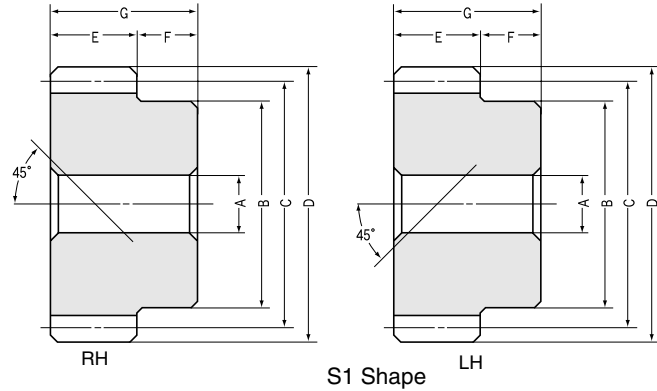




AN Aluminum-Bronze Screw Gears Modules 1~4



Module 1

Catalog No.	Hand of helix	Module	No. of teeth	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
		<i>m</i>	<i>z</i>	AH7	B	C	D	E	F	G
AN1 -13R AN1 -13L	R L	1	13	6	15	18.38	20.38	10	10	20
AN1 -15R AN1 -15L	R L	1	15	6	18	21.21	23.21	10	10	20

Module 1.5

AN1.5-10R AN1.5-10L	R L	1.5	10	8	16	21.21	24.21	15	10	25
AN1.5-13R AN1.5-13L	R L	1.5	13	10	23	27.58	30.58	15	10	25
AN1.5-15R AN1.5-15L	R L	1.5	15	10	25	31.82	34.82	15	10	25

Module 2

AN2 -10R AN2 -10L	R L	2	10	12	22	28.28	32.28	20	15	35
AN2 -13R AN2 -13L	R L	2	13	12	30	36.77	40.77	20	15	35
AN2 -15R AN2 -15L	R L	2	15	12	35	42.43	46.43	20	15	35

Module 2.5

AN2.5-10R AN2.5-10L	R L	2.5	10	12	26	35.36	40.36	22	16	38
AN2.5-13R AN2.5-13L	R L	2.5	13	15	35	45.96	50.96	22	16	38
AN2.5-15R AN2.5-15L	R L	2.5	15	15	40	53.03	58.03	22	16	38

Module 3

AN3 -10R AN3 -10L	R L	3	10	15	34	42.43	48.43	25	18	43
AN3 -13R AN3 -13L	R L	3	13	20	45	55.15	61.15	25	18	43
AN3 -15R AN3 -15L	R L	3	15	20	50	63.64	69.64	25	18	43

Module 4

AN4 -10R AN4 -10L	R L	4	10	20	45	56.57	64.57	30	20	50
AN4 -13R AN4 -13L	R L	4	13	20	60	73.54	81.54	30	20	50
AN4 -15R AN4 -15L	R L	4	15	20	70	84.85	92.85	30	20	50

CAUTION: For skewed shaft applications, RH and RH or LH and LH are meshed to make up a set of screw gears or crossed-helical gears. For parallel shaft applications, mesh opposite hands of helical gear sets. Please see the "Selection Hints" on page 278.

CATUION: The maximum allowable sliding speed of AN gears mated to SN gears is 5m/s due to heat buildup.



Aluminum-Bronze Screw Gears

Specifications

Precision grade	JIS N9 grade (JIS B1702-1: 1996) OLD JIS 5 grade (JIS B1702: 1976)	Heat treatment	—
Reference section of gear	Normal plane	Surface treatment	—
Gear teeth	Standard full depth	Tooth surface finish	Cut
Normal pressure angle	20°	Datum reference surface for gear cutting	Bore
Helix angle	45°	Secondary Operations	Possible
Material	CAC702 (formerly JIS A(BC2))		

CAUTION: A(BC2) is aluminum bronze.

Shape	Allowable torque (N·m) NOTE 1		Allowable torque (kgf·m)		Backlash (mm) NOTE 2	Weight (kgf)	Catalog No.
	Bending strength	Surface durability	Bending strength	Surface durability			
S1	—	0.31	—	(0.03)	0.08 ~ 0.18	0.03	AN1 -13R AN1 -13L
S1	—	0.48	—	(0.05)	0.08 ~ 0.18	0.05	AN1 -15R AN1 -15L

S1	—	0.48	—	(0.05)	0.1 ~ 0.2	0.05	AN1.5-10R AN1.5-10L
S1	—	1.03	—	(0.1)	0.12 ~ 0.22	0.08	AN1.5-13R AN1.5-13L
S1	—	1.55	—	(0.16)	0.12 ~ 0.22	0.11	AN1.5-15R AN1.5-15L

S1	—	1.1	—	(0.11)	0.12 ~ 0.22	0.11	AN2 -10R AN2 -10L
S1	—	2.36	—	(0.24)	0.12 ~ 0.26	0.22	AN2 -13R AN2 -13L
S1	—	3.56	—	(0.36)	0.12 ~ 0.26	0.31	AN2 -15R AN2 -15L

S1	—	2.11	—	(0.21)	0.12 ~ 0.24	0.2	AN2.5-10R AN2.5-10L
S1	—	4.48	—	(0.46)	0.14 ~ 0.28	0.35	AN2.5-13R AN2.5-13L
S1	—	6.72	—	(0.69)	0.14 ~ 0.28	0.48	AN2.5-15R AN2.5-15L

S1	—	3.56	—	(0.36)	0.14 ~ 0.26	0.34	AN3 -10R AN3 -10L
S1	—	7.51	—	(0.77)	0.16 ~ 0.32	0.55	AN3 -13R AN3 -13L
S1	—	11.25	—	(1.15)	0.16 ~ 0.32	0.77	AN3 -15R AN3 -15L

S1	—	8.07	—	(0.82)	0.16 ~ 0.34	0.7	AN4 -10R AN4 -10L
S1	—	16.86	—	(1.72)	0.18 ~ 0.38	1.3	AN4 -13R AN4 -13L
S1	—	25.07	—	(2.56)	0.18 ~ 0.38	1.8	AN4 -15R AN4 -15L

NOTE 1: The allowable torques shown in the table are calculated from the Niemann formula. Please see the "Selection Hints" (page 278) for further details.

NOTE 2: The backlash values shown in the table are the theoretical values in the normal direction of a pair of identical gears in mesh.