

# CM/CMP ЧЕРВЯЧНЫЕ РЕДУКТОРЫ WORMGEARBOXES

## Технические характеристики

## Technical features

Особенностью червячных редукторов серий CM и CMP является высокая степень модульности и большой выбор входных и выходных принадлежностей.

The high degree of modularity is a design feature of CM and CMP wormgearboxes range tank to a wide selection of input and output kits.

Основные характеристики серий CM и CMP:

Main features of CM and CMP range are:

- Литой алюминиевый корпус для габаритов 026, 030, 040, 050, 063, 075, 090 и 110. Чугунный корпус для 130 габарита;
- Die-cast aluminum housing on sizes 026, 030, 040, 050, 063, 075, 090 and 110. Cast iron housing on size 130;
- Двойной конический роликовый подшипник для 090, 110 и 130 габаритов;
- Double taper roller bearing on sizes 090, 110 and 130;
- Литой алюминиевый корпус цилиндрической ступени;
- Die-cast aluminum housing on pre-stage units;
- Синтетическая долговечная смазка.
- Permanent synthetic oil long-life lubrication.

## Маркировка

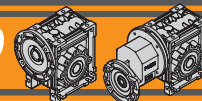
## Classification

### ЧЕРВЯЧНЫЕ РЕДУКТОРЫ / WORMGEARBOXES

| РЕДУКТОР / GEARBOX |  |  |                                |                                  |                          |   |                                     |   |  |                  |
|--------------------|--|--|--------------------------------|----------------------------------|--------------------------|---|-------------------------------------|---|--|------------------|
| CM                 | 050  | U  | 10                             | 71                               | B5                       | SZDX                                    | BRSX                                | 90  | B3   | VS               |
| Тип<br>Type        | Габарит<br>Size  | Версия<br>Gearbox Version  | Передаточное<br>число<br>Ratio | IEC<br>                          | Тип<br>фланца<br>Version | Выходной вал<br>Output shaft            | Удерживающий<br>рычаг<br>Torque arm | Угол<br>Angle   | Монтажная<br>позиция<br>Mounting<br>position                               | Опции<br>Options |
| <b>CM</b><br>      | <b>026</b><br><b>030</b><br><b>040</b><br><b>050</b><br><b>063</b> | <b>U</b><br><b>FD</b><br><b>FS</b><br><b>FLD</b><br><b>FLS</b><br><b>FBD</b><br><b>FBS</b> | См. таблицу<br>See<br>tables   | <b>56..</b><br>—<br><b>132..</b> | <b>B5</b><br><b>B14</b>  | <b>SZDX</b><br><b>SZSX</b><br><b>DZ</b> | <b>BRDX</b><br><b>BRSX</b>          | <b>0°</b><br><b>90°</b><br><b>180°</b><br><b>270°</b> | <b>B3</b><br><b>B8</b><br><b>B6</b><br><b>B7</b><br><b>V5</b><br><b>V6</b> | <b>VS</b>        |
| <b>CMIS</b><br>    | <b>075</b><br><b>090</b><br><b>110</b><br><b>130</b>               |  |                                |                                  |                          |   |                                     |   |  |                  |




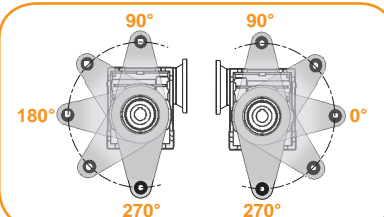





### ЧЕРВЯЧНЫЕ РЕДУКТОРЫ С ЦИЛИНДРИЧЕСКОЙ СТУПЕНЬЮ / PRE-STAGE WORMGEARBOXES

| РЕДУКТОР / GEARBOX |  |  |                                |                                 |                          |   |                                     |   |  |  |                  |
|--------------------|--|--|--------------------------------|---------------------------------|--------------------------|---|-------------------------------------|---|--|--|------------------|
| CMP                | 063/050  | U  | 90                             | 63                              | B14                      | SZDX                                    | BRSX                                | 90  | P4   | B3   | VS               |
| Тип<br>Type        | Габарит<br>Size  | Версия<br>Gearbox Version  | Передаточное<br>число<br>Ratio | IEC<br>                         | Тип<br>фланца<br>Version | Выходной вал<br>Output shaft            | Удерживающий<br>рычаг<br>Torque arm | Угол<br>Angle   | Монтажная<br>позиция<br>цилиндрической<br>ступени<br>Pre stage<br>mounting<br>position | Монтажная<br>позиция<br>Mounting<br>position                               | Опции<br>Options |
| <b>CMP</b><br>     | <b>056/030</b><br><b>056/040</b><br><b>063/040</b><br><b>063/050</b><br><b>063/063</b><br><b>071/050</b><br><b>071/063</b><br><b>071/075</b><br><b>071/090</b><br><b>080/063</b><br><b>080/075</b><br><b>080/090</b><br><b>080/110</b><br><b>080/130</b><br><b>090/075</b><br><b>090/090</b><br><b>090/110</b><br><b>090/130</b> | <b>U</b><br><b>FD</b><br><b>FS</b><br><b>FLD</b><br><b>FLS</b><br><b>FBD</b><br><b>FBS</b> | Vedere tabella<br>See tables   | <b>56..</b><br>—<br><b>80..</b> | <b>B14</b>               | <b>SZDX</b><br><b>SZSX</b><br><b>DZ</b> | <b>BRDX</b><br><b>BRSX</b>          | <b>0°</b><br><b>90°</b><br><b>180°</b><br><b>270°</b> | <b>P1</b><br><b>P2</b><br><b>P3 (стандарт)</b><br><b>P4</b>                            | <b>B3</b><br><b>B8</b><br><b>B6</b><br><b>B7</b><br><b>V5</b><br><b>V6</b> | <b>VS</b>        |
|                    |  |  |                                |                                 |                          |   |                                     |   |  |  |                  |



## Маркировка

## Designation

| Версия<br>Gearbox Version  | Выходной вал<br>Output shaft   | Удерживающий рычаг<br>Torque arm   | Угол<br>Angle   |
|--|--|--|---|
| <br><b>U</b>                | <br><b>SZDX</b> | <br><b>BRDX</b> |  |
| <br><b>FD</b><br>FLD<br>FBD | <br><b>SZSX</b> | <br><b>BRSX</b> |   |
| <br><b>FS</b><br>FLS<br>FBS | <br><b>DZ</b>   |  |   |

