



Gear Couplings

Power Transmission Group

Continental Gear Couplings

Features

Continental Flexible Gear Couplings offer efficient transmission of mechanical power and are capable of compensating parallel, angular and axial misalignment of coupled shafts. This coupling consists of two Hubs with curved external teeth engaging with internal spur teeth of the outer Sleeves bolted together through high tensile Steel Bolts using a Gasket in between.

Hubs and Sleeves are machined from forged / cast Carbon Steels. Gear teeth are generated using CNC Machines / sophisticated Gear Shapers and back-lash values are chosen to ensure mechanical flexibility as well as smooth torque transmission. Continental Gear Couplings are supplied with **teeth induction hardened** to the required degree as a standard and are distinguished by this feature.

'O' Rings at the end of the Hubs ensure sealing of lubricants inside the coupling while preventing entry of dust. Continental couplings are suitable for both Grease and Oil lubrication. While Lithium based Greases with EP additives are recommended for operating temperatures up to 80°C, EP Gear Oils can be used for temperatures above 80°C

Coupling Selection :

Details required for coupling selection :

- ▶ Type of Driving and Driven Equipment.
- ▶ Power & Speed of Prime Mover (Electric Motor etc.)
- ▶ Speed & Power absorbed by Driven Equipment, if available and Peak Load.
- ▶ Diameter of Shafts to be coupled.

Example :

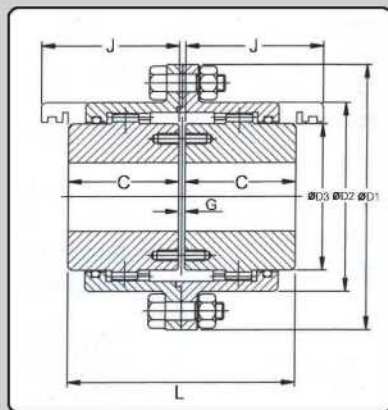
Select a Gear coupling for a Calender driven by a 350 kW, 720 rev/min Motor. Peak load is 180% of full load and shaft diameters are 110mm and 120mm

- ▶ Service Factor : 2 for Calender (heavy shocks)
- ▶ Peak Load : 180% of Full Load
- ▶ Design Power : $350 \times 2 \times 180 / 100 = 1260 \text{ kW}$
- ▶ Power to be transmitted at 100 rev/min : $1260 / 720 \times 100 = 175 \text{ kW}$
- ▶ Coupling Size : From the Power Rating Table, Coupling Size CTG - 6 with a power rating of 250 kW exceeds the required power of 175 kW and can accommodate the shafts of 110mm & 120mm. Thus coupling selected is CTG - 6

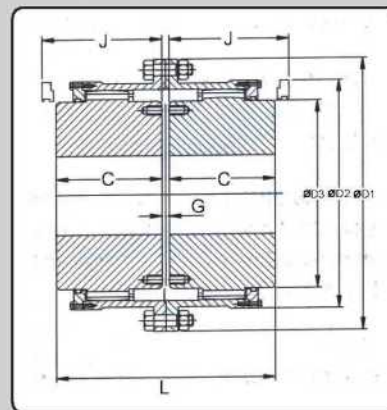
Service Factors

APPLICATIONS			Prime Mover		
			Electric Motors Turbines Hydraulic Motors	Reciprocating Engines 1-3 Cylinders	4 or more Cylinders
DRIVEN EQUIPMENT	UNIFORM	Generators, Blowers, Centrifugal Fans, Pumps and compressors, Machine Tools, Belt and chain conveyors-uniformly loaded, Escalators, Bottling Machinery, Can filling Machines, Agitators	1.25	1.5	2
	MODERATE SHOCKS	Lobe Blowers, Pumps, Gear Vane Compressors, Machine Tools-Main Drives, Belt and Chain conveyors-Non uniformly loaded, Bucket and Screw conveyors, Elevators, Cranes and Winches, Wire winding machines, Reels, Paper Industry Winders, Agitators - Variable Density Liquids and Solids	1.5	1.75	2.25
	HEAVY SHOCKS	Welding Generators, Reciprocating, Pumps & Compressors, Laundry Washers, Calenders, Paper Presses, Briquetting machines, Crushers-Ore and Stone, Hammer Mills, Rubber Mills, Steel Rolling Mills, Cement Mills, Draw Benches, Wire Drawing and Flattening Machines	2	2.25	2.5

Coupling Sizes CTG 1 to 10



Coupling Sizes CTG 11 & 12



Dimensions (mm)

