TC 100

# INTERNATIONAL STANDARD 4347

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

## Leaf chains, clevises and sheaves

*Chaînes de levage à mailles jointives, chapes et tourteaux de renvoi*

**First edition — 1977-09-01**



**UDC 621.855** **Ref. No. ISO 4347-1977 (E)**

**Descriptors :** chain drives, chains, conveyor chains, clevises, chain centre-bosses, specifications, dimensions, measuring loads, breaking loads.

Price based on 12 pages

## 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 4347 was developed by Technical Committee ISO/TC 100, *Chains and chain wheels for power transmission and conveyors*, and was circulated to the member bodies in January 1976.

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

| | | |
|---|---|---|
| Australia | India | Spain |
| Austria | Italy | Sweden |
| Belgium | Japan | Turkey |
| Chile | Korea, Dem. P. Rep. of | United Kingdom |
| Czechoslovakia | Mexico | U.S.A. |
| Finland | Netherlands | U.S.S.R. |
| France | Romania | |
| Germany | South Africa, Rep. of | |

No member body expressed disapproval of the document.





Printed in Switzerland

# Leaf chains, clevises and sheaves

## 0 INTRODUCTION

This International Standard has been prepared after examining the possibility of having one single series of chains derived directly from the short pitch precision chains defined in ISO/R 606 (July 1967). However, in order to be realistic, it has become clear that standardization of chains of the BL series, from American Standard ANSI B29-8, which are universally used, would also be desirable.

Consequently, this International Standard includes two series of chains, the one derived from the American Standard being designated by the symbol LH, and the one from ISO/R 606 Series B designated by the symbol LL. The dimensions are shown in inches and millimetres; the latter are conversions of the basic inch dimensions.

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies characteristics of chains used for general lifting purposes together with the rim profiles of sheaves and the chain attachment ends of clevises. It covers dimensions, limits for interchangeability, measuring loads and minimum breaking loads.

## 2 REFERENCES

ISO/R 286, *ISO system for limits and fits – Part I : General, tolerances and deviations.*

ISO/R 606, *Short pitch transmission precision roller chains and chain wheels.*

## 3 CHAINS

### 3.1 Nomenclature

The nomenclature of chains is indicated in figure 1 and the key to tables 1, 1M, 2 or 2M.

The illustrations in figure 1 do not necessarily define the actual form of the chain plates.

### 3.2 Designation

Leaf chains are designated by the same numerical symbols as chains of ISO/R 606 with the same pitch, i.e. two figures expressing the pitch in 1/16 in preceded by the prefix LH for chains from ANSI B29-8, and LL for chains from ISO/R 606 Series B, and followed by the two numbers indicating the number of plates, link pins and articulating links respectively.

*Example* :

LL 0822 – Chain with nominal pitch of 12,7 mm derived from chain 08B consisting of pin links and articulating links each including two plates.

LH 1234 – Chain with nominal pitch of 19,05 mm consisting of pin links including three plates and articulating links including four plates.

### 3.3 Dimensions

Chains shall conform to the dimensions given in tables 1, 1M, 2 or 2M. Maximum and minimum dimensions are specified to ensure interchangeability of complete chains in clevises. They represent limits for interchangeability but are not the actual tolerances that should be used in manufacture.

NOTE – Chains from different manufacturers should not be placed together within the same application.

### 3.4 Breaking loads

The test chain shall have a minimum length of five free pitches. The chain ends shall be attached to the testing machine shackles by a pin through the plate holes. The shackles shall be so designed as to allow universal movement; the actual method to be used is left to the discretion of the manufacturer.

Tests in which failure occurs adjacent to the shackles shall be disregarded.

The minimum tensile breaking loads shall be those given in tables 1, 1M, 2 or 2M.

### 3.5 Proof loading

All chains shall be proof loaded to at least one-third of the minimum breaking load given in tables 1, 1M, 2 or 2M.

### 3.6 Length accuracy

As LL leaf chains are normally constructed from plates also used for short pitch transmission roller chains, the actual

pitch of the chain does not necessarily equal its nominal pitch but depends upon each manufacturer. For the specific chain length consult the manufacturer.

Finished chains shall be measured after proof loading but before lubricating.

The standard length of chain for measurement shall be 49 pitches or 1 524 mm, whichever is less, and shall terminate each end in an identical link.

The chain shall be supported throughout its entire length and a measuring load equal to 1/100 of the breaking load given in tables 1, 1M, 2 or 2M applied.

