



Call us at (800) 491-1073 and ask for Design Support * commercialgear.com

INVOLUTE SPLINES AND SERRATIONS 30° PA

TO GET	HAVING	RULE	FORMULA
Diametral pitch	Outer diameter and number of teeth	Divide number of teeth plus 1 by the outer diameter	$Pd = N + 1 / Do$
Pitch diameter	Outer diameter and number of teeth	Divide the product of outer diameter and number of teeth by number of teeth plus 1	$D = N * Do / N + 1$
Outer diameter	Diametral pitch and number of teeth	Divide the number of teeth plus 1 by the quotient of number of teeth divided by pitch diameter	$Do = N + 1 / (N/D)$
Diametral pitch	Internal diameter and number of teeth	Divide number of teeth minus 1 by the internal diameter	$Pd = N - 1 / D$
Internal diameter	Diametral pitch and number	Divide number of teeth minus 1 by	$Di = N - 1 / Pd$

DISCLAIMER AND LIMITED LIABILITY

Commercial Gear and Sprocket Company, Inc. has provided this Designers & Engineers Resource in an effort to help you conceptualize your design. Due to the complex nature of designing and its interaction with an assortment of components, Commercial Gear and Sprocket Company, Inc. does not warrant that the usage of

this site and the information therein is completely error free or fit for your specific design. Commercial Gear and Sprocket Company, Inc. makes no warranties, express or implied, with respect to the usage of the information provided or as to its fitness for any particular purpose. Commercial Gear and Sprocket Company, Inc. shall not be liable for any damage or loss of any kind, whether direct or indirect, incidental or consequential, regardless of whether such liability is based in Tort, Contract or otherwise including without limitation damages for loss of business, business profits, business interruption, or any other pecuniary loss arising out of or relating to the use of this site. **Commercial Gear and Sprocket Company, Inc. is however, standing by to assist you or design and fabricate to your specifications. Our third generation family owned company has been producing quality gears and other power transmission products at competitive prices since 1946. Call us at (800) 491-1073 and ask for Design Support**