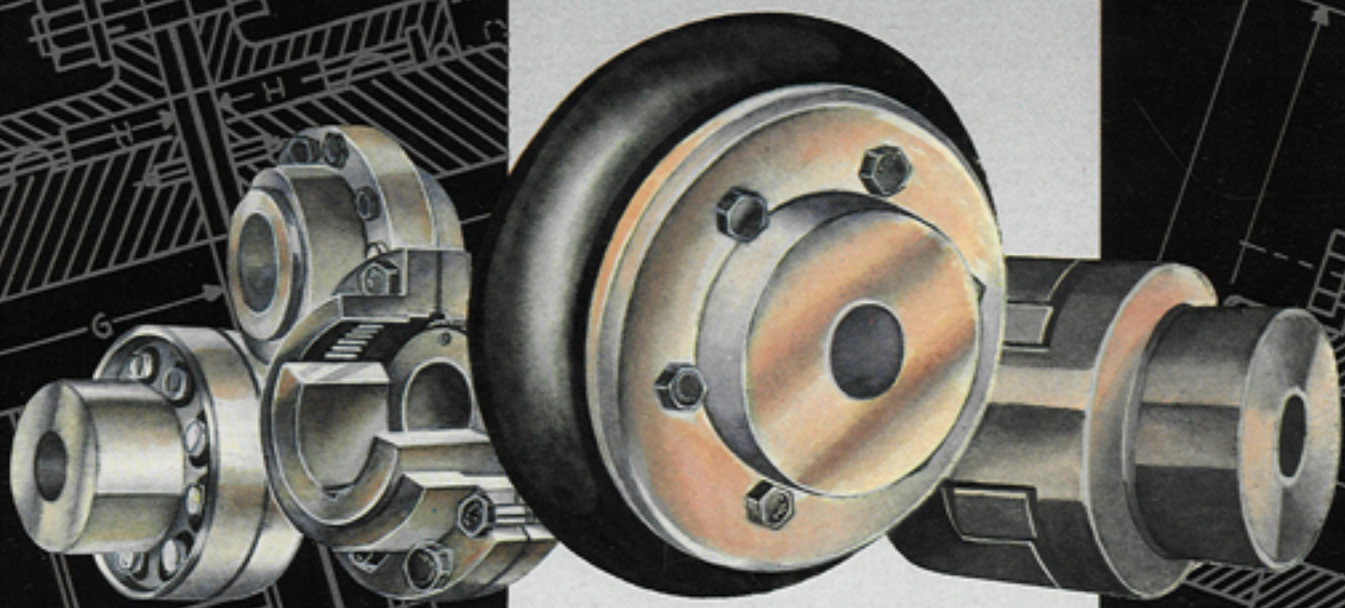


The background of the advertisement is filled with technical drawings of various mechanical components, including gears, shafts, and couplings. These drawings are rendered in a dark, high-contrast style with white lines and hatching. Some drawings include dimension lines and labels like 'F', 'H', 'G', 'B', and 'C'.

THE  
LEADING EDGE  
IN  
MECHANICAL  
POWER  
TRANSMISSION  
SYSTEMS



**FLEXIBLE COUPLINGS FROM**

**Meritt**

*The Transmission Engineers*

# THE COMPANY

Established in 1987, MERITT TRANSMISSIONS, (MT) has, over the years, emerged as a leading manufacturers of mechanical power transmission products, and has come to be known as a reliable source for pin-bush couplings, tyre couplings, chain couplings, spring-grid couplings, jaw couplings, and gear couplings.

MT couplings are designed for long, trouble-free service, and are available in an extensive range of types and sizes, for use with almost any kind of drive, as well as, ratings from fractional HP, to over 700 HP, per 100 RPM.

MT couplings are built to withstand widely varying load characteristics, ranging from 'uniform', to 'extreme shock' conditions, and are configured to absorb shock and vibrations without energy loss, ensuring lower downtime, and improved productivity.

MT's mechanical power transmission products have found wide acceptance in various industries.

MT has comprehensive design and manufacturing capabilities as well as a dedicated team of professionals, to cater to all aspects of manufacturing, quality-control, product application, and after sales services, and is today, a name to reckon with in the field of mechanical power transmission products.

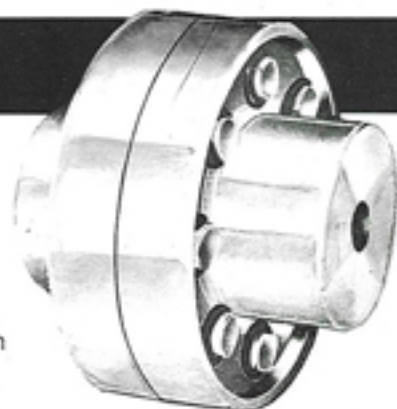
In it's tenth year of existence, MT's commitment to quality has led to phenomenal domestic successes, and has paved the way for wide acceptance, and a fast-growing export component, to lucrative developed markets.

## PIN-BUSH COUPLINGS

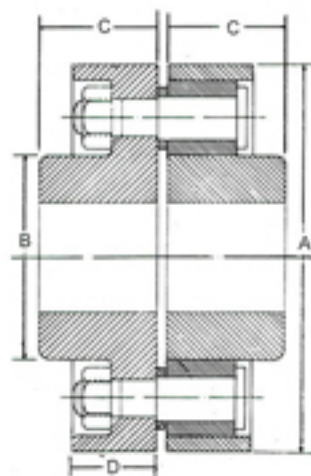
Meritt Pin Bush Flexible Couplings are designed to give long, trouble-free service. They are capable of accommodating a reasonable amount of axial angularity between the shafts, and axial movements of shafts, during use.

