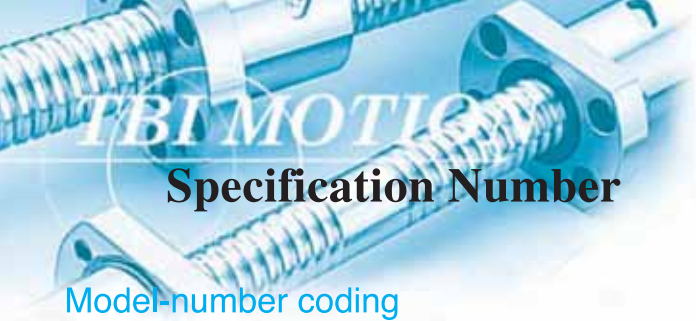


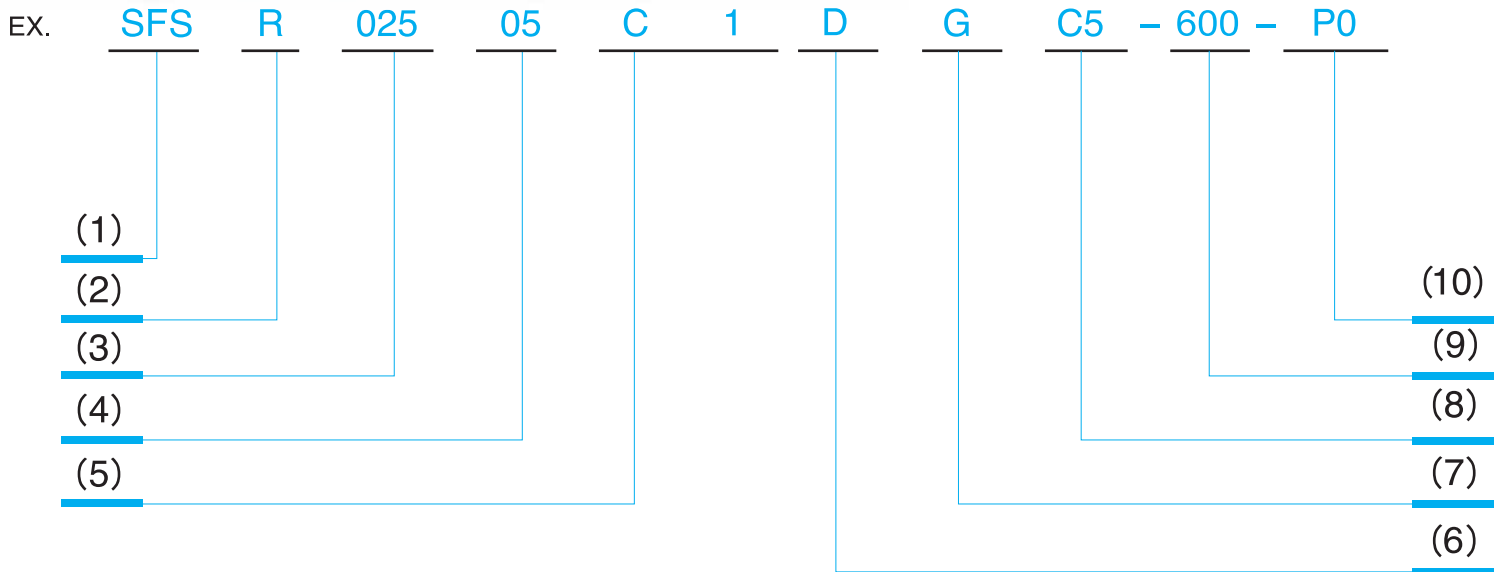
Ball Screw





Specification Number

Model-number coding



(1) Nut type codes

S S : Single nut
D : Double nut

F F : With flange
C : Without flange

S S : DIN nut
U : DIN nut
I : I type nut
E : E type nut
K : K type nut
V : V type nut
T : T type nut
M : M type nut

(SFS \ DFS \ SFU \ DFU \ SFI \ DFI \ SFT \ DFT \ SFV \ DFV \ SFE \ SFK \ BSH \ SCI \ SFM \ DFM)

(2) Direction of helix

R : Right L : Left

(3) Shaft dia. (mm)

(4) Lead(mm)

(5) No. of Turn (Circuits) or Turn x Row

Turn: T:1 A:1.5(or 1.7/1.8) B:2.5/2.8 C:3.8 D: 4.8 ex: (2.5x2 = B2)

(6) Flange type

N : Not cutting S : Single cutting D : Double cutting

(7) Produce code

G : Ground F : Rolled

(8) Accuracy grade code

C0 \ C1 \ C2 \ C3 \ C5 \ C7 \ C10

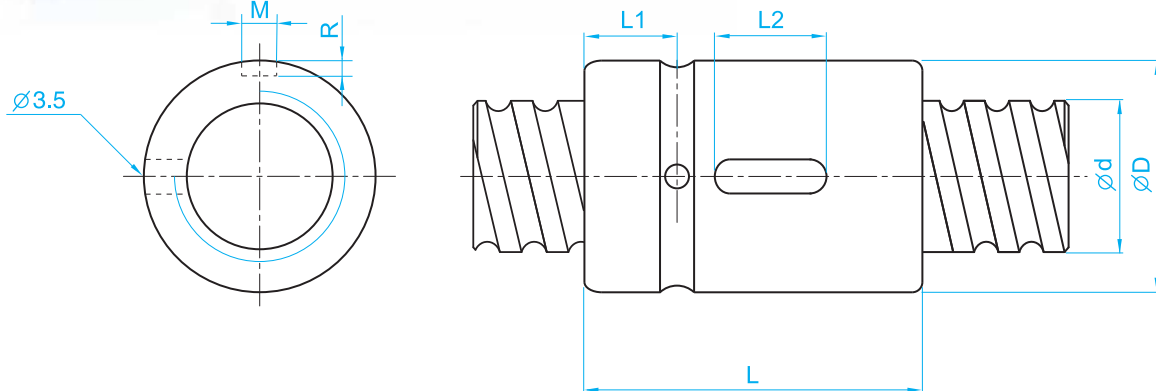
(9) Overall length of shaft(mm)

(10) Axial clearance and preload code

P0 \ P1 \ P2 \ P3 \ P4

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SCI



Unit : mm

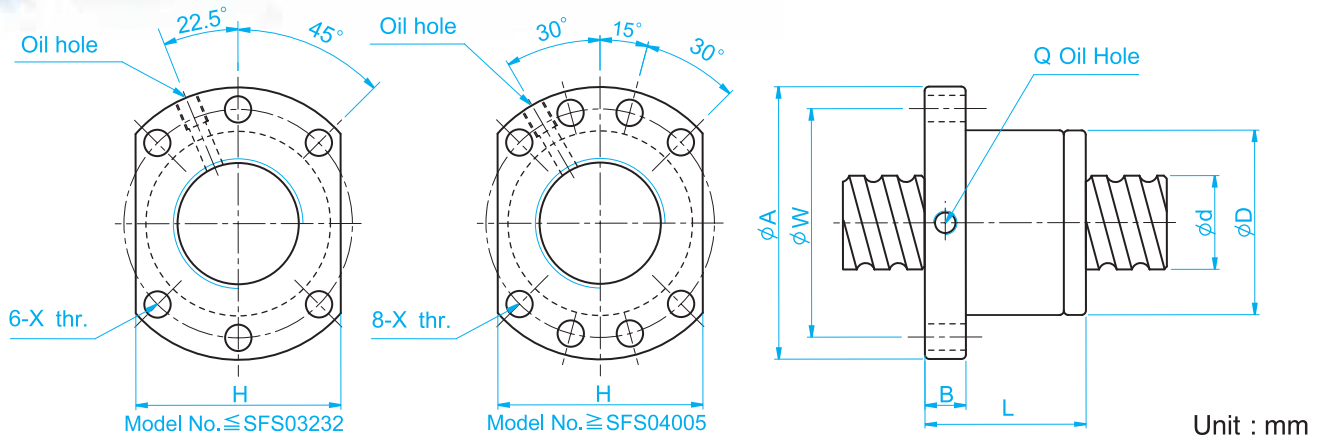
Model No.	Dimensions												
	d	l	Da	D	L	L1	L2	M	R	n	Ca	Coa	K
SCI01604-4	16	4	2.381	30	40	9	15	3	1.5	1x4	973	2406	32
★ SCI01605-4		5	3.175	30	45	9	20	5	3	1x4	1380	3052	33
SCI02004-4	20	4	2.381	34	40	9	15	3	1.5	1x4	1066	2987	37
★ SCI02005-4		5	3.175	34	45	9	20	5	3	1x4	1551	3875	39
SCI02504-4	25	4	2.381	40	40	9	15	3	1.5	1x4	1180	3795	43
★ SCI02505-4		5	3.175	40	45	9	20	5	3	1x4	1724	4904	45
SCI02510-4		10	4.762	46	85	13	30	5	3	1x4	2954	7295	51
SCI03204-4	32	4	2.381	46	40	9	15	3	1.5	1x4	1296	4838	49
★ SCI03205-4		5	3.175	46	45	9	20	5	3	1x4	1922	6343	52
★ SCI03210-4		10	6.35	54	85	13	30	5	3	1x4	4805	12208	62
★ SCI04005-4	40	5	3.175	56	45	9	20	5	3	1x4	2110	7988	59
★ SCI04010-4		10	6.35	62	85	13	30	5	3	1x4	5399	15500	72
SCI05010-4	50	10	6.35	72	85	13	30	5	3	1x4	6004	19614	83
★ SCI06310-4	63	10	6.35	85	85	13	30	6	3.5	1x4	6719	25358	95
★ SCI08010-4	80	10	6.35	105	85	13	30	8	4.5	1x4	7346	31953	109

