



# Lead Screw Nut

**THK** General Catalog

## B Product Specifications

### Dimensional Drawing, Dimensional Table

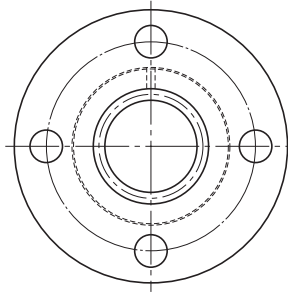
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\* Please see the separate "A Technical Descriptions of the Products".

# Model DCM



Lead Screw Nut Model No.	Outer dimensions			Lead screw nut dimensions						
	Outer diameter		Length L	Flange diameter D <sub>f</sub>	H	B	PCD	r	F	d
	D	Tolerance h9								
DCM 12	22	0 -0.052	30	44	6	5.4	31	1.5	7	1.5
DCM 14	22		30	44	6	5.4	31	1.5	7	1.5
DCM 16	28		35	51	7	6.6	38	1.5	8	1.5
DCM 18	32	0 -0.062	40	56	7	6.6	42	1.5	10.5	2
DCM 20	32		40	56	7	6.6	42	1.5	10.5	2
DCM 22	36		50	61	8	6.6	47	2	14	2.5
DCM 25	36	-0.062	50	61	8	6.6	47	2	14	2.5
DCM 28	44		56	76	10	9	58	2	15	2.5
DCM 32	44		56	76	10	9	58	2	15	2.5
DCM 36	52	0 -0.074	60	84	10	9	66	2.5	17	3
DCM 40	58		70	98	12	11	76	2.5	19	3
DCM 45	64		75	104	12	11	80	2.5	21.5	4
DCM 50	68	80	109	12	11	85	2.5	24	4	

Note) Cut shafts (K) and ground shafts (G) are build-to-order.

The dynamic permissible thrust (F) indicates the torque at which the contact surface pressure on the screw tooth surface is 9.8 N/mm<sup>2</sup>.

The static permissible load (P) of the flange indicates the strength of the flange against the load as shown in the figure on the right.

## Model number coding

Combination of lead screw nut and screw shaft

**2 DC20 +1500L T**

Overall screw shaft length  
(in mm)

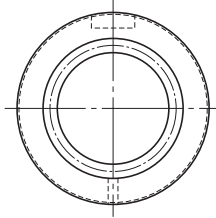
Model No. of  
lead screw nut

How the screw shaft is processed  
(T: rolled shaft)

Number of lead screw nuts used on the same shaft



# Model DC



Lead Screw Nut  Model No.	Outer dimensions			Lead screw nut dimensions					
	Outer diameter		L 0 -0.3	Keyway dimensions				d	r
	D	Tolerance h9		b	Tolerance N9	t	ℓ		
DC 12	22	0 -0.052	22	4	0 -0.030	2	16	1.5	1
DC 14	22		22	4		2	16	1.5	1
DC 16	28		26	5		2.5	18	1.5	1
DC 18	32	0 -0.062	31	7	0 -0.036	2.5	22	2	1
DC 20	32		31	7		2.5	22	2	1
DC 22	36		40	7		2.5	26	2.5	1
DC 25	36		40	7		2.5	26	2.5	1
DC 28	44		45	10		4	32	2.5	1.5
DC 32	44		45	10		4	32	2.5	1.5
DC 36	52	0 -0.074	49	12	0 -0.043	4.5	40	3	1.5
DC 40	58		57	15		5	42	3	1.5
DC 45	64		62	15		5	48	4	1.5
DC 50	68		67	15		5	52	4	1.5

Note) Cut shafts (K) and ground shafts (G) are build-to-order.

The dynamic permissible thrust (F) indicates the torque at which the contact surface pressure on the screw tooth surface is 9.8 N/mm<sup>2</sup>.

## Model number coding

Combination of lead screw nut and screw shaft

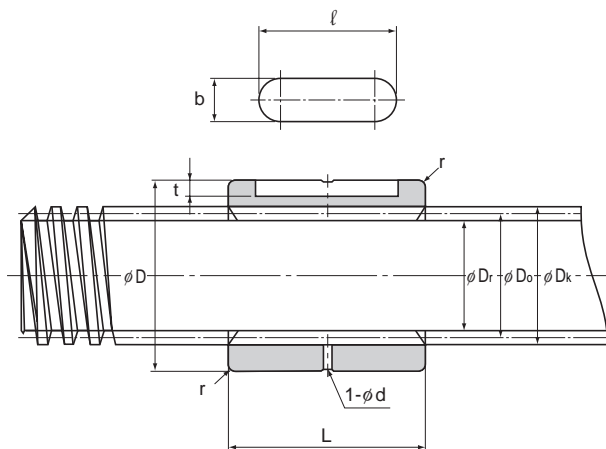
**2 DC20 +1500L T**

Overall screw shaft length  
(in mm)

Model No. of  
lead screw nut

How the screw shaft is processed  
(T: rolled shaft)

Number of lead screw nuts used on the same shaft



Unit: mm

	Screw shaft	Screw shaft details					Standard shaft length	Maximum shaft length	Dynamic permissible thrust $F^{(note)}$ N	Mass		
		Model No. <small>(note)</small>	Outer diameter	Effective diameter	Thread minor diameter	Lead				Lead angle	Screw nut g	Screw shaft kg/m
			$D_o$	$D_e$	$D_r$	R				$\alpha$		
	CS 12	12	11	9.5	2	3°19'	1000	1500	2840	40	0.8	
	CS 14	14	12.5	10.5	3	4°22'	1000	1500	3630	45	1	
	CS 16	16	14.5	12.5	3	3°46'	1000	1500	4900	75	1.3	
	CS 18	18	16	13.5	4	4°33'	1000	2000	6860	120	1.6	
	CS 20	20	18	15.5	4	4°03'	1500	2000	7650	110	2	
	CS 22	22	19.5	16.5	5	4°40'	1500	2500	9900	180	2.3	
	CS 25	25	22.5	19.5	5	4°03'	1500	3000	11400	155	3.1	
	CS 28	28	25.5	22.5	5	3°34'	2000	3000	14400	280	4	
	CS 32	32	29	25.5	6	3°46'	2000	4000	17100	230	5.2	
	CS 36	36	33	29.5	6	3°19'	2000	4000	21200	380	6.7	
	CS 40	40	37	33.5	6	2°57'	2000	4000	27500	520	8.4	
	CS 45	45	41	36.5	8	3°33'	3000	5000	34900	730	10.4	
	CS 50	50	46	41.5	8	3°10'	3000	5000	42100	810	13	

Lead Screw Nut

### Model number coding

Screw shaft

**CS20 T +1500L**

How the screw shaft is processed (T: rolled shaft)      Overall screw shaft length (in mm)

Model number of screw shaft

