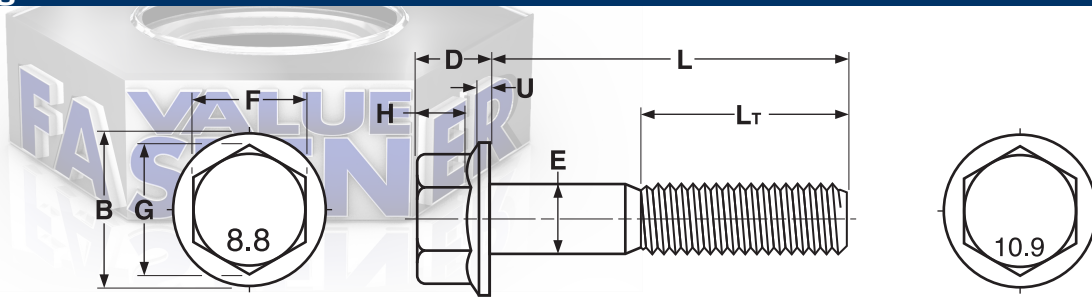


DIN 6921
Flange Bolts

CAP SCREWS & BOLTS



DIN 6921 Hex Flange Bolts											DIN 6921
Nominal Size	Thread Pitch	E		F		G	D	H	U	B	
		Body Diameter		Width Across Flats		Width Across Corners	Total Head Height	Wrenching Height	Flange Edge Thickness	Flange Diameter	
		Max	Min	Max	Min	Min	Max	Min	Min	Max	Min
M6	1	6	5.82	10	9.78	10.95	6.6	2.6	1.1	14.2	12.2
M8	1.25	8	7.78	13	12.73	14.26	8.1	3.2	1.2	18	16.8
M10	1.5	10	9.78	15	14.73	16.5	9.2	3.6	1.5	22.3	19.6
M12	1.75	12	11.73	16	15.73	17.62	11.5	4.6	1.8	28.6	23.8
Tolerance on Length		12 thru 16mm: $\pm 0.35\text{mm}$		20mm thru 30mm: $\pm 0.42\text{mm}$		35 thru 50mm: $\pm 0.5\text{ mm}$					
		55 thru 80 mm: $\pm 0.6\text{ mm}$		90 thru 120 mm: $\pm 0.7\text{ mm}$		130 thru 180 mm: $\pm 0.8\text{ mm}$					

THREAD LENGTHS (L _T) FOR DIN 6921 Hex Flange Bolts					DIN 6921
Nominal Size	Thread Pitch	For Lengths $\leq 125\text{mm}$	For Lengths $> 125\text{mm}$ $\leq 200\text{mm}$	For Lengths $> 200\text{mm}$	
M6	1	18			
M8	1.25	22	28		
M10	1.5	26	32		
M12	1.75	30	36		

Description	A one-piece hex washer head bolt with a flat bearing surface, made of medium carbon or high-alloy steel.	A one-piece hex washer head bolt with a flat bearing surface, made of corrosion resistant stainless steel.
Applications / Advantages	Primary use for Class 10.9 bolt is on truck chassis frames. The flange eliminates the need for a flat washer and helps compensate for a misaligned hole. When used with a proper class flange nut, the bolt system resists bolt slippage by distributing the clamp load over a wide area.	For use in low-strength applications where resistance to environmental corrosion is a primary concern.
Material	Class 8.8 carbon steel chemical composition: Carbon- 0.15 - 0.55%; Phosphorous- 0.35% max; Sulphur- 0.35% max Class 10.9 alloy steel chemical composition: Carbon- 0.20 - 0.55%; Phosphorous- 0.35% max; Sulphur- 0.35% max	Class A2-70
Tempering Temperature	425° C Minimum	
Tensile Strength	Class 8.8: 800 N/mm ² min.; Class 10.9: 1040 N/mm ² min.	700 N / mm ²
Rockwell Hardness	Class 8.8: Rockwell C22 - 32.; Class 10.9: Rockwell C32 - 39	
Proof Stress	Class 8.8: 640 N/mm ² min.; Class 10.9: 940 N/mm ² min.	
Plating	Parts are available in various finishes including black phosphate, zinc, or with a plain finish.	Stainless screws are usually supplied without a supplemental finish.