

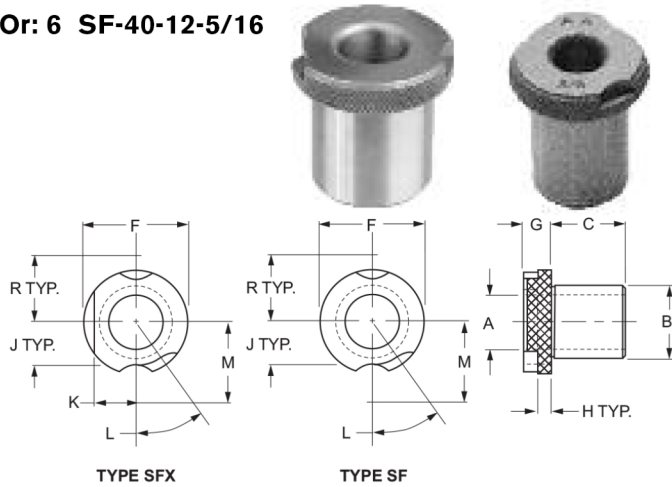
# SLIP FIXED RENEWABLES - TYPE SF & SFX

When ordering specify:

Example:

Quantity	Bushing Type	I.D.(A)	O.D.(B)	Length(C)
6	SF	5/16	5/8	3/4

Or: 6 SF-40-12-5/16



## SLIP/FIXED RENEWABLE HEAD DIMENSIONS

BODY O.D. B	F	G	H	J	K*	L	M	R
3/16	5/16	3/16	3/32	3/32	-	55°	-	17/64
1/4	27/64	1/4	1/8	9/64	-	30°	-	23/64
5/16	35/64	1/4	1/8	11/64	11/64	65°	5/8	1/2
3/8	5/8	1/4	1/8	15/64	-	30°	-	29/64
7/16	5/8	1/4	1/8	15/64	-	30°	-	29/64
1/2	25/32	1/4	1/8	19/64	17/64	65°	3/4	5/8
9/16	7/8	1/4	1/8	23/64	-	30°	-	37/64
5/8	7/8	1/4	1/8	23/64	-	30°	-	37/64
3/4	1-3/64	1/4	1/8	27/64	25/64	50°	7/8	3/4
7/8	1-1/4	3/8	3/16	33/64	-	30°	-	53/64
1	1-25/64	3/8	3/16	19/32	1/2	35°	1-7/64	59/64
1-3/8	1-49/64	3/8	3/16	25/32	11/16	30°	1-19/64	1-7/64
1-3/4	2-5/16	3/8	3/16	1	7/8	30°	1-41/64	1-25/64
2-1/4	2-49/64	3/8	3/16	1-1/4	1-1/8	25°	1-57/64	1-41/64

A - I.D. RANGE Drill Size Decimal Range	B - O.D. TOLERANCE Nominal DIGITAL RANGE	C	ANSI SYMBOL	PRICE CODE	LOCK SCREW CLAMPS
#80 - #70 (.0135 - .0280) .35 - .70mm	3/16 .1875 .1873	*1/4	SF-12-4	233	LS-0
		*5/16	SF-12-5	235	
		*3/8	SF-12-6	237	
		*1/2	SF-12-8	238	
		*5/8	SF-12-10	248	
		*3/4	SF12-12	260	
#69 - 3/64 (.0292 - .0469) .75 - 1.25mm	3/16 .1875 .1873	1/4	SF-12-4	214	LS-0
		*5/16	SF-12-5	216	
		*3/8	SF-12-6	219	
		*1/2	SF-12-8	221	
		*5/8	SF-12-10	225	
#55 - 1/16 (.0520 - .0625) 1.30 - 1.60mm	3/16 .1875 .1873	1/4	SF-12-4	182	LS-0
		*5/16	SF-12-5	184	
		*3/8	SF-12-6	186	
		*1/2	SF-12-8	187	
		*5/8	SF-12-10	191	
#52-#40 (.0635 - .0980) 1.65 - 2.50mm	3/16 .1875 .1873	1/4	SF-12-4	141	LS-0
		*5/16	SF-12-5	143	
		*3/8	SF-12-6	144	
		*1/2	SF-12-8	147	
		*5/8	SF-12-10	151	
#39-9/64 (.0995 - .1406) 2.55 - 3.50mm	1/4 .2500 .2498	1/4	SF-16-4	136	TW-2
		5/16	SF-16-5	136	
		*3/8	SF-16-6	138	
		*1/2	SF-16-8	141	
		*5/8	SF-16-10	146	
#80-#70 (.0135 - .0280) .35 - .70mm	5/16 .3125 .3123	*1/4	SF-20-4	233	LS-1 RC-01 RK-01 RK-11
		*5/16	SF-20-5	235	
		*3/8	SF-20-6	237	
		*1/2	SF-20-8	238	
		*3/4	SF20-12	260	

