

Table of contents

- **FSCR/FSCL**
- **FDCR**
- **FSER**
- **RSCR**
- **RSKR**
- **SFYAR**
- **SFKR**
- **SNFSCR**
- **RN/RN..W**
- **RNB**
- **BKN**
- **BFN**
- **FKN**
- **FFN**
- **WBK..DF/WBK..DFF**
- **RA Grease**

FSCR/FSCL

Ball nut with Flange (DIN 69051).

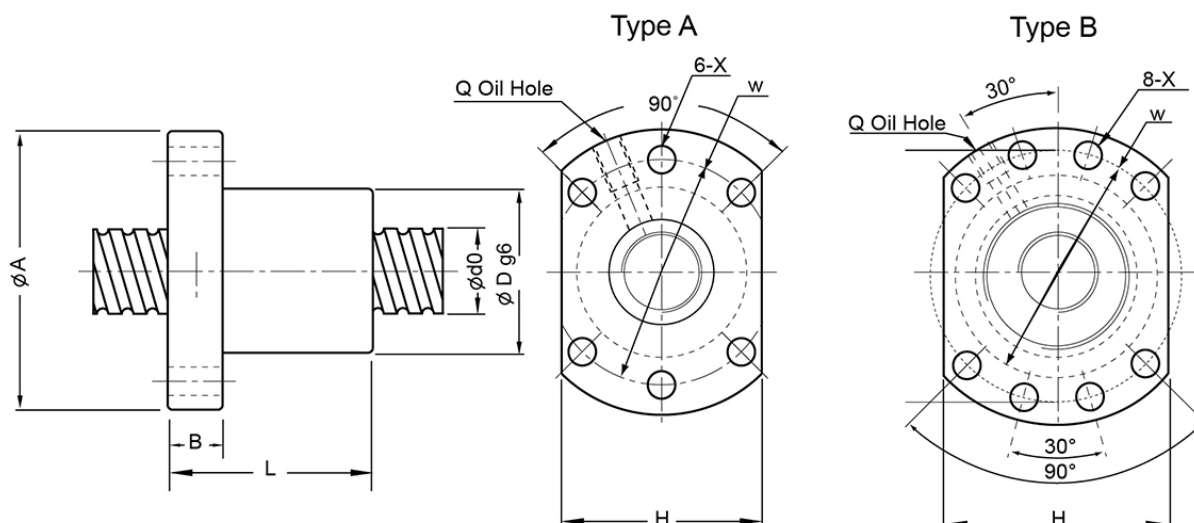
Available in right (FSCR) and left (FSCL) lead.

Standard nuts are with oil-seals.

All dimensions in mm.



General Data



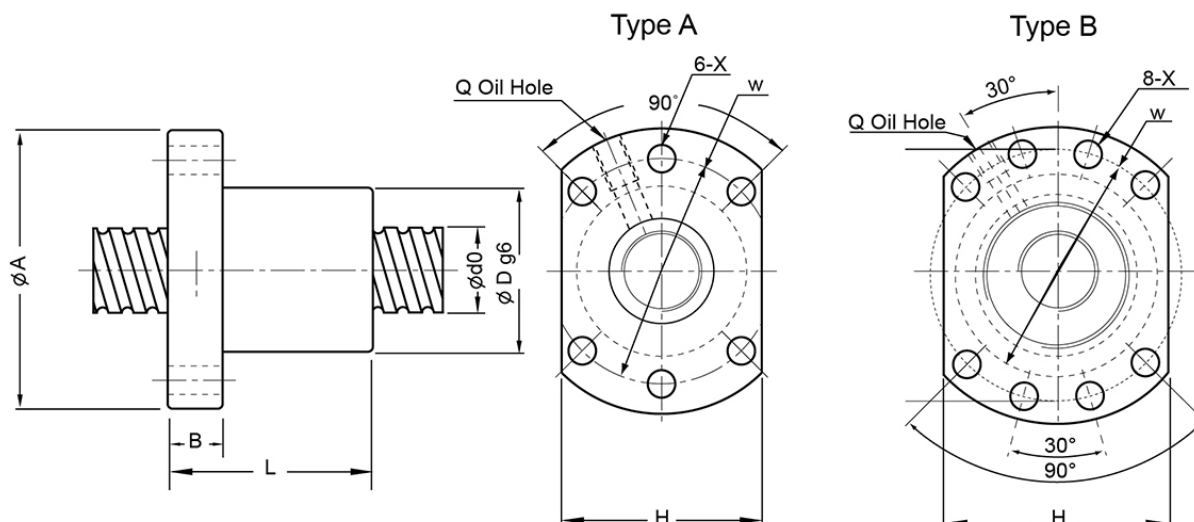
Designation	Compatible with	Type	Dynamic Load Ratings C_a (N)	Static Load Ratings C_{0a} (N)	Ball diameter
FSCR1605	BKN12 / FKN12 / BFN12 / FFN12	A	13185	14960	3.175
FSCRN1610	BKN12 / FKN12 / BFN12 / FFN12	A	11576	14676	3.175
FSCR2005	BKN15 / FKN15 / BFN15 / FFN15	A	14833	19571	3.175
FSCL2005	BKN15 / FKN15 / BFN15 / FFN15	A	14833	19571	3.175
FSCR2505	BKN20 / FKN20 / BFN20 / FFN20	A	16716	25320	3.175
FSCR2510	BKN17 / FKN17 / BFN17 / FFN17	A	28263	36248	4.762
FSCR3205	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	18874	33383	3.175
FSCL3205	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	18874	33383	3.175
FSCR3210	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	47422	76861	6.35
FSCR3220	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	21003	35081	3.969
FSCR4005	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	B	21013	42595	3.175
FSCR4010	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	B	52964	98826	6.35
FSCR4020	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	B	37101	63451	5.556
FSCR5010	BKN40 / WBK40DF / WBK40DFF / BFN40	B	58203	120791	6.35
FSCR6310	—	B	65727	159216	6.35

General Data

Designation	Compatible with	Type	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter
FSCR6320	—	B	87868	176040	9.525

Designation	Turns x circuits
FSCR1605	1 x 4
FSCRN1610	3 x 1
FSCR2005	1 x 4
FACL2005	4 x 1
FSCR2505	1 x 4
FSCR2510	1 x 4
FSCR3205	1 x 4
FACL3205	1 x 4
FSCR3210	1 x 4
FSCR3220	3 x 1
FSCR4005	1 x 4
FSCR4010	1 x 4
FSCR4020	3 x 1
FSCR5010	1 x 4
FSCR6310	1 x 4
FSCR6320	1 x 3

Dimensions



Designation	A	B	D	H	L	Q	W	X	d0 x Lead
FSCR1605	48	10	28	40	50	M6	38	5.5	16 x 5
FSCRN1610	48	12	28	40	43	M6	38	5.5	16 x 10
FSCR2005	58	10	36	44	53	M6	47	6.6	20 x 5
FSCL2005	58	10	36	44	34	M6	47	6.6	20 x 5
FSCR2505	62	10	40	48	53	M6	51	6.6	25 x 5
FSCR2510	62	12	40	48	85	M6	51	6.6	25 x 10
FSCR3205	80	12	50	62	53	M6	65	9	32 x 5
FSCL3205	80	12	50	62	53	M6	65	9	32 x 5
FSCR3210	80	16	50	62	90	M6	65	9	32 x 10
FSCR3220	80	13	50	62	78	M6	65	9	32 x 20
FSCR4005	93	16	63	70	56	M8	78	9	40 x 5
FSCR4010	93	18	63	70	93	M8	78	9	40 x 10
FSCR4020	93	15	63	70	83	M8	78	9	40 x 20
FSCR5010	110	18	75	85	93	M8	93	11	50 x 10
FSCR6310	125	18	90	95	98	M8	108	11	63 x 10
FSCR6320	135	20	95	100	138	M8	115	13.5	63 x 20

FDCR

Double Nut with Flange (DIN 69051).

Standard nuts are with oil-seals.

Best combination for smooth and backlash-free operation with high rigidity.

