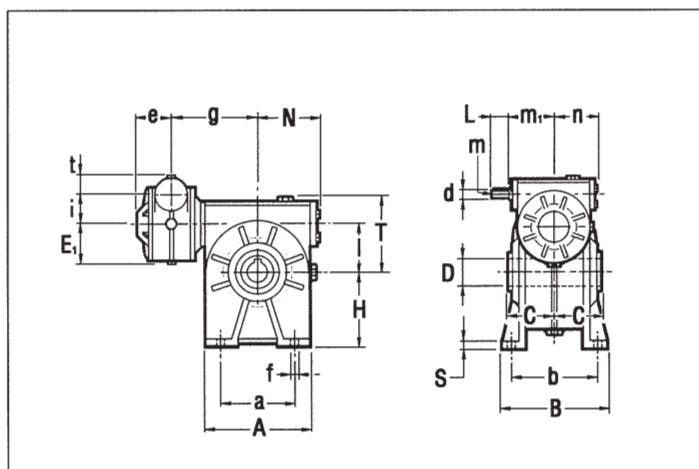
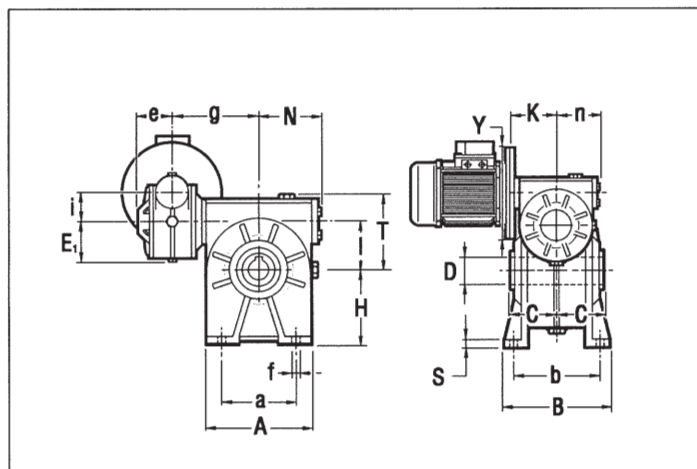




