CHALLENGE®

FFX Tyre Couplings

FFX Tyre Coupling Data

Coupling Size	Bush Size	Max Bore Metric	Max Bore Inch	A	B	C	E¶	G	Types F & H F	Types F & H D	Type B F	Type B D	Clamping Screw	Weight# (kg)	Inertia# (kgm^2)
040B	–	32	–	104	–	82	11.0	29	–	–	33.0	22	M5	0.8	0.00074
040F	1008	25	1"	104	–	82	11.0	29	33.0	22	–	–	–	0.8	0.00074
040H	1008	25	1"	104	–	82	11.0	29	33.0	22	–	–	–	0.8	0.00074
050B	–	38	–	133	79	100	12.5	38	–	–	45.0	32	M5	1.2	0.00115
050F	1210	32	1.1/4"	133	79	100	12.5	38	38.0	25	–	–	–	1.2	0.00115
050H	1210	32	1.1/4"	133	79	100	12.5	38	38.0	25	–	–	–	1.2	0.00115
060B	–	45	–	165	70	125	16.5	38	–	–	55.0	38	M6	2.0	0.0052
060F	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	–	–	–	2.0	0.0052
060H	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	–	–	–	2.0	0.0052
070B	–	50	–	187	80	144	11.5	–	–	–	47.0	35	M10	3.1	0.009
070F	2012	50	2"	187	80	144	11.5	42	44.0	32	–	–	–	3.1	0.009
070H	1610	42	1.5/8"	187	80	144	11.5	38	42.0	25	–	–	–	3.0	0.009
080B	–	60	–	211	98	167	12.5	–	–	–	55.0	42	M10	4.9	0.018
080F	2517	60	2.1/2"	211	97	167	12.5	48	58.0	45	–	–	–	4.9	0.018
080H	2012	50	2"	211	98	167	12.5	42	45.0	32	–	–	–	4.6	0.017
090B	–	70	–	235	112	188	13.5	–	–	–	63.5	49	M12	7.1	0.032
090F	2517	60	2.1/2"	235	108	188	13.5	48	59.5	45	–	–	–	7.0	0.031
090H	2517	60	2.1/2"	235	108	188	13.5	48	59.5	45	–	–	–	7.0	0.031
100B	–	80	–	254	125	216	13.5	–	–	–	70.5	56	M12	9.9	0.055
100F	3020	75	3"	254	120	216	13.5	55	65.5	51	–	–	–	9.9	0.055
100H	2517	60	2.1/2"	254	113	216	13.5	48	59.5	45	–	–	–	9.4	0.054
110B	–	90	–	279	128	233	12.5	–	–	–	75.5	63	M12	12.5	0.081
110F	3020	75	3"	279	134	233	12.5	55	63.5	51	–	–	–	11.7	0.078
110H	3020	75	3"	279	134	233	12.5	55	63.5	51	–	–	–	11.7	0.078
120B	–	100	–	314	143	264	14.5	–	–	–	84.5	70	M16	16.9	0.137
120F	3525	100	4"	314	140	264	14.5	67	79.5	65	–	–	–	16.5	0.137
120H	3020	75	3"	314	140	264	14.5	55	65.5	51	–	–	–	15.9	0.13
140B	–	130	–	359	178	311	16.0	–	–	–	110.5	94	M20	22.2	0.254
140F	3525	100	4"	359	178	311	16.0	67	81.5	65	–	–	–	22.3	0.255
140H	3525	100	4"	359	178	311	16.0	67	81.5	65	–	–	–	22.3	0.255
160B	–	140	–	402	187	345	15.0	–	–	–	117.0	102	M20	35.8	0.469
160F	4030	115	4.1/2"	402	197	345	15.0	80	92.0	77	–	–	–	32.5	0.38
160H	4030	115	4.1/2"	402	197	345	15.0	80	92.0	77	–	–	–	32.5	0.38
180B	–	150	–	470	200	398	23.0	–	–	–	137.0	114	M20	49.1	0.871
180F	4535	125	5"	470	205	398	23.0	89	112.0	89	–	–	–	42.2	0.847
180H	4535	125	5"	470	205	398	23.0	89	112.0	89	–	–	–	42.2	0.847
200B	–	150	–	508	200	429	24.0	–	–	–	138.0	114	M20	58.2	1.301
200F	4535	125	5"	508	205	429	24.0	89	113.0	89	–	–	–	53.6	1.281
200H	4535	125	5"	508	205	429	24.0	89	113.0	89	–	–	–	53.6	1.281
220B	–	160	–	562	218	474	27.5	–	–	–	154.5	127	M20	79.6	2.142
220F	5040	125	5"	562	223	474	27.5	92	129.5	102	–	–	–	72.0	2.104
220H	5040	125	5"	562	223	474	27.5	92	129.5	102	–	–	–	72.0	2.104
250B	–	190	–	628	254	532	29.5	–	–	–	161.5	132	M20	104.0	3.505

Notes

G = Wrench clearance needed to allow for the tightening or loosening of the bush on the shaft as well as the tyre clamping screws.