Meritt Flexible Couplings also serve the important function of absorbing some shock and vibration appearing on one shaft.

Meritt Pin-Bush Flexible Couplings are constructed using the highest quality materials. The flanges are of cast iron, the coupling pins are of medium carbon steel, and the bush, which is the heart of the coupling, is of rubber. These couplings provide a positive, flexible drive, which protects bearings, gears, and other expensive components from major damage, due to unavoidable misalignments. They also damp out vibrations and impulse loads, in the drive.



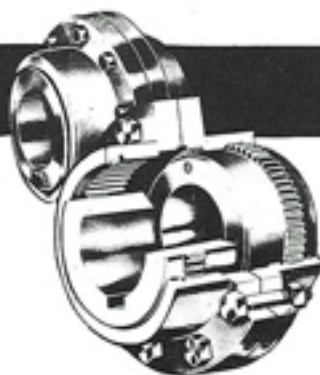
| Coupling No. | Max Safe Speed RPM | H.P. per 100 RPM | No. of Pins | Outside Dia. A | Bore  |      | Hub Dia. B | Hub Length C | Flange Width D |
|--------------|--------------------|------------------|-------------|----------------|-------|------|------------|--------------|----------------|
|              |                    |                  |             |                | Min.  | Max. |            |              |                |
| MPB-3        | 5500               | 0.40             | 4           | 3              | 0.25  | 0.75 | 1.5        | 0.875        | 0.50           |
| MPB-4        | 4200               | 0.54             | 4           | 4              | 0.375 | 1.00 | 2.125      | 1.00         | 0.58           |
| MPB-5        | 3300               | 0.63             | 4           | 5              | 0.375 | 1.25 | 2.5        | 1.00         | 0.80           |
| MPB-6        | 2800               | 2.60             | 4           | 6              | 0.5   | 1.50 | 3.0        | 1.25         | 1.00           |
| MPB-7        | 2400               | 3.15             | 6           | 7              | 0.5   | 1.75 | 3.5        | 1.5          | 1.125          |
| MPB-8        | 2200               | 3.75             | 6           | 8              | 0.75  | 2.25 | 4.0        | 1.625        | 1.125          |
| MPB-9        | 2050               | 9.25             | 6           | 9              | 0.75  | 2.50 | 4.5        | 1.75         | 1.25           |
| MPB-10       | 1700               | 10.00            | 8           | 10             | 1.00  | 3.00 | 5.0        | 1.75         | 1.25           |
| MPB-11       | 1600               | 16.00            | 8           | 11             | 1.00  | 3.25 | 5.0        | 1.75         | 1.25           |
| MPB-12       | 1350               | 27.00            | 10          | 12             | 1.50  | 3.50 | 6.0        | 1.875        | 1.5            |
| MPB-14       | 1200               | 38.00            | 10          | 14             | 2.04  | 4.25 | 7.0        | 2.25         | 1.625          |
| MPB-16       | 1000               | 44.00            | 12          | 16             | 2.0   | 4.75 | 8.0        | 2.75         | 1.75           |
| MPB-18       | 920                | 85.00            | 12          | 18             | 2.0   | 4.75 | 9.0        | 3.0          | 2.0            |
| MPB-21       | 7800               | 105.00           | 12          | 21             | 2.0   | 5.00 | 10.5       | 3.5          | 2.0            |
| MPB-25       | 600                | 130.00           | 14          | 25             | 2.5   | 6.00 | 13.0       | 3.5          | 3.0            |



H.P. Rating of Coupling =  $\frac{\text{H.P. to be transmitted} \times \text{Service factor (SF)} \times 100}{\text{Required at 100 RPM}}$

RPM

# GEAR COUPLINGS

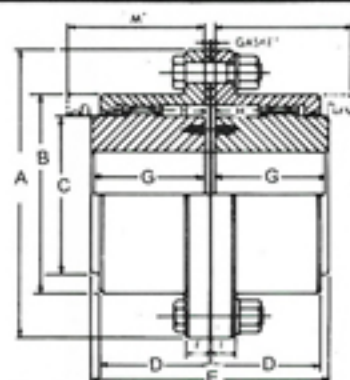


MERITT Flexible Gear Coupling are of special design with teeth of involute flanks, and faces curved in both directions, so that they are able to accommodate angular misalignment by a ball and socket action. Flexibility is obtained by play between the teeth.

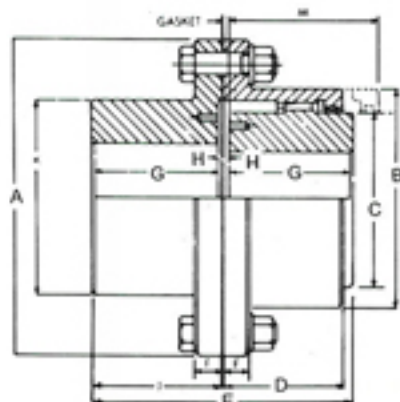
MERITT Flexible Gear Coupling gear improves the accuracy of the fit, results in smoother and quieter operations, and offers long service life with minimum maintenance.

Lubrication : Lubrication is provided for by heavy oil, enclosed in a dust and grit-proof casing, and distributed over the gear teeth by centrifugal action. The large area of lubricated surface also cushions shock, and permits fairly high-speed operations.

MERITT Flexible Gear Coupling also provide high power/size ratios.