Note: with sign ★ can be produced in left helix

Dimension Table of TBI MOTION Ball Screws

(TYPE) : SFS (DIN 69051 FORM B)

High-Speed Ball Screw



Unit : mm

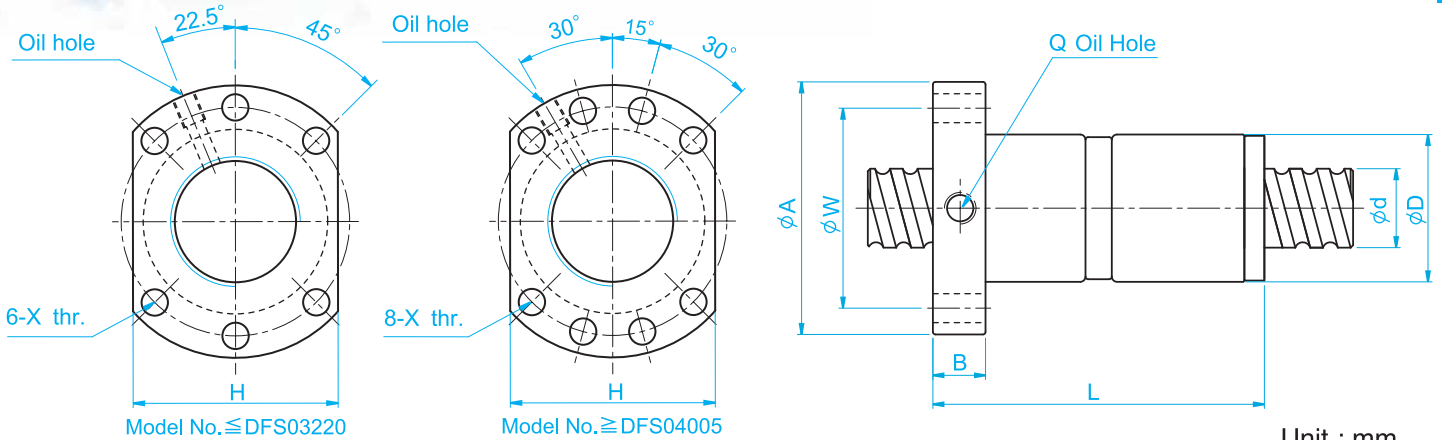
Model No.	Dimensions														
	d	l	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
SFS01205-2.8	12	5	2.5	24	40	10	31	32	30	4.5		2.8x1	661	1316	19
SFS01210-2.8		10	2.5	24	40	10	48.5	32	30	4.5		2.8x1	642	1287	19
SFS01605-3.8	15	5	2.778	28	48	10	38	38	40	5.5	M6	3.8x1	1112	2507	30
SFS01610-2.8		10	2.778	28	48	10	47	38	40	5.5	M6	2.8x1	839	1821	23
SFS01616-1.8	15	16	2.778	28	48	10	45	38	40	5.5	M6	1.8x1	552	1137	14
SFS01616-2.8		16	2.778	28	48	10	61	38	40	5.5	M6	2.8x1	808	1769	22
SFS01620-1.8	20	2.778	28	48	10	57	38	40	5.5	M6	1.8x1	554	1170	14	
SFS02005-3.8	20	5	3.175	36	58	10	40	47	44	6.6	M6	3.8x1	1484	3681	37
SFS02006-4.8		6	3.175	36	58	10	50	47	44	6.6	M6	4.8x1	1811	4644	47
SFS02008-4.8	20	8	3.175	36	58	10	60	47	44	6.6	M6	4.8x1	1863	4861	50
SFS02010-3.8		10	3.175	36	58	10	60	47	44	6.6	M6	3.8x1	1516	3833	40
SFS02020-1.8	20	20	3.175	36	58	10	57	47	44	6.6	M6	1.8x1	764	1758	19
SFS02020-2.8		20	3.175	36	58	10	77	47	44	6.6	M6	2.8x1	1118	2734	29
SFS02505-3.8	25	5	3.175	40	62	10	40	51	48	6.6	M6	3.8x1	1650	4658	43
SFS02506-4.8		6	3.175	40	62	10	50	51	48	6.6	M6	4.8x1	2015	5879	55
SFS02508-4.8	25	8	3.175	40	62	10	60	51	48	6.6	M6	4.8x1	2009	5867	56
SFS02510-3.8		10	3.175	40	62	12	62	51	48	6.6	M6	3.8x1	1638	4633	45
SFS02525-1.8	25	25	3.175	40	62	12	70	51	48	6.6	M6	1.8x1	843	2199	22
SFS02525-2.8		25	3.175	40	62	12	95	51	48	6.6	M6	2.8x1	1232	3421	34
SFS03205-3.8	32	5	3.175	50	80	12	42	65	62	9	M6	3.8x1	1839	6026	51
SFS03206-4.8		6	3.175	50	80	12	51	65	62	9	M6	4.8x1	2247	7608	65
SFS03208-4.8	32	8	3.969	50	80	12	62	65	62	9	M6	4.8x1	3015	9181	68
SFS03210-3.8		10	3.969	50	80	13	62	65	62	9	M6	3.8x1	2460	7255	55
SFS03220-2.8	31	20	3.969	50	80	12	80	65	62	9	M6	2.8x1	1907	5482	43
SFS03232-1.8		32	3.969	50	80	13	84	65	62	9	M6	1.8x1	1257	3426	27
SFS03232-2.8	32	32	3.969	50	80	13	116	65	62	9	M6	2.8x1	1838	5329	42
SFS04005-3.8		5	3.175	63	93	15	45	78	70	9	M8	3.8x1	2018	7589	60
SFS04006-4.8	40	6	3.175	63	93	14	50	78	70	9	M6	4.8x1	2467	9583	77
SFS04008-4.8		8	3.969	63	93	14	61	78	70	9	M6	4.8x1	3327	11491	81
SFS04010-3.8	38	10	6.35	63	93	14	63	78	70	9	M8	3.8x1	5035	13943	67
SFS04020-2.8		20	6.35	63	93	14	82	78	70	9	M8	2.8x1	3959	10715	54
SFS04040-1.8	40	40	6.35	63	93	15	105	78	70	9	M8	1.8x1	2585	6648	34
SFS04040-2.8		40	6.35	63	93	15	145	78	70	9	M8	2.8x1	3780	10341	52
SFS05005-3.8	50	5	3.175	75	110	15	45	93	85	11	M8	3.8x1	2207	9542	68
SFS05010-3.8		10	6.35	75	110	18	68	93	85	11	M8	3.8x1	5638	17852	79
SFS05012-3.8	48	12	6.35	75	110	18	75	93	85	11	M8	3.8x1	5632	17836	81
SFS05020-3.8		20	6.35	75	110	18	108	93	85	11	M8	3.8x1	5749	18485	87
SFS05050-1.8	50	50	6.35	75	110	18	125	93	85	11	M8	1.8x1	2946	8749	42
SFS05050-2.8		50	6.35	75	110	18	175	93	85	11	M8	2.8x1	4308	13610	65
SFS06310-3.8	61	10	6.35	90	125	18	70	108	95	11	M8	3.8x1	6343	23308	94
SFS06316-3.8		16	6.35	90	125	18	95	108	95	11	M8	3.8x1	6327	23262	100
SFS06320-3.8	77	20	7.144	95	135	20	116	115	100	13.5	M8	3.8x1	7493	26424	105
SFS08010-3.8		10	6.35	105	145	20	70	125	110	13.5	M8	3.8x1	6980	29563	105
SFS08020-3.8	77	20	9.525	125	165	25	120	145	130	13.5	M8	3.8x1	12145	43598	128
SFS10020-3.8		96	12.7	150	202	30	124	176	155	17.5	M8	3.8x1	19633	71408	152

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : DFS (DIN 69051 FORM B)

