

International Standard



606

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

Short pitch transmission precision roller chains and chain wheels

Chaînes de transmission de précision à rouleaux à pas courts et roues dentées correspondantes

First edition — 1982-12-01

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Ref. No. ISO 606-1982 (E)

Descriptors : chains, roller chains, short pitch chains, sprockets, chain pitch, dimensions, designation, marking.

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 606 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 June 1981.

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

Austria	Germany, F. R.	Romania
Belgium	India	South Africa, Rep. of
Brazil	Italy	Spain
China	Japan	Sweden
Czechoslovakia	Mexico	United Kingdom
Egypt, Arab Rep. of	Netherlands	USA
France	Poland	USSR

No member body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 606-1967, of which it constitutes a technical revision, as well as its Addendum 1-1974.

Short pitch transmission precision roller chains and chain wheels

0 Introduction

The provisions of this International Standard have been arrived at by including sizes of chains used by the majority of countries in the world, and by unifying dimensions, strength and other data in respect of which current national standards were differing and at the same time eliminating certain size ranges listed in some national standards for which it was considered a universal usage had not been established.

The whole applicational field open to this medium of transmission has been covered by the ranges of chains already established. To achieve this the sizes of 12,7 mm (0.5 in) to 76,2 mm (3.0 in) pitch inclusive have been duplicated by the inclusion of chains derived from standards originating in the western hemisphere and centred around ANSI (suffix A) and, on the other hand, by chains representing the unification of the principal standards originating in Europe and centred around BSI (suffix B), the two being complementary for the coverage of the widest possible field of application.

The part of this International Standard covering chain wheels represents the unification of all the relevant national standards in the world and includes, in particular, complete tolerances relating to tooth form which are absent from most current national standards.

The dimensions of chain specified ensure complete interchangeability of any given size and provide interchangeability of individual links of chains for repair purposes.

1 Scope and field of application

This International Standard applies to short pitch precision roller chains of simple and multiplex construction suitable for the mechanical transmission of power and allied applications, together with the tooth gap forms and rim profiles of their associated chain wheels. It covers dimensions, tolerances, measuring loads and minimum breaking loads.

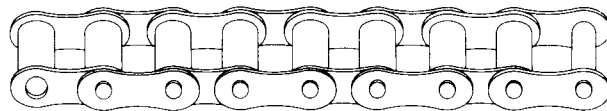
2 Reference

ISO 286/1, *ISO system of limits and fits — Part 1 : General, tolerances and deviations.*¹⁾

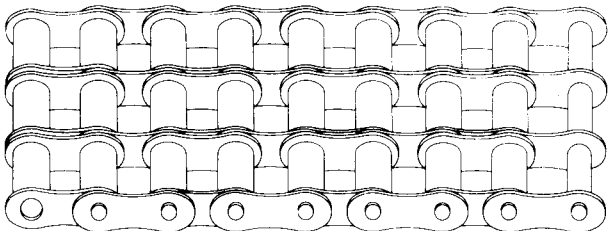
3 Chains

3.1 Nomenclature

Figures 1, 2 and 3 do not define the actual form of the chain plates.