The length tolerance of ± 0,25 % shall be applied to the specific length of the chain.

### 3.7 Cranked links

Cranked links shall not be used in leaf chain.

### 3.8 Marking

The chains should be marked with the manufacturer's name or trade mark.

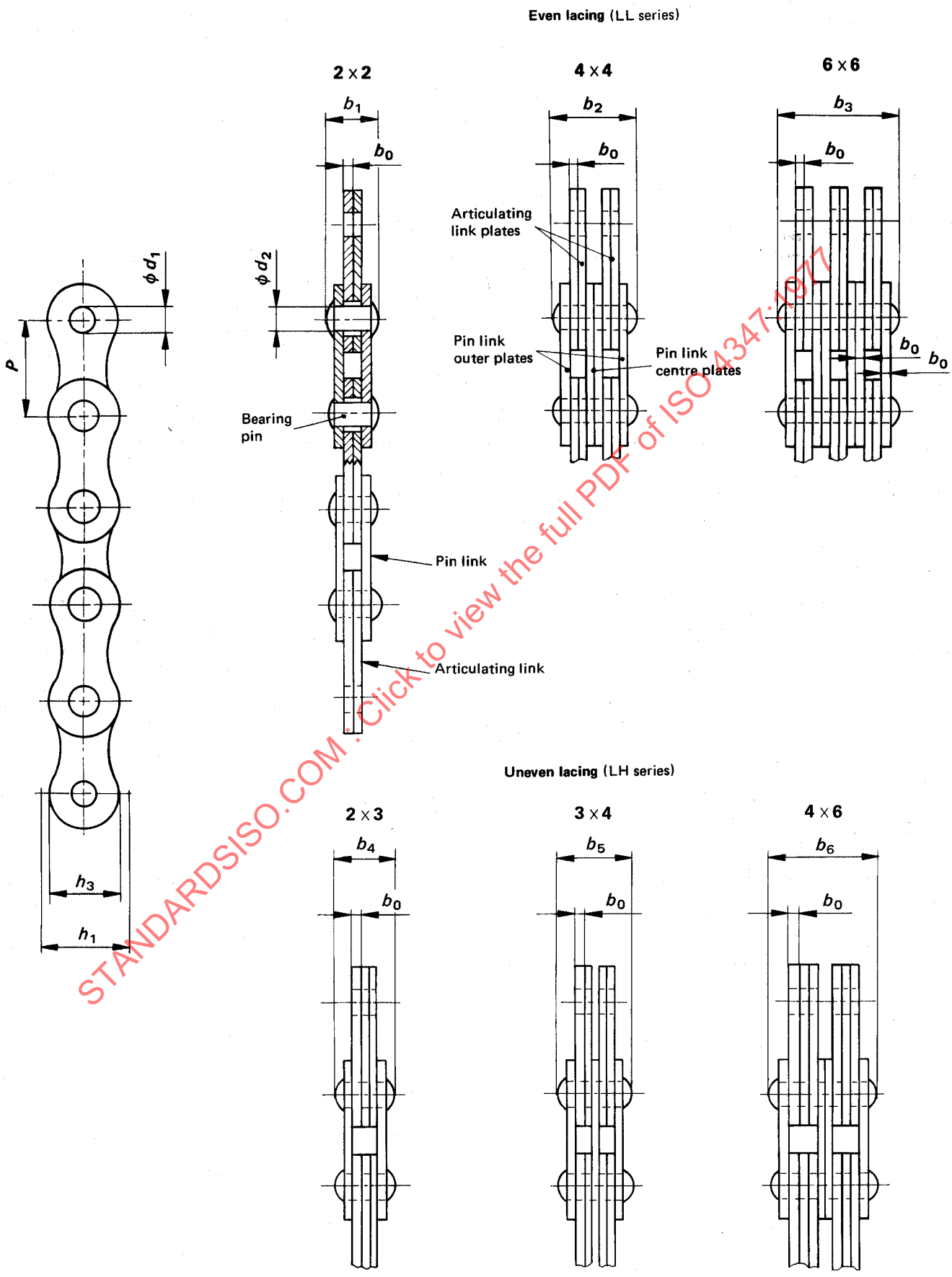




FIGURE 1 — **Key to tables 1, 1M, 2 and 2M**

TABLE 1 — **Chain dimensions and breaking loads, series LH (inch/pound units)**

| ISO chain number | Nominal pitch $P$ | Lacing | Thickness of plates $b_0$ max. | Hole diameter of articulating link plates $\phi d_1$ min. | Bearing pin diameter $\phi d_2$ max. | Chain path depth[1] $h_1$ min. | Plate depth $h_3$ max. | Width over riveted bearing pins $b_4$, $b_5$, $b_6$ max. | Breaking load min. |
|---|---|---|---|---|---|---|---|---|---|
| | in | | in | in | in | in | in | in | lbf |
| LH 0823 | 0.500 | 2 X 3 | 0.082 | 0.201 5 | 0.200 5 | 0.485 | 0.475 | 0.518 | 5 000 |
| LH 0834 | | 3 X 4 | | | | | | 0.685 | 7 500 |
| LH 0846 | | 4 X 6 | | | | | | 0.935 | 10 000 |
| LH 1023 | 0.625 | 2 X 3 | 0.096 | 0.235 5 | 0.234 5 | 0.604 | 0.594 | 0.605 | 7 500 |
| LH 1034 | | 3 X 4 | | | | | | 0.800 | 11 000 |
| LH 1046 | | 4 X 6 | | | | | | 1.092 | 15 000 |
