



## Tyre-Flex Couplings - Type T / TO / RST



The flexible capabilities of the Tyreflex Coupling help to accommodate angular, parallel and axial misalignments.

Parallel Misalignment upto 6 mm. Angular Misalignment upto 4°. End Float upto 8 mm. Suitable in ambient temp. upto 70°C

### Cushioning Shock Loads

Tyreflex being a torsionally soft coupling protects against vibration, impact loads and heavy shocks in the event of sudden load changes.

### Ease Of Assembly/ Disassembly

Alignment is quickly checked by placing a straight edge across the outside diameters of the flanges.

Installation or replacement of new tyre is achieved without disturbing driver or driven shafts, simply by loosening the clamping screws, placing a new tyre between the flanges and clamping rings and then tightening the clamping screws.

### Tyre-Flex Coupling - RST

Tyre-flex Spacer Couplings RST are specifically designed for motor-pump installations, where it is desirable not to disturb drive/driven equipment while servicing impellers, packing glands, etc.

The maintenance time-reduction feature is valuable on pumps, compressors and many other applications.

It comprises of a spacer assembly and a standard Tyre-flex coupling. The spacer assembly consists of a flanged shaft and a spacer adapter taper bored to suit standard Taper Bush.



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### POWER RATING (kW)

Speed rpm	Size								T / TO							
	4	5	6	7	8	9	10	11	12	14	16	18	20	22	25	
100	0.25	0.69	1.33	2.62	3.93	5.24	7.07	9.16	13.9	24.3	39.5	65.7	97.6	121	154	
750	1.87	5.17	9.97	19.65	29.47	39.30	53.02	68.70	104.25	182.25	296.25	492.75	732	907.5	1155	
1000	2.50	6.90	13.30	26.20	39.30	52.40	70.70	91.60	139.0	243.0	395.0	657.0	976	1215	1537	
1500	3.75	10.35	19.95	39.30	58.95	78.60	106.05	137.40	208.50	364.50	592.50*	986.5*	-	-	-	
1800	4.50	12.42	23.94	47.16	70.74	94.32	127.26	164.88	250.20	437.40*	-	-	-	-	-	
3000	7.50	20.70	39.90	78.60	117.90*	157.20*	-	-	-	-	-	-	-	-	-	
3600	9.00	24.84	47.98	94.32	-	-	-	-	-	-	-	-	-	-	-	

- All these power ratings are calculated at constant torque.
- For speeds below 100 rpm and intermediate speeds use normal torque ratings.
- \* Dynamic balancing preferred at these speeds.

