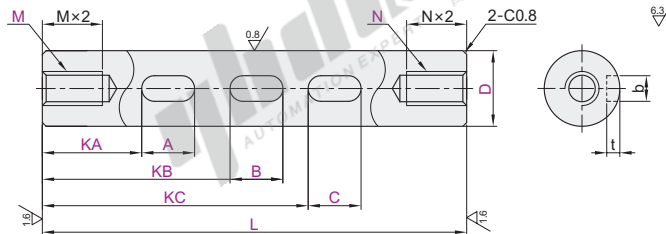


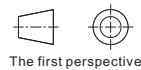
Rotary Shafts

Both Ends Tapped, with Keyways Straight

Code	Type		D Tolerance	Material		Surface Treatment
				GB	Equiv.	
MAN02	Both Ends Tapped	with Keyway	g6	45	S45C	Electroless Nickel Plating
MAN11				0Cr18Ni9	SUS304	—
MAN32			h7	45	S45C	Electroless Nickel Plating
MAN41				0Cr18Ni9	SUS304	—
MAN62			h9	45	S45C	Electroless Nickel Plating



- ① Circularity, straightness, perpendicularity and concentricity, please refer to the introduction of shaft products.
② For keyway details, please refer to the rotary shafts product introduction.



g6

Part Number		L	M-N Selection	Keyway① KA-A	Keyway② KB-B	Keyway③ KC-C
Code	D _{g6}					
		0.1 mm Inc.		1 mm Inc.		
MAN02 MAN11	6 -0.004 -0.012	18.0~300.0	3 4	KA≥0 bsA≤120	KB≥KA+A bsB≤120	KC≥KB+B bsC≤120
	8 -0.005 -0.014	18.0~400.0	3 4 5 6			
	10	18.0~500.0	4 5 6			
	12	25.0~600.0	5 6 8			
	13	25.0~600.0	5 6 8			
	15	25.0~700.0	5 6 8			
	16 -0.004 -0.017	25.0~800.0	5 6 8 10			
	17	35.0~800.0	5 6 8 10 12			
	18	35.0~800.0	5 6 8 10 12			
	20	35.0~800.0	5 6 8 10 12 16			
	22	45.0~800.0	5 6 8 10 12 16			
	25 -0.007 -0.020	45.0~800.0	5 6 8 10 12 16			
	30	55.0~800.0	8 10 12 16			
	35	65.0~800.0	8 10 12 16 20			
	40 -0.009 -0.025	75.0~800.0	12 16 20 24			
	50	95.0~800.0	16 20 24 30			

h7

Part Number		L 0.1 mm Inc.	M-N Selection	Keyway①	Keyway②	Keyway③
Code	D _{h7}			KA-A	KB-B	KCC
				1 mm Inc.		
MAN32 MAN41	6 ^{0 -0.012}	18.0~300.0	3 4	KA≥0 bsA≤120	KB≥KA+A bsB≤120	KC≥KB+B bsC≤120
	8 ^{0 -0.015}	18.0~400.0	3 4 5 6			
	10 ^{0 -0.018}	18.0~500.0	4 5 6			
	12 ^{0 -0.018}	25.0~600.0	5 6 8			
	15 ^{0 -0.021}	25.0~700.0	5 6 8			
	20 ^{0 -0.021}	25.0~800.0	5 6 8 10			
	25 ^{0 -0.021}	45.0~800.0	5 6 8 10 12			
	30 ^{0 -0.025}	55.0~800.0	8 10 12 16			
	35 ^{0 -0.025}	65.0~800.0	8 10 12 16 20			
	40 ^{0 -0.025}	75.0~800.0	12 16 20 24			
	50 ^{0 -0.025}	95.0~800.0	16 20 24 30			

h9

Part Number		L 0.1 mm Inc.	M-N Selection	Keyway①	Keyway②	Keyway③	
Code	D _{h9}			KA-A	KB-B	KC-C	
1 mm Inc.							
MAN62	6	0-0.030	18.0~300.0	3 4	KA≥0 bsA≤120	KB≥KA+A bsB≤120	KC≥KB+B bsC≤120
	8		18.0~400.0	3 4 5 6			
	10	-0.036	18.0~500.0	4 5 6			
	12		25.0~600.0	5 6 8			
	15	-0.043	25.0~700.0	5 6 8			
	20		35.0~800.0	5 6 8 10			
	25		45.0~800.0	5 6 8 10 12			
	30	-0.052	55.0~800.0	8 10 12 16			
	35		65.0~800.0	8 10 12 16 20			
	35	-0.062					



Code	Spec.
LC	Changes L Dimension Tolerance [Ordering Code] LC ① L<400 changes to L±0.05 L≥400 changes to L±0.1
LA() LB()	Adds 1 Set Screw Flat. LA() [Ordering Code] LA10-G3 Adds 2 set screw flats LB() [Ordering Code] LB10-J3-Y10-X3 ① 1 mm Inc. ② G·J·X ≤50.
KD()	Adds a Slit Cam Groove [Ordering Code] KD10 ① 1 mm Inc. ② Only applicable to D=6~12.
KE()	Adds a Wrench Flat [Ordering Code] KE10 ① 1 mm Inc.



Part Number	L	M-N Selection	KA-A	KB-B	KC-C
MAN02	6	18~300	3 4	KA≥0	KB≥0
MAN02	8	18~400	3 4 5 6	bsA≤120	bsB≤120
MAN02	10	18~500	4 5 6	bsA≤120	bsC≤120

MAN02—D8—L350—M4—N4—KA10—A10—KB90—B30—KC210—C30

Optional Processing

Part Number	L	M-N Selection	KA-A	KB-B	KC-C	Optional Processing Code
MAN02	6	18~300	3 4	KA≥0	KB≥0	
MAN02	8	18~400	3 4 5 6	bsA≤120	bsB≤120	① KD() KE()...

MAN02—D8—L350—M4—N4—KA10—A10—KB90—B30—KC210—C30—LC

Discount price	Per	1~4	5~
	Price	100%	Additional quotation

Delivery	8
	① No Surface Treatment

Delivery	10
	① with Surface Treatment