» 25.0 » 300 »	±0,9	+1.0 -0.9	1.0 -0.9	+1.1 -0.9	+1.1 -0.9	12 -0.9	1.1 -0.9	+13 -0.9	1.1 -0.9	14 -0.9	+1.1 -0.9	1.5 -0.9	+1.1 -0.9	1.6 -0.9	+1.1 -0.9	1.6 -3.9
» 300 » 34.0 »	0.9 -	±1.0	±1.0	1.2 -1.0	±1.0	13 -1.0	±1.0	1.4 -1.0	±1.0	15 -1.0	±1.0	1.6 -1.0	±1.0	1.7 -1.0	±1.0	1.7 -1.0
» 34.0 » 400 »	±10	±1.1	±10	+1.3 -1.1	±1.0	1.4 -1.1	±1.0	15 -1.1	±1.0	1.6 -1.1	±1.0	1.7 -1.1	±1.0	+1.8 -1.1	±1.0	1.8 -1.1
» 40.0 » 50.0 »	1.1 -12	±1.2	±12	1.4 -1.2	±1.2	15 -1.2	±1.2	15 -1.2	±1.2	1.7 -12	±1.2	1.8 -12	±1.2	1.9 -1.2	±1.2	1.9 -1.2
500 » 600 »	1.1 -13	+1.2 -1.3	±12	+1.4 -1.3	±1.2	15 -1.3	±1.2	1.6 -1.3	±1.2	1.7 -13	±1.2	1.8 -13	±1.2	+1.9 -1.3	±1.2	1.9 -1.3
» 60.0 » 70.0 »	+1.0 -1	+1.3 -1.6	1.0 -1.4	+1.4 -1.6	+1.0 -1.4	+15 -1.6	+1.0 -1.4	±1.6	1.0 -1.4	1.7 -1.6	+1.0 -1.4	+1.8 -1.6	+1.0 -1.4	+1.9 -1.6	+1.0 -1.4	+1.9 -1.6
» 70.0 » 80.0 »	1.0 -1.4	1.3 -2.2	1.0 -1.4	*1.4 -2.2	1.0 -1.4	15 -2.2	1.0 -1.4	1.6 -2.2	1.0 -1.4	1.7 -22	1.0 -1.4	1.8 -22	1.0 -1.4	1.9 -2.2	1.0 -1.4	1.9 -2.2
» 800 » 900 »	+1.0 -22	+1.4 -2.5	1.0 -2.2	+1.5 -2.5	1.0 -2.2	+15 -2.5	+1.0 -2.2	+1.7 -2.5	1.0 -2.2	+18 -25	+1.0 -2.2	1.9 -25	+1.0 -2.2	2.0 -2.5	1.0 -2.2	+2.0 -2.5
» 900 » 100.0 »	1.0 -22	1.5 -2.7	1.0 -2.2	1.6 -2.7	1.0 -2.2	1.7 -2.7	1.0 -2.2	18 -2.7	1.0 -2.2	1.9 -2.7	1.0 -2.2	2.0 -2.7	1.0 -2.2	2.1 -2.7	1.0 -2.2	2.1 -2.7
*100.0 » 115.0 »	1.0 -22	1.7 -3.1	+1.0 -2.2	+1.8 -3.1	1.0 -2.2	1.9 -3.1	1.0 -2.2	2.0 -3.1	+1.0 -2.2	2.1 -3.1	+1.0 -2.2	+2.2 -3.1	1.0 -2.2	2.3 -3.1	+1.0 -2.2	2.3 -3.1
» 115.0 » 125.0 »	1.0 -22	2.0 -3.5	1.0 -2.2	2.1 -3.5	1.0 -2.2	22 -3.5	1.0 -2.2	23 -3.5	1.0 -2.2	2.4 -35	1.0 -2.2	2.5 -35	1.0 -2.2	2.6 -3.5	1.0 -2.2	2.6 -3.5
1250 » 1400	+1.0 -22	2.2 -3.8	1.0 -2.2	2.3 -3.8	1.0 -2.2	24 -3.8	1.0 -2.2	25 -3.8	1.0 -2.2	2.6 -38	+1.0 -2.2	2.8 -38	+1.0 -2.2	2.9 -3.8	+1.0 -2.2	2.9 -3.8
» 1400 *160.0 »	+1.0 -22	+2.5 -4.2	+1.0 -2.2	+2.6 -4.2	+1.0 -2.2	2.7 -4.2	+1.0 -2.2	28 -4.2	+1.0 -2.2	2.9 -42	+1.0 -2.2	+3.0 -42	+1.0 -2.2	+3.1 -4.2	+1.0 -2.2	+3.1 -4.2