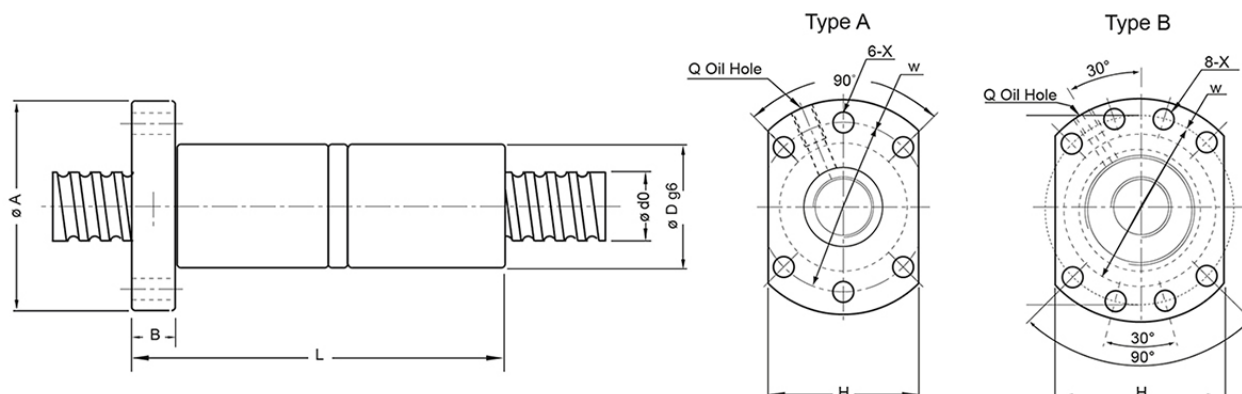
A double nut must always be used pre-loaded and have to be assembled on the ball screw spindle by Rollco.
Standard preload is P2, see "Preload and clearance" in Technical information.

Lead accuracy G5 or better is required for proper function.
For best performance, a ground spindle is recommended.

All dimensions in mm.



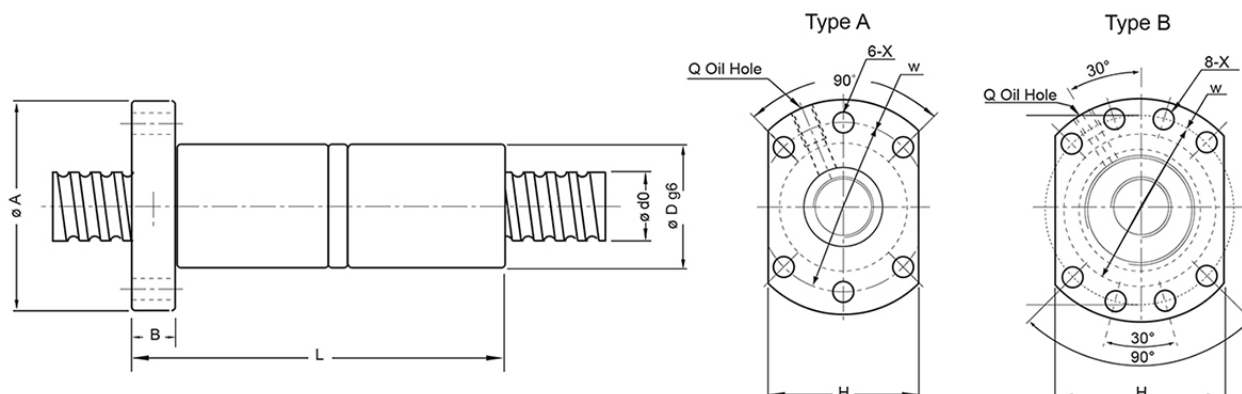
General Data



Designation	Compatible with	Type	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter
FDCR1605	BKN12 / FKN12 / BFN12 / FFN12	A	10291	11223	3.175
FDCR2005	BKN15 / FKN15 / BFN15 / FFN15	A	14833	19571	3.175
FDCR2505	BKN20 / FKN20 / BFN20 / FFN20	A	16716	25320	3.175
FDCR2510	BKN17 / FKN17 / BFN17 / FFN17	A	28263	36248	4.762
FDCR3205	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	18874	33383	3.175
FDCR3210	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	A	47422	76861	6.35
FDCR4005	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	B	21013	42595	3.175
FDCR4010	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	B	52964	98826	6.35
FDCR5010	BKN40 / WBK40DF / WBK40DFF / BFN40	B	58203	120791	6.35

Designation	Turns x circuits
FDCR1605	1 x 3
FDCR2005	1 x 4
FDCR2505	1 x 4
FDCR2510	1 x 4
FDCR3205	1 x 4
FDCR3210	1 x 4
FDCR4005	1 x 4
FDCR4010	1 x 4
FDCR5010	1 x 4

Dimensions



Designation	A	B	D	H	L	Q	W	X	d0 x Lead
FDCR1605	48	10	28	40	80	M6	38	5.5	16 x 5
FDCR2005	58	12	36	44	92	M6	47	6.6	20 x 5
FDCR2505	62	12	40	48	92	M6	51	6.6	25 x 5
FDCR2510	62	12	40	48	153	M6	51	6.6	25 x 10
FDCR3205	80	12	50	62	92	M6	65	9	32 x 5
FDCR3210	80	16	50	62	160	M6	65	9	32 x 10
FDCR4005	93	15	63	70	96	M8	78	9	40 x 5
FDCR4010	93	18	63	70	162	M8	78	9	40 x 10
FDCR5010	110	16	75	85	162	M8	93	11	50 x 10

FSER

Single Nut with Flange, Long Lead.

Standard nuts are with oil-seals. Other types on request.

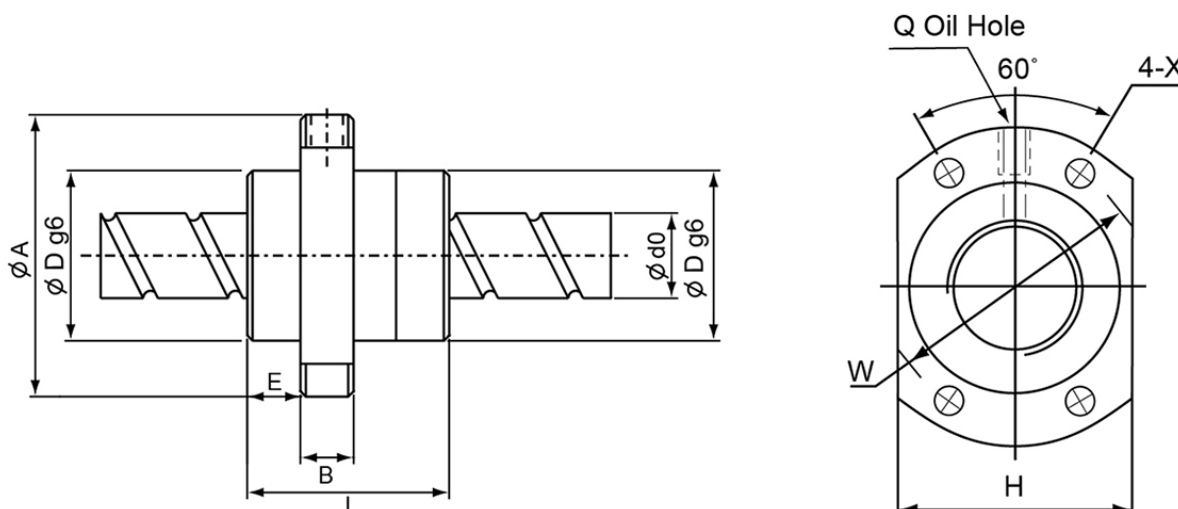
All dimensions in mm.



General Data

Designation	Compatible with	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter	Turns x circuits
FSER1616	BKN12 / FKN12 / BFN12 / FFN12	14833	19571	3.175	1.8 x 2
FSER2020	BKN15 / FKN15 / BFN15 / FFN15	16275	24172	3.175	1.8 x 2
FSER2525	BKN20 / FKN20 / BFN20 / FFN20	24339	37778	3.969	1.8 x 2
FSER3232	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	35169	59557	4.762	1.8 x 2
FSER4040	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	56682	115297	6.35	1.8 x 2
FSER5050	BKN40 / WBK40DF / WBK40DFF / BFN40	86514	188754	7.938	1.8 x 2

Dimensions



Designation	A	B	D	E	H	L	Q	W	X
FSER1616	53	10	32	10.5	38	48	M6	42	4.5
FSER2020	62	10	39	10.8	46	55	M6	50	5.5
FSER2525	74	12	47	11.2	56	67	M6	60	6.6
FSER3232	92	15	58	14	68	82	M6	74	9
FSER4040	114	17	73	17	84	100	M6	93	11
FSER5050	135	20	90	21.5	92	125	M6	112	14

Designation	d0 x Lead
FSER1616	16 x 16
FSER2020	20 x 20
FSER2525	25 x 25
FSER3232	32 x 32
FSER4040	40 x 40
FSER5050	50 x 50

RSCR

Single Nut, Cylindrical with Thread, Internal Recirculation.

