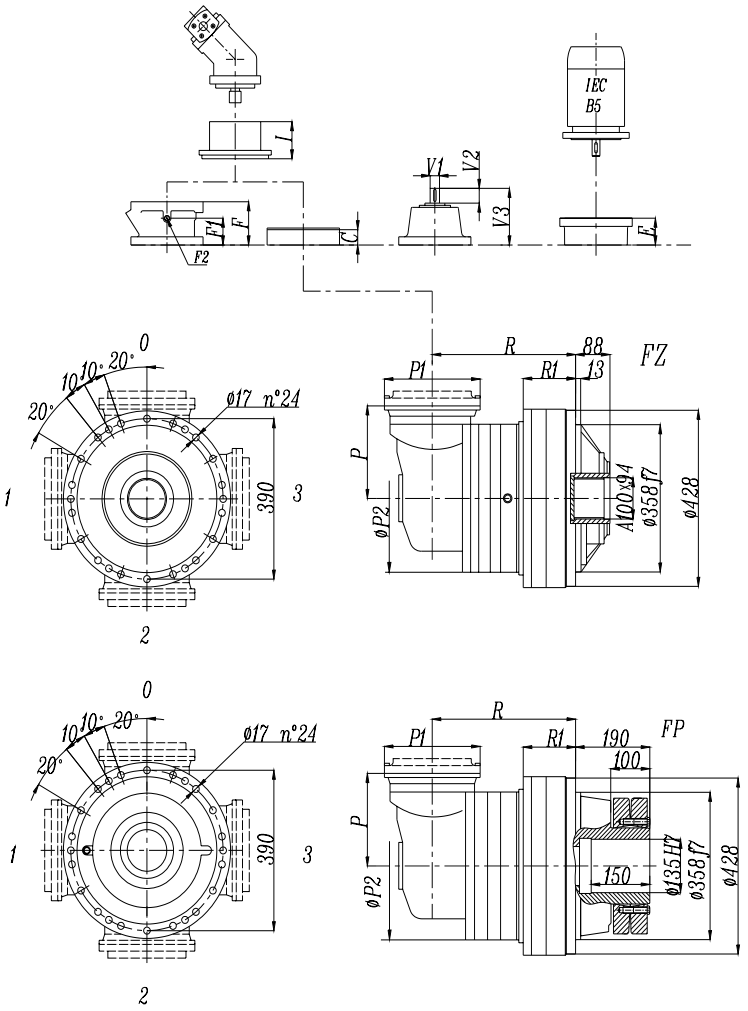
# EP311 R

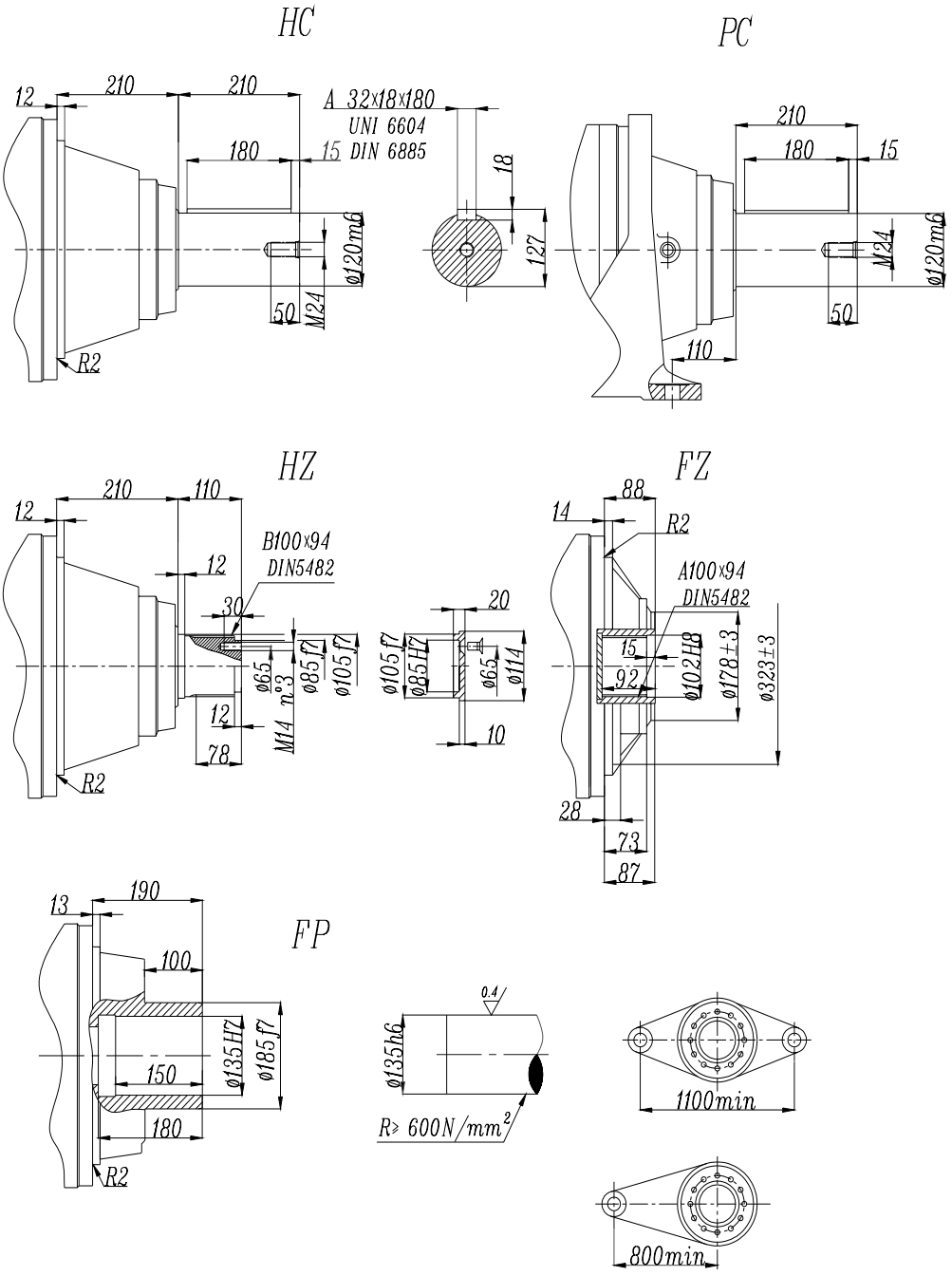



**FP version**
**Max. transmissible**
**54000 N.m**

| | R | | | | Ref. weight (without input) (Kg) | | | | C | P | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | | F | F1 | F2 | Type | Ref. Weight 15 Kg |
| **311 R2** | 340 | 550 | 340 | 340 | 320 | 390 | 300 | 310 | 45 | 345 | According to hydraulic motor | 195 | 147 | 1/4 G | 6 | 38 |
| **311 R3** | 367 | 577 | 367 | 367 | 275 | 345 | 255 | 265 | 37 | 140 | | 145 | 95 | 1/4 G | 4 | 22 |
| **311 R4** | 433 | 641 | 433 | 433 | 257 | 331 | 241 | 251 | 37 | 140 | | 105 | 65 | 1/4 G | 4 | 15 |

| | P1 | E (IEC motor input) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HZ | HC | FZ | FP | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 |
| **311 R2** | 292 | 154 | 154 | 154 | 154 | | | | | | | | 152 | 182 | 212 | 193 |
| **311 R3** | 245 | 130 | 130 | 110 | 110 | | | | | | 114 | 144 | 144 | 174 | 174 | |
| **311 R4** | 186 | 130 | 130 | 110 | 110 | 65 | 84 | 84 | 94 | 94 | 114 | 144 | | | | |

