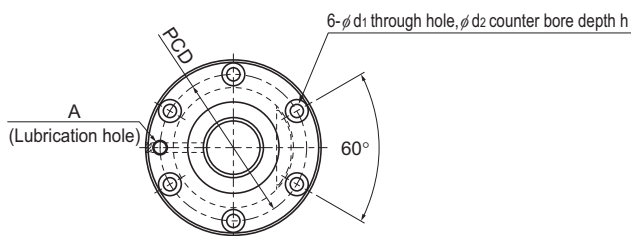


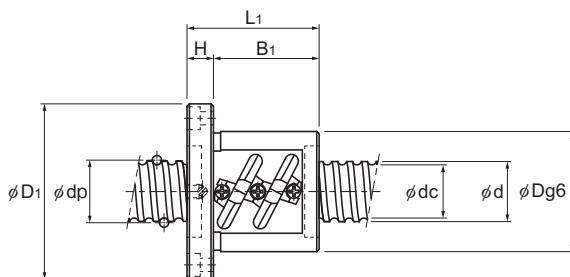
BIF-V Small With Preload

DN value	100,000
----------	---------



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center- to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows × turns	Basic load rating		Rigidity K N/μm
						Ca kN	C _{0a} kN	
BIF 1604V-5	16	4	16.5	13.8	1×2.5	4.3	8.7	298
BIF 1605V-5	16	5	16.75	13.2	1×2.5	7.4	13.9	330
BIF 2004V-5	20	4	20.5	17.8	1×2.5	4.8	10.9	360
BIF 2004V-10	20	4	20.5	17.8	2×2.5	8.6	21.8	692
BIF 2005V-5	20	5	20.75	17.2	1×2.5	8.3	17.5	390
BIF 2005V-10	20	5	20.75	17.2	2×2.5	15.1	35	762
BIF 2010V-5	20	10	20.75	17.2	1×2.5	8.3	17.6	394
BIF 2504V-5	25	4	25.5	22.8	1×2.5	5.2	13.7	426
BIF 2504V-10	25	4	25.5	22.8	2×2.5	9.5	27.4	824
BIF 2505V-5	25	5	25.75	22.2	1×2.5	9.2	21.9	470
BIF 2505V-10	25	5	25.75	22.2	2×2.5	16.7	43.9	910
BIF 2506V-5	25	6	26	21.4	1×2.5	12.4	27.4	482
BIF 2506V-10	25	6	26	21.4	2×2.5	22.6	54.8	934
BIF 2805V-5	28	5	28.75	25.2	1×2.5	9.7	24.6	520
BIF 2805V-10	28	5	28.75	25.2	2×2.5	17.5	49.2	1,000
BIF 2806V-5	28	6	28.75	25.2	1×2.5	9.6	24.6	520
BIF 2806V-10	28	6	28.75	25.2	2×2.5	17.5	49.2	1,000
BIF 3205V-5	32	5	32.75	29.2	1×2.5	10.2	28.1	570
BIF 3205V-10	32	5	32.75	29.2	2×2.5	18.5	56.3	1,110
BIF 3206V-5	32	6	33	28.4	1×2.5	13.9	35.2	600
BIF 3206V-10	32	6	33	28.4	2×2.5	25.2	70.3	1,150