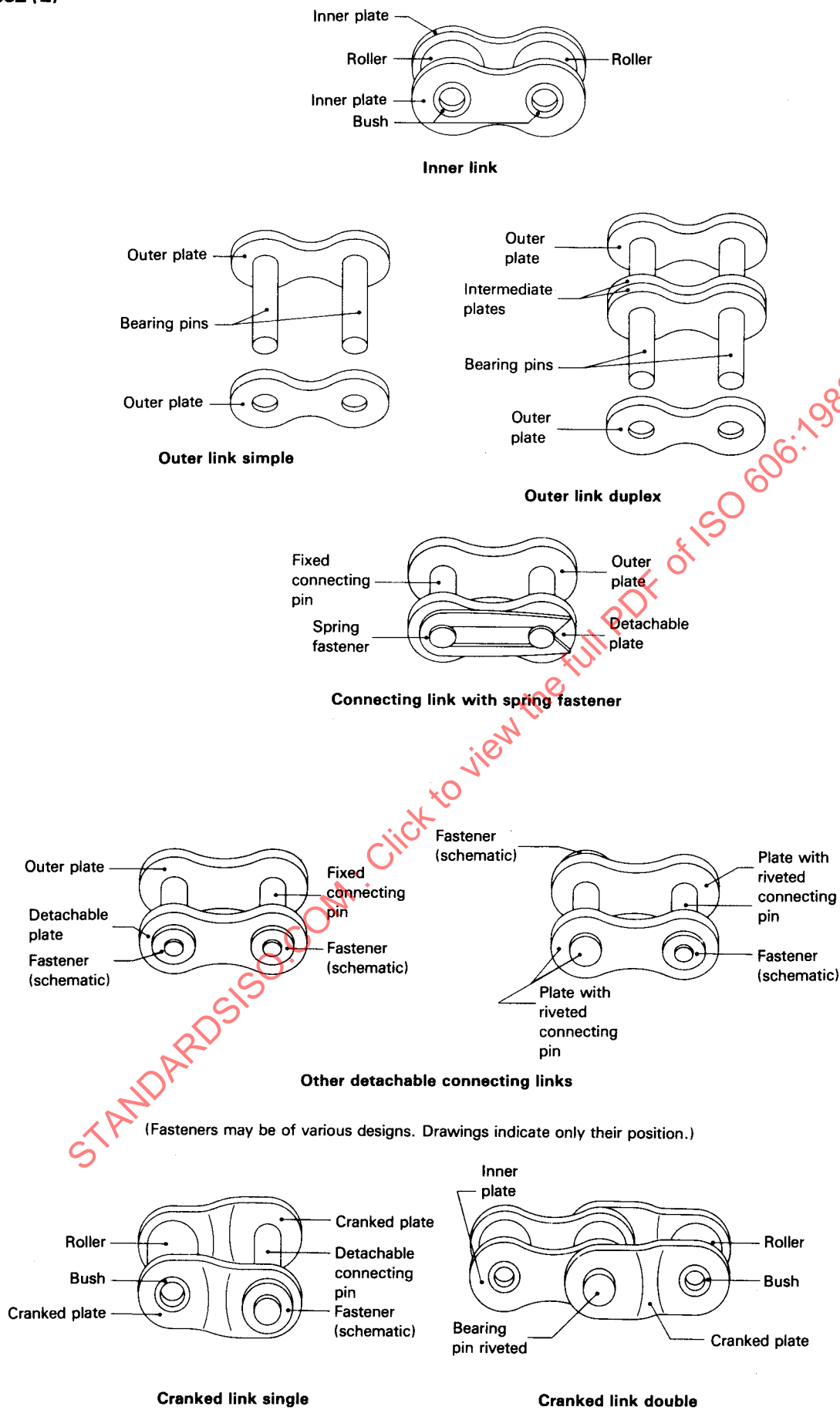
Roller chain, simple



Roller chain, multiple (triplex)

Figure 1 — Roller chains

1) At present at the stage of draft. (Revision of ISO/R 286-1962.)



NOTE — Dimensional definitions are contained in the key to tables 1, 1M, 2 and 2M.

3.2 Designation

Transmission precision roller chains shall be designated by the standard ISO chain number given in tables 1, 1M, 2 and 2M; the first two digits expressing the pitch in sixteenths of an inch. The ISO chain numbers in tables 1 and 1M are supplemented by a hyphenated suffix 1 for simple chain, 2 for duplex chain, 3 for triplex chain, etc., for example 16B-1, 16B-2, 16B-3, etc.

3.3 Dimensions

Chains shall conform to the dimensions given in tables 1, 1M, 2 and 2M. Maximum and minimum dimensions are specified to ensure interchangeability of links as produced by different makers of chain. They represent limits for interchangeability, but are not the actual tolerances that should be used in manufacture.

3.4 Minimum ultimate tensile strength

3.4.1 The minimum tensile strength is the minimum strength of samples tested to destruction in tensile loading, as defined in 3.4.2. This strength is not a working load. It is intended primarily as a comparative figure between chains of various constructions. For application information, the manufacturers or their published data should be consulted.

3.4.2 A tensile load, not less than that specified in table 1, 1M, 2 or 2M, is applied slowly to the ends of a chain length, containing at least five free pitches, by means of shackles permitting free movement on both sides of the chain centre line, in the normal plane of articulation.

Failure shall be considered to have occurred at the first point where increasing extension is no longer accompanied by increasing load, i.e. the summit of the load/extension diagram.

Tests in which failures occur adjacent to the shackles should be disregarded.

3.4.3 The tensile test shall be considered a destructive test. Even though a chain may not visibly fail when subjected to the minimum breaking load, it will have been stressed beyond the yield point and will be unfit for service.

3.5 Proof loading

It is recommended that all chains should be proof loaded to one-third of the minimum tensile breaking load given in tables 1, 1M, 2 and 2M.

3.6 Length accuracy

Finished chains shall be measured after proof loading (where applicable) but before lubricating.

The standard length for measurement shall be a minimum of :

- a) 610 mm (24 in) for ISO chain numbers 05B to 12B and 081 to 085 inclusive,
- b) 1 220 mm (48 in) for ISO chain numbers 16A to 72B inclusive,

and shall terminate with an inner link at each end.

The chain shall be supported throughout its entire length and the measuring load in tables 1, 1M, 2 and 2M shall be applied.

