

... the coupling that pays for itself



Type L Coupling



Type SW Coupling



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 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. |

SELECTION PROCEDURE

(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 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 $65 \times 1.0 = 65 \text{ kW}$

(c) Coupling Size

Read from 1500 rpm in the speed column of 'TECHNICAL DATA' table. The first power to exceed the DESIGN POWER of 65 kW is 84 kW. The size of the coupling specified in the first column corresponding to 84 kW 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.

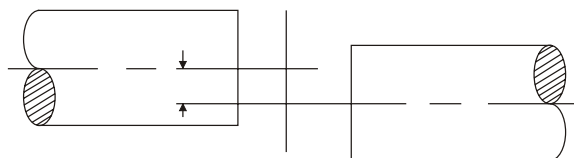
A : SERVICE FACTORS

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

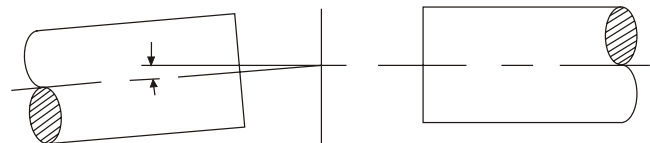
* It is recommended that keys with top clearance are fitted for applications where load fluctuation is expected.

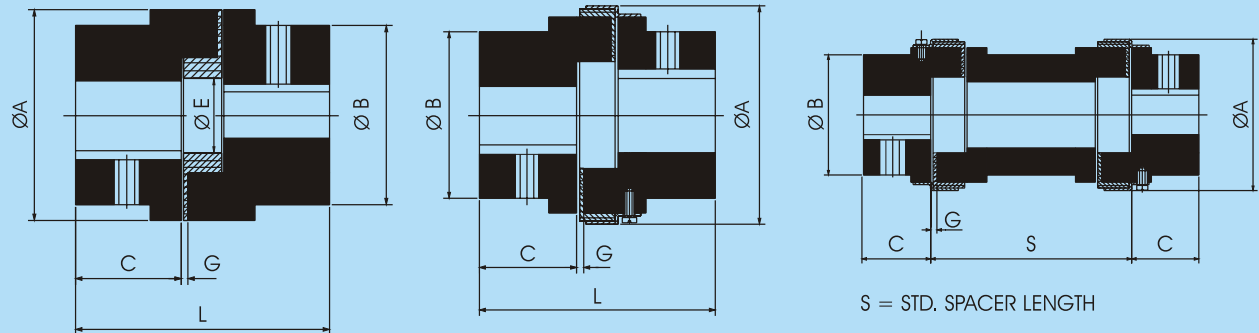
MISALIGNMENT CAPABILITY

PARALLEL 0.4 mm



ANGULAR - 1°





TYPE L

TYPE SW

TYPE RRS

S = STD. SPACER LENGTH

TECHNICAL DATA

Coupling Type	Size	Rated Torque Nm	kW Capacity			Pilot Drill Size	Max. Bore	ØA		Length thru Bore "C"	Ø B	Gap G	Ø E	S	# Overall Length "L" for (SW/L)
			100 rpm	1500 rpm	3000 rpm			SW /RRS	L						
L	035	0.38	0.004	0.06	0.12	-	10	-	16	6.5	16	1	-	-	21
	050	2.80	0.03	0.45	0.90	5	16	-	27	15	27	1	-	-	42
	070	4.90	0.05	0.75	1.50	9	20	-	34.5	19	34.5	2	-	-	51
	⊙ 075	9.80	0.10	1.50	3.00	9	22	-	44.5	21	44.5	2	-	-	55
	■ 075	9.80	0.10	1.50	3.00	-	22	-	44.5	21	39	2	-	-	55
L SW RRS	095	21.1	0.22	3.30	6.60	-	28	65	54	25	49	2	19	90, 100, 140	63
	099	35.1	0.37	5.55	11.10	-	30	78	65	27	51	2	27	-	72
	100	46.4	0.49	7.35	14.70	-	35	78	65	35	57	2	27	90, 100, 140	88
	110	89.0	0.93	13.95	27.90	-	42	96	85	43	76	3	35	90, 100, 140, 180	108
	150	141	1.49	22.35	44.70	-	48	111	96	45	80	3	35		115
	190	190	2.01	30.15	60.30	-	60	129	115	54	102	3	45		133
	225	265	2.76	41.40	82.80	-	65	142	127	64	111	3	45		153
	226	327	3.43	51.45	102.90	25	70	153	137	70	119	3	51	-	178
L	276	532	5.60	84.00	168.00	25	75	173	157	80	127	3	60	-	200
	280	782	8.20	123.00	246.00*	30	80	208	192	80	140	3	70	-	200
	295	1279	13.4	201.00	-	30	95	253	237	95	162	3	80	-	238
SW	2955	2132	22.4	336.00	-	30	105	253	237	108	180	3	80	-	264
SW	300	3047	31.9	478.50	-	30	105	272	-	115	180	3	-	-	283
	350	4308	45.0	675.00	-	30	115	323	-	128	200	3	-	-	309

All dimensions are in mm.

Above ratings are based on shore 80° elements.

Shore 92° elements are recommended for low rpm applications.

For power rating of elements with shore 80° & 92°, refer table B on page 4.