High-Speed Ball Screw



Unit : mm

I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

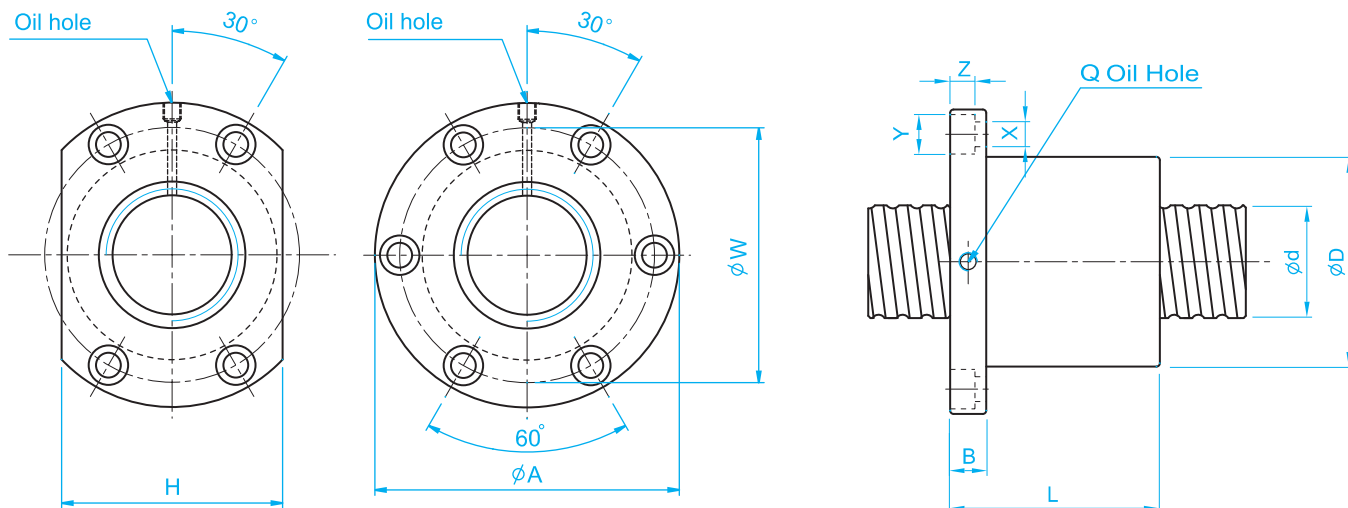
Model No.	Dimensions														
	d	I	Da	D	A	B	L	W	H	X	Q	n	Ca	Coa	K
DFS01605-3.8	15	5	2.778	28	48	10	73	38	40	5.5	M6	3.8x1	1112	2507	41
DFS01610-2.8		10	2.778	28	48	10	97	38	40	5.5	M6	2.8x1	839	1821	31
DFS02005-3.8	20	5	3.175	36	58	10	75	47	44	6.6	M6	3.8x1	1484	3681	50
DFS02006-4.8		6	3.175	36	58	10	98	47	44	6.6	M6	4.8x1	1811	4644	63
DFS02008-4.8		8	3.175	36	58	10	116	47	44	6.6	M6	4.8x1	1863	4861	66
DFS02010-3.8		10	3.175	36	58	10	120	47	44	6.6	M6	3.8x1	1516	3833	53
DFS02505-3.8	25	5	3.175	40	62	10	75	51	48	6.6	M6	3.8x1	1650	4658	59
DFS02506-4.8		6	3.175	40	62	10	98	51	48	6.6	M6	4.8x1	2015	5879	75
DFS02508-4.8		8	3.175	40	62	10	116	51	48	6.6	M6	4.8x1	2009	5867	76
DFS02510-3.8		10	3.175	40	62	12	122	51	48	6.6	M6	3.8x1	1638	4633	61
DFS03205-3.8	32	5	3.175	50	80	12	82	65	62	9	M6	3.8x1	1839	6026	71
DFS03206-4.8		6	3.175	50	80	12	99	65	62	9	M6	4.8x1	2247	7608	90
DFS03208-4.8		8	3.969	50	80	12	126	65	62	9	M6	4.8x1	3015	9181	92
DFS03210-3.8	31	10	3.969	50	80	13	122	65	62	9	M6	3.8x1	2460	7255	75
DFS03220-2.8		20	3.969	50	80	12	160	65	62	9	M6	2.8x1	1907	5482	58
DFS04005-3.8	40	5	3.175	63	93	15	85	78	70	9	M8	3.8x1	2018	7589	83
DFS04006-4.8		6	3.175	63	93	14	98	78	70	9	M6	4.8x1	2467	9583	106
DFS04008-4.8		8	3.969	63	93	14	125	78	70	9	M6	4.8x1	3327	11491	110
DFS04010-3.8	38	10	6.35	63	93	14	123	78	70	9	M8	3.8x1	5035	13943	91
DFS04020-2.8		20	6.35	63	93	14	162	78	70	9	M8	2.8x1	3959	10715	73
DFS05005-3.8	50	5	3.175	75	110	15	85	93	85	11	M8	3.8x1	2207	9542	96
DFS05010-3.8		10	6.35	75	110	18	138	93	85	11	M8	3.8x1	5638	17852	109
DFS05012-3.8		48	12	6.35	75	110	18	147	93	85	11	M8	3.8x1	5632	17836
DFS05020-3.8	20		6.35	75	110	18	218	93	85	11	M8	3.8x1	5749	18485	116
DFS06310-3.8			10	6.35	90	125	18	140	108	95	11	M8	3.8x1	6343	23308
DFS06316-3.8	61	16	6.35	90	125	18	191	108	95	13.5	M8	3.8x1	6327	23262	136
DFS06320-3.8		20	7.144	95	135	20	226	115	100	13.5	M8	3.8x1	7493	26424	142
DFS08010-3.8	77	10	6.35	105	145	20	140	125	110	13.5	M8	3.8x1	6980	29563	149
DFS08020-3.8		20	9.525	125	165	25	230	145	130	13.5	M8	3.8x1	12145	43598	174
DFS10020-3.8	96	20	12.7	150	202	30	244	176	155	17.5	M8	3.8x1	19633	71408	208

Note: with sign ★ can be produced in left helix

Dimension Table of TBI MOTION Ball Screws

(TYPE) : SFV

High-Speed Ball Screw



Unit : mm

I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load (Kgf)

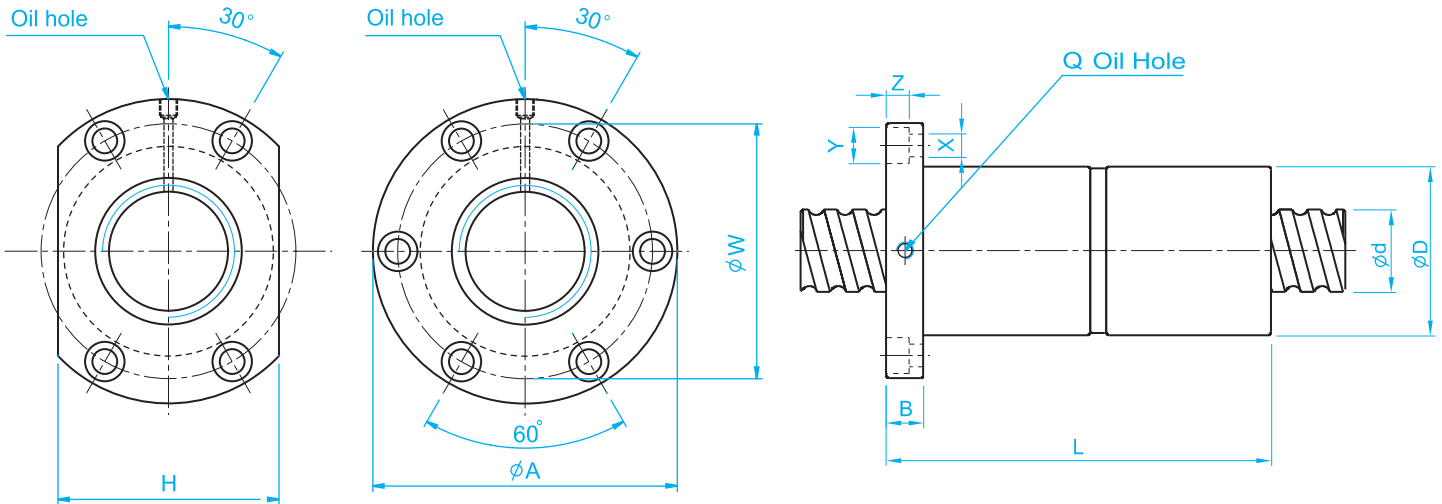
Model No.	Dimensions																
	d	l	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
SFV01205-2.8	12	5	2.5	30	50	10	42	40	32	4.5	8	4.5	M6	2.8x1	661	1316	19
SFV01210-2.7		10	2.5	30	50	10	53	40	32	4.5	8	4.5	M6	2.7x1	623	1241	18
SFV01510-2.7	15	10	3.175	34	58	10	57	45	34	5.5	9.5	5.5	M6	2.7x1	972	2020	23
SFV01604-3.8		4	2.381	34	57	11	45	45	34	5.5	9.5	5.5	M6	3.8x1	931	2285	31
SFV01605-4.8	16	5	3.175	40	63	11	58	51	42	5.5	9.5	5.5	M6	4.8x1	1614	3662	40
SFV01610-2.7		10	3.175	40	63	11	56	51	42	5.5	9.5	5.5	M6	2.7x1	1008	2161	24
SFV02004-4.8	20	4	2.381	40	60	10	50	50	40	4.5	8	4	M6	4.8x1	1247	3584	45
SFV02005-4.8		5	3.175	44	67	11	57	55	52	5.5	9.5	5.5	M6	4.8x1	1814	4650	47
SFV02010-2.7		10	3.969	46	74	13	57	59	46	6.6	11	6.5	M6	2.7x1	1518	3398	30
SFV02020-1.8		20	3.175	46	74	13	70	59	46	6.6	11	6.5	M6	1.8x1	764	1758	19
SFV02505-4.8	25	5	3.175	50	73	11	55	61	52	5.5	9.5	5.5	M8	4.8x1	2017	5884	56
SFV02506-4.8		6	3.969	53	76	11	62	64	58	5.5	9.5	5.5	M6	4.8x1	2711	7268	58
SFV02508-4.8		8	4.762	56	85	13	70	71	64	6.5	11	6.5	M6	4.8x1	3466	8776	61
SFV02510-2.7		10	6.35	68	102	15	70	84	82	9	14	8.5	M8	2.7x1	3040	6547	37
SFV02525-1.8	32	25	3.175	50	73	13	83	61	52	5.5	9.5	5.5	M8	1.8x1	843	2199	22
SFV03204-4.8		4	2.381	54	81	12	50	67	64	6.6	11	6.5	M6	4.8x1	1517	5806	62
SFV03205-4.8		5	3.175	58	85	12	56	71	64	6.6	11	6.5	M8	4.8x1	2249	7612	66
SFV03206-4.8		6	3.969	62	89	12	60	75	68	6.6	11	6.5	M8	4.8x1	3079	9575	70
SFV03208-4.8	40	8	4.762	66	100	15	75	82	76	9	14	8.5	M8	4.8x1	3962	11547	74
SFV03210-4.8		10	6.35	74	108	15	96	90	82	9	14	9	M8	4.8x1	5620	14649	76
SFV03220-2.7		20	6.35	74	108	16	100	90	82	9	14	8.5	M8	2.7x1	3509	8644	46
SFV04005-4.8		5	3.175	67	101	15	59	83	72	9	14	8.5	M8	4.8x1	2468	9586	76
SFV04010-4.8	50	10	6.35	82	124	18	100	102	94	11	17.5	11	M8	4.8x1	6316	18600	90
SFV04020-2.7		20	6.35	82	124	18	100	102	90	11	17.5	11	M8	2.7x1	3935	10893	56
SFV05005-4.8	63	5	3.175	80	114	15	60	96	82	9	14	8.5	M8	4.8x1	2698	12053	87
SFV05010-4.8		10	6.35	93	135	16	93	113	98	11	17.5	11	M8	4.8x1	7023	23537	106
SFV05020-2.7		20	9.525	105	152	28	121	128	110	14	20	13	M8	2.7x1	7336	19700	68
SFV06310-4.8		10	6.35	108	154	22	105	130	110	14	20	13	M8	4.8x1	7860	30430	126
SFV06320-2.7	80	20	9.525	122	180	28	120	150	130	18	26	17.5	M8	2.7x1	8162	24741	80
SFV08010-4.8		10	6.35	130	176	22	105	152	132	14	20	13	M8	4.8x1	8593	38344	145
SFV08020-4.8	80	20	9.525	143	204	28	180	172	148	18	26	18	M8	4.8x1	15103	57296	168
SFV08020-7.6		20	9.525	143	204	28	240	172	148	18	26	18	M8	3.8x2	22423	90719	260

