

... the coupling that pays for itself



Type L Coupling



Type SW Coupling



Spiders - Synthetic Rubber, Polyurethane, Hytrel, Bronze



SW Elements - Synthetic Rubber, Polyurethane, Hytrel



Type RRS Spacer Coupling

With its unique wrap around Nitrile 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 downtime 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.

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

- | | |
|-------------------------------|---|
| 1. Prebored hubs | Hubs bored and keyed to standard IEC motor shaft sizes. |
| 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. |

SELECTION PROCEDURE

(a) Service Factor

Determine appropriate SERVICE FACTOR from table A.

(b) Design Power

Convert application rating at 100 rpm by multiplying service factor. This gives DESIGN POWER which is used as a base 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 65 kW from an electric motor which runs at 1500 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.

(a) Service Factor

From Table A the service factor is 1.0

(b) Design Power

Design Power

$$@100\text{rpm} = \frac{100}{1500} \times 65\text{kW} \times 1(\text{SF}) = 4.3 \text{ kW}$$

(c) Coupling Size

Refer Table. The first power to exceed Design Power of 4.3kW is 5.6kW. The size of coupling specified in the first column corresponding to 5.6kW is SW - 276.

(d) Bore Size

Max. Bore for coupling size SW-276 is 75 mm.

This shows that both the shaft diameters are within the range.

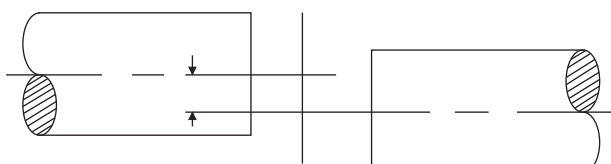
A : SERVICE FACTORS

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
UNIFORM 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
MODERATE SHOCK* 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
HEAVY SHOCK* 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

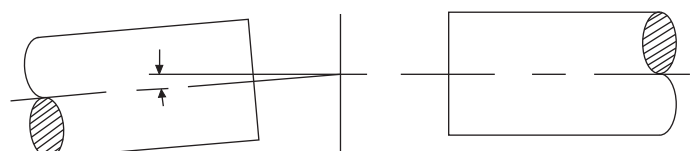
* It is recommended that keys with top clearance are fitted for applications where load fluctuation is expected.