A - I.D. RANGE Drill Size Decimal Range	B - O.D. TOLERANCE Nominal DIGITAL RANGE	C	ANSI SYMBOL	PRICE CODE	LOCK SCREW CLAMPS
#69 - 3/64 (.0292 - .0469) .75 - 1.25mm	5/16 .3125 .3123	*5/16	SF-20-5	216	LS-1
		*3/8	SF-20-6	219	RC-01
		*1/2	SF-20-8	221	RK-01
		*3/4	SF-20-12	230	RK-11
#55 - 1/16 (.0520 - .0625) 1.30 - 1.60mm	5/16 .3125 .3123	*5/16	SF-20-5	184	LS-1
		*3/8	SF-20-6	186	RC-01
		*1/2	SF-20-8	187	RK-01
		*3/4	SF-20-12	197	RK-11
#52 - #43 (.0635 - .0890) 1.65 - 2.35mm	5/16 .3125 .3123	5/16	SF-20-5	142	LS-1 RC-01 RK-01 RK-11
		*3/8	SF-20-6	144	
		*1/2	SF-20-8	147	
		*3/4	SF-20-12	154	
		*1	SF-20-16	172	
#42 - #31 (.0935 - .1200) 2.40 - 3.15mm	5/16 .3125 .3123	5/16	SF-20-5	136	LS-1 RC-01 RK-01 RK-11
		3/8	SF-20-6	138	
		*1/2	SF-20-8	141	
		*3/4	SF-20-12	150	
		*1	SF-20-16	163	
		*1-3/8	SF-20-22	185	
1/8-#10 (.1250 - .1935) 3.20 - 4.90mm	5/16 .3125 .3123	5/16	SF-20-5	135	LS-1 RC-01 RK-01 RK-11
		3/8	SF-20-6	136	
		1/2	SF-20-8	139	
		5/8	SF-20-10	143	
		*3/4	SF-20-12	148	
		*1	SF-20-16	161	
#10-#1 (.1935 - .2280) 4.90 - 5.80mm	3/8 .3750 .3748	1/4	SF-20-4	117	TW-2
		5/16	SF-20-5	120	
		3/8	SF-20-6	122	
		1/2	SF-20-8	125	
		5/8	SF-20-10	126	
		*3/4	SF-20-12	128	
		*1	SF-20-16	135	

\* Counterbored leaving correct drill bearing length and chip clearance.

# SLIP FIXED RENEWABLES - TYPE SF & SFX



A - I.D. RANGE Drill Size Decimal Range	B - O.D. TOLERANCE Nominal DIGITAL RANGE	C	ANSI SYMBOL	PRICE CODE	LOCK SCREW CLAMPS
<b>A - L</b> (.2340 - .2900)  5.90 - 7.40mm	<b>7/16</b> .4375 .4373	1/4	SF-28-4	117	TW-2
		5/16	SF-28-5	120	
		3/8	SF-28-6	122	
		1/2	SF-28-8	125	
		5/8	SF-28-10	126	
		3/4	SF-28-12	128	
		*1	SF-28-16	135	
<b>#28 - 3/16</b> (.1405 - .1875)  3.60 - 4.75mm	<b>1/2</b> .5000 .4998	5/16	SFX-32-5	126	LS-1 RC-01 RK-01 RK-11
		3/8	SFX-32-6	128	
		1/2	SFX-32-8	130	
		*3/4	SFX-32-12	135	
		*1	SFX-32-16	143	
		*1-3/8	SFX-32-22	152	
		*1-1/2	SFX-32-24	157	
*1-3/4	SFX-32-28	164			
<b>#12 - 11/32</b> (.1890 - .3437)  4.80 - 8.70mm	<b>1/2</b> .5000 .4998	5/16	† SFX-32-5	120	LS-1 RC-01 RK-01 RK-11
		3/8	† SFX-32-6	122	
		1/2	† SFX-32-8	124	
		3/4	† SFX-32-12	128	
		*1	† SFX-32-16	135	
		*1-3/8	† SFX-32-22	147	
		*1-1/2	† SFX-32-24	150	
		*1-3/4	† SFX-32-28	155	
*2-1/8	† SFX-32-34	221			
<b>M-11/32</b> (.2950 - .3437)  7.50 - 14.00mm	<b>9/16</b> .5625 .5623	1/4	SF-36-4	117	TW-2
		5/16	SF-36-5	120	
		3/8	SF-36-6	122	
		1/2	SF-36-8	125	
		5/8	SF-36-10	126	
		3/4	SF-36-12	128	
		1	SF-36-16	135	
<b>S - 7/16</b> (.3480 - .4375)  8.90 - 11.00mm	<b>5/8</b> .6250 .6248	3/8	SF-40-6	123	TW-2
		1/2	SF-40-8	123	
		5/8	SF-40-10	125	
		3/4	SF-40-12	126	
		1	SF-40-16	129	
		1-1/4	SF-40-20	147	
		<b>9/32 - 9/16</b> (.2812 - .5625)  7.20 - 14.00mm	<b>3/4</b> .7500 .7498	3/8	
1/2	† SFX-48-8			123	
3/4	† SFX-48-12			126	
1	† SFX-48-16			130	
1-3/8	† SFX-48-22			147	
1-1/2	† SFX-48-24			151	
1-3/4	† SFX-48-28			156	
2-1/8	† SFX-48-34			166	
*2-1/2	† SFX-48-40			226	
*3	† SFX-48-48	257			
<b>35/64-21/32</b> (.5469 - .6562)  13.50 - 16.50mm	<b>7/8</b> .8750 .8748	1/2	SF-56-8	135	TW-7
		5/8	SF-56-10	136	
		3/4	SF-56-12	137	
		1	SF-56-16	141	
		1-1/4	SF-56-20	148	
		1-1/2	SF-56-24	153	

