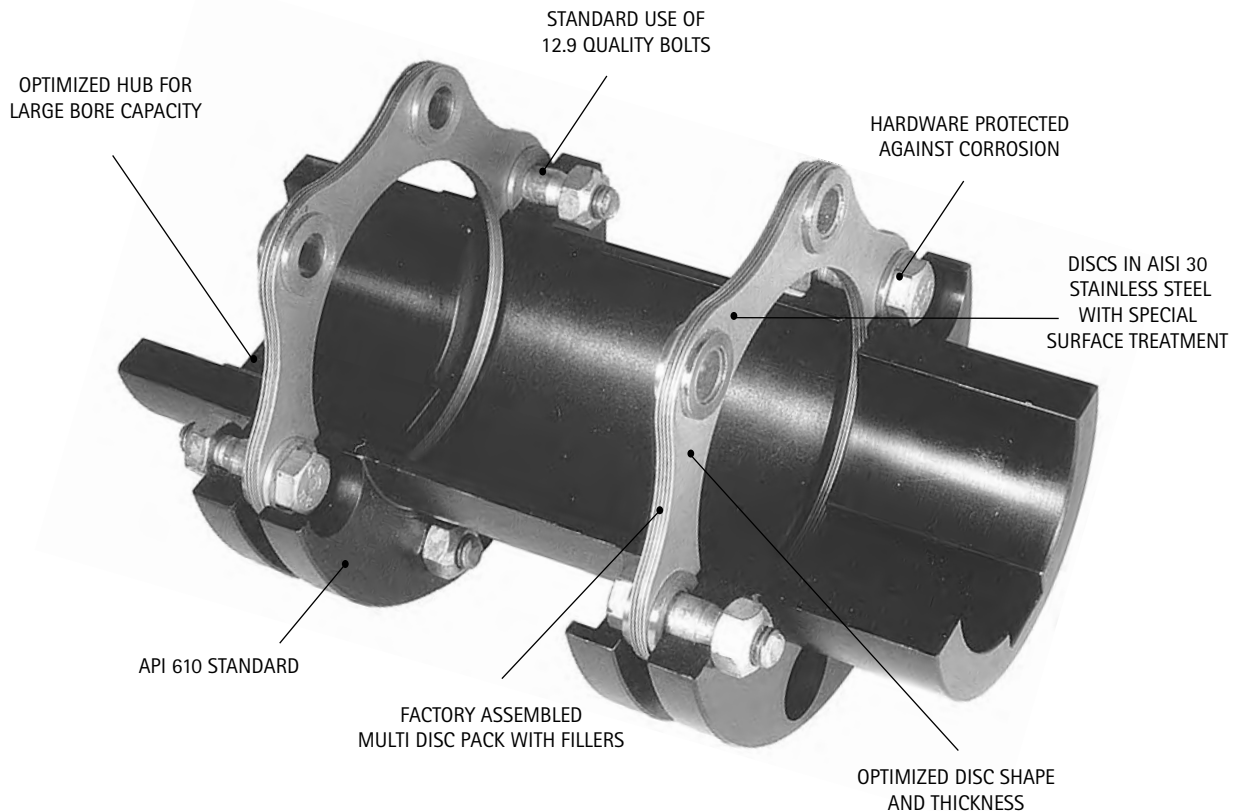


## SERIES DMU

The General Purpose High Torque/High Misalignment Solution

Maximum torque capacity: up to 260000 Nm - Bore Capacity: up to 370 mm



### General Purpose Design

Because of the high torque, bore and misalignment capacity of the Escodisc DMU coupling range, its high degree of natural inherent balance (AGMA class 9) up to size 85 and the fact that it meets the API 610 standards, this coupling is the ideal solution in a multitude of applications up to 260000 Nm (and larger upon request).

### Unitised Disc Pack

The DMU disc pack consists of an optimised number of discs or separated links (for sizes greater or equal to size 190) and has been factory assembled for easy field assembly. To eliminate fretting corrosion (which limits disc type coupling life), stainless steel fillers between the discs are used.

