



# PLANT STANDARD

HPBP TIRUCHIRAPPALLI

BPS 41304

Rev. No. 02

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## HEXAGON NUTS, PRODUCTS GRADES 'B' & 'C'

(Property Class 4 & 14H)

### 1.0 SCOPE

Covers the requirements of hexagon nuts in the size range M27, M33 and above

### 2.0 SPECIFICATION AND REFERENCE STANDARDS

Dimensions and preferred sizes	Fig 1 & Table 1 of this standard	
Tolerance	Product grade	C for nuts with $d \leq M64$ B for nuts with $d > M64$
	Indian Standard	IS 1367 (Part 2) for nuts with $d \leq M39 \times 3$ IS: 3138 for nuts with $d \geq m42 \times 3$
Thread	Pitch	Table 1 of this standard
	Tolerance	7H for nuts with $d \leq M39 \times 3$ 6H for nuts with $d \Rightarrow M42 \times 3$
	Indian Standard	IS 4218 (Part 3, 5 & 6)
Material	Steel	
Mechanical properties	Property class	4 for nuts with $d \leq M39 \times 3$ 14H for nuts with $d \Rightarrow M42 \times 3$
	Indian standard	IS: 1367 (Part 6&7)
Sampling and Acceptability	Indian Standard	IS: 1367 (Part 17)
General requirements	Nuts shall comply with IS: 1363 part 3 and IS: 3138 in respect of requirements not covered in this standard	

### 2.1 Referred standards (only current versions are applicable)

IS: 1367 (Part 2, 6, 7 & 17)

IS: 3138

IS: 4218 (Part 3, 5 & 6)

Technical supply conditions for threaded steel fasteners

Specification for hexagon bolts and nuts

ISO Metric screw threads

### 3.0 DESIGNATION

A Grade 'C' hexagon nut to this standard of thread size M36x3 shall be designated as :

### 3.1 On Drawings

i) Material Specification column

ii) Description Column

iii) Drawing Number Column

iv) Material Code column:

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HEX NUT GR C M36x3-4

BPS 41304

4130400036

Revisions

Brought up to date

Approved

STANDARDS SECTION  
CONTRACT ENGINEERING AND CO-ORDINATION  
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### 3.2 Ordering Description

For placing indents, issuing enquires and on purchase order, ordering description given below shall be followed. (Typical examples)

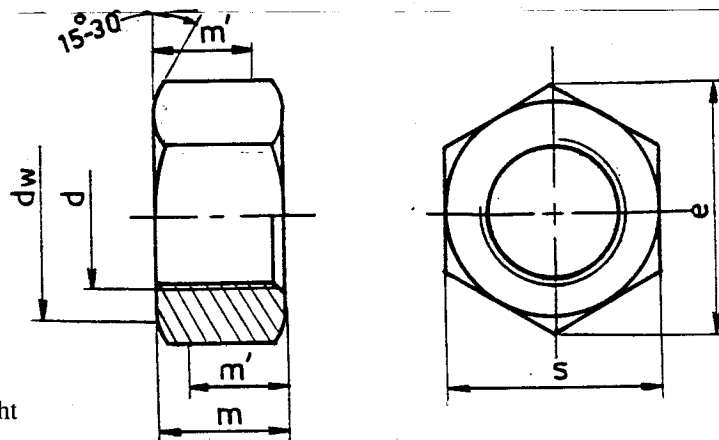
- i) HEXAGON NUT M33 TO BPS:41304 for nuts with  $d=M27$  & M33
- II) HEXAGON NUT M36x3 TO BPS:41304 for nuts with  $d \geq M36X3$

### 4.0 ADDITIONAL INFORMATION

Copies of this standard shall be enclosed alongwith the purchase order for thread sizes M27, M33 and above.

**FIG. 1 DIMENSIONS FOR HEXAGON NUTS**

(All dimensions are in millimetres)



'm' = Effective gauging height

**TABLE 1**

(All dimensions are in millimetres)

Thread Size d	d <sub>w</sub> Min	m		m' Min	s		e		Weight
		Max	Min		Max	Min	Min	Max	
(M27)		22.65	21.35		41	40.0	45.20		166
(M33)		26.65	25.35		50	49.0	55.37		299
M36x3	51.1	31.5	29.4	23.5	55	53.8	60.79		364
(M39x3)		31.8	30.2		60	58.8	66.44		485
(M45x3)		36.0	35.0		70	68.8		80.8	750
M48x3		38.0	37.0		75	73.8		86.5	935
M56x4		45.0	44.0		85	83.6		98	1355
(M60x4)		48.0	47.0		90	88.6		104	1625
M72x4		58.0	56.8		105	103.6		121	2430
M80x4		64.0	62.8		115	113.6		133	3190

**NOTE :**

1. Sizes in brackets are non-preferred.
2. Weights are given in Kg per 1000 numbers only.