

Annulee

8

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION
R 40**

**SHIPBUILDING DETAILS FOR SEA NAVIGATION
AND INLAND NAVIGATION**

**ANCHOR CHAINS
Studless Links**

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

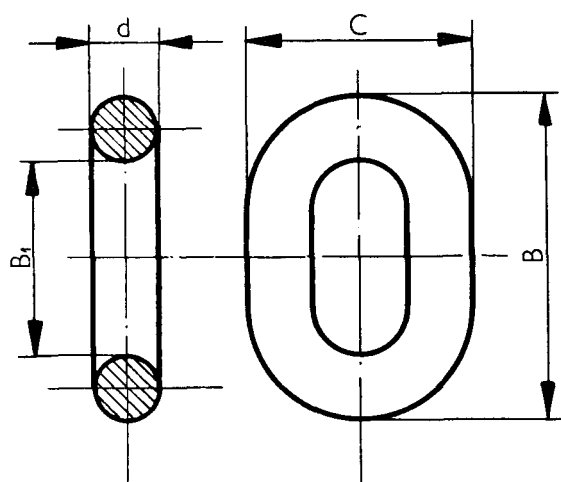
Also issued in French and Russian. Copies to be obtained through the national standards organizations.

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:

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

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

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

A		d		B	B ₁	C
mm	inches	d'	d''	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.