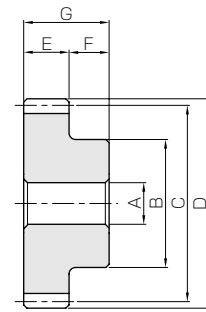




Specifications	
Precision grade	JIS grade N9 (JIS B1702-1: 1998) * JIS grade 5 (JIS B1702: 1976)
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Helix angle	45°
Material	MC901
Heat treatment	—

* The precision grade of this product is equivalent to the value shown in the table.



S1

Catalog No.	Module	No. of teeth	Direction of helix	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width	Total length
					A	B					
PN1.5-10R PN1.5-10L	m1.5	10	R L	S1	6	16	21.21	24.21	15	10	25
PN1.5-13R PN1.5-13L		13	R L	S1	8	23	27.58	30.58	15	10	25
PN1.5-15R PN1.5-15L		15	R L	S1	8	25	31.82	34.82	15	10	25
PN1.5-20R PN1.5-20L		20	R L	S1	10	30	42.43	45.43	15	10	25
PN2-10R PN2-10L	m2	10	R L	S1	10	22	28.28	32.28	20	15	35
PN2-13R PN2-13L		13	R L	S1	10	30	36.77	40.77	20	15	35
PN2-15R PN2-15L		15	R L	S1	10	35	42.43	46.43	20	15	35
PN2-20R PN2-20L		20	R L	S1	12	45	56.57	60.57	20	15	35
PN2.5-10R PN2.5-10L	m2.5	10	R L	S1	10	26	35.36	40.36	22	16	38
PN2.5-13R PN2.5-13L		13	R L	S1	12	35	45.96	50.96	22	16	38
PN2.5-15R PN2.5-15L		15	R L	S1	12	40	53.03	58.03	22	16	38
PN2.5-20R PN2.5-20L		20	R L	S1	12	60	70.71	75.71	22	16	38
PN3-10R PN3-10L	m3	10	R L	S1	12	34	42.43	48.43	25	18	43
PN3-13R PN3-13L		13	R L	S1	15	45	55.15	61.15	25	18	43
PN3-15R PN3-15L		15	R L	S1	15	50	63.64	69.64	25	18	43
PN3-20R PN3-20L		20	R L	S1	15	60	84.85	90.85	25	18	43

[Caution on Product Characteristics]

- ① Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears), for bore size (H8 when produced), teeth diameter, and backlash. Please see the section "Design of Plastic Gears" in the technical reference (Page 693).
- ② When mating screw gears made of the same material they may cause abrasion and scoring. It is recommended to mate Screw Gears composed of different materials.
- ③ The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 495 for more details.
- 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.
- ⑤ For offset shaft applications, match a RH with a RH, or LH with a LH, to make a set of screw gears. For parallel shaft applications, mesh opposite hands (RH and LH) of helical gear sets. See page 494 for more details.

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
—	0.29	—	0.029	0~0.38	0.0077	PN1.5-10R PN1.5-10L
—	0.62	—	0.063	0~0.38	0.014	PN1.5-13R PN1.5-13L
—	0.93	—	0.095	0~0.38	0.018	PN1.5-15R PN1.5-15L
—	2.14	—	0.22	0~0.38	0.031	PN1.5-20R PN1.5-20L
—	0.66	—	0.068	0~0.42	0.018	PN2-10R PN2-10L
—	1.42	—	0.14	0~0.42	0.034	PN2-13R PN2-13L
—	2.14	—	0.22	0~0.42	0.046	PN2-15R PN2-15L
—	4.84	—	0.49	0~0.44	0.081	PN2-20R PN2-20L
—	1.27	—	0.13	0~0.44	0.031	PN2.5-10R PN2.5-10L
—	2.68	—	0.27	0~0.44	0.055	PN2.5-13R PN2.5-13L
—	4.03	—	0.41	0~0.46	0.075	PN2.5-15R PN2.5-15L
—	9.07	—	0.92	0~0.46	0.15	PN2.5-20R PN2.5-20L
—	2.14	—	0.22	0~0.52	0.054	PN3-10R PN3-10L
—	4.51	—	0.46	0~0.54	0.094	PN3-13R PN3-13L
—	6.75	—	0.69	0~0.54	0.12	PN3-15R PN3-15L
—	15.0	—	1.53	0~0.54	0.21	PN3-20R PN3-20L

[Caution on Secondary Operations]

- ① Please read “Caution on Performing Secondary Operations” (Page 36) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK’s 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.
- ③ Plastic gears are susceptible to the effects of temperature and moisture. Dimensional changes may occur while performing secondary operations and during post-machining operations.

Spur Gears

Helical Gears

Internal Gears

Racks

CP Racks & Pinions

Miter Gears

Bevel Gears

Screw Gears

Worm Gear Pair

Bevel Gearboxes

Other Products