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800 . .800	3.9 .	+6 +10
1500 . .1500	.3.9 16.0 .	+10 +15
	.16.0 60.0 . » 60.0 » 100.0 » » 100.0 » 160.0 »	+25 +50 +75
1 : +5 — 1000 ; +10 — 1000 . 2		

2.7

50

5.

2.8

20 — 1000 :
 30 — 1000 .

2.9

6.

6

1500 . .1500	3.9 .	+10 +15
2000 . .2000 6000 . .6000	.3.9 16.0 .	+10 +25 +35
3000 . .3000 6000 . .6000	.16.0 60,0 .	+15 +25 +40
	.60.0 100.0 . » 100.0 160.0 »	+50 +75

2.10

7.

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1500 . 1500	3.9 .	+15 +20
4000 . .4000	.3.9	+20 +25

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0.4 1.4 .	8	10	15	20
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2.5 .	800 . .800	50 100
.2.5	800 . .800	35 70

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1 .600 70 2.5

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2.17 :

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2.19.1 , , () -

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2.21 650 1000

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	500	510		050		700	710	750		850	900	950	1000	1100	1250		1420	1500	1000
0.40:0.45; 050:055; 0.60			1200 2000	1400					—	—	—	—	2000	—	—	—	—	—	—
053:0.65:0.70; 0.75	1200	710 1420				1420	1200 2000	1500 2000	—	—	—	—	2000 2500	—		—	—	—	—
0.8; 0.9								1500	—	—	—	—		—	2500	—	—	—	—
1.0	—	—		2000				1600 2000	1600 2500	1700	1800 2000	1900		—		—	—	—	—
1.2; 1.3; 1.4	—	—						1500 2000	1600 2000 2500	1800	1800 2000 2500	2000	1800 2500	2000 2500	2500 3000	—	—	—	—
1.5; 1.6; 1.8	—	—			1420 2000		1420 6000	1500 6000	1600 6000	1800 6000	1500 6000		1500 6000						—
2.0; 2.2	—	—				1420 6000				2000 6000	1600 6000		2000 6000				2000		—
2.5: 2.8	—	—															6000		—
3.0; 3.2; 3.5; 3.8: 3.9	—	—		2000						1200									
4.0; 4.5; 5.0; 5.5	—	—								6000									
6.0; 6.5; 7.0; 7.5	—	—	—	—	—								1200 7000					2000 7000	
8.0; 8.5; 9.0; 9.5:10.0; 10.5	—	—	—	—	—								1200 8000					2000	2000 3000
11.0; 11.5; 12.0; 12.5:12,7													2000 6000					8000	2000 12000

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			1700	1600	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3200	3400	3600	3800	4000	4200	4400	
1.5; 1,6:1.8																								
2.0; 2.2																								
2.5; 2.6																								
3.0:32; 3,5:38; 3.9			2000 6000																					
4.0; 4.5; 5.0; 5.5																								
6.0; 6.5:7.0; 7.5			2000 7000																					
8.0; 8.5; 9.0; 9.5; 10.0:10.5			3000						4000 12000															
11.0; 11.5; 12.0; 12.5:12.7			12000						4000 10000	4000 9000														
13.0	13.5;	14.0	3200 12000						3200 10000				-	-	-	-	-	-	3600 11650					
14.5	15.0;	15.5																						
16.0	16.5;	17.0																						
17.5	18.0;	18.5																						
19.0	19.5;	20.0																						
20.5	21.0;	21.5																						
22.0	22.5;	23.0																						
23.5	24.0;	24.5																						
25.0	25.5																							
26; 27; 28: 29; 30; 31:32; 34; 36; 38:40																								3200 12000
42;45;48;50:52;55 58; 60:62; 65; 68; 70 72:75; 78; 80:82; 85 87; 90; 92; 95; 100 105; 110; 115; 120 125; 130; 135; 140 145:150; 155:160			3500 9000						3000 9000				3200 9000	3400 8500	3600 8000	3600 7000	-	-	-					

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