To comply with this International Standard, the length shall be the nominal length subject to the limits of tolerance :

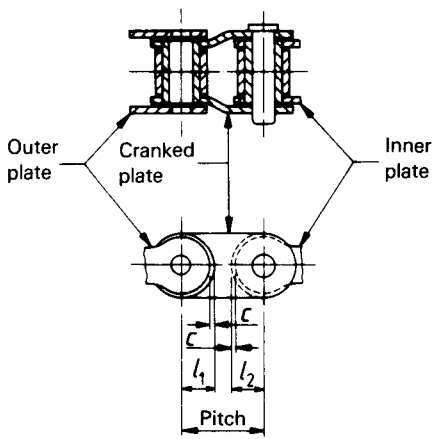
$$\pm 0,15 \%$$

The length accuracy of chains which have to work in parallel shall be within the limits above but matched in agreement with the manufacturer.

3.7 Marking

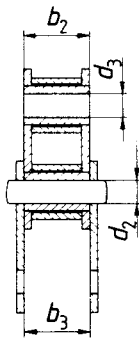
The chain shall be marked with :

- a) the manufacturer's name or trade mark;
- b) the ISO chain number (see column 1 of tables 1, 1M, 2 and 2M).

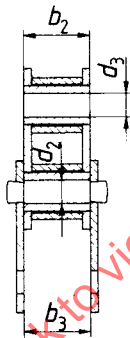


Cranked link

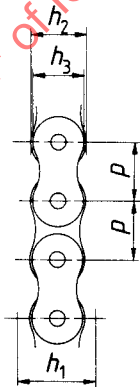
Dimension c represents the clearance between the cranked link plates and the straight plates available during articulation.



Plain pin

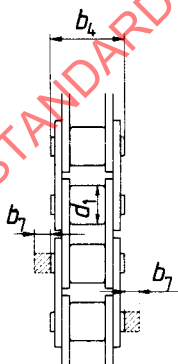


Shouldered pin

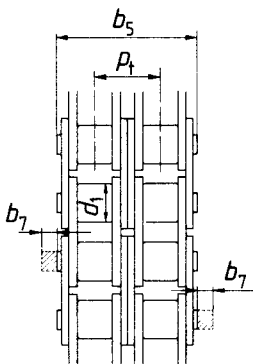


Sections through chain

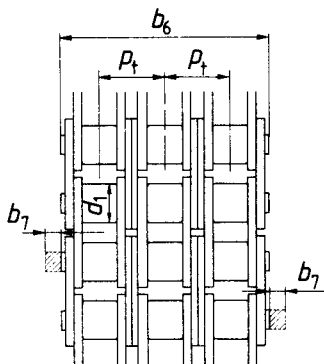
The chain path depth h_1 is the minimum depth of channel through which the assembled chain will pass.



Simple



Duplex



Triplex

The overall width of a chain with a joint fastener is equal to the width over the bearing pins b_4 , b_5 or b_6 plus b_7 for riveted pin end (or $+ 1,6 b_7$ for headed pin end) if fastener is on one side only, or $+ 2 b_7$ if fastener is on both sides.

The width over bearing pins for chains wider than triplex is equal to $b_4 + p_t$ (number of strands in chain $- 1$).

Figure 3 — Key to tables 1, 1M, 2 and 2M

Table 1 — (Inch-pound units) Chain dimensions, measuring loads and breaking loads of base chains