Standard nuts are with oil-seals.

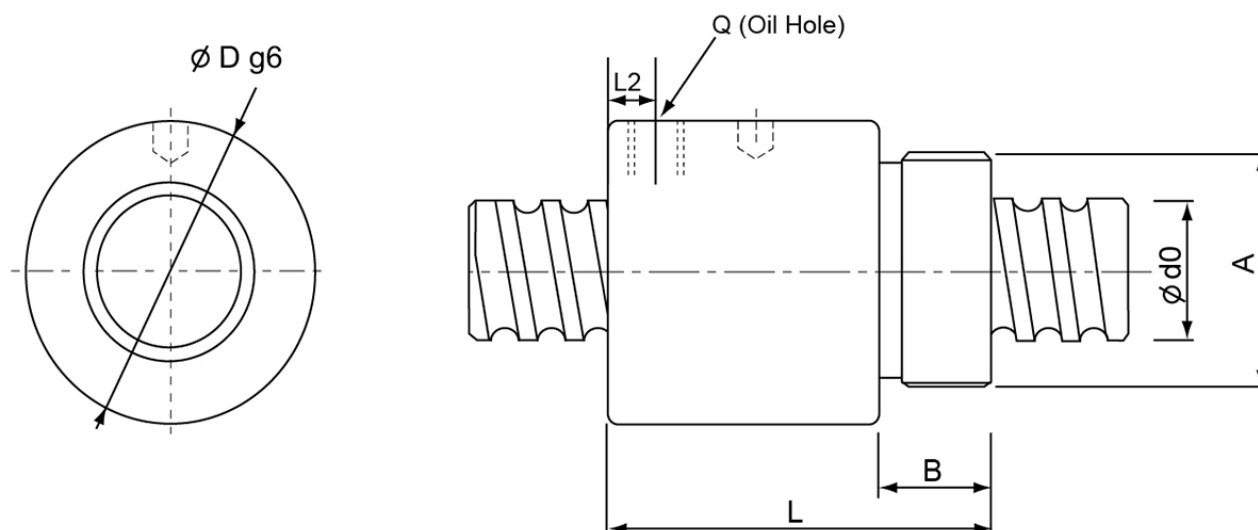
All dimensions in mm.



General Data

Designation	Compatible with	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter	Turns x circuits
RSCR1605	BKN12 / FKN12 / BFN12 / FFN12	13185	14960	3.175	1 x 4
RSCR2005	BKN15 / FKN15 / BFN15 / FFN15	14833	19571	3.175	1 x 4
RSCR2505	BKN20 / FKN20 / BFN20 / FFN20	16716	25320	3.175	1 x 4
RSCR2510	BKN17 / FKN17 / BFN17 / FFN17	28263	36248	4.762	1 x 4
RSCR3205	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	18874	33383	3.175	1 x 4
RSCR3210	BKN25 / FKN25 / WBK25DF / BFN25 / FFN25	47422	76861	6.35	1 x 4
RSCR4005	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	21003	35081	3.175	1 x 4
RSCR4010	BKN30 / FKN30 / WBK30DF / WBK30DFF / BFN30 / FFN30	52964	98826	6.35	1 x 4
RSCR5010	BKN40 / WBK40DF / WBK40DFF / BFN40	58203	120791	6.35	1 x 4

Dimensions



Designation	A	B	D	L	Q	L2	d0 x Lead
RSCR1605	M30 x 1.5	16	32	56	M6	6.5	16 x 5
RSCR2005	M35 x 1.5	16.5	38	59.5	M6	7	20 x 5
RSCR2505	M40 x 1.5	17	42	60	M6	7	25 x 5
RSCR2510	M40 x 1.5	17	42	90	M6	10	25 x 10
RSCR3205	M48 x 1.5	19	52	60	M6	7	32 x 5
RSCR3210	M48 x 1.5	19	52	93	M6	12	32 x 10
RSCR4005	M56 x 1.5	19	58	59	M8	6	40 x 5
RSCR4010	M60 x 2	27	65	102	M8	12	40 x 10
RSCR5010	M72 x 2	29	78	104	M8	12	50 x 10

RSKR

Single Nut, Cylindrical with Thread.

Tolerance D: h10.

Standard nuts are without any seals or scrapers. Other types on request.

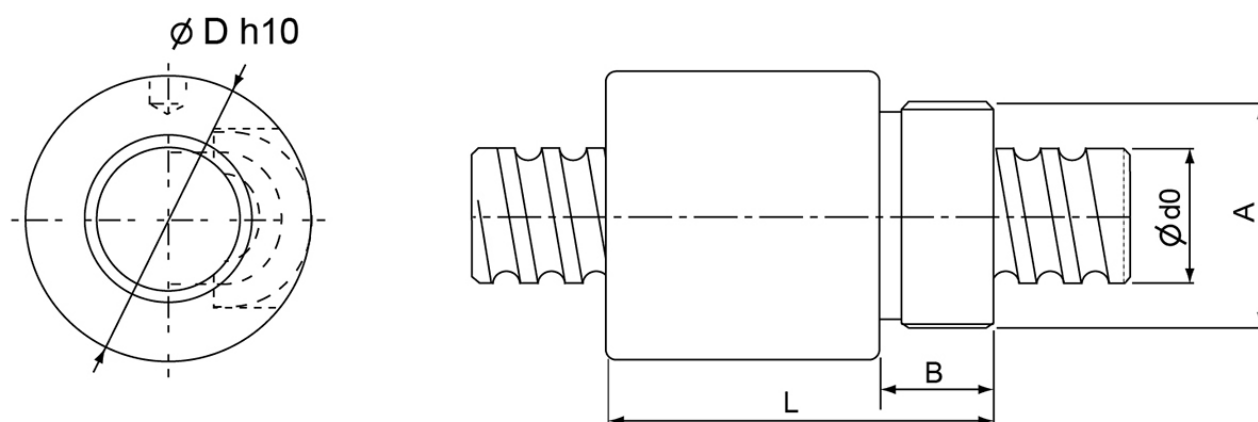
All dimensions in mm.



General Data

Designation	Compatible with	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter	Turns x circuits
RSKR082.5	FKN06	2109	2345	1.2	1 x 2.5
RSKR1204	BKN08 / FKN08 / BFN08	6327	6798	2.381	1 x 3.5
RSKR1605	BKN12 / FKN12 / BFN12 / FFN12	10291	11223	3.175	1 x 3.5

Dimensions



Designation	A	B	D	L	d0 x Lead
RSKR082.5	M15 x 1	7.5	17.5	26	8 x 2.5
RSKR1204	M20 x 1	10	25.5	34	12 x 4
RSKR1605	M26 x 1.5	12	32.5	42	16 x 5

SFYAR

Single Nut with Flange, Over Lead.

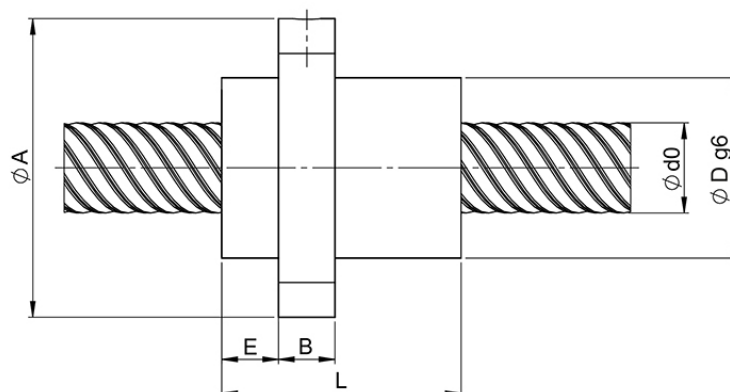
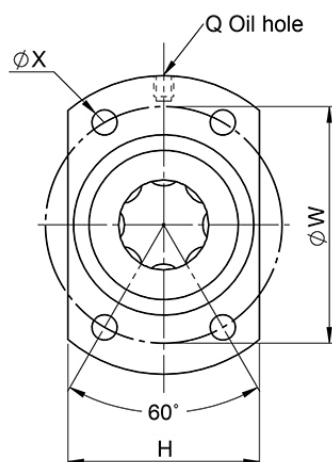
All dimensions in mm.



