Guide Axis ▶ One-end External Thread and One-end Internal Thread with Chamfer Type • Type with Wrench Slot

Ordinary Grade/Precision Grade

Please order according to the diagram

❶~❼ Select the type and parameters in the order of for ordering.

Type with Wrench Slot(Ordinary Grade)

Model(❶Code)	–	❷D	–	❸L	–	❹E	–	❺M	–	❻N	–	❼S	–	MC() MD() LC NC()
HCZMN	–	D8	–	L800	–	E10	–	M6	–	N4	–	S15	–	LC

Optional Processing

Price Excluding Tax (Yuan)

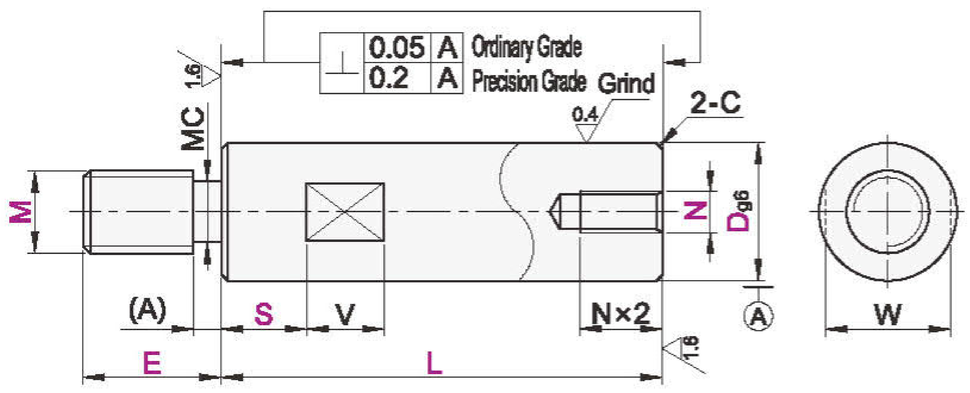
Discounted Price

Quantity	1~9	10~
Price	100%	Separate Quotation

Custom-made / Inventory

CAD 2D 3D

Type with Wrench Slot		D Tolerance	Material		Hardness	Surface Treatment
Ordinary Grade	Precision Grade		International	Equivalent		
HCZMN	HCZMJN	g6	GCr15	SUJ2	High-frequency quenching Effective hardened layer depth see P003 Quenching hardness GCr15 HRC56~ 9Cr18Mo HRC54~	—
HCZMP	HCZMJP					Hard Chromium Plating,Coating hardness HV850~,Coating thickness 3~53~5μm
HCZMS	HCZMJS		9Cr18Mo	SUS440C		—
HCZMT	HCZMJT					Hard Chromium Plating,Coating hardness HV850~,Coating thickness 3~53~5μm



- For roundness, straightness, perpendicularity, coaxiality, hardness change, and chromium layer distribution, please refer to the guide shaft product brochure.
- Wrench Slot, Through Hole of the shaft end processing part (effective thread length + approximately 10mm) may decrease due to the annealing effect of processing. For more details, please refer to the overview of the guide shaft.
- For precision grade guide shafts, the thread root is equipped with a grinding chamfer (maximum width of 1 mm, maximum depth of 0.1 mm).
- Deformation near the through hole may occur due to the annealing effect of processing, causing the outer diameter tolerance to exceed the specified value.

Type with Wrench Slot(Ordinary Grade)

Model ❶Code	❷Dg6		Minimum Unit 1 ❸L	❹E	❺M Selection	❻N Selection	Wrench slot size ❼S	W	V	C
HCZMN HCZMP HCZMS HCZMT	8	-0.005 -0.014	20~800	5≤E≤3×M	6	3 4 5	* Customer Specified	7	9	0.5
	10				6 8	3 4 5 6		8		
	12	-0.006 -0.017	20~1000		6 8 10	4 5 6 8		10	11	
	13				6 8 10 12	4 5 6 8		11		
	15				6 8 10 12	4 5 6 8 10		13		
	16		20~1200		6 8 10 12	4 5 6 8 10		14		
	18				6 8 10 12 16	4 5 6 8 10 12		16		
	20	-0.007 -0.020			6 8 10 12 16	4 5 6 8 10 12		17		
	25				8 10 12 16 20 24	4 5 6 8 10 12 16		22		
	30		20~1500		8 10 12 16 20 24	6 8 10 12 16 20		27	16	1.0
	35	-0.009 -0.025			10 12 16 20 24 30	8 10 12 16 20 24		30		
	40				12 16 20 24 30	10 12 16 20 24 30		36	21	
	50				16 20 24 30	12 16 20 24 30		41		

