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INTERNATIONAL STANDARD ISO 4027

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Hexagon socket set screws with cone point

Vis sans tête à six pans creux, à bout conique

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 4027 was developed by Technical Committee ISO/TC 2, *Fasteners*, and was circulated to the member bodies in April 1976.

It has been approved by the member bodies of the following countries:

Belgium	India	Romania
Brazil	Ireland	South Africa, Rep. of
Bulgaria	Italy	Spain
Czechoslovakia	Korea, Rep. of	Sweden
Denmark	Mexico	Switzerland
Finland	Netherlands	Turkey
France	Norway	United Kingdom
Germany	Philippines	U.S.S.R.
Hungary	Poland	

The member bodies of the following countries expressed disapproval of the document on technical grounds:

Australia
Japan
U.S.A.

Printed in Switzerland

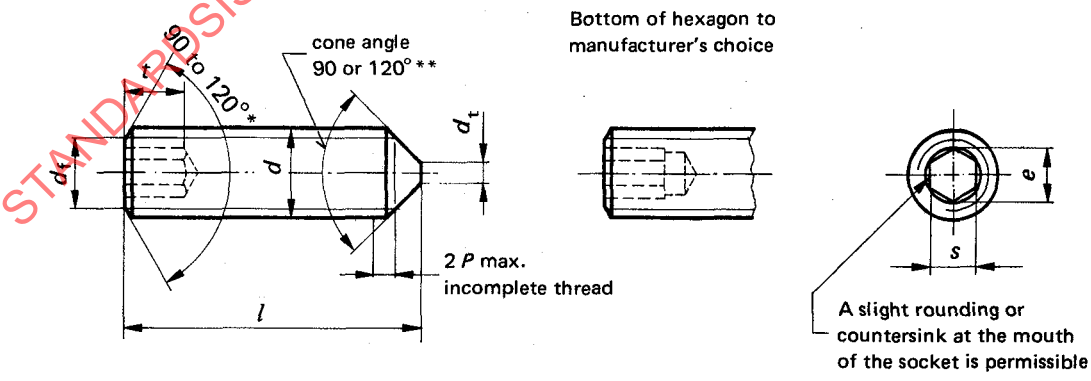
Hexagon socket set screws with cone point

1 SCOPE AND FIELD OF APPLICATION

This International Standard gives specifications for hexagon socket set screws with cone point with metric dimensions and thread diameters from 1,6 up to and including 24 mm and product grade A.

If, in special cases, specifications other than those listed in this International Standard are required, it is recommended that they should be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898, ISO 965.

2 DIMENSIONS



* The 120° angle on the top of the screw is mandatory for short-length screws above the dotted stepped line.

** The cone angle applies only to the portion of the point below the root diameter of the thread, and shall be 120° for lengths above the dotted stepped line. For all other lengths it shall be 90°.

Dimensions in millimetres

Thread size d		M 1,6	M 2	M 2,5	M 3	M 4	M 5	M 6	M 8	M 10	M 12	M 16	M 20	M 24
P	1)	0,35	0,4	0,45	0,5	0,7	0,8	1,0	1,25	1,5	1,75	2,0	2,5	3,0
d_t	max.	0	0	0	0	0	0	1,5	2,0	2,5	3,0	4,0	5,0	6,0
d_f	≈	Minor thread diameter												
e	min. 2)	0,803	1,003	1,427	1,73	2,30	2,87	3,44	4,58	5,72	6,86	9,15	11,43	13,72
s	nominal	0,7	0,9	1,3	1,5	2,0	2,5	3,0	4,0	5,0	6,0	8,0	10,0	12,0
	min.	0,711	0,889	1,270	1,520	2,020	2,520	3,020	4,020	5,020	6,020	8,025	10,025	12,032
	max.	0,724	0,902	1,295	1,545	2,045	2,560	3,080	4,095	5,095	6,095	8,115	10,115	12,142
t	min. 3)	0,7	0,8	1,2	1,2	1,5	2,0	2,0	3,0	4,0	4,8	6,4	8,0	10,0
	min. 4)	1,5	1,7	2,0	2,0	2,5	3,0	3,5	5,0	6,0	8,0	10,0	12,0	15,0

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nominal	min.	max.
2	1,80	2,20
2,5	2,30	2,70
3	2,80	3,20
4	3,76	4,24
5	4,76	5,24
6	5,76	6,24
8	7,71	8,29
10	9,71	10,29
12	11,65	12,35
16	15,65	16,35
20	19,58	20,42
25	24,58	25,42
30	29,58	30,42
35	34,5	35,5
40	39,5	40,5
45	44,5	45,5
50	49,5	50,5
55	54,4	55,6
60	59,4	60,6

Range of popular lengths

1) P = pitch of the thread.

2) e min. = 1,14 s min., except for sizes M 1,6, M 2 and M 2,5.

3) Minimum depth of key engagement for screws with nominal lengths above the stepped line marked thus———.

4) Minimum depth of key engagement for screws with nominal lengths below the stepped line marked thus———.