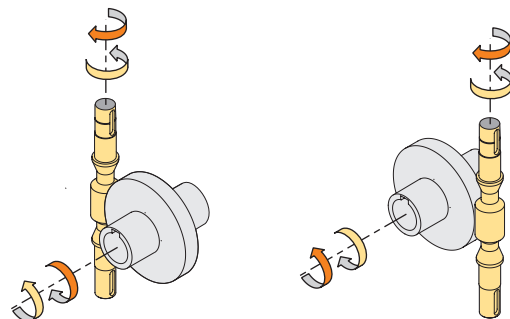
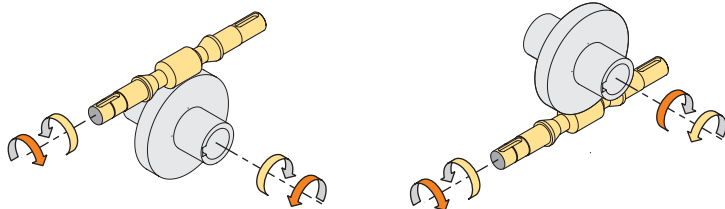
| ДВИГАТЕЛЬ CM / CM MOTOR   |                         |                      |                      |   |
|---------------------------|-------------------------|----------------------|----------------------|---|
| 0.75kW                    | 4p                      | 3ph                  | 50Hz                 | T1  |
| Мощность<br>Power         | Кол-во полюсов<br>Poles | Кол-во фаз<br>Phases | Частота<br>Frequency | Позиция клеммной<br>коробки<br>Terminal box pos.      |
| См. таблицы<br>See tables | 2p<br>4p<br>6p<br>8p    | 1ph<br>3ph           | 50Hz<br>60Hz         | T1 (стандарт)<br>T2<br>T3<br>T4<br><br>T1<br>T2 T3 T4 |

CM/CMP

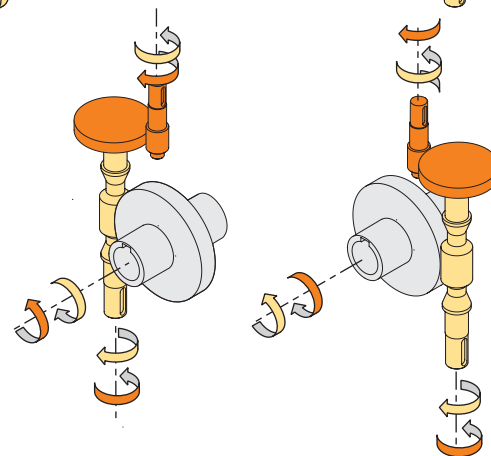
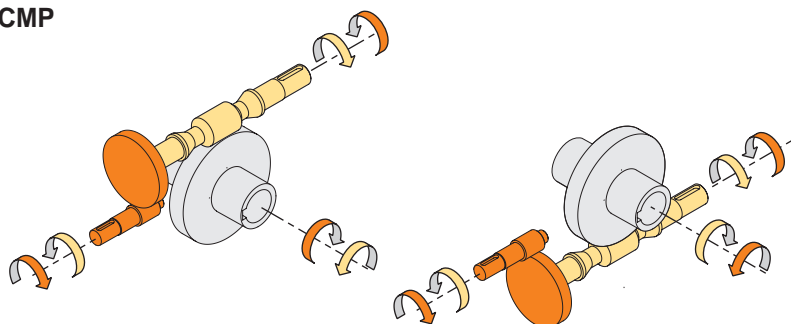
## Направление вращения

## Direction of rotation

CM



CMP

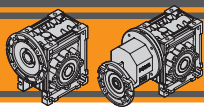


## Обозначения

## Symbols

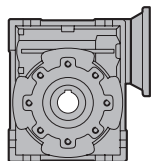
|          |                      |  |
|----------|----------------------|--|
| $n_1$    | [min <sup>-1</sup> ] | Скорость на входе / Input speed  |
| $n_2$    | [min <sup>-1</sup> ] | Скорость на выходе / Output speed  |
| $i$      |                      | Передаточное отношение / Ratio   |
| $P_1$    | [kW]                 | Номинальная мощность двигателя / Nominal input power                                       |
| $M_2$    | [Nm]                 | Вых. момент при мощности $P_1$ / Output torque referred to $P_1$                           |
| $P_{n1}$ | [kW]                 | Номинальная входная мощность / Nominal input power   |
| $M_{n2}$ | [Nm]                 | Номинальный вых. момент при мощности $P_{n1}$ / Nominal output torque referred to $P_{n1}$ |

|         |     |  |
|---------|-----|--|
| sf      |     | Сервис фактор / Service factor                     |
| Rd      | %   | Динамическая эффективность / Dynamic efficiency    |
| Rs      | %   | Статическая эффективность / Static efficiency      |
| $R_2$   | [N] | Радиальная нагрузка / Permitted output radial load |
| $A_2$   | [N] | Осевая нагрузка / Permitted output axial load      |
| Z       |     | Число зацепления червячной передачи / Worm starts  |
| $\beta$ |     | Угол наклона линии зуба / Helix angle              |



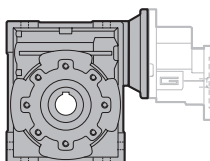
## Смазка

## Lubrication



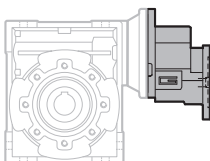
| CM  | Количество смазки (литры) / Oil quantity (litres) |     |     |     |     |     |
|-----|---|-----|-----|-----|-----|-----|
|     | B3  | B8  | B6  | B7  | V5  | V6  |
| 026 | 0.015   |     |     |     |     |     |
| 030 | 0.03  |     |     |     |     |     |
| 040 | 0.07  |     |     |     |     |     |
| 050 | 0.1   |     |     |     |     |     |
| 063 | 0.25  |     |     |     |     |     |
| 075 | 0.3   |     |     |     |     |     |
| 090 | 0.85  |     |     |     |     |     |
| 110 | 1.5   |     |     |     |     |     |
| 130 | 4.5   | 3.3 | 3.5 | 3.5 | 4.5 | 3.3 |

На весь срок эксплуатации  
Life lubricated



| CMP                         | Количество смазки (литры) / Oil quantity (litres) |     |     |     |     |     |
|-----------------------------|---|-----|-----|-----|-----|-----|
|                             | B3  | B8  | B6  | B7  | V5  | V6  |
| 056/030                     | 0.03  |     |     |     |     |     |
| 056/040 - 063/040           | 0.07  |     |     |     |     |     |
| 063/050 - 071/050           | 0.1   |     |     |     |     |     |
| 063/063 - 071/063 - 080/063 | 0.25  |     |     |     |     |     |
| 071/075 - 080/075 - 090/075 | 0.4   |     |     |     |     |     |
| 071/090 - 080/090 - 090/090 | 0.85  |     |     |     |     |     |
| 080/110 - 090/110           | 1.5   |     |     |     |     |     |
| 080/130 - 090/130           | 4.5   | 3.3 | 3.5 | 3.5 | 4.5 | 3.3 |

