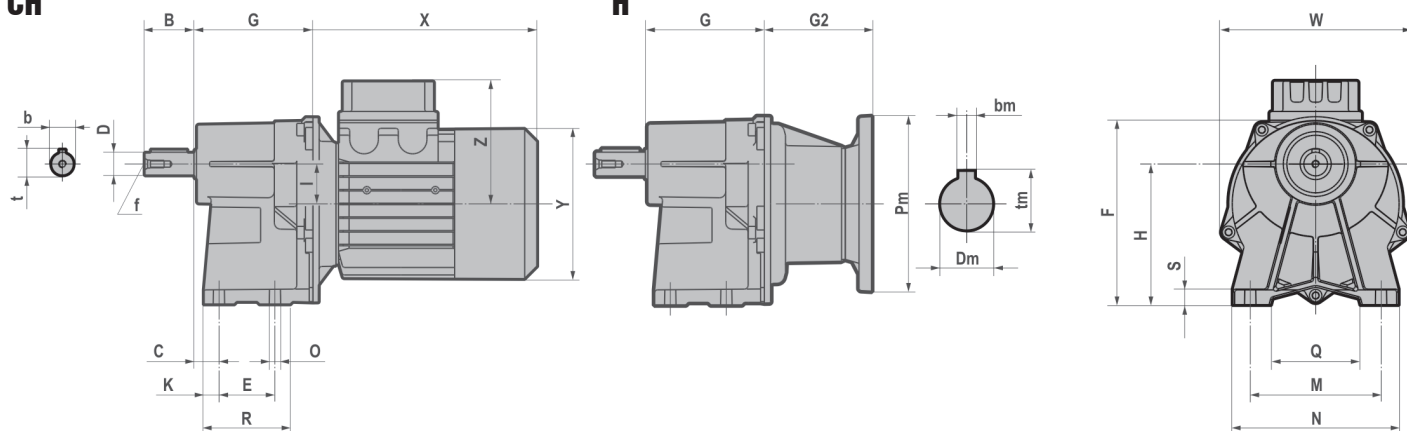


# HELICAL GEARED MOTORS

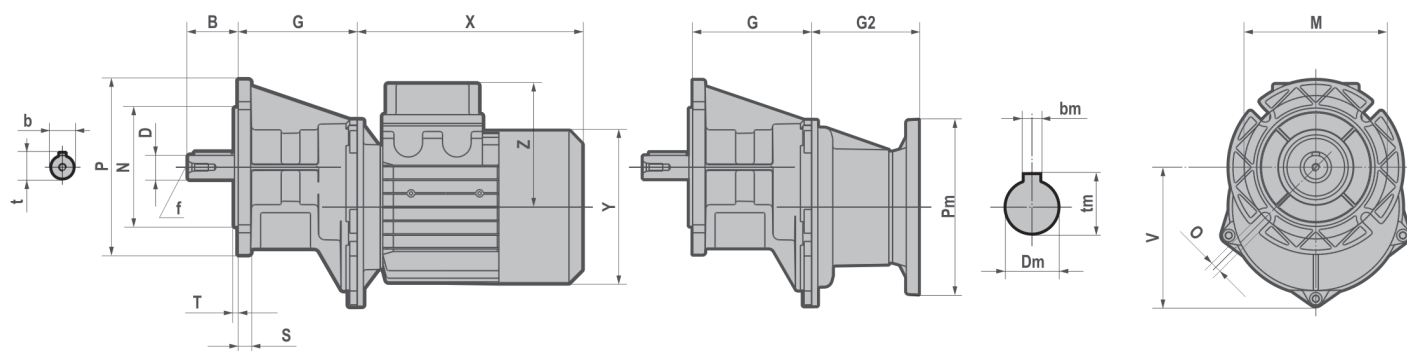


## HA/CHA..1 - Dimensions

### CH



### CH..F



### H...F

### H... - CH...

|            | D     | B  | b | t    | f  | C   | E  | F     | G    | H   | I    | K    | M   | N   | O  | Q   | R   | S  | W   |
|------------|-------|----|---|------|----|-----|----|-------|------|-----|------|------|-----|-----|----|-----|-----|----|-----|
| <b>A41</b> | 16 j6 | 40 | 5 | 18   | M6 | 20  | 45 | 151   | 95.5 | 113 | 32   | 12.5 | 105 | 130 | 9  | 75  | 70  | 12 | 152 |
|            | 19 j6 |    | 6 | 21.5 |    |     |    |       |      |     |      |      |     |     |    |     |     |    |     |
| <b>A51</b> | 24 j6 | 50 | 8 | 27   | M8 | 6   | 70 | 169   | 104  | 130 | 32   | 15   | 150 | 180 | 11 | 115 | 100 | 12 | 152 |
| <b>A61</b> | 28 j6 | 60 | 8 | 31   | M8 | 7.5 | 70 | 219.5 | 129  | 165 | 47.5 | 20   | 165 | 200 | 11 | 120 | 110 | 15 | 218 |

### H...F - CH...F

|             | M   | N      | O  | P   | S  | T   | V     |
|-------------|-----|--------|----|-----|----|-----|-------|
| <b>A41F</b> | 115 | 95 f8  | 9  | 140 | 10 | 3   | 111.5 |
| <b>A51F</b> | 130 | 110 f8 | 9  | 160 | 10 | 3.5 | 111.5 |
| <b>A61F</b> | 165 | 130 f8 | 11 | 200 | 15 | 3.5 | 161.5 |

### H... - H...F

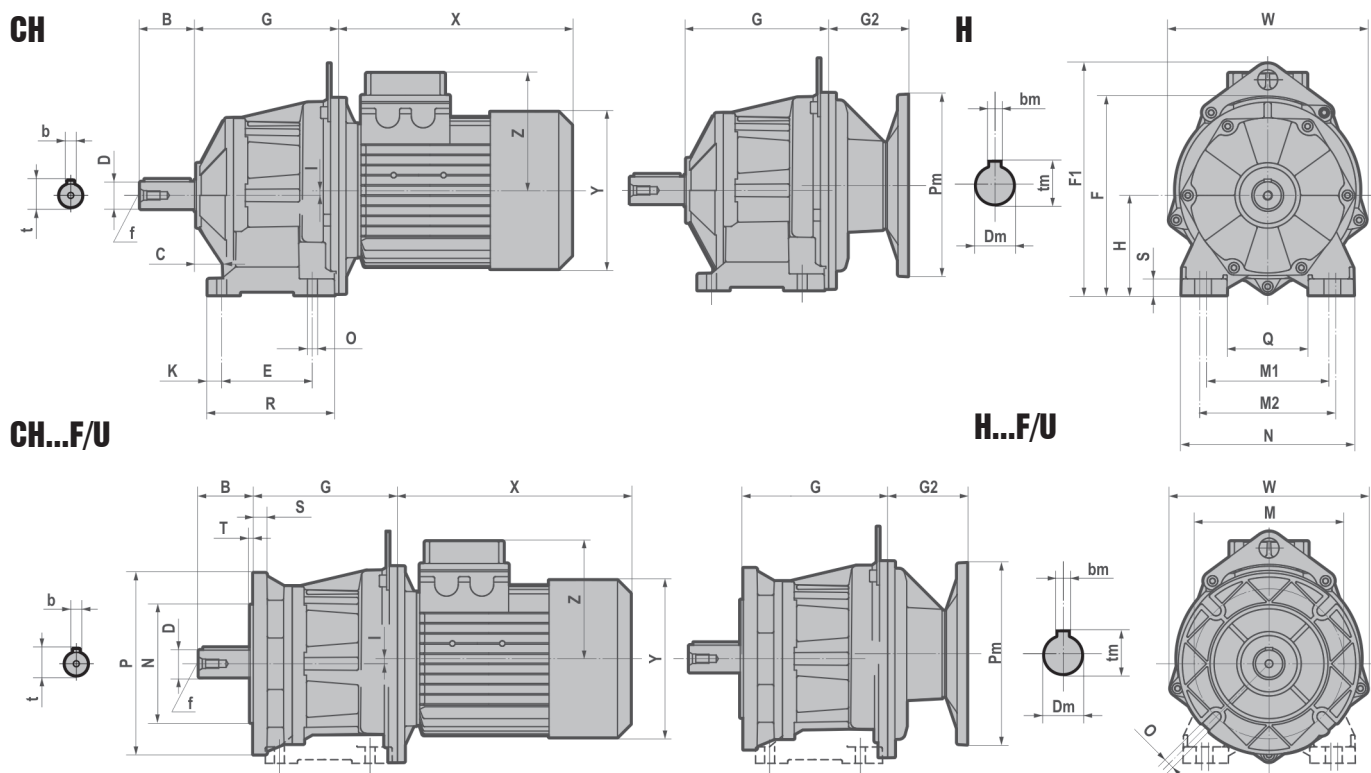
|                | G2      |      |
|----------------|---------|------|
|                | A41-A51 | A61  |
| <b>063</b>     | 55      | /    |
| <b>071</b>     | 55      | /    |
| <b>080</b>     | 86      | 87.5 |
| <b>090</b>     | 86      | 87.5 |
| <b>100-112</b> | /       | 87.5 |

| ~ kg           |     |     |     |
|----------------|-----|-----|-----|
|                | A41 | A51 | A61 |
| <b>063</b>     | 3,1 | 4,2 | /   |
| <b>071</b>     | 3,2 | 4,3 | /   |
| <b>080-090</b> | 3,5 | 4,5 | 6,6 |
| <b>100-112</b> | /   | /   | 7,0 |

