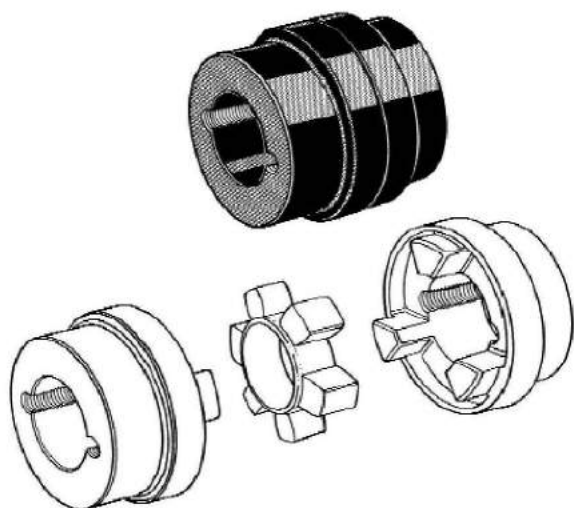


**KR coupling**



- Applicable to most of machinery and hydraulics
- Fine grain cast iron
- Very simple construction
- Easy to install
- Virtually no maintenance required
- ใช้กับเครื่องจักรหลากหลายประเภท และงานไฮดรอลิก
- ผลิตจากเหล็กหล่อคุณภาพดี
- โครงสร้างคัปปลิงที่แสนง่าย
- ง่ายต่อการติดตั้ง
- ไม่ต้องการการบำรุงรักษา

These semi-elastomeric couplings are designed for general purpose applications and permit quick and easy assembly by means of Taper bush. Outside diameters are fully machined to allow alignment by simple straight edge methods. Shaft connection is “fail safe” due to interacting jaw design.



**Selection**

**(a) Service Factor**  
Determine appropriate Service Factor from table below.

**(b) Design Power**  
Multiply running power of driven machinery by the service factor. This gives the design power which is used as a basis for coupling selection.

**(c) Coupling Size**  
Refer to Power Ratings table below and read across from the appropriate speed until a power greater than the design power is found. The size of coupling is given at the head of that column.

**(d) Bore Size**  
From Dimensions table (page 7) check that the required bores can be accommodated.

**EXAMPLE**

A shaft coupling is required to transmit 70kW between a 1200 rev/min diesel engine and a hoist running over 16hrs/day. Engine shaft is 70mm and the hoist shaft is 75mm.

**(a) Service Factor**  
The appropriate Service Factor is 2,5.

**(b) Design Power**  
Design power  $70 \times 2,5=175\text{kW}$ .

**(c) Coupling Size**  
Reading across from 1200 rev/min in the speed column of Power Ratings table below, 251kW is the first power to exceed the required 175kW (design power). The size of the coupling at the head of this column is 230.

**(d) Bore Size**  
The Dimensions table (page 7) shows that both shaft diameters are within the bore range available.

Service Factors

SPECIAL CASES For application where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines e.g. internal combustion engines, piston type pumps and compressors, refer to Palawat with full machine details for torsional analysis.	Type of Driving Unit					
	Electric Motors Steam Turbines			Internal Combustion Engines Steam Engines Water Turbines		
	Hours per day duty			Hours per day duty		
	8 and under	over 8 to 16 inclusive	over 16	8 and under	over 8 to 16 inclusive	over 16
<b>Driven Machine Class</b>						
<b>UNIFORM</b> Agitators, Brewing machinery, Centrifugal blowers, Centrifugal compressors+, Conveyors, Centrifugal fans and pumps, Generators, Sewage disposal equipment.	1,00	1,12	1,25	1,25	1,40	1,60
<b>MODERATE SHOCK*</b> Clay working machinery, crane hoists, Laundry machinery, Wood working machinery, Machine tools, Rotary mills, Paper mill machinery, Textile machinery, Non-uniformly loaded centrifugal pumps.	1,60	1,80	2,00	2,00	2,24	2,50
<b>HEAVY SHOCK*</b> Reciprocating conveyors, Crushers, Shakers, Metal mills, Rubber machinery (Banbury mixers and mills), Reciprocating compressors, Welding sets.	2,50	2,80	3,12	3,12	3,55	4,00

\*It is recommended that keys (with top clearance if in Taper bushes) are fitted for applications where load fluctuation is expected.

+ For Centrifugal Compressors multiply Service Factor by an additional 1,15.

Power Rating (Kw)

Speed rev/min	Coupling Size							
	70	90	110	130	150	180	230	280
100	0,33	0,84	1,68	3,30	6,28	9,95	20,90	33,00
200	0,66	1,68	3,35	6,60	12,60	19,90	41,90	65,00
400	1,32	3,35	6,70	13,20	25,10	39,80	83,80	132,00
600	1,98	5,03	10,10	19,80	37,70	59,70	126,00	198,00
720	2,37	6,03	12,10	23,80	45,20	71,60	151,00	238,00
800	2,65	6,70	13,40	26,40	50,30	79,60	168,00	264,00
960	3,17	8,04	16,10	31,70	60,30	95,50	201,00	317,00
1200	3,96	10,10	20,10	39,60	75,40	119,00	251,00	396,00
1440	4,75	12,10	24,10	47,50	90,50	143,00	302,00	475,00
1600	5,28	13,40	26,80	52,80	101,00	159,00	335,00	528,00
1800	5,94	15,10	30,20	59,40	113,00	179,00	377,00	594,00
2000	6,60	16,80	33,50	66,00	126,00	199,00	419,00	660,00
2200	7,26	18,40	36,90	72,60	138,00	219,00	461,00	726,00
2400	7,92	20,10	40,20	79,20	151,00	239,00	503,00	
2600	8,58	21,80	43,60	85,80	163,00	259,00	545,00	
2880	9,50	24,10	48,30	95,00	181,00	286,00		
3000	9,90	25,10	50,30	99,00	188,00	298,00		
3600	11,90	30,10	60,30	118,00	226,00			
Nominal Torque (Nm)	31,50	80,00	160,00	315,00	600,00	950,00	2000,00	3150,00
Max Torque (Nm)	72,00	180,00	360,00	720,00	1500,00	2350,00	5000,00	7200,00