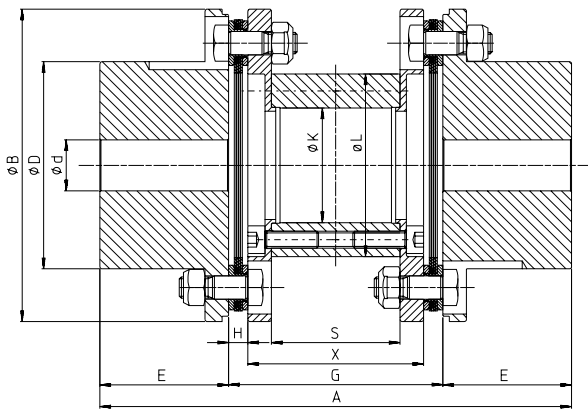
### Close Coupled Design

The Escodisc DMU coupling is also available in close coupled design (DMUCC). The high torque/bore capacity makes it an ideal maintenance free alternative for close coupled gear and elastic type couplings and can be modified in such a way that replacement of gear and elastic couplings is possible without modifications to an existing installation. Furthermore, thanks to the split spacer design, disconnection of the two machines and replacement of the disc pack is possible without axial displacement of the connected machines.

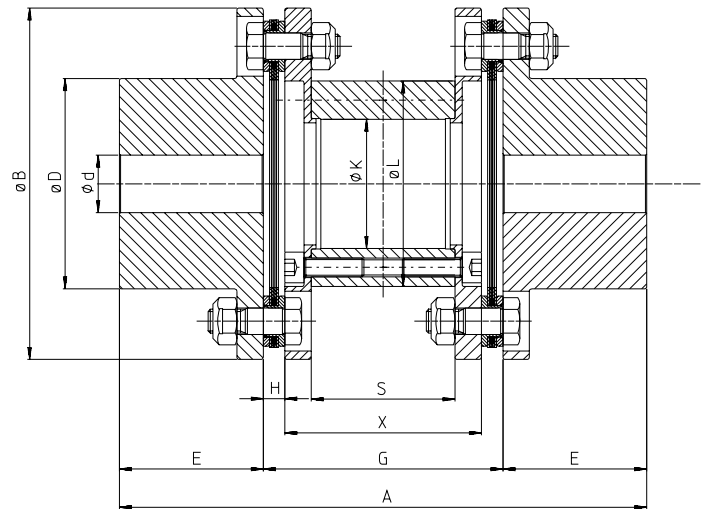
## Escodisc Series DMU - Quick Selection Table

| Coupling<br>size | Maximum Power (kW) |        |      |          |        |      |          |        |      |          |        |      |          |        |      | Max.<br>Speed<br>(Rpm) | Max.<br>Bore<br>(mm) |
|------------------|--------------------|--------|------|----------|--------|------|----------|--------|------|----------|--------|------|----------|--------|------|------------------------|----------------------|
|                  | 1000 Rpm           |        |      | 1500 Rpm |        |      | 1800 Rpm |        |      | 3000 Rpm |        |      | 3600 Rpm |        |      |                        |                      |
|                  | SF 1               | SF 1,5 | SF 2 | SF 1     | SF 1,5 | SF2  | SF 1     | SF 1,5 | SF2  | SF 1     | SF 1,5 | SF2  | SF 1     | SF 1,5 | SF2  |                        |                      |
| DMU 38-45        | 20                 | 13     | 10   | 30       | 20     | 15   | 36       | 24     | 18   | 60       | 40     | 30   | 72       | 48     | 36   | 16000                  | 45                   |
| DMU 45-55        | 35                 | 23     | 17   | 52       | 35     | 26   | 62       | 41     | 31   | 104      | 69     | 52   | 124      | 83     | 62   | 13600                  | 55                   |
| DMU 55-65        | 79                 | 52     | 39   | 118      | 79     | 59   | 141      | 94     | 71   | 236      | 157    | 118  | 283      | 188    | 141  | 12000                  | 65                   |
| DMU 65-75        | 139                | 93     | 70   | 209      | 139    | 104  | 251      | 167    | 125  | 418      | 279    | 209  | 501      | 334    | 251  | 10000                  | 75                   |
| DMU 75-90        | 230                | 154    | 115  | 346      | 230    | 173  | 415      | 276    | 207  | 691      | 461    | 346  | 829      | 553    | 415  | 8600                   | 90                   |
| DMU 85-105       | 366                | 244    | 183  | 550      | 366    | 275  | 660      | 440    | 330  | 1099     | 733    | 550  | 1319     | 880    | 660  | 7200                   | 105                  |
| DMU 95-105       | 586                | 391    | 293  | 880      | 586    | 440  | 1056     | 704    | 528  | 1759     | 1173   | 880  | 2111     | 1407   | 1056 | 6400                   | 105                  |
| DMU 110-120      | 838                | 558    | 419  | 1257     | 838    | 628  | 1508     | 1005   | 754  | 2513     | 1675   | 1257 | 3016     | 2010   | 1508 | 5600                   | 120                  |
| DMU 125-135      | 1141               | 761    | 571  | 1712     | 1141   | 856  | 2054     | 1370   | 1027 | 3424     | 2283   | 1712 | 4109     | 2739   | 2054 | 5000                   | 135                  |
| DMU 140-160      | 1487               | 991    | 744  | 2231     | 1487   | 1115 | 2677     | 1784   | 1338 | 4461     | 2974   | 2231 | 5353     | 3569   | 2677 | 4600                   | 160                  |
| DMU 160-185      | 2074               | 1383   | 1037 | 3109     | 2073   | 1554 | 3735     | 2490   | 1868 | 6226     | 4151   | 3113 | 11245    | 7497   | 5623 | 4000                   | 185                  |





