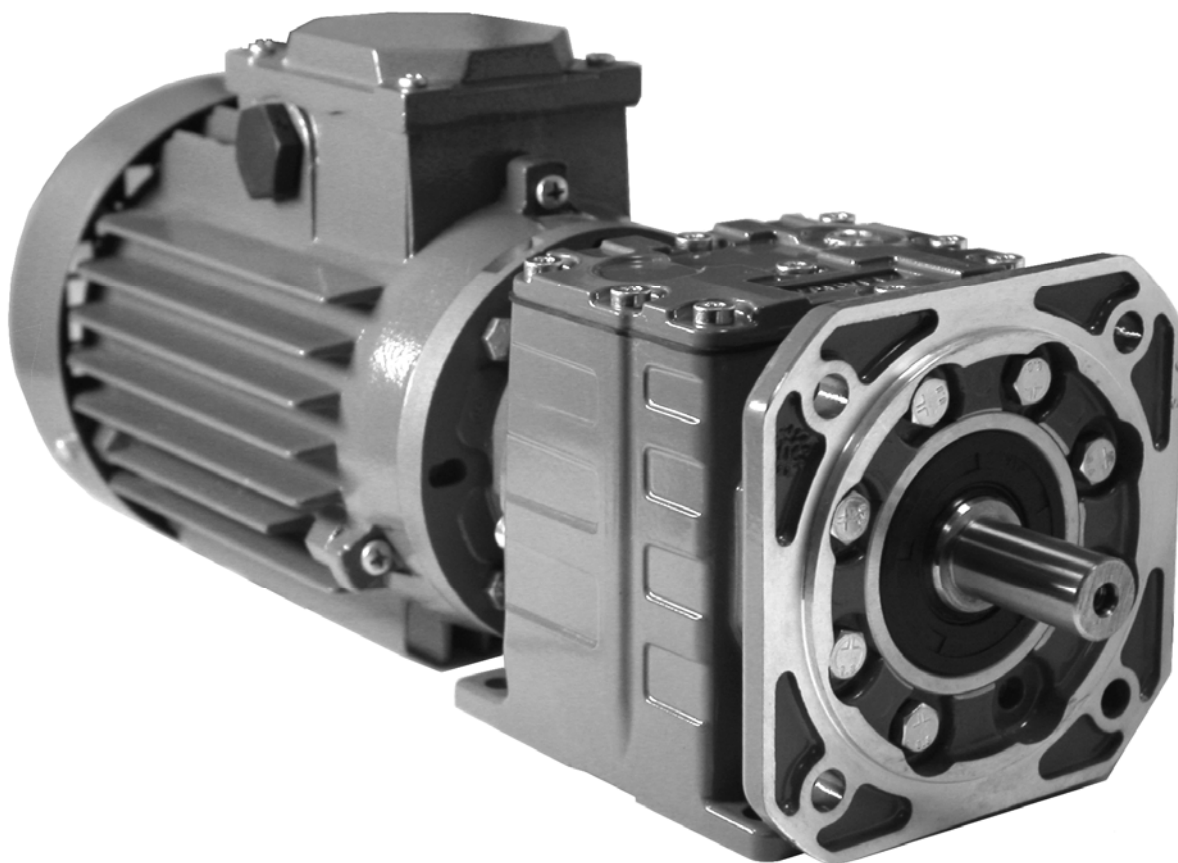




#### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



|                                 |     |
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### 4.2.1 Система обозначений

**MRD 43 / B5 H 250 IEC80-B14 (П19/120) AU35 DFU300 //0,55/4-19/120/000/IM3681-IP54/F/220/380/50/Y3/S1-T/10/AC/220/380-K2**

**0.55** – мощность электродвигателя в кВт.

**4** – количество полюсов.

**19** – диаметр вала электродвигателя в мм.

**120** – наружный диаметр фланца электродвигателя в мм.

**000** – высота от лап до оси (только для лапного исполнения, для фланцевого исполнения ставится 000).

**IM:3681** – конструктивное исполнение по способу монтажа (ГОСТ 2479)

**IP:54** – исполнение по степени защиты.

**F** – класс изоляции

**220/380/50** – напряжение питания электродвигателя и частота питающего тока (возможны варианты 230/400/50, 400/690/50, 380/660/50, 275/480/60, 480/830/60)

**Y3** – климатическое исполнение

**S1** – режим работы

**T** – тормоз

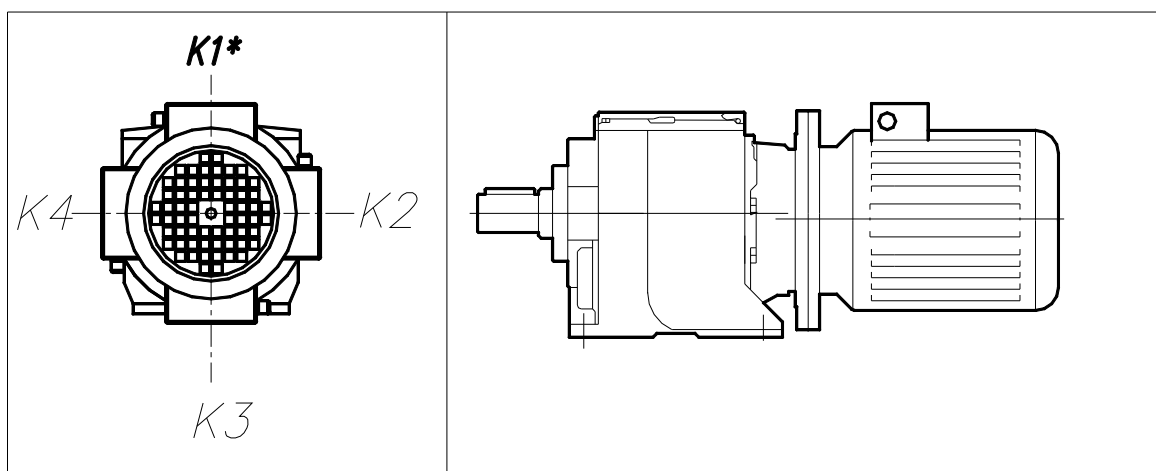
**10** – тормозной момент в Нм

**AC** – тип питания тормоза (переменное)

**220/380** – напряжение (В) питания электротормоза

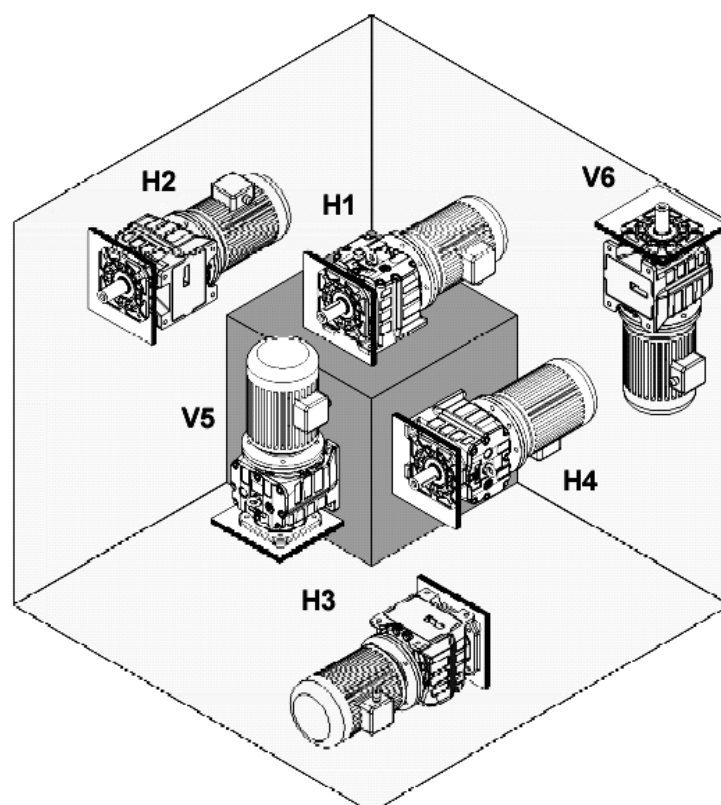
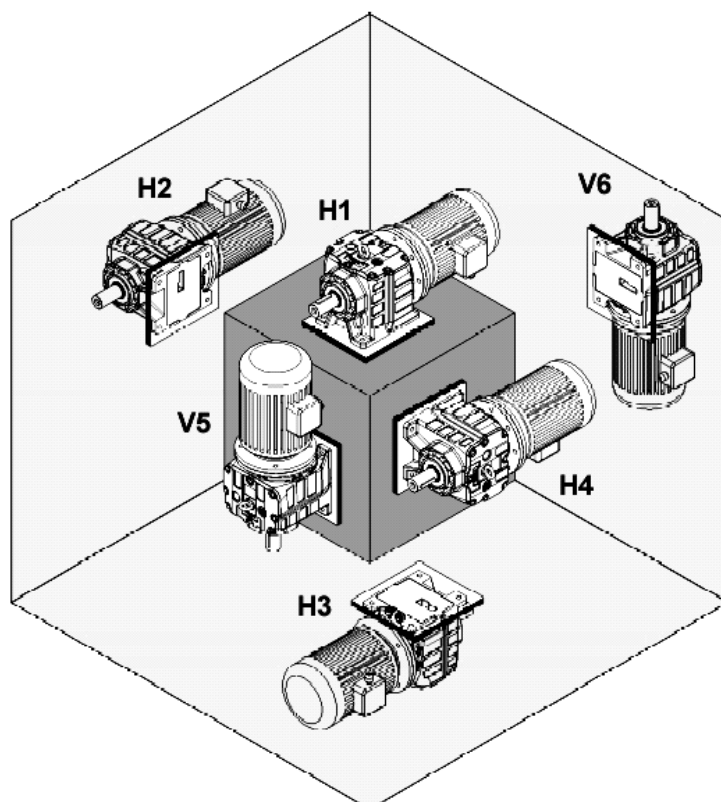
**K2** – положение клеммной коробки.

*Положение клеммной коробки (ПКК) электродвигателя*



\* – стандартный вариант установки.

### 4.2.2 Варианты установки



### 4.2.3 Таблицы выбора мотор-редукторов

Принятые в таблице обозначения:

$i_n$  – номинальное передаточное отношение редуктора  
 $i_d$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

**$P_1 = 0.06$  кВт**

**$n_1 = 1360$  об/мин**

| $i_n$ | $i_d$  | $n_2$<br>об/мин | $M_2$<br>Н·м | $FS$ | Тип мотор-редуктора | $F_{r2}$<br>Н | Масса,<br>кг |
|-------|--------|-----------------|--------------|------|---------------------|---------------|--------------|
| 2,5   | 2,57   | 529             | 1,0          | >3,5 | MRD02               | 820           | 5,5          |
| 3,15  | 3,28   | 415             | 1,3          | >3,5 | MRD02               | 890           | 5,5          |
| 4,0   | 4,26   | 319             | 1,7          | >3,5 | MRD02               | 960           | 5,5          |
| 5,0   | 5,28   | 258             | 2,1          | >3,5 | MRD02               | 1020          | 5,5          |
| 6,3   | 6,25   | 218             | 2,5          | >3,5 | MRD02               | 1100          | 5,5          |
| 8,0   | 7,98   | 170             | 3,2          | >3,5 | MRD02               | 1180          | 5,5          |
| 10,0  | 10,36  | 131             | 4,2          | >3,5 | MRD02               | 1290          | 5,5          |
| 12,5  | 12,84  | 106             | 5,2          | >3,5 | MRD02               | 1370          | 5,5          |
| 16,0  | 16,32  | 83              | 6,6          | >3,5 | MRD02               | 1480          | 5,5          |
| 20,0  | 21,53  | 63              | 8,7          | >3,5 | MRD02               | 1590          | 5,5          |
| 25,0  | 26,75  | 51              | 10,8         | >3,5 | MRD02               | 1590          | 5,5          |
| 31,5  | 30,22  | 45              | 12,2         | >3,5 | MRD02               | 1580          | 5,5          |
| 35,5  | 34,68  | 39              | 13,9         | >3,5 | MRD02               | 1580          | 5,5          |
| 40    | 43,07  | 32              | 17,4         | 2,01 | MRD02               | 1560          | 5,5          |
| 40    | 36,89  | 37              | 14,9         | 3,48 | MRD03               | 1570          | 5,7          |
| 50    | 48,67  | 28              | 19,7         | 1,83 | MRD02               | 1550          | 5,5          |
| 50    | 47,07  | 29              | 19,0         | 2,73 | MRD03               | 1560          | 5,7          |
| 63    | 61,14  | 22              | 24,7         | 2,10 | MRD03               | 1520          | 5,7          |
| 63    | 61,67  | 22              | 25,0         | 2,81 | MRD12               | 1960          | 7,0          |
| 80    | 75,78  | 18              | 30,7         | 1,70 | MRD03               | 1480          | 5,7          |
| 80    | 80,43  | 17              | 33           | 3,07 | MRD13               | 1930          | 7,2          |
| 100   | 96,29  | 14              | 38,9         | 1,34 | MRD03               | 1400          | 5,7          |
| 100   | 100,60 | 14              | 41           | 2,45 | MRD13               | 1900          | 7,2          |
| 125   | 127,05 | 10,7            | 51,4         | 1,01 | MRD03               | 1230          | 5,7          |
| 125   | 130,84 | 10,4            | 53           | 1,89 | MRD13               | 1820          | 7,2          |
| 160   | 157,81 | 8,6             | 63,8         | 0,81 | MRD03               | 970           | 5,7          |
| 160   | 165,08 | 8,2             | 67           | 1,50 | MRD13               | 1710          | 7,2          |
| 180   | 178,31 | 7,6             | 72,1         | 0,80 | MRD03               | 700           | 5,7          |
| 200   | 204,58 | 6,6             | 45,0         | 0,80 | MRD03               | 1300          | 5,7          |
| 200   | 206,46 | 6,6             | 84           | 1,20 | MRD13               | 1530          | 7,2          |
| 250   | 254,11 | 5,4             | 45,0         | 0,80 | MRD03               | 1300          | 5,7          |
| 250   | 268,54 | 5,1             | 109          | 0,92 | MRD13               | 1100          | 7,2          |
| 280   | 287,13 | 4,7             | 45,0         | 0,80 | MRD03               | 1300          | 5,7          |
| 315   | 324,44 | 4,2             | 45,0         | 0,80 | MRD03               | 1300          | 5,7          |

## Часть 1. Редукторы и мотор-редукторы

### 4. Цилиндрические соосные редукторы и мотор-редукторы

#### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



ПРИВОДНАЯ  
ТЕХНИКА™

$i_n$  – номинальное передаточное отношение редуктора  
 $i_o$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

**$P_1 = 0.09$  кВт**

**$n_1 = 1360$  об/мин**

| $i_n$ | $i_o$  | $n_2$ ,<br>об/мин | $M_2$ ,<br>Н·м | $FS$ | Тип мотор-<br>редуктора | $F_{r2}$ ,<br>Н | Масса,<br>кг |
|-------|--------|-------------------|----------------|------|-------------------------|-----------------|--------------|
| 2,5   | 2,57   | 529               | 1,6            | >3,5 | MRD02                   | 810             | 5,6          |
| 3,15  | 3,28   | 415               | 2,0            | >3,5 | MRD02                   | 880             | 5,6          |
| 4,0   | 4,26   | 319               | 2,6            | >3,5 | MRD02                   | 950             | 5,6          |
| 5,0   | 5,28   | 258               | 3,2            | >3,5 | MRD02                   | 1010            | 5,6          |
| 6,3   | 6,25   | 218               | 3,8            | >3,5 | MRD02                   | 1080            | 5,6          |
| 8,0   | 7,98   | 170               | 4,8            | >3,5 | MRD02                   | 1170            | 5,6          |
| 10,0  | 10,36  | 131               | 6,3            | >3,5 | MRD02                   | 1270            | 5,6          |
| 12,5  | 12,84  | 106               | 7,8            | >3,5 | MRD02                   | 1350            | 5,6          |
| 16,0  | 16,32  | 83                | 9,9            | >3,5 | MRD02                   | 1450            | 5,6          |
| 20,0  | 21,53  | 63                | 13,1           | >3,5 | MRD02                   | 1570            | 5,6          |
| 25,0  | 26,75  | 51                | 16,2           | 3,20 | MRD02                   | 1570            | 5,6          |
| 31,5  | 30,22  | 45                | 18,3           | 2,84 | MRD02                   | 1560            | 5,6          |
| 35,5  | 34,68  | 39                | 20,9           | 1,68 | MRD02                   | 1540            | 5,6          |
| 40    | 43,07  | 32                | 26,1           | 1,34 | MRD02                   | 1510            | 5,6          |
| 40    | 36,89  | 37                | 22,4           | 2,32 | MRD03                   | 1540            | 5,8          |
| 40    | 39,08  | 35                | 23,7           | 2,95 | MRD12                   | 1940            | 7,0          |
| 50    | 48,67  | 28                | 29,5           | 1,22 | MRD02                   | 1490            | 5,6          |
| 50    | 47,07  | 29                | 28,6           | 1,82 | MRD03                   | 1500            | 5,8          |
| 50    | 48,12  | 28                | 29,2           | 2,40 | MRD12                   | 1940            | 7,0          |
| 50    | 52,20  | 26                | 32             | 3,12 | MRD13                   | 1940            | 7,2          |
| 63    | 61,14  | 22                | 37,1           | 1,40 | MRD03                   | 1420            | 5,8          |
| 63    | 61,67  | 22                | 37             | 1,88 | MRD12                   | 1900            | 7,1          |
| 63    | 66,03  | 21                | 40             | 2,50 | MRD13                   | 1900            | 7,3          |
| 80    | 75,78  | 18                | 46,0           | 1,13 | MRD03                   | 1310            | 5,8          |
| 80    | 80,43  | 17                | 49             | 2,05 | MRD13                   | 1850            | 7,3          |
| 100   | 96,29  | 14                | 58,4           | 0,89 | MRD03                   | 1100            | 5,8          |
| 100   | 100,60 | 14                | 61             | 1,64 | MRD13                   | 1760            | 7,3          |
| 125   | 130,84 | 10,4              | 79             | 1,26 | MRD13                   | 1580            | 7,3          |
| 160   | 165,08 | 8,2               | 100            | 1,00 | MRD13                   | 1280            | 7,3          |
| 200   | 206,46 | 6,6               | 125            | 0,80 | MRD13                   | 1000            | 7,3          |

