

# Engine Mechanism Chain

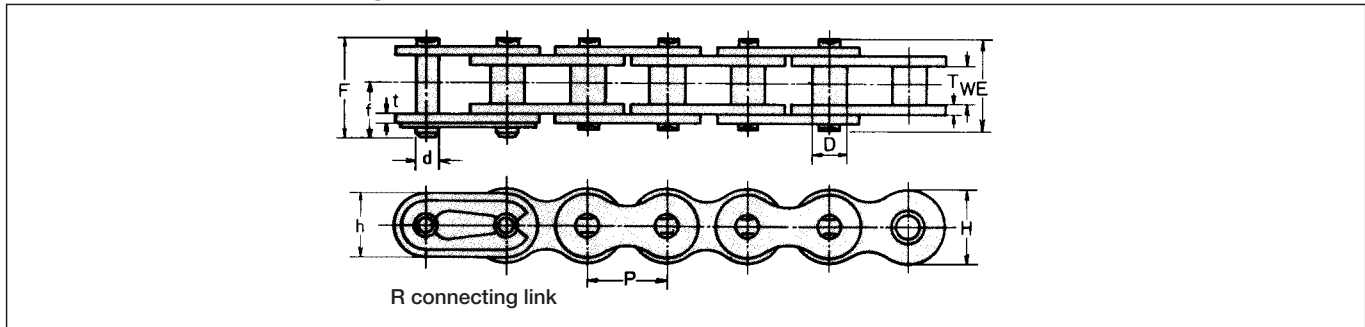
Due to the extremely high technical demands derived from the development of the automobile industry, rapid strides were made in the development of engine mechanism chains such as timing chains for driving cam shafts on 4-cycle engines used in motorcycles and motor vehicles, chains for driving oil pumps, 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

Speciality 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	
<b>DID 25</b>	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
<b>DID 25H</b>	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
<b>DID 25SH</b>	—	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
<b>DID 25SD</b>	—	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
<b>DID 25-2</b>	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
<b>DID 25H-2</b>	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
<b>DID 215F DHA</b>	—	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
<b>DID 219H</b>	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
<b>DID 219HTM</b>	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
※ <b>DID 219FTS DHA</b>	—	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
※ <b>DID 219FTH1</b>	—	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
※ <b>DID 05T DHA</b>	—	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
※ <b>DID 05R SDH</b>	—	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
※ <b>DID 05S SDH</b>	—	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
<b>DID 270H</b>	—	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
<b>DID 270S DHA</b>	—	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
<b>DID 270FH DHA</b>	—	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
※ <b>DID 06B DHA</b>	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
※ <b>DID 06BH DHA</b>	—	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
※ <b>DID 06B-2</b>	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
※ <b>DID 317FM2</b>	—	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
※ <b>DID 317FM-2</b>	—	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.
- 2. Chains marked with ※ have flat oval-shaped plates.
- 3. DH-α treatment (DHA) is available. Consult us for DHA types.
- 4. The values of max. allowable load are not applied to connecting links. Don't use connecting links in engines.

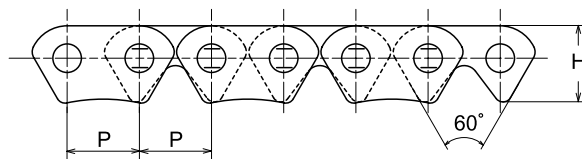
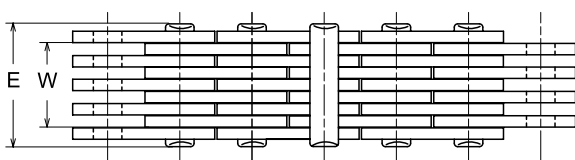
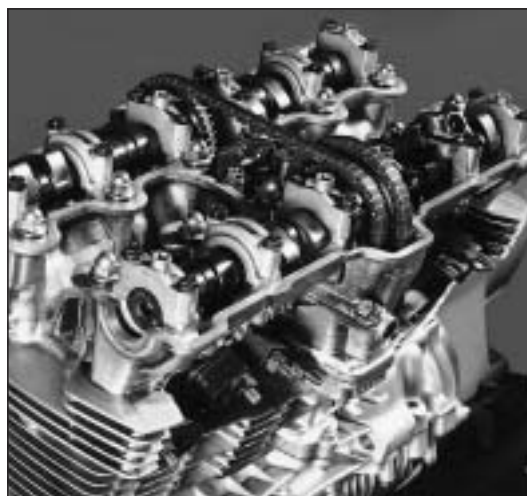
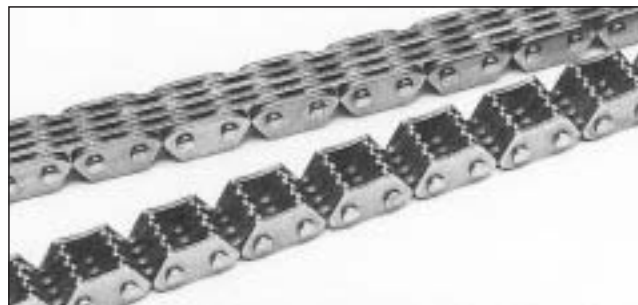
## Silent Chain

### SC silent chains (SCA, SCR, SC)

SC silent chains use specially-coated round pins and special plates to achieve an ideal engagement mechanism, and can keep a noise level remarkably lower than conventional roller chains.

SC type silent chains can be used for high speed and large tension transmission just like a toothed metallic belt since the plates directly engage with the sprockets for driving.

SCR-04 silent chains are designed with inner engaging structure for further reduced noise level.



### Dimensions

Unit (mm)

Chain No.	Pitch P	Plate quantity	W	E	H	Min. tensile strength		Approx. weight (kg/m)
						kN	kgf	
<b>DID SCA-0404A SDH</b>	6.35	2×3	3.20	6.00	6.70	6.27	640	0.161
<b>DID SCA-0409A SDH</b>		3×4	5.10	8.10		9.81	1,000	0.238
<b>DID SCA-0412A SDH</b>		4×5	7.15	11.00		12.26	1,250	0.316
<b>DID SCR-0404 SDH</b>	6.35	2×3	3.20	6.00	6.85	6.93	705	0.172
<b>DID SCR-0409 SDH</b>		3×4	5.10	8.10		10.00	1,020	0.255
<b>DID SCR-0412 SDH</b>		4×5	7.15	10.30		13.23	1,350	0.322
<b>DID SC-2614H SDH</b>	8.00	5×4	8.65	12.75	8.70	19.10	1,950	0.520
<b>DID SC-0624A SDH</b>	9.525	6×7	17.65	22.70	10.10	40.99	4,180	1.05
<b>DID SC-0628A SDH</b>		7×8	20.85	26.00		48.05	4,900	1.20