Positioning Ball Screw



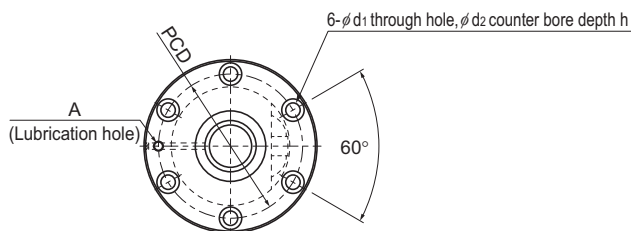
Unit: mm

	Nut dimensions								Screw shaft inertial moment/mm	Nut mass	Shaft mass	Permissible rotational speed
	Outer diameter	Flange diameter	Overall length					Lubrication hole				
	D	D ₁	L ₁	H	B ₁	PCD	d ₁ ×d ₂ ×h	A	kg·m ² /mm	kg	kg/m	min ⁻¹
	36	59	53	11	42	47	5.5×9.5×5.5	M6	5.05×10 ⁻⁸	0.42	1.42	5,000
	40	60	56	10	46	50	4.5×8×4.5	M6	5.05×10 ⁻⁸	0.56	1.37	5,000
	40	63	49	11	38	51	5.5×9.5×5.5	M6	1.23×10 ⁻⁷	0.43	2.22	4,870
	40	63	73	11	62	51	5.5×9.5×5.5	M6	1.23×10 ⁻⁷	0.55	2.22	4,870
	44	67	56	11	45	55	5.5×9.5×5.5	M6	1.23×10 ⁻⁷	0.57	2.19	4,810
	44	67	86	11	75	55	5.5×9.5×5.5	M6	1.23×10 ⁻⁷	0.79	2.19	4,810
	46	74	90	15	75	59	5.5×9.5×5.5	M6	1.23×10 ⁻⁷	1.06	2.46	4,810
	46	69	48	11	37	57	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	0.55	3.6	3,920
	46	69	72	11	61	57	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	0.66	3.6	3,920
	50	73	55	11	44	61	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	0.75	3.52	3,880
	50	73	85	11	74	61	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	0.96	3.52	3,880
	53	76	62	11	51	64	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	0.9	3.43	3,840
	53	76	98	11	87	64	5.5×9.5×5.5	M6	3.01×10 ⁻⁷	1.22	3.43	3,840
	55	85	59	12	47	69	6.6×11×6.5	M6	4.74×10 ⁻⁷	0.98	4.35	3,470
	55	85	89	12	77	69	6.6×11×6.5	M6	4.74×10 ⁻⁷	1.34	4.35	3,470
	55	85	68	12	56	69	6.6×11×6.5	M6	4.74×10 ⁻⁷	1.09	4.52	3,470
	55	85	104	12	92	69	6.6×11×6.5	M6	4.74×10 ⁻⁷	1.52	4.52	3,470
	58	85	56	12	44	71	6.6×11×6.5	M6	8.08×10 ⁻⁷	0.94	5.89	3,050
	58	85	86	12	74	71	6.6×11×6.5	M6	8.08×10 ⁻⁷	1.31	5.89	3,050
	62	89	63	12	51	75	6.6×11×6.5	M6	8.08×10 ⁻⁷	1.21	5.88	3,030
	62	89	99	12	87	75	6.6×11×6.5	M6	8.08×10 ⁻⁷	1.75	5.88	3,030

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.

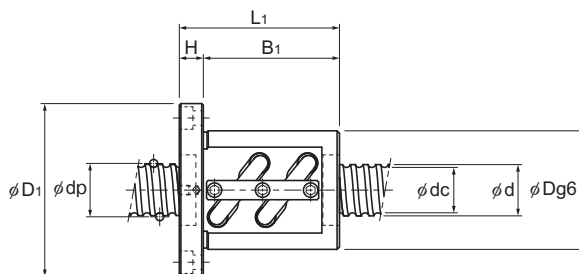
BIF-V Medium With Preload

DN value	130,000
----------	---------



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center- to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows × turns	Basic load rating		Rigidity K N/μm
						Ca kN	C _{0a} kN	
BIF 2508V-5	25	8	26.25	20.5	1×2.5	15.8	32.9	500
BIF 2508V-7	25	8	26.25	20.5	1×3.5	21.1	46	688
BIF 2508V-10	25	8	26.25	20.5	2×2.5	28.7	65.7	968
BIF 2510V-5	25	10	26.25	21.5	1×2.5	15.8	32.9	500
BIF 2810V-3	28	10	29.75	22.4	1×1.5	15.6	29.4	350
BIF 3210V-5	32	10	33.75	26.4	1×2.5	26	56.2	640
BIF 3210V-7	32	10	33.75	26.4	1×3.5	34.8	78.6	874
BIF 3210V-10	32	10	33.75	26.4	2×2.5	47.3	112.3	1,128
BIF 3212V-5	32	12	34	26.1	1×2.5	30.2	63.2	644
BIF 3212V-7	32	12	34	26.1	1×3.5	40.4	88.5	888
BIF 3216V-5	32	16	33.75	26.4	1×2.5	25.9	56.5	636
BIF 3610V-5	36	10	37.75	30.5	1×2.5	27.6	63.3	696
BIF 3610V-7	36	10	37.75	30.5	1×3.5	36.9	88.6	700
BIF 3610V-10	36	10	37.75	30.5	2×2.5	50.1	126.5	1,350
BIF 3612V-5	36	12	38	30.1	1×2.5	32.2	71.2	708
BIF 3612V-7	36	12	38	30.1	1×3.5	43	99.6	976
BIF 3612V-10	36	12	38	30.1	2×2.5	58.4	142.3	1,372
BIF 3616V-5	36	16	38	30.1	1×2.5	32.1	71.5	710
BIF 3620V-3	36	20	37.75	30.5	1×1.5	17.7	38.4	430
BIF 4010V-5	40	10	41.75	34.4	1×2.5	29	70.4	750
BIF 4010V-7	40	10	41.75	34.4	1×3.5	38.8	98.5	1,044
BIF 4010V-10	40	10	41.75	34.4	2×2.5	52.7	140.7	1,470
BIF 4012V-5	40	12	42	34.1	1×2.5	33.9	79.2	770
BIF 4012V-7	40	12	42	34.1	1×3.5	45.3	110.8	1,062
BIF 4012V-10	40	12	42	34.1	2×2.5	61.6	158.3	1,490
BIF 4016V-5	40	16	42	34.1	1×2.5	33.9	79.4	772
BIF 4020V-5	40	20	41.75	34.4	1×2.5	28.9	71	760

