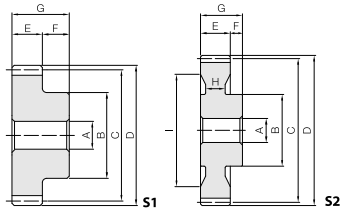
SS Module 2.5
Spur Gears

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	0.14 to 0.28

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



To order Hardened Plus, please specify Catalog No. + H. Example: SS2.5-12H

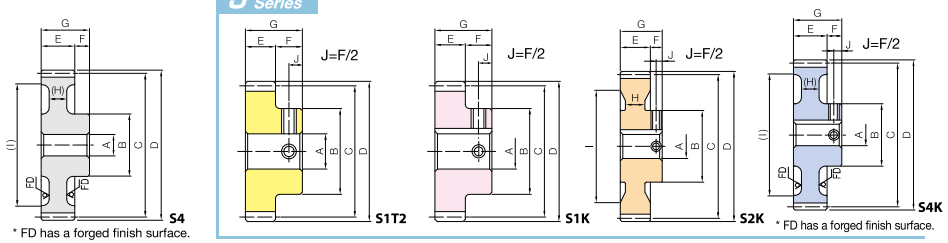
Catalog Number		No. of teeth	Shape	Bore A_{H7}	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total length G	Web thickness (H)	Web O.D. (I)	Allowable torque: Bending strength N·m	Bending strength kgf·m	Surface durability N·m	Surface durability kgf·m	Surface durability (H) N·m	Surface durability (H) kgf·m	Weight (kg)
SS2.5-12	(H)	12	S1	12	23	30	35	25	12	37	—	—	31.8	3.24	1.77	0.18	8.37	0.85	0.15
SS2.5-13	(H)	13			25	32.5	37.5						40.9	4.17	2.14	0.22	10.1	1.03	0.18
SS2.5-14	(H)	14			25	35	40						51.5	5.25	2.53	0.26	11.9	1.21	0.20
SS2.5-15	(H)	15		15	30	37.5	42.5						57.7	5.89	2.96	0.30	13.9	1.41	0.23
SS2.5-16	(H)	16			32	40	45						64.0	6.52	3.43	0.35	16.0	1.63	0.27
SS2.5-17	(H)	17			35	42.5	47.5						70.3	7.17	3.93	0.40	18.3	1.86	0.32
SS2.5-18	(H)	18			38	45	50						76.7	7.82	4.47	0.46	20.7	2.11	0.37
SS2.5-19	(H)	19			39	47.5	52.5						83.2	8.49	5.05	0.51	23.3	2.38	0.41
SS2.5-20	(H)	20			40	50	55						89.8	9.16	5.66	0.58	26.1	2.66	0.45
SS2.5-21	(H)	21			42	52.5	57.5						96.4	9.83	6.30	0.64	29.0	2.96	0.50
SS2.5-22	(H)	22			44	55	60						103	10.5	6.99	0.71	32.1	3.28	0.56
SS2.5-23	(H)	23			46	57.5	62.5						110	11.2	7.71	0.79	35.4	3.61	0.61
SS2.5-24	(H)	24			48	60	65						117	11.9	8.47	0.86	38.8	3.95	0.67
SS2.5-25	(H)	25			50	62.5	67.5						124	12.6	9.26	0.94	42.3	4.32	0.74
SS2.5-26	(H)	26			55	65	70						130	13.3	10.1	1.03	45.9	4.68	0.82
SS2.5-27	(H)	27			60	67.5	72.5						137	14.0	10.9	1.11	49.6	5.06	0.92
SS2.5-28	(H)	28			60	70	75						144	14.7	11.7	1.20	53.4	5.45	0.97
SS2.5-29	(H)	29			62	72.5	77.5						151	15.4	12.6	1.29	57.4	5.86	1.04
SS2.5-30	(H)	30			65	75	80						159	16.2	13.6	1.39	61.6	6.28	1.13
SS2.5-32	(H)	32			70	80	85						173	17.6	15.6	1.59	70.3	7.17	1.30
SS2.5-34	(H)	34		20		85	90						187	19.1	17.7	1.80	79.6	8.11	1.42
SS2.5-35	(H)	35				87.5	92.5						194	19.8	18.8	1.92	84.4	8.61	1.49
SS2.5-36	(H)	36			70	90	95						201	20.5	20.0	2.04	89.5	9.12	1.56
SS2.5-38	(H)	38				95	100						216	22.0	22.4	2.28	99.9	10.2	1.66
SS2.5-40	(H)	40				100	105						230	23.5	24.9	2.54	111	11.3	1.81
SS2.5-42	(H)	42				105	110						245	25.0	27.6	2.82	123	12.5	1.97
SS2.5-44	(H)	44				110	115						260	26.5	30.5	3.11	135	13.8	2.14
SS2.5-45	(H)	45			70	112.5	117.5						267	27.2	31.9	3.26	141	14.4	2.22
SS2.5-46	(H)	46				115	120						274	28.0	33.5	3.41	148	15.1	2.31
SS2.5-48	(H)	48				120	125						289	29.5	36.7	3.74	161	16.4	2.49
SS2.5-50	(H)	50				125	130						304	31.0	40.0	4.08	175	17.9	2.68
SS2.5-52	(H)	52				130	135						319	32.5	43.5	4.44	190	19.3	2.88
SS2.5-54	(H)	54			70	135	140						334	34.0	47.2	4.81	205	20.9	3.08
SS2.5-55	(H)	55				137.5	142.5						341	34.8	49.1	5.01	213	21.7	3.19
SS2.5-56	(H)	56				140	145						349	35.6	51.0	5.20	221	22.5	3.29
SS2.5-58	(H)	58			70	145	150						364	37.1	55.0	5.61	237	24.2	3.51
SS2.5-60	(H)	60	S4		70	150	155				(10)	(127)	379	38.6	59.1	6.03	254	25.9	2.80
SS2.5-62	(H)	62	S2	25	80	155	160					130	394	40.1	63.4	6.46	272	27.7	3.54
SS2.5-64	(H)	64			80	160	165					131	409	41.7	67.8	6.92	290	29.6	3.76
SS2.5-65	(H)	65			80	162.5	167.5					134	416	42.4	70.1	7.15	299	30.5	3.84
SS2.5-66	(H)	66				165	170					140	424	43.2	72.4	7.39	309	31.5	3.87
SS2.5-68	(H)	68				170	175				15	140	439	44.7	77.2	7.87	328	33.4	4.13
SS2.5-70	(H)	70			80	175	180					146	454	46.3	82.1	8.37	348	35.5	4.30
SS2.5-72	(H)	72				180	185					151	469	47.8	87.1	8.89	368	37.6	4.49
SS2.5-75	(H)	75				187.5	192.5					159	492	50.1	95.0	9.69	400	40.8	4.77
SS2.5-76	(H)	76			80	190	195					160	499	50.9	97.7	9.97	411	41.9	4.90
SS2.5-80	(H)	80	S4		80	200	205					(177)	441	45.0	90.9	9.27	359	36.7	4.42
SS2.5-90	(H)	90		30	90	225	230				(10)	(202)	505	51.5	117	12.0	460	46.9	5.64
SS2.5-100	(H)	100			90	250	255					(227)	569	58.0	147	15.0	573	58.5	6.78
SS2.5-120	(H)	120			100	300	305					(277)	696	71.0	218	22.2	840	85.7	9.38