- For the dimensions concerning the motor connection area (Pm, Dm, bm, tm, X, Y, Z) please refer to  
CHA..1/2/3 - Dimensions  
PAM B5 - Dimensions

- Kg w/o oil

## HA/CHA..2 - Dimensions



### H... - CH...

|            | D       | B  | b  | t    | f   | C  | E   | F     | F1    | G     | H   | I    | K    | M1  | M2  | N   | O  | Q   | R   | S  | W   |
|------------|---------|----|----|------|-----|----|-----|-------|-------|-------|-----|------|------|-----|-----|-----|----|-----|-----|----|-----|
| <b>A32</b> | 20 j6   | 40 | 6  | 22.5 | M6  | 18 | 80  | 155   | /     | 117.5 | 75  | 10   | 13   | 110 | 120 | 145 | 9  | 75  | 111 | 15 | 152 |
|            | (19 j6) | 40 | 6  | 21.5 | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (16 j6) | 40 | 5  | 18   | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (14 j6) | 30 | 5  | 16   | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A42</b> | 25 j6   | 50 | 8  | 28   | M10 | 25 | 85  | 160   | /     | 124.5 | 80  | 10   | 13   | 110 | 120 | 145 | 9  | 75  | 111 | 15 | 152 |
|            | (24 j6) | 50 | 8  | 27   | M8  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (19 j6) | 40 | 6  | 21.5 | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A52</b> | 30 j6   | 60 | 8  | 33   | M10 | 30 | 100 | 217.5 | 255.5 | 159   | 110 | 5.5  | 15.5 | 135 | 150 | 190 | 11 | 90  | 140 | 18 | 218 |
|            | (35 j6) | 70 | 10 | 38   | M12 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (24 j6) | 50 | 8  | 27   | M8  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A62</b> | 40 j6   | 80 | 12 | 43   | M16 | 35 | 110 | 237.5 | 275.5 | 168   | 120 | 15.5 | 20   | 170 | 185 | 230 | 14 | 120 | 150 | 20 | 218 |
|            | (30 j6) | 60 | 8  | 33   | M10 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (28 j6) | 60 | 8  | 31   | M10 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |

### H...F/U - CH...F/U

|             | P     | M   | N 18 | O  | G     | I    | S  | T   | W   |
|-------------|-------|-----|------|----|-------|------|----|-----|-----|
| <b>A32F</b> | 140   | 115 | 95   | 9  | 117.5 | 10   | 10 | 3   | 152 |
|             | (120) | 100 | 80   | 9  |       |      |    |     |     |
| <b>A42F</b> | 160   | 130 | 110  | 9  | 124.5 | 10   | 10 | 3.5 | 152 |
|             | (140) | 115 | 95   | 9  |       |      |    |     |     |
| <b>A52F</b> | 200   | 165 | 130  | 11 | 159   | 5.5  | 15 | 3.5 | 218 |
|             | (160) | 130 | 110  | 11 |       |      |    |     |     |
| <b>A62F</b> | 250   | 215 | 180  | 14 | 168   | 15.5 | 15 | 4   | 218 |
|             | (200) | 165 | 130  | 14 |       |      |    |     |     |

|                | G2      |         |
|----------------|---------|---------|
|                | A32-A42 | A52-A62 |
| <b>063</b>     | 55      | /       |
| <b>071</b>     | 55      | /       |
| <b>080</b>     | 86      | 87.5    |
| <b>090</b>     | 86      | 87.5    |
| <b>100-112</b> | /       | 87.5    |

| ~ kg           |     |     |      |      |
|----------------|-----|-----|------|------|
|                | A32 | A42 | A52  | A62  |
| <b>063</b>     | 4,2 | 5,2 | /    | /    |
| <b>071</b>     | 4,3 | 5,3 | /    | /    |
| <b>080-090</b> | 4,6 | 5,5 | 9,5  | 11,3 |
| <b>100-112</b> | /   | /   | 13,0 | 14,8 |

Kg w/o oil

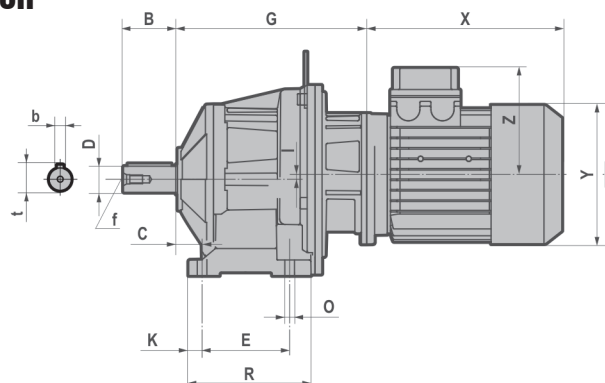
- For the dimensions concerning the motor connection area (Pm, Dm, bm, tm, X, Y, Z) please refer to **CHA..1/2/3 - Dimensions**

**PAM B5 - Dimensions**

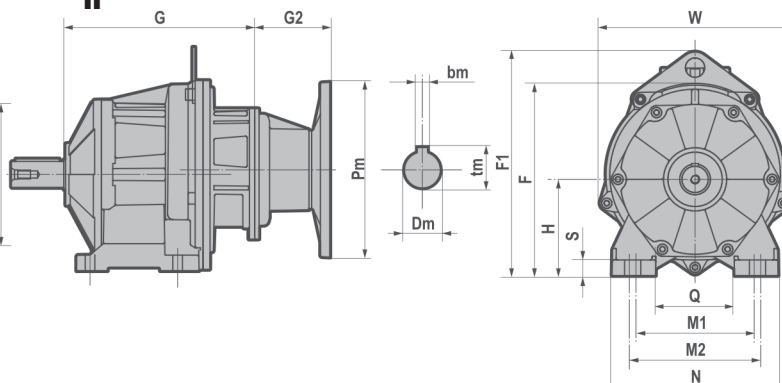
(..) Only on request

## HA/CHA..3 - Dimensions

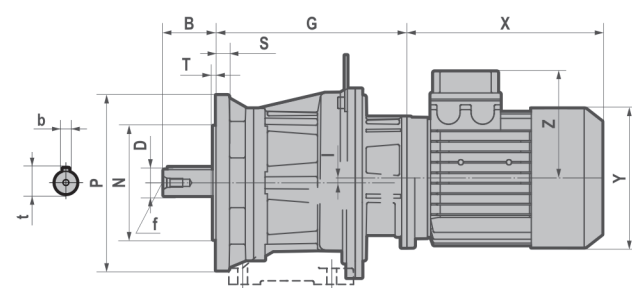
**CH**



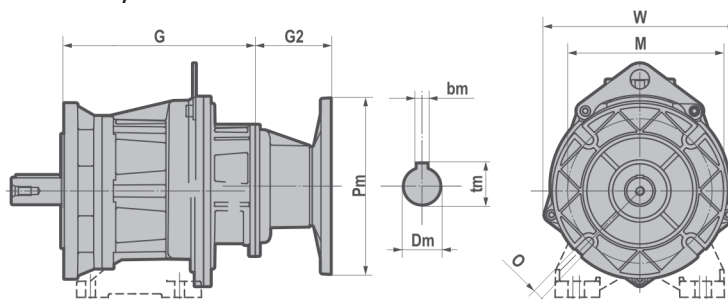
**H**



**CH...F/U**



**H...F/U**



**H... - CH...**

|            | D       | B  | b  | t    | f   | C  | E   | F     | F1    | G     | H   | I    | K    | M1  | M2  | N   | O  | Q   | R   | S  | W   |
|------------|---------|----|----|------|-----|----|-----|-------|-------|-------|-----|------|------|-----|-----|-----|----|-----|-----|----|-----|
| <b>A33</b> | 20 j6   | 40 | 6  | 22.5 | M6  | 18 | 80  | 155   | /     | 170.5 | 75  | 10   | 13   | 110 | 120 | 145 | 9  | 75  | 111 | 15 | 152 |
|            | (19 j6) | 40 | 6  | 21.5 | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (16 j6) | 40 | 5  | 18   | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (14 j6) | 30 | 5  | 16   | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A43</b> | 25 j6   | 50 | 8  | 28   | M10 | 25 | 85  | 160   | /     | 177.5 | 80  | 10   | 13   | 110 | 120 | 145 | 9  | 75  | 111 | 15 | 152 |
|            | (24 j6) | 50 | 8  | 27   | M8  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (19 j6) | 40 | 6  | 21.5 | M6  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A53</b> | 30 j6   | 60 | 8  | 33   | M10 | 30 | 100 | 217.5 | 255.5 | 218   | 110 | 5.5  | 15.5 | 135 | 150 | 190 | 11 | 90  | 140 | 18 | 218 |
|            | (35 j6) | 70 | 10 | 38   | M12 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (24 j6) | 50 | 8  | 27   | M8  |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
| <b>A63</b> | 40 j6   | 80 | 12 | 43   | M16 | 35 | 110 | 237.5 | 275.5 | 227   | 120 | 15.5 | 20   | 170 | 185 | 230 | 14 | 120 | 150 | 20 | 218 |
|            | (30 j6) | 60 | 8  | 33   | M10 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |
|            | (28 j6) | 60 | 8  | 31   | M10 |    |     |       |       |       |     |      |      |     |     |     |    |     |     |    |     |