Positioning Ball Screw



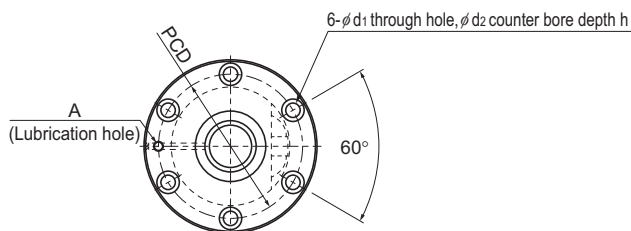
Unit: mm

	Nut dimensions								Screw shaft inertial moment/mm	Nut mass	Shaft mass	Permissible rotational speed
	Outer diameter	Flange diameter	Overall length	H	B ₁	PCD	d ₁ ×d ₂ ×h	Lubrication hole				
	D	D ₁	L ₁	H	B ₁	PCD	d ₁ ×d ₂ ×h	A	kg·m ² /mm	kg	kg/m	min ⁻¹
	58	85	82	15	67	71	6.6×11×6.5	M6	3.01×10 ⁻⁷	1.52	3.51	4,950
	58	85	98	15	83	71	6.6×11×6.5	M6	3.01×10 ⁻⁷	1.5	3.51	4,950
	58	85	130	15	115	71	6.6×11×6.5	M6	3.01×10 ⁻⁷	1.93	3.51	4,950
	58	85	100	18	82	71	6.6×11×6.5	M6	3.01×10 ⁻⁷	1.31	3.5	4,950
	65	106	88	18	70	85	11×17.5×11	M6	4.74×10 ⁻⁷	2.33	4.15	4,360
	74	108	100	15	85	90	9×14×8.5	M6	8.08×10 ⁻⁷	2.92	5.53	3,850
	74	108	120	15	105	90	9×14×8.5	M6	8.08×10 ⁻⁷	3.1	5.53	3,850
	74	108	160	15	145	90	9×14×8.5	M6	8.08×10 ⁻⁷	4.27	5.53	3,850
	76	121	117	18	99	98	11×17.5×11	M6	8.08×10 ⁻⁷	3.7	5.7	3,820
	76	121	146	18	128	98	11×17.5×11	M6	8.08×10 ⁻⁷	3.7	5.7	3,820
	74	108	139	18	121	90	9×14×8.5	M6	8.08×10 ⁻⁷	3.81	5.82	3,850
	75	120	111	18	93	98	11×17.5×11	M6	1.29×10 ⁻⁶	3.45	7.1	3,440
	75	120	123	18	105	98	11×17.5×11	M6	1.29×10 ⁻⁶	3.82	7.1	3,440
	75	120	171	18	153	98	11×17.5×11	M6	1.29×10 ⁻⁶	4.84	7.1	3,440
	78	123	123	18	105	100	11×17.5×11	M6	1.29×10 ⁻⁶	4.69	7.99	3,420
	78	123	140	18	122	100	11×17.5×11	M6	1.29×10 ⁻⁶	4.34	7.99	3,420
	78	123	195	18	177	100	11×17.5×11	M6	1.29×10 ⁻⁶	5.67	7.99	3,420
	78	123	140	18	122	100	11×17.5×11	M6	1.29×10 ⁻⁶	4.31	7.99	3,420
	75	114	122	18	104	93	11×17.5×11	M6	1.29×10 ⁻⁶	3.4	7.54	3,440
	82	124	103	18	85	102	11×17.5×11	M6	1.97×10 ⁻⁶	3.61	8.87	3,110
	82	124	123	18	105	102	11×17.5×11	M6	1.97×10 ⁻⁶	3.97	8.87	3,110
	82	124	163	18	145	102	11×17.5×11	M6	1.97×10 ⁻⁶	5.33	8.87	3,110
	84	126	119	18	101	104	11×17.5×11	M6	1.97×10 ⁻⁶	4.36	8.83	3,090
	84	126	143	18	125	104	11×17.5×11	M6	1.97×10 ⁻⁶	4.92	8.83	3,090
	84	126	191	18	173	104	11×17.5×11	M6	1.97×10 ⁻⁶	6.47	8.83	3,090
	84	126	144	18	126	104	11×17.5×11	M6	1.97×10 ⁻⁶	4.9	9.09	3,090
	82	126	162	18	144	104	11×17.5×11	M6	1.97×10 ⁻⁶	5.17	9.37	3,110

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.