Size 38 -45 to 85 -105

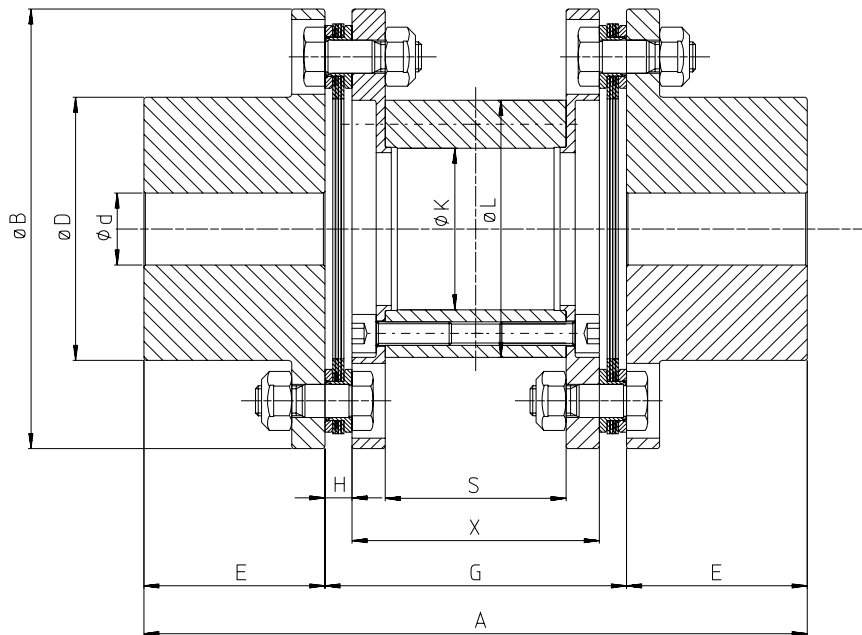


Size 95 -105 to 160 -185

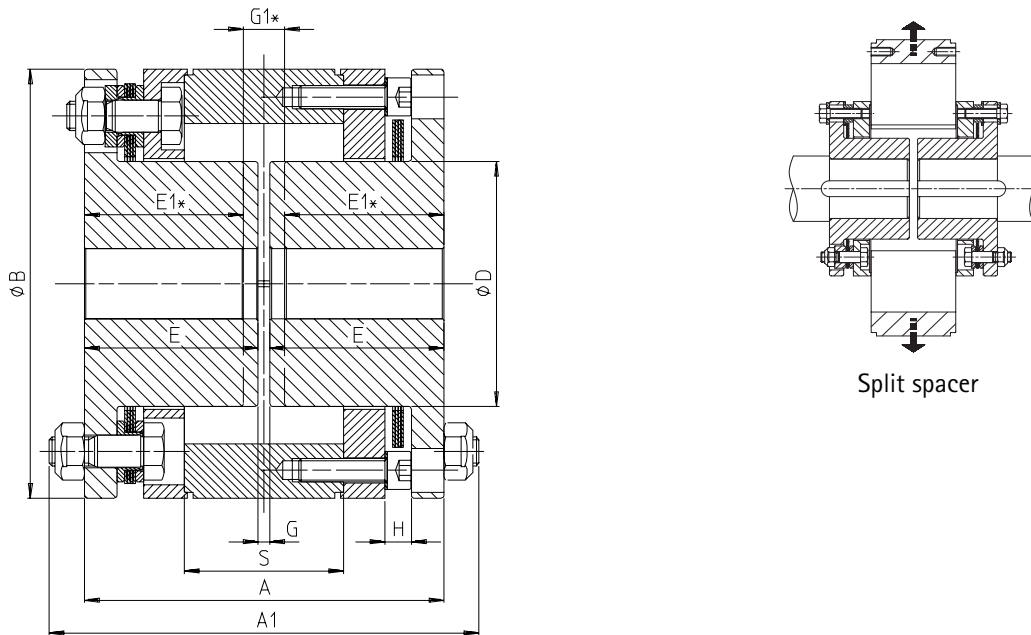
| ←A105 |     |                  | Type DMU |        |        |        |       |        |        |         |         |         |         |     |
|-------|-----|------------------|----------|--------|--------|--------|-------|--------|--------|---------|---------|---------|---------|-----|
|       |     |                  | 38-45    | 45-55  | 55-65  | 65-75  | 75-90 | 85-105 | 95-105 | 110-120 | 125-135 | 140-160 | 160-185 |     |
|       | 1   | mm               | 45       | 55     | 65     | 75     | 90    | 105    | 105    | 120     | 135     | 160     | 185     |     |
|       |     | mm               | 0        | 0      | 0      | 25     | 32    | 38     | 45     | 55      | 65      | 65      | 80      |     |
|       | 2.1 | Nm               | 190      | 330    | 750    | 1330   | 2200  | 3500   | 5600   | 8000    | 10900   | 14200   | 19800   |     |
|       |     | Nm               | 290      | 500    | 1120   | 2000   | 3320  | 5200   | 8400   | 12000   | 16400   | 21200   | 29600   |     |
|       | 3   | tr/min           | 8000     | 6800   | 6000   | 5000   | 4300  | 3600   | 3200   | 2800    | 2500    | 2300    | 2000    |     |
|       |     | rpm              | 16000*   | 13600* | 12000* | 10000* | 8600* | 7200*  | 6400*  | 5600*   | 5000*   | 4600*   | 4000*   |     |
|       | 12  | degré            | 2x0,75   | 2x0,5  | 2x0,5  | 2x0,5  | 2x0,5 | 2x0,5  | 2x0,5  | 2x0,5   | 2x0,5   | 2x0,5   | 2x0,5   |     |
|       |     | Grad             | 2x0,75   | 2x0,5  | 2x0,5  | 2x0,5  | 2x0,5 | 2x0,5  | 2x0,5  | 2x0,5   | 2x0,5   | 2x0,5   | 2x0,5   |     |
|       | 12  | mm: ±            | 2,4      | 2      | 2,4    | 2,6    | 3     | 4      | 4      | 4,4     | 5,2     | 6,6     | 6,8     |     |
