

TETRAFLEX

Torque from 160 to 250 N.m.



Torsional flexibility



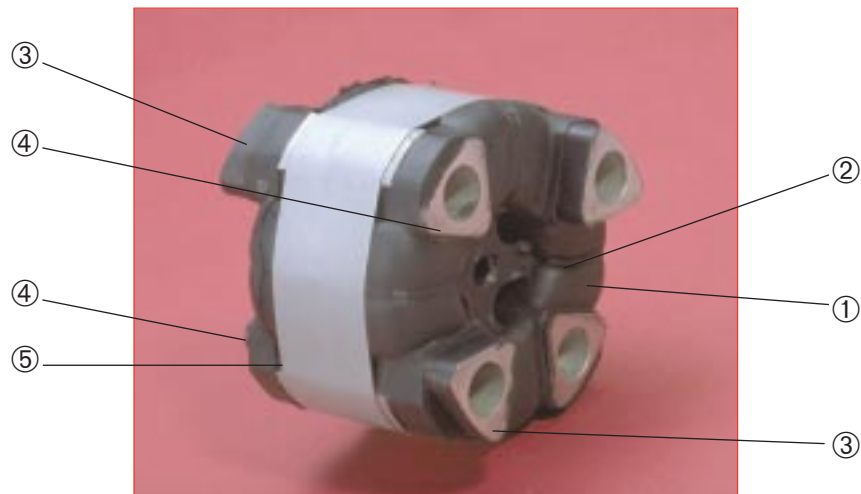
Radial flexibility



Axial flexibility



Conical flexibility



DESCRIPTION

- Flexible element comprising :
 - ① Natural rubber in the form of a cross.
 - ② A floating aluminium star, whose arms are bonded to the rubber.
- Mountings :
 - ③ 2 aluminium bosses, bonded to the rubber, which will be attached to one of the machines.
 - ④ 2 aluminium bosses, bonded to the rubber, which will be attached to the other machine.
 - ⑤ Band for precompressing the rubber before assembly.

2 retaining bars are supplied although not shown in the photo.

OPERATION

The TETRAFLEX coupling is designed with the following features :

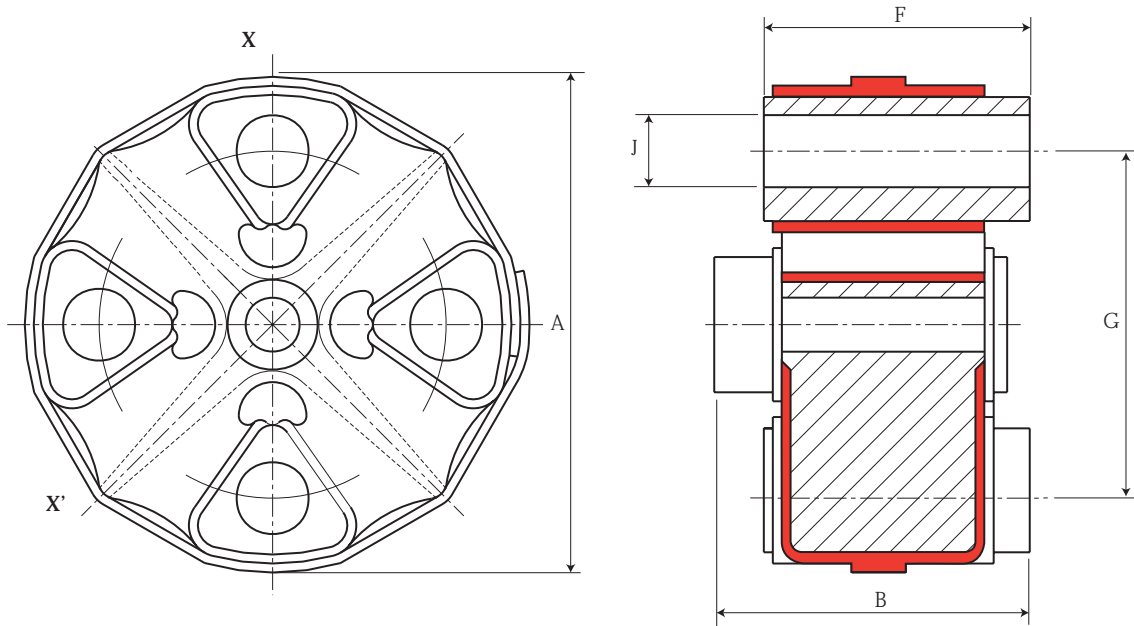
- Binary symmetry which allows considerable conical misalignment to the order of 8°.
- Precompression of the rubber when assembled which limits operation under tension.

Advantages :

The floating star allows :

- Increased torque capacity without reducing the axial flexibility, hence reduced size for a given torque.
- Rotation at higher speeds as the star ensures that the arms are anchored centrifugally.
- The possibility of using a floating shaft (at moderate speed) as the increased radial rigidity provides self-centering for the coupling.

DIMENSIONS



Nominal torque N.m	Max torque N.m	Max speed rpm	A mm	B mm	Reference	G mm	J mm	F mm
160	400	6000 (1)	110	70	630400	77	16	59
250	600	6000 (1)	110	90	630408	77	16	79

(1) for supported driving and driven shafts (1500 rpm with floating shaft).

The maximum torque is considered to be an infrequent start-up torque and is not periodic.

OPERATING CHARACTERISTICS

Nominal torque N.m	Vibrat. coupling N.m	Torsion under NT degrees	STIFFNESS			
			AXIAL daN/mm	RADIAL daN/mm	TORSIONAL m.KN/rad.	CONICAL m.KN/rad.
160	80	8	10	40	1.14	0.143
250	125	8	20	80	1.72	0.344

ASSEMBLY

Method :

- Attach the coupling to the flanges (not supplied), eg using bolts.
- Install the centrifugal retaining bars supplied with the coupling.
- Cut the band.

Compression is ensured by the mountings.

- Replace the band before disassembling.
- Mounting on floating shaft : the maximum conical misalignment allowed at 1500 rpm is :
10° for ref. 630400,
6° for ref. 630408.