**H...F/U - CH...F/U**

|             | P     | M   | N f8 | O  | G     | I    | S  | T   | W   |
|-------------|-------|-----|------|----|-------|------|----|-----|-----|
| <b>A33F</b> | 140   | 115 | 95   | 9  | 170.5 | 10   | 10 | 3   | 152 |
|             | (120) | 100 | 80   | 9  |       |      |    |     |     |
| <b>A43F</b> | 160   | 130 | 110  | 9  | 177.5 | 10   | 10 | 3.5 | 152 |
|             | (140) | 115 | 95   | 9  |       |      |    |     |     |
| <b>A53F</b> | 200   | 165 | 130  | 11 | 218   | 5.5  | 15 | 3.5 | 218 |
|             | (160) | 130 | 110  | 11 |       |      |    |     |     |
| <b>A63F</b> | 250   | 215 | 180  | 14 | 227   | 15.5 | 15 | 4   | 218 |
|             | (200) | 165 | 130  | 14 |       |      |    |     |     |

|            | G2 |
|------------|----|
| <b>063</b> | 55 |
| <b>071</b> | 55 |
| <b>080</b> | 86 |
| <b>090</b> | 86 |

|                | ~ kg |     |      |      |
|----------------|------|-----|------|------|
|                | A33  | A43 | A53  | A63  |
| <b>063</b>     | 4,0  | 5,8 | 9,9  | 12,5 |
| <b>071</b>     | 4,1  | 5,9 | 10,0 | 12,6 |
| <b>080-090</b> | 5,2  | 6,1 | 10,2 | 13,2 |

Kg w/o oil

- For the dimensions concerning the motor connection area (Pm, Dm, bm, tm, X, Y, Z) please refer to  
**CHA..1/2/3 - Dimensions**  
**PAM B5 - Dimensions**
- (..) Only on request

## CHA..1/2/3 - Dimensions

### CHA... - CHA...F

T - Motor

| CH                                    | T | 063 | 071 | 080 | 090S | 090L | 100 | 112 |
|---------------------------------------|---|-----|-----|-----|------|------|-----|-----|
| A41-A51<br>A32-A42<br>A33-A43-A53-A63 | X | 180 | 205 | 223 | 232  | 257  | /   | /   |
|                                       | Y | 121 | 139 | 158 | 173  | 173  | /   | /   |
|                                       | Z | 104 | 112 | 122 | 130  | 130  | /   | /   |
| A52-A61-A62                           | X | /   | /   | 218 | 232  | 257  | 290 | 302 |
|                                       | Y | /   | /   | 158 | 173  | 173  | 191 | 211 |
|                                       | Z | /   | /   | 122 | 130  | 130  | 139 | 154 |

TB -Brake motor

| CH                                    | TB | 063 | 071 | 080 | 090S | 090L | 100 | 112 |
|---------------------------------------|----|-----|-----|-----|------|------|-----|-----|
| A41-A51<br>A32-A42<br>A33-A43-A53-A63 | X  | 238 | 271 | 294 | 309  | 334  | /   | /   |
|                                       | Y  | 121 | 139 | 158 | 173  | 173  | /   | /   |
|                                       | Z  | 104 | 112 | 122 | 130  | 130  | /   | /   |
| A52-A61-A62                           | X  | /   | /   | 290 | 309  | 334  | 372 | 400 |
|                                       | Y  | /   | /   | 158 | 173  | 173  | 191 | 211 |
|                                       | Z  | /   | /   | 122 | 130  | 130  | 139 | 154 |

### Weight (kg)

T - Motor

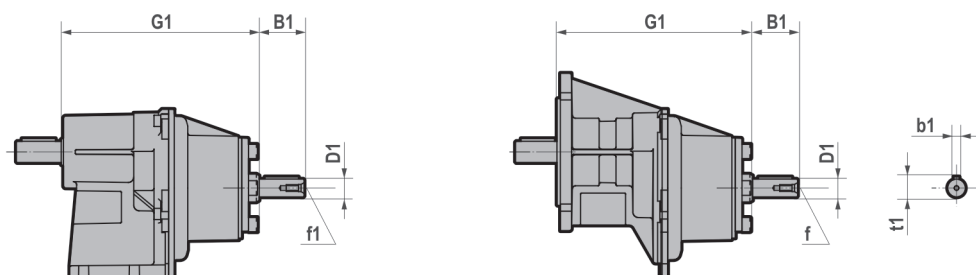
| CH  | 063  | 071  | 080  | 090S | 090L | 100  | 112  |
|-----|------|------|------|------|------|------|------|
| A32 | 6,9  | 8,7  | 12,7 | /    | /    | /    | /    |
| A33 | 7,6  | 9,5  | 13,5 | /    | /    | /    | /    |
| A41 | 5,9  | 7,8  | 11,8 | /    | /    | /    | /    |
| A42 | 7,8  | 9,7  | 13,7 | 15,6 | 18,1 | /    | /    |
| A43 | 8,4  | 10,3 | 14,3 | 16,2 | 18,7 | /    | /    |
| A51 | 6,2  | 8,1  | 12,1 | 14,0 | 16,5 | /    | /    |
| A52 | /    | /    | 17,2 | 19,1 | 21,6 | 26,2 | 36,5 |
| A53 | 12,0 | 13,9 | 17,9 | 19,8 | 22,3 | /    | /    |
| A61 | /    | /    | 14,3 | 16,2 | 18,7 | 23,3 | 33,6 |
| A62 | /    | /    | 19,2 | 21,1 | 23,6 | 28,2 | 38,5 |
| A63 | 14,6 | 16,5 | 20,5 | 22,4 | 24,9 | /    | /    |

TB -Brake motor

| CH  | 063  | 071  | 080  | 090S | 090L | 100  | 112  |
|-----|------|------|------|------|------|------|------|
| A32 | 8,2  | 10,6 | 15,8 | /    | /    | /    | /    |
| A33 | 8,9  | 11,4 | 16,6 | /    | /    | /    | /    |
| A41 | 7,2  | 9,7  | 14,9 | /    | /    | /    | /    |
| A42 | 9,1  | 11,6 | 16,8 | 20,5 | 23,0 | /    | /    |
| A43 | 9,7  | 12,2 | 17,4 | 21,1 | 23,6 | /    | /    |
| A51 | 7,5  | 10,0 | 15,2 | 18,9 | 21,4 | /    | /    |
| A52 | /    | /    | 20,3 | 24,3 | 26,5 | 31,1 | 44,8 |
| A53 | 13,3 | 15,8 | 21,0 | 24,7 | 27,2 | /    | /    |
| A61 | /    | /    | 17,4 | 21,1 | 23,6 | 28,2 | 41,9 |
| A62 | /    | /    | 22,3 | 26,0 | 28,5 | 33,1 | 46,8 |
| A63 | 15,9 | 18,4 | 23,6 | 27,3 | 29,8 | /    | /    |

## IHA..1/2/3 - Dimensions

### A41 - A51 - A61

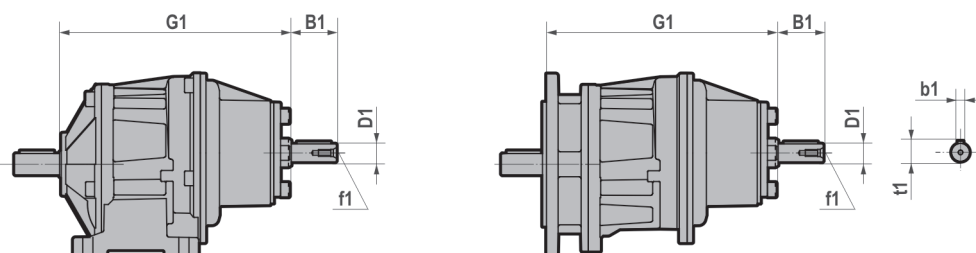


IH...