$i_n$  – номинальное передаточное отношение редуктора  
 $i_d$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

 **$P_1 = 0.12$  кВт**
 **$n_1 = 1360$  об/мин**

| $i_n$ | $i_d$  | $n_2$ ,<br>об/мин | $M_2$ ,<br>Н·м | $FS$ | Тип мотор-<br>редуктора | $F_{r2}$ ,<br>Н | Масса,<br>кг |
|-------|--------|-------------------|----------------|------|-------------------------|-----------------|--------------|
| 2,5   | 2,57   | 529               | 2,1            | >3,5 | MRD02                   | 810             | 6,8          |
| 3,15  | 3,28   | 415               | 2,7            | >3,5 | MRD02                   | 870             | 6,8          |
| 4,0   | 4,26   | 319               | 3,4            | >3,5 | MRD02                   | 940             | 6,8          |
| 5,0   | 5,28   | 258               | 4,3            | >3,5 | MRD02                   | 1000            | 6,8          |
| 6,3   | 6,25   | 218               | 5,1            | >3,5 | MRD02                   | 1070            | 6,8          |
| 8,0   | 7,98   | 170               | 6,5            | >3,5 | MRD02                   | 1160            | 6,8          |
| 10,0  | 10,36  | 131               | 8,4            | >3,5 | MRD02                   | 1250            | 6,8          |
| 12,5  | 12,84  | 106               | 10,4           | >3,5 | MRD02                   | 1330            | 6,8          |
| 16,0  | 16,32  | 83                | 13,2           | >3,5 | MRD02                   | 1420            | 6,8          |
| 20,0  | 21,53  | 63                | 17,4           | 2,93 | MRD02                   | 1530            | 6,8          |
| 25,0  | 26,75  | 51                | 21,6           | 2,40 | MRD02                   | 1550            | 6,8          |
| 31,5  | 30,22  | 45                | 24,4           | 2,13 | MRD02                   | 1530            | 6,8          |
| 35,5  | 34,68  | 39                | 27,8           | 1,26 | MRD02                   | 1510            | 6,8          |
| 40    | 43,07  | 32                | 34,8           | 1,00 | MRD02                   | 1450            | 6,8          |
| 40    | 36,89  | 37                | 29,8           | 1,74 | MRD03                   | 1500            | 7,0          |
| 40    | 39,08  | 35                | 32             | 2,21 | MRD12                   | 1910            | 8,3          |
| 40    | 40,10  | 34                | 32             | 3,05 | MRD13                   | 1940            | 8,4          |
| 50    | 48,67  | 28                | 39,4           | 0,91 | MRD02                   | 1410            | 6,8          |
| 50    | 47,07  | 29                | 38,1           | 1,37 | MRD03                   | 1430            | 7,0          |
| 50    | 48,12  | 28                | 39             | 1,80 | MRD12                   | 1910            | 8,3          |
| 50    | 52,20  | 26                | 42             | 2,34 | MRD13                   | 1900            | 8,4          |
| 63    | 61,14  | 22                | 49,5           | 1,05 | MRD03                   | 1300            | 7,0          |
| 63    | 61,67  | 22                | 50             | 1,41 | MRD12                   | 1850            | 8,4          |
| 63    | 66,03  | 21                | 53             | 1,87 | MRD13                   | 1840            | 8,5          |
| 80    | 75,78  | 18                | 61,3           | 0,85 | MRD03                   | 1100            | 7,0          |
| 80    | 80,43  | 17                | 65             | 1,54 | MRD13                   | 1750            | 8,5          |
| 80    | 81,52  | 16,7              | 66             | 3,03 | MRD23                   | 3300            | 26,3         |
| 100   | 100,60 | 14                | 81             | 1,23 | MRD13                   | 1600            | 8,5          |
| 100   | 105,43 | 12,9              | 85             | 2,34 | MRD23                   | 3250            | 26,6         |
| 125   | 130,84 | 10,4              | 106            | 0,94 | MRD13                   | 1270            | 8,5          |
| 125   | 124,16 | 11                | 100            | 1,99 | MRD23                   | 3150            | 27,2         |
| 160   | 165,08 | 8,2               | 134            | 0,75 | MRD13                   | 1100            | 8,5          |
| 160   | 164,94 | 8,2               | 133            | 1,50 | MRD23                   | 2950            | 32,4         |
| 200   | 209,25 | 6,5               | 169            | 1,18 | MRD23                   | 2650            | 27,2         |
| 250   | 270,63 | 5                 | 219            | 0,91 | MRD23                   | 1980            | 33,5         |
| 315   | 318,70 | 4,3               | 258            | 0,78 | MRD23                   | 1600            | 33,6         |



$i_n$  – номинальное передаточное отношение редуктора  
 $i_d$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

$P_1 = 0.18$  кВт

$n_1 = 1370$  об/мин

| $i_n$ | $i_d$  | $n_2$ ,<br>об/мин | $M_2$ ,<br>Н·м | $FS$ | Тип мотор-<br>редуктора | $F_{r2}$ ,<br>Н | Масса,<br>кг |
|-------|--------|-------------------|----------------|------|-------------------------|-----------------|--------------|
| 2,5   | 2,57   | 533               | 3,1            | >3,5 | MRD02                   | 800             | 7,4          |
| 3,15  | 3,28   | 418               | 3,9            | >3,5 | MRD02                   | 860             | 7,4          |
| 4,0   | 4,26   | 322               | 5,1            | >3,5 | MRD02                   | 920             | 7,4          |
| 5,0   | 5,28   | 259               | 6,4            | >3,5 | MRD02                   | 980             | 7,4          |
| 6,3   | 6,25   | 219               | 7,5            | >3,5 | MRD02                   | 1050            | 7,4          |
| 8,0   | 7,98   | 172               | 9,6            | >3,5 | MRD02                   | 1130            | 7,4          |
| 10,0  | 10,36  | 132               | 12,5           | >3,5 | MRD02                   | 1210            | 7,4          |
| 12,5  | 12,84  | 107               | 15,5           | 3,23 | MRD02                   | 1280            | 7,4          |
| 16,0  | 16,32  | 84                | 19,7           | 2,59 | MRD02                   | 1360            | 7,4          |
| 20,0  | 21,53  | 64                | 25,9           | 1,97 | MRD02                   | 1460            | 7,4          |
| 25,0  | 26,75  | 51                | 32,2           | 1,61 | MRD02                   | 1480            | 7,4          |
| 25,0  | 26,52  | 52                | 32             | 2,90 | MRD12                   | 1940            | 8,9          |
| 31,5  | 30,22  | 45                | 36,4           | 1,43 | MRD02                   | 1440            | 7,4          |
| 31,5  | 32,65  | 42                | 40             | 2,38 | MRD12                   | 1910            | 8,9          |
| 35,5  | 34,68  | 40                | 41,8           | 0,84 | MRD02                   | 1390            | 7,4          |
| 40    | 36,89  | 37                | 44,4           | 1,17 | MRD03                   | 1370            | 7,6          |
| 40    | 39,08  | 35                | 47             | 1,48 | MRD12                   | 1800            | 8,9          |
| 40    | 40,10  | 34                | 49             | 2,03 | MRD13                   | 1870            | 9,0          |
| 50    | 47,07  | 29                | 56,7           | 0,92 | MRD03                   | 1200            | 7,6          |
| 50    | 48,12  | 28                | 58             | 1,20 | MRD12                   | 1800            | 8,9          |
| 50    | 52,20  | 26                | 63             | 1,56 | MRD13                   | 1770            | 9,0          |
| 50    | 52,17  | 26,3              | 63             | 3,15 | MRD23                   | 3330            | 34,0         |
| 63    | 61,14  | 22                | 73,6           | 0,80 | MRD03                   | 800             | 7,6          |
| 63    | 61,67  | 22                | 75             | 0,94 | MRD12                   | 1670            | 9,0          |
| 63    | 66,03  | 21                | 80             | 1,25 | MRD13                   | 1630            | 9,1          |
| 63    | 64,26  | 21,3              | 78             | 2,57 | MRD23                   | 3280            | 35,5         |
| 80    | 80,43  | 17                | 98             | 1,02 | MRD13                   | 1420            | 9,1          |
| 80    | 81,52  | 16,8              | 99             | 2,02 | MRD23                   | 3190            | 35,7         |
| 100   | 100,60 | 14                | 122            | 0,82 | MRD13                   | 1200            | 9,1          |
| 100   | 105,43 | 13                | 128            | 1,56 | MRD23                   | 3000            | 26,6         |
| 125   | 124,16 | 11                | 151            | 1,33 | MRD23                   | 2850            | 26,6         |
| 160   | 164,94 | 8,3               | 200            | 1,00 | MRD23                   | 2280            | 26,6         |
| 200   | 209,25 | 6,5               | 254            | 0,79 | MRD23                   | 1500            | 32,1         |

$i_n$  – номинальное передаточное отношение редуктора  
 $i_d$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

 **$P_1 = 0.25$  кВт**
 **$n_1 = 1370$  об/мин**

| $i_n$ | $i_d$  | $n_2$<br>об/мин | $M_2$<br>Н·м | $FS$ | Тип мотор-<br>редуктора | $F_{r2}$<br>Н | Масса,<br>кг |
|-------|--------|-----------------|--------------|------|-------------------------|---------------|--------------|
| 2,5   | 2,57   | 533             | 4,3          | >3,5 | MRD02                   | 780           | 9,0          |
| 3,15  | 3,28   | 418             | 5,5          | >3,5 | MRD02                   | 840           | 9,0          |
| 4,0   | 4,26   | 322             | 7,1          | >3,5 | MRD02                   | 900           | 9,0          |
| 5,0   | 5,28   | 259             | 8,8          | >3,5 | MRD02                   | 960           | 9,0          |
| 6,3   | 6,25   | 219             | 10,5         | >3,5 | MRD02                   | 1020          | 9,0          |
| 8,0   | 7,98   | 172             | 13,3         | >3,5 | MRD02                   | 1100          | 9,0          |
| 10,0  | 10,36  | 132             | 17,3         | 2,88 | MRD02                   | 1170          | 9,0          |
| 12,5  | 12,84  | 107             | 21,5         | 2,33 | MRD02                   | 1230          | 9,0          |
| 16,0  | 16,32  | 84              | 27,3         | 1,87 | MRD02                   | 1300          | 9,0          |
| 16,0  | 16,30  | 84              | 27           | 3,36 | MRD12                   | 1960          | 10,5         |
| 20,0  | 21,53  | 64              | 36,0         | 1,42 | MRD02                   | 1370          | 9,0          |
| 20,0  | 20,39  | 67              | 34           | 2,72 | MRD12                   | 1930          | 10,5         |
| 25,0  | 26,75  | 51              | 44,7         | 1,16 | MRD02                   | 1370          | 9,0          |
| 25,0  | 26,52  | 52              | 44           | 2,12 | MRD12                   | 1890          | 10,5         |
| 31,5  | 32,65  | 42              | 54           | 1,74 | MRD12                   | 1840          | 10,5         |
| 40    | 36,89  | 37              | 61,7         | 0,84 | MRD03                   | 1140          | 9,2          |
| 40    | 39,08  | 35              | 65           | 1,08 | MRD12                   | 1630          | 10,5         |
| 40    | 40,10  | 34              | 67           | 1,49 | MRD13                   | 1750          | 10,6         |
| 40    | 39,39  | 35              | 65           | 2,11 | MRD22                   | 3320          | 13,5         |
| 40    | 40,76  | 34              | 68           | 2,94 | MRD23                   | 2000          | 13,9         |
| 50    | 48,12  | 28              | 80           | 0,88 | MRD12                   | 1630          | 10,5         |
| 50    | 52,20  | 26              | 87           | 1,14 | MRD13                   | 1580          | 10,6         |
| 50    | 50,76  | 27              | 84           | 1,64 | MRD22                   | 3250          | 13,5         |
| 50    | 52,17  | 26              | 87           | 2,30 | MRD23                   | 3250          | 14,0         |
| 50    | 50,73  | 27              | 84           | 3,37 | MRD32                   | 7950          | 19,1         |
| 63    | 66,03  | 21              | 110          | 0,91 | MRD13                   | 1260          | 10,7         |
| 63    | 62,13  | 22              | 103          | 1,35 | MRD22                   | 3170          | 13,6         |
| 63    | 64,26  | 21              | 107          | 1,87 | MRD23                   | 3150          | 14,0         |
| 63    | 63,33  | 22              | 105          | 2,71 | MRD32                   | 7850          | 19,1         |
| 80    | 80,43  | 17              | 134          | 0,75 | MRD13                   | 1020          | 10,7         |
| 80    | 81,52  | 17              | 135          | 1,48 | MRD23                   | 2950          | 14,0         |
| 80    | 76,31  | 18              | 127          | 3,33 | MRD33                   | 7800          | 20,1         |
| 100   | 105,43 | 13              | 175          | 1,14 | MRD23                   | 2650          | 14,0         |
| 100   | 99,54  | 14              | 165          | 2,56 | MRD33                   | 7600          | 20,2         |
| 125   | 124,16 | 11              | 206          | 0,97 | MRD23                   | 2250          | 14,0         |
| 125   | 130,90 | 10,5            | 217          | 1,95 | MRD33                   | 7200          | 20,2         |
| 125   | 128,71 | 10,6            | 214          | 2,95 | MRD43                   | 7700          | 28,2         |
| 160   | 164,94 | 8,3             | 274          | 0,73 | MRD23                   | 2000          | 14,0         |
| 160   | 167,80 | 8,2             | 279          | 1,53 | MRD33                   | 6500          | 20,2         |
| 160   | 157,36 | 8,7             | 261          | 2,42 | MRD43                   | 9800          | 33,8         |
| 200   | 197,50 | 6,9             | 328          | 1,30 | MRD33                   | 5900          | 20,2         |
| 200   | 206,95 | 6,6             | 344          | 1,84 | MRD43                   | 9600          | 33,8         |
| 250   | 257,60 | 5,3             | 428          | 1,00 | MRD33                   | 3600          | 20,3         |
| 250   | 258,38 | 5,3             | 429          | 1,48 | MRD43                   | 9100          | 28,3         |
| 315   | 307,21 | 4,5             | 510          | 0,84 | MRD33                   | 2700          | 20,3         |
| 315   | 318,46 | 4,3             | 529          | 1,20 | MRD43                   | 8000          | 39,6         |



## Часть 1. Редукторы и мотор-редукторы

### 4. Цилиндрические соосные редукторы и мотор-редукторы

#### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



ПРИВОДНАЯ  
ТЕХНИКА™

$i_n$  – номинальное передаточное отношение редуктора  
 $i_d$  – действительное передаточное отношение редуктора  
 $n_1$  – число оборотов входного вала  
 $n_2$  – число оборотов выходного вала  
 $M_2$  – крутящий момент на выходном валу  
 $FS$  – сервис-фактор  
 $F_{r2}$  – радиальная нагрузка на выходном валу  
 $P_1$  – мощность двигателя

**$P_1 = 0.37$  кВт**

**$n_1 = 1380$  об/мин**

| $i_n$ | $i_d$  | $n_2$ ,<br>об/мин | $M_2$ ,<br>Н·м | $FS$ | Тип мотор-<br>редуктора | $F_{r2}$ ,<br>Н | Масса,<br>кг |
|-------|--------|-------------------|----------------|------|-------------------------|-----------------|--------------|
| 2,5   | 2,57   | 537               | 6,3            | >3,5 | MRD02                   | 760             | 9,4          |
| 3,15  | 3,28   | 421               | 8,1            | >3,5 | MRD02                   | 820             | 9,4          |
| 4,0   | 4,26   | 324               | 10,5           | 3,44 | MRD02                   | 870             | 9,4          |
| 5,0   | 5,28   | 261               | 13,1           | 2,91 | MRD02                   | 920             | 9,4          |
| 6,3   | 6,25   | 221               | 15,4           | 3,12 | MRD02                   | 980             | 9,4          |
| 8,0   | 7,98   | 173               | 19,6           | 2,50 | MRD02                   | 1040            | 9,4          |
| 10,0  | 10,36  | 133               | 25,5           | 1,96 | MRD02                   | 1100            | 9,4          |
| 10,0  | 10,58  | 130               | 26             | 3,42 | MRD12                   | 1960            | 10,8         |
| 12,5  | 12,84  | 107               | 31,6           | 1,62 | MRD02                   | 1140            | 9,4          |
| 12,5  | 13,38  | 103               | 33             | 2,74 | MRD12                   | 1940            | 10,8         |
| 16,0  | 16,32  | 85                | 40,1           | 1,27 | MRD02                   | 1180            | 9,4          |
| 16,0  | 16,30  | 85                | 40             | 2,27 | MRD12                   | 1910            | 10,9         |
| 20,0  | 21,53  | 64                | 52,9           | 0,96 | MRD02                   | 1220            | 9,4          |
| 20,0  | 20,39  | 68                | 50             | 1,84 | MRD12                   | 1860            | 10,9         |
| 25,0  | 26,75  | 52                | 65,7           | 0,80 | MRD02                   | 1020            | 9,4          |
| 25,0  | 26,52  | 52                | 65             | 1,43 | MRD12                   | 1760            | 10,9         |
| 25,0  | 26,73  | 52                | 66             | 2,85 | MRD22                   | 3320            | 13,8         |
| 31,5  | 32,65  | 42                | 80             | 1,17 | MRD12                   | 1630            | 10,9         |
| 31,5  | 31,48  | 44                | 77             | 2,44 | MRD22                   | 3280            | 13,8         |
| 40    | 39,08  | 35                | 96             | 0,73 | MRD12                   | 1630            | 10,9         |
| 40    | 40,10  | 34                | 99             | 1,00 | MRD13                   | 1580            | 11,0         |
| 40    | 39,39  | 35                | 97             | 1,43 | MRD22                   | 3200            | 13,9         |
| 40    | 40,76  | 34                | 100            | 1,99 | MRD23                   | 2000            | 14,3         |
| 40    | 38,57  | 36                | 95             | 2,99 | MRD32                   | 7900            | 19,5         |
| 50    | 52,20  | 26                | 128            | 0,77 | MRD13                   | 1500            | 11,0         |
| 50    | 50,76  | 27                | 125            | 1,11 | MRD22                   | 3040            | 13,9         |
| 50    | 52,17  | 26                | 128            | 1,56 | MRD23                   | 2800            | 14,4         |
| 50    | 50,73  | 27                | 125            | 2,28 | MRD32                   | 7800            | 19,5         |
| 63    | 62,13  | 22                | 153            | 0,91 | MRD22                   | 2820            | 14,0         |
| 63    | 64,26  | 21                | 158            | 1,27 | MRD23                   | 2350            | 14,4         |
| 63    | 63,33  | 22                | 156            | 1,83 | MRD32                   | 7600            | 19,5         |
| 63    | 64,84  | 21                | 159            | 2,64 | MRD33                   | 7600            | 20,5         |
| 80    | 81,52  | 17                | 200            | 1,00 | MRD23                   | 1500            | 14,4         |
| 80    | 76,31  | 18                | 188            | 2,25 | MRD33                   | 7400            | 20,5         |
| 80    | 82,25  | 16,8              | 184            | 3,41 | MRD43                   | 9900            | 43,4         |
| 100   | 105,43 | 13                | 259            | 0,77 | MRD23                   | 1200            | 14,4         |
| 100   | 99,54  | 14                | 245            | 1,73 | MRD33                   | 6900            | 20,6         |
| 100   | 102,50 | 13,5              | 241            | 2,62 | MRD23                   | 9800            | 43,5         |
| 125   | 130,90 | 10,5              | 322            | 1,32 | MRD33                   | 6000            | 20,6         |
| 125   | 124,13 | 11,1              | 316            | 1,99 | MRD43                   | 7700            | 41,0         |
| 160   | 167,80 | 8,2               | 413            | 1,03 | MRD33                   | 4100            | 20,6         |
| 160   | 160,69 | 8,6               | 387            | 1,64 | MRD43                   | 9400            | 43,7         |
| 200   | 197,50 | 7                 | 486            | 0,88 | MRD33                   | 3500            | 20,6         |
| 200   | 207,34 | 6,7               | 509            | 1,25 | MRD43                   | 8100            | 43,8         |
| 250   | 258,38 | 5,3               | 635            | 1,00 | MRD43                   | 6000            | 49,4         |
| 315   | 312,90 | 4,4               | 783            | 0,81 | MRD43                   | 5000            | 43,8         |

