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Torque/Force Control Signal Attributes

These are the torque/force signal related attributes associated with a Motion Control Axis.

Torque Command

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - C	Get/GSV	T	REAL	-	$-\infty$	∞	% Motor Rated

Command torque output from fine interpolator (if active) into torque input summing junction when configured for toque control.

Torque Trim

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - C	Set/SSV	T	REAL	0	$-\infty$	∞	% Motor Rated

Additional torque command added to the torque input summing junction.

Torque Reference

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - C	Get/GSV	T	REAL	-	-	-	% Motor Rated

Commanded torque reference input signal before torque filter section representing the sum of the Torque Command and Torque Trim signal inputs.

Torque Reference Filtered

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - C	Get/GSV	T	REAL	-	-	-	% Motor Rated

Commanded torque reference input signal after torque filter section.

Torque Reference Limited

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - C	Get/GSV	T	REAL	-	-	-	% Motor Rated

Commanded torque reference input signal after torque limiter section.

Total Inertia Estimate

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - C	Get	T	REAL	-	-	-	% Motor Rated/ (Motor Units/Sec ²)

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The Total Inertia Estimate attribute is the estimated total inertia or mass of the axis based on output of Inertia Observer. This value is directly applied to K_j to adapt to changing load inertia or mass.

See also

[Torque Control Mode](#)

[Torque/Force Control Configuration Attributes](#)

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