IH...F

|            | G1    | D1    | B1 | b1 | f1 | t1   | ~kg |
|------------|-------|-------|----|----|----|------|-----|
| <b>A41</b> | 176   | 16 j6 | 40 | 5  | M6 | 18   | 3,3 |
| <b>A51</b> | 184,5 | 16 j6 | 40 | 5  | M6 | 18   | 4,2 |
| <b>A61</b> | 209   | 19 j6 | 40 | 6  | M6 | 21,5 | 6,5 |

### A32 - A42 - A52 - A62

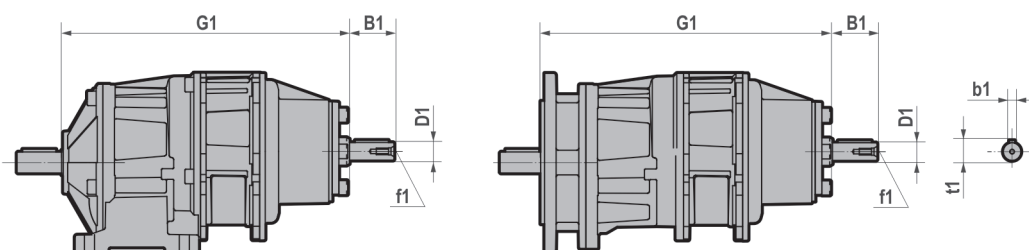


IH...

IH...F

|            | G1  | D1    | B1 | b1 | f1 | t1   | ~kg  |
|------------|-----|-------|----|----|----|------|------|
| <b>A32</b> | 198 | 16 j6 | 40 | 5  | M6 | 18   | 4,3  |
| <b>A42</b> | 205 | 16 j6 | 40 | 5  | M6 | 18   | 5,2  |
| <b>A52</b> | 239 | 19 j6 | 40 | 6  | M6 | 21,5 | 9,4  |
| <b>A62</b> | 248 | 19 j6 | 40 | 6  | M6 | 21,5 | 11,2 |

### A33 - A43 - A53 - A63



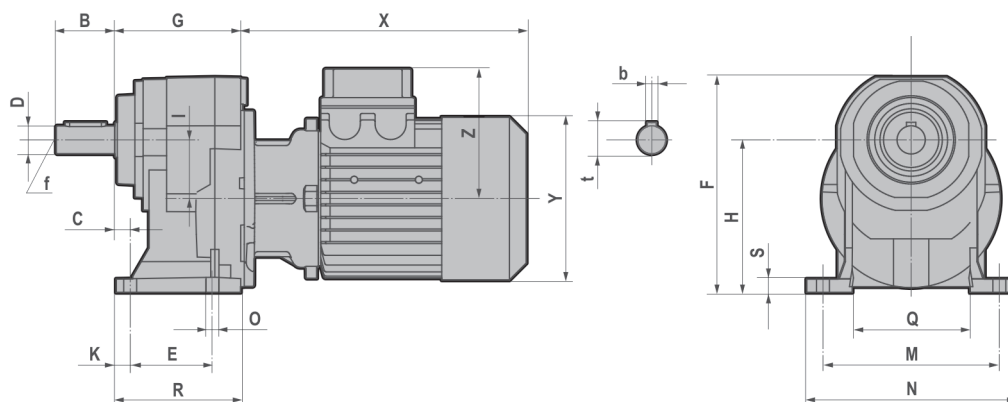
IH...

IH...F

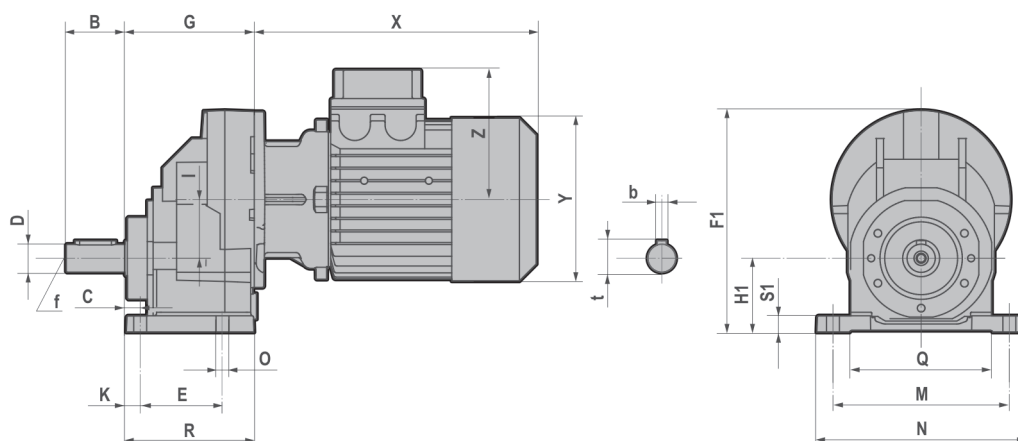
|            | G1  | D1    | B1 | b1 | f1 | t1 | ~kg  |
|------------|-----|-------|----|----|----|----|------|
| <b>A33</b> | 251 | 16 j6 | 40 | 5  | M6 | 18 | 5,0  |
| <b>A43</b> | 258 | 16 j6 | 40 | 5  | M6 | 18 | 5,8  |
| <b>A53</b> | 299 | 16 j6 | 40 | 5  | M6 | 18 | 9,9  |
| <b>A63</b> | 308 | 16 j6 | 40 | 5  | M6 | 18 | 12,9 |

## H/CH..1 - Dimensions

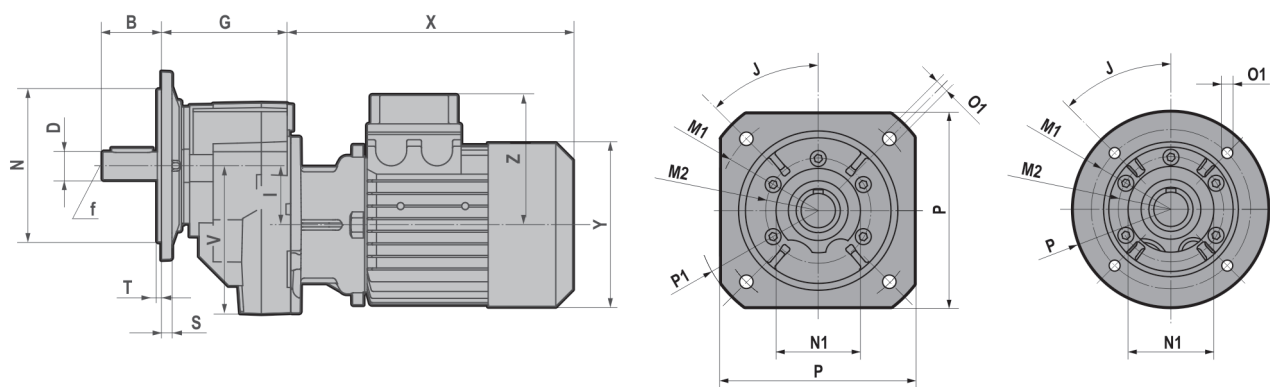
**CH...**



**CH...M**



**CH...F**



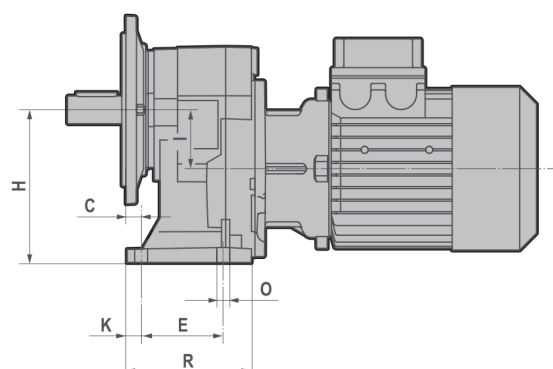
**FA**

**FB**

**FC**

**FD**

**CH...U**



## H/CH..1 - Dimensions

### H... - CH...

|            | B   | C  | D     | E   | F     | F1    | G   | H   | H1  | I   | K  | M   |  |
|------------|-----|----|-------|-----|-------|-------|-----|-----|-----|-----|----|-----|--|
| <b>041</b> | 40  | 13 | 19 j6 | 45  | 168.5 | 168   | 100 | 120 | 50  | 42  | 12 | 105 |  |
| <b>051</b> | 50  | 13 | 24 j6 | 70  | 183.5 | 189   | 110 | 130 | 63  | 50  | 12 | 150 |  |
| <b>061</b> | 60  | 16 | 28 j6 | 70  | 231   | 216   | 125 | 165 | 80  | 60  | 14 | 165 |  |
| <b>081</b> | 80  | 25 | 38 k6 | 85  | 277   | 284   | 135 | 195 | 100 | 80  | 23 | 185 |  |
| <b>101</b> | 110 | 19 | 48 k6 | 130 | 355   | 377   | 180 | 252 | 125 | 100 | 17 | 240 |  |
| <b>121</b> | 110 | 25 | 55 m6 | 150 | 422   | 426.5 | 210 | 300 | 160 | 115 | 22 | 280 |  |

|            | N   | N1  | O  | Q   | Q1    | R    | R1  | S    | S1 | V~    | b  | t    | f   |
|------------|-----|-----|----|-----|-------|------|-----|------|----|-------|----|------|-----|
| <b>041</b> | 130 | 125 | 9  | 74  | 55    | 86.5 | 98  | 9.5  | 8  | 118   | 6  | 21.5 | M6  |
| <b>051</b> | 178 | 178 | 11 | 100 | 121.5 | 106  | 109 | 11.5 | 14 | 126   | 8  | 27   | M8  |
| <b>061</b> | 195 | 195 | 11 | 110 | 135.5 | 120  | 123 | 15   | 16 | 136   | 8  | 31   | M10 |
| <b>081</b> | 230 | 232 | 14 | 123 | 151   | 130  | 135 | 15   | 20 | 184   | 10 | 41   | M12 |
| <b>101</b> | 295 | 295 | 18 | 162 | 185.5 | 173  | 178 | 16   | 22 | 251.5 | 14 | 51.5 | M16 |
| <b>121</b> | 340 | 340 | 18 | 183 | 224   | 202  | 207 | 19   | 25 | 266.5 | 16 | 59   | M20 |

