

Cross Spiralock* Wire Thread Inserts - User torque values

Metric coarse pitch series

The following table shows the applied torque required to achieve a preload in the bolt of 75% of the 0.2% proof stress of the bolt / screw material.

Light oil is recommended as the thread lubricant for consistent torque / preload values.

Property class - strength grade designation (General workshop quality high tensile steel)		8.8
Bolt size	Torque Nm	Design aim preload N
M3 x 0.5	1.6	2410
M4 x 0.7	3.7	4210
M5 x 0.8	7.5	6820
M6 x 1.0	12.7	9650
M8 x 1.25	30.9	17570
M10 x 1.5	61.2	27840
M12 x 1.75	107	40460
M16 x 2.0	265	75360

Property class - strength grade designation (Aerospace quality high tensile steel)		12.9
Bolt size	Torque Nm	Design aim preload N
M3 x 0.5	2.7	4070
M4 x 0.7	6.3	7110
M5 x 0.8	12.7	11500
M6 x 1.0	21.5	16280
M8 x 1.25	52.2	29650
M10 x 1.5	103	46980
M12 x 1.75	180	68280
M16 x 2.0	448	127200

It is recommended that user refers to the CMC 'Users Guide for Insert Length Selection' to ensure that the insert length specified is sufficient relative to the shear strength of the parent material.

Torque wrenches should be calibrated to give accuracy within +/- 10%

Disclaimer

The figures in this table are for guidance only. It remains the responsibility of the user to ensure that torque figures used are suitable for the application.

Dependence on the contents of these tables for any purposes by any person is at the sole risk of that person, and Cross Manufacturing Company is not responsible for any loss, claim or damages arising therefrom.