General Data

Designation	Compatible with	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter	Turns x circuits
SFYAR1632	BKN12 / FKN12 / BFN12 / FFN12	4930	11160	2.778	0.8 x 2
SFYAR2040	BKN15 / FKN15 / BFN15 / FFN15	6530	15970	3.175	0.8 x 2
SFYAR2550	BKN20 / FKN20 / BFN20 / FFN20	9760	24950	3.969	0.8 x 2

Dimensions



Designation	A	B	D	E	H	L	Q	W	X
SFYAR1632	53	10	32	10.1	34	42.5	M6	42	4.5
SFYAR2040	62	10	39	13	41	48	M6	50	5.5
SFYAR2550	74	12	47	15	49	58	M6	60	6.6

Designation	d0 x Lead
SFYAR1632	16 x 32
SFYAR2040	20 x 40
SFYAR2550	25 x 50

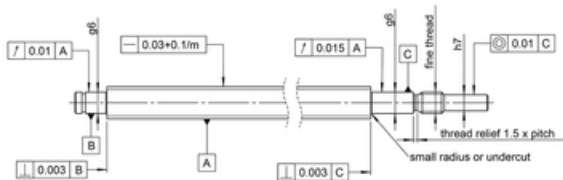
SFKR

SFKR are miniature ball screws, best suitable for small manipulators, instruments etc. They enable very high positioning precision and stiffness because of the small lead. For optimal operation they do, however, require very high cleanliness and accuracy when built into an application.

A limited service- and prototyping-stock of basic grade with rolled spindles (C7) and axial play in the nut (P0) is kept available. For more demanding applications or larger quantities, contact us.

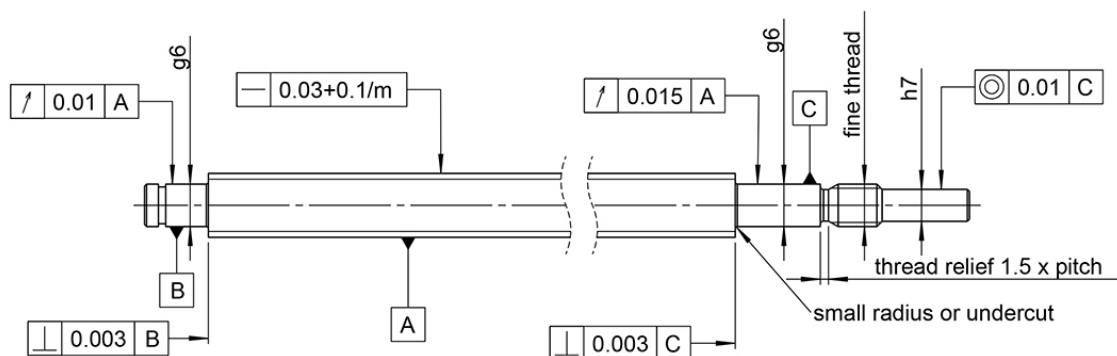
Standard nuts are with scrapers. Other types on request.

All dimensions in mm.



Recommended dimensional and geometrical tolerances for typical machining of miniature ball screws.
Undercuts, radii and thread reliefs to be checked for suitability for chosen bearing- and lock-nut solution.

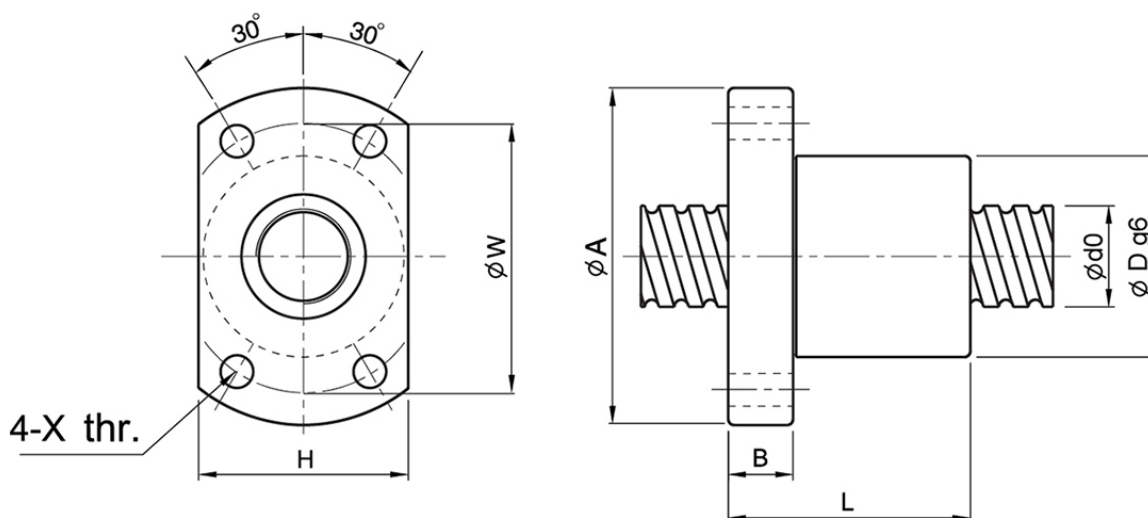
General Data



Recommended dimensional and geometrical tolerances for typical machining of miniature ball screws.
Undercuts, radii and thread reliefs to be checked for suitability for chosen bearing- and lock-nut solution.

Designation	Compatible with	Dynamic Load Ratings Ca (N)	Static Load Ratings C0a (N)	Ball diameter	Turns x circuits
SFKR0601	—	1110	2240	0.8	1 x 3
SFKR0801	FKN06	1610	4030	0.8	1 x 4
SFKR1002	FKN06	2430	5690	1.2	1 x 3
SFKR1202	BKN08 / FKN08 / BFN08	3340	9060	1.2	1 x 4
SFKR1402	BKN10 / FKN10 / BFN10 / FFN10	3540	10530	1.2	1 x 4

Dimensions



Designation	A	B	D	H	L	W	X	d0 x Lead
SFKR0601	24	3.5	12	16	15	18	3.4	6 x 1
SFKR0801	27	4	14	18	16	21	3.4	8 x 1
SFKR1002	35	5	18	22	28	27	4.5	10 x 2
SFKR1202	37	5	20	24	28	29	4.5	12 x 2
SFKR1402	40	6	21	26	23	31	5.5	14 x 2

SNFSCR

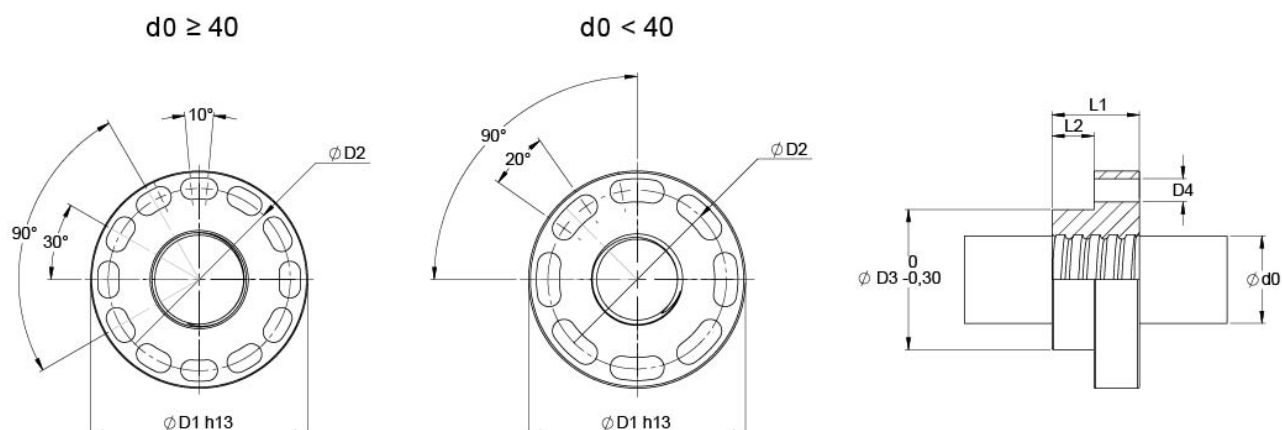
All dimensions in mm.



General Data

Designation	Ca0 (N)
SNFSCR1605	50000
SNFSCR2005	61000
SNFSCR2505	75000
SNFSCR2510	56000
SNFSCR3205	112000
SNFSCR3210	113000
SNFSCR4005	163000
SNFSCR4010	190000
SNFSCR5010	226000

Dimensions



Designation	d1	d2	D3	D4	L1	L2	d0 x Lead
SNFSCR1605	48	38	28	8x5.5	25	12	16
SNFSCR2005	58	47	36	8x6.6	25	12	20
SNFSCR2505	62	51	40	8x6.6	25	12	25
SNFSCR2510	62	51	40	8x6.6	30	15	25
SNFSCR3205	80	65	50	8x9	30	15	32
SNFSCR3210	80	65	50	8x9	30	15	32
SNFSCR4005	93	78	63	12x9	35	15	40
SNFSCR4010	93	78	63	12x9	40	15	40
SNFSCR5010	110	93	75	12x11	40	15	50

RN/RN..W

Spanner tools for radial holes "R" available from Rollco.

