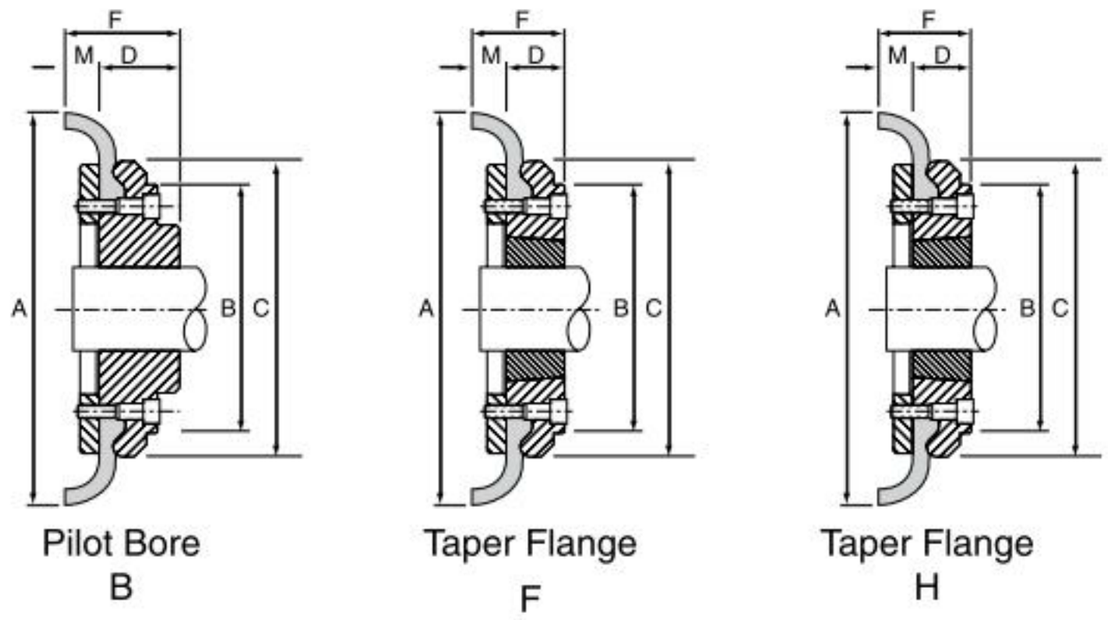
FFX Tyre Couplings

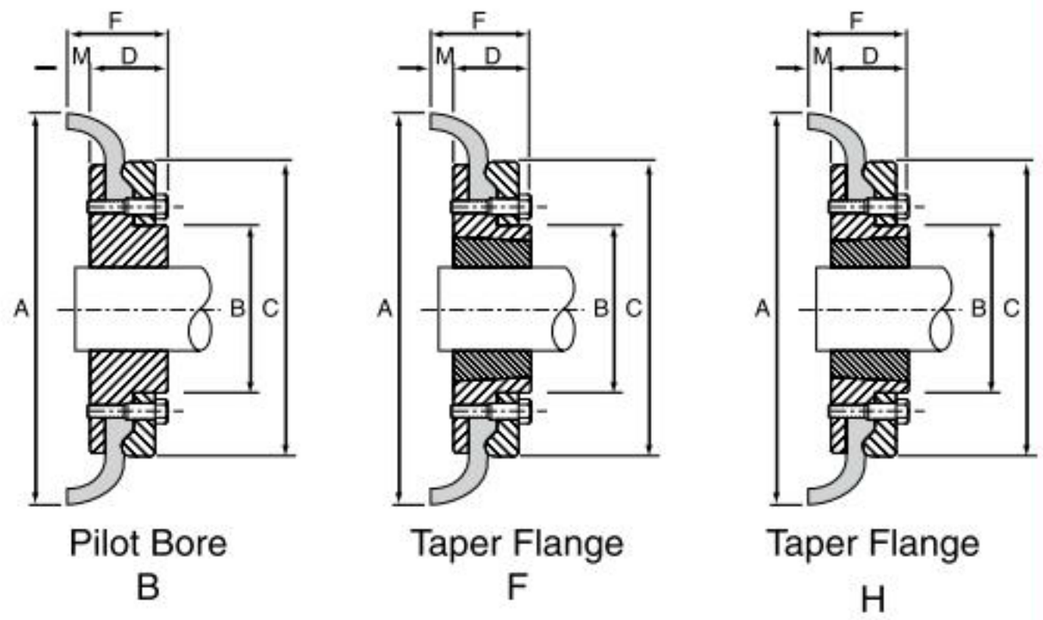
FFX Tyre Coupling Data

Sizes 040 to 060



Pilot Bore B | Taper Flange F | Taper Flange H

Sizes 070 to 250

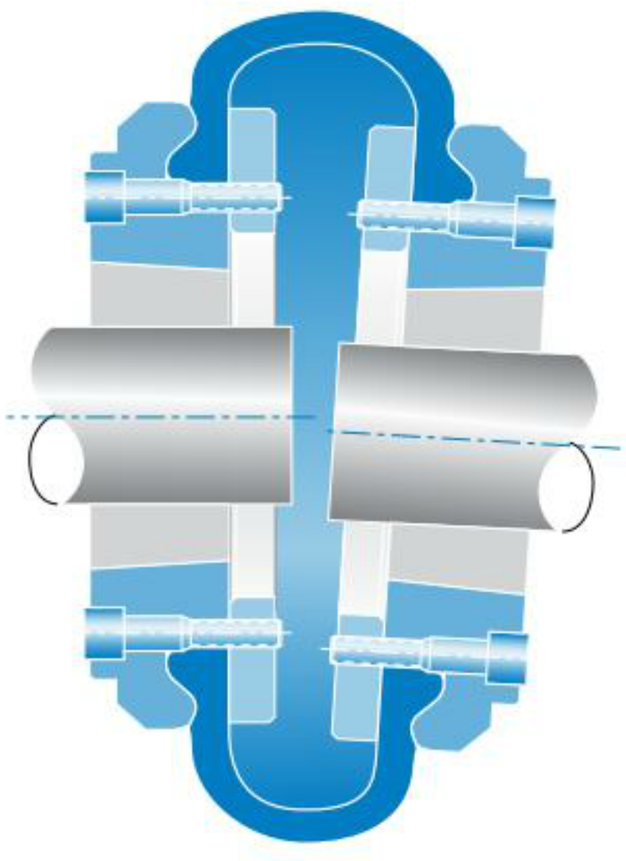


Pilot Bore B | Taper Flange F | Taper Flange H

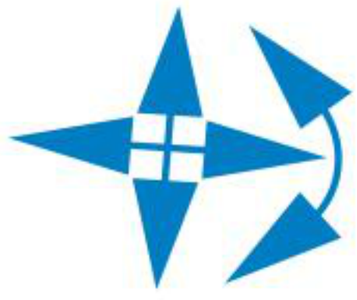
FFX Coupling Installation and Operational Data

Coupling Size	Flange Face Spacing mm	Gap Between Tyre Ends mm	Nominal Torque Nm	Max Speed rev/min	Max Parallel Misalignment 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

*** End Float, alternatively called axial misalignment**



CHALLENGE® FFX Tyre Coupling



Accommodate simultaneous maximum misalignment in all planes.

 All dimensions in millimetres unless otherwise stated.