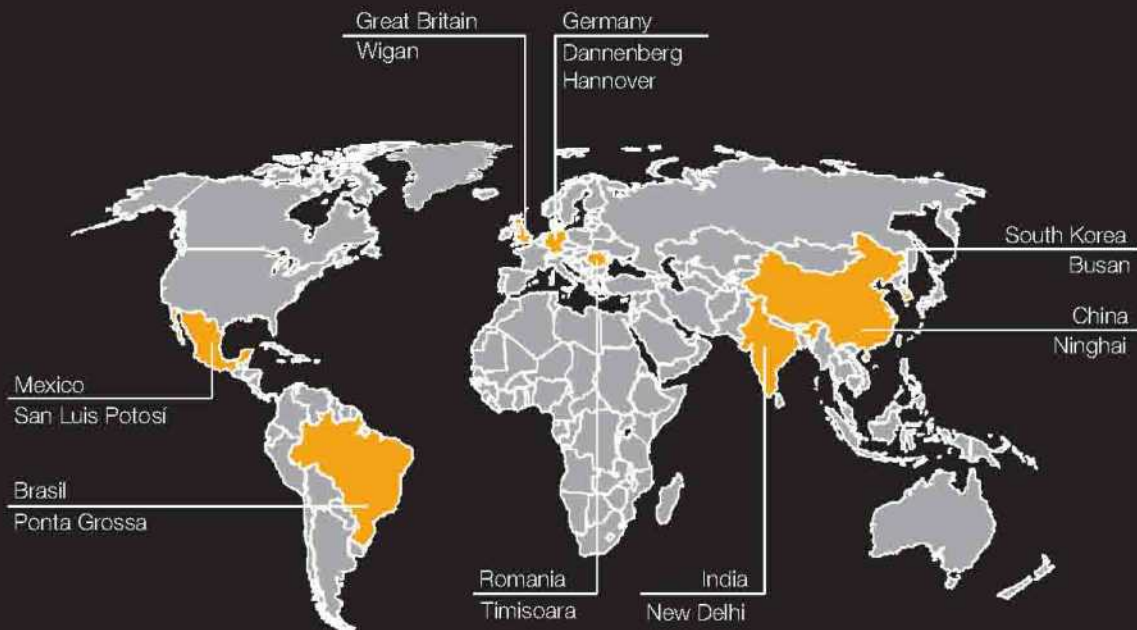
Size	L	D1	D2	D3	C	G	J	Clamping Bolt Size	No. of Bolts
CTG 1	115	170	110	65	55	5	65	M12 X 50	6
CTG 2	145	185	125	85	70	5	85	M12 X 50	6
CTG 3	175	220	150	105	85	5	105	M16 X 60	6
CTG 4	215	250	175	130	105	5	125	M16 X 60	8
CTG 5	230	290	200	155	110	10	135	M20 X 75	8
CTG 6	260	320	230	175	125	10	155	M20 X 75	8
CTG 7	290	350	260	205	140	10	175	M20 X 75	10
CTG 8	320	380	290	230	155	10	195	M20 X 75	12
CTG 9	340	430	330	250	165	10	210	M24 X 85	10
CTG 10	370	490	390	310	180	10	230	M24 X 85	12
CTG 11	410	545	445	350	200	10	270	M24 X 90	12
CTG 12	490	590	490	400	240	10	300	M24 X 90	14

Power, Torque Ratings, Weights and Mass Moments of Inertia

Size	kW at 100 Rev/Min	Nominal Torque (Nm)	Hub Bore (mm)		Maximum Speed Rev/Min	Approx. Weight (kg)	Approx. Moment of Inertia (WR^2) (kg-m ²)	Amount of Grease / Oil		Max. Mis - alignment Capacity		
			Min.	Max.				kg.	Litre	Parallel (mm)	Axial Float (mm)	Angular per Gear Mesh
CTG 1	13	1240	20	50	6700	11	0.04	0.25	0.20	0.80	0.5	1.5°
CTG 2	29	2800	30	65	6100	15	0.05	0.50	0.40	0.95	0.5	1.5°
CTG 3	52	4950	40	75	5200	25	0.12	0.80	0.60	1.10	0.5	1.5°
CTG 4	100	9550	50	95	4500	39	0.24	1	0.80	1.30	0.5	1.5°
CTG 5	153	14600	60	115	3950	57	0.49	1.80	1.50	1.45	0.5	1.5°
CTG 6	250	23875	75	130	3500	85	0.75	2.40	2	1.55	1	1.5°
CTG 7	411	39250	90	145	3250	103	1.31	3.50	3	1.80	1	1.5°
CTG 8	528	50420	105	165	3000	138	2.13	4	4	1.90	1	1.5°
CTG 9	658	62830	125	185	2600	210	3.75	5.50	5	2.25	1	1.5°
CTG 10	963	91960	140	230	2300	310	8.54	8.50	8	2.60	1	1.5°
CTG 11	1300	124150	160	260	2100	408	10.75	12.50	12	3.30	2	1.5°
CTG 12	1700	162350	180	300	1900	600	18.50	14	16	3.50	2	1.5°

Note : For sizes above CTG - 12, contact Contitech with complete application details.

Power Transmission Group - Production Plants Worldwide



ContiTech
Antriebssysteme GmbH
Postfach 445
D-30004 Hannover
Phone +49 511 938-71
Fax: +49 511 938-5128
Email: industrie.as@ptg.contitech.id

Works & Corporate Office-India

ContiTech India Private Limited
Badkhalsa,
Distt. Sonapat-131 029
Haryana, India
Tel.: 0130-6066827
Mobile: +91-9996600827
Email: industry.sales@ptg.contitech.in
Website : www.contitech.de
www.contitechindia.com

Branch Sales Offices

- Ahmedabad : (079) 27542680, 27545189
- Kolkata : (033) 40638290, 40638009
- Chennai : (044) 28110736, 28110737
- Mumbai : (022) 64520354, 64527154
- Delhi : (011) 25920590, 25920074

- ✉ Ahmedabad.cipl@contitechindia.com
- ✉ Kolkata.cipl@contitechindia.com
- ✉ Chennai.cipl@contitechindia.com
- ✉ Mumbai.cipl@contitechindia.com
- ✉ Nro.cipl@contitechindia.com