

Rexnord Addax Composite Coupling



CUSTOMER-FOCUSED SOLUTIONS. RELIABLE PERFORMANCE. TRUSTED BRANDS.

You want a trusted name when it comes to providing engineered power transmission products that improve productivity and efficiency. Rexnord® provides superior products for your industrial applications world wide. We work closely with you to reduce maintenance costs, eliminate redundant inventories and prevent equipment downtime.

REXNORD ADDAX

Rexnord pioneered and introduced the first advanced composite couplings to the cooling tower industry in 1987. With over 50 000 Rexnord Addax® Composite Couplings installed on every continent around the world over the past 30 years, Rexnord has the most experience of any composite cooling tower manufacturer. The Rexnord Addax Composite Cooling Tower Coupling delivers the best value for the cooling tower industry by providing excellent features such as corrosion resistance, high-misalignment capacity, excellent fatigue resistance, low weight and ease of installation.

Design features include:

- Corrosion-resistant center member, flex element, hub and hardware lowering the cost of ownership and extending service life
- Low weight allowing easy installation
- High strength to weight ratio providing reduced vibration
- Low coefficient of thermal expansion giving dimensional stability and reduced stresses
- Continuous fiber composite spacer flange resulting in infinite fatigue life and low cost of ownership
- Unitized flex element and high misalignment capacity for reduced maintenance

Applications:

- Cooling towers
- Vertical pumps

Industry Compliant:

- ISO 14691
- ATEX II 2G c T5



ATEX II 2GD c T5

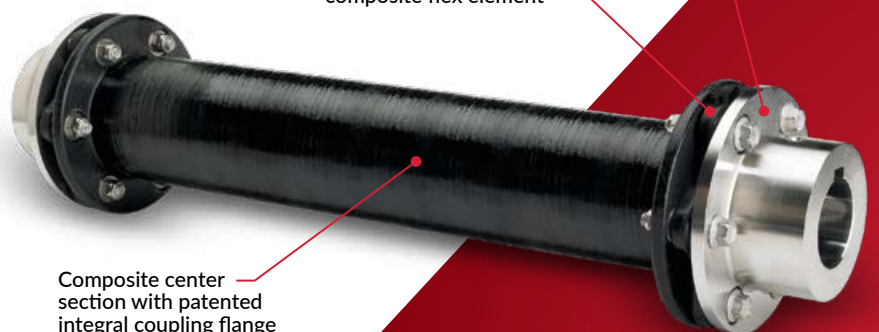
Special design options:

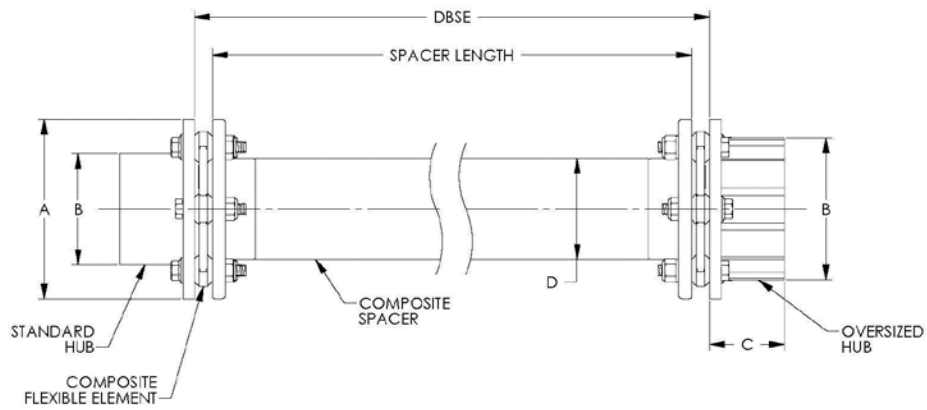
- Brake disc
- Backstop
- Spark resistant

