International Standard ISO 7043

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

Prevailing torque type hexagon nuts with flange (with non-metallic insert)

Écrous hexagonaux à embase cylindro-tronconique, à freinage interne, à couple préalable (avec anneau non métallique)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (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 authorized 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 7043 was developed by Technical Committee ISO/TC 2, *Fasteners*, and was circulated to the member bodies in December 1981.

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

Australia	Germany, F.R.	New Zealand
Belgium	Hungary	Norway
Brazil	India	Poland
Canada	Ireland	Romania
China	Italy	South Africa, Rep. of
Czechoslovakia	Japan	Spain
Denmark	Korea, Dem. P. Rep. of	Sri Lanka
Egypt, Arab Rep. of	Korea, Rep. of	Sweden
Finland	Mexico	Switzerland
France	Netherlands	USA

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

United Kingdom
USSR

Printed in Switzerland

Prevailing torque type hexagon nuts with flange (with non-metallic insert)

1 Scope and field of application

This International Standard specifies the characteristics of prevailing torque type hexagon nuts with flange and non-metallic annular insert and thread sizes from M 5 to M 20 inclusive, in product grade A.

NOTE — The dimensions of the nuts correspond to those given in ISO 4161 plus prevailing torque feature.

If other specifications are required, it is recommended that they should be selected from existing International Standards, for example ISO 261, ISO 898, ISO 965, ISO 2320, ISO 4759/1.

2 References

ISO 225, *Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions.*

ISO 261, *ISO general purpose metric screw threads — General plan.*

ISO 898, *Mechanical properties of fasteners.*

ISO 965, *ISO general purpose metric screw threads — Tolerances.*

ISO 2320, *Prevailing torque type steel hexagon nuts — Mechanical and performance properties.*

ISO 3269, *Fasteners — Acceptance inspection.*[1)]

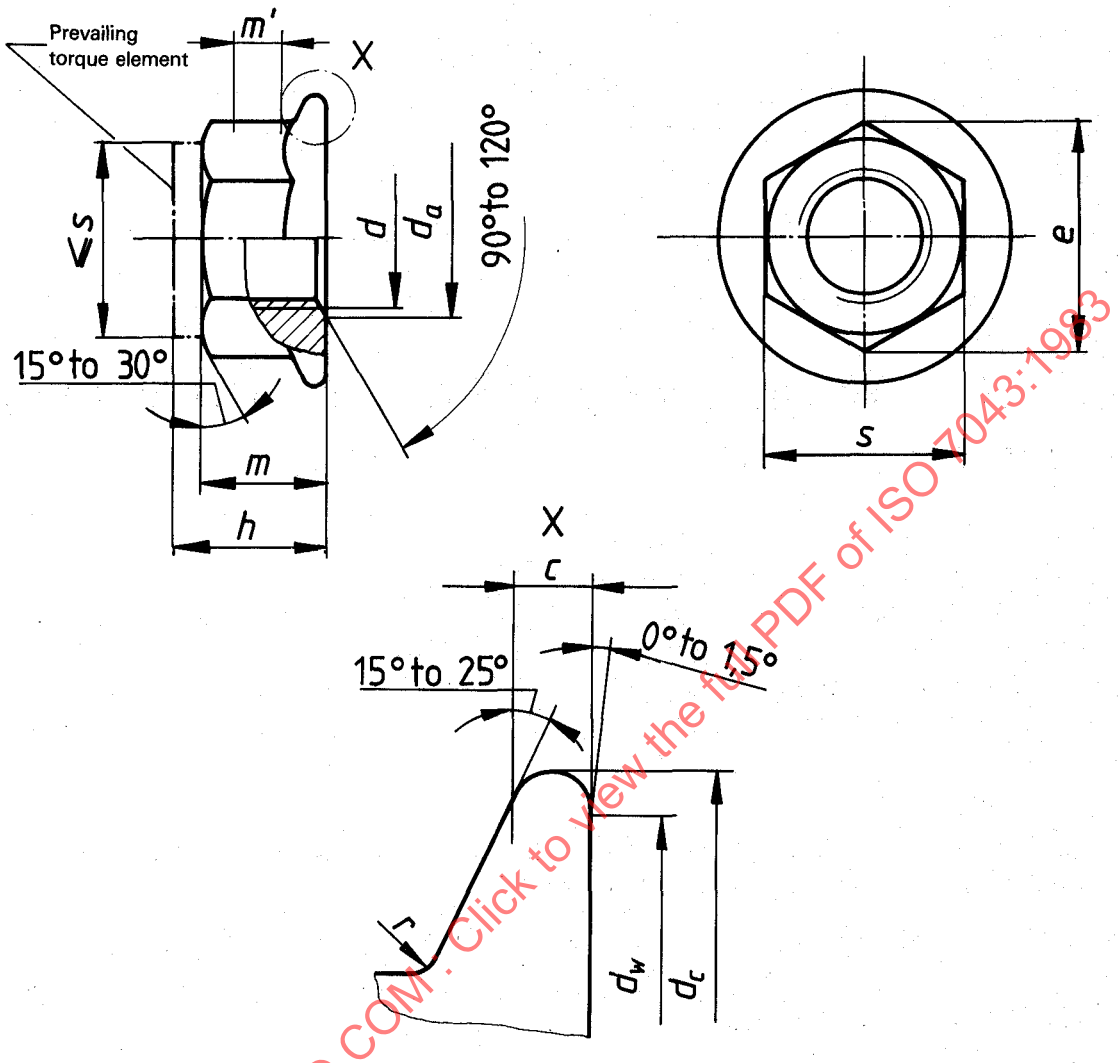
ISO 4042, *Threaded components — Electroplated coatings components.*[1)]

ISO 4161, *Hexagon nuts with flange — Product grade A.*

ISO 4759/1, *Tolerances for fasteners — Part 1: Bolts, screws and nuts with thread diameters* > 1,6 *and* < 150 mm *and product grades A, B and C.*

1) At present at the stage of draft.

3 Dimensions



Dimensions in millimetres

Thread size d		M 5	M 6	M 8	M 10	M 12	(M 14)[1]	M 16	M 20
P[2]		0,8	1	1,25	1,5	1,75	2	2	2,5
c	min.	1	1,1	1,2	1,5	1,8	2,1	2,4	3
d_a	min.	5	6	8	10	12	14	16	20
	max.	5,75	6,75	8,75	10,8	13	15,1	17,3	21,6
d_c	max.	11,8	14,2	17,9	21,8	26	29,9	34,5	42,8
d_w	min.	9,8	12,2	15,8	19,6	23,8	27,6	31,9	39,9
e	min.	8,79	11,05	14,38	16,64	20,03	23,36	26,75	32,95
h	max.	7,1	9,1	11,1	13,5	16,1	18,2	20,3	24,8
m[3]	min.	4,7	5,7	7,6	9,6	11,6	13,3	15,3	18,9
m'[4]	min.	2,2	3,1	4,5	5,5	6,7	7,8	9	11,1
s	max.	8	10	13	15	18	21	24	30
	min.	7,78	9,78	12,73	14,73	17,73	20,67	23,67	29,16
r[5]	max.	0,3	0,36	0,48	0,6	0,72	0,88	0,96	1,2

1) The size in brackets should be avoided if possible.

2) P = pitch of the thread.

3) Also minimum thread height.

4) Minimum wrenching height (m' min. = T_a max. — see annex).

5) Radius applies both at the corner and the flats of the hexagon.