

SGF Series

Sungil Gum Type Flexible Coupling

Sungil Gum Type Coupling (SGF) is realized optimal design and high gain of servo system by high torsion Stiffness and high torque through perfect design of hub and Anti-Vibration Rubber by simulation SGF is perfect product that can yield high torque by spreading stress of torsion



Features

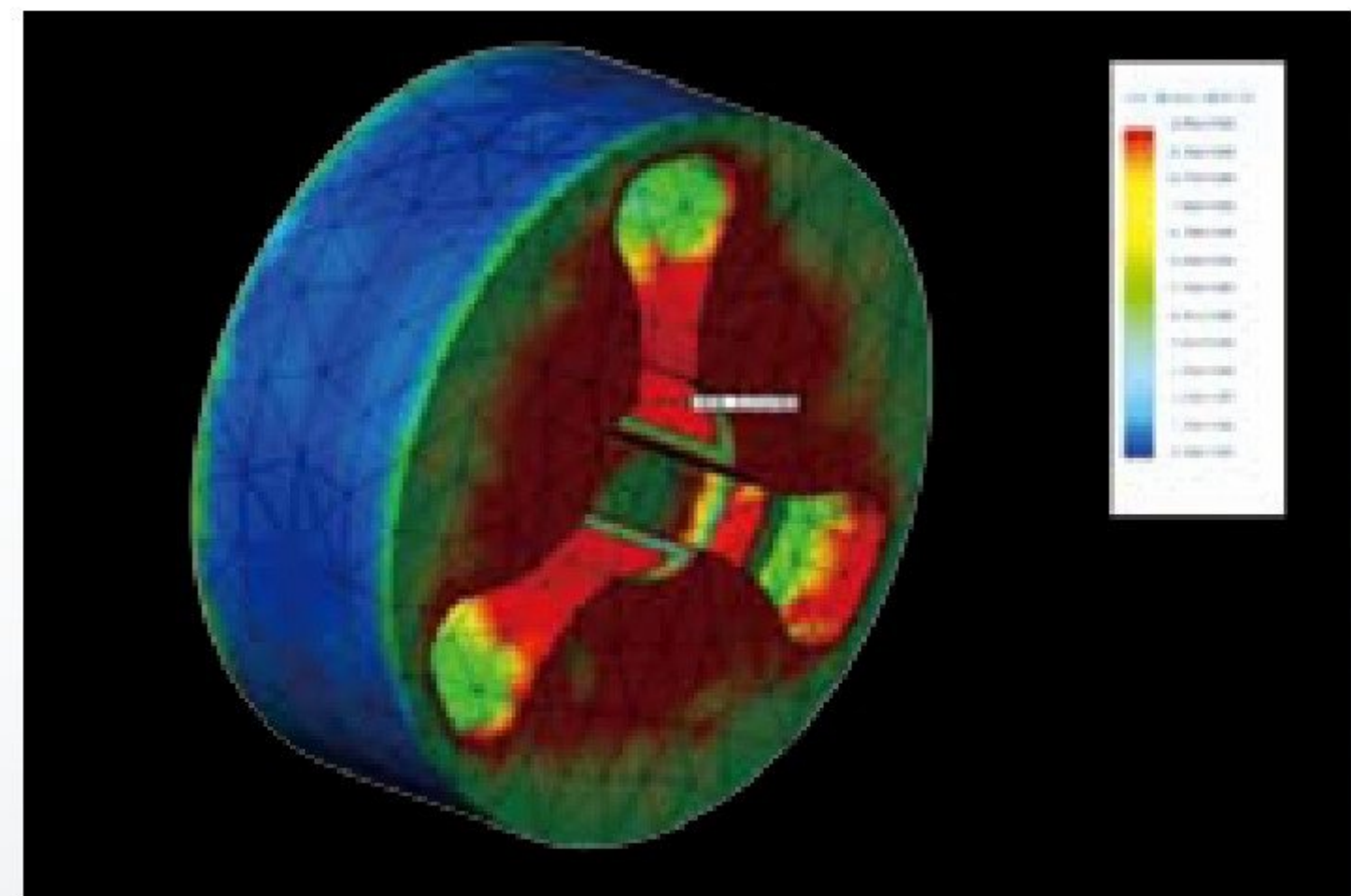
- Zero Backlash
- No Resonance
- High Vibration Absorption
- High Gain
- Excellent exact position decision
- Identical clockwise and counter-clockwise rotational characteristics
- Available in high speed and torque and torsion stiffness

