



VIBRATION CONTROL SYSTEMS

ROTOFLEX® COUPLINGS

**For Motor Vehicle Propeller Shafts · Half Shafts
Steering Columns · Industrial Drives, etc.**

Accommodates large angular and axial displacements with minimum resistance.

Reduces torsional vibration and noise.

Absorbs torque fluctuations.

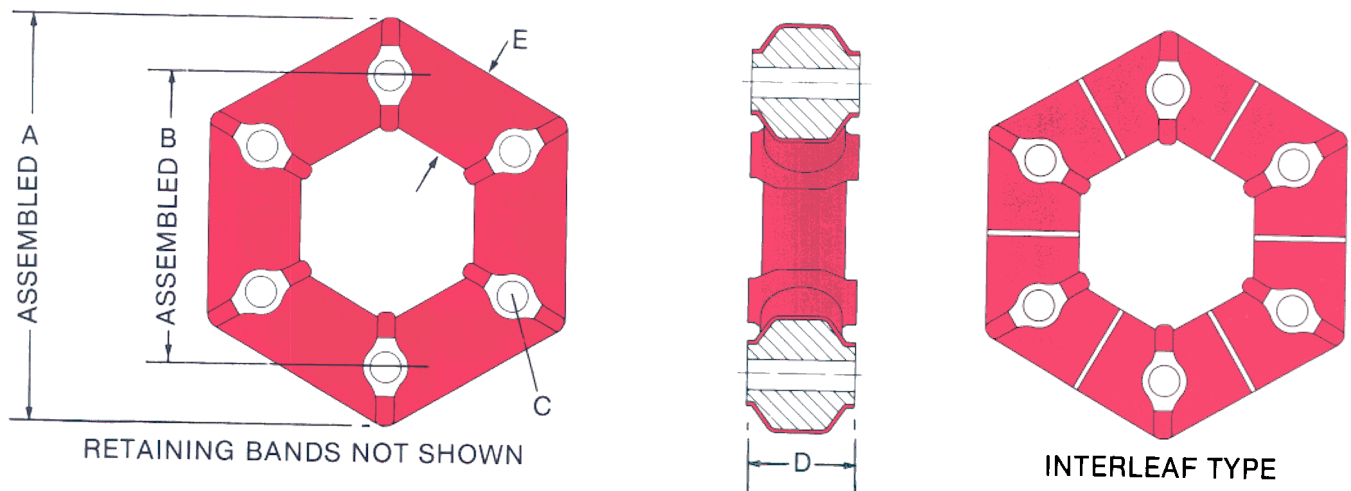
Replaces mechanical joints, eliminating lubrication and metal-to-metal wear.

No servicing required.

Unaffected by dust, grit or moisture.



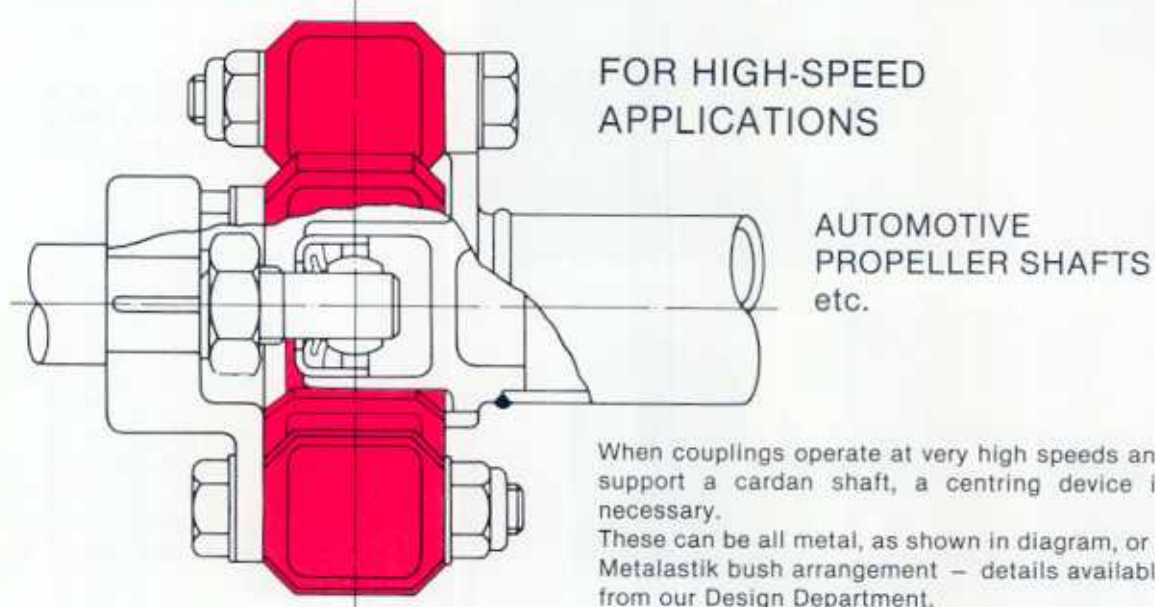
The Metalastik Rotoflex Coupling consists of a regular polygon of rubber with metal inserts bonded in position. It can have 4, 6 or 8 sides. After moulding, the rubber elements in the coupling are compressed by the fitting of a steel retaining band. This important design feature ensures maximum fatigue life. The retaining band is discarded after assembly. Metal interleaves bonded into the rubber elements provide increased torque capacity when required. Rotoflex couplings have proved highly successful for motor car propeller and half-shaft applications for auxiliary drives on road vehicles and for many industrial drives.