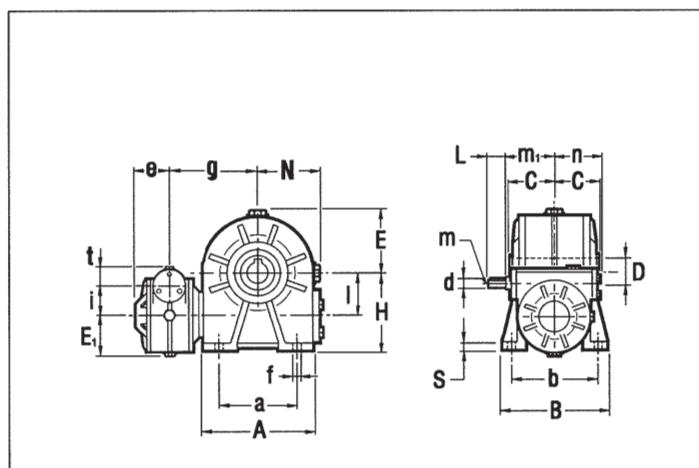
## CRI S



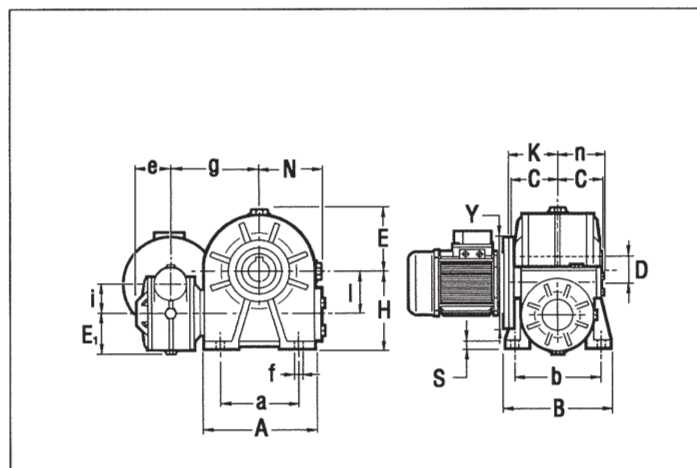
## CRMI S



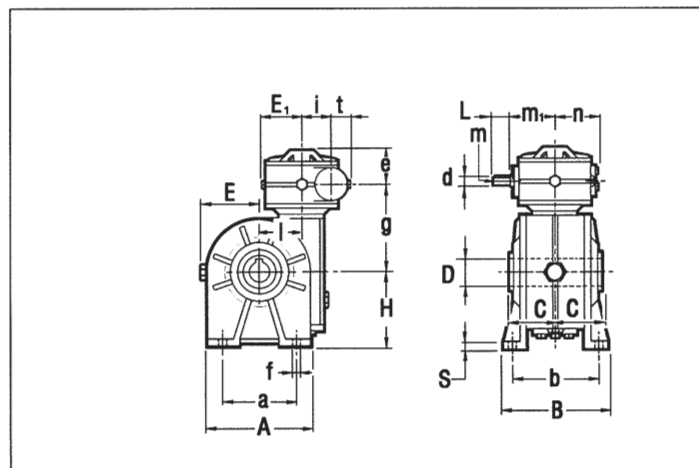
## CRI I



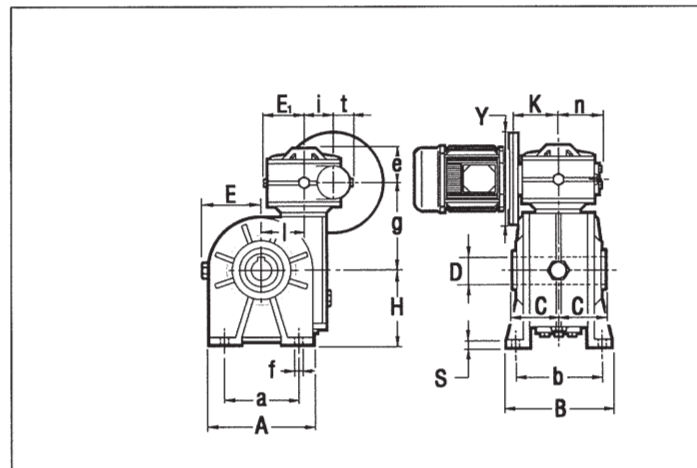
## CRMI I



## CRI D



## CRMI D





### 3.9 Rozměry

### 3.9 Dimensions

### 3.9 Abmessungen

| CRI<br>CRMI | A   | a   | B   | b                               | C    | D<br>H7 | d<br>j6 | E   | E <sub>1</sub> | e   | f   | g     | H   | I   | i   | L  | m   | m <sub>1</sub> | N    | n     | S  | T   | t  |
|-------------|-----|-----|-----|---------------------------------|------|---------|---------|-----|----------------|-----|-----|-------|-----|-----|-----|----|-----|----------------|------|-------|----|-----|----|
| 28/28       | 67  | 52  | 78  | 66 <sup>+2</sup> <sub>-6</sub>  | 30   | 14      | 9       | 40  | 40             | 35  | 5.5 | 90    | 52  | 28  | 28  | 20 | M4  | 47             | 44.5 | 44.5* | 6  | 49  | 21 |
| 28/40       | 100 | 70  | 102 | 84 <sup>±3</sup>                | 41   | 19(18)  | 9       | 59  | 40             | 35  | 7   | 104.5 | 71  | 40  | 28  | 20 | M4  | 47             | 61.5 | 44.5* | 8  | 66  | 21 |
| 40/40 °     | 100 | 70  | 102 | 84 <sup>±3</sup>                | 41   | 19(18)  | 11      | 59  | 59             | 49  | 7   | 145.5 | 71  | 40  | 40  | 22 | M5  | 64             | 61.5 | 61.5  | 8  | 66  | 26 |
| 28/50       | 120 | 85  | 119 | 99 <sup>±3</sup>                | 49   | 24(25)  | 9       | 69  | 40             | 35  | 9   | 115   | 85  | 50  | 28  | 20 | M4  | 43             | 72.5 | 44.5* | 10 | 80  | 21 |
| 40/50       | 120 | 85  | 119 | 99 <sup>±3</sup>                | 49   | 24(25)  | 11      | 69  | 59             | 49  | 9   | 106   | 85  | 50  | 40  | 22 | M5  | 64             | 72.5 | 61.5  | 10 | 80  | 26 |
| 28/63       | 140 | 95  | 136 | 111                             | 60   | 25      | 9       | 81  | 40             | 35  | 11  | 135.5 | 100 | 63  | 28  | 20 | M4  | 47             | 84   | 44.5* | 11 | 99  | 20 |
| 40/63       | 140 | 95  | 136 | 111 <sup>+2</sup> <sub>-8</sub> | 60   | 25      | 11      | 81  | 59             | 49  | 11  | 146   | 100 | 63  | 40  | 22 | M5  | 64             | 84   | 61.5  | 11 | 99  | 26 |
| 28/70       | 158 | 120 | 140 | 116 <sup>+2</sup> <sub>-8</sub> | 60   | 28      | 9       | 87  | 40             | 35  | 11  | 140.5 | 115 | 70  | 28  | 20 | M4  | 47             | 92   | 44.5* | 13 | 108 | 21 |
| 40/70       | 158 | 120 | 140 | 116 <sup>+2</sup> <sub>-8</sub> | 60   | 28      | 11      | 87  | 59             | 49  | 11  | 151   | 115 | 70  | 40  | 22 | M5  | 64             | 92   | 61.5  | 13 | 108 | 26 |
| 50/70       | 158 | 120 | 140 | 116 <sup>+2</sup> <sub>-8</sub> | 60   | 28      | 14      | 87  | 69             | 59  | 11  | 149   | 115 | 70  | 50  | 30 | M6  | 74             | 92   | 72.5  | 13 | 108 | 30 |
| 63/70 °     | 158 | 120 | 140 | 116                             | 60   | 28      | 18      | 87  | 81             | 69  | 11  | 182   | 115 | 70  | 63  | 45 | M6  | 96             | 92   | 81    | 13 | 108 | 36 |
| 40/85 °     | 193 | 140 | 168 | 140                             | 61   | 32(35)  | 11      | 105 | 59             | 49  | 13  | 198   | 135 | 85  | 40  | 22 | M5  | 64             | 111  | 61.5  | 15 | 135 | 26 |
| 50/85       | 193 | 140 | 168 | 140                             | 61   | 32(35)  | 14      | 105 | 69             | 59  | 13  | 173   | 135 | 85  | 50  | 30 | M6  | 74             | 111  | 72.5  | 15 | 135 | 30 |
| 63/85 °     | 193 | 140 | 168 | 140                             | 61   | 32(35)  | 18      | 105 | 81             | 69  | 13  | 198   | 135 | 85  | 63  | 45 | M6  | 96             | 111  | 81    | 15 | 135 | 36 |
| 70/85       | 193 | 140 | 168 | 140                             | 61   | 32(35)  | 19      | 105 | 87             | 68  | 13  | 165   | 135 | 85  | 70  | 40 | M8  | 97             | 111  | 92    | 15 | 135 | 43 |
| 50/110 °    | 250 | 200 | 200 | 162                             | 77.5 | 42      | 14      | 135 | 69             | 59  | 14  | 236.5 | 172 | 110 | 50  | 30 | M6  | 74             | 142  | 72.5  | 17 | 170 | 30 |
| 63/110 °    | 250 | 200 | 200 | 162                             | 77.5 | 42      | 18      | 135 | 81             | 69  | 14  | 227   | 172 | 110 | 63  | 45 | M6  | 96             | 142  | 81    | 17 | 170 | 36 |
| 70/110      | 250 | 200 | 200 | 162                             | 77.5 | 42      | 19      | 135 | 87             | 68  | 14  | 191   | 172 | 110 | 70  | 40 | M8  | 97             | 142  | 92    | 17 | 170 | 38 |
| 85/110      | 250 | 200 | 200 | 162                             | 77.5 | 42      | 24      | 135 | 105            | 71  | 14  | 195   | 172 | 110 | 85  | 50 | M8  | 115            | 142  | 111   | 17 | 170 | 50 |
| 63/130 °    | 286 | 235 | 230 | 190                             | 90   | 48      | 18      | 150 | 81             | 69  | 15  | 265   | 200 | 130 | 63  | 45 | M6  | 96             | 159  | 81    | 19 | 200 | 36 |
| 70/130      | 286 | 235 | 230 | 190                             | 90   | 48      | 19      | 150 | 87             | 68  | 15  | 214   | 200 | 130 | 70  | 40 | M8  | 97             | 159  | 92    | 19 | 200 | 38 |
| 85/130      | 286 | 235 | 230 | 190                             | 90   | 48      | 24      | 150 | 105            | 71  | 15  | 213   | 200 | 130 | 85  | 50 | M8  | 115            | 159  | 111   | 19 | 200 | 50 |
| 85/150      | 336 | 260 | 250 | 210                             | 105  | 55      | 24      | 178 | 105            | 71  | 19  | 240   | 230 | 150 | 85  | 50 | M8  | 115            | 189  | 111   | 20 | 224 | 50 |
| 110/150     | 336 | 260 | 250 | 210                             | 105  | 55      | 28      | 178 | 135            | 92  | 19  | 254   | 230 | 150 | 110 | 60 | M8  | 146            | 189  | 142   | 20 | 224 | 60 |
| 85/180      | 400 | 310 | 320 | 260                             | 120  | 65      | 24      | 210 | 105            | 71  | 22  | 283   | 265 | 180 | 85  | 50 | M8  | 115            | 232  | 111   | 22 | 265 | 50 |
| 110/180     | 400 | 310 | 320 | 260                             | 120  | 65      | 28      | 210 | 135            | 92  | 22  | 296   | 265 | 180 | 110 | 60 | M8  | 146            | 232  | 142   | 22 | 265 | 60 |
| 130/180     | 400 | 310 | 320 | 260                             | 120  | 65      | 38      | 210 | 150            | 102 | 22  | 306   | 265 | 180 | 130 | 80 | M10 | 166            | 232  | 159   | 22 | 265 | 70 |

\* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

|     | CRMI                                      |    |                                               |      |                            |    |                                            |    |                           |     |                                      |     |                    |     |         |     |
|-----|-------------------------------------------|----|-----------------------------------------------|------|----------------------------|----|--------------------------------------------|----|---------------------------|-----|--------------------------------------|-----|--------------------|-----|---------|-----|
|     | 28/28<br>28/40<br>28/50<br>28/63<br>28/70 |    | 40/40 °<br>40/50<br>40/63<br>40/70<br>40/85 ° |      | 50/70<br>50/85<br>50/110 ° |    | 63/70 °<br>63/85 °<br>63/110 °<br>63/130 ° |    | 70/85<br>70/110<br>70/130 |     | 85/110<br>85/130<br>85/150<br>85/180 |     | 110/150<br>110/180 |     | 130/180 |     |
|     | Y                                         | K  | Y                                             | K    | Y                          | K  | Y                                          | K  | Y                         | K   | Y                                    | K   | Y                  | K   | Y       | K   |
| B5  | 120                                       | 49 | 120                                           | 63.5 | 140                        | 77 | 160                                        | 95 | 160                       | 100 | 160                                  | 116 | 200                | 145 | —       | —   |
|     | —                                         | —  | 140                                           | 63.5 | 160                        | 77 | 200                                        | 95 | 200                       | 100 | 200                                  | 116 | 250                | 145 | 250     | 163 |
|     | —                                         | —  | 160                                           | 71   | 200                        | 81 | —                                          | —  | —                         | —   | 250                                  | 118 | —                  | —   | 300     | 163 |
| B14 | 80•                                       | 49 | 80•                                           | 63.5 | 90•                        | 77 | 105•                                       | 95 | 105                       | 100 | 120                                  | 116 | 160                | 145 | —       | —   |
|     | 90                                        | 51 | 90                                            | 63.5 | 105                        | 77 | 120                                        | 95 | 120                       | 100 | 140                                  | 116 | —                  | —   | —       | —   |
|     | —                                         | —  | 105                                           | 71   | 120                        | 81 | 140                                        | 95 | 140                       | 100 | 160                                  | 118 | —                  | —   | —       | —   |
|     | —                                         | —  | —                                             | —    | —                          | —  | —                                          | —  | 160                       | 100 | —                                    | —   | —                  | —   | —       | —   |

(•) Viz. poznámka pod tabulkou 3.4.

