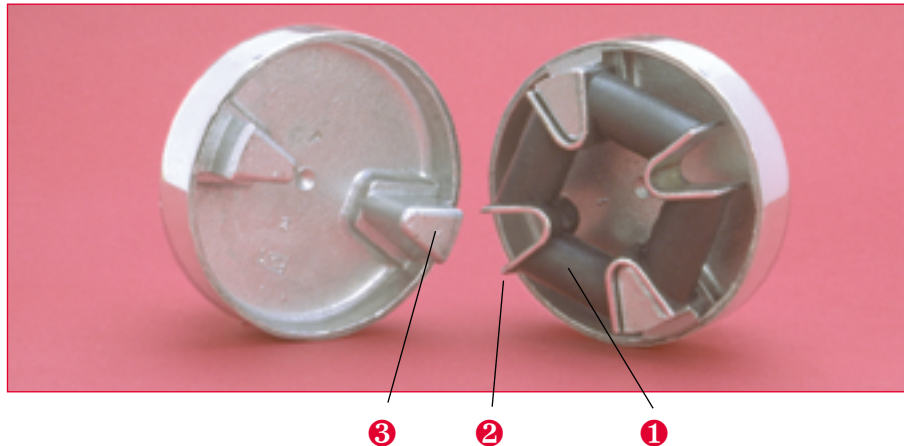


IV - DATA SHEETS



MINIFLEX®

*** Torsional flexibility *** Radial flexibility Push fit Axial flexibility ** Conical flexibility



DESCRIPTION

- Flexible element :
 - 1 Natural rubber block bonded to.
 - 2 V-shaped metal armatures.
- Flange : aluminium or cast-iron :
 - 3 DRIVE-SEGMENT

Operation

The MINIFLEX coupling is designed with the following features :

- Push fit assembly.
- Compact, smooth cylindrical shape without protrusions.
- The flexible element is precompressed during assembly, which extends the range of operating conditions where the rubber is not subject to tension.

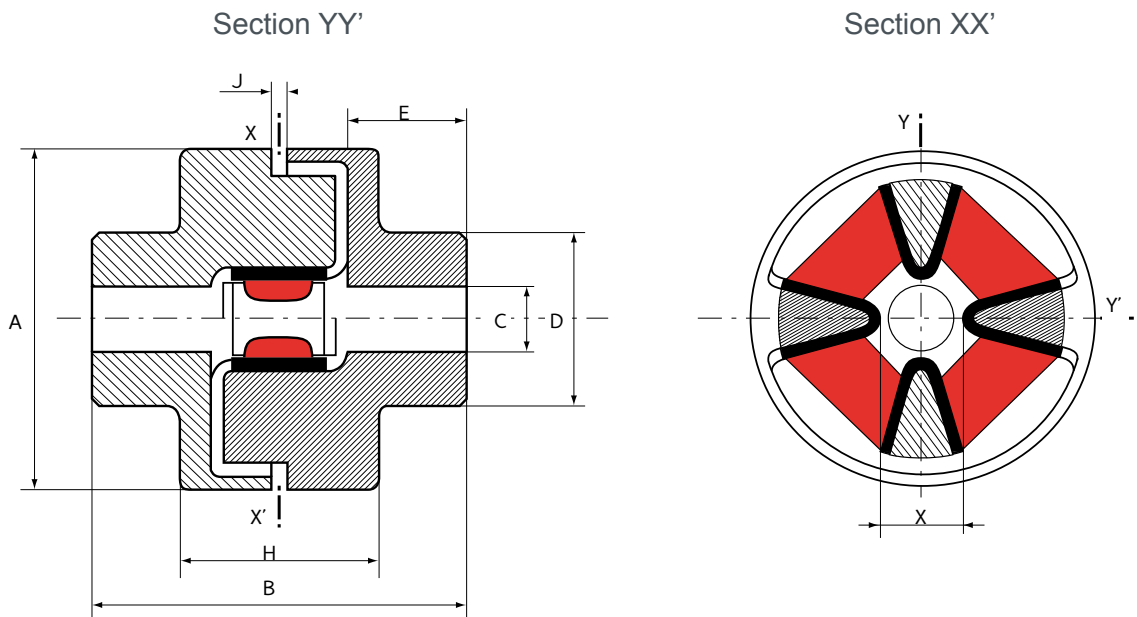
Advantages :

- Highly effective attenuation of cyclic irregularities and peaks in the torque.
- Exceptionally long-life ensured by precompressing the flexible element.
- Tolerance to large misalignment: avoids the need for precise alignment of the machines to be coupled.

Recommendation :

- It is recommended that the coupling should not be subjected to axial tension which might cause the flexible element to slip from the drive segment on the flange.

