















SYMBOL	GEOMETRIC CHARACTERISTIC	TYPE OF TOLERANCE	PRIMARY CONTROL
	FLATNESS	Form  No relation between features	Controls form (shape) of size and non-size features.
	STRAIGHTNESS		Datum reference is not allowed
	CYLINDRICITY		Controls form (shape) of size features
	CIRCULARITY (ROUNDNESS)		Datum reference is not allowed
	PERPENDICULARITY	Orientation  No relation between features	Controls orientation (tilt) of surfaces, axes, or median planes for size and non-size features Datum reference required
	PARALLELISM		<i>Optional: Angularity symbol may be used for all orientation controls</i>
	ANGULARITY		
	POSITION	Location	Locates center points, axes and median planes for size features. Can also control orientation.
	PROFILE OF A SURFACE		Locates surfaces Can also be used to control size, form, and orientation of surfaces based on datum reference
	PROFILE OF A LINE		
	TOTAL RUNOUT	Runout	Controls surface coaxiality Can also control form and orientation of surfaces.
	CIRCULAR RUNOUT		
	CONCENTRICITY	Location of derived median points.	Locates derived median points of a feature
	SYMMETRY		<i>Not common, consider position, runout, or profile.</i>