



90 Bissel Street

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### Symbol for Rules and Formulas

$a$	Addendum	$P_b$	Base Pitch	$V_s$	Spacing Variation
$ac$	Chordal Addendum	$P_m$	True Position Pitch	$V_x$	Index Variation
$anc$	Normal Chordal Addendum	$P_n$	Normal Circular Pitch	$V\Phi$	Profile Variation
$B$	Backlash	$P_N$	Normal Base Pitch	$V\Phi T$	Profile Tolerance
$b$	Dedendum	$P_t$	Transverse Circular Pitch	$V\Psi$	Tooth Alignment Variation
$C$	Center Distance	$P_x$	Axial Pitch	$V\Psi T$	Tooth Alignment Tolerance
$c$	Clearance	$P_X$	Axial Base Pitch	$Z$	Length of Action
$D$	Reference Standard Pitch Diameter	$Q$	Quality Number	$\alpha$	Addendum Angle
$Db$	Base Diameter	$Qa$	Arc of Approach	$\Gamma$	Pitch Angle
$Dc$	Datum Circle	$Qr$	Arc of Recess	$\Gamma R$	Root Angle
$Di$	Internal Diameter	$O_t$	Arc of Action	$\Sigma$	Shaft Angle
$DR$	Root Diameter	$R_r$	Test Radius	$\epsilon$	Involute Roll Angle
$Dt$	Throat Diameter	$rf$	Fillet Radius, (when constant)	$\vartheta$	Involute Polar Angle
$DO$	Out side diameter	$rt$	Throat-form Radius	$\Theta N$	Angular Pitch
$dp$	Operating Pitch Diameter	$rr$	Tip or Edge Radius of Tool	$\lambda$	Lead Angle
$F$	Face Width	$t$	Circular Tooth Thickness	$\lambda b$	Base Lead Angle
$Fe$	Effective or Active Face Width	$tb$	Base Circular Thickness	$\lambda o$	Outside Lead Angle
$Ft$	Total Face Width	$tc$	Chordal Thickness	$\lambda p$	Pitch Lead Angle
$hk$	Working Depth	$tn$	Normal Circular Thickness	$\rho$	Profile Radius of Curvature
$ht$	Whole Depth (tooth depth)	$tnc$	Normal Chordal Thickness	$\Phi$	Pressure Angle



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### Symbol for Rules and Formulas (cont)

$L$	Lead	$tr$	Tooth Thickness Tolerance	$\Phi n$	Normal Pressure Angle
$m$	Module	$tt$	Transverse Circular Thickness	$\Phi t$	Transverse Pressure Angle
$mc$	Contact Ratio	$tx$	Axial Thickness	$\Phi x$	Axial Pressure Angle
$mF$	Face Contact Ratio	$Vap$	Total Accumulated Pitch Variation	$\Psi$	Helix Angle, Spiral Angle
$mG$	Gear Ratio	$Vapk$	Total Accumulated Pitch Variation within a sector of k pitches	$\Psi b$	Base Helix Angle
$mn$	Normal Module	$Vcq$	Total Composite Variation (double flank)	$A$	Allowable Variation
$mo$	Modified Contact Ratio	$VcqT$	Total Composite Tolerance (double flank)	$G$	Features on a gear
$mp$	Transverse Contact Ratio	$Vp$	Pitch Variation	$K$	A Variable
$mt$	Total Contact Ratio	$VpA$	Allowable Pitch Variation	$n$	Normal Plane
$N$	Number of teeth or threads	$Vpn$	Normal Pitch Variation	$P$	Features on a pinion
$Ne$	Equivalent Number of teeth	$Vq$	Tooth-to-Tooth Composite Variation (double flank)	$T$	Tolerance
$Pd$	Diametral Pitch (transverse)	$VqT$	Tooth-to-Tooth Composite Tolerance (double flank)	$t$	Transverse Plane
$Pnd$	Normal Diametral Pitch	$Vr$	Radial Runout	$W$	Features on a Worm
$P$	Circular Pitch	$VrT$	Radial Runout Tolerance		