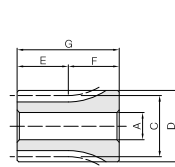
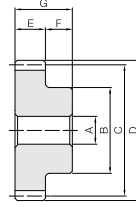




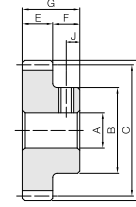
Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



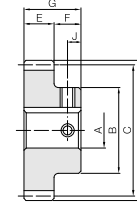
53



51



51T



51K

H To order Hardened Plus, please specify Catalog No. + H.

Catalog Number	Module	No. of teeth	Shape	Bore			Outside dia.	Face width	Hub width	Total length	Keyway	Socket head screw																															
				A-H	B	C						Width × Depth	Size	J																													
SS1.5-12	m1.5	12	S3	8	21	18	21	15	10	25	—	—	—																														
SS1.5-13		13	S3	8	22.5	19.5	22.5							15																													
SS1.5-14		14	S1	8	16	21	24								15																												
SS1.5-14B		14	S1T	8	16	21	24									15																											
SS1.5-15		15	S1	8	18	22.5	25.5										15																										
SS1.5-16		16	S1	8	20	24	27											15																									
SS1.5-16B		16	S1T	8	20	24	27												15																								
SS1.5-17		17	S1	8	21	25.5	28.5													15																							
SS1.5-18		18	S1	8	22	27	30														15																						
SS1.5-19		19	S1	8	23	28.5	31.5															15																					
SS1.5-20		20	S1	8	24	30	33																15																				
SS1.5-21		21	S1	8	25	31.5	34.5																	15																			
SS1.5-22		22	S1	8	26	33	36																		15																		
SS1.5-23		23	S1	8	27	34.5	37.5																			15																	
SS1.5-24		24	S1	8	28	36	39																				15																
SS1.5-25		25	S1	8	30	37.5	40.5																					15															
SS1.5-26		26	S1	10	32	39	42																						15														
SS1.5-26A		26	S1K	10	32	39	42																							15													
SS1.5-27		27	S1	10	34	40.5	43.5																								15												
SS1.5-28		28	S1	10	36	42	45																									15											
SS1.5-28A		28	S1K	10	36	42	45																										15										
SS1.5-29		29	S1	10	37	43.5	46.5																											15									
SS1.5-30		30	S1	10	38	45	48																												15								
SS1.5-30C		30	S1K	10	38	45	48																													15							
SS1.5-32		32	S1	10	40	48	51																														15						
SS1.5-32B		32	S1K	10	40	48	51																															15					
SS1.5-34		34	S1	10	40	51	54																																15				
SS1.5-35		35	S1	10	42	52.5	55.5																																	15			
SS1.5-36		36	S1	10	45	54	57																																		15		
SS1.5-38		38	S1	12	45	57	60																																			15	
SS1.5-40		40	S1	12	45	60	63																																				15

- [Caution on Product Characteristics]
- The key groove used is a JIS B 1301 normal type (Js9) and a set screw is included for products with a tapped hole.
 - The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 38 for more details.
 - The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.
 - When using S3T and S1T set screws for fastening gears to a shaft, only use this method for applications with light load usage. For secure fastening, please use dowel pins in combination.

