

HK Type Roller Chains



Downsizing Your System with Higher Power Chains

HK type roller chains conform to H type of ANSI, and their thickness of inner and outer link plates are equal to those of the next larger size chain. Therefore, HK type roller chains are higher in tensile strength by about 20% and in maximum allowable load by about 15% than those of standard roller chains. Since the weight of the chains is also larger, HK type roller chains are suitable for the application of heavy duty at low speed.

Recommended uses

- Optimal for places where higher strength is required but large and heavier chains cannot be used.

<Examples>

Asphalt finishers

Selection of chains

Select a proper HK type roller chain based on "Low-speed selection" (P121)

For the maximum allowable load, see the following table of dimensions.

HK type roller chains are available up to triplex.

Sprockets

Use standard sprockets for a simplex HK roller chain. Since the transverse pitches (C dimension: see P61) are larger than those of standard chains in the case of duplex or triplex, standard sprockets cannot be used. Refer to the sprocket tooth profiles for HK (see P116~117)

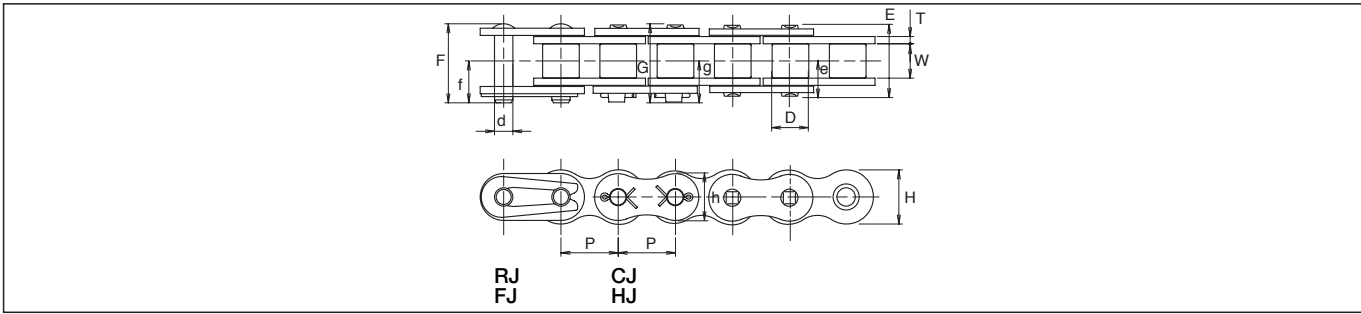
Connecting link and offset link

The tensile strength of connecting links and offset links are listed on the left, but the maximum allowable load is lower than that of the base chain. Please consult us should you have any questions. It is recommended to use the connecting link of interference-fitted (FJ, HJ)

Never make the holes of the connecting plate larger and never make the pins thinner to facilitate the work for fitting the pins into the connecting plate, since otherwise the fatigue strength will be lowered.

HK Type Connecting Link and Offset Link

	Connecting link		Offset link	
	Clearance fit	Interference fit	Clearance fit	2-Pitch Offset link (Interference fit)
Applicable connecting link	RJ: DID 50 & under CJ: DID 80 & over RJ/ CJ: DID 60	FJ: DID 50 & under HJ: DID 80 & over FJ/ HJ: DID 60	OJ: exclusive use for HK unavailable (for DID 40HK & under)	2POJ: exclusive use for HK unavailable (for DID 40HK & under)
Tensile Strength	Same as chain			

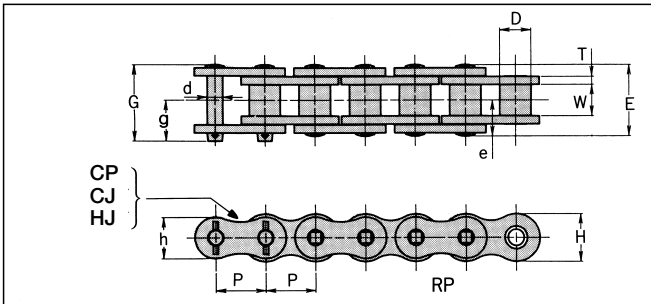


Dimensions

Unit (mm)