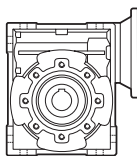
На весь срок эксплуатации  
Life lubricated



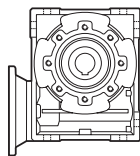
| CMP                |                               |  |   |  |
|--------------------|-------------------------------|--|---|--|
| 056/030<br>056/040 | 063/040<br>063/050<br>063/063 | 071/050<br>071/063<br>071/075<br>071/090 | 080/063<br>080/075<br>080/090<br>080/110<br>080/130 | 090/075<br>090/090<br>090/110<br>090/130 |

На весь срок эксплуатации  
Life lubricated

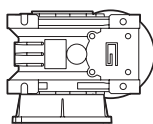
## Монтажные позиции / Mounting positions



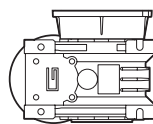
**B3**  
(Стандарт)



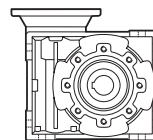
**B8**



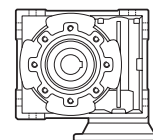
**B6**



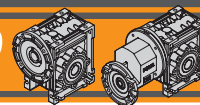
**B7**



**V5**

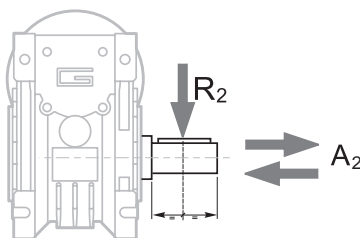


**V6**



Радиальные нагрузки

Radial loads



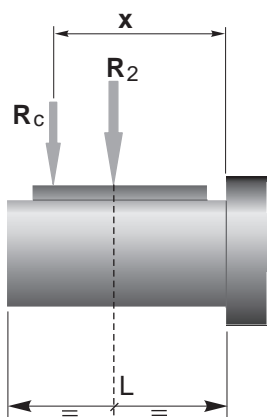
$$A_2 = R_2 \times 0.2$$

| n <sub>2</sub><br>[min <sup>-1</sup> ] | R <sub>2</sub> [N] |             |             |             |             |             |             |             |       |
|--|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
|  | CM026              | CM030       | CM040       | CM050       | CM063       | CM075       | CM090       | CM110       | CM130 |
| 187                                    | 400                | 674         | 1264        | 1770        | 2445        | 2824        | 3161        | 5058        | 5732  |
| 140                                    | 490                | 743         | 1392        | 1949        | 2692        | 3110        | 3481        | 5570        | 6313  |
| 93                                     | 580                | 851         | 1596        | 2234        | 3085        | 3564        | 3990        | 6384        | 7235  |
| 70                                     | 610                | 936         | 1754        | 2456        | 3392        | 3918        | 4386        | 7018        | 7953  |
| 56                                     | 610                | 1008        | 1890        | 2646        | 3654        | 4221        | 4725        | 7560        | 8567  |
| 47                                     | 610                | 1069        | 2004        | 2805        | 3874        | 4475        | 5009        | 8014        | 9083  |
| 35                                     | 610                | 1179        | 2210        | 3095        | 4273        | 4937        | 5526        | 8842        | 10021 |
| 28                                     | 610                | 1270        | 2381        | 3334        | 4603        | 5318        | 5953        | 9524        | 10794 |
| 23                                     | 610                | 1356        | 2542        | 3559        | 4915        | 5678        | 6356        | 10170       | 11526 |
| 18                                     | 610                | 1471        | 2759        | 3862        | 5334        | 6162        | 6897        | 11036       | 12507 |
| 14                                     | 610                | 1600        | 3000        | 4200        | 5800        | 6700        | 7500        | 12000       | 13600 |
|  | CMP... /030        | CMP... /040 | CMP... /050 | CMP... /063 | CMP... /075 | CMP... /090 | CMP... /110 | CMP... /130 |       |

CM/CMP

Если суммарная радиальная нагрузка не приходится на центр выходного вала, необходимо рассчитать её по формуле:

When the resulting radial load is not applied on the centre line of the shaft it is necessary to calculate the effective load with the following formula:

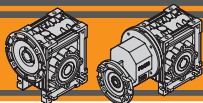


|                   | CM  | CM / CMP |      |      |      |      |      |       |       |
|-------------------|-----|----------|------|------|------|------|------|-------|-------|
|                   | 026 | 030      | 040  | 050  | 063  | 075  | 090  | 110   | 130   |
| a                 | 56  | 65       | 84   | 101  | 120  | 131  | 182  | 176   | 188   |
| b                 | 43  | 50       | 64   | 76   | 95   | 101  | 122  | 136   | 148   |
| R <sub>2MAX</sub> | 610 | 1600     | 3000 | 4200 | 5800 | 6700 | 7500 | 12000 | 13600 |

$$R_c = \frac{R_2 \cdot a}{(b+x)} \leq R_{2MAX}$$

$$R \leq R_c$$

a, b = значения из таблицы  
a, b = values given in the table



## Характеристики зубьев

## Toothing data

|       | Данные червячной шестерни<br>Worm wheel data | Передаточное число / Ratio |         |         |         |         |         |        |        |        |        |        |        |
|-------|--|----------------------------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
|       |  | 5                          | 7.5     | 10      | 15      | 20      | 25      | 30     | 40     | 50     | 60     | 80     | 100    |
| СМ026 | Z  | 6                          | 4       | 3       | 2       | 2       |         | 1      | 1      | 1      | 1      |        |        |
|       | β  | 34° 35'                    | 24° 41' | 19° 1'  | 12° 57' | 10° 30' |         | 6° 33' | 5° 17' | 4° 26' | 3° 49' |        |        |
| СМ030 | Z  | 6                          | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  | 27° 4'                     | 24° 28' | 18° 50' | 12° 49' | 10° 23' | 8° 43'  | 6° 29' | 5° 14' | 4° 23' | 3° 46' | 2° 57' | 2° 25' |
| СМ040 | Z  | 6                          | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  | 34° 19'                    | 24° 28' | 18° 50' | 12° 49' | 10° 23' | 8° 43'  | 6° 29' | 5° 14' | 4° 23' | 3° 46' | 2° 57' | 2° 25' |
| СМ050 | Z  | 6                          | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  | 33° 37'                    | 23° 54' | 18° 23' | 12° 29' | 10° 6'  | 8° 28'  | 6° 19' | 5° 5'  | 4° 15' | 3° 39' | 2° 51' | 2° 20' |
| СМ063 | Z  | 6                          | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  | 34° 23'                    | 24° 31' | 18° 53' | 12° 50' | 10° 24' | 8° 44'  | 6° 30' | 5° 14' | 4° 23' | 3° 47' | 2° 57' | 2° 25' |
| СМ075 | Z  |                            | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  |                            | 26° 17' | 20° 20' | 13° 52' | 11° 18' | 9° 32'  | 7° 2'  | 5° 42' | 4° 48' | 4° 8'  | 3° 14' | 2° 40' |
| СМ090 | Z  |                            | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  |                            | 29° 11' | 22° 43' | 15° 36' | 12° 50' | 10° 53' | 7° 56' | 6° 30' | 5° 29' | 4° 45' | 3° 45' | 3° 6'  |
| СМ110 | Z  |                            | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  |                            | 28° 14' | 21° 56' | 15° 1'  | 14° 41' | 12° 34' | 7° 38' | 7° 28' | 6° 21' | 5° 32' | 4° 24' | 3° 39' |
| СМ130 | Z  |                            | 4       | 3       | 2       | 2       | 2       | 1      | 1      | 1      | 1      | 1      | 1      |
|       | β  |                            | 28° 43' | 22° 20' | 15° 19' | 13° 47' | 11° 54' | 7° 48' | 7° 00' | 6° 01' | 5° 16' | 4° 08' | 3° 27' |

