Spiderflex

A medium power torsionally flexible coupling combining shock absorbing and misalignment capacity, used in the widest range of industries and applications.

Coupling capacity

- Maximum power @ 100rpm: 33kW
- Maximum torque: 3150Nm

Features and benefits

- Torsionally flexible – shock absorbing, extending machine life
- Maintenance free – minimum number of wearing parts
- Misalignment capabilities allowing flexibility in installation
- Cost effective – offering a low cost product with high quality design
- Dimensionally similar to other spider couplings – interchangeable
- Optional fire retardant anti-static elements for use in flameproof environment
- Taper bush bores available for ease of maintenance
- Compact design – small, with high torque capacity

Standard range comprises

- Shaft to shaft
- Flywheel to shaft
- Taper bush or parallel bore

Applications

- Bulk handling
- Compressors
- Generator sets
- Metal manufacture
- Pumps
- General industrial applications

General details

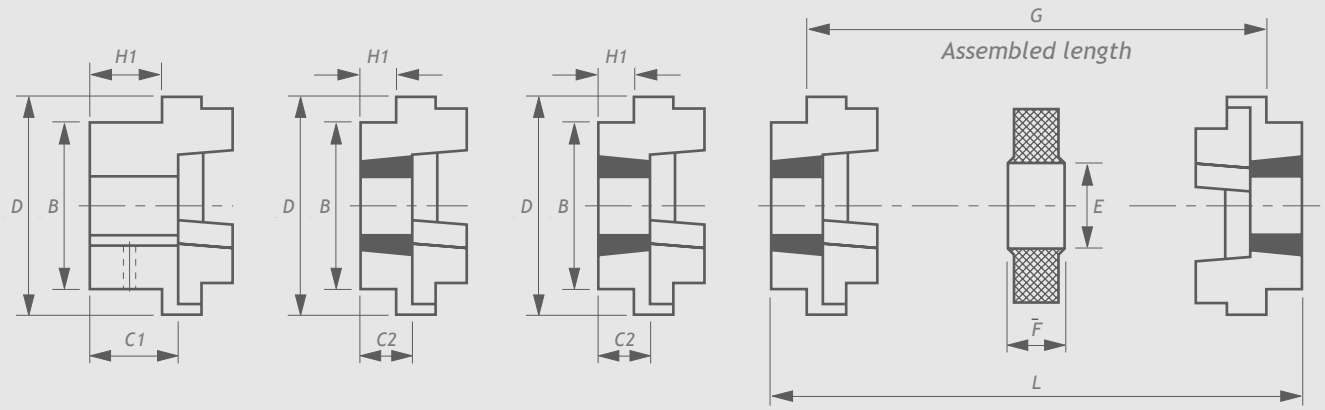
- Cast iron half bodies grade G220
- Standard element shore harness A90 Temp range -30 to +100°C
- FRAS element shore harness A78 Temp range -30 to +95°C

Can be certified for use in potentially explosive atmospheres containing gas or dust, according to ATEX directive 94/9/EC.

The couplings are classified for equipment group II, categories 2 and 3.

Contact Renold for further details.

Spiderflex



Coupling size	Power /100rpm kW	Torque nominal Nm	Speed max rpm	Type B		Type F & H			Max. misalignment		End float mm
				Bore dia		Bush size	Bore		Offset mm	Angular deg	
				Max	Min		Max	Min			
RSC70 # # #	0.33	32	7700	32	0	TB1008	25	9	0.3	0.5	+.2
RSC90 # # #	0.84	80	6300	42	0	TB1108	28	9	0.3	0.5	+.5
RSC110 # # #	1.68	160	5000	55	0	TB1610	42	14	0.3	1	+.6
RSC130 # # #	3.30	315	4100	60	0	TB1610	42	14	0.4	1	+.8
RSC150 # # #	6.28	600	3600	70	0	TB2012	50	14	0.4	1.5	+.9
RSC180 # # #	9.95	950	3000	80	0	TB2517	60	16	0.4	1.5	+1.1
RSC230 # # #	21	2000	2600	100	48	TB3020	75	25	0.5	2	+1.3
RSC280 # # #	33	3150	2200	115	60	TB3525	90	35	0.5	2.5	+1.7

Coupling size	Dimensions									Assembled overall length L		
	B mm	C1 mm	C2 mm	D mm	E mm	F mm	G mm	H1 mm	H2 mm	With half body combinations:		
										BB	FF, FH, HH	FB, HB
RSC70 # # #	61	23.5	23.5	69	31	18	25	20	20.0	65	65	65
RSC90 # # #	70	30.0	23.5	85	32	22.5	30.5	26	19.5	83	70	77
RSC110 # # #	100	45.0	26.5	112	45	29	45	37	18.5	119	82	101
RSC130 # # #	105	55.5	26.5	139	50	36	53	47	18.0	147	89	118
RSC150 # # #	115	60.0	33.5	150	62	40	60	50	23.5	160	107	134
RSC180 # # #	125	70.0	46.4	180	77	49	73	73	34.5	189	142	166
RSC230 # # #	155	90.0	52.5	225	99	59.5	85.5	85.5	39.5	240	164	202
RSC280 # # #	206	105.5	66.5	275	119	74.5	105.5	105.5	51.0	285	207	246

1. At speeds exceeding allowable maximum speed, consult Renold.
2. Both moment of inertia and coupling weight have been calculated assuming fitting of taper bush of medium bore size.
3. For information on torsional stiffness, consult Renold.

