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CIRCULAR PITCH SPUR GEARS

<u>To Get</u>	<u>Having</u>	<u>Rule</u>	<u>Formula</u>
Module	Circular pitch	Divide the circular by .12368	$m=P/.12368$
Circular pitch	Diametral pitch	divide π by the diametral pitch	$P=\pi/Pd$
	Module	Multiply the modules by .12368	$P-m*.12368$
	Pitch diameter and number of teeth	Divide pitch diameter by the product of .3183 and number of teeth	$P=D/0.3183 N$
	Outside diameter and number of teeth	Divide outside diameter by the product of .3183 and number of teeth plus 2	$P=D/0.3183 (N+2)$
Pitch diameter	Number of teeth and circular pitch	The continued product of the number of teeth, the circular pitch and .3183	$D=NO.3183p$
	Outside diameter and circular pitch	Subtract from the outside diameter the product of the circular pitch and .6366	$D=D-(0.6366p)$
Outside diameter	Number of teeth and circular pitch	Divide number of teeth plus 2 by π divided by circular pitch	$D_o=(N+2)+\pi/p$
	Pitch diameter and circular pitch	Add to the pitch diameter the product of the circular pitch and .6336	$D_o=D+0.6336p$
Number of teeth	Pitch diameter and circular pitch	Divide the product of pitch diameter and π by the circular pitch	$N=\pi \cdot D/p$
Circular tooth thickness	Circular pitch	One-half the circular pitch	$t=p/2$
Std. addendum	Circular pitch	Multiply the circular pitch by .3183	$a=0.3183 \cdot p$
Std. dedendum	Circular pitch	Multiply the circular pitch by .3683	$b=.3683 \cdot p$
whole depth (2.157/DP)	Circular pitch	Multiply circular pitch by .6366	$h_1=0.6366p$