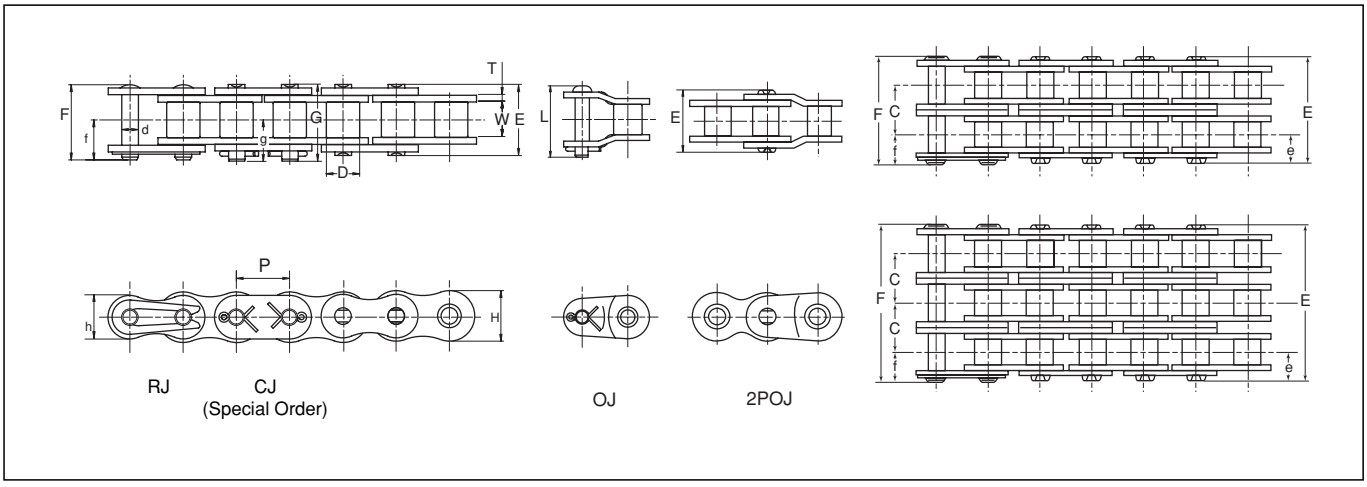
DID 50 standard roller chain



Dimensions

Unit (mm)

Chain No.		Pitch	Roller Link Width	Roller dia.	Pin								Transverse Pitch	Plate			JIS Min. Tensile Strength		DID Min. Tensile Strength		DID Avg. Tensile Strength		DID Max. Allowable Load		Approx. Weight (kg/m)
DID	JIS	P	W	D	d	E	F	G	L	e	f	g	C	T	H	h	kN	kgf	kN	kgf	kN	kgf	kN	kgf	
DID50	50					20.3	21.9	22.1	23.2								24	2,447	26.48	2,700	30.8	3,150	6.86	700	1.06
DID50-2	50-2					38.5	40.1	40.3	41.3								48	4,894	52.96	5,400	61.7	6,300	11.6	1,190	2.04
DID50-3	50-3	15.875	9.53	10.16	5.09	56.7	58.3	58.5	59.5	10.2	11.6	12.1	18.1	2.00	15.0	13.0	72	7,341	79.44	8,100	92.6	9,450	17.1	1,750	3.06
DID50-4	50-4					74.8	76.4	76.6	76.6								96	9,788	105.9	10,800	123	12,600	22.6	2,310	4.06
DID50-5	50-5					93.0	94.5	94.7	94.7								120	12,236	132.4	13,500	155	15,750	26.7	2,730	5.08

Note: The values of average tensile strength and Max. allowable tension are for chains.

