

# Nylon Wearband Formulas

## Formula for Calculating Piston Wear Ring Grooves

Maximum Groove Diameter	=	Mimimum Bore Diameter	-	Maximum Wear Ring Cross Section
Tolerance= +.000" -.005"				

Groove Length	=	Actual Part Length +.010"
Tolerance= +.010" -.000"		

## Formula for Calculating Rod Wear Ring Grooves

Mimimum Groove Diameter	=	Maximum Rod Diameter	+	Maximum Wear Ring Cross Section
Tolerance= +.003" -.000"				

Groove Length	=	Actual Part Length +.010"
Tolerance= +.010" -.000"		

**NOTES :**

1 - The piston diameter will not correspond to diameters called out for piston seals. Additional clearances are required for wear ring use. Piston seal material should provide sufficient extrusion resistance to prevent extrusion of the piston seal with the increase in diametral clearance caused by wear ring use.

2 - Radii MUST NOT EXCEED .010" MAXIMUM at corners on bottom of piston wear ring gland.

**NOTES :**

1 - The rod throat diameter is a new diameter over and above the diameter which is called out for the rod seal. Additional diametral clearances is required as noted for the wear ring to function properly. Since a larger clearance gap results, an extrusion resistant material should be specified for the rod seal when using wear rings.

2 - Radii MUST NOT EXCEED .010" MAXIMUM at corners on bottom of piston wear ring gland.