## EP311 L - EP311 R

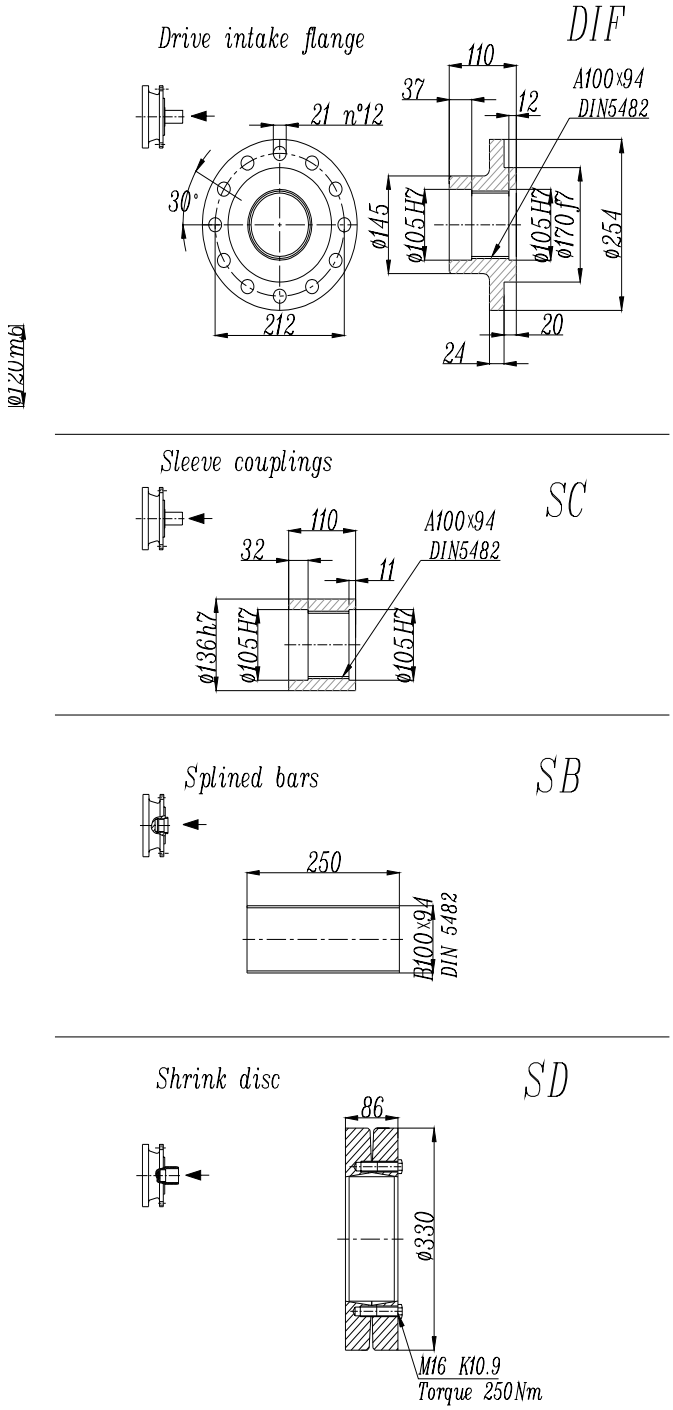



**FP version**

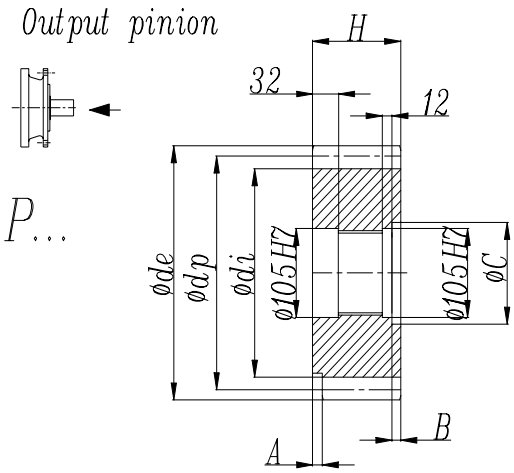
**Max. transmissible**

**54000 N.m**

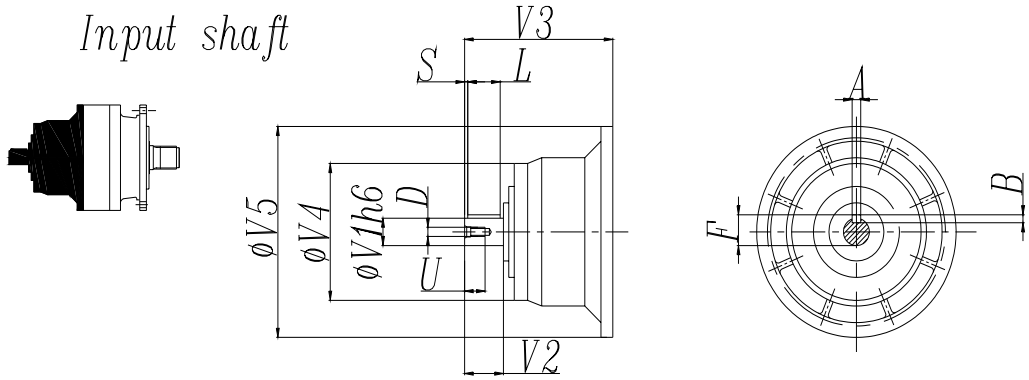
## EP311 L - EP311 R



## EP311 L - EP311 R



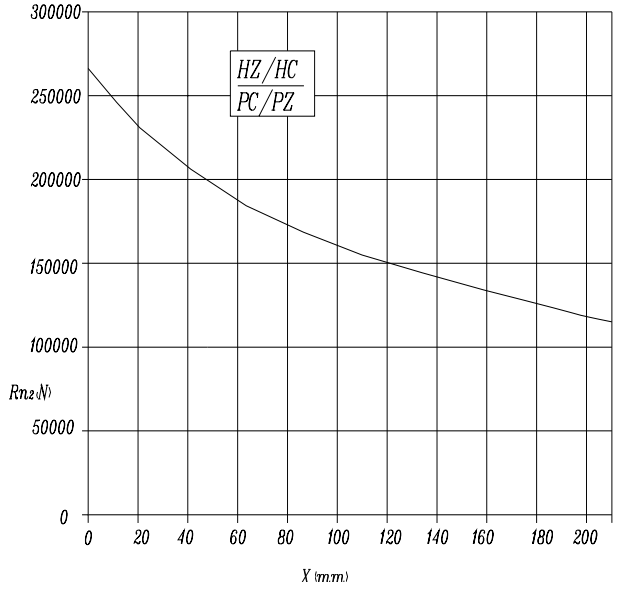

| | m | z | x | dp | di | de | H | A | B | C |
|---|---|---|---|---|---|---|---|---|---|---|
| **PLQ** | 12 | 23 | 0 | 276 | 246 | 300 | 110 | 0 | 0 | 0 |
| **PPD** | 16 | 13 | 0.5000 | 208 | 184 | 252.5 | 145 | 0 | 35 | 116 |
| **PPF** | 16 | 15 | 0.450 | 240 | 215 | 280 | 125 | 0 | 15 | 120 |