| LH 1223 | 0.750 | 2 X 3 | 0.130 | 0.313 5 | 0.312 5 | 0.722 | 0.713 | 0.816 | 11 000 |
| LH 1234 | | 3 X 4 | | | | | | 1.080 | 17 000 |
| LH 1246 | | 4 X 6 | | | | | | 1.476 | 22 000 |
| LH 1623 | 1.000 | 2 X 3 | 0.161 | 0.376 5 | 0.375 5 | 0.960 | 0.950 | 1.003 | 19 000 |
| LH 1634 | | 3 X 4 | | | | | | 1.329 | 29 000 |
| LH 1646 | | 4 X 6 | | | | | | 1.818 | 38 000 |
| LH 2023 | 1.250 | 2 X 3 | 0.193 | 0.438 5 | 0.437 5 | 1.200 | 1.188 | 1.194 | 26 000 |
| LH 2034 | | 3 X 4 | | | | | | 1.584 | 41 000 |
| LH 2046 | | 4 X 6 | | | | | | 2.169 | 52 000 |
| LH 2423 | 1.500 | 2 X 3 | 0.227 | 0.501 5 | 0.500 5 | 1.439 | 1.425 | 1.395 | 34 000 |
| LH 2434 | | 3 X 4 | | | | | | 1.853 | 55 000 |
| LH 2446 | | 4 X 6 | | | | | | 2.540 | 68 000 |
| LH 2823 | 1.750 | 2 X 3 | 0.258 | 0.563 5 | 0.562 5 | 1.680 | 1.663 | 1.581 | 43 000 |
| LH 2834 | | 3 X 4 | | | | | | 2.101 | 71 000 |
| LH 2846 | | 4 X 6 | | | | | | 2.881 | 86 000 |
| LH 3223 | 2.000 | 2 X 3 | 0.296 | 0.688 5 | 0.687 5 | 1.919 | 1.900 | 1.834 | 65 000 |
| LH 3234 | | 3 X 4 | | | | | | 2.430 | 99 000 |
| LH 3246 | | 4 X 6 | | | | | | 3.324 | 130 000 |

1) Chain path depth = minimum depth of channel through which the assembled chain will pass.