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : DFV

High-Speed Ball Screw



Unit : mm

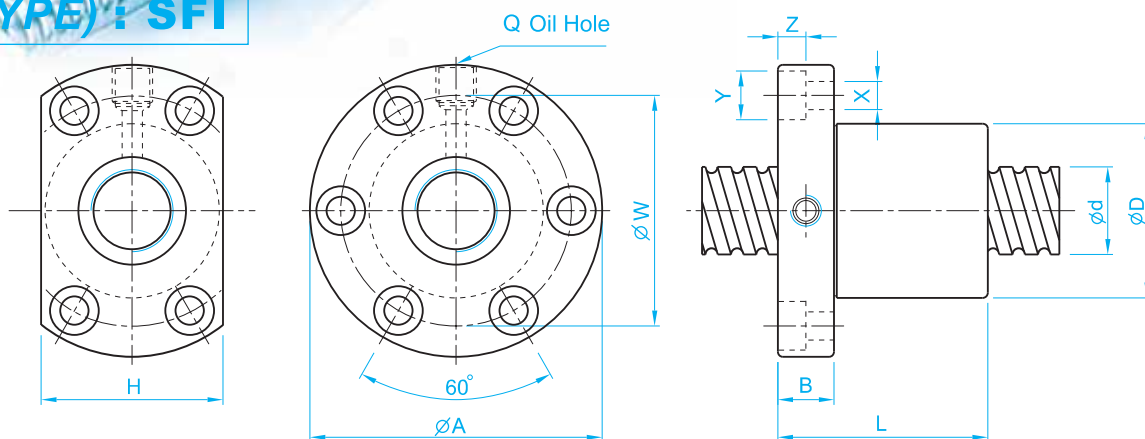
I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/ μ m)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	l	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
DFV01510-2.7	15	10	3.175	34	58	10	107	45	34	5.5	9.5	5.5	M6	2.7x1	972	2020	30
DFV01604-3.8	16	4	2.381	34	57	11	89	45	34	5.5	9.5	5.5	M6	3.8x1	931	2285	42
DFV01605-4.8	16	5	3.175	40	63	11	113	51	42	5.5	9.5	5.5	M6	4.8x1	1614	3662	53
DFV01610-2.7	16	10	3.175	40	63	11	106	51	42	5.5	9.5	5.5	M6	2.7x1	1008	2161	32
DFV02004-4.8	20	4	2.381	40	60	10	94	50	40	4.5	8	4	M6	4.8x1	1247	3584	61
DFV02005-4.8	20	5	3.175	44	67	11	112	55	52	5.5	9.5	5.5	M6	4.8x1	1814	4650	63
DFV02010-2.7	20	10	3.969	46	74	13	117	59	46	6.6	11	6.5	M6	2.7x1	1518	3398	40
DFV02505-4.8	25	5	3.175	50	73	11	105	61	52	5.5	9.5	5.5	M8	4.8x1	2017	5884	75
DFV02506-4.8	25	6	3.969	53	76	11	116	64	58	5.5	9.5	5.5	M6	4.8x1	2711	7268	78
DFV02508-4.8	25	8	4.762	56	85	13	134	71	64	6.5	11	6.5	M6	4.8x1	3466	8776	82
DFV02510-2.7	25	10	6.35	68	102	15	130	84	82	9	14	8.5	M8	2.7x1	3040	6547	49
DFV03204-4.8	32	4	2.381	54	81	12	94	67	64	6.6	11	6.5	M6	4.8x1	1517	5806	85
DFV03205-4.8	32	5	3.175	58	85	12	106	71	64	6.6	11	6.5	M8	4.8x1	2249	7612	90
DFV03206-4.8	32	6	3.969	62	89	12	114	75	68	6.6	11	6.5	M8	4.8x1	3079	9575	95
DFV03208-4.8	32	8	4.762	66	100	15	139	82	76	9	14	8.5	M8	4.8x1	3962	11547	100
DFV03210-4.8	32	10	6.35	74	108	15	186	90	82	9	14	9	M8	4.8x1	5620	14649	101
DFV03220-2.7	32	20	6.35	74	108	16	200	90	82	9	14	8.5	M8	2.7x1	3509	8644	61
DFV04005-4.8	40	5	3.175	67	101	15	109	83	72	9	14	8.5	M8	4.8x1	2468	9586	105
DFV04010-4.8	40	10	6.35	82	124	18	188	102	94	11	17.5	11	M8	4.8x1	6316	18600	121
DFV04020-2.7	40	20	6.35	82	124	18	200	102	90	11	17.5	11	M8	2.7x1	3935	10893	74
DFV05005-4.8	50	5	3.175	80	114	15	115	96	82	9	14	8.5	M8	4.8x1	2698	12053	122
DFV05010-4.8	50	10	6.35	93	135	16	173	113	98	11	17.5	11	M8	4.8x1	7023	23537	144
DFV05020-2.7	50	20	9.525	105	152	28	221	128	110	14	20	13	M8	2.7x1	7336	19700	90
DFV06310-4.8	63	10	6.35	108	154	22	195	130	110	14	20	13	M8	4.8x1	7860	30430	172
DFV06320-2.7	63	20	9.525	122	180	28	220	150	130	18	26	17.5	M8	2.7x1	8162	24741	107
DFV08010-4.8	80	10	6.35	130	176	22	195	152	132	14	20	13	M8	4.8x1	8593	38344	201
DFV08020-4.8	80	20	9.525	143	204	28	340	172	148	18	26	18	M8	4.8x1	15103	57296	226
DFV08020-7.6	80	20	9.525	143	204	28	460	172	148	18	26	18	M8	3.8x2	22423	90719	351

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SFI



Unit : mm

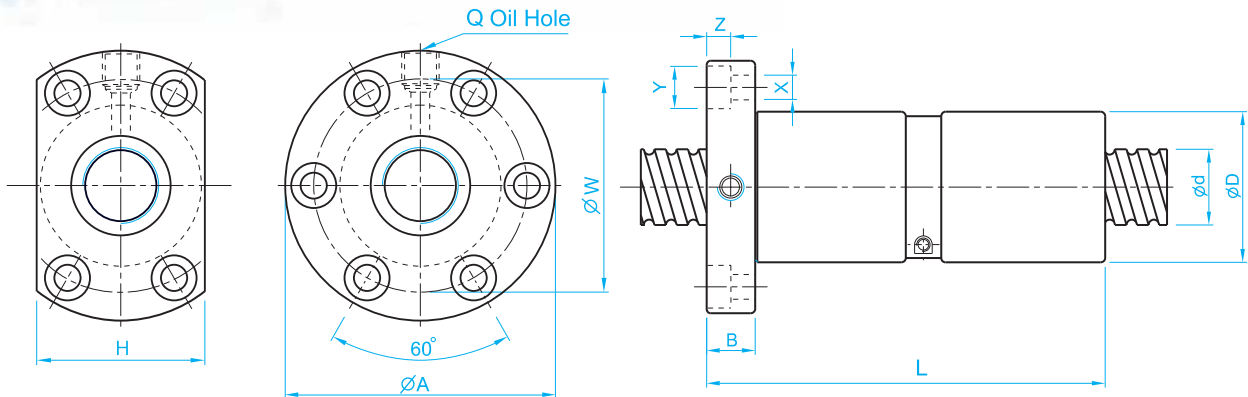
I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	I	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
SFI01604-4	16	4	2.381	30	49	10	45	39	34	4.5	8	4.5	M6	1x4	973	2406	32
★ SFI01605-4		5	3.175	30	49	10	50	39	34	4.5	8	4.5	M6	1x4	1380	3052	33
★ SFI01610-3		10	3.175	34	58	10	57	45	34	5.5	9.5	5.5	M6	1x3	1103	2401	27
SFI02004-4	20	4	2.381	34	57	11	46	45	40	5.5	9.5	5.5	M6	1x4	1066	2987	37
★ SFI02005-4		5	3.175	34	57	11	51	45	40	5.5	9.5	5.5	M6	1x4	1551	3875	39
★ SFI0205T-4		5.08	3.175	34	57	11	51	45	40	5.5	9.5	5.5	M6	1x4	1550	3875	39
★ SFI02504-4	25	4	2.381	40	63	11	46	51	46	5.5	9.5	5.5	M6	1x4	1180	3795	43
★ SFI02505-4		5	3.175	40	63	11	51	51	46	5.5	9.5	5.5	M8	1x4	1724	4904	45
SFI02510-4		10	4.762	46	72	12	85	58	52	6.5	11	6.5	M6	1x4	2954	7295	51
SFI03204-4	32	4	2.381	46	72	12	47	58	52	6.5	11	6.5	M6	1x4	1296	4838	49
★ SFI03205-4		5	3.175	46	72	12	52	58	52	6.5	11	6.5	M8	1x4	1922	6343	52
★ SFI03210-4		10	6.35	54	88	15	90	70	62	9	14	8.5	M8	1x4	4805	12208	62
★ SFI04005-4	40	5	3.175	56	90	15	55	72	64	9	14	8.5	M8	1x4	2110	7988	59
★ SFI04010-4		10	6.35	62	104	18	93	82	70	11	17.5	11	M8	1x4	5399	15500	72
★ SFI05010-4	50	10	6.35	72	114	18	93	92	82	11	17.5	11	M8	1x4	6004	19614	83
★ SFI06310-4	63	10	6.35	85	131	22	98	107	95	14	20	13	M8	1x4	6719	25358	95
SFI08010-4	80	10	6.35	105	150	22	98	127	115	14	20	13	M8	1x4	7346	31953	109

