

# Jaw Couplings

Power Transmission Group



# Continental Jaw Couplings

## Features:

Designed to meet the requirement of a general purpose flexible coupling which caters for incidental misalignments of shafts & dampens small amplitude vibrations.

The Nitrile Rubber Element as a standard offering makes them suitable for use in most conditions as they are unaffected by moisture, grease & oils and can withstand temperatures of -40°C to +100°C. Polyurethane elements are also available optionally as a superior offering.

They have angular mis-alignment capacity up to 1° and parallel mis-alignment capacity up to 0.4mm depending on the size of the coupling.

The raised dimples on legs of the Spider as well as the snap wrap Element ensure correct distance between Hubs. Easy inspection & replacement of the external snap-wrap element possible in minutes using just a Screw Driver.

The spacer couplings enable maintenance of Pumps & other equipment without disturbing the alignment & piping etc. Couplings with standard Cast Iron spacers or light weight Aluminum spacers using 2 external snap wrap elements are available as a standard.

## Selection :

Details Required for coupling selection:

- ▶ Power & Speed of Prime Mover (Electric Motor etc.)
- ▶ Power Absorbed by Driven Equipment (Pump, Compressor etc.) if available.  
If not, Motor Power to be used for selection.
- ▶ Type of Driving & Driven Equipment.
- ▶ Diameter of Shafts to be coupled.
- ▶ Distance between two Shaft Ends, DBSE (in case of Spacer Coupling selection only).

## Procedure :

- ▶ Service Factor : Select the required Service Factor from the table below
- ▶ Design Power : Multiply the absorbed power of driven equipment (if available) or Motor Power with Service Factor to get Design power to be used as a basis for selection of coupling
- ▶ Coupling Size : After interpolating to arrive at Design power at 100 rev/min, refer to the Power Rating Table, read under the kW at 100 rev/min column till a power exceeding the design power is found. Read to the left and the coupling size required is given in the first column of the table.
- ▶ Bore Size : From the Dimension Table, check if the coupling size selected can accommodate shaft sizes and if not, select the next higher size of coupling.

## Service Factors

TYPE OF LOAD	EXAMPLE OF LOAD	ELECTRIC MOTORS STEAM TURBINES	DIESEL ENGINES GASOLINE ENGINES	
			6 OR MORE CYL	LESS THAN 6 CYL
Light duty (Uniform load)	Generators, Centrifugal pumps and Compressors, Agitators, Belt Conveyors (Uniformly loaded), Fans and Blowers up to 7.5 kW, Feeders, Line Shafts	1.00	1.50	2.00
Medium duty (Pulsating and varying loads without severe shocks)	Generators (varying load), Rotary & Reciprocating pumps, Mixers and Pulverizers (light), Cranes & hoists, Paper Mill Beaters & Winders, Rotary Screens, Textile Machinery, Fans over 7.5 kW	1.50	2.00	2.50
Heavy duty ( Severe shock loads, High vibrations)	Reciprocating Compressors, Crushers & Pulverizers, Hammer mills, Paper Mill Calendars, Bucket Elevators Rubber Calendars, Vibrating Screens, Metal Presses	2.00	2.50	3.00

## ► Standard Jaw Couplings

Size	kW Rating at		Bore (mm)		Dimensions (mm)				
	100 Rev/Min	1440 Rev/Min	Min.	Max.	L	D1	D2	C	G
CTJ - 75	0.10	1.45	9	22	55	45	45	21	2
CTJ - 95	0.22	3.17	10	28	63	54	49	25	2
CTJ - 99	0.39	5.60	10	30	72	65	51	27	2
CTJ - 100	0.50	7.20	10	35	88	65	57	35	2
CTJ - 110	0.93	13.40	15	42	108	85	76	43	3
CTJ - 150	1.50	21.50	20	48	115	96	80	45	3
CTJ - 190	2.02	29.00	30	60	133	115	102	54	3
CTJ - 225	2.76	39.75	40	60	153	127	108	64	3

## ► External Spider Jaw Couplings

Size	kW Rating at		Bore (mm)		Dimensions (mm)				
	100 Rev/Min	1440 Rev/Min	Min.	Max.	L	D1	D2	C	G
CTJ - 95E	0.22	3.17	10	28	63	65	49	25	2
CTJ - 99E	0.39	5.60	10	30	72	78	51	27	2
CTJ - 100E	0.50	7.20	10	35	88	78	57	35	2
CTJ - 110E	0.93	13.40	15	42	108	96	76	43	3
CTJ - 150E	1.50	21.50	20	48	115	111	80	45	3
CTJ - 190E	2.02	29.00	30	60	133	129	102	54	3
CTJ - 225E	2.76	39.75	40	60	153	142	108	64	3

## ► Standard Spacer Couplings

Size	kW Rating at		Bore (mm)		Dimensions (mm)				
	100 Rev/Min	1440 Rev/Min	Min.	Max.	S (DBSE)	D1	C	G	J
CTJ - 95S	0.22	3.17	10	28	90,100,140	54	25	2	20
CTJ - 100S	0.50	7.20	10	35	90,100,140	65	30	2	21
CTJ - 110S	0.93	13.40	15	42	90,100,140,180	85	35	3	27
CTJ - 150S	1.50	21.50	20	48	90,100,140,180	96	45	3	27
CTJ - 190S	2.02	29.00	30	60	90,100,140,180	115	51	3	27
CTJ - 225S	2.76	39.75	40	60	90,100,140,180	127	57	3	21

DBSE - Distance Between Shaft Ends

## ► External Spider Aluminum Spacer Couplings

Size	kW Rating at		Bore (mm)		Dimensions (mm)				
	100 Rev/Min	1440 Rev/Min	Min.	Max.	S(DBSE)	D1	D2	C	G
CTJ - 95ES	0.22	3.17	10	28	90,100,140,180	65	49	25	2
CTJ - 100ES	0.50	7.20	10	35		78	57	35	2
CTJ - 110ES	0.93	13.40	15	42		96	76	43	3
CTJ - 150ES	1.50	21.50	20	48		111	80	45	3
CTJ - 190ES	2.02	29.00	30	60		129	102	54	3
CTJ - 225ES	2.76	39.75	40	60		142	108	64	3

DBSE - Distance Between Shaft Ends

Note: kW Ratings in the tables are for Nitrile Rubber Elements. For Polyurethane Elements, add 50% to power ratings.



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