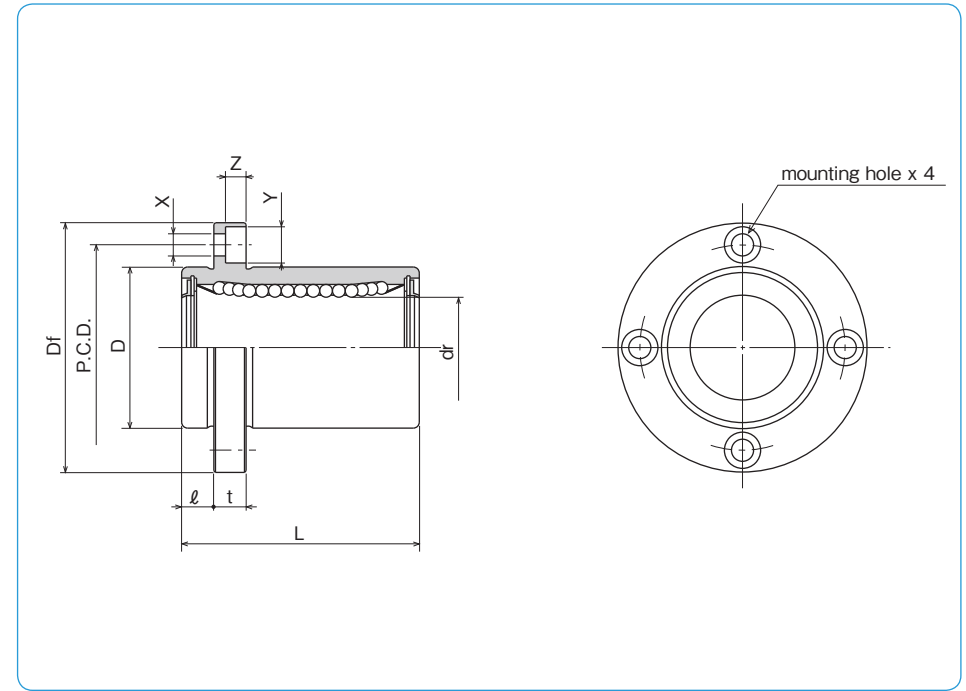
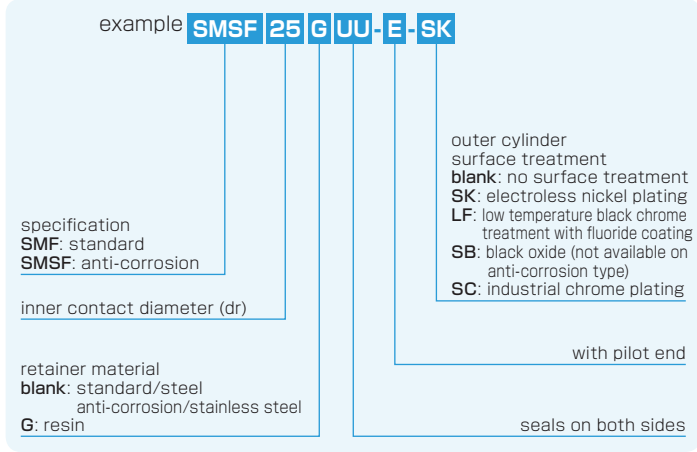


SMF-E TYPE

– Round Flange Type with Pilot End –



part number structure



part number*				number of ball circuits	dr	major dimensions			
standard steel retainer	anti-corrosion resin retainer	stainless steel retainer	resin retainer			mm	tolerance μm	D mm	tolerance μm
SMF 6UU-E	SMF 6GUU-E	SMSF 6UU-E	SMSF 6GUU-E	4	6	0	12	0	19
SMF 8UU-E	SMF 8GUU-E	SMSF 8UU-E	SMSF 8GUU-E	4	8	-9	15	-13	24
SMF 10UU-E	SMF 10GUU-E	SMSF 10UU-E	SMSF 10GUU-E	4	10	0	19	0	29
SMF 12UU-E	SMF 12GUU-E	SMSF 12UU-E	SMSF 12GUU-E	4	12	-9	21	0	30
SMF 13UU-E	SMF 13GUU-E	SMSF 13UU-E	SMSF 13GUU-E	4	13	0	23	-16	32
SMF 16UU-E	SMF 16GUU-E	SMSF 16UU-E	SMSF 16GUU-E	4	16	-10	28	-19	37
SMF 20UU-E	SMF 20GUU-E	SMSF 20UU-E	SMSF 20GUU-E	5	20	0	32	0	42
SMF 25UU-E	SMF 25GUU-E	SMSF 25UU-E	SMSF 25GUU-E	6	25	-10	40	-19	59
SMF 30UU-E	SMF 30GUU-E	SMSF 30UU-E	SMSF 30GUU-E	6	30	0	45	0	64
SMF 35UU-E	SMF 35GUU-E	-	-	6	35	-12	52	0	70
SMF 40UU-E	SMF 40GUU-E	-	-	6	40	0	60	-22	80
SMF 50UU-E	SMF 50GUU-E	-	-	6	50	-12	80	-22	100
SMF 60UU-E	SMF 60GUU-E	-	-	6	60	0/-15	90	0/-25	110

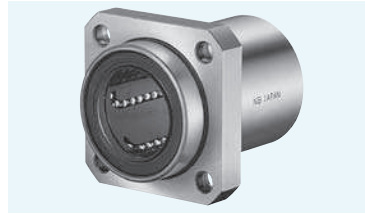
* UU type is standard.

ℓ mm	D_f mm	flange			eccentricity μm	perpendicularity μm	basic load rating		mass g	shaft diameter mm		
		t mm	P.C.D. mm	$X \times Y \times Z$ mm			dynamic C N	static Co N				
5	28	5	20	3.5×6×3.1	12	12	206	265	24	6		
5	32	5	24	3.5×6×3.1			274	392	37	8		
6	40	6	29	4.5×7.5×4.1			372	549	72	10		
6	42	6	32	4.5×7.5×4.1			510	784	76	12		
6	43	6	33	4.5×7.5×4.1			510	784	88	13		
6	48	6	38	4.5×7.5×4.1			774	1,180	120	16		
8	54	8	43	5.5×9×5.1	15	15	882	1,370	180	20		
8	62	8	51	5.5×9×5.1			980	1,570	340	25		
10	74	10	60	6.6×11×6.1			1,570	2,740	470	30		
10	82	10	67	6.6×11×6.1	20	20	1,670	3,140	650	35		
13	96	13	78	9×14×8.1			2,160	4,020	1,060	40		
13	116	13	98	9×14×8.1			3,820	7,940	2,200	50		
18	134	18	112	11×17×11.1			25	25	4,700	10,000	3,000	60

1N=0.102kgf

SMK-E TYPE

– Square Flange Type with Pilot End –



part number structure

example **SMSK 25 G UU-E-SK**

specification
SMK: standard
SMSK: anti-corrosion

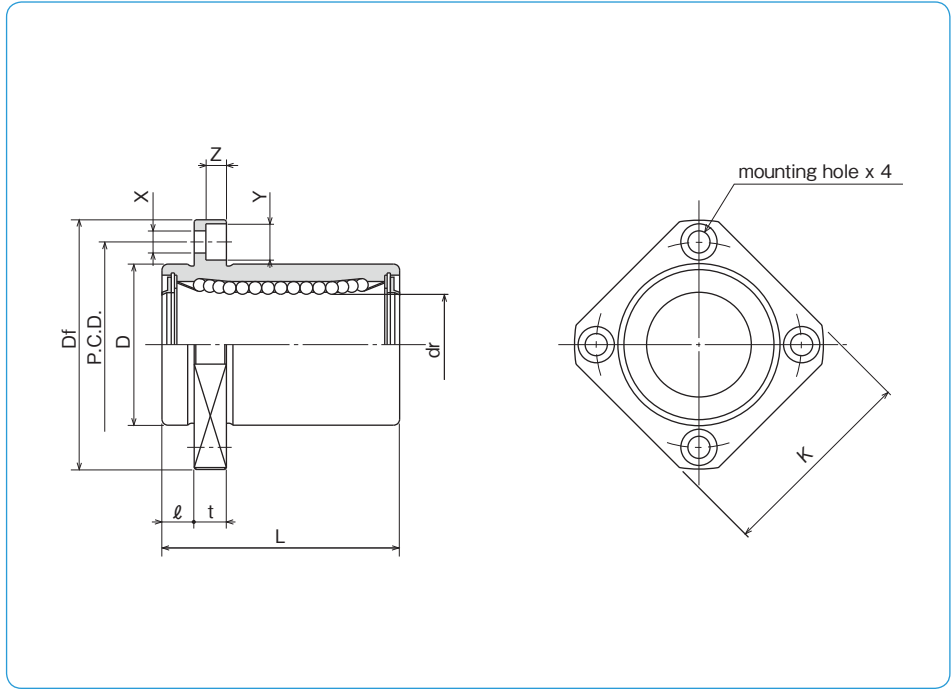
inner contact diameter (dr)

retainer material
blank: standard/steel
 anti-corrosion/stainless steel
G: resin

outer cylinder surface treatment
blank: no surface treatment
SK: electroless nickel plating
LF: low temperature black chrome treatment with fluoride coating
SB: black oxide (not available on anti-corrosion type)
SC: industrial chrome plating

with pilot end

seals on both sides



part number*				number of ball circuits	dr		major dimensions		
standard steel retainer	resin retainer	anti-corrosion			mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
SMK 6UU-E	SMK 6GUU-E	SMSK 6UU-E	SMSK 6GUU-E	4	6	12	0	19	
SMK 8UU-E	SMK 8GUU-E	SMSK 8UU-E	SMSK 8GUU-E	4	8	15	-13	24	
SMK 10UU-E	SMK 10GUU-E	SMSK 10UU-E	SMSK 10GUU-E	4	10	19	0	29	
SMK 12UU-E	SMK 12GUU-E	SMSK 12UU-E	SMSK 12GUU-E	4	12	21	0	30	
SMK 13UU-E	SMK 13GUU-E	SMSK 13UU-E	SMSK 13GUU-E	4	13	23	-16	32	
SMK 16UU-E	SMK 16GUU-E	SMSK 16UU-E	SMSK 16GUU-E	4	16	28		37	
SMK 20UU-E	SMK 20GUU-E	SMSK 20UU-E	SMSK 20GUU-E	5	20	32	0	42	
SMK 25UU-E	SMK 25GUU-E	SMSK 25UU-E	SMSK 25GUU-E	6	25	40	-19	59	
SMK 30UU-E	SMK 30GUU-E	SMSK 30UU-E	SMSK 30GUU-E	6	30	45		64	
SMK 35UU-E	SMK 35GUU-E	—	—	6	35	52	0	70	
SMK 40UU-E	SMK 40GUU-E	—	—	6	40	60	0	80	
SMK 50UU-E	SMK 50GUU-E	—	—	6	50	80	-22	100	
SMK 60UU-E	SMK 60GUU-E	—	—	6	60	90	0/-25	110	

* UU type is standard.

l mm	Df mm	flange				eccentricity μm	perpendicularity μm	basic load rating		mass g	shaft diameter mm		
		K mm	t mm	P.C.D. mm	X×Y×Z mm			dynamic C N	static Co N				
5	28	22	5	20	3.5×6×3.1	12	12	206	265	18	6		
5	32	25	5	24	3.5×6×3.1			274	392	29	8		
6	40	30	6	29	4.5×7.5×4.1			372	549	52	10		
6	42	32	6	32	4.5×7.5×4.1			510	784	57	12		
6	43	34	6	33	4.5×7.5×4.1			510	784	72	13		
6	48	37	6	38	4.5×7.5×4.1	774	1,180	104	16				
8	54	42	8	43	5.5×9×5.1	15	15	882	1,370	145	20		
8	62	50	8	51	5.5×9×5.1			980	1,570	300	25		
10	74	58	10	60	6.6×11×6.1			1,570	2,740	375	30		
10	82	64	10	67	6.6×11×6.1	20	20	1,670	3,140	560	35		
13	96	75	13	78	9×14×8.1			2,160	4,020	880	40		
13	116	92	13	98	9×14×8.1			3,820	7,940	2,000	50		
18	134	106	18	112	11×17×11.1			25	25	4,700	10,000	2,560	60

1N=0.102kgf

SMT-E TYPE

– Two Side Cut Pilot End Flange Type –



part number structure

example **SMST 25 G UU-E-SK**

specification
SMT: standard
SMST: anti-corrosion

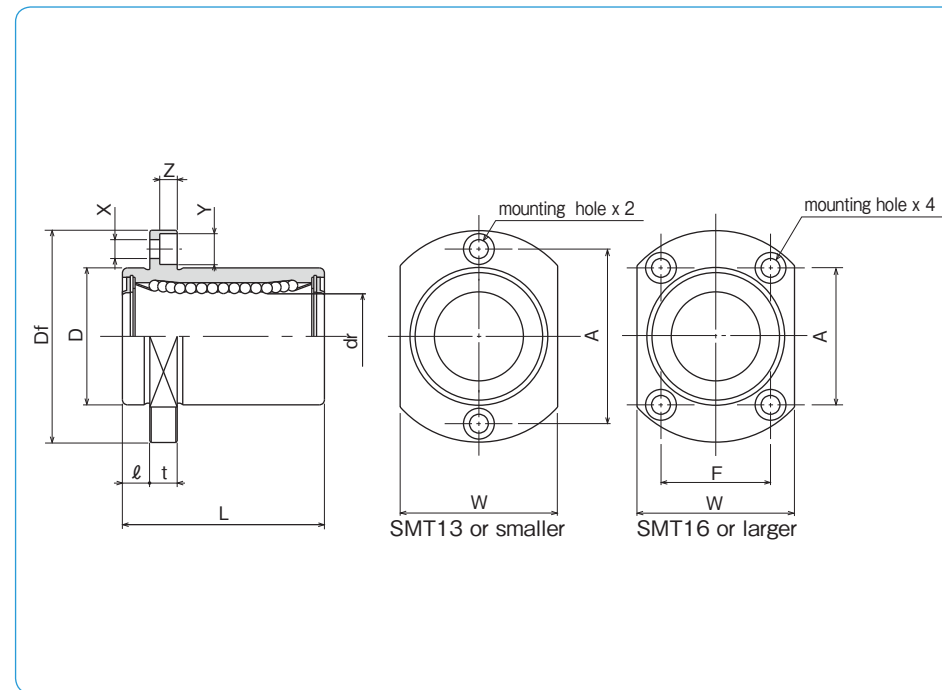
inner contact diameter (dr)

retainer material
blank: standard/steel
 anti-corrosion/stainless steel
G: resin

outer cylinder surface treatment
blank: no surface treatment
SK: electroless nickel plating
LF: low temperature black chrome treatment with fluoride coating
SB: black oxide (not available on anti-corrosion type)
SC: industrial chrome plating

with pilot end

seals on both sides



part number*				number of ball circuits	dr		major dimensions		
standard steel retainer	standard resin retainer	anti-corrosion stainless retainer	anti-corrosion resin retainer		mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
SMT 6UU-E	SMT 6GUU-E	SMST 6UU-E	SMST 6GUU-E	4	6	12	0	19	
SMT 8UU-E	SMT 8GUU-E	SMST 8UU-E	SMST 8GUU-E	4	8	15	-13	24	
SMT10UU-E	SMT10GUU-E	SMST10UU-E	SMST10GUU-E	4	10	19	0	29	
SMT12UU-E	SMT12GUU-E	SMST12UU-E	SMST12GUU-E	4	12	21	0	30	
SMT13UU-E	SMT13GUU-E	SMST13UU-E	SMST13GUU-E	4	13	23	-16	32	
SMT16UU-E	SMT16GUU-E	SMST16UU-E	SMST16GUU-E	4	16	28		37	
SMT20UU-E	SMT20GUU-E	SMST20UU-E	SMST20GUU-E	5	20	32	0	42	
SMT25UU-E	SMT25GUU-E	SMST25UU-E	SMST25GUU-E	6	25	40	-19	59	
SMT30UU-E	SMT30GUU-E	SMST30UU-E	SMST30GUU-E	6	30	45		64	

