



*Rathi Cone - Flex couplings consists of sets of resilient "Cone-Flex" rings with pins & nuts and two flanged hubs of graded cast iron. These "Cone-Flex" rings are specially shaped to permit the rubber to deflect in all directions and give over four times torsional flexibility as compared to a plain bush.*

**UNMATCHED SIMPLICITY :**

Easy to assemble & disassemble. With pins removed, the equipment can run independently for no load. Flanged hub can be withdrawn upwards without disturbing original alignment.

**NO LUBRICATION :**

"Cone-Flex" couplings do not require lubrication of any kind whatsoever.

**SIZE AND COST :**

High torque capacity for compact size and low weight.

**SIMPLE / EASY MAINTENANCE :**

No complicated mechanism to demand adjustment or maintenance. Inspection and replacement of "Cone-Flex" rings are easy and can be quickly fitted without dismantling or moving either of coupled shafts.

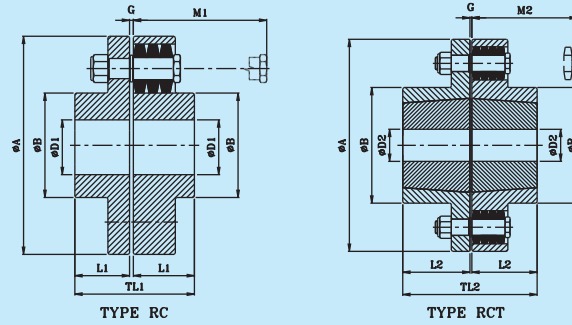
**LOW OPERATIONAL COST :**

Only wear part is low cost "Cone-Flex" rings make the coupling economical in long run.

**SMOOTH & QUIET OPERATION :**

Reduces vibrations and noise arising from severe torque fluctuations.

"Cone-Flex" couplings are suitable in ambient temperature upto 70° C.



