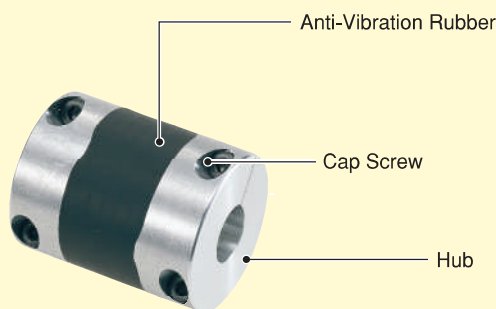
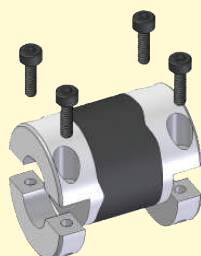


XGT/XGS

Configuration



- Split Coupling
Easy attachment
and removal



Material & Finish

Hub	A2017
Anti-Vibration Rubber	HNBR
Cap Screw	SCM435, Black Oxide Coating*

* Stock screws can be replaced with stainless steel screws. Please take advantage of our stainless steel screw option. For more information please refer to page 16.

● Physical and Chemical Resistant Properties of Anti-Vibration Rubber (HNBR)

Volume Resistance (Ωm)	$10^{12} \sim 10^{13}$
Aging Resistance	◎
Weathering Resistance	◎
Ozone Resistance	◎
Gasoline / Light Oil	○~◎
Benzene / Toluene	△~○
Alcohol	◎
Ether	×~△
Ketone (MEK)	×
Acetic Ether	×~△
Water	◎
Organic Acid	◎
High Concentration Organic Acid	○
Low Concentration Organic Acid	◎
Strong Alkali	◎
Weak Alkali	◎

◎ : Excellent

○ : Usable

△ : Usable under certain conditions

× : Unusable

Features



Merits

- Vibration Absorption
- High Torque, High Response
- Zero Backlash

- Single piece structure with anti-vibration rubber molded between the two hubs
- Available in high torque variety **XGT** and compact variety **XGS**
- Identical clockwise and counter-clockwise rotational characteristics
- Exhibits excellent electrical insulation
- Operational temperature: $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$

Application

Servomotor	◎
Stepping Motor	◎
General-Purpose Motor	●
Encoder	—

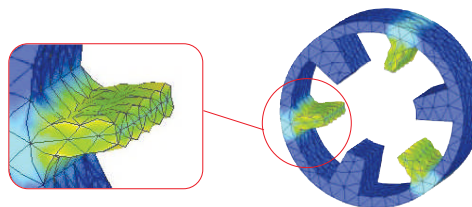
Special Characteristics

Zero Backlash	◎
High Torsional Stiffness	●
High Torque	◎
Allowable Misalignment	●
Vibration Absorption	◎
Electrical Insulation	◎
Corrosion Resistant (All Stainless Steel)	—

◎ : Excellent ● : Very Good

In Pursuit of Optimal Design

Using the latest FEM analysis techniques, the construction of the anti-vibration rubber is designed to yield high torsional stiffness and torque. Additionally, the shape is designed to relieve stress from the jaws' inner diameter. By distributing stress uniformly throughout the jaw, product longevity is significantly increased (patent pending).



When Ordering

Specify product code and both bore diameters.