Allowable torque						Backlash (mm)	Weight (kg)	Catalog Number
Bending strength		Surface durability		Surface durability ^H				
N-m	kgf-m	N-m	kgf-m	N-m	kgf-m			
6.86	0.70	0.36	0.037	1.76	0.18	0.10~0.22	0.059	SS1.5-12
8.84	0.90	0.44	0.045	2.12	0.22		0.070	SS1.5-13
11.1	1.13	0.52	0.053	2.50	0.26		0.047	SS1.5-14
							0.046	SS1.5-14B
12.5	1.27	0.60	0.062	2.91	0.30		0.057	SS1.5-15
13.8	1.41	0.70	0.071	3.36	0.34		0.068	SS1.5-16
							0.067	SS1.5-16B
15.2	1.55	0.80	0.082	3.84	0.39		0.077	SS1.5-17
16.6	1.69	0.91	0.093	4.35	0.44		0.087	SS1.5-18
18.0	1.83	1.03	0.11	4.89	0.50		0.098	SS1.5-19
19.4	1.98	1.15	0.12	5.47	0.56		0.11	SS1.5-20
20.8	2.12	1.29	0.13	6.08	0.62		0.12	SS1.5-21
22.3	2.27	1.43	0.15	6.72	0.69		0.13	SS1.5-22
23.7	2.42	1.58	0.16	7.40	0.75		0.15	SS1.5-23
25.2	2.57	1.73	0.18	8.12	0.83		0.16	SS1.5-24
26.7	2.72	1.90	0.19	8.87	0.90		0.18	SS1.5-25
28.2	2.87	2.06	0.21	9.62	0.98		0.19	SS1.5-26
							0.18	SS1.5-26A
29.7	3.03	2.23	0.23	10.4	1.06		0.21	SS1.5-27
31.2	3.18	2.41	0.25	11.2	1.14		0.23	SS1.5-28
							0.22	SS1.5-28A
32.7	3.34	2.60	0.26	12.1	1.23		0.24	SS1.5-29
34.2	3.49	2.79	0.28	12.9	1.32		0.26	SS1.5-30
							0.24	SS1.5-30C
37.3	3.80	3.19	0.33	14.8	1.51		0.30	SS1.5-32
							0.28	SS1.5-32B
40.4	4.12	3.63	0.37	16.7	1.71		0.32	SS1.5-34
41.9	4.28	3.85	0.39	17.8	1.81		0.35	SS1.5-35
43.5	4.43	4.09	0.42	18.8	1.92		0.38	SS1.5-36
46.6	4.75	4.58	0.47	21.0	2.14		0.40	SS1.5-38
49.8	5.07	5.10	0.52	23.4	2.38		0.44	SS1.5-40

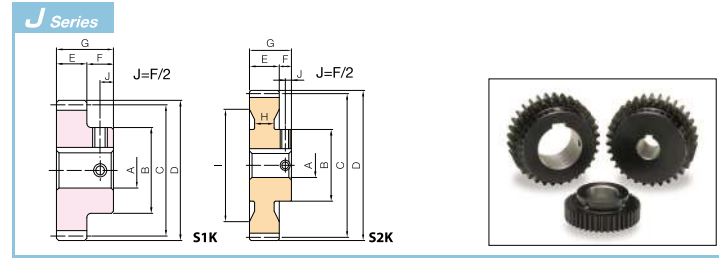
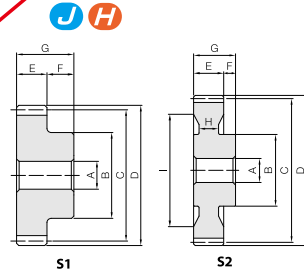
- [Caution on Secondary Operations]
- Please read "Cautions on Performing Secondary Operations" (Page 40) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK system for quick modification of KHK stock gears, is also available.
 - Avoid performing secondary operations that narrow the tooth width, as it affects precision and strength.

[Caution on Hardened Plus] ① See Page 6 for more details on Hardened Plus.



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
Backlash	0.10 to 0.22

* The precision grade of J Series products is equivalent to the value shown in the table.



H To order Hardened Plus, please specify **Catalog No. + H**. Example: **SS1.5-42H**