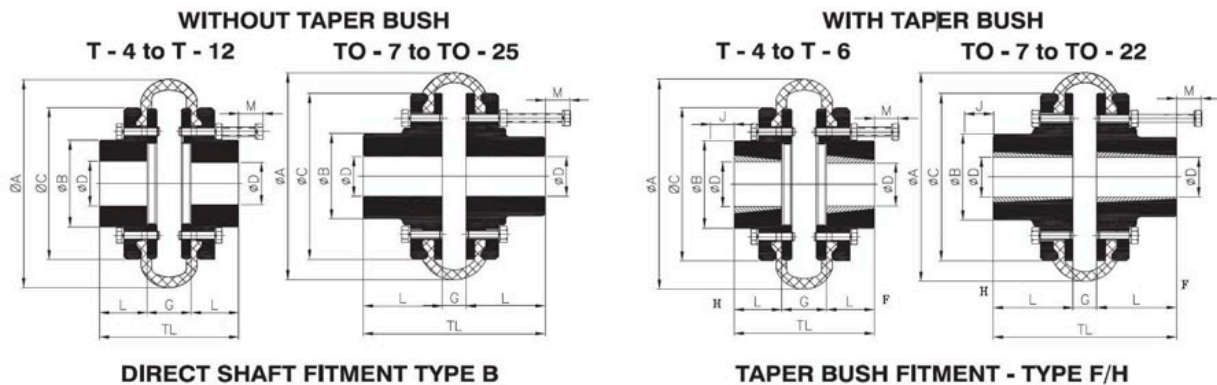
Poles	2	4	6	8
rpm	3000	1500	1000	750

### Technical Data Flexible Tyres

Size	4	5	6	7	8	9	10	11	12	14	16	18	20	22	25
Max. Speed rpm	4500	4500	4000	3600	3100	3000	2600	2300	2050	1800	1600	1500	1300	1100	1000
Torsional Stiffness Nm/Deg.	5	13	26	41	63	91	126	178	296	470	778	1371	1959	2760	3562
Parallel Misalignment mm	1.1	1.3	1.6	1.9	2.1	2.4	2.6	2.9	3.2	3.7	4.2	4.8	5.3	5.8	6.6
End Float mm	1.3	1.7	2.0	2.3	2.6	3.0	3.3	3.7	4.0	4.6	5.3	6.0	6.6	7.3	8.2
Normal Torque Nm	24	66	127	250	375	500	675	875	1330	2325	3730	6270	9325	11600	14675
Max. Torque Nm	64	160	318	487	759	1096	1517	2137	3547	5642	9339	16455	23508	33125	42740



## Tyre-Flex Couplings - Type T / TO



## DIMENSIONS OF TYRE-FLEX HUB TYPES B, F &amp; H

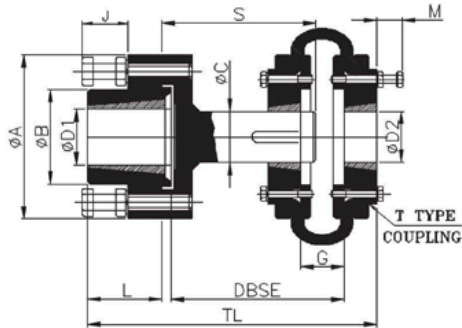
COUPLING SIZE	KW at 100 RPM	MAX. SPEED (RPM)	TYPE	# BUSH SIZE	BORE ØD		#TYPE F/H			TYPE B		ØA	ØB	ØC	G	M	WT.(Kg)	M.I. (WR <sup>2</sup> ) Kg-m <sup>2</sup>
					PB	MAX.	TL	L	J	TL	L							
T-4	0.25	4500	B	-	10	32	-	-	-	68	22	104	-	82	24	17	1.9	0.00161
			F/H	1008	-	25	68	22	29	-	-				24	17	1.7	0.00148
T-5	0.69	4500	B	-	10	38	-	-	-	93	32	133	79	100	29	17	3.5	0.00358
			F/H	1210	-	32	79	25	38	-	-				29	19	2.7	0.00349
T-6	1.33	4000	B	-	15	45	-	-	-	111	38	165	73	125	35	8	5	0.0105
			F/H	1610	-	42	85	25	38	-	-				35	19	3.6	0.0103
T-7	2.62	3600	B	-	19	50	-	-	-	133	45	197	77	144	43	-	7.8	0.0198
TO-7			F/H	1610	-	42	66	25	38	-	-				16	-	5.6	0.0142
T-8	3.93	3100	B	-	25	63	-	-	-	150	51	210	96	167	48	-	10.9	0.042
TO-8			F/H	2012	-	50	86	32	42	-	-				22	-	7.9	0.0304
T-9	5.24	3000	B	-	30	75	-	-	-	165	57	235	110	188	51	-	15	0.0681
TO-9			F/H	2517	-	60	114	45	48	-	-				24	-	11	0.0499
T-10	7.07	2600	B	-	32	80	-	-	-	178	60	254	125	216	58	-	21.5	0.1303
TO-10			F/H	2517	-	60	114	45	48	-	-				24	-	16.9	0.1024
T-11	9.16	2300	B	-	32	90	-	-	-	183	65	279	140	233	53	-	28.8	0.1622
TO-11			F/H	2517	-	60	112	45	48	-	-				22	-	21.5	0.1210
T-12	13.90	2050	B	-	38	100	-	-	-	210	76	314	152	264	58	-	43.1	0.365
TO-12			F/H	3020	-	75	127	51	55	-	-				25	-	33.3	0.282
TO-14	24.30	1800	B	-	58	125	-	-	-	210	89	359	195	311	32	26	60.6	0.6045
			F/H	3525	-	90	162	65	67	-	-				32	-	42.6	0.4922
TO-16	39.50	1600	B	-	65	140	-	-	-	234	102	395	216	345	30	-	86.4	1.2755
			F/H	4030	-	100	184	77	80	-	-				30	-	72.6	1.1134
TO-18	65.70	1500	B	-	70	150	-	-	-	278	116	470	220	398	46	-	133.3	2.1525
			F/H	4535	-	115	224	89	89	-	-				46	-	123	1.9514
TO-20	97.60	1300	B	-	70	150	-	-	-	276	114	508	220	429	48	-	144.6	3.1765
			F/H	4535	-	115	226	89	89	-	-				48	-	158.3	3.0129
TO-22	121	1100	B	-	75	160	-	-	-	308	127	562	240	470	54	-	181.63	4.7861
			F/H	5040	-	125	258	102	92	-	-				54	-	195.1	4.8954
TO-25	154	1000	B	-	85	190	-	-	-	324	132	628	275	532	60	-	281.1	8.129