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : DFI



Unit : mm

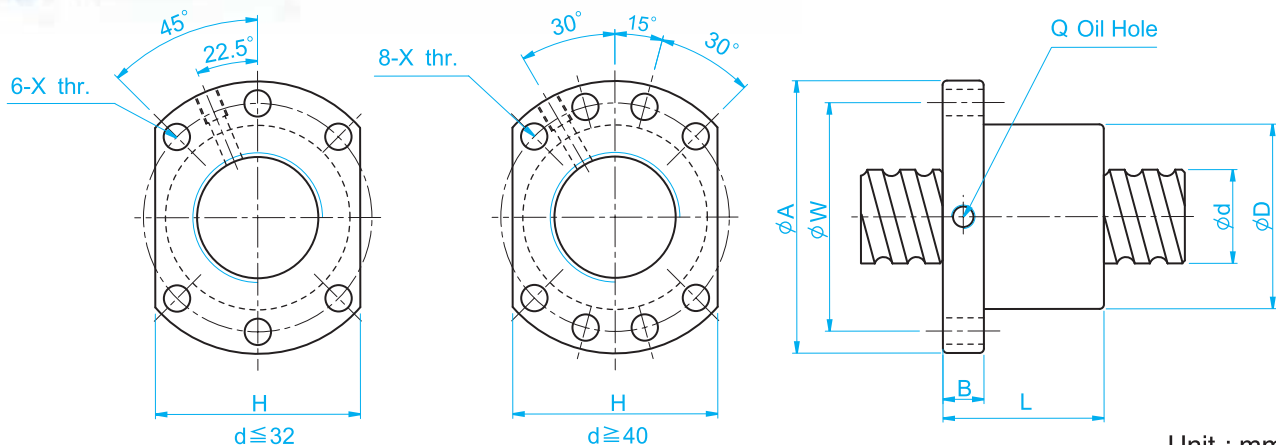
I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	I	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
DFI01604-4	16	4	2.381	30	49	10	80	39	34	4.5	8	4.5	M6	1x4	973	2406	44
DFI01605-4		5	3.175	30	49	10	100	39	34	4.5	8	4.5	M6	1x4	1380	3052	44
DFI02004-4	20	4	2.381	34	57	11	80	45	40	5.5	9.5	5.5	M6	1x4	1066	2987	51
★ DFI02005-4		5	3.175	34	57	11	101	45	40	5.5	9.5	5.5	M6	1x4	1551	3875	52
DFI02504-4	25	4	2.381	40	63	11	80	51	46	5.5	9.5	5.5	M6	1x4	1180	3795	60
★ DFI02505-4		5	3.175	40	63	11	101	51	46	5.5	9.5	5.5	M8	1x4	1724	4904	62
DFI02510-4		10	4.762	46	72	12	145	58	52	6.5	11	6.5	M6	1x4	2954	7295	68
DFI03204-4	32	4	2.381	46	72	12	80	58	52	6.5	11	6.5	M6	1x4	1296	4838	69
★ DFI03205-4		5	3.175	46	72	12	102	58	52	6.5	11	6.5	M8	1x4	1922	6343	72
DFI03210-4		10	6.35	54	88	15	162	70	62	9	14	8.5	M8	1x4	4805	12208	83
★ DFI04005-4	40	5	3.175	56	90	15	105	72	64	9	14	8.5	M8	1x4	2110	7988	84
DFI04010-4		10	6.35	62	104	18	165	82	70	11	17.5	11	M8	1x4	5399	15500	99
DFI05010-4	50	10	6.35	72	114	18	171	92	82	11	17.5	11	M8	1x4	6004	19614	115
★ DFI06310-4	63	10	6.35	85	131	22	182	107	95	14	20	13	M8	1x4	6719	25358	135
★ DFI08010-4	80	10	6.35	105	150	22	182	127	115	14	20	13	M8	1x4	7346	31953	156

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SFU(DIN 69051 FORM B)



Unit : mm

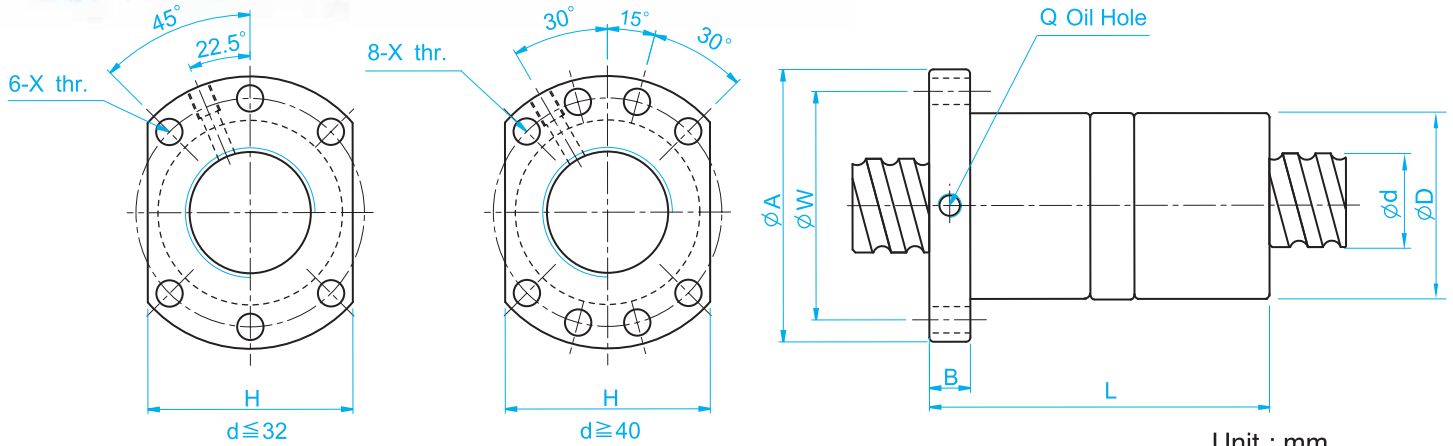
l: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/ μ m)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions														
	d	l	Da	D	A	B	L	W	X	H	Q	n	Ca	Coa	K
★ SFU01204-4	12	4	2.5	24	40	10	40	32	4.5	30		1x4	902	1884	26
★ SFU01604-4		4	2.381	28	48	10	40	38	5.5	40	M6	1x4	973	2406	32
★ SFU01605-4	16	5	3.175	28	48	10	50	38	5.5	40	M6	1x4	1380	3052	32
★ SFU01610-3		10	3.175	28	48	10	57	38	5.5	40	M6	1x3	1103	2401	26
★ SFU02004-4	20	4	2.381	36	58	10	42	47	6.6	44	M6	1x4	1066	2987	38
★ SFU02005-4		5	3.175	36	58	10	51	47	6.6	44	M6	1x4	1551	3875	39
★ SFU02504-4		4	2.381	40	62	10	42	51	6.6	48	M6	1x4	1180	3795	43
★ SFU02505-4		5	3.175	40	62	10	51	51	6.6	48	M6	1x4	1724	4904	45
★ SFU02506-4	25	6	3.969	40	62	10	54	51	6.6	48	M6	1x4	2318	6057	47
★ SFU02508-4		8	4.762	40	62	10	63	51	6.6	48	M6	1x4	2963	7313	49
★ SFU02510-4		10	4.762	40	62	12	85	51	6.6	48	M6	1x4	2954	7295	50
★ SFU03204-4		4	2.381	50	80	12	44	65	9	62	M6	1x4	1296	4838	51
★ SFU03205-4		5	3.175	50	80	12	52	65	9	62	M6	1x4	1922	6343	54
★ SFU03206-4		6	3.969	50	80	12	57	65	9	62	M6	1x4	2632	7979	57
★ SFU03208-4	32	8	4.762	50	80	12	65	65	9	62	M6	1x4	3387	9622	60
★ SFU03210-4		10	6.35	50	80	12	90	65	9	62	M6	1x4	4805	12208	61
★ SFU04005-4		5	3.175	63	93	14	55	78	9	70	M8	1x4	2110	7988	63
★ SFU04006-4		6	3.969	63	93	14	60	78	9	70	M6	1x4	2873	9913	66
★ SFU04008-4	40	8	4.762	63	93	14	67	78	9	70	M6	1x4	3712	11947	70
★ SFU04010-4		10	6.35	63	93	14	93	78	9	70	M8	1x4	5399	15500	73
★ SFU05010-4		10	6.35	75	110	16	93	93	11	85	M8	1x4	6004	19614	85
★ SFU05020-4	50	20	7.144	75	110	16	138	93	11	85	M8	1x4	7142	22588	94
★ SFU06310-4		10	6.35	90	125	18	98	108	11	95	M8	1x4	6719	25358	99
★ SFU06320-4	63	20	9.525	95	135	20	149	115	13.5	100	M8	1x4	11444	36653	112
★ SFU08010-4		10	6.35	105	145	20	98	125	13.5	110	M8	1x4	7346	31953	109
★ SFU08020-4	80	20	9.525	125	165	25	154	145	13.5	130	M8	1x4	12911	47747	138
★ SFU10020-4	100	20	9.525	150	202	30	180	170	17.5	155	M8	1x4	14303	60698	162