Catalog Number	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Allowable torque				Weight (kg)		
												Bending strength		Surface durability				
												N-m	kgf-m	N-m	kgf-m			
SS1.5-42	42	H	12	45	63	66	15	10	25	—	—	52.9	5.40	5.65	0.58	25.8	2.63	0.47
SS1.5-44	44	H			66	69						56.1	5.72	6.23	0.64	28.4	2.90	0.51
SS1.5-45	45	H			67.5	70.5						57.7	5.88	6.53	0.67	29.8	3.03	0.52
SS1.5-46	46	H			69	72						59.3	6.04	6.83	0.70	31.1	3.17	0.54
SS1.5-48	48	H			72	75						62.4	6.37	7.47	0.76	34.0	3.46	0.58
SS1.5-50	50	H			75	78						65.7	6.69	8.15	0.83	36.9	3.77	0.62
SS1.5-52	52	H			78	81						68.9	7.02	8.85	0.90	40.0	4.08	0.68
SS1.5-54	54	H			81	84						72.1	7.35	9.59	0.98	43.3	4.41	0.73
SS1.5-55	55	H			82.5	85.5						73.7	7.51	9.96	1.02	44.9	4.58	0.75
SS1.5-56	56	H			84	87						75.3	7.68	10.4	1.06	46.6	4.75	0.77
SS1.5-58	58	H			87	90						78.5	8.01	11.2	1.14	50.1	5.11	0.82
SS1.5-60	60	H			90	93						81.8	8.34	12.0	1.22	53.7	5.47	0.87
SS1.5-62	62	H	93	96	85.0	8.67	12.8	1.31	57.4	5.85	0.95							
SS1.5-64	64	H	96	99	88.3	9.00	13.7	1.40	61.3	6.25	1.00							
SS1.5-65	65	H	97.5	100.5	89.9	9.17	14.2	1.45	63.2	6.45	1.03							
SS1.5-66	66	H	99	102	91.5	9.33	14.6	1.49	65.2	6.65	1.06							
SS1.5-68	68	H	102	105	94.8	9.66	15.6	1.59	69.3	7.07	1.11							
SS1.5-70	70	H	105	108	98.0	10.0	16.6	1.69	73.6	7.50	1.17							
SS1.5-72	72	H	108	111	101	10.3	17.6	1.79	77.9	7.95	1.23							
SS1.5-75	75	H	112.5	115.5	106	10.8	19.2	1.95	84.7	8.64	1.36							
SS1.5-76	76	H	114	117	108	11.0	19.7	2.01	87.0	8.88	1.39							
SS1.5-80	80	H	120	123	114	11.7	22.0	2.24	96.7	9.86	1.52							
SS1.5-84	84	H	126	129	121	12.3	24.4	2.49	107	10.9	1.66							
SS1.5-85	85	H	127.5	130.5	123	12.5	25.1	2.56	109	11.2	1.69							
SS1.5-88	88	H	132	135	128	13.0	27.0	2.75	117	12.0	1.80							
SS1.5-90	90	H	135	138	131	13.3	28.3	2.89	123	12.5	1.87							
SS1.5-95	95	H	142.5	145.5	139	14.2	31.8	3.24	137	14.0	2.07							
SS1.5-100	100	H	150	153	147	15.0	35.5	3.62	152	15.5	1.88							
SS1.5-120	120	H	180	183	180	18.4	52.3	5.33	221	22.5	2.74							
SS1.5-150	150	H	180	225	192	19.6	70.3	7.17	276	28.1	6.62							
SS1.5-200	200	H	200	240	261	26.7	131	13.3	504	51.4	11.8							

- [Caution on Product Characteristics] ① The key groove used is a JIS B 1301 normal type (Js9) and a set screw is included for products with a tapped hole.
 ② The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 38 for more details.
 ③ The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.

- [Caution on Secondary Operations] ① Please read "Cautions on Performing Secondary Operations" (Page 40) when performing modifications and/or secondary operations for safety concerns.
 KHK Quick-Mod Gears, the KHK system for quick modification of KHK stock gears, is also available.
 ② Avoid performing secondary operations that narrow the tooth width, as it affects precision and strength.

- [Caution on Hardened Plus] ① See Page 6 for more details on Hardened Plus.

To order J Series products, please specify: **Catalog No. + J + BORE**. Example: **SS1.5-42J12**

Bore H7	* The product shapes of J Series items are identified by background color.																
	10	12	14	15	16	17	18	19	20	22	25	28	30	32	35		
Keyway Js9	4x1.8			5x2.3				6x2.8				8x3.3				10x3.3	
Screw size	M4			M5				M6				M8					
Catalog Number																	
SS1.5-42 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-44 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-45 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-46 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-48 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-50 J BORE	* S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS1.5-52 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K				
SS1.5-54 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-55 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-56 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-58 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-60 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-62 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-64 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-65 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-66 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-68 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-70 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-72 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS1.5-75 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-76 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-80 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-84 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-85 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-88 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-90 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-95 J BORE				S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS1.5-100 J BORE				S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K		
SS1.5-120 J BORE				S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K	S2K		
SS1.5-150																	
SS1.5-200																	

- [Caution on J series] ① As available-on-request products, these require a lead-time for shipping of 2 working days (excludes the day ordered) after placing an order, and 6 working days for Hardened Plus products.
 Because the machining starts immediately, we cannot accept cancellations. Please see Page 34 for more details.
 ② Number of pieces we can process for one order is 1 to 20 units. For larger quantities, please request price and delivery quotes.
 ③ Keyways are made according to JIS B1301 standards, Js9 tolerance.
 ④ Certain products which would otherwise have a very long tapped hole are counterbored to reduce the length of the tap. For details, please see the KHK Web Catalog.
 ⑤ Areas of products which have been re-worked will not be black oxide coated.
 ⑥ For products having a tapped hole, a set screw is included.
 ⑦ * is a product with the original bore diameter, so Hardened Plus is not available. See Page 6 for more details on Hardened Plus.