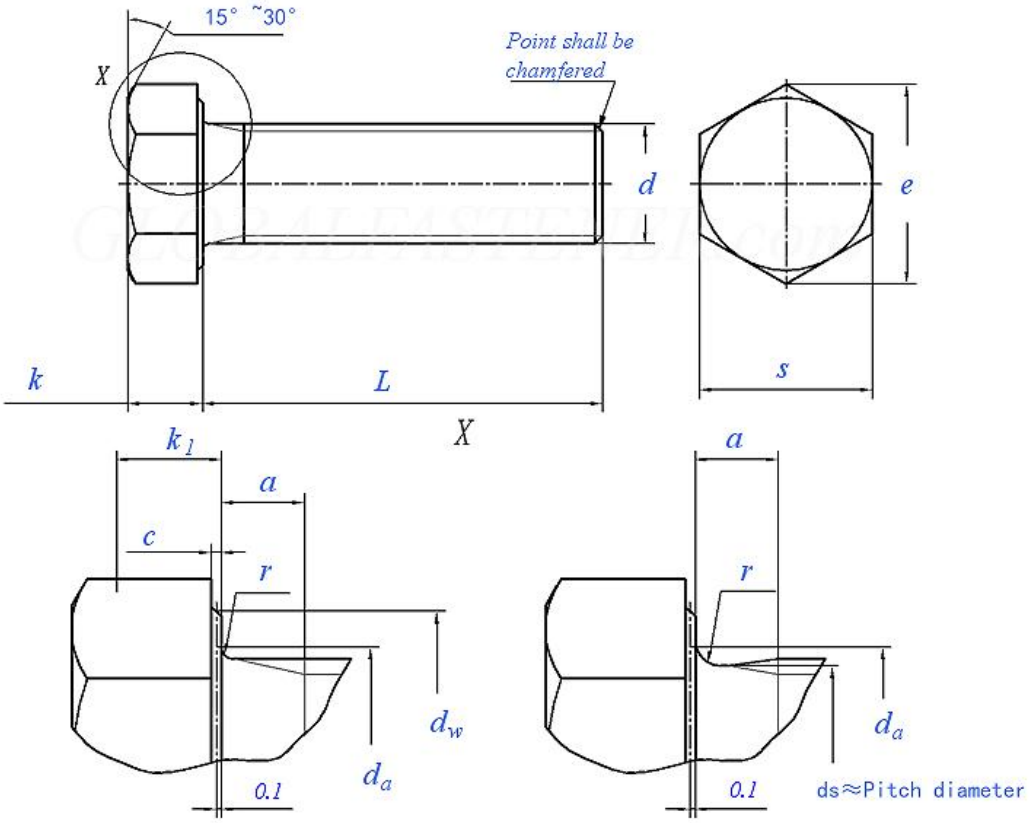
DIN 961 Hex Bolt

Leader-Fastener is a manufacturer and distributor of **DIN 961 Hex Bolt.** We have a complete line of service from having invested in production plants, export department and to having a quality control team and center to meet your requirements. We regard quality as the life of the company. We persist in good quality as the first policy and have established a set of quality control and inspection system according to the international standard. We have carried out ISO9001 Quality Guarantee System in every course of production, transportation and selling. We do hope we could be your partner in business by topping quality, knight service and competitive price in the near future and be your friends as well.

DIN 961 - Hex Cap Screws, Metric Fine Thread - Full Thread

DIN 961 Hex Head Cap Screws are fully threaded and have fine or extra fine external machine screw threads (the distance from thread to thread is less than for coarse threads). Having dimensions that are similar to ISO 8675, use with tapped holes and nuts. Class 8.8 and 10.9 steel are available; zinc plating provides corrosion protection while plain finish is unplated and can rust. The thread tolerance of Class 8.8 and 10.9 is 6g for plain finish and 6h for plated; right-hand threads are standard. Sometimes called hex head bolts and tap bolts, the length of the bolt is measured from under the head to the tip. **DIN 961 Hex Head Cap Screws** are similar to ISO 8675 and JIS B1180. For comparison, DIN 960 is partially threaded and DIN 933 is fully threaded but has coarse threads.

