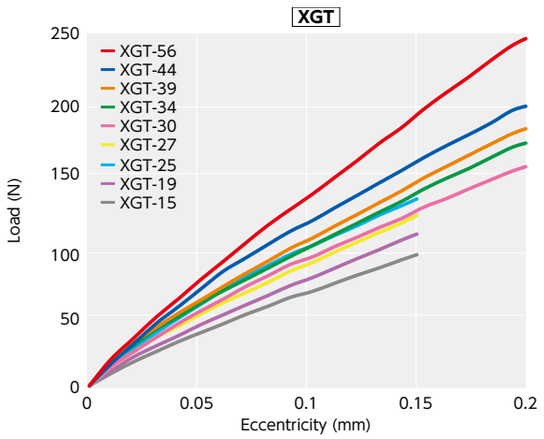
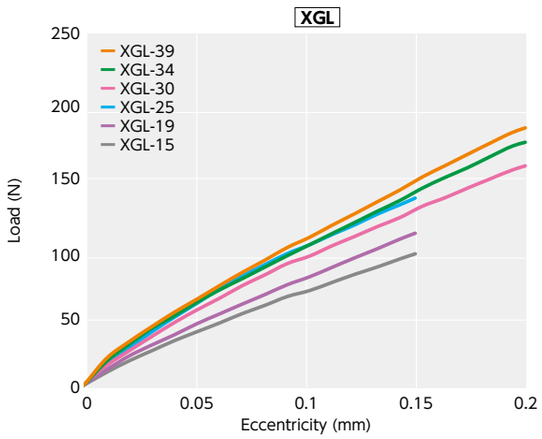
XGT/XGL/XGS Flexible Couplings - High-gain Rubber Type Specification Change

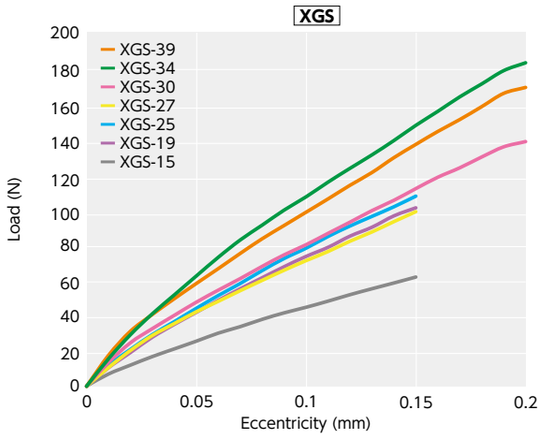
Zero Backlash | High gain supported | High torque | Vibration absorption

