

Small Pitch Chain

The smallest chain complying to ANSI is DID25 of 6.35 mm pitch. However, in response to the demands for smaller chains in recent years for high technology machinery such as office equipment, medical machines and industrial robots, we provide DID15 of 4.7625 mm (3/16 inch) pitch and also DID15H1 as a high-power version of DID15. These high precision chains are manufactured under severe quality control especially required for small sizes, taking wear resistance also into account.

DID15: A high precision mini-pitch bushing chain that is smaller than a compact drive chain for general applications, DID25



DID25: Smallest bushing chain among ANSI standard chains using curl bushings.



DID35: A ANSI standard bushing chain suitable for small precision machines that require high strength.



Selection of chain

Refer to the "Low-speed selection" (P.121). However, the chain operation speed can be set considerably high depending on the type of lubrication as shown in the table below.

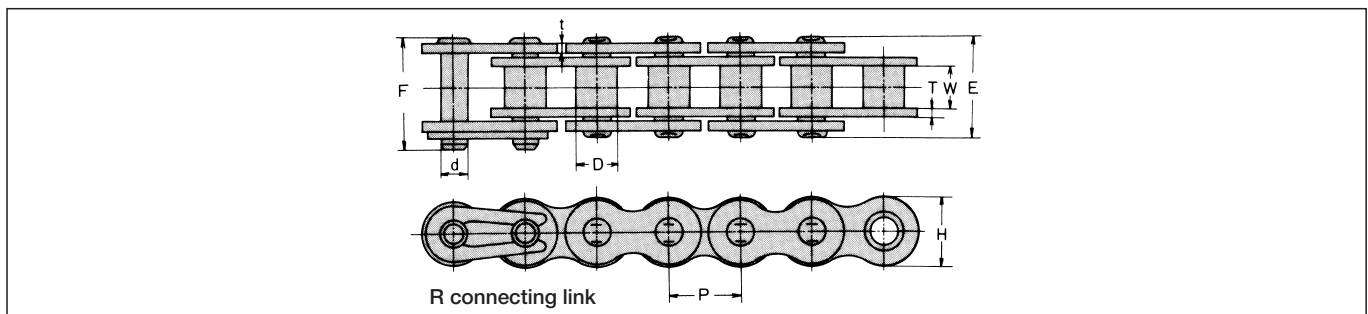
Connecting links and offset links

R connecting links are used for small pitch chains. However, since their strength is lower than that of the base chain, and since the clip is likely to come off in high speed operation, the use of connecting links is not recommended. Use a loop chain without attaching connecting links.

Offset links are available for chains other than DID15 and DID15H1, but their use is not recommended for the same reason as stated for the R Connecting links.

Operating speed and type of lubrication

	Type A Oil feeder, brush, drip	Type B Oil bath, disk	Type C Forced pump feed
DID 15 DID 15H1 DID 25 DID 25H DID 25T DID 35 DID 35T	200m/min or less	1200m/min or less	Over 1200m/min
	150	1000	
	110	850	



Dimensions

Unit (mm)

Chain No.	Pitch P	Bushing		Pin		Plate		Baring area (cm ²)	Avg. tensile strength		Max. allowable load		Approx. weight (kg/m)
		Width W	Dia. D	Dia. d	Length E F	Thickness T t	Width H		kN	kgf	kN	kgf	
DID 15	4.7625	2.40	2.48	1.62	6.25 6.90	0.60 0.60	4.30	0.060	1.96	270	0.49	50	0.089
DID 15H1	4.7625	3.18	2.48	1.62	7.30 —	0.72 0.72	4.30	0.789	3.14	320	0.58	60	0.103
DID 25	6.35	3.18	3.30	2.31	7.80 8.50	0.72 0.72	5.90	0.109	4.41	450	0.73	75	0.134
DID 25H	6.35	3.18	3.30	2.31	9.00 9.45	1.00 1.00	5.90	0.122	5.88	600	1.07	110	0.163
DID 25T	6.35	3.18	3.30	2.31	8.00 8.50	0.72 0.72	5.90	0.109	4.41	450	0.73	75	0.134
DID 35	9.525	4.78	5.08	3.59	12.00 13.00	1.25 1.25	9.00	0.265	11.20	1,150	2.15	220	0.332
DID 35T	9.525	4.78	5.08	3.59	12.00 13.00	1.25 1.25	9.00	0.265	11.20	1,150	2.15	220	0.332

Note: The values of max. allowable tension are not applied to connecting links.

Engine Mechanism Chain

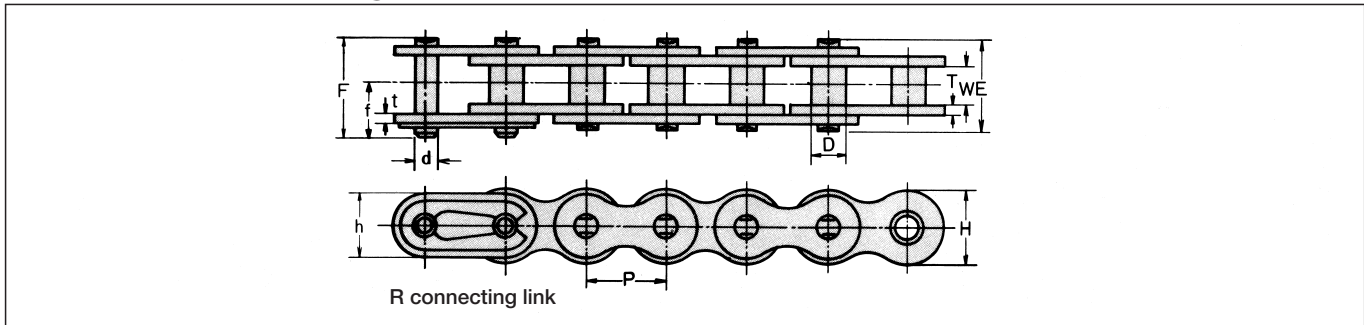
Due to the extremely high technical demands derived from the development of the automobile industry, rapid strides were made in the development of engine mechanism chains such as timing chains for driving cam shafts on 4-cycle engines used in motorcycles and motor vehicles, chains for driving oil pumps, generators and other auxiliary machines, and chains for driving balancer shafts. We have world class technical expertise in this area. The DID engine mechanism chains have excellent wear resistance, fatigue strength, silencing effect and shock strength capable of withstanding high speed operation, and can meet the conditions required for today's powerful yet down-sized high performance engines. For silent chains, see the section for silent chains in this catalog.