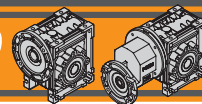
## КПД

## Efficiency

|       | n <sub>1</sub><br>[об/мин] | КПД<br>Efficiency | Передаточное число / Ratio |     |    |    |    |    |    |    |    |    |    |     |
|-------|----------------------------|-------------------|----------------------------|-----|----|----|----|----|----|----|----|----|----|-----|
|       |                            |                   | 5                          | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 |
| СМ026 | 2800                       | Rd                | 89                         | 87  | 85 | 83 | 80 |    | 73 | 68 | 64 | 60 |    |     |
|       |                            |                   | 87                         | 84  | 83 | 78 | 74 |    | 66 | 61 | 57 | 53 |    |     |
|       |                            |                   | 84                         | 83  | 80 | 75 | 71 |    | 61 | 57 | 52 | 48 |    |     |
|       |                            |                   | Rs                         | 72  | 71 | 68 | 61 | 56 | 46 | 41 | 36 | 34 |    |     |
| СМ030 | 2800                       | Rd                | 89                         | 88  | 86 | 84 | 81 | 78 | 74 | 70 | 65 | 62 | 57 | 52  |
|       |                            |                   | 86                         | 85  | 84 | 79 | 75 | 72 | 67 | 62 | 58 | 55 | 48 | 43  |
|       |                            |                   | 84                         | 83  | 81 | 75 | 71 | 68 | 62 | 58 | 53 | 49 | 43 | 39  |
|       |                            |                   | Rs                         | 72  | 67 | 63 | 55 | 50 | 43 | 39 | 35 | 31 | 27 | 23  |
| СМ040 | 2800                       | Rd                | 90                         | 89  | 87 | 84 | 83 | 80 | 77 | 73 | 69 | 66 | 60 | 56  |
|       |                            |                   | 88                         | 86  | 84 | 81 | 78 | 74 | 70 | 65 | 60 | 58 | 52 | 46  |
|       |                            |                   | 86                         | 84  | 82 | 77 | 74 | 70 | 66 | 60 | 57 | 53 | 46 | 41  |
|       |                            |                   | Rs                         | 74  | 71 | 67 | 60 | 55 | 51 | 45 | 40 | 36 | 32 | 28  |
| СМ050 | 2800                       | Rd                | 91                         | 90  | 88 | 86 | 84 | 82 | 78 | 74 | 71 | 68 | 62 | 58  |
|       |                            |                   | 89                         | 87  | 85 | 82 | 79 | 76 | 72 | 67 | 63 | 60 | 54 | 49  |
|       |                            |                   | 87                         | 85  | 84 | 79 | 75 | 72 | 68 | 62 | 59 | 55 | 48 | 43  |
|       |                            |                   | Rs                         | 73  | 70 | 66 | 59 | 55 | 51 | 44 | 39 | 35 | 32 | 27  |
| СМ063 | 2800                       | Rd                | 91                         | 90  | 88 | 86 | 84 | 83 | 79 | 76 | 73 | 70 | 65 | 60  |
|       |                            |                   | 90                         | 88  | 86 | 84 | 81 | 78 | 75 | 70 | 66 | 63 | 57 | 52  |
|       |                            |                   | 89                         | 86  | 84 | 81 | 78 | 75 | 70 | 65 | 61 | 58 | 52 | 47  |
|       |                            |                   | Rs                         | 73  | 71 | 67 | 60 | 55 | 51 | 45 | 40 | 36 | 33 | 28  |
| СМ075 | 2800                       | Rd                | 90                         | 89  | 87 | 85 | 84 | 81 | 78 | 75 | 72 | 68 | 63 | 58  |
|       |                            |                   | 89                         | 87  | 84 | 83 | 80 | 77 | 73 | 69 | 66 | 60 | 56 |     |
|       |                            |                   | 87                         | 85  | 83 | 80 | 77 | 73 | 68 | 64 | 61 | 55 | 50 |     |
|       |                            |                   | Rs                         | 71  | 68 | 61 | 57 | 53 | 46 | 42 | 38 | 35 | 29 | 26  |
| СМ090 | 2800                       | Rd                | 91                         | 90  | 88 | 86 | 85 | 83 | 80 | 78 | 75 | 71 | 67 |     |
|       |                            |                   | 90                         | 88  | 86 | 84 | 83 | 79 | 76 | 72 | 69 | 64 | 60 |     |
|       |                            |                   | 88                         | 87  | 84 | 82 | 80 | 76 | 72 | 68 | 65 | 60 | 55 |     |
|       |                            |                   | Rs                         | 73  | 70 | 64 | 60 | 56 | 49 | 45 | 41 | 38 | 32 | 28  |
| СМ110 | 2800                       | Rd                | 90                         | 89  | 88 | 87 | 86 | 82 | 81 | 79 | 77 | 73 | 70 |     |
|       |                            |                   | 89                         | 88  | 86 | 85 | 84 | 80 | 79 | 76 | 73 | 68 | 64 |     |
|       |                            |                   | 88                         | 87  | 84 | 83 | 82 | 78 | 75 | 71 | 68 | 63 | 59 |     |
|       |                            |                   | Rs                         | 72  | 69 | 63 | 62 | 59 | 48 | 46 | 44 | 41 | 36 | 32  |
| СМ130 | 2800                       | Rd                | 90                         | 89  | 88 | 87 | 86 | 82 | 80 | 79 | 77 | 72 | 70 |     |
|       |                            |                   | 89                         | 88  | 86 | 84 | 83 | 79 | 76 | 75 | 73 | 69 | 64 |     |
|       |                            |                   | 88                         | 87  | 84 | 82 | 81 | 77 | 74 | 73 | 70 | 64 | 59 |     |
|       |                            |                   | Rs                         | 72  | 69 | 62 | 61 | 59 | 49 | 46 | 43 | 39 | 34 | 30  |