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : DFU(DIN 69051 FORM B)



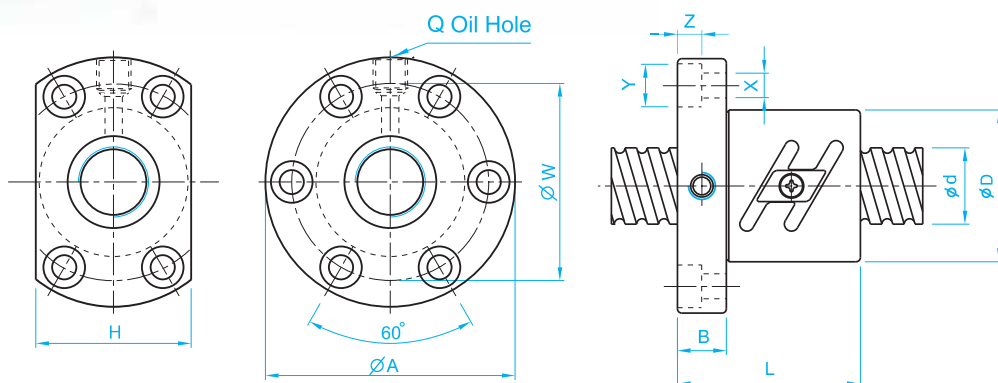
l: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions														
	d	l	Da	D	A	B	L	W	X	H	Q	n	Ca	Coa	K
DFU01604-4	16	4	2.381	28	48	10	80	38	5.5	40	M6	1x4	973	2406	43
★ DFU01605-4		5	3.175	28	48	10	100	38	5.5	40	M6	1x4	1380	3052	44
★ DFU01610-3		10	3.175	28	48	10	118	38	5.5	40	M6	1x3	1103	2401	35
DFU02004-4	20	4	2.381	36	58	10	80	47	6.6	44	M6	1x4	1066	2987	51
★ DFU02005-4		5	3.175	36	58	10	101	47	6.6	44	M6	1x4	1551	3875	53
DFU02504-4	25	4	2.381	40	62	10	80	51	6.6	48	M6	1x4	1180	3795	60
★ DFU02505-4		5	3.175	40	62	10	101	51	6.6	48	M6	1x4	1724	4904	62
DFU02506-4		6	3.969	40	62	10	105	51	6.6	48	M6	1x4	2318	6057	64
DFU02508-4		8	4.762	40	62	10	120	51	6.6	48	M6	1x4	2963	7313	67
★ DFU02510-4	10	4.762	40	62	12	145	51	6.6	48	M6	1x4	2954	7295	67	
DFU03204-4	32	4	2.381	50	80	12	80	65	9	62	M6	1x4	1296	4838	71
★ DFU03205-4		5	3.175	50	80	12	102	65	9	62	M6	1x4	1922	6343	74
DFU03206-4		6	3.969	50	80	12	105	65	9	62	M6	1x4	2632	7979	78
DFU03208-4		8	4.762	50	80	12	122	65	9	62	M6	1x4	3387	9622	82
★ DFU03210-4	10	6.35	50	80	12	162	65	9	62	M6	1x4	4805	12208	82	
★ DFU04005-4	40	5	3.175	63	93	14	105	78	9	70	M8	1x4	2110	7988	87
DFU04006-4		6	3.969	63	93	14	108	78	9	70	M6	1x4	2873	9913	91
DFU04008-4		8	4.762	63	93	14	132	78	9	70	M6	1x4	3712	11947	96
★ DFU04010-4	10	6.35	63	93	14	165	78	9	70	M8	1x4	5399	15500	99	
★ DFU05010-4	50	10	6.35	75	110	16	171	93	11	85	M8	1x4	6004	19614	117
★ DFU05020-4		20	7.144	75	110	16	280	93	11	85	M8	1x4	7142	22588	126
★ DFU06310-4	63	10	6.35	90	125	18	182	108	11	95	M8	1x4	6719	25358	139
DFU06320-4		20	9.525	95	135	20	290	115	13.5	100	M8	1x4	11444	36653	152
★ DFU08010-4	80	10	6.35	105	145	20	182	125	13.5	110	M8	1x4	7346	31953	156
DFU08020-4		20	9.525	125	165	25	295	145	13.5	130	M8	1x4	12911	47747	187
DFU10020-4	100	20	9.525	150	202	30	340	170	17.5	155	M8	1x4	14303	60698	222

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SFT



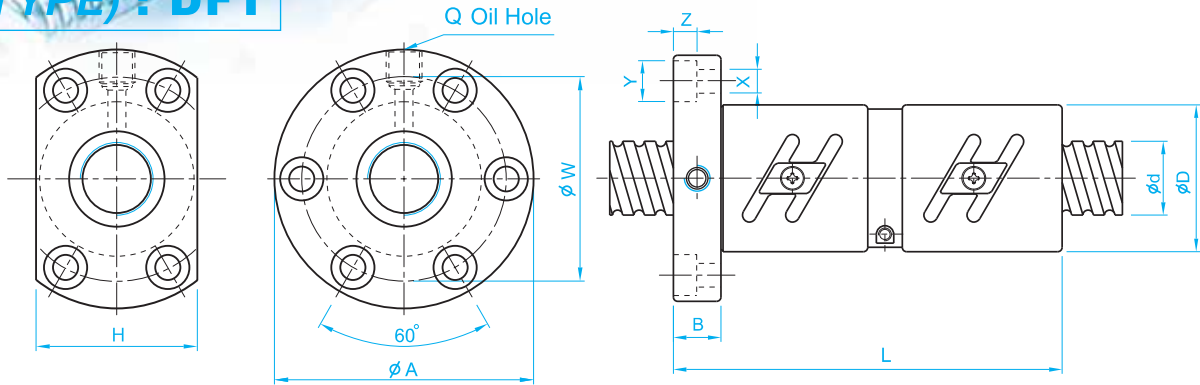
Unit : mm

I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	I	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
SFT02005-5	20	5	3.175	44	67	11	57	55	52	5.5	9.5	5.5	M6	2.5x2	1879	4844	49
SFT02505-5	25	5	3.175	50	73	11	55	61	52	5.5	9.5	5.5	M8	2.5x2	2089	6129	58
SFT02510-2.5		10	6.35	68	102	15	70	84	82	9	14	8.5	M8	2.5x1	2845	6062	34
SFT03205-5	32	5	3.175	58	85	12	56	71	64	6.6	11	6.5	M8	2.5x2	2329	7929	69
SFT03206-5		6	3.969	62	89	12	65	75	68	6.6	11	6.5	M8	2.5x2	3189	9974	73
SFT03208-5		8	4.762	66	100	15	82	82	76	9	14	8.5	M8	2.5x2	4103	12028	77
SFT03210-5		10	6.35	74	108	15	96	90	82	9	14	9	M8	2.5x2	5821	15259	79
SFT03220-2.5		20	6.35	74	108	16	100	90	82	9	14	8.5	M8	2.5x1	3284	8004	43
SFT04005-5		40	5	3.175	67	101	15	59	83	72	9	14	8.5	M8	2.5x2	2556	9985
SFT04010-5	10		6.35	82	124	18	100	102	94	11	17.5	11	M8	2.5x2	6541	19375	94
SFT04020-2.5	20		6.35	82	124	18	100	102	90	11	17.5	11	M8	2.5x1	3683	10086	52
SFT05010-5	50	10	6.35	93	135	18	103	113	98	11	17.5	11	M8	2.5x2	7274	24518	110
SFT05020-2.5		20	9.525	105	152	28	121	128	110	14	20	13	M8	2.5x1	6867	18241	63
SFT06310-5	63	10	6.35	108	154	22	105	130	110	14	20	13	M8	2.5x2	8141	31697	131
SFT06320-2.5		20	9.525	122	180	28	127	150	130	18	26	17.5	M8	2.5x1	7639	22908	74
SFT08010-5	80	10	6.35	130	176	22	105	152	132	14	20	13	M8	2.5x2	8900	39942	151
SFT08020-5		20	9.525	143	204	28	180	172	148	18	26	18	M8	2.5x2	15642	59684	174
SFT08020-7.5		20	9.525	143	204	28	240	172	148	18	26	18	M8	2.5x3	22169	89525	257

