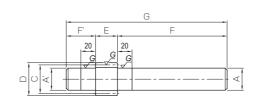
S7

CP Ground Spur Pinion Shafts

	Specifications
Precision grade	JIS grade N7 (JIS B1702-1: 1998)*
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat Treatment	Thermal refined, gear teeth induction hardened
Tooth hardness	50 to 60HRC
Surface treatment	Black oxide coated except for ground part



Catalog Number	Pitch mm	No. of	Dislocation	Shape	Shaft diameter (L)	Shaft length (L)	Pitch dia.	Outside dia.	Face width	Shaft diameter (R	Shaft length (R)
Catalog Number	(Module)	teeth	coefficient	Snape	A'	F'	С	D	Е	Α	F
KSSCPGS5-15 KSSCPGS5-20 KSSCPGS5-25	CP5 (1.5915)	15 20 25	0 0		19.2 27.2 30.2	25	23.87 31.83 39.79	27.06 35.01 42.97	15	19.2 27.2 30.2	100
KSSCPGS10-10 KSSCPGS10-15 KSSCPGS10-20	CP10 (3.1831)	10 15 20	+0.5 0 0	S7	25.2 35.2 40.2	40	31.83 47.75 63.66	41.38 54.11 70.03	30	25.2 35.2 40.2	150

Racks

Bevel Gears

Other Bevel Worm Products Gearboxes Gear Pairs

- [Caution on Product Characteristics] ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see
 - ② The backlash values shown in the table are the theoretical values when these gears and KSRGCP Racks are in mesh.
 - ③ For the center distance of the profile shifted gear, please refer to "Center distance of stock spur gear meshing with pro-file shifted gear" on Pages 40 to 41.

CP Ground Spur Gears



_	G	
	EHF	
	_ <u>_</u>	
_		

Circular pitch 5, 10, 15, 20

Surface treatment	Black oxide coated except for teeth
Tooth hardness	50 to 60HRC
mealment	Gear teeth induction nardened

Specifications

20° S45C

JIS grade N7 (JIS B1702-1: 1998) Standard full depth

*The precision grade of J Series products is

Catalog	Pitch mm	No. of teeth	Chana	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width Hub width Total Length		Distance traveled	Allowable to	orque (N·m)	Allowable to	orque (kgf·m)	Backlash	Weight	
Number	(Module)	teeth	Snape	А н7	В	С	D	Е	F	G	in one turn (mm)	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)
KSSCPG5-20		20		8	25	31.83	35.01				100	24.8	13.7	2.53	1.40		0.14
KSSCPG5-25	CP5	25		10	32	39.79	42.97	15	15	30	125	33.5	23.0	3.41	2.34	0.04 ~ 0.18	0.22
KSSCPG5-30	(1.5915)	30		10	38	47.75	50.93	13	13	30	150	42.3	35.0	4.32	3.57	0.04 0.10	0.33
KSSCPG5-40		40		12	50	63.66	66.85				200	60.4	66.9	6.16	6.82		0.58
KSSCPG10-20		20		15	50	63.66	70.03				200	198	110	20.2	11.2		0.99
KSSCPG10-25	CP10	25		20	60	79.58	85.94	94 30 20	20 50	250	268	184	27.3	18.7	0.06 ~ 0.21	1.49	
KSSCPG10-30	(3.1831)	30	S1	20	75	95.49	101.86	30	20	50	300	339	280	34.5	28.5	0.00 0.21	2.26
KSSCPG10-40		40	31	25	80	127.32	133.69	133.69			400	483	535	49.3	54.6		3.59
KSSCPG15-20	CP15	20		25	75	95.49	105.04				300	744	399	75.9	40.7		3.45
KSSCPG15-25	(4.7746)	25		25	100	119.37	128.92	50	27	77	375	1005	667	102	68.0	$0.07 \sim 0.23$	5.76
KSSCPG15-30	(4.7740)	30		25	110	143.24	152.79				450	1270	1020	130	104		8.04
KSSCPG20-20	CP20	20		25	100	127.32	140.06				400	1590	880	162	89.7		7.50
KSSCPG20-25	(6.3662)	25		30	130	159.15	171.89	60	30	90	500	2140	1470	219	150	$0.09 \sim 0.25$	12.0
KSSCPG20-30	(0.3002)	30		30	150	190.99	203.72				600	2710	2240	276	228		17.2

- [Caution on Product Characteristics] ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 241 for more details.
 - ② The backlash values shown in the table are the theoretical values when these gears and KSRGCP Racks are in mesh.

- ① Please read "Cautions on Performing Secondary Operations" (Page 26) when performing modifications and/or second-
- 2) Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm).

Recommended mating rack



	Distance traveled		orque (N·m)		rque (kgf·m)	Backlash	Weight	Catalog Number
G	in one turn (mm)	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	Catalog Nulliber
	75	21.2	8.49	2.16	0.87		0.34	KSSCPGS5-15
140	100	32.0	16.6	3.26	1.70	$0.04 \sim 0.18$	0.66	KSSCPGS5-20
	125	43.2	27.8	4.40	2.83		0.85	KSSCPGS5-25
	100	121	25.9	12.4	2.64		0.97	KSSCPGS10-10
220	150	169	67.9	17.3	6.93	$0.06 \sim 0.21$	1.87	KSSCPGS10-15
	200	256	133	26.1	13.6		2.64	KSSCPGS10-20

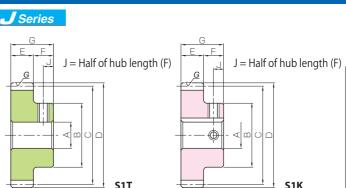
[Caution on Secondary Operations]

- ① Please read "Cautions on Performing Secondary Operations" (Page 26) when performing modifications and/or secondary operations for safety concerns.
- 2) Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm). Please use a carbide tool or the like when machining shafts that are close to the tooth root.











CP Ground Spur Gears

To order J Series products, please specify: Catalog No. + J + BORE.

120000000000000000000000000000000000000	00000000	>>>>>	00000000	200000000	0000000	200000000	0000000	00000000	>>>>>>	000000000	000000000	000000000	000000000	0000000 ¹						
Bore H7		* The product shapes of J Series items are identified by background color.																		
Keyway Js9	8	10	12	14	15	16	17	18	19	20	22	25	28	30	32	35	40	45	50	
Screw size	_	4×	1.8		5×2.3				6×2.8				8×3.3			10×3.3 12×			3 14×3.8	
Catalog Number	M5 M4					M5				M6			M8			M10				
KSSCPG5-20 J BORE	S1T	S1K	S1K																	
KSSCPG5-25 J BORE		S1K	S1K	S1K	S1K	S1K	S1K													
KSSCPG5-30 J BORE		S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K									
KSSCPG5-40 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
KSSCPG10-20 J BORE					S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
KSSCPG10-25 J BORE										S1K	S1K	S1K	S1K	S1K	S1K	S1K				
KSSCPG10-30 J BORE										S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
KSSCPG10-40 J BORE												S1K	S1K	S1K	S1K	S1K	S1K	S1K		

- ① As available-on-request products, these require a lead-time for shipping within 2 working days (excludes the day or-
- 2 Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote
- 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. Please see the Web Catalog or Master Catalog for more details.
- 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.
- ③ When using 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.

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