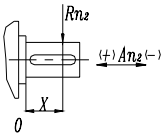



| | CODE | V1 | V2 | V3 | V4 | V5 | A | B | F | L | S | D | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **311 L1** | V11B | 80 | 130 | 348 | 200 | 428 | 22 | 14 | 85 | 110 | 10 | M16 | 36 |
| **311 L2** | V07B | 80 | 130 | 315 | 200 | 345 | 22 | 14 | 85 | 110 | 105 | M16 | 36 |
| | V07A | 60 | 105 | 313 | 155 | 345 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **311 L3** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |
| **311 L4** | V01A | 24 | 36 | 137.5 | 120 | 186 | 8 | 7 | 27 | 30 | 3 | M8 | 19 |
| | V01B | 38 | 58 | 158 | 120 | 186 | 10 | 8 | 41 | 50 | 4 | M12 | 28 |
| **311 R2** | V06B | 60 | 105 | 307 | 155 | 292 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **311 R3-R4** | V01A | 24 | 36 | 137.5 | 120 | 186 | 8 | 7 | 27 | 30 | 3 | M8 | 19 |
| | V01B | 38 | 58 | 158 | 120 | 186 | 10 | 8 | 41 | 50 | 4 | M12 | 28 |

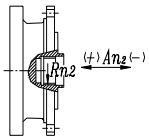
## EP311 L - EP311 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)



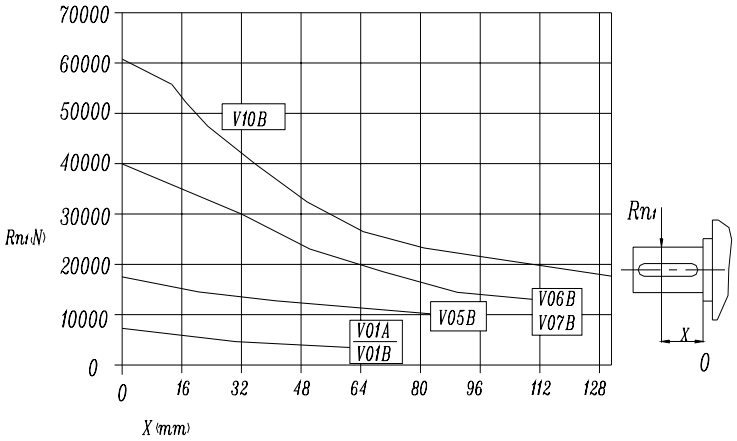

| | An2 (+) | An2 (−) |
|---|---|---|
| HZ- HC- PC- PZ | 200 000 | 140 000 |



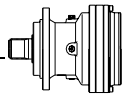

| | Rn2 | An2 (+/−) |
|---|---|---|
| FZ | 65 000 | 52 000 |

| Load corrective factor fh2 on shafts | fh2= n2 • h | | 10 000 | 25 000 | 50 000 | 100 000 | 500 000 | 1 000 000 |
|---|---|---|---|---|---|---|---|---|
| | fh2 | MZ-MC-PC-PZ-FZ | 1 | 0.74 | 0.58 | 0.46 | 0.27 | 0.21 |
| | | HZ-HC | 1 | 0.76 | 0.61 | 0.50 | 0.31 | 0.25 |

Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)



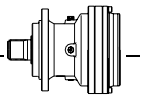

| Load corrective factor fh1 on shafts | Fh1= n1 • h | 250 000 | 500 000 | 1 000 000 | 2 00 000 | 5 000 000 | 10 000 000 |
|---|---|---|---|---|---|---|---|
| | fh1 | 1 | 0.79 | 0.63 | 0.50 | 0.37 | 0.29 |



## EP313L M2'=50000N.m

| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) (ta=20℃) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| L1 | 4.0 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 200 | 45 | 500 | 800 | | |
| | 5.7 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 200 | 45 | 500 | 800 | | |
| | 6.5 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 200 | 45 | 500 | 800 | | |
| L2 | 13.7 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 130 | 30 | 1500 | 2500 | 3200 | 6L |
| | 17.6 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 130 | 30 | 1500 | 2500 | 3200 | 6L |
| | 22.6 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 130 | 30 | 1500 | 2500 | 3200 | 6L |
| | 26.9 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 130 | 30 | 1500 | 2500 | 3200 | 6L |
| | 31.9 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 120 | 30 | 1500 | 2500 | 2600 | 6K |
| | 37.9 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 110 | 30 | 1500 | 2500 | 2100 | 6G |
| L3 | 50.3 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 80 | 18 | 1750 | 3 500 | 1000 | 5K |
| | 64.5 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 65 | 18 | 1750 | 3 500 | 1000 | 5K |
| | 73.9 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 60 | 18 | 1750 | 3 500 | 1000 | 5K |
| | 82.7 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 58 | 18 | 1750 | 3 500 | 1000 | 5K |
| | 94.7 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 55 | 18 | 1750 | 3 500 | 800 | 5G |
| | 113 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 55 | 18 | 1750 | 3 500 | 800 | 5G |
| | 135 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 50 | 18 | 1750 | 3 500 | 800 | 5G |
| | 150 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 45 | 18 | 1750 | 3 500 | 500 | 5C |
| | 183 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 40 | 18 | 1750 | 3 500 | 400 | 5B |
| | 218 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 36 | 18 | 1750 | 3 500 | 400 | 5B |
| | 258 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 31 | 18 | 1750 | 3 500 | 400 | 5B |
| L4 | 250 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 30 | 11 | 1750 | 3 500 | 330 | 4H |
| | 280 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 30 | 11 | 1750 | 3 500 | 330 | 4H |
| | 329 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 28 | 11 | 1750 | 3 500 | 260 | 4F |
| | 426 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 22 | 11 | 1750 | 3 500 | 260 | 4F |
| | 546 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 15 | 11 | 1750 | 3 500 | 160 | 4D |
| | 650 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 12.5 | 11 | 1750 | 3 500 | 160 | 4D |
| | 776 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 10 | 11 | 1750 | 3 500 | 100 | 4B |
| | 865 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 9 | 11 | 1750 | 3 500 | 100 | 4B |
| | 1079 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 8 | 11 | 1750 | 3 500 | 100 | 4B |
| | 1321 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 6.7 | 11 | 1750 | 3 500 | 100 | 4B |
| | 1568 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 5.7 | 11 | 1750 | 3 500 | 50 | 4A |
| | 1859 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 4.5 | 11 | 1750 | 3 500 | 50 | 4A |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