### H...F/U - CH...F/U

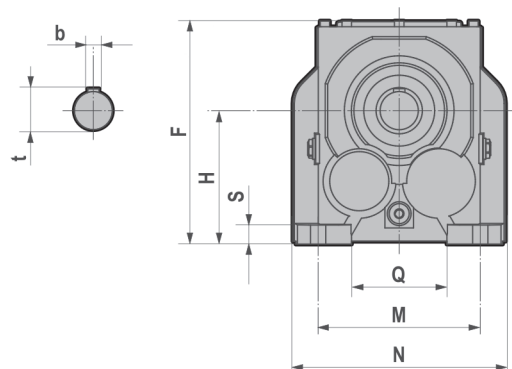
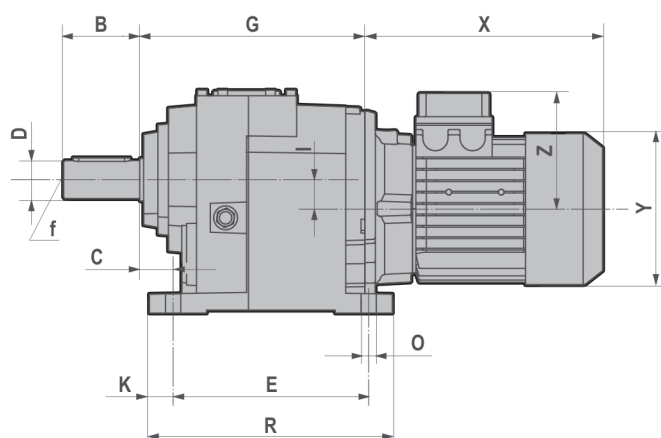
|                    |    | J  | M1    | M2    | N      | N1  | O1 | P     | P1    | S  | T   |
|--------------------|----|----|-------|-------|--------|-----|----|-------|-------|----|-----|
| <b>041<br/>051</b> | FA | 45 | ø 165 | ø 85  | 130 f8 | 70  | 11 | ø 160 | ø 200 | 9  | 3,5 |
|                    | FB | 45 | ø 130 | ø 85  | 110 f8 | 70  | 9  | ø 160 | /     | 9  | 3,5 |
|                    | FC | 45 | ø 115 | ø 85  | 95 f8  | 70  | 9  | ø 140 | /     | 9  | 3   |
|                    | FD | 45 | ø 100 | ø 85  | 80 f8  | 70  | M8 | ø 120 | /     | 9  | 3   |
| <b>061</b>         | FA | 45 | ø 215 | ø 105 | 180 f8 | 90  | 14 | ø 200 | ø 250 | 12 | 4   |
|                    | FB | 45 | ø 165 | ø 105 | 130 f8 | 90  | 11 | ø 200 | /     | 12 | 3,5 |
|                    | FC | /  | /     | /     | /      | /   | /  | /     | /     | /  | /   |
| <b>081<br/>101</b> | FA | 45 | ø 265 | ø 130 | 230 f8 | 110 | 14 | ø 250 | ø 300 | 15 | 4   |
|                    | FB | 45 | ø 215 | ø 130 | 180 f8 | 110 | 14 | ø 250 | /     | 15 | 4   |
|                    | FC | 45 | ø 165 | ø 130 | 130 f8 | 110 | 11 | ø 200 | /     | 15 | 3,5 |
| <b>121</b>         | FA | 45 | ø 300 | ø 165 | 250 f8 | 130 | 18 | ø 300 | ø 350 | 16 | 5   |
|                    | FB | 45 | ø 265 | ø 165 | 230 f8 | 130 | 14 | ø 300 | /     | 16 | 4   |
|                    | FC | 45 | ø 215 | ø 165 | 180 f8 | 130 | 14 | ø 250 | /     | 16 | 4   |

- For the dimensions concerning the motor connection area (X, Y, Z) please refer to **CH..1/2/3 - Dimensions**

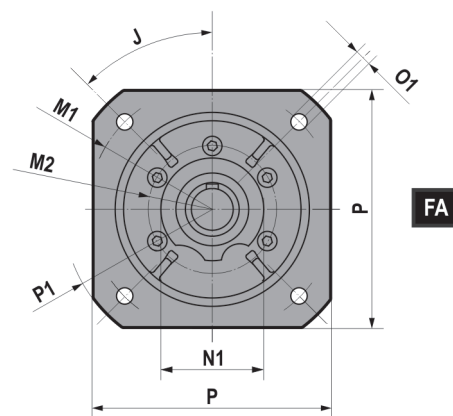
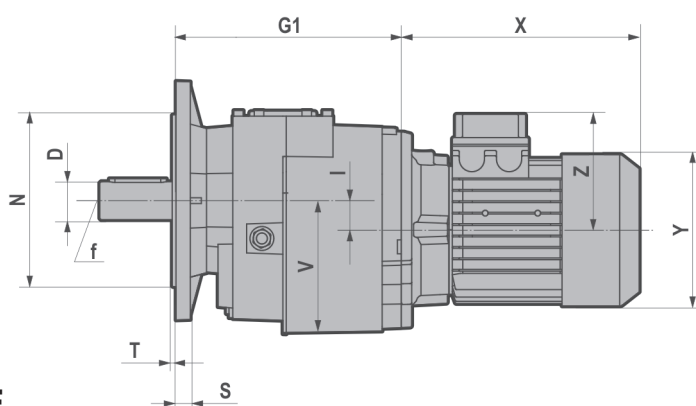


## H/CH..2/3 - Dimensions

**CH...**

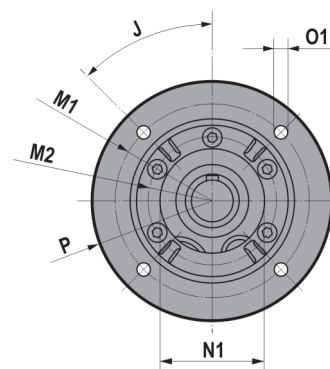
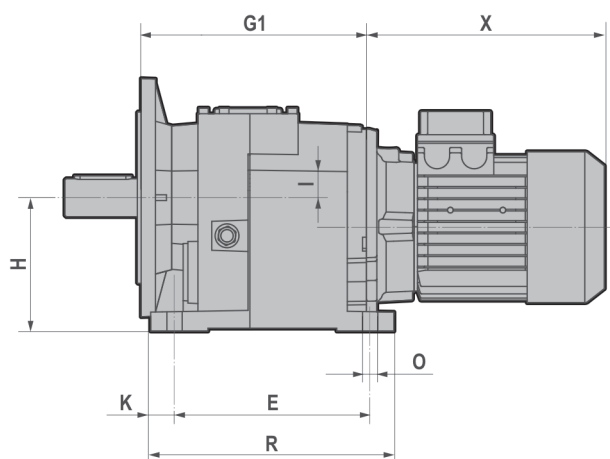