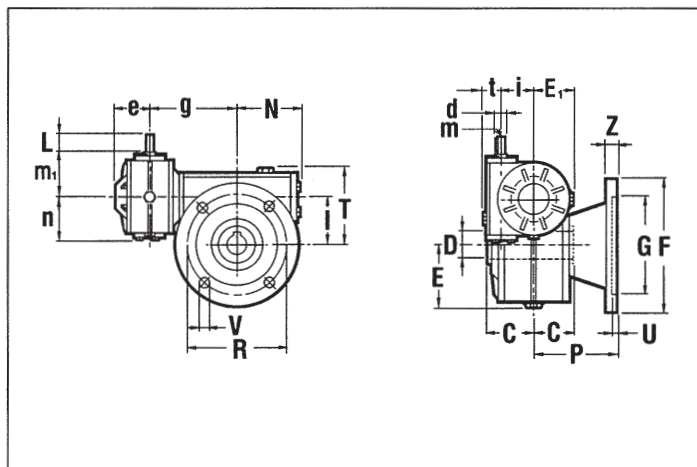
(•) See note at the bottom of table 3.4.

(•) Siehe Bemerkungen Tabelle 3.4 unten.

(°) Převodovky montované za stavebnice, viz také kapitola 3.11.  
Pozn.: Velikosti per jsou uvedeny dále.

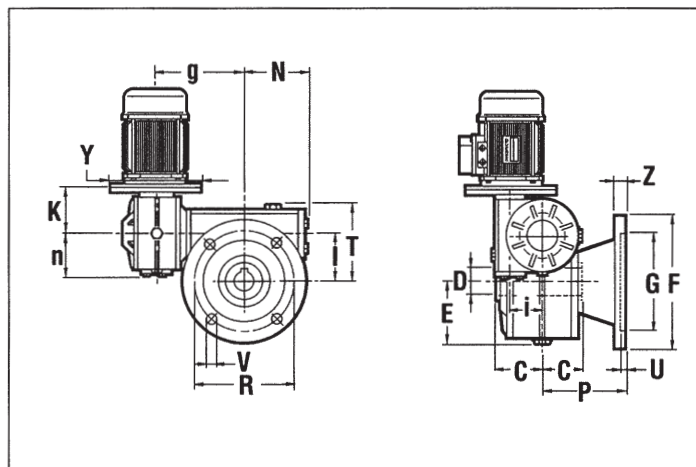
(°) Gearboxes assembled with combination kit, see also chapter 3.11.  
NOTE: Sizes of feathers are shown below.

(°) Getriebe angebaut mit kombinationskit, siehe auch Abschnitt 3.11.  
HINWEIS: Die Abmessungen der Federn sind auf angegeben.

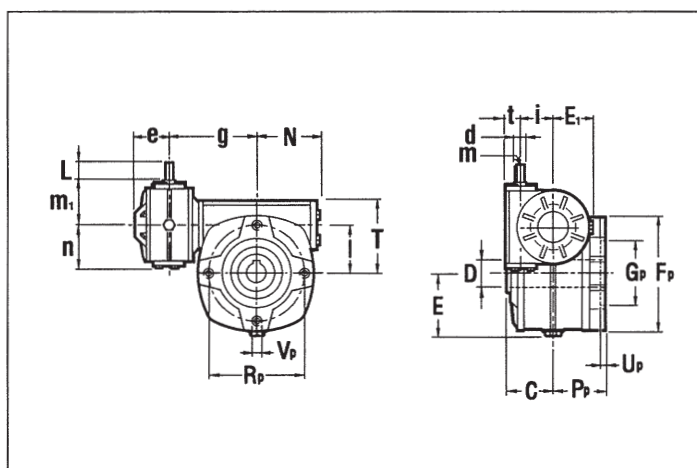
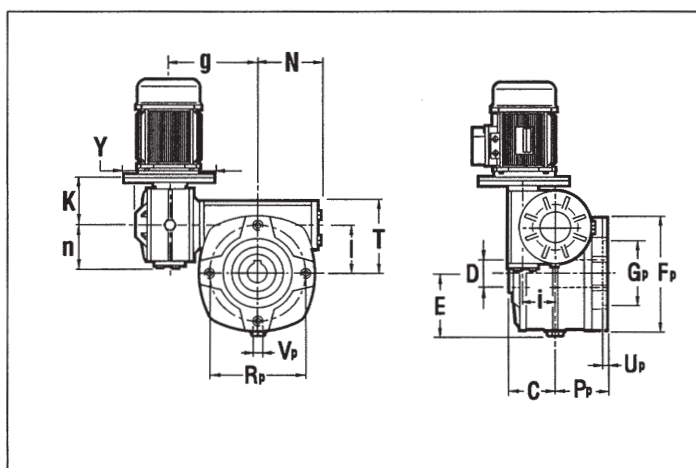
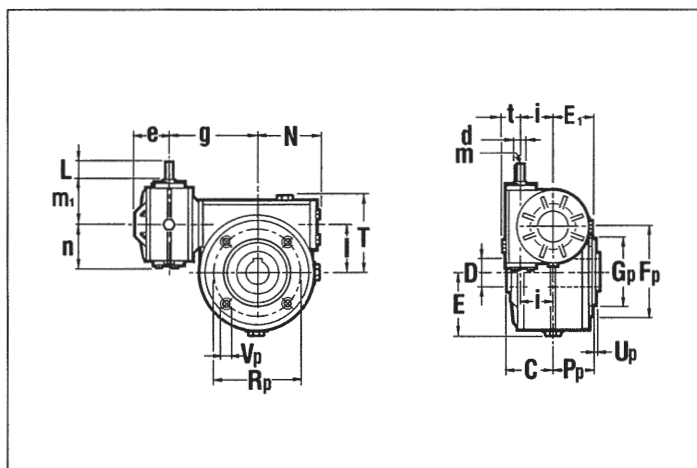
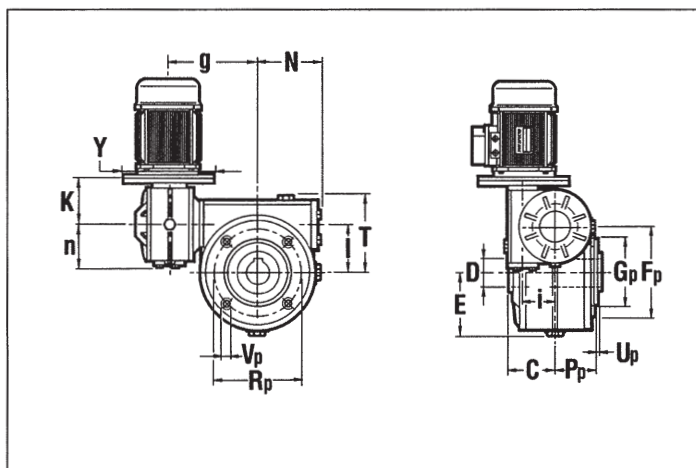
**3.9 Rozměry****3.9 Dimensions****3.9 Abmessungen****CRI A(FL)**

**Poznámka :**  
U velikostí .../40, .../50, .../63, .../70 je provedení FL docíleno montáží modulární přírubby k montážní ploše provedení A(PP).

**NOTE.**  
*In sizes .../40, .../50, .../63, .../70 the FL version is obtained by applying a modular flange onto the shaft-mounted flange of the A(PP) version.*

**CRMI A(FL)**

**HINWEIS.**  
Bei den Größen .../40, .../50, .../63, .../70 erhält man die FL-Version, indem ein Modulflansch an den Flansch mit Drehmomentstütze der A(PP)-Version befestigt wird.