TABLE 1M — **Chain dimensions and breaking loads, series LH (metric units)**

| ISO chain number | Nominal pitch $P$ | Lacing | Thickness of plates $b_0$ max. | Hole diameter of articulating link plates $\phi d_1$ min. | Bearing pin diameter $\phi d_2$ max. | Chain path depth[1] $h_1$ min. | Plate depth $h_3$ max. | Width over riveted bearing pins $b_4$, $b_5$, $b_6$ max. | Breaking load min. |
|---|---|---|---|---|---|---|---|---|---|
| | mm | | mm | mm | mm | mm | mm | mm | daN |
| LH 0823 | 12,700 | 2 × 3 | 2,08 | 5,12 | 5,09 | 12,32 | 12,07 | 13,16 | 2 220 |
| LH 0834 | | 3 × 4 | | | | | | 17,40 | 3 340 |
| LH 0846 | | 4 × 6 | | | | | | 23,75 | 4 450 |
| LH 1023 | 15,875 | 2 × 3 | 2,44 | 5,98 | 5,96 | 15,34 | 15,09 | 15,37 | 3 340 |
| LH 1034 | | 3 × 4 | | | | | | 20,32 | 4 890 |
| LH 1046 | | 4 × 6 | | | | | | 27,74 | 6 670 |
| LH 1223 | 19,050 | 2 × 3 | 3,30 | 7,96 | 7,94 | 18,34 | 18,11 | 20,73 | 4 890 |
| LH 1234 | | 3 × 4 | | | | | | 27,43 | 7 560 |
| LH 1246 | | 4 × 6 | | | | | | 37,49 | 9 790 |
| LH 1623 | 25,400 | 2 × 3 | 4,09 | 9,56 | 9,54 | 24,38 | 24,13 | 25,48 | 8 450 |
| LH 1634 | | 3 × 4 | | | | | | 33,76 | 12 900 |
| LH 1646 | | 4 × 6 | | | | | | 46,18 | 16 900 |
| LH 2023 | 31,750 | 2 × 3 | 4,90 | 11,14 | 11,11 | 30,48 | 30,18 | 30,33 | 11 570 |
| LH 2034 | | 3 × 4 | | | | | | 40,23 | 18 240 |
| LH 2046 | | 4 × 6 | | | | | | 55,09 | 23 130 |
| LH 2423 | 38,100 | 2 × 3 | 5,77 | 12,74 | 12,71 | 36,55 | 36,20 | 35,43 | 15 120 |
| LH 2434 | | 3 × 4 | | | | | | 47,07 | 24 470 |
| LH 2446 | | 4 × 6 | | | | | | 64,52 | 30 250 |
| LH 2823 | 44,450 | 2 × 3 | 6,55 | 14,31 | 14,29 | 42,67 | 42,24 | 40,16 | 19 130 |
| LH 2834 | | 3 × 4 | | | | | | 53,37 | 31 580 |
| LH 2846 | | 4 × 6 | | | | | | 73,18 | 38 250 |
| LH 3223 | 50,800 | 2 × 3 | 7,52 | 17,49 | 17,46 | 48,74 | 48,26 | 46,58 | 28 910 |
| LH 3234 | | 3 × 4 | | | | | | 61,72 | 44 040 |
| LH 3246 | | 4 × 6 | | | | | | 84,43 | 57 830 |

1) Chain path depth = minimum depth of channel through which the assembled chain will pass.

TABLE 2 — **Chain dimensions and breaking loads, series LL (inch/pound units)**