A - I.D. RANGE Drill Size Decimal Range	B - O.D. TOLERANCE Nominal DIGITAL RANGE	C	ANSI SYMBOL	PRICE CODE	LOCK SCREW CLAMPS
<b>15/32 - 25-32</b> (.4687 - .7812)  12.00 - 19.50mm	<b>1</b> 1.0000 .9998	1/2	† SFX-64-8	135	LS-2 RC-02 RK-02 RK-12
		3/4	† SFX-64-12	136	
		1	† SFX-64-16	141	
		1-3/8	† SFX-64-22	148	
		1-1/2	† SFX-64-24	152	
		1-3/4	† SFX-64-28	161	
		2-1/8	† SFX-64-34	177	
		2-1/2	† SFX-64-40	234	
		3	† SFX-64-48	259	
		<b>23/32 - 1-1/16</b> (.7187 - 1.0625)  18.50 - 27.00mm	<b>1-3/8</b> 1.3750 1.3747	3/4	
1	† SFX-88-16			175	
1-3/8	† SFX-88-22			184	
1-1/2	† SFX-88-24			190	
1-3/4	† SFX-88-28			198	
2-1/8	† SFX-88-34			212	
2-1/2	† SFX-88-40			244	
<b>31/32 - 1-13/32</b> (.9687 - 1.4062)  25.00 - 35.00mm	<b>1-3/4</b> 1.7500 1.7497	3/4	† SFX-112-12	202	LS-3 RC-03 RK-03 RK-13
		1	† SFX-112-16	191	
		1-3/8	† SFX-112-22	202	
		1-1/2	† SFX-112-24	210	
		1-3/4	† SFX-112-28	220	
		2-1/8	† SFX-112-34	233	
		2-1/2	† SFX-112-40	252	
<b>1-11/32 - 1-7/8</b> (1.3438 - 1.8750)  35.00 - 47.00mm	<b>2-1/4</b> 2.2500 2.2496	3/4	† SFX-144-12	239	LS-3 RC-03 RK-03 RK-13
		1	† SFX-144-16	228	
		1-3/8	† SFX-144-22	239	
		1-1/2	† SFX-144-24	243	
		1-3/4	† SFX-144-28	245	
		2-1/8	† SFX-144-34	256	
		2-1/2	† SFX-144-40	263	
		3	† SFX-144-48	271	

\* Counterbored leaving correct drill bearing length and chip clearance.  
† Type SF are also available.

BUSHINGS

# EXTENDED RANGE SLIP FIXED RENEWABLE - TYPE SFX

When ordering specify:

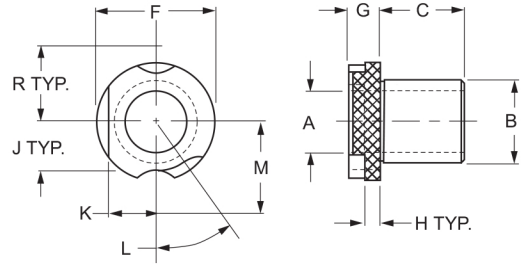
Example:

Quantity	Bushing Type	I.D.(A)	O.D.(B)	Length(C)
6	† SFX	2-1/4	2-3/4	3

Or: 6 SFX-176-48-2-1/4

All extended range bushings are considered special orders and are non-returnable.

† Type SF are also available.