316 stainless steel hubs and hardware

Unitized high strength composite flex element

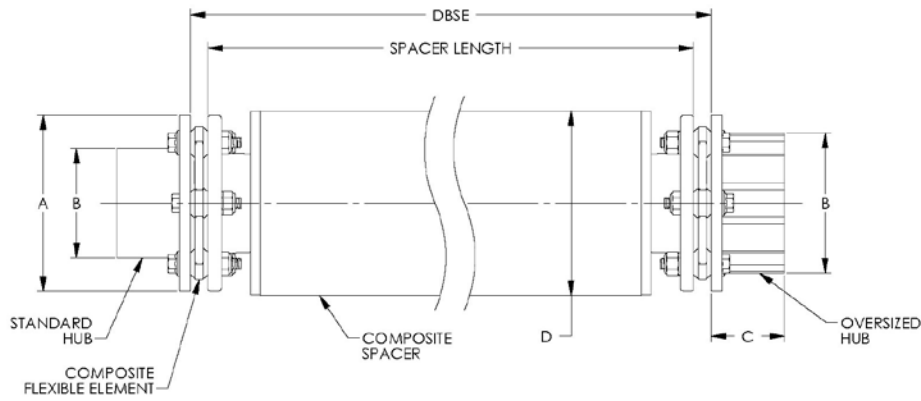
Composite center section with patented integral coupling flange