| ISO chain number | Nominal pitch $P$ | Lacing | Thickness of plates[1] $b_0$ max. | Hole diameter of articulating link plates $\phi d_1$ min. | Bearing pin diameter $\phi d_2$ max. | Chain path depth[2] $h_1$ min. | Plate depth $h_3$ max. | Width over riveted bearing pins $b_1$, $b_2$, $b_3$ max. | Breaking load min. |
|---|---|---|---|---|---|---|---|---|---|
| | in | | in | in | in. | in. | in. | in. | lbf |
| LL 0822 | 0.500 | 2 X 2 | 0.051 | 0.175 5 | 0.175 0 | 0.440 | 0.430 | 0.300 | 4 000 |
| LL 0844 | | 4 X 4 | | | | | | 0.510 | 7 000 |
| LL 0866 | | 6 X 6 | | | | | | 0.725 | 10 000 |
| LL 1022 | 0.625 | 2 X 2 | 0.065 | 0.200 5 | 0.200 0 | 0.550 | 0.540 | 0.365 | 5 000 |
| LL 1044 | | 4 X 4 | | | | | | 0.635 | 10 000 |
| LL 1066 | | 6 X 6 | | | | | | 0.900 | 15 000 |
| LL 1222 | 0.750 | 2 X 2 | 0.075 | 0.225 5 | 0.225 0 | 0.645 | 0.635 | 0.420 | 6 500 |
| LL 1244 | | 4 X 4 | | | | | | 0.730 | 13 000 |
| LL 1266 | | 6 X 6 | | | | | | 1.035 | 19 500 |
| LL 1622 | 1.000 | 2 X 2 | 0.126 | 0.327 0 | 0.326 0 | 0.840 | 0.830 | 0.675 | 9 500 |
| LL 1644 | | 4 X 4 | | | | | | 1.190 | 19 000 |
| LL 1666 | | 6 X 6 | | | | | | 1.700 | 28 500 |
| LL 2022 | 1.250 | 2 X 2 | 0.146 | 0.402 0 | 0.401 0 | 1.050 | 1.040 | 0.790 | 14 500 |
| LL 2044 | | 4 X 4 | | | | | | 1.380 | 29 000 |
| LL 2066 | | 6 X 6 | | | | | | 1.970 | 43 500 |
| LL 2422 | 1.500 | 2 X 2 | 0.205 | 0.577 0 | 0.576 0 | 1.328 | 1.315 | 1.120 | 22 000 |
| LL 2444 | | 4 X 4 | | | | | | 1.945 | 44 000 |
| LL 2466 | | 6 X 6 | | | | | | 2.770 | 66 000 |
| LL 2822 | 1.750 | 2 X 2 | 0.254 | 0.627 0 | 0.626 0 | 1.475 | 1.460 | 1.340 | 29 000 |
| LL 2844 | | 4 X 4 | | | | | | 2.360 | 58 000 |
| LL 2866 | | 6 X 6 | | | | | | 3.385 | 87 000 |
| LL 3222 | 2.000 | 2 X 2 | 0.254 | 0.702 0 | 0.701 0 | 1.682 | 1.665 | 1.380 | 38 000 |
| LL 3244 | | 4 X 4 | | | | | | 2.400 | 76 000 |
| LL 3266 | | 6 X 6 | | | | | | 3.425 | 114 000 |
| LL 4022 | 2.500 | 2 X 2 | 0.325 | 0.902 0 | 0.901 0 | 2.106 | 2.085 | 1.760 | 59 000 |
| LL 4044 | | 4 X 4 | | | | | | 3.065 | 118 000 |
| LL 4066 | | 6 X 6 | | | | | | 4.374 | 177 000 |
| LL 4822 | 3.000 | 2 X 2 | 0.406 | 1.152 0 | 1.151 0 | 2.540 | 2.515 | 2.210 | 90 000 |
| LL 4844 | | 4 X 4 | | | | | | 3.835 | 180 000 |
| LL 4866 | | 6 X 6 | | | | | | 5.470 | 270 000 |

