



Technical Data Sheet

Tyre Couplings – Flanges & Tyre

Mecaline Tyre couplings can compensate angular, radial and axial misalignment as well as dampen vibration. Flanges are available with F and H taper bush fitting or pilot bore.

Coupling Properties

Flanges are manufactured in GG25 cast Iron
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Tyres from NBR rubber - Temperature range -15°C to + 70°C

Size range

Size	F type flange	H Type flange	Pilot bore	Tyre
F40	✓	✓	✓	✓
F50	✓	✓	✓	✓
F60	✓	✓	✓	✓
F70	✓	✓	✓	✓
F80	✓	✓	✓	✓
F90	✓	✓	✓	✓
F100	✓	✓	✓	✓
F110	✓	✓	✓	✓
F120	✓	✓	✓	✓
F140	✓	✓	✓	✓
F160	✓	✓	✓	✓
F180	✓	✓	✓	✓
F200	✓	✓	✓	✓
F220	✓	✓	✓	✓

Misalignment

Mecaline tyre couplings can compensate for parallel, angular and axial displacement. Parallel misalignment up to 6mm, angular misalignment up to 4°, and end float of up to 8mm.

Maintenance

Since Mecaline Tyre couplings have no moving parts, no lubrication is required. Periodic visual inspection of the tyre is all that is necessary.

Replacing the element

To replace the flexible element simply loosen the clamping screws, remove the tyre and replace with a new tyre. It is not necessary to move the coupling flanges or either driver or driven machine.

Physical Characteristics

Size	Max. Speed (rev/min)	Torque (Nm)		Moment of inertia MR ₂ (kgm ₂)	Torsional Stiffness (NM/°)	Maximum Misalignment (mm)	
		Nominal	Max.			Parallel	End Float +/-
F40	4500	21	64	0.00148	5	1.1	1.3
F50	4500	53	160	0.00349	13	1.3	1.7
F60	4000	106	318	0.01030	26	1.6	2.0
F70	3600	162	487	0.01811	41	1.9	2.3
F80	3100	253	759	0.03679	63	2.1	2.6
F90	2880	365	1096	0.06374	91	2.4	3.0
F100	2600	505	1517	0.11989	126	2.6	3.3
F110	2300	712	2137	0.16012	178	2.9	3.7
F120	2050	1182	3547	0.34302	296	3.2	4.0
F140	1800	1881	5642	0.69452	470	3.7	4.6
F160	1600	3113	9339	1.21767	778	4.2	5.3
F180	1500	5485	16455	2.01800	1371	4.8	6.0
F200	1300	8022	23508	4.03446	1959	5.3	6.6
F220	1100	9932	33125	8.67644	2760	5.8	7.3

Clamping screw torque settings

Coupling Size		F40*	F50*	F60*	F70	F80	F90	F100	F110	F120	F140	F160	F180	F200	F220
M2 (mm)		22	25	33	23	25	27	27	25	29	32	30	46	48	55
Clamping Screw Torque	Nm	15	15	15	24	24	32	32	32	35	35	35	35	35	38

* Hex Socket Cap Head Clamping Screws