| <b>P<sub>1</sub> = 0.55 кВт</b> |                      | <b>n<sub>1</sub> = 1390 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|---------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>            | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                             | 2,57                 | 541                                | 9,3                       | 3,22        | MRD02                      | 730                      | 11,5             |
| 3,15                            | 3,28                 | 424                                | 11,9                      | 2,78        | MRD02                      | 780                      | 11,5             |
| 4,0                             | 4,26                 | 326                                | 15,4                      | 2,33        | MRD02                      | 820                      | 11,5             |
| 4,0                             | 4,01                 | 347                                | 14,7                      | 3,39        | MRD12                      | 1889                     | 13,3             |
| 5,0                             | 5,28                 | 263                                | 19,3                      | 1,97        | MRD02                      | 870                      | 11,5             |
| 5,0                             | 5,07                 | 274                                | 18,5                      | 2,85        | MRD12                      | 1980                     | 13,3             |
| 6,3                             | 6,25                 | 222                                | 22,7                      | 2,12        | MRD02                      | 910                      | 11,5             |
| 8,0                             | 7,98                 | 174                                | 28,9                      | 1,69        | MRD02                      | 960                      | 11,5             |
| 8,0                             | 8,13                 | 171                                | 30                        | 2,96        | MRD12                      | 1950                     | 13,4             |
| 10,0                            | 10,36                | 134                                | 37,6                      | 1,33        | MRD02                      | 980                      | 11,5             |
| 10,0                            | 10,58                | 131                                | 39                        | 2,30        | MRD12                      | 1920                     | 13,4             |
| 12,5                            | 12,84                | 108                                | 46,6                      | 1,07        | MRD02                      | 1010                     | 11,5             |
| 12,5                            | 13,38                | 104                                | 49                        | 1,84        | MRD12                      | 1870                     | 13,4             |
| 16,0                            | 16,32                | 85                                 | 59,2                      | 0,86        | MRD02                      | 1010                     | 11,5             |
| 16,0                            | 16,30                | 85                                 | 60                        | 1,53        | MRD12                      | 1800                     | 13,5             |
| 16,0                            | 16,29                | 85                                 | 60                        | 3,07        | MRD22                      | 3253                     | 16,4             |
| 20,0                            | 20,39                | 68                                 | 75                        | 1,23        | MRD12                      | 1660                     | 13,5             |
| 20,0                            | 20,67                | 67                                 | 76                        | 2,45        | MRD22                      | 3290                     | 16,4             |
| 25,0                            | 26,52                | 52                                 | 97                        | 0,96        | MRD12                      | 1430                     | 13,5             |
| 25,0                            | 26,73                | 52                                 | 98                        | 1,92        | MRD22                      | 3200                     | 16,4             |
| 31,5                            | 32,65                | 43                                 | 119                       | 0,79        | MRD12                      | 1020                     | 13,5             |
| 31,5                            | 31,48                | 44                                 | 115                       | 1,64        | MRD22                      | 3100                     | 16,4             |
| 31,5                            | 33,21                | 42                                 | 121                       | 3,30        | MRD32                      | 7800                     | 21,8             |
| 40                              | 39,39                | 35                                 | 144                       | 0,96        | MRD22                      | 2900                     | 16,5             |
| 40                              | 40,76                | 34                                 | 149                       | 1,34        | MRD23                      | 1870                     | 16,9             |
| 40                              | 38,57                | 36                                 | 141                       | 2,01        | MRD32                      | 7700                     | 22,1             |
| 40                              | 41,54                | 33                                 | 152                       | 2,66        | MRD42                      | 10700                    | 28,8             |
| 40                              | 38,06                | 37                                 | 139                       | 3,01        | MRD33                      | 1940                     | 23,0             |
| 50                              | 50,76                | 27                                 | 186                       | 0,75        | MRD22                      | 2700                     | 16,5             |
| 50                              | 52,17                | 27                                 | 191                       | 1,5         | MRD23                      | 2450                     | 17,0             |
| 50                              | 50,73                | 27                                 | 185                       | 1,53        | MRD32                      | 7400                     | 22,1             |
| 50                              | 50,30                | 28                                 | 184                       | 2,20        | MRD42                      | 10600                    | 28,8             |
| 50                              | 48,77                | 29                                 | 178                       | 2,36        | MRD33                      | 7500                     | 23,0             |
| 63                              | 64,26                | 22                                 | 235                       | 0,85        | MRD23                      | 1800                     | 17,0             |
| 63                              | 63,33                | 22                                 | 231                       | 1,23        | MRD32                      | 7000                     | 22,1             |
| 63                              | 62,96                | 22                                 | 230                       | 1,76        | MRD42                      | 10300                    | 28,9             |
| 63                              | 64,84                | 21                                 | 237                       | 1,78        | MRD33                      | 7000                     | 23,1             |
| 63                              | 63,75                | 21,8                               | 233                       | 2,69        | MRD43                      | 9800                     | 30,0             |
| 63                              | 66,67                | 20,8                               | 242                       | 3,51        | MRD52                      | 12000                    | 57,5             |
| 80                              | 76,31                | 18                                 | 279                       | 1,51        | MRD33                      | 6500                     | 23,1             |
| 80                              | 82,25                | 16,9                               | 274                       | 2,29        | MRD43                      | 9700                     | 30,1             |
| 100                             | 99,54                | 14                                 | 364                       | 1,16        | MRD33                      | 5200                     | 23,2             |
| 100                             | 102,50               | 13,6                               | 358                       | 1,76        | MRD43                      | 9500                     | 30,3             |
| 125                             | 130,90               | 10,6                               | 478                       | 0,89        | MRD33                      | 4200                     | 23,2             |
| 125                             | 124,13               | 11,2                               | 470                       | 1,34        | MRD43                      | 7200                     | 30,4             |
| 125                             | 129,80               | 10,7                               | 461                       | 2,82        | MRD53                      | 8100                     | 60,5             |
| 160                             | 160,69               | 8,7                                | 575                       | 1,10        | MRD43                      | 7000                     | 30,2             |
| 160                             | 157,14               | 8,8                                | 558                       | 2,33        | MRD53                      | 8200                     | 60,5             |
| 200                             | 207,34               | 6,7                                | 756                       | 0,84        | MRD43                      | 9000                     | 30,3             |
| 200                             | 195,82               | 7,1                                | 696                       | 1,87        | MRD53                      | 8400                     | 50,5             |
| 200                             | 201,57               | 6,9                                | 716                       | 3,21        | MRD53                      | 12600                    | 78,5             |
| 250                             | 264,00               | 5,3                                | 938                       | 1,39        | MRD53                      | 8700                     | 60,5             |
| 250                             | 265,50               | 5,2                                | 943                       | 2,44        | MRD63                      | 13000                    | 78,5             |
| 315                             | 332,31               | 4,2                                | 1180                      | 0,76        | MRD53                      | 9000                     | 60,5             |
| 315                             | 332,00               | 4,2                                | 1179                      | 1,95        | MRD63                      | 13500                    | 78,5             |
| 355                             | 373,33               | 3,7                                | 1326                      | 1,73        | MRD63                      | 15700                    | 78,5             |
| 450                             | 448,00               | 3,1                                | 1591                      | 1,45        | MRD63                      | 16800                    | 78,5             |
| 560                             | 560,00               | 2,5                                | 1989                      | 1,16        | MRD63                      | 18000                    | 78,5             |

# Часть 1. Редукторы и мотор-редукторы

## 4. Цилиндрические соосные редукторы и мотор-редукторы

### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



ПРИВОДНАЯ  
ТЕХНИКА™

| P <sub>1</sub> = 0.75 кВт |                | n <sub>1</sub> = 1390 об/мин |                         |      | Тип мотор-редуктора | F <sub>r2</sub> ,<br>Н | Масса,<br>кг |
|---------------------------|----------------|------------------------------|-------------------------|------|---------------------|------------------------|--------------|
| i <sub>n</sub>            | i <sub>0</sub> | n <sub>2</sub> ,<br>об/мин   | M <sub>2</sub> ,<br>Н·м | F.S. |                     |                        |              |
| 2,5                       | 2,57           | 541                          | 12,7                    | 2,36 | MRD02               | 700                    | 12,8         |
| 2,5                       | 2,53           | 549                          | 12,6                    | 3,39 | MRD12               | 1680                   | 14,6         |
| 3,15                      | 3,28           | 424                          | 16,2                    | 2,04 | MRD02               | 730                    | 12,8         |
| 3,15                      | 3,08           | 451                          | 15,3                    | 2,99 | MRD12               | 1713                   | 14,6         |
| 4,0                       | 4,26           | 326                          | 21,1                    | 1,71 | MRD02               | 760                    | 12,8         |
| 4,0                       | 4,01           | 347                          | 19,9                    | 2,50 | MRD12               | 1842                   | 14,6         |
| 5,0                       | 5,28           | 263                          | 26,1                    | 1,46 | MRD02               | 810                    | 12,8         |
| 5,0                       | 5,07           | 274                          | 25                      | 2,10 | MRD12               | 1958                   | 14,6         |
| 6,3                       | 6,25           | 222                          | 30,9                    | 1,55 | MRD12               | 840                    | 12,8         |
| 6,3                       | 6,69           | 208                          | 33                      | 2,62 | MRD12               | 1940                   | 14,7         |
| 8,0                       | 7,98           | 174                          | 39,5                    | 1,24 | MRD02               | 860                    | 12,8         |
| 8,0                       | 8,13           | 171                          | 40                      | 2,18 | MRD12               | 1910                   | 14,7         |
| 10,0                      | 10,36          | 134                          | 51,3                    | 0,98 | MRD02               | 860                    | 12,8         |
| 10,0                      | 10,58          | 131                          | 53                      | 1,69 | MRD12               | 1850                   | 14,7         |
| 12,5                      | 12,84          | 108                          | 63,5                    | 0,80 | MRD02               | 850                    | 12,8         |
| 12,5                      | 13,38          | 104                          | 66                      | 1,36 | MRD12               | 1750                   | 14,7         |
| 12,5                      | 13,23          | 105                          | 66                      | 2,76 | MRD22               | 2970                   | 17,6         |
| 16,0                      | 16,30          | 85                           | 81                      | 1,12 | MRD12               | 1620                   | 14,8         |
| 16,0                      | 16,29          | 85                           | 81                      | 2,26 | MRD22               | 3120                   | 17,7         |
| 20,0                      | 20,39          | 68                           | 101                     | 0,91 | MRD12               | 1360                   | 14,8         |
| 20,0                      | 20,67          | 67                           | 103                     | 1,80 | MRD22               | 3170                   | 17,7         |
| 25,0                      | 26,52          | 52                           | 132                     | 0,71 | MRD12               | 1380                   | 14,8         |
| 25,0                      | 26,73          | 52                           | 133                     | 1,41 | MRD22               | 2980                   | 17,7         |
| 25,0                      | 25,26          | 55                           | 125                     | 3,15 | MRD32               | 7550                   | 23,1         |
| 31,5                      | 31,48          | 44                           | 156                     | 1,21 | MRD22               | 2790                   | 17,7         |
| 31,5                      | 33,21          | 42                           | 165                     | 2,43 | MRD32               | 7350                   | 23,1         |
| 40                        | 39,39          | 35                           | 196                     | 0,71 | MRD22               | 2600                   | 17,8         |
| 40                        | 40,76          | 34                           | 202                     | 0,98 | MRD23               | 1750                   | 18,2         |
| 40                        | 38,57          | 36                           | 192                     | 1,48 | MRD32               | 6800                   | 23,4         |
| 40                        | 41,54          | 33                           | 206                     | 1,96 | MRD42               | 10480                  | 30,1         |
| 40                        | 38,06          | 37                           | 189                     | 2,22 | MRD33               | 5000                   | 24,3         |
| 40                        | 37,42          | 37,1                         | 186                     | 3,36 | MRD43               | 9900                   | 31,2         |
| 50                        | 52,17          | 27                           | 259                     | 0,77 | MRD23               | 1500                   | 18,3         |
| 50                        | 50,73          | 27                           | 252                     | 1,13 | MRD32               | 5950                   | 23,4         |
| 50                        | 50,30          | 28                           | 250                     | 1,62 | MRD42               | 9500                   | 30,1         |
| 50                        | 48,77          | 29                           | 242                     | 1,74 | MRD33               | 6900                   | 24,3         |
| 50                        | 47,95          | 29                           | 238                     | 2,63 | MRD43               | 9800                   | 31,2         |
| 50                        | 53,33          | 26,1                         | 264                     | 3,22 | MRD52               | 11200                  | 58,8         |
| 63                        | 63,33          | 21,9                         | 315                     | 0,91 | MRD32               | 5000                   | 23,4         |
| 63                        | 62,96          | 22                           | 313                     | 1,30 | MRD42               | 8500                   | 30,2         |
| 63                        | 64,84          | 21                           | 322                     | 1,31 | MRD33               | 5900                   | 24,4         |
| 63                        | 63,75          | 21,8                         | 317                     | 1,98 | MRD43               | 9700                   | 31,3         |
| 63                        | 66,67          | 20,8                         | 330                     | 2,58 | MRD52               | 12000                  | 58,8         |
| 80                        | 76,31          | 18                           | 379                     | 1,11 | MRD33               | 4900                   | 24,4         |
| 80                        | 75,03          | 18,5                         | 373                     | 1,87 | MRD43               | 9200                   | 31,4         |
| 80                        | 77,26          | 18,0                         | 374                     | 3,47 | MRD53               | 7900                   | 61,8         |
| 100                       | 99,54          | 14                           | 494                     | 0,86 | MRD33               | 3500                   | 24,5         |
| 100                       | 97,86          | 14,2                         | 486                     | 1,30 | MRD43               | 8100                   | 31,6         |
| 100                       | 96,28          | 14,4                         | 466                     | 2,79 | MRD53               | 7900                   | 61,8         |
| 125                       | 124,13         | 11,2                         | 639                     | 0,99 | MRD43               | 6000                   | 31,7         |
| 125                       | 129,80         | 10,7                         | 629                     | 2,07 | MRD53               | 8100                   | 61,8         |
| 160                       | 160,69         | 8,7                          | 781                     | 0,90 | MRD43               | 5000                   | 31,5         |
| 160                       | 157,14         | 8,8                          | 761                     | 1,71 | MRD53               | 8200                   | 61,8         |
| 160                       | 157,33         | 8,8                          | 762                     | 3,02 | MRD63               | 12300                  | 79,8         |
| 200                       | 195,82         | 7,1                          | 949                     | 1,37 | MRD53               | 8400                   | 61,8         |
| 200                       | 201,57         | 6,9                          | 976                     | 2,36 | MRD63               | 12600                  | 79,8         |
| 250                       | 264,00         | 5,3                          | 1279                    | 1,02 | MRD53               | 8700                   | 61,8         |
| 250                       | 265,50         | 5,2                          | 1286                    | 1,79 | MRD63               | 13000                  | 79,8         |
| 315                       | 332,00         | 4,2                          | 1608                    | 1,43 | MRD63               | 13500                  | 79,8         |
| 355                       | 373,33         | 3,7                          | 1808                    | 1,27 | MRD63               | 15700                  | 79,8         |
| 450                       | 448,00         | 3,1                          | 2170                    | 1,06 | MRD63               | 16800                  | 79,8         |
| 560                       | 560,00         | 2,5                          | 2712                    | 0,85 | MRD63               | 18000                  | 79,8         |