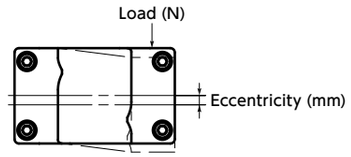
Technical Information

● Eccentric Reaction Force



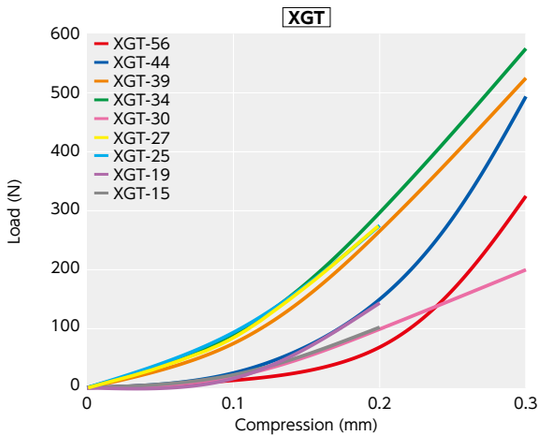


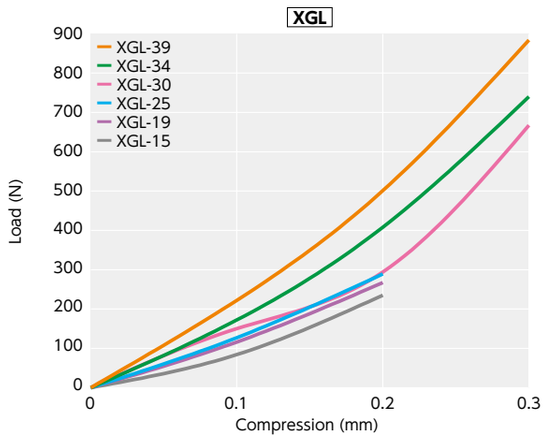


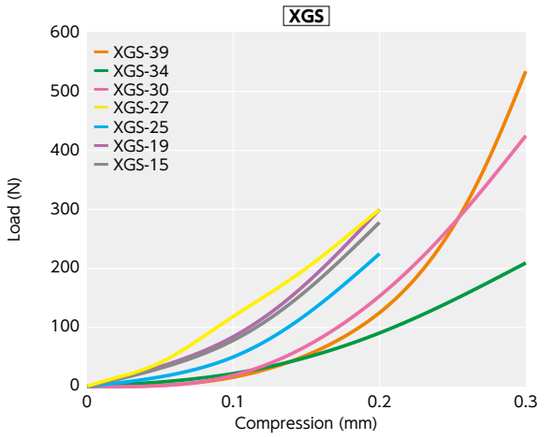


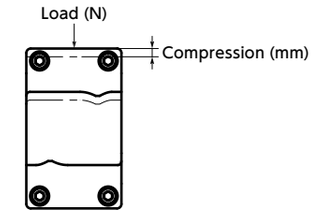
This is the force generated when placing **XGT** **XGL** **XGS** in an eccentric condition. As the eccentric reaction force becomes smaller, the force acting on the shaft bearing also becomes smaller.

● Thrust Reaction Force





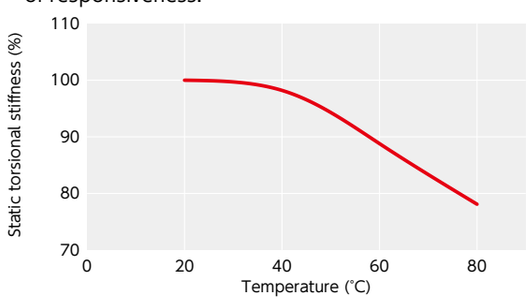




This is the force generated when compressing **XGT** **XGL** **XGS** in the axial direction. As the thrust reaction force becomes smaller, the force acting on the motor also becomes smaller.

● Change in static torsional stiffness due to temperature

This is a value under the condition where the static torsional stiffness at 20℃ is 100%.
Changes in the static torsion spring constant within the operating temperature are shown in the graph.
Before using the unit, be aware of the deterioration of responsiveness.



● Physical property and chemical resistance of high-gain type rubber (HNBR)

	Effect
Aging Resistance	◎
Weather Resistance	◎
Ozone Resistance	◎
Gasoline / Gas Oil	○ - ◎
Benzene / Toluene	△ - ○
Alcohol	◎
Ether	× - △
Ketone (MEK)	×
Ethyl Acetate	× - △
Water	◎
Organic Acid	◎
High Concentration Inorganic Acid	○
Low Concentration Inorganic Acid	◎
Strong Alkali	◎
Weak Alkali	◎

◎: Excellent ○: Available △: Available depending on conditions ×: Not available

● Slip Torque

For set screw type **XGT** **XGS**, see Aluminum Alloy Coupling under "Slip Torque of Coupling - Set Screw Type" for details.
As in the table below, the clamping types **XGT-C**, **XGT-CS**, **XGS-C**, **XGS-CS**, and **XGL-C** have different slip torque according to the bore diameter. Take care during selection.

Unit : N・m

Outside Diameter	Bore Diameter (mm)																	
	3	4	4.5	5	6	6.35	7	8	10	11	12	12.7	14	15	16	17	19	20
15	1	1.3	1.5	1.7	1.9													
19		2.2		2.7	3.1	3.3	3.8											
25				4.3	5	5.5		6.8										
27				3.8	5			6.8										
30								7.5	10	12								
34								8.3	10	10	12		13					
39									13		15	17	17	18	18	23	25	
44											16		19	20	21	23	25	27
56														45			50	61

- These are test values based on the conditions of shaft dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **XGT-C** **XGT-CS** **XGS-C** **XGS-CS** **XGL-C** dimension tables. They are not guaranteed values.
- Slip torque changes with usage conditions. Carry out tests under conditions similar to actual conditions in advance.

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