1) This dimension is for clevis calculations only, it is not an agreed plate thickness.

2) Chain path depth = minimum depth of channel through which the assembled chain will pass.

TABLE 2M — **Chain dimensions and breaking loads, series LL (metric units)**

| ISO chain number | Nominal pitch $P$ | Lacing | Thickness of plates[1] $b_0$ max. | Hole diameter of articulating link plates $\phi d_1$ min. | Bearing pin diameter $\phi d_2$ max. | Chain path depth[2] $h_1$ min. | Plate depth $h_3$ max. | Width over riveted bearing pins $b_1$, $b_2$, $b_3$ max. | Breaking load min. |
|---|---|---|---|---|---|---|---|---|---|
| | mm | | mm | mm | mm | mm | mm | mm | daN |
| LL 0822 | 12,700 | 2 × 2 | 1,30 | 4,46 | 4,45 | 11,18 | 10,92 | 7,60 | 1 780 |
| LL 0844 | | 4 × 4 | | | | | | 13,00 | 3 110 |
| LL 0866 | | 6 × 6 | | | | | | 18,40 | 4 450 |
| LL 1022 | 15,875 | 2 × 2 | 1,65 | 5,09 | 5,08 | 13,98 | 13,72 | 9,30 | 2 220 |
| LL 1044 | | 4 × 4 | | | | | | 16,10 | 4 450 |
| LL 1066 | | 6 × 6 | | | | | | 22,90 | 6 670 |
| LL 1222 | 19,050 | 2 × 2 | 1,90 | 5,73 | 5,72 | 16,39 | 16,13 | 10,70 | 2 890 |
| LL 1244 | | 4 × 4 | | | | | | 18,50 | 5 780 |
| LL 1266 | | 6 × 6 | | | | | | 26,30 | 8 670 |
| LL 1622 | 25,400 | 2 × 2 | 3,20 | 8,30 | 8,28 | 21,34 | 21,08 | 17,20 | 4 230 |
| LL 1644 | | 4 × 4 | | | | | | 30,20 | 8 450 |
| LL 1666 | | 6 × 6 | | | | | | 43,20 | 12 680 |
| LL 2022 | 31,750 | 2 × 2 | 3,70 | 10,21 | 10,19 | 26,68 | 26,42 | 20,10 | 6 450 |
| LL 2044 | | 4 × 4 | | | | | | 35,10 | 12 900 |
| LL 2066 | | 6 × 6 | | | | | | 50,10 | 19 350 |
| LL 2422 | 38,100 | 2 × 2 | 5,20 | 14,65 | 14,63 | 33,73 | 33,40 | 28,40 | 9 790 |
| LL 2444 | | 4 × 4 | | | | | | 49,40 | 19 570 |
| LL 2466 | | 6 × 6 | | | | | | 70,40 | 29 360 |
| LL 2822 | 44,450 | 2 × 2 | 6,45 | 15,92 | 15,90 | 37,46 | 37,08 | 34,00 | 12 900 |
| LL 2844 | | 4 × 4 | | | | | | 60,00 | 25 800 |
| LL 2866 | | 6 × 6 | | | | | | 86,00 | 38 700 |
| LL 3222 | 50,800 | 2 × 2 | 6,45 | 17,83 | 17,81 | 42,72 | 42,29 | 35,00 | 16 900 |
| LL 3244 | | 4 × 4 | | | | | | 61,00 | 33 810 |
| LL 3266 | | 6 × 6 | | | | | | 87,00 | 50 720 |
| LL 4022 | 63,500 | 2 × 2 | 8,25 | 22,91 | 22,89 | 53,49 | 52,96 | 44,70 | 26 240 |
| LL 4044 | | 4 × 4 | | | | | | 77,90 | 52 490 |
| LL 4066 | | 6 × 6 | | | | | | 111,10 | 78 730 |
| LL 4822 | 76 200 | 2 × 2 | 10,30 | 29,26 | 29,24 | 64,52 | 63,88 | 56,10 | 40 030 |
| LL 4844 | | 4 × 4 | | | | | | 97,40 | 80 070 |
| LL 4866 | | 6 × 6 | | | | | | 138,90 | 120 100 |