* UU type is standard.

l mm	D_f mm	flange					eccentricity μm	perpendicularity μm	basic load rating		mass g	shaft diameter mm
		W mm	t mm	A mm	F mm	X×Y×Z mm			dynamic C N	static Co N		
5	28	18	5	20	—	3.5×6×3.1	12	12	206	265	21	6
5	32	21	5	24	—	3.5×6×3.1			274	392	33	8
6	40	25	6	29	—	4.5×7.5×4.1			372	549	64	10
6	42	27	6	32	—	4.5×7.5×4.1			510	784	68	12
6	43	29	6	33	—	4.5×7.5×4.1			510	784	81	13
6	48	34	6	31	22	4.5×7.5×4.1			774	1,180	112	16
8	54	38	8	36	24	5.5×9×5.1	15	15	882	1,370	167	20
8	62	46	8	40	32	5.5×9×5.1			980	1,570	325	25
10	74	51	10	49	35	6.6×11×6.1			1,570	2,740	388	30

1N=0.102kgf

SMFC TYPE

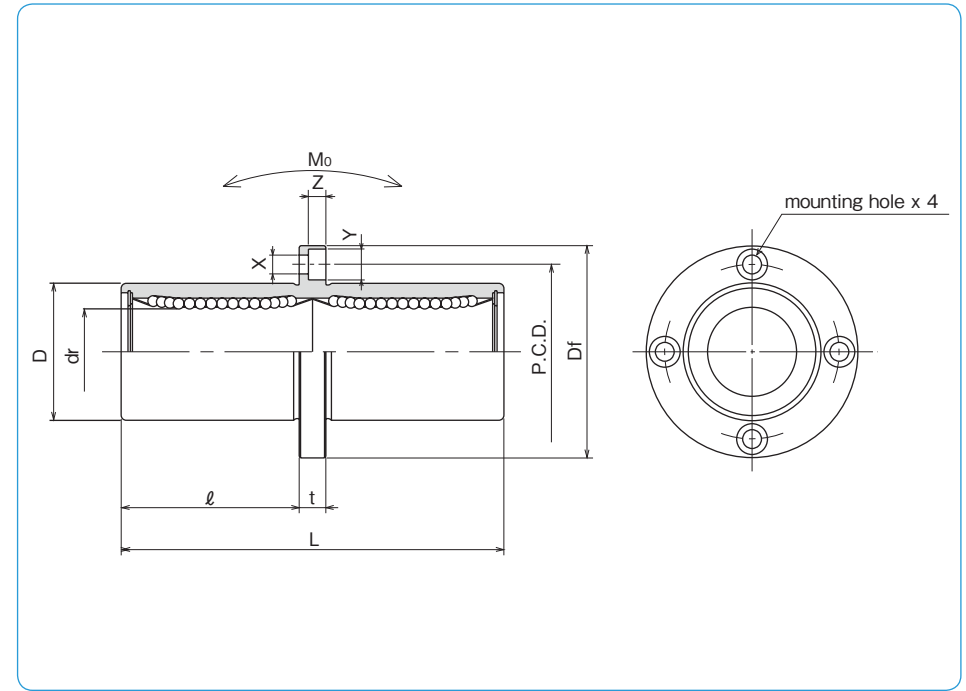
– Center Mount Round Flange Type –



part number structure

example **SMSFC 25 G UU-SK**

specification SMFC: standard SMSFC: anti-corrosion	inner contact diameter (dr)	retainer material blank: standard/steel G: resin	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating	seal blank: without seal UU: seals on both sides
--	-----------------------------	--	--	--



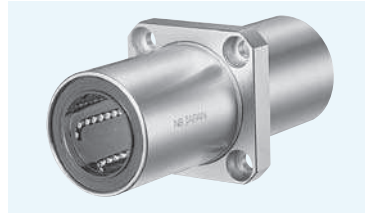
part number				number of ball circuits	major dimensions		
standard steel retainer	anti-corrosion resin retainer	stainless steel retainer	resin retainer		dr	D	L
mm	mm	mm	mm	mm	mm	mm	
SMFC 6	SMFC 6G	SMSFC 6	SMSFC 6G	4	6	12	35
SMFC 8	SMFC 8G	SMSFC 8	SMSFC 8G	4	8	15	45
SMFC 10	SMFC 10G	SMSFC 10	SMSFC 10G	4	10	19	55
SMFC 12	SMFC 12G	SMSFC 12	SMSFC 12G	4	12	21	57
SMFC 13	SMFC 13G	SMSFC 13	SMSFC 13G	4	13	23	61
SMFC 16	SMFC 16G	SMSFC 16	SMSFC 16G	4	16	28	70
SMFC 20	SMFC 20G	SMSFC 20	SMSFC 20G	5	20	32	80
SMFC 25	SMFC 25G	SMSFC 25	SMSFC 25G	6	25	40	112
SMFC 30	SMFC 30G	SMSFC 30	SMSFC 30G	6	30	45	123
SMFC 35	SMFC 35G	SMSFC 35	SMSFC 35G	6	35	52	135
SMFC 40	SMFC 40G	SMSFC 40	SMSFC 40G	6	40	60	151
SMFC 50	SMFC 50G	SMSFC 50	SMSFC 50G	6	50	80	192
SMFC 60	SMFC 60G	SMSFC 60	SMSFC 60G	6	60	90	209

ℓ	D_f	flange			eccentricity	perpendicularity	basic load rating		allowable static moment	mass	shaft diameter
		t	P.C.D.	$X \times Y \times Z$			dynamic C	static Co			
mm	mm	mm	mm	mm	μm	μm	N	N	N · m	g	mm
15	28	5	20	3.5×6×3.1	15	15	323	530	2.18	31	6
20	32	5	24	3.5×6×3.1			431	784	4.31	51	8
24.5	40	6	29	4.5×7.5×4.1			588	1,100	7.24	98	10
25.5	42	6	32	4.5×7.5×4.1			813	1,570	10.9	110	12
27.5	43	6	33	4.5×7.5×4.1			813	1,570	11.6	130	13
32	48	6	38	4.5×7.5×4.1			1,230	2,350	19.7	190	16
36	54	8	43	5.5×9×5.1	20	20	1,400	2,740	26.8	260	20
52	62	8	51	5.5×9×5.1			1,560	3,140	43.4	540	25
56.5	74	10	60	6.6×11×6.1			2,490	5,490	82.8	680	30
62.5	82	10	67	6.6×11×6.1	25	25	2,650	6,270	110	1,020	35
69	96	13	78	9×14×8.1			3,430	8,040	147	1,570	40
89.5	116	13	98	9×14×8.1			6,080	15,900	397	3,600	50
95.5	134	18	112	11×17×11.1			7,550	20,000	530	4,500	60

1N≐0.102kgf 1N · m≐0.102kgf · m

SMKC TYPE

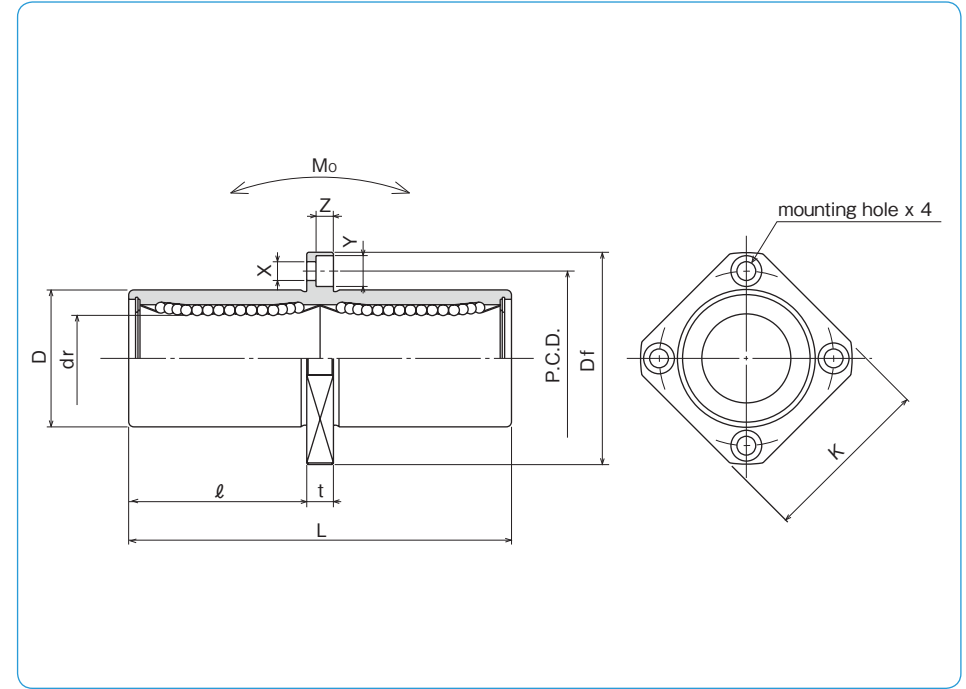
– Center Mount Square Flange Type –



part number structure

example **SMSKC 25 G UU-SK**

specification SMKC : standard SMSKC : anti-corrosion	outer cylinder surface treatment blank : no surface treatment SK : electroless nickel plating LF : low temperature black chrome treatment with fluoride coating SB : black oxide (not available on anti-corrosion type) SC : industrial chrome plating
inner contact diameter (dr)	seal blank : without seal UU : seals on both sides
retainer material blank : standard/steel G : anti-corrosion/stainless steel G : resin	



part number				number of ball circuits	major dimensions				
standard steel retainer	resin retainer	anti-corrosion stainless retainer	resin retainer		dr mm	tolerance μm	D mm	tolerance μm	L ±0.3 mm
SMKC 6	SMKC 6G	SMSKC 6	SMSKC 6G	4	6		12	0	35
SMKC 8	SMKC 8G	SMSKC 8	SMSKC 8G	4	8		15	-13	45
SMKC 10	SMKC 10G	SMSKC 10	SMSKC 10G	4	10	0	19		55
SMKC 12	SMKC 12G	SMSKC 12	SMSKC 12G	4	12	-10	21	0	57
SMKC 13	SMKC 13G	SMSKC 13	SMSKC 13G	4	13		23	-16	61
SMKC 16	SMKC 16G	SMSKC 16	SMSKC 16G	4	16		28		70
SMKC 20	SMKC 20G	SMSKC 20	SMSKC 20G	5	20	0	32	0	80
SMKC 25	SMKC 25G	SMSKC 25	SMSKC 25G	6	25	-12	40	-19	112
SMKC 30	SMKC 30G	SMSKC 30	SMSKC 30G	6	30		45		123
SMKC 35	SMKC 35G	SMSKC 35	SMSKC 35G	6	35		52		135
SMKC 40	SMKC 40G	SMSKC 40	SMSKC 40G	6	40	0	60	0	151
SMKC 50	SMKC 50G	SMSKC 50	SMSKC 50G	6	50	-15	80	-22	192
SMKC 60	SMKC 60G	SMSKC 60	SMSKC 60G	6	60	0/-20	90	0/-25	209

l mm	Df mm	flange				eccentricity μm	perpendicularity μm	basic load rating		allowable static moment N·m	mass g	shaft diameter mm
		K mm	t mm	P.C.D. mm	X×Y×Z mm			dynamic C N	static Co N			
15	28	22	5	20	3.5×6×3.1	15	15	323	530	2.18	25	6
20	32	25	5	24	3.5×6×3.1			431	784	4.31	43	8
24.5	40	30	6	29	4.5×7.5×4.1			588	1,100	7.24	78	10
25.5	42	32	6	32	4.5×7.5×4.1			813	1,570	10.9	90	12
27.5	43	34	6	33	4.5×7.5×4.1			813	1,570	11.6	108	13
32	48	37	6	38	4.5×7.5×4.1			1,230	2,350	19.7	165	16
36	54	42	8	43	5.5×9×5.1	20	20	1,400	2,740	26.8	225	20
52	62	50	8	51	5.5×9×5.1			1,560	3,140	43.4	500	25
56.5	74	58	10	60	6.6×11×6.1			2,490	5,490	82.8	590	30
62.5	82	64	10	67	6.6×11×6.1	25	25	2,650	6,270	110	930	35
69	96	75	13	78	9×14×8.1			3,430	8,040	147	1,380	40
89.5	116	92	13	98	9×14×8.1			6,080	15,900	397	3,400	50
95.5	134	106	18	112	11×17×11.1	30	30	7,550	20,000	530	4,060	60