Теоретическое значение КПД на первом периоде эксплуатации  
Theoretical efficiency of the gearbox after the first running period



Таблицы выбора

Technical data

| P <sub>1</sub><br>[кВт] | n <sub>2</sub><br>[об/мин] | M <sub>2</sub><br>[Нм] | sf | i |  |  |  | P <sub>1</sub><br>[кВт] | n <sub>2</sub><br>[об/мин] | M <sub>2</sub><br>[Нм] | sf | i |  |  |  |
|-------------------------|----------------------------|------------------------|----|---|--|--|--|-------------------------|----------------------------|------------------------|----|---|--|--|--|
|-------------------------|----------------------------|------------------------|----|---|--|--|--|-------------------------|----------------------------|------------------------|----|---|--|--|--|

0.18

|                      |     |     |     |       |            |        |        |
|----------------------|-----|-----|-----|-------|------------|--------|--------|
| 71A6<br>(900 об/мин) | 180 | 8   | 5.7 | 5     | CM040      |        | B5/B14 |
|                      | 120 | 12  | 4.2 | 7.5   | CM040      |        | B5/B14 |
|                      | 90  | 16  | 3.3 | 10    | CM040      |        | B5/B14 |
|                      | 60  | 22  | 2.4 | 15    | CM040      |        | B5/B14 |
|                      | 45  | 28  | 1.6 | 20    | CM040      |        | B5/B14 |
|                      | 36  | 33  | 1.3 | 25    | CM040      |        | B5/B14 |
|                      | 30  | 38  | 1.5 | 30    | CM040      |        | B5/B14 |
|                      | 23  | 46  | 1.0 | 40    | CM040      |        | B5/B14 |
|                      | 36  | 34  | 2.2 | 25    | CM050      |        | B5/B14 |
|                      | 30  | 39  | 2.5 | 30    | CM050      |        | B5/B14 |
| 23                   | 47  | 1.8 | 40  | CM050 |            | B5/B14 |        |
| 18                   | 56  | 1.4 | 50  | CM050 |            | B5/B14 |        |
| 15                   | 63  | 1.2 | 60  | CM050 |            | B5/B14 |        |
| 15                   | 76  | 1.6 | 60  |       | CMP071/050 | B14    |        |
| 12                   | 90  | 1.2 | 75  |       | CMP071/050 | B14    |        |
| 11                   | 73  | 0.9 | 80  | CM050 |            | B5/B14 |        |
| 10                   | 98  | 1.5 | 90  |       | CMP071/050 | B14    |        |
| 18                   | 58  | 2.6 | 50  | CM063 |            | B5/B14 |        |
| 15                   | 66  | 2.1 | 60  | CM063 |            | B5/B14 |        |
| 15                   | 75  | 3.1 | 60  |       | CMP071/063 | B14    |        |
| 12                   | 88  | 2.3 | 75  |       | CMP071/063 | B14    |        |
| 11                   | 79  | 1.6 | 80  | CM063 |            | B5/B14 |        |
| 10                   | 101 | 2.8 | 90  |       | CMP071/063 | B14    |        |
| 9                    | 90  | 1.4 | 100 | CM063 |            | B5/B14 |        |
| 7.5                  | 121 | 1.9 | 120 |       | CMP071/063 | B14    |        |
| 6.0                  | 140 | 1.5 | 150 |       | CMP071/063 | B14    |        |
| 5.0                  | 155 | 1.3 | 180 |       | CMP071/063 | B14    |        |
| 11                   | 84  | 2.5 | 80  | CM075 |            | B5     |        |
| 9                    | 96  | 2.0 | 100 | CM075 |            | B5     |        |
| 7.5                  | 128 | 3.0 | 120 |       | CMP071/075 | B14    |        |
| 6.0                  | 149 | 2.3 | 150 |       | CMP071/075 | B14    |        |
| 5.0                  | 165 | 1.9 | 180 |       | CMP071/075 | B14    |        |
| 3.8                  | 193 | 1.4 | 240 |       | CMP071/075 | B14    |        |
| 3.0                  | 213 | 1.1 | 300 |       | CMP071/075 | B14    |        |
| 5.0                  | 179 | 2.9 | 180 |       | CMP071/090 | B14    |        |
| 3.8                  | 211 | 2.1 | 240 |       | CMP071/090 | B14    |        |
| 3.0                  | 236 | 1.7 | 300 |       | CMP071/090 | B14    |        |

0.22

|                       |     |     |     |       |            |        |        |
|-----------------------|-----|-----|-----|-------|------------|--------|--------|
| 63C4<br>(1400 об/мин) | 280 | 6   | 2.8 | 5     | CM030      |        | B5/B14 |
|                       | 187 | 10  | 2.1 | 7.5   | CM030      |        | B5/B14 |
|                       | 140 | 13  | 1.7 | 10    | CM030      |        | B5/B14 |
|                       | 93  | 18  | 1.2 | 15    | CM030      |        | B5/B14 |
|                       | 70  | 23  | 0.8 | 20    | CM030      |        | B5/B14 |
| 280                   | 7   | 6.2 | 5   | CM040 |            | B5/B14 |        |
| 187                   | 10  | 4.5 | 7.5 | CM040 |            | B5/B14 |        |
| 140                   | 13  | 3.6 | 10  | CM040 |            | B5/B14 |        |
| 93                    | 18  | 2.5 | 15  | CM040 |            | B5/B14 |        |
| 70                    | 23  | 1.7 | 20  | CM040 |            | B5/B14 |        |
| 56                    | 28  | 1.4 | 25  | CM040 |            | B5/B14 |        |
| 47                    | 32  | 1.5 | 30  | CM040 |            | B5/B14 |        |
| 35                    | 39  | 1.1 | 40  | CM040 |            | B5/B14 |        |
| 28                    | 45  | 0.9 | 50  | CM040 |            | B5/B14 |        |
| 23                    | 62  | 0.9 | 60  |       | CMP063/040 | B14    |        |
| 19                    | 73  | 0.7 | 75  |       | CMP063/040 | B14    |        |
| 16                    | 83  | 0.9 | 90  |       | CMP063/040 | B14    |        |