1	2	3	4	5	6	7	8	9	Cranked link dimensions 1)			13	14	15	16	17	18	19	Measuring load			Breaking load		
ISO chain number	Pitch	Roller diameter	Width between inner plates	Bearing pin body diameter	Bush bore	Chain path depth	Inner plate depth	Outer intermediate plate depth				Transverse pitch	Width over inner link	Width between outer plates	Width over bearing pins			Addit-ional width for joint fastener 2)						
	p	d_1 max.	b_1 min.	d_2 max.	d_3 min.	h_1 min.	h_2 max.	h_3 max.	l_1 min.	l_2 min.	c	p_t	b_2 max.	b_3 min.	Simple	Duplex	Triplex	—	Simple	Duplex	Triplex	Simple	Duplex	Triplex
	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in
05B	0.315	0.197	0.118	0.091	0.093	0.290	0.280	0.280	0.146	0.146	0.003	0.222	0.188	0.193	0.34	0.57	0.79	0.12	11	22	33	1 000	1 750	2 500
06B	0.375	0.250	0.225	0.129	0.131	0.335	0.325	0.325	0.170	0.170	0.003	0.403	0.336	0.341	0.53	0.94	1.34	0.13	16	32	48	2 000	3 800	5 600
08A	0.500	0.313	0.309	0.156	0.158	0.485	0.475	0.410	0.208	0.240	0.003	0.566	0.440	0.442	0.70	1.27	1.84	0.15	28	56	84	3 100	6 200	9 300
08B	0.500	0.335	0.305	0.175	0.177	0.475	0.465	0.430	0.223	0.241	0.003	0.548	0.445	0.450	0.67	1.22	1.77	0.15	28	56	84	4 000	7 000	10 000
10A	0.625	0.400	0.370	0.200	0.202	0.604	0.594	0.513	0.260	0.300	0.004	0.713	0.545	0.547	0.86	1.57	2.28	0.16	44	88	132	4 900	9 800	14 700
10B	0.625	0.400	0.380	0.200	0.202	0.590	0.580	0.540	0.280	0.300	0.004	0.653	0.523	0.528	0.77	1.43	2.08	0.16	44	88	132	5 000	10 000	15 000
12A	0.750	0.469	0.495	0.234	0.236	0.722	0.712	0.615	0.311	0.360	0.004	0.897	0.699	0.701	1.06	1.96	2.86	0.18	63	126	189	7 000	14 000	21 000
12B	0.750	0.475	0.460	0.225	0.227	0.645	0.635	0.635	0.328	0.328	0.004	0.766	0.615	0.620	0.89	1.66	2.43	0.18	63	126	189	6 500	13 000	19 500
16A	1.000	0.625	0.620	0.312	0.314	0.960	0.950	0.820	0.415	0.480	0.005	1.153	0.890	0.892	1.32	2.47	3.62	0.21	112	224	336	12 500	25 000	37 500
16B	1.000	0.625	0.670	0.326	0.328	0.840	0.830	0.830	0.439	0.439	0.005	1.255	1.002	1.007	1.42	2.68	3.93	0.21	112	224	336	9 500	19 000	28 500
20A	1.250	0.750	0.744	0.375	0.377	1.200	1.188	1.025	0.518	0.600	0.006	1.408	1.081	1.083	1.62	3.03	4.45	0.24	175	350	525	19 500	39 000	58 500
20B	1.250	0.750	0.770	0.401	0.403	1.050	1.040	1.040	0.547	0.547	0.006	1.435	1.142	1.147	1.70	3.14	4.57	0.24	175	350	525	14 500	29 000	43 500
24A	1.500	0.875	0.993	0.437	0.439	1.439	1.425	1.230	0.622	0.719	0.007	1.789	1.396	1.398	2.00	3.79	5.58	0.26	250	500	750	28 000	56 000	84 000
24B	1.500	1.000	1.000	0.576	0.578	1.328	1.315	1.315	0.691	0.691	0.007	1.904	1.493	1.498	2.10	4.01	5.91	0.26	250	500	750	22 000	44 000	66 000
28A	1.750	1.000	0.993	0.500	0.502	1.680	1.663	1.435	0.725	0.839	0.008	1.924	1.464	1.466	2.16	4.08	6.00	0.29	340	680	1 020	38 000	76 000	114 000
28B	1.750	1.100	1.220	0.626	0.628	1.475	1.460	1.460	0.768	0.768	0.008	2.345	1.834	1.839	2.56	4.91	7.25	0.29	340	680	1 020	29 000	58 000	87 000
32A	2.000	1.125	1.242	0.562	0.564	1.919	1.900	1.640	0.828	0.968	0.008	2.305	1.780	1.782	2.58	4.89	7.20	0.31	450	900	1 350	50 000	100 000	150 000
32B	2.000	1.150	1.220	0.701	0.703	1.682	1.665	1.665	0.874	0.874	0.008	2.305	1.794	1.799	2.65	4.96	7.26	0.31	450	900	1 350	38 000	76 000	114 000
40A	2.500	1.562	1.490	0.781	0.783	2.389	2.375	2.050	1.033	1.195	0.008	2.817	2.161	2.163	3.16	5.98	8.80	0.40	700	1 400	2 100	78 000	156 000	234 000
40B	2.500	1.550	1.500	0.901	0.903	2.106	2.085	2.085	1.093	1.093	0.008	2.846	2.195	2.200	3.25	6.10	8.95	0.40	700	1 400	2 100	59 000	118 000	177 000
48A	3.000	1.875	1.864	0.937	0.939	2.879	2.850	2.460	1.238	1.433	0.008	3.458	2.670	2.672	3.76	7.22	10.68	0.41	1 000	2 000	3 000	112 500	225 000	337 500
48B	3.000	1.900	1.800	1.151	1.153	2.540	2.515	2.515	1.317	1.317	0.008	3.591	2.778	2.783	3.90	7.50	11.09	0.41	1 000	2 000	3 000	90 000	180 000	270 000
56B	3.500	2.125	2.100	1.351	1.353	3.096	3.065	3.065	1.599	1.599	0.008	4.197	3.202	3.207	4.51	8.71	—	0.46	1 370	2 740	—	122 000	244 000	—
64B	4.000	2.500	2.400	1.551	1.553	3.586	3.550	3.550	1.853	1.853	0.008	4.720	3.623	3.628	5.15	9.87	—	0.51	1 790	3 580	—	160 000	320 000	—
72B	4.500	2.850	2.700	1.751	1.753	4.121	4.080	4.080	2.101	2.101	0.008	5.365	4.087	4.092	5.80	11.17	—	0.56	2 270	4 540	—	202 000	404 000	—

1) Cranked links are not recommended for use on chains which are intended for onerous applications.