FULL GEARED COUPLING



HALF RIGID & HALF FLEXIBLE COUPLING

RATINGS AND DIMENSIONS  
FULL GEARED COUPLING AND HALF GEAR HALF RIGID COUPLINGS

| Gear Coupling<br>No. MGC- | Maximum Bore<br>in M.M. |       | Pilot<br>Bore<br>mm | Max<br>Speed<br>R.P.M. | Load Capacity   |                   | GD <sup>2</sup><br>Kg. M <sup>2</sup> | DIMENSIONS IN MM |     |     |      |     |    |     |     |       |     |     |     | Wt.<br>in<br>Kg. |
|---------------------------|-------------------------|-------|---------------------|------------------------|-----------------|-------------------|---------------------------------------|------------------|-----|-----|------|-----|----|-----|-----|-------|-----|-----|-----|------------------|
|                           | Gear                    | Rigid |                     |                        | Torque<br>Kg.M. | HP Per<br>100 RPM |                                       | A                | B   | C   | D    | E   | F  | G   | H   | J     | K   | M   |     |                  |
| 100                       | 35                      | 50    | 10                  | 8000                   | 50              | 7                 | .03                                   | 120              | 75  | 50  | 39.5 | 93  | 15 | 45  | 1.5 | 46.5  | 70  | 55  | 4.2 |                  |
| 101                       | 50                      | 60    | 20                  | 6300                   | 100             | 14                | .14                                   | 170              | 110 | 65  | 49   | 115 | 17 | 55  | 2.5 | 57.5  | 85  | 65  | 10  |                  |
| 102                       | 60                      | 75    | 30                  | 5000                   | 250             | 35                | .20                                   | 185              | 125 | 85  | 62   | 145 | 17 | 70  | 2.5 | 72.5  | 110 | 80  | 15  |                  |
| 103                       | 75                      | 90    | 40                  | 4000                   | 450             | 63                | .48                                   | 220              | 150 | 105 | 78   | 175 | 20 | 85  | 2.5 | 87.5  | 130 | 105 | 26  |                  |
| 104                       | 90                      | 110   | 50                  | 3300                   | 850             | 119               | .95                                   | 250              | 175 | 130 | 96   | 215 | 20 | 105 | 2.5 | 107.5 | 160 | 125 | 40  |                  |
| 105                       | 110                     | 130   | 60                  | 2800                   | 1300            | 182               | 1.90                                  | 290              | 200 | 155 | 106  | 230 | 25 | 110 | 5.0 | 115   | 185 | 140 | 62  |                  |
| 106                       | 125                     | 150   | 75                  | 2500                   | 2000            | 280               | 3.00                                  | 320              | 230 | 175 | 117  | 260 | 25 | 125 | 5.0 | 130   | 215 | 155 | 85  |                  |
| 107                       | 140                     | 170   | 90                  | 2100                   | 3500            | 490               | 5.25                                  | 350              | 260 | 205 | 134  | 290 | 25 | 140 | 5.0 | 145   | 240 | 175 | 120 |                  |
| 108                       | 160                     | 200   | 105                 | 1900                   | 4500            | 630               | 8.50                                  | 380              | 290 | 230 | 147  | 320 | 25 | 155 | 5.0 | 160   | 285 | 190 | 180 |                  |
| 109                       | 180                     | 220   | 125                 | 1700                   | 5600            | 784               | 15.00                                 | 430              | 330 | 250 | 156  | 340 | 25 | 165 | 5.0 | 170   | 315 | 205 | 210 |                  |
| 110                       | 220                     | 260   | 140                 | 1400                   | 8200            | 1148              | 30.50                                 | 490              | 390 | 310 | 171  | 370 | 25 | 180 | 5.0 | 185   | 370 | 220 | 290 |                  |

Other types of gear coupling are :

1. Mill Motor Type Gear Coupling
2. Spacer Type Gear Couplings
3. Half Gear and Half Rigid Type Gear Coupling
4. Gear Coupling custom built to specifications
5. Full Gear Coupling above size 110

## 6. Brake Drum Coupling

$$\text{Torque (kg./mtr)} = \frac{716.2 \times \text{HP} \times \text{SF}^*}{\text{RPM}}$$

$$\text{H.P. per 100 rpm} = \frac{\text{HP} \times \text{SF}^* \times 100}{\text{RPM}}$$

\* Service Factor

# TYRE COUPLINGS

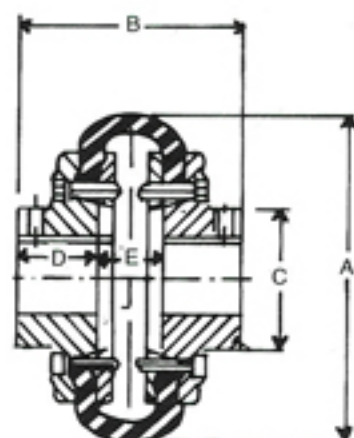


MERITT Cushion Couplings are a totally new concept in mechanical power transmission, and compensates angular, parallel, or combination angular/parallel misalignment and shaft-end float, and reduces excessive bearing loads, and shaft stress.

Power is transmitted by flexible rubber tyre coupling, thereby avoiding metal-to-metal contact, and effectively accommodating misalignments, as well as absorbing torsional and lateral vibrations.