All dimensions in mm.

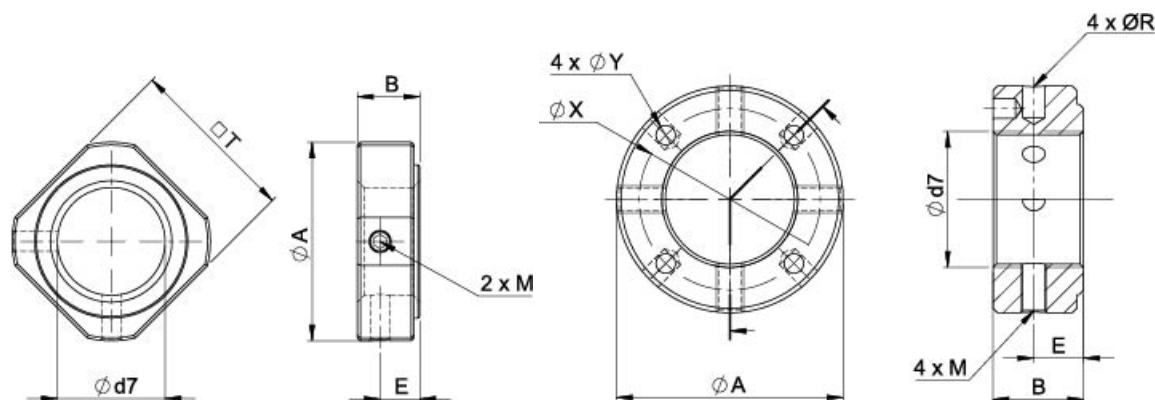
* The Maximal tightening torque of the nut should not be exceeded. It is not required, neither recommended to tighten the nut to its limits. What is mandatory is to always tighten the set screws to prescribed values, after the nut have been tighten to a distinct stop.



General Data

Designation	Max. Tightening Torque Nut (Nm)*	Tightening Torque Set Screws (Nm)
RN06	2	0.6
RN08	3	0.6
RN10	3	0.6
RN12	7	1.5
RN15	8	1.5
RN17	10	1.5
RN20	17	1.5
RN25	21	5.0
RN30	32	5.0
RN40	72	5.0
RN25W	87	5.0
RN30W	105	5.0
RN40W	160	5.0

Dimensions

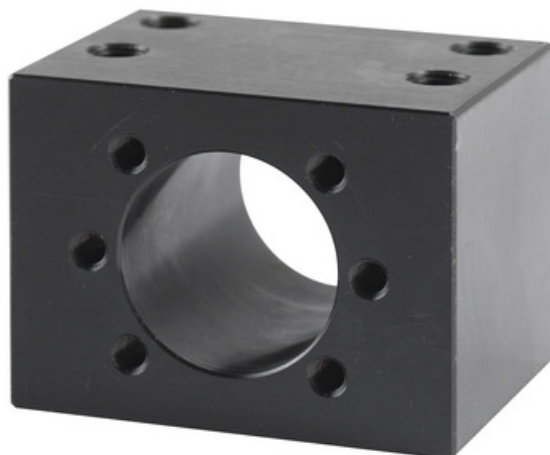


Designation	A	B	E	M	R	T	Y	d7	X
RN06	13.5	5	2.7	M3	-	12	-	M6x0.75	-
RN08	16.4	6.5	4	M3	-	14	-	M8x1	-
RN10	19	8	5.5	M3	-	16	-	M10x1	-
RN12	22.8	8	5.5	M4	-	19	-	M12x1	-
RN15	25.8	8	4.75	M4	-	22	-	M15x1	-
RN17	29	13	9	M4	-	24	-	M17x1	-
RN20	35	11	7	M4	-	30	-	M20x1	-
RN25	43	15	10	M6	-	35	-	M25x1.5	-
RN30	48	20	14	M6	-	40	-	M30x1.5	-
RN40	62	25	18	M6	-	50	-	M40x1.5	-
RN25W	45	20	11	M6	5	-	4.3	M25x1.5	35
RN30W	50	20	11	M6	5	-	4.3	M30x1.5	40
RN40W	60	22	12	M6	5	-	4.3	M40x1.5	50

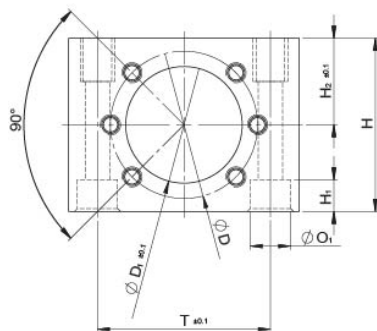
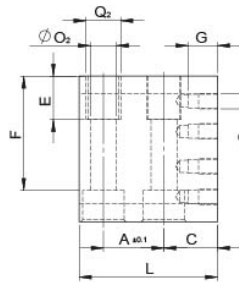
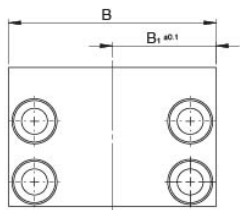
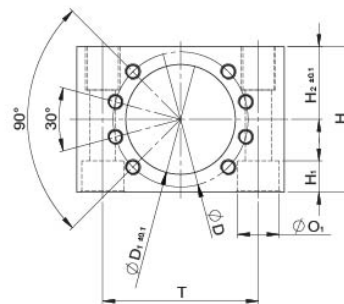
RNB

Other types on request. Please contact Rollco for more information.

All dimensions in mm.



Dimensions


Fig. 1

Fig. 2

Designation	Fig.	H1	G	A	B	H	D	F	L
RNB16	1	11	10	20	70	48	38	37	50
RNB20	1	9	11	23	75	54	47	45	55
RNB25	1	9	11	23	80	58	51	49	55
RNB32	1	16	14	30	100	68	65	52	70
RNB40	2	18	17	35	120	84	78	66	80

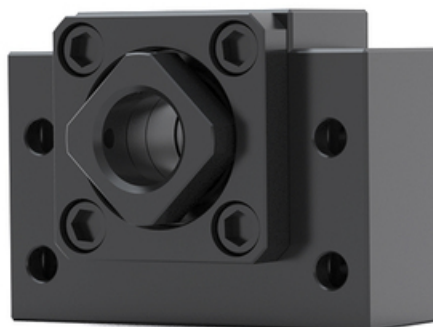
Designation	C	T	E	d1	H2	B1	O1	O2	Q1	Q2
RNB16	20	50	15	28.4	24	35	14	8.4	M5	M10
RNB20	22	55	15	36.4	28	37.5	14	8.4	M6	M10
RNB25	22	60	15	40.4	30	40	14	8.4	M6	M10
RNB32	27	75	20	50.4	35	50	18	13	M8	M16
RNB40	31	90	25	63.4	42	60	24	15	M8	M18

BKN

All dimensions in mm.

Using standard shaft nut type RN.

* The Maximal tightening torque of the nut should not be exceeded. It is not required, neither recommended to tighten the nut to its limits. What is mandatory is to always tighten the set screws to prescribed values, after the nut have been tighten to a distinct stop.



