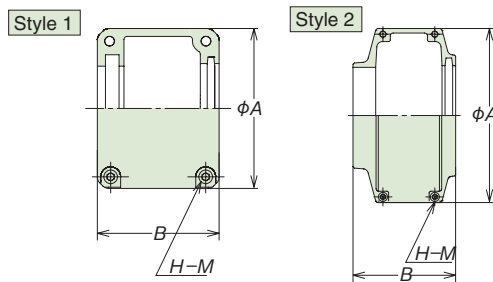


Dimensions

Case (K-SS)



● Specify the case model number when ordering a case.

Coating type: Melamine resin bake coating

Coating color: Munsell 8.1YR7.6/15.2 orange yellow

Model No.	Style	Moment of inertia kg.m ²	A	B	H-M	Oil seal	Case material	Weight kg
CR4012K-SS	1	5.13×10 ⁻⁴	75	75	4-M6	Special shape	Die cast aluminum	0.33
CR4014K-SS	1	6.53×10 ⁻⁴	84	75				0.38
CR4016K-SS	1	8.58×10 ⁻⁴	92	75				0.41
CR5014K-SS	1	1.29×10 ⁻³	101	85				0.50
CR5016K-SS	1	1.81×10 ⁻³	111	85				0.58
CR5018K-SS	1	2.35×10 ⁻³	122	85				0.66
CR6018K-SS	1	4.85×10 ⁻³	142	106	4-M8			0.96
CR6022K-SS	1	9.35×10 ⁻³	167	106				1.30
CR8018K-SS	1	1.86×10 ⁻²	186	130				2.0
CR8022K-SS	1	3.30×10 ⁻²	220	130				2.5
CR10020K-SS	1	6.60×10 ⁻²	250	148				3.7
CR12018K-SS	2	7.63×10 ⁻²	307	181				4-M10
CR12022K-SS	2	1.29×10 ⁻¹	357	181	3.9			

Product Selection

1. Operating conditions required for product selection

- (1) Daily operation time
- (2) Load type and motor type
- (3) Transmitted power [kW]/rotation speed [min⁻¹], torque [N·m]
- (4) Diameters of both shafts

2. Selection method

- (1) Find the service factor corresponding to the operating conditions in the table on the right.
- (2) Multiply the transmitted power (or torque) by the service factor to calculate the correction transmission power (or correction torque).
- (3) Use the transmission capacity table to select a coupling that satisfies the correction transmission power (or correction torque) at the operating rotation speed.
- (4) If the required shaft diameter exceeds the maximum shaft diameter of the selected coupling, use the next coupling size up.
- (5) The contact pressure may become excessive when a standard key is used, so calculate the key contact pressure and determine whether a special key or spline must be used.

Service factor (SF) table

Load type	Motor type		
	Motor turbine	Steam engine/ gasoline engine (4 cylinders or more)	Diesel engine/ gas engine
Low variation, low shock, low starting torque, no reversing	1.0	1.5	2.0
Moderate variation, moderate shock, no reversing (most typical case)	1.5	2.0	2.5
High variation, high shock, reversing with load applied, starting with load applied	2.0	2.5	3.0

Notes 1. Value to add to service factor to account for chain coupling operation time (only for operation at 50 min⁻¹ or faster)

8 to 16 hours per day: 0.5

16 hours or more per day: 1.0

2. The service factors in the table above are general guidelines.

Determine the service factor based on your actual operating conditions.

Reference: Relationship between torque, transmitted power and rotation speed

$$T = \frac{60000 \times P}{2 \pi \times n} \quad T = \left\{ \frac{974 \times P}{n} \right\}$$

T : Torque [N·m]

P : Transmitted power [kW]

n : Rotation speed [min⁻¹]

3. Backlash

Model No.	CR4012	CR4014	CR4016	CR5014	CR5016	CR5018	CR6018	CR6022	CR8018	CR8022	CR10020	CR12018	CR12022
Backlash (angle, degrees)	±1.06	±0.90	±0.79	±0.86	±0.75	±0.66	±0.62	±0.51	±0.58	±0.47	±0.50	±0.42	±0.34

Note: The values above are estimates, not guaranteed values.

4. Operating temperature range

	Without case	With case
Operating temperature (°C)	-20 to 200	-10 to 80

Note: Contact Tsubaki for information about operation at temperatures above 80°C with the case.