1N≐0.102kgf 1N·m≐0.102kgf·m

SMTC TYPE

– Two Side Cut Center Flange Type –



part number structure

example **SMSTC 25 G UU -SK**

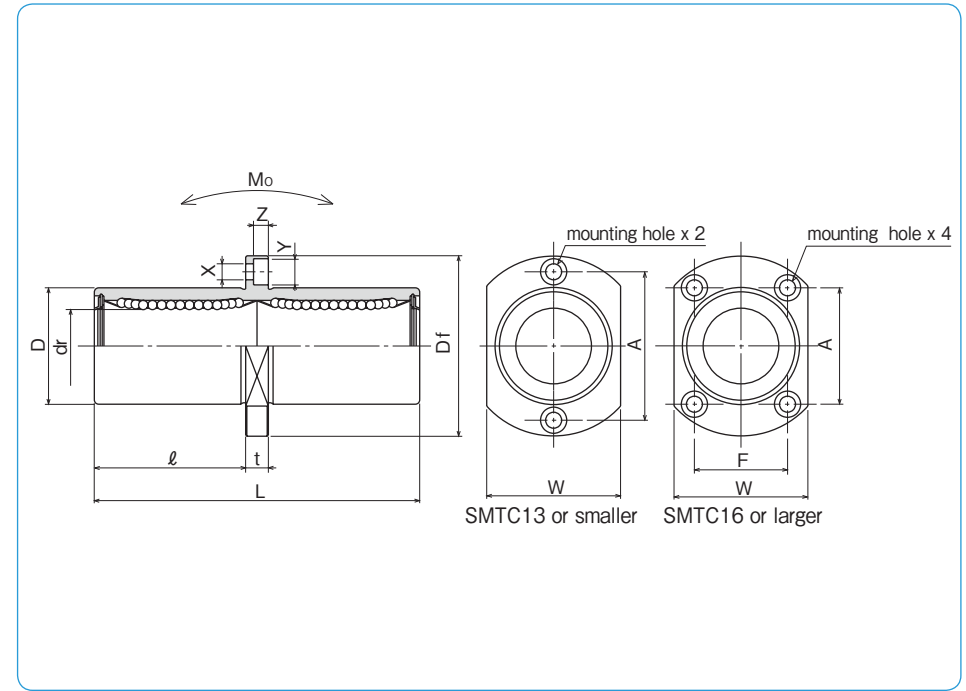
specification
SMTC: standard
SMSTC: anti-corrosion

inner contact diameter (dr)

retainer material
blank: standard/steel
 anti-corrosion/stainless steel
G: resin

outer cylinder surface treatment
blank: no surface treatment
SK: electroless nickel plating
LF: low temperature black chrome treatment with fluoride coating
SB: black oxide (not available on anti-corrosion type)
SC: industrial chrome plating

seals on both sides



part number*				number of ball circuits	dr		major dimensions		
standard steel retainer	resin retainer	anti-corrosion (stainless retainer / resin retainer)			mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
SMTC 6UU	SMTC 6GUU	SMSTC 6UU	SMSTC 6GUU	4	6	12	0	35	
SMTC 8UU	SMTC 8GUU	SMSTC 8UU	SMSTC 8GUU	4	8	15	-13	45	
SMTC 10UU	SMTC 10GUU	SMSTC 10UU	SMSTC 10GUU	4	10	19	0	55	
SMTC 12UU	SMTC 12GUU	SMSTC 12UU	SMSTC 12GUU	4	12	21	0	57	
SMTC 13UU	SMTC 13GUU	SMSTC 13UU	SMSTC 13GUU	4	13	23	-16	61	
SMTC 16UU	SMTC 16GUU	SMSTC 16UU	SMSTC 16GUU	4	16	28		70	
SMTC 20UU	SMTC 20GUU	SMSTC 20UU	SMSTC 20GUU	5	20	32	0	80	
SMTC 25UU	SMTC 25GUU	SMSTC 25UU	SMSTC 25GUU	6	25	40	-19	112	
SMTC 30UU	SMTC 30GUU	SMSTC 30UU	SMSTC 30GUU	6	30	45		123	

* UU type is standard.

l mm	D_f mm	W mm	t mm	A mm	F mm	X×Y×Z mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $N \cdot m$	mass g	shaft diameter mm
									dynamic C N	static Co N			
15	28	18	5	20	—	3.5×6×3.1	15	15	323	530	2.18	28	6
20	32	21	5	24	—	3.5×6×3.1			431	784	4.31	47	8
24.5	40	25	6	29	—	4.5×7.5×4.1			588	1,100	7.24	90	10
25.5	42	27	6	32	—	4.5×7.5×4.1			813	1,570	10.9	102	12
27.5	43	29	6	33	—	4.5×7.5×4.1			813	1,570	11.6	123	13
32	48	34	6	31	22	4.5×7.5×4.1			1,230	2,350	19.7	182	16
36	54	38	8	36	24	5.5×9×5.1			1,400	2,740	26.8	247	20
52	62	46	8	40	32	5.5×9×5.1	20	20	1,560	3,140	43.4	525	25
56.5	74	51	10	49	35	6.6×11×6.1			2,490	5,490	82.8	645	30

1N \approx 0.102kgf 1N \cdot m \approx 0.102kgf \cdot m

SMF-W-E TYPE

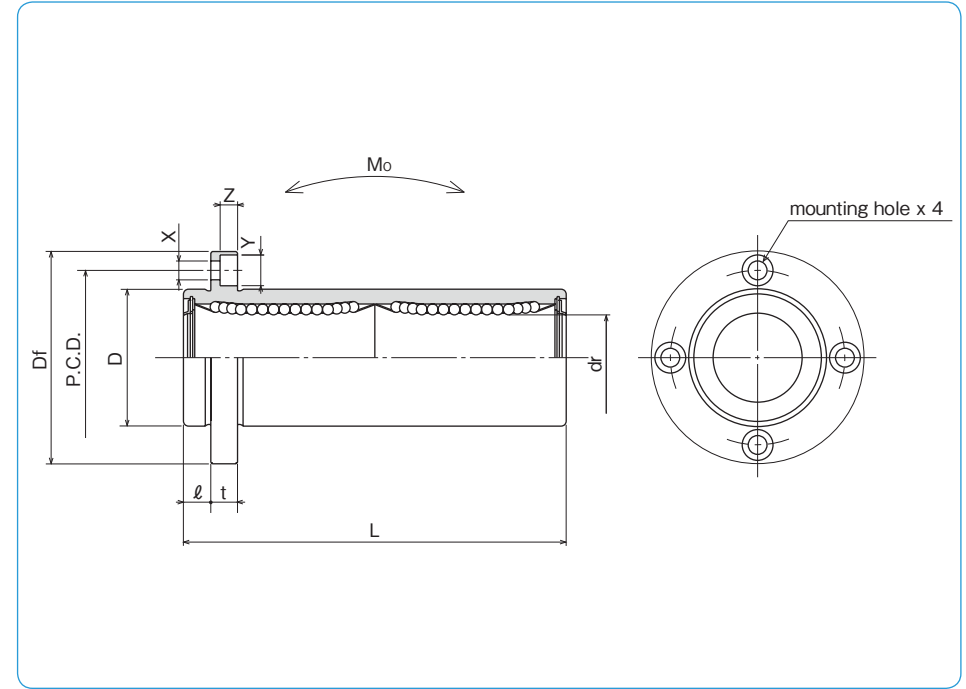
— Round Flange Double-Wide Pilot End Type —



part number structure

example **SMSF 25 G W UU - E - SK**

specification SMF: standard SMSF: anti-corrosion	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating
inner contact diameter (dr)	with pilot end
retainer material blank: standard/steel anti-corrosion/stainless steel G: resin	seals on both sides
double-wide type	



part number*				number of ball circuits	dr mm	dr tolerance μm	major dimensions		
standard steel retainer	anti-corrosion resin retainer	stainless retainer	resin retainer				D mm	D tolerance μm	L ±0.3 mm
SMF 6WUU-E	SMF 6GWUU-E	SMSF 6WUU-E	SMSF 6GWUU-E	4	6	0	12	0	35
SMF 8WUU-E	SMF 8GWUU-E	SMSF 8WUU-E	SMSF 8GWUU-E	4	8	-10	15	-13	45
SMF10WUU-E	SMF10GWUU-E	SMSF10WUU-E	SMSF10GWUU-E	4	10	0	19	0	55
SMF12WUU-E	SMF12GWUU-E	SMSF12WUU-E	SMSF12GWUU-E	4	12	-10	21	0	57
SMF13WUU-E	SMF13GWUU-E	SMSF13WUU-E	SMSF13GWUU-E	4	13	0	23	-16	61
SMF16WUU-E	SMF16GWUU-E	SMSF16WUU-E	SMSF16GWUU-E	4	16	-10	28	0	70
SMF20WUU-E	SMF20GWUU-E	SMSF20WUU-E	SMSF20GWUU-E	5	20	0	32	0	80
SMF25WUU-E	SMF25GWUU-E	SMSF25WUU-E	SMSF25GWUU-E	6	25	-12	40	-19	112
SMF30WUU-E	SMF30GWUU-E	SMSF30WUU-E	SMSF30GWUU-E	6	30	0	45	0	123
SMF35WUU-E	SMF35GWUU-E	—	—	6	35	0	52	0	135
SMF40WUU-E	SMF40GWUU-E	—	—	6	40	-15	60	-22	151
SMF50WUU-E	SMF50GWUU-E	—	—	6	50	0	80	0	192
SMF60WUU-E	SMF60GWUU-E	—	—	6	60	0/-20	90	0/-25	209

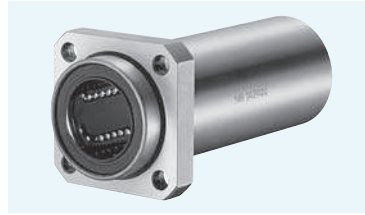
* UU type is standard.

l mm	Df mm	flange			eccentricity μm	perpendicularity μm	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter mm
		t mm	P.C.D. mm	X×Y×Z mm			dynamic C N	static Co N			
5	28	5	20	3.5×6×3.1	15	15	323	530	2.18	31	6
5	32	5	24	3.5×6×3.1			431	784	4.31	51	8
6	40	6	29	4.5×7.5×4.1			588	1,100	7.24	98	10
6	42	6	32	4.5×7.5×4.1			813	1,570	10.9	110	12
6	43	6	33	4.5×7.5×4.1			813	1,570	11.6	130	13
6	48	6	38	4.5×7.5×4.1			1,230	2,350	19.7	190	16
8	54	8	43	5.5×9×5.1	20	20	1,400	2,740	26.8	260	20
8	62	8	51	5.5×9×5.1			1,560	3,140	43.4	540	25
10	74	10	60	6.6×11×6.1			2,490	5,490	82.8	680	30
10	82	10	67	6.6×11×6.1			2,650	6,270	110	1,020	35
13	96	13	78	9×14×8.1	25	25	3,430	8,040	147	1,570	40
13	116	13	98	9×14×8.1			6,080	15,900	397	3,600	50
18	134	18	112	11×17×11.1			7,550	20,000	530	4,500	60

1N≒0.102kgf 1N·m≒0.102kgf·m

SMK-W-E TYPE

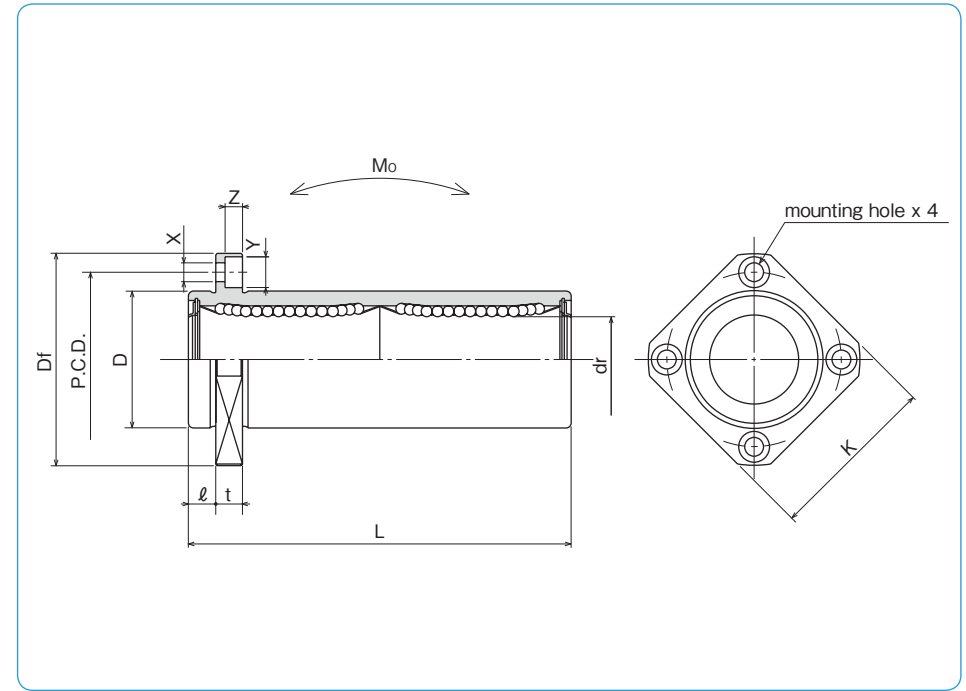
— Square Flange Double-Wide Pilot End Type —



part number structure

example **SMSK 25 G W UU-E-SK**

specification SMK : standard SMSK : anti-corrosion	outer cylinder surface treatment blank : no surface treatment SK : electroless nickel plating LF : low temperature black chrome treatment with fluoride coating SB : black oxide (not available on anti-corrosion type) SC : industrial chrome plating
inner contact diameter (dr)	with pilot end
retainer material blank : standard/steel anti-corrosion/stainless steel G : resin	seals on both sides
double-wide type	



part number*				number of ball circuits	dr mm	dr tolerance μm	major dimensions		
standard steel retainer	anti-corrosion resin retainer	anti-corrosion stainless retainer	anti-corrosion resin retainer				D mm	D tolerance μm	L ±0.3 mm
SMK 6WUU-E	SMK 6GWUU-E	SMSK 6WUU-E	SMSK 6GWUU-E	4	6	0	12	0	35
SMK 8WUU-E	SMK 8GWUU-E	SMSK 8WUU-E	SMSK 8GWUU-E	4	8	-10	15	-13	45
SMK 10WUU-E	SMK 10GWUU-E	SMSK 10WUU-E	SMSK 10GWUU-E	4	10	0	19	0	55
SMK 12WUU-E	SMK 12GWUU-E	SMSK 12WUU-E	SMSK 12GWUU-E	4	12	-10	21	0	57
SMK 13WUU-E	SMK 13GWUU-E	SMSK 13WUU-E	SMSK 13GWUU-E	4	13	0	23	-16	61
SMK 16WUU-E	SMK 16GWUU-E	SMSK 16WUU-E	SMSK 16GWUU-E	4	16	-10	28	0	70
SMK 20WUU-E	SMK 20GWUU-E	SMSK 20WUU-E	SMSK 20GWUU-E	5	20	0	32	0	80
SMK 25WUU-E	SMK 25GWUU-E	SMSK 25WUU-E	SMSK 25GWUU-E	6	25	-12	40	-19	112
SMK 30WUU-E	SMK 30GWUU-E	SMSK 30WUU-E	SMSK 30GWUU-E	6	30	0	45	0	123
SMK 35WUU-E	SMK 35GWUU-E	—	—	6	35	-15	52	0	135
SMK 40WUU-E	SMK 40GWUU-E	—	—	6	40	0	60	-22	151
SMK 50WUU-E	SMK 50GWUU-E	—	—	6	50	-15	80	0	192
SMK 60WUU-E	SMK 60GWUU-E	—	—	6	60	0/-20	90	0/-25	209