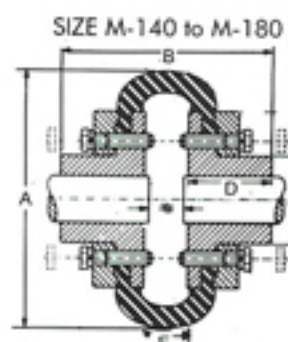
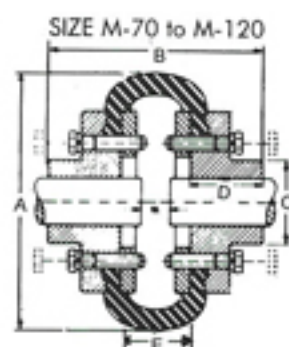
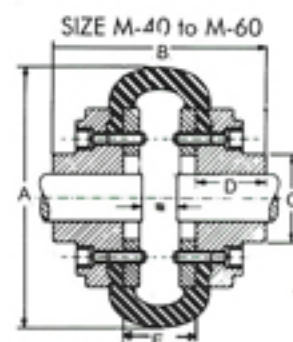
## TYPE I

| Size    | Max. RPM | Max. Bore | H.P. at 100 RPM | A   | B   | C   | D   | E  |
|---------|----------|-----------|-----------------|-----|-----|-----|-----|----|
| MTC-05A | 11       | 6000      | 0.035           | 90  | 63  | 29  | 20  | 20 |
| MTC-075 | 14       | 5500      | 0.055           | 93  | 74  | 29  | 26  | 22 |
| MTC-1   | 22       | 5500      | 0.080           | 97  | 73  | 32  | 26  | 21 |
| MTC-1.5 | 25       | 5250      | 0.14            | 106 | 99  | 43  | 38  | 23 |
| MTC-2   | 28       | 5200      | 0.21            | 116 | 96  | 50  | 38  | 20 |
| MTC-3   | 30       | 4600      | 0.42            | 132 | 96  | 55  | 38  | 20 |
| MTC-5   | 38       | 4400      | 0.63            | 160 | 112 | 65  | 42  | 28 |
| MTC-10  | 40       | 4200      | 0.98            | 175 | 134 | 65  | 52  | 30 |
| MTC-18  | 50       | 3750      | 1.25            | 203 | 145 | 80  | 55  | 35 |
| MTC-26  | 55       | 3200      | 2.1             | 210 | 157 | 90  | 61  | 36 |
| MTC-42  | 60       | 2800      | 3.1             | 246 | 157 | 110 | 60  | 37 |
| MTC-82  | 75       | 2500      | 8.4             | 310 | 175 | 133 | 65  | 45 |
| MTC-100 | 100      | 2450      | 11.0            | 316 | 202 | 160 | 96  | 10 |
| MTC-130 | 105      | 2200      | 16.8            | 350 | 227 | 157 | 86  | 55 |
| MTC-200 | 125      | 2000      | 21.0            | 370 | 230 | 237 | 110 | 10 |
| MTC-300 | 140      | 1700      | 33.6            | 415 | 230 | 237 | 110 | 10 |
| MTC-650 | 171      | 1700      | 75.2            | 530 | 282 | 315 | 128 | 26 |



## TYPE II

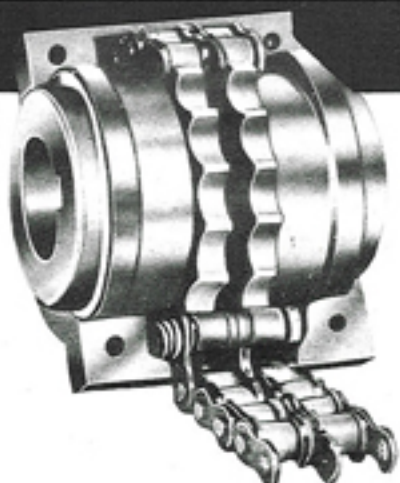
| Size  | Power per 100 rev/min KW | Max.Speed rev/min | Bore   |        | A mm  | B mm  | C mm | D mm | E mm |
|-------|--------------------------|-------------------|--------|--------|-------|-------|------|------|------|
|       |                          |                   | Min mm | Max mm |       |       |      |      |      |
| M-40  | 0.22                     | 4500              | 11     | 30     | 104   | 67    | -    | 22   | 22   |
| M-45  | 0.39                     | 4500              | 11     | 32     | 120   | 73    | -    | 25   | 24   |
| M-50  | 0.56                     | 4500              | 16     | 38     | 133.5 | 92    | -    | 32   | 25   |
| M-60  | 1.11                     | 4000              | 16     | 48     | 165   | 112.4 | 73   | 38   | 33   |
| M-70  | 1.70                     | 3600              | 19.05  | 55     | 197   | 132   | 82   | 45   | 40   |
| M-80  | 2.65                     | 3100              | 25.4   | 65     | 211   | 150   | 95   | 51   | 43   |
| M-85  | 3.20                     | 3000              | 31.75  | 70     | 222   | 153   | 103  | 53   | 44   |
| M-90  | 3.82                     | 2880              | 31.75  | 76     | 235   | 164   | 110  | 57   | 46   |
| M-100 | 5.29                     | 2600              | 31.75  | 85     | 254   | 178   | 124  | 60   | 48   |
| M-110 | 7.46                     | 2300              | 31.75  | 90     | 279   | 180   | 134  | 65   | 44   |
| M-120 | 12.40                    | 2050              | 38.1   | 102    | 314   | 207   | 152  | 76   | 49   |
| M-140 | 19.70                    | 1800              | 75     | 120    | 359   | 204   | 195  | 89   | 24   |
| M-160 | 32.60                    | 1600              | 75     | 140    | 402   | 220   | 216  | 102  | 30   |
| M-180 | 57.40                    | 1500              | 75     | 150    | 470   | 258   | 266  | 114  | 46   |



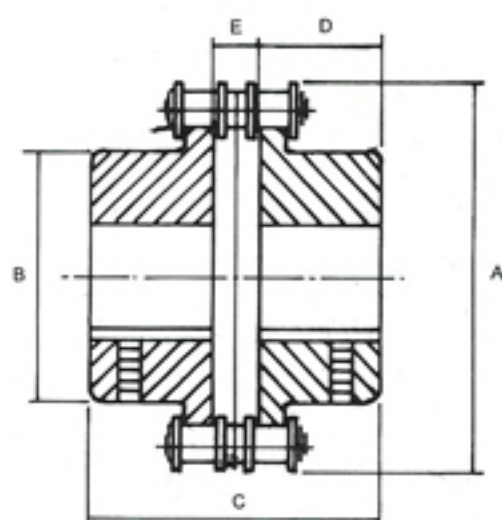
# CHAIN COUPLING

MERITT Chain Coupling are of all-steel construction, compact, and capable of transmitting relatively high torque, even with limited-space constraints. Flexibility is obtained by lateral play in the fit of the chain over the sprocket teeth (zero circumferential play).

