



Formsprag Clutch

Stieber

TB Wood's

Couplings and Accessories for Cooling Tower Applications





MODEL HSB BACKSTOPPING CLUTCH

Formsprag

HSB (High Speed Backstop) clutches are used on cooling tower fan drives to prevent rotation in the opposite direction from the normal driving direction. When the fan drive is off, wind pressure from other fans or ambient breezes can apply sufficient force to rotate fan blades in the opposite direction.

FORM-FLEX® FLEXIBLE DISC COUPLING

TB Wood's

The **Form-Flex**® exclusive design reduces stress levels in our flex discs and increases misalignment capabilities to ensure longer life in cooling tower installations.

TB Wood's couplings are industry proven and used throughout the world. Form-Flex® disc type couplings attached to any of our TrueTube™ composite tubes, creates a superior designed cooling tower coupling. As an option, for applications 50HP and under, the HD4CS cooling tower coupling is an excellent high misalignment all-composite cooling tower coupling.

Our Form-Flex all metal disc type couplings allow you the option of close coupled or spacer type applications with many options for corrosion resistance. The **Dura-Flex**® coupling is a patented design with an improved shoe-to-element bond and exceptional hydrolytic resisting properties extending its working life. An industry leader in elastomeric type couplings, the **Sure-Flex**® Plus is a no maintenance, dependable coupling not affected by abrasives, dirt or moisture.

- Close couple, spacer and floating shaft designs
- Torque capacity to 3175HP@100RPM
- Reduced maintenance time



TB Wood's has been a proven leader in couplings for the cooling tower industry.



MODEL RSCI BACKSTOPPING CLUTCH

Stieber Clutch

Type RSCI is a centrifugal lift off sprag type freewheel with the inner race rotating. Only the inner race is designed for freewheeling. Primarily designed as a backstop, it can be also used as an overrunning clutch in crawl drives.

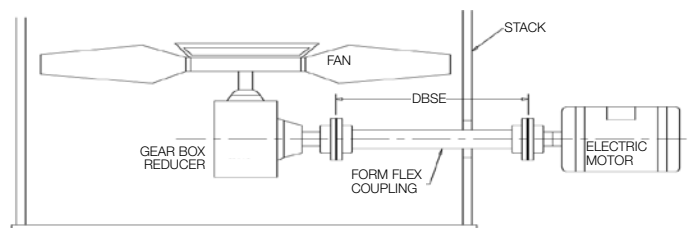


HIGH STRENGTH STAINLESS STEEL FLEX DISC

- High torsional stiffness
- No lubrication required
- No moving parts
- Zero backlash
- Wide Temperature Range

INDUCED DRAFT COOLING TOWERS

Induced draft cooling tower drive systems are usually designed with a motor, gearbox, and fan located at the top of the cooling tower. The atmosphere inside the tower is hot and humid. Placing a motor inside the tower under these conditions can quickly deteriorate its performance. Using a TB Wood's floating shaft coupling, the motor is located on the outside of the stack and away from the corrosive airflow. It spans the gap between the motor and gearbox reducer shaft through various coupling designs to meet your cooling tower application.



TRUE TUBE™

TrueTube composites are high-strength, lightweight torque tubes for long span drive shafts. These tubes are filament wound carbon or glass fiber construction which are oven-cured under precision controlled conditions for consistent quality. All TrueTube composites include our exclusive barrier layer wound into the structure of each tube providing UV protection and giving the TrueTube its unique, smooth appearance, plus protection for the working structure of the tube from damage during handling and installation.

Longer Spans

- Composite couplings span up to 6 meters.
- No high maintenance center support bearings.
- High stiffness-to-weight ratio increasing critical speed.

Lighter Weight

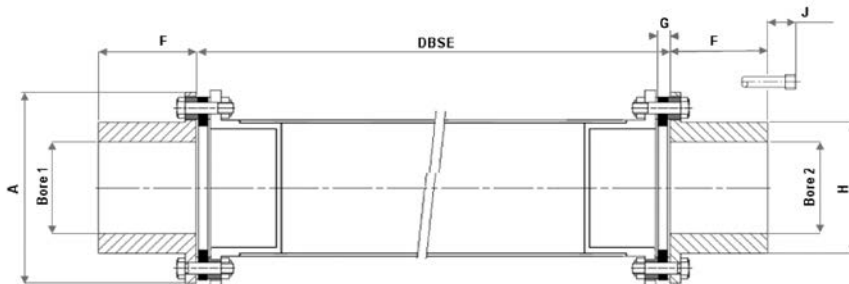
- TrueTube™ drive shafts weigh up to 80% less than comparable steel driveshafts.