**CH...F**



**FA**

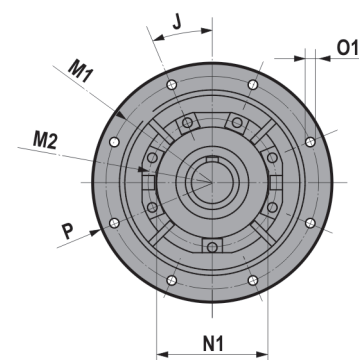
**CH...U**



**FB**

**FC**

**FD**



**FB (H140)**

## H/CH..2/3 - Dimensions

### H... - CH...

|            | B   | C  | D     | E   | F   | G     | G1    | H   | I    | K    |
|------------|-----|----|-------|-----|-----|-------|-------|-----|------|------|
| <b>030</b> | 50  | 25 | 25 j6 | 130 | 169 | 141   | 150   | 90  | 9.2  | 15   |
| <b>040</b> | 60  | 30 | 30 j6 | 165 | 189 | 152   | 152   | 115 | 18   | 15   |
| <b>050</b> | 70  | 30 | 35 k6 | 165 | 192 | 187   | 187   | 115 | 25.5 | 18   |
| <b>060</b> | 80  | 35 | 40 k6 | 205 | 234 | 236   | 236   | 140 | 31   | 25   |
| <b>080</b> | 100 | 40 | 50 k6 | 260 | 292 | 272.5 | 272.5 | 180 | 31   | 27.5 |
| <b>100</b> | 120 | 40 | 60 m6 | 310 | 364 | 316   | 316   | 225 | 35.5 | 27.5 |
| <b>125</b> | 140 | 45 | 70 m6 | 370 | 399 | 376.5 | 376.5 | 250 | 47.5 | 35   |
| <b>140</b> | 170 | 50 | 90 m6 | 410 | 490 | 430   | 430   | 315 | 45   | 40   |

|            | M   | N   | O  | Q     | R   | S  | V~  | b  | t    | f   |
|------------|-----|-----|----|-------|-----|----|-----|----|------|-----|
| <b>030</b> | 110 | 140 | 11 | 60    | 160 | 15 | 92  | 8  | 28   | M10 |
| <b>040</b> | 135 | 170 | 14 | 85    | 195 | 15 | 115 | 8  | 33   | M10 |
| <b>050</b> | 135 | 185 | 14 | 80    | 201 | 18 | 116 | 10 | 38   | M12 |
| <b>060</b> | 170 | 220 | 16 | 100   | 255 | 20 | 140 | 12 | 43   | M16 |
| <b>080</b> | 215 | 280 | 18 | 140   | 315 | 25 | 180 | 14 | 53.5 | M16 |
| <b>100</b> | 250 | 330 | 22 | 159   | 365 | 30 | 227 | 18 | 64   | M20 |
| <b>125</b> | 290 | 406 | 26 | 185.5 | 440 | 35 | 253 | 20 | 74.5 | M20 |
| <b>140</b> | 340 | 450 | 26 | 230   | 490 | 35 | 320 | 25 | 95   | M20 |

### H...F/U - CH...F/U

|                    |    | J    | M1    | M2    | N      | N1  | O1 | P     | P1    | S  | T   |
|--------------------|----|------|-------|-------|--------|-----|----|-------|-------|----|-----|
| <b>030<br/>040</b> | FA | 45   | ø 165 | ø 85  | 130 f8 | 70  | 11 | 160   | ø 200 | 9  | 3,5 |
|                    | FB | 45   | ø 130 | ø 85  | 110 f8 | 70  | 9  | ø 160 | /     | 9  | 3,5 |
|                    | FC | 45   | ø 115 | ø 85  | 95 f8  | 70  | 9  | ø 140 | /     | 9  | 3   |
|                    | FD | 45   | ø 100 | ø 85  | 80 f8  | 70  | M8 | ø 120 | /     | 9  | 3   |
| <b>050</b>         | FA | 45   | ø 215 | ø 105 | 180 f8 | 90  | 14 | 200   | ø 250 | 12 | 4   |
|                    | FB | 45   | ø 165 | ø 105 | 130 f8 | 90  | 11 | ø 200 | /     | 12 | 3,5 |
|                    | FC | /    | /     | /     | /      | /   | /  | /     | /     | /  | /   |
| <b>060</b>         | FA | 45   | ø 265 | ø 130 | 230 f8 | 110 | 14 | 250   | ø 300 | 15 | 4   |
|                    | FB | 45   | ø 215 | ø 130 | 180 f8 | 110 | 14 | ø 250 | /     | 15 | 4   |
|                    | FC | 45   | ø 165 | ø 130 | 130 f8 | 110 | 11 | ø 200 | /     | 15 | 3,5 |
| <b>080</b>         | FA | 45   | ø 300 | ø 165 | 250 f8 | 130 | 18 | 300   | ø 350 | 16 | 5   |
|                    | FB | 45   | ø 265 | ø 165 | 230 f8 | 130 | 14 | ø 300 | /     | 16 | 4   |
|                    | FC | 45   | ø 215 | ø 165 | 180 f8 | 130 | 14 | ø 250 | /     | 16 | 4   |
| <b>100</b>         | FA | /    | /     | /     | /      | /   | /  | /     | /     | /  | /   |
|                    | FB | 45   | ø 300 | ø 185 | 250 f8 | 150 | 18 | ø 350 | /     | 18 | 5   |
|                    | FC | 45   | ø 265 | ø 185 | 230 f8 | 150 | 14 | ø 300 | /     | 18 | 4   |
| <b>125</b>         | FA | /    | /     | /     | /      | /   | /  | /     | /     | /  | /   |
|                    | FB | 45   | ø 350 | ø 200 | 300 f8 | 170 | 18 | ø 400 | /     | 18 | 5   |
|                    | FC | /    | /     | /     | /      | /   | /  | /     | /     | /  | /   |
| <b>140</b>         | FA | /    | /     | /     | /      | /   | /  | /     | /     | /  | /   |
|                    | FB | 22,5 | ø 400 | ø 245 | 350 f8 | 210 | 18 | ø 450 | /     | 25 | 5   |
|                    | FC | 45   | ø 350 | ø 245 | 300 f8 | 210 | 18 | ø 400 | /     | 25 | 5   |

- For the dimensions concerning the motor connection area (X, Y, Z) please refer to **CH..1/2/3 - Dimensions**

## H/PH..1/2/3 - Dimensions

### H/PH..1

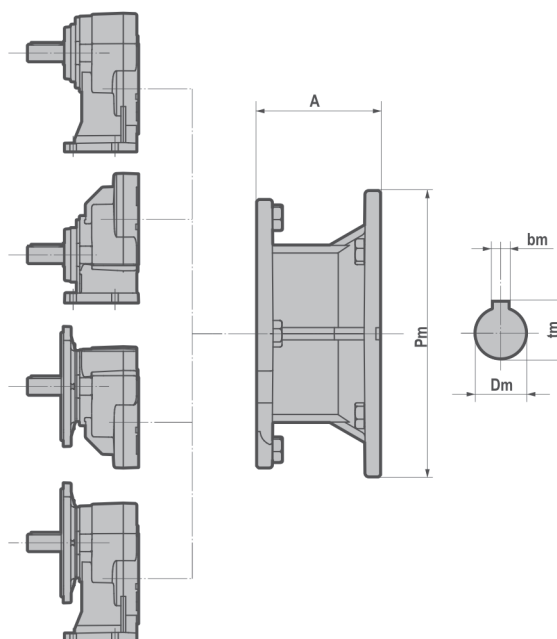
| H<br>PH | A                 |     |            |
|---------|-------------------|-----|------------|
|         | 041<br>051<br>061 | 081 | 101<br>121 |
| 071     | 69                | /   | /          |
| 080-090 | 90                | 70  | /          |
| 100-112 | 105               | 85  | 75,5       |
| 132     | /                 | 110 | 100,5      |
| 160-180 | /                 | /   | 148        |
| 200     | /                 | /   | 185        |

#### H..1 - PH..1

#### H..1M - PH..1M

#### H..1F - PH..1F

#### H..1U - PH..1U



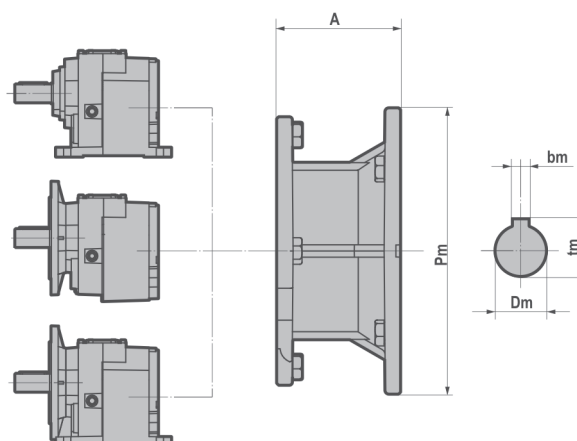
### H/PH..2/3

| H<br>PH | A                 |            |            |       |
|---------|-------------------|------------|------------|-------|
|         | 030<br>040<br>050 | 060<br>080 | 100<br>125 | 140   |
| 063     | 57                | /          | /          | /     |
| 071     | 69                | 49         | /          | /     |
| 080-090 | 90                | 70         | 60,5       | /     |
| 100-112 | 105               | 85         | 75,5       | /     |
| 132     | /                 | 110        | 100,5      | 76    |
| 160-180 | /                 | 157,5      | 148        | 123,5 |
| 200     | /                 | /          | 185        | 160,5 |
| 225     | /                 | /          | /          | 160,5 |