| <b>P<sub>1</sub> = 1.1 кВт</b> |                      | <b>n<sub>1</sub> = 1400 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|--------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                            | 2,53                 | 553                                | 18,4                      | 2,34        | MRD12                      | 1569                     | 16,8             |
| 3,15                           | 3,08                 | 455                                | 22,4                      | 2,05        | MRD12                      | 1650                     | 16,8             |
| 4,0                            | 4,01                 | 349                                | 29                        | 1,71        | MRD12                      | 1761                     | 16,8             |
| 5,0                            | 5,07                 | 276                                | 37                        | 1,43        | MRD12                      | 1855                     | 16,8             |
| 5,0                            | 5,01                 | 279                                | 36                        | 2,89        | MRD22                      | 2160                     | 19,6             |
| 6,3                            | 6,69                 | 209                                | 49                        | 1,79        | MRD12                      | 1870                     | 16,9             |
| 8,0                            | 8,13                 | 172                                | 59                        | 1,49        | MRD12                      | 1800                     | 16,9             |
| 8,                             | 8,27                 | 169                                | 60                        | 2,95        | MRD22                      | 2510                     | 19,8             |
| 10,0                           | 10,58                | 132                                | 77                        | 1,16        | MRD12                      | 1660                     | 16,9             |
| 10,0                           | 10,33                | 136                                | 75                        | 2,39        | MRD22                      | 2650                     | 19,8             |
| 12,5                           | 13,38                | 105                                | 97                        | 0,93        | MRD12                      | 1420                     | 16,9             |
| 12,5                           | 13,23                | 106                                | 96                        | 1,89        | MRD22                      | 2790                     | 19,8             |
| 16,0                           | 16,30                | 86                                 | 118                       | 0,77        | MRD12                      | 1030                     | 17,0             |
| 16,0                           | 16,29                | 86                                 | 118                       | 1,55        | MRD22                      | 2900                     | 19,9             |
| 16,0                           | 16,45                | 85                                 | 119                       | 3,24        | MRD32                      | 6290                     | 25,2             |
| 20,0                           | 20,67                | 68                                 | 150                       | 1,23        | MRD22                      | 2850                     | 19,9             |
| 20,0                           | 19,36                | 72                                 | 141                       | 2,77        | MRD32                      | 6560                     | 25,2             |
| 25,0                           | 26,73                | 52                                 | 194                       | 0,97        | MRD22                      | 2380                     | 19,9             |
| 25,0                           | 25,26                | 55                                 | 183                       | 2,15        | MRD32                      | 7020                     | 25,3             |
| 25,0                           | 24,48                | 57                                 | 178                       | 3,30        | MRD42                      | 8820                     | 31,9             |
| 31,5                           | 31,48                | 44                                 | 228                       | 0,83        | MRD22                      | 1820                     | 19,9             |
| 31,5                           | 33,21                | 42                                 | 241                       | 1,66        | MRD32                      | 6900                     | 25,3             |
| 31,5                           | 29,64                | 47                                 | 215                       | 2,75        | MRD42                      | 9290                     | 31,9             |
| 40                             | 38,57                | 36                                 | 280                       | 1,01        | MRD32                      | 6470                     | 25,6             |
| 40                             | 41,54                | 34                                 | 301                       | 1,34        | MRD42                      | 9860                     | 32,3             |
| 40                             | 38,06                | 37                                 | 276                       | 1,52        | MRD33                      | 3800                     | 26,5             |
| 40                             | 41,88                | 33,4                               | 272                       | 2,30        | MRD43                      | 9700                     | 33,4             |
| 40                             | 40,48                | 34,8                               | 292                       | 2,92        | MRD52                      | 10500                    | 61,0             |
| 50                             | 50,73                | 28                                 | 368                       | 0,77        | MRD32                      | 5800                     | 25,6             |
| 50                             | 50,30                | 28                                 | 365                       | 1,11        | MRD42                      | 9310                     | 32,3             |
| 50                             | 48,77                | 29                                 | 354                       | 1,19        | MRD33                      | 5400                     | 26,5             |
| 50                             | 51,08                | 27,4                               | 348                       | 1,80        | MRD43                      | 9500                     | 33,4             |
| 50                             | 53,33                | 26,3                               | 384                       | 2,21        | MRD52                      | 11200                    | 61,0             |
| 63                             | 62,96                | 22                                 | 457                       | 0,89        | MRD42                      | 8200                     | 32,4             |
| 63                             | 64,84                | 22                                 | 471                       | 0,90        | MRD33                      | 4000                     | 26,6             |
| 63                             | 63,75                | 22                                 | 463                       | 1,36        | MRD43                      | 8700                     | 33,5             |
| 63                             | 66,67                | 21                                 | 480                       | 1,77        | MRD52                      | 12000                    | 61,0             |
| 63                             | 59,88                | 23,4                               | 422                       | 3,05        | MRD53                      | 7800                     | 64,0             |
| 80                             | 76,31                | 18                                 | 554                       | 0,76        | MRD33                      | 3000                     | 26,6             |
| 80                             | 82,25                | 17                                 | 545                       | 1,16        | MRD43                      | 6700                     | 33,6             |
| 80                             | 77,26                | 18,1                               | 545                       | 2,39        | MRD53                      | 7900                     | 64,0             |
| 100                            | 102,50               | 13,7                               | 710                       | 0,89        | MRD43                      | 5500                     | 33,8             |
| 100                            | 96,28                | 14,5                               | 679                       | 1,91        | MRD53                      | 7900                     | 64,0             |
| 100                            | 104,08               | 13,5                               | 734                       | 3,13        | MRD63                      | 11900                    | 82,0             |
| 125                            | 129,80               | 10,8                               | 916                       | 1,42        | MRD53                      | 8100                     | 64,0             |
| 125                            | 125,87               | 11,1                               | 888                       | 2,59        | MRD63                      | 12000                    | 82,0             |
| 160                            | 157,14               | 8,9                                | 1108                      | 1,17        | MRD53                      | 8200                     | 64,0             |
| 160                            | 157,33               | 8,9                                | 1110                      | 2,07        | MRD63                      | 12300                    | 82,0             |
| 200                            | 195,82               | 7,1                                | 1381                      | 0,94        | MRD53                      | 8400                     | 64,0             |
| 200                            | 201,57               | 6,9                                | 1422                      | 1,62        | MRD63                      | 12600                    | 82,0             |
| 250                            | 264,00               | 5,3                                | 1862                      | 0,70        | MRD53                      | 8700                     | 64,0             |
| 250                            | 265,50               | 5,3                                | 1873                      | 1,23        | MRD63                      | 13000                    | 82,0             |
| 315                            | 332,00               | 4,2                                | 2342                      | 0,98        | MRD63                      | 13500                    | 82,0             |
| 355                            | 373,33               | 3,8                                | 2633                      | 0,87        | MRD63                      | 15700                    | 82,0             |
| 450                            | 448,00               | 3,1                                | 3160                      | 0,73        | MRD63                      | 16800                    | 82,0             |

| P <sub>1</sub> = 1.5 кВт |                | n <sub>1</sub> = 1400 об/мин |                         |      | Тип мотор-редуктора | F <sub>r2</sub> ,<br>Н | Масса,<br>кг |
|--------------------------|----------------|------------------------------|-------------------------|------|---------------------|------------------------|--------------|
| i <sub>n</sub>           | i <sub>0</sub> | n <sub>2</sub> ,<br>об/мин   | M <sub>2</sub> ,<br>Н·м | F.S. |                     |                        |              |
| 2,5                      | 2,55           | 549                          | 25                      | 3,42 | MRD22               | 1950                   | 21,1         |
| 3,15                     | 3,13           | 447                          | 31                      | 2,99 | MRD22               | 1840                   | 21,1         |
| 4,0                      | 3,92           | 357                          | 38                      | 2,56 | MRD22               | 1950                   | 21,1         |
| 5,0                      | 5,01           | 279                          | 49                      | 2,14 | MRD22               | 2060                   | 21,1         |
| 6,3                      | 6,72           | 208                          | 66                      | 2,65 | MRD22               | 2280                   | 21,1         |
| 8,0                      | 8,27           | 169                          | 81                      | 2,18 | MRD22               | 2380                   | 21,3         |
| 10,0                     | 10,33          | 136                          | 102                     | 1,76 | MRD22               | 2490                   | 21,3         |
| 12,5                     | 13,23          | 106                          | 130                     | 1,39 | MRD22               | 2580                   | 21,3         |
| 12,5                     | 12,38          | 113                          | 122                     | 3,13 | MRD32               | 5500                   | 26,6         |
| 16,0                     | 16,29          | 86                           | 160                     | 1,14 | MRD22               | 2650                   | 21,4         |
| 16,0                     | 16,45          | 85                           | 162                     | 2,39 | MRD32               | 6080                   | 26,7         |
| 20,0                     | 20,67          | 68                           | 203                     | 0,91 | MRD22               | 2230                   | 21,4         |
| 20,0                     | 19,36          | 72                           | 190                     | 2,05 | MRD32               | 6310                   | 26,7         |
| 20,0                     | 19,64          | 71                           | 193                     | 3,01 | MRD42               | 8050                   | 33,3         |
| 25,0                     | 26,73          | 52                           | 263                     | 0,71 | MRD22               | 2100                   | 21,4         |
| 25,0                     | 25,26          | 55                           | 248                     | 1,59 | MRD32               | 6705                   | 26,8         |
| 25,0                     | 24,48          | 57                           | 241                     | 2,44 | MRD42               | 8510                   | 33,4         |
| 31,5                     | 33,21          | 42                           | 326                     | 1,23 | MRD32               | 5700                   | 26,8         |
| 31,5                     | 29,64          | 47                           | 291                     | 2,03 | MRD42               | 8920                   | 33,4         |
| 40                       | 38,57          | 36                           | 379                     | 0,75 | MRD32               | 5000                   | 27,1         |
| 40                       | 41,54          | 34                           | 408                     | 0,99 | MRD42               | 8830                   | 33,8         |
| 40                       | 38,06          | 37                           | 374                     | 1,12 | MRD33               | 3000                   | 28,0         |
| 40                       | 41,88          | 33,4                         | 368                     | 1,70 | MRD43               | 9200                   | 34,9         |
| 40                       | 40,48          | 34,6                         | 398                     | 2,14 | MRD52               | 10500                  | 62,5         |
| 40                       | 39,33          | 35,6                         | 378                     | 3,36 | MRD53               | 7600                   | 65,5         |
| 50                       | 50,30          | 28                           | 494                     | 0,82 | MRD42               | 7850                   | 33,8         |
| 50                       | 48,77          | 29                           | 479                     | 0,88 | MRD33               | 4500                   | 28,0         |
| 50                       | 51,08          | 27,4                         | 471                     | 1,33 | MRD43               | 8100                   | 34,9         |
| 50                       | 53,33          | 26,3                         | 524                     | 1,62 | MRD52               | 11200                  | 62,5         |
| 50                       | 47,98          | 29,2                         | 462                     | 2,77 | MRD53               | 7800                   | 65,5         |
| 50                       | 49,80          | 28,1                         | 489                     | 3,27 | MRD62               | 16800                  | 75,5         |
| 63                       | 63,75          | 22                           | 626                     | 1,00 | MRD43               | 6000                   | 35,0         |
| 63                       | 66,67          | 21,0                         | 655                     | 1,30 | MRD52               | 12000                  | 62,5         |
| 63                       | 59,88          | 23,4                         | 576                     | 2,24 | MRD53               | 7800                   | 65,5         |
| 63                       | 56,00          | 25,0                         | 550                     | 2,91 | MRD62               | 18000                  | 75,5         |
| 80                       | 82,25          | 17                           | 737                     | 0,85 | MRD43               | 6100                   | 35,1         |
| 80                       | 77,26          | 18,1                         | 743                     | 1,75 | MRD53               | 7900                   | 65,5         |
| 80                       | 81,29          | 17,2                         | 782                     | 2,94 | MRD63               | 11900                  | 83,5         |
| 100                      | 96,28          | 14,5                         | 926                     | 1,40 | MRD53               | 7900                   | 65,5         |
| 100                      | 104,08         | 13,5                         | 1001                    | 2,30 | MRD63               | 11900                  | 83,5         |
| 125                      | 129,80         | 10,8                         | 1248                    | 1,04 | MRD53               | 8100                   | 65,5         |
| 125                      | 125,87         | 11,1                         | 1211                    | 1,90 | MRD63               | 12000                  | 83,5         |
| 160                      | 157,14         | 8,9                          | 1511                    | 0,86 | MRD53               | 8200                   | 65,5         |
| 160                      | 157,33         | 8,9                          | 1513                    | 1,52 | MRD63               | 12300                  | 83,5         |
| 200                      | 201,57         | 6,9                          | 1939                    | 1,18 | MRD63               | 12600                  | 83,5         |
| 250                      | 265,50         | 5,3                          | 2554                    | 0,90 | MRD63               | 13000                  | 83,5         |
| 315                      | 332,00         | 4,2                          | 3193                    | 0,72 | MRD63               | 13500                  | 83,5         |



| <b>P<sub>1</sub> = 2.2 кВт</b> |                      | <b>n<sub>1</sub> = 1410 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|--------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                            | 2,55                 | 553                                | 36                        | 2,36        | MRD22                      | 1670                     | 26,6             |
| 3,15                           | 3,13                 | 450                                | 45                        | 2,07        | MRD22                      | 1740                     | 26,6             |
| 4,0                            | 3,92                 | 360                                | 56                        | 1,77        | MRD22                      | 1820                     | 26,6             |
| 5,0                            | 5,01                 | 281                                | 71                        | 1,48        | MRD22                      | 1890                     | 26,6             |
| 5,0                            | 5,33                 | 265                                | 76                        | 3,10        | MRD32                      | 4250                     | 32,6             |
| 6,3                            | 6,72                 | 210                                | 95                        | 1,83        | MRD22                      | 2100                     | 26,6             |
| 8,0                            | 8,27                 | 170                                | 117                       | 1,51        | MRD22                      | 2160                     | 26,8             |
| 8,0                            | 7,72                 | 183                                | 110                       | 3,39        | MRD32                      | 4800                     | 32,8             |
| 10,0                           | 10,33                | 136                                | 147                       | 1,22        | MRD22                      | 2200                     | 26,8             |
| 10,0                           | 9,66                 | 146                                | 137                       | 2,74        | MRD32                      | 5050                     | 32,9             |
| 12,5                           | 13,23                | 107                                | 188                       | 0,96        | MRD22                      | 2220                     | 26,8             |
| 12,5                           | 12,38                | 114                                | 176                       | 2,17        | MRD32                      | 5360                     | 32,9             |
| 12,5                           | 12,20                | 116                                | 173                       | 3,27        | MRD42                      | 6800                     | 39,5             |
| 16,0                           | 16,29                | 87                                 | 231                       | 0,79        | MRD22                      | 1650                     | 26,9             |
| 16,0                           | 16,45                | 86                                 | 234                       | 1,65        | MRD32                      | 5710                     | 33,0             |
| 16,0                           | 15,22                | 93                                 | 216                       | 2,65        | MRD42                      | 7180                     | 39,6             |
| 20,0                           | 19,36                | 73                                 | 275                       | 1,42        | MRD32                      | 5890                     | 33,0             |
| 20,0                           | 19,64                | 72                                 | 279                       | 2,08        | MRD42                      | 7620                     | 39,7             |
| 25,0                           | 25,26                | 56                                 | 359                       | 1,10        | MRD32                      | 5000                     | 33,1             |
| 25,0                           | 24,48                | 58                                 | 348                       | 1,69        | MRD42                      | 7990                     | 39,8             |
| 25,0                           | 25,99                | 54                                 | 372                       | 3,31        | MRD52                      | 9000                     | 68,0             |
| 31,5                           | 33,21                | 42                                 | 472                       | 0,85        | MRD32                      | 4200                     | 33,1             |
| 31,5                           | 29,64                | 48                                 | 421                       | 1,41        | MRD42                      | 8290                     | 39,8             |
| 31,5                           | 31,43                | 45                                 | 450                       | 2,76        | MRD52                      | 9100                     | 68,0             |
| 40                             | 41,88                | 33,7                               | 532                       | 1,17        | MRD43                      | 6800                     | 41,2             |
| 40                             | 40,48                | 35                                 | 579                       | 1,47        | MRD52                      | 10500                    | 68,0             |
| 40                             | 39,33                | 36                                 | 551                       | 2,31        | MRD53                      | 7600                     | 71,0             |
| 40                             | 40,50                | 35                                 | 579                       | 2,76        | MRD62                      | 15700                    | 81,0             |
| 50                             | 51,08                | 27,6                               | 681                       | 0,92        | MRD43                      | 5500                     | 41,2             |
| 50                             | 53,33                | 26                                 | 763                       | 1,11        | MRD52                      | 11200                    | 68,0             |
| 50                             | 47,98                | 29                                 | 672                       | 1,90        | MRD53                      | 7800                     | 71,0             |
| 50                             | 49,80                | 28                                 | 712                       | 2,25        | MRD62                      | 16800                    | 81,0             |
| 50                             | 48,95                | 29                                 | 686                       | 3,21        | MRD63                      | 11700                    | 89,0             |
| 63                             | 66,67                | 21                                 | 954                       | 0,89        | MRD52                      | 12000                    | 68,0             |
| 63                             | 59,88                | 24                                 | 839                       | 1,54        | MRD53                      | 7800                     | 71,0             |
| 63                             | 56,00                | 25                                 | 801                       | 2,00        | MRD62                      | 18000                    | 81,0             |
| 63                             | 61,88                | 23                                 | 867                       | 2,54        | MRD63                      | 11700                    | 89,0             |
| 80                             | 77,26                | 18                                 | 1082                      | 1,20        | MRD53                      | 7900                     | 71,0             |
| 80                             | 81,29                | 17                                 | 1139                      | 2,02        | MRD63                      | 11900                    | 89,0             |
| 100                            | 96,28                | 15                                 | 1349                      | 0,96        | MRD53                      | 7900                     | 71,0             |
| 100                            | 104,08               | 14                                 | 1458                      | 1,58        | MRD63                      | 11900                    | 89,0             |
| 125                            | 129,80               | 11                                 | 1818                      | 0,72        | MRD53                      | 8100                     | 71,0             |
| 125                            | 125,87               | 11                                 | 1763                      | 1,30        | MRD63                      | 12000                    | 89,0             |
| 160                            | 157,33               | 9,0                                | 2204                      | 1,04        | MRD63                      | 12300                    | 89,0             |
| 200                            | 201,57               | 7,0                                | 2823                      | 0,81        | MRD63                      | 12600                    | 89,0             |