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : DFT



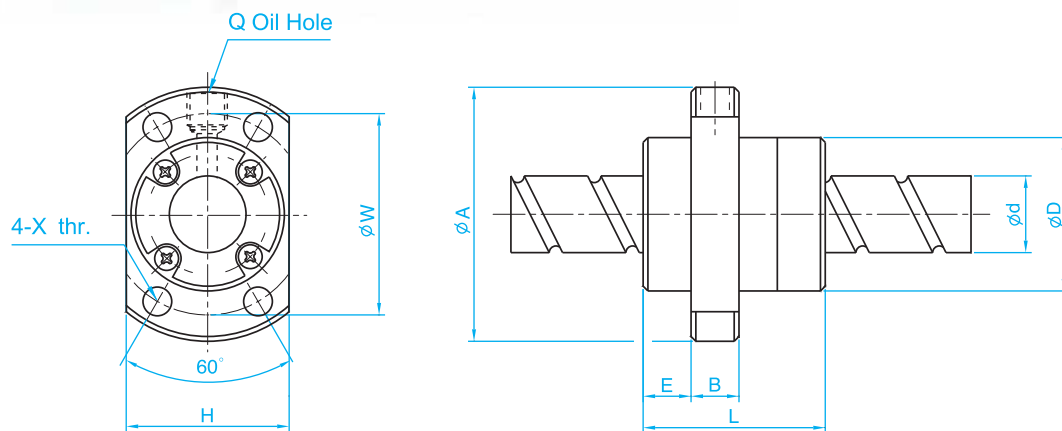
Unit : mm

I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	I	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
DFT02005-5	20	5	3.175	44	67	11	105	55	52	5.5	9.5	5.5	M6	2.5x2	1879	4844	66
DFT02505-5	25	5	3.175	50	73	11	105	61	52	5.5	9.5	5.5	M8	2.5x2	2089	6129	78
DFT02510-2.5		10	6.35	68	102	15	130	84	82	9	14	8.5	M8	2.5x1	2845	6062	46
DFT03205-5	32	5	3.175	58	85	12	106	71	64	6.6	11	6.5	M8	2.5x2	2329	7929	94
DFT03206-5		6	3.969	62	89	12	123	75	68	6.6	11	6.5	M8	2.5x2	3189	9974	99
DFT03208-5		8	4.762	66	100	15	154	82	76	9	14	8.5	M8	2.5x2	4103	12028	104
DFT03210-5		10	6.35	74	108	16	187	90	82	9	14	8.5	M8	2.5x2	5821	15259	105
DFT03220-2.5		20	6.35	74	108	16	198	90	82	9	14	8.5	M8	2.5x1	3284	8004	57
DFT04005-5		40	5	3.175	67	101	15	109	83	72	9	14	8.5	M8	2.5x2	2556	9985
DFT04010-5	10		6.35	82	124	18	188	102	94	11	17.5	11	M8	2.5x2	6541	19375	126
DFT04020-2.5	20		6.35	82	124	18	200	102	90	11	17.5	11	M8	2.5x1	3683	10086	69
DFT05010-5	50	10	6.35	93	135	18	193	113	98	11	17.5	11	M8	2.5x2	7274	24518	149
DFT05020-2.5		20	9.525	105	152	28	225	128	110	14	20	13	M8	2.5x1	6867	18241	84
DFT06310-5	63	10	6.35	108	154	22	197	130	110	14	20	13	M8	2.5x2	8141	31697	179
DFT06320-2.5		20	9.525	122	180	28	227	150	130	18	26	17.5	M8	2.5x1	7639	22908	100
DFT08010-5	80	10	6.35	130	176	22	195	152	132	14	20	13	M8	2.5x2	8900	39942	209
DFT08020-5		20	9.525	143	204	28	340	172	148	18	26	18	M8	2.5x2	15642	59684	235

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SFE



Unit : mm

I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions															
	d	I	Da	D	A	E	B	L	X	W	H	Q	n	Ca	Coa	K
SFE01616-3	16	16	2.778	32	53	10.1	10	38	4.5	42	34	M6	1.7x2	1021	2409	29
SFE01616-6		16	2.778	32	53	10.1	10	38	4.5	42	34	M6	1.7x4	1853	4818	57
SFE01632-3	16	32	2.778	34	55	10.5	10	34	5.5	45	36	M6	0.7x2	439	976	11
SFE01632-6		32	2.778	34	55	10.5	10	34	5.5	45	36	M6	0.7x4	797	1953	21
SFE02020-3	20	20	3.175	39	62	12	10	47	5.5	50	41	M6	1.7x2	1321	3320	35
SFE02020-6		20	3.175	39	62	12	10	47	5.5	50	41	M6	1.7x4	2397	6640	67
SFE02040-3	20	40	3.175	38	58	11	10	41	5.5	48	40	M6	0.7x2	582	1397	13
SFE02040-6		40	3.175	38	58	11	10	41	5.5	48	40	M6	0.7x4	1056	2794	26
SFE02525-3	25	25	3.969	47	74	14	12	57	6.6	60	49	M6	1.7x2	1974	5188	43
SFE02525-6		25	3.969	47	74	14	12	57	6.6	60	49	M6	1.7x4	3583	10377	83
SFE02550-3	25	50	3.969	46	70	13	12	50	6.6	58	48	M6	0.7x2	870	2183	16
SFE02550-6		50	3.969	46	70	13	12	50	6.6	58	48	M6	0.7x4	1579	4366	32
SFE03232-3	32	32	4.762	58	92	17	12	71	9	74	60	M6	1.7x2	2876	8207	54
SFE03232-6		32	4.762	58	92	17	12	71	9	74	60	M6	1.7x4	5220	16414	106
SFE03264-3	32	64	4.762	58	92	15.5	12	62	9	74	60	M6	0.7x2	1225	3282	20
SFE03264-6		64	4.762	58	92	15.5	12	62	9	74	60	M6	0.7x4	2223	6565	39
SFE04040-3	40	40	6.35	73	114	19.5	15	89	11	93	75	M6	1.7x2	4600	13281	66
SFE04040-6		40	6.35	73	114	19.5	15	89	11	93	75	M6	1.7x4	8348	26561	128
SFE05050-3	50	50	7.938	90	135	21.5	20	107	14	112	92	M6	1.7x2	6512	19430	80
SFE05050-6		50	7.938	90	135	21.5	20	107	14	112	92	M6	1.7x4	11820	38859	155

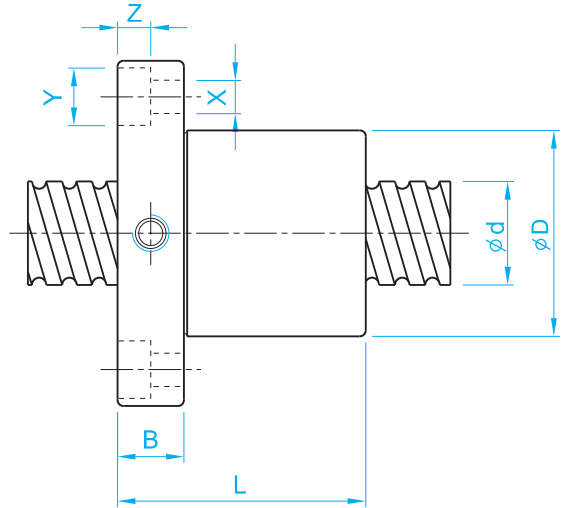
Note: 1. "-3" means 2 starts, "-6" means 4 starts.

Note: 2. *TBI MOTION* Standard nuts are without seals, if required, please advise.

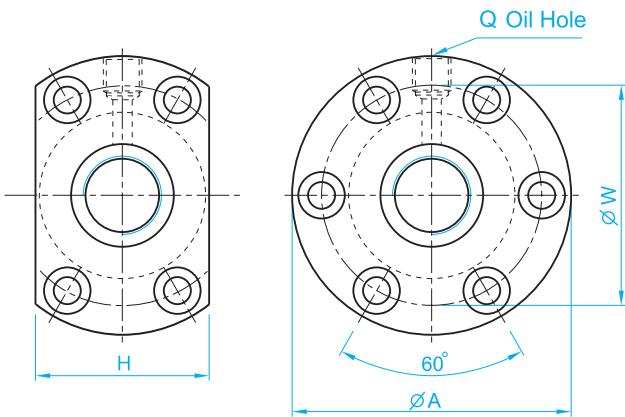
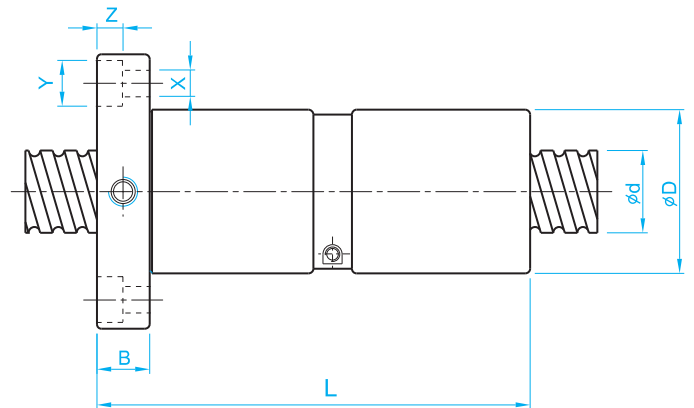
Dimension Table of TBI MOTION Ball Screws