* UU type is standard.

l mm	Df mm	flange				eccentricity μm	perpendicularity μm	basic load rating		allowable static moment N·m	mass g	shaft diameter mm
		K mm	t mm	P.C.D. mm	X×Y×Z mm			dynamic C N	static Co N			
5	28	22	5	20	3.5×6×3.1	15	15	323	530	2.18	25	6
5	32	25	5	24	3.5×6×3.1			431	784	4.31	43	8
6	40	30	6	29	4.5×7.5×4.1			588	1,100	7.24	78	10
6	42	32	6	32	4.5×7.5×4.1			813	1,570	10.9	90	12
6	43	34	6	33	4.5×7.5×4.1			813	1,570	11.6	108	13
6	48	37	6	38	4.5×7.5×4.1			1,230	2,350	19.7	165	16
8	54	42	8	43	5.5×9×5.1	20	20	1,400	2,740	26.8	225	20
8	62	50	8	51	5.5×9×5.1			1,560	3,140	43.4	500	25
10	74	58	10	60	6.6×11×6.1			2,490	5,490	82.8	590	30
10	82	64	10	67	6.6×11×6.1	25	25	2,650	6,270	110	930	35
13	96	75	13	78	9×14×8.1			3,430	8,040	147	1,380	40
13	116	92	13	98	9×14×8.1			6,080	15,900	397	3,400	50
18	134	106	18	112	11×17×11.1	30	30	7,550	20,000	530	4,060	60

1N≐0.102kgf 1N·m≐0.102kgf·m

SMT-W-E TYPE

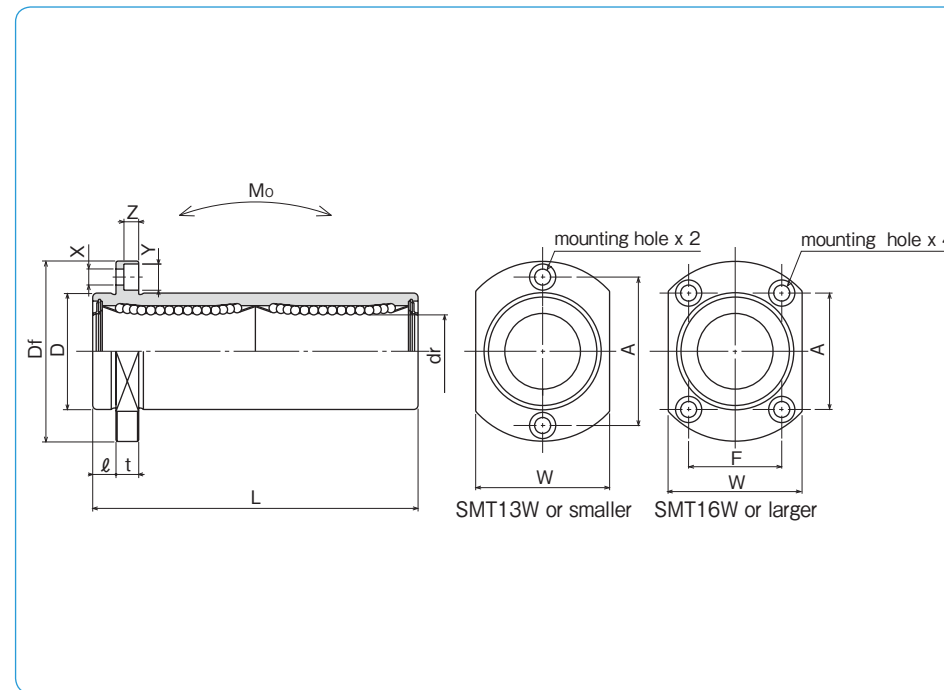
— Two Side Cut Double-Wide Flange Pilot End Type —



part number structure

example **SMST 25 G W UU-E-SK**

specification SMT: standard SMST: anti-corrosion	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating
inner contact diameter (dr)	with pilot end
retainer material blank: standard/steel anti-corrosion/stainless steel G: resin	seals on both sides
double-wide type	



part number*				number of ball circuits	dr mm	dr tolerance μm	major dimensions		
standard steel retainer	standard resin retainer	anti-corrosion stainless retainer	anti-corrosion resin retainer				D mm	D tolerance μm	L mm
SMT 6WUU-E	SMT 6GWUU-E	SMST 6WUU-E	SMST 6GWUU-E	4	6	0	12	0	35
SMT 8WUU-E	SMT 8GWUU-E	SMST 8WUU-E	SMST 8GWUU-E	4	8	0	15	-13	45
SMT10WUU-E	SMT10GWUU-E	SMST10WUU-E	SMST10GWUU-E	4	10	0	19	0	55
SMT12WUU-E	SMT12GWUU-E	SMST12WUU-E	SMST12GWUU-E	4	12	-10	21	0	57
SMT13WUU-E	SMT13GWUU-E	SMST13WUU-E	SMST13GWUU-E	4	13	-10	23	-16	61
SMT16WUU-E	SMT16GWUU-E	SMST16WUU-E	SMST16GWUU-E	4	16	-10	28	-16	70
SMT20WUU-E	SMT20GWUU-E	SMST20WUU-E	SMST20GWUU-E	5	20	0	32	0	80
SMT25WUU-E	SMT25GWUU-E	SMST25WUU-E	SMST25GWUU-E	6	25	-12	40	-19	112
SMT30WUU-E	SMT30GWUU-E	SMST30WUU-E	SMST30GWUU-E	6	30	-12	45	-19	123

* UU type is standard.

l mm	Df mm	flange					X×Y×Z mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment N·m	mass g	shaft diameter mm
		W mm	t mm	A mm	F mm	dynamic C N				static Co N				
5	28	18	5	20	—	3.5×6×3.1	15	15	323	530	2.18	28	6	
5	32	21	5	24	—	3.5×6×3.1			431	784	4.31	47	8	
6	40	25	6	29	—	4.5×7.5×4.1			588	1,100	7.24	90	10	
6	42	27	6	32	—	4.5×7.5×4.1			813	1,570	10.9	102	12	
6	43	29	6	33	—	4.5×7.5×4.1			813	1,570	11.6	123	13	
6	48	34	6	31	22	4.5×7.5×4.1			1,230	2,350	19.7	182	16	
8	54	38	8	36	24	5.5×9×5.1	20	20	1,400	2,740	26.8	247	20	
8	62	46	8	40	32	5.5×9×5.1			1,560	3,140	43.4	525	25	
10	74	51	10	49	35	6.6×11×6.1			2,490	5,490	82.8	645	30	

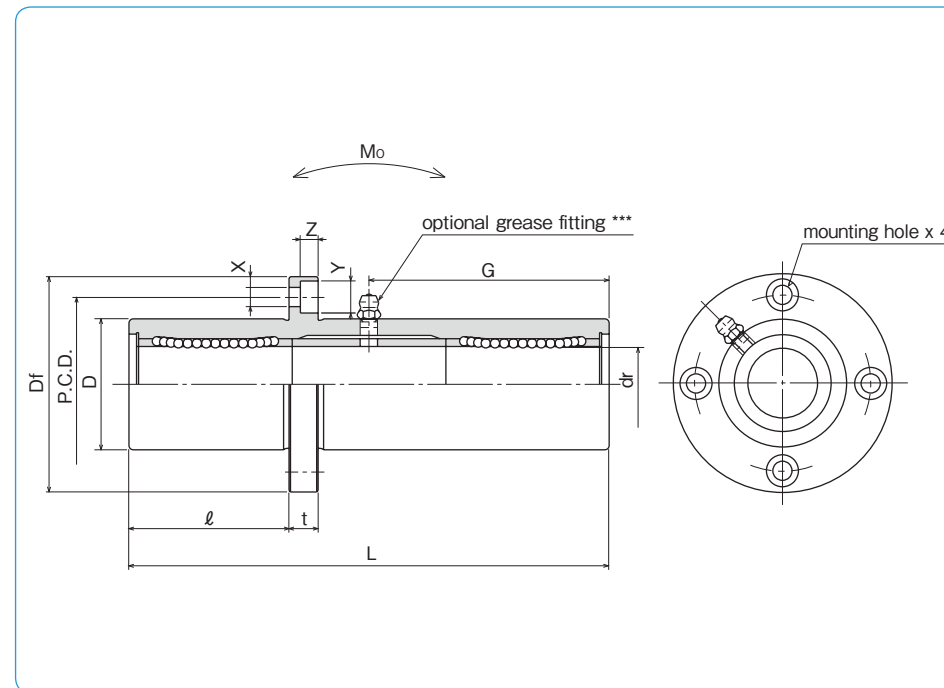
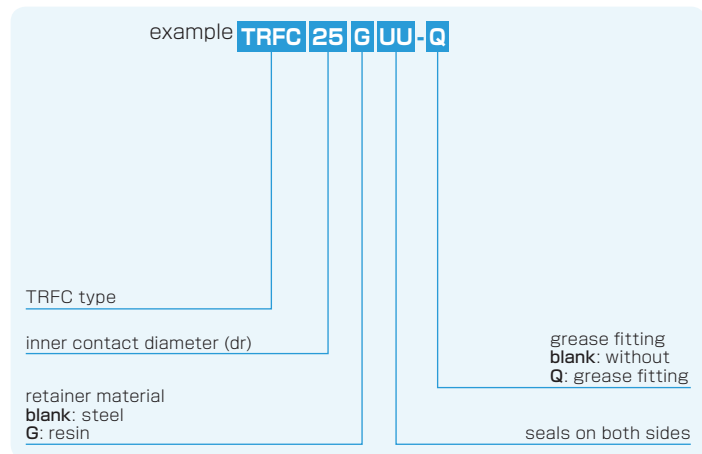
1N≐0.102kgf 1N·m≐0.102kgf·m

TRFC TYPE

— Triple-Wide Intermediate Position Round Flange Type —



part number structure



part number*		number of ball circuits	dr		major dimensions		
steel retainer	resin retainer		mm	tolerance μm	D	tolerance μm	L ± 0.3 mm
TRFC 6UU	TRFC 6GUU	4	6	0	15	0/-18	51
TRFC 8UU	TRFC 8GUU	4	8	-12	19	0	66
TRFC 10UU	TRFC 10GUU	4	10	-15	23	-21	80
TRFC 12UU	TRFC 12GUU	4	12	0	26	-21	84
TRFC 13UU	TRFC 13GUU	4	13	-15	28	0	90
TRFC 16UU	TRFC 16GUU	4	16	-18	32	0	103
TRFC 20UU	TRFC 20GUU	5	20	0	40	-25	118
TRFC 25UU	TRFC 25GUU	6	25	-18	45	-25	165
TRFC 30UU	TRFC 30GUU	6	30	0	52	0	182
TRFC 35UU	TRFC 35GUU	6	35	-21	60	-30	200
TRFC 40UU	TRFC 40GUU	6	40	0	65	-30	230
TRFC 50UU	TRFC 50GUU	6	50	-21	85	0	290
TRFC 60UU	TRFC 60GUU	6	60	0/-25	100	-35	310

* UU type is standard.

