Durlok[®] Nuts - Metric

Unbrako



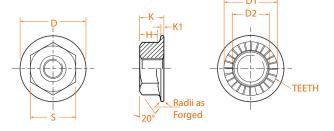


Durlok nuts are designed with long, ramp shaped, radial teeth blended evenly into a smooth slightly conical outer surface. For use with Durlok Bolts. Self-locking. Anti-vibration. Reusable.

Mechanical Properties

Material: Alloy Steel ISO 898-1 Hardness: 28-36HRc Thread class: 6H Head marking: U 12 Threads: ANSI B1.13M, ISO 261, ISO 262 (coarse series only) Property Class: 12





Product Dimensions

	D	D1	D2	S	Н	Κ	K1
Size	max	min	max	max	min	nom	min
M5	12	10.0	6.2	8	2.46	4.5	1.0
M6	14	11.8	7.4	10	3.06	5.2	1.1
M8	18	15.2	9.5	13	4.60	7.2	1.3
M10	21	17.2	12.5	15	5.90	9.0	1.6
M12	25	20.6	15.0	19	7.45	11.0	1.9
M14	28	23.4	17.0	22	8.55	12.5	2.2
M16	32	26.4	19.0	24	10.25	16.0	2.3
M20	39	32.4	23.0	30	13.05	18.0	2.9

Technical Data

The Durlok fastener system is effective on a wide variety of engineering materials including steel - both heat treated and non-heat treated, cast irons including nodular types, non ferrous metals and sheet materials.

The Presence of oil or other lubricants, organic or inorganic coatings should not adversely affect the locking ability. Durlok Fasteners can be used at elevated temperatures up to 300°C.

The Induced assembly pre-load Fmax and the corresponding tightening torques, T max are based on a 90% utilisation of the minimum yield strength by combined tension and torsional stresses. For cases where the yield strength must never be exceeded during tightening, the tightening torque must be reduced by a value equivalent to the scatter. Comprehensive investigation has shown that the scatter, due to variations in friction coefficient and torque scatter when tightening with torque wrench, must be accounted for by using a reduced torque T which is 90% of the tabulated value T max, T = 0.9 x Tmax Accordingly the induced pre-load Fmax will be reduced to the new pre-load F, Ff = 0.9 x Fmax

It should be noted that pre-load and tightening torque are a function of the joint stiffness. The tabulated values are valid for

a joint stiffness which occurs under snug conditions with a clamping length of 2.5 - 4d. In addition , the values are based on an average friction co-efficent for the threads of $\mu = 0.125$.

The value of the friction coefficient in the bearing area μ h, has a different value to that of the friction coefficient in the threads μ t, due to the serrations. As for all bolts the friction coefficient under the head is a function of the material, surface finish and lubrication condition of the contacting materials. To account for this the tightening torques are listed for various values of μ h.

For guidance the following chart is designed to indicate the appropriate value of friction coefficient to be applied for various engineering materials and finishes. The value of μ h are based on the results of comprehensive tests:

Coated Surface Bare Bolt Surface	Fine Turning Grinding	Turning, Boring, Milling	Rough Turning Rough Milling	
Steel Hardness 250-350 HV	0.125 0.16	0.125 0.160	0.125 0.125	
Steel Hardness 150-250HV	0.160 0.20	0.160 0.160	0.160 0.160	
Grey cast Iron Nodular Cast Iron	0.20	0.160	0.125	