

Brass round bars Z33 (W5000)

updated on: february 2019

material	Wieland Z33 / CuZn39Pb3	availability	● Stock Wieland Metalix AG
standard	EN-Nr. CW614N / 12164		○ CH-4512 Bellach
length (mm)	3000 ± 30		○ Stock Wieland-Werke
Packaging	to Dimension 9.5 in Kisten / from Dim. 10 in Bunden		○ DE-89269 Vöhringen

Nenn ø [mm]	Features			state	mechanical properties				mass (kg/m)	avail- ability	Nenn ø [mm]	
	ISO-Tolerance [mm]	end	eddy current test		Rm [MPa]	Rp0,2 [MPa]	A [%]	HB2,5				
1	h8	+0 / -0.014	chamfer 0.2 - 1.0 top 1.5 - 4.0	standard to DK1-Check Sheet 791	R500	≥ 500	ca. 390	≥ 5	ca. 150	0.007	●	1
1.2										0.010	●	1.2
1.3										0.011	●	1.3
1.4										0.013	●	1.4
1.5										0.015	●	1.5
1.6										0.017	●	1.6
1.7										0.019	●	1.7
1.8										0.022	●	1.8
1.9										0.024	●	1.9
2										0.027	●	2
2.1		0.029								●	2.1	
2.2		0.032								●	2.2	
2.3		0.035								●	2.3	
2.35		0.037								●	2.35	
2.4		0.038								●	2.4	
2.5		0.042								●	2.5	
2.6		0.045								●	2.6	
2.7		0.049								●	2.7	
2.8		0.052								●	2.8	
2.9		0.056								●	2.9	
3	+0 / -0.018									0.060	●	3
3.1										0.064	●	3.1
3.2										0.068	●	3.2
3.3										0.073	●	3.3
3.4										0.077	●	3.4
3.5										0.082	●	3.5
3.6										0.087	●	3.6
3.7										0.091	●	3.7
3.8										0.096	●	3.8
3.9										0.102	●	3.9
4										0.107	●	4
4.2										0.118	●	4.2
4.3										0.123	●	4.3
4.4										0.129	●	4.4
4.5										0.135	●	4.5
4.6										0.141	●	4.6
4.7										0.147	●	4.7

* also available in thermally relaxed version from stock (for watch parts).

Nenn ∅ [mm]	Features			eddy current test	mechanical properties				mass (kg/m)	avail- ability	Nenn ∅ [mm]	
	ISO-Tolerance [mm]	end	state		Rm [MPa]	Rp0,2 [MPa]	A [%]	HB2,5				
4.8	h8	+0 / -0.018	chamfer 0.2 - 1.0 top 1.5 - 4.0	standard to DKI-Check Sheet 791	R500	≥ 500	ca. 390	≥ 5	ca. 150	0.154	●	4.8
4.9			0.160							●	4.9	
5			0.167							●	5	
5.2			0.181							●	5.2	
5.3			0.188							●	5.3	
5.5			0.202							●	5.5	
5.8		0.225	●							5.8		
6		0.240	●							6		
6.1		0.248	●							6.1		
6.2		0.257	●							6.2		
6.35		0.269	●							6.35		
6.5		0.282	●							6.5		
7 *		0.327	●							7 *		
7.5		0.376	●							7.5		
8 *		0.427	●							8 *		
8.5*		0.482	●							8.5*		
9 *		0.541	●							9 *		
9.5 *		0.603	●							9.5 *		
10 *	0.668	●	10 *									
10.5	0.737	●	10.5									
11 *	0.808	●	11 *									
11.5	0.888	●	11.5									
12 *	0.961	●	12 *									
12.5 *	1.040	●	12.5 *									
13 *	1.128	●	13 *									
13.5	1.220	●	13.5									
14 *	1.308	●	14 *									
14.5	1.400	●	14.5									
15 *	1.502	●	15 *									
15.5	1.608	●	15.5									
16 *	1.710	●	16 *									
16.5	1.824	●	16.5									
17 *	1.929	●	17 *									
17.5	2.052	●	17.5									
18 *	2.163	●	18 *									
18.5	2.228	●	18.5									
19 *	2.410	●	19 *									
19.5	2.544	●	19.5									
20 *	2.670	●	20 *									
20.5	2.812	○	20.5									
21 *	2.944	●	21 *									
22 *	3.231	●	22 *									
22.5	3.384	○	22.5									
23	3.552	●	23									
24 *	3.844	●	24 *									
25 *	4.160	●	25 *									
26 *	4.512	●	26 *									
27 *	4.880	●	27 *									
28 *	5.232	●	28 *									
29	5.600	●	29									
30 *	6.008	●	30 *									
		+0 / -0.022	chamfer 0.2 - 1.5 top 2.0 - 7.0									
		+0 / -0.027	chamfer 0.2 - 2.0 top 3.0 - 10.0		R430	≥ 430	ca. 250	≥ 10	ca. 120			
		+0 / -0.033	chamfer 0.2 - 3.0 top 4.0 - 12.0									