** Outer cylinder is treated with electroless nickel plating.

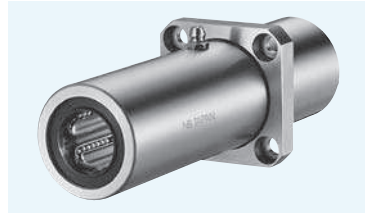
*** TRFC6~8: A-M6x1 TRFC10~30: A-M6F TRFC35~60: A-R1/8

l mm	Df mm	flange			grease fitting G mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $\text{N} \cdot \text{m}$	mass g	shaft diameter mm
		t mm	P.C.D. mm	X×Y×Z mm				dynamic C N	static Co N			
17	32	5	24	3.5×6×3.1	20.5	20	20	323	530	8.2	66	6
22	40	6	29	4.5×7.5×4.1	29			431	784	16.0	135	8
27	43	6	33	4.5×7.5×4.1	38			588	1,100	27.0	205	10
28	46	6	36	4.5×7.5×4.1	41			813	1,570	40.1	248	12
30	48	6	38	4.5×7.5×4.1	45			813	1,570	42.9	308	13
35	54	8	43	5.5×9×5.1	51	25	25	1,230	2,350	73.5	412	16
40	62	8	51	5.5×9×5.1	59			1,400	2,740	98.0	752	20
55	74	10	60	6.6×11×6.1	82.5			1,560	3,140	157	1,244	25
61	82	10	67	6.6×11×6.1	91			2,490	5,490	297	1,636	30
67	96	13	78	9×14×8.1	100			2,650	6,270	373	2,580	35
77	101	13	83	9×14×8.1	115	30	30	3,430	8,040	553	2,950	40
97	129	18	107	11×17×11.1	145			6,080	15,900	1,370	6,860	50
104	144	18	122	11×17×11.1	155			7,550	20,000	1,800	9,660	60

1N \approx 0.102kgf 1N·m \approx 0.102kgf·m

TRKC TYPE

— Triple-Wide Intermediate Position Square Flange Type —



part number structure

example **TRKC 25 G UU-Q**

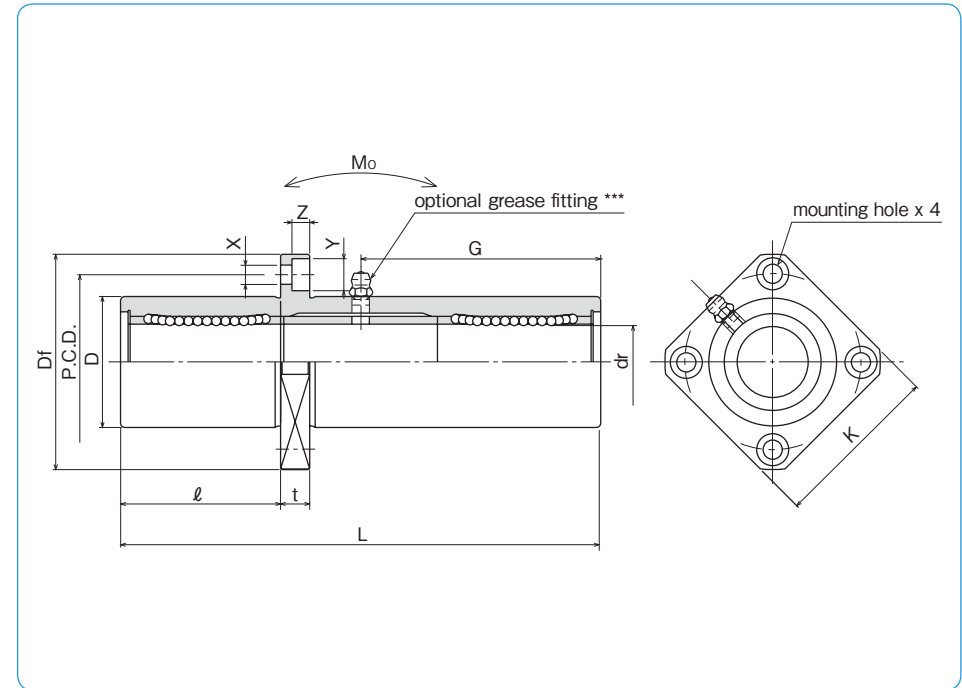
TRKC type

inner contact diameter (dr)

retainer material
blank: steel
G: resin

grease fitting
blank: without
Q: grease fitting

seals on both sides



part number*		number of ball circuits	dr		major dimensions		
steel retainer	resin retainer		mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
TRKC 6UU	TRKC 6GUU	4	6		15	0/-18	51
TRKC 8UU	TRKC 8GUU	4	8	0	19		66
TRKC 10UU	TRKC 10GUU	4	10	-12	23	0	80
TRKC 12UU	TRKC 12GUU	4	12		26	-21	84
TRKC 13UU	TRKC 13GUU	4	13	0	28		90
TRKC 16UU	TRKC 16GUU	4	16	-15	32		103
TRKC 20UU	TRKC 20GUU	5	20		40	0	118
TRKC 25UU	TRKC 25GUU	6	25	0	45	-25	165
TRKC 30UU	TRKC 30GUU	6	30	-18	52		182
TRKC 35UU	TRKC 35GUU	6	35		60	0	200
TRKC 40UU	TRKC 40GUU	6	40	0	65	-30	230
TRKC 50UU	TRKC 50GUU	6	50	-21	85	0	290
TRKC 60UU	TRKC 60GUU	6	60	0/-25	100	-35	310

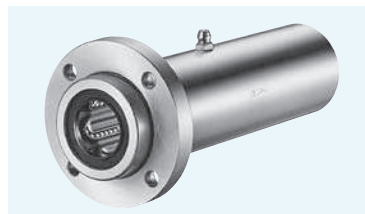
* UU type is standard.
 ** Outer cylinder is treated with electroless nickel plating.
 *** TRKC6~8: A-M6x1 TRKC10~30: A-M6F TRKC35~60: A-R1/8

l mm	Df mm	flange			P.C.D. mm	X×Y×Z mm	grease fitting G mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter mm
		K mm	t mm	C N						Co N				
17	32	25	5	24	3.5×6×3.1	20.5	20	20	323	530	8.2	58	6	
22	40	30	6	29	4.5×7.5×4.1	29			431	784	16.0	117	8	
27	43	34	6	33	4.5×7.5×4.1	38			588	1,100	27.0	189	10	
28	46	35	6	36	4.5×7.5×4.1	41			813	1,570	40.1	228	12	
30	48	37	6	38	4.5×7.5×4.1	45			813	1,570	42.9	286	13	
35	54	42	8	43	5.5×9×5.1	51	25	25	1,230	2,350	73.5	376	16	
40	62	50	8	51	5.5×9×5.1	59			1,400	2,740	98.0	714	20	
55	74	58	10	60	6.6×11×6.1	82.5			1,560	3,140	157	1,163	25	
61	82	64	10	67	6.6×11×6.1	91			2,490	5,490	297	1,543	30	
67	96	75	13	78	9×14×8.1	100			2,650	6,270	373	2,400	35	
77	101	80	13	83	9×14×8.1	115	30	30	3,430	8,040	553	2,510	40	
97	129	100	18	107	11×17×11.1	145			6,080	15,900	1,370	6,400	50	
104	144	116	18	122	11×17×11.1	155			7,550	20,000	1,800	9,200	60	

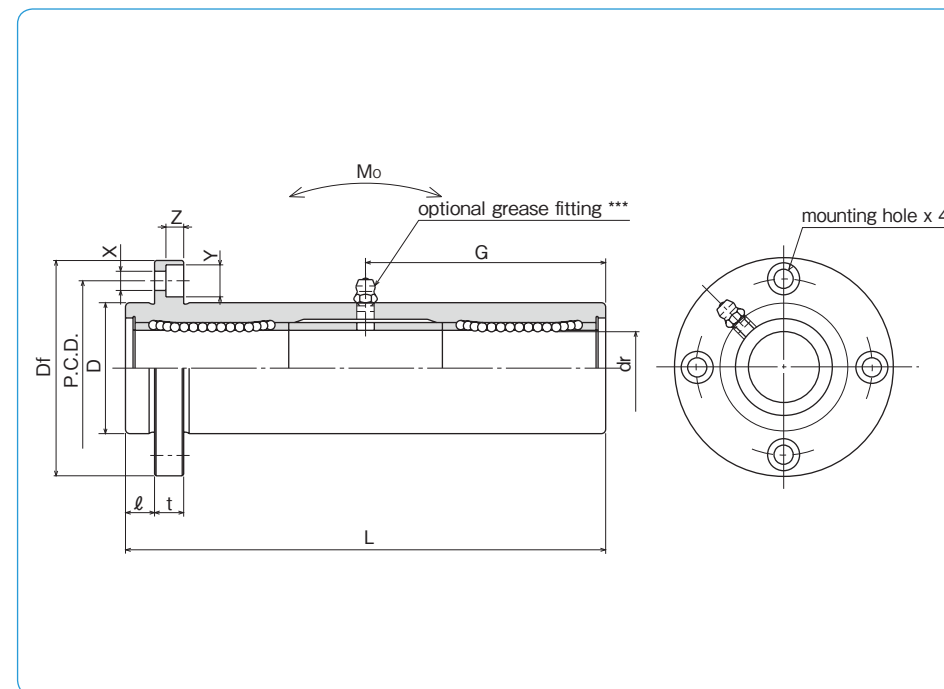
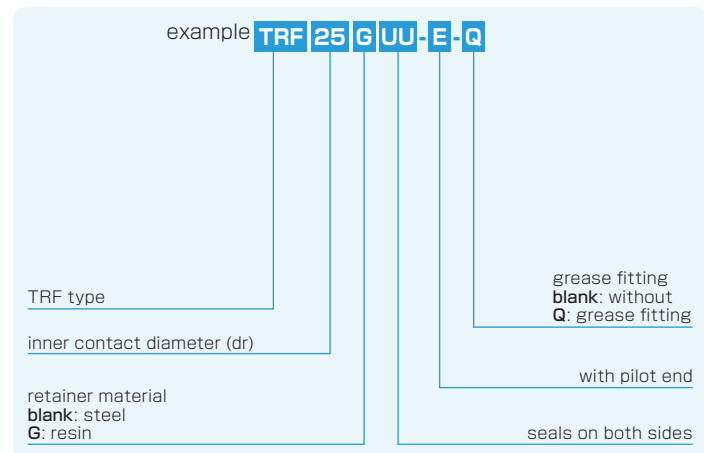
1N≐0.102kgf 1N·m≐0.102kgf·m

TRF-E TYPE

– Triple-Wide Round Flange Pilot End Type –



part number structure



part number*		number of ball circuits	dr		major dimensions		
steel retainer	resin retainer		mm	tolerance μm	D	tolerance μm	L ± 0.3 mm
TRF 6UU-E	TRF 6GUU-E	4	6	0	15	0/-18	51
TRF 8UU-E	TRF 8GUU-E	4	8	-12	19		66
TRF10UU-E	TRF10GUU-E	4	10		23	0	80
TRF12UU-E	TRF12GUU-E	4	12		26	-21	84
TRF13UU-E	TRF13GUU-E	4	13	0	28		90
TRF16UU-E	TRF16GUU-E	4	16	-15	32		103
TRF20UU-E	TRF20GUU-E	5	20		40	0	118
TRF25UU-E	TRF25GUU-E	6	25	0	45	-25	165
TRF30UU-E	TRF30GUU-E	6	30	-18	52		182
TRF35UU-E	TRF35GUU-E	6	35		60	0	200
TRF40UU-E	TRF40GUU-E	6	40	0	65	-30	230
TRF50UU-E	TRF50GUU-E	6	50	-21	85	0	290
TRF60UU-E	TRF60GUU-E	6	60	0/-25	100	-35	310

* UU type is standard.

** Outer cylinder is treated with electroless nickel plating.

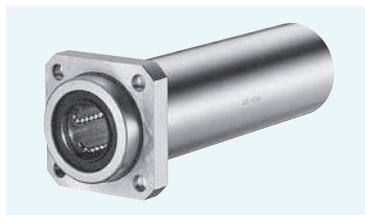
*** TRF6~8: A-M6x1 TRF10~30: A-M6F TRF35~60: A-R1/8

l mm	Df mm	flange			grease fitting G mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $\text{N} \cdot \text{m}$	mass g	shaft diameter mm
		t mm	P.C.D. mm	X×Y×Z mm				dynamic C N	static Co N			
5	32	5	24	3.5×6×3.1	20.5	20	20	323	530	8.2	66	6
6	40	6	29	4.5×7.5×4.1	29			431	784	16.0	135	8
6	43	6	33	4.5×7.5×4.1	38			588	1,100	27.0	205	10
6	46	6	36	4.5×7.5×4.1	41			813	1,570	40.1	248	12
6	48	6	38	4.5×7.5×4.1	45			813	1,570	42.9	308	13
8	54	8	43	5.5×9×5.1	51			1,230	2,350	73.5	412	16
8	62	8	51	5.5×9×5.1	59	25	25	1,400	2,740	98.0	752	20
10	74	10	60	6.6×11×6.1	82.5			1,560	3,140	157	1,244	25
10	82	10	67	6.6×11×6.1	91			2,490	5,490	297	1,636	30
13	96	13	78	9×14×8.1	100			2,650	6,270	373	2,580	35
13	101	13	83	9×14×8.1	115	30	30	3,430	8,040	553	2,950	40
18	129	18	107	11×17×11.1	145			6,080	15,900	1,370	6,860	50
18	144	18	122	11×17×11.1	155			7,550	20,000	1,800	9,660	60

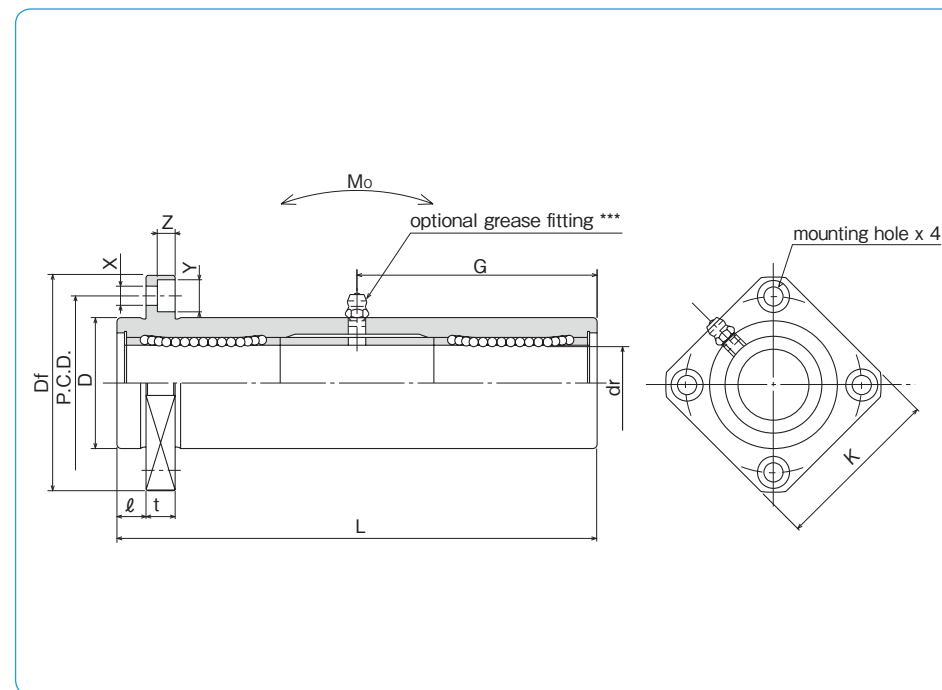
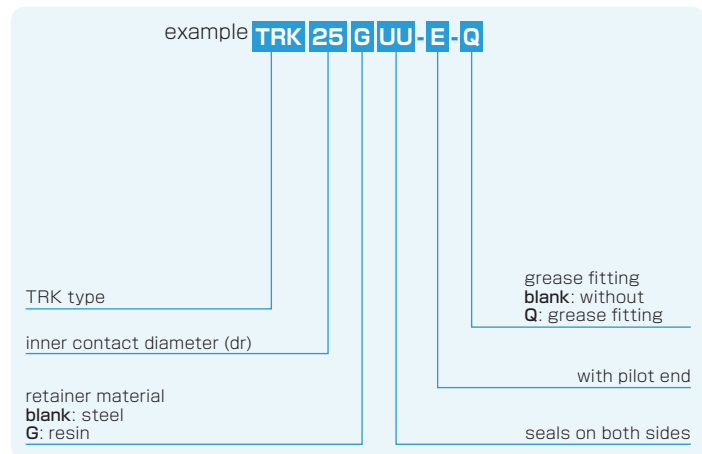
1N \approx 0.102kgf 1N·m \approx 0.102kgf·m

TRK-E TYPE

– Triple-Wide Square Flange Pilot End Type –



part number structure



part number*		number of ball circuits	dr		major dimensions		
steel retainer	resin retainer		mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
TRK 6UU-E	TRK 6GUU-E	4	6		15	0/-18	51
TRK 8UU-E	TRK 8GUU-E	4	8	0	19		66
TRK10UU-E	TRK10GUU-E	4	10	-12	23	0	80
TRK12UU-E	TRK12GUU-E	4	12		26	-21	84
TRK13UU-E	TRK13GUU-E	4	13	0	28		90
TRK16UU-E	TRK16GUU-E	4	16	-15	32	0	103
TRK20UU-E	TRK20GUU-E	5	20		40	-25	118
TRK25UU-E	TRK25GUU-E	6	25	0	45		165
TRK30UU-E	TRK30GUU-E	6	30	-18	52	0	182
TRK35UU-E	TRK35GUU-E	6	35		60	-30	200
TRK40UU-E	TRK40GUU-E	6	40	0	65		230
TRK50UU-E	TRK50GUU-E	6	50	-21	85	0	290
TRK60UU-E	TRK60GUU-E	6	60	0/-25	100	-35	310

* UU type is standard.