S with * should be specified according to usage requirements,Minimum Unit 1 — Refer to the guide shaft product brochure for the wrench slot size

Type with Wrench Slot(Precision Grade)

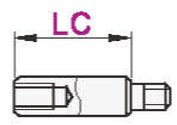
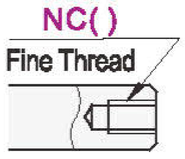
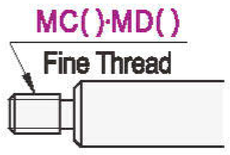
Model ❶Code	❷Dg6		Minimum Unit 1 ❸L	❹E	❺M Selection	❻N Selection	Wrench slot size ❼S	W	V	C
HCZMJN HCZMJP HCZMJS HCZMJT	8	-0.005 -0.014	20~300	5≤E≤3×M	6	3 4 5	* Customer Specified	7	9	0.2
	10				6 8	3 4 5 6		8		
	12	-0.006 -0.017	20~350		6 8 10	4 5 6 8		10	11	
	13				6 8 10	4 5 6 8		11		
	15				6 8 10 12	4 5 6 8 10		13		
	16				6 8 10 12	4 5 6 8 10		14		
	18				6 8 10 12 16	4 5 6 8 10 12		16		
	20	-0.007 -0.020	20~450		6 8 10 12 16	4 5 6 8 10 12		17		
	25				8 10 12 16 20	4 5 6 8 10 12 16		22		
	30				8 10 12 16 20 24	6 8 10 12 16 20		27	16	

S with * should be specified according to usage requirements,Minimum Unit 1 — Refer to the guide shaft product brochure for the wrench slot size

Thread Chamfer Dimension			
M	Pitch	MC	(A)
6	1.0	4.4 (4.2)	2
8	1.25	6.0	3
10	1.5	7.7	
12	1.75	9.4	4
16	2.0	13.0	
20	2.5	16.4	5
24	3.0	19.6	
30	3.5	25.0	

For M6, the internal dimension of MC() is Precision Grade

Optional Processing

Code	Technical Specification
LC	**Change L size tolerance** Selection Method LC  Minimum Unit 0.1 L < 300 Change to $L_{\pm 0.03}$; 300≤L < 600 Change to $L_{\pm 0.05}$; L≥600 Change to $L_{\pm 0.1}$ Precision Grade is not applicable for L>300
NC()	**Change internal thread to fine thread** Selection Method NC14  NC() Fine Thread When selecting, please change N to NC When selecting, N and NC must be of the same size The dimension in () is not applicable to Precision Grade
MC() MD()	**Change external thread to fine thread** Selection Method MC17  MC()·MD() Fine Thread MC: The pitch of this fine thread corresponds to the bearing screw cap MD: The pitch of this fine thread corresponds to the cylinder

D	NC					MD			
12	8								
13	8								
15·16	8	10							
18	8	10	12						
20	8	10	12	14					
25~(35)	8	10	12	14	18				
(40)	—	10	12	14	18				
(50)	—	—	12	14	18				
Pitch	1.0	1.25	1.5						

D	MC							MD			
8	6										
10	6	8									
12·13	6	8	10					10			
15·16	6	8	10	12				10	12		
18	6	8	10	12	15			10	12	14	18
20	6	8	10	12	15	17		10	12	14	18
25	—	8	10	12	15	17	20	10	12	14	18
30	—	8	10	12	15	17	20	25	10	12	14	18
(35)	—		10	12	15	17	20	25	10	12	14
(40)	—			12	15	17	20	25	30	—	12	14	18
(50)	—				15	17	20	25	30	—		14	18
Pitch	0.75	1.0						1.5	1.25	1.5	

When selecting 2 or more optional processing items, there should be a gap of more than 2mm between each processing area.
Optional processing may reduce the hardness of the product.