TETRAFLEX
Torque from 160 to 250 N.m.

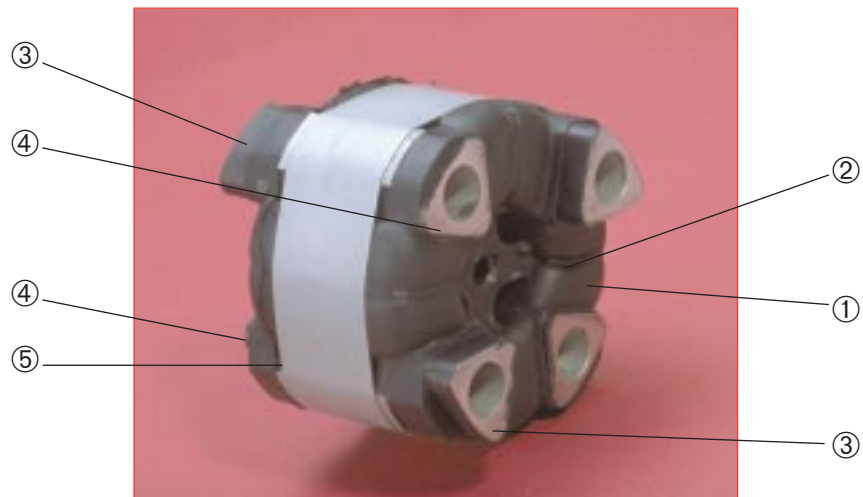|	Torsional flexibility		Radial flexibility		Axial flexibility		Conical flexibility
* *		*		* * *		* * *	

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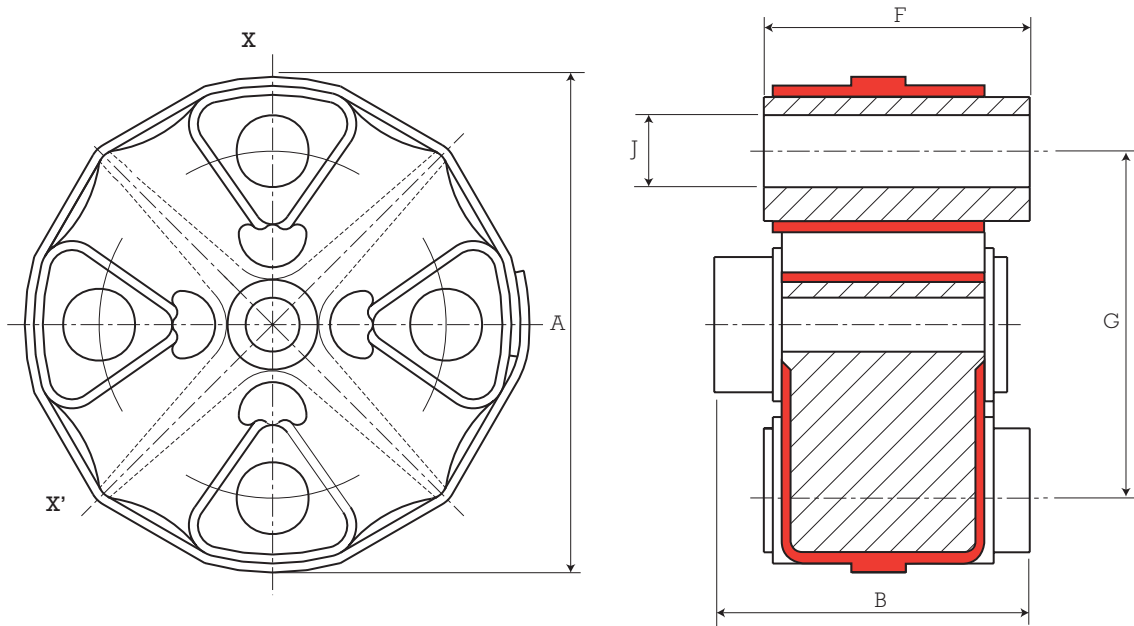
Nominal torque N.m	Max torque N.m	Max speed rpm	A mm	B mm	Reference	G mm	J mm	F mm
160	400	6000 (1)	110	70	**630400**	77	16	59
250	600	6000 (1)	110	90	**630408**	77	16	79

(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.
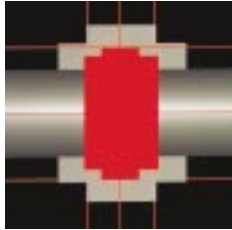
TETRAFLEX
Torque from 1 000 to 8 000 N.m.

