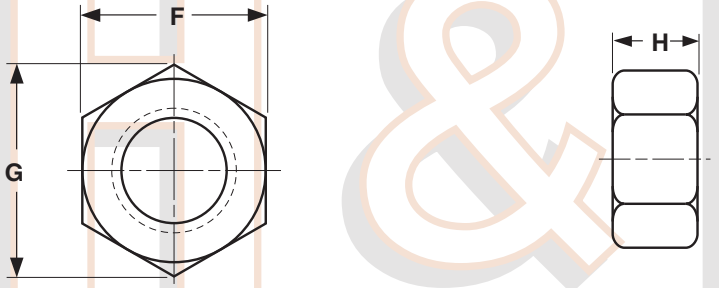
METRIC

DIN 934 Hex Nuts



METRIC - Hex Nuts, DIN 934

DIN 934

Nominal Size	Thread Pitch	F		H	
		Width Across Flats		Thickness	
		Max	Min	Max	Min
M2	0.4	4	3.82	1.6	1.35
M2.5	0.45	5	4.82	2	1.75
M3	0.5	5.5	5.32	2.4	2.15
M4	0.7	7	6.78	3.2	2.9
M5	0.8	8	7.78	4	3.7
M6	1	10	9.78	5	4.7
M8	1.25	13	12.73	6.5	6.14
M10	1.5	17	16.73	8	7.64
M12	1.75	19	18.67	10	9.64
M16	2	24	23.67	13	12.3
M20	2.5	30	29.16	16	14.9

Description	A Style 1, heat treated fastener with a metric thread pitch. Nuts M16 and smaller are chamfered on the top and the bearing surface. Nuts M20 and larger may be either double chamfered, or have a washer face on one side and a chamfered surface on the opposite side.			
Applications/ Advantages	Class 6 nuts are to be used with screws and bolts of property class 6.8 or lower. They are commonly used with metric machine screws.	Class 8 nuts are for use with screws and bolts of property class 8.8 and lower. They are often used in automotive and electronic applications.	Class 10 nuts are intended for use with screws and bolts of property classes 10.9 and lower. They are widely used in farm equipment.	18-8 stainless steel nuts are intended for use with 18-8 screws and bolts. They are used where corrosion resistance is desired.
Material	Class 6 nuts shall be made of a steel which conforms to the following chemical composition-- ***Carbon***: 0.50% maximum; ***Phosphorus***: 0.060% maximum; ***Sulfur***: 0.150% maximum.	Class 8 nuts shall be made of a steel which conforms to the following chemical composition-- ***Carbon***: 0.58% maximum; ***Manganese***: 0.25% minimum; ***Phosphorus***: 0.060% maximum; ***Sulfur***: 0.150% maximum.	Class 10 nuts shall be made of a steel which conforms to the following chemical composition-- ***Carbon***: 0.58% maximum; ***Manganese***: 0.30% minimum; ***Phosphorus***: 0.048% maximum; ***Sulfur***: 0.058% maximum.	Diameters M3 & M4: A2-50 Diameters M5 & M6: A2-70
Heat Treatment	-	Class 8 nuts of diameter 18mm or greater shall be heat treated by quenching in a liquid medium from a temperature above the transformation temperature and tempering at a temperature of at least 425°C.	Class 10 nuts shall be heat treated by quenching in a liquid medium from a temperature above the transformation temperature and tempering at a temperature of at least 425°C.	-
Hardness	***Class 6***: ***Thru M16 Diam***: Rockwell B78.7 - C30; ***Diam M18 thru M39***: Rockwell B85 - C30	***Class 8***: ***Diam M1.6 thru M4:*** Rockwell B87.1 - C30; ***Diam M5 thru M16:*** Rockwell B91.5 - C30; ***Diam M18 thru M39:*** Rockwell C18 - 36.	***Class 10:*** Rockwell C26 - 36	Diameters M3 & M4: Rockwell B81 - B95 Diameters M5 & M6: Rockwell B96 - C33
Proof Load	***Diameters M1.6 thru M10:*** 600 N/mm² ***Diameters M5 thru M7:*** 670 N/mm² ***Diameters M8 thru M10:*** 680 N/mm² ***Diameters M12 thru M16:*** 700 N/mm² ***Diameters M18 thru M36:*** 720 N/mm²	***Diameters M1.6 thru M4:*** 900 N/mm² ***Diameters M5 thru M7:*** 855 N/mm² ***Diameters M8 thru M10:*** 870 N/mm² ***Diameters M12 thru M16:*** 880 N/mm² ***Diameters M18 thru M36:*** 920 N/mm²	***Diameters through M10:*** 1040 N/mm² ***Diameters M12 through M16:*** 1050 N/mm² ***Diameters M18 through M39:*** 1060 N/mm²	Diameters M3 & M4: 500 MPa Diameters M5 & M6: 700 MPa
Plating	DIN 934 Hex Nuts are commonly supplied in both plain and zinc finishes; see Appendix-A for more details.			Usually supplied plain