2) The actual dimensions will depend on the type of fastener used but they should not exceed the dimensions in this column, details of which should be obtained by the purchaser from the manufacturer.

NOTE — There are narrow versions of the simple chain, 08B and 10B respectively, having widths between inner plates of 5.21 mm (0.205 in) min. and 6.48 mm (0.255 in) min. which are used for motorcycle applications.

Table 1M — (Metric units) Chain dimensions, measuring loads and breaking loads of base chains

ISO chain number	Pitch	Roller diameter	Width between inner plates	Bearing pin body diameter	Bush bore	Chain path depth	Inner plate depth	Outer intermediate plate depth	Cranked link dimensions ¹⁾			Transverse pitch	Width over inner link	Width between outer plates	Width over bearing pins			Addit-ional width for joint fastener ²⁾	Measuring load			Breaking load			
									l_1 min.	l_2 min.	c				p_t	b_2 max.	b_3 min.		Simple b_4 max.	Duplex b_5 max.	Triplex b_6 max.	Simple	Duplex	Triplex	Simple
p	mm	d_1 max.	b_1 min.	d_2 max.	d_3 min.	h_1 min.	h_2 max.	h_3 max.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	da N	da N	da N	min.	min.	da N
05B	8,00	5,00	3,00	2,31	2,36	7,37	7,11	7,11	3,71	3,71	0,08	5,64	4,77	4,90	8,6	14,3	19,9	3,1	5	10	15	440	780	1 110	
06B	9 525	6,35	5,72	3,28	3,33	8,52	8,26	8,26	4,32	4,32	0,08	10,24	8,53	8,66	13,5	23,8	34,0	3,3	7	14	21	890	1 690	2 490	
08A	12,70	7,95	7,85	3,96	4,01	12,33	12,07	10,41	5,28	6,10	0,08	14,38	11,18	11,23	17,8	32,3	46,7	3,9	12	25	37	1 380	2 760	4 140	
08B	12,70	8,51	7,75	4,45	4,50	12,07	11,81	10,92	5,66	6,12	0,08	13,92	11,30	11,43	17,0	31,0	44,9	3,9	12	25	37	1 780	3 110	4 450	
10A	15,875	10,16	9,40	5,08	5,13	15,35	15,09	13,03	6,60	7,62	0,10	18,11	13,84	13,89	21,8	39,9	57,9	4,1	20	39	59	2 180	4 360	6 540	
10B	15,875	10,16	9,65	5,08	5,13	14,99	14,73	13,72	7,11	7,62	0,10	16,59	13,28	13,41	19,6	36,2	52,8	4,1	20	39	59	2 220	4 450	6 670	
12A	19,05	11,91	12,57	5,94	5,99	18,34	18,08	15,62	7,90	9,14	0,10	22,78	17,75	17,81	26,9	49,8	72,6	4,6	28	56	84	3 110	6 230	9 340	
12B	19,05	12,07	11,68	5,72	5,77	16,39	16,13	16,13	8,33	8,33	0,10	19,46	15,62	15,75	22,7	42,2	61,7	4,6	28	56	84	2 890	5 780	8 670	
16A	25,40	15,88	15,75	7,92	7,97	24,39	24,13	20,83	10,54	12,19	0,13	29,29	22,61	22,66	33,5	62,7	91,9	5,4	50	100	149	5 560	11 120	16 680	
16B	25,40	15,88	17,02	8,28	8,33	21,34	21,08	21,08	11,15	11,15	0,13	31,88	25,45	25,58	36,1	68,0	99,9	5,4	50	100	149	4 230	8 450	12 680	
20A	31,75	19,05	18,90	9,53	9,58	30,48	30,18	26,04	13,16	15,24	0,15	35,76	27,46	27,51	41,1	77,0	113,0	6,1	78	156	234	8 670	17 350	26 020	
20B	31,75	19,05	19,56	10,19	10,24	26,68	26,42	26,42	13,89	13,89	0,15	36,45	29,01	29,14	43,2	79,7	116,1	6,1	78	156	234	6 450	12 900	19 350	
24A	38,10	22,23	25,22	11,10	11,15	36,55	36,20	31,24	15,80	18,26	0,18	45,44	35,46	35,51	50,8	96,3	141,7	6,6	111	222	334	12 460	24 910	37 370	
24B	38,10	25,40	25,40	14,63	14,68	33,73	33,40	33,40	17,55	17,55	0,18	48,36	37,92	38,05	53,4	101,8	150,2	6,6	111	222	334	9 790	19 570	29 360	
28A	44,45	25,40	25,22	12,70	12,75	42,67	42,24	36,45	18,42	21,31	0,20	48,87	37,19	37,24	54,9	103,6	152,4	7,4	151	302	454	16 900	33 810	50 710	
28B	44,45	27,94	30,99	15,90	15,95	37,46	37,08	37,08	19,51	19,51	0,20	59,56	46,58	46,71	65,1	124,7	184,3	7,4	151	302	454	12 900	25 800	38 700	
32A	50,80	28,58	31,55	14,27	14,32	48,74	48,26	41,66	21,03	24,33	0,20	58,55	45,21	45,26	65,5	124,2	182,9	7,9	200	400	601	22 240	44 480	66 720	
32B	50,80	29,21	30,99	17,81	17,86	42,72	42,29	42,29	22,20	22,20	0,20	58,55	45,57	45,70	67,4	126,0	184,5	7,9	200	400	601	16 900	33 810	50 710	
40A	63,50	39,68	37,85	19,84	19,89	60,93	60,33	52,07	26,24	30,35	0,20	71,55	54,89	54,94	80,3	151,9	223,5	10,2	311	623	934	34 700	69 390	104 080	
40B	63,50	39,37	38,10	22,89	22,94	53,49	52,96	52,96	27,76	27,76	0,20	72,29	55,75	55,88	82,6	154,9	227,2	10,2	311	623	934	26 240	52 490	78 730	
48A	76,20	47,63	47,35	23,80	23,85	73,13	72,39	62,48	31,45	36,40	0,20	87,83	67,82	67,87	95,5	183,4	271,3	10,5	445	890	1 334	50 040	100 080	150 130	
48B	76,20	48,26	45,72	29,24	29,29	64,52	63,88	63,88	33,45	33,45	0,20	91,21	70,56	70,69	99,1	190,4	281,6	10,5	445	890	1 334	40 030	80 070	120 100	
56B	88,90	53,98	53,34	34,32	34,37	78,64	77,85	77,85	40,61	40,61	0,20	106,60	81,33	81,46	114,6	221,2	328,8	11,7	609	1 219	1 828	54 270	108 540	—	
64B	101,60	63,50	60,96	39,40	39,45	91,08	90,17	90,17	47,07	47,07	0,20	119,89	92,02	92,15	130,9	250,8	—	13,0	796	1 592	—	71 170	142 340	—	
72B	114,30	72,39	68,58	44,48	44,53	104,67	103,63	103,63	53,37	53,37	0,20	136,27	103,81	103,94	147,4	283,7	—	14,3	1 010	2 019	—	89 850	179 710	—	

