

# Selection Procedure

Refer Page No. 11 for RRJ & Page No. 19 for T/TO



- (a) **Service Factor**  
Determine appropriate SERVICE FACTOR from table A.
- (b) **Design Power**  
Multiply running power of driven machinery by the service factor. This gives DESIGN POWER which is used as a basis for coupling selection.
- (c) **Coupling Size**  
Refer respective table for your required coupling type and read from the appropriate speed column until a power equal to or greater than the DESIGN POWER is found.
- (d) **Bore Size**  
Refer respective coupling 'TECHNICAL DATA' table to check that the required bores can be accommodated.

**EXAMPLE**

A coupling is required to transmit 5 kW from an electric motor which runs at 100 rpm to a centrifugal pump for 12 hours a day. The motor shaft diameter is 60 mm. and the pump shaft diameter is 55 mm.

**Select SW Type Coupling**

- (a) **Service Factor**  
From Table A the service factor is 1.0
- (b) **Design Power**  
Design Power  $5 \times 1.0 = 5 \text{ kW}$
- (c) **Coupling Size**  
Read from 100 rpm in the speed column of 'TECHNICAL DATA' table. The first power to exceed the DESIGN POWER of 5 kW is 5.6 kW. The size of the coupling specified in the first column corresponding to 5.6 kW is SW-276 for Synthetic Rubber.
- (d) **Bore Size**  
Max. Bore for coupling size SW-276 is 75 mm. This shows that both the shaft diameters are within the range.



**A. SERVICE FACTORS**

SPECIAL CLASSES For applications where substantial shock, vibration and torque fluctuations occur and for reciprocating machines e.g. internal combustion engines, piston pumps and compressors, refer to Rathi Transpower with full machine details	Type of Driving Unit					
	Electric Motors			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
<b>UNIFORM</b> Agitators, Brewing machinery, Centrifugal Blowers, Conveyors, Centrifugal Fans and Pumps, Generators, Sewage disposal Equipments. Evaporators, Feeders, Textile machines, Wood working machines.	1.00	1.00	1.00	1.00	1.10	1.10
<b>MODERATE SHOCK*</b> Clay working machinery, Crane Hoists, Laundry machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Non-uniformly loaded centrifugal pumps, Rotary Screens, Centrifugal Compressors. Shredders, Printing presses, Oil industry, Mixers, Food industry, Beaters, Bucket elevators, Gear pumps, Wood working machinery, Textile machinery	1.10	1.10	1.20	1.20	1.25	1.25
<b>HEAVY SHOCK*</b> Reciprocating Conveyors, Crushers, Shakers, Metal Mills, Rubber machinery (Banbury Mixers and Mills) Reciprocating Compressors, Welding Sets, Freight & passenger elevators, Cooling tower fans, Hammer mills, Reciprocating pumps, Vibrating screens, Winches, Wire drawing machines.	1.25	1.40	1.60	1.60	1.80	2.00

\* It is recommended that keys with top clearance are fitted for applications where load fluctuation is expected.

## SNAP WRAP COUPLINGS TYPE L / SW / RRS



... the coupling that pays for itself



Type L Coupling



Type TSW Coupling



Type RRS Spacer Coupling



Spider  
Synthetic Rubber,  
Polyurethane, H-Trans



SW Spider  
Synthetic Rubber,  
Polyurethane, H-Trans



SW Element  
(Nitrile / Urathane / H-Trans)

## 6 ways the "Snap Wrap" coupling can help pay for itself:

*With its unique wrap around Synthetic rubber connecting element, the Snap Wrap coupling eliminates the need for dismantling the connected equipment while inspecting or replacing the element - a major benefit when down-time on machinery can run into huge amounts.*

*Combined with a range of prebored hubs, a modular hub design and a spacer option, the Snap Wrap coupling is unsurpassed for quality, flexibility, speed of installation and maintenance.*

### 1. Prebored hubs

Hubs bored and keyed to standard IEC motor shaft sizes at no extra cost.

### 2. Snap Wrap element

Ease of inspection and replacement within 5 minutes.

### 3. Modular hub design

Both Models, SW & RRS use the same hubs.

### 4. Spacer coupling

RRS spacer model is available for pump applications.

### 5. Fully machined hubs

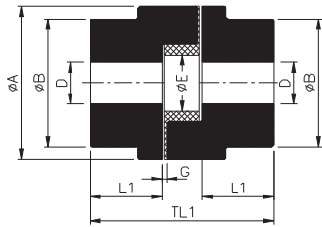
Balance, ease of alignment and smooth contact surface for elements are assured.