**CRI .../28A(P)****CRMI .../28A(P)****CRI .../40A(PP) - .../70A(PP)**  
**CRI .../85A(P) - .../180A(P)****CRMI .../40A(PP) - .../70A(PP)**  
**CRMI .../85A(P) - .../180A(P)**



### 3.9 Rozměry

### 3.9 Dimensions

### 3.9 Abmessungen

| CRI<br>CRMI | C    | D<br>H7 | d<br>j6 | E   | E <sub>1</sub> | e   | g     | l   | i   | L  | m   | m <sub>1</sub> | N    | n     | T   | t  |
|-------------|------|---------|---------|-----|----------------|-----|-------|-----|-----|----|-----|----------------|------|-------|-----|----|
| 28/28       | 30   | 14      | 9       | 40  | 40             | 35  | 90    | 28  | 28  | 20 | M4  | 47             | 44.5 | 44.5* | 49  | 21 |
| 28/40       | 41   | 19 (18) | 9       | 59  | 40             | 35  | 104.5 | 40  | 28  | 20 | M4  | 47             | 61.5 | 44.5* | 66  | 21 |
| 40/40 °     | 41   | 19 (18) | 11      | 59  | 59             | 49  | 145.5 | 40  | 40  | 22 | M5  | 64             | 61.5 | 61.5  | 66  | 26 |
| 28/50       | 49   | 24 (25) | 9       | 69  | 40             | 35  | 115   | 50  | 28  | 20 | M4  | 43             | 72.5 | 44.5* | 80  | 21 |
| 40/50       | 49   | 24 (25) | 11      | 69  | 59             | 49  | 106   | 50  | 40  | 22 | M5  | 64             | 72.5 | 61.5  | 80  | 26 |
| 28/63       | 60   | 25      | 9       | 81  | 40             | 35  | 135.5 | 63  | 28  | 20 | M4  | 47             | 84   | 44.5* | 99  | 21 |
| 40/63       | 60   | 25      | 11      | 81  | 59             | 49  | 145.5 | 63  | 40  | 22 | M5  | 64             | 84   | 61.5  | 99  | 26 |
| 28/70       | 60   | 28      | 9       | 87  | 40             | 35  | 140.5 | 70  | 28  | 20 | M4  | 47             | 92   | 44.5* | 108 | 21 |
| 40/70       | 60   | 28      | 11      | 87  | 59             | 49  | 151   | 70  | 40  | 22 | M5  | 64             | 92   | 61.5  | 108 | 26 |
| 50/70       | 60   | 28      | 14      | 87  | 69             | 59  | 149   | 70  | 50  | 30 | M6  | 74             | 92   | 72.5  | 108 | 30 |
| 63/70 °     | 60   | 28      | 18      | 87  | 81             | 69  | 182   | 70  | 63  | 45 | M6  | 96             | 92   | 81    | 108 | 36 |
| 40/85 °     | 61   | 32 (35) | 11      | 105 | 59             | 49  | 198   | 85  | 40  | 22 | M5  | 64             | 111  | 61.5  | 135 | 26 |
| 50/85       | 61   | 32 (35) | 14      | 105 | 69             | 59  | 173   | 85  | 50  | 30 | M6  | 74             | 111  | 72.5  | 135 | 30 |
| 63/85 °     | 61   | 32 (35) | 18      | 105 | 81             | 69  | 198   | 85  | 63  | 45 | M6  | 96             | 111  | 81    | 135 | 36 |
| 70/85       | 61   | 32 (35) | 19      | 105 | 87             | 68  | 165   | 85  | 70  | 40 | M8  | 97             | 111  | 92    | 135 | 43 |
| 50/110 °    | 77.5 | 42      | 14      | 135 | 69             | 59  | 236.5 | 110 | 50  | 30 | M6  | 74             | 142  | 72.5  | 170 | 30 |
| 63/110 °    | 77.5 | 42      | 18      | 135 | 81             | 69  | 227   | 110 | 63  | 45 | M6  | 96             | 142  | 81    | 170 | 36 |
| 70/110      | 77.5 | 42      | 19      | 135 | 87             | 68  | 191   | 110 | 70  | 40 | M8  | 97             | 142  | 92    | 170 | 38 |
| 85/110      | 77.5 | 42      | 24      | 135 | 105            | 71  | 195   | 110 | 85  | 50 | M8  | 115            | 142  | 111   | 170 | 50 |
| 63/130 °    | 90   | 48      | 18      | 150 | 81             | 69  | 265   | 130 | 63  | 45 | M6  | 96             | 159  | 81    | 200 | 36 |
| 70/130      | 90   | 48      | 19      | 150 | 87             | 68  | 214   | 130 | 70  | 40 | M8  | 97             | 159  | 92    | 200 | 38 |
| 85/130      | 90   | 48      | 24      | 150 | 105            | 71  | 213   | 130 | 85  | 50 | M8  | 115            | 159  | 111   | 200 | 50 |
| 85/150      | 105  | 55      | 24      | 178 | 105            | 71  | 240   | 150 | 85  | 50 | M8  | 115            | 189  | 111   | 224 | 50 |
| 110/150     | 105  | 55      | 28      | 178 | 135            | 92  | 254   | 150 | 110 | 60 | M8  | 146            | 189  | 142   | 224 | 60 |
| 85/180      | 120  | 65      | 24      | 210 | 105            | 71  | 283   | 180 | 85  | 50 | M8  | 115            | 232  | 111   | 265 | 50 |
| 110/180     | 120  | 65      | 28      | 210 | 135            | 92  | 296   | 180 | 110 | 60 | M8  | 146            | 232  | 142   | 265 | 60 |
| 130/180     | 120  | 65      | 38      | 210 | 150            | 102 | 306   | 180 | 130 | 80 | M10 | 166            | 232  | 159   | 265 | 70 |

\* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

| CRI<br>CRMI | F   | G<br>H8 | P    | R   | U   | V   | Z  | Fp  | Gp<br>h8 | Pp   | Rp  | Up  | Vp  |
|-------------|-----|---------|------|-----|-----|-----|----|-----|----------|------|-----|-----|-----|
| 28/28       | 70  | 40      | 49   | 56  | 5   | 6   | 5  | 67  | 42(H8)   | 36   | 56  | 7   | M6  |
| 28/40       | 140 | 95      | 82   | 115 | 5   | 8.5 | 9  | 95  | 60       | 38   | 83  | 2   | M6  |
| 40/40 °     | 160 | 110     | 91.5 | 130 | 5   | 10  | 10 | 105 | 70       | 49   | 85  | 2.5 | M8  |
| 28/50       | 180 | 115     | 116  | 150 | 5   | 11  | 11 | 105 | 70       | 57.5 | 85  | 3.5 | M8  |
| 40/63       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 28/70       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 40/70       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 50/70       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 63/70 °     | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 40/85 °     | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 50/85       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 63/85 °     | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 70/85       | 200 | 130     | 111  | 165 | 5   | 13  | 11 | 120 | 80       | 57   | 100 | 4   | M8  |
| 50/110 °    | 250 | 180     | 150  | 215 | 5   | 15  | 16 | 200 | 130      | 74   | 165 | 3   | M12 |
| 63/110 °    | 250 | 180     | 150  | 215 | 5   | 15  | 16 | 200 | 130      | 74   | 165 | 3   | M12 |
| 70/110      | 250 | 180     | 150  | 215 | 5   | 15  | 16 | 200 | 130      | 74   | 165 | 3   | M12 |
| 85/110      | 250 | 180     | 150  | 215 | 5   | 15  | 16 | 200 | 130      | 74   | 165 | 3   | M12 |
| 63/130 °    | 300 | 230     | 150  | 265 | 5   | 15  | 18 | 242 | 180      | 87   | 215 | 5   | M12 |
| 70/130      | 300 | 230     | 150  | 265 | 5   | 15  | 18 | 242 | 180      | 87   | 215 | 5   | M12 |
| 85/130      | 300 | 230     | 150  | 265 | 5   | 15  | 18 | 242 | 180      | 87   | 215 | 5   | M12 |
| 85/150      | 350 | 250     | 160  | 300 | 6   | 19  | 18 | 250 | 180      | 102  | 215 | 5   | M14 |
| 110/150     | 350 | 250     | 160  | 300 | 6   | 19  | 18 | 250 | 180      | 102  | 215 | 5   | M14 |
| 85/180      | 400 | 300     | 180  | 350 | 6.5 | 22  | 22 | 300 | 230      | 117  | 265 | 5   | M16 |
| 110/180     | 400 | 300     | 180  | 350 | 6.5 | 22  | 22 | 300 | 230      | 117  | 265 | 5   | M16 |
| 130/180     | 400 | 300     | 180  | 350 | 6.5 | 22  | 22 | 300 | 230      | 117  | 265 | 5   | M16 |

