

Annulee

8

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION
R 40

SHIPBUILDING DETAILS FOR SEA NAVIGATION
AND INLAND NAVIGATION
ANCHOR CHAINS

ISO/R 40:1957
Studless Links
<https://standards.iteh.ai/catalog/standards/sist/a9a6ce79-ce83-4486-af5f-867a49f4989e/iso-r-40-1957>

1st EDITION

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

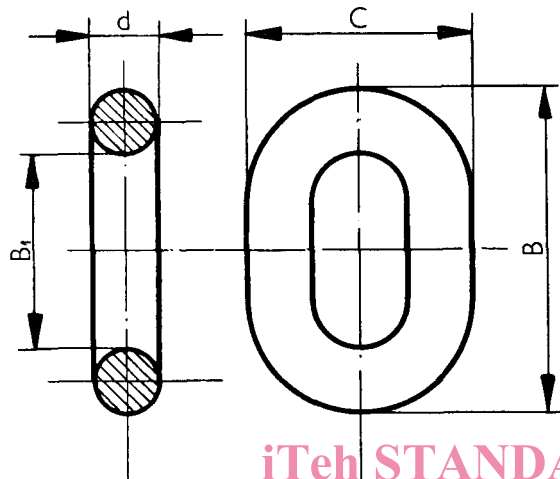
Also issued in French and Russian. Copies to be obtained through the national standards organizations.

SHIPBUILDING DETAILS FOR SEA NAVIGATION AND INLAND NAVIGATION

ANCHOR CHAINS

Studless Links

1. DIMENSIONS



A = nominal dimension of the link

d = diameter

2 values: d' = millimetre value of A

d'' = inch value of A transposed into rounded off millimetre value

$$B = 5 \frac{d' + d''}{2}$$

$$B_1 = B - 2 \frac{d' + d''}{2}$$

$$C = 3.4 \frac{d' + d''}{2}$$

Example for A = 20.5 mm or $13/16$ inch:

$$B = 5 \frac{20.5 + 20.6}{2} = 103 \text{ mm (rounded off)}$$

$$B_1 = 103 - 2 \frac{20.5 + 20.6}{2} = 62 \text{ mm (rounded off)}$$

$$C = 3.4 \frac{20.5 + 20.6}{2} = 70 \text{ mm (rounded off)}$$

iTeh STANDARD PREVIEW
(standards.iteh.ai)

A		d'	d''	B	B ₁	C
mm	inches	mm	mm	mm	mm	mm
6*	1/4 *	6	6.4	31	19	21
8*	5/16 *	8	7.9	40	24	27
10*	3/8 *	10	9.5	49	29	33
11	7/16	11	11.1	55	33	38
12.5	1/2	12.5	12.7	63	38	43
14.5	9/16	14.5	14.3	72	43	49
16	5/8	16	15.9	80	48	54
17.5	11/16	17.5	17.5	88	53	60
19	3/4	19	19.1	95	57	65
20.5	13/16	20.5	20.6	103	62	70
22	7/8	22	22.2	110	66	75
24	15/16	24	23.8	120	72	81
25.5	1	25.5	25.4	127	76	87
27	1 1/16	27	27.0	135	81	92
28.5	1 1/8	28.5	28.6	143	86	97
30	1 3/16	30	30.2	150	90	102
32	1 1/4	32	31.8	160	96	108
33	1 5/16	33	33.3	166	100	113
35	1 3/8	35	34.9	175	105	119
37	1 7/16	37	36.5	184	110	125
38	1 1/2	38	38.1	190	114	129
40	1 9/16	40	39.7	199	119	135

* These dimensions for inland navigation only.

NOTE. — Allowable manufacturing tolerance for the dimensions B, B₁ and C is ± 2 per cent.

2. TESTS

$A = d$	Minimum breaking load in tonnes, calculated for 24 kgf/mm ² **	Minimum proof load in tonnes, calculated for 12 kgf/mm ² **
mm		
6**	1.4	0.7
8**	2.4	1.2
10**	3.8	1.9
11	4.6	2.3
12.5	5.9	2.9
14.5	7.9	4.0
16	9.7	4.8
17.5	11.6	5.8
19	13.6	6.8
20.5	15.8	7.9
22	18.2	9.1
24	21.7	10.9
25.5	24.5	12.3
27	27.5	13.7
28.5	30.6	15.3
30	33.9	17.0
32	38.6	19.3
33	41.1	20.5
35	46.2	23.1
37	51.6	25.8
38	54.4	27.2
40	60.3	30.2

* The minimum loads have been calculated by multiplying the double cross-section of the material of the link by 24 kgf/mm² and 12 kgf/mm² respectively.

The table shows the minimum strengths that should be attained whatever material is used.

** These dimensions for inland navigation only.

BRIEF HISTORY

The ISO Recommendation R 40, *Anchor Chains: Studless Links*, was drawn up by the Technical Committees ISO/TC 8, *Shipbuilding Details for Sea Navigation*, and ISO/TC 9, *Shipbuilding Details for Inland Navigation*. The Secretariats of both Committees are held by the Hoofdcmissie voor de Normalisatie in Nederland (H.C.N.N.).

At their initial meetings, held in Paris, June 1949, Technical Committees ISO/TC 8 and ISO/TC 9 unanimously decided to adopt the proposals which had been drawn up by the former International Federation of the National Standardizing Associations (ISA). Only one slight amendment from Poland had been inserted (mention of the breaking and proof loads in tenths of tonnes).

The following Member Bodies took part in the meeting of Technical Committee ISO/TC 8:

Belgium	Netherlands	Portugal
Denmark (as observer)	New Zealand	Sweden
France	Norway	U.S.S.R.
Italy	Poland	

The following Member Bodies took part in the meeting of Technical Committee ISO/TC 9:

Belgium	Netherlands	U.S.S.R.
France	Poland (as observer)	
Italy	Portugal	

The draft proposal drawn up on that basis by the ISO/TC 8 Secretariat after the meeting was submitted by correspondence to the members of the two Technical Committees and adopted as a Draft ISO Recommendation, no objection having been raised.

The Draft ISO Recommendation was submitted in October 1953 to all the ISO Member Bodies and approved, subject to certain editorial amendments, by the following 22 (out of a total of 36) Member Bodies:

Bulgaria	*Greece	Netherlands	*Switzerland
Canada	*Hungary	New Zealand	Union of South Africa
Chile	India	*Pakistan	*U.S.A.
Denmark	Italy	Portugal	Yugoslavia
France	Japan	Spain	
Germany	Mexico	Sweden	

The U.S.S.R. opposed approval of the Draft, giving preference to its own standard GOST 228-52.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in May 1957, to accept it as an ISO RECOMMENDATION.

* These Member Bodies stated that they had no objection to the Draft being approved.

Date of the first edition: May 1957.