### 6. Any environment

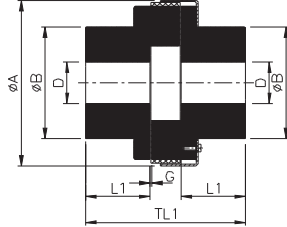
Water, oil, greases & dust do not affect performance.

# SNAP WRAP COUPLINGS

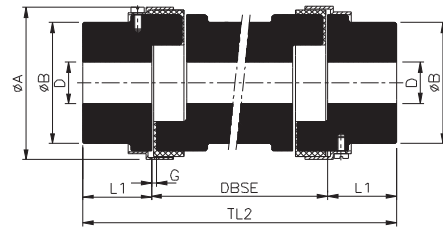
## TYPE L / SW / RRS



TYPE L



TYPE SW



TYPE RRS

### TECHNICAL DATA

Coupling		Power Rating						Pilot Drill Size	Max. Bore D	ØA		Length thru' Bore L1	ØB	Gap G	ØE	DBSE	TL1	TL2
		Synthetic Rubber		Polyurethane		H-Trans				SW/RRS	L							
Type	Size	Rated Torque (Nm)	kW@ 100 rpm	Rated Torque (Nm)	kW@ 100 rpm	Rated Torque (Nm)	kW@ 100 rpm											
L	35	0.38	0.004	0.6	0.01	1.0	0.01	-	10	-	16	6.5	16	1	-	-	21	-
	50	2.80	0.03	4.2	0.04	7.0	0.07	-	16	-	27	15	27	1	-	-	42	-
	70	4.90	0.05	7.4	0.08	12.3	0.13	-	20	-	35	19	35	2	-	-	51	-
	⊙ 75	9.80	0.1	14.7	0.15	24.5	0.26	-	22	-	45	21	45	2	-	-	55	-
	■ 75	9.80	0.1	14.7	0.15	24.5	0.26	-	22	-	45	21	39	2	-	-	55	-
L SW RRS	95	21.10	0.22	31.7	0.33	52.8	0.55	-	28	65	54	25	49	2	19	90,100,140	63	-
	99	46.40	0.49	69.6	0.73	116	1.2	-	30	78	65	27	51	2	27		72	-
	100	46.40	0.49	69.6	0.73	116	1.2	-	35	78	65	35	57	2	27		88	TL2 =
	110	89	0.93	133.5	1.4	222.5	2.3	-	42	96	85	43	76	3	35	90	108	DBSE
	150	141	1.5	211.5	2.2	352.5	3.7	-	48	111	96	45	80	3	35	100	115	+
	190	190	2.0	285	3.0	475	5.0	-	60	129	115	54	102	3	45	140	133	2L1
	225	265	2.8	397.5	4.2	662.5	6.9	-	65	142	127	64	111	3	45	180	153	
	226	327	3.4	490.5	5.1	817.5	8.6	25	70	153	137	70	119	3	51		178	
	276	532	5.6	798	8.4	1330	13.9	25	75	173	157	80	127	3	60	-	200	-
L SW	280	782	8.2	1173	12.3	1955	20.5	30	80	208	192	80	140	3	70	-	200	-
	295	1279	13.4	1918.5	20.1	3197.5	33.5	30	95	253	237	95	162	3	80	-	238	-
	2955	2132	22.3	3198	33.5	5330	55.8	30	105	253	237	108	180	3	80	-	264	-
	SW	300	3047	31.9	4570.5	47.9	7617.5	79.8	30	105	272	-	115	180	3	-	-	283
350		4308	45.1	6462	67.7	10770	112.8	30	115	323	-	128	200	3	-	-	309	-

All dimensions are in mm.

For vertical installation contact RATHI.

For RRS/SW maintain gap 'G' at the time of assembly.

Maximum bores can be increased in case of steel hubs. Consult manufacturer

Material : Sintered iron for sizes 035 to 075

Aluminum for sizes 050 to 110 & for all RRS spacers.

Cast Iron for sizes 095 to 350.

■ 075 - Aluminium

⊙ 075 - Sintered Iron

# For RRS, TL2 = DBSE + 2L1

L Type Spider : Polyurethane - for Sizes 50 to 295

H-Trans - for Sizes 50 to 225