

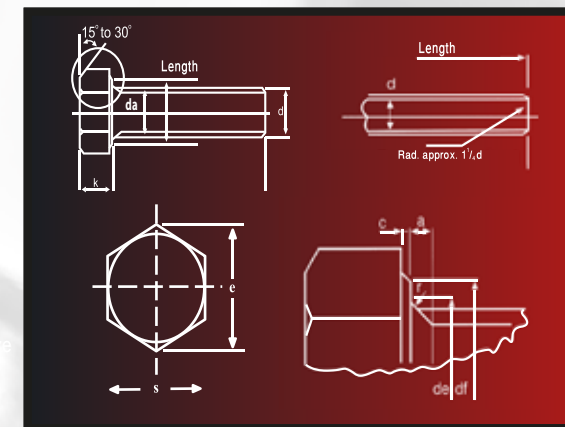


Non- Pre Load Bolt Assemblies as BS 3692 (8.8 /10.9)

Hex Bolt

Bolt Drawing

BS 3692 Partially threaded Hex Bolt dimensions. Classes 8.8 & 10.9												
Nominal size and Thread dia. d	Pitch of thread p	Thread rouout a	Width across flats s		Width across corners e		Depth of washer face d		Radius under head r	Transition diameter ^a d_a	Thickness of head k	
			max	min	max	min	max	min			max	Min
M12	1.75	4.00	19.00	18.67	21.90	21.10	18.37	18.12	0.60	14.20	8.18	7.82
M16	2.00	5.00	24.00	23.67	27.75	26.70	23.27	23.02	0.60	18.20	10.18	9.82
M20	2.50	6.00	30.00	29.67	34.60	33.53	29.27	28.80	0.80	22.40	13.215	12.785
M24	3.00	7.00	36.00	35.38	41.60	39.98	34.98	34.51	0.80	26.40	15.215	14.785
M30	3.50	8.00	46.00	45.38	53.10	53.10	44.98	44.36	1.00	33.40	19.26	18.74
M36	4.00	10.00	55.00	54.26	63.50	61.31	53.86	53.24	1.00	39.40	23.26	22.74



Product Characteristics	Standard	
Fully threaded setscrews		
General requirements	BS3692	
Material & manufacture	ISO 898-1 CLASSES 8.8 & 10.9	
Finish /coatings	Zinc electroplated	BS 7371-3 or BS EN ISO 4042
	Hot dip galvanized	BS 7371-6 or BS EN ISO 10684
Mechanical Properties	ISO 898-1 Classes 8.8 & 10.9	
Dimensions & tolerances	BS3643-2	
Threads	BS3643-1 class 6G	

BS 3692 Mechanical properties. Grade 8.8 setscrews					
Bolt thread dia	Tensile strength	Proof load	Elongation	Hardness Rockwell HRC	
	N/mm ² min	N/mm ² min	% min	min	Max
M12	800.00	48.90	12.00	22.00	32.00
M16	800.00	91.00	12.00	22.00	32.00
M20	830.00	147.00	12.00	23.00	34.00
M22	830.00	182.00	12.00	23.00	34.00
M24	830.00	212.00	12.00	23.00	34.00
M27	830.00	275.00	12.00	23.00	34.00
M30	830.00	337.00	12.00	23.00	34.00
M36	830.00	490.00	12.00	23.00	34.00

ISO 4014 Assemblies also require a charpy impact test to en 10045-1

Marking