### TECHNICAL DATA

| Type       | Size | POWER RATING     |                       |                    |                       |                    |                       | Max.<br>Speed<br>RPM | ØD1(RC)      |              | #ØD2(RCT)    |              |                   | Dimensions |     |     |     |   |     |     |    | Wt.<br>in Kg<br>(Min. Bore) |     | M.I. (WR <sup>2</sup> ) Kg m <sup>2</sup><br>(Min. Bore) |         |        |
|------------|------|------------------|-----------------------|--------------------|-----------------------|--------------------|-----------------------|----------------------|--------------|--------------|--------------|--------------|-------------------|------------|-----|-----|-----|---|-----|-----|----|-----------------------------|-----|----------------------------------------------------------|---------|--------|
|            |      | Synthetic Rubber |                       | Polyurethane       |                       | HTrans             |                       |                      | Min.<br>Bore | Max.<br>Bore | Min.<br>Bore | Max.<br>Bore | #<br>Bush<br>Size | ØA         | ØB  | L1  | L2  | G | TL1 | TL2 | RC | RCT                         | RC  | RCT                                                      | RC      | RCT    |
|            |      | KW @<br>100 RPM  | Rated<br>Torque<br>Nm | KW @<br>100<br>RPM | Rated<br>Torque<br>Nm | KW @<br>100<br>RPM | Rated<br>Torque<br>Nm |                      |              |              |              |              |                   |            |     |     |     |   |     |     | M1 | M2                          |     |                                                          |         |        |
| RC         | 020  | 0.56             | 50                    | 0.84               | 75                    | 1.40               | 125                   | 6500                 | 12           | 22           | -            | -            | -                 | 89         | 35  | 33  | -   | 3 | 69  | -   | 30 | -                           | 1.4 | -                                                        | 0.0015  | -      |
|            | 030  | 1.2              | 110                   | 1.8                | 165                   | 3.0                | 275                   | 5470                 | 12           | 32           | -            | -            | -                 | 127        | 51  | 41  | -   | 3 | 85  | -   | 28 | -                           | 3.7 | -                                                        | 0.0078  | -      |
|            | 038  | 2.0              | 190                   | 3.0                | 285                   | 5.0                | 475                   | 5260                 | 15           | 40           | -            | -            | -                 | 132        | 64  | 48  | -   | 3 | 99  | -   | 22 | -                           | 4.2 | -                                                        | 0.0095  | -      |
| RC/<br>RCT | 042  | 3.0              | 290                   | 4.5                | 435                   | 7.5                | 725                   | 4750                 | 15           | 44           | 12           | 32           | 1215              | 146        | 70  | 56  | 38  | 3 | 115 | 79  | 14 | 32                          | 5.6 | 5                                                        | 0.0144  | 0.0163 |
|            | 048  | 5.0              | 480                   | 7.5                | 720                   | 12.5               | 1200                  | 4050                 | 21           | 52           | 16           | 42           | 1615              | 171        | 81  | 61  | 38  | 3 | 125 | 79  | 28 | 52                          | 6.4 | 9                                                        | 0.0357  | 0.0346 |
|            | 058  | 8.0              | 760                   | 12.0               | 1140                  | 20                 | 1900                  | 3600                 | 21           | 62           | 14           | 50           | 2017              | 193        | 97  | 68  | 45  | 3 | 139 | 93  | 24 | 52                          | 13  | 12                                                       | 0.0588  | 0.0567 |
|            | 070  | 11.0             | 1000                  | 17                 | 1500                  | 28                 | 2500                  | 3220                 | 21           | 74           | 19           | 60           | 2525              | 216        | 117 | 76  | 64  | 3 | 155 | 130 | 23 | 28                          | 19  | 17                                                       | 0.0980  | 0.0951 |
|            | 075  | 27               | 2600                  | 41                 | 3900                  | 68                 | 6500                  | 2730                 | 28           | 80           | 16           | 60           | 2525              | 254        | 127 | 88  | 64  | 3 | 179 | 131 | 50 | 28                          | 34  | 33                                                       | 0.2882  | 0.2827 |
|            | 085  | 37               | 3500                  | 56                 | 5250                  | 93                 | 8750                  | 2480                 | 28           | 92           | 35           | 75           | 3030              | 279        | 147 | 100 | 76  | 3 | 203 | 155 | 38 | 60                          | 45  | 37                                                       | 0.4337  | 0.4237 |
|            | 105  | 56               | 5300                  | 84                 | 7950                  | 140                | 13250                 | 2100                 | 34           | 114          | 35           | 90           | 3535              | 330        | 180 | 117 | 89  | 3 | 237 | 181 | 25 | 54                          | 67  | 59                                                       | 0.8767  | 0.8529 |
|            | 120  | 94               | 9000                  | 141                | 13500                 | 235                | 22500                 | 1880                 | 61           | 130          | 40           | 100          | 4040              | 370        | 206 | 132 | 102 | 6 | 270 | 210 | 48 | 78                          | 95  | 95                                                       | 1.9162  | 1.8753 |
|            | 135  | 128              | 12223                 | 192                | 18334.5               | 320                | 30557.5               | 1660                 | 67           | 144          | 55           | 110          | 4545              | 419        | 230 | 147 | 114 | 6 | 300 | 235 | 35 | 68                          | 128 | 120                                                      | 3.1724  | 3.1032 |
|            | 150  | 167              | 16000                 | 251                | 24000                 | 418                | 40000                 | 1520                 | 82           | 160          | 70           | 125          | 5050              | 457        | 256 | 165 | 127 | 6 | 336 | 260 | 16 | 55                          | 154 | 141                                                      | 4.6277  | 4.4951 |
|            | 170  | 262              | 25000                 | 393                | 37500                 | 655                | 62500                 | 1300                 | 96           | 184          | -            | -            | -                 | 533        | 292 | 188 | -   | 6 | 382 | -   | 48 | -                           | 249 | -                                                        | 10.5670 | -      |
| RC         | 190  | 360              | 34377                 | 540                | 51565.5               | 900                | 85942.5               | 1170                 | 122          | 206          | -            | -            | -                 | 597        | 330 | 211 | -   | 6 | 428 | -   | 28 | -                           | 304 | -                                                        | 17.0054 | -      |
|            | 215  | 471              | 45000                 | 707                | 67500                 | 1178               | 112500                | 1050                 | 135          | 230          | -            | -            | -                 | 660        | 368 | 237 | -   | 6 | 480 | -   | 10 | -                           | 392 | -                                                        | 26.1883 | -      |
|            | 240  | 788              | 75248                 | 1182               | 112872                | 1970               | 188120                | 800                  | 152          | 254          | -            | -            | -                 | 737        | 407 | 264 | -   | 6 | 534 | -   | 43 | -                           | 578 | -                                                        | 50.1718 | -      |
|            | 265  | 1047             | 100000                | 1571               | 150000                | 2618               | 250000                | 700                  | 165          | 286          | -            | -            | -                 | 826        | 457 | 292 | -   | 6 | 590 | -   | 15 | -                           | 775 | -                                                        | 81.8464 | -      |
|            |      |                  |                       |                    |                       |                    |                       |                      |              |              |              |              |                   |            |     |     |     |   |     |     |    |                             |     |                                                          |         |        |