Spiderflex

Ordering code

RSC 70 # # #

- Spiderflex
- Size
- Half body type
  - B - Plain bore
  - F - Taper bush
  - H - Taper bush
- Element material
  - S - Standard
  - X - FRAS
- Half body type
  - B - Plain bore
  - F - Taper bush
  - H - Taper bush

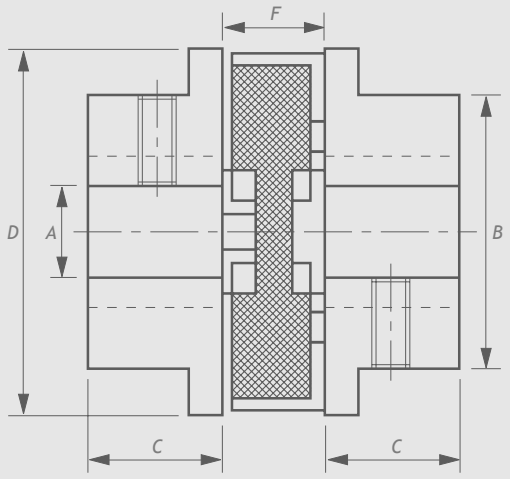
Specials available, eg Shear Pin, Extended Boss, Flywheel Flange, Spacer.
Please contact Renold for details.

Coupling size	Coupling	Coupling Inertia WR^2	
	Mass Kg	Type B KG m^2	Type F&H KG m^2
RSC70	1.00	0.00078	0.00085
RSC90	1.17	0.00108	0.00115
RSC110	5.00	0.00344	0.00400
RSC130	5.46	0.00850	0.00780
RSC150	7.11	0.02112	0.01810
RSC180	16.60	0.04820	0.04340
RSC230	26.00	0.14052	0.12068
RSC280	50.00	0.54790	0.44653

Component Spares

Spider flexible element	Product number	Half body unbored Type B	Product number	Half body taper bored Type F	Product number	Half body taper bored Type H	Product number
RSC70 EL	644907/2	RSC70 B	644907/1	RSC70 F	644907/177	RSC70 H	644907/188
RSC90 EL	644909/2	RSC90 B	644909/1	RSC90 F	644909/177	RSC90 H	644909/188
RSC110 EL	644911/2	RSC110 B	644911/1	RSC110 F	644911/177	RSC110 H	644911/188
RSC130 EL	644913/2	RSC130 B	644913/1	RSC130 F	644913/177	RSC130 H	644913/188
RSC150 EL	644915/2	RSC150 B	644915/1	RSC150 F	644915/177	RSC150 H	644915/188
RSC180 EL	644918/2	RSC180 B	644918/1	RSC180 F	644918/177	RSC180 H	644918/188
RSC230 EL	644923/2	RSC230 B	644923/1	RSC230 F	644923/177	RSC230 H	644923/188
RSC280 EL	644928/2	RSC280 B	644928/1	RSC280 F	644928/177	RSC280 H	644928/188

Spider



Ordering code

S 15 #

Spider

Size

Half body material
C - Cast iron
B - Aluminium bronze

Coupling number	Power /100rpm kW	Torque nominal Nm	Speed max rpm	Bore A		Stock bore mm	Dimensions					Max misalignment		End float mm
				Max mm	Min mm		B mm	C* mm	D mm	F mm	Mass kg	Angular degrees	Offset mm	
S11C	0.025	2.39	11000	14	0	6	28	12	28	8.8	0.12	1°	0.25	0.25
S11B	0.025	2.39	11000	12	0	6	28	12	28	8.8	0.13	1°	0.25	0.25
S15C	0.061	5.83	6500	20	0	12	38	14	38	11.8	0.26	1°	0.25	0.38
S15B	0.061	5.83	6500	20	0	12	38	14	38	11.8	0.27	1°	0.25	0.38
S21C	0.28	26.74	4800	25	0	14	48	21	55	16.2	0.68	1°	0.25	0.51
S21B	0.28	26.74	4800	25	0	N/A	48	21	55	16.2	0.70	1°	0.25	0.51
S30C	0.56	53.5	4800	30	0	19	57	27	78	22.9	1.57	1°	0.25	0.76
S30B	0.56	53.5	4800	30	0	N/A	57	27	78	22.9	1.63	1°	0.25	0.76
S37C	1.12	107	3500	42	0	24	83	36	95	26.2	3.53	1°	0.25	0.89
S37B	1.12	107	3500	42	0	N/A	83	36	95	26.2	3.66	1°	0.25	0.89

Component Spares

Coupling number	Product number pilot bored	Product number unbored	Spider flexible element	Half body pilot bored	Half body solid boss unbored
S11C	644801	644821	644851	644826	644846
S11B	644813	644817	644851	644838	644842
S15C	644802	644822	644852	644827	644847
S15B	644814	644818	644852	644839	644843
S21C	644803	644823	644853	644828	644848
S21B	644815	644819	644853	644840	644844
S30C	644804	644824	644854	644829	644849
S30B	MTO	MTO	644854	MTO	MTO
S37C	644805	644825	644855	644830	644850
S37B	MTO	MTO	644855	MTO	MTO

MTO - Made To Order only - please ask for details.

* To avoid fouling spider, shaft length inside coupling half-body must not exceed this dimension.