
HEXAGONAL NUTS, CLASS OF ACCURACY A

Designs and dimensions

GOST 5927-70

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I N T E R S T A T E S T A N D A R D

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GOST
5927-70

OKII 12 8300

Date of introduction 01.01.72

1. This standard pertains to hexagonal nuts with class of accuracy A and diameter of threads from 1 to 48 mm.

(Amended edition, amendment No. 4).

2. Design and dimensions of the nuts should correspond to those specified in drawing and table.

(Amended edition, amendment No. 3, 4, 6, 7).

3. Threads – as per GOST 24705.

(Amended edition, amendment No. 2, 4, 5).

3a. Tolerances of dimensions, deviation of shapes, location of surface and method of inspection- as per GOST 1759.1 are not set in this standard.

3б. Permissible defect of surface of nuts and method of inspection- as per GOST 1759.3.

3a, 3б. **(Introduced additionally, amendment No. 5).**

4. It is permissible to manufacture the nuts with nominal diameter of threads from 36 to 48 mm with pitch of thread 2 mm, according to the agreement between manufacturer and customer.

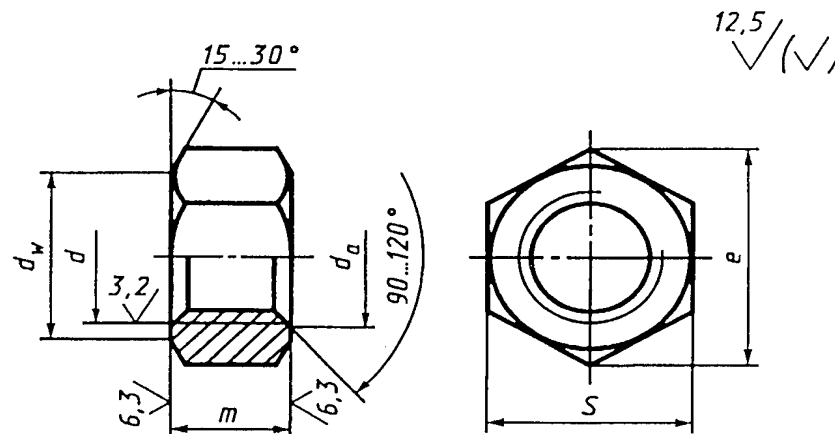
(Amended edition, amendment No. 2, 5).

5. Technical requirement – as per GOST 1759.0.

6. **(Deleted, amendment No. 2).**

7. Weight of nuts specified in annexure 1.

8. **(Deleted, amendment No. 4).**



MM

Nominal diameter of thread d		(1)	(1,4)	1,6	2	2,5	3	(3,5)	4	5	6	8	10	12	(14)	16	(18)	20	(22)	24	(27)	30	36	42	48
Pitch of thread	Coarse	0,25	0,30	0,35	0,40	0,45	0,5	0,6	0,7	0,8	1	1,25	1,5	1,75	2	2,5	3	3,5	4	4,5	5				
	Fine	—										1	1,25	1,5	2	3									
Width across flats. S		3,2	4	5	5,5	6	7	8	10	13	16	18	21	24	27	30	34	36	41	46	55	65	75		
Diameter of circumscribed circle. e . not less than		3,4	4,3	5,5	6	6,6	7,7	8,8	11,1	14,4	17,8	20,0	23,4	26,8	30,1	33,5	37,7	40,0	45,6	51,3	61,3	72,6	83,9		
d_e	not less than	1,0	1,4	1,6	2,0	2,5	3	3,5	4,0	5,0	6,0	8,0	10	12	14	16	18	20	22	24	27	30	36	42	48
	not more than	1,15	1,61	1,84	2,30	2,9	3,45	4,00	4,60	5,75	6,75	8,75	10,8	13,0	15,1	17,3	19,4	21,6	23,8	25,9	29,2	32,4	38,9	45,40	51,80
d_w , not less than		2,90	3,60	4,50	5,00	5,40	6,30	7,20	9,00	11,7	14,6	16,6	19,6	22,5	25,3	28,2	31,7	33,6	38,4	43,1	51,5	61,0	70,5		
Height m		1,0	1,3	1,6	2,0	2,4	2,8	3,2	4,7	5,2	6,8	8,4	10,8	12,8	14,8	16,4	18,0	19,8	21,5	23,6	25,6	31,0	34,0	38,0	

Note:

1. Dimensions of the nuts, written in the bracket are not recommended to use.
2. It is permitted to manufacture the nuts with dimensions, specified in annexure 2.
3. It is permitted to manufacture the nuts with nominal height m not less than $0.8d$ and maximum deviations as per GOST 1759.1 with conditions of observance of requirement of GOST 1759.5.

Example conventional code of nuts with diameter of threads $d = 12$ mm, with across flats $S = 18$ mm, with coarse pitch threads with tolerance zone 6H, class of accuracy 5, without coating:

Nut M12 – 6H.5 (S18) GOST 5927-70

Also, with coarse pitch of threads with tolerance zone 6H, class of accuracy 6, from steel of grade A12, without coating:

Nut M12 – 6H.6.A (S18) GOST 5927-70

Also, with width across flats $S = 19$ mm, with fine pitch of threads with tolerance zone 6H, class of accuracy 12, from steel of grade 40X, with coating 01 of thickness 6 microns:

Nut M12 X 1.25 – 6H.12.40X.016 GOST 5927-70

ANNEXURE 1
Reference**Weight of steel nuts with coarse pitch of threads**

Nominal diameter of threads d , MM	Theoretical mass of 1000 piece of nut, kg \approx	Nominal diameter of threads d , MM	Theoretical mass of 1000 piece of nut, kg \approx	Nominal diameter of threads d , MM	Theoretical mass of 1000 piece of nut, kg \approx
1	0,062	5	1,440	20	71,44
1,4	0,057	6	2,573	22	103,15
1,6	0,074	8	5,548	24	122,87
2	0,141	10	10,220	27	175,28
2,5	0,272	12	15,670	30	242,54
3	0,377	14	25,33	36	416,78
3,6	0,497	16	37,61	42	623,88
4	0,800	18	53,27	48	956,20

For determinations of weight of the nuts from other materials, the value of weight specified in table should be multiplied with coefficient: 0.356 – for aluminium alloy: 1.080 – for brass.

ANNEXURE 1. (Amended edition, amendment No. 3, 6).

ANNEXURE 2
Reference

	Dimension in mm			
Nominal diameter of thread d	10	12	14	22
Width across flats, S	17	19	22	32
Diameter of circumscribed circle. e. not less than	18,9	21,1	24,5	35,7
d_w , not less than	15,6	17,4	20,6	30,0
Theoretical mass of 1000 pcs. of nuts with coarse pitch of thread, kg =	12,06	18,40	28,91	85,67

ANNEXURE 2. (Introduced additionally, amendment No.6; Amended edition, amendment No.7)

**SUPERSEDES GOST 5927-62
REFERENCE OF NORMATIVE- TECHNICAL DOCUMENTS**

Code of HTД on which reference is given	Point Number	Code of HTД on which reference is given	Point Number
GOST 1759.0-87	5	GOST 1759.5-87	2
GOST 1759.1-82	2, 3a	GOST 24705-81	3
GOST 1759.3-83	3б		

REPRINTED with amendment No. 2, 3, 4, 5, 6, 7, certified in February 1974, Match 1981, June 1983, May 1985, March 1989, July 1995 (ИУС 3-74, 6-81, 11-83, 8-85, 6-89, 9-95).