Notes : ● Maintain gap G at the time of assembly  
● For vertical installation contact RATHI.  
# Available only with Taper Bore, without Taper Bush.

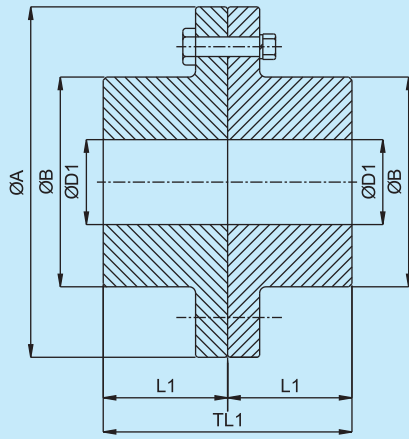
Axial Misalignment : Size 020 to 058 : 2 mm ( ± ), Size 070 to 135 : 3 mm ( ± ), Size 150 to 215 : 2 mm ( ± ), Size 240 to 265 : 1.5 mm ( ± )

Angular Misalignment : Size 020 to 135 : 1° , Size 150 to 265 : 0.5°

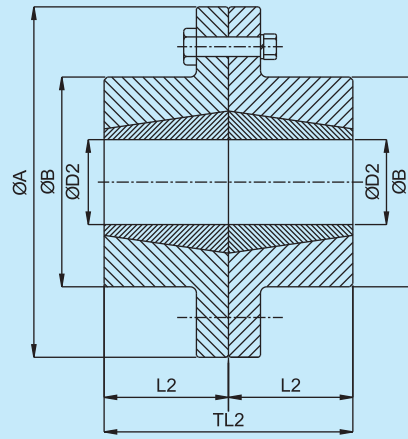
Radial Misalignment : Size 020 : 0.3 mm ( ± ), Size 030 to 042 : 0.4 mm ( ± ), Size 048 to 058 : 0.5 mm ( ± ), Size 070 to 075 : 0.6 mm ( ± ), Size 085 to 105 : 0.7 mm ( ± ), Size 120 : 0.9 mm ( ± ), Size 135 to 170 : 0.11 mm ( ± ), Size 190 to 215 : 0.15 mm ( ± ), Size 240 to 265 : 0.18 mm ( ± ),