Roller Chains for Power Transmission

Specialty Chain Series

Dimensional Drawing



Dimensions

Unit (mm)

Chain No.	Connecting link	Pitch P	Roller link width W	Roller dia. D	Pin				Plate				Avg. tensile strength		Max. allowable load		Approx. weight (kg/m)
					d	E	F	f	T	t	H	h	kN	kgf	kN	kgf	
DID 25	RJ	6.35	3.18	*3.30	2.31	7.8	8.5	4.7	0.72	0.72	5.9	5.2	4.41	450	0.73	75	0.13
DID 25H	RJ	6.35	3.18	*3.30	2.31	9.0	9.45	5.15	1.0	1.0	5.9	5.2	5.88	600	1.07	110	0.16
DID 25SH	—	6.35	3.18	*3.30	2.01	9.0	—	—	1.0	1.0	5.9	5.2	5.09	520	0.91	93	0.17
DID 25SD	—	6.35	3.18	*3.30	2.00	9.0	—	—	1.0	1.0	5.9	5.2	5.59	570	0.88	90	0.17
DID 25-2	RJ	6.35	3.18	*3.30	2.31	14.4	15.0	4.7	0.72	0.72	5.9	5.2	8.23	840	1.17	120	0.26
DID 25H-2	RJ	6.35	3.18	*3.30	2.29	16.6	17.2	5.15	1.0	1.0	5.9	5.2	10.79	1,100	1.76	180	0.38
DID 215F DHA	—	7.00	3.50	*4.00	2.51	10.15	—	—	1.2	1.0	6.7	6.7	8.14	830	1.62	165	0.26
DID 219H	RJ	7.774	5.00	*4.59	3.01	12.0	12.7	6.8	1.2	1.0	7.6	6.6	7.74	790	1.27	130	0.27
DID 219HTM	RJ	7.774	4.60	*4.59	3.01	12.15	12.9	6.9	1.4	1.3	7.6	6.5	9.80	1,000	1.76	180	0.30
※ DID 219FTS DHA	—	7.774	5.00	*4.59	2.61	11.85	—	—	1.2	1.0	7.6	7.6	8.92	910	1.77	180	0.31
※ DID 219FTH1	—	7.774	5.00	*4.59	2.62	12.3	—	—	1.2	1.2	7.6	7.6	8.92	910	2.15	220	0.33
※ DID 05T DHA	—	8.00	4.61	*4.71	3.01	11.5	—	—	1.3	1.0	7.8	7.8	9.61	980	2.15	220	0.33
※ DID 05R SDH	—	8.00	4.61	5.65	2.62	11.85	—	—	1.3	1.0	7.8	7.8	8.97	915	2.15	220	0.37
※ DID 05S SDH	—	8.00	4.61	5.65	3.00	12.30	—	—	1.3	1.2	7.8	7.8	12.1	1,230	3.00	305	0.40
DID 270H	—	8.50	4.75	*5.00	3.28	13.15	—	—	1.8	1.4	8.6	7.1	12.1	1,240	2.15	220	0.39
DID 270S DHA	—	8.50	4.75	*5.00	3.01	12.0	—	—	1.3	1.2	8.6	7.1	10.7	1,100	1.96	200	0.33
DID 270FH DHA	—	8.50	4.75	*5.00	3.28	13.15	—	—	1.8	1.4	8.6	8.6	14.7	1,500	2.45	250	0.50
※ DID 06B DHA	RJ	9.525	5.72	6.35	3.28	13.15	13.6	7.4	1.3	1.0	8.2	8.2	10.4	1,070	1.96	200	0.39
※ DID 06BH DHA	—	9.525	5.72	6.35	3.27	13.85	—	—	1.4	1.2	8.2	8.2	11.1	1,130	2.65	270	0.43
※ DID 06B-2	RJ	9.525	5.72	6.35	3.28	22.75	23.9	7.4	1.3	1.0	8.2	8.2	19.4	1,980	3.13	320	0.74
※ DID 317FM2	—	9.525	5.05	6.35	3.28	13.15	—	—	1.5	1.2	8.2	8.2	12.7	1,300	3.23	330	0.28
※ DID 317FM-2	—	9.525	5.05	6.35	3.27	24.7	—	—	1.5	1.2	8.2	8.2	24.3	2,480	4.90	500	0.81

- Note 1. Those marked with * are bushing chains, and thus the values indicate bushing diameters.
- Note 2. Chains marked with ※ have flat oval-shaped plates.
- Note 3. DH- α treatment (DHA) is available. Consult us for DHA types.
- Note 4. The values of max. allowable load are not applied to connecting links. Don't use connecting links in engines.