General Data

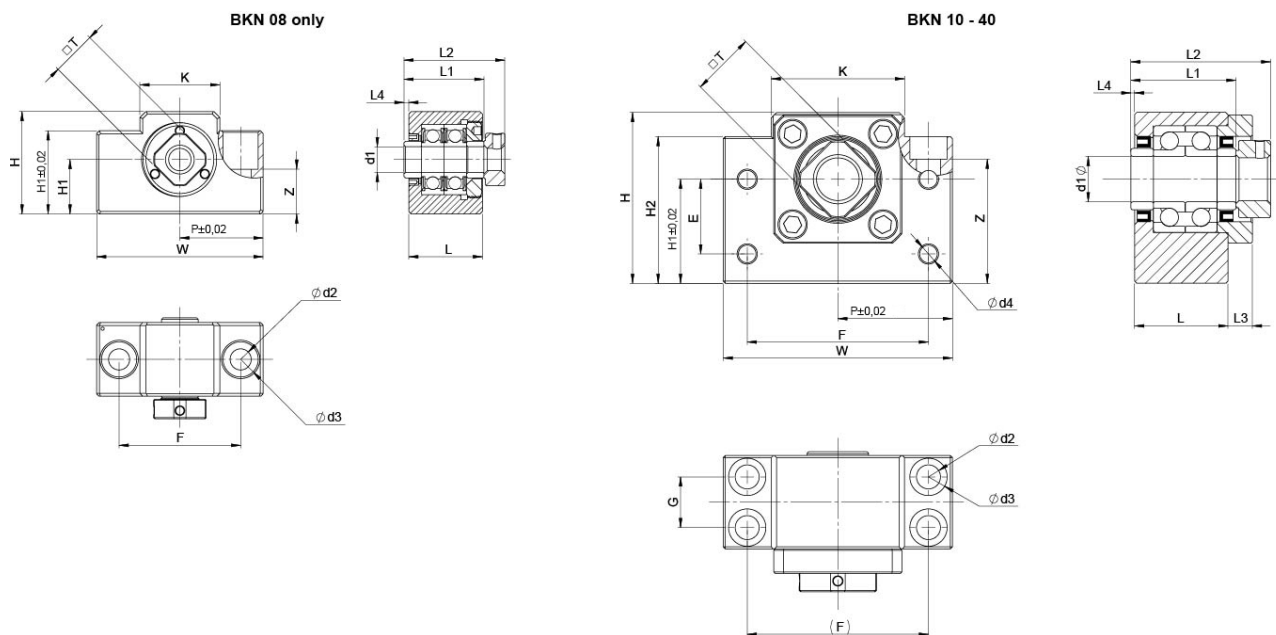
* Dynamic limits are the loads where a reliable life time calculation isn't possible to do. Noise level and heat generation will also increase rapidly above this limit. Static limit is calculated with a static safety factor $s_0 = 2,5$ to C0a. See more in section "Life Calculation" or contact Rollco for advise.

*Axial dynamic rating Ca is used to calculate the nominal life of the bearings. Axial static rating C0a is a theoretical value where the bearings get permanent damaged. See more in section "Life Calculation" or contact Rollco for advise.

Designation	Compatible with	Bearing	Dynamic Permissible Axial Load (N)	Static Permissible Axial Load (N)	Max. Tightening Torque Nut (Nm)*
BKN08	Screw dim. 1202 / 1204	708 A	1020	1760	3
BKN10	Screw dim. 1402	7000 A	2000	3150	3
BKN12	Screw dim. 1605 / 1610 / 1616 / 1632	7001 A	2400	3600	7
BKN15	Screw dim. 2005 / 2020 / 2040	7002 A	2900	4200	8
BKN17	Screw dim. 2510	7203 A	4100	7300	10
BKN20	Screw dim. 2505 / 2525 / 2550	7004 A	5800	8000	17
BKN25	Screw dim. 3205 / 3210 / 3220 / 3232	7205 B	9700	14500	21
BKN30	Screw dim. 4005 / 4010 / 4020 / 4040	7206 B	14200	20800	32
BKN40	Screw dim. 5010 / 5050	7208 B	18000	35400	72

Designation	Tightening Torque Set Screws (Nm)	Axial Dynamic Load Capacity Ca (N)	Axial Static Load Capacity C0a (N)
BKN08	0.6	4410	4390
BKN10	0.6	7040	7880
BKN12	1.5	7600	9000
BKN15	1.5	8000	10500
BKN17	1.5	14200	18200
BKN20	1.5	14200	20000
BKN25	5.0	26000	36200
BKN30	5.0	36000	51900
BKN40	5.0	56100	88500

Dimensions



Designation	E	F	G	H	K	L	P	T	Z
BKN08	-	38	-	32	25	23	26	14	14
BKN10	15	46	13	39	34	25	30	16	27.5
BKN12	18	46	13	43	34	25	30	19	31
BKN15	18	54	15	48	40	27	35	22	31.5
BKN17	28	68	19	64	50	35	43	24	46.5
BKN20	22	70	19	60	52	35	44	30	41.5
BKN25	33	85	22	80	64	42	53	35	59
BKN30	33	102	23	89	76	45	64	40	65
BKN40	37	130	33	110	100	61	80	50	72.5

Designation	d1	d2	D3	D4	H1	H2	L1	L2	L3	L4
BKN08	8	6.6	11	-	17	26	25	31.5	-	1.5
BKN10	10	6.6	10.8	5.5	22	32.5	27	35	5	0.5
BKN12	12	6.6	10.8	5.5	25	32.5	27	35	5	0.5
BKN15	15	6.6	11	5.5	28	38	30	38	6	0
BKN17	17	9	14	6.6	39	55	38	51	9	0
BKN20	20	9	14	6.6	34	50	40	51	8	0
BKN25	25	11	17	9	48	70	48	63	12	0
BKN30	30	14	20	11	51	78	50	70	14	0
BKN40	40	18	26	14	60	90	66	91	18	0

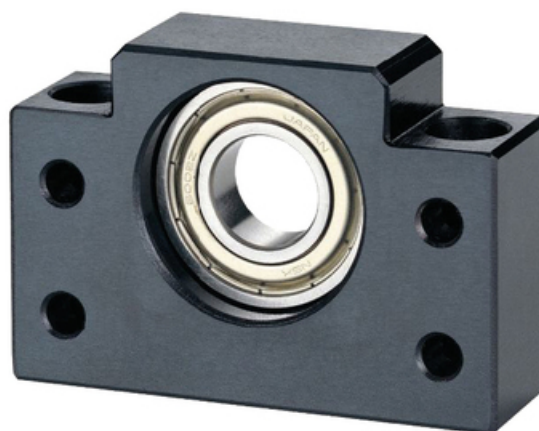
Designation	W
BKN08	52
BKN10	60
BKN12	60
BKN15	70

Dimensions

Designation	W
BKN17	86
BKN20	88
BKN25	106
BKN30	128
BKN40	160

BFN

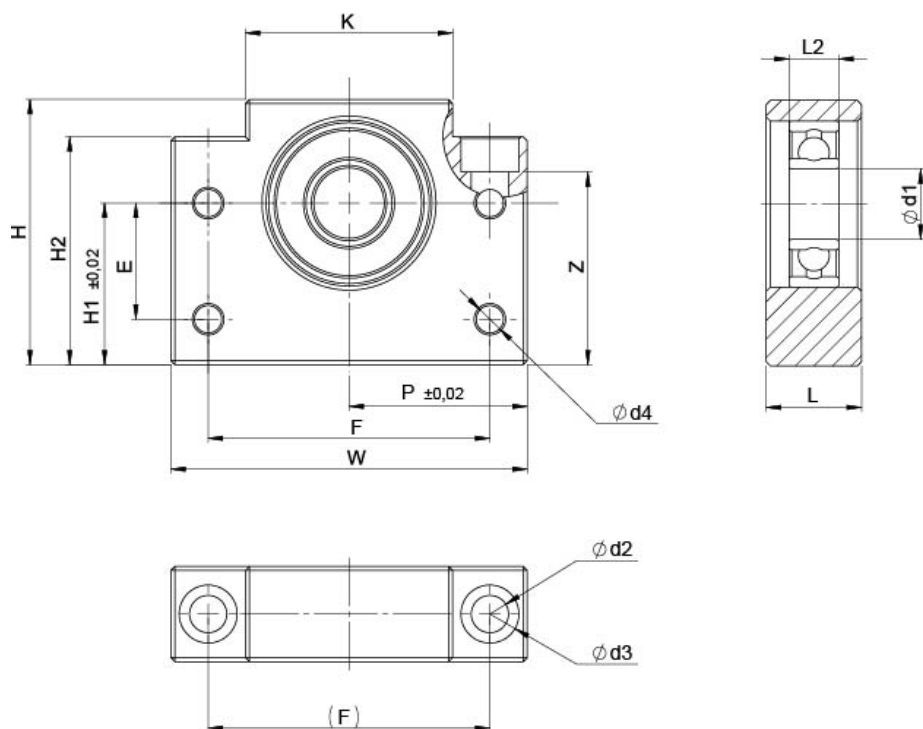
All dimensions in mm.