### SPARE PARTS

| Type RC |                   |                    | Type RCT |           |                   |                    | Pins and Nuts  |          |                 | Cone Rings   |                 |
|---------|-------------------|--------------------|----------|-----------|-------------------|--------------------|----------------|----------|-----------------|--------------|-----------------|
| Size    | Pin Half Part No. | Bush Half Part No. | Size     | Bush Size | Pin Half Part No. | Bush Half Part No. | Pin Part No.   | Nut Size | No/per Coupling | Part No.     | No/per Coupling |
| RC-020  | RC020/1           | RC020/2            | -        | -         | -                 | -                  | GC 3/4" /3/5   | M 8      | 6               | GC 3/4" /4   | 18              |
| RC-030  | RC030/1           | RC030/2            | -        | -         | -                 | -                  | GC 1" /3/5     | M 10     | 4               | GC 1" /4     | 12              |
| RC-038  | RC038/1           | RC038/2            | -        | -         | -                 | -                  |                |          | 6               |              | 18              |
| RC-042  | RC042/1           | RC042/2            | RCT-042  | 1215      | RCT042/1          | RCT042/2           |                |          | 8               |              | 24              |
| RC-048  | RC048/1           | RC048/2            | RCT-048  | 1615      | RCT048/1          | RCT048/2           | GC 1 3/4" /3/5 | M 12     | 6               | GC 1 3/4" /4 | 18              |
| RC-058  | RC058/1           | RC058/2            | RCT-058  | 2017      | RCT058/1          | RCT058/2           |                |          | 8               |              | 24              |
| RC-070  | RC070/1           | RC070/2            | RCT-070  | 2525      | RCT070/1          | RCT070/2           |                |          | 10              |              | 30              |
| RC-075  | RC075/1           | RC075/2            | -        | -         | -                 | -                  | GC 2 3/4" /3/5 | M 20     | 8               | GC 2 3/4" /4 | 32              |
| RC-085  | RC085/1           | RC085/2            | RCT-085  | 3030      | RCT085/1          | RCT085/2           |                |          | 10              |              | 40              |
| RC-105  | RC105/1           | RC105/2            | RCT-105  | 3535      | RCT105/1          | RCT105/2           |                |          | 12              |              | 48              |
| RC-120  | RC120/1           | RC120/2            | RCT-120  | 4040      | RCT120/1          | RCT120/2           | GC 4 1/4" /3/5 | M 24     | 10              | GC 4 1/4" /4 | 40              |
| RC-135  | RC135/1           | RC135/2            | RCT-135  | 4545      | RCT135/1          | RCT135/2           |                |          | 12              |              | 48              |
| RC-150  | RC150/1           | RC150/2            | RCT-150  | 5050      | RCT150/1          | RCT150/2           |                |          | 14              |              | 56              |
| RC-170  | RC170/1           | RC170/2            | -        | -         | -                 | -                  | GC 6 1/4" /3/5 | M 36     | 10              | GC 6 1/4" /4 | 40              |
| RC-190  | RC190/1           | RC190/2            | -        | -         | -                 | -                  |                |          | 12              |              | 48              |
| RC-215  | RC215/1           | RC215/2            | -        | -         | -                 | -                  |                |          | 14              |              | 56              |
| RC-240  | RC240/1           | RC240/2            | -        | -         | -                 | -                  | GC 9" /3/5     | M 48     | 12              | GC 9" /4     | 48              |
| RC-265  | RC265/1           | RC265/2            | -        | -         | -                 | -                  |                |          | 14              |              | 56              |



TYPE - RR



TYPE - RRT

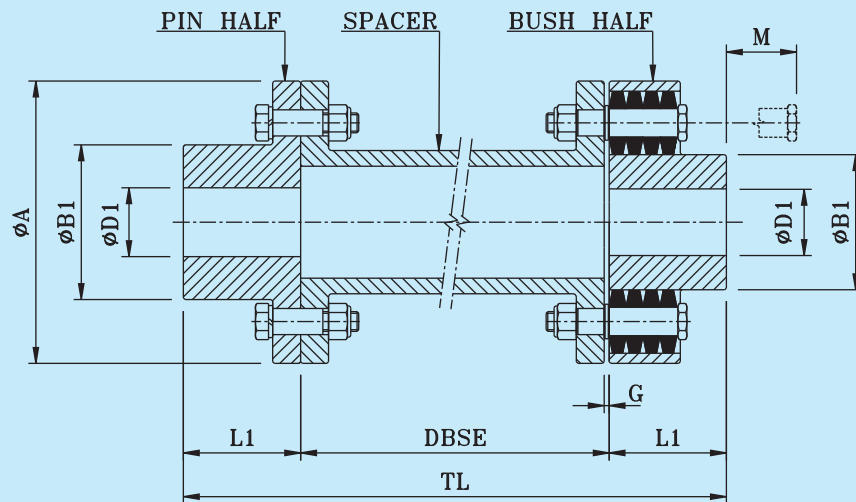
Rathi Rigid Couplings are robust, simple & ideal for exactly aligned shafts. They are torsionally stiff & backlashfree. Type RR permits larger finish bores in both halves.

