Parallel Splines

METRIC PARALLEL SPLINE SHAFT CONNECTIONS DIN 5463

The flank of each key must be parallel to the inside diameter d' as far as to the point of intersection.

Details left unspecified are to be designed as appropriate

Dimensions of a spline bore profile A having the nominal dimensions 8 x 32 x 36:
Spline bore profile A 8 x 32 x 38 DIN 5462

Designation of a spline shaft profile B having the nominal dimensions 8 x 46 x 54:
Spline shaft profile B 8 x 46 x 54 DIN 5463

Nominal dimensions New symbol Number of keys inside diameter outside diam.	**Old symbol inside diam. Outside diam. width of key**	**Liczba wypustów**	**Centrowanie**	**d1**	**d2**	**b**	**D3**	**e2**	**f**	**g**	**K**	**r**
6 x 11 x 14	11 x 14 x 4			11	14	3	9.9	1.55		0.3	0.3	0.2
6 x 13 x 16	13 x 16 x 3.5			13	16	3.5	12	1.5	0.32	0.3	0.3	0.2
6 x 16 x 20	16 x 20 x 4		interior	16	20	4	14.54	2.1	0.16	0.3	0.3	0.2
6 x 16 x 22	18 x 22 x 5	6		18	22	5	16.7	1.95	0.45	0.3	0.3	0.2
6 x 21 x25	21 x 25 x 5		centering	21	25	5	19.5	1.98	1.95	0.3	0.3	0.2
6 x 23 x 28	23 x 28 x 6			23	28	6	21.3	2.3	1.34	0.3	0.3	0.2
6 x 26 x 32	26 x 32 x 6			26	32	6	23.4	2.94	1.65	0.4	0.4	0.3
6 x 28 x 34	28 x 34 x 7			28	34	7	25.9	2.94	1.7	0.4	0.4	0.3
8 x 32 x 36	32 x 38 x 6			32	38	6	29.4	3.3	0.15	0.4	0.4	0.3
8 x 36 x 40	36 x 42 x 7		interior	35	42	7	33.9	3.01	1.02	0.4	0.4	0.3
8 x 42 x 46	42 x 48 x 8			42	48	8	39.5	2.91	2.57	0.4	0.4	0.3
8 x 46 x 50	46 x 54 x 9	8	or flank	46	54	9	42.7	4.1	0.86	0.5	0.5	0.5
8 x 52 x 58	52 x 60 x 10			52	60	10	48.7	4.74	2.44	0.5	0.5	0.5
8 x 56 x 62	56 x 65 x 10		centering	56	65	10	52.2	5	2.5	0.5	0.5	0.5
8 x 62 x 68	62 x 72 x 10			62	72	12	57.8	5.43	2.4	0.5	0.5	0.5
10 x 72 x 72	72 x 82 x 12			72	78	12	67.4	5.43		0.5	0.5	0.5
10 x 82 x 92	82 x 92 x 12			82	88	12	77.1	5.4	3	0.5	0.5	0.5
10 x 92 x 102	92 x 102 x 14	10		92	98	14	87.3	5.2	4.5	0.5	0.5	0.5
10 x 102 x 112	102 x 112 x 16			102	108	16	97.7	4.9	6.3	0.5	0.5	0.5
10 x 112 x 125	112 x 125 x 18			112	120	18	106.3	3.4	4.4	0.5	0.5	0.5

1) Internal centering is not possible for all profiles when producing spline shaft profiles by the hobbing process.
2) These values have been calculated on the basis that the spline shaft profiles are produced by the hobbing process
3) Tolerances for inside diameter d1, outside diameter d2, and key width b should be stated
4) The old symbol should no longer be used for new construction and remains in force only for the transition period.