

Rotary Shafts - D Tolerance h9 (Cold-drawn) / h7 (Ground) / g6 (Ground)

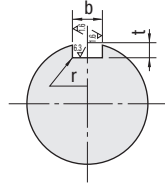
One End Tapped with Keyway

Number of keyways can be specified up to 3.



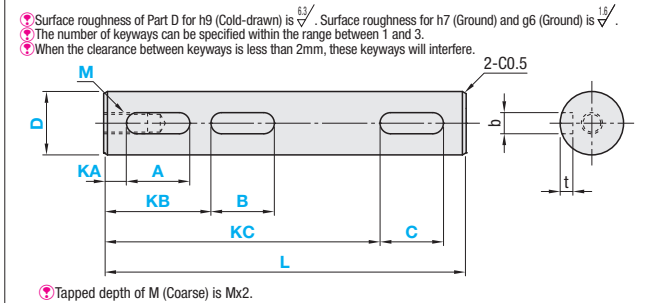
Type	D Tolerance	Material	Surface Treatment
(1) SFMKRT	h9 (Cold-drawn)	S45C	Black Oxide
PSFMKRT		Equivalent	Electroless Nickel Plating
SSFMKRT		SUS304	-
(2) SFHKRT	h7 (Ground)	S45C	Black Oxide
PSFHKRT		Equivalent	Electroless Nickel Plating
SSFHKRT		SUS304	-
(3) SFGKRT	g6 (Ground)	S45C	Black Oxide
PSFGKRT		Equivalent	Electroless Nickel Plating
SSFSGKRT		SUS304	-

Detailed Keyway Dimensions



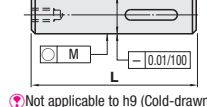
Shaft Dia.	Reference Dimension	b Tolerance (N9)	Reference Dimension	t Tolerance	r
6	2	-0.004	1.2		0.08-0.16
8, 10	3	-0.029	1.8	+0.1	0
12	4	0	2.5		0.16-0.25
13-17	5	-0.03	3.0		
18-22	6		3.5		
25, 30	8	0	4.0		
35	10	-0.036	5.0	+0.2	0
40	12	0	5.0		0.25-0.4
50	14	-0.043	5.5		

When KA < 1, KA+A-L, KB+B-L and L-KC-C < 1, keyway is shaped as shown below.



Tapped depth of M (Coarse) is Mx2.

Circularity and Straightness



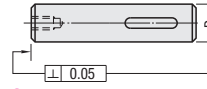
Not applicable to h9 (Cold-drawn).

Circularity of Part D

D over or Less	Circularity M
5	0.004
13	0.005
20	0.006
40	0.007

Not applicable to h9 (Cold-drawn).

Perpendicularity



Not applicable to h9 (Cold-drawn).

Tolerances of L and Other Dimensions

Dimension over or Less	Tolerance
2	±0.1
6	±0.2
30	±0.3
120	±0.5
400	±0.8

(1)h9 (Cold-drawn)

Type	Part Number		L 1mm Increment	M (Coarse) Selection	Keyway (1) KA, A	Keyway (2) KB, B	Keyway (3) KC, C
	D _{h9}	Tolerance					
SFMKRT	6	0 -0.030	15.0-400.0	(2.6) (3) (4)	KA+A≤L	KB+B≤L	KC+C≤L
	8	0	15.0-500.0	(2.6) (3) (4) (5) (6)			
	10	-0.036	15.0-600.0	3 4 (5) (6)			
PSFMKRT	12	0	15.0-700.0	4 5 (6) (8)	KA≥0	KB≥KA+A	KC≥KB+B
	15	-0.043	15.0-800.0	4 5 6 (8)			
SSFMKRT (D6 is not available for SSFMKRT.)	20	0	30.0-1000.0	4 5 6 8 10	b≤A≤100	b≤B≤100	b≤C≤100
	25	0	50.0-1000.0	4 5 6 8 10 12			
	30	-0.052	60.0-1000.0	6 8 10 12 16			
	35	0	70.0-1000.0	6 8 10 12 16 20			
	40	-0.062	70.0-1000.0	6 8 10 12 16 20			

(2)h7 (Ground)

Type	Part Number		L 1mm Increment	M (Coarse) Selection	Keyway (1) KA, A	Keyway (2) KB, B	Keyway (3) KC, C
	D _{h7}	Tolerance					
SFHKRT	6	0 -0.012	15.0-400.0	(2.6) (3) (4)	KA+A≤L	KB+B≤L	KC+C≤L
	8	0	15.0-500.0	(2.6) (3) (4) (5) (6)			
	10	-0.015	15.0-600.0	3 4 (5) (6)			
PSFHKRT	12	0	15.0-700.0	4 5 (6) (8)	KA≥0	KB≥KA+A	KC≥KB+B
	15	-0.018	15.0-800.0	4 5 6 (8)			
SSFHKRT	17	0	30.0-900.0	4 5 6 (8) (10) (12)	b≤A≤100	b≤B≤100	b≤C≤100
	20	0	30.0-1000.0	4 5 6 8 (10) (12) (16)			
	25	0	50.0-1000.0	4 5 6 8 10 12 (16)			
	30	-0.021	60.0-1000.0	6 8 10 12 16			
	35	0	70.0-1000.0	6 8 10 12 16 20			
40	0	80.0-1000.0	10 12 16 20 24				
50	-0.025	100.0-1000.0	12 16 20 24 30				

(3)g6 (Ground)

Type	Part Number		L 1mm Increment	M (Coarse) Selection	Keyway (1) KA, A	Keyway (2) KB, B	Keyway (3) KC, C
	D _{g6}	Tolerance					
SFGKRT	6	-0.004 -0.012	15.0-400.0	(2.6) (3) (4)	KA+A≤L	KB+B≤L	KC+C≤L
	8	-0.005	15.0-500.0	(2.6) (3) (4) (5) (6)			
	10	-0.014	15.0-600.0	3 4 (5) (6)			
PSFGKRT	12	-0.006	15.0-700.0	4 5 (6) (8)	KA≥0	KB≥KA+A	KC≥KB+B
	13	-0.017	15.0-700.0	4 5 6 (8)			
SSFSGKRT (D13, D16, D18 or D22 is not available for SSFSGKRT.)	15	-0.006	15.0-800.0	4 5 6 (8)	b≤A≤100	b≤B≤100	b≤C≤100
	16	-0.017	15.0-900.0	4 5 6 8 (10)			
	17	0	30.0-900.0	4 5 6 8 (10) (12)			
	18	0	30.0-900.0	4 5 6 8 (10) (12)			
	20	0	30.0-1000.0	4 5 6 8 10 (12) (16)			
22	-0.007	40.0-1000.0	4 5 6 8 10 12 (16)				
25	-0.020	50.0-1000.0	4 5 6 8 10 12 (16)				
30	0	60.0-1000.0	6 8 10 12 16				
35	0	70.0-1000.0	6 8 10 12 16 20				
40	-0.009 -0.025	80.0-1000.0	10 12 16 20 24				
50	0	100.0-1000.0	12 16 20 24 30				

Ordering Example: Part Number - L - M - Keyway (1) - Keyway (2) - Keyway (3)

1 Keyway SFMKRT10 - 325 - M4 - KA20 - A50

2 Keyways SFHKRT30 - 300 - M10 - KA20 - A50 - KB120 - B20

3 Keyways SFGKRT25 - 350 - M8 - KA10 - A60 - KB90 - B30 - KC210 - C30