Used for Milling Machine Only

TYPE : SFM



TYPE : DFM



Unit : mm

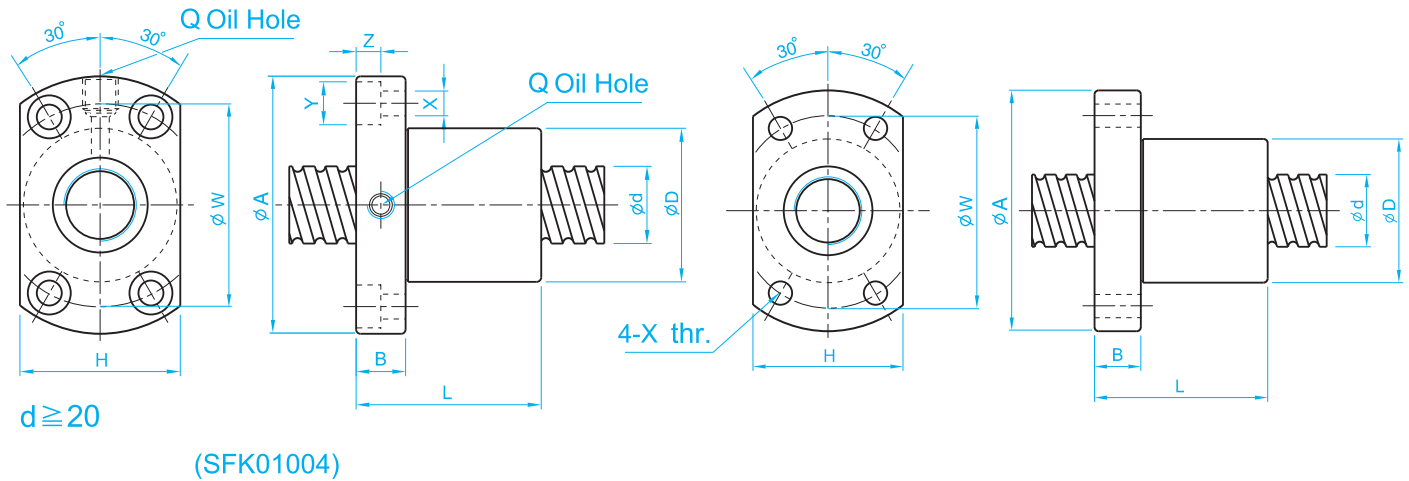
I: Lead Da: Ball Dia. n: Number of Circuits K: Stiffness (Kgf/μm)
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load(Kgf)

Model No.	Dimensions																
	d	I	Da	D	A	B	L	W	H	X	Y	Z	Q	n	Ca	Coa	K
★ SFM03205-4	32	5	3.175	48	74	12	52	60	60	6.5	11	6.5	M8	1x4	1922	6343	53
★ SFM0325T-4		5.08	3.175	48	74	12	53	60	60	6.5	11	6.5	M8	1x4	1922	6343	53
★ DFM03205-4	32	5	3.175	48	74	12	102	60	60	6.5	11	6.5	M8	1x4	1922	6343	73
★ DFM0325T-4		5.08	3.175	48	74	12	104	60	60	6.5	11	6.5	M8	1x4	1922	6343	73

Note: with sign ★ can be produced in left helix

Dimension Table of *TBI MOTION* Ball Screws

(TYPE) : SFK



Unit : mm

I: Lead D_a : Ball Dia. n: Number of Circuits K: Stiffness (Kgf/ μ m)
 C_a : Basic Dynamic Rating Load (Kgf) C_oa : Basic Static Rating Load (Kgf)

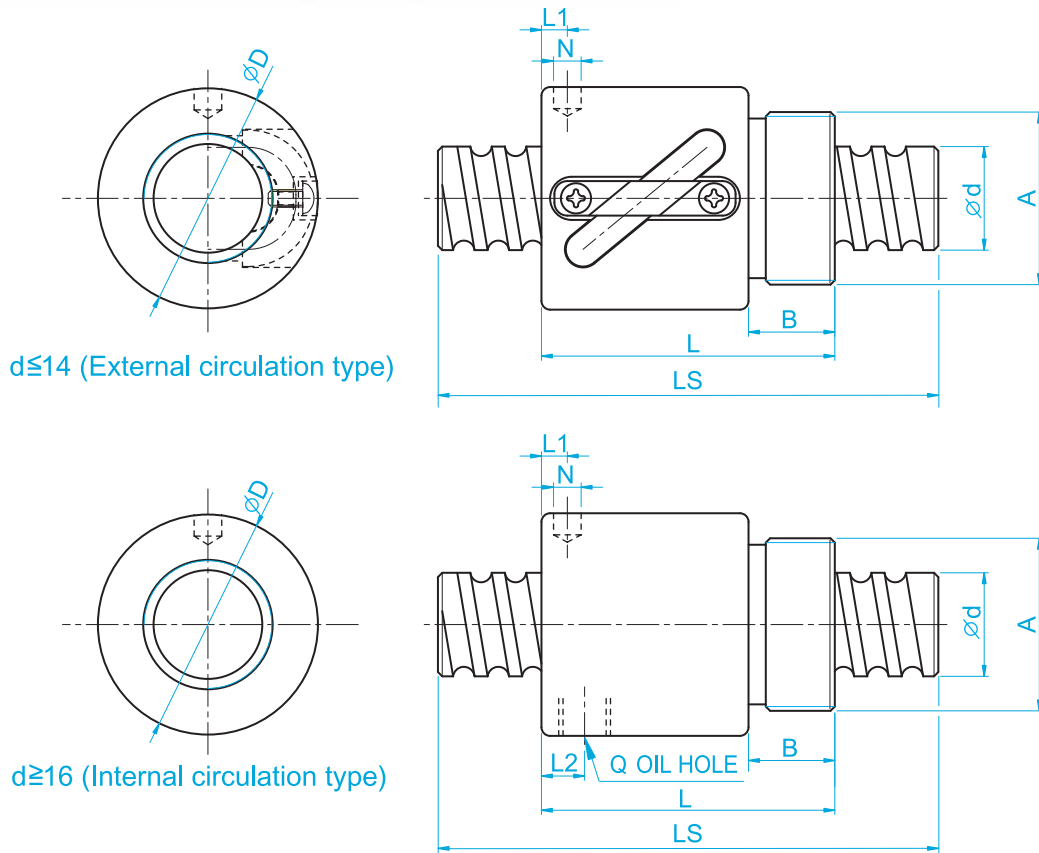
Model No.	Dimensions																
	d	I	D_a	D	A	B	L	W	H	X	Y	Z	Q	n	C_a	C_oa	K
SFK00401	4	1	0.8	10	20	3	12	15	14	2.9	-	-	-	1x2	64	97	5
SFK00601	6	1	0.8	12	24	3.5	15	18	16	3.4	-	-	-	1x3	111	224	9
★ SFK00801	8	1	0.8	14	27	4	16	21	18	3.4	-	-	-	1x4	161	403	14
★ SFK00802		2	1.2	14	27	4	16	21	18	3.4	-	-	-	1x3	222	458	13
SFK0082.5		2.5	1.2	16	29	4	26	23	20	3.4	-	-	-	1x3	221	457	13
★ SFK01002	10	2	1.2	18	35	5	28	27	22	4.5	-	-	-	1x3	243	569	15
SFK01004		4	2	26	46	10	34	36	28	4.5	8	4.5	M6	1x3	468	905	17
★ SFK01202	12	2	1.2	20	37	5	28	29	24	4.5	-	-	-	1x4	334	906	22
SFK01402	14	2	1.2	21	40	6	23	31	26	5.5	-	-	-	1x4	354	1053	24
SFK01602	16	2	1.2	25	43	10	40	35	29	5.5	-	-	M6	1x4	373	1200	26

Note: 1. *TBI MOTION* Standard nuts are without seals, if required, please advise.

Note: with sign ★ can be produced in left helix

Dimension Table of **TBI MOTION** Ball Screws

(TYPE) : BSH



Unit : mm

d: Screw O.D. l: Lead Da: Ball Dia. n: Number of Circuits Ls: Screw Length
 Ca: Basic Dynamic Rating Load (Kgf) Coa: Basic Static Rating Load (Kgf)

Model No.	Dimensions														
	d	l	Da	D	A	B	L	L1	N	L2	Q	n	Ca	Coa	K
BSHR0082.5-2.5	8	2.5	1.2	17.5	M15x1P	7.5	23.5	10	3	-	-	2.5x1	189	381	11
BSHR01002-3.5	10	2	1.2	19.5	M17x1P	7.5	22	3	3.2	-	-	3.5x1	277	664	17
BSHR01004-2.5		4	2	25	M20x1P	10	34	3	3	-	-	2.5x1	400	754	14
BSHR01204-3.5	12	4	2.5	25.5	M20x1P	10	34	13	3	-	-	3.5x1	804	1649	23
BSHR01205-3.5		5	2.5	25.5	M20x1P	10	39	16.25	3	-	-	3.5x1	801	1644	24
BSHR01404-3.5	14	4	2.381	32.1	M25x1.5P	10	35	13	3	-	-	3.5x1	804	1803	26
BSHR01604-3	16	4	2.381	29	M22x1.5P	8	32	4	3.2	-	-	1x3	759	1804	24
BSHR01605-3		5	3.175	32.5	M26x1.5P	12	42	19.25	3	-	-	1x3	1077	2289	25
BSHR02005-3	20	5	3.175	38	M35x1.5P	15	45	20.3	3	-	-	1x3	1211	2906	30
BSHR02505-4	25	5	3.175	43	M40x1.5P	19	69	32.11	3	8	M6	1x4	1724	4904	37

Note : Nuts do not attach seals from Ø 8 to Ø16.