|       |     | mm: ±            | 0,8      | 0,8    | 0,8    | 0,8    | 1,1   | 1,1    | 1,1    | 1,4     | 1,4     | 2       | 2       |     |
|       | 4   | kgm <sup>2</sup> | 0,0015   | 0,004  | 0,008  | 0,018  | 0,04  | 0,084  | 0,136  | 0,262   | 0,434   | 0,779   | 1,436   |     |
|       |     | kg               | 3,08     | 4,98   | 8      | 12,05  | 20,12 | 30,65  | 39,5   | 59,8    | 79,04   | 115,5   | 163,6   |     |
| mm ±  | A   | 11               | mm       | 170    | 190    | 200    | 220   | 280    | 310    | 330     | 400     | 430     | 530     | 570 |
|       | B   |                  | mm       | 88     | 102    | 123    | 147   | 166    | 192    | 224     | 244     | 273     | 303     | 340 |
|       | D   |                  | mm       | 58,5   | 69,5   | 82     | 97,5  | 113    | 132    | 133     | 154     | 175     | 196     | 228 |
|       | E   |                  | mm       | 35     | 45     | 50     | 60    | 70     | 85     | 95      | 110     | 125     | 140     | 160 |
|       | G   | 11•              | mm       | 100    | 100    | 100    | 100   | 140    | 140    | 140     | 180     | 180     | 250     | 250 |
|       | H   |                  | mm       | 6,7    | 6,5    | 7      | 9     | 10     | 13     | 14      | 15,5    | 19      | 20      | 20  |
|       | K   |                  | mm       | 21     | 37     | 48     | 54    | 65     | 76     | 94      | 108     | 123     | 143     | 165 |
|       | L   |                  | mm       | 41     | 61     | 72     | 86    | 98     | 116    | 134     | 156     | 171     | 191     | 221 |
|       | S   | 11               | mm       | 70,6   | 71     | 64     | 60    | 88     | 80     | 76      | 103     | 96      | 160     | 154 |
|       | X   |                  | mm       | 86,6   | 87     | 86     | 82    | 120    | 114    | 112     | 149     | 142     | 210     | 210 |

