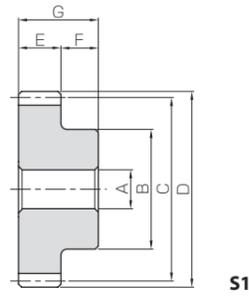




Specifications	
Precision grade	JIS grade N8 (JIS B1702-1:1998)
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Transverse pressure angle	20°
Helix angle	15°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating

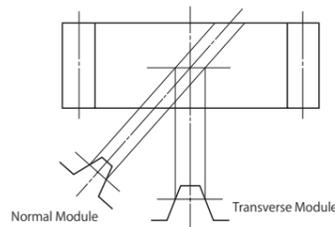


Catalog No.	Module	No. of teeth	Direction of helix	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width	Total length
					A _{H7}	B					
KSH2-15R KSH2-15L	m2	15	R L	S1	12	24	31.06	35.06	25	10	35
KSH2-20R KSH2-20L		20	R L	S1	12	32	41.41	45.41	25	10	35
KSH2-30R KSH2-30L		30	R L	S1	12	50	62.12	66.12	25	10	35
KSH2-40R KSH2-40L		40	R L	S1	18	60	82.82	86.82	25	10	35
KSH2-60R KSH2-60L		60	R L	S1	18	70	124.23	128.23	25	10	35
KSH2-90R KSH2-90L		90	R L	S1	18	120	186.35	190.35	25	10	35
KSH3-15R KSH3-15L	m3	15	R L	S1	15	36	46.59	52.59	35	15	50
KSH3-20R KSH3-20L		20	R L	S1	15	50	62.12	68.12	35	15	50
KSH3-30R KSH3-30L		30	R L	S1	20	70	93.17	99.17	35	15	50
KSH3-40R KSH3-40L		40	R L	S1	20	80	124.23	130.23	35	15	50
KSH3-60R KSH3-60L		60	R L	S1	20	140	186.35	192.35	35	15	50

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 164 for more details.
 - 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.
 - These gears produce axial thrust forces. See Page 167 for more details.
 - Right handed and left handed helical gears in the same module are designed to mesh as a pair, but KSH gears are not interchangeable with KKHG type helical gears.

Reference Section of Gears

Transverse module (KSH helical gears) and normal module (KKHG ground helical gears) are available for the gear teeth according to the gear reference cross section. Even if products have the same helix angle and module, transverse and normal module gears have different gear teeth and thus cannot engage.



* Above is for illustration purposes only and differs from actual tooth forms. To find more details, please see the section "4.3 Helical Gears" in separate technical reference book (Page 22).

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
43.7	2.90	4.46	0.30	0.12~0.26	0.15	KSH2-15R KSH2-15L
67.1	5.85	6.84	0.60	0.12~0.26	0.30	KSH2-20R KSH2-20L
117	15.3	11.9	1.56	0.14~0.30	0.72	KSH2-30R KSH2-30L
169	28.9	17.2	2.95	0.14~0.30	1.21	KSH2-40R KSH2-40L
275	70.8	28.0	7.22	0.18~0.36	2.61	KSH2-60R KSH2-60L
437	173	44.6	17.6	0.20~0.44	6.17	KSH2-90R KSH2-90L
138	9.67	14.0	0.99	0.14~0.32	0.52	KSH3-15R KSH3-15L
211	19.4	21.6	1.98	0.14~0.32	0.99	KSH3-20R KSH3-20L
368	50.2	37.5	5.12	0.18~0.38	2.20	KSH3-30R KSH3-30L
531	95.5	54.1	9.73	0.18~0.38	3.80	KSH3-40R KSH3-40L
866	236	88.3	24.0	0.20~0.44	9.18	KSH3-60R KSH3-60L

- [Caution on Secondary Operations]
- Please read "Caution on Performing Secondary Operations" (Page 166) when performing modifications and/or secondary operations for safety concerns.
 - Avoid performing secondary operations that narrow the tooth width as it affects precision and strength.

SH Helical Gear Center Distance

Catalog No.	KSH2-15 ^R _L	KSH2-20 ^R _L	KSH2-30 ^R _L	KSH2-40 ^R _L	KSH2-60 ^R _L	KSH2-90 ^R _L
KSH2-15 ^R _L	31.06	—	—	—	—	—
KSH2-20 ^R _L	36.23	41.41	—	—	—	—
KSH2-30 ^R _L	46.59	51.76	62.12	—	—	—
KSH2-40 ^R _L	56.94	62.12	72.47	82.82	—	—
KSH2-60 ^R _L	77.65	82.82	93.17	103.53	124.23	—
KSH2-90 ^R _L	108.70	113.88	124.23	134.59	155.29	186.35

SH Helical Gear Center Distance

Catalog No.	KSH3-15 ^R _L	KSH3-20 ^R _L	KSH3-30 ^R _L	KSH3-40 ^R _L	KSH3-60 ^R _L
KSH3-15 ^R _L	46.59	—	—	—	—
KSH3-20 ^R _L	54.35	62.12	—	—	—
KSH3-30 ^R _L	69.88	77.65	93.17	—	—
KSH3-40 ^R _L	85.41	93.17	108.70	124.23	—
KSH3-60 ^R _L	116.47	124.23	139.76	155.29	186.35