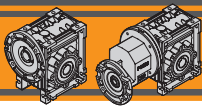
0.22

|                       |     |     |     |       |            |            |        |
|-----------------------|-----|-----|-----|-------|------------|------------|--------|
| 63C4<br>(1400 об/мин) | 56  | 29  | 2.5 | 25    | CM050      |            | B5/B14 |
|                       | 47  | 32  | 2.7 | 30    | CM050      |            | B5/B14 |
|                       | 35  | 40  | 1.9 | 40    | CM050      |            | B5/B14 |
|                       | 28  | 47  | 1.5 | 50    | CM050      |            | B5/B14 |
|                       | 23  | 54  | 1.3 | 60    | CM050      |            | B5/B14 |
|                       | 23  | 63  | 1.6 | 60    |            | CMP063/050 | B14    |
|                       | 19  | 74  | 1.2 | 75    |            | CMP063/050 | B14    |
|                       | 18  | 65  | 0.9 | 80    | CM050      |            | B5/B14 |
|                       | 16  | 86  | 1.5 | 90    |            | CMP063/050 | B14    |
|                       | 14  | 74  | 0.8 | 100   | CM050      |            | B5/B14 |
| 12                    | 104 | 1.1 | 120 |       | CMP063/050 | B14        |        |
| 9.3                   | 121 | 0.9 | 150 |       | CMP063/050 | B14        |        |
| 23                    | 57  | 2.2 | 60  | CM063 |            | B5         |        |
| 23                    | 64  | 2.9 | 60  |       | CMP063/063 | B14        |        |
| 19                    | 77  | 2.2 | 75  |       | CMP063/063 | B14        |        |
| 18                    | 68  | 1.7 | 80  | CM063 |            | B5         |        |
| 16                    | 85  | 2.8 | 90  |       | CMP063/063 | B14        |        |
| 14                    | 78  | 1.5 | 100 | CM063 |            | B5         |        |
| 12                    | 106 | 1.9 | 120 |       | CMP063/063 | B14        |        |
| 9.3                   | 126 | 1.5 | 150 |       | CMP063/063 | B14        |        |
| 7.8                   | 140 | 1.3 | 180 |       | CMP063/063 | B14        |        |
| 5.8                   | 166 | 0.9 | 240 |       | CMP063/063 | B14        |        |
| 4.7                   | 185 | 0.8 | 300 |       | CMP063/063 | B14        |        |

0.25

|                       |     |     |     |       |            |        |        |
|-----------------------|-----|-----|-----|-------|------------|--------|--------|
| 63B2<br>(2800 об/мин) | 560 | 4   | 3.4 | 5     | CM030      |        | B5/B14 |
|                       | 373 | 6   | 2.7 | 7.5   | CM030      |        | B5/B14 |
|                       | 280 | 7   | 2.2 | 10    | CM030      |        | B5/B14 |
|                       | 187 | 11  | 1.5 | 15    | CM030      |        | B5/B14 |
|                       | 140 | 14  | 1.0 | 20    | CM030      |        | B5/B14 |
|                       | 112 | 17  | 0.9 | 25    | CM030      |        | B5/B14 |
|                       | 93  | 19  | 1.0 | 30    | CM030      |        | B5/B14 |
|                       | 140 | 14  | 2.2 | 20    | CM040      |        | B5/B14 |
|                       | 112 | 17  | 1.6 | 25    | CM040      |        | B5/B14 |
|                       | 93  | 20  | 1.9 | 30    | CM040      |        | B5/B14 |
| 70                    | 25  | 1.4 | 40  | CM040 |            | B5/B14 |        |
| 56                    | 29  | 1.1 | 50  | CM040 |            | B5/B14 |        |
| 47                    | 34  | 0.9 | 60  | CM040 |            | B5/B14 |        |
| 47                    | 37  | 1.2 | 60  |       | CMP063/040 | B14    |        |
| 37                    | 44  | 1.0 | 75  |       | CMP063/040 | B14    |        |
| 31                    | 50  | 1.1 | 90  |       | CMP063/040 | B14    |        |
| 23                    | 60  | 0.8 | 120 |       | CMP063/040 | B14    |        |
| 70                    | 25  | 2.3 | 40  | CM050 |            | B5/B14 |        |
| 56                    | 30  | 1.9 | 50  | CM050 |            | B5/B14 |        |
| 47                    | 35  | 1.5 | 60  | CM050 |            | B5/B14 |        |
| 47                    | 38  | 2.1 | 60  |       | CMP063/050 | B14    |        |
| 37                    | 45  | 1.7 | 75  |       | CMP063/050 | B14    |        |
| 35                    | 42  | 1.1 | 80  | CM050 |            | B5/B14 |        |
| 31                    | 51  | 1.9 | 90  |       | CMP063/050 | B14    |        |
| 28                    | 49  | 0.9 | 100 | CM050 |            | B5/B14 |        |
| 23                    | 62  | 1.4 | 120 |       | CMP063/050 | B14    |        |
| 19                    | 74  | 1.1 | 150 |       | CMP063/050 | B14    |        |
| 16                    | 83  | 0.9 | 180 |       | CMP063/050 | B14    |        |
| 35                    | 44  | 2.0 | 80  | CM063 |            | B5     |        |
| 31                    | 53  | 3.5 | 90  |       | CMP063/063 | B14    |        |
| 28                    | 51  | 1.6 | 100 | CM063 |            | B5     |        |