| <b>P<sub>1</sub> = 3.0 кВт</b> |                      | <b>n<sub>1</sub> = 1420 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|--------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                            | 2,55                 | 557                                | 49                        | 1,75        | MRD22                      | 1570                     | 28,6             |
| 3,15                           | 3,13                 | 454                                | 60                        | 1,53        | MRD22                      | 1620                     | 28,6             |
| 3,15                           | 3,32                 | 428                                | 64                        | 3,21        | MRD32                      | 3630                     | 34,5             |
| 4,0                            | 3,92                 | 362                                | 75                        | 1,31        | MRD22                      | 1660                     | 28,6             |
| 4,0                            | 4,16                 | 341                                | 80                        | 2,75        | MRD32                      | 3850                     | 34,6             |
| 5,0                            | 5,01                 | 283                                | 96                        | 1,09        | MRD22                      | 1700                     | 28,6             |
| 5,0                            | 5,33                 | 266                                | 103                       | 2,29        | MRD32                      | 4080                     | 34,6             |
| 6,3                            | 6,72                 | 211                                | 129                       | 1,35        | MRD22                      | 1890                     | 28,6             |
| 6,3                            | 6,26                 | 227                                | 120                       | 3,06        | MRD32                      | 4360                     | 32,1             |
| 8,0                            | 8,27                 | 172                                | 159                       | 1,11        | MRD22                      | 1900                     | 28,8             |
| 8,0                            | 7,72                 | 184                                | 148                       | 2,51        | MRD32                      | 4580                     | 34,8             |
| 10,0                           | 10,33                | 137                                | 199                       | 0,90        | MRD22                      | 1880                     | 28,8             |
| 10,0                           | 9,66                 | 147                                | 186                       | 2,03        | MRD32                      | 4800                     | 34,9             |
| 10,0                           | 10,00                | 142                                | 192                       | 2,91        | MRD42                      | 6200                     | 41,4             |
| 12,5                           | 13,23                | 107                                | 254                       | 0,71        | MRD22                      | 1600                     | 28,8             |
| 12,5                           | 12,38                | 115                                | 238                       | 1,60        | MRD32                      | 5040                     | 34,9             |
| 12,5                           | 12,20                | 116                                | 235                       | 2,41        | MRD42                      | 6500                     | 41,5             |
| 16,0                           | 16,45                | 86                                 | 317                       | 1,22        | MRD32                      | 5300                     | 35,0             |
| 16,0                           | 15,22                | 93                                 | 293                       | 1,96        | MRD42                      | 6810                     | 41,6             |
| 20,0                           | 19,36                | 73                                 | 373                       | 1,05        | MRD32                      | 4500                     | 35,0             |
| 20,0                           | 19,64                | 72                                 | 378                       | 1,53        | MRD42                      | 7150                     | 41,7             |
| 20,0                           | 20,30                | 70                                 | 393                       | 3,10        | MRD52                      | 8700                     | 70,0             |
| 25,0                           | 25,26                | 56                                 | 486                       | 0,81        | MRD32                      | 4000                     | 35,1             |
| 25,0                           | 24,48                | 58                                 | 471                       | 1,25        | MRD42                      | 7400                     | 41,8             |
| 25,0                           | 25,99                | 55                                 | 503                       | 2,44        | MRD52                      | 9000                     | 70,0             |
| 31,5                           | 29,64                | 47,9                               | 570                       | 1,04        | MRD42                      | 6110                     | 41,8             |
| 31,5                           | 31,43                | 45                                 | 609                       | 2,04        | MRD52                      | 9100                     | 70,0             |
| 31,5                           | 33,20                | 43                                 | 643                       | 3,45        | MRD62                      | 13700                    | 83,0             |
| 40                             | 41,88                | 34                                 | 720                       | 0,87        | MRD43                      | 5800                     | 43,2             |
| 40                             | 40,48                | 35                                 | 784                       | 1,08        | MRD52                      | 10500                    | 70,0             |
| 40                             | 39,33                | 36                                 | 746                       | 1,70        | MRD53                      | 7600                     | 73,0             |
| 40                             | 40,50                | 35                                 | 784                       | 2,04        | MRD62                      | 15700                    | 83,0             |
| 40                             | 39,71                | 36                                 | 753                       | 2,92        | MRD63                      | 11400                    | 91,0             |
| 50                             | 53,33                | 27                                 | 1033                      | 0,82        | MRD52                      | 11200                    | 70,0             |
| 50                             | 47,98                | 30                                 | 910                       | 1,41        | MRD53                      | 7800                     | 73,0             |
| 50                             | 49,80                | 29                                 | 965                       | 1,66        | MRD62                      | 16800                    | 83,0             |
| 50                             | 48,95                | 29                                 | 928                       | 2,37        | MRD63                      | 11700                    | 91,0             |
| 63                             | 59,88                | 24                                 | 1136                      | 1,14        | MRD53                      | 7800                     | 73,0             |
| 63                             | 56,00                | 25                                 | 1085                      | 1,48        | MRD62                      | 18000                    | 83,0             |
| 63                             | 61,88                | 23                                 | 1174                      | 1,87        | MRD63                      | 11700                    | 91,0             |
| 80                             | 77,26                | 18                                 | 1465                      | 0,89        | MRD53                      | 7900                     | 73,0             |
| 80                             | 81,29                | 18                                 | 1542                      | 1,49        | MRD63                      | 11900                    | 91,0             |
| 100                            | 96,28                | 15                                 | 1826                      | 0,71        | MRD53                      | 7900                     | 73,0             |
| 100                            | 104,08               | 14                                 | 1974                      | 1,17        | MRD63                      | 11900                    | 91,0             |
| 125                            | 125,87               | 11                                 | 2387                      | 0,96        | MRD63                      | 12000                    | 91,0             |
| 160                            | 157,33               | 9,0                                | 2984                      | 0,77        | MRD63                      | 12300                    | 91,0             |

| <b>P<sub>1</sub> = 4.0 кВт</b> |                      | <b>n<sub>1</sub> = 1425 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|--------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                            | 2,70                 | 528                                | 69                        | 2,74        | MRD32                      | 3330                     | 36,5             |
| 3,15                           | 3,32                 | 429                                | 86                        | 2,40        | MRD32                      | 3500                     | 42,5             |
| 4,0                            | 4,16                 | 343                                | 107                       | 2,05        | MRD32                      | 3690                     | 42,6             |
| 4,0                            | 3,96                 | 360                                | 102                       | 3,38        | MRD42                      | 4000                     | 48,8             |
| 5,0                            | 5,33                 | 267                                | 137                       | 1,71        | MRD32                      | 3880                     | 42,6             |
| 5,0                            | 4,83                 | 295                                | 124                       | 2,92        | MRD42                      | 4850                     | 48,8             |
| 6,3                            | 6,26                 | 228                                | 161                       | 2,29        | MRD32                      | 4160                     | 40,1             |
| 6,3                            | 6,29                 | 227                                | 162                       | 3,39        | MRD42                      | 5340                     | 49,3             |
| 8,0                            | 7,72                 | 185                                | 199                       | 1,87        | MRD32                      | 4330                     | 42,8             |
| 8,0                            | 7,86                 | 181                                | 202                       | 2,74        | MRD42                      | 5620                     | 49,3             |
| 10,0                           | 9,66                 | 148                                | 249                       | 1,51        | MRD32                      | 4500                     | 42,9             |
| 10,0                           | 10,00                | 143                                | 257                       | 2,18        | MRD42                      | 5920                     | 49,4             |
| 12,5                           | 12,38                | 115                                | 319                       | 1,20        | MRD32                      | 4650                     | 42,9             |
| 12,5                           | 12,20                | 117                                | 314                       | 1,80        | MRD42                      | 6150                     | 49,5             |
| 16,0                           | 16,45                | 87                                 | 424                       | 0,91        | MRD32                      | 2900                     | 43,0             |
| 16,0                           | 15,22                | 94                                 | 392                       | 1,46        | MRD42                      | 6380                     | 49,6             |
| 16,0                           | 15,45                | 92                                 | 398                       | 3,02        | MRD52                      | 8500                     | 72,0             |
| 20,0                           | 19,36                | 74                                 | 498                       | 0,78        | MRD32                      | 2500                     | 43,0             |
| 20,0                           | 19,64                | 73                                 | 506                       | 1,15        | MRD42                      | 6590                     | 49,7             |
| 20,0                           | 20,30                | 70                                 | 522                       | 2,34        | MRD52                      | 8700                     | 72,0             |
| 25,0                           | 24,48                | 58                                 | 630                       | 0,93        | MRD42                      | 4290                     | 49,8             |
| 25,0                           | 25,99                | 55                                 | 669                       | 1,84        | MRD52                      | 9000                     | 72,0             |
| 25,0                           | 24,62                | 58                                 | 633                       | 3,32        | MRD62                      | 13500                    | 85,0             |
| 31,5                           | 29,64                | 48                                 | 763                       | 0,78        | MRD42                      | 4000                     | 49,8             |
| 31,5                           | 31,43                | 45                                 | 809                       | 1,53        | MRD52                      | 9100                     | 72,0             |
| 31,5                           | 33,20                | 43                                 | 854                       | 2,60        | MRD62                      | 13700                    | 85,0             |
| 40                             | 40,48                | 35                                 | 1042                      | 0,82        | MRD52                      | 10500                    | 72,0             |
| 40                             | 39,33                | 36                                 | 991                       | 1,28        | MRD53                      | 7600                     | 75,0             |
| 40                             | 40,50                | 35                                 | 1042                      | 1,54        | MRD62                      | 15700                    | 85,0             |
| 40                             | 39,71                | 36                                 | 1001                      | 2,20        | MRD63                      | 11400                    | 93,0             |
| 50                             | 47,98                | 30                                 | 1209                      | 1,06        | MRD53                      | 7800                     | 75,0             |
| 50                             | 49,80                | 29                                 | 1282                      | 1,25        | MRD62                      | 16800                    | 85,0             |
| 50                             | 48,95                | 29                                 | 1233                      | 1,78        | MRD63                      | 11700                    | 93,0             |
| 63                             | 59,88                | 24                                 | 1509                      | 0,85        | MRD53                      | 7800                     | 75,0             |
| 63                             | 56,00                | 25                                 | 1441                      | 1,11        | MRD62                      | 18000                    | 85,0             |
| 63                             | 61,88                | 23                                 | 1559                      | 1,41        | MRD63                      | 11700                    | 93,0             |
| 80                             | 81,29                | 18                                 | 2048                      | 1,12        | MRD63                      | 11900                    | 93,0             |
| 100                            | 104,08               | 14                                 | 2623                      | 0,88        | MRD63                      | 11900                    | 93,0             |
| 125                            | 125,87               | 11                                 | 3172                      | 0,73        | MRD63                      | 12000                    | 93,0             |

# Часть 1. Редукторы и мотор-редукторы

## 4. Цилиндрические соосные редукторы и мотор-редукторы

### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



**ПРИВОДНАЯ  
ТЕХНИКА** <sup>TM</sup>

| <b>P<sub>1</sub> = 5.5 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                               |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>,<br/>Н</i> | <i>Масса,<br/>кг</i> |
|--------------------------------|----------------------|------------------------------------|-------------------------------|-------------|----------------------------|------------------------------|----------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>,<br/>об/мин</i>   | <i>M<sub>2</sub>,<br/>Н·м</i> | <i>F.S.</i> |                            |                              |                      |
| 2,5                            | 2,49                 | 578                                | 87                            | 3,38        | MRD42                      | 3950                         | 58,0                 |
| 3,15                           | 3,11                 | 463                                | 109                           | 2,94        | MRD42                      | 4167                         | 58,0                 |
| 4,0                            | 3,96                 | 364                                | 139                           | 2,49        | MRD42                      | 4400                         | 58,1                 |
| 5,0                            | 4,83                 | 298                                | 169                           | 2,15        | MRD42                      | 4580                         | 58,1                 |
| 6,3                            | 6,29                 | 229                                | 220                           | 2,49        | MRD42                      | 5050                         | 58,6                 |
| 8,0                            | 7,86                 | 183                                | 275                           | 2,01        | MRD42                      | 5270                         | 58,6                 |
| 10,0                           | 10,00                | 144                                | 350                           | 1,60        | MRD42                      | 5480                         | 58,7                 |
| 10,0                           | 9,92                 | 145                                | 347                           | 3,40        | MRD52                      | 5500                         | 84,0                 |
| 12,5                           | 12,20                | 118                                | 427                           | 1,33        | MRD42                      | 5610                         | 58,8                 |
| 12,5                           | 12,22                | 118                                | 428                           | 2,78        | MRD52                      | 6900                         | 84,0                 |
| 16,0                           | 15,22                | 95                                 | 533                           | 1,07        | MRD42                      | 5710                         | 58,9                 |
| 16,0                           | 15,45                | 93                                 | 541                           | 2,22        | MRD52                      | 8500                         | 84,0                 |
| 20,0                           | 19,64                | 73                                 | 688                           | 0,84        | MRD42                      | 5260                         | 59,0                 |
| 20,0                           | 20,30                | 71                                 | 711                           | 1,72        | MRD52                      | 8700                         | 84,0                 |
| 20,0                           | 20,67                | 70                                 | 724                           | 2,90        | MRD62                      | 13000                        | 97,0                 |
| 25,0                           | 25,99                | 55                                 | 910                           | 1,35        | MRD52                      | 9000                         | 84,0                 |
| 25,0                           | 24,62                | 59                                 | 862                           | 2,44        | MRD62                      | 13500                        | 97,0                 |
| 31,5                           | 31,43                | 46                                 | 1101                          | 1,13        | MRD52                      | 9100                         | 84,0                 |
| 31,5                           | 33,20                | 43                                 | 1163                          | 1,91        | MRD62                      | 13700                        | 97,0                 |
| 40                             | 39,33                | 37                                 | 1349                          | 0,94        | MRD53                      | 7600                         | 87,0                 |
| 40                             | 40,50                | 36                                 | 1418                          | 1,13        | MRD62                      | 15700                        | 97,0                 |
| 40                             | 39,71                | 36                                 | 1361                          | 1,62        | MRD63                      | 11400                        | 105,0                |
| 50                             | 47,98                | 30                                 | 1645                          | 0,78        | MRD53                      | 7800                         | 87,0                 |
| 50                             | 49,80                | 29                                 | 1744                          | 0,92        | MRD62                      | 16800                        | 97,0                 |
| 50                             | 48,95                | 29                                 | 1678                          | 1,31        | MRD63                      | 11700                        | 105,0                |
| 63                             | 56,00                | 26                                 | 1961                          | 0,82        | MRD62                      | 18000                        | 97,0                 |
| 63                             | 61,88                | 23                                 | 2122                          | 1,04        | MRD63                      | 11700                        | 105,0                |
| 80                             | 81,29                | 18                                 | 2787                          | 0,83        | MRD63                      | 11900                        | 105,0                |

| <b>P<sub>1</sub> = 7.5 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                               |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>,<br/>Н</i> | <i>Масса,<br/>кг</i> |
|--------------------------------|----------------------|------------------------------------|-------------------------------|-------------|----------------------------|------------------------------|----------------------|
| <i>i<sub>n</sub></i>           | <i>i<sub>0</sub></i> | <i>n<sub>2</sub>,<br/>об/мин</i>   | <i>M<sub>2</sub>,<br/>Н·м</i> | <i>F.S.</i> |                            |                              |                      |
| 2,5                            | 2,49                 | 578                                | 118                           | 2,50        | MRD42                      | 3760                         | 75,0                 |
| 3,2                            | 3,11                 | 463                                | 148                           | 2,17        | MRD42                      | 3940                         | 75,0                 |
| 4,0                            | 3,96                 | 364                                | 188                           | 1,84        | MRD42                      | 4110                         | 75,1                 |
| 5,0                            | 4,83                 | 298                                | 229                           | 1,58        | MRD42                      | 4230                         | 75,1                 |
| 6,3                            | 6,29                 | 229                                | 298                           | 1,84        | MRD42                      | 4690                         | 75,6                 |
| 8,0                            | 7,86                 | 183                                | 373                           | 1,49        | MRD42                      | 4820                         | 75,6                 |
| 8,0                            | 8,19                 | 176                                | 391                           | 2,99        | MRD52                      | 5200                         | 101,0                |
| 10,0                           | 10,00                | 144                                | 474                           | 1,18        | MRD42                      | 4900                         | 75,7                 |
| 10,0                           | 9,92                 | 145                                | 473                           | 2,49        | MRD52                      | 5500                         | 101,0                |
| 12,5                           | 12,20                | 118                                | 579                           | 0,98        | MRD42                      | 4590                         | 75,8                 |
| 12,5                           | 12,22                | 118                                | 584                           | 2,04        | MRD52                      | 6900                         | 101,0                |
| 12,5                           | 12,44                | 116                                | 594                           | 3,53        | MRD62                      | 10300                        | 114,0                |
| 16,0                           | 15,22                | 95                                 | 722                           | 0,79        | MRD42                      | 5100                         | 75,9                 |
| 16,0                           | 15,45                | 93                                 | 738                           | 1,63        | MRD52                      | 8500                         | 101,0                |
| 16,0                           | 15,73                | 92                                 | 751                           | 2,80        | MRD62                      | 12800                        | 114,0                |
| 20,0                           | 20,30                | 71                                 | 969                           | 1,26        | MRD52                      | 8700                         | 101,0                |
| 20,0                           | 20,67                | 70                                 | 987                           | 2,13        | MRD62                      | 13000                        | 114,0                |
| 25,0                           | 25,99                | 55                                 | 1241                          | 0,99        | MRD52                      | 9000                         | 101,0                |
| 25,0                           | 24,62                | 59                                 | 1175                          | 1,79        | MRD62                      | 13500                        | 114,0                |
| 31,5                           | 31,43                | 46                                 | 1501                          | 0,83        | MRD52                      | 9100                         | 101,0                |
| 31,5                           | 33,20                | 43                                 | 1585                          | 1,40        | MRD62                      | 13700                        | 114,0                |
| 40,0                           | 40,50                | 36                                 | 1934                          | 0,83        | MRD62                      | 15700                        | 114,0                |
| 40,0                           | 39,71                | 36                                 | 1857                          | 1,18        | MRD63                      | 11400                        | 122,0                |
| 50,0                           | 48,95                | 29                                 | 2289                          | 0,96        | MRD63                      | 11700                        | 122,0                |
| 63,0                           | 61,88                | 23                                 | 2893                          | 0,76        | MRD63                      | 11700                        | 122,0                |