Application

- Servo motor
- Stepping motor
- General-purpose motor



Structure & Material



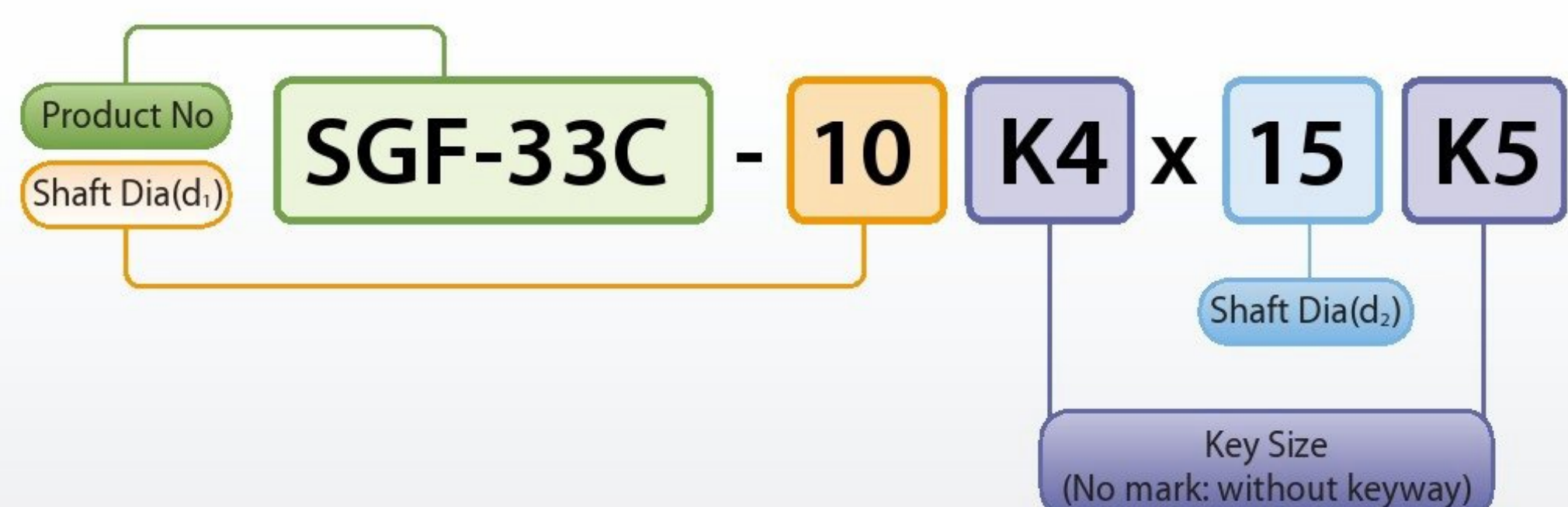
High torsion Stiffness and torque of SGF is realized by optimal design of Anti-Vibration through the newest CAE. And jaw of SGF is designed by round(R) in order to spread stress. So product longevity is significantly increased.

Physical Chemical Resistant properties of Anti-Vibration (HNBR)

Aging Resistance, Weather Resistance, Ozone Resistance	◎
Gasoline, Light Oil	○~◎
Water, Organic Acid, Alcohol	◎
Strong, Weak Alkali	◎
Acetic Ethyl, Ether	×~△

