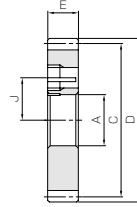




Specifications	
Precision grade	JIS grade N8 (JIS B1702-1:1998) * JIS grade 4 (JIS B1702:1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)

* The gear grade listed is the value before clamping. The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.



55

Catalog No.	Module	No. of teeth	Shape	Bore		Pitch dia.	Outside dia.	Face width	Set Screw		Allowable torque (N·m)	
				A _{H7}	C				Size	J	Bending strength	Surface durability
SSAY0.8-28/K6	m0.8	28	S5	6	22.4	24	6	M5	6.3	3.55	0.26	
SSAY0.8-30/K6 /K8		30	S5	6 8	24	25.6	6	M5	6.3 7.3	3.89	0.30	
SSAY0.8-32/K6 /K8		32	S5	6 8	25.6	27.2	6	M5	6.3 7.3	4.24	0.34	
SSAY0.8-35/K6 /K8		35	S5	6 8	28	29.6	6	M5	6.3 7.3	4.77	0.41	
SSAY0.8-36/K6 /K8		36	S5	6 8	28.8	30.4	6	M5	6.3 7.3	4.95	0.43	
SSAY0.8-40/K6 /K8 /K10		40	S5	6 8 10	32	33.6	6	M5	6.3 7.3 8.3	5.66	0.54	
SSAY0.8-45/K6 /K8 /K10		45	S5	6 8 10	36	37.6	6	M5	6.3 7.3 8.3	6.56	0.70	
SSAY0.8-48/K6 /K8 /K10		48	S5	6 8 10	38.4	40	6	M5	6.3 7.3 8.3	7.11	0.80	
SSAY0.8-50/K6 /K8 /K10		50	S5	6 8 10	40	41.6	6	M5	6.3 7.3 8.3	7.47	0.87	
SSAY0.8-55/K6 /K8 /K10		55	S5	6 8 10	44	45.6	6	M5	6.3 7.3 8.3	8.39	1.06	
SSAY0.8-56/K6 /K8 /K10		56	S5	6 8 10	44.8	46.4	6	M5	6.3 7.3 8.3	8.57	1.10	
SSAY0.8-60/K6 /K8 /K10		60	S5	6 8 10	48	49.6	6	M5	6.3 7.3 8.3	9.30	1.28	

[Caution on Product Characteristics]

- For products with a tapped hole, a set screw is included.
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 31 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.
- The reference slipping torques shown in the table are experimentally obtained by attaching the gears to shafts with g6 tolerance and 0.4μ surface finish.
- Do not tighten the clamping screw without inserting a shaft, or the bore will be permanently deformed and will not accept a shaft.



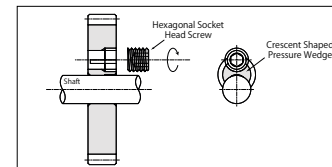
Allowable torque (kgf·m)		Reference slipping torque (N·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Screw fastening torque	Ref. slipping torque			
0.36	0.026	2.8	2.4	0 ~ 0.10	0.017	SSAY0.8-28/K6
0.40	0.030	2.8	2.4 3.7	0 ~ 0.10	0.020 0.019	SSAY0.8-30/K6 /K8
0.43	0.035	2.8	2.4 3.7	0 ~ 0.10	0.023 0.022	SSAY0.8-32/K6 /K8
0.49	0.042	2.8	2.4 3.7	0 ~ 0.10	0.028 0.027	SSAY0.8-35/K6 /K8
0.50	0.044	2.8	2.4 3.7	0 ~ 0.10	0.029 0.028	SSAY0.8-36/K6 /K8
0.58	0.055	2.8	2.4 3.7 3.9	0 ~ 0.10	0.037 0.036 0.034	SSAY0.8-40/K6 /K8 /K10
0.67	0.071	2.8	2.4 3.7 3.9	0 ~ 0.10	0.047 0.046 0.044	SSAY0.8-45/K6 /K8 /K10
0.72	0.081	2.8	2.4 3.7 3.9	0 ~ 0.10	0.053 0.052 0.051	SSAY0.8-48/K6 /K8 /K10
0.76	0.089	2.8	2.4 3.7 3.9	0 ~ 0.10	0.058 0.057 0.055	SSAY0.8-50/K6 /K8 /K10
0.86	0.11	2.8	2.4 3.7 3.9	0 ~ 0.10	0.070 0.069 0.068	SSAY0.8-55/K6 /K8 /K10
0.87	0.11	2.8	2.4 3.7 3.9	0 ~ 0.10	0.073 0.072 0.071	SSAY0.8-56/K6 /K8 /K10
0.95	0.13	2.8	2.4 3.7 3.9	0 ~ 0.10	0.084 0.083 0.082	SSAY0.8-60/K6 /K8 /K10

[Caution on Secondary Operations]

- As these are finished products, avoid performing secondary operations on the bore, with the exception of adding a keyway.
- Perform secondary operations carefully as to not to distort the clamping groove.

How does the K-Clamp work?

The K-Clamp uses a crescent shaped piece, appropriate for the size of the shaft as the pressure wedge to secure the gear on the shaft.



Application Hints

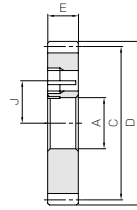
- The slipping torque is affected by the fitting and clamping surface conditions. Remove as much lubricant as possible, and use the same size shaft as the bore, within h7 tolerances.
- K-Clamp gears are suitable for relatively small gears in light loads with the bore size ranging between φ 6 and φ 12mm. The gear will slip on the shaft when the actual load exceeds the slipping torque. The use of a key in addition to the K-Clamp is recommended for heavier loads or large bores sizes.