* * Torsional flexibility	* * * Radial flexibility	* * Axial flexibility	* * * Conical flexibility

① ②

DESCRIPTION

- Flexible element comprising :
  ① Natural rubber in the form of a cross.
  ② A floating aluminium or steel star, whose arms are bonded to the rubber.

- Mountings :
  2 aluminium bosses, bonded to the rubber which will be attached to one of the machines.
  2 bosses bonded to the rubber which will be attached to the other machine.

OPERATION

The TETRAFLEX coupling is designed with the following features :

- Binary symmetry which allows considerable conical misalignment.
- The rubber is precompressed from manufacture 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.
- A good torque/speed ratio.

DIMENSIONS
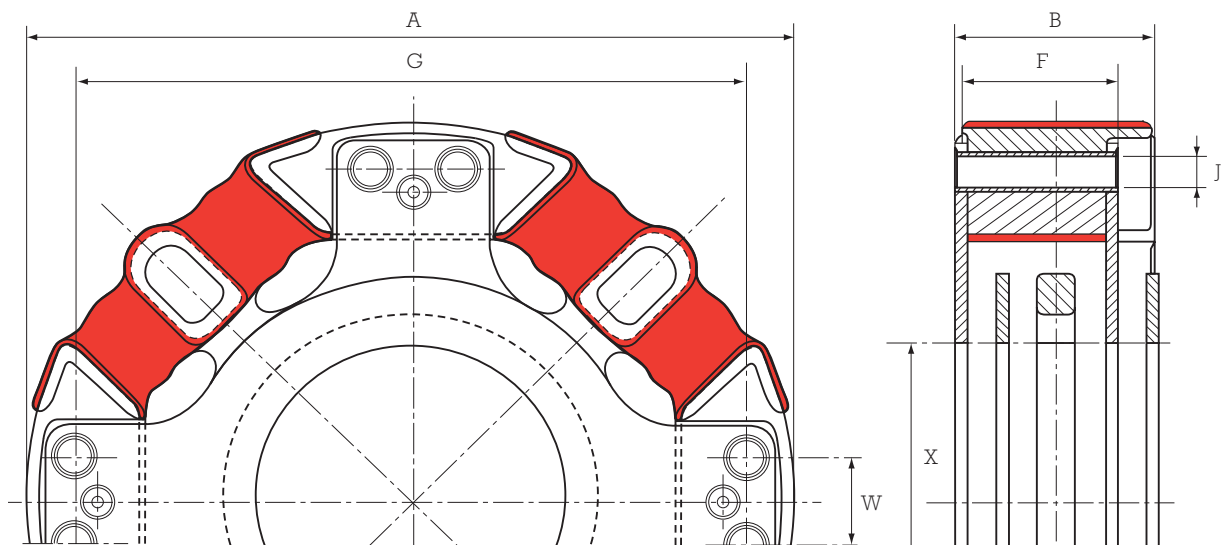
Nominal torque N.m	Max Torque N.m	Max speed rpm	A mm	B mm	Reference	G mm	J mm	F mm	W mm	X mm
2000	3000	3500	350	90	**630802**	253	14.2	90	58	-
2500	3700	3000	400	85	**630419**	352	16	62	55	190
4000	6000	3000	408	108	**630470**	358	17	86	48	170
6000	9000	3000	420	130	**630420**	350	18	88	50	185

1 Nm ≠ 0.1 mkg.

The maximum torque is considered to be a dynamic infrequent torque and of short duration.

OPERATING CHARACTERISTICS

Nominal torque N.m	Vribatory coupling N.m	Torsion under NT degrees	STIFFNESS		
			AXIAL daN/mm	RADIAL daN/mm	TORSIONAL m.KN/rad.
2000	1000	7	10	44	17
2500	1250	8	13	40	18
4000	2000	8	21	72	29
6000	3000	9	26	86	38

1 Nm ≠ 0.1 mkg

ASSEMBLY

Can be mounted on units that are badly misaligned.
These couplings must not be mounted on floating shafts.