Nenn ∅ [mm]	Features			eddy current test	state	mechanical properties			mass (kg/m)	avail- ability	Nenn ∅ [mm]	
	ISO-Tolerance [mm]	end				Rm [MPa]	Rp0,2 [MPa]	A [%]				HB2,5
31	h9	+0 / -0.062	chamfer 0.2 - 4.0 top 7.5 - 11.0	standard to DKJ- Check Sheet 791	R430	≥ 430	ca. 250	≥ 10	ca. 120	6.432	●	31
32 *										6.840	●	32 *
33										7.276	●	33
34 *										7.716	●	34 *
35 *										8.188	●	35 *
36 *										8.652	●	36 *
37	h9									9.152	●	37
38 *										9.640	●	38 *
39	h10	+0 / -0.100	chamfer 0.2 - 4.0 top 10 - 12	on request	R360	≥ 360	ca. 150	≥ 20	ca. 90	10.156	●	39
40 *										10.688	●	40 *
41										11.222	●	41
42 *										11.780	●	42 *
43										12.344	●	43
44										12.920	●	44
45 *	h11	+0 / -0.160	chamfer 0.2 - 4.0 top serrated	on request	R360	≥ 360	ca. 150	≥ 20	ca. 90	13.520	●	45 *
46										14.130	●	46
48 *										15.380	●	48 *
49										16.029	●	49
50 *										16.680	●	50 *
51										17.364	●	51
52	18.050	●	52									
54	19.467	●	54									
55	20.180	●	55									
56	20.940	●	56									
58	22.460	●	58									
60	24.030	●	60									
65	28.210	●	65									
70	32.710	●	70									
75	37.552	●	75									
80	serrated			M	M	M	M	M	42.726	●	80	

* also available in thermally relaxed version from stock (for watch parts).

Further dimensions and alloys on request

The Wieland Precision Rods W5000 in overview

W5000 S

The W5000 S. is the precision pole in the dimension area of 1 to 10 mm. She considers the demands in Speeds more than 10,000 revos and the special signs for the treatment on long automatic lathes. Diameter tolerance h8 is limited within an alliance to 5 around and the unroudness on 0.05% Of diameter (4 - 10 mm), i. e. for a pole with 4 mm of diameter the unroudness only max. 2 amounts around. The W5000 S. if we deliver diamond-pulled with an improved, evenly bright and shining surface.

W5000 M

The W5000 M is the classical precision pole in the dimension area more than 10 to 50 mm. She considers in to special measure the demands for the treatment on Mehrspindelautomaten by a high same moderation within a lot. To diameter of 30 mm we deliver the W5000 M with tolerance h8. The allowed one We have limited directness divergence to max. 0.5 mm / m.

W5000 L

The W5000 L is the "big" precision pole in the dimension area more than 50 to 80 mm. She allows an undisturbed one Treatment with big rotary masses and also reaches a directness from 0.5 mm / m

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