



PLANT STANDARD

HPBP TIRUCHIRAPALLI

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BPS: 41205

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Based on IS: 1365-1978

SLOTTED COUNTERSUNK HEAD SCREWS

1.0 SCOPE

Covers the requirements of Slotted Countersunk Head Screws in the size range M3 to M20.

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: 1365 in respect of requirements not covered in this standard	

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

- IS: 1365 Specification for slotted countersunk 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 Countersunk Head Screw to this standard of thread size M6 and nominal length 12mm shall be designated as:

3.1 On Drawings:

- i) Material Specification column: IS: 1365
- ii) Description column : SCRU SLT CSK GR A 4.8 M6x12
- iii) Drawing Number column : 4120506012
- iv) Material Code column : 4120506012

3.2 Ordering Description

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

Countersunk Screw M6x12-IS: 1365-4.8

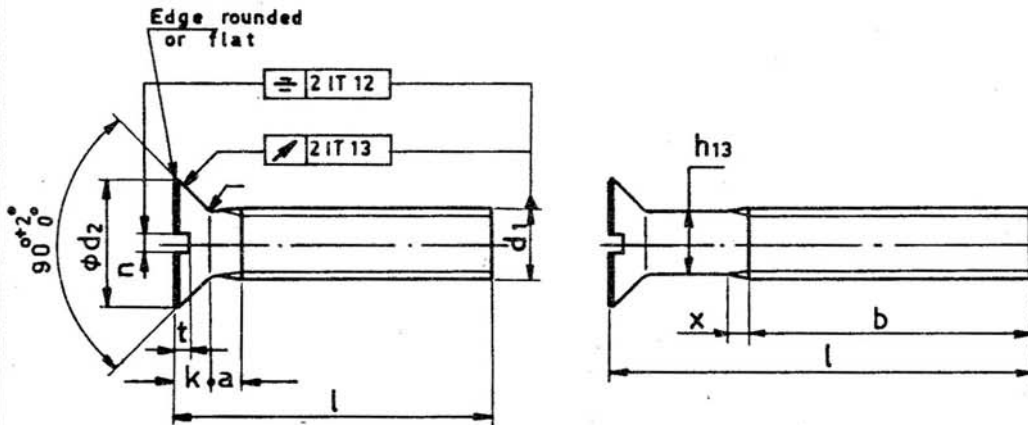
4.0 ADDITIONAL INFORMATION

4.1 Property class 6.6 is also acceptable.

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TABLE-1 DIMENSIONS FOR SLOTTED COUNTERSUNK HEAD SCREWS



(All dimensions are in mm)

Thread size		d	M3	M4	M5	M6	M8	M10	M12	M16	M20
d2	Nom		5.6	7.5	9.2	11	14.5	18	22	29	36
	Max		5.60	7.50	9.20	11.0	14.5	18.0	22.0	29.0	36.0
	Min		5.30	7.19	8.84	10.57	14.07	17.57	21.48	28.48	35.38
k	Max		1.65	2.2	2.5	3	4	5	6	8	10
n	Nom		0.8	1.0	1.2	1.6	2	2.5	3	4	5
	Max		1.0	1.2	1.51	1.91	2.31	2.81	3.31	4.37	5.3
	Min		0.86	1.06	1.26	1.66	2.06	2.56	3.06	4.07	5.0
t	Max		0.85	1.1	1.35	1.6	2.1	2.6	3.0	4.0	5
	Min		0.6	0.8	1.0	1.2	1.6	2	2.4	3.2	4
r	≈		0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.6	2
b	+2P		19	22	25	28	34	40	46	58	70

Note:

- a and x according to IS: 1369 - 'Dimensions of screw thread run-outs and under-cuts.'
- Shank diameter ≈ pitch diameter=major diameter.
- Chamfered end is also permitted.

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**TABLE 2 PREFERRED LENGTH-SIZE COMBINATION
FOR SLOTTED CSK SCREWS**

(All dimensions are in mm)

Nominal length 1 Js 15	Thread size d								
	M3	M4	M5	M6	M8	M10	M12	M16	M20
5									
6		0.8							
8									
10		1.1							
12				2.8					
14									
16									
(18)									
20			2.9	4.2					
22									
25									
(28)									
30						18.4	27.4		
(32)									
35					15.1				
40						23.4		66.7	
45									
50							49.6		
55				12.8	25.7				
60								103	
(65)								109.7	
70								118	
80									
90									
100									
110									
120									
130									
140									
150									
160									
170									
180									
190									
200									

WEIGHTS

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Note:

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

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