

Annulé

**ISO**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION  
R 39**

**SHIPBUILDING DETAILS FOR SEA NAVIGATION  
ANCHOR CHAINS  
Lugless Joining Shackles, Kenter Type**

**1<sup>st</sup> EDITION**

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## BRIEF HISTORY

The ISO Recommendation R 39, *Anchor Chains: Lugless Joining Shackles, Kenter Type*, was drawn up by the Technical Committee ISO /TC 8, *Shipbuilding Details for Sea Navigation*, the Secretariat of which is held by the Hoofdcmissie voor de Normalisatie in Nederland (H.C.N.N.).

At its initial meeting, held in Paris, June 1949, the Technical Committee unanimously decided to adopt a proposal which had been drawn up in 1939 by the former International Federation of the National Standardizing Associations (ISA).

The following Member Bodies took part in the meeting:

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

The Draft Proposal drawn up on that basis was submitted by correspondence to the members of the Technical Committee and adopted as a Draft ISO Recommendation, no objection having been raised.

The Draft ISO Recommendation was submitted to all the ISO Member Bodies in October 1953 and approved, subject to certain editorial amendments, by the following 23 (out of a total of 36) Member Bodies:

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

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.

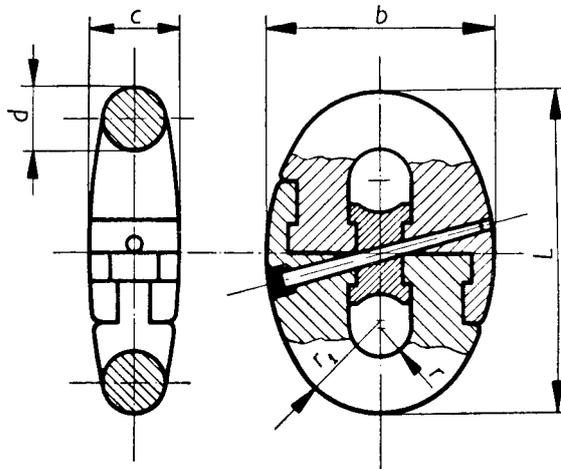
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\* These Member Bodies stated that they had no objection to the Draft being approved.

## SHIPBUILDING DETAILS FOR SEA NAVIGATION

## ANCHOR CHAINS

## Lugless Joining Shackles, Kenter Type



$A$  = diameter of material of common link

$d = A$

$b = 4.18 A$

$c = 1.52 A$

$r = 0.67 A$

$r_1 = 1.84 A$

Dimensions in millimetres

$A$	$d$	$L$	$b$	$c$	$r$	$r_1$
11	11	66	46	16.5	7.5	20
12.5	12.5	76	52	19	8.5	23
14.5	14.5	86	61	22	9.5	26.5
16	16	96	67	24.5	10.5	29.5
17.5	17.5	105	73	26.5	11.5	32
19	19	114	79	29	12.5	35
20.5	20.5	123	86	31	13.5	38
22	22	133	92	33	14.5	40
24	24	143	100	36	16	44
25.5	25.5	153	107	39	17	47
27	27	162	113	41	18	50
28.5	28.5	171	119	43	19	52
30	30	181	125	46	20	55
32	32	191	134	49	21.5	59
33	33	199	138	50	22	61
35	35	210	146	53	23.5	64
37	37	220	155	56	25	68
38	38	228	159	58	25.5	70
40	40	239	167	61	27	74
41	41	247	171	62	27.5	75
43	43	258	180	65	29	79
44	44	266	184	67	29.5	81
46	46	276	192	70	31	85
48	48	287	201	73	32	88
49	49	295	205	74	33	90
51	51	305	213	78	34	94

Dimensions in millimetres

$A$	$d$	$L$	$b$	$c$	$r$	$r_1$
52	52	313	217	79	35	96
54	54	324	226	82	36	99
56	56	335	234	85	38	103
57	57	343	238	87	38	105
59	59	353	247	90	40	109
60	60	361	251	91	40	110
62	62	372	259	94	42	114
64	64	382	268	97	43	118
65	65	390	272	99	44	120
67	67	401	280	102	45	123
68	68	409	284	103	46	125
70	70	420	293	106	47	129
71	71	427	297	108	48	131
73	73	438	305	111	49	134
75	75	449	314	114	50	138
76	76	457	318	116	51	140
78	78	467	326	119	52	144
80	80	478	334	122	54	147
82	82	494	343	125	55	151
85	85	512	355	129	57	156
88	88	526	368	134	59	162
90	90	542	376	137	60	166
92	92	552	385	140	62	169
95	95	571	397	144	64	175
98	98	589	410	149	66	180
100	100	600	418	152	67	184

## NOTE

The quality of the material used for the manufacture of the shackles should not be inferior in any respect to that of the material of the anchor cables with which the links are used. The design, material and tests of the complete anchor cables are subject to the legal requirements of the countries concerned and of the recognized approving authorities.