1) This dimension is for clevis calculations only, it is not an agreed plate thickness.

2) Chain path depth = minimum depth of channel through which the assembled chain will pass.

## 4 CLEVISES

### 4.1 Dimensions

The dimensions of terminal clevises for use with series LH and LL leaf chains shall be as given in tables 3, 3M, 4 or 4M. Limiting dimensions therein established are for the purpose of assuring acceptance of chains built in accordance with the foregoing standards.

### 4.2 Breaking strength

The clevises and the pins used to anchor chain shall be of adequate strength to withstand at least the breaking load of the chain.

### 4.3 Length adjustment

In multi-strand applications, where it becomes necessary within the chain assembly to compensate for small length differences between strands it is always desirable to provide within the anchoring device a length adjustment at least equal to one pitch of the chain.



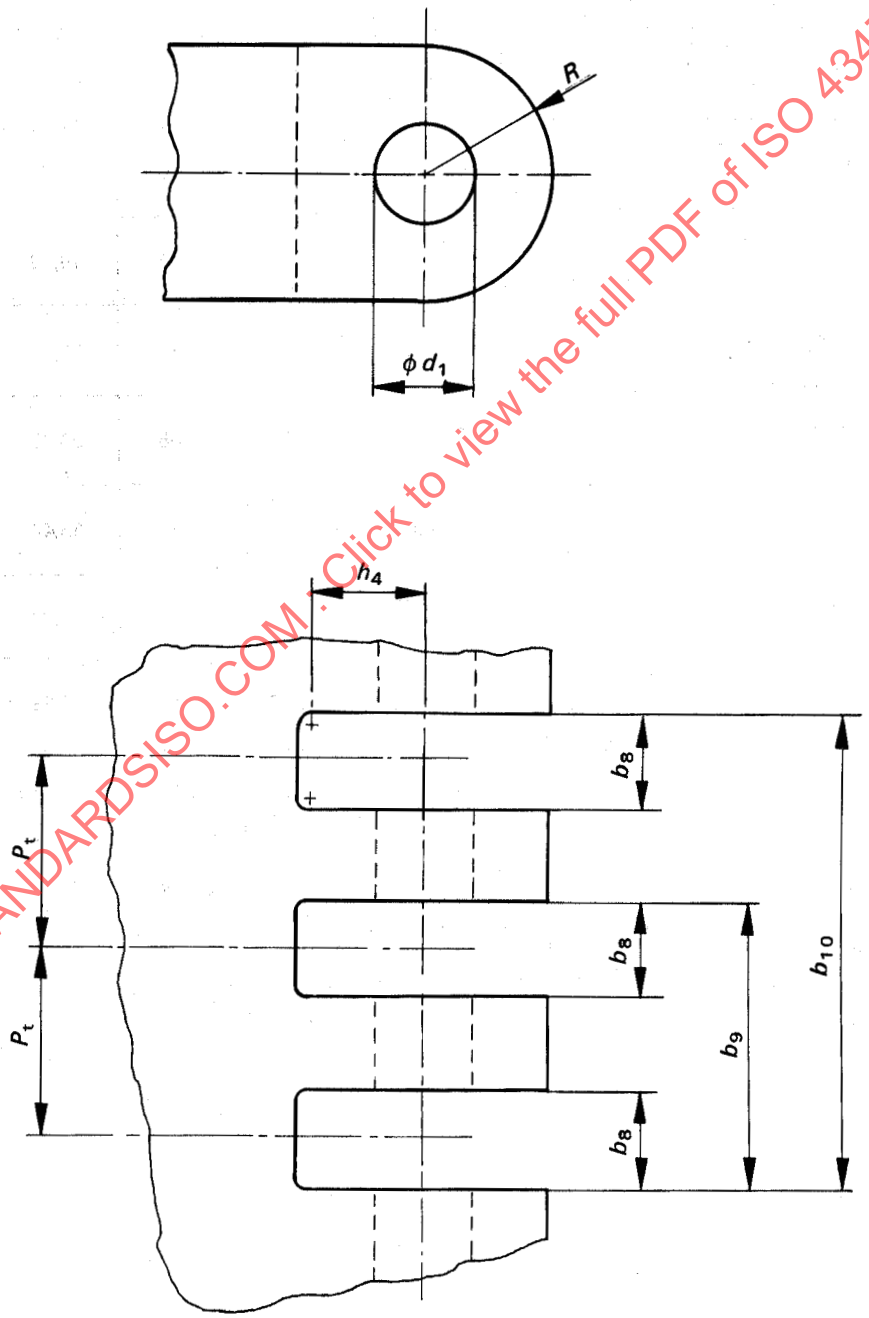


FIGURE 2 — **Dimensions of terminal clevises**

TABLE 3 — **Clevis dimensions, series LH (inch units)**

| ISO chain number | $b_8$ tol. H11 [1] | $b_9$ tol. H11 [1] | $P_t$ nom. | $\phi d_1$ min. | $h_4$ min. | $R$ max. |
|---|---|---|---|---|---|---|
| | in | in | in | in | in | in |
| LH 0823 | 0.258 | — | — | | | |
| LH 0834 | 0.171 | 0.421 | 0.250 | 0.201 5 | 0.250 | 0.250 |
| LH 0846 | 0.258 | 0.676 | 0.418 | | | |
| LH 1023 | 0.301 | — | — | | | |
| LH 1034 | 0.199 | 0.492 | 0.293 | 0.235 5 | 0.312 | 0.312 |
| LH 1046 | 0.301 | 0.789 | 0.488 | | | |
| LH 1223 | 0.406 | — | — | | | |
| LH 1234 | 0.269 | 0.665 | 0.396 | 0.313 5 | 0.375 | 0.375 |
| LH 1246 | 0.406 | 1.066 | 0.660 | | | |
| LH 1623 | 0.501 | — | — | | | |
| LH 1634 | 0,332 | 0.821 | 0.489 | 0.376 5 | 0.500 | 0.500 |
| LH 1646 | 0.501 | 1.316 | 0.815 | | | |
| LH 2023 | 0.599 | — | — | | | |
| LH 2034 | 0.397 | 0.982 | 0.585 | 0.438 5 | 0.625 | 0.625 |
| LH 2046 | 0.599 | 1.574 | 0.975 | | | |
| LH 2423 | 0.703 | — | — | | | |
| LH 2434 | 0.466 | 1.153 | 0.687 | 0.501 5 | 0.750 | 0.750 |
| LH 2446 | 0.703 | 1.848 | 1.145 | | | |
| LH 2823 | 0.798 | — | — | | | |
| LH 2834 | 0.529 | 1.309 | 0.780 | 0.563 5 | 0.875 | 0.875 |
| LH 2846 | 0.798 | 2.098 | 1.300 | | | |
| LH 3223 | 0.914 | — | — | | | |
| LH 3234 | 0.606 | 1.500 | 0.894 | 0.688 5 | 1.000 | 1.000 |
| LH 3246 | 0.914 | 2.404 | 1.490 | | | |

1) Tolerance grade H11 in accordance with ISO/R 286.