General Data

Designation	Compatible with	Bearing
BFN08	Screw dim. 1202 / 1204	606-2Z
BFN10	Screw dim. 1402	608-2Z
BFN12	Screw dim. 1605 / 1610 / 1616 / 1632	6000-2Z
BFN15	Screw dim. 2005 / 2020 / 2040	6002-2Z
BFN17	Screw dim. 2510	6203-2Z
BFN20	Screw dim. 2505 / 2525 / 2550	6004-2Z
BFN25	Screw dim. 3205 / 3210 / 3220 / 3232	6205-2Z
BFN30	Screw dim. 4005 / 4010 / 4020 / 4040	6206-2Z
BFN40	Screw dim. 5010 / 5050	6208-2Z

Dimensions



Designation	E	F	H	K	L	P	Z	d1	d2
BFN08	-	38	32	25	14	26	14	6	6.6
BFN10	15	46	39	34	20	30	27.5	8	6.6
BFN12	18	46	43	34	20	30	31	10	6.6
BFN15	18	54	48	40	20	35	31.5	15	6.6
BFN17	28	68	64	50	23	43	46.5	17	9
BFN20	22	70	60	52	26	44	41.5	20	9
BFN25	33	85	80	64	30	53	59	25	11
BFN30	33	102	89	76	32	64	65	30	14
BFN40	37	130	110	100	37	80	72.5	40	18

Designation	D3	D4	H1	H2	L2	W
BFN08	11	-	17	26	6	52
BFN10	10.8	5.5	22	32.5	7	60
BFN12	10.8	5.5	25	32.5	8	60
BFN15	11	5.5	28	38	9	70
BFN17	14	6.6	39	55	12	86
BFN20	14	6.6	34	50	12	88
BFN25	17	9	48	70	15	106
BFN30	20	11	51	78	16	128
BFN40	26	14	60	90	18	160

FKN

All dimensions in mm.

Using standard shaft nut type RN.

* The Maximal tightening torque of the nut should not be exceeded. It is not required, neither recommended to tighten the nut to its limits. What is mandatory is to always tighten the set screws to prescribed values, after the nut have been tighten to a distinct stop.



General Data

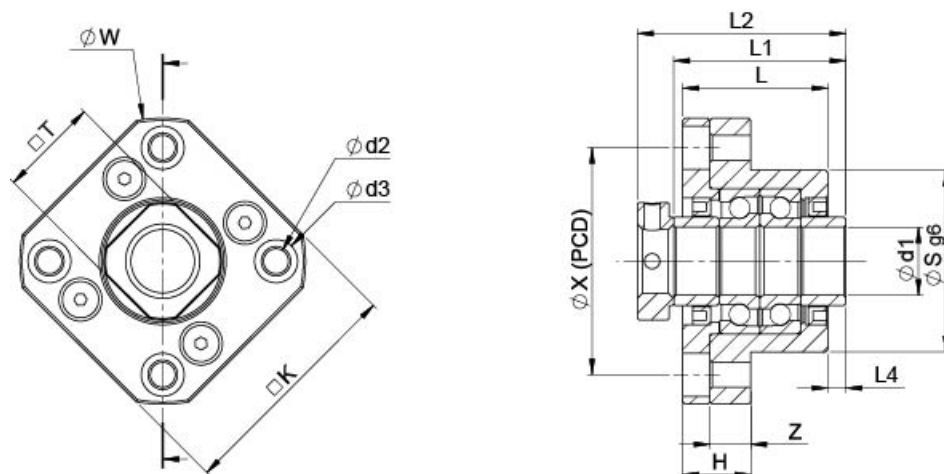
* Dynamic limits are the loads where a reliable life time calculation isn't possible to do. Noise level and heat generation will also increase rapidly above this limit. Static limit is calculated with a static safety factor $s_0 = 2,5$ to C0a. See more in section "Life Calculation" or contact Rollco for advise.

*Axial dynamic rating Ca is used to calculate the nominal life of the bearings. Axial static rating C0a is a theoretical value where the bearings get permanent damaged. See more in section "Life Calculation" or contact Rollco for advise.

Designation	Compatible with	Bearing	Dynamic Permissible Axial Load (N)	Static Permissible Axial Load (N)	Max. Tightening Torque Nut (Nm)*
FKN06	Screw dim. 0801 / 082,5 / 1002	706 A	720	960	2
FKN08	Screw dim. 1202 / 1204	708 A	1020	1760	3
FKN10	Screw dim. 1402	7000 A	2000	3150	3
FKN12	Screw dim. 1605 / 1610 / 1616 / 1632	7001 A	2400	3600	7
FKN15	Screw dim. 2005 / 2020 / 2040	7002 A	2900	4200	8
FKN17	Screw dim. 2510	7203 A	4100	7300	10
FKN20	Screw dim. 2505 / 2525 / 2550	7204 B	8300	11800	17
FKN25	Screw dim. 3205 / 3210 / 3220 / 3232	7205 B	9700	14500	21
FKN30	Screw dim. 4005 / 4010 / 4020 / 4040	7208 B	14200	20800	32

Designation	Tightening Torque Set Screws (Nm)	Axial Dynamic Load Capacity Ca (N)	Axial Static Load Capacity C0a (N)
FKN06	0.6	2670	2410
FKN08	0.6	4410	4390
FKN10	0.6	7040	7880
FKN12	1.5	7600	9000
FKN15	1.5	8000	10500
FKN17	1.5	14200	18200
FKN20	1.5	23300	29400
FKN25	5.0	26000	36200
FKN30	5.0	36000	51900

Dimensions

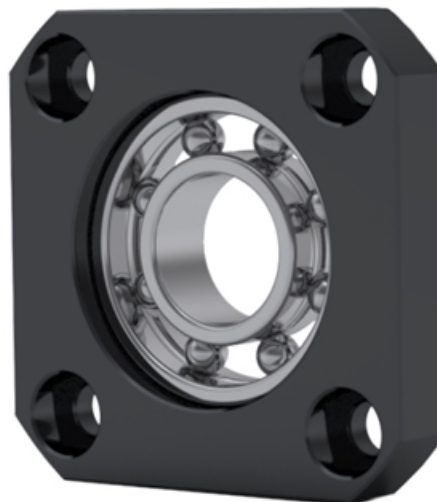


Designation	H	K	L	S	T	Z	d1	d2	D3
FKN06	7	34	20	22	12	3	6	3.4	6.5
FKN08	9	35	23	28	14	5	8	3.4	6.5
FKN10	10	42	27	34	16	6	10	4.5	8
FKN12	10	44	27	36	19	6	12	4.5	8
FKN15	15	52	32	40	22	9	15	5.5	9.5
FKN17	22	61	45	50	24	12	17	6.6	11
FKN20	22	68	52	57	30	12	20	6.6	11
FKN25	27	79	57	63	35	14	25	9	14
FKN30	30	93	62	75	40	15	30	11	17.5

Designation	L1	L2	L4	X	W
FKN06	22	27	1.5	28	36
FKN08	25	31.5	1.5	35	43
FKN10	27	35	0.5	42	52
FKN12	27	35	0.5	44	54
FKN15	38	46	4	50	63
FKN17	44	56	1	62	77
FKN20	50	61	1	70	85
FKN25	58	73	4	80	98
FKN30	50	70	-3	95	117

FFN

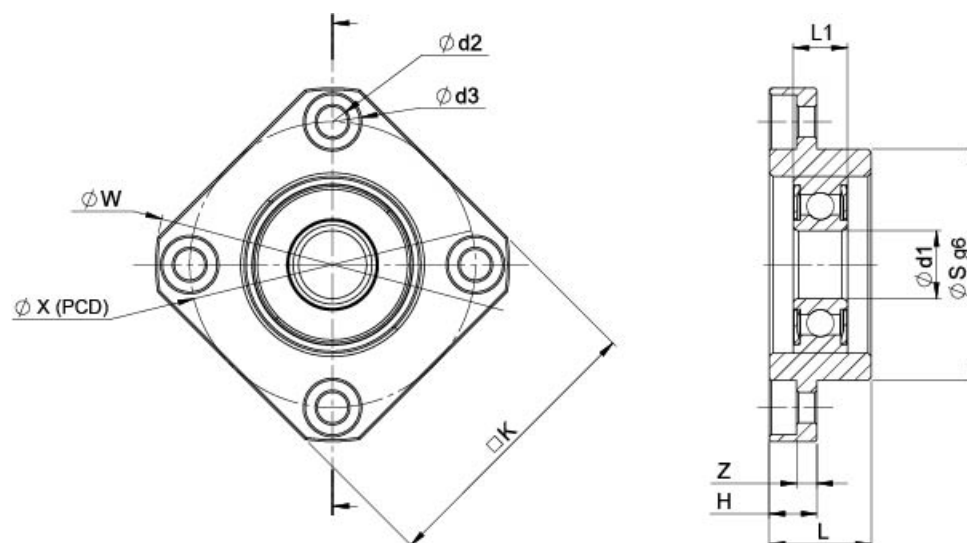
All dimensions in mm.



