

Stainless Steel Type Roller Chain Couplings

Stainless steel roller chain couplings with outstanding environmental resistance

Roller chains and sprockets are made of austenitic stainless steel, enabling use in harsh operating environments unsuited to conventional steel roller chain couplings.

Features

- (1) Highly corrosion-resistant: Suited for use outdoors or in corrosive acid or alkaline atmospheres.
- (2) Highly heat-resistant: Can be used in wide temperature range of -20 to 200°C .
- (3) Clean quality: Highly rustproof, outstanding affinity for fluorinated greases used in food processing machinery and clean rooms.
- (4) Rapid delivery: Models CR4012 to CR6022 can be delivered in two weeks (pilot bore models) or three weeks (machined bore models).
Models CR8018 to CR12022 can be delivered in four weeks (both pilot and machined bore models).



Chemical resistance table

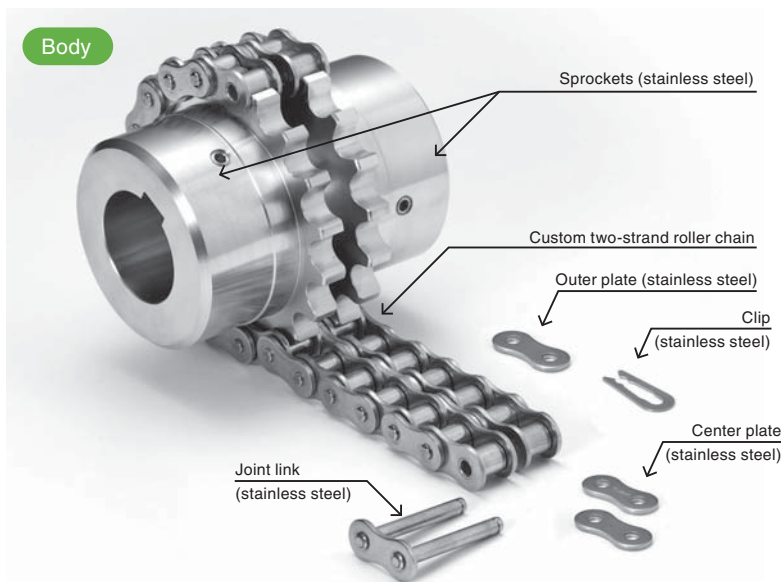
Since chemical resistance changes somewhat according to the operating conditions, the information in this table is not guaranteed.
Determine your specification requirements after first checking chemical resistance under the actual operating conditions using this table as a reference. The data in this table applies to an ambient temperature of 20°C .

●: Chemical-resistant
▲: Chemical-resistant under some operating conditions
x: Not chemical-resistant

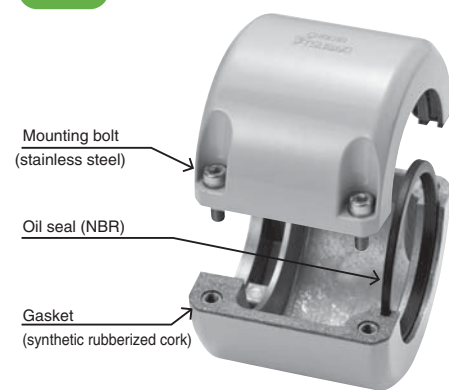
Chemical/food name	Acetone	Alcohol	Ammonia water	Zinc chloride 50%	Ferric chloride 5%	Sodium chloride 5%	Hydrochloric acid 2%	Seawater	Hydrogen peroxide 30%	Formic acid 50%	Chromic acid 5%	Acetic acid 10%	Calcium hypochlorite	Sodium hypochlorite 10%	Oxalic acid 10%	Nitric acid 5%	Vinegar	Potassium hydroxide 20%	Sodium hydroxide 25%	Concentrated nitric acid 65%	Boric acid 50%	Sulfuric acid 5%	Zinc sulfate 25%	Phosphoric acid 5%
Coupling body	●	●	●	▲	▲	●	x	▲	●	●	●	●	●	x	●	●	▲	●	●	●	●	x	●	●
Stainless steel type	●	●	●	▲	▲	●	x	▲	●	●	●	●	●	x	●	●	▲	●	●	●	●	x	●	●

Main applications: Water gates, food processing machinery (brewed/fermented foods), marine rigging equipment

Structure/Materials



Case Die cast aluminum case



Model Number

Body (pilot bore models)

CR40 12 H - SS

SS: Stainless steel type
H: Body
12: Number of sprocket teeth
40: Chain number
Coupling

Case

CR4012 K - SS

Model No. Custom casing (Includes oil seal, gasket and mounting bolts.)

Note: Order the body and case separately.