\* Balancing needed – • Other lenght available – Please consult us.

DMU 190-220 ⇨ 360-370

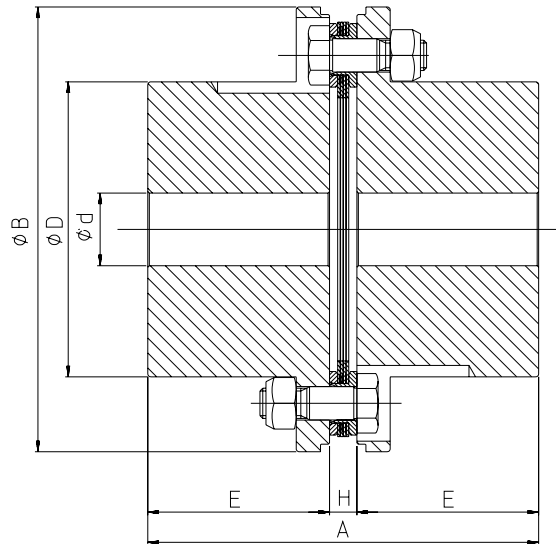










| ←A105                     |     |   | Type DMU |         |         |         |         |         |      |
|---------------------------|-----|---|----------|---------|---------|---------|---------|---------|------|
|                           |     |   | 190-220  | 220-255 | 250-290 | 280-320 | 320-360 | 360-370 |      |
| $d$                       | 1   | $\varnothing$ max.                            | 220      | 255     | 290     | 320     | 360     | 370     |      |
|                           |     | $\varnothing$ min.                            | 90       | 120     | 150     | 180     | 200     | 200     |      |
| $T_n$<br>$T_p$            | 2.1 | Nm  | 30700    | 53000   | 93000   | 120000  | 167000  | 260000  |      |
|                           |     |   | 46000    | 80000   | 140000  | 180000  | 250000  | 390000  |      |
| /min.max.                 | 3   | tr/min<br>omw/min<br>rpm<br>min <sup>-1</sup> | 1800     | 1500    | 1300    | 1200    | 1050    | 900     |      |
| $\Delta K_w$              | 12  | degré<br>graad<br>degree<br>Grad              | 2x0,33   | 2x0,33  | 2x0,25  | 2x0,25  | 2x0,2   | 2x0,2   |      |
| $\Delta K_a$              | 12  | mm: ±   | 5        | 6,6     | 7,6     | 8       | 9       | 6       |      |
| $\Delta K_r$              | 12  | mm: ±   | 1,4      | 1,6     | 1,3     | 1,4     | 1,3     | 1,4     |      |
| $J$<br>(WR <sup>2</sup> ) | 4   | kgm <sup>2</sup>                              | 3        | 7,3     | 11,6    | 23      | 36      | 72      |      |
|                           | 5   | kg  | 222      | 358     | 418     | 680     | 916     | 1400    |      |
| mm ±                      | A   | 11  | mm       | 630     | 720     | 800     | 900     | 1020    | 1120 |
|                           | B   |   | mm       | 368     | 445     | 515     | 554     | 604     | 704  |
|                           | D   |   | mm       | 266     | 320     | 350     | 392     | 431     | 504  |
|                           | E   |   | mm       | 190     | 220     | 250     | 280     | 320     | 360  |
|                           | G   |   | mm       | 250     | 280     | 300     | 340     | 380     | 400  |
|                           | H   |   | mm       | 19,25   | 24,6    | 38      | 41      | 44,9    | 34   |
|                           | K   |   | mm       | 204     | 254     | 292     | 314     | 330     | 432  |
|                           | L   |   | mm       | 268     | 318     | 364     | 394     | 426     | 528  |
|                           | S   |   | mm       | 165,5   | 174,8   | 160     | 186     | 217,2   | 252  |
|                           | X   |   | mm       | 211,5   | 230,8   | 224     | 258     | 290,2   | 332  |