FFX Tyre Coupling Installation

Installation Instructions

1] Clean all parts

2] Assemble the flanges onto the shafts after connecting the clamping rings loosely to them

3] Move the flanges along the shafts until dimension '2M' is obtained (see Table 3). Ensure there is sufficient gap between the shaft ends to allow for any axial movement

4] Check the alignment in both parallel and angular planes to ensure the shafts are aligned as accurately as possible – the more accurate the alignment, the less the tyre wear. See Table 3 for misalignment values

5] Fit the tyre into the gap between the flange and clamping ring, ensuring the tyre bead is correctly located. When correctly seated, the tyre gap should match the value in Table 4

6] Tighten the clamping ring screws alternately, and gradually, until the correct torque is achieved (see Table 3)

FFX Assembly

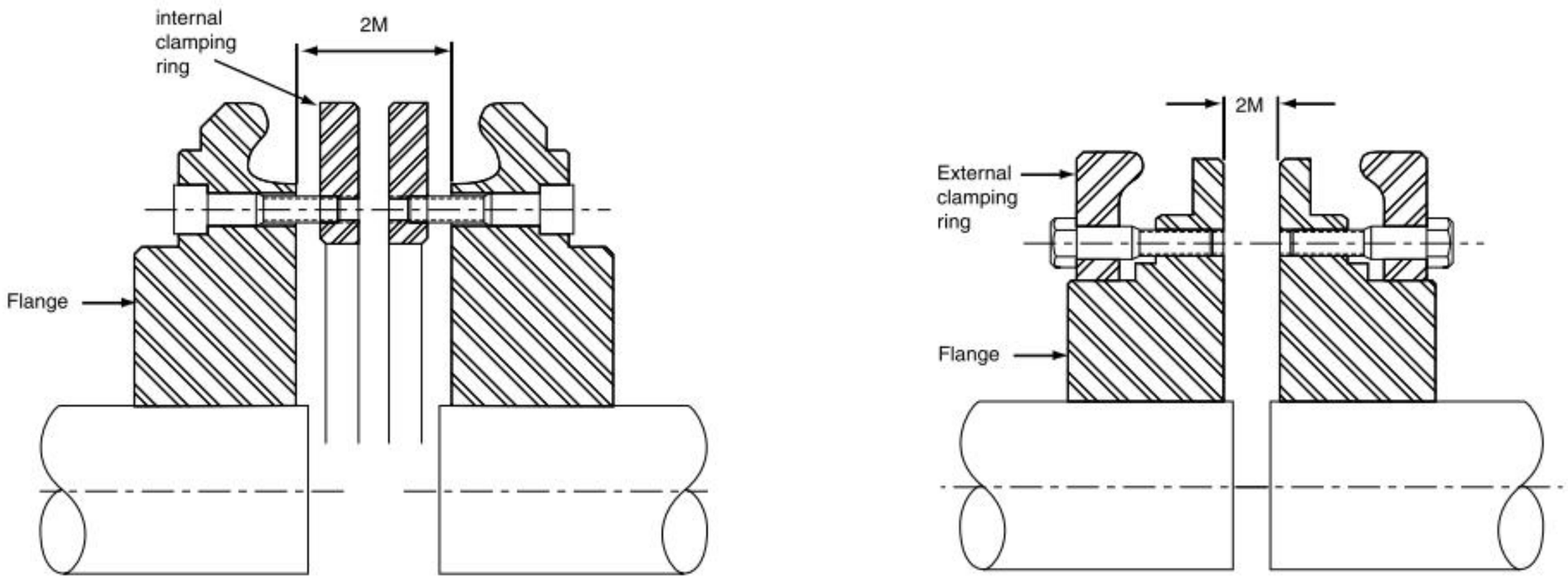


Table 3

FFX Coupling size	040	050	060	070	080	090	100	110	120	140	160	180	200	220	250
Parallel misalignment	1.0	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
Axial (end float) misalignment	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
Angular misalignment	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°	4°
'2M' dimension	22	25	33	23	25	27	27	25	29	32	30	46	48	55	59
Clamping ring screw torque - Nm	15	15	15	24	24	40	40	40	50	55	80	105	120	165	165

Table 4

FFX Coupling Size	040 to 060	070 to 120	140 to 160	180 to 250
Gap between tyre ends	2	3	5	6