| PART No. | | A OVERALL DIAMETER (ASSEMBLED) | B P.C.D. OF BOLT CENTRES (ASSEMBLED) | C DIAMETER OF FIXING HOLES | D WIDTH ACROSS METAL FACES | E DIAMETER OF RUBBER CROSS SECTION |
|-----------|------|---|---|----------------------------------|----------------------------------|---|
| 21/555/1 | mm. | 91 | 65 | 8 | 28 | 22 |
| | ins. | 3.58 | 2.58 | .32 | 1.10 | .87 |
| 21/1026/1 | mm. | 117 | 85 | 10 | 32 | 27 |
| | ins. | 4.61 | 3.35 | .39 | 1.26 | 1.06 |
| 21/892/1 | mm. | 137 | 96 | 11 | 46 | 33 SQUARE |
| | ins. | 5.38 | 3.78 | .45 | 1.83 | 1.3 SQUARE |
| 21/932/1 | mm. | 162 | 113 | 13 | 47 | 37 x 42 |
| | ins. | 6.38 | 4.44 | .52 | 1.84 | 1.44 x 1.66 |
| 21/967/1 | mm. | 137 | 96 | 11 | 46 | 33 SQUARE |
| | ins. | 5.38 | 3.78 | .45 | 1.83 | 1.3 SQUARE |
| 21/979/1 | mm. | 162 | 113 | 13 | 47 | 37 x 42 |
| | ins. | 6.38 | 4.44 | .52 | 1.84 | 1.44 x 1.66 |
| 21/924/1 | mm. | 187 | 133 | 16 | 57 | 44 |
| | ins. | 7.38 | 5.25 | .64 | 2.25 | 1.75 |
| 21/524/1 | mm. | 234 | 170 | 20 | 62 | 50 |
| | ins. | 9.21 | 6.69 | .79 | 2.44 | 1.97 |
| 21/933/1 | mm. | 187 | 133 | 16 | 70 | 44 x 57 |
| | ins. | 7.38 | 5.25 | .64 | 2.75 | 1.75 x 2.25 |
| 21/525/1 | mm. | 254 | 186 | 20 | 68 | 56 |
| | ins. | 10.00 | 7.32 | .79 | 2.68 | 2.20 |
| 21/526/1 | mm. | 281 | 210 | 20 | 78 | 60 |
| | ins. | 11.06 | 8.27 | .79 | 3.07 | 2.36 |

Part Nos. 21/967/1 and 21/979/1 have interleaves

Part No. 21/526/1 has 8 rubber elements.