### TECHNICAL DATA

| Coup-<br>ling<br>Type | Size | "kW<br>at<br>100<br>RPM" | Torque<br>Nm | Max.<br>Speed<br>RPM | RR           |              | RRT          |                   |              | ØA  | ØB  | L1  | TL1 | L2    | TL2   | Wt. in Kg.<br>(Min. Bore) |      | M.I. (WR <sup>2</sup> )<br>Kg. m <sup>2</sup><br>(Min. Bore) |       |
|-----------------------|------|--------------------------|--------------|----------------------|--------------|--------------|--------------|-------------------|--------------|-----|-----|-----|-----|-------|-------|---------------------------|------|--------------------------------------------------------------|-------|
|                       |      |                          |              |                      | Ø D1         |              | Ø D2         |                   |              |     |     |     |     |       |       | RR                        | RRT  | RR                                                           | RRT   |
|                       |      |                          |              |                      | Min.<br>Bore | Max.<br>Bore | Min.<br>Bore | Max.<br>Bore<br># | Bush<br>Size |     |     |     |     |       |       |                           |      |                                                              |       |
| RR                    | 020  | 1.06                     | 101          | 6500                 | 12           | 22           | -            | -                 | -            | 89  | 35  | 33  | 66  | -     | -     | 1.6                       | -    | 0.002                                                        | -     |
| RR/<br>RRT            | 030  | 2.30                     | 220          | 5470                 | 12           | 32           | 10           | 25                | 1008         | 127 | 51  | 41  | 82  | 23    | 46    | 3.2                       | 2.8  | 0.004                                                        | 0.004 |
|                       | 038  | 4.80                     | 458          | 5260                 | 15           | 40           | 10           | 28                | 1108         | 132 | 64  | 48  | 96  | 23    | 46    | 4.1                       | 3.6  | 0.006                                                        | 0.006 |
|                       | 042  | 6.40                     | 611          | 4750                 | 15           | 44           | 12           | 32                | 1215         | 146 | 70  | 56  | 112 | 38.1  | 76.2  | 5.6                       | 5    | 0.008                                                        | 0.008 |
|                       | 048  | 9.63                     | 920          | 4050                 | 21           | 52           | 16           | 42                | 1615         | 171 | 81  | 61  | 122 | 38    | 76    | 9.3                       | 8.3  | 0.024                                                        | 0.023 |
|                       | 058  | 16.90                    | 1614         | 3600                 | 21           | 62           | 14           | 50                | 2017         | 193 | 97  | 68  | 136 | 47    | 94    | 12                        | 10.7 | 0.04                                                         | 0.038 |
|                       | 070  | 29.90                    | 2855         | 3220                 | 21           | 74           | 16           | 60                | 2525         | 216 | 117 | 76  | 152 | 63.5  | 127   | 18                        | 16   | 0.07                                                         | 0.067 |
|                       | 075  | 36.50                    | 3485         | 2730                 | 28           | 80           | 16           | 60                | 2525         | 254 | 127 | 88  | 176 | 68    | 136   | 32                        | 30   | 0.18                                                         | 0.177 |
|                       | 085  | 53.40                    | 5099         | 2480                 | 28           | 92           | 24           | 75                | 3030         | 279 | 147 | 100 | 200 | 76    | 152   | 44                        | 39.3 | 0.28                                                         | 0.260 |
|                       | 105  | 100.0                    | 9549         | 2100                 | 34           | 114          | 35           | 90                | 3535         | 330 | 180 | 117 | 234 | 89    | 178   | 69                        | 61   | 0.59                                                         | 0.56  |
|                       | 120  | 149.0                    | 14228        | 1880                 | 61           | 130          | 40           | 100               | 4040         | 370 | 206 | 132 | 264 | 102   | 204   | 109                       | 97   | 1.42                                                         | 1.36  |
|                       | 135  | 213.0                    | 20340        | 1660                 | 67           | 144          | 55           | 115               | 4545         | 419 | 230 | 147 | 294 | 114.3 | 228.6 | 145                       | 129  | 2.35                                                         | 2.25  |
|                       | 150  | 292.0                    | 27884        | 1520                 | 82           | 160          | 70           | 127               | 5050         | 457 | 256 | 165 | 330 | 127   | 254   | 186                       | 166  | 3.48                                                         | 3.33  |
| RR                    | 170  | 470.0                    | 44882        | 1300                 | 96           | 184          | -            | -                 | -            | 533 | 292 | 188 | 376 | -     | -     | 350                       | -    | 9.52                                                         | -     |
|                       | 190  | 575.0                    | 54908        | 1170                 | 122          | 206          | -            | -                 | -            | 597 | 330 | 211 | 422 | -     | -     | 475                       | -    | 14.2                                                         | -     |
|                       | 215  | 750.0                    | 71620        | 1050                 | 135          | 230          | -            | -                 | -            | 660 | 368 | 237 | 474 | -     | -     | 640                       | -    | 22.8                                                         | -     |