XGT-19C-6×8

Product Code

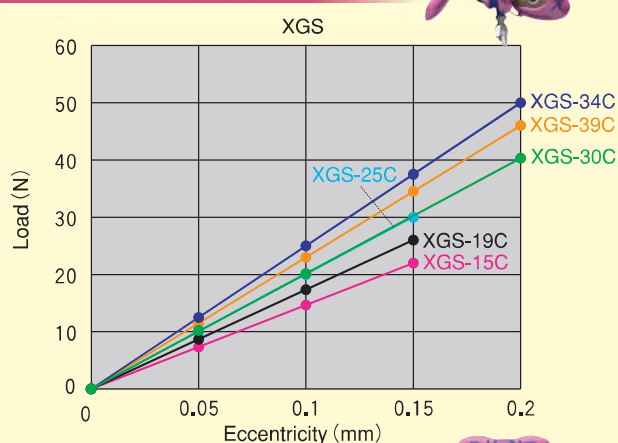
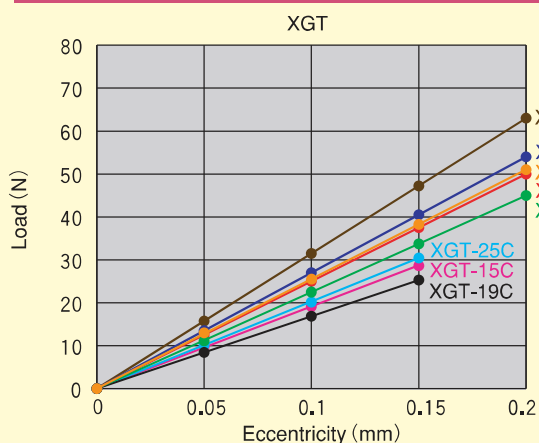
D₁

D₂

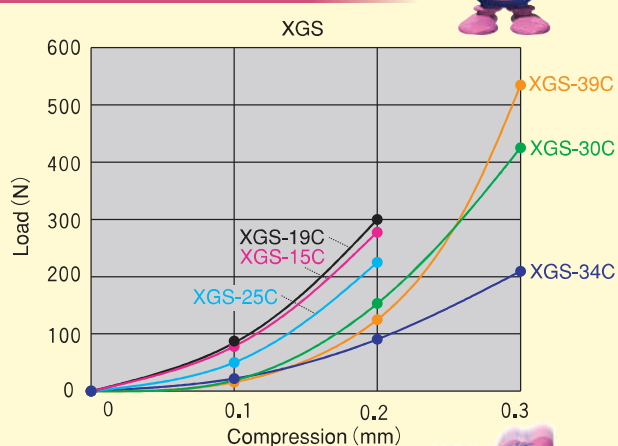
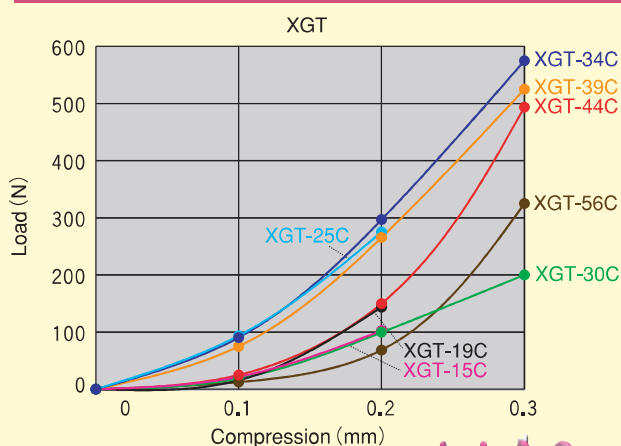
Technical Data