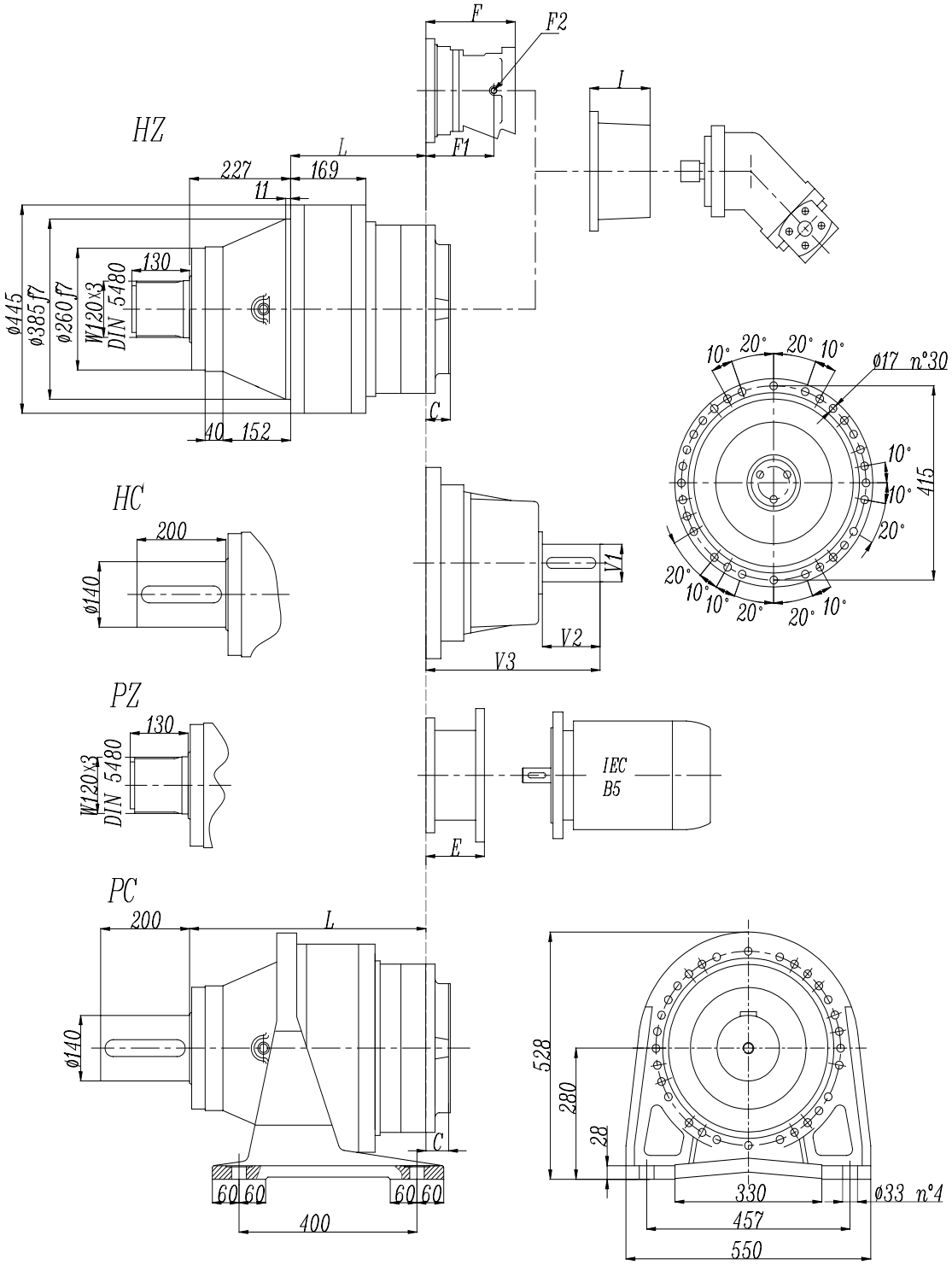


## EP313R M2'=50000N.m

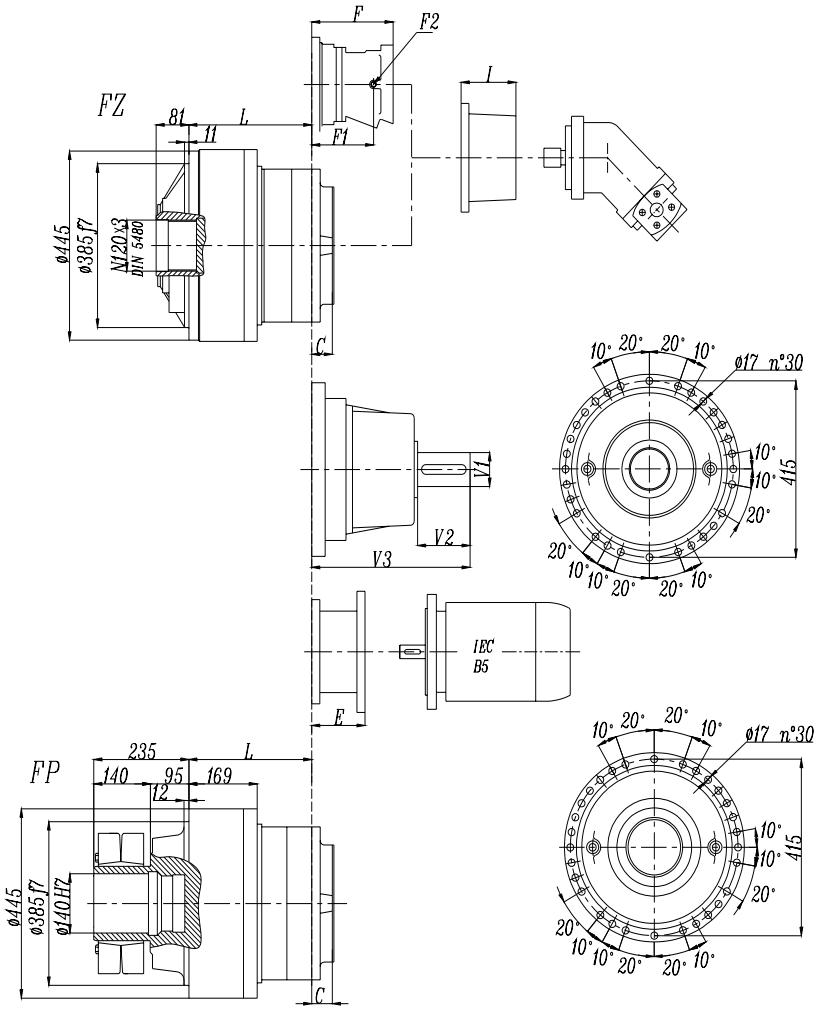
| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | (ta=20℃) ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| R2 | 11.7 | 28000 | 27000 | 25000 | 24000 | 16000 | 12500 | 150 | 75 | 1500 | 2 500 | 3200 | 6L |
| | 16.7 | 35000 | 33000 | 31000 | 30000 | 18000 | 15000 | 150 | 75 | 1500 | 2 500 | 3200 | 6L |
| | 19.0 | 44000 | 40000 | 37000 | 36000 | 22000 | 17000 | 150 | 75 | 1500 | 2 500 | 3200 | 6L |
| R3 | 51.9 | 34000 | 29500 | 27000 | 27000 | 18600 | 15100 | 70 | 40 | 1750 | 3 500 | 800 | 5G |
| | 66.6 | 45000 | 45000 | 37400 | 32000 | 19700 | 16000 | 60 | 40 | 1750 | 3 500 | 800 | 5G |
| | 85.4 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 60 | 40 | 1750 | 3 500 | 800 | 5G |
| | 102 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 50 | 40 | 1750 | 3 500 | 630 | 5E |
| | 121 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 45 | 40 | 1750 | 3 500 | 630 | 5E |
| | 143 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 40 | 40 | 1750 | 3 500 | 500 | 5C |
| R4 | 129 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 35 | 22 | 1750 | 3 500 | 400 | 4K |
| | 165 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 35 | 22 | 1750 | 3 500 | 400 | 4K |
| | 189 | 55000 | 55000 | 55000 | 46000 | 28400 | 23000 | 35 | 22 | 1750 | 3 500 | 330 | 4H |
| | 212 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 35 | 22 | 1750 | 3 500 | 330 | 4H |
| | 243 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 31 | 22 | 1750 | 3 500 | 330 | 4H |
| | 289 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 27 | 22 | 1750 | 3 500 | 260 | 4F |
| | 345 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 23 | 22 | 1750 | 3 500 | 260 | 4F |
| | 384 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 21 | 22 | 1750 | 3 500 | 160 | 4D |
| | 470 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 17.5 | 22 | 1750 | 3 500 | 160 | 4D |
| | 558 | 55000 | 48000 | 45000 | 45000 | 27800 | 22600 | 15 | 22 | 1750 | 3 500 | 160 | 4D |
| | 662 | 49000 | 42400 | 39000 | 39000 | 27800 | 22500 | 11 | 22 | 1750 | 3 500 | 100 | 4B |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