** Outer cylinder is treated with electroless nickel plating.

*** TRK6~8: A-M6x1 TRK10~30: A-M6F TRK35~60: A-R1/8

ℓ mm	D_f mm	flange			P.C.D. mm	X×Y×Z mm	grease fitting G mm	eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $\text{N} \cdot \text{m}$	mass g	shaft diameter mm
		K mm	t mm	C N						Co N				
5	32	25	5	24	3.5×6×3.1	20.5	20	20	323	530	8.2	58	6	
6	40	30	6	29	4.5×7.5×4.1	29			431	784	16.0	117	8	
6	43	34	6	33	4.5×7.5×4.1	38			588	1,100	27.0	189	10	
6	46	35	6	36	4.5×7.5×4.1	41	25	25	813	1,570	40.1	228	12	
6	48	37	6	38	4.5×7.5×4.1	45			813	1,570	42.9	286	13	
8	54	42	8	43	5.5×9×5.1	51			1,230	2,350	73.5	376	16	
8	62	50	8	51	5.5×9×5.1	59	30	30	1,400	2,740	98.0	714	20	
10	74	58	10	60	6.6×11×6.1	82.5			1,560	3,140	157	1,163	25	
10	82	64	10	67	6.6×11×6.1	91			2,490	5,490	297	1,543	30	
13	96	75	13	78	9×14×8.1	100	30	30	2,650	6,270	373	2,400	35	
13	101	80	13	83	9×14×8.1	115			3,430	8,040	553	2,510	40	
18	129	100	18	107	11×17×11.1	145			6,080	15,900	1,370	6,400	50	
18	144	116	18	122	11×17×11.1	155	7,550	20,000	1,800	9,200	60			

1N≐0.102kgf 1N·m≐0.102kgf·m

KBFC TYPE (Euro Standard)

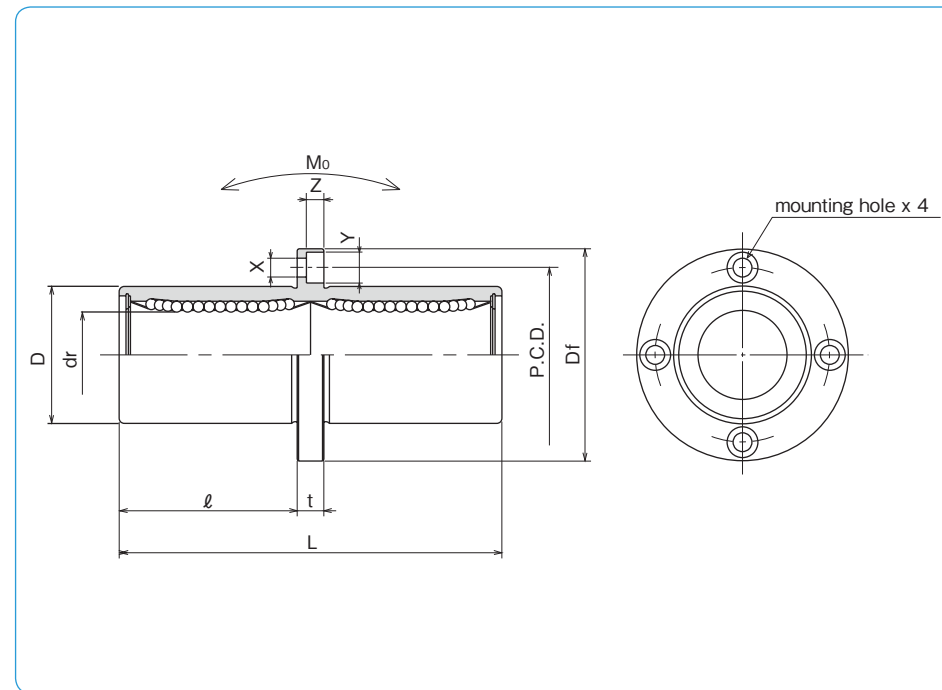
– Center Mount Round Flange Type –



part number structure

example **KBSFC 25 G UU-SK**

specification KBFC: standard KBSFC: anti-corrosion	inner contact diameter (dr)	retainer material blank: standard/steel anti-corrosion/stainless steel G: resin	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating	seal blank: without seal UU: seals on both sides
--	-----------------------------	--	--	--



part number				number of ball circuits	dr		major dimensions		
standard steel retainer	resin retainer	anti-corrosion stainless retainer resin retainer			mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
KBFC 8	KBFC 8G	KBSFC 8	KBSFC 8G	4	8	+ 9	16	0/-13	46
KBFC12	KBFC12G	KBSFC12	KBSFC12G	4	12	- 1	22	0	61
KBFC16	KBFC16G	KBSFC16	KBSFC16G	4	16	+11	26	-16	68
KBFC20	KBFC20G	KBSFC20	KBSFC20G	5	20	- 1	32	0	80
KBFC25	KBFC25G	KBSFC25	KBSFC25G	6	25	+13	40	-19	112
KBFC30	KBFC30G	KBSFC30	KBSFC30G	6	30	- 2	47	0	123
KBFC40	KBFC40G	KBSFC40	KBSFC40G	6	40	+16	62	0	151
KBFC50	KBFC50G	KBSFC50	KBSFC50G	6	50	- 4	75	-22	192
KBFC60	KBFC60G	KBSFC60	KBSFC60G	6	60		90	0/-25	209

l mm	Df mm	flange			eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $\text{N} \cdot \text{m}$	mass g	shaft diameter mm
		t mm	P.C.D. mm	X × Y × Z mm			dynamic C N	static Co N			
20.5	32	5	24	3.5 × 6 × 3.1	15	15	421	804	4.3	59	8
27.5	42	6	32	4.5 × 7.5 × 4.1			813	1,570	11.7	110	12
31	46	6	36	4.5 × 7.5 × 4.1			921	1,780	14.2	160	16
36	54	8	43	5.5 × 9 × 5.1	17	17	1,370	2,740	25.0	260	20
52	62	8	51	5.5 × 9 × 5.1			1,570	3,140	44.0	540	25
56.5	76	10	62	6.6 × 11 × 6.1			2,500	5,490	78.9	815	30
69	98	13	80	9 × 14 × 8.1	20	20	3,430	8,040	147	1,805	40
89.5	112	13	94	9 × 14 × 8.1			6,080	15,900	396	2,820	50
95.5	134	18	112	11 × 17 × 11.1			7,550	20,000	487	4,920	60

1N \approx 0.102kgf 1N · m \approx 0.102kgf · m

KBKC TYPE (Euro Standard)

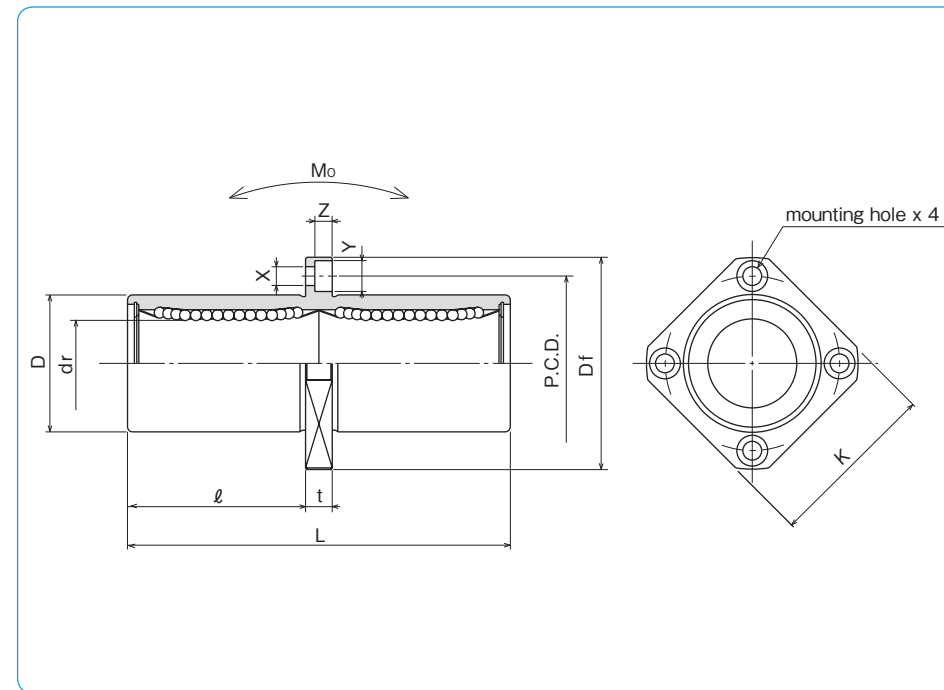
– Center Mount Square Flange Type –



part number structure

example **KBSKC 25 G UU-SK**

specification KBKC: standard KBSKC: anti-corrosion	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating
inner contact diameter (dr)	seal blank: without seal UU: seals on both sides
retainer material blank: standard/steel G: anti-corrosion/stainless steel G: resin	



part number				number of ball circuits	dr		major dimensions		
standard steel retainer	resin retainer	anti-corrosion stainless retainer	resin retainer		mm	tolerance μm	D mm	tolerance μm	L ± 0.3 mm
KBKC 8	KBKC 8G	KBSKC 8	KBSKC 8G	4	8	+ 9	16	0/-13	46
KBKC 12	KBKC 12G	KBSKC 12	KBSKC 12G	4	12	- 1	22	0	61
KBKC 16	KBKC 16G	KBSKC 16	KBSKC 16G	4	16	+ 11	26	-16	68
KBKC 20	KBKC 20G	KBSKC 20	KBSKC 20G	5	20	- 1	32	0	80
KBKC 25	KBKC 25G	KBSKC 25	KBSKC 25G	6	25	+ 13	40	-19	112
KBKC 30	KBKC 30G	KBSKC 30	KBSKC 30G	6	30	- 2	47	0	123
KBKC 40	KBKC 40G	KBSKC 40	KBSKC 40G	6	40	+ 16	62	0	151
KBKC 50	KBKC 50G	KBSKC 50	KBSKC 50G	6	50	- 4	75	-22	192
KBKC 60	KBKC 60G	KBSKC 60	KBSKC 60G	6	60		90	0/-25	209

l mm	Df mm	flange				eccentricity μm	perpendicularity μm	basic load rating		allowable static moment $\text{N} \cdot \text{m}$	mass g	shaft diameter mm
		K mm	t mm	P.C.D. mm	X × Y × Z mm			dynamic C N	static Co N			
20.5	32	25	5	24	3.5 × 6 × 3.1	15	15	421	804	4.3	51	8
27.5	42	32	6	32	4.5 × 7.5 × 4.1			813	1,570	11.7	90	12
31	46	35	6	36	4.5 × 7.5 × 4.1			921	1,780	14.2	135	16
36	54	42	8	43	5.5 × 9 × 5.1	17	17	1,370	2,740	25.0	225	20
52	62	50	8	51	5.5 × 9 × 5.1			1,570	3,140	44.0	500	25
56.5	76	60	10	62	6.6 × 11 × 6.1			2,500	5,490	78.9	720	30
69	98	75	13	80	9 × 14 × 8.1	20	20	3,430	8,040	147	1,600	40
89.5	112	88	13	94	9 × 14 × 8.1			6,080	15,900	396	2,620	50
95.5	134	106	18	112	11 × 17 × 11.1			7,550	20,000	487	4,480	60

1N \approx 0.102kgf 1N · m \approx 0.102kgf · m

SWFC TYPE (Inch Standard)