Model Series	Spacer & Flange Material	Max DBSE @ 1780 RPM @ 1.15SF	Max DBSE @ 1480 RPM @ 1.15SF	Max Bore		A	B		C		D	Min DBSE	Min Bore
				Standard	Oversized		Standard	Oversized	Standard	Oversized			
				(in)	mm	(in)	mm	(in)	mm	(in)	mm	(in)	mm
350.275	LRF	(95) / 2 413	(106) / 2 692	(2,13) / 55	(2,38) / 65	(5,25) / 133	(3,06) / 78	(4) / 102	(1,81) / 46	(2,6) / 66	(2,75) / 70	(5,4) / 137	(0,63) / 16
	LRA	(107) / 2 718	(119) / 3 023										
	LRR	(114) / 2 896	(126) / 3 200										
375.275	LRF	(95) / 2 413	(106) / 2 692	(2,13) / 55	(2,38) / 65	(5,25) / 133	(3,06) / 78	(4) / 102	(1,81) / 46	(2,6) / 66	(2,75) / 70	(5,4) / 137	(0,63) / 16
	LRA	(107) / 2 718	(119) / 3 023										
	LRR	(114) / 2 896	(126) / 3 200										
450.275	LRF	(95) / 2 413	(106) / 2 692	(2,25) / 55	(2,88) / 75	(5,25) / 133	(3,15) / 80	(4) / 102	(1,81) / 46	(2,63) / 67	(2,75) / 70	(5,4) / 137	(0,63) / 16
	LRA	(107) / 2 718	(119) / 3 023										
	LRR	(114) / 2 896	(126) / 3 200										
	LRX	(128) / 3 251	(141) / 3 581										
485.338	LRF	(100) / 2 540	(113) / 2 870	(2,63) / 70	(3,38) / 85	(6,00) / 152	(3,72) / 94	(4,75) / 121	(2,5) / 63,5	(2,75) / 70	(3,38) / 86	(8,0) / 203	(0,87) / 22
	LRA	(116) / 2 946	(127) / 3 226										
	LRR	(127) / 3226	(140) / 3 556										
485.425	LRR	(141) / 3 581	(154) / 3 912	(2,63) / 70	(3,38) / 85	(6,00) / 152	(3,72) / 94	(4,75) / 121	(2,5) / 63,5	(2,75) / 70	(4,25) / 108	(8,0) / 203	(0,87) / 22
	LRX	(154) / 3 912	(169) / 4 293										
485.625	LRR	(170) / 4 318	(189) / 4 800	(2,63) / 70	(3,38) / 85	(6,00) / 152	(3,72) / 94	(4,75) / 121	(2,5) / 63,5	(2,75) / 70	(6,25) / 159	(9,5) / 241	(0,87) / 22
650.425	LRA	(133) / 3 378	(148) / 3 759	(3,13) / 80	(4,01) / 100	(6,75) / 171	(4,25) / 108	(5,15) / 133	(2,56) / 65	(2,75) / 70	(4,25) / 108	(6) / 152	(1,00) / 25
	LRR	(141) / 3 581	(154) / 3 912										
	LRX	(154) / 3 912	(169) / 4 293										
650.625	LRR	(170) / 4 318	(189) / 4 800	(3,13) / 80	(4,01) / 100	(6,75) / 171	(4,25) / 108	(5,15) / 133	(2,56) / 65	(2,75) / 70	(6,25) / 159	(9,5) / 241	(1,00) / 25
	LRX	(186) / 4 725	(208) / 5 283										
650.825	LRR	(193) / 4 902	(215) / 5 461	(3,13) / 80	(4,01) / 100	(6,75) / 171	(4,25) / 108	(5,15) / 133	(2,56) / 65	(2,75) / 70	(8,25) / 210	(9,5) / 241	(1,00) / 25
	LRX	(209) / 5 309	(232) / 5 893										
850.625	LRA	(157) / 3 988	(172) / 4 369	std. short (3,125) / 75 std. Long (4,13) / 105	(5,06) / 130	(9,0) / 229	(5,8) / 147	(7,5) / 191	std. short (2,5) / 63,5 std. Long (3,31) / 84,1	(3,5) / 89	(6,25) / 159	(14,2) / 361	(1,00) / 25
	LRR	(170) / 4 318	(189) / 4 800										
	LRX	(186) / 4 725	(208) / 5 283										
850.825	LRR	(193) / 4 902	(215) / 5 461	std. short (3,125) / 75 std. Long (4,13) / 105	(5,06) / 130	(9,0) / 229	(5,8) / 147	(7,5) / 191	std. short (2,5) / 63,5 std. Long (3,31) / 84,1	(3,5) / 89	(8,25) / 210	(14,2) / 361	(1,00) / 25
	LRX	(209) / 5 309	(232) / 5 893										
850.1025	LRX	(229) / 5 817	(253) / 6 426	std. short (3,125) / 75 std. Long (4,13) / 105	(5,06) / 130	(9,0) / 229	(5,8) / 147	(7,5) / 191	std. short (2,5) / 63,5 std. Long (3,31) / 84,1	(3,5) / 89	(10,25) / 260	(14,2) / 361	(1,00) / 25
850.1275	LRX	(245) / 6 223	(275) / 6 985	std. short (3,125) / 75 std. Long (4,13) / 105	(5,06) / 130	(9,0) / 229	(5,8) / 147	(7,5) / 191	std. short (2,5) / 63,5 std. Long (3,31) / 84,1	(3,5) / 89	(12,75) / 324	(14,2) / 361	(1,00) / 25

LRF = Fiberglass LRA = Amalgamation (carbon fiber & fiberglass) LRR = Standard carbon fiber LRX = Special carbon fiber