Chain No.	Pitch P	Roller link width W	Roller dia. D	Pin						Plate			Min. tensile strength		Avg. tensile strength		Max. allowable load		Approx. weight (kg/m)
				d	E	F	G	f	g	T	H	h	kN	kgf	kN	kgf	kN	kgf	
DID 40HK	12.70	7.95	7.92	3.97	18.5	19.5	—	10.5	—	2.0	12.0	10.4	19.6	2,000	21.5	2,000	4.51	460	0.72
DID 50HK	15.875	9.53	10.16	5.09	21.8	23.4	—	12.6	—	2.4	15.0	13.0	33.34	3,400	36.3	3,700	8.63	880	1.12
DID 60HK	19.05	12.70	11.91	5.96	28.7	30.5	31.2	16.1	16.9	3.2	18.1	15.6	47.07	4,800	52.0	5,300	10.70	1,100	1.81

- Note: 1. The values of average tensile strength and maximum allowable tension are for chains.
 2. When grooving using sprockets with smaller number of teeth, the grooves may interfere with the chain outer plate. Consult us for advise.
 3. Ask us for the delivery time.



Dimensions

Unit (mm)

Chain No.	Pitch P	Roller link width W	Roller dia. D	Pin					Transverse Pitch C	Plate			Min. tensile strength		Avg. tensile strength		Max. allowable load		Approx. weight (kg/m)
				d	E	G	e	g		T	H	h	kN	kgf	kN	kgf	kN	kgf	
DID 80HK	25.4	15.88	15.88	7.94	36.1	38.7	18.1	20.6	32.6	4.0	24.0	20.8	81.3	8,300	96.1	9,800	16.6	1,700	2.97
DID 80HK-2					68.5	71.3							162	16,600	192	19,600	28.3	2,890	5.88
DID 80HK-3					101.2	104.0							244	24,900	288	29,400	41.6	4,250	8.76
DID 100HK	31.75	19.05	19.05	9.54	43.6	45.8	21.8	24.4	39.1	4.8	29.9	26.0	123	12,600	142	14,500	26.4	2,700	4.16
DID 100HK-2					82.0	85.1							246	25,200	284	29,000	45.0	4,590	8.23
DID 100HK-3					121.1	124.1							369	37,800	426	43,500	66.1	6,750	12.27
DID 120HK	38.10	25.40	22.23	11.11	54.1	56.5	27.1	29.9	48.9	5.6	35.9	31.2	166	17,000	191	19,500	34.3	3,500	6.08
DID 120HK-2					102.2	105.5							332	34,000	426	39,000	58.3	5,950	12.04
DID 120HK-3					151.1	154.4							498	51,000	573	58,500	85.8	8,750	17.94
DID 140HK	44.45	25.40	25.40	12.71	57.9	61.7	29.0	33.3	52.2	6.4	41.9	36.3	217	22,200	250	25,500	45.1	4,600	8.81
DID 140HK-2					109.2	114.0							434	44,400	500	51,000	76.6	7,820	17.44
DID 140HK-3					161.4	166.2							651	66,600	750	76,500	112.7	11,500	25.99
DID 160HK	50.80	31.75	28.58	14.29	68.0	71.6	34.0	38.2	61.9	7.1	47.8	41.4	277	28,300	318	32,500	58.8	6,000	10.93
DID 160HK-2					133.9	135.1							554	56,600	637	65,000	100	10,200	21.64
DID 160HK-3					195.6	197.1							831	84,900	956	97,500	147	15,000	32.24
DID 180HK	57.15	35.72	35.71	17.46	75.5	80.8	37.8	43.3	69.2	8.0	53.8	46.6	402	41,000	441	45,000	71.5	7,300	14.81
DID 180HK-2					150.0	152.0							804	82,000	882	90,000	121	12,410	29.32
DID 180HK-3					219.3	221.3							1,200	123,000	1,320	135,000	178	18,250	43.69
DID 200HK	63.50	38.10	39.68	19.85	84.4	91.7	42.2	49.4	78.3	9.5	60.0	52.0	486	49,600	558	57,000	83.3	8,500	19.17
DID 200HK-2					170.0	172.3							972	99,200	1,110	114,000	141	14,450	37.95
DID 200HK-3					248.4	250.7							1,450	148,800	1,670	171,000	208	21,250	56.55
DID 240HK	76.20	47.63	47.63	23.81	108.0	116.3	54.0	61.9	101.2	12.7	71.5	62.0	767	78,300	882	90,000	112	11,500	28.30
DID 240HK-2					217.6	220.1							1,530	156,600	1,760	180,000	191	19,550	56.03
DID 240HK-3					318.8	321.3							2,300	234,900	2,640	270,000	281	28,750	83.48

- Note: 1. The above chains are of riveted pin type (RP). As for cotter pin type (CP), consult us.
 2. The values of average tensile strength and maximum allowable tension are for chains.
 3. When grooving using sprockets with smaller number of teeth, the grooves may interfere with the chain outer plate. Consult us.