The simplicity of design allows easy installation and removal. The two sprockets are identical in dimensions and construction, and provide a balanced unit during operation, with vibration-damping characteristics. In addition the flexibility of the roller chain, and the clearance between the chain rollers and sprocket teeth, allow slight angular misalignment of upto 1° (maximum), and shaft-end float.



| Coupling No. | Bore Min. | Dia. Max. | H.P. per 100 RPM | A   | B   | C   | D   | E    | Weight Kgs. |
|--------------|-----------|-----------|------------------|-----|-----|-----|-----|------|-------------|
| MCC-6112     | 10        | 16        | 1.05             | 45  | 26  | 65  | 30  | 5.0  | 0.30        |
| MCC-8312     | 10        | 22        | 2.31             | 61  | 36  | 78  | 36  | 7.0  | 0.80        |
| MCC-8316     | 16        | 32        | 4.13             | 78  | 50  | 78  | 36  | 7.0  | 1.40        |
| MCC-1016     | 16        | 42        | 7.80             | 96  | 62  | 96  | 44  | 7.9  | 2.80        |
| MCC-1018     | 19        | 48        | 9.90             | 106 | 71  | 98  | 45  | 7.9  | 3.50        |
| MCC-1218     | 22        | 60        | 18.00            | 126 | 89  | 121 | 54  | 8.9  | 6.80        |
| MCC-1222     | 25        | 76        | 25.00            | 151 | 110 | 121 | 54  | 8.9  | 8.50        |
| MCC-1618     | 25        | 80        | 41.33            | 170 | 115 | 150 | 67  | 16.0 | 13.4        |
| MCC-1622     | 35        | 95        | 59.00            | 202 | 140 | 150 | 67  | 18.2 | 20.00       |
| MCC-2020     | 40        | 110       | 94.00            | 231 | 160 | 200 | 91  | 18.0 | 34.00       |
| MCC-2418     | 50        | 119       | 141.00           | 254 | 166 | 260 | 118 | 24.0 | 51.00       |
| MCC-2422     | 50        | 150       | 182.00           | 301 | 208 | 260 | 118 | 24.0 | 64.00       |
| MCC-3218     | 50        | 160       | 305.00           | 341 | 220 | 360 | 165 | 30.0 | 110.00      |
| MCC-3222     | 50        | 199       | 444.00           | 410 | 280 | 360 | 165 | 30.0 | 173.00      |
| MCC-4018     | 70        | 205       | 605.00           | 425 | 295 | 517 | 240 | 37.0 | 266.00      |
| MCC-4022     | 70        | 260       | 760.00           | 507 | 373 | 517 | 240 | 37.0 | 334.00      |