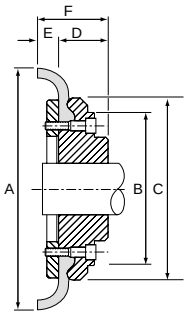
E¶ = Half the distance required between flanges faces

= Weight and inertia figures are for a single flange including mid range bore, clamping ring, screws and half tyre.

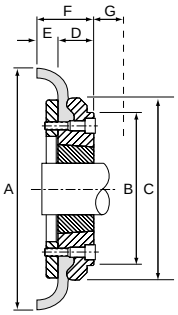
FFX Tyre Couplings

FFX Tyre Coupling Data

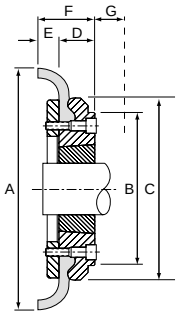
Sizes 040 to 060



Pilot Bore
(B)

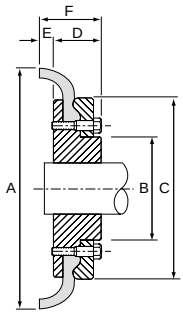


Taper Flange
(F)

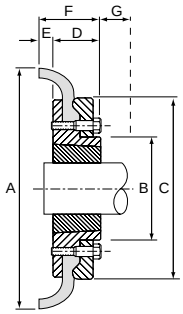


Taper Flange
(H)

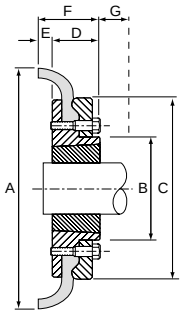
Sizes 070 to 250



Pilot Bore
(B)



Taper Flange
(F)

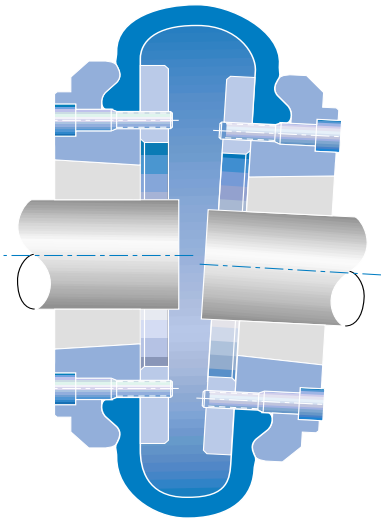


Taper Flange
(H)

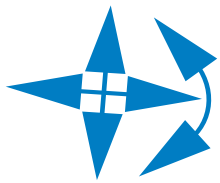
FFX Coupling Installation and Operational Data

Coupling Size	Flange Face Spacing (mm)	Gap Between Tyre Ends (mm)	Nominal Torque (Nm)	Max Speed (rev/min)	Max Par Mis (mm)	Max End Float (mm)	Clamping Screw Size	Clamping Screw Torque (Nm)
40	22	2	24	4500	1.1	1.3	M6	15
50	25	2	66	4500	1.3	1.7	M6	15
60	33	2	127	4000	1.6	2.0	M6	15
70	23	3	250	3600	1.9	2.3	M8	24
80	25	3	375	3100	2.1	2.6	M8	24
90	27	3	500	3000	2.4	3.0	M10	40
100	27	3	675	2600	2.6	3.3	M10	40
110	25	3	875	2300	2.9	3.7	M10	40
120	29	3	1330	2050	3.2	4.0	M12	50
140	32	5	2325	1800	3.7	4.6	M12	55
160	30	5	3770	1600	4.2	5.3	M16	80
180	46	6	6270	1500	4.8	6.0	M16	105
200	48	6	9325	1300	5.3	6.6	M16	120
220	55	6	11600	1100	5.8	7.3	M20	165
250	59	6	14675	1000	6.6	8.2	M20	165

NB. All flexible tyres have an angular misalignment capacity up to 4 deg.



CHALLENGE® FFX Tyre Coupling



Accommodate simultaneous maximum misalignment in all planes.

 All dimensions in millimetres unless otherwise stated.