|     | CRMI                                      |                                               |                            |                                            |                           |                                      |                    |         |     |     |     |     |     |     |     |     |
|-----|-------------------------------------------|-----------------------------------------------|----------------------------|--------------------------------------------|---------------------------|--------------------------------------|--------------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 28/28<br>28/40<br>28/50<br>28/63<br>28/70 | 40/40 °<br>40/50<br>40/63<br>40/70<br>40/85 ° | 50/70<br>50/85<br>50/110 ° | 63/70 °<br>63/85 °<br>63/110 °<br>63/130 ° | 70/85<br>70/110<br>70/130 | 85/110<br>85/130<br>85/150<br>85/180 | 110/150<br>110/180 | 130/180 |     |     |     |     |     |     |     |     |
|     | Y                                         | K                                             | Y                          | K                                          | Y                         | K                                    | Y                  | K       | Y   | K   | Y   | K   | Y   | K   | Y   | K   |
| B5  | 120                                       | 49                                            | 120                        | 63.5                                       | 140                       | 77                                   | 160                | 95      | 160 | 100 | 160 | 116 | 200 | 145 | 200 | 163 |
|     | —                                         | —                                             | 140                        | 63.5                                       | 160                       | 77                                   | 200                | 95      | 200 | 100 | 200 | 116 | 250 | 145 | 250 | 163 |
|     | —                                         | —                                             | 160                        | 71                                         | 200                       | 81                                   | —                  | —       | —   | —   | 250 | 118 | —   | —   | 300 | 163 |
| B14 | 80 •                                      | 49                                            | 80 •                       | 63.5                                       | 90 •                      | 77                                   | 105 •              | 95      | 105 | 100 | 120 | 116 | 160 | 145 | —   | —   |
|     | 90                                        | 51                                            | 90                         | 63.5                                       | 105                       | 77                                   | 120                | 95      | 120 | 100 | 140 | 116 | —   | —   | —   | —   |
|     | —                                         | —                                             | 105                        | 71                                         | 120                       | 81                                   | 140                | 95      | 140 | 100 | 160 | 118 | —   | —   | —   | —   |
|     | —                                         | —                                             | —                          | —                                          | —                         | —                                    | —                  | —       | 160 | 100 | —   | —   | —   | —   | —   | —   |

(•) Viz. poznámka pod tabulkou 3.4.

(•) See note at the bottom of table 3.4.

(•) Siehe Bemerkungen Tabelle 3.4 unten.

(°) Převodovky montované za stavebnice, viz také kapitola 3.11.

Pozn.: Velikosti per jsou uvedeny dále.

(°) Gearboxes assembled with combination kit, see also chapter 3.11.

NOTE: Sizes of feathers are shown below.

(°) Getriebe angebaut mit kombinationskit, siehe auch Abschnitt 3.11.

HINWEIS: Die Abmessungen der Federn sind angegeben.



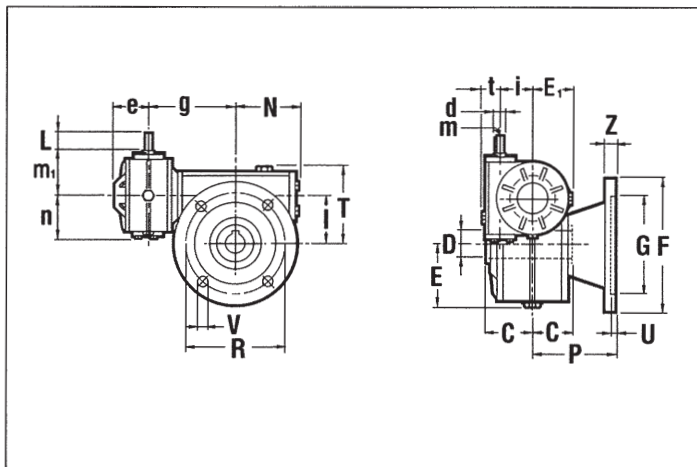


### 3.9 Rozměry

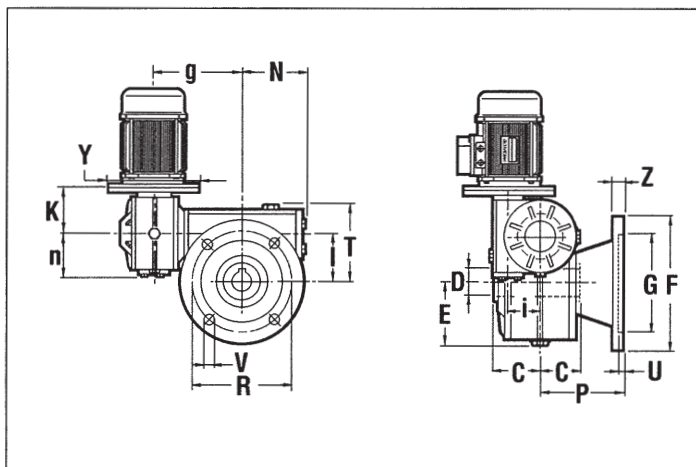
### 3.9 Dimensions

### 3.9 Abmessungen

## CRI A(F1 - F2 - F3)



## CRMI A(F1 - F2 - F3)



|        | CRI - CRMI |                  |     |                               |     |     |                |     |     |                                    |     |     |                                      |     |      |                                          |      |      |                              |
|--------|------------|------------------|-----|-------------------------------|-----|-----|----------------|-----|-----|------------------------------------|-----|-----|--------------------------------------|-----|------|------------------------------------------|------|------|------------------------------|
|        | 28/28      | 28/40<br>40/40 ° |     | 28/50<br>40/50                |     |     | 28/63<br>40/63 |     |     | 28/70<br>40/70<br>50/70<br>63/70 ° |     |     | 40/85 °<br>50/85<br>63/85 °<br>70/85 |     |      | 50/110 °<br>63/110 °<br>70/110<br>85/110 |      |      | 85/180<br>110/180<br>130/180 |
|        | F1         | F1               | F2  | F1                            | F2  | F3  | F1'            | F2' | F3' | F1'                                | F2' | F3  | F1                                   | F2  | F3   | F1                                       | F2   | F3   | F2                           |
| F      | 80         | 106              | 120 | 125                           | 125 | 140 | 175            | 200 | 160 | 175                                | 175 | 160 | 200                                  | 210 | 160  | 200                                      | 270  | 270  | 400                          |
| G (H8) | 50         | 60               | 80  | 70                            | 70  | 95  | 115            | 130 | 110 | 115                                | 115 | 110 | 130                                  | 152 | 110  | 130                                      | 170  | 170  | 300                          |
| P      | 53         | 69               | 62  | 93                            | 73  | 81  | 86             | 102 | 82  | 116                                | 85  | 101 | 141                                  | 120 | 91   | 115                                      | 132  | 178  | 150                          |
| R      | 63±5       | 87               | 100 | 90 <sub>+9</sub> <sup>0</sup> | 100 | 115 | 150            | 165 | 130 | 150                                | 150 | 130 | 165                                  | 176 | 130  | 165                                      | 230  | 230  | 350                          |
| U      | 4          | 5                | 5   | 5                             | 4   | 4   | 5              | 5   | 5   | 5                                  | 5   | 6   | 6                                    | 5   | 5    | 5                                        | 10   | 10   | 6.5                          |
| V      | 6          | 8.5              | 9   | 10.5                          | 9   | 9   | 11             | 13  | 10  | 11                                 | 11  | 11  | 13                                   | 13  | 11.5 | 13                                       | 13.5 | 13.5 | 22                           |
| Z      | 7          | 9                | 9   | 10                            | 9   | 9   | 11             | 11  | 11  | 10                                 | 10  | 11  | 12                                   | 14  | 10   | 12                                       | 18   | 18   | 22                           |

Provedení F1, F2 a F3 označené (#) je docíleno montáží modulární příruby k montážní ploše provedení PP.

F1, F2 and F3 versions that are marked with (#) are obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

Die mit (#) gekennzeichneten Versionen F1, F2 und F3 erhält man, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