DIN 961 - 1990 Hexagon head bolts with fine pitch thread—Product grades A and B



Screw Thread d			M8	M10	M12	M14	M16	M18	M20	M22	M24
P	Pitch	Fine thread-1	1	1	1.5	1.5	1.5	2	1.5	2	2
		Fine thread-2	-	1.25	1.25	-	-	1.5	2	1.5	1.5
a	max		3	3.75	4.5	4.5	4.5	6	6	6	6
c	min		0.15	0.15	0.15	0.15	0.2	0.2	0.2	0.2	0.2
	max		0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8
d_a	max		9.2	11.2	13.7	15.7	17.7	20.2	22.4	24.4	26.4
d_w	Grade A	min	11.6	15.6	17.4	20.5	22.5	25.3	28.2	30	33.6
	Grade B	min	11.4	15.4	17.2	20.1	22	24.8	27.7	29.5	33.2
e	Grade A	min	14.38	18.9	21.1	24.49	26.75	30.14	33.53	35.72	39.98
	Grade B	min	14.2	18.72	20.88	23.91	26.17	29.56	32.95	35.03	39.55
k	Nominal Size		5.3	6.4	7.5	8.8	10	11.5	12.5	14	15
	Grade A	min	5.15	6.22	7.32	8.62	9.82	11.28	12.28	13.78	14.78
		max	5.45	6.58	7.68	8.98	10.18	11.72	12.72	14.22	15.22
	Grade B	min	5.06	6.11	7.21	8.51	9.71	11.15	12.15	13.65	14.65
		max	5.54	6.69	7.79	9.09	10.29	11.85	12.85	14.35	15.35

k_1	min		3.54	4.28	5.05	5.96	6.8	7.8	8.5	9.6	10.3
r	min		0.4	0.4	0.6	0.6	0.6	0.6	0.8	0.8	0.8
s	max=nominal size		13	17	19	22	24	27	30	32	36
	Grade A	min	12.73	16.73	18.67	21.67	23.67	26.67	29.67	31.61	35.38
	Grade B	min	12.57	16.57	18.48	21.16	23.16	26.16	29.16	31	35
Weight of per 1000 steel products(≈kg)			-	-	-	-	-	-	-	-	-

Screw Thread d			M27	M30	M33	M36	M39	M42	M45	M48	M52
P	Pitch	Fine thread-1	2	2	2	3	3	3	3	3	3
		Fine thread-2	-	-	-	-	-	-	-	-	-
a	max		6	6	6	9	9	9	9	9	9
c	min		0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	max		0.8	0.8	0.8	0.8	1	1	1	1	1
d_a	max		30.4	33.4	36.4	39.4	42.4	45.6	48.6	52.6	56.6
d_w	Grade A	min	-	-	-	-	-	-	-	-	-
	Grade B	min	38	42.7	46.6	51.1	55.9	59.9	64.7	69.4	74.2
e	Grade A	min	-	-	-	-	-	-	-	-	-
	Grade B	min	45.2	50.85	55.37	60.79	66.44	71.3	76.95	82.6	88.25
k	Nominal Size		17	18.7	21	22.5	25	26	28	30	33
	Grade A	min	-	-	-	-	-	-	-	-	-
		max	-	-	-	-	-	-	-	-	-
	Grade B	min	16.65	18.28	20.58	22.08	24.58	25.58	27.58	29.58	32.5
		max	17.35	19.12	21.42	22.92	25.42	26.42	28.42	30.42	33.5
k_1	min		11.7	12.8	14.4	15.5	17.2	17.9	19.3	20.9	22.8
r	min		1	1	1	1	1	1.2	1.2	1.6	1.6
s	max=nominal size		41	46	50	55	60	65	70	75	80
	Grade A	min	-	-	-	-	-	-	-	-	-
	Grade B	min	40	45	49	53.8	58.8	63.1	68.1	73.1	78.1
Weight of per 1000 steel products(≈kg)			-	-	-	-	-	-	-	-	-

Material:

a) Steel, Property class (material): d≤39mm: 5.6,8.8,10.9; d > 39mm: subject to agreement. Standard DIN ISO 898-1

b) Stainless steel, Property class (material): d≤20mm： A2-70， A4-70; 20mm 39mm: subject to agreement. Standard DIN 267-11

c) Non-ferrous metal, Property class (material): subject to agreement. Standard DIN 267-18

Note: The symbols used to denote property class as specified in DIN ISO 898-1 and DIN 267-11 may also be used for sizes above M39 provided that the finished product has all the properties assigned to the particular symbol.