



# DIMENSIONAL TOLERANCES

Threaded, Socket-Welding, Slip-on, Lap Joint and Blind		
* Outside Diameter	When O.D. is 24" or less	$\pm 1/16"$ (1.6mm)
	When O.D. is over 24"	$\pm 1/8"$ (3.2mm)
Inside Diameter	Threaded	Within limits on boring gauge
	Socket-Welding, Slip-on and Lap joint	10" & Smaller $+ 1/32"$ (0.8mm), - 0" 12" & Larger $+ 1/16"$ (1.6mm), - 0"
* Outside Diameter of Hub	12" and Smaller	$+ 1/32"$ (0.8mm) $- 1/16"$ (1.6mm)
	14" and Larger	$\pm 1/8"$ (3.2mm)
Diameter of Contact Face	1/16" Raised Face	$\pm 1/32"$ (0.8mm)
	1/4" Raised Face Tongue & Groove Male, Female	$\pm 1/64"$ (0.4mm)
Diameter of Counterbore	Same as for Inside Diameter	
	Bolt Circle	$\pm 1/16"$ (1.6mm)
* Drilling	Bolt hole spacing	$\pm 1/32"$ (0.8mm)
	Eccentricity of Bolt Circle with Respect to Facing	2 1/2" & Smaller $1/32"$ (0.8mm) max 3" & Larger $1/16"$ (1.6mm) max
	Eccentricity of Bolt Circle with Respect to Bore	$1/32"$ (0.8mm) max
	Eccentricity of Facing with Respect to Bore	$1/32"$ (0.8mm) max
Thickness	18" and Smaller	$+ 1/8"$ (3.2mm), - 0"
	20" and Larger	$+ 3/16"$ (4.8mm), - 0"
Length	10" and Smaller	$\pm 1/16"$ (1.6mm)
Thru Hub	12" and Larger	$\pm 1/8"$ (3.2mm)

Welding Neck		
* Outside Diameter	When O. D. is 24" or Less	$\pm 1/16"$ (1.6mm)
	When O. D. is over 24"	$\pm 1/8"$ (3.2mm)
Inside Diameter	10" and Smaller	$\pm 1/32"$ (0.8mm)
	12" thru 18"	$\pm 1/16"$ (1.6mm)
	20" and Larger	$+ 1/8"$ (3.2mm) $- 1/16"$ (1.6mm)
Diameter of Contact Face	1/16" Raised Face	$\pm 1/32"$ (0.8mm)
	1/4" Raised Face Tongue & Groove Male, Female	$\pm 1/64"$ (0.4mm)
* Diameter of Hub at Base	When Hub Base is 24" or Smaller	$\pm 1/16"$ (1.6mm)
	When Hub Base is Over 24"	$\pm 1/8"$ (3.2mm)
Diameter of Hub at Point of Welding	5" and Smaller	$+ 3/32"$ (2.4mm) $- 1/32"$ (0.8mm)
	6" and Larger	$+ 5/32"$ (4.0mm) $- 1/32"$ (0.8mm)
* Drilling	Bolt Circle	$\pm 1/16"$ (1.6mm)
	Bolt hole spacing	$\pm 1/32"$ (0.8mm)
	Eccentricity of Bolt Circle with Respect to Facing	2 1/2" & Smaller $1/32"$ (0.8mm) max 3" & Larger $1/16"$ (1.6mm) max
	Eccentricity of Bolt Circle with Respect to Bore	$1/32"$ (0.8mm) max
Thickness	18" and Smaller	$\pm 1/8"$ (3.2mm), - 0"
	20" and Larger	$\pm 3/16"$ (4.8mm), - 0"
Length	10" and Smaller	$\pm 1/16"$ (1.6mm)
Thru Hub	12" and Larger	$\pm 1/8"$ (3.2mm)

\* Tolerance for these dimensions not covered by ANSI B16.5