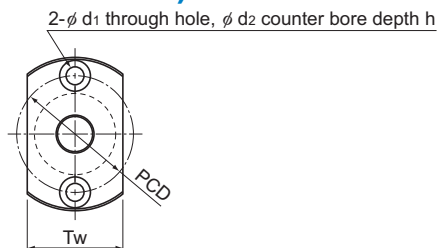


MBF (Unfinished Shaft Ends) No Preload

DN value

70,000



Model No.	Ball screw specifications							Nut			
	Screw shaft outer diameter	Lead	Ball center-to-center diameter	Thread minor diameter	No. of loaded circuits	Basic load rating		Outer diameter	Flange diameter	Overall length	H
	d	Ph	dp	dc	Rows X turns	Ca kN	C _{0a} kN	D	D _f	L _t	
MBF 0401-3.7	4	1	4.15	3.3	1×3.7	0.59	0.93	11	24	18	4
MBF 0601-3.7	6	1	6.15	5.3	1×3.7	0.74	1.5	13	30	21	5
MBF 0802-3.7	8	2	8.3	6.6	1×3.7	2.5	4.2	20	40	28	6
MBF 1002-3.7	10	2	10.3	8.6	1×3.7	2.8	5.3	23	43	28	6
MBF 1202-3.7	12	2	12.3	10.6	1×3.7	3	6.5	25	47	30	8
MBF 1402-3.7	14	2	14.3	12.6	1×3.7	3.3	7.5	26	48	30	8
MBF 1404-3.7	14	4	14.3	11.8	1×3.7	5.7	11.1	30	54	38	8

Model number coding

MBF0802-3.7 RR GT +218L C5 A

Model No.

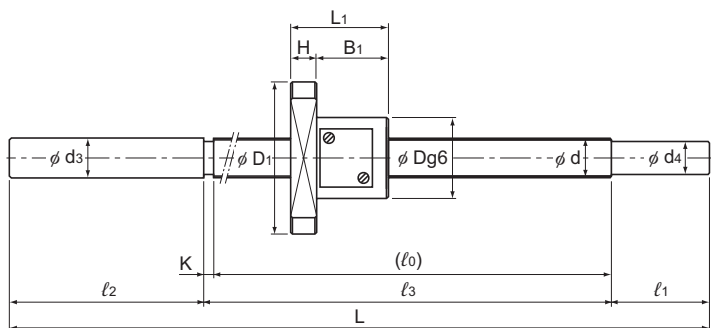
Seal symbol¹

Overall screw shaft length (in mm)

Unfinished shaft ends code

Symbol for clearance in the axial direction²Accuracy symbol³

¹ See **A15-356**. ² See **A15-19**. ³ See **A15-12**.



Unit: mm

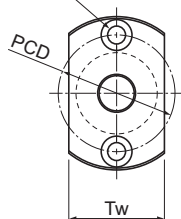
dimensions							Screw shaft dimensions										Nut mass	Shaft mass	Permissible rotational speed
	B ₁	PCD	d ₁	d ₂	h	Tw	Unfinished shaft end symbol	Overall length											
	14	17	3.4	6.5	2.5	13	A	90	48	10	30	50	4.3	3.2	2	0.02	0.07	3,500	
								110	68			70							
								130	88			90							
	16	21.5	3.4	6.5	3	17	A	131	58	20	50	61	6.3	5.2	3	0.04	0.14	3,500	
								161	88			91							
								201	128			131							
	22	30	4.5	8	4	24	A	168	85	25	55	88	8.3	6.2	3	0.1	0.19	3,500	
								193	110			113							
								218	135			138							
	22	33	4.5	8	4	27	A	183	95	25	60	98	10.3	8.2	3	0.11	0.36	3,500	
								223	135			138							
								273	185			188							
	22	36	5.5	9.5	5.5	29	A	210	117	30	60	120	12.3	10.2	3	0.15	0.58	3,500	
								235	142			145							
								285	192			195							
	22	37	5.5	9.5	5.5	32	A	205	102	40	60	105	14.3	12.2	3	0.16	0.85	3,500	
								245	142			145							
								295	192			195							
	30	42	5.5	9.5	5.5	34	A	345	242	40	60	245	14.3	11.2	4	0.25	1.2	3,500	
								233	129			133							
								293	189			193							
								353	249			253							
								413	309			313							

Note: The standard specification for the Model MBF is with no seal. Please contact THK if you are interested in attaching a seal.

MBF No Preload

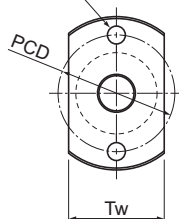
DN value	70,000
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2- ϕ d1 through hole,
 ϕ d2 counter bore depth h



