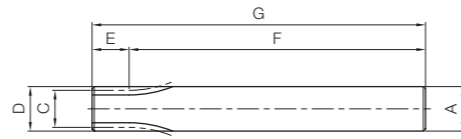


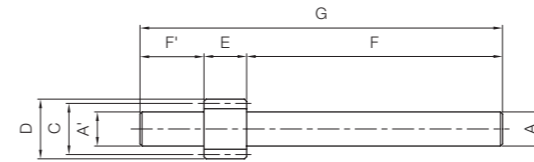


Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—*
Tooth hardness	less than 194HB*
Surface treatment	Black oxide coating

\* Products with module 1.5 use S45C thermal refined materials, so the surface hardness is 200~270 HB.



SA



SB

Catalog Number	Module	No. of teeth	Profile shift coefficient	Shape	Shaft diameter (L)		Pitch dia.	Outside dia.	Face width	Shaft diameter (R)		Total Length
					A'	F'				A	F	
SSS1-10	m1	10	0	SA	—	—	10	12	12	78	90	
SSS1-12		12					14	14				
SSS1-13		13					15	15				
SSS1.5-10	m1.5	10	+0.5	SB	12.2	25	15	19.35	12.2	100	140	
SSS1.5-12		12	0		13.7		18	13.7				
SSS1.5-13		13	0		15.2		19.5	15.2				

- [Caution on Product Characteristics] ① For the center distance of the profile shifted gear, please refer to "Center distance of stock spur gear meshing with profile shifted gear" below.  
 ② The backlash values shown in the table are the theoretical values for the normal direction for the internal ring in mesh with an SS spur gear.

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog Number
Bending strength	Surface durability	Bending strength	Surface durability			
1.62	0.063	0.16	0.0064	0.08~0.18	0.077	SSS1-10
2.52	0.092	0.26	0.0094		0.10	SSS1-12
3.05	0.11	0.31	0.011		0.12	SSS1-13
12.7	0.71	1.30	0.073	0.10~0.22	0.14	SSS1.5-10
9.97	0.89	1.02	0.091		0.17	SSS1.5-12
12.1	1.05	1.23	0.11		0.21	SSS1.5-13

### Center distance of stock spur gear meshing with profile shifted gear

The center distance of the stock gear ( $x = 0$ ) that meshes with profile shifted gear ( $x = +0.5$ ) of  $m = 1$  is shown in the table at right. Please multiply by the module of the gear to be used.

### Center distance where number of teeth is 12 to 30 (unit: mm)

Number of teeth ( $x = 0$ )	Number of teeth ( $x = +0.5$ )	10
12	11.4410	
13	11.9428	
14	12.4446	
15	12.9462	
16	13.4477	
17	13.9492	
18	14.4505	
19	14.9518	
20	15.4530	
21	15.9542	
22	16.4553	
23	16.9564	
24	17.4574	
25	17.9583	
26	18.4592	
27	18.9601	
28	19.4610	
29	19.9618	
30	20.4625	

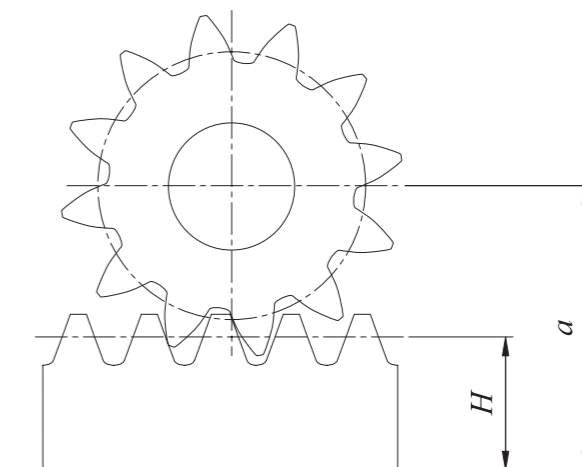
### Center distance where number of teeth is 32 to 62 (unit: mm)

Number of teeth ( $x = 0$ )	Number of teeth ( $x = +0.5$ )	10
32	21.4640	
34	22.4653	
35	22.9660	
36	23.4666	
38	24.4677	
40	25.4688	
42	26.4698	
44	27.4707	
45	27.9712	
46	28.4716	
48	29.4725	
50	30.4733	
52	31.4740	
54	32.4747	
55	32.9750	
56	33.4754	
58	34.4760	
60	35.4766	
62	36.4772	

### Center distance where number of teeth is 64 to 200 (unit: mm)

Number of teeth ( $x = 0$ )	Number of teeth ( $x = +0.5$ )	10
64	37.4777	
65	37.9780	
66	38.4782	
68	39.4787	
70	40.4792	
72	41.4796	
75	42.9803	
76	43.4805	
80	45.4813	
84	47.4820	
85	47.9822	
88	49.4826	
90	50.4830	
95	52.9837	
100	55.4844	
120	65.4866	
150	80.4890	
200	105.4915	

### Mounting distance of a profile shifted gear and the meshing rack



$$a = \frac{zm}{2} + H + xm$$

Where  
 $a$  : Mounting distance  
 $H$  : Pitch line height  
 $m$  : Module  
 $z$  : No. of teeth  
 $x$  : Profile shift coefficient