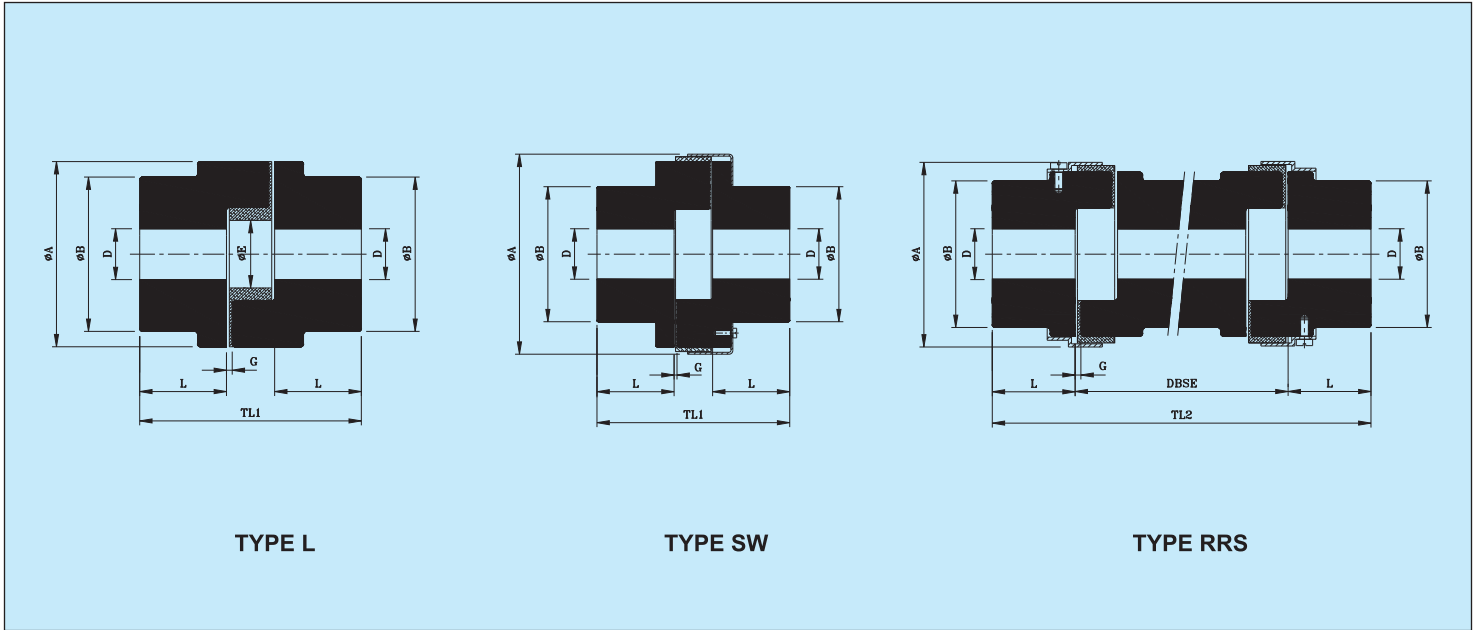
MISALIGNMENT CAPABILITY

PARALLEL 0.4 mm



ANGULAR - 1°





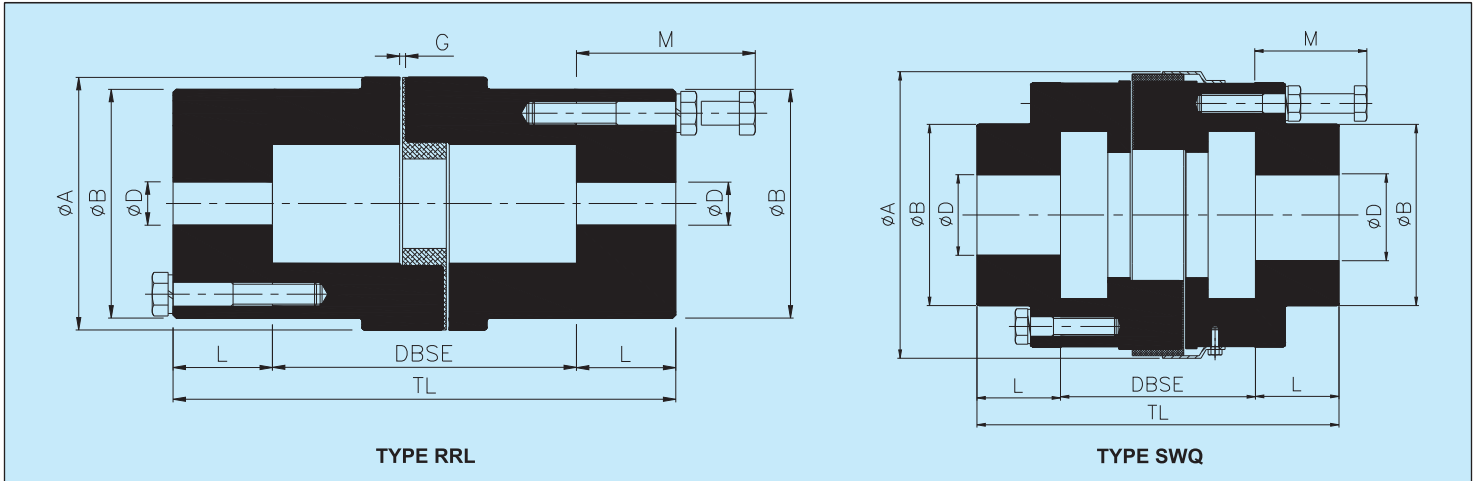
TECHNICAL DATA

Coupling		Power Rating						Pilot Drill Size	Max. Bore D	ØA		Length thru' Bore "L"	ØB	Gap G	ØE	DBSE	#Overall Length "TL2" for (SW/L)
		Synthetic Rubber		Polyurethane		Hytel				SW/RRS	TL1						
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	90	88
	110	89	0.93	133.5	1.4	222.5	2.3	-	42	96	85	43	76	3	35	100	108
	150	141	1.5	211.5	2.2	352.5	3.7	-	48	111	96	45	80	3	35	140	115
	190	190	2.0	285	3.0	475	5.0	-	60	129	115	54	102	3	45	180	133
	225	265	2.8	397.5	4.2	662.5	6.9	-	65	142	127	64	111	3	45		153
	226	327	3.4	490.5	5.1	817.5	8.6	25	70	153	137	70	119	3	51		178
L SW	276	532	5.6	798	8.4	1330	13.9	25	75	173	157	80	127	3	60	-	200
	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. # FOR RRS, TL2=DBSE + 2L1
 Cast Iron for sizes 095 to 350.

■ 075 -- Aluminium
 ⊙ 075 -- Sintered Iron



Special Features:

Provides quick, easy disconnection from driving unit without disturbing drive shaft or piping, permits removal of equipment from line in three simple steps. Only two sets of bolts need to be removed.

Applications:

For pumps in chemical industry, ideal for reciprocating pumps, diesel or gas engines, multiple generator sets and other drives where rapid disconnection without disturbing the drive or driven unit is required.

DIMENSIONAL DATA