1) Cranked links are not recommended for use on chains which are intended for onerous applications.

2) The actual dimensions will depend on the type of fastener used but they should not exceed the dimensions in this column, details of which should be obtained by the purchaser from the manufacturer.

NOTE — There are narrow versions of the simple chain, 08B and 10B respectively, having widths between inner plates of 5,21 mm (0,255 in) min. and 6,48 mm (0,255 in) min. which are used for motorcycle applications.

Table 2 — (Inch-pound units) Chain dimensions, measuring loads and breaking loads of cycle and moped chains¹⁾

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ISO chain number	Pitch	Roller diameter	Width between inner plates	Bearing pin body diameter	Bush bore	Chain path depth	Inner plate depth	Outer plate depth	Cranked link dimensions ²⁾			Width over inner link	Width between outer plates	Width over bearing pins	Additional width for joint fastener ³⁾	Measuring load	Breaking load
	p	d_1 max.	b_1 min.	d_2 max.	d_3 min.	h_1 min.	h_2 max.	h_3 max.	l_1 min.	l_2 min.	c	b_2 max.	b_3 min.	b_4 max.	b_7 max.	—	min. lb
081	0.500	0.305	0.130	0.144	0.146	0.400	0.390	0.390	0.211	0.211	0.003	0.228	0.233	0.40	0.06	28	1 800
082	0.500	0.305	0.094	0.144	0.146	0.400	0.390	0.390	0.211	0.211	0.003	0.181	0.186	0.32	4)	28	2 200
083	0.500	0.305	0.192	0.161	0.163	0.416	0.406	0.406	0.211	0.211	0.003	0.311	0.316	0.51	0.06	28	2 600
084	0.500	0.305	0.192	0.161	0.163	0.449	0.439	0.439	0.227	0.227	0.003	0.346	0.351	0.58	0.06	28	3 500
085	0.500	0.306	0.251	0.141	0.143	0.400	0.390	0.390	0.208	0.240	0.003	0.357	0.362	0.55	0.08	28	1 500

Table 2M — (Metric units) Chain dimensions, measuring loads and breaking loads of cycle and moped chains¹⁾

