Guide Axis ► One-end External Thread and One-end Internal Thread Type • Type with Chamfer

Ordinary Grade/Precision Grade

Please order according to the diagram

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

Ordinary Grade

Model(❶Code)	–	❷D	–	❸L	–	❹E	–	❺M	–	❻N	–	Optional Processing MC() MD() LC SD() NC()
HCZLN	–	D8	–	L800	–	E10	–	M6	–	N4	–	LC

Price Excluding Tax (Yuan)

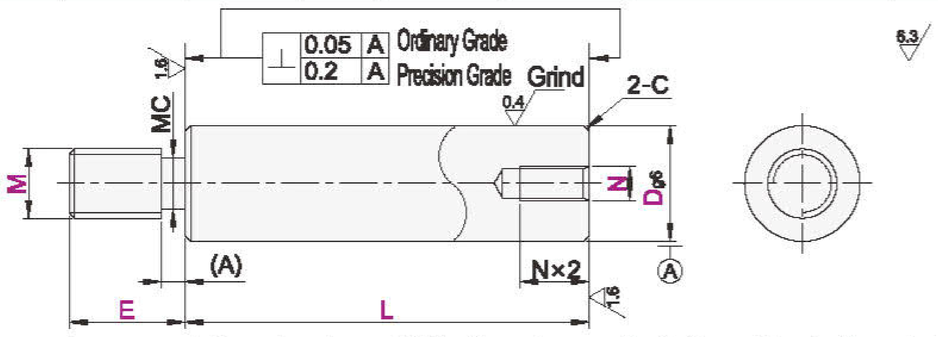
Discounted Price

Quantity	1~9	10~
Price	100%	Separate Quotation

Custom-made / Inventory

CAD 2D 3D

Code	Type		Ordinary Grade	D Tolerance	Material International	Material Equivalent	Hardness	Surface Treatment
HCZLN	One-end External Thread and One-end Internal Thread Type	Type with Chamfer	Ordinary Grade	g6	GCr15	SUJ2	High-frequency quenching Effective hardened layer depth see P003 Quenching hardness GCr15 HRC56~ 9Cr18Mo HRC54~	—
HCZLP								Hard Chromium Plating,Coating hardness HV850~,Coating thickness 3~53~5μm
HCZLS					9Cr18Mo	SUS440C		—
HCZLT								Hard Chromium Plating,Coating hardness HV850~,Coating thickness 3~53~5μm
HCZLJN			Precision Grade		GCr15	SUJ2		—
HCZLJP								Hard Chromium Plating,Coating hardness HV850~,Coating thickness 3~53~5μm
HCZLJS					9Cr18Mo	SUS440C		—
HCZLJT								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.
- Please note that the hardness 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.

Ordinary Grade

Model ❶Code	❷Dg6		Minimum Unit 1 ❸L	❹E	❺M Selection	❻N Selection	C
HCZLN HCZLP HCZLS HCZLT	8	-0.005 -0.014	20~800	5≤E≤3×M	6	3 4 5	0.5
	10				6 8	3 4 5 6	
	12	-0.006 -0.017	20~1000		6 8 10	4 5 6 8	
	13				6 8 10 12	4 5 6 8	
	15				6 8 10 12	4 5 6 8 10	
	16		20~1200		6 8 10 12	4 5 6 8 10	
	18				6 8 10 12 16	4 5 6 8 10 12	
	20	-0.007 -0.020			6 8 10 12 16	4 5 6 8 10 12	
	25				8 10 12 16 20 24	4 5 6 8 10 12 16	
	30		20~1500		8 10 12 16 20 24	6 8 10 12 16 20	1.0
	35	-0.009 -0.025			10 12 16 20 24 30	8 10 12 16 20 24	
	40				12 16 20 24 30	10 12 16 20 24 30	
	50				16 20 24 30	12 16 20 24 30	

Precision Grade

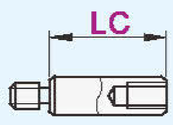
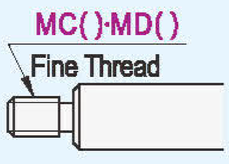
Model ❶Code	❷Dg6		Minimum Unit 1 ❸L	❹E	❺M Selection	❻N Selection	C
HCZLJN HCZLJP HCZLJS HCZLJT	8	-0.005 -0.014	20~300	5≤E≤3×M	6	3 4 5	0.2
	10		20~350		6 8	3 4 5 6	
	12	-0.006 -0.017			6 8 10	4 5 6 8	
	13				6 8 10 12	4 5 6 8	
	15				6 8 10 12	4 5 6 8 10	
	16				6 8 10 12	4 5 6 8 10	
	18				6 8 10 12 16	4 5 6 8 10 12	
	20	-0.007 -0.020	20~450		6 8 10 12 16	4 5 6 8 10 12	
	25				8 10 12 16 20	4 5 6 8 10 12 16	
	30				8 10 12 16 20 24	4 5 6 8 10 12 16 20	

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	

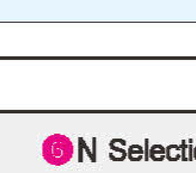
For M6, the internal dimension of MC() is Precision Grade

Optional Processing

Code	Technical Specification	
LC	Change L size tolerance 	Selection Method LC Minimum Unit 0.1 L < 300 Change to L±0.03; 300≤L < 600 Change to L±0.05; L≥600 Change to L±0.1 Precision Grade is not applicable for L>300
MC() MD()	Change external thread to fine thread 	Selection Method MC17 MC: The pitch of this fine thread corresponds to the bearing screw cap MD: The pitch of this fine thread corresponds to the cylinder

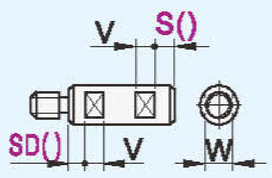
D	MC							MD			
8	6										
10	6	8									
12·13	6	8	10					10			
15·16	6	8	10	12				10	12		
18	6	8	10	12	15			10	12	14	18
20	6	8	10	12	15	17		10	12	14	18
25	—	8	10	12	15	17	20	10	12	14	18
30	—	8	10	12	15	17	20	25	10	12	14	18
(35)	—		10	12	15	17	20	25	10	12	14	
(40)	—			12	15	17	20	25	30	—	12	14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

When selecting, please change M to MC(MD)
The dimension in () is not applicable to Precision Grade

Code	Technical Specification	
NC()	Change internal thread to fine thread 	Selection Method NC14

D	NC				
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		

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

Code	Technical Specification	
SD()	Add 2 wrench slot 	Selection Method SD12-S8 Minimum Unit 0.1 The two wrench slots are not located on the same plane.

D	W	V
8	7	9
10	8	
12	10	11
13	11	
15	13	
16	14	
18	16	
20	17	
25	22	
30	27	16
35	30	
40	36	21
50	41	

- 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.