I.D. RANGE	.0003 to .0007	1.0937 to 1.5312	1.5000 to 2.0312	1.5000 to 2.2812	1.7500 to 2.5312	2.2500 to 2.6250	2.2500 to 2.8750	2.6250 to 2.8750	2.5000 to 3.1250	2.7500 to 3.2500	3.0000 to 3.5000	3.0000 to 3.6250	3.3750 to 3.7500	3.3750 to 4.0000	3.6250 to 4.2500
	NOM.	2"	2-1/2	2-3/4	3	3-1/4	3-3/8	3-1/2	3-3/4	4	4-1/4	4-3/8	4-1/2	4-3/4	5
O.D. RANGE (B)	DEC. RANGE	2.0000 to 1.9996	2.5000 to 2.4996	2.7500 to 2.7496	3.0000 to 2.9996	3.2500 to 3.2496	3.3750 to 3.3746	3.5000 to 3.4996	3.7500 to 3.7496	4.0000 to 3.9996	4.2500 to 4.2496	4.3750 to 4.3746	4.5000 to 4.4996	4.7500 to 4.7496	5.0000 to 4.9996
	ANSI CODE	128	160	176	192	208	216	224	240	256	272	280	288	304	320
LENGTH (C)	ANSI CODE	128	160	176	192	208	216	224	240	256	272	280	288	304	320
3/4	12	312	349	371	384	386	391	394	*	*	*	*	*	*	*
1	16	313	352	377	388	393	396	398	*	*	*	*	*	*	*
1-1/4	20	317	356	382	393	398	403	406	*	*	*	*	*	*	*
1-1/2	24	321	360	384	397	404	409	413	*	*	*	*	*	*	*
1-3/4	28	324	365	386	403	410	416	420	*	*	*	*	*	*	*
2	32	332	372	391	407	416	422	426	*	*	*	*	*	*	*
2-1/8	34	335	376	395	-	-	-	-	-	-	-	-	-	-	-
2-1/4	36	337	380	399	413	422	430	434	*	*	*	*	*	*	*
2-1/2	40	342	384	404	419	427	437	441	*	*	*	*	*	*	*
2-3/4	44	347	389	409	425	435	445	451	*	*	*	*	*	*	*
3	48	358	393	413	431	442	455	459	*	*	*	*	*	*	*
3-1/4	52	367	397	418	438	452	463	468	*	*	*	*	*	*	*
3-1/2	56	368	402	422	445	459	473	477	*	*	*	*	*	*	*
3-3/4	60	372	405	426	454	468	483	487	*	*	*	*	*	*	*
4	64	380	410	431	461	476	490	495	*	*	*	*	*	*	*
4-1/4	68	382	415	435	470	484	496	502	*	*	*	*	*	*	*
4-1/2	72	383	420	440	479	492	502	508	*	*	*	*	*	*	*
4-3/4	76	387	425	446	488	498	507	517	*	*	*	*	*	*	*
5	80	391	432	458	496	505	513	526	*	*	*	*	*	*	*
5-1/2	88	-	-	-	-	-	527	543	*	*	*	*	*	*	*
6	96	-	-	-	-	-	-	-	*	*	*	*	*	*	*
6-1/2	104	-	-	-	-	-	-	-	-	*	*	*	*	*	*
7	112	-	-	-	-	-	-	-	-	-	-	*	*	*	*
HEAD F		2-9/16	3-1/16	3-7/16	3-11/16	3-15/16	4-1/16	4-3/16	4-9/16	4-13/16	5-1/16	5-3/16	5-5/16	5-9/16	5-13/16
HEAD G		3/8	3/8	7/16	7/16	7/16	7/16	7/16	7/16	1/2	1/2	1/2	1/2	1/2	1/2
H		3/16	3/16	7/32	7/32	7/32	7/32	7/32	7/32	1/4	1/4	1/4	1/4	1/4	1/4
J		1-1/8	1-3/8	1-35/64	1-43/64	1-51/64	1-55/64	1-59/64	2-7/64	2-15/64	2-23/64	2-27/64	2-31/64	2-39/64	2-47/64
K		1	1-1/4	1-3/8	1-1/2	1-5/8	1-11/16	1-3/4	1-7/8	2	2-1/8	2-3/16	2-1/4	2-3/8	2-1/2
L		30°	25°	25°	25°	25°	25°	25°	25°	25°	20°	20°	20°	20°	20°
R		1-33/64	1-49/64	1-15/16	2-1/16	2-3/16	2-1/4	2-5/16	2-1/2	2-5/8	2-3/4	2-13/16	2-7/8	3	3-1/8
LOCK SCREW		#3	#3	#4	#4	#4	#4	#4	#4	#5	#5	#5	#5	#5	#5

\*- Priced upon request

BUSHINGS