

MKM HRC COUPLINGS

MKM TaperBush Spider Couplings

MKM HRC Couplings facilitate easy installation with no machining of hubs with minimal maintenance and no lubrication.

(Note: For speeds below 500 rpm — select on rated torque)

Ratings

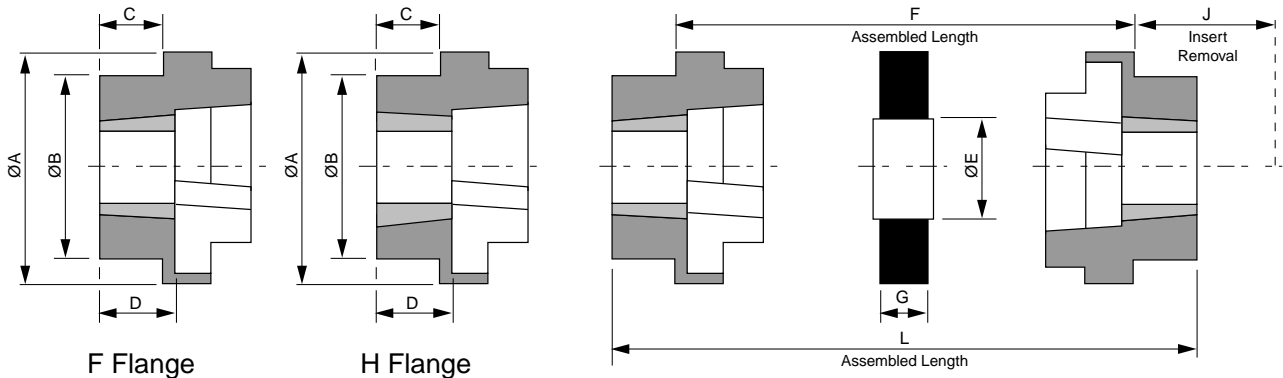
Coupling Size	Nominal Torque Nm	Power kW /100 rpm	kW Rating @ standard speeds rpm			
			720	960	1440	2880
HRC70	31.5	0.33	2.37	3.17	4.75	9.5
HRC90	80	0.84	6.03	8.04	12.1	24.1
HRC110	160	1.68	12.1	16.1	24.1	48.3
HRC130	315	3.3	23.8	31.7	47.5	95
HRC150	600	6.28	45.2	60.3	90.5	181
HRC180	950	9.95	71.6	95.5	143	286
HRC230	2000	20.9	151	201	302	-

Selection

- A Select the appropriate service factor (SF) from Chart No 2.
- B Design Power: Multiply running power of driven machinery by the SF. This gives the design power that is used for coupling selection.
- C Coupling Size: Refer to the Ratings Chart above, read down from the appropriate speed until a power greater than the Design Power is found. The coupling is given at the left
- D Check that the coupling selected can accommodate the larger of the shaft diameters.
- E 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:
 - 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
		FOOD INDUSTRY	- filling machines
Shock Load	SF = 2.0	GENERATORS	- fluctuating load i.e. hoists
AGITATORS	- large solids	KILNS	- small-medium
CALENDERS/ CENTRIFUGES/ COMPRESSORS	- lobe/multi-cylinder	MACHINE TOOLS	- light duty
CONVEYORS	- apron/shuttle	PRESS	- printing
CRANES/HOISTS	- medium duty	PUMPS	- centrifugal/geared rotary
CRUSHERS	- sugar Industry	SCREENS	- rotary trommel
EXTRUDER/INJECTOR		TEXTILE INDUSTRY	- general
FANS	- forced/Induced draft cooling tower	TIMBER INDUSTRY	- woodworking machines
GENERATOR	- heavy load i.e. welders/cranes		
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

Coupling Size	Bush Size	Max Bore mm in	Misalignment		Dimensions								Insert Removal mm	Weight kg
			Parallel mm	Axial mm	mm									
					A	B	C	D	E	F	G	L		
HRC70	1008	25 1"	0.3	+0.2	69	60	20.0	23.5	31.0	25.0	18	65	29	1.0
HRC90	1108	28 1 ¹ / ₈ "	0.3	+0.5	85	70	19.5	23.5	32.0	30.5	22.5	69.5	29	1.2
HRC110	1610	42 1 ⁵ / ₈ "	0.3	+0.6	112	100	18.5	26.5	45	45	29	82	38	5.0
HRC130	1610	42 1 ⁵ / ₈ "	0.4	+0.8	130	105	18.0	26.5	50	53	36	89	38	5.5
HRC150	2012	50 2"	0.4	+0.9	150	115	23.5	33.5	62	60	40	107	42	7.1
HRC180	2517	60 2 ¹ / ₂ "	0.4	+1.1	180	125	34.5	46.5	77	73	49	142	48	16.5
HRC230	3020	75 3"	0.5	+1.3	225	155	39.5	52.5	99	85.3	59.5	164.5	55	26.0

All HRC elements have an angular misalignment capacity of up to 1 degree.

Bore limits H7 tolerance.

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Specifications and illustrations are subject to revision without notice.

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