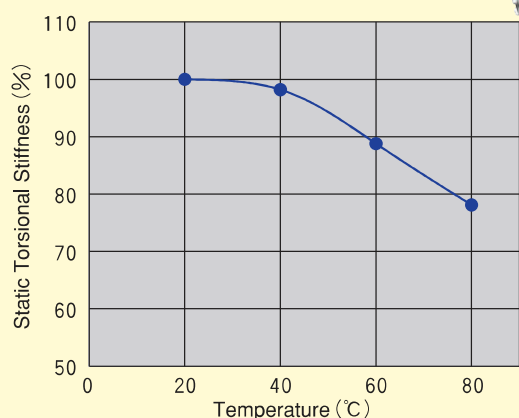
Eccentric Reaction Force



Thrust Reaction Force

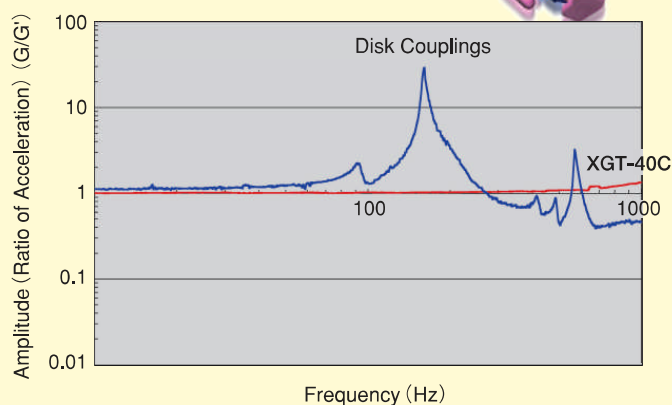


Changes in Static Torsional Stiffness Caused by Temperature



100% values represent product performance at 20°C. The graph shows the changes in torsional stiffness within the operational temperature range. Please take into consideration the decreases in response at higher temperatures.

Natural Frequency

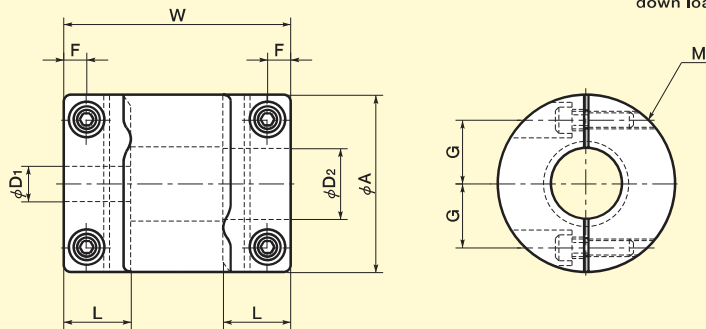


XGT XGS have low natural frequency amplitudes and feature excellent vibration absorption. This reduces hunting at high gain and improves high response control.

* Data for all sizes can be downloaded from our homepage.

● The technical data contained in this catalog is for convenient reference, but they are not guaranteed values. More detailed technical data can be downloaded from our homepage.

CAD DATA [2D](#) [3D](#)
down load



Dimensions & Specifications

unit:mm

Product Code	A	L	W	F	G	M	Wrench Torque (N·m)
XGT-15C	15	6.5	23	2.15	5	M1.6	0.25
XGT-19C	19	7.7	26	2.65	6.5	M2	0.5
XGT-25C	25	9.5	32	3.25	9	M2.5	1
XGT-30C	30	11	36	4	11	M3	1.5
XGT-34C	34	12	38	4	12.25	M3	1.5
XGT-39C	39	15.5	48	4.5	14.5	M4	2.5
XGT-44C	44	15	48	4.75	16	M4	2.5
XGT-56C	56	19.5	60	5.5	20	M5	7
XGS-15C	15	6.5	18	2.15	5	M1.6	0.25
XGS-19C	19	7.7	20	2.65	6.5	M2	0.5
XGS-25C	25	9.5	27	3.25	9	M2.5	1
XGS-30C	30	11	30	4	11	M3	1.5
XGS-34C	34	12	35	4	12.25	M3	1.5
XGS-39C	39	15.5	40	4.5	14.5	M4	2.5

Product Code	Max. Bore (mm)	Rated* Torque (N·m)	Max.* Torque (N·m)	Max. Rotational Frequency (min ⁻¹)	Moment** of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Errors of Shaft End-Play (mm)	Mass** (g)
XGT-15C	6	1.1	2.2	42000	2.7×10^{-7}	43	0.15	1.5	±0.2	8
XGT-19C	8	2.1	4.2	33000	8.4×10^{-7}	88	0.15	1.5	±0.2	14
XGT-25C	12	4	8	25000	3.0×10^{-6}	170	0.15	1.5	±0.2	28
XGT-30C	15	6.3	12.6	21000	6.9×10^{-6}	220	0.20	1.5	±0.3	45
XGT-34C	16	8	16	18000	1.3×10^{-5}	390	0.20	1.5	±0.3	65
XGT-39C	20	13.5	27	16000	2.7×10^{-5}	520	0.20	1.5	±0.3	98
XGT-44C	22	18	36	14000	4.2×10^{-5}	640	0.20	1.5	±0.3	136
XGT-56C	28	35	70	11000	1.4×10^{-4}	1500	0.20	1.5	±0.3	276
XGS-15C	6	0.5	1	42000	2.0×10^{-7}	25	0.15	1.5	±0.2	7
XGS-19C	8	0.8	1.6	33000	6.2×10^{-7}	63	0.15	1.5	±0.2	12
XGS-25C	12	2.3	4.6	25000	2.3×10^{-6}	125	0.15	1.5	±0.2	25
XGS-30C	15	3.3	6.6	21000	5.5×10^{-6}	160	0.20	1.5	±0.3	39
XGS-34C	16	5.5	11	18000	1.0×10^{-5}	350	0.20	1.5	±0.3	62
XGS-39C	20	7	14	16000	2.1×10^{-5}	440	0.20	1.5	±0.3	85