#### H.. - PH..

#### H..F - PH...F

#### H..U - PH..U



### Weight (kg)

| H<br>PH | 030  | 040  | 041 | 050  | 051  | 060  | 061  | 080  | 081  | 100  | 101  | 121  | 125   | 140   |
|---------|------|------|-----|------|------|------|------|------|------|------|------|------|-------|-------|
| 063     | 8,4  | 10,9 | /   | 16,0 | /    | /    | /    | /    | /    | /    | /    | /    | /     | /     |
| 071     | 8,8  | 11,3 | 4,8 | 16,4 | 6,7  | 27,0 | /    | /    | /    | /    | /    | /    | /     | /     |
| 080-090 | 9,4  | 11,9 | 5,4 | 17,0 | 7,3  | 29,1 | 9,3  | 49,1 | 19,3 | 77,6 | /    | /    | /     | /     |
| 100-112 | 13,7 | 16,2 | /   | 21,3 | 11,6 | 31,2 | 13,6 | 51,2 | 21,3 | 79,9 | 32,7 | /    | 109,5 | /     |
| 132     | /    | /    | /   | /    | /    | 33,9 | /    | 53,2 | 23,9 | 82,7 | 35,5 | 36,8 | 112,3 | 177,0 |
| 160-180 | /    | /    | /   | /    | /    | /    | /    | 60,5 | /    | 88,7 | 41,5 | 42,8 | 118,3 | 184,9 |
| 200     | /    | /    | /   | /    | /    | /    | /    | /    | /    | /    | /    | 57,8 | 133,3 | 199,1 |
| 225     | /    | /    | /   | /    | /    | /    | /    | /    | /    | /    | /    | /    | /     | 200,9 |

Weight without motor

Kg w/o oil

- For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to **PAM B5 - Dimensions**

## CH..1/2/3 - Dimensions

### CH... - CH...F

T - Motor

| CH                         | T | 063 | 071 | 080 | 090S | 090L | 100 | 112 | 132S | 132M |
|----------------------------|---|-----|-----|-----|------|------|-----|-----|------|------|
| 030-040-041<br>050-051-061 | X | 215 | 241 | 268 | 296  | 321  | 333 | 351 | /    | /    |
|                            | Y | 121 | 139 | 158 | 173  | 173  | 191 | 211 | /    | /    |
|                            | Z | 104 | 112 | 122 | 130  | 130  | 139 | 154 | /    | /    |
| 060-080-081                | X | /   | 221 | 248 | 276  | 301  | 335 | 356 | 396  | 443  |
|                            | Y | /   | 139 | 158 | 173  | 173  | 191 | 211 | 249  | 249  |
|                            | Z | /   | 112 | 122 | 130  | 130  | 139 | 154 | 194  | 194  |
| 100-101<br>121-125         | X | /   | /   | /   | 267  | 292  | 326 | 347 | 386  | 434  |
|                            | Y | /   | /   | /   | 173  | 173  | 191 | 211 | 249  | 249  |
|                            | Z | /   | /   | /   | 130  | 130  | 139 | 154 | 194  | 194  |

TB - Brake motor

| CH                         | TB | 063 | 071   | 080 | 090S | 090L | 100 | 112 | 132S | 132M |
|----------------------------|----|-----|-------|-----|------|------|-----|-----|------|------|
| 030-040-041<br>050-051-061 | X  | 273 | 306.5 | 341 | 373  | 398  | 415 | 448 | /    | /    |
|                            | Y  | 121 | 139   | 158 | 173  | 173  | 191 | 211 | /    | /    |
|                            | Z  | 104 | 112   | 122 | 130  | 130  | 139 | 154 | /    | /    |
| 060-080-081                | X  | /   | 286.5 | 321 | 353  | 378  | 417 | 453 | 495  | 547  |
|                            | Y  | /   | 139   | 158 | 173  | 173  | 191 | 211 | 249  | 249  |
|                            | Z  | /   | 112   | 122 | 130  | 130  | 139 | 154 | 194  | 194  |
| 100-101<br>121-125         | X  | /   | /     | /   | 343  | 368  | 407 | 443 | 485  | 537  |
|                            | Y  | /   | /     | /   | 173  | 173  | 191 | 211 | 249  | 249  |
|                            | Z  | /   | /     | /   | 130  | 130  | 139 | 154 | 194  | 194  |

### Weight (kg)

T - Motor

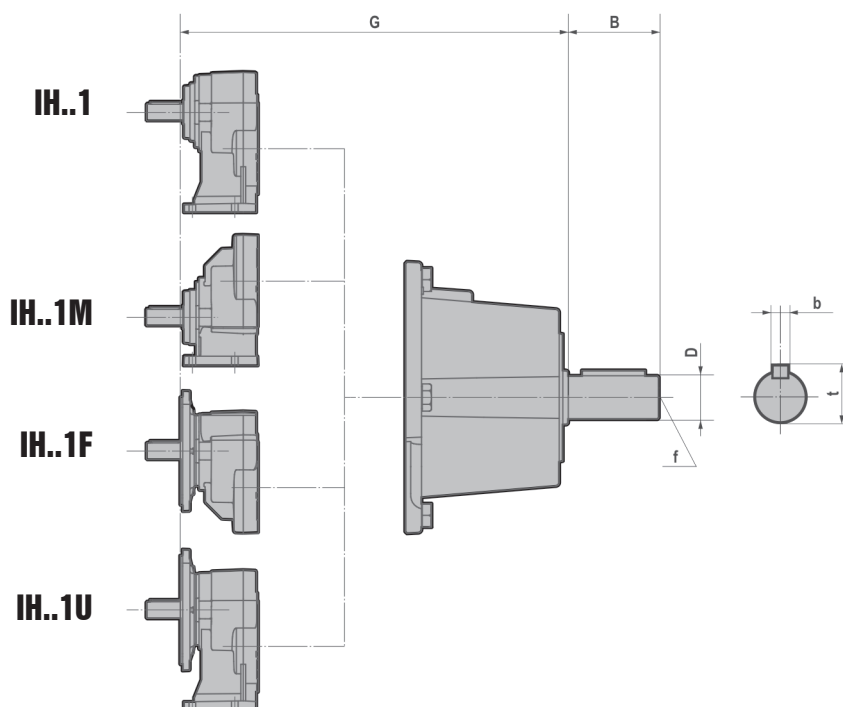
| CH  | 063  | 071  | 080  | 090S | 090L | 100   | 112   | 132S  | 132M  |
|-----|------|------|------|------|------|-------|-------|-------|-------|
| 030 | 11,9 | 12,8 | 17,5 | 21,4 | 23,4 | 28,9  | 40,4  | /     | /     |
| 040 | 14,4 | 15,3 | 20,0 | 23,9 | 25,9 | 31,4  | 42,9  | /     | /     |
| 041 | /    | 8,8  | 13,5 | 17,4 | 19,4 | /     | /     | /     | /     |
| 050 | 19,5 | 20,4 | 25,1 | 29,0 | 31,0 | 36,5  | 48,0  | /     | /     |
| 051 | /    | 10,7 | 15,4 | 19,3 | 21,3 | 26,8  | 38,3  | /     | /     |
| 060 | /    | 30,6 | 35,7 | 38,1 | 39,6 | 44,7  | 56,1  | 70,1  | 81,7  |
| 061 | /    | /    | 17,4 | 21,3 | 23,3 | 28,8  | 40,3  | /     | /     |
| 080 | /    | /    | 55,7 | 58,1 | 59,6 | 64,7  | 76,1  | 90,1  | 101,7 |
| 081 | /    | /    | 25,8 | 28,2 | 29,7 | 34,8  | 46,2  | 60,2  | 71,8  |
| 100 | /    | /    | /    | 86,6 | 87,6 | 93,6  | 103,6 | 118,6 | 127,6 |
| 101 | /    | /    | /    | /    | /    | 46,5  | 56,5  | 71,5  | 80,5  |
| 121 | /    | /    | /    | /    | /    | /     | /     | 72,8  | 81,8  |
| 125 | /    | /    | /    | /    | /    | 123,3 | 133,3 | 148,3 | 157,3 |

TB - Brake motor

| CH  | 063  | 071  | 080  | 090S | 090L | 100   | 112   | 132S  | 132M  |
|-----|------|------|------|------|------|-------|-------|-------|-------|
| 030 | 13,4 | 15,0 | 21,0 | 26,9 | 28,9 | 34,4  | 50,1  | /     | /     |
| 040 | 15,9 | 17,5 | 23,5 | 29,4 | 31,4 | 36,9  | 52,6  | /     | /     |
| 041 | /    | 11,0 | 17,0 | 22,9 | 24,9 | /     | /     | /     | /     |
| 050 | 21,0 | 22,6 | 28,6 | 34,5 | 36,5 | 42,0  | 57,7  | /     | /     |
| 051 | /    | 12,9 | 18,9 | 24,8 | 26,8 | 32,3  | 48,0  | /     | /     |
| 060 | /    | 32,8 | 39,2 | 43,6 | 45,1 | 50,2  | 65,8  | 80,4  | 96,4  |
| 061 | /    | /    | 20,9 | 26,8 | 28,8 | 34,3  | 50,0  | /     | /     |
| 080 | /    | /    | 59,2 | 63,6 | 65,1 | 70,2  | 85,8  | 100,4 | 116,4 |
| 081 | /    | /    | 29,3 | 33,7 | 35,2 | 40,3  | 55,9  | 70,5  | 86,5  |
| 100 | /    | /    | /    | 92,2 | 93,2 | 99,2  | 113,4 | 129,0 | 142,4 |
| 101 | /    | /    | /    | /    | /    | 51,9  | 66,2  | 81,9  | 95,2  |
| 121 | /    | /    | /    | /    | /    | /     | /     | 83,1  | 96,5  |
| 125 | /    | /    | /    | /    | /    | 128,8 | 143,0 | 158,6 | 172,0 |