DIMENSIONS



Flanges supplied unbored

| | Nominal torque (N.m) | Max torque (N.m) | Max speed (rpm) | Max hole C (mm) | A (mm) | B (mm) | D (mm) | E (mm) | Reference | H (mm) | J (mm) | X (mm) | Weight (kg) |
|-------------------|----------------------|------------------|-----------------|-----------------|--------|--------|--------|--------|---------------|--------|--------|--------|-------------|
| ALUMINIUM FLANGES | 2.5 | 5 | 10,000 | 14 | 45 | 41 | 28 | 14 | 633040 | 21 | 2 | 14 | 0.10 |
| | 10 | 20 | 9,000 | 19 | 58 | 61 | 36 | 20 | 633010 | 31 | 2 | 16 | 0.26 |
| | 20 | 40 | 7,000 | 28 | 80 | 88 | 48 | 30 | 633020 | 40 | 4 | 28 | 0.68 |
| CAST IRON FLANGES | 2.5 | 5 | 10,000 | 14 | 45 | 41 | 28 | 14 | 633041 | 21 | 2 | 14 | 0.25 |
| | 10 | 20 | 9,000 | 28 | 58 | 61 | 42 | 20 | 633039 | 31 | 2 | 16 | 0.6 |
| | 20 | 40 | 7,000 | 42 | 84 | 88 | 63 | 30 | 633038 | 40 | 4 | 28 | 1.8 |
| | 40 | 80 | 4,000 | 55 | 118 | 116 | 82 | 40 | 633044 | 51 | 6 | 38 | 4.5 |
| | 60 | 120 | 4,000 | 55 | 118 | 120 | 82 | 40 | 633047 | 55 | 10 | 38 | 4.5 |

1 N.m ≈ 0.1 mkg

Please see current price list for availability of items.

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

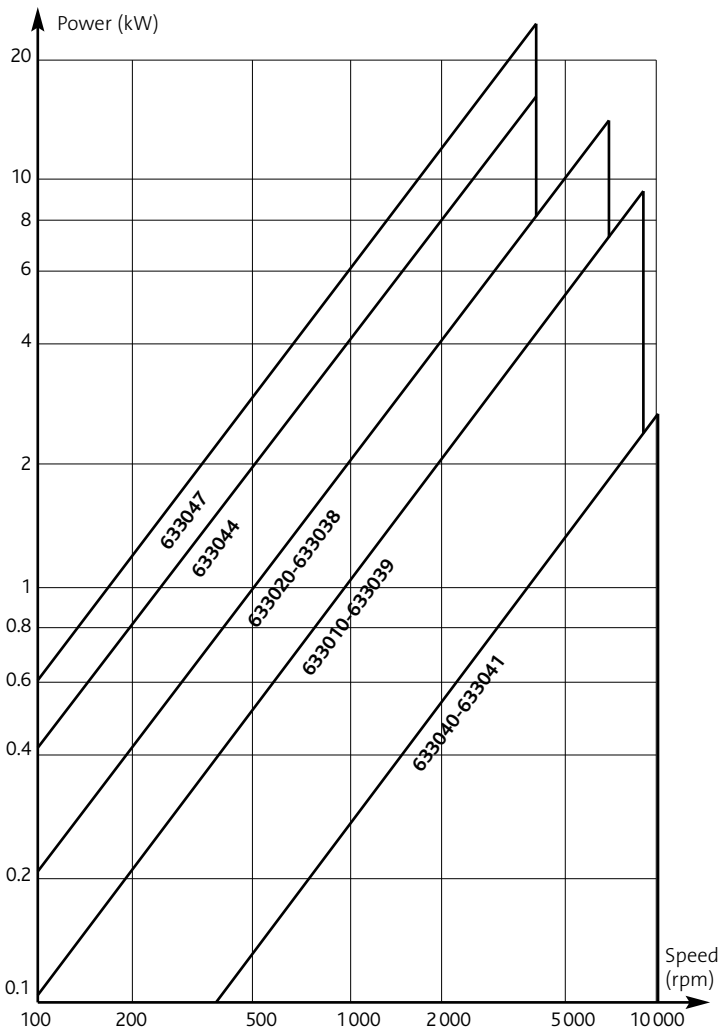
PARTS LIST

| Coupling reference | Flexible element reference | Qty | Flange reference | Qty |
|--------------------|----------------------------|-----|------------------|-----|
| 633010 | 633510 | 1 | 321521 | 2 |
| 633020 | 633520 | 1 | 321531 | 2 |
| 633038 | 633520 | 1 | 321534 | 2 |
| 633039 | 633510 | 1 | 321503 | 2 |