| CRI<br>CRMI | C    | D<br>H7 | d<br>j6 | E   | E <sub>1</sub> | e  | g     | l   | i  | L  | m  | m <sub>1</sub> | N    | n     | T   | t  |
|-------------|------|---------|---------|-----|----------------|----|-------|-----|----|----|----|----------------|------|-------|-----|----|
| 28/28       | 30   | 14      | 9       | 40  | 40             | 35 | 90    | 28  | 28 | 20 | M4 | 47             | 44.5 | 44.5* | 49  | 21 |
| 28/40       | 41   | 19 (18) | 9       | 59  | 40             | 35 | 104.5 | 40  | 28 | 20 | M4 | 47             | 61.5 | 44.5* | 66  | 21 |
| 40/40 °     | 41   | 19 (18) | 11      | 59  | 59             | 49 | 145.5 | 40  | 40 | 22 | M5 | 64             | 61.5 | 61.5  | 66  | 26 |
| 28/50       | 49   | 24 (25) | 9       | 69  | 40             | 35 | 115   | 50  | 28 | 20 | M4 | 43             | 72.5 | 44.5* | 80  | 21 |
| 40/50       | 49   | 24 (25) | 11      | 69  | 59             | 49 | 106   | 50  | 40 | 22 | M5 | 64             | 72.5 | 61.5  | 80  | 26 |
| 28/63       | 60   | 25      | 9       | 81  | 40             | 35 | 135.5 | 63  | 28 | 20 | M4 | 47             | 81   | 44.5* | 99  | 21 |
| 40/63       | 60   | 25      | 11      | 81  | 59             | 49 | 146   | 63  | 40 | 22 | M5 | 64             | 81   | 61.5  | 99  | 26 |
| 28/70       | 60   | 28      | 9       | 87  | 40             | 35 | 140.5 | 70  | 28 | 20 | M4 | 47             | 92   | 44.5* | 108 | 21 |
| 40/70       | 60   | 28      | 11      | 87  | 59             | 49 | 151   | 70  | 40 | 22 | M5 | 64             | 92   | 61.5  | 108 | 26 |
| 50/70       | 60   | 28      | 14      | 87  | 69             | 59 | 149   | 70  | 50 | 30 | M6 | 74             | 92   | 72.5  | 108 | 30 |
| 63/70 °     | 60   | 28      | 18      | 87  | 81             | 69 | 182   | 70  | 63 | 45 | M6 | 96             | 92   | 81    | 108 | 36 |
| 40/85 °     | 61   | 32 (35) | 11      | 105 | 59             | 49 | 198   | 85  | 40 | 22 | M5 | 64             | 111  | 61.5  | 135 | 26 |
| 50/85       | 61   | 32 (35) | 14      | 105 | 69             | 59 | 173   | 85  | 50 | 30 | M6 | 74             | 111  | 72.5  | 135 | 30 |
| 63/85 °     | 61   | 32 (35) | 18      | 105 | 81             | 69 | 198   | 85  | 63 | 45 | M6 | 96             | 111  | 81    | 135 | 36 |
| 70/85       | 61   | 32 (35) | 19      | 105 | 87             | 68 | 165   | 85  | 70 | 40 | M8 | 97             | 111  | 92    | 135 | 43 |
| 50/110 °    | 77.5 | 42      | 14      | 135 | 69             | 59 | 236.5 | 110 | 50 | 30 | M6 | 74             | 142  | 72.5  | 170 | 30 |
| 63/110 °    | 77.5 | 42      | 18      | 135 | 81             | 69 | 227   | 110 | 63 | 45 | M6 | 96             | 142  | 81    | 170 | 36 |
| 70/110      | 77.5 | 42      | 19      | 135 | 87             | 68 | 191   | 110 | 70 | 40 | M8 | 97             | 142  | 92    | 170 | 38 |
| 85/110      | 77.5 | 42      | 24      | 135 | 105            | 71 | 195   | 110 | 85 | 50 | M8 | 115            | 142  | 111   | 170 | 50 |
| 85/180      | 120  | 65      | 24      | 210 | 105            | 71 | 283   | 180 | 85 | 50 | M8 | 115            | 232  | 111   | 265 | 50 |

\* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

(°) Převodovky montované za stavebnice, viz také kapitola 3.11.

Pozn.: Velikosti per jsou uvedeny dále.

(°) Gearboxes assembled with combination kit, see also chapter 3.11.

NOTE: Sizes of feathers are shown below.

(°) Getriebe angebaut mit kombinationskit, siehe auch Abschnitt 3.11.

HINWEIS: Die Abmessungen der Federn sind auf angegeben.

### 3.9. Rozměry

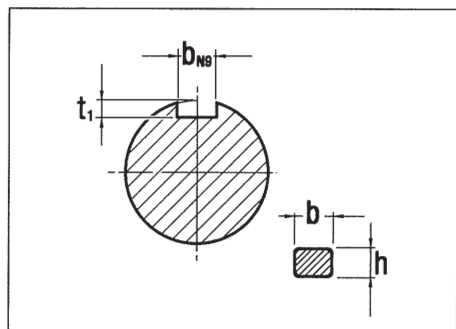
### 3.9 Dimensions

### 3.9 Abmessungen

#### Pera

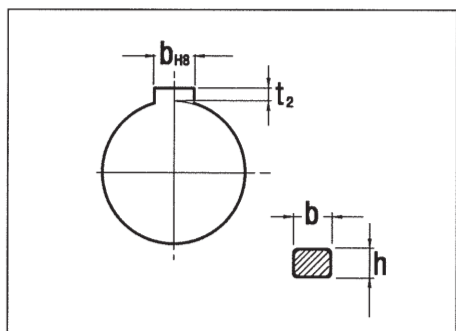
#### Keys

#### Federn



Vstupní hřídel  
Input shaft  
Antriebswelle

| d  | b x h  | t <sub>1</sub> |
|----|--------|----------------|
| 9  | 3 x 3  | 1.8            |
| 11 | 4 x 4  | 2.5            |
| 14 | 5 x 5  | 3.0            |
| 18 | 6 x 6  | 3.5            |
| 19 | 6 x 6  | 3.5            |
| 24 | 8 x 7  | 4.0            |
| 28 | 8 x 7  | 4.0            |
| 38 | 10 x 8 | 5.0            |
| 42 | 12 x 8 | 5.0            |
| 48 | 14 x 9 | 5.5            |



Výstupní hřídel  
Output shaft  
Abtriebswelle

| D  | b x h   | t <sub>2</sub> |
|----|---------|----------------|
| 14 | 5 x 5   | 2.3            |
| 18 | 6 x 6   | 2.8            |
| 19 | 6 x 6   | 2.8            |
| 24 | 8 x 7   | 3.3            |
| 25 | 8 x 7   | 3.3            |
| 28 | 8 x 7   | 3.3            |
| 32 | 10 x 8  | 3.3            |
| 35 | 10 x 8  | 3.3            |
| 42 | 12 x 8  | 3.3            |
| 48 | 14 x 9  | 3.8            |
| 55 | 16 x 10 | 4.3            |
| 65 | 18 x 11 | 4.4            |

#### Dvojitý vstupní hřídel

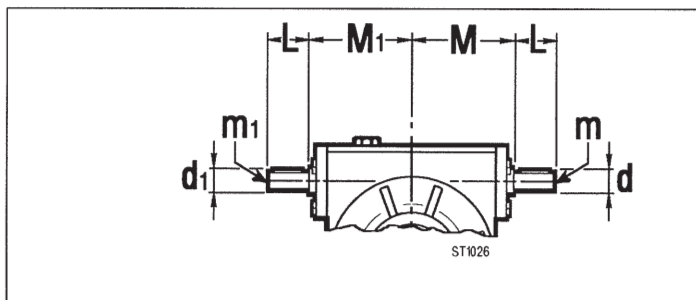
#### Double extended input shaft

#### Ausführung mit Wellenzapfen auf beiden Seiten

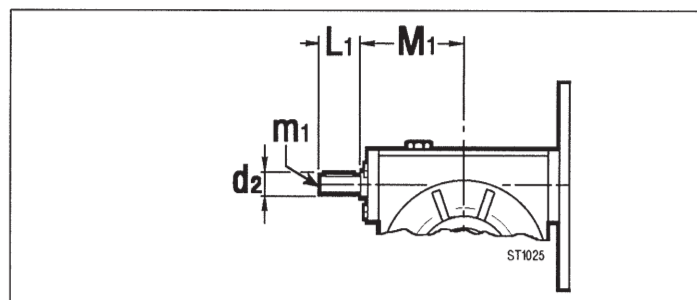
Je potřebné specifikovat, zda tato konfigurace odpovídá první převodovce (vstupní převodovka) nebo druhé (výstupní převodovka).

*In combined gearboxes, it is necessary to specify if such configuration refers to the first gearbox (input gearbox) or to the second one (output gearbox).*

Bei den Kombinationsgetrieben muß angegeben werden, ob sich die Konfiguration auf das erste Getriebe (Eingang) oder auf das zweite (Ausgang) bezieht.



Tato konfigurace může být pouze u první převodovky (CRI)  
This configuration can only be obtained on the first gearbox (CRI).  
Nur am ersten Getriebe (CRI) realisierbare Konfiguration.