Model Series	Spacer & Flange Material	Continuous Torque @ 1.0 SF	Peak Overload Torque	Weight @ Min DBSE	WR ² @ Min DBSE	Weight change per length	WR ² change per length
		(in-lb) / Nm	(in-lb) / Nm	(lbs) / kg	(lb-in ²) / kgm ²	(lb/in) / kg/m	(lb-in ² /in) / kgm ² /m
350.275	LRF	(3 617) / 408	(5 425) / 613	(13,8) / 6,2	(32) / 0,0093	(0,07) / 1,5	(0,13) / 0,0015
	LRA					(0,06) / 1,2	(0,11) / 0,0013
	LRR					(0,06) / 1,1	(0,10) / 0,0012
375.275	LRF	(5 311) / 600	(7 967) / 900	(13,8) / 6,2	(32) / 0,0093	(0,07) / 1,5	(0,13) / 0,0015
	LRA					(0,06) / 1,2	(0,11) / 0,0013
	LRR					(0,06) / 1,1	(0,10) / 0,0012
450.275	LRF	(7 250) / 820	(10 875) / 1 229	(12,9) / 5,9	(32) / 0,0093	(0,07) / 1,5	(0,13) / 0,0015
	LRA					(0,06) / 1,2	(0,11) / 0,0013
	LRR					(0,06) / 1,1	(0,10) / 0,0012
	LRX					(0,06) / 1,2	(0,10) / 0,0012
485.338	LRF	(11 000) / 1 243	(16 500) / 1 864	(23,4) / 10,6	(47) / 0,014	(0,09) / 1,8	(0,24) / 0,0029
	LRA					(0,08) / 1,5	(0,21) / 0,0024
	LRR					(0,07) / 1,4	(0,19) / 0,0022
485.425	LRR	(11 000) / 1 243	(16 500) / 1 864	(24,0) / 10,9	(74) / 0,022	(0,09) / 1,7	(0,38) / 0,0044
	LRX					(0,09) / 1,8	(0,39) / 0,0045
485.625	LRR	(11 000) / 1 243	(16 500) / 1 864	(26,5) / 12,0	(92) / 0,027	(0,13) / 2,6	(1,2) / 0,015
650.425	LRA	(18 275) / 2 065	(27 415) / 3 097	(31,5) / 14,3	(122) / 0,036	(0,10) / 1,9	(0,42) / 0,0049
	LRR					(0,089) / 1,7	(0,38) / 0,0044
	LRX					(0,092) / 1,8	(0,39) / 0,005
650.625	LRR	(18 275) / 2 065	(27 415) / 3 097	(34,4) / 15,6	(141) / 0,041	(0,13) / 2,6	(1,2) / 0,014
	LRX					(0,14) / 2,7	(1,3) / 0,015
650.825	LRR	(18 275) / 2 065	(27 415) / 3 097	(37,9) / 17,2	(194) / 0,056	(0,18) / 3,4	(2,9) / 0,033
	LRX					(0,18) / 3,6	(3,0) / 0,035
850.625	LRA	(36 200) / 4 090	(54 300) / 6 135	(63,6) / 28,8	(440) / 0,130	(0,15) / 2,9	(1,4) / 0,016
	LRR					(0,13) / 2,6	(1,2) / 0,014
	LRX					(0,14) / 2,7	(1,3) / 0,015
850.825	LRR	(36 200) / 4 090	(54 300) / 6 135	(68,5) / 31,0	(512) / 0,15	(0,18) / 3,4	(2,9) / 0,033
	LRX					(0,18) / 3,6	(3,0) / 0,035
850.1025	LRX	(36 200) / 4 090	(54 300) / 6 135	(74,8) / 33,9	(657) / 0,19	(0,23) / 4,4	(5,8) / 0,067
850.1275	LRX	(36 200) / 4 090	(54 300) / 6 135	(78,4) / 35,6	(768) / 0,22	(0,28) / 5,5	(11,3) / 0,13

The standard weight and inertia (WR²) values are at minimum DBSE and standard minimum bore for a complete assembly. To determine the total weight or inertia subtract the minimum DBSE from the total DBSE required and multiply that value times the WT and/or WR² change per length then add that calculated WT or WR² to the minimum DBSE values. Values may vary slightly depending on your actual bore and key size.



SELECTION PROCESS

$$\text{Min. Coupling Design Torque (Nm)} = \frac{\text{kW} * 9549}{\text{rpm}} * \text{Service Factor}$$

- CTI recommends a service factor of 2.0 for cooling tower applications
- Consult general dimension chart for maximum span using 1.15 safety factor
- Consult general dimension chart for maximum bore size

ORDERING INSTRUCTION

		F, A, R, X	Table	Table	Stainless	S=stainless M=monel			
L	R				S				
Longspan	Reinforced	Spacer and Flange Material	Model	Series	Hub Material	Hardware Material	DBSE	Bore 1	Bore 2