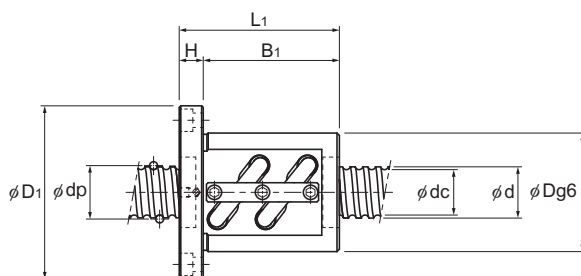
BIF-V Medium With Preload

DN value	130,000
----------	---------



Model No.	Screw shaft outer diameter d	Lead Ph	Ball center- to-center diameter dp	Thread minor diameter dc	No. of loaded circuits Rows X turns	Basic load rating		Rigidity K N/μm
						Ca kN	C _{0a} kN	
BIF 4510V-5	45	10	46.75	39.5	1×2.5	30.6	79.3	830
BIF 4510V-10	45	10	46.75	39.5	2×2.5	55.6	158.5	1,610
BIF 4512V-5	45	12	47	39.2	1×2.5	35.9	89.2	846
BIF 4512V-10	45	12	47	39.2	2×2.5	65.2	178.3	1,638
BIF 4516V-5	45	16	47	39.2	1×2.5	35.8	89.4	846
BIF 4520V-5	45	20	47	39.2	1×2.5	35.8	89.7	848
BIF 5010V-5	50	10	51.75	44.4	1×2.5	32.1	88.1	900
BIF 5010V-7	50	10	51.75	44.4	1×3.5	42.9	123.4	1,244
BIF 5010V-10	50	10	51.75	44.4	2×2.5	58.2	176.3	1,750
BIF 5012V-5	50	12	52.25	43.3	1×2.5	43.4	110.1	934
BIF 5012V-7	50	12	52.25	43.3	1×3.5	58	154.1	1,286
BIF 5012V-10	50	12	52.25	43.3	2×2.5	78.8	220.2	1,808
BIF 5016V-5	50	16	52.7	42.9	1×2.5	72.6	183.1	1,220
BIF 5016V-10	50	16	52.7	42.9	2×2.5	131.8	366.2	2,364
BIF 5020V-5	50	20	52.7	42.9	1×2.5	72.5	183.6	1,222

Positioning Ball Screw



Unit: mm

	Nut dimensions							Screw shaft inertial moment/mm	Nut mass	Shaft mass	Permissible rotational speed	
	Outer diameter	Flange diameter	Overall length									Lubrication hole
	D	D ₁	L ₁	H	B ₁	PCD	d ₁ ×d ₂ ×h	A	kg·m ² /mm	kg	kg/m	min ⁻¹
	88	132	111	18	93	110	11×17.5×11	Rc1/8 (PT1/8)	3.16×10 ⁻⁶	4.29	12.48	2,780
	88	132	171	18	153	110	11×17.5×11		3.16×10 ⁻⁶	5.97	12.48	2,780
	90	130	119	18	101	110	11×17.5×11		3.16×10 ⁻⁶	4.6	11.32	2,760
	90	130	191	18	173	110	11×17.5×11		3.16×10 ⁻⁶	6.67	11.32	2,760
	90	130	140	18	122	110	11×17.5×11		3.16×10 ⁻⁶	5.3	11.61	2,760
	90	130	162	18	144	110	11×17.5×11		3.16×10 ⁻⁶	5.96	11.1	2,760
	93	135	103	18	85	113	11×17.5×11		4.82×10 ⁻⁶	4.28	14.16	2,510
	93	135	123	18	105	113	11×17.5×11		4.82×10 ⁻⁶	4.94	14.16	2,510
	93	135	163	18	145	113	11×17.5×11		4.82×10 ⁻⁶	6.26	14.16	2,510
	100	146	123	22	101	122	14×20×13		4.82×10 ⁻⁶	6.12	13.82	2,480
	100	146	147	22	125	122	14×20×13		4.82×10 ⁻⁶	7.06	13.82	2,480
	100	146	195	22	173	122	14×20×13		4.82×10 ⁻⁶	8.91	13.82	2,480
	105	152	164	25	139	128	14×20×13		4.82×10 ⁻⁶	8.82	13.71	2,460
	105	152	260	25	235	128	14×20×13		4.82×10 ⁻⁶	12.3	13.71	2,460
	105	152	201	28	173	128	14×20×13		4.82×10 ⁻⁶	10.63	14.05	2,460

Note: The overall length of the nut will increase when equipping the QZ Lubricator. See **A15-366** for further details.