| <b>P<sub>1</sub> = 11 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                               |             |                         |                              |              |
|-------------------------------|----------------------|------------------------------------|-------------------------------|-------------|-------------------------|------------------------------|--------------|
| <i>i<sub>n</sub></i>          | <i>i<sub>0</sub></i> | <i>n<sub>2</sub></i> ,<br>об/мин   | <i>M<sub>2</sub></i> ,<br>Н·м | <i>F.S.</i> | Тип мотор-<br>редуктора | <i>F<sub>r2</sub></i> ,<br>Н | Масса,<br>кг |
| 2,5                           | 2,56                 | 571                                | 185                           | 3,41        | MRD52                   | 3400                         | 117,0        |
| 3,15                          | 3,24                 | 451                                | 234                           | 2,95        | MRD52                   | 3700                         | 117,0        |
| 4,0                           | 3,93                 | 372                                | 284                           | 2,65        | MRD52                   | 4000                         | 117,0        |
| 5,0                           | 4,84                 | 302                                | 350                           | 2,43        | MRD52                   | 4500                         | 117,0        |
| 6,3                           | 6,45                 | 226                                | 466                           | 2,49        | MRD52                   | 4600                         | 117,0        |
| 8,0                           | 8,19                 | 178                                | 591                           | 1,98        | MRD52                   | 5200                         | 117,0        |
| 8,0                           | 8,33                 | 175                                | 602                           | 3,32        | MRD62                   | 7800                         | 130,0        |
| 10,0                          | 9,92                 | 147                                | 716                           | 1,65        | MRD52                   | 5500                         | 117,0        |
| 10,0                          | 10,10                | 145                                | 729                           | 2,88        | MRD62                   | 8300                         | 130,0        |
| 12,5                          | 12,22                | 120                                | 883                           | 1,35        | MRD52                   | 6900                         | 117,0        |
| 12,5                          | 12,44                | 117                                | 899                           | 2,34        | MRD62                   | 10300                        | 130,0        |
| 16,0                          | 15,45                | 95                                 | 1116                          | 1,08        | MRD52                   | 8500                         | 117,0        |
| 16,0                          | 15,73                | 93                                 | 1136                          | 1,85        | MRD62                   | 12800                        | 130,0        |
| 20,0                          | 20,30                | 72                                 | 1466                          | 0,83        | MRD52                   | 8700                         | 117,0        |
| 20,0                          | 20,67                | 70                                 | 1492                          | 1,41        | MRD62                   | 13000                        | 130,0        |
| 25,0                          | 24,62                | 59                                 | 1778                          | 1,18        | MRD62                   | 13500                        | 130,0        |
| 31,5                          | 33,20                | 44                                 | 2397                          | 0,93        | MRD62                   | 13700                        | 130,0        |
| 40,0                          | 39,71                | 37                                 | 2808                          | 0,78        | MRD63                   | 11400                        | 138,0        |

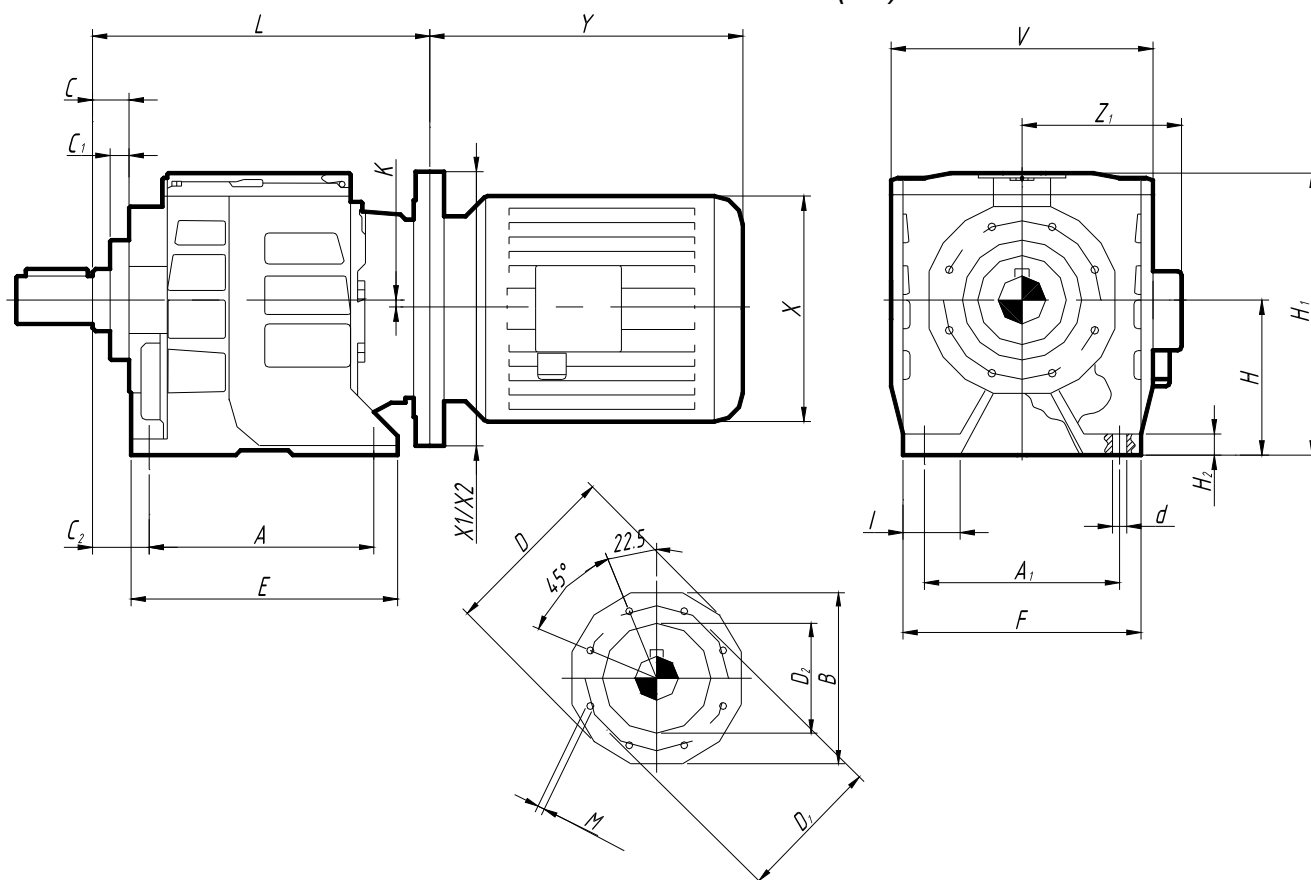
| <b>P<sub>1</sub> = 15 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                               |             |                         |                              |              |
|-------------------------------|----------------------|------------------------------------|-------------------------------|-------------|-------------------------|------------------------------|--------------|
| <i>i<sub>n</sub></i>          | <i>i<sub>0</sub></i> | <i>n<sub>2</sub></i> ,<br>об/мин   | <i>M<sub>2</sub></i> ,<br>Н·м | <i>F.S.</i> | Тип мотор-<br>редуктора | <i>F<sub>r2</sub></i> ,<br>Н | Масса,<br>кг |
| 2,5                           | 2,56                 | 571                                | 241                           | 2,62        | MRD52                   | 3400                         | 127,0        |
| 3,15                          | 3,24                 | 451                                | 305                           | 2,26        | MRD52                   | 3700                         | 127,0        |
| 4,0                           | 3,93                 | 372                                | 370                           | 2,03        | MRD52                   | 4000                         | 127,0        |
| 5,0                           | 4,84                 | 302                                | 456                           | 1,86        | MRD52                   | 4500                         | 127,0        |
| 6,3                           | 6,45                 | 226                                | 608                           | 1,91        | MRD52                   | 4600                         | 127,0        |
| 6,3                           | 6,57                 | 222                                | 619                           | 3,23        | MRD62                   | 6900                         | 140,0        |
| 8,0                           | 8,19                 | 178                                | 771                           | 1,52        | MRD52                   | 5200                         | 127,0        |
| 8,0                           | 8,33                 | 175                                | 785                           | 2,55        | MRD62                   | 7800                         | 140,0        |
| 10,0                          | 9,92                 | 147                                | 934                           | 1,26        | MRD52                   | 5500                         | 127,0        |
| 10,0                          | 10,10                | 145                                | 951                           | 2,21        | MRD62                   | 8300                         | 140,0        |
| 12,5                          | 12,22                | 120                                | 1151                          | 1,03        | MRD52                   | 6900                         | 127,0        |
| 12,5                          | 12,44                | 117                                | 1172                          | 1,79        | MRD62                   | 10300                        | 140,0        |
| 16,0                          | 15,45                | 95                                 | 1455                          | 0,82        | MRD52                   | 8500                         | 127,0        |
| 16,0                          | 15,73                | 93                                 | 1482                          | 1,42        | MRD62                   | 12800                        | 140,0        |
| 20,0                          | 20,67                | 71                                 | 1947                          | 1,08        | MRD62                   | 13000                        | 140,0        |
| 25,0                          | 24,62                | 59                                 | 2319                          | 0,91        | MRD62                   | 13500                        | 140,0        |
| 31,5                          | 33,20                | 44                                 | 3127                          | 0,71        | MRD62                   | 13700                        | 140,0        |

| <b>P<sub>1</sub> = 18,5 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|---------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>            | <i>i<sub>o</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                             | 2,56                 | 575                                | 295                       | 2,14        | MRD52                      | 3400                     | 159,0            |
| 3,15                            | 3,24                 | 454                                | 374                       | 1,85        | MRD52                      | 3700                     | 159,0            |
| 4,0                             | 3,93                 | 374                                | 453                       | 1,66        | MRD52                      | 4000                     | 159,0            |
| 4,0                             | 4,02                 | 366                                | 464                       | 3,45        | MRD62                      | 6000                     | 172,0            |
| 5,0                             | 4,84                 | 304                                | 558                       | 1,52        | MRD52                      | 4500                     | 159,0            |
| 5,0                             | 4,96                 | 297                                | 572                       | 3,15        | MRD62                      | 6700                     | 172,0            |
| 6,3                             | 6,45                 | 228                                | 745                       | 1,56        | MRD52                      | 4600                     | 159,0            |
| 6,3                             | 6,57                 | 224                                | 758                       | 2,64        | MRD62                      | 6900                     | 172,0            |
| 8,0                             | 8,19                 | 180                                | 944                       | 1,24        | MRD52                      | 5200                     | 159,0            |
| 8,0                             | 8,33                 | 176                                | 961                       | 2,08        | MRD62                      | 7800                     | 172,0            |
| 10,0                            | 9,92                 | 148                                | 1144                      | 1,03        | MRD52                      | 5500                     | 159,0            |
| 10,0                            | 10,10                | 146                                | 1165                      | 1,80        | MRD62                      | 8300                     | 172,0            |
| 12,5                            | 12,22                | 120                                | 1410                      | 0,84        | MRD52                      | 6900                     | 159,0            |
| 12,5                            | 12,44                | 118                                | 1436                      | 1,46        | MRD62                      | 10300                    | 172,0            |
| 16,0                            | 15,73                | 93                                 | 1815                      | 1,16        | MRD62                      | 12800                    | 172,0            |
| 20,0                            | 20,67                | 71                                 | 2385                      | 0,88        | MRD62                      | 13000                    | 172,0            |
| 25,0                            | 24,62                | 60                                 | 2840                      | 0,74        | MRD62                      | 13500                    | 172,0            |

| <b>P<sub>1</sub> = 22 кВт</b> |                      | <b>n<sub>1</sub> = 1440 об/мин</b> |                           |             | <i>Тип мотор-редуктора</i> | <i>F<sub>r2</sub>, Н</i> | <i>Масса, кг</i> |
|-------------------------------|----------------------|------------------------------------|---------------------------|-------------|----------------------------|--------------------------|------------------|
| <i>i<sub>n</sub></i>          | <i>i<sub>o</sub></i> | <i>n<sub>2</sub>, об/мин</i>       | <i>M<sub>2</sub>, Н·м</i> | <i>F.S.</i> |                            |                          |                  |
| 2,5                           | 2,56                 | 575                                | 351                       | 1,80        | MRD52                      | 3400                     | 168              |
| 3,15                          | 3,24                 | 454                                | 445                       | 1,55        | MRD52                      | 3700                     | 168              |
| 3,15                          | 3,32                 | 443                                | 455                       | 3,08        | MRD62                      | 5600                     | 181              |
| 4,0                           | 3,93                 | 374                                | 539                       | 1,39        | MRD52                      | 4000                     | 168              |
| 4,0                           | 4,02                 | 366                                | 551                       | 2,90        | MRD62                      | 6000                     | 181              |
| 5,0                           | 4,84                 | 304                                | 664                       | 1,28        | MRD52                      | 4500                     | 168              |
| 5,0                           | 4,96                 | 297                                | 680                       | 2,65        | MRD62                      | 6700                     | 181              |
| 6,3                           | 6,45                 | 228                                | 886                       | 1,31        | MRD52                      | 4600                     | 168              |
| 6,3                           | 6,57                 | 224                                | 902                       | 2,22        | MRD62                      | 6900                     | 181              |
| 8,0                           | 8,33                 | 176                                | 1143                      | 1,75        | MRD62                      | 7800                     | 181              |
| 10,0                          | 10,10                | 146                                | 1385                      | 1,52        | MRD62                      | 8300                     | 181              |
| 12,5                          | 12,44                | 118                                | 1707                      | 1,23        | MRD62                      | 10300                    | 181              |
| 16,0                          | 15,73                | 93                                 | 2159                      | 0,97        | MRD62                      | 12800                    | 181              |
| 20,0                          | 20,67                | 71                                 | 2836                      | 0,74        | MRD62                      | 13000                    | 181              |

## 4.2.4 Размеры

### Исполнение на лапах (B3)



| MRD            | 02/03     | 02/03 | 02/03 | 02  | 12/13   | 12/13 | 12/13 | 12  | 12      |
|----------------|-----------|-------|-------|-----|---------|-------|-------|-----|---------|
| IEC            | 56        | 63    | 71    | 80  | 56      | 63    | 71    | 80  | 90 S/L  |
| X              | 110       | 123   | 140   | 159 | 110     | 123   | 140   | 159 | 176     |
| X1(B5)         | 120       | 140   | 160   | —   | 120     | 140   | 160   | 200 | 200     |
| X2(B14)        | 80        | 90    | 105   | 120 | —       | 90    | 105   | 120 | 140     |
| Y              | 168       | 185   | 220   | 238 | 168     | 185   | 220   | 238 | 255/280 |
| Z1             | 108       | 110   | 121   | 138 | 108     | 110   | 121   | 138 | 149     |
| L              | 140/143   |       |       | 140 | 151/161 |       |       | 151 |         |
| C              | 13        |       |       |     | 10      |       |       |     |         |
| C <sub>1</sub> | 9         |       |       |     |         |       |       |     |         |
| K              | 4.5       |       |       |     | 5       |       |       |     |         |
| C <sub>2</sub> | 20        |       |       |     | 18      |       |       |     |         |
| A              | 95        |       |       |     | 110     |       |       |     |         |
| E              | 115       |       |       |     | 132     |       |       |     |         |
| V              | 100       |       |       |     | 140     |       |       |     |         |
| I              | 23        |       |       |     | 38      |       |       |     |         |
| A <sub>1</sub> | 80        |       |       |     | 110     |       |       |     |         |
| F              | 96        |       |       |     | 135     |       |       |     |         |
| d              | Ø9        |       |       |     |         |       |       |     |         |
| H              | 60        |       |       |     | 75      |       |       |     |         |
| H <sub>1</sub> | 111       |       |       |     | 131     |       |       |     |         |
| H <sub>2</sub> | 6.5       |       |       |     | 8       |       |       |     |         |
| D              | 84        |       |       |     |         |       |       |     |         |
| M              | M6x14 (7) |       |       |     |         |       |       |     |         |
| B              | □82       |       |       |     |         |       |       |     |         |
| D <sub>1</sub> | Ø75       |       |       |     |         |       |       |     |         |