Nut type I

2- ϕ d1 through hole



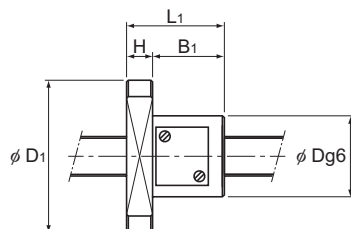
Nut type II

Model No.	Screw shaft outer diameter	Lead	Ball center- to-center diameter	Thread minor diameter	No. of loaded circuits	Basic load rating		Rigidity K N/ μ m
						Ca kN	C _{0a} kN	
MBF0401-3.7	4	1	4.15	3.3	1 $\times$ 3.7	0.59	0.93	54
MBF0601-3.7	6	1	6.15	5.3	1 $\times$ 3.7	0.74	1.5	75
MBF0602-2.7	6	2	6.2	5.1	1 $\times$ 2.7	0.75	1.2	58
MBF0602.5-2.7	6	2.5	6.2	5.1	1 $\times$ 2.7	0.75	1.2	59
MBF0801.5-3.7	8	1.5	8.2	7.1	1 $\times$ 3.7	1.1	2.2	99
MBF0802-3.7	8	2	8.3	6.6	1 $\times$ 3.7	2.5	4.2	111
MBF0802.5-3.7	8	2.5	8.3	6.6	1 $\times$ 3.7	2.4	4.1	111
MBF0803-2.7	8	3	8.3	6.2	1 $\times$ 2.7	2.6	4.2	85
MBF0804-2.7	8	4	8.3	6.2	1 $\times$ 2.7	2.6	4.2	84
MBF1001-3.7	10	1	10.15	9.3	1 $\times$ 3.7	0.84	2	113
MBF1001.5-3.7	10	1.5	10.2	9.1	1 $\times$ 3.7	1.25	2.8	120
MBF1002-3.7	10	2	10.3	8.6	1 $\times$ 3.7	2.8	5.3	134
MBF1002.5-3.7	10	2.5	10.3	8.6	1 $\times$ 3.7	2.7	5.3	133
MBF1003-3.7	10	3	10.3	8.2	1 $\times$ 3.7	3.9	7.2	140
MBF1005-2.7	10	5	10.3	8.2	1 $\times$ 2.7	3	5.2	103
MBF1202-3.7	12	2	12.3	10.6	1 $\times$ 3.7	3	6.5	156
MBF1202.5-3.7	12	2.5	12.3	10.6	1 $\times$ 3.7	3	6.4	156
MBF1203-3.7	12	3	12.3	10.2	1 $\times$ 3.7	4.3	8.7	162
MBF1204-3.7	12	4	12.3	9.8	1 $\times$ 3.7	5.4	10.2	165
MBF1402-3.7	14	2	14.3	12.6	1 $\times$ 3.7	3.3	7.5	176
MBF1404-3.7	14	4	14.3	11.8	1 $\times$ 3.7	5.7	11.1	187

Notes: The standard specification for the Model MBF is with no seal. Please contact THK if you are interested in attaching a seal.

The Model MBF can support an axial clearance of 0 or less. Please contact THK if you would like to use it in this manner.

Positioning Ball Screw



Unit: mm

	Nut dimensions											Screw shaft inertial moment/mm kg·m ² /mm	Nut mass kg	Shaft mass kg/m	Permissible rotational speed min ⁻¹
	Outer diameter D	Flange diameter D ₁	Overall length L ₁	H	B ₁	PCD	d ₁	d ₂	h	Nut type	Tw				
	11	24	18	4	14	17	3.4	6.5	2.5	I	13	1.97×10^{-10}	0.02	0.07	3,500
	13	30	21	5	16	21.5	3.4	6.5	3	I	17	9.99×10^{-10}	0.04	0.14	3,500
	15	29	17	4	13	23	3.4	—	—	II	17	9.99×10^{-10}	0.03	0.21	3,500
	15	29	18	4	14	23	3.4	—	—	II	17	9.99×10^{-10}	0.03	0.21	3,500
	16	30	19	4	15	24	3.4	—	—	II	18	3.16×10^{-9}	0.03	0.36	3,500
	20	40	28	6	22	30	4.5	8	4	I	24	3.16×10^{-9}	0.1	0.19	3,500
	20	38	26	5	21	30	4.5	—	—	II	22	3.16×10^{-9}	0.07	0.34	3,500
	20	38	25	5	20	30	4.5	—	—	II	22	3.16×10^{-9}	0.06	0.32	3,500
	21	39	28	5	23	31	4.5	—	—	II	23	3.16×10^{-9}	0.08	0.34	3,500
	19	37	18	5	13	29	4.5	—	—	II	21	7.71×10^{-9}	0.04	0.57	3,500
	19	37	20	5	15	29	4.5	—	—	II	21	7.71×10^{-9}	0.04	0.57	3,500
	23	43	28	6	22	33	4.5	8	4	I	27	7.71×10^{-9}	0.11	0.36	3,500
	24	44	27	6	21	35	5.5	—	—	II	26	7.71×10^{-9}	0.09	0.55	3,500
	24	44	30	6	24	35	5.5	—	—	II	26	7.71×10^{-9}	0.1	0.52	3,500
	24	44	34	6	28	35	5.5	—	—	II	26	7.71×10^{-9}	0.12	0.56	3,500
	25	47	30	8	22	36	5.5	9.5	5.5	I	29	1.60×10^{-8}	0.15	0.58	3,500
	26	46	27	6	21	37	5.5	—	—	II	28	1.60×10^{-8}	0.11	0.8	3,500
	28	48	30	6	24	39	5.5	—	—	II	30	1.60×10^{-8}	0.14	0.77	3,500
	28	48	33	6	27	39	5.5	—	—	II	30	1.60×10^{-8}	0.15	0.76	3,500
	26	48	30	8	22	37	5.5	9.5	5.5	I	32	2.96×10^{-8}	0.16	0.85	3,500
	30	54	38	8	30	42	5.5	9.5	5.5	I	34	2.96×10^{-8}	0.25	1.2	3,500

Ball Screw