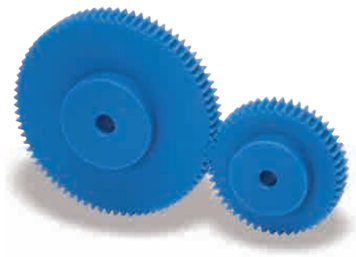
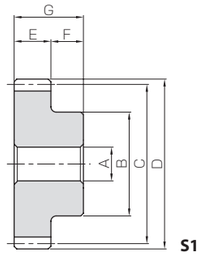


Specifications	
Precision grade	JIS grade N9 (JIS B1702-1: 1998)*
Gear teeth	Standard full depth
Pressure angle	20°
Material	MC901
Heat Treatment	—
Tooth hardness	(115 to 120HRR)

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



S1

Catalog Number	No. of teeth	Shape	Bore A	Hub dia. B	Pitch dia. C	Outside dia. D	Face width E	Hub width F	Total Length G	Allowable torque (N·m) Bending strength	Allowable torque (kgf·m) Bending strength	Backlash (mm)	Weight (kg)
PS1-15	15	S1	6	12	15	17	10	10	20	0.41	0.042	0~0.32	0.0027
PS1-16	16			12	16	18				0.45	0.046		0.0030
PS1-18	18			14	18	20				0.53	0.054		0.0041
PS1-20	20			16	20	22				0.61	0.063		0.0053
PS1-22	22		8	18	22	24				0.69	0.071	0~0.34	0.0062
PS1-24	24			20	24	26				0.77	0.079		0.0077
PS1-25	25			20	25	27				0.82	0.083		0.0082
PS1-26	26			20	26	28				0.86	0.088		0.0086
PS1-28	28			22	28	30				0.94	0.096		0.010
PS1-30	30			25	30	32				1.03	0.10		0.013
PS1-32	32			26	32	34				1.11	0.11		0.014
PS1-35	35			26	35	37				1.25	0.13		0.016
PS1-36	36			28	36	38				1.30	0.13		0.018
PS1-40	40		10	35	40	42				1.48	0.15		0.024
PS1-45	45			35	45	47				1.71	0.17		0.028
PS1-48	48				48	50				1.86	0.19		0.030
PS1-50	50				50	52				1.96	0.20		0.032
PS1-55	55			35	55	57				2.18	0.22	0~0.36	0.037
PS1-60	60				60	62				2.41	0.25		0.042
PS1-65	65				65	67				2.64	0.27		0.048
PS1-70	70			40	70	72				2.87	0.29		0.057
PS1-75	75				75	77				3.11	0.32		0.064
PS1-80	80				80	82				3.34	0.34		0.071
PS1-85	85				85	87				3.57	0.36		0.079
PS1-90	90				90	92				3.80	0.39		0.087
PS1-95	95			40	95	97				4.03	0.41		0.095
PS1-100	100				100	102				4.27	0.44		0.10

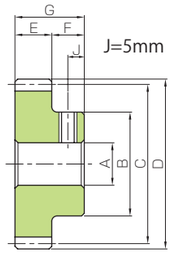
[Caution on Product Characteristics]
① Significant variations in temperature or humidity can cause dimensional changes in plastic gears, including bore size (H8 when produced), tooth diameter, and backlash. Please see the section "Design of Plastic Gears" in our separate technical reference book. (Page 100).
② The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 24 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]
① Please read "Cautions on Performing Secondary Operations" (Page 26) 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 Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.

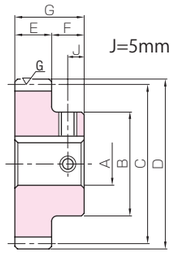
* In regard to MC Nylon gears, other materials are available for plastic gears, including Ultra High Molecular Weight Polyethylene (U-PE), which has excellent abrasion resistance and resin conforming to the Plastic Implementation Measure (PIM). A single piece order is acceptable and will be produced as a custom-made gear.
Please see Page 16 for more details on quotations and orders.

J Series

Plastic Spur Gears



S1T



S1K

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

Bore H8	* The product shapes of J Series items are identified by background color.														
Keyway Js9	6	8	10	12	14	15	16	17	18	19	20	22	25	28	30
Screw size	—		4×1.8		5×2.3				6×2.8				8×3.3		
Catalog Number	M4	M5	M4						M5				M6		
PS1-15 J BORE	S1T														
PS1-16 J BORE	S1T														
PS1-18 J BORE	S1T														
PS1-20 J BORE	S1T														
PS1-22 J BORE		S1T													
PS1-24 J BORE		S1T													
PS1-25 J BORE		S1T													
PS1-26 J BORE		S1T													
PS1-28 J BORE		S1T	S1K												
PS1-30 J BORE		S1T	S1K	S1K											
PS1-32 J BORE		S1T	S1K	S1K											
PS1-35 J BORE		S1T	S1K	S1K											
PS1-36 J BORE		S1T	S1K	S1K	S1K	S1K									
PS1-40 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-45 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-48 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-50 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-55 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-60 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-65 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
PS1-70 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-75 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-80 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-85 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-90 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-95 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			
PS1-100 J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K			

[Caution on J series]
① As available-on-request products, these require a lead-time for shipping within 2 working days (excludes the day ordered), after placing an order.
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 price and lead time.
③ Keyways are made according to JIS B1301 standards, Js9 tolerance. They may be 0.01 mm negative depending on material characteristics.
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 For products having a tapped hole, a set screw is included.
⑥ Since tapped holes of plastic products are easily broken, avoid too much tightening when fastening screws.
For products which have a short tapped hole (Products marked with " ** " are the tap size), fasten with torques less than 0.12N·m for M4, and 0.38N·m for M5.
For details, please see the KHK Web Catalog.
⑦ 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.