



MKM CHAIN COUPLINGS

The MKM Chain Couplings are flexible and simple in construction suitable for a wide range of medium to low speed applications. The coupling comprises a duplex roller chain and a pair of induction hardened sprockets housed in an aluminium or plastic casing.

Ratings Chart No.1

Coupling No.	Max Bore mm	Power Per 100 RPM kW	Maximum Torque		Max. RPM
			Nm	Kg.mf	
KC4012	22	1.5	175	17.5	4800
KC4016	32	2.8	310	31	4800
KC5016	40	5.3	590	59	3600
KC5018	45	6.7	745	74.5	3000
KC6018	55	12.5	1400	140	2500
KC6022	70	17.0	1900	190	2500
KC8018	80	27.0	3100	310	2000
KC8022	100	40.0	4470	447	2000
KC10020	110	63.0	7025	703	1800
KC12022	140	123.0	13720	1372	1200

Selection

- A Select the appropriate service factor (SF) from Chart No 2.
- B Calculate the suitable coupling ratings:

$$\frac{\text{Actual Load (kW)} \times 100 \times \text{SF}}{\text{Coupling RPM}} = \text{kW per / 100 RPM}$$
- C Check that the coupling selected can accommodate the larger of the shaft diameters.
- D When actual load is unknown, select a coupling with "equiv. shaft dia". the same or greater than the smaller shaft - providing both shafts are mild steel.
- E For high inertia, stalling or braking torques greater than twice the catalogued rating, select a coupling rated no less than:

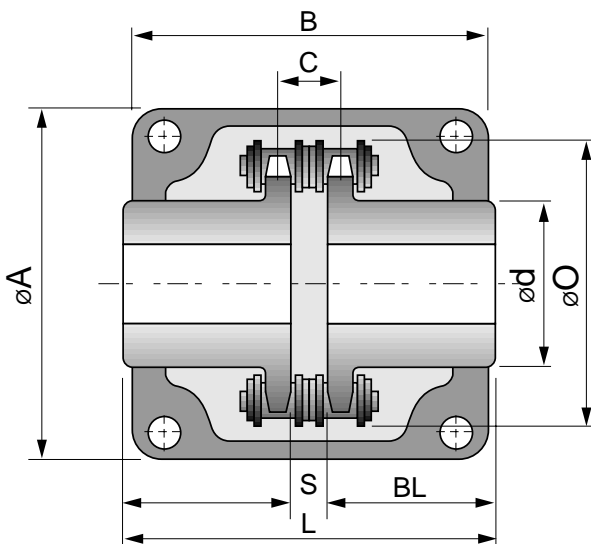
$$\frac{\text{Max. Drive Torque}}{2}$$
- F For multi-cylinder internal combustion engines:
Add 1.0 to SF
- G For single-cylinder internal combustion engines:
Add 2.0 to SF
- H Drives subject to torsional vibration must be referred to MKM Engineers.

Service factors Chart No.2

Even Load	SF = 1.0	Fluctuating Load	SF = 1.5
AGITATORS	- constant density	AGITATOR	- variable density - liquid and solid
COMPRESSORS	- rotary - uniform load	COMPRESSOR	- rotary - fluctuating load
CONVEYORS	- apron belt/screw-uniform load	CONVEYORS	- apron/belt/screw-fluctuating load
DYNAMOMETERS	- uniform load	CRANES/HOISTS	- light duty
FANS	- centrifugal - light duty	DRYERS/COOLERS	- rotary type
GENERATORS	- uniform load	DYNAMOMETERS	- fluctuating load
PUMPS	- centrifugal - uniform load	ELEVATORS	- belt/bucket
SCREENS	- airwashing/water (bar type)	FANS	- centrifugal
Shock Load	SF = 2.0	FOOD INDUSTRY	- filling machines
AGITATORS	- large solids	GENERATORS	- fluctuating load i.e. hoists
CALENDERS/ CENTRIFUGES/ COMPRESSORS	- lobe/multi-cylinder	KILNS	- small-medium
CONVEYORS	- apron/shuttle	MACHINE TOOLS	- light duty
CRANES/HOISTS	- medium duty	PRESS	- printing
CRUSHERS	- sugar Industry	PUMPS	- centrifugal/geared rotary
EXTRUDER/INJECTOR		SCREENS	- rotary trommel
FANS	- forced/Induced draft cooling tower	TEXTILE INDUSTRY	- general
GENERATOR	- heavy load i.e. welders/cranes	TIMBER INDUSTRY	- woodworking machines
KILNS	- large - heavy duty	Heavy Shock Load	SF = 3.0
MACHINE TOOLS	- guillotines/forming presses	COMPRESSORS	- single cylinder
MIXERS	- concrete	CONVEYORS	- reciprocating/vibrating/live roll/shacking
PRESSES	- briquette/forming/punching	CRANES/HOISTS	- heavy duty
PUMPS	- plunger/multi-cylinder/ reciprocating/vane/lobe	CRUSHERS	- crushing and grinding mills
SAWS	- circular/gang	DRILLING RIGS	
SUGAR INDUSTRY	- crushing rolls	MACHINE TOOLS	- croppers/shears/notching and punching presses
TIMBER INDUSTRY	- sawmill equipment	MINING INDUSTRY	
TUMBLERS		PUMPS	- plunger - single cylinder
WASHERS		RUBBER INDUSTRY	- crackers/mills/mixers
WINCHES/WINDERS		SCREENS	- oscillating/vibrating
		STEEL INDUSTRY	
		SUGAR INDUSTRY	- cane shredders
		WINCHES/WINDERS	- heavy duty

Dimensions (millimetres) Chart No.3

Coupling Size	Thru Bore Dia		Chain Pitch	Dimensions								Weight kg	Grease Amount kg
	Max	Min		A	B	L	BL	S	O	Ød	C		
KC4012	20	13	12.70	75	75	80	369	7.4	61	35	14.5	0.28	0.09
KC4016	30	13	12.70	92	75	88	40	7.4	77	50	14.5	0.37	0.12
KC5016	40	16	15.875	111	85	100	45	9.7	96	60	18.1	0.55	0.18
KC5018	45	16	15.875	122	85	100	45	9.7	106	70	18.1	0.73	0.25
KC6018	55	19	19.05	142	106	124	56	11.5	128	85	22.8	1.15	0.4
KC6022	70	19	19.05	167	116	124	56	11.5	152	110	22.8	1.68	0.5
KC8018	80	19	25.40	190	130	141	63	15.2	170	115	29.3	2.36	0.8
KC8022	100	19	25.40	225	137	157	71	15.2	203	140	29.3	3.36	1.0
KC10020	110	25	31.75	280	153	179	80	18.8	233	160	35.8	4.32	1.7
KC12022	140	35	38.10	356	181	222	100	22.7	304	210	45.4	7.5	4.5



Alignment

- Allowable angular misalignment = 1°
- Allowable parallel misalignment = 2% of chain pitch

Lubrication

Install the casing filled with grease. It is important to use high-grade grease such as Shell Alvania EP No. 1 or No. 2.

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Specifications and illustrations are subject to revision without notice.