**EP313 L**


HZ
F
F2
F1
L
I
227
169
11
130
ø445
ø385 f7
ø260 f7
W120x3
DIN 5480
40
152
C
10° 20° 20° 10°
ø17 n°30
10°
10°
20°
415
HC
200
ø140
V1
V2
V3
PZ
130
W120x3
DIN 5480
IEC
B5
E
PC
200
L
ø140
C
60 60
60 60
400
528
280
28
330
457
550
ø33 n°4

# EP313 L




**FP version**

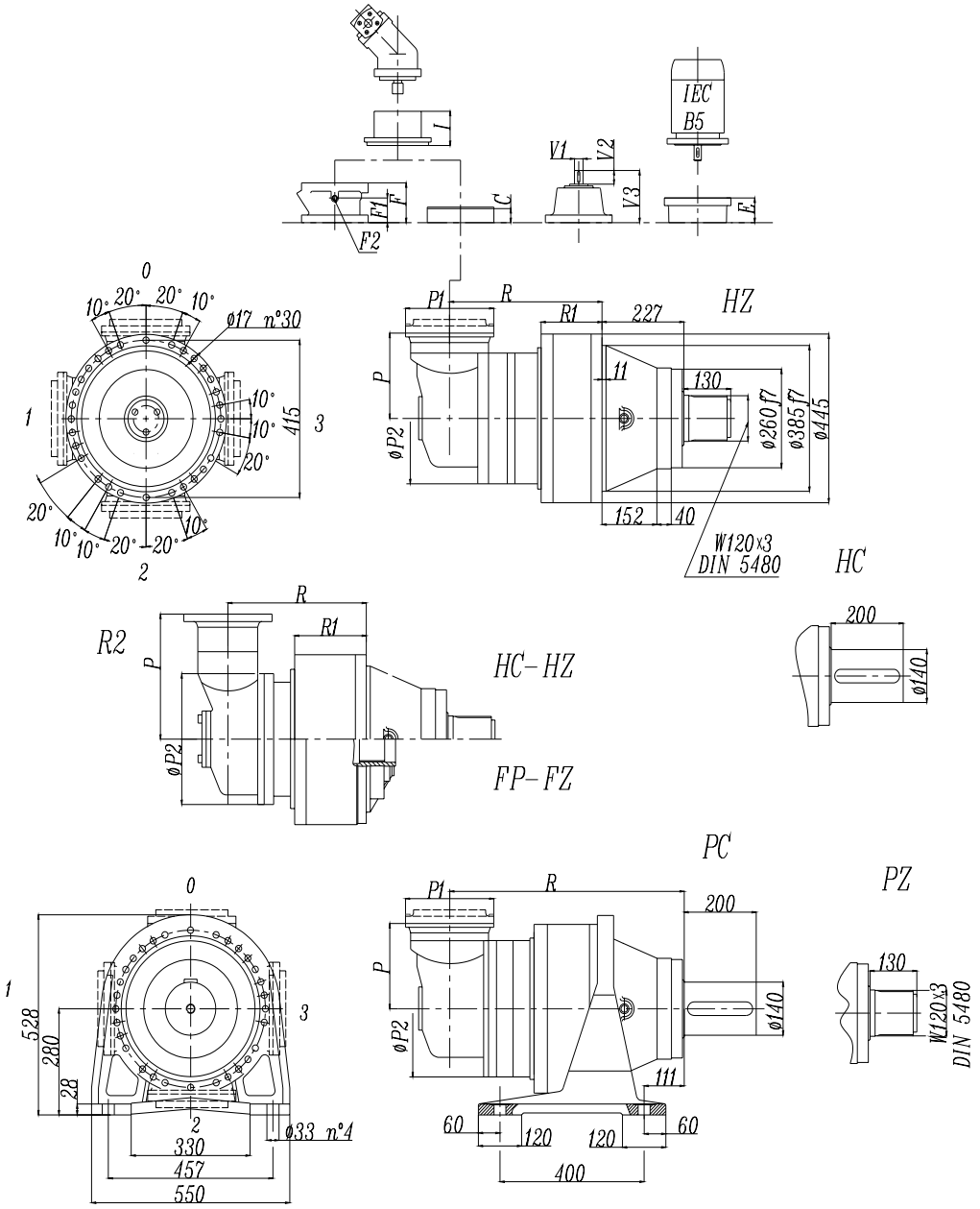
**Max. transmissible**

**66000 N.m**

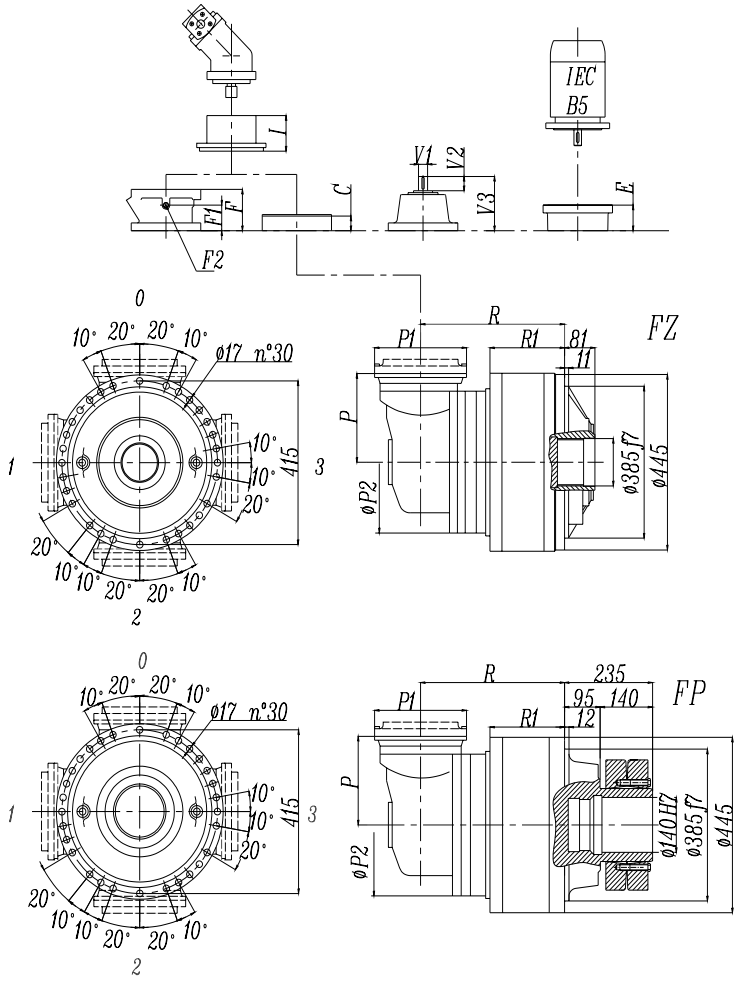
| | L | | | | Ref. weight (without input) (Kg) | | | | C | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | F | F1 | F2 | Type | Ref. Weight |
| **313 L1** | 154 | 381 | 154 | 154 | 230 | 320 | 200 | 200 | 76 | According to hydraulic motor | | | | | |
| **313 L2** | 304 | 531 | 304 | 304 | 290 | 380 | 260 | 280 | 51 | | 201 | 153 | 1/4 G | 6 | 38 Kg |
| **313 L3** | 397 | 624 | 397 | 397 | 302 | 392 | 272 | 292 | 37 | | 145 | 95 | 1/4 G | 5 | 22 Kg |
| **313 L4** | 462 | 689 | 462 | 462 | 309 | 400 | 279 | 300 | 37 | | 105 | 65 | 1/4 G | 4 | 15 Kg |

| | E (IEC motor input) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 | | | |
| **313 L1** | | | | | | | | | | | | | | |
| **313 L2** | | | | | | | | 195 | 186 | 216 | 215 | | | |
| **313 L3** | | | | | | 114 | 144 | 144 | 174 | | | | | |
| **313 L4** | 65 | 84 | 84 | 94 | 94 | 114 | 144 | | | | | | | |

## EP313 R


IEC
B5
I
V1
V2
V3
C
F1
F
F2
E
0
1
2
3
10°
20°
ø17 n°30
415
P1
R
R1
227
HZ
P
øP2
11
130
ø260 f7
ø385 f7
ø445
152
40
W120x3
DIN 5480
HC
R2
HC-HZ
FP-FZ
200
ø140
PC
PZ
528
280
28
330
457
550
ø33 n°4
111
60
120
400