Max. Kilowatt Ratings DID 50

Unit (kW)

No. of Teeth of Small Sprocket \ Type of Lubrication	Small Sprocket revolutions per minute (rpm) (See P132 for the details of type of lubrication A, B and C.)																			
	50	100	300	500	900	1200	1500	1800	2100	2400	2700	3000	3300	3500	4000	4500	5000	5400	5800	6200
	A			B										C						
11	0.48	0.90	2.42	3.83	6.49	7.64	5.47	4.16	3.30	2.70	2.26	1.93	1.68	1.53	1.26	1.05	0.09	0.80	0.72	
12	0.53	0.99	2.65	4.20	7.13	8.71	6.23	4.74	3.76	3.08	2.58	2.20	1.91	1.75	1.43	1.20	1.02	0.91	0.82	
13	0.58	1.08	2.89	4.58	7.78	9.82	7.02	5.34	4.24	3.47	2.91	2.48	2.15	1.97	1.61	1.35	1.15	1.03	0.92	
14	0.63	1.17	3.14	4.96	8.43	10.9	7.85	5.97	4.74	3.88	3.25	2.78	2.41	2.20	1.80	1.51	1.29	1.15		
15	0.67	1.26	3.38	5.35	9.08	11.8	8.71	6.62	5.26	4.30	3.61	3.08	2.67	2.44	2.00	1.68	1.43	1.27		
16	0.72	1.35	3.62	5.74	9.73	12.6	9.59	7.30	5.79	4.74	3.97	3.39	2.94	2.69	2.20	1.85	1.58	1.40		
17	0.77	1.44	3.87	6.12	10.4	13.5	10.5	7.99	6.34	5.19	4.35	3.71	3.22	2.95	2.41	2.02	1.73	1.54		
18	0.82	1.53	4.11	6.51	11.1	14.3	11.4	8.71	6.91	5.65	4.74	4.05	3.51	3.21	2.63	2.20	1.88			
19	0.87	1.62	4.36	6.90	11.7	15.2	12.4	9.44	7.49	6.13	5.14	4.39	3.80	3.48	2.85	2.39	2.04			
20	0.92	1.71	4.61	7.30	12.4	16.1	13.4	10.2	8.09	6.62	5.55	4.74	4.11	3.76	3.08	2.58	2.20			
21	0.97	1.81	4.86	7.69	13.1	16.9	14.4	11.0	8.71	7.13	5.97	5.10	4.42	4.05	3.31	2.78	2.37			
22	1.02	1.90	5.11	8.09	13.7	17.8	15.5	11.8	9.34	7.64	6.40	5.47	4.74	4.34	3.55	2.98	2.54			
23	1.07	1.99	5.36	8.49	14.4	18.7	16.5	12.6	9.98	8.17	6.84	5.84	5.07	4.64	3.80	3.18				
24	1.12	2.09	5.61	8.89	15.1	19.5	17.6	13.4	10.6	8.71	7.30	6.23	5.40	4.94	4.05	3.39				
25	1.17	2.18	5.86	9.29	15.8	20.4	18.7	14.3	11.3	9.26	7.76	6.62	5.74	5.26	4.30	3.61				
28	1.32	2.47	6.63	10.5	17.8	23.1	22.2	16.9	13.4	11.0	9.19	7.85	6.80	6.23	5.10					
30	1.42	2.66	7.14	11.3	19.2	24.9	24.6	18.7	14.9	12.2	10.2	8.71	7.55	6.91	5.65					
32	1.53	2.85	7.66	12.1	20.6	26.7	27.1	20.6	16.4	13.4	11.2	9.59	8.31	7.61	6.23					
35	1.68	3.14	8.43	13.4	22.7	29.4	31.0	23.6	18.7	15.3	12.9	11.0	9.51	8.71	7.13					
40	1.94	3.62	9.74	15.4	26.2	33.9	37.9	28.8	22.9	18.7	15.7	13.4	11.6	10.6						
45	2.21	4.12	11.1	17.5	29.7	38.5	45.2	34.4	27.3	22.4	18.7	16.0	13.9							

Note: Values in the table above are for simplex chain only. For multiplex chains, please multiply the coefficient of multi-strand. (See "Chain Selection" on P120).