

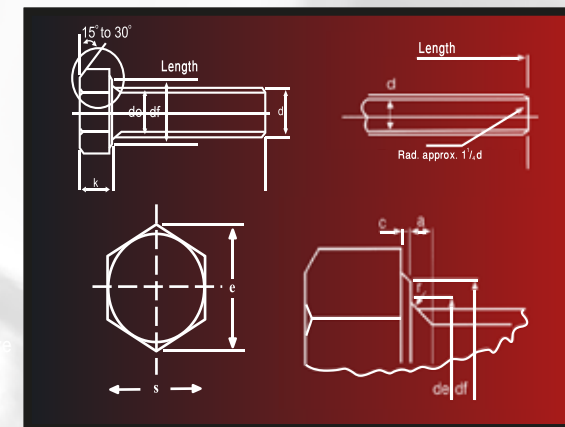
# Non- Pre Load Bolt Assemblies as ISO 4014

## Hex Bolt

## Bolt Drawing

ISO 4014 Partially threaded Hex Bolt dimensions. Classes 8.8 & 10.9

Nominal size and Thread dia. <i>d</i>	Pitch of thread <i>p</i> (Coarse pitch series)	Plain portion <i>a</i> max	Width across flats <i>s</i>		Width across corners <i>e</i> min	Diameter of washer face <i>df</i> min	Depth of washer face <i>c</i>		Radius under head <i>r</i> min	Transition diameter <i>r<sub>de</sub></i> max	Thickness of head <i>k</i>	
			max	min			max	min			max	Min
M12	1.75	5.25	18.00	17.57	19.85	16.47	0.60	0.15	0.60	13.70	7.68	7.32
M16	2.00	6.00	24.00	23.16	26.16	22.00	0.80	0.20	0.60	17.70	10.29	9.71
M20	2.50	7.50	30.00	29.16	32.95	27.70	0.80	0.20	0.80	22.40	12.85	12.15
M24	3.00	9.00	36.00	35.00	39.55	33.25	0.80	0.20	0.80	26.40	15.35	14.65
M30	3.50	10.50	46.00	45.00	50.85	42.75	0.80	0.20	1.00	33.40	19.12	18.28
M36	4.00	12.00	55.00	53.00	60.78	51.11	0.80	0.20	1.00	39.40	22.92	22.08



Product Characteristics		Standard
Fully threaded setscrews		
General requirements		ISO 4014
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		ISO 4014
Threads		ISO 965-2 class 6G

ISO 4014 Mechanical properties. Grade 8.8 setscrews

Bolt thread dia	Tensile strength	Proof load	Elongation	Hardness Rockwell HRC	
	N/mm <sup>2</sup> min	N/mm <sup>2</sup> 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

## Marking