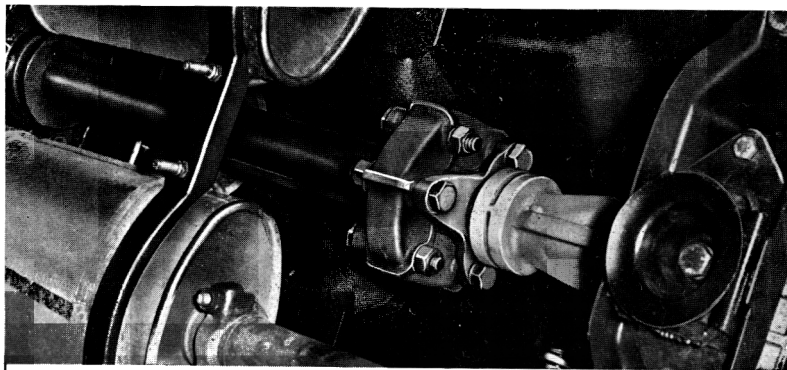


Our engineers will be pleased to advise on any application on receipt of the following – torque, speed and misalignment.

| PART No. | TORQUE | | | | TORSIONAL STIFFNESS Nm./deg.lb.ft./deg. | AXIAL STIFFNESS | | NORMAL CONTINUOUS AXIAL DEFLECTION | | NORMAL CONTINUOUS CARDAN DEFLECTION degrees |
|-----------|--------|--------|------|--------|--|-----------------|--------|------------------------------------|------|--|
| | Nm. | lb.ft. | Nm. | lb.ft. | | kN/m. | lb.in. | mm. | ins. | |
| 21/555/1 | 40 | | 100 | | 5,4 | 55 | | 2,54 | | 5 |
| | 30 | | 75 | | 4 | 310 | | 0·10 | | |
| 21/1026/1 | 80 | | 200 | | 10,8 | 60 | | 4,06 | | 5 |
| | 60 | | 145 | | 8 | 345 | | 0·16 | | |
| 21/892/1 | 190 | | 460 | | 27 | 115 | | 5,08 | | 5 |
| | 140 | | 340 | | 20 | 650 | | 0·20 | | |
| 21/932/1 | 240 | | 600 | | 32 | 105 | | 6,35 | | 5 |
| | 180 | | 440 | | 24 | 590 | | 0·25 | | |
| 21/967/1 | 280 | | 680 | | 37 | 115 | | 5,08 | | 5 |
| | 210 | | 500 | | 27 | 650 | | 0·20 | | |
| 21/979/1 | 340 | | 830 | | 45 | 105 | | 6,35 | | 5 |
| | 250 | | 610 | | 33 | 590 | | 0·25 | | |
| 21/924/1 | 450 | | 1080 | | 65 | 160 | | 7,62 | | 5 |
| | 330 | | 800 | | 48 | 890 | | 0·30 | | |
| 21/524/1 | 550 | | 1400 | | 65 | 80 | | 8,89 | | 5 |
| | 405 | | 1030 | | 48 | 450 | | 0·35 | | |
| 21/933/1 | 570 | | 1360 | | 75 | 255 | | 3,81 | | 3 |
| | 420 | | 1000 | | 55 | 1450 | | 0·15 | | |
| 21/525/1 | 800 | | 1990 | | 102 | 105 | | 9,40 | | 5 |
| | 590 | | 1470 | | 75 | 600 | | 0·37 | | |
| 21/526/1 | 1190 | | 2980 | | 190 | 175 | | 7,62 | | 3 |
| | 880 | | 2200 | | 140 | 1000 | | 0·30 | | |

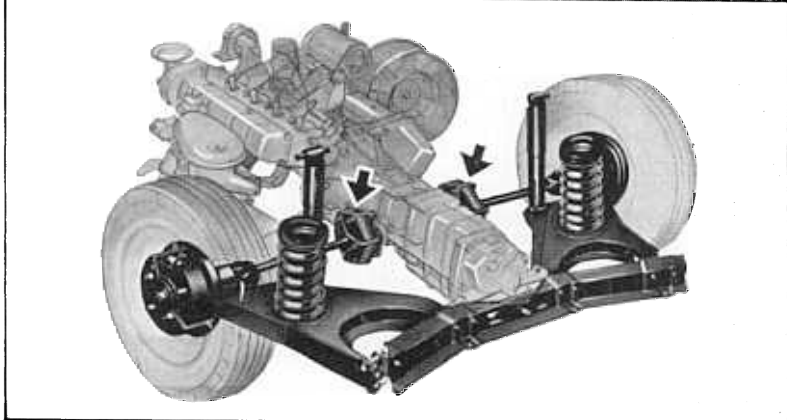
Larger continuous cardan deflections can be accommodated in certain applications. For shock and bump loads increase the above figures by a factor of 3.