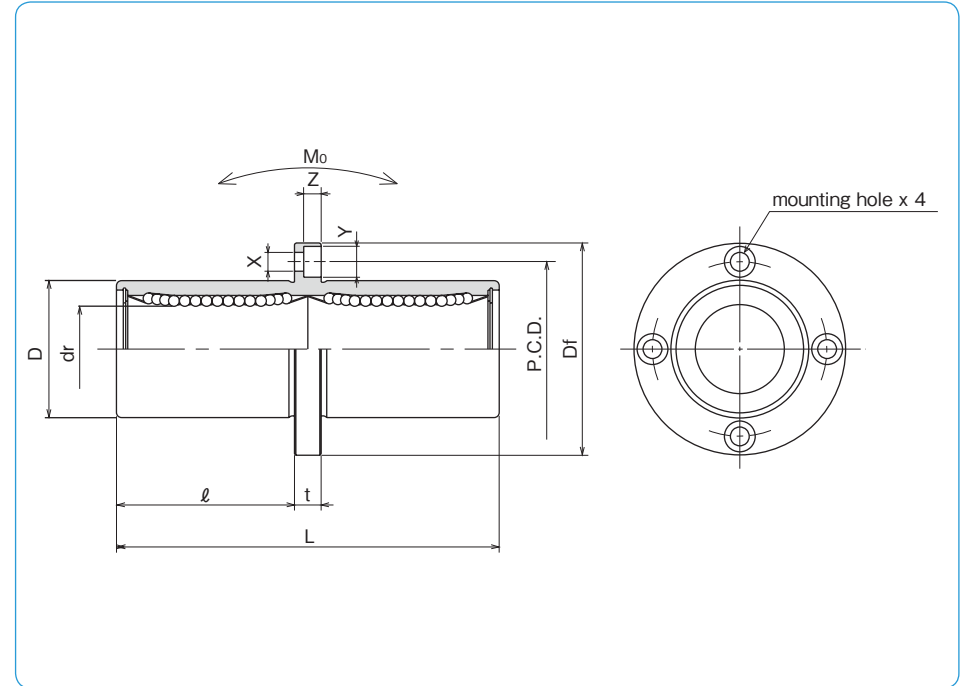
– Center Mount Round Flange Type –



part number structure

example **SWSFC 16 G UU-SK**

specification SWFC: standard SWSFC: anti-corrosion	size	retainer material blank: standard/steel anti-corrosion/stainless steel G: resin	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating	seal blank: without seal UU: seals on both sides
--	------	--	---	--



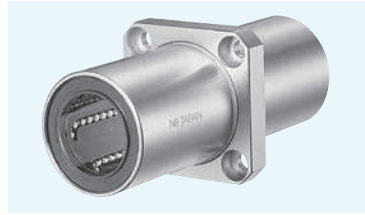
part number				number of ball circuits	major dimensions				
standard steel retainer	resin retainer	anti-corrosion stainless retainer	resin retainer		dr	D		L	
				inch (mm)	tolerance inch/(μm)	inch (mm)	tolerance inch/(μm)	±.012 (±0.3) inch/(mm)	
SWFC 4	SWFC 4G	SWSFC 4	SWSFC 4G	4	.2500 (6.350)		.5000 (12.700)	⁰ / _{-.00050 (-13)}	1.3750 (34.925)
SWFC 6	SWFC 6G	SWSFC 6	SWSFC 6G	4	.3750 (9.525)	⁰ / _{-.00040 (-10)}	.6250 (15.875)	⁰ / _{-.00065 (-16)}	1.5938 (40.481)
SWFC 8	SWFC 8G	SWSFC 8	SWSFC 8G	4	.5000 (12.700)		.8750 (22.225)	⁰ / _{-.00090 (-22)}	2.3750 (60.325)
SWFC10	SWFC10G	SWSFC10	SWSFC10G	4	.6250 (15.875)		1.1250 (28.575)	⁰ / _{-.00100 (-25)}	2.8125 (71.438)
SWFC12	SWFC12G	SWSFC12	SWSFC12G	5	.7500 (19.050)	⁰ / _{-.00050 (-12)}	1.2500 (31.750)	⁰ / _{-.00075 (-19)}	3.0937 (78.581)
SWFC16	SWFC16G	SWSFC16	SWSFC16G	6	1.0000 (25.400)		1.5625 (39.688)	⁰ / _{-.00090 (-22)}	4.2813 (108.744)
SWFC20	SWFC20G	SWSFC20	SWSFC20G	6	1.2500 (31.750)		2.0000 (50.800)	⁰ / _{-.00100 (-25)}	5.0000 (127.000)
SWFC24	SWFC24G	SWSFC24	SWSFC24G	6	1.5000 (38.100)	⁰ / _{-.00060 (-15)}	2.3750 (60.325)	⁰ / _{-.00100 (-25)}	5.6875 (144.463)
SWFC32	SWFC32G	SWSFC32	SWSFC32G	6	2.0000 (50.800)		3.0000 (76.200)	⁰ / _{-.00100 (-25)}	7.7500 (196.850)

flange						eccentricity inch (μm)	perpendicularity inch (μm)	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter inch/(mm)
l	Df	t	P.C.D.	X × Y × Z	dynamic C N			static Co N				
.5781 (14.684)	1.2500 (31.750)	.2188 (5.556)	.8750 (22.225)	.1563 × .2500 × .1406 (3.969 × 6.350 × 3.572)	323	530	2.0	40 (6.350)				
.6719 (17.066)	1.5000 (38.100)	.2500 (6.350)	1.0625 (26.988)	.1875 × .2969 × .1719 (4.763 × 7.541 × 4.366)	353	630	2.7	60 (9.525)				
1.0625 (26.988)	1.7500 (44.450)	.2500 (6.350)	1.3125 (33.338)	.1875 × .2969 × .1719 (4.763 × 7.541 × 4.366)	813	1,570	11.5	126 (12.700)				
1.2813 (32.544)	2.0000 (50.800)	.2500 (6.350)	1.5625 (39.688)	.1875 × .2969 × .1719 (4.763 × 7.541 × 4.366)	1,230	2,350	20.0	215 (15.875)				
1.3906 (35.322)	2.1875 (55.563)	.3125 (7.938)	1.7188 (43.656)	.2188 × .3438 × .2031 (5.556 × 8.731 × 5.159)	1,370	2,740	26.5	280 (19.050)				
1.9844 (50.403)	2.5000 (63.500)	.3125 (7.938)	2.0313 (51.594)	.2188 × .3438 × .2031 (5.556 × 8.731 × 5.159)	1,570	3,140	41.2	515 (25.400)				
2.3125 (58.738)	3.1250 (79.375)	.3750 (9.525)	2.5625 (65.088)	.2813 × .4063 × .2656 (7.144 × 10.319 × 6.747)	2,500	5,490	84.8	1,020 (31.750)				
2.5938 (65.882)	3.7500 (95.250)	.5000 (12.700)	3.0625 (77.788)	.3437 × .5000 × .3281 (8.731 × 12.700 × 8.334)	3,430	8,040	143	1,630 (38.100)				
3.6250 (92.075)	4.3750 (111.125)	.5000 (12.700)	3.6875 (93.662)	.3437 × .5000 × .3281 (8.731 × 12.700 × 8.334)	6,080	15,900	399	2,800 (50.800)				

1N=0.225lbf 1N·m=0.738lbf·ft
1kg=2.205lbf

SWKC TYPE (Inch Standard)

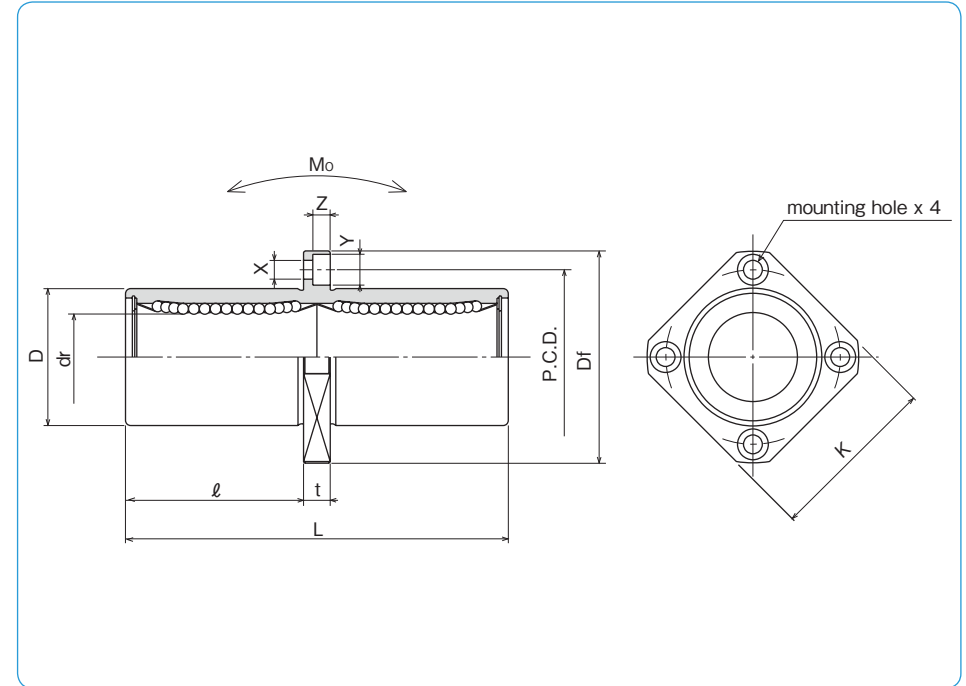
– Center Mount Square Flange Type –



part number structure

example **SWSKC 16 G UU-SK**

specification SWKC: standard SWSKC: anti-corrosion	size	retainer material blank: standard/steel anti-corrosion/stainless steel G: resin	outer cylinder surface treatment blank: no surface treatment SK: electroless nickel plating LF: low temperature black chrome treatment with fluoride coating SB: black oxide (not available on anti-corrosion type) SC: industrial chrome plating	seal blank: without seal UU: seals on both sides
--	------	--	---	--



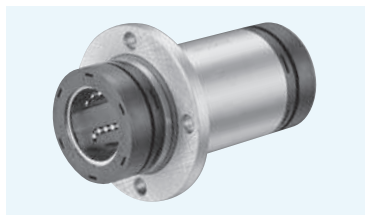
part number				number of ball circuits	major dimensions				
standard steel retainer	anti-corrosion resin retainer	stainless resin retainer	resin retainer		dr	D		L	
inch (mm)	inch (mm)	inch (mm)	inch (mm)	inch (mm)	tolerance inch/(μm)	inch (mm)	tolerance inch/(μm)	±.012 (±0.3) inch/(mm)	
SWKC 4	SWKC 4G	SWSKC 4	SWSKC 4G	4	.2500 (6.350)		.5000 (12.700)	0 (-13)	1.3750 (34.925)
SWKC 6	SWKC 6G	SWSKC 6	SWSKC 6G	4	.3750 (9.525)	0 (-10)	.6250 (15.875)	0 (-16)	1.5938 (40.481)
SWKC 8	SWKC 8G	SWSKC 8	SWSKC 8G	4	.5000 (12.700)		.8750 (22.225)	0 (-16)	2.3750 (60.325)
SWKC10	SWKC10G	SWSKC10	SWSKC10G	4	.6250 (15.875)		1.1250 (28.575)	0 (-16)	2.8125 (71.438)
SWKC12	SWKC12G	SWSKC12	SWSKC12G	5	.7500 (19.050)	0 (-12)	1.2500 (31.750)	0 (-19)	3.0937 (78.581)
SWKC16	SWKC16G	SWSKC16	SWSKC16G	6	1.0000 (25.400)		1.5625 (39.688)	0 (-22)	4.2813 (108.744)
SWKC20	SWKC20G	SWSKC20	SWSKC20G	6	1.2500 (31.750)	0 (-15)	2.0000 (50.800)	0 (-25)	5.0000 (127.000)
SWKC24	SWKC24G	SWSKC24	SWSKC24G	6	1.5000 (38.100)		2.3750 (60.325)	0 (-25)	5.6875 (144.463)
SWKC32	SWKC32G	SWSKC32	SWSKC32G	6	2.0000 (50.800)		3.0000 (76.200)	0 (-25)	7.7500 (196.850)

flange						eccentricity inch (μm)	perpendicularity inch (μm)	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter inch (mm)		
ℓ	Df	K	t	P.C.D.	X×Y×Z			C N	Co N					
inch/(mm)	inch/(mm)	inch/(mm)	inch/(mm)	inch/(mm)	inch/(mm)									
.5781 (14.684)	1.2500 (31.750)	1.0000 (25.400)	.2188 (5.556)	.8750 (22.225)	.1563×.2500×.1406 (3.969×6.350×3.572)	.0006 (15)	.0006 (15)	323	530	2.0	33	1/4 (6.350)		
.6719 (17.066)	1.5000 (38.100)	1.2500 (31.750)	.2500 (6.350)	1.0625 (26.988)	.1875×.2969×.1719 (4.763×7.541×4.366)			353	630	2.7	45	3/8 (9.525)		
1.0625 (26.988)	1.7500 (44.450)	1.3750 (34.925)	.2500 (6.350)	1.3125 (33.338)	.1875×.2969×.1719 (4.763×7.541×4.366)			813	1,570	11.5	106	1/2 (12.700)		
1.2813 (32.544)	2.0000 (50.800)	1.5000 (38.100)	.2500 (6.350)	1.5625 (39.688)	.1875×.2969×.1719 (4.763×7.541×4.366)			1,230	2,350	20.0	200	5/8 (15.875)		
1.3906 (35.322)	2.1875 (55.563)	1.6875 (42.863)	.3125 (7.938)	1.7188 (43.656)	2.188×.3438×.2031 (5.556×8.731×5.159)			.0008 (20)	.0008 (20)	1,370	2,740	26.5	240	3/4 (19.050)
1.9844 (50.403)	2.5000 (63.500)	2.0000 (50.800)	.3125 (7.938)	2.0313 (51.594)	2.188×.3438×.2031 (5.556×8.731×5.159)					1,570	3,140	41.2	470	1 (25.400)
2.3125 (58.738)	3.1250 (79.375)	2.5000 (63.500)	.3750 (9.525)	2.5625 (65.088)	2.813×.4063×.2656 (7.144×10.319×6.747)					2,500	5,490	84.8	935	1-1/4 (31.750)
2.5938 (65.882)	3.7500 (95.250)	3.0000 (76.200)	.5000 (12.700)	3.0625 (77.788)	3.437×.5000×.3281 (8.731×12.700×8.334)					3,430	8,040	143	1,460	1-1/2 (38.100)
3.6250 (92.075)	4.3750 (111.125)	3.5000 (88.900)	.5000 (12.700)	3.6875 (93.662)	3.437×.5000×.3281 (8.731×12.700×8.334)					6,080	15,900	399	2,620	2 (50.800)