TABLE 3M — **Clevis dimensions, series LH (metric units)**

| ISO chain number | $b_8$ tol. H11 [1] | $b_9$ tol. H11 [1] | $P_t$ nom. | $\phi d_1$ min. | $h_4$ min. | $R$ max. |
|---|---|---|---|---|---|---|
| | mm | mm | mm | mm | mm | mm |
| LH 0823 | 6,55 | — | — | | | |
| LH 0834 | 4,34 | 10,69 | 6,35 | 5,12 | 6,35 | 6,35 |
| LH 0846 | 6,55 | 17,17 | 10,62 | | | |
| LH 1023 | 7,65 | — | — | | | |
| LH 1034 | 5,05 | 12,50 | 7,44 | 5,98 | 7,92 | 7,92 |
| LH 1046 | 7,65 | 20,04 | 12,40 | | | |
| LH 1223 | 10,31 | — | — | | | |
| LH 1234 | 6,83 | 16,89 | 10,06 | 7,96 | 9,53 | 9,53 |
| LH 1246 | 10,31 | 27,08 | 16,76 | | | |
| LH 1623 | 12,73 | — | — | | | |
| LH 1634 | 8,43 | 20,85 | 12,42 | 9,56 | 12,70 | 12,70 |
| LH 1646 | 12,73 | 33,43 | 20,70 | | | |
| LH 2023 | 15,21 | — | — | | | |
| LH 2034 | 10,08 | 24,94 | 14,86 | 11,14 | 15,88 | 15,88 |
| LH 2046 | 15,21 | 39,98 | 24,77 | | | |
| LH 2423 | 17,86 | — | — | | | |
| LH 2434 | 11,84 | 29,29 | 17,45 | 12,74 | 19,05 | 19,05 |
| LH 2446 | 17,86 | 46,94 | 29,08 | | | |
| LH 2823 | 20,27 | — | — | | | |
| LH 2834 | 13,44 | 33,25 | 19,81 | 14,31 | 22,23 | 22,23 |
| LH 2846 | 20,27 | 53,29 | 33,02 | | | |
| LH 3223 | 23,22 | — | — | | | |
| LH 3234 | 15,39 | 38,10 | 22,71 | 17,49 | 25,40 | 25,40 |
| LH 3246 | 23,22 | 61,06 | 37,85 | | | |

1) Tolerance grade H11 in accordance with ISO/R 286.

TABLE 4 – **Clevis dimensions, series LL (inch units)**

| ISO chain number | $b_8$ tol. H11[1)] | $b_9$ tol. H11[1)] | $b_{10}$ tol. H11[1)] | $P_t$ nom. | $\phi d_1$ min. | $h_4$ min. | $R$ max. |
|---|---|---|---|---|---|---|---|
| | in | in | in | in | in | in | in |
| **LL 0822**<br>**LL 0844**<br>**LL 0866** | 0.106 | 0.317 | 0.528 | 0.211 | 0.175 5 | 0.236 | 0.250 |
| **LL 1022**<br>**LL 1044**<br>**LL 1066** | 0.134 | 0.400 | 0.666 | 0.266 | 0.200 5 | 0.315 | 0.312 |
| **LL 1222**<br>**LL 1244**<br>**LL 1266** | 0.154 | 0.459 | 0.765 | 0.305 | 0.225 5 | 0.394 | 0.375 |
| **LL 1622**<br>**LL 1644**<br>**LL 1666** | 0.256 | 0.768 | 1.280 | 0.512 | 0.327 0 | 0.472 | 0.500 |
| **LL 2022**<br>**LL 2044**<br>**LL 2066** | 0.295 | 0.886 | 1.476 | 0.591 | 0.402 0 | 0.551 | 0.625 |
| **LL 2422**<br>**LL 2444**<br>**LL 2466** | 0.413 | 1.240 | 2,067 | 0.827 | 0.577 0 | 0.709 | 0.750 |
| **LL 2822**<br>**LL 2844**<br>**LL 2866** | 0.512 | 1.535 | 2.559 | 1.024 | 0.627 0 | 0.787 | 0.875 |
| **LL 3222**<br>**LL 3244**<br>**LL 3266** | 0.512 | 1.535 | 2.559 | 1.023 | 0.702 0 | 0.906 | 1.000 |
| **LL 4022**<br>**LL 4044**<br>**LL 4066** | 0.654 | 1.961 | 3.268 | 1.307 | 0.902 0 | 1.102 | 1.250 |
| **LL 4822**<br>**LL 4844**<br>**LL 4866** | 0.815 | 2.445 | 4.075 | 1.630 | 1.152 0 | 1.339 | 1.500 |

1) Tolerance grade H11 in accordance with ISO/R 286.