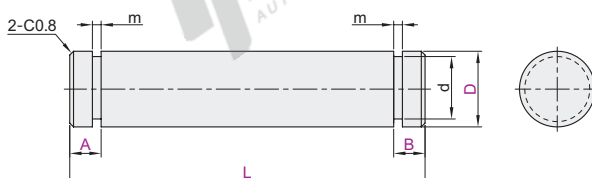


Retaining Ring Grooves on Both Ends

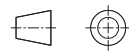
Straight

Rotary Shafts

Code	Type	D Tolerance	Material		Surface Treatment
			GB	Equiv.	
MAD02	Retaining Ring Grooves on Both Ends	g6	45	S45C	Electroless Nickel Plating
MAD11			0Cr18Ni9	SUS304	—
MAD22		h7	35CrMo	SCM435 Hardness 28~33 HRC	Electroless Nickel Plating
MAD32			45	S45C	Electroless Nickel Plating
MAD41		h9	0Cr18Ni9	SUS304	—
MAD52			45	S45C	Electroless Nickel Plating
MAD61			0Cr18Ni9	SUS304	—



6.3



The first perspective

- ① Roundness, straightness, perpendicularity and coaxiality, please refer to the introduction of shaft products.
② For retaining rings details, please refer to the rotary shafts product introduction.

g6

Part Number		D _{g6}	0.1 mm Inc.	1 mm Inc.	Accessory Retaining Ring 2 Pcs.
Code			L	A·B	
MAD02 MAD11 MAD22	2		18.0~50.0		E Type 1.2
	2.5	-0.002 -0.008			E Type 1.5
	3		18.0~150.0	3≤A<L/2	E Type 2
	4		18.0~200.0	3≤B<L/2	E Type 3
	5	-0.004 -0.012	18.0~250.0		E Type 4
	6		18.0~300.0		E Type 5
	8	-0.005 -0.014	18.0~400.0	4≤A<L/2	E Type 7
	10		20.0~500.0	4≤B<L/2	C Type 10
	12		35.0~600.0		C Type 12
	13				C Type 13
	15	-0.006 -0.017	45.0~700.0		C Type 15
	16		45.0~800.0	5≤A<L/2	C Type 16
	17			5≤B<L/2	C Type 17
	18		65.0~800.0		C Type 18
	20				C Type 20
	22	-0.007 -0.020			C Type 22
	25				C Type 25
	30		75.0~800.0	6≤A<L/2	C Type 30
	35			6≤B<L/2	C Type 35
	40	-0.009 -0.025			C Type 40
	50		95.0~800.0		C Type 50

h7

Part Number		D _{h7}	0.1 mm Inc.	1 mm Inc.	Accessory Retaining Ring 2 Pcs.
Code			L	A·B	
MAD32 MAD41	6		18.0~300.0	3≤A<L/2 3≤B<L/2	E Type 5
	8	-0.012	18.0~400.0	4≤A<L/2	E Type 7
	10	-0.015	20.0~500.0	4≤B<L/2	C Type 10
	12		35.0~600.0	5≤A<L/2	C Type 12
	15	-0.018	45.0~700.0	5≤B<L/2	C Type 15
	20		65.0~800.0		C Type 20
	25				C Type 25
	30	-0.021			C Type 30
	35		75.0~800.0	6≤A<L/2	C Type 35
	40			6≤B<L/2	C Type 40
	50	-0.025	95.0~800.0		C Type 50



Optional Processing

h9

Part Number		D _{h9}	0.1 mm Inc.	1 mm Inc.	Accessory Retaining Ring 2 Pcs.
Code			L	A·B	
MAD52 MAD61	3	0 -0.025	18.0~150.0		E Type 2
	4		18.0~200.0	3≤A<L/2	E Type 3
	5	0 -0.030	18.0~250.0	3≤B<L/2	E Type 4
	6		18.0~300.0		E Type 5
	8	0	18.0~400.0	4≤A<L/2	E Type 7
	10	-0.036	20.0~500.0	4≤B<L/2	C Type 10
	12		35.0~600.0		C Type 12
	15	-0.043	45.0~700.0	5≤A<L/2	C Type 15
	20		65.0~800.0	5≤B<L/2	C Type 20
	25	0 -0.052			C Type 25
	30		75.0~800.0	6≤A<L/2	C Type 30
	35			6≤B<L/2	C Type 35
	40	0 -0.062			C Type 40
	50		95.0~800.0		C Type 50