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
ISO chain number	Pitch	Roller diameter	Width between inner plates	Bearing pin body diameter	Bush bore	Chain path depth	Inner plate depth	Outer plate depth	Cranked link dimensions ²⁾			Width over inner link	Width between outer plates	Width over bearing pins	Additional width for joint fastener ³⁾	Measuring load	Breaking load
	p	d_1 max.	b_1 min.	d_2 max.	d_3 min.	h_1 min.	h_2 max.	h_3 max.	l_1 min.	l_2 min.	c	b_2 max.	b_3 min.	b_4 max.	b_7 max.	—	min. da N
081	12,70	7,75	3,30	3,66	3,71	10,17	9,91	9,91	5,36	5,36	0,08	5,80	5,93	10,2	1,5	12,5	800
082	12,70	7,75	2,38	3,66	3,71	10,17	9,91	9,91	5,36	5,36	0,08	4,80	4,73	8,2	4)	12,5	980
083	12,70	7,75	4,88	4,09	4,14	10,56	10,30	10,30	5,36	5,36	0,08	7,90	8,03	12,9	1,5	12,5	1 160
084	12,70	7,75	4,88	4,09	4,14	11,41	11,15	11,15	5,77	5,77	0,08	8,80	8,93	14,8	1,5	12,5	1 580
085	12,70	7,77	6,38	3,58	3,63	10,17	9,91	9,91	5,28	6,10	0,08	9,07	9,20	14,0	2,0	12,5	670

1) These chains are recommended in the single version only.

2) Cranked links are not recommended for use on chains which are intended for onerous applications.

3) The actual dimensions will depend on the type of fastener used but they should not exceed the dimensions in this column, details of which should be obtained by the purchaser from the manufacturer.

4) It is recommended that the joints for derailleur chain should always be riveted.

4 Attachments

4.1 General

Except when otherwise stated, the characteristics, dimensions and tests for the chain with attachments shall conform to the requirements of clause 3.

4.2 Designation

Two types of attachments are given, having the common dimensional basis as detailed in tables 1 and 1M (columns 2, 3 and 4); their designation and distinguishing features are as follows :

- K1 : with one attachment hole centrally disposed in each platform;
- K2 : with two attachment holes longitudinally disposed as shown in figure 4.

4.3 Dimensions

Attachments shall conform to the dimensions given in tables 3 and 3M.

4.4 Manufacture

The actual form of the attachment plates is left to the discretion of the manufacturer, but the attachments are normally of integral construction whereby the chain plates are extended and bent over to make the platform, as shown in figure 4.

The length of the attachment plate is also left to the discretion of the manufacturer, but it should be sufficient to accommodate the two attachment holes longitudinally in the case of type K2, and not interfere with the working of the adjoining links. A common length is normally adopted for both type K1 and K2.

4.5 Marking

The marking shall be the same as would be shown on the chain plates replaced by an integral construction attachment (see 3.7).