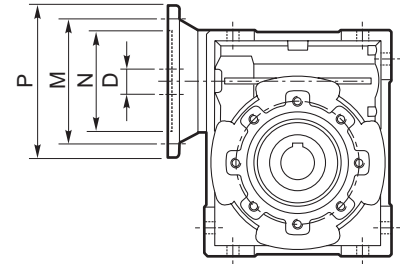




## Соединительные адаптеры для моторов IEC

## IEC Motor adapters

|       | IEC        | N   | M   | P   | D  | i  |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|-------|------------|-----|-----|-----|----|----|-----|----|----|----|----|----|----|----|----|----|-----|----|----|----|----|--|--|
|       |            |     |     |     |    | 5  | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 |    |    |    |    |  |  |
| CM026 | 56B14      | 50  | 65  | 80  | 9  |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM030 | 63B5       | 95  | 115 | 140 | 11 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 63B14      | 60  | 75  | 90  |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 56B5       | 80  | 100 | 120 | 9  | B  | B   | B  | B  | B  | B  | B  | B  | B  |    |    |     |    |    |    |    |  |  |
|       | 56B14      | 50  | 65  | 80  |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM040 | 71B5       | 110 | 130 | 160 | 14 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B14      | 70  | 85  | 105 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 63B5       | 95  | 115 | 140 | 11 | B  | B   | B  | B  | B  | B  | B  | B  |    |    |    |     |    |    |    |    |  |  |
|       | 63B14      | 60  | 75  | 90  |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 56B5       | 80  | 100 | 120 | 9  | BS | BS  | BS | BS | BS | BS | BS | BS | BS | B  | B  | B   | B  |    |    |    |  |  |
|       | 56B14      | 50  | 65  | 80  |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM050 | 80B5       | 130 | 165 | 200 | 19 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B14      | 80  | 100 | 120 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B5       | 110 | 130 | 160 | 14 | B  | B   | B  | B  | B  | B  | B  |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B14      | 70  | 85  | 105 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 63B5       | 95  | 115 | 140 | 11 | BS | BS  | BS | BS | BS | BS | BS | BS | B  | B  | B  | B   |    |    |    |    |  |  |
|       | 63B14      | 60  | 75  | 90  |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM063 | 90B5       | 130 | 165 | 200 | 24 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B14      | 95  | 115 | 140 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B5       | 130 | 165 | 200 | 19 | B  | B   | B  | B  | B  | B  | B  |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B14      | 80  | 100 | 120 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B5       | 110 | 130 | 160 | 14 | BS | BS  | BS | BS | BS | BS | BS | BS | B  | B  | B  |     |    |    |    |    |  |  |
|       | 71B14      | 70  | 85  | 105 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM075 | 63B5       | 95  | 115 | 140 | 11 |    |     |    |    |    |    |    |    | BS | BS | BS | B   | B  |    |    |    |  |  |
|       | 100/112B5  | 180 | 215 | 250 | 28 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 100/112B14 | 110 | 130 | 160 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B5       | 130 | 165 | 200 | 24 |    | B   | B  | B  |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B14      | 95  | 115 | 140 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B5       | 130 | 165 | 200 | 19 | BS | BS  | BS | B  | B  | B  | B  |    |    |    |    |     |    |    |    |    |  |  |
| CM090 | 80B14      | 80  | 100 | 120 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B5       | 110 | 130 | 160 | 14 |    |     |    |    |    |    |    |    | BS | BS | BS | B   | B  |    |    |    |  |  |
|       | 100/112B5  | 180 | 215 | 250 | 28 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 100/112B14 | 110 | 130 | 160 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B5       | 130 | 165 | 200 | 24 |    | B   | B  | B  | B  | B  |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B14      | 95  | 115 | 140 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM110 | 80B5       | 130 | 165 | 200 | 19 | BS | BS  | BS | BS | BS | BS | B  | B  | B  | B  |    |     |    |    |    |    |  |  |
|       | 80B14      | 80  | 100 | 120 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 71B5       | 110 | 130 | 160 | 14 |    |     |    |    |    |    |    |    | BS | BS | BS | B   | B  |    |    |    |  |  |
|       | 132B5      | 230 | 265 | 300 | 38 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 132B14     | 130 | 165 | 200 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 100/112B5  | 180 | 215 | 250 | 28 |    | B   | B  | B  | B  | B  |    |    |    |    |    |     |    |    |    |    |  |  |
| CM130 | 100/112B14 | 110 | 130 | 160 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B5       | 130 | 165 | 200 | 24 | BS | BS  | BS | BS | BS | B  | B  | B  | B  |    |    |     |    |    |    |    |  |  |
|       | 90B14      | 95  | 115 | 140 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B5       | 130 | 165 | 200 | 19 |    |     |    |    |    |    |    |    | BS | BS | BS | BS  | B  | B  |    |    |  |  |
|       | 132B5      | 230 | 265 | 300 | 38 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 132B14     | 130 | 165 | 200 |    |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
| CM130 | 100/112B5  | 180 | 215 | 250 | 28 |    | B   | B  | B  | B  | B  | B  |    |    |    |    |     |    |    |    |    |  |  |
|       | 90B5       | 130 | 165 | 200 | 24 | BS | BS  | BS | BS | BS | BS | BS | B  | B  | B  | B  |     |    |    |    |    |  |  |
|       | 80B5       | 130 | 165 | 200 | 19 |    |     |    |    |    |    |    |    |    |    |    |     |    |    |    |    |  |  |
|       | 80B5       | 130 | 165 | 200 | 19 |    |     |    |    |    |    |    |    |    |    |    |     | BS | BS | BS | BS |  |  |



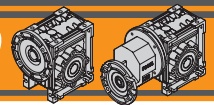
### ВНИМАНИЕ

Серым выделены возможные варианты соединений редукторов с моторами в зависимости от габарита редуктора и его передаточного числа.

*N.B. Grey areas indicate motor inputs available on each size of unit.*

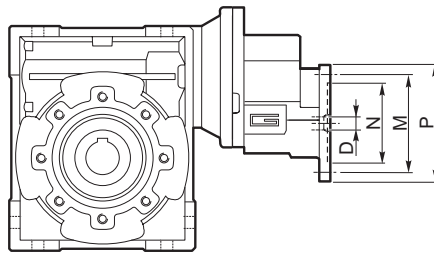
**B/BS =** Необходимо применение переходной втулки

**B/BS =** Metal shaft sleeve



Соединительные адаптеры для моторов IEC

IEC Motor adapters



| CMP     | IEC             | N         | M          | P          | D  | i<br>(i <sub>1</sub> x i <sub>2</sub> ) |              |              |               |               |               |               |                |  |  |
|---------|-----------------|-----------|------------|------------|----|---|--------------|--------------|---------------|---------------|---------------|---------------|----------------|--|--|
|         |                 |           |            |            |    | 60<br>(3x20)                            | 75<br>(3x25) | 90<br>(3x30) | 120<br>(3x40) | 150<br>(3x50) | 180<br>(3x60) | 240<br>(3x80) | 300<br>(3x100) |  |  |
| 056/030 | 56 B14          | 50        | 65         | 80         | 9  |   |              |              |               |               |               |               |                |  |  |
| 056/040 |                 |           |            |            |    | B                                       | B            | B            | B             |               |               |               |                |  |  |
| 063/040 | 63 B14          | 60        | 75         | 90         | 11 |   |              |              |               |               |               |               |                |  |  |
| 063/050 |                 |           |            |            |    | B                                       | B            | B            |               |               |               |               |                |  |  |
| 063/063 |                 |           |            |            |    | BS                                      | BS           | BS           | B             | B             | B             |               |                |  |  |
| 071/050 | 71 B14          | 70        | 85         | 105        | 14 |   |              |              |               |               |               |               |                |  |  |
| 071/063 |                 |           |            |            |    | B                                       | B            | B            |               |               |               |               |                |  |  |
| 071/075 |                 |           |            |            |    | B                                       | B            | B            | B             |               |               |               |                |  |  |
| 071/090 |                 |           |            |            |    | BS                                      | BS           | BS           | B             | B             | B             |               |                |  |  |
| 080/063 | 80 B14          | 80        | 100        | 120        | 19 |   |              |              |               |               |               |               |                |  |  |
| 080/075 |                 |           |            |            |    |   |              |              |               |               |               |               |                |  |  |
| 080/090 |                 |           |            |            |    | B                                       | B            | B            |               |               |               |               |                |  |  |
| 080/110 |                 |           |            |            |    | BS                                      | BS           | B            | B             | B             | B             |               |                |  |  |
| 080/130 |                 |           |            |            |    | BS                                      | BS           | BS           | BS            | B             | B             | B             | B              |  |  |
| 090/075 | 90 B14<br>90 B5 | 95<br>130 | 115<br>165 | 140<br>200 | 24 |   |              |              |               |               |               |               |                |  |  |
| 090/090 |                 |           |            |            |    | B                                       | B            | B            |               |               |               |               |                |  |  |
| 090/110 |                 |           |            |            |    | BS                                      | BS           | B            | B             | B             | B             |               |                |  |  |
| 090/130 |                 |           |            |            |    | BS                                      | BS           | BS           | BS            | B             | B             | B             | B              |  |  |