Kg w/o oil

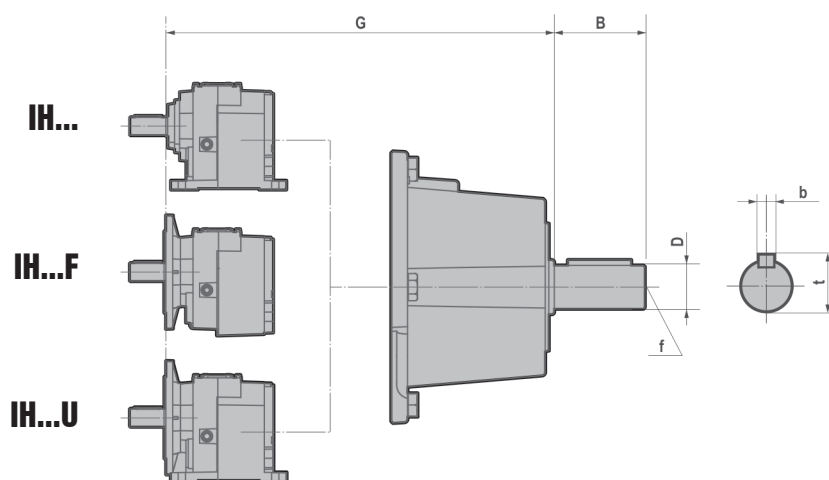
## IH..1/2/3 - Dimensions



### IH..1

| IH  | G     | B  | D     | b  | t  | f   |
|-----|-------|----|-------|----|----|-----|
| 041 | 190   | 40 | 16 j6 | 5  | 18 | M6  |
| 051 | 200   | 50 | 24 j6 | 8  | 27 | M8  |
| 061 | 215   | 50 | 24 j6 | 8  | 27 | M8  |
| 081 | 248   | 60 | 28 j6 | 8  | 31 | M10 |
| 101 | 306.5 | 80 | 38 k6 | 10 | 41 | M12 |
| 121 | 336.5 | 80 | 38 k6 | 10 | 41 | M12 |

| IH  | ~ Kg |
|-----|------|
| 041 | 7,5  |
| 051 | 9,4  |
| 061 | 11,4 |
| 081 | 23,2 |
| 101 | 40,3 |
| 121 | 41,6 |

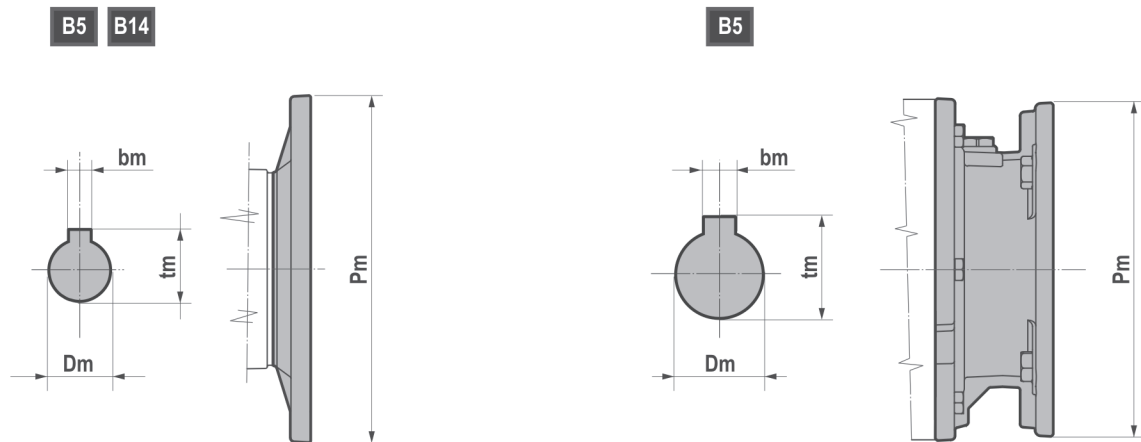


### IH..2/3

| IH  | G     | G1    | B   | D     | b  | t  | f   |
|-----|-------|-------|-----|-------|----|----|-----|
| 030 | 231   | 240   | 50  | 24 j6 | 8  | 27 | M8  |
| 040 | 242   | 242   | 50  | 24 j6 | 8  | 27 | M8  |
| 050 | 277   | 277   | 50  | 24 j6 | 8  | 27 | M8  |
| 060 | 349   | 349   | 60  | 28 j6 | 8  | 31 | M10 |
| 080 | 385.5 | 385.5 | 60  | 28 j6 | 8  | 31 | M10 |
| 100 | 442.5 | 442.5 | 80  | 38 k6 | 10 | 41 | M12 |
| 125 | 503   | 503   | 80  | 38 k6 | 10 | 41 | M12 |
| 140 | 570   | 570   | 110 | 42 k6 | 12 | 45 | M16 |

| IH  | ~ Kg  |
|-----|-------|
| 030 | 11,5  |
| 040 | 14,0  |
| 050 | 19,1  |
| 060 | 33,1  |
| 080 | 53,1  |
| 100 | 87,5  |
| 125 | 117,1 |
| 140 | 192,1 |

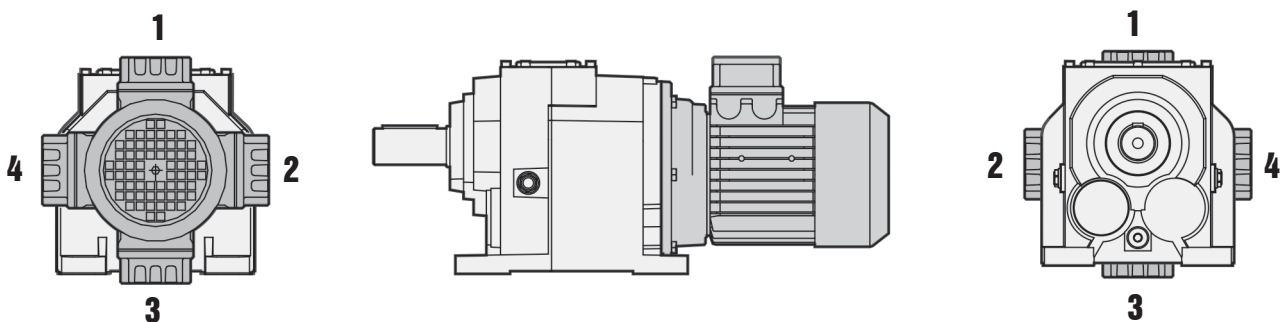
## PAM B5 - Dimensions



| B5        | IEC  |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
|           | 056  | 063  | 071  | 080  | 090  | 100  | 112  | 132  | 160  | 180  | 200  | 225  |
| <b>Pm</b> | 120  | 140  | 160  | 200  | 200  | 250  | 250  | 300  | 350  | 350  | 400  | 450  |
| <b>Dm</b> | 9    | 11   | 14   | 19   | 24   | 28   | 28   | 38   | 42   | 48   | 55   | 60   |
| <b>bm</b> | 3    | 4    | 5    | 6    | 8    | 8    | 8    | 10   | 12   | 14   | 16   | 18   |
| <b>tm</b> | 10,4 | 12,8 | 16,3 | 21,8 | 27,3 | 31,3 | 31,3 | 41,3 | 45,3 | 51,8 | 59,3 | 64,4 |

| B14       | IEC  |      |      |      |      |      |      |  |
|-----------|------|------|------|------|------|------|------|--|
|           | 056  | 063  | 071  | 080  | 090  | 100  | 112  |  |
| <b>Pm</b> | 80   | 90   | 105  | 120  | 140  | 160  | 160  |  |
| <b>Dm</b> | 9    | 11   | 14   | 19   | 24   | 28   | 28   |  |
| <b>bm</b> | 3    | 4    | 5    | 6    | 8    | 8    | 8    |  |
| <b>tm</b> | 10,4 | 12,8 | 16,3 | 21,8 | 27,3 | 31,3 | 31,3 |  |

## Position of terminal box



- Unless otherwise specified, the gear reducer is supplied with terminal box in position 1.