## EP313 R

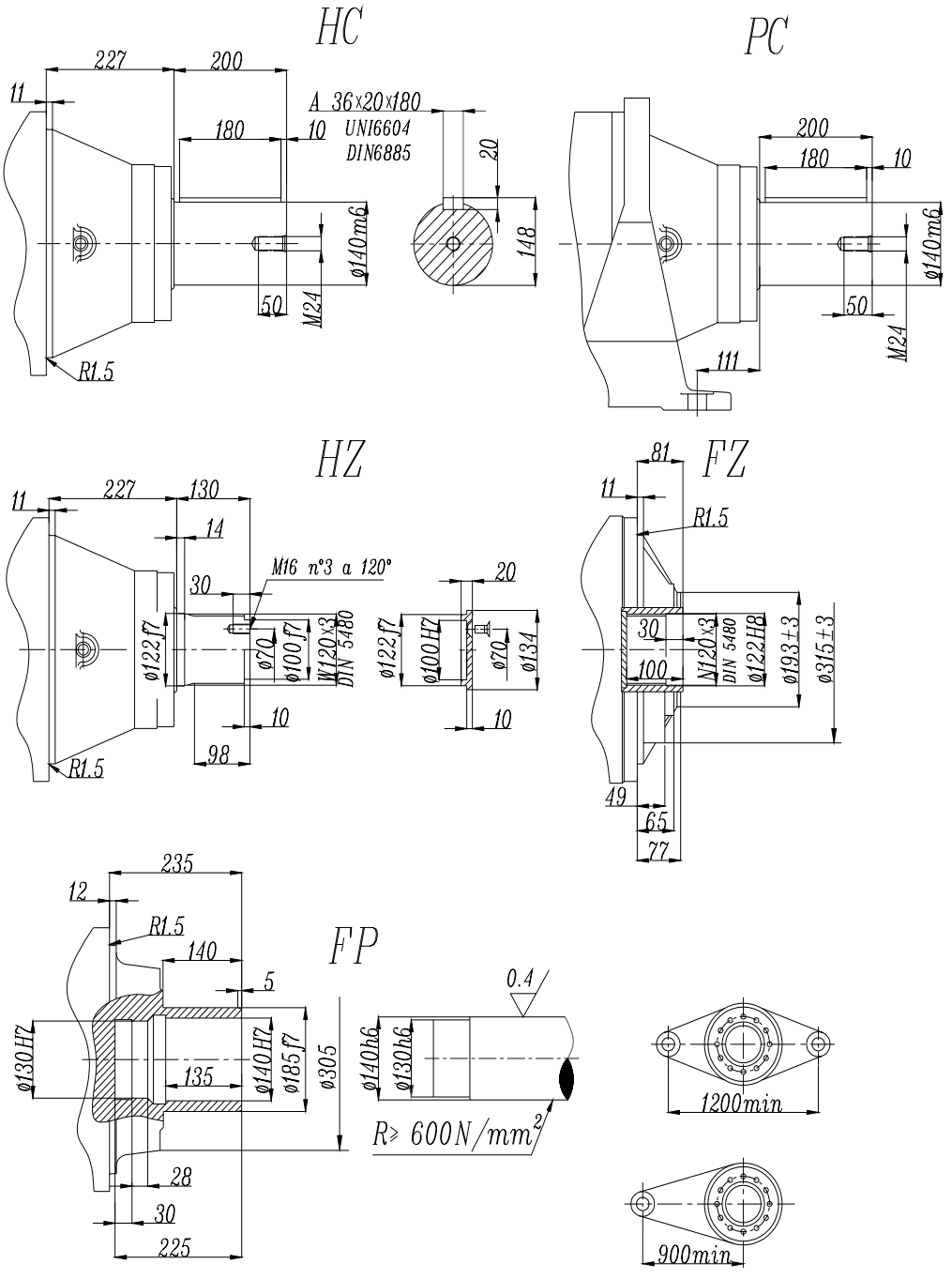



**FP version**
**Max. transmissible**
**66000 N.m**

| | R | | | | Ref. weight (without input) (Kg) | | | | C | P | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | | F | F1 | F2 | Type | Ref. Weight 15 Kg |
| **313 R2** | 384 | 611 | 384 | 384 | 370 | 460 | 340 | 360 | 45 | 395 | According to hydraulic motor | 195 | 147 | 1/4 G | 6 | 38 |
| **313 R3** | 423 | 650 | 423 | 423 | 340 | 430 | 310 | 330 | 37 | 225 | | 145 | 95 | 1/4 G | 4 | 22 |
| **313 R4** | 485 | 712 | 485 | 485 | 322 | 412 | 292 | 312 | 37 | 140 | | 105 | 65 | 1/4 G | 4 | 15 |

| | P1 | E (IEC motor input) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HZ | HC | FZ | FP | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 |
| **313 R2** | 292 | 154 | 154 | 154 | 154 | | | | | | | | 152 | 182 | 212 | 193 |