1N=0.225lbf 1N·m=0.738lb·ft
1kg=2.205lbs

GMF-W-E TYPE

— Round Flange Double-Wide Type with pilot end—



part number structure

example **GMF25WUU-E**

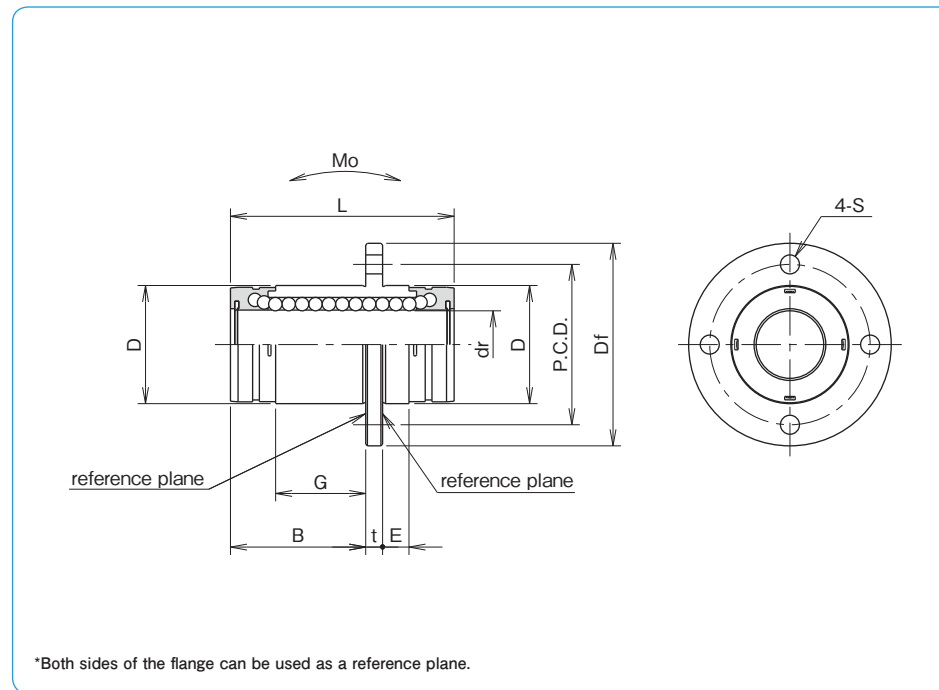
GMF type

inner contact diameter (dr)

with pilot end

seals on both sides

double-wide type



part number	number of ball circuits	major dimensions							
		dr mm	tolerance μm	D mm	tolerance μm	L mm	B mm	G mm	E mm
GMF 6W UU-E	4	6	0	12	0	28	13.8	7.6	4
GMF 8W UU-E	4	8	0	15	-13	36	21.1	14.2	4
GMF10W UU-E	4	10	0	19	0	41	24.2	15.4	4
GMF12W UU-E	4	12	-10	21	0	46	30.2	22.4	4
GMF13W UU-E	4	13	-10	23	-16	48	30.65	21.3	4
GMF16W UU-E	4	16	-10	28	-16	53	33.3	22.6	5
GMF20W UU-E	6	20	0	32	0	65	44.2	33.4	5
GMF25W UU-E	6	25	-12	40	-19	91	65.5	50.0	5
GMF30W UU-E	6	30	-12	45	-19	99	69.3	52.6	5

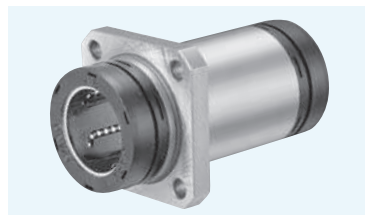
*UU type is standard.

Df mm	flange			perpendicularity μm	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter mm
	t mm	P.C.D. mm	S mm		dynamic C N	static Co N			
28	4	20	3.5	15	323	530	1.5	25	6
32	4	24	3.5		431	784	3.3	38	8
40	4	29	4.5		588	1,100	5.0	62	10
42	4	32	4.5		813	1,570	7.6	75	12
43	4	33	4.5		813	1,570	8.1	83	13
48	4	38	4.5		1,230	2,350	13.8	115	16
54	5	43	5.5		1,400	2,740	20.0	188	20
62	5	51	5.5	20	1,560	3,140	34.8	350	25
74	8	60	6.6		2,490	5,490	57.5	502	30

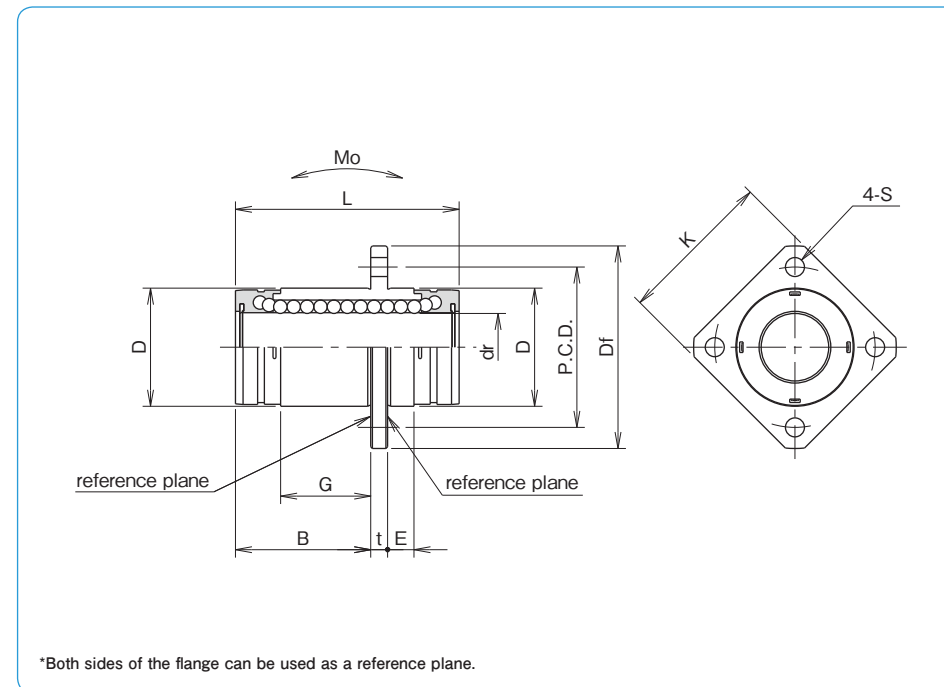
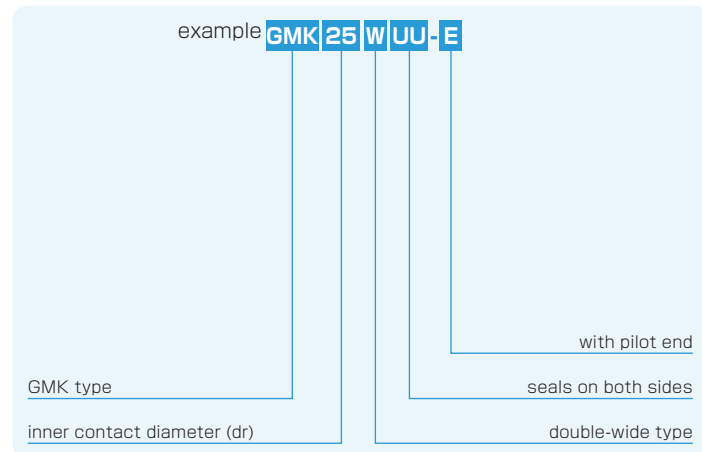
1N≐0.102kgf 1N·m≐0.102kgf·m

GMK-W-E TYPE

— Square Flange Double-Wide Type with pilot end—



part number structure



part number	number of ball circuits	major dimensions							
		dr mm	dr tolerance μm	D mm	D tolerance μm	L mm	B mm	G mm	E mm
GMK 6W UU-E	4	6	0	12	0	28	13.8	7.6	4
GMK 8W UU-E	4	8	0	15	-13	36	21.1	14.2	4
GMK 10W UU-E	4	10	0	19	0	41	24.2	15.4	4
GMK 12W UU-E	4	12	-10	21	0	46	30.2	22.4	4
GMK 13W UU-E	4	13	-10	23	-16	48	30.65	21.3	4
GMK 16W UU-E	4	16	-10	28	-16	53	33.3	22.6	5
GMK 20W UU-E	6	20	0	32	0	65	44.2	33.4	5
GMK 25W UU-E	6	25	-12	40	-19	91	65.5	50.0	5
GMK 30W UU-E	6	30	-12	45	-19	99	69.3	52.6	5

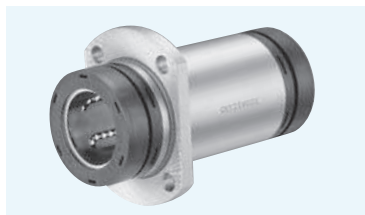
*UU type is standard.

Df mm	t mm	flange			perpendicularity μm	basic load rating		allowable static moment Mo N·m	mass g	shaft diameter mm
		P.C.D. mm	K mm	S mm		dynamic C N	static Co N			
28	4	20	22	3.5	15	323	530	1.5	20	6
32	4	24	25	3.5		431	784	3.3	32	8
40	4	29	30	4.5		588	1,100	5.0	50	10
42	4	32	32	4.5		813	1,570	7.6	63	12
43	4	33	34	4.5		813	1,570	8.1	72	13
48	4	38	37	4.5		1,230	2,350	13.8	99	16
54	5	43	42	5.5	20	1,400	2,740	20.0	165	20
62	5	51	50	5.5		1,560	3,140	34.8	325	25
62	5	51	50	5.5		1,560	3,140	34.8	325	25
74	8	60	58	6.6		2,490	5,490	57.5	437	30

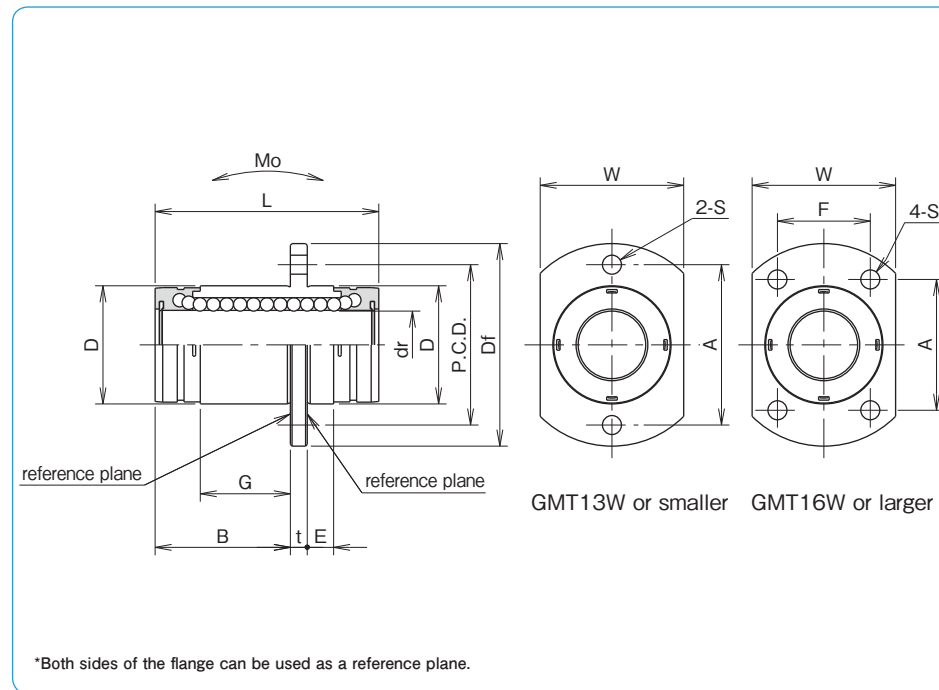
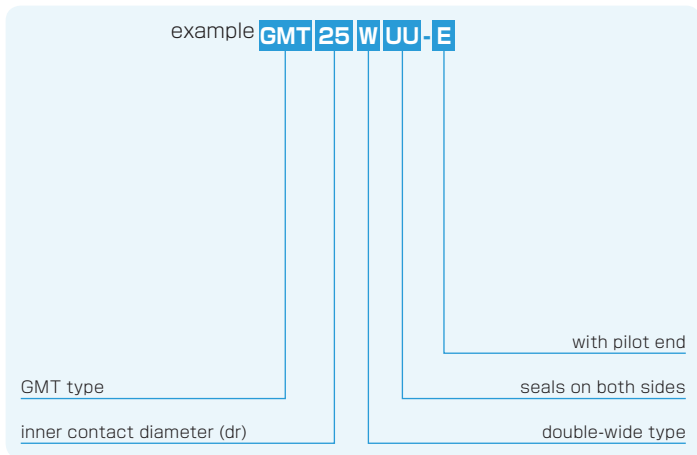
1N≒0.102kgf 1N·m≒0.102kgf·m

GMT-W-E TYPE

— Two Side Cut Double-Wide Flange Type with pilot end—



part number structure



part number	number of ball circuits	major dimensions								
		mm	dr tolerance μm	mm	D tolerance μm	mm	B	G	E	
GMT 6W UU-E	4	6	0	12	0	28	13.8	7.6	4	
GMT 8W UU-E	4	8		15	-13	36	21.1	14.2	4	
GMT10W UU-E	4	10		19	-16	41	24.2	15.4	4	
GMT12W UU-E	4	12		21		0	46	30.2	22.4	4
GMT13W UU-E	4	13		23		48	30.65	21.3	4	
GMT16W UU-E	4	16	28	53	33.3	22.6	5			
GMT20W UU-E	6	20	-12	32	0	65	44.2	33.4	5	
GMT25W UU-E	6	25		40	-19	91	65.5	50.0	5	
GMT30W UU-E	6	30		45	99	69.3	52.6	5		

*UU type is standard.

Df	t	flange				perpendicularity μm	basic load rating		allowable static moment M_o	mass	shaft diameter
		W	A	F	S		dynamic C	static C_o			
28	4	18	20	—	3.5	15	323	530	1.5	21	6
32	4	21	24	—	3.5		431	784	3.3	33	8
40	4	25	29	—	4.5		588	1,100	5.0	52	10
42	4	27	32	—	4.5		813	1,570	7.6	65	12
43	4	29	33	—	4.5		813	1,570	8.1	74	13
48	4	34	31	22	4.5	20	1,230	2,350	13.8	104	16
54	5	38	36	24	5.5		1,400	2,740	20.0	171	20
62	5	46	40	32	5.5		1,560	3,140	34.8	331	25
74	8	51	49	35	6.6		2,490	5,490	57.5	447	30

1N \approx 0.102kgf 1N \cdot m \approx 0.102kgf \cdot m