



Type B
Plain With Hub

Type B

Steel

No. Teeth	Catalog Number	Pressure Angle (Deg.)	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lbs. (App.)
			Pitch	Outside		Stock	Max.*	Diameter	Proj.	
12	S612BS 1	14-1/2	2.000	2.333	B	1.000" Bore 1/4" kw		1-1/2	7/8	1.1

Rules and Formulas For Spur Gear Calculations

Diametral Pitch
Diametral Pitch is the Number of Teeth to Each Inch of the Pitch Diameter.

To Find	Having	Rule	Formula
The Diametral Pitch	The Circular Pitch	Divide 3.1416 by the Circular Pitch	$DP = \frac{3.1416}{CP}$
The Diametral Pitch	The Pitch Diameter and the Number of Teeth	Divide the Number of Teeth by Pitch Diameter	$DP = \frac{N}{D}$
The Diametral Pitch	The Outside Diameter and Number of Teeth	Divide the Number of Teeth plus 2 by Outside Diameter	$DP = \frac{N+2}{D}$