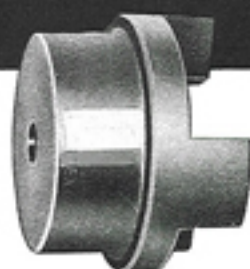
| COUPLING NO. | EQUIV. ASA NO. | MAX. BORE | REVOLUTIONS PER MINUTE |       |        |        |        |        |         |        |        |        |        |        |        |        |        |        |        |        |
|--------------|----------------|-----------|------------------------|-------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|              |                |           | 1                      | 5     | 10     | 25     | 50     | 100    | 200     | 300    | 400    | 500    | 600    | 800    | 1000   | 1200   | 1500   | 1800   | 2000   | 2500   |
| MCC6112      | 3812           | 16        | 0.013                  | 0.066 | 0.146  | 0.346  | 0.693  | 1.053  | 1.613   | 2.106  | 2.520  | 3.013  | 3.440  | 4.253  | 5.173  | 5.880  | 7.133  | 8.333  | 8.973  | 10.82  |
| MCC8312      | 4012           | 22        | 0.026                  | 0.146 | 0.293  | 0.773  | 1.533  | 2.306  | 3.506   | 4.613  | 5.533  | 6.613  | 7.560  | 9.346  | 11.37  | 12.90  | 15.46  | 18.26  | 19.73  | 23.56  |
| MCC8316      | 4016           | 32        | 0.053                  | 0.280 | 0.546  | 1.373  | 2.746  | 4.120  | 6.253   | 8.226  | 9.880  | 11.80  | 13.46  | 16.66  | 20.40  | 23.06  | 28.00  | 32.53  | 35.06  | 42.53  |
| MCC1016      | 5016           | 42        | 0.106                  | 0.520 | 1.040  | 2.600  | 5.213  | 7.813  | 11.89   | 15.60  | 18.80  | 22.40  | 25.60  | 31.73  | 38.53  | 43.86  | 53.20  | 61.86  | 66.66  | 80.80  |
| MCC1018      | 5018           | 48        | 0.133                  | 0.666 | 1.320  | 3.306  | 6.600  | 9.906  | 15.06   | 19.86  | 23.73  | 28.40  | 32.53  | 43.13  | 48.80  | 55.46  | 66.73  | 78.40  | 84.53  | 102.40 |
| MCC1218      | 6018           | 60        | 0.240                  | 1.240 | 2.493  | 6.226  | 12.44  | 18.66  | 28.40   | 37.33  | 44.80  | 53.46  | 61.20  | 75.73  | 92.13  | 104.53 | 126.93 | 148.0  | 160.0  | 193.33 |
| MCC1222      | 6022           | 76        | 0.333                  | 1.666 | 3.346  | 8.413  | 16.66  | 25.06  | 38.13   | 50.26  | 60.40  | 72.13  | 82.53  | 102.0  | 124.13 | 140.0  | 170.66 | 198.66 | 214.66 | 260.0  |
| MCC1618      | 8018           | 80        | 0.546                  | 2.760 | 5.520  | 13.73  | 27.60  | 41.33  | 62.93   | 82.80  | 99.33  | 118.66 | 134.66 | 168.0  | 104.0  | 232.0  | 281.33 | 328.0  | 353.33 |        |
| MCC1622      | 8022           | 95        | 0.786                  | 3.946 | 7.906  | 19.73  | 39.46  | 59.33  | 89.60   | 118.66 | 141.33 | 169.33 | 194.66 | 240.0  | 292.0  | 332.0  | 402.6  | 469.33 | 505.33 |        |
| MCC2020      | 10020          | 110       | 1.240                  | 6.213 | 12.44  | 31.06  | 62.13  | 93.33  | 141.33  | 166.66 | 224.0  | 266.66 | 305.33 | 377.33 | 460.0  | 522.66 | 634.66 | 738.66 |        |        |
| MCC2418      | 12018          | 119       | 1.866                  | 9.360 | 18.66  | 46.80  | 93.60  | 140.0  | 213.33  | 280.0  | 336.0  | 402.6  | 460.0  | 568.0  | 692.0  | 786.66 | 954.66 |        |        |        |
| MCC2422      | 12022          | 150       | 2.413                  | 12.09 | 24.13  | 60.40  | 120.93 | 181.33 | 274.66  | 362.66 | 434.66 | 520.0  | 594.66 | 734.66 | 894.66 | 1016.0 |        |        |        |        |
| MCC3218      | 16018          | 160       | 4.040                  | 20.13 | 40.40  | 101.06 | 201.33 | 302.66 | 460.0   | 606.66 | 728.0  | 869.33 | 994.66 | 1229.3 | 1496.0 |        |        |        |        |        |
| MCC3222      | 16022          | 199       | 5.906                  | 29.46 | 59.06  | 146.66 | 194.66 | 444.00 | 674.66  | 886.66 | 1065.3 | 1272.0 | 1453.3 | 1800.0 | 2186.6 |        |        |        |        |        |
| MCC4018      | 20018          | 205       | 8.080                  | 40.40 | 80.80  | 201.33 | 404.00 | 605.33 | 921.33  | 1212.0 | 1453.3 | 1733.3 | 1986.6 | 2453.3 |        |        |        |        |        |        |
| MCC4022      | 20022          | 260       | 10.17                  | 50.93 | 101.73 | 254.66 | 509.33 | 762.66 | 1161.33 | 1520.0 | 1826.6 | 2186.6 | 2506.6 |        |        |        |        |        |        |        |

The special features of Meritt Roller Chain Flexible Couplings are :

- Economical, with constant power transmission
- Positive fit
- Maximum Flexibility with minimum backlash
- Easily assembled and dis-assembled
- Silent operation

# JAW COUPLING

MERITT Flexible Jaw Coupling transmission members are combined with a single-piece, integrally moulded, synthetic rubber spider. The advantage of this coupling include ease of installation, zero lubrication, and built in flexibility, for angular and parallel misalignment, besides ensuring no metal to metal contact.

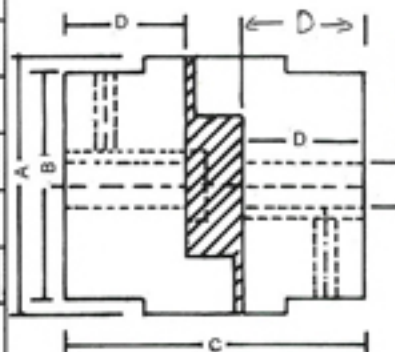


| Coupling<br>Size<br>Number | Material | BORE    |         | DIMENSIONS ARE IN MM     |                      |                        |                          |                      |
|----------------------------|----------|---------|---------|--------------------------|----------------------|------------------------|--------------------------|----------------------|
|                            |          | Minimum | Maximum | Outside<br>Diameter<br>A | Hub<br>Diameter<br>B | Overall<br>Length<br>C | Length thru<br>Bore<br>D | Approx. Weight<br>Kg |
| M-095                      | CI       | 12      | 28      | 54                       | 49                   | 63                     | 25                       | 0.75                 |
| M-099                      | CI       | 12      | 30      | 65                       | 51                   | 72                     | 27                       | 1.1                  |
| M-100                      | CI       | 12      | 35      | 65                       | 57                   | 88                     | 35                       | 1.5                  |
| M-110                      | CI       | 15      | 42      | 85                       | 76                   | 108                    | 43                       | 3.2                  |
| M-150                      | CI       | 15      | 48      | 96                       | 80                   | 115                    | 45                       | 3.9                  |
| M-190                      | CI       | 20      | 55      | 115                      | 102                  | 133                    | 54                       | 7.5                  |
| M-225                      | CI       | 20      | 60      | 127                      | 108                  | 154                    | 64                       | 10.5                 |
| M-226                      | CI       | 25      | 65      | 137                      | 115                  | 178                    | 70                       | 13                   |
| M-276                      | CI       | 25      | 75      | 157                      | 127                  | 200                    | 80                       | 19                   |
| M-280                      | CI       | 30      | 75      | 192                      | 140                  | 200                    | 80                       | 26                   |
| M-295                      | CI       | 40      | 90      | 237                      | 160                  | 238                    | 95                       | 44                   |

Misalignment Capacity : Angular upto 1°, Parallel upto 0.38 mm.

