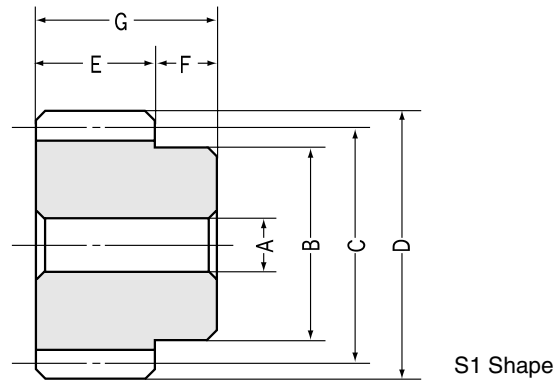




# SSCP CP Spur Gears Circular Pitches 2.5~20



## CP2.5 (m 0.7958)

Catalog No.	Pitch mm (m)	No. of teeth	Bore	Hub dia.	Pitch dia	Outside dia	Face width	Hub width	Total length	Distance traveled in one turn <small>NOTE1</small>	Shape
		z	AH7	B	C	D	E	F	G		
<b>SSCP2.5-20</b>	CP2.5 (0.7958)	20	6	13	15.92	17.51	10	10	20	50	S1
<b>SSCP2.5-25</b>	CP2.5 (0.7958)	25	8	17	19.89	21.49	10	10	20	62.5	S1
<b>SSCP2.5-30</b>	CP2.5 (0.7958)	30	8	21	23.87	25.46	10	10	20	75	S1
<b>SSCP2.5-40</b>	CP2.5 (0.7958)	40	10	28	31.83	33.42	10	10	20	100	S1

## CP5 (m 1.5915)

<b>SSCP5 -20</b>	CP5 (1.5915)	20	8	25	31.83	35.01	15	15	30	100	S1
<b>SSCP5 -25</b>	CP5 (1.5915)	25	10	32	39.79	42.97	15	15	30	125	S1
<b>SSCP5 -30</b>	CP5 (1.5915)	30	10	38	47.74	50.92	15	15	30	150	S1
<b>SSCP5 -40</b>	CP5 (1.5915)	40	12	45	63.66	66.84	15	15	30	200	S1

## CP10 (m 3.1831)

<b>SSCP10 -20</b>	CP10 (3.1831)	20	15	50	63.66	70.03	30	20	50	200	S1
<b>SSCP10 -25</b>	CP10 (3.1831)	25	20	60	79.57	85.93	30	20	50	250	S1
<b>SSCP10 -30</b>	CP10 (3.1831)	30	20	75	95.49	101.86	30	20	50	300	S1
<b>SSCP10 -40</b>	CP10 (3.1831)	40	20	80	127.32	133.69	30	20	50	400	S1

## CP15 (m 4.7746)

<b>SSCP15 -20</b>	CP15 (4.7746)	20	22	75	95.49	105.04	50	27	77	300	S1
<b>SSCP15 -25</b>	CP15 (4.7746)	25	25	100	119.37	128.92	50	27	77	375	S1
<b>SSCP15 -30</b>	CP15 (4.7746)	30	25	110	143.24	152.79	50	27	77	450	S1

## CP20 (m 6.3662)

<b>SSCP20 -20</b>	CP20 (6.3662)	20	25	100	127.32	140.06	60	30	90	400	S1
<b>SSCP20 -25</b>	CP20 (6.3662)	25	30	130	159.16	171.89	60	30	90	500	S1
<b>SSCP20 -30</b>	CP20 (6.3662)	30	30	150	190.99	203.72	60	30	90	600	S1

**CAUTION:** SSCP and SS spur gears are similar in appearance and dimensions. Please check the identifying marking before use.

**NOTE 1:** The amount denotes the distance in mm that a pinion travels on the rack in one revolution.

**Specifications**

Precision grade	JIS N8 grade (JIS B1702-1: 1998) OLD JIS 4 grade (JIS B1702: 1976)	Tooth hardness	Less than 194HB
Gear teeth	Standard full depth	Surface treatment	Black oxide
Pressure angle	20°	Tooth surface finish	Cut
Material	S45C	Datum reference surface for gear cutting	Bore
Heat treatment	—	Secondary Operations	Possible

Allowable torque (N·m) <small>NOTE 2</small>		Allowable torque (kgf·m)		Backlash (mm) <small>NOTE 3</small>	Weight (kgf)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
3.637	0.1981	(0.3709)	(0.0202)	0.06 ~ 0.20	0.02	<b>SSCP2.5 -20</b> <b>SSCP2.5 -25</b> <b>SSCP2.5 -30</b> <b>SSCP2.5 -40</b>
5.005	0.3236	(0.5104)	(0.033)	0.08 ~ 0.22	0.04	
6.419	0.4844	(0.6546)	(0.0494)	0.08 ~ 0.22	0.06	
9.326	0.8934	(0.951)	(0.0911)	0.08 ~ 0.22	0.11	

21.83	1.317	(2.226)	(0.1343)	0.09 ~ 0.24	0.16	<b>SSCP5 -20</b> <b>SSCP5 -25</b> <b>SSCP5 -30</b> <b>SSCP5 -40</b>
30.04	2.149	(3.063)	(0.2191)	0.10 ~ 0.26	0.22	
38.52	3.156	(3.928)	(0.3218)	0.10 ~ 0.26	0.4	
56.01	5.774	(5.711)	(0.5888)	0.10 ~ 0.26	0.54	

174.7	11.35	(17.81)	(1.157)	0.14 ~ 0.34	1.1	<b>SSCP10 -20</b> <b>SSCP10 -25</b> <b>SSCP10 -30</b> <b>SSCP10 -40</b>
240.4	18.47	(24.51)	(1.883)	0.16 ~ 0.37	1.7	
308.2	27.13	(31.43)	(2.767)	0.16 ~ 0.37	2.5	
448	49.95	(45.68)	(5.094)	0.16 ~ 0.37	3.7	

655	43.87	( 66.79)	( 4.474)	0.19 ~ 0.46	3.5	<b>SSCP15 -20</b> <b>SSCP15 -25</b> <b>SSCP15 -30</b>
901.3	72.15	( 91.91)	( 7.357)	0.21 ~ 0.49	5.8	
1156	107.1	(117.9)	(10.92)	0.21 ~ 0.49	8.9	

1397	98.16	(142.5)	(10.01)	0.21 ~ 0.52	7.5	<b>SSCP20 -20</b> <b>SSCP20 -25</b> <b>SSCP20 -30</b>
1923	160.9	(196.1)	(16.41)	0.23 ~ 0.56	12	
2465	237.1	(251.4)	(24.18)	0.23 ~ 0.56	17	

**NOTE 2:** The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 181 for more details.

**NOTE 3:** The backlash values shown in the table are the theoretical values when these gears are meshed with SRCP racks.