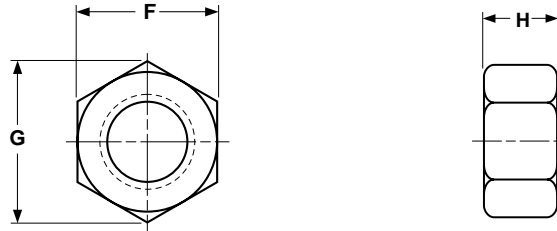


# Hex Nut Style 2 Class 12

# METRIC

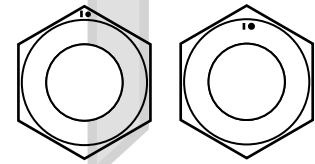
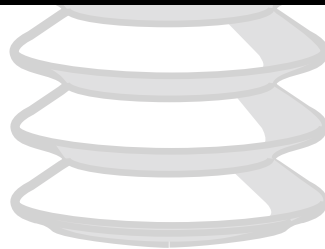
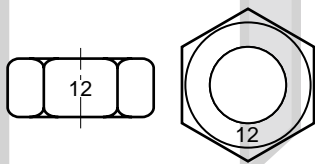
# Nuts



## METRIC - HEX NUTS, STYLE 2

ISO 4033

Nominal Size	Thread Pitch	F		G	H	
		Width Across Flats		Width Across Corners	Thickness	
		Max	Min	Min	Max	Min
M5	0.8	8	7.78	8.79	5.1	4.8
M6	1	10	9.78	11.05	5.7	5.4
M8	1.25	13	12.73	14.38	7.5	7.14
M10	1.5	16	15.73	17.77	9.3	8.94
M12	1.75	18	17.73	20.03	12	11.57
M14	2	21	20.67	23.35	14.1	13.4
M16	2	24	23.67	26.75	16.4	15.7
M20	2.5	30	29.16	32.95	20.3	19
M24	3	36	35	39.55	23.9	22.6
M30	3.5	46	45	50.85	28.6	27.3
M36	4	55	53.8	60.79	34.7	33.1



Description	A six-sided internally threaded, heat treated fastener with a metric thread pitch. Style 2 nuts are approximately 10% thicker than Style 1 nuts of the same nominal diameter. Nuts M16 and smaller are chamfered on the top and the bearing surface. Nuts M18 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 12 nuts are intended for use with screws and bolts of property classes 12.9 or lower.
Material	Class 12 nuts shall be made of a steel which conforms to the following chemical composition-- <i>Carbon</i> : 0.58% maximum; <i>Manganese</i> : 0.45% minimum; <i>Phosphorus</i> : 0.048% maximum; <i>Sulfur</i> : 0.058% maximum.
Heat Treatment	Class 12 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	<b>Style 1:</b> Vickers HV 295 - 353 (Rockwell C 29.2 - 36) <b>Style 2:</b> Vickers HV 272 - 353 (Rockwell C 25 - 36)
Proof Load	<b>Style 1:</b> <u>Diameters M1.6 through M10:</u> 1140 N/mm <sup>2</sup> ; <u>Diameters M12 through M16:</u> 1170 N/mm <sup>2</sup> <b>Style 2:</b> <u>Diameters M1.6 through M7:</u> 1150 N/mm <sup>2</sup> ; <u>Diameters M8 through M10:</u> 1160 N/mm <sup>2</sup> ; <u>Diameters M12 through M16:</u> 1190 N/mm <sup>2</sup> ; <u>Diameters M18 through M36:</u> 1200 N/mm <sup>2</sup>
Plating	See Appendix-A for plating information