◎ : Excellence, ○ : Usable,
△ : Usable under certain conditions, × : Unusable

How to order product

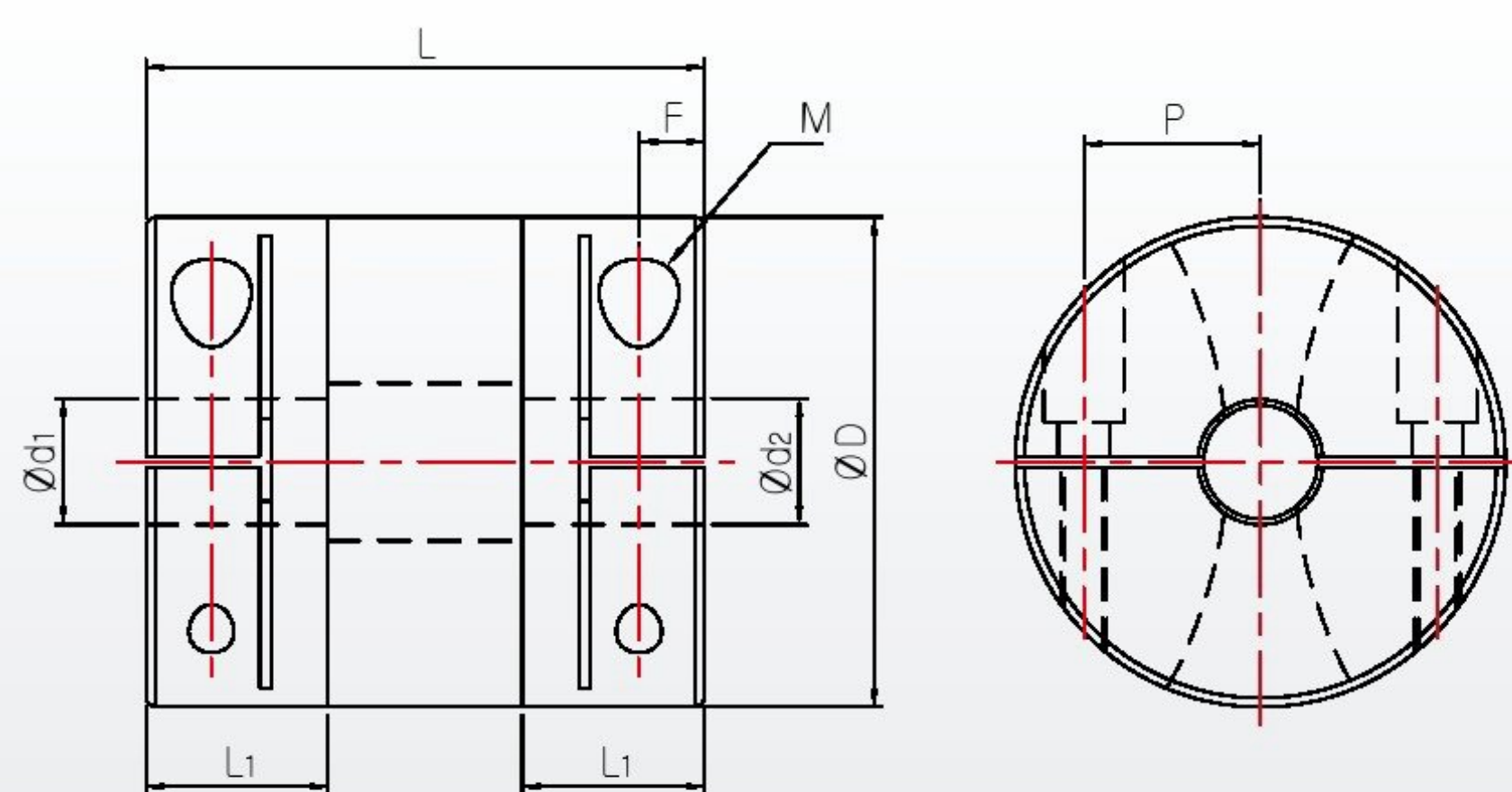


※ Please mark each inner diameter size.