## Часть 1. Редукторы и мотор-редукторы

### 4. Цилиндрические соосные редукторы и мотор-редукторы

#### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



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| MRD                    | 23        | 22/23   | 22/23 | 22/23   | 22  | 22  | 32/33     | 32/33 | 32/33   |
|------------------------|-----------|---------|-------|---------|-----|-----|-----------|-------|---------|
| IEC                    | 63        | 71      | 80    | 90 S/L  | 100 | 112 | 71        | 80    | 90S/L   |
| X<br>X1(B5)<br>X2(B14) | 123       | 140     | 159   | 176     | 195 | 219 | 140       | 159   | 176     |
|                        | 140       | 160     | 200   | 200     | 250 | 250 | 160       | 200   | 200     |
|                        | —         | 105     | 120   | 140     | 160 | 160 | 105       | 120   | 140     |
| Y<br>Z1                | 185       | 220     | 238   | 255/280 | 314 | 328 | 220       | 238   | 255/280 |
|                        | 110       | 121     | 138   | 149     | 160 | 172 | 121       | 138   | 149     |
| L                      | 208       | 190/208 |       |         | 190 |     | 220/253   |       |         |
| C                      |           |         |       |         | 13  |     |           |       |         |
| C <sub>1</sub>         |           |         |       |         | 11  |     |           |       |         |
| K                      | 6         |         |       |         |     |     | 8.5       |       |         |
| C <sub>2</sub>         | 25        |         |       |         |     |     | 30        |       |         |
| A                      | 130       |         |       |         |     |     | 165       |       |         |
| E                      | 153       |         |       |         |     |     | 195       |       |         |
| V                      | 155       |         |       |         |     |     | 190       |       |         |
| I                      | 37        |         |       |         |     |     | 44        |       |         |
| A <sub>1</sub>         | 110       |         |       |         |     |     | 135       |       |         |
| F                      | 140       |         |       |         |     |     | 173       |       |         |
| d                      | Ø9        |         |       |         |     |     | Ø11.5     |       |         |
| H                      | 90        |         |       |         |     |     | 115       |       |         |
| H <sub>1</sub>         | 158       |         |       |         |     |     | 198       |       |         |
| H <sub>2</sub>         | 10        |         |       |         |     |     | 14        |       |         |
| D                      | 108       |         |       |         |     |     | 130       |       |         |
| M                      | M6x10 (8) |         |       |         |     |     | M8x18 (8) |       |         |
| B                      | □102      |         |       |         |     |     | □125      |       |         |
| D <sub>1</sub>         | Ø95       |         |       |         |     |     | Ø115      |       |         |

| MRD            | 32        | 32  | 43        | 42/43   | 42/43   | 42/43 | 42  | 42      |
|----------------|-----------|-----|-----------|---------|---------|-------|-----|---------|
| IEC            | 100       | 112 | 71        | 80      | 90 S/L  | 100   | 112 | 132 S/M |
| X              | 195       | 219 | 140       | 159     | 176     | 195   | 219 | 258     |
| X1(B5)         | 250       | 250 | 160       | 200     | 200     | 250   | 250 | 300     |
| X2(B14)        | 160       | 160 | —         | 120     | 140     | 160   | 160 | 200     |
| Y              | 314       | 328 | 220       | 238     | 255/280 | 314   | 328 | 368/410 |
| Z1             | 160       | 172 | 121       | 138     | 149     | 160   | 172 | 192     |
| L              | 220       |     | 305       | 265/305 |         |       | 265 |         |
| C              | 13        |     | 15        |         |         |       |     |         |
| C <sub>1</sub> | 11        |     | 13        |         |         |       |     |         |
| K              | 8.5       |     | 9.5       |         |         |       |     |         |
| C <sub>2</sub> | 30        |     | 30        |         |         |       |     |         |
| A              | 165       |     | 195       |         |         |       |     |         |
| E              | 195       |     | 221       |         |         |       |     |         |
| V              | 190       |     | 215       |         |         |       |     |         |
| I              | 44        |     | 50        |         |         |       |     |         |
| A <sub>1</sub> | 135       |     | 150       |         |         |       |     |         |
| F              | 173       |     | 195       |         |         |       |     |         |
| d              | Ø11.5     |     | Ø13.5     |         |         |       |     |         |
| H              | 115       |     | 130       |         |         |       |     |         |
| H <sub>1</sub> | 198       |     | 222       |         |         |       |     |         |
| H <sub>2</sub> | 14        |     | 15        |         |         |       |     |         |
| D              | 130       |     | Ø145      |         |         |       |     |         |
| M              | M8x18 (8) |     | M8x18 (8) |         |         |       |     |         |
| B              | □125      |     | □142      |         |         |       |     |         |
| D <sub>1</sub> | Ø115      |     | Ø130      |         |         |       |     |         |



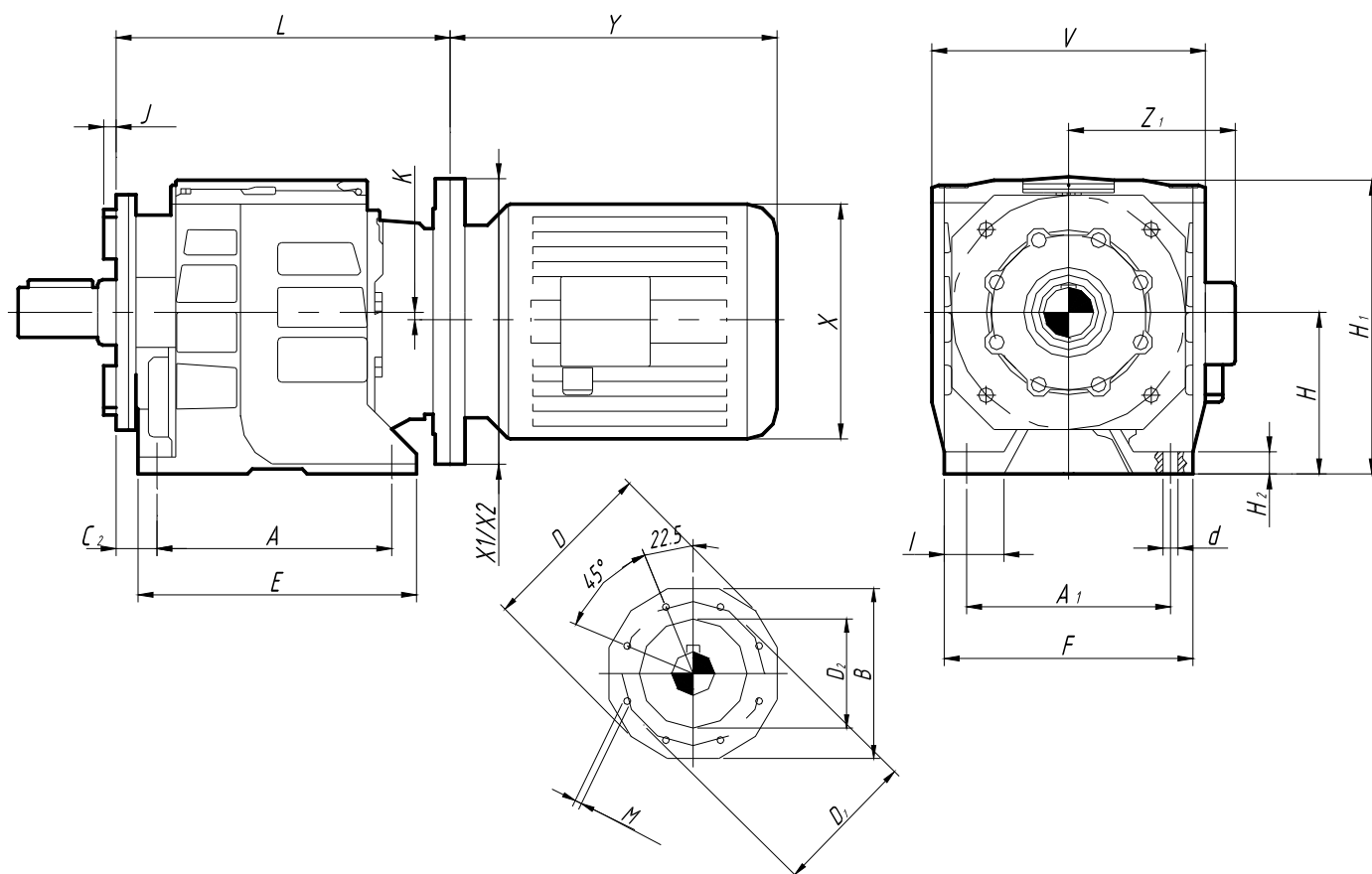
| MRD            | 52/53      | 52/53 | 52/53 | 52/53 | 52/53 | 52/53   | 52  | 52  |
|----------------|------------|-------|-------|-------|-------|---------|-----|-----|
| IEC            | 80         | 90 S  | 90 L  | 100   | 112   | 132 S/M | 160 | 180 |
| X              | 159        | 176   | 176   | 195   | 219   | 258     | 310 | 320 |
| X1(B5)         | 200        | 200   | 200   | 250   | 250   | 300     | 350 | 350 |
| X2(B14)        | —          | —     | —     | —     | —     | 200     | —   | —   |
| Y              | 238        | 255   | 280   | 314   | 328   | 368/410 | 486 | 580 |
| Z1             | 138        | 149   | 149   | 160   | 172   | 192     | 235 | 245 |
| L              | 322        |       |       |       |       |         | 353 |     |
| C              | 18         |       |       |       |       |         |     |     |
| C <sub>1</sub> | 14         |       |       |       |       |         |     |     |
| C <sub>2</sub> | 35         |       |       |       |       |         |     |     |
| A              | 205        |       |       |       |       |         |     |     |
| E              | 254        |       |       |       |       |         |     |     |
| V              | 284        |       |       |       |       |         |     |     |
| I              | 42         |       |       |       |       |         |     |     |
| A <sub>1</sub> | 170        |       |       |       |       |         |     |     |
| F              | 254        |       |       |       |       |         |     |     |
| d              | Ø18        |       |       |       |       |         |     |     |
| H              | 140        |       |       |       |       |         |     |     |
| H <sub>1</sub> | 255        |       |       |       |       |         |     |     |
| H <sub>2</sub> | 20         |       |       |       |       |         |     |     |
| D              | Ø190       |       |       |       |       |         |     |     |
| M              | M10x25 (8) |       |       |       |       |         |     |     |
| B              | □180       |       |       |       |       |         |     |     |
| D <sub>1</sub> | Ø130g6     |       |       |       |       |         |     |     |

| MRD            | 62/63      | 62/63 | 62/63 | 62/63 | 62/63 | 62/63   | 62  | 62  |
|----------------|------------|-------|-------|-------|-------|---------|-----|-----|
| IEC            | 80         | 90 S  | 90 L  | 100   | 112   | 132 S/M | 160 | 180 |
| X              | 159        | 176   | 176   | 195   | 219   | 258     | 310 | 320 |
| X1(B5)         | 200        | 200   | 200   | 250   | 250   | 300     | 350 | 350 |
| X2(B14)        | —          | —     | —     | —     | —     | 200     | —   | —   |
| Y              | 238        | 255   | 280   | 314   | 328   | 368/410 | 486 | 580 |
| Z1             | 138        | 149   | 149   | 160   | 172   | 192     | 235 | 245 |
| L              | 379        |       |       |       |       |         | 410 |     |
| C              | 18         |       |       |       |       |         |     |     |
| C <sub>1</sub> | 14         |       |       |       |       |         |     |     |
| C <sub>2</sub> | 40         |       |       |       |       |         |     |     |
| A              | 260        |       |       |       |       |         |     |     |
| E              | 305        |       |       |       |       |         |     |     |
| V              | 340        |       |       |       |       |         |     |     |
| I              | 42,5       |       |       |       |       |         |     |     |
| A <sub>1</sub> | 215        |       |       |       |       |         |     |     |
| F              | 300        |       |       |       |       |         |     |     |
| d              | Ø18        |       |       |       |       |         |     |     |
| H              | 180        |       |       |       |       |         |     |     |
| H <sub>1</sub> | 302        |       |       |       |       |         |     |     |
| H <sub>2</sub> | 24         |       |       |       |       |         |     |     |
| D              | Ø190       |       |       |       |       |         |     |     |
| M              | M10x25 (8) |       |       |       |       |         |     |     |
| B              | □180       |       |       |       |       |         |     |     |
| D <sub>1</sub> | Ø130q6     |       |       |       |       |         |     |     |



**ВНИМАНИЕ:** Габаритные размеры **X**, **Y**, **Z** (стр. 179) могут отличаться в зависимости от типа применяемого электродвигателя и его аксессуаров (принудительное охлаждение, встроенный тормоз, и т.д.)

Фланцевое исполнение (B5)



| MRD                    | 02/03     | 02/03 | 02/03 | 02  | 12/13   | 12/13 | 12/13 | 12  | 12      |
|------------------------|-----------|-------|-------|-----|---------|-------|-------|-----|---------|
| IEC                    | 56        | 63    | 71    | 80  | 56      | 63    | 71    | 80  | 90 S/L  |
| X<br>X1(B5)<br>X2(B14) | 110       | 123   | 140   | 159 | 110     | 123   | 140   | 159 | 176     |
|                        | 120       | 140   | 160   | —   | 120     | 140   | 160   | 200 | 200     |
|                        | 80        | 90    | 105   | 120 | —       | 90    | 105   | 120 | 140     |
| Y<br>Z1                | 168       | 185   | 220   | 238 | 168     | 185   | 220   | 238 | 255/280 |
|                        | 108       | 110   | 121   | 138 | 108     | 110   | 121   | 138 | 149     |
| L                      | 140/143   |       |       | 140 | 151/161 |       |       | 151 |         |
| J                      | 3         |       |       |     |         |       |       |     |         |
| K                      | 4.5       |       |       |     | 5       |       |       |     |         |
| C <sub>2</sub>         | 20        |       |       |     | 18      |       |       |     |         |
| A                      | 95        |       |       |     | 110     |       |       |     |         |
| E                      | 115       |       |       |     | 132     |       |       |     |         |
| V                      | 100       |       |       |     | 140     |       |       |     |         |
| I                      | 23        |       |       |     | 38      |       |       |     |         |
| A <sub>1</sub>         | 80        |       |       |     | 110     |       |       |     |         |
| F                      | 96        |       |       |     | 135     |       |       |     |         |
| d                      | Ø9        |       |       |     |         |       |       |     |         |
| H                      | 60        |       |       |     | 75      |       |       |     |         |
| H <sub>1</sub>         | 111       |       |       |     | 131     |       |       |     |         |
| H <sub>2</sub>         | 6.5       |       |       |     | 8       |       |       |     |         |
| D                      | 84        |       |       |     |         |       |       |     |         |
| M                      | M6x14 (7) |       |       |     |         |       |       |     |         |
| B                      | □82       |       |       |     |         |       |       |     |         |
| D <sub>1</sub>         | Ø75       |       |       |     |         |       |       |     |         |



| MRD                    | 23        | 22/23   | 22/23 | 22/23   | 22  | 22  | 32/33     | 32/33 | 32/33   |
|------------------------|-----------|---------|-------|---------|-----|-----|-----------|-------|---------|
| IEC                    | 63        | 71      | 80    | 90 S/L  | 100 | 112 | 71        | 80    | 90S/L   |
| X<br>X1(B5)<br>X2(B14) | 123       | 140     | 159   | 176     | 195 | 219 | 140       | 159   | 176     |
|                        | 140       | 160     | 200   | 200     | 250 | 250 | 160       | 200   | 200     |
|                        | —         | 105     | 120   | 140     | 160 | 160 | 105       | 120   | 140     |
| Y<br>Z1                | 185       | 220     | 238   | 255/280 | 314 | 328 | 220       | 238   | 255/280 |
|                        | 110       | 121     | 138   | 149     | 160 | 172 | 121       | 138   | 149     |
| L                      | 208       | 190/208 |       |         | 190 |     | 220/253   |       |         |
| J                      | 3         |         |       |         |     |     | 3.5       |       |         |
| K                      | 6         |         |       |         |     |     | 8.5       |       |         |
| C <sub>2</sub>         | 25        |         |       |         |     |     | 30        |       |         |
| A                      | 130       |         |       |         |     |     | 165       |       |         |
| E                      | 153       |         |       |         |     |     | 195       |       |         |
| V                      | 155       |         |       |         |     |     | 190       |       |         |
| I                      | 37        |         |       |         |     |     | 44        |       |         |
| A <sub>1</sub>         | 110       |         |       |         |     |     | 135       |       |         |
| F                      | 140       |         |       |         |     |     | 173       |       |         |
| d                      | Ø9        |         |       |         |     |     | Ø11.5     |       |         |
| H                      | 90        |         |       |         |     |     | 115       |       |         |
| H <sub>1</sub>         | 158       |         |       |         |     |     | 198       |       |         |
| H <sub>2</sub>         | 10        |         |       |         |     |     | 14        |       |         |
| D                      | 108       |         |       |         |     |     | 130       |       |         |
| M                      | M6x10 (8) |         |       |         |     |     | M8x18 (8) |       |         |
| B                      | □102      |         |       |         |     |     | □125      |       |         |
| D <sub>1</sub>         | Ø95       |         |       |         |     |     | Ø115      |       |         |

| MRD                    | 32        | 32  | 43        | 42/43   | 42/43   | 42/43 | 42  | 42      |
|------------------------|-----------|-----|-----------|---------|---------|-------|-----|---------|
| IEC                    | 100       | 112 | 71        | 80      | 90 S/L  | 100   | 112 | 132 S/M |
| X<br>X1(B5)<br>X2(B14) | 195       | 219 | 140       | 159     | 176     | 195   | 219 | 258     |
|                        | 250       | 250 | 160       | 200     | 200     | 250   | 250 | 300     |
|                        | 160       | 160 | —         | 120     | 140     | 160   | 160 | 200     |
| Y<br>Z1                | 314       | 328 | 220       | 238     | 255/280 | 314   | 328 | 368/410 |
|                        | 160       | 172 | 121       | 138     | 149     | 160   | 172 | 192     |
| L                      | 220       |     | 305       | 265/305 |         |       | 265 |         |
| J                      | 3.5       |     | 4         |         |         |       |     |         |
| K                      | 8.5       |     | 9.5       |         |         |       |     |         |
| C <sub>2</sub>         | 30        |     | 30        |         |         |       |     |         |
| A                      | 165       |     | 195       |         |         |       |     |         |
| E                      | 195       |     | 221       |         |         |       |     |         |
| V                      | 190       |     | 215       |         |         |       |     |         |
| I                      | 44        |     | 50        |         |         |       |     |         |
| A <sub>1</sub>         | 135       |     | 150       |         |         |       |     |         |
| F                      | 173       |     | 195       |         |         |       |     |         |
| d                      | Ø11.5     |     | Ø13.5     |         |         |       |     |         |
| H                      | 115       |     | 130       |         |         |       |     |         |
| H <sub>1</sub>         | 198       |     | 222       |         |         |       |     |         |
| H <sub>2</sub>         | 14        |     | 15        |         |         |       |     |         |
| D                      | 130       |     | Ø145      |         |         |       |     |         |
| M                      | M8x18 (8) |     | M8x18 (8) |         |         |       |     |         |
| B                      | □125      |     | □142      |         |         |       |     |         |
| D <sub>1</sub>         | Ø115      |     | Ø130      |         |         |       |     |         |