General Data

Designation	Compatible with	Bearing
FFN10	Screw dim. 1402	608-2Z
FFN12	Screw dim. 1605 / 1610 / 1616 / 1632	6000-2Z
FFN15	Screw dim. 2005 / 2020 / 2040	6002-2Z
FFN17	Screw dim. 2510	6203-2Z
FFN20	Screw dim. 3205 / 3210 / 3220 / 3232	6204-2Z
FFN25	Screw dim. 3205 / 3210 / 3220 / 3232	6205-2Z
FFN30	Screw dim. 4005 / 4010 / 4020 / 4040	6206-2Z

Dimensions



Designation	H	K	L	S	Z	d1	d2	D3	L1
FFN10	7	35	12	28	3	8	3.4	6.5	7
FFN12	7	42	15	34	3	10	4.5	8	8
FFN15	9	52	17	40	3.5	15	5.5	9.5	9
FFN17	11	61	20	50	4.5	17	6.6	11	12
FFN20	11	68	20	57	4.5	20	6.6	11	14
FFN25	14	79	24	63	5.5	25	9	14	15
FFN30	18	93	27	75	7	30	11	17	16

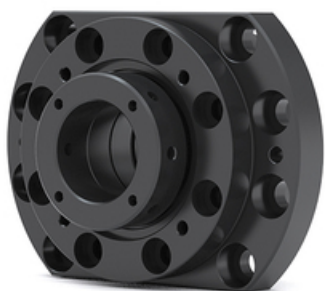
Designation	X	W
FFN10	35	43
FFN12	42	52
FFN15	50	63
FFN17	62	77
FFN20	70	85
FFN25	80	98
FFN30	95	117

WBK..DF/WBK..DFF

All dimensions in mm.

Using standard shaft nut type RN...W.

* The Maximal tightening torque of the nut should not be exceeded. It is not required, neither recommended to tighten the nut to its limits. What is mandatory is to always tighten the set screws to prescribed values, after the nut have been tighten to a distinct stop.



General Data

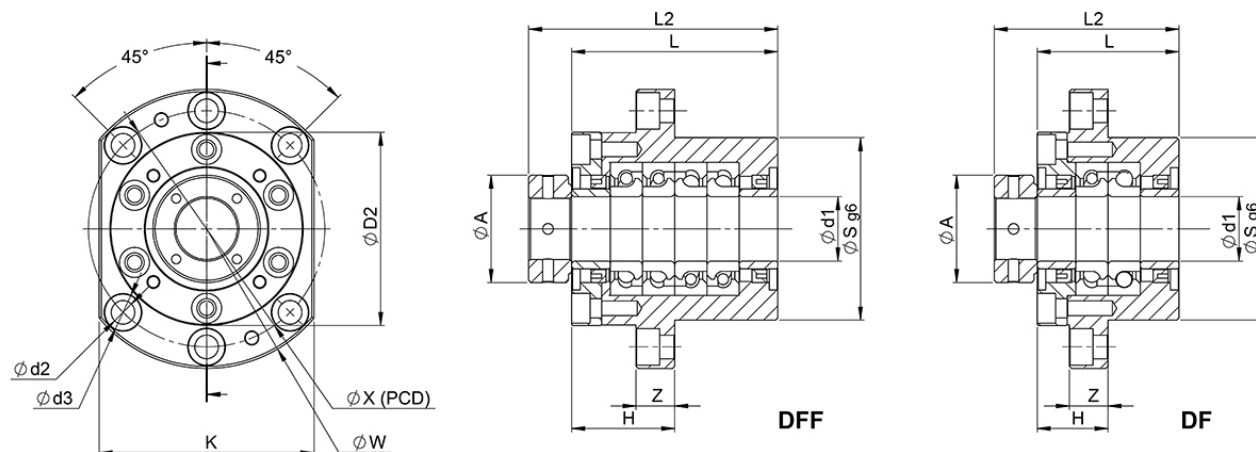
Heavy load units can operate at very high loads compared to its size. Dynamic loads up to 100% of Ca is feasible but at the expense of the life.

Designation	Compatible with	Fig.	Bearing	Dynamic Permissible Axial Load (N)	Static Permissible Axial Load (N)
WBK25DF	Screw dim. 3205 / 3210 / 3220 / 3232	1	25TAC 62B	20000	28500
WBK30DF	Screw dim. 4005 / 4010 / 4020 / 4040	1	30TAC 62B	20500	30200
WBK30DFF	Screw dim. 4005 / 4010 / 4020 / 4040	1	30TAC 62B	33300	60400
WBK40DF	Screw dim. 5010 / 5050	2	40TAC 72B	22300	36400
WBK40DFF	Screw dim. 5010 / 5050	2	40TAC 72B	36100	72800

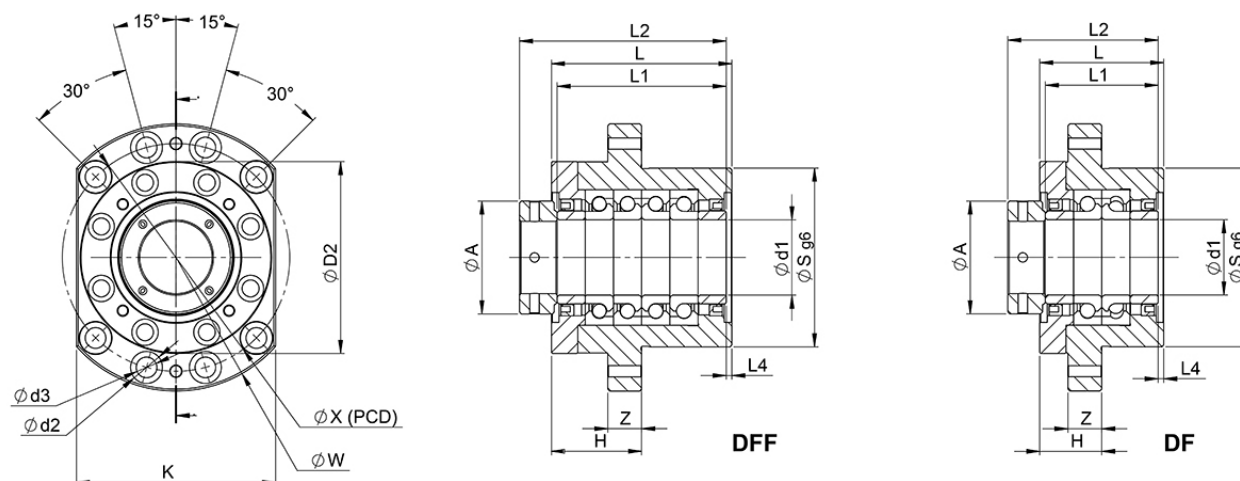
Designation	Max. Tightening Torque Nut (Nm)*	Tightening Torque Set Screws (Nm)	Axial Dynamic Load Capacity Ca (N)	Axial Static Load Capacity C0a (N)
WBK25DF	87	5.0	28500	40700
WBK30DF	105	5.0	29200	43200
WBK30DFF	105	5.0	47600	86300
WBK40DF	160	5.0	31900	52000
WBK40DFF	160	5.0	51500	104000

Dimensions

WBK25DF / WBK30DF / WBK30DFF



WBK40DF / WBK40DFF



Designation	A	H	K	L	S	Z	d1	d2	D3
WBK25DF	45	33	100	66	85	18	25	11	17
WBK30DF	50	33	100	66	85	18	30	11	17
WBK30DFF	50	48	100	96	85	18	30	11	17
WBK40DF	60	33	106	66	95	18	40	11	17
WBK40DFF	60	48	106	96	95	18	40	11	17

Designation	L1	L2	L4	X	W
WBK25DF	66	86	-	110	130
WBK30DF	66	86	-	110	130
WBK30DFF	96	116	-	110	130
WBK40DF	60	83	3	121	142
WBK40DFF	90	118	3	121	142

RA Grease

NLGI grade 1.5

Clear grease based on synthetic oils and PTFE. Will fulfil all severe specifications from bearing manufacturers, industrial applications and vehicle producers. Very suitable for use where long service life is required and desired. The specific rheological properties of the lubricant will give very low good flow properties of the grease at extremely low temperatures, at the same time the high film strength and thickness will guarantee lubrication also at elevated temperatures. The type of PTFE used will adhere strongly to all surfaces lubricated and give a very low friction coefficient. The grease is water resistant, withstands oxidation, has very good mechanical stability, is completely non-toxic and provides a very wide application temperature range.

Temperature: -40 to +260 °C (application range)



General Data

Designation	Remark	Colour	Weight (g)
RA Grease NLGI 1.5	Cartridge package	Translucent white	400 g