



PS

Plastic Spur Gears



Module 1.5

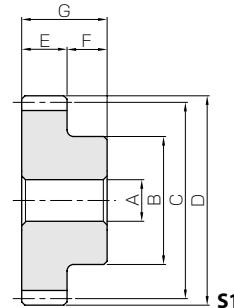
Spur
GearsHelical
GearsInternal
Gears

Racks

CP Racks
& PinionsMiter
GearsBevel
GearsScrew
GearsWorm
Gear PairBevel
GearboxesOther
Products

Specifications	
Precision grade	JIS grade N9 (JIS B1702-1: 1998) * JIS grade 5 (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	MC901
Heat treatment	—
Tooth hardness	(115 ~ 120HRR)
Face width (E)	15
Hub width (F)	10
Total length (G)	25
Screw offset (J)	5

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



Catalog No.	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Allowable torque (N·m)	Allowable torque (kgf·m)	Backlash	Weight	
			A _{H7}	B	C	D	Bending strength	Bending strength	(mm)	(kg)	
PS1.5-15	15	S1	8	18	22.5	25.5	1.39	0.14	0~0.38	0.0084	
PS1.5-16	16			20	24	27	1.53	0.16		0.010	
PS1.5-18	18			22	27	30	1.79	0.18		0.013	
PS1.5-20	20			24	30	33	2.07	0.21		0.016	
PS1.5-22	22			26	33	36	2.34	0.24		0.020	
PS1.5-24	24		10	28	36	39	2.61	0.27	0~0.40	0.023	
PS1.5-25	25			30	37.5	40.5	2.76	0.28		0.026	
PS1.5-26	26			32	39	42	2.91	0.3		0.029	
PS1.5-28	28			36	42	45	3.18	0.32		0.034	
PS1.5-30	30			38	45	48	3.46	0.35		0.039	
PS1.5-32	32	12		40	48	51	3.76	0.38	0~0.42	0.045	
PS1.5-35	35			42	52.5	55.5	4.22	0.43		0.052	
PS1.5-36	36			45	54	57	4.38	0.45		0.057	
PS1.5-40	40			45	60	63	5.00	0.51		0.065	
PS1.5-45	45			45	67.5	70.5	5.79	0.59		0.078	
PS1.5-48	48			45	72	75	6.27	0.64	0~0.42	0.087	
PS1.5-50	50			45	75	78	6.60	0.67		0.093	
PS1.5-55	55			45	82.5	85.5	7.36	0.75		0.11	
PS1.5-60	60			50	90	93	8.14	0.83		0.13	
PS1.5-65	65			50	97.5	100.5	8.91	0.91		0.15	
PS1.5-70	70			50	105	108	9.69	0.99	0~0.42	0.17	
PS1.5-75	75			50	112.5	115.5	10.5	1.07		0.19	
PS1.5-80	80			55	120	123	11.3	1.15		0.22	
PS1.5-85	85			55	127.5	130.5	12.0	1.23		0.25	
PS1.5-90	90			55	135	138	12.8	1.31		0.27	
PS1.5-95	95			60	142.5	145.5	13.6	1.39		0.31	
PS1.5-100	100			60	150	153	14.4	1.47		0.34	

[Caution on Product Characteristics] ① Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears), including bore size (H8 when produced), tooth diameter, and backlash. Please see the section "Design of Plastic Gears" in separate technical reference book. (Page 101).
 ② The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 31 for more details.
 ③ Without lubrication, using plastic gears in pairs may generate heat and dilation. It is recommended to mate them with steel gears.
 ④ 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] ①Please read "Caution on Performing Secondary Operations" (Page 32) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
 ②Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.

* In regards to MC Nylon gears, other materials are available for plastic gears, including Ultra High Molecular Weight Polyethylene (UHMW-PE), which has excellent abrasion resistance. Poly Ether Ether Ketone (PEEK) also has quality properties. A single piece order is acceptable and will be produced as a custom-made gear. For details on quotations and orders please see page 8.