## Часть 1. Редукторы и мотор-редукторы

### 4. Цилиндрические соосные редукторы и мотор-редукторы

#### 4.2 Цилиндрические соосные мотор-редукторы серии MRD по лицензии VARVEL



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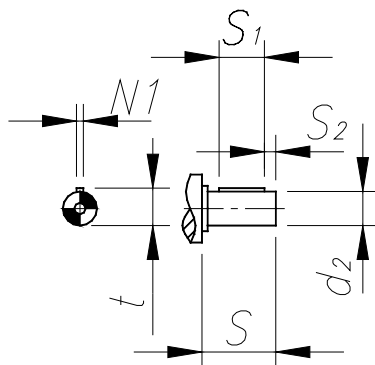
| MRD                    | 52/53      | 52/53 | 52/53 | 52/53 | 52/53 | 52/53   | 52  | 52  |
|------------------------|------------|-------|-------|-------|-------|---------|-----|-----|
| IEC                    | 80         | 90 S  | 90 L  | 100   | 112   | 132 S/M | 160 | 180 |
| X<br>X1(B5)<br>X2(B14) | 159        | 176   | 176   | 195   | 219   | 258     | 310 | 320 |
|                        | 200        | 200   | 200   | 250   | 250   | 300     | 350 | 350 |
|                        | —          | —     | —     | —     | —     | 200     | —   | —   |
| Y                      | 238        | 255   | 280   | 314   | 328   | 368/410 | 486 | 580 |
| Z1                     | 138        | 149   | 149   | 160   | 172   | 192     | 235 | 245 |
| L                      | 322        |       |       |       |       |         | 353 |     |
| J                      | 4          |       |       |       |       |         |     |     |
| C <sub>2</sub>         | 35         |       |       |       |       |         |     |     |
| A                      | 205        |       |       |       |       |         |     |     |
| E                      | 254        |       |       |       |       |         |     |     |
| V                      | 284        |       |       |       |       |         |     |     |
| I                      | 42         |       |       |       |       |         |     |     |
| A <sub>1</sub>         | 170        |       |       |       |       |         |     |     |
| F                      | 254        |       |       |       |       |         |     |     |
| d                      | Ø18        |       |       |       |       |         |     |     |
| H                      | 140        |       |       |       |       |         |     |     |
| H <sub>1</sub>         | 255        |       |       |       |       |         |     |     |
| H <sub>2</sub>         | 20         |       |       |       |       |         |     |     |
| D                      | Ø190       |       |       |       |       |         |     |     |
| M                      | M10x25 (8) |       |       |       |       |         |     |     |
| B                      | □180       |       |       |       |       |         |     |     |
| D <sub>1</sub>         | Ø130g6     |       |       |       |       |         |     |     |

| MRD                    | 62/63      | 62/63 | 62/63 | 62/63 | 62/63 | 62/63   | 62  | 62  |
|------------------------|------------|-------|-------|-------|-------|---------|-----|-----|
| IEC                    | 80         | 90 S  | 90 L  | 100   | 112   | 132 S/M | 160 | 180 |
| X<br>X1(B5)<br>X2(B14) | 159        | 176   | 176   | 195   | 219   | 258     | 310 | 320 |
|                        | 200        | 200   | 200   | 250   | 250   | 300     | 350 | 350 |
|                        | —          | —     | —     | —     | —     | 200     | —   | —   |
| Y                      | 238        | 255   | 280   | 314   | 328   | 368/410 | 486 | 580 |
| Z1                     | 138        | 149   | 149   | 160   | 172   | 192     | 235 | 245 |
| L                      | 379        |       |       |       |       |         | 410 |     |
| J                      | 4          |       |       |       |       |         |     |     |
| C <sub>2</sub>         | 40         |       |       |       |       |         |     |     |
| A                      | 260        |       |       |       |       |         |     |     |
| E                      | 305        |       |       |       |       |         |     |     |
| V                      | 340        |       |       |       |       |         |     |     |
| I                      | 42,5       |       |       |       |       |         |     |     |
| A <sub>1</sub>         | 215        |       |       |       |       |         |     |     |
| F                      | 300        |       |       |       |       |         |     |     |
| d                      | Ø18        |       |       |       |       |         |     |     |
| H                      | 180        |       |       |       |       |         |     |     |
| H <sub>1</sub>         | 302        |       |       |       |       |         |     |     |
| H <sub>2</sub>         | 24         |       |       |       |       |         |     |     |
| D                      | Ø190       |       |       |       |       |         |     |     |
| M                      | M10x25 (8) |       |       |       |       |         |     |     |
| B                      | □180       |       |       |       |       |         |     |     |
| D <sub>1</sub>         | Ø130g6     |       |       |       |       |         |     |     |



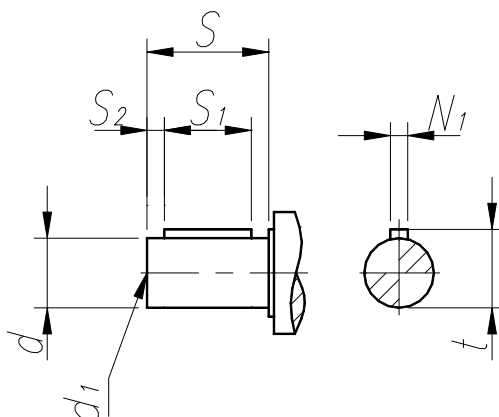
**ВНИМАНИЕ:** Габаритные размеры **X, Y, Z** (стр. 179) могут отличаться в зависимости от типа применяемого электродвигателя и его аксессуаров (принудительное охлаждение, встроенный тормоз, и т.д.)

**Размеры выступающего входного вала**



| Размеры<br>Габарит   | N <sub>1</sub> | t    | S   | S <sub>1</sub> | S <sub>2</sub> | d <sub>2</sub> |
|----------------------|----------------|------|-----|----------------|----------------|----------------|
| <b>RD 02 / RD 03</b> | 4              | 12,5 | 23  | 15             | 4              | 11h6           |
| <b>RD 12 / RD 13</b> | 5              | 16   | 30  | 25             | 2,5            | 14h6           |
| <b>RD 22 / RD 23</b> | 6              | 21,5 | 40  | 30             | 5              | 19h6           |
| <b>RD 32 / RD 33</b> | 8              | 27   | 50  | 40             | 5              | 24h6           |
| <b>RD 42 / RD 43</b> | 8              | 31   | 60  | 50             | 5              | 28h6           |
| <b>RD 52 / RD 53</b> | 10             | 41   | 80  | 60             | 10             | 38h6           |
| <b>RD 62 / RD 63</b> | 14             | 51,5 | 100 | 80             | 10             | 48h6           |

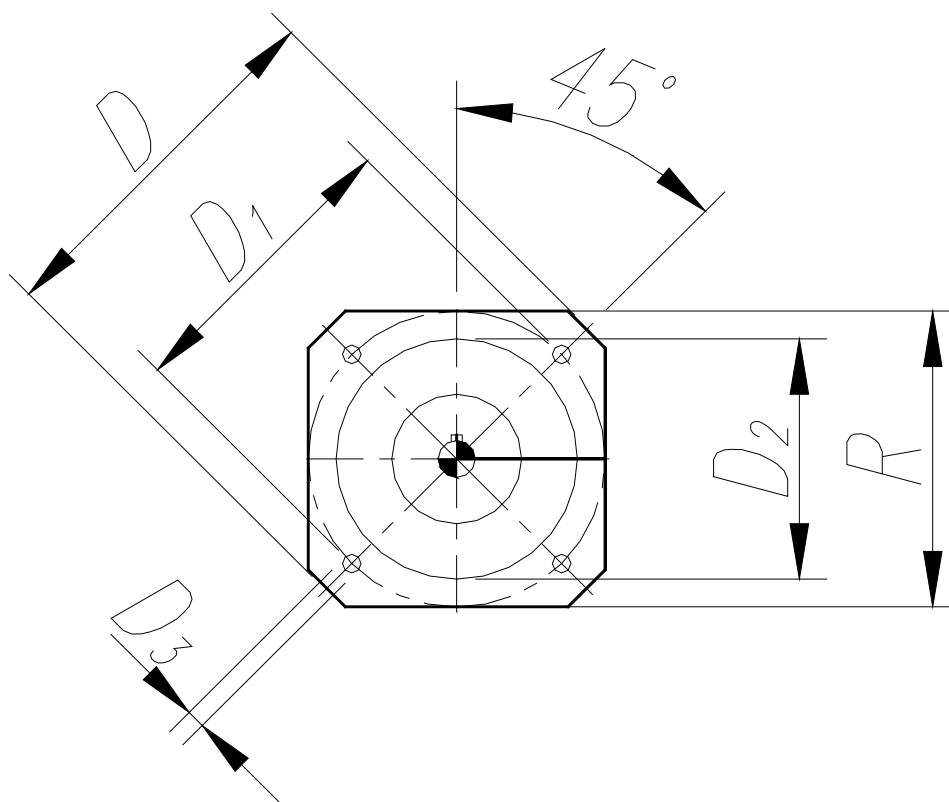
**Размеры выходного вала**



| Размеры<br>Габарит   |      | S   | S <sub>1</sub> | S <sub>2</sub> | d     | d <sub>1</sub> | N <sub>1</sub> | t    |
|----------------------|------|-----|----------------|----------------|-------|----------------|----------------|------|
| <b>RD 02 / RD 03</b> | AU17 | 35  | 25             | 5              | Ø17h6 | M6x16          | 5              | 19   |
|                      | AU20 | 40  | 30             | 5              | Ø20h6 | M6x16          | 6              | 22,5 |
| <b>RD 12 / RD 13</b> | AU20 | 40  | 30             | 5              | Ø20h6 | M6x16          | 6              | 22,5 |
|                      | AU25 | 50  | 40             | 5              | Ø25h6 | M6x16          | 8              | 28   |
| <b>RD 22 / RD 23</b> | AU25 | 50  | 40             | 5              | Ø25h6 | M6x16          | 8              | 28   |
|                      | AU30 | 60  | 40             | 10             | Ø30h6 | M10x22         | 8              | 33   |
| <b>RD 32 / RD 33</b> | AU30 | 60  | 40             | 10             | Ø30h6 | M10x22         | 8              | 33   |
|                      | AU35 | 70  | 50             | 10             | Ø35h6 | M10x22         | 10             | 38   |
| <b>RD 42 / RD 43</b> | AU35 | 70  | 50             | 10             | Ø35h6 | M10x22         | 10             | 38   |
|                      | AU40 | 80  | 60             | 10             | Ø40h6 | M12x28         | 12             | 43   |
| <b>RD 52 / RD 53</b> | AU40 | 80  | 60             | 10             | Ø40h6 | M12x28         | 12             | 43   |
|                      | AU45 | 100 | 90             | 5              | Ø50h6 | M16x36         | 14             | 53,5 |
| <b>RD 62 / RD 63</b> | AU45 | 100 | 90             | 5              | Ø50h6 | M16x36         | 14             | 53,5 |
|                      | AU50 | 120 | 110            | 5              | Ø60h6 | M20x42         | 18             | 64   |

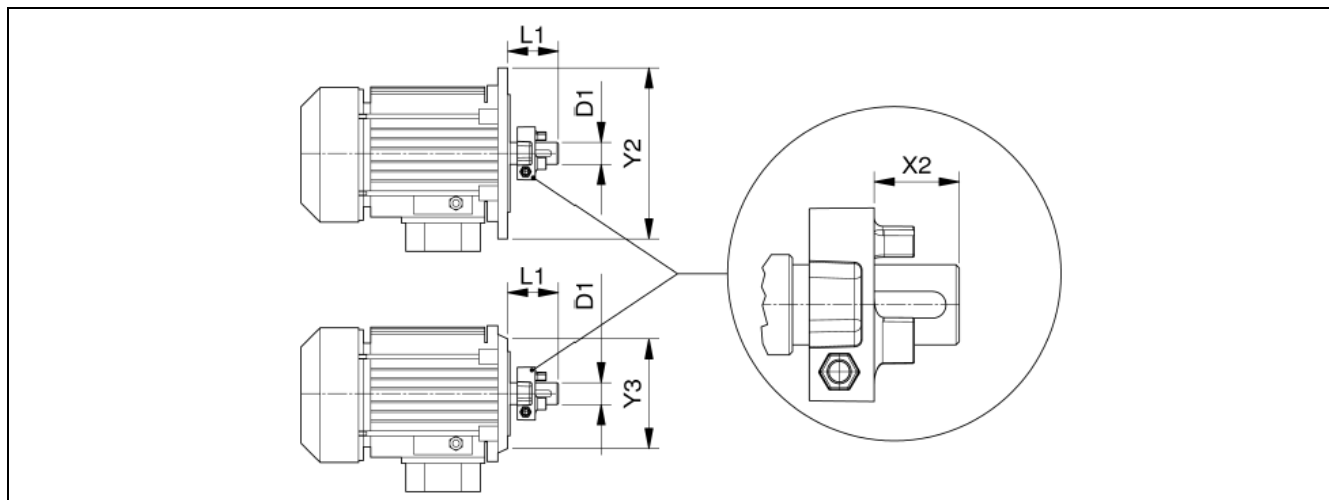


Размеры выходного фланца (B5)



| Размеры<br>Габарит |        | D    | D <sub>1</sub> | D <sub>2</sub> | D <sub>3</sub> | R    |
|--------------------|--------|------|----------------|----------------|----------------|------|
| RD 02 / RD 03      | DFU120 | Ø120 | Ø100           | Ø90h7          | Ø9 (4)         | □100 |
|                    | DFU140 | Ø140 | Ø115           | Ø95h7          | Ø9 (4)         | □115 |
|                    | DFU160 | Ø160 | Ø130           | Ø110h7         | Ø9 (4)         | □130 |
| RD 12 / RD 13      | DFU120 | Ø120 | Ø100           | Ø90h7          | Ø9 (4)         | □100 |
|                    | DFU140 | Ø140 | Ø115           | Ø95h7          | Ø9 (4)         | □115 |
|                    | DFU160 | Ø160 | Ø130           | Ø110h7         | Ø9 (4)         | □130 |
| RD 22 / RD 23      | DFU140 | Ø140 | Ø115           | Ø95h7          | Ø9 (4)         | □115 |
|                    | DFU160 | Ø160 | Ø130           | Ø110h7         | Ø9 (4)         | □130 |
|                    | DFU200 | Ø200 | Ø165           | Ø130h7         | Ø11 (4)        | □165 |
| RD 32 / RD 33      | DFU160 | Ø160 | Ø130           | Ø110h7         | Ø9 (4)         | □135 |
|                    | DFU200 | Ø200 | Ø165           | Ø130h7         | Ø11 (4)        | □165 |
|                    | DFU250 | Ø250 | Ø215           | Ø180h7         | Ø13 (4)        | □215 |
| RD 42 / RD 43      | DFU200 | Ø200 | Ø165           | Ø130h7         | Ø11 (4)        | □165 |
|                    | DFU250 | Ø250 | Ø215           | Ø180h7         | Ø13,5 (4)      | □215 |
|                    | DFU300 | Ø300 | Ø265           | Ø230h7         | Ø17 (4)        | □265 |
| RD 52 / RD 53      | DFU250 | Ø250 | Ø215           | Ø180h7         | Ø13,5 (4)      | □215 |
|                    | DFU300 | Ø300 | Ø265           | Ø230h7         | Ø17 (4)        | □265 |
|                    | DFU350 | Ø350 | Ø300           | Ø250h7         | Ø17,5 (4)      | □300 |
| RD 62 / RD 63      | DFU250 | Ø250 | Ø215           | Ø180h7         | Ø13,5 (4)      | □215 |
|                    | DFU300 | Ø300 | Ø265           | Ø230h7         | Ø17 (4)        | □265 |
|                    | DFU350 | Ø350 | Ø300           | Ø250h7         | Ø17,5 (4)      | □300 |

### Установка муфты на валу электродвигателя



| RD – IEC B5 |    |    |     | RD02<br>G5 | RD03<br>G3 | RD12<br>G5 | RD13<br>G5 | RD22<br>G6 | RD23<br>G5 | RD32<br>G6 | RD33<br>G6 | RD42<br>G6 | RD43<br>G6 |
|-------------|----|----|-----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| IEC         | D1 | L1 | Y2  | X2         |            |            |            |            |            |            |            |            |            |
| 56          | 9  | 20 | 120 | 5.5        | 8.5        | 5.5        | 5.5        | ---        | ---        | ---        | ---        | ---        | ---        |
| 63          | 11 | 23 | 140 | 8.5        | 11.5       | 8.5        | 8.5        | ---        | 5.5        | ---        | ---        | ---        | ---        |
| 71          | 14 | 30 | 160 | 15.5       | 18.5       | 15.5       | 15.5       | 10         | 14.5       | 10         | 10         | ---        | 10         |
| 80          | 19 | 40 | 200 | 25.5       | ---        | 25.5       | ---        | 20         | 24.5       | 20         | 20         | 20         | 20         |
| 90          | 24 | 50 | 200 | ---        | ---        | 35.5       | ---        | 30         | 34.5       | 30         | 30         | 30         | 30         |
| 100<br>112  | 28 | 60 | 250 | ---        | ---        | ---        | ---        | 38.5       | ---        | 38.5       | ---        | 38.5       | 38.5       |

| RD – IEC B14 |    |    |     | RD02<br>G5 | RD03<br>G3 | RD12<br>G5 | RD13<br>G5 | RD22<br>G6 | RD23<br>G5 | RD32<br>G6 | RD33<br>G6 | RD42<br>G6 | RD43<br>G6 |
|--------------|----|----|-----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| IEC          | D1 | L1 | Y2  | X2         |            |            |            |            |            |            |            |            |            |
| 56           | 9  | 20 | 80  | 5.5        | 8.5        | 5.5        | 5.5        | ---        | ---        | ---        | ---        | ---        | ---        |
| 63           | 11 | 23 | 90  | 8.5        | 11.5       | 8.5        | 8.5        | ---        | 5.5        | ---        | ---        | ---        | ---        |
| 71           | 14 | 30 | 105 | 15.5       | 18.5       | 10         | 10         | 10         | 14.5       | 10         | 10         | ---        | 10         |
| 80           | 19 | 40 | 120 | 25.5       | ---        | 25.5       | ---        | 18         | 22.5       | 18         | 18         | 20         | 20         |
| 90           | 24 | 50 | 140 | ---        | ---        | 35.5       | ---        | 28         | 32.5       | 28         | 28         | 27         | 27         |
| 100<br>120   | 28 | 60 | 160 | ---        | ---        | ---        | ---        | 38.5       | ---        | 38.5       | ---        | 38.5       | 38.5       |