## H.P. RATING

| Coupling Size Number | Rated Torque in Kg mtr | Horse Power Capacity at varying speeds (R.P.M.) |       |        |       |       |       |      |
|----------------------|------------------------|-------------------------------------------------|-------|--------|-------|-------|-------|------|
|                      |                        | 100                                             | 500   | 750    | 1000  | 1500  | 1800  | 3000 |
| M-095                | 2.02                   | 0.280                                           | 1.400 | 2.10   | 2.80  | 4.2   | 5.04  | 8.4  |
| M-099                | 3.05                   | 0.42                                            | 2.10  | 3.15   | 4.2   | 6.30  | 7.56  | 12.6 |
| M-100                | 4.35                   | 0.6                                             | 3.0   | 4.50   | 6.0   | 9.00  | 10.8  | 18.0 |
| M-110                | 7.97                   | 1.10                                            | 5.50  | 8.250  | 11.0  | 16.50 | 19.8  | 33.0 |
| M-150                | 12.32                  | 1.70                                            | 8.50  | 12.75  | 17.00 | 25.50 | 30.6  | 51.0 |
| M-190                | 15.94                  | 2.20                                            | 11.08 | 16.50  | 22.00 | 33.0  | 39.6  | 66.0 |
| M-225                | 23.92                  | 3.30                                            | 16.50 | 24.75  | 33.0  | 49.50 | 59.4  | 99.0 |
| M-226                | 30.33                  | 4.3                                             | 21.5  | 32.25  | 43    | 64.5  | 77.4  | 129  |
| M-276                | 51.21                  | 6.9                                             | 34.5  | 51.75  | 69    | 103.5 | 124.2 | 207  |
| M-280                | 77.69                  | 10.2                                            | 51.0  | 76.50  | 102   | 153.0 | 183.6 | 306  |
| M-295                | 125.41                 | 16.7                                            | 83.5  | 125.25 | 167   | 250.5 | 300.6 | 501  |



(Above Rating based on Service Factor(SF) of 1)

Other Jaw Couplings available

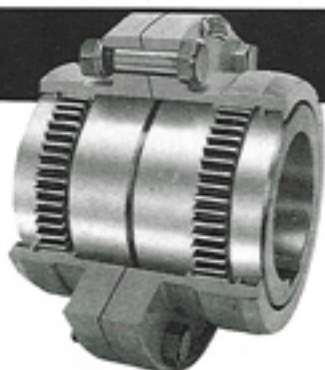
1. Spacer Couplings
2. Aluminium spacer with external spider Coupling.
3. External Spider Coupling.
4. Cushion Coupling.

### 5. Spacer Coupling with cushion

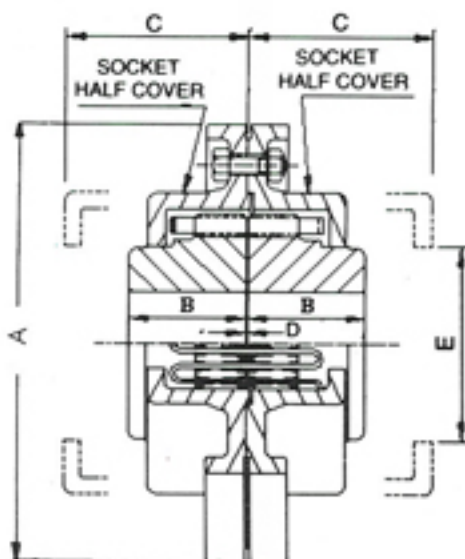
$$HP = \frac{RPM \times Torque (Kg/mtr)}{716}$$

# SPRING GRID COUPLING

MERITT Spring Grid Couplings operate on the principle of connecting two grooved discs or hubs, one on the driving, and the other on the driven shaft, by a grid spring. This is one of the most effective type of coupling for shock absorbing and detuning, and finds wide application in cement mills and kilns, paper mills, and heavy engineering applications, among others.