# For detail information about Taper Bush bore, please refer Taper Bush catalogue.

● For vertical installation contact RATHI.



Spacer Type "Cone-Flex" coupling is suitable where distance between shaft ends (DBSE) is large. The spacer member is radially removable without disturbing shaft alignment. Flexible element can be installed without disturbing the hub.

### TECHNICAL DATA

| Coupling Size | kW at 100 rpm | Torque Nm | Max. Speed rpm | Bore |      | Dimensions |      |    |   |                   |                   |    |
|---------------|---------------|-----------|----------------|------|------|------------|------|----|---|-------------------|-------------------|----|
|               |               |           |                | Min. | Max. | ØA         | Ø B1 | L1 | G | DBSE              | TL                | M  |
| RCS – 020     | 0.56          | 50        | 6500           | 12   | 20   | 89         | 35   | 33 | 3 | 100<br>140<br>180 | 166<br>206<br>246 | 30 |
| RCS – 030     | 1.2           | 110       | 5470           | 12   | 30   | 127        | 51   | 41 |   |                   | 182<br>222<br>262 | 28 |
| RCS – 038     | 2.0           | 190       | 5260           | 15   | 38   | 132        | 64   | 48 |   |                   | 196<br>236<br>276 | 22 |
| RCS – 042     | 3.0           | 290       | 4750           | 15   | 42   | 146        | 70   | 56 |   |                   | 212<br>252<br>292 | 14 |
| RCS – 048     | 5.0           | 480       | 4050           | 21   | 48   | 171        | 81   | 61 |   |                   | 222<br>262<br>302 | 28 |
| RCS – 058     | 8.0           | 760       | 3600           | 21   | 58   | 193        | 97   | 68 |   |                   | 236<br>276<br>316 | 24 |
| RCS – 070     | 11.0          | 1000      | 3220           | 21   | 70   | 216        | 117  | 76 |   |                   | 252<br>292<br>332 | 23 |

- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.

In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specifications without prior notice. This document is the intellectual property of Rathi Transpower Pvt. Ltd. and subject to copyright.



**Rathi Transpower Pvt Ltd**  
Gaia Apex, S. No. 33/2D, Viman Nagar  
Pune 411 014.(INDIA)  
Phone : 91-20-30517201  
Fax : 91-20-30517212  
E-mail : enquiry@rathigroup.com  
Website : www.rathicouplings.com

Distributor