[Caution on Product Characteristics] ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 38 for more details.
② 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.

J Series



* FD has a forged finish surface.

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To order J Series products, please specify: Catalog No. + J + BORE. Example: SS2.5-12J12

Bore H7	* The product shapes of J Series items are identified by background color.														
Keyway Js9	12	14	15	16	17	18	19	20	22	25	28	30	32	35	40
Screw size	4×1.8	5×2.3				6×2.8				8×3.3			10×3.3		12×3.3
Catalog Number	M4					M5				M6			M8		
SS2.5-12 J BORE	*S1T2														
SS2.5-13 J BORE	*S1K														
SS2.5-14 J BORE	*S1K	S1K													
SS2.5-15 J BORE			*S1K	S1K											
SS2.5-16 J BORE			*S1K	S1K	S1K	S1K									
SS2.5-17 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K							
SS2.5-18 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS2.5-19 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS2.5-20 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K						
SS2.5-21 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
SS2.5-22 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
SS2.5-23 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
SS2.5-24 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K				
SS2.5-25 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
SS2.5-26 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
SS2.5-27 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
SS2.5-28 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
SS2.5-29 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
SS2.5-30 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
SS2.5-32 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-34 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-35 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-36 J BORE			*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-38 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-40 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-42 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-44 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-45 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-46 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-48 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-50 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-52 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-54 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-55 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-56 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-58 J BORE								*S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K
SS2.5-60 J BORE										*S4K	S4K	S4K	S4K	S4K	S4K
SS2.5-62 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-64 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-65 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-66 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-68 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-70 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-72 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-75 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-76 J BORE										*S2K	S2K	S2K	S2K	S2K	S2K
SS2.5-80 J BORE										*S4K	S4K	S4K	S4K	S4K	S4K
SS2.5-90 J BORE												*S4K	S4K	S4K	S4K
SS2.5-100 J BORE												*S4K	S4K	S4K	S4K
SS2.5-120 J BORE												*S4K	S4K	S4K	S4K

To order J Series Hardened Plus products, please specify: Catalog No. + H + J + BORE.
Example: SS2.5-14HJ14

[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 When using S1T2 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.
⑧ * is a product with the original bore diameter, so Hardened Plus is not available. See Page 6 for more details on Hardened Plus.