

**Draft Sri Lanka Standard
HEXAGON BOLTS FOR GENERAL PURPOSES
Part 2 - Dimensions of Product grade C**

SLS 977 : Part 2 : 1992

Gr.

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SRI LANKA**

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FOREWORD

This standard was approved by the Sectoral Committee on Metal and Metal Products and was authorized for adoption and publication as a Sri Lanka Standard by the council of the Sri Lanka Standards Institution on

Since there are several types of bolts used for different applications, a series of standards have been formulated on hexagon bolts to fall in line with the international standards published by the International Organization for Standardization (ISO). These standards comprise of the following:

Hexagon bolts for general purposes

- Part 1 Dimensions of Product Grades A and B
- Part 2 Dimensions of Product Grade C
- Part 3 Dimensions of Product Grade B - Reduced shank
- Part 4 Dimensions of Product Grade A and B - Fine pitch thread
- Part 5 General Requirements

There are three grades of hexagon bolts as follows, the grading being according to the range of tolerance:

- a) Grade A - Most precise
- b) Grade B - Semi precise
- c) Grade C - Least precise.

This part deals with product Grade C only. Part 5 of this standard specifies, inter alia, the grading of hexagon bolts.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or an observation shall be rounded off in accordance with CS 102. The number of figures to be retained in the rounded off value shall be the same as that of the specified value in this standard.

The Sri Lanka Standards Institution gratefully acknowledges the use of the following publication of the International Organization for Standardization (ISO) in the preparation of this standard:

ISO 4016 Hexagon bead bolts-Product grade C.

1 SCOPE

This standard specifies dimensions for hexagon head bolts of product Grade C. For Product Grade C, the thread diameters covered ^{the} range from M 5 upto and including M 64.

2 REFERENCES

CS 102 Presentation of numerical values
SLS 268 ISO metric screw threads

3 GRADES

The grades of hexagon bolts covered in this part shall be Product Grade C (see Foreword).

4 DIMENSIONS

4.1 Bolt

Dimensions of hexagon bolts shall be as given in Table 1 and Table 2 (see Fig. 1)

4.2 Thread

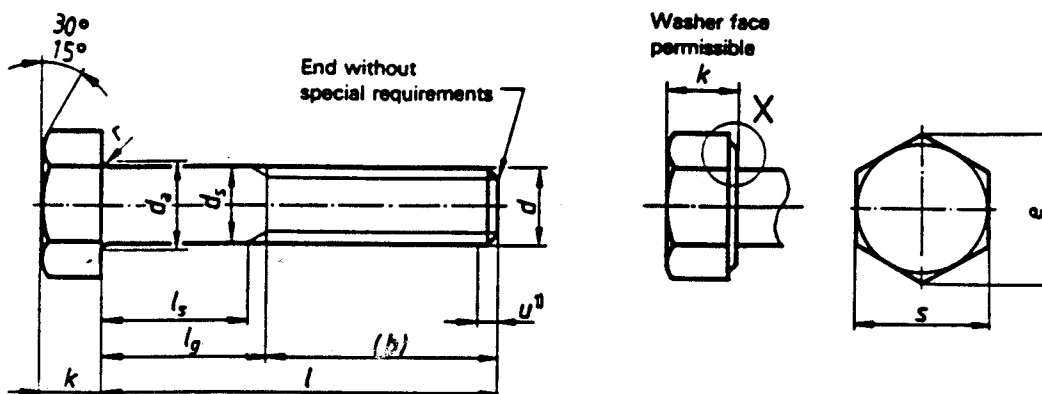
4.2.1 The thread shall be ISO metric coarse screw thread as specified in SLS 268.

4.2.2 Tolerance on screw thread shall conform to Class 8g as specified in SLS 268 Part 4.

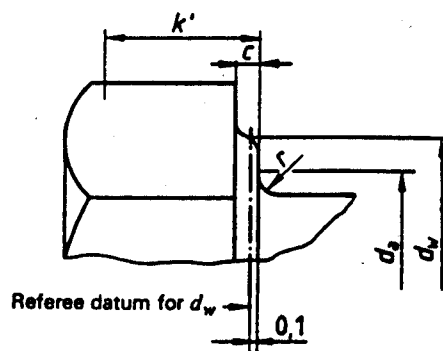
3 Dimensions

NOTE — Symbols and designations of dimensions are specified in ISO 225.

Dimensions in millimetres



X



ISO	10	12	16	20	24	30	36	48	60	80	100	120	150	180	220	270	330	400	500	630	800	1000	
ISO 4016																							

11. Incomplete thread in $\leq 2 P$

Table 2 — Non-preferred threads

Thread (d)	Dimensions in millimetres										
	M14	M18	M22	M27	M33	M39	M45	M52	M60		
P1)	2	2,5	2,5	3	3,5	4	4,5	5	5,5		
b ref	21	42	50	60	—	—	—	—	—		
	31	48	56	66	78	90	102	116	—		
	41	—	69	79	91	103	115	129	145		
c	max. 0,6	0,8	0,8	0,8	0,8	1	1	1	1		
d _g	max. 16,7	21,2	26,4	32,4	38,4	45,4	52,6	62,6	71		
d _s	max. 14,7	18,7	22,84	27,84	34	40	46	53,2	61,2		
	min. 13,3	17,3	21,16	26,16	32	38	44	50,8	58,8		
d _w	min. 19,15	24,85	31,35	38	46,55	55,86	64,7	74,2	83,41		
e	min. 22,78	29,56	37,29	45,2	55,37	66,44	76,95	88,26	99,21		
	nom. 8,8	11,5	14	17	21	25	28	33	38		
k	min. 8,35	10,6	13,1	16,1	19,95	23,95	26,95	31,75	36,75		
	max. 9,25	12,4	14,9	17,9	22,05	26,05	29,05	34,25	39,25		
k'5)	min. 5,85	7,42	9,17	11,27	13,97	16,77	18,87	22,23	25,73		
r	min. 0,6	0,6	0,8	1	1	1	1,2	1,6	2		
s	nom. = max. 21	27	34	41	50	60	70	80	90		
	min. 20,16	26,16	33	40	49	58,8	68,1	78,1	87,8		

norm.	l		l _s and l _g (6), 7)		l _s		l _g		l _s		l _g		l _s		l _g	
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
60	58,5	61,5	16	26	—	—	—	—	—	—	—	—	—	—	—	—
65	63,5	66,5	21	31	—	—	—	—	—	—	—	—	—	—	—	—
70	68,5	71,5	26	36	—	—	—	—	—	—	—	—	—	—	—	—
80	78,5	81,5	36	46	25,5	38	—	—	—	—	—	—	—	—	—	—
90	88,25	91,75	46	56	35,5	48	27,5	40	—	—	—	—	—	—	—	—
100	98,25	101,75	56	66	45,5	58	37,5	50	—	—	—	—	—	—	—	—
110	108,25	111,75	66	76	55,5	68	47,5	60	35	50	—	—	—	—	—	—
120	118,25	121,75	76	86	65,5	78	57,5	70	45	60	—	—	—	—	—	—
130	128	132	80	90	69,5	82	61,5	74	49	64	34,5	52	—	—	—	—
140	138	142	90	100	79,5	92	71,5	84	59	74	44,5	62	—	—	—	—
150	148	152	—	—	89,5	102	81,5	94	69	84	54,5	72	40	60	—	—
160	156	164	—	—	99,5	112	91,5	104	79	94	64,5	82	50	70	—	—

For sizes above the stepped line, marked thus —, ISO 4018 is recommended.