Tato konfigurace může být u obou, na první převodovce (CRI) i na druhé převodovce (CRI a CRMI).  
This configuration can be obtained both on the first gearbox (CRMI) and on the second gearbox (CRI and CRMI).

| Velikost<br>Size<br>Größe | d  | d <sub>1</sub> | d <sub>2</sub> | L   | L <sub>1</sub> | m   | m <sub>1</sub> | M   | M <sub>1</sub> |
|---------------------------|----|----------------|----------------|-----|----------------|-----|----------------|-----|----------------|
| 28                        | 9  | 9              | 9              | 20  | 20             | M4  | —              | 47  | 47             |
| 40                        | 11 | 11             | 11             | 22  | 22             | M5  | M5             | 64  | 64•            |
| 50                        | 14 | 14             | 14             | 30  | 30             | M6  | M6             | 74  | 74             |
| 63                        | 18 | 18             | 18             | 45  | 45             | M6  | M6             | 96  | 85             |
| 70                        | 19 | 19             | 19             | 40  | 40             | M8  | M8             | 97  | 97             |
| 85                        | 24 | 24             | 24             | 50  | 50             | M8  | M8             | 115 | 115            |
| 110                       | 28 | 28             | 28             | 60  | 60             | M8  | M8             | 146 | 146            |
| 130                       | 38 | 38             | 38             | 80  | 80             | M10 | M10            | 166 | 166            |
| 150                       | 42 | 42             | 42             | 100 | 100            | M12 | M12            | 195 | 195            |
| 180                       | 48 | 48             | 48             | 110 | 110            | M14 | M14            | 235 | 235            |

(•) RMI 40/... IEC71: M<sub>1</sub> = 67



### 3.10 Malá vůle

Dvojité šnekové převodovky je také možné dodat s malou vůlí. Pro získání bližších informací kontaktujte naše prodejní oddělení.

### 3.10 Low backlash

*The combined worm gearboxes are also available with low/adjustable backlash. For informations of quantities and prices please contact our sales department.*

### 3.10 Spielarme Getriebe

Die kombinierten Schneckengetriebe sind auch spielarm bzw. mit einstellbarem Spiel erhältlich. Für Informationen bzgl. Abnahmemenge und Preis wenden Sie sich bitte an unseren Vertrieb.

### 3.11 Spojování

Pro umožnění větší pružnosti je také možné dodat převodovky odděleně a kombinovat je s montážní soupravou. Pro tuto možnost dodáváme vstupní převodovku v provedení s výstupní přírubou a výstupní převodovku se vstupní přírubou IEC.

Možné kombinace montážní soupravy jsou uvedeny níže.

### 3.11 Coupling

*To make you more flexible it is also possible to supply the gearboxes separately and to combine them with an assembling kit. For this we deliver the input gearbox in the flanged version and the output gearbox with IEC motor connecting flange. The possible combinations and the assembling kits are listed below.*

### 3.11 Kupplung

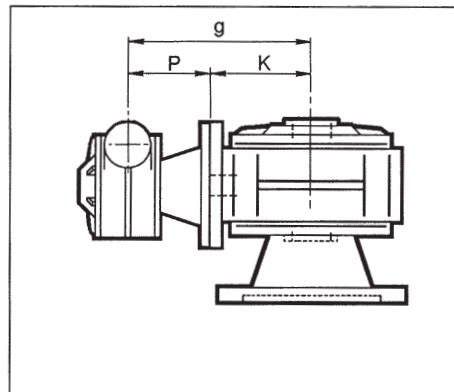
Um bei der Kombination der Getriebe vorort flexibler zu sein, bieten wir einen Montage-Kit an, mit dessen Hilfe ein Standardgetriebe mit Abtriebsflansch in der ersten Übersetzungsstufe und ein Standardgetriebe mit IEC-Eingangsflansch in der zweiten Übersetzungsstufe kombiniert werden können. Die Kombinationsmöglichkeiten sowie die zugehörigen Montage-Kits sind in der folgenden Tabelle aufgelistet.

U dvojitých šnekových převodovek a moto-variátorů 28/28 a 28/40 (sestavených ze stavebnice) jsou osy šnekového hřídele první převodovky posunuty o 45° k horizontální nebo vertikální ose. Poloha musí být uvedena v objednávce.

*In the combined worm gearboxes and motor-variators 28/28 and 28/40 (coupled with an assembly kit) the wormshaft axis of the first gearbox has always a tilt of 45° compared to the horizontal or vertical axis.*

*The position has to be specified in the order.*

Wird das Kombinationsgetriebe 28/28 und 28/40 mit Hilfe des Montagekits gebildet, so befindet sich die Achse des ersten Getriebes immer in 45° bezüglich zur Horizontalen bzw. Vertikalen. Bei Auftragserteilung bitte die Montageposition angeben.



| CRI<br>CRMI | P    | K    | g     | Vstupní převodovka<br>Input gearbox<br>Erstes Getriebe                              | Montážní souprava<br>Assembling kit<br>Montage-kit                                    | Výstupní převodovka<br>Output gearbox<br>Zweites Getriebe                             |
|-------------|------|------|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|             |      |      |       |  |  |  |
| 28/28       | 53   | 49   | 102   | 28 F1                                                                               | KIT 28/28                                                                             | 28 IEC56 B14                                                                          |
| 40/40       | 82   | 63.5 | 145.5 | 40 FL                                                                               | KIT 40/40                                                                             | 40 IEC63 B5                                                                           |
| 40/50       | 82   | 77   | 159   | 40 FL                                                                               | KIT 40/50                                                                             | 50 IEC140/14                                                                          |
| 50/50       | 91.5 | 77   | 168.5 | 50 FL                                                                               | KIT 50/50                                                                             | 50 IEC71 B5                                                                           |
| 40/63       | 82   | 95   | 177   | 40 FL                                                                               | KIT 40/63                                                                             | 63 IEC140/19                                                                          |
| 50/63       | 91.5 | 95   | 186.5 | 50 FL                                                                               | KIT 50/63                                                                             | 63 IEC160/19                                                                          |
| 63/63       | 82   | 95   | 177   | 63 F3                                                                               | KIT 63/63                                                                             | 63 IEC160/19                                                                          |
| 40/70       | 82   | 100  | 182   | 40 FL                                                                               | KIT 40/70                                                                             | 70 IEC140/19                                                                          |
| 50/70       | 91.5 | 100  | 191.5 | 50 FL                                                                               | KIT 50/70                                                                             | 70 IEC160/19                                                                          |
| 63/70       | 82   | 100  | 182   | 63 F3                                                                               | KIT 63/70                                                                             | 70 IEC160/19                                                                          |
| 70/70       | 111  | 100  | 211   | 70 FL                                                                               | KIT 70/70                                                                             | 70 IEC80 B5                                                                           |
| 40/85       | 82   | 116  | 198   | 40 FL                                                                               | KIT 40/85                                                                             | 85 IEC90 B14                                                                          |
| 50/85       | 91.5 | 116  | 207.5 | 50 FL                                                                               | KIT 50/85                                                                             | 85 IEC160/24                                                                          |
| 63/85       | 82   | 116  | 198   | 63 F3                                                                               | KIT 63/85                                                                             | 85 IEC160/24                                                                          |
| 70/85       | 111  | 116  | 227   | 70 FL                                                                               | KIT 70/85                                                                             | 85 IEC90 B5                                                                           |
| 85/85       | 100  | 116  | 216   | 85 FL                                                                               | KIT 85/85                                                                             | 85 IEC90 B5                                                                           |
| 50/110      | 91.5 | 145  | 236.5 | 50 FL                                                                               | KIT 50/110                                                                            | 110 IEC100 B14                                                                        |
| 63/110      | 82   | 145  | 227   | 63 F3                                                                               | KIT 63/110                                                                            | 110 IEC100 B14                                                                        |
| 70/110      | 111  | 145  | 256   | 70 FL                                                                               | KIT 70/110                                                                            | 110 IEC200/28                                                                         |
| 85/110      | 100  | 145  | 245   | 85 FL                                                                               | KIT 85/110                                                                            | 110 IEC200/28                                                                         |
| 63/130      | 102  | 163  | 265   | 63 F2                                                                               | KIT 63/130                                                                            | 130 IEC200/28                                                                         |