- 1) All Dimensions are in mm .
- 2) M is amount by which clamping screw need to be withdrawn to release tyre .
- 3) J is wrench clearance to allow for tightening and loosening of the bush on the shaft.
- 4) Shaft ends, although normally located G apart can project beyond flanges.
- 5) Weight & Moment of inertia specified for solid bores.
- 6) F/H construction for size 7 to 12 available in TO - 07 to iro - 12
- 7) #Available only with taper bore, without taper bush



# Spacer Tyre-Flex Couplings - RST Type B

T-4 to T-6



TO-7 to TO-14

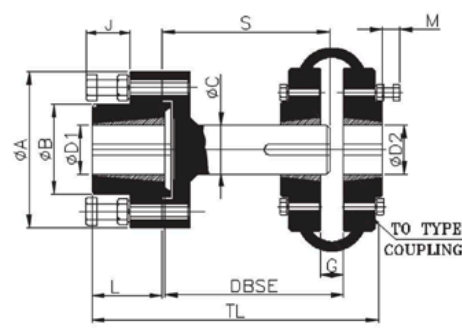


TABLE A - DIMENSIONAL DATA

COUPLING SIZE	TYPE	NOM. DBSE	BORE ØD1		ØA	ØB	TL		L	J	S		ØC	TYRE FLEX SIZE T/TO	BORE ØD2		G		M
			PB	MAX.			T	TO			T	TO			PB	MAX.	T	TO	
RST-12	B	80 100	10	42	118	83	127 147	- -	25	22	57 77	-	25	4	10	32	24	-	17
RST-16	B	100	18	48	127	80	160	-	38	24	94	-	32	4	10	32	24	-	17
		140					200				134			4	10	32	24		17
		100					170				94			5	10	38	29		17
		140					210				134			5	10	38	29		17
		100					176				94			6	15	45	35		8
140	216	134	6	15	45	35	8												
RST-25	B	100	38	80	178	127	-	190	45	27	94	48	8	7	19	50	-	16	
		230						134			7			19	50	16			
		270						174			7			19	50	16			
		100						196			94			8	25	63		22	10
		140						236			134			8	25	63		22	10
		180						276			174			8	25	63		22	10
		140						242			134			9	30	75		24	-
180	282	174	9	30	75	24	-												
RST-30	B	140	40	90	216	146	-	276	76	33	134	60	10	32	80	-	24	24	
		316						174			10			32	80		24	24	
		281						134			11			32	90		22	22	
		321						134			11			32	90		22	22	
		140						276			134			11	32		90	22	22
RST-35	B	140	66	110	248	178	-	337	89	33	134	80	12	38	100	-	25	-	
		297						174			12			38	100		32	-	
		297						174			14			58	125		32	-	
		337						174			14			58	125		32	26	

\* T 4 'B' flange must be used to fit spacer shaft.  
 # For detailed information about Taper Bush bore, please refer Taper Bush catalogue.  
 • All dimensions are in mm unless otherwise specified.  
 M is amount by which clamping screw need to be withdrawn to release tyre.  
 J is wrench clearance to allow for tightening and loosening of the bush on thB shaft.

TABLE B: DISTANCE BETWEEN SHAFT ENDS (IDBSE)

Tyre-flex Size T/TO	RST12		RST 16				RST 25						RST 30				RST 35			
	80		100		140		100		140		180		140		180		140		180	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
4	80	100	100	113	140	153														
5			100	116	140	156														
6			100	124	140	164														
7 F							100	107	140	147	180	187								
8 F							100	112	140	152	180	192								
9									140	155	180	195								
10 F													140	151	180	191				
11													140	151	180	192				
12 F																	140	156	180	196
14																	140	153	180	193

- 1) Non STD Spacers are available on request .
- 2) Refer Installation Instructions for Mounting and Dismounting ..
- 3) Available only with taper bore, without taper bush.
- 4) Consult for Max Bore with Square Key.