The couplings listed will cater for running speeds up to 8,000 r.p.m. for the smallest size, and up to 2,000 r.p.m. for the largest size.



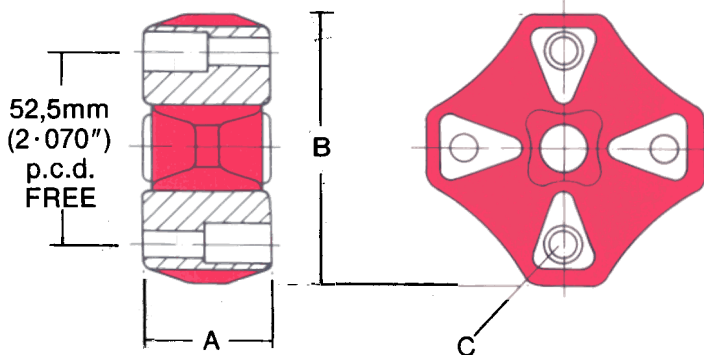
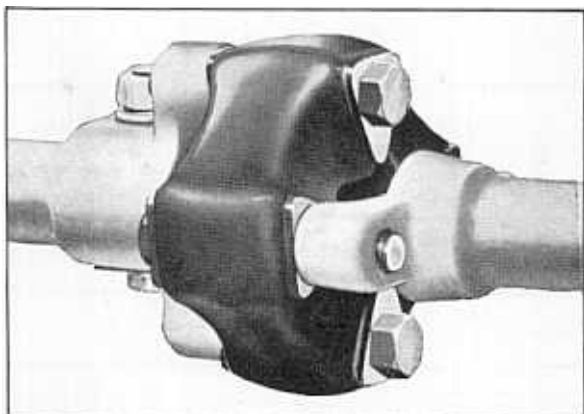
Rotoflex couplings provide torsional and axial flexibility in the drive shaft system.

When applied to motor-car propeller shafts a centring device is necessary. See diagram on page 3.



Accommodating axial as well as universal movements, Rotoflex couplings reduce loads on gear-box casing and bearings and obviate the need for sliding splines. Their flexibility promotes a smooth drive and helps to reduce noise.

ROTOFLEX STEERING COLUMN COUPLINGS



Assembled on P.C.D. 49 mm. (1.937")

| PART No. | | A | B | C | MAXIMUM ANGULAR MISALIGNMENT degrees | TORSIONAL STIFFNESS | | AXIAL STIFFNESS | |
|----------|------|-------|-------|---------|---|------------------------|-------------|--------------------|--------|
| | | | | | | Nm./deg. | lb.ft./deg. | kN/m. | lb.in. |
| 21/568/1 | mm. | 33,27 | 73 | C/BORED | 10° | 4,3 | | 150 | |
| | ins. | 1.312 | 2.875 | | | 3.2 | | 860 | |
| 21/1014 | mm. | 33,27 | 73 | PLAIN | 10° | 4,3 | | 150 | |
| | ins. | 1.312 | 2.875 | | | 3.2 | | 860 | |
| 21/940/1 | mm. | 25,40 | 70,4 | KEYED | 15° | 3,1 | | 105 | |
| | ins. | 1.00 | 2.77 | | | 2.3 | | 600 | |

Part No. 21/940/1 has a retaining band

METALASTIK

VIBRATION CONTROL SYSTEMS

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The Metalastik product range is subject to development which may result in amendment or withdrawal of the data provided in this literature.

Product performance information given is calculated nominal static data which must be verified by adequate testing by the buyer in the configuration in which the components are to be used. If incorrectly used danger or damage may result.

For any proposed application additional free technical assistance will be provided on request.

The buyer shall take all reasonable measures to eliminate or reduce any risk to health or safety which may arise from use of the goods. Product data sheets providing information in accordance with Section 6 of the U.K. Health & Safety at Work Act 1974 are available upon request.