

Reference	Type of Torsional Actuator	Activation Mechanism	Specific gravity	Free torsion (°/mm)	Torque normalized by cross sectional. ($\frac{N}{m^2} \times 10^6$)	Magnitude of activation.
[1] [2]	CNT	Temperature	1.6	15 ~ 80	0.5 ~ 1.8	0 ~ 90 °C
[3]	SMA	Temperature	6.5	0.18	100 ~ 200	0 ~ 100 °C
[4]	TPA	Temperature	1.12	~12.7	0 ~ 119	0 ~ 90 °C
[5]	EAPs Ion-based actuation	Electricity	1.12	0.01	N/A	0 ~ 4 V (Alternating Current)
[6]	PAMs (Antagonistic Torsion Shape Actuators)	Pneumatic (Pressure)	...	0.287	0 ~ 1.43	50 ~ 90 kPa
[6]	PAMs (Peano Actuators)	Pneumatic (Pressure)	...	0.315	0 ~ 0.713	50 ~ 90 kPa
[7]	SMP Shape Memory Polymers	Temperature	1.12	~1.8	~1	0 ~ 62 °C
N/A	HAMS	Hydraulic	N/A	N/A	N/A	N/A