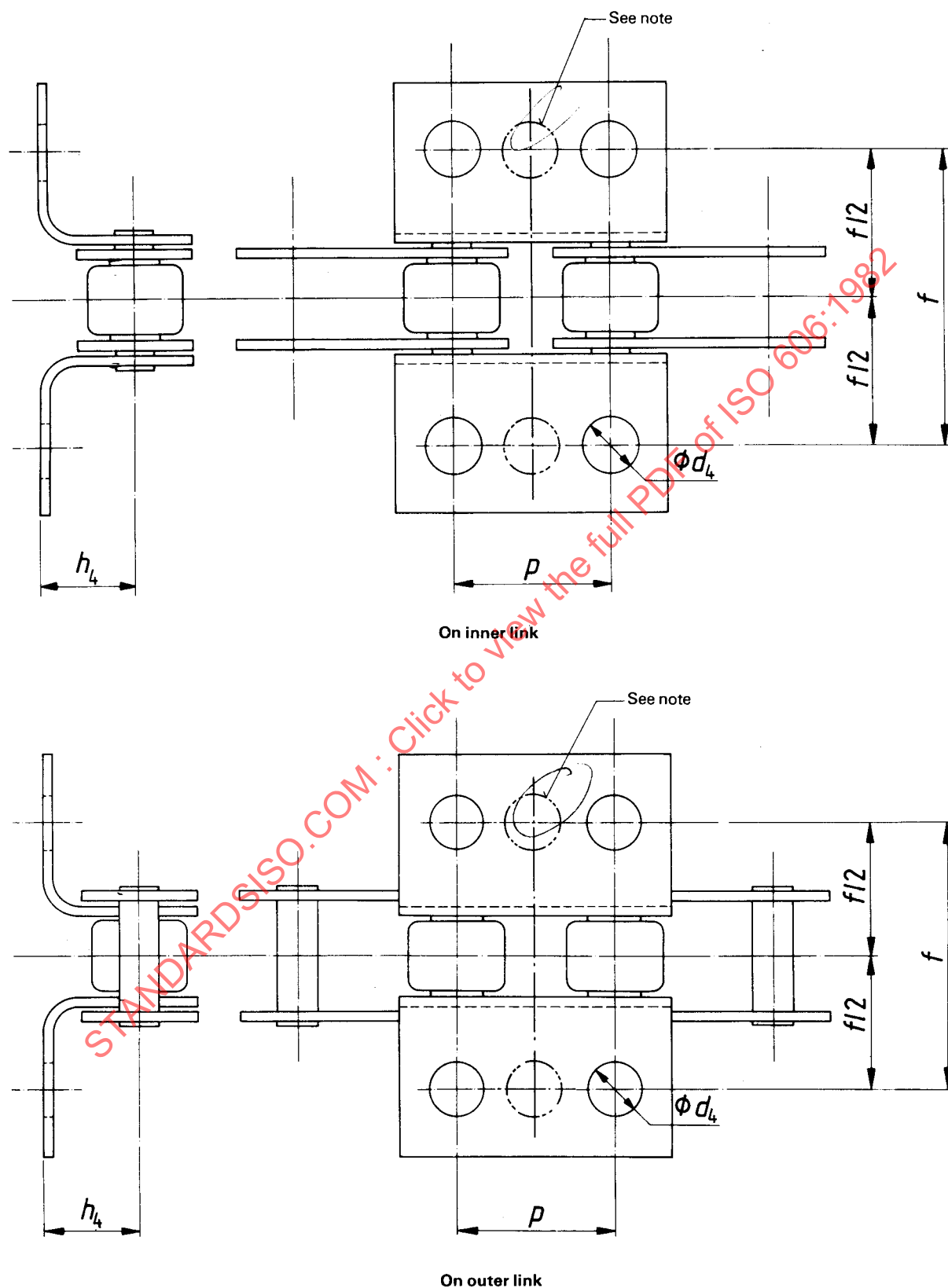


Figure 4 — K attachments (key to tables 3 and 3M)

NOTE — K2 attachment plates each have two attachment holes. K1 plates are similar except that they have one hole, centrally disposed (see 4.2).

Table 3 — (Inch units) Dimensions of attachments

(1)	(2)	(3)	(4)
ISO chain number	Platform height h_4	Hole diameter d_4 min.	Transverse distance between hole centres f
08 A	0.312	0.131	1.00
08 B	0.350	0.169	
10 A	0.406	0.200	1.25
10 B		0.209	
12 A	0.469	0.200	1.50
12 B	0.530	0.252	
16 A	0.625	0.261	2.00
16 B		0.252	
20 A	0.781	0.323	2.50
20 B		0.331	
24 A	0.906	0.386	3.00
24 B	1.050	0.413	
28 A	1.125	0.448	3.50
28 B		0.516	
32 A	1.250	0.516	4.00
32 B			

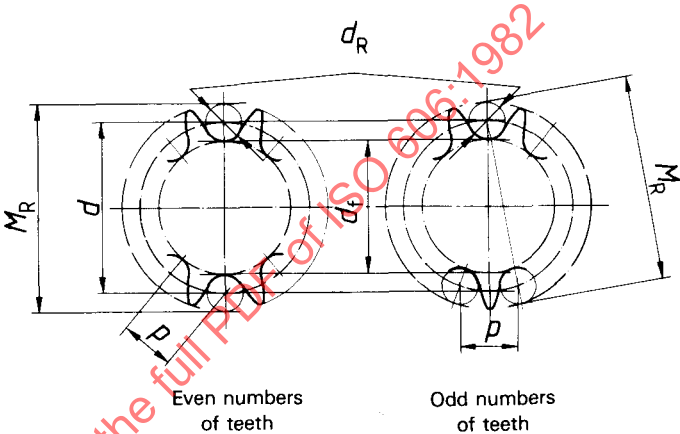
5 Chain wheels

5.1 Nomenclature

The nomenclature for basic chain dimensions on which all wheel data are based is given in figure 3. Chain wheel nomenclature is covered under the respective headings.

5.2 Diametral dimensions of wheel rim

5.2.1 Nomenclature



p = chordal pitch, equal to chain pitch

d_R = measuring pin diameter

z = number of teeth

d = pitch circle diameter

d_f = root diameter

M_R = measurement over pins

5.2.2 Dimensions

5.2.2.1 Pitch circle diameter

$$d = \frac{p}{\sin \frac{180^\circ}{z}} \quad \text{(see the annex for pitch circle diameters in relation to the number of teeth)}$$

5.2.2.2 Measuring pin diameter

$d_R = d_1$ (see 5.3.1) subject to tolerance limits

$$+ 0.000\,5 \text{ in } (0,01 \text{ mm})$$

0

Table 3M — (Metric units) Dimensions of attachments

(1)	(2)	(3)	(4)
ISO chain number	Platform height h_4	Hole diameter d_4 min.	Transverse distance between hole centres f
08 A	7,92	3,3	25,40
08 B	8,89	4,3	
10 A	10,31	5,1	31,75
10 B		5,3	
12 A	11,91	5,1	38,10
12 B	13,46	6,4	
16 A	15,88	6,6	50,80
16 B		6,4	
20 A	19,84	8,2	63,50
20 B		8,4	
24 A	23,01	9,8	76,20
24 B	26,67	10,5	
28 A	28,58	11,4	88,90
28 B		13,1	
32 A	31,75	13,1	101,60
32 B			