



PLANT STANDARD

HPBP TIRUCHIRAPALLI

BPS: 41201

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Based on IS: 1366-1982

SLOTTED CHEESE HEAD SCREWS

1.0 SCOPE

Covers the requirements of Slotted Cheese Head Screws in the size range M1.6 to M10.

2.0 SPECIFICATION AND REFERENCE STANDARDS

Dimensions and Preferred sizes	Table 1 of this standard	
Preferred length-size combination	Table 2 of this standard	
Tolerance	Product grade	A
	Indian Standard	IS: 1367 (Part 2)
Thread	Pitch	Coarse
	Tolerance	6g
	Indian Standard	IS: 4218 (Part 3, 5 & 6)
Material	Steel	
Mechanical properties	Property class	4.8
	Indian Standard	IS: 1367 (Part 3)
Sampling and Acceptability	Indian Standard	IS: 2614
General requirements	Screws shall comply with IS: 1366 in respect of requirements not covered in this standard	

2.1 Referred Standards (Only the relevant parts of current versions are applicable)

- IS: 1366 Specification for slotted cheese head screws
- IS: 1367 Technical supply conditions for threaded steel fasteners
- IS: 2614 Methods for sampling of fasteners
- IS: 4218 ISO Metric screw threads

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REVISIONS

DATE

APPROVED

STANDARDS SECTION
ENGINEERING AND DEVELOPMENT CENTRE
HPBP TIRUCHIRAPALLI

PREPARED

HPBP TIRUCHY

ISSUED

STANDARDS
ENGG

DATE

DEC 1986



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3.0 DESIGNATION

A Grade A Slotted Cheese Head Screw to this standard of thread size M6 and nominal length 30mm shall be designated as:

3.1 On Drawings:

- i) Material Specification column: IS: 1366
- ii) Description column : SCRU SLT CHS GR A 4.8 M6x30
- iii) Drawing Number column : 4120106030
- iv) Material Code column : 4120106030

3.2 Ordering Description

For placing indents, issuing enquiries and on purchase order, the Ordering Description given below shall be followed.

Cheese Head Screw M6x30 IS: 1366-4.8

4.0 ADDITIONAL INFORMATION

- 4.1 Property class 6.6 is also acceptable
- 4.2 For Cadmium plated slotted cheese head screws, refer HPS: 41241.

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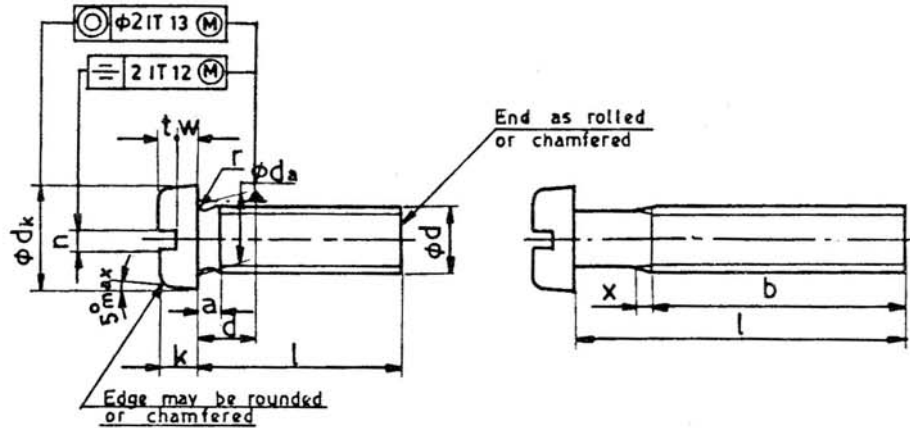


PLA

HPB1

TABLE 1 DIMENSIONS OF HEAD SCREWS

(All dimensions are in mm)



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Thread size d		M1.6	M2	M3	M4	M5	M6	M8	M10
b	Max	25.7	25.8	26	39.4	39.6	40	40.5	41
	Min	25	25	25	38	38	38	38	38
dk	Max	3	3.8	5.5	7	8.5	10	13	16
	Min	2.86	3.62	5.32	6.78	8.28	9.78	12.73	15.73
da	Max	2	2.6	3.6	4.7	5.7	6.8	9.2	11.2
	Min	1	1.3	2	2.6	3.3	3.9	5	6
k	Max	0.86	1.16	1.86	2.46	3.12	3.6	4.7	5.7
	Min	0.6	0.7	1	1.51	1.51	1.91	2.31	2.5
n	Max	0.46	0.56	0.86	1.26	1.26	1.66	2.06	2.5
	Min	0.1	0.1	0.1	0.2	0.2	0.25	0.4	0.4
r	Max	0.4	0.55	0.8	1.1	1.3	1.6	2	2.4
	Min	0.35	0.45	0.8	1.1	1.3	1.6	2	2.4

Note:

1. Shank dia \approx pitch dia = Major dia permissible.
2. a and x according to IS: 1369 'Dimensions for screw thread run outs and undercuts'.
3. Thread end when chamfered shall be according to IS: 1368 'Dimensions for ends of bolts and screws'.

TABLE PREFERRED LENGTH-SIZE COMBINATION
FOR SLOTTED TORX HEAD SCREWS

(All dimensions are in millimetres)

Nominal length 'l'			Thread size d							
Nom	Max	Min	M1.6	M2	M3	M4	M5	M6	M8	M10
2	2.2	1.8								
2.5	2.7	2.3								
3	3.2	2.8								
4	4.3	3.7								
5	5.3	4.7								
6	6.3	5.7								
8	8.3	7.7								
10	10.3	9.7			0.7	1.3				
12	12.4	11.6						4.1		
(14)	14.4	13.6								
16	16.4	15.6								
20	20.5	19.5				2.2		5.5		
25	25.5	24.5			1.5					
30	30.5	29.5						7.3		
35	35.5	34.5								
40	40.5	39.5								
45	45.5	44.5								
50	50.5	49.5								
55	56	54				4.6				
60	61	59								
(65)	66	64				5.4				
70	71	69								
80	81	79								

Note:

1. Screws with nominal length above the dotted stepped line are threaded up to the head ($b=l-a$)
2. Sizes in brackets are non-preferred.
3. Preferred lengths are in between the stepped bold lines.
4. For stocked sizes refer BPS components book-let.
5. Weights are given in Kg. per 1000 numbers only.