These semi-elastic flexible couplings are designed for general purpose use and permit quick and easy assembly by means of Taper Lock bush fixing.

Their characteristics are designed for use particulary on machinery driven from standard IEC electric motors.

Fully machined outside diameters allow alignment by simple straight edge methods.

Shaft connection is "fail safe" due to interacting dog 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 equal to or 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 on page 117 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 x 2.5=175kW.

(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 117) shows that both shaft diameters are within the bore range available.

SERVICE FACTORS

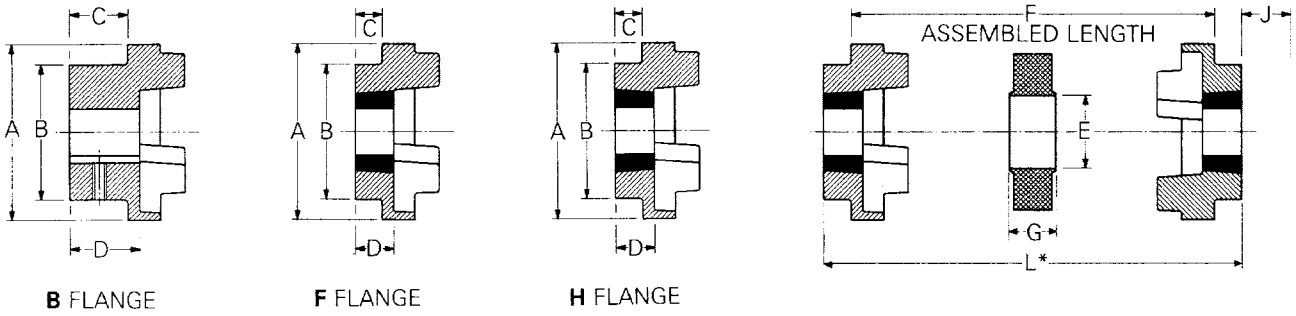
SPECIAL CASES For applications where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines e.g. internal combustion engines, piston type pumps and compressors, refer to your local Authorised Distributor. with full machine details for torsional analysis.	Type of Driving Unit					
	Electric Motors Steam Turbines			Internal Combustion Engines Steam Engines Water Turbines		
	Hours per day duty			Hours per day duty		
Driven Machine Class	8 and under	over 8 to 16 inclusive	over 16	8 and under	over 8 to 16 inclusive	over 16
UNIFORM 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
MODERATE SHOCK* Clay working machinery, Crane hoists, Laundry machinery, Wood working machinery, Machine tools, Rotary mills, Paper mill machinery, Textile machinery, Non-unifomly loaded centrifugal pumps.	1.60	1.80	2.00	2.00	2.24	2.50
HEAVY SHOCK* 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 Lock bushes) are fitted for applications where load fluctuation is expected.
† For Centrifugal Compressors multiply Service Factor by an additional 1,15.

POWER RATINGS (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	2.64	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)	31.5	80	160	315	600	950	2000	3150
Max Torque (Nm)	72	180	360	720	1500	2350	5000	7200

Fire Resistant/Anti-Static (FRAS) inserts available ex-stock.
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 your local Authorised Distributor.



PHYSICAL DIMENSIONS AND CHARACTERISTICS

	Common Dimensions					Type F & H						Type B				
							Max. Bore					Bore Dia's				
Size	A	B	E	F_1‡	G	Bush size	mm	ins.	C	D	J†	Max.	Pilot H9	Screw over key	C	D
70	69	60	31	25.0	18.0	1008	25	1"	20.0	23.5	29	32	8	M 6	20	23.5
90	85	70	32	30.5	22.5	1108	28	1⅛	19.5	23.5	29	42	10	M 6	26	30.0
110	112	100	45	45.0	29.0	1610	42	1⅝	18.5	26.5	38	55	10	M10	37	45.0
130	130	105	50	53.0	36.0	1610	42	1⅝	18.0	26.5	38	60	15	M10	39	47.5
150	150	115	62	60.0	40.0	2012	50	2	23.5	33.5	42	70	20	M10	46	56.0
180	180	125	77	73.0	49.0	2517	60	2½	34.5	46.5	48	80	25	M10	58	70.0
230	225	155	99	85.5	59.5	3020	75	3	39.5	52.5	55	100	25	M12	77	90.0
280	275	206	119	105.5	74.5	3525	100	4	51.0	66.5	67	115	30	M16	90	105.5

† 'J' is the wrench clearance required for tightening/loosening the bush on the shaft. A shortened wrench will allow this dimension to be reduced.
‡ F_1 refers to combinations of flanges: FF, FH, HH, FB, HB, BB.
Bore limits H7 unless otherwise specified.

Size	Assembled Length (L*) Comprising Flange Types			Mass (kg)	Inertia Mr^2 (kgm^2)	Dynamic Stiffness (Nm/°)	Maximum Misalignment		Nominal Torque (Nm)
	FF. FH. HH	FB.HB	BB				Parallel	Axial	
70	65.0	65.0	65.0	1.00	0.00085	–	0.3	+0.2	31
90	69.5	76.0	82.5	1.78	0.00115	–	0.3	+0.5	80
110	82.0	100.5	119.0	5.00	0.00400	65	0.3	+0.6	160
130	89.0	110.0	131.0	5.46	0.00780	130	0.4	+0.8	315
150	107.0	129.5	152.0	7.11	0.01810	175	0.4	+0.9	600
180	142.0	165.5	189.0	16.60	0.04340	229	0.4	+1.1	950
230	164.5	202.0	239.5	26.00	0.12068	587	0.5	+1.3	2000
280	207.5	246.5	285.5	50.00	0.44653	1025	0.5	+1.7	3150

All dimensions in millimetres unless otherwise stated.
All HRC couplings have an angular misalignment capacity of up to 1°.
Mass is for an FF, FH or HH coupling with mid range Taper Lock Bushes.

ORDERING CODES

Size	Type F	Type H	Type B Unbored	Standard Element Tempr. -40°C/+100°C	FRAS Element Tempr. -20°C/+80°C
70	045L0002	045L0003	045L0004	045L0009	045L0006
90	045M0002	045M0003	045M0004	045M0009	045M0006
110	045N0012	045N0013	045N0004	045N0009	045N0006
130	045P0002	045P0003	045P0004	045P0009	045P0006
150	045R0002	045R0003	045R0004	045R0009	045R0006
180	045S0002	045S0003	045S0004	045S0009	045S0006
230	045T0002	045T0003	045T0001	045T0009	045T0006
280	045U0002	045U0003	045U0001	045U0009	045U0006

Note: For details of HRC couplings suitable for application to drives involving SAE engine flywheels, consult your local Authorised Distributor.
Type B flanges can be supplied finished bored to H7 tolerance with keyway, if required.
Hub material: GG25 grey cast iron.