Please order as shown

Part Number	D	L	A·B
MAD02	2.5	18.0~50.0	3≤A<L/2 3≤B<L/2

MAD02—D2—L30—A12—B12

Optional Processing

Part Number	D	L	A·B	Optional Processing Code
MAD02	2.5	75~300	6≤A<D/2 6≤B<L/2	LA() LB() KE() KB() KC() KD()

MAD02—D25—L200—A30—B30—KB50—S10



Discount price

Per Price	1~4	5~
100%	100%	100%



Delivery

8

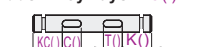
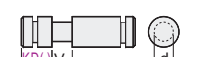


Delivery

10

① No Surface Treatment

② with Surface Treatment

Code	Spec.																																							
LA() LB()	Adds 1 Set Screw Flat. LA()  Ordering Code LA10-G3 Ordering Code LB10-J3-Y10-X3 ① 1 mm Inc. ② G·J·X ≤50. ③ Not applicable to D2 and D2.5. <table><tr><th>D</th><th>H</th></tr><tr><td>3~5</td><td>0.5</td></tr><tr><td>6~17</td><td>1</td></tr><tr><td>18~40</td><td>2</td></tr><tr><td>50</td><td>3</td></tr></table>	D	H	3~5	0.5	6~17	1	18~40	2	50	3																													
D	H																																							
3~5	0.5																																							
6~17	1																																							
18~40	2																																							
50	3																																							
KE()	Adds a Wrench Flat  Ordering Code KE5 ① 1 mm Inc. ② Not applicable to D=2~5. <table><tr><th>D</th><th>W</th><th>V</th></tr><tr><td>6</td><td>5</td><td>6</td></tr><tr><td>8</td><td>7</td><td>8</td></tr><tr><td>10</td><td>8</td><td>10</td></tr><tr><td>12</td><td>10</td><td>12</td></tr><tr><td>15</td><td>13</td><td>15</td></tr><tr><td>17</td><td>14</td><td>17</td></tr><tr><td>20</td><td>17</td><td>20</td></tr><tr><td>25</td><td>22</td><td>25</td></tr><tr><td>30</td><td>27</td><td>30</td></tr><tr><td>35</td><td>30</td><td>35</td></tr><tr><td>40</td><td>36</td><td>40</td></tr><tr><td>50</td><td>41</td><td>50</td></tr></table>	D	W	V	6	5	6	8	7	8	10	8	10	12	10	12	15	13	15	17	14	17	20	17	20	25	22	25	30	27	30	35	30	35	40	36	40	50	41	50
D	W	V																																						
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30	27	30																																						
35	30	35																																						
40	36	40																																						
50	41	50																																						
KB() KC()	Adds 1 Keyway. KB()  Ordering Code KB50-S10 Ordering Code KC50-C8-K40-T10 ① 1 mm Inc. ② S·T·C ≤100. ③ If 3 keyways are required, use both KB() and KC(). ④ Not applicable to D=2~5. ⑤ For keyway details, please refer to the product introduction. Adds 2 Keyways. KC() 																																							
KD()	Adds a Slit Cam Groove  Ordering Code KD10 ① 1 mm Inc. ② Only applicable to D=3~12. <table><tr><th>D</th><th>d</th><th>V2</th></tr><tr><td>3</td><td>2</td><td>3</td></tr><tr><td>4</td><td>3</td><td>4</td></tr><tr><td>5</td><td>4</td><td>5</td></tr><tr><td>6</td><td>5</td><td>6</td></tr><tr><td>8</td><td>7</td><td>8</td></tr><tr><td>10</td><td>8</td><td>10</td></tr><tr><td>12</td><td>10</td><td>12</td></tr></table>	D	d	V2	3	2	3	4	3	4	5	4	5	6	5	6	8	7	8	10	8	10	12	10	12															
D	d	V2																																						
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