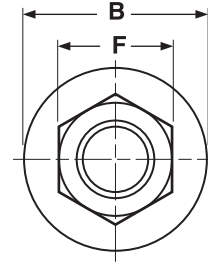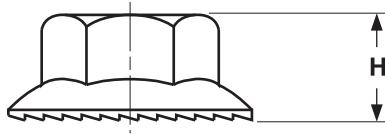# METRIC FASTENERS

DIN 6923 / ISO 4161 Hex Flange—Serrated, Class 8 Steel & Class A2 Stainless

NUTS

METRIC DIN 6923 / ISO 4161 SERRATED HEX FLANGE NUTS

DIN 6923
ISO 4161

Nominal Size	Thread Pitch	F Width Across Flats		H Overall Height		B Flange Diameter
		Max	Min	Max	Min	Max
M3	0.5	5.50	5.30	4.0	3.4	8.0
M4	0.7	7.00	6.78	4.65	4.2	10.0
M5	0.8	8.00	7.78	5.0	4.7	11.8
M6	1.0	10.00	9.78	6.0	5.7	14.2
M8	1.25	13.00	12.73	8.0	7.6	17.9
M10	1.5	15.00	14.73	10.0	9.6	21.8
M12	1.75	18.00	17.73	12.0	11.6	26
M16	2	24.00	23.67	16.0	15.3	34.5
M20	2.5	30.00	29.61	20.0	18.9	42.8

Description	Hex nut with an enlarged circular base flaring out from the bottom of the nut. The bearing surface of the flange has serrations which displace material on the mating surface when the nut is wrenched into place, forming a connection which resists loosening.	
Applications/ Advantages	Requires a greater amount of torque to loosen than to tighten the nut. Will span oversized or poorly aligned holes. Flange provides a more uniform bearing-stress to clamp-force ratio than other low carbon lock nuts. Does not gall screw threads.	Class A2 50 nuts are intended for use with stainless screws and bolts. The flange design will span oversized or poorly aligned holes. The flange provides a more uniform bearing-stress to clamp-force ratio.
Material	*Class 8*	*Class A2 50*
	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.	A2 Stainless Steel
Heat Treatment	Class 8 nuts of diameter less than 18mm do not require heat treatment.	-
Hardness	*Diameters M5 thru M16:* Vickers HV 188 - 302	-
Proof Load	*Diameters M5 thru M6:* 117,450 psi. *Diameters M8 thru M10:* 120,350 psi. *Diameters M12 thru M16:* 121,800 psi.	72,500 psi.
Plating	Available in various finishes, including to RoHS specifications.	Typically provided without additional finish.