| ← A105 |     |                         | Type DMUCC |   |       |       |       |       |         |         |         |         |       |       |
|--------|-----|-------------------------|------------|---|-------|-------|-------|-------|---------|---------|---------|---------|-------|-------|
|        |     |                         | 45-45      | 55-50   | 65-65 | 75-75 | 85-90 | 95-95 | 110-115 | 125-130 | 140-140 | 160-170 |       |       |
|        | d   | ∅ max.                  | 1          | mm  | 45    | 50    | 65    | 75    | 90      | 95      | 115     | 130     | 140   | 170   |
|        |     | ∅ min.                  | 1          | mm  | 0     | 0     | 25    | 32    | 38      | 45      | 55      | 65      | 65    | 65    |
|        | 1m  | Tn                      | 2.1        | Nm  | 330   | 750   | 1330  | 2200  | 3500    | 5600    | 8000    | 10900   | 14200 | 19800 |
|        |     | Tp                      |            |   | 500   | 1120  | 2000  | 3320  | 5200    | 8400    | 12000   | 16400   | 21200 | 29600 |
|        |     | min.max.                | 3          | tr/min<br>omw/min<br>rpm<br>min <sup>-1</sup> | 6800  | 6000  | 5000  | 4300  | 3600    | 3200    | 2800    | 2500    | 2300  | 2000  |
|        |     | ΔK <sub>W</sub>         | 12         | degré<br>graad<br>degree<br>Grad              | 2x0,5 | 2x0,5 | 2x0,5 | 2x0,5 | 2x0,5   | 2X0,5   | 2X0,5   | 2X0,5   | 2X0,5 | 2X0,5 |
|        |     | ΔK <sub>a</sub>         | 12         | mm: ±   | 2     | 2,4   | 2,6   | 3     | 4       | 4       | 4,4     | 5,2     | 6,6   | 6,8   |
|        |     | ΔK <sub>r</sub>         | 12         | mm: ±   | 0,8   | 0,8   | 0,8   | 0,8   | 1,1     | 1,1     | 1,4     | 1,4     | 2     | 2     |
|        |     | J<br>(WR <sup>2</sup> ) | 4          | kgm <sup>2</sup>                              | 0,006 | 0,014 | 0,032 | 0,062 | 0,135   | 0,272   | 0,459   | 0,8     | 1,36  | 2,5   |
|        |     |                         | 5          | kg  | 4,52  | 7,57  | 12,01 | 17,42 | 29,08   | 42,7    | 61,2    | 84,3    | 118   | 170   |
| mm ±   | A   | 11                      | mm         | 93  | 103   | 122   | 132   | 174   | 194     | 226     | 256     | 286     | 328   |       |
|        | A1  | 11                      | mm         | 108   | 123   | 146   | 160   | 204   | 230     | 269     | 302     | 336     | 382   |       |
|        | B   |                         | mm         | 102   | 123   | 147   | 166   | 192   | 224     | 244     | 273     | 303     | 340   |       |
|        | D   |                         | mm         | 59  | 70    | 84    | 97    | 112   | 126     | 151     | 166     | 182     | 213   |       |
|        | E   |                         | mm         | 45  | 50    | 59    | 64    | 85    | 95      | 110     | 125     | 140     | 160   |       |
|        | E1* |                         | mm         | 43  | 47,5  | 56    | 60,5  | 80    | 89,5    | 104,8   | 118     | 132,5   | 153,5 |       |
|        | G   | 11                      | mm         | 3   | 3     | 4     | 4     | 4     | 4       | 6       | 6       | 6       | 8     |       |
|        | G1* |                         | mm         | 7   | 8     | 10    | 11    | 14    | 15      | 16,5    | 20      | 21      | 21    |       |
|        | H   |                         | mm         | 6,5   | 7     | 9     | 10    | 13    | 14      | 15,5    | 19      | 20      | 20    |       |
|        | S   |                         | mm         | 46  | 43    | 54    | 46    | 76    | 88      | 98      | 117     | 135     | 167   |       |