| **313 R3** | 245 | 130 | 130 | 110 | 110 | | | | | | 114 | 144 | 144 | 174 | 174 | |
| **313 R4** | 186 | 130 | 130 | 110 | 110 | 65 | 84 | 84 | 94 | 94 | 114 | 144 | | | | |

## EP313 L - EP313 R



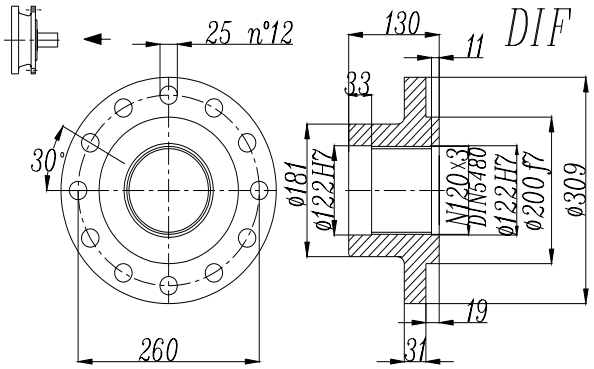

**FP version**

**Max. transmissible**

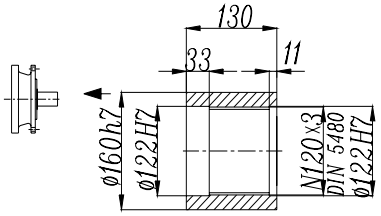
**66000 N.m**

## EP313 L - EP313 R

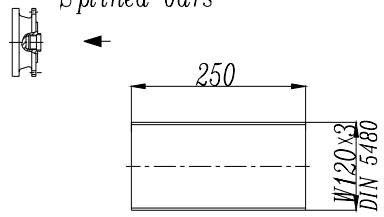
*Drive intake flange*



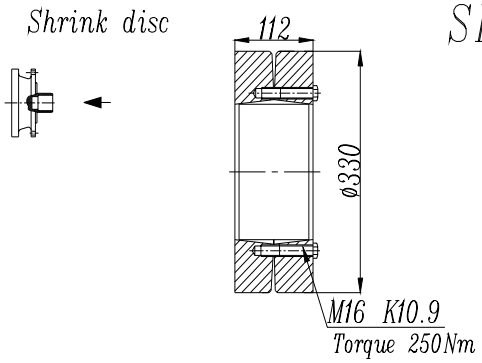

*Sleeve couplings* SC



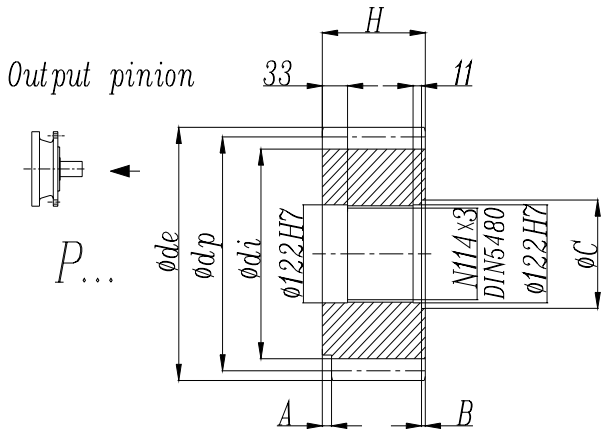

*Splined bars* SB



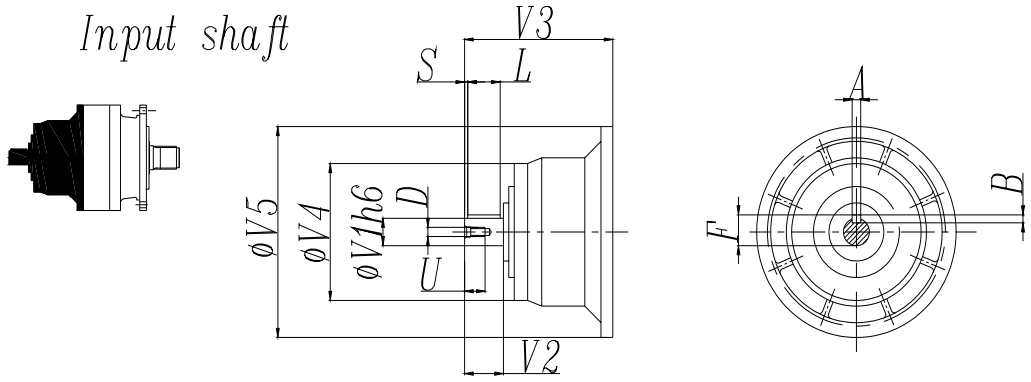

*Shrink disc* SD



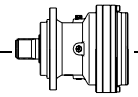
## EP313 L - EP313 R




| | m | z | x | dp | di | de | H | A | B | C |
|---|---|---|---|---|---|---|---|---|---|---|
| **PRH** | 16 | 17 | 0.500 | 272 | 247 | 315 | 135 | 0 | 5 | 136 |
| **PRI** | 18 | 18 | 0.333 | 324 | 294 | 365 | 140 | 0 | 10 | 140 |