Design Flexibility

- May be custom designed to meet your requirements for torsional stiffness, critical speed or torque capacity.
- Can tune torsional or lateral critical speeds out of a machine system.

Quick Selection Guide for Cooling Tower Applications

1800 RPM				Coupling Model	1500 RPM			
DBSE mm	DBSE in	Max Power Kw	Max Power HP		Max Power Kw	Max Power HP	DBSE mm	DBSE in
1829	72	23	31	A520-CS2G	20	26	2007	79
1803	71	40	54	A525-CS2G	34	45	1981	78
2134	84	23	31	A520-CS2R	20	26	2134	84
2108	83	40	54	A525-CS2R	34	35	2108	83
2870	113	74	99	A530-CS3R	62	82	3150	124
3099	122	74	99	A530-CS3B	62	82	3302	130
3302	130	121	162	A535-CS4R	101	135	3607	142
3302	130	195	261	A540-CS4R	162	217	3607	142
3556	140	121	162	A535-CS4B	101	135	3734	147
3556	140	195	261	A540-CS4B	162	217	3734	147
-	-	121	261	A535-CS6BL	101	135	4724	186
3861	152	121	162	A535-CS6R	101	135	3861	152
3912	154	362	486	B558-CS6R	302	405	4267	168
4318	170	121	162	A535-CS6B	101	135	4597	181
4318	170	362	486	B558-CS6B	302	405	4572	180
4420	174	362	486	B558-CS6X	302	405	4572	180
4674	184	121	162	A535-CS8R	101	135	4978	196
-	-	362	486	B558-CS6BL	302	405	4750	187
4648	183	362	486	B558-CS8R	302	405	5004	197
-	-	362	486	B558-CS6XL	302	405	4826	190
4978	196	121	162	A535-CS8B	101	135	4978	196
4953	195	362	486	B558-CS8B	302	405	5004	197
5309	209	362	486	B558-CS10R	302	405	5842	230
5537	218	362	486	B558-CS10B	302	405	6020	237
6020	237	362	486	B558-CS12B	302	405	6020	237



Formflex Coupling for Cooling Tower Applications

Coupling Model	Max DBSE mm at				KW/100 RPM	Max Bore mm		Dimensions mm					Max Rated Torque kNm	Peak Torque kNm
	1800 rpm in	1800 rpm mm	1500 rpm in	1500 rpm mm		Std Hub	Large Hub	A	F	G	H	J		
A520-CS2G	72	1829	79	2007	2.6	42	55	104	34	9	61	58	0.25	0.47
A520-CS2R	84	2134	84	2134	2.6	42	55	104	34	9	61	58	0.25	0.47
A525-CS2G	71	1803	78	1981	4.5	50	65	126	41	11	71	58	0.43	0.86
A525-CS2R	83	2108	83	2108	4.5	50	65	126	41	11	71	58	0.43	0.86
A530-CS3R	113	2870	124	3150	8.2	60	73	143	48	12	84	83	0.78	1.57
A530-CS3B	122	3099	130	3302	8.2	60	73	143	48	12	84	83	0.78	1.57
A535-CS4R	130	3302	142	3607	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS4B	140	3556	147	3734	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS6R	152	3861	152	3861	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS6B	170	4318	181	4597	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS6BL	-	-	186	4724	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS8R	184	4674	196	4978	13.4	73	95	168	57	14	105	108	1.28	2.56
A535-CS8B	196	4978	196	4978	13.4	73	95	168	57	14	105	108	1.28	2.56
A540-CS4R	130	3302	142	3607	21.6	83	102	194	64	15	118	108	2.06	4.13
A540-CS4B	140	3556	147	3734	21.6	83	102	194	64	15	118	108	2.06	4.13
B558-CS6R	154	3912	168	4267	40.3	102	127	228	70	14	138	160	3.84	7.68
B558-CS6B	170	4318	180	4572	40.3	102	127	228	70	14	138	160	3.84	7.68
B558-CS6BL	-	-	187	4750	40.3	102	127	228	70	14	138	160	3.84	7.68
B558-CS6X	174	4420	180	4572	40.3	102	127	228	70	14	138	160	3.84	7.68
B558-CS6XL	-	-	190	4826	40.3	102	127	228	70	14	138	160	3.84	7.68
B558-CS8R	183	4648	197	5004	40.3	102	127	228	70	14	138	211	3.84	7.68
B558-CS8B	195	4953	197	5004	40.3	102	127	228	70	14	138	211	3.84	7.68
B558-CS10R	209	5309	230	5842	40.3	102	127	228	70	14	138	262	3.84	7.68
B558-CS10B	218	5537	237	6020	40.3	102	127	228	70	14	138	262	3.84	7.68



A Global Footprint to Support Customers Around the World

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