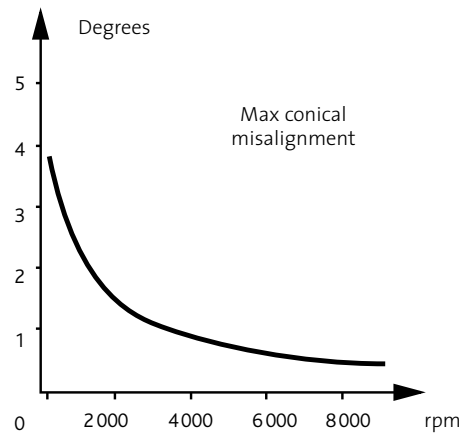
| Coupling reference | Flexible element reference | Qty | Flange reference | Qty |
|--------------------|----------------------------|-----|------------------|-----|
| 633040 | 633501 | 1 | 321511 | 2 |
| 633041 | 633501 | 1 | 321501 | 2 |
| 633044 | 633540 | 1 | 321535 | 2 |
| 633047 | 633640 | 1 | 321535 | 2 |

OPERATING LIMITS

POWER RANGE



CONICAL MISALIGNMENT



RADIAL MISALIGNMENT

| Nominal torque N.m | Radial misalignment at 1,500 rpm |
|--------------------|----------------------------------|
| 2.5 | 0.15 mm |
| 10 | 0.25 mm |
| 20 | 0.50 mm |
| 40 | 1.00 mm |
| 60 | 1.00 mm |

OPERATING CHARACTERISTICS

| Nominal torque (N.m) | Vibrat. coupling (N.m) | Torsion under NT (degrees) | STIFFNESS | | | |
|----------------------|------------------------|----------------------------|---------------|-----------------|--------------------|------------------|
| | | | AXIA (daN/mm) | RADIAL (daN/mm) | TORSIONAL (daN/mm) | CONICAL (daN/mm) |
| 2.5 | 1.2 | 28 | 0.30 | 2 | 0.004 | 0.005 |
| 10 | 5 | 28 | 1.50 | 5 | 0.020 | 0.090 |
| 20 | 10 | 24 | 1.25 | 7 | 0.045 | 0.090 |
| 40 | 20 | 18 | 2.0 | 8 | 0.126 | 0.022 |
| 60 | 30 | 16 | 4.5 | 12 | 0.214 | 0.034 |

1 N.m ≈ 0.1 mkg

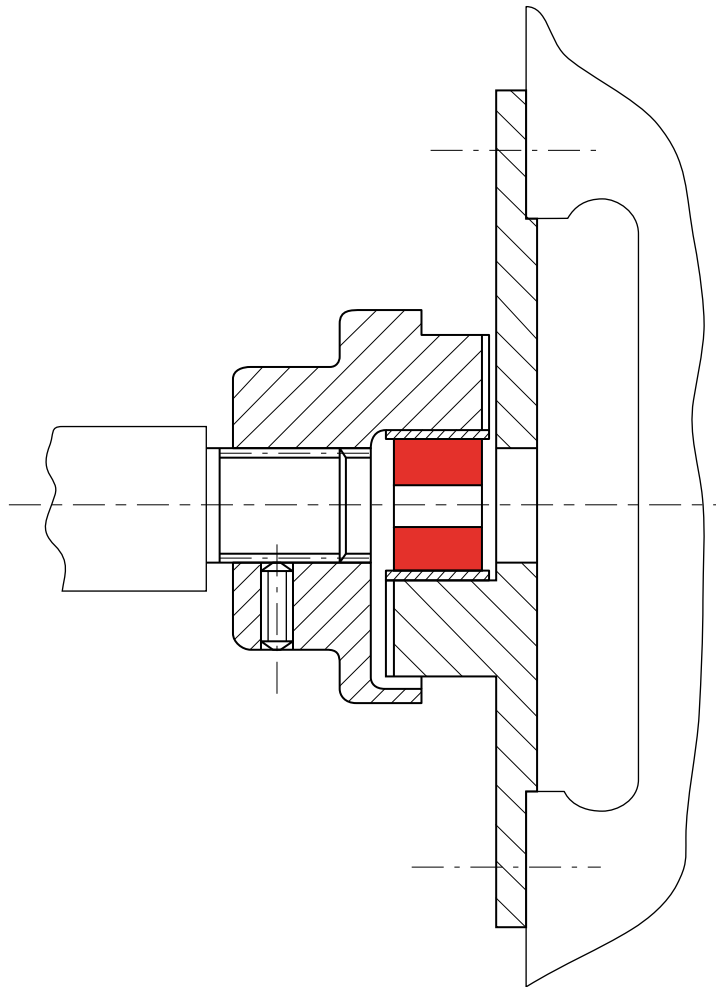
Please see current price list for availability of items.

ASSEMBLY

The coupling is assembled and disassembled axially which entails moving one of the machines. This procedure is not difficult and can be done quickly, as at least one of the machines being coupled is not heavy.

Method :

- Fit an opposing pair of armatures of the flexible element half-way onto the drive segments of one flange.
- Position the second flange.
- Push the two flanges together to engage the armatures of the flexible element.
- Release.



Example : electric motor/pump coupling mounted on fly wheel and grooved shaft.