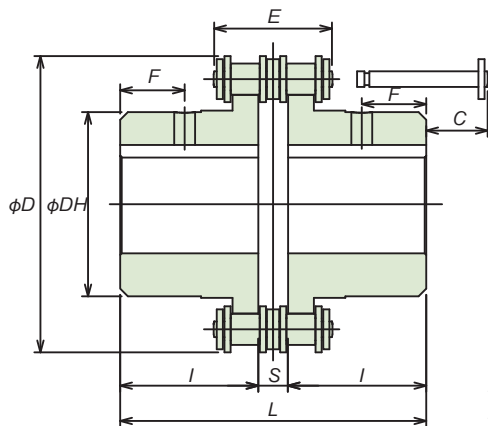
Transmission Capacity

Model No.	Unit	Rotation speed [r/min]									
		1	5	10	25	50	100	200	300	400	
CR4012H-SS	kW	0.01	0.04	0.08	0.19	0.39	0.58	0.88	1.16	1.39	
	N · m	74	74	74	74	74	55	42	37	33	
CR4014H-SS	kW	0.01	0.05	0.11	0.26	0.53	0.79	1.20	1.58	1.90	
	N · m	101	101	101	101	101	76	57	50	45	
CR4016H-SS	kW	0.01	0.07	0.14	0.35	0.69	1.04	1.58	2.07	2.49	
	N · m	132	132	132	132	132	99	75	66	59	
CR5014H-SS	kW	0.02	0.10	0.20	0.50	1.00	1.50	2.28	3.00		
	N · m	191	191	191	191	191	144	109	96		
CR5016H-SS	kW	0.03	0.13	0.26	0.66	1.31	1.97	2.99	3.93		
	N · m	250	250	250	250	250	188	143	125		
CR5018H-SS	kW	0.03	0.17	0.33	0.83	1.66	2.49	3.79	4.99		
	N · m	317	317	317	317	317	238	181	159		
CR6018H-SS	kW	0.06	0.32	0.63	1.58	3.17	4.75	7.22			
	N · m	605	605	605	605	605	454	345			
CR6022H-SS	kW	0.09	0.43	0.86	2.15	4.30	6.44	9.80			
	N · m	821	821	821	821	821	615	468			
CR8018H-SS	kW	0.14	0.70	1.40	3.50	7.01	10.5				
	N · m	1338	1338	1338	1338	1338	1004				
CR8022H-SS	kW	0.20	1.01	2.02	5.05	10.1	15.1				
	N · m	1929	1929	1929	1929	1929	1447				
CR10020H-SS	kW	0.31	1.57	3.13	7.83	15.7					
	N · m	2992	2992	2992	2992	2992					
CR12018H-SS	kW	0.47	2.37	4.74	11.8	23.7					
	N · m	4526	4526	4526	4526	4526					
CR12022H-SS	kW	0.62	3.08	6.16	15.4	30.8					
	N · m	5883	5883	5883	5883	5883					

Note: When selecting a product, use the product selection procedure given on page 108.

Dimensions

■ Body (H-SS)



- The C dimension is the space needed to attach or remove the chain's joint link.
- The F dimension is the recommended dimension for machining a tapped hole.

Model No.	Pilot bore diameter	Bore diameter range		Moment of inertia kg·m ²	Chain		D	DH	L	I	S	C	F	Weight kg
		Minimum	Maximum		Pitch	Maximum width E								
CR4012H-SS	9	11	22	2.38×10 ⁻⁴	12.7	32.6	61	35	79.4	36	7.4	9	16	0.78
CR4014H-SS	9	11	28	4.37×10 ⁻⁴	12.7	32.6	69	43	79.4	36	7.4	9	16	1.11
CR4016H-SS	13	16	32	7.64×10 ⁻⁴	12.7	32.6	77	50	87.4	40	7.4	5	20	1.53
CR5014H-SS	13	16	35	1.33×10 ⁻³	15.875	40.4	86	53	99.7	45	9.7	10	21	2.11
CR5016H-SS	13	18	40	2.11×10 ⁻³	15.875	40.4	96	60	99.7	45	9.7	10	21	2.68
CR5018H-SS	13	18	45	3.41×10 ⁻³	15.875	40.4	107	70	99.7	45	9.7	10	21	3.51
CR6018H-SS	18	22	56	9.03×10 ⁻³	19.05	50.4	128	85	123.5	56	11.5	13	26	6.36
CR6022H-SS	18	28	71	2.10×10 ⁻²	19.05	50.4	152	110	123.5	56	11.5	13	26	10.09
CR8018H-SS	23	32	80	3.63×10 ⁻²	25.40	65.3	170	115	141.2	63	15.2	30	26	13.8
CR8022H-SS	28	40	100	8.00×10 ⁻²	25.40	65.3	203	140	157.2	71	15.2	22	34	21.7
CR10020H-SS	33	45	110	1.61×10 ⁻¹	31.75	81.9	233	160	178.8	80	18.8	30	36	32.6
CR12018H-SS	43	50	125	2.68×10 ⁻¹	38.10	102.7	256	170	202.7	90	22.7	50	36	43.9
CR12022H-SS	53	56	140	5.93×10 ⁻¹	38.10	102.7	304	210	222.7	100	22.7	40	46	69.0