| Coupling No.<br>(see note 1) | Safe Speed<br>R.P.M. | Rating<br>H.P. per<br>R.P.M. | Stock<br>Rough<br>Bore<br>(M.M.) | Max.<br>Bore<br>(M.M.) | Clear<br>Dia.<br>A<br>(M.M.) | Boss<br>Length<br>B<br>(M.M.) | Removal<br>Space<br>C<br>(M.M.) | Gap<br>D<br>(M.M.) | Cover<br>Bore<br>E<br>(M.M.) | Approx.<br>Weight<br>(kg.) |
|------------------------------|----------------------|------------------------------|----------------------------------|------------------------|------------------------------|-------------------------------|---------------------------------|--------------------|------------------------------|----------------------------|
| 102                          | 5625                 | 0.006                        | 9                                | 29                     | 105                          | 38.0                          | 53                              | 0.8                | 44.5                         | 3                          |
| 110                          | 4700                 | 0.009                        | 13                               | 38                     | 120                          | 38.0                          | 53                              | 0.8                | 58.8                         | 4                          |
| 120                          | 4420                 | 0.015                        | 16                               | 41                     | 144                          | 45.5                          | 60                              | 0.8                | 62                           | 5                          |
| 124                          | 3360                 | 0.25                         | 16                               | 41                     | 171                          | 51.0                          | 60                              | 0.8                | 87.4                         | 9                          |
| 130                          | 3130                 | 0.04                         | 16                               | 54                     | 190                          | 51.0                          | 80                              | 0.8                | 84.2                         | 11                         |
| 136                          | 2900                 | 0.06                         | 16                               | 63                     | 197                          | 57.0                          | 80                              | 0.8                | 96.9                         | 16                         |
| 152                          | 2430                 | 0.09                         | 25                               | 78                     | 222                          | 63.5                          | 80                              | 0.8                | 119.2                        | 20                         |
| 158                          | 2090                 | 0.12                         | 25                               | 92                     | 254                          | 70.0                          | 81                              | 0.8                | 143.0                        | 27                         |
| 168                          | 1860                 | 0.18                         | 25                               | 108                    | 276                          | 89.0                          | 81                              | 0.8                | 165.2                        | 43                         |
| 212                          | 1765                 | 0.35                         | 38                               | 102                    | 295                          | 102.0                         | 129                             | 1.6                | 155.7                        | 54                         |
| 236                          | 1560                 | 0.45                         | 50                               | 122                    | 324                          | 101.5                         | 148                             | 1.6                | 187.4                        | 63                         |
| 266                          | 1500                 | 0.65                         | 50                               | 121                    | 336                          | 101.5                         | 148                             | 1.6                | 184.3                        | 72                         |
| 290                          | 1290                 | 0.90                         | 50                               | 146                    | 375                          | 114.0                         | 148                             | 1.6                | 222.4                        | 114                        |
| 318                          | 1230                 | 1.25                         | 50                               | 167                    | 425                          | 127.0                         | 148                             | 1.6                | 254.0                        | 149                        |

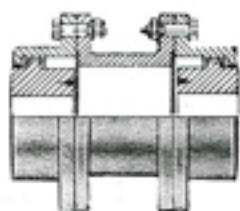


- Note: 1) For vertical shafts, higher speed and rapidly reversing drivers, please furnish relevant technical data, and drawings, for selection of appropriate coupling.  
2) Larger size couplings are also available.

## OTHER FLEXIBLE COUPLINGS



BRAKE DRUM COUPLING



SPACER GEAR COUPLING



ALUMINIUM SPACER WITH  
EXTERNAL SPIDER COUPLING



TORQUE LIMITER



TORQUE LIMITER COUPLING



NYLON GEARED COUPLING

# SELECTION PROCEDURE FOR ALL FLEXIBLE COUPLINGS

| LOAD          | DRIVEN EQUIPMENT                                                                                                                                                                      | TYPE OF DRIVE    |                      |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|
|               |                                                                                                                                                                                       | Motor or Turbine | Reciprocating Engine |
| UNIFORM       | Centrifugal Pumps<br>Conveyors - Even Loaded<br>Exciters Fans and<br>Blowers - Light Duty<br>Generators - Even Loaded<br>Mixers - Liquid                                              | 1.0              | 1.50                 |
| LIGHT SHOCK   | Centrifugal Pumps<br>Generators - Pulsating Load<br>Grinders. Hydraulic Pumps<br>Kins. Line Shafting Machine<br>Tools Oscillating Pumps<br>Textile Machinery<br>Woodworking Machinery | 1.5              | 2.0                  |
| MEDIUM SHOCK  | Air - Compressors-<br>Multi Cylinder<br>Ball and Rod Mills,<br>Cranes Elevators. Hoists<br>Punch Presses<br>Reciprocating Pumps<br>Shear, Ship Drives<br>Welding Generators.          | 2.0              | 2.5                  |
| HEAVY SHOCK   | Air Compressors -<br>Single Cylinder<br>Dredges, Drilling Rigs<br>Mine Machinery<br>Rolling Mill Drives<br>Rubber Mixers                                                              | 2.5              | 3.0                  |
| EXTREME SHOCK | Ore Crushers<br>Barstock Shears<br>Vibrating Conveyors                                                                                                                                | 3.0              | 4.0                  |

The Specification sheets give the maximum torque, bore, and RPM capacities of individual couplings. To arrive at final size, please adopt the following procedure:

1. Calculate the Effective Torque to be transmitted using the following formula :

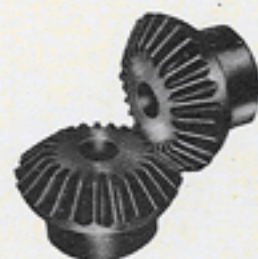
$$\text{Effective Torque (Kg/M.)} = \frac{716.2 \times \text{H.P.} \times \text{SF}}{\text{RPM}}$$

Where SF is the Service Factor, to be selected from adjacent table.

2. Select the coupling size tentatively on the basis of bore, taking into consideration the maximum diameter of driven, and driving shafts. In case the rated torque capacity of the coupling thus selected is equal to, or greater than, effective torque calculated (above as in # 1), the coupling is suitable. In case the rated torque, is less than effective torque, increase coupling size, and thus rated torque, so as to equal, or exceed, effective torque.

3. Check that RPM is within the limits specified, for the size of coupling selected. For higher RPM applications, please refer to us for guidance and selection of appropriate, dynamically balanced, high-speed couplings.

## OTHER PRODUCTS



Bevel Gear



Sprocket



Spur Gear



Worm & Worm Gear

For Further details contact :



# Meritt

**T.R.A.N.S.M.I.S.S.I.O.N.S**

157/159, Narayan Dhuru Street,  
Ground Floor, Behind Nagdevi Street,  
Mumbai - 400 003.INDIA.

Tel.: 342 8342 / 344 4956 / 2857 / 341 1197  
Fax: 91 - 22 - 341 4107 / 407 8268