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

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

* Dynamic balancing preferred at this speed

.Material : Sintered iron for sizes 035 to 075

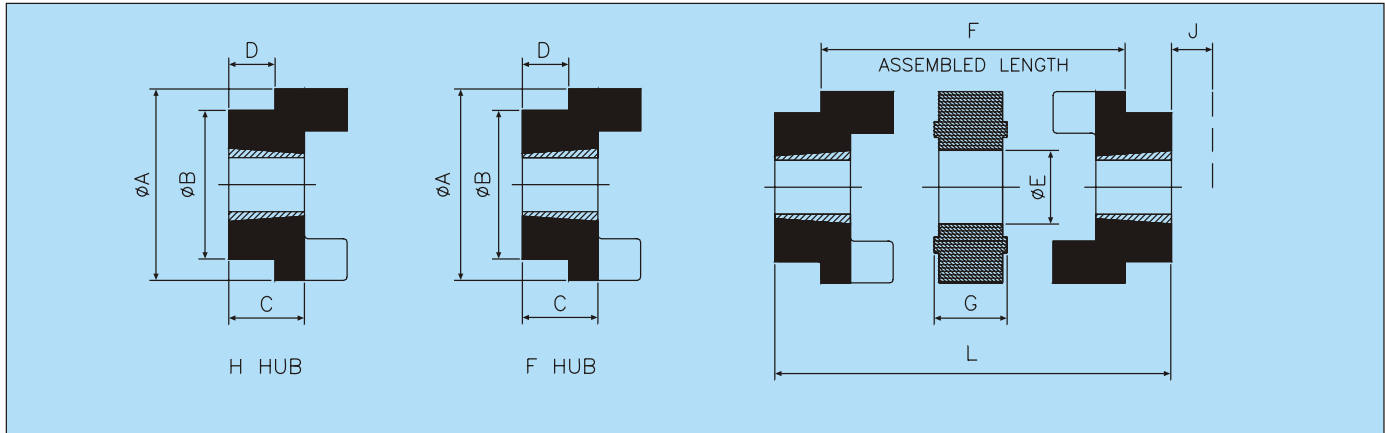
Aluminum for sizes 050 to 110 & for all RRS spacers.

Cast Iron for sizes 095 to 350.

■ 075 - Aluminium

⊙ 075 - Sintered Iron

For RRS, L = S + 2C



A : DIMENSIONAL DATA

Size TL/TSW	Bush ■			Ø A		Ø B	Ø E	F	G	D	C	J	L
	Size	● Max. Bore		TL	TSW								
		mm	Inch										
099	1008	25	1	65	78	55	27	34	18	15.5	23.5	29	65
100	1108	28	1 1/8	65	78	60	27	44	18	10.5	23.5	29	65
110	1210	32	1 1/4	85	96	83	35	48	22	13.5	26.5	38	75
150	1210	32	1 1/4	96	111	92	35	55	25	11.5	26.5	38	78
190	1610	42	1 5/8	115	129	102	45	63	25	7.5	26.5	38	78
225	2012	50	2	127	142	115	45	63	25	14.5	33.5	42	92
226	2012	50	2	137	153	115	51	70	38	17.5	33.5	42	105
276	2517	60	2 1/2	157	173	124	60	78	40	27.5	46.5	48	133
280	2517	60	2 1/2	192	208	124	70	78	40	27.5	46.5	48	133
295	3020	75	3	237	253	159	80	98	48	27.5	52.5	55	153
2955	3020	75	3	237	253	159	80	98	48	27.5	52.5	55	153
300	3020	75	3	-	272	180	-	103	-	27.5	52.5	55	158
350A	3525	100	4	-	323	200	-	103	-	41.5	66.5	67	186
350	3535	90	3 1/2	-	323	200	-	103	-	64.0	89.0	67	231

B : TECHNICAL DATA

Size TL/TSW	kW capacity						Weight per coupling kg	Moment of Inertia (WR ²) per coupling kg.m ²	Dynamic tor. Stiffness Nm/ Deg.
	100 rpm		1500 rpm		3000 rpm				
	80°	92°	80°	92°	80°	92°			
099	0.37	0.79	5.55	11.89	11.1	23.79	1.24	0.00064	12
100	0.49	1.05	7.35	15.75	14.70	31.50	1.26	0.00066	12
110	0.93	2.10	13.95	31.50	27.90	63.00	2.46	0.0020	30
150	1.49	3.35	22.35	50.25	44.70	100.50	3.30	0.0036	37
190	2.01	4.19	30.15	62.85	60.30	125.70	4.71	0.0076	61
225	2.76	6.28	41.40	94.20	82.80	188.40	5.80	0.0112	80
226	3.43	6.86	51.45	102.90	102.90	205.80	8.48	0.0184	122
276	5.60	11.20	84.00	168.00	168.00	336.00	13.75	0.0380	222
280	8.20	16.40	123.00	246.00	*246.00	*492.00	18.00	0.0720	393
295	13.4	26.80	201.00	402.00	--	--	34.15	0.2140	894
2955	22.4	44.80	336.00	672.00	--	--	32.70	0.2040	1491
300	31.9	63.80	478.50	957.00	--	--	39.10	0.3000	2206
350A	45.0	90.20	675.00	1353.00	--	--	63.30	0.6500	3205
350	45.0	90.20	675.00	1353.00	--	--	73.60	0.6800	3205

J is the wrench clearance required for tightening and loosening the bush on the shaft. The use of shortened key will allow this dimension to be reduced. Couplings can be supplied with F/F or H/H or F/H flange as required.

Weight is for flange without Bore.

■ Rathi couplings are supplied with taper bore suitable to the bush size specified in this column.

TL couplings are supplied with spider.

TSW couplings are supplied with snap-wrap.

Shore 92° spiders are recommended for low rpm applications.

● All dimensions are in mm unless otherwise specified.

* Dynamic Balancing preferred at these speeds.

● For detailed information about Taper Bush bore, please refer Taper Bush catalogue.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice.

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