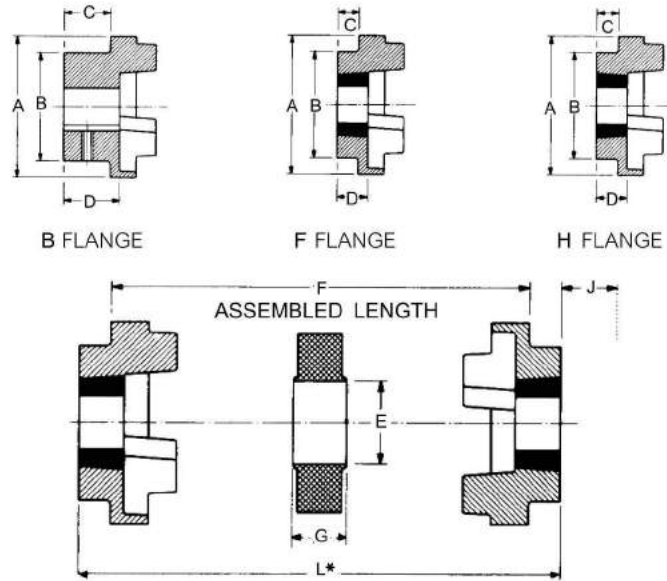
Fire Resistant/Anti-Static (F.R.A.S.) inserts are available to special order.

For speeds below 100 rev/min and intermediate speeds use nominal torque ratings.

\*Maximum coupling speeds are calculated using an allowable peripheral speed for the hub material.

For selection of smaller sizes with speeds in excess of 3600 rev/min - Consult Palwat.

**KR coupling**



**Dimensional & Technical Data**

Size	Common Dimension					Type B				Type F,H						
	A	B	E	F	G	Bore <sup>2</sup>		Screw over key	C	D	Bush size	Max Bore		C	D	J <sup>3</sup>
						Max	Min					mm	in			
70	69	60	31	25	18	32	10	M6	20	23.5	1008	25	1	20.0	23.5	29
90	85	70	32	30.5	22.5	42	10	M6	26	30	1108	28	1 1/8	19.5	23.5	29
110	112	100	45	45	29	55	10	M10	37	45.5	1610	42	1 5/8	18.5	26.5	38
130	130	105	50	53	36	60	20	M10	39	47.5	1610	42	1 5/8	18.0	26.5	38
150	150	115	62	60	40	65	28	M10	46	56	2012	50	2	23.5	33.5	42
180	180	125	77	73	49	80	28	M10	58	70	2517	60	2 1/2	34.5	46.5	48
230	225	155	99	86	59.5	100	48	M12	77	90	3020	75	3	39.5	52.5	55
280	275	206	119	106	74.5	115	60	M16	90	105.5	3525	100	4	51.0	66.5	67

Size	L			Mass <sup>4</sup> Kg	Inertia Mr <sup>2</sup> Kgm <sup>2</sup>	Dynamic Stiffness Nm/°	Max Misalignment <sup>5</sup>		Normal Torque Nm
	BB	BF/BH	FF/HH/FH				Parallel	Axial	
70	65	65	65	1.00	0.00085	-	0.3	+0.2	33
90	82.5	76	69.5	1.17	0.00115	-	0.3	+0.5	85
110	119	101	82	5.00	0.00400	65	0.3	+0.6	170
130	131	110	89	5.46	0.00780	130	0.4	+0.8	330
150	152	129.5	107	7.11	0.01810	175	0.4	+0.9	630
180	189	166	142	16.60	0.04340	229	0.4	+1.1	1000
230	240	202	165	26.00	0.12068	587	0.5	+1.3	2100
280	286	247	208	50.00	0.44653	1025	0.5	+1.7	3300

**Item Code**

Size	Item Code 1201xxxx						Spart part Item Code			
	BB	BF	BH	FF	HH	FH	Element	B Hub	F Hub	H Hub
70	1107	1207	1307	2207	3307	2307	12000007	12001107	12001207	12001307
90	1109	1209	1309	2209	3309	2309	12000009	12001109	12001209	12001309
110	1111	1211	1311	2211	3311	2311	12000011	12001111	12001211	12001311
130	1113	1213	1313	2213	3313	2313	12000013	12001113	12001213	12001313
150	1115	1215	1315	2215	3315	2315	12000015	12001115	12001215	12001315
180	1118	1218	1318	2218	3318	2318	12000018	12001118	12001218	12001318
230	1123	1223	1323	2223	3323	2323	12000023	12001123	12001223	12001323
280	1128	1228	1328	2228	3328	2328	12000028	12001128	12001228	12001328