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SGF- ■ ■ ■ C



Standards & Performance

Product Number	Dimension (mm)(±0.3)					Fastening Bolt M	Fastening Torque (N·m)
	D	L	L1	F	P		
SGF-14C	14	22,4	6,7	2,15	4,5	M1,6	0,25
SGF-18C	18	25,5	7,95	2,7	6,1	M2	0,5
SGF-24C	24	31,2	9,6	3,3	8,5	M2,6	1
SGF-29C	29	35	11	4	10,5	M3	1,7
SGF-33C	33	37	12	4	11,75	M3	1,7
SGF-38C	38	47	15,5	4,55	14	M4	3,5
SGF-43C	43	48	15	4,75	15,5	M4	3,5
SGF-55C	55	59	19,5	5,5	18,5	M5	8

Product Number	Max Inner Dia (mm)	Rated Torque (N·m)	Max Torque (N·m)	Max RPM (min ⁻¹)	Moment of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Mass (g)	Errors of Misalignment		
								Angle (°)	Parallel (mm)	End-Play (mm)
SGF-14C	6	1,0	2,0	42,000	1,6 × 10 ⁻⁷	41	8	1,5	0,15	±0,2
SGF-18C	8	1,9	3,8	33,000	3,9 × 10 ⁻⁷	84	12	1,5	0,15	±0,2
SGF-24C	12	3,5	7	25,000	1,5 × 10 ⁻⁶	162	28	1,5	0,15	±0,2
SGF-29C	15	5,7	11,4	21,000	3,9 × 10 ⁻⁶	209	50	1,5	0,20	±0,3
SGF-33C	16	7	14	18,000	7,2 × 10 ⁻⁶	370	70	1,5	0,20	±0,3
SGF-38C	20	12	24	16,000	1,4 × 10 ⁻⁵	479	112	1,5	0,20	±0,3
SGF-43C	22	16	32	14,000	2,4 × 10 ⁻⁵	610	140	1,5	0,20	±0,3
SGF-55C	28	31,5	63	11,000	8,6 × 10 ⁻⁵	1430	310	1,5	0,20	±0,3

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Standard Inner diameter

Product Number	Stock Bores							
	Standard Inner diameter (d ₁ ,d ₂) Standard Inner Diameter(mm)							
SGF-14C	3×4	3×5	4×4	4×5	4×6	4,5×5	5×5	5×6
	6×6							
SGF-18C	4×4	4×5	4×6	5×5	5×6	5×7	5×8	6×6
	6×6,35	6×7	6×8	6,35×8	8×8			
SGF-24C	5×5	5×6	5×8	6×6	6×8	6×10	6×11	6×12
	6,35×8	6,35×10	8×8	8×10	8×11	8×12	10×10	10×12
	12×12							
SGF-29C	6×6	6×8	6×10	8×8	8×10	8×11	8×12	8×14
	8×15	10×10	10×11	10×12	10×14	10×15	11×12	12×12
	12×14	12×15	14×14	14×15	15×15			
SGF-33C	8×8	8×10	8×11	8×12	8×14	8×15	10×10	10×11
	10×12	10×14	10×15	11×11	11 X 12	12×12	12×14	12×15
	14×14	14×15	15×15	16×16				
SGF-38C	8×8	8×10	8×12	10×10	10×12	10×14	10×15	10×16
	12×12	12×14	12×15	12×16	12×19	12×20	14×14	14×15
	14×16	15×15	15×16	15×19	16×16	17×17	20×20	
SGF-43C	10×10	10×12	10×14	12×12	12×14	12×15	12×16	12×19
	14×14	14×15	14×16	14×19	15×15	15×16	15×19	15×20
	16×16	16×19	17×17	19×20	20×20			
SGF-55C	12×12	12×14	14×14	14×15	14×16	15×15	15×19	15×20
	15×25	19×20	19×24	20×20	20×25	24×25	25×25	

- Six angle Wench Bolt is included in SGF
- We recommend that tolerance of shaft is H7
- No standard and Keyway is possible, please ask us before order.
- Please contact us when you order product excepted standard inner diameter size.

Adjustment of Torque according to Temperature

Ambient temperature	-20℃ ~ 30℃	30℃ ~ 40℃	40℃ ~ 60℃	60℃ ~ 80℃
Correction value	1	0.8	0.7	0.55

Maximum torque and rated torque should be not checked by load fluctuation.

When ambient temperature exceeds 30℃, maximum torque and rated torque should be checked by the correction value chart above.

Operational temperature is from -20℃ to 80℃.