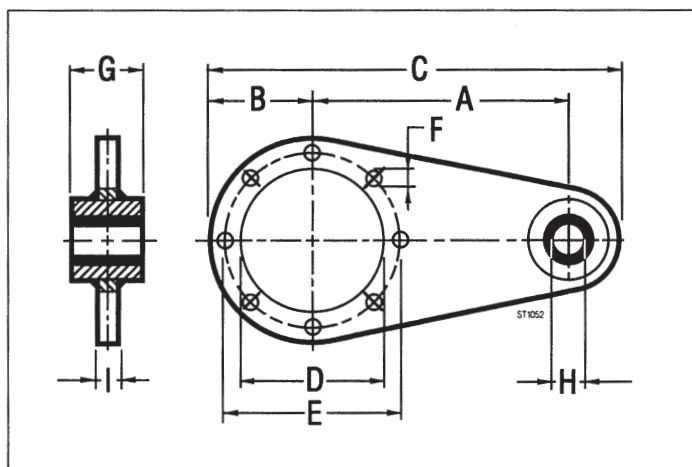


### 3.12 Příslušenství Zkrutová vzpěra

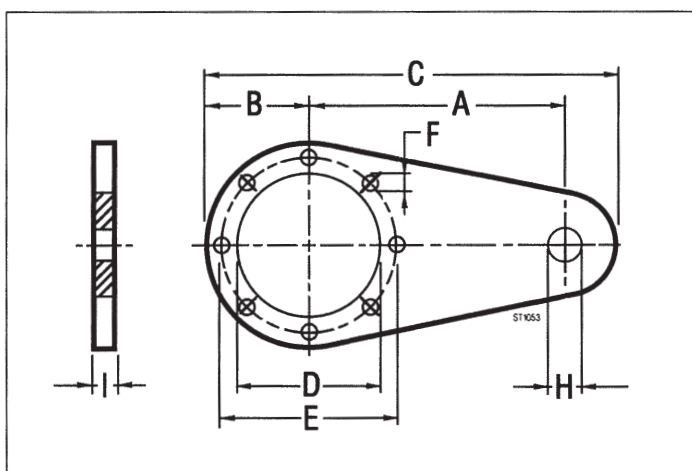
### 3.12 Accessories Torque arm

### 3.12 Zubehör Drehmomentstütze

S pouzdem VKL  
With VKL bushing  
Mit VKL-Buchse



Standard



|          | CRI - CRMI |                |                |                |                                  |                                  |                                      |                            |                   |                              |
|----------|------------|----------------|----------------|----------------|----------------------------------|----------------------------------|--------------------------------------|----------------------------|-------------------|------------------------------|
|          | 28/28      | 28/40<br>40/40 | 28/50<br>40/50 | 28/63<br>40/63 | 28/70<br>40/70<br>50/70<br>63/70 | 40/85<br>50/85<br>63/85<br>70/85 | 50/110<br>63/110<br>70/110<br>85/110 | 63/130<br>70/130<br>85/130 | 85/150<br>110/150 | 85/180<br>110/180<br>130/180 |
| <b>A</b> | 70         | 90             | 100            | 150            | 150                              | 200                              | 250                                  | 300                        | 350               | 400                          |
| <b>B</b> | 34.5       | 50             | 60             | 53             | 60                               | 75                               | 100                                  | 120                        | 125               | 150                          |
| <b>C</b> | 119.5      | 165            | 185            | 230            | 240                              | 313                              | 388                                  | 465                        | 525               | 610                          |
| <b>D</b> | 42.15      | 60             | 70             | 70             | 80                               | 110                              | 130                                  | 180                        | 180               | 230                          |
| <b>E</b> | 56         | 83             | 85             | 85             | 100                              | 130                              | 165                                  | 215                        | 215               | 265                          |
| <b>F</b> | 6.5        | 7              | 9              | 9              | 9                                | 11                               | 13                                   | 13                         | 15                | 17                           |
| <b>G</b> | —          | 15             | 15             | 20             | 20                               | 25                               | 25                                   | 30                         | 30                | 35                           |
| <b>H</b> | 9          | 10             | 10             | 10             | 10                               | 20                               | 20                                   | 25                         | 25                | 35                           |
| <b>I</b> | 4          | 4              | 4              | 6              | 6                                | 6                                | 6                                    | 6                          | 6                 | 10                           |





### 3.12 Příslušenství Výstupní hřídel

Všechny šnekové převodovky jsou dodávány s dutou výstupní hřídelí. Výstupní hřídele dle rozměrového výkresu jsou dodávány na základě požadavku.

Rozměry per odpovídají normám UNI 6604-69 (viz kapitola 2.11).

### 3.12 Accessories Output shafts

All worm gearboxes are supplied with hollow output shaft. Output shafts as shown in the size drawings can be supplied upon request.

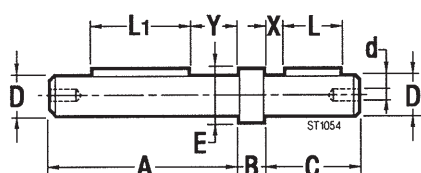
Sizes of feathers comply with standards UNI 6604-69 (see chapter 2.11).

### 3.12 Zubehör Abtriebswellen

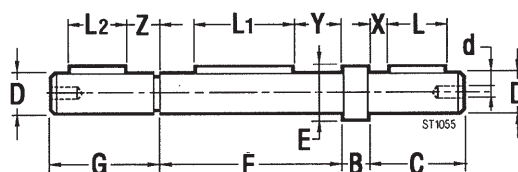
Alle Schneckengetriebe werden mit hohler Abtriebswelle geliefert. Auf Anfrage können Abtriebswellen gemäß den Maßzeichnungen geliefert werden.

Die Abmessungen der Federn entsprechen den Normen UNI 6604-69 (siehe Kapitel 2.11).

Jednoduchá výstupní hřídel  
Single output shaft  
Einseitige Abtriebswelle



Dvojitá výstupní hřídel  
Double output shaft  
Beidseitige Abtriebswelle



|                       | CRI - CRMI |                |                |                |                                  |                                  |                                      |                            |                   |                              |
|-----------------------|------------|----------------|----------------|----------------|----------------------------------|----------------------------------|--------------------------------------|----------------------------|-------------------|------------------------------|
|                       | 28/28      | 28/40<br>40/40 | 28/50<br>40/50 | 28/63<br>40/63 | 28/70<br>40/70<br>50/70<br>63/70 | 40/85<br>50/85<br>63/85<br>70/85 | 50/110<br>63/110<br>70/110<br>85/110 | 63/130<br>70/130<br>85/130 | 85/150<br>110/150 | 85/180<br>110/180<br>130/180 |
| <b>A</b>              | 58         | 80             | 95             | 117            | 117                              | 119                              | 153                                  | 177                        | 207               | 239                          |
| <b>B</b>              | 1.5        | 10             | 10             | 10             | 10                               | 10                               | 10                                   | 20                         | 20                | 20                           |
| <b>C</b>              | 29.5       | 40             | 45             | 60             | 60                               | 71                               | 100                                  | 110                        | 110               | 130                          |
| <b>D<sub>g6</sub></b> | 14         | 19             | 24             | 25             | 28                               | 32                               | 42                                   | 48                         | 55                | 65                           |
| <b>d</b>              | M6         | M8             | M8             | M8             | M8                               | M10                              | M10                                  | M10                        | M12               | M14                          |
| <b>E</b>              | 17         | 22             | 28             | 34             | 34                               | 38                               | 50                                   | 58                         | 63                | 78                           |
| <b>F</b>              | 60         | 82             | 98             | 120            | 120                              | 122                              | 155                                  | 180                        | 210               | 240                          |
| <b>G</b>              | 31         | 50             | 55             | 70             | 70                               | 81                               | 110                                  | 130                        | 130               | 150                          |
| <b>L</b>              | 20         | 25             | 30             | 40             | 40                               | 50                               | 80                                   | 90                         | 90                | 100                          |
| <b>L1</b>             | 20         | 40             | 50             | 60             | 60                               | 70                               | 80                                   | 90                         | 100               | 120                          |
| <b>L2</b>             | 20         | 25             | 30             | 40             | 40                               | 50                               | 80                                   | 90                         | 90                | 100                          |
| <b>X</b>              | 4.5        | 8              | 7.5            | 10             | 10                               | 10                               | 10                                   | 10                         | 10                | 15                           |
| <b>Y</b>              | 20         | 21             | 24             | 30             | 30                               | 26                               | 37                                   | 45                         | 55                | 60                           |
| <b>Z</b>              | 6          | 18             | 18             | 20             | 20                               | 20                               | 20                                   | 30                         | 30                | 35                           |

Poznámka :

Všechny výstupní hřídele jsou dodávány kompletně s pery, podložkami a šrouby (dvojitě hřídele včetně pojistných kroužků).

NOTE.

All output shafts are supplied in kit complete with feathers, washers and screws (as well as snap rings for the double extended shaft).

HINWEIS.

Alle Abtriebswellen werden als Bausätze komplett mit Federn, Scheiben, Schrauben (bei beidseitiger Abtriebswelle auch die Seegerringe) geliefert.