* Adjustment of rated and maximum torque specifications for load fluctuations is not required. However, if operating temperature exceeds 30℃, please adjust rated torque and maximum torque as detailed in the table below. The operational temperature range for **XGT** and **XGS** is -20℃~80℃. For more detailed information, please refer to For Better Drive on page 34.

** Moment of inertia and mass figures based on maximum bore dimensions.

Air Temperature	-20℃~30℃	30℃~40℃	40℃~60℃	60℃~80℃
Temperature Correction Factor	1.00	0.80	0.70	0.55

unit:mm

Product Code	Stock Bore Diameters							
	D ₁ ×D ₂							
XGT-15C XGS-15C	3 × 5	4× 4	4× 5	4× 6	4.5× 5	5× 5	5× 6	6 × 6
XGT-19C XGS-19C	5 × 5	5× 6	5× 7	5× 8	6 × 6	6× 6.35	6× 7	6 × 8
	6.35× 8	8× 8						
XGT-25C XGS-25C	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
XGT-30C XGS-30C	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						
XGT-34C XGS-34C	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 × 12	12× 12	12× 14	12 × 15
	14 × 14	14× 15	15× 15	16× 16				
XGT-39C XGS-39C	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				
XGT-44C	12 × 12	12× 14	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							
XGT-56C	15 × 15	15× 19	15× 20	15 × 25	19 × 20	19× 24	20× 20	20 × 25
	24 × 25	25× 25						

- All products come with cap screws.
- Recommended tolerance for shaft diameters is h6 and h7.
- Bore and keyway modifications are available on request. Please take advantage of our bore modification services.
For more information please refer to pages 17~19.

Slip Torque

Please be aware that for the bore sizes shown in the table below, the slip torque is smaller than [XBS] and [XBSS]'s maximum torque.

unit:N·m

Product Code	Bore Diameter (mm)																		
	3	4	4.5	5	6	6.35	7	8	10	11	12	14	15	16	17	19	20		
XGT-15C XGS-15C	1	1.4	1.5	1.7	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
XGT-19C XGS-19C	—	—	—	2.7	3.3	3.5	3.8	—	—	—	—	—	—	—	—	—	—	—	—
XGT-25C XGS-25C	—	—	—	4.3	5.2	5.5	7	—	—	—	—	—	—	—	—	—	—	—	—
XGT-30C XGS-30C	—	—	—	—	—	—	—	8.7	10.9	12	—	—	—	—	—	—	—	—	—
XGT-34C XGS-34C	—	—	—	—	—	—	—	8.7	10.9	12	13	15.2	—	—	—	—	—	—	—
XGT-39C XGS-39C	—	—	—	—	—	—	—	—	13.6	—	16.3	19	20.4	21.7	23.1	25.8	—	—	—
XGT-44C	—	—	—	—	—	—	—	—	—	—	16.3	19	20.4	21.7	23.1	25.8	27.2	—	—
XGT-56C	—	—	—	—	—	—	—	—	—	—	—	—	46	—	—	58	61	—	—

*Testing performed with an h7 tolerance shaft, hardness of 34~40 HRC and wrench torque shown in the above chart.