Specifications	
Precision grade	JIS grade N8 (JIS B1702-1:1998) * JIS grade 4 (JIS B1702:1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)

* The gear grade listed is the value before clamping. The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.



55

Catalog No.	Module	No. of teeth	Shape	Bore		Pitch dia.	Outside dia.	Face width	Set Screw		Allowable torque (N·m)	
				A _{H7}	C				Size	J	Bending strength	Surface durability
SSAY1-24/K6	m1	24	S5	6	24	26	6	M5	6.3	4.48	0.30	
SSAY1-25/K6 /K8		25	S5	6 8	25	27	6	M5	6.3 7.3	4.74	0.32	
SSAY1-28/K6 /K8 /K10		28	S5	6 8 10	28	30	6	M5	6.3 7.3 8.3	5.55	0.41	
SSAY1-30/K6 /K8 /K10		30	S5	6 8 10	30	32	6	M5	6.3 7.3 8.3	6.08	0.47	
SSAY1-32/K6 /K8 /K10		32	S5	6 8 10	32	34	6	M5	6.3 7.3 8.3	6.63	0.54	
SSAY1-35/K6 /K8 /K10		35	S5	6 8 10	35	37	6	M5	6.3 7.3 8.3	7.45	0.66	
SSAY1-36/K6 /K8 /K10		36	S5	6 8 10	36	38	6	M5	6.3 7.3 8.3	7.73	0.70	
SSAY1-40/K6 /K8 /K10		40	S5	6 8 10	40	42	6	M5	6.3 7.3 8.3	8.84	0.87	
SSAY1-45/K6 /K8 /K10		45	S5	6 8 10	45	47	6	M5	6.3 7.3 8.3	10.3	1.12	
SSAY1-48/K6 /K8 /K10		48	S5	6 8 10	48	50	6	M5	6.3 7.3 8.3	11.1	1.28	
SSAY1-50/K8 /K10 /K12		50	S5	8 10 12	50	52	6	M5 M5 M6	7.3 8.3 9.9	11.7	1.39	
SSAY1-55/K8 /K10 /K12		55	S5	8 10 12	55	57	6	M5 M5 M6	7.3 8.3 9.9	13.1	1.70	
SSAY1-56/K8 /K10 /K12		56	S5	8 10 12	56	58	6	M5 M5 M6	7.3 8.3 9.9	13.4	1.77	
SSAY1-60/K8 /K10 /K12		60	S5	8 10 12	60	62	6	M5 M5 M6	7.3 8.3 9.9	14.5	2.04	

- [Caution on Product Characteristics]
- For products with a tapped hole, a set screw is included.
 - The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 31 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.
 - The reference slipping torques shown in the table are experimentally obtained by attaching the gears to shafts with g6 tolerance and 0.4a surface finish.
 - Do not tighten the clamping screw without inserting a shaft, or the bore will be permanently deformed and will not accept a shaft.

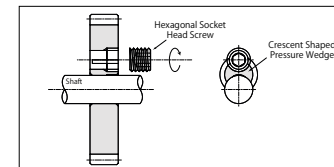


Allowable torque (kgf·m)		Reference slipping torque (N·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Screw fastening torque	Ref. slipping torque			
0.46	0.030	2.8	2.4	0.08~0.18	0.020	SSAY1-24/K6
0.48	0.033	2.8 2.8	2.4 3.7	0.08~0.18	0.022 0.021	SSAY1-25/K6 /K8
0.57	0.042	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.028 0.027 0.025	SSAY1-28/K6 /K8 /K10
0.62	0.048	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.032 0.031 0.030	SSAY1-30/K6 /K8 /K10
0.68	0.055	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.037 0.036 0.034	SSAY1-32/K6 /K8 /K10
0.76	0.067	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.044 0.043 0.042	SSAY1-35/K6 /K8 /K10
0.79	0.071	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.047 0.046 0.044	SSAY1-36/K6 /K8 /K10
0.90	0.089	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.058 0.057 0.055	SSAY1-40/K6 /K8 /K10
1.05	0.11	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.074 0.073 0.071	SSAY1-45/K6 /K8 /K10
1.13	0.13	2.8 2.8 2.8	2.4 3.7 3.9	0.08~0.18	0.084 0.083 0.082	SSAY1-48/K6 /K8 /K10
1.19	0.14	2.8 2.8 4	3.7 3.9 6.6	0.08~0.18	0.090 0.089 0.087	SSAY1-50/K8 /K10 /K12
1.34	0.17	2.8 2.8 4	3.7 3.9 6.6	0.08~0.18	0.11 0.11 0.11	SSAY1-55/K8 /K10 /K12
1.37	0.18	2.8 2.8 4	3.7 3.9 6.6	0.08~0.18	0.11 0.11 0.11	SSAY1-56/K8 /K10 /K12
1.48	0.21	2.8 2.8 4	3.7 3.9 6.6	0.08~0.18	0.13 0.13 0.13	SSAY1-60/K8 /K10 /K12

- [Caution on Secondary Operations]
- As these are finished products, avoid performing secondary operations on the bore, with the exception of adding a keyway.
 - Perform secondary operations carefully as to not to distort the clamping groove.

How does the K-Clamp work?

The K-Clamp uses a crescent shaped piece, appropriate for the size of the shaft as the pressure wedge to secure the gear on the shaft.



Application Hints

- The slipping torque is affected by the fitting and clamping surface conditions. Remove as much lubricant as possible, and use the same size shaft as the bore, within h7 tolerances.
- K-Clamp gears are suitable for relatively small gears in light loads with the bore size ranging between $\phi 6$ and $\phi 12$ mm. The gear will slip on the shaft when the actual load exceeds the slipping torque. The use of a key in addition to the K-Clamp is recommended for heavier loads or large bores sizes.