\* E1 and G1 are min. dimensions to allow disc-pack disassembly without moving the machines.



|  ← A105 |     |                  | Type DMUFR |        |        |        |       |        |        |         |         |         |         |
|--|-----|------------------|------------|--------|--------|--------|-------|--------|--------|---------|---------|---------|---------|
|  |     |                  | 38-45      | 45-55  | 55-65  | 65-75  | 75-90 | 85-105 | 95-105 | 110-120 | 125-135 | 140-160 | 160-185 |
|         | 1   | mm               | 45         | 55     | 65     | 75     | 90    | 105    | 105    | 120     | 135     | 160     | 185     |
|  |     | mm               | 0          | 0      | 0      | 25     | 32    | 38     | 45     | 55      | 65      | 65      | 80      |
|         | 2.1 | Nm               | 190        | 330    | 750    | 1330   | 2200  | 3500   | 5600   | 8000    | 10900   | 14200   | 19800   |
|  |     | Nm               | 290        | 500    | 1120   | 2000   | 3320  | 5200   | 8400   | 12000   | 16400   | 21200   | 29600   |
|         | 3   | tr/min           | 8000       | 6800   | 6000   | 5000   | 4300  | 3600   | 3200   | 2800    | 2500    | 2300    | 2000    |
|  |     | rpm              | 16000*     | 13600* | 12000* | 10000* | 8600* | 7200*  | 6400*  | 5600*   | 5000*   | 4600*   | 4000*   |
|         | 12  | degré            | 0,75       | 0,5    | 0,5    | 0,5    | 0,5   | 0,5    | 0,5    | 0,5     | 0,5     | 0,5     | 0,5     |
|  |     | Grad             | 0,75       | 0,5    | 0,5    | 0,5    | 0,5   | 0,5    | 0,5    | 0,5     | 0,5     | 0,5     | 0,5     |
|         | 12  | mm: ±            | 1,2        | 1      | 1,2    | 1,3    | 1,5   | 2      | 2      | 2,2     | 2,6     | 3,3     | 3,4     |
|  |     | mm: ±            | 0          | 0      | 0      | 0      | 0     | 0      | 0      | 0       | 0       | 0       | 0       |
|         | 4   | kgm <sup>2</sup> | 0,001      | 0,003  | 0,007  | 0,015  | 0,032 | 0,0683 | 0,1095 | 0,2035  | 0,3493  | 0,601   | 1,136   |
|  |     | kg               | 1,91       | 3,23   | 5,31   | 8,3    | 13,15 | 21,13  | 26,21  | 38,94   | 54,3    | 77,35   | 113,6   |
|         | 5   | mm               | 76,7       | 96,5   | 107    | 129    | 150   | 183    | 204    | 235,5   | 269     | 300     | 340     |
|  |     | mm               | 88         | 102    | 123    | 147    | 166   | 192    | 224    | 244     | 273     | 303     | 340     |
|  |     | mm               | 58,5       | 69,5   | 82     | 97,5   | 113   | 132    | 133    | 154     | 175     | 196     | 228     |
|  |     | mm               | 35         | 45     | 50     | 60     | 70    | 85     | 95     | 110     | 125     | 140     | 160     |
|  |     | mm               | 6,7        | 6,5    | 7      | 9      | 10    | 13     | 14     | 15,5    | 19      | 20      | 20      |

\* Balancing needed