ВНИМАНИЕ

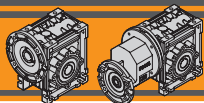
Серым выделены возможные варианты соединений редукторов с моторами в зависимости от габарита редуктора и его передаточного числа.

**B/BS =** Необходимо применение переходной втулки

N.B. Grey areas indicate motor inputs available on each size of unit.

**B/BS =** Metal shaft sleeve

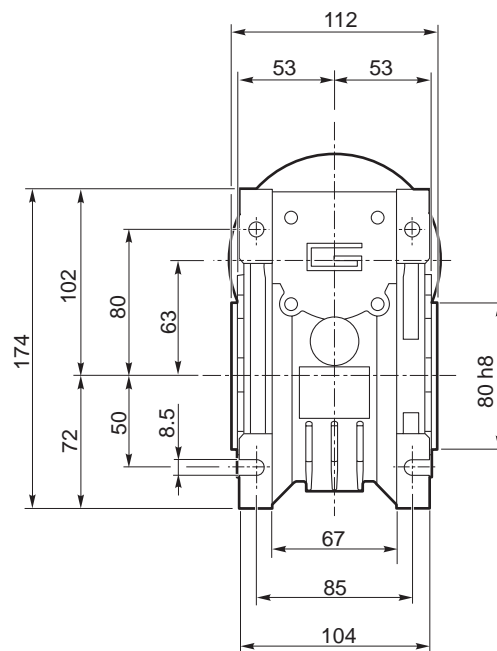
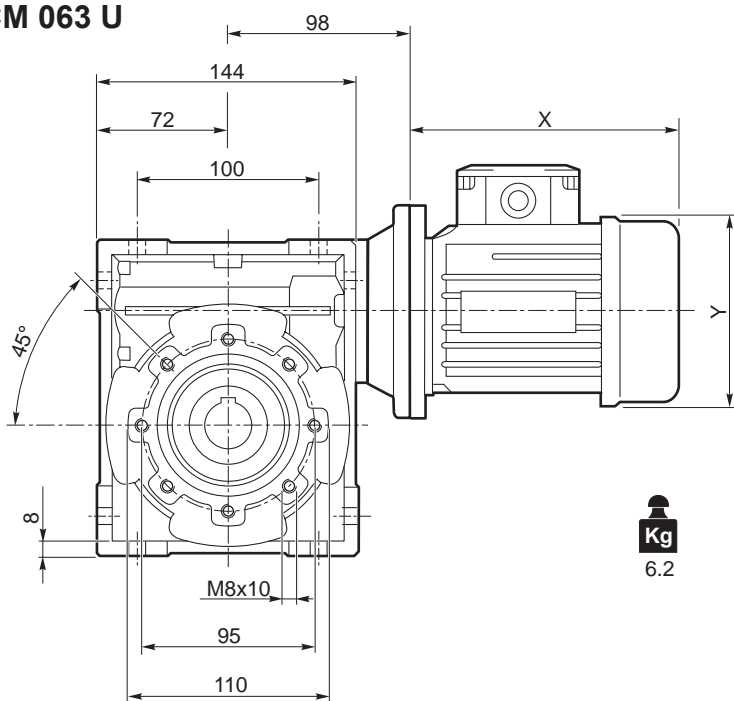




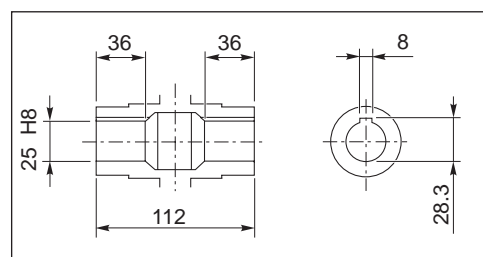
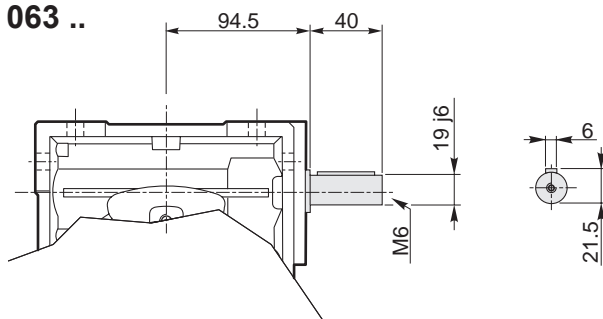
**Габаритные размеры**

**Dimensions**

**CM 063 U**

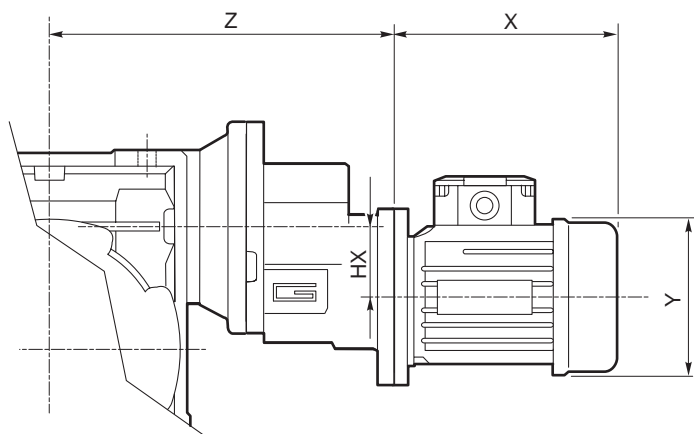


**CMIS 063 ..**

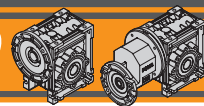


Выходной полый вал / Hollow output shaft

**CMP ..**



|                | HX   | Z   | Kg  |
|----------------|------|-----|-----|
| <b>063/063</b> | 30.5 | 170 | 7.2 |
| <b>071/063</b> | 41   | 187 | 8.2 |
| <b>080/063</b> | 41   | 198 | 9.0 |



Габаритные размеры

Dimensions

