

■ Gear Coupling

Catalog No.	AH7	B	C	D	E	F	G	H	I	Tapped hole	Keyway		Gear	
											Width×Depth	Module	No. of teeth	
Outer ring GC1-I	—	—	—	68	—	—	25	—	—	—	—	—	2	25
Inner hubs GC1-125 NOTE 1 GC1-20 GC1-22 GC1-25	12	45	3	—	73	24	—	35	10	M5	5 × 2.3	2	25	
	20													
	22													
	25													
Outer ring GC2-I	—	—	—	105	—	—	36	—	—	—	—	2	40	
Inner hubs GC2-20S NOTE 1 GC2-30 GC2-32 GC2-35 GC2-40	20	70	5	—	115	39.5	—	55	13	M6	7 × 3	2	40	
	30													
	32													
	35													
	40													
Outer ring GC3-I	—	—	—	145	—	—	48	—	—	—	—	2.5	42	
Inner hubs GC3-20S NOTE 1 GC3-45 GC3-50	20	90	5	—	135	43.5	—	65	20	M10	12 × 3.3	2.5	42	
	45													
	50													

NOTE 1: "S" denotes minimum bore products. Inner hubs come with snap rings and set screws.

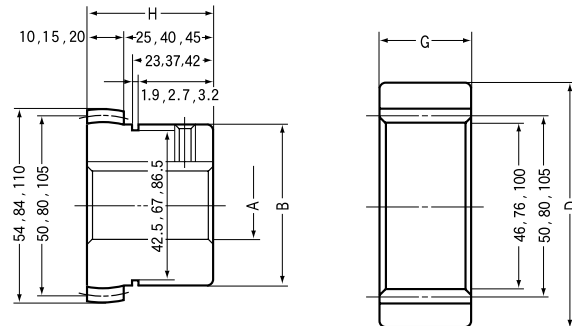
■ Ordering Gear Couplings

(Example) If you require one set of GC2-30, you will need one GC2-I (outer ring) and two GC2-30 (inner hubs). These components may also be purchased separately. Therefore, please specify set or each when ordering.

There are many ways to couple shafts to transmit power. We have developed these standardized gear couplings of our own design. They are easier to connect or disconnect than chain couplings and are especially suitable for use in power testing devices.

■ Characteristics of Gear Couplings

- The gear teeth of the inner hubs are crowned to allow for up to 5° of shaft angle offset.
- Due to induction hardened gear teeth, these couplings have excellent durability. All surfaces are plated (Unichromic plating).
- The units are machined complete with keyways, set screw holes and finished bores and are ready for immediate installation. We also offer minimum bore models for users who want to perform their own secondary operations.





Specifications

Catalog No.	GC	GC-I
Precision grade	JIS N9 grade (JIS B1702-1: 1998) OLD JIS 5 grade (JIS B1702: 1974)	JIS N9 grade (JIS B1702-1: 1998) OLD JIS 5 grade (JIS B1702: 1974)
Gear teeth	Standard full depth (Crowning)	Standard full depth
Pressure angle	20°	20°
Material	S45C	S45C
Heat treatment	Induction hardened teeth	Induction hardened teeth
Tooth hardness	48~53HRC	48~53HRC
Surface treatment	Unichromic plating	Unichromic plating
Tooth surface finish	Cut	Cut
Datum reference surface for gear cutting	Bore	Outside diameter
Secondary Operations	Possible except the tooth area	Possible except the tooth area

Shape	Allowable torque (N-m) NOTE 2	Allowable torque (kgf-m) NOTE 2	Backlash (mm)	Weight (kgf)	Catalog No.
	Surface durability	Surface durability			
T1	—	—	0.4 ~ 0.6	0.4	GC1-I
T2	68.65 98.07 137.3	(7) (10) (14)	0.4 ~ 0.6	0.4 0.35 0.35 0.32	GC1-12S GC1-20 GC1-22 GC1-25
T1	—	—	0.4 ~ 0.6	1	GC2-I
T2	245.2 294.2 392.3 490.3	(25) (30) (40) (50)	0.4 ~ 0.6	1.7 1.4 1.4 1.3 1.3	GC2-20S GC2-30 GC2-32 GC2-35 GC2-40
T1	—	—	0.4 ~ 0.6	3.2	GC3-I
T2	784.5 882.6	(80) (90)	0.4 ~ 0.6	3 2.8 2.6	GC3-20S GC3-45 GC3-50

NOTE 2: The allowable torques in the table are obtained from the shear strength of keyways. The shear strength of keyway is assumed to be 49Mpa (5kgf/mm²).