Size	Synthetic Rubber		DBSE		Bore ϕD			Outside Dia. ϕA	Adapter Hub Dia. ϕB	Length thru' Bore L		Min. bolt clearance * M		Total Length 'TL'
	Rated Torque Nm	kW at 100 rpm	Min.	Std.	Min.	Max.				\blacktriangle	Std.	\blacktriangle	Std.	
						\blacktriangle	Std.							
RRL-095	21.1	0.221	75	90,100,140	10	—	28	54	54	—	25	—	45	140, 150, 190
RRL-100	46.4	0.49	75	90,100, 140,180	10	—	38	65	65	—	30	—	50	150, 160, 200, 240
RRL-110	89	0.93	75		15	24	42	85	76	35	35	36	60	160, 170, 210, 250
RRL-150	141	1.48	75		15	32	48	96	90	40	40	48	70	170, 180, 220, 260
RRL-190	190	1.99	75		15	38	55	115	102	45	45	48	75	180, 190, 230, 270
RRL-225	265	2.78	90		15	42	65	127	115	50	50	54	90	190, 200, 240, 280

\blacktriangle Triangular Adapter Body.

Size	Rated Torque Nm	kW at 100 rpm	DBSE 'S'	Bore		Outside Dia. ϕA	Adapter Hub Dia. ϕB	Length thru' Bore L	Min. bolt clearance * M	Total Length 'TL'
				Min.	Max.					
SWQ-226	327	3.42	140, 180	25	70	153	134	50	92	240, 280
SWQ-276	524	5.49		25	80	173	130	60	107	260, 300
SWQ-280	783	8.20		30	80	208	130	60	70	260, 300
SWQ-295	1279	13.39		30	105	253	160	70	80	280, 320
SWQ-2955	2139	22.40		30	105	253	160	75	80	290, 330
SWQ-300	3046	31.90		30	115	272	180	80	85	300, 340
SWQ-350	4297	45		30	125	323	200	90	85	320, 360

* Loosening & Tightening of bolts is possible within dimension 'M'.

- Maintain gap 2 mm for RRL-095, RRL-100 & 3 mm for all other sizes at the time of assembly.
- Non-standard (NSTD) DBSE available on request.
- For vertical installation contact RATHI.

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