

MODERN ENGINEERING WORKS

AN ISO 9001 - 2008 Certified Organization



TYRE TYPE COUPLING



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Tyre Type Coupling comprises of a rubber tyre of high quality which connects two metal hubs-one on the driving shaft and the other on the driven shaft. The tyre with reinforcements, specially designed and manufactured under advanced technology, provides reasonable resilience to the tyre coupling-a feature that makes a tyre coupling capable of absorbing, parallel misalignment upto 5 mm, angular misalignment upto 4°, end float upto 5mm or combination of all misalignment depending upon the size of the coupling.

Design and construction of tyre coupling is such that

- Its mounting on and dismantling from shafts can be easily accomplished.
- Inspection of components can be carried out without dismantling of coupling.
- Type element can be easily replaced without disturbing the alignment of the installation.
- No lubrication is needed.

Tyre Type Coupling Selection

Details required for coupling selection are

- Power rating and RPM of the drive/driven machine.
- Type of drive and driven machine.
- Diameter of shafts to be connected.
- Usable shaft length i.e. Length of the keys on both shaft.
- Application for which the coupling is to be used.

To ensure above coupling so selected for the required rating capacity

- A. Check the service factor applicable to drive the from the service factor chart.
- B. Find out the rating HP/100 RPM of the drive as per the following formula.

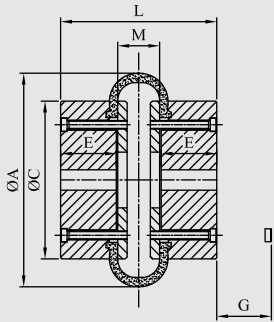
$$\text{Rating of coupling} = \frac{\text{HP} \times \text{Service Factor} \times 100}{\text{RPM}} = \text{HP}/100 \text{ RPM}$$
- C. Select the correct coupling size by matching the derived rating with the table and subsequently conforming with shaft dia to be connected.

Service Factors

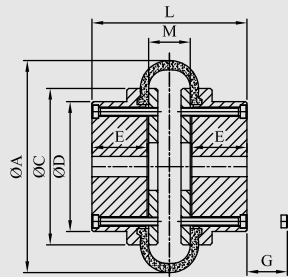
Load	Driven Equipment	Prime Mover		
		Motor or Turbine	Hydraulic or Drive	Reciprocating Engine
Uniform	Centrifugal Pumps, Conveyors loading, Exciters Fans & Blowers, Light Duty Generators-uniform loading, Mixers-liquid	1.00	1.10	1.25
Light Shock	Centrifugal Pumps, Generators, Pulsating Grinders, Hydraulic Pumps, Kilns, Line Crafting Machine Tools, Oscillating Pumps, Textile Machinery, Woodworking Machinery	1.25	1.5	1.85
Medium Shock	Air Compressors Multi-Cylinder, Ball & Rod Mills, cranes, Elavators & Hoists, Punch Presses, Reciprocating Pumps, Shares Ships Drives, Welding Generators	1.75	2.00	2.35
Heavy Shock	Air Compressors Single-Cylinder, Dredgers, Drilling Rings, Mining Machinery, Rolling Mill Drives, Rubber Mixers	2.25	2.50	2.80
Extreme Shock	Ore Crushers, Barrstock Sheers, Conveyors-vibrating	2.75	3.25	3.75

Permissible Misalignment

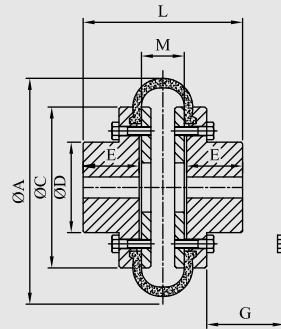
Parallel	Range	Angular	Range
MTC 10 to MTC 50	1.0 mm to 2.5 mm	MTC 10 to MTC 90	1° to 4° per mesh
MTC 60 to MTC 90	2.5 mm to 5.0 mm		



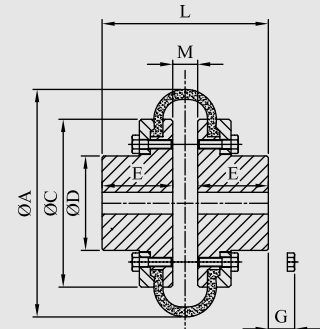
MTC 10 & MTC 20



MTC-20A & MTC-30



MTC-30A & MTC-70



MTC-80 & MTC-90

Size	Rating		Max Speed rev/min	Bore (mm)		Dimensions							No. Of screw per flange	Approx Wt. Kg
	HP/ 100 RPM	Torque Kgm		Pilot	Max	A	L	D	E	C	G	M		
MTC 10	0.9	6.5	4500	13	30	104	67	-	23	83	43	23	4	2.0
MTC 20	1.6	11.2	4500	13	32	120	73	-	26	95	43	23	4	2.2
MTC 20A	2.3	16.3	4500	18	38	133	92	79	33	101	43	28	4	4.0
MTC 30	4.5	32.4	4000	18	48	165	112	73	39	126	43	36	5	5.0
MTC 30A	6.9	49.6	3600	20	55	197	132	82	46	145	10	42	5	8.0
MTC 30B	10.8	77.3	3100	26	65	211	149	95	52	168	10	47	6	12.0
MTC 40	13.0	93.3	3000	32	70	222	154	103	54	180	13	48	6	14.0
MTC 40A	15.6	111.7	2880	32	76	235	164	110	58	189	13	50	6	15.0
MTC 50	21.6	154.6	2600	32	85	254	178	124	61	217	13	58	6	21.0
MTC 60	30.4	217.8	2300	32	90	279	180	134	66	234	14	50	6	28.0
MTC 70	50.5	361.6	2050	39	102	314	207	152	77	265	14	55	6	41.0
MTC 80	80.5	575.1	1800	76	120	359	204	195	90	312	14	26	8	61.0
MTC 80A	133.0	952.0	1600	75	140	402	220	216	103	346	19	16	8	86.0
MTC 90	234.2	1677.4	1500	75	150	470	258	266	115	399	19	30	10	141.0

NOTE: All dimensions are in mm are approximate for general only and subject to change with out notice.



OUR OTHER PRODUCT



SHEET METAL PRODUCT



WHEEL & AXLES



GEAR BOX



HOPPER



HEAT EXCHANGER



PRESSURE VESSEL

OUR OTHER PRODUCT



CONVEYOR PULLEY WITH RING FEEDER



SHAFT



ROPE DRUM



NUT & BOLT



IMPELLER CASING



IMPELLER

**OUR OTHER PRODUCT
FOR MATERIAL HANDLING EQUIPMENT
CONVEYOR PULLEY & IDLER**



MODERN ENGINEERING WORKS

AN ISO 9001 - 2008 Certified Unit



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