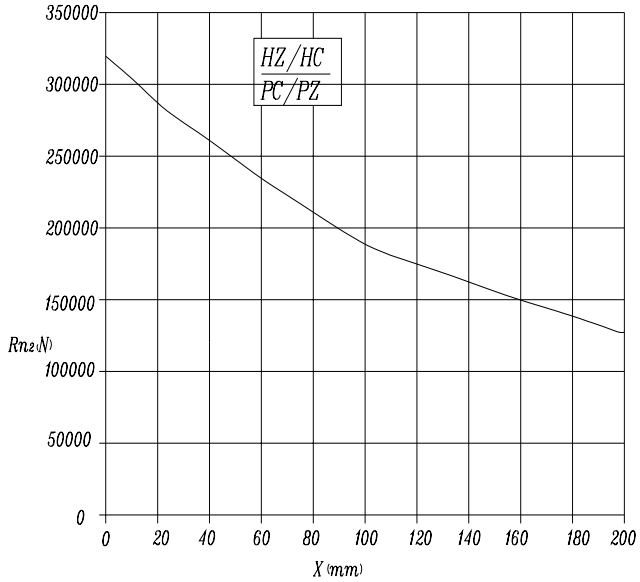


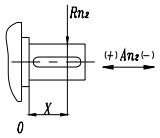

| | CODE | V1 | V2 | V3 | V4 | V5 | A | B | F | L | S | D | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **313 L1** | V11B | 80 | 130 | 348 | 200 | 428 | 22 | 14 | 85 | 110 | 10 | M16 | 36 |
| **313 L2** | V07B | 80 | 130 | 315 | 200 | 345 | 22 | 14 | 85 | 110 | 105 | M16 | 36 |
| | V07A | 60 | 105 | 313 | 155 | 345 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **313 L3** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |
| **313 L4** | V01A | 24 | 36 | 137.5 | 120 | 186 | 8 | 7 | 27 | 30 | 3 | M8 | 19 |
| | V01B | 38 | 58 | 158 | 120 | 186 | 10 | 8 | 41 | 50 | 4 | M12 | 28 |
| **313 R2** | V06B | 60 | 105 | 307 | 155 | 292 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **313 R3-R4** | V01A | 24 | 36 | 137.5 | 120 | 186 | 8 | 7 | 27 | 30 | 3 | M8 | 19 |
| | V01B | 38 | 58 | 158 | 120 | 186 | 10 | 8 | 41 | 50 | 4 | M12 | 28 |



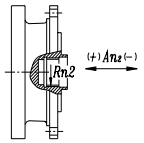
## EP313 L - EP313 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)



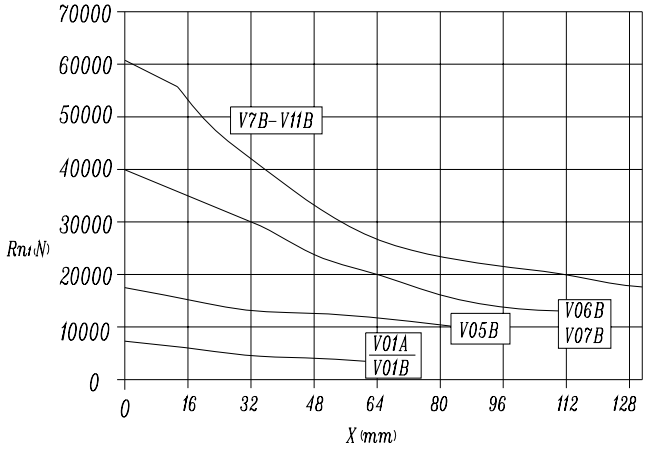

| | An2 (+) | An2 (−) |
|---|---|---|
| HZ-HC'-PC'-PZ | 250 000 | 160 000 |

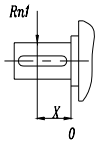



| | Rn2 | An2 (+/−) |
|---|---|---|
| PZ | 80 000 | 75 000 |

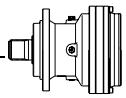
| Load corrective factor fh2 on shafts | fh2= n2 • h | | 10 000 | 25 000 | 50 000 | 100 000 | 500 000 | 1 000 000 |
|---|---|---|---|---|---|---|---|---|
| | fh2 | MZ-MC-PC-PZ-FZ | 1 | 0.74 | 0.58 | 0.46 | 0.27 | 0.21 |
| | | HZ-HC | 1 | 0.76 | 0.61 | 0.50 | 0.31 | 0.25 |

Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)



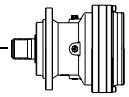

| Load corrective factor fh1 on shafts | Fh1= n1 • h | 250 000 | 500 000 | 1 000 000 | 2 00 000 | 5 000 000 | 10 000 000 |
|---|---|---|---|---|---|---|---|
| | fh1 | 1 | 0.79 | 0.63 | 0.50 | 0.37 | 0.29 |



## EP315L M2'=80000N.m

| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) (ta=20℃) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| L1 | 3.8 | 105000 | 100000 | 97000 | 85000 | 53000 | 42800 | 260 | 60 | 350 | 500 | | |
| | 4.4 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 260 | 60 | 350 | 500 | | |
| | 5.3 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 260 | 60 | 350 | 500 | | |
| | 6.2 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 230 | 60 | 350 | 500 | | |
| L2 | 16.1 | 105000 | 100000 | 97000 | 85000 | 53000 | 42800 | 180 | 45 | 750 | 1000 | | |
| | 18.5 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 180 | 45 | 750 | 1000 | | |
| | 22.0 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 180 | 45 | 750 | 1000 | | |
| | 26.3 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 170 | 45 | 750 | 1000 | | |
| | 31.2 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 140 | 45 | 750 | 1000 | | |
| | 35.8 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 120 | 45 | 750 | 1000 | | |
| | 42.5 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 100 | 45 | 750 | 1000 | | |
| L3 | 59.2 | 105000 | 100000 | 97000 | 85000 | 53000 | 42800 | 100 | 30 | 1500 | 2500 | 2600 | 6K |
| | 67.5 | 105000 | 100000 | 97000 | 85000 | 53000 | 42800 | 100 | 30 | 1500 | 2500 | 2100 | 6G |
| | 77.4 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 100 | 30 | 1500 | 2500 | 2100 | 6G |
| | 92.2 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 100 | 30 | 1500 | 2500 | 1500 | 6E |
| | 109 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 90 | 30 | 1500 | 2500 | 1500 | 6E |
| | 127 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 80 | 30 | 1500 | 2500 | 1100 | 6C |
| | 152 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 65 | 30 | 1500 | 2500 | 1100 | 6C |
| | 180 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 55 | 30 | 1500 | 2500 | 850 | 6B |
| | 207 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 50 | 30 | 1500 | 2500 | 850 | 6B |
| | 254 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 42 | 30 | 1500 | 2500 | 850 | 6B |
| | 301 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 32 | 30 | 1500 | 2500 | 850 | 6B |
| L4 | 337 | 105000 | 100000 | 97000 | 85000 | 53000 | 42800 | 50 | 18 | 1750 | 3 500 | 400 | 5B |
| | 387 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 35 | 18 | 1750 | 3 500 | 400 | 5B |
| | 461 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 30 | 18 | 1750 | 3 500 | 400 | 5B |
| | 544 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 26 | 18 | 1750 | 3 500 | 400 | 5B |
| | 636 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 23 | 18 | 1750 | 3 500 | 400 | 5B |
| | 709 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 21 | 18 | 1750 | 3 500 | 400 | 5B |
| | 868 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 17.5 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1036 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 14 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1229 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 10.5 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1412 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 10.5 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1731 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 9 | 18 | 1750 | 3 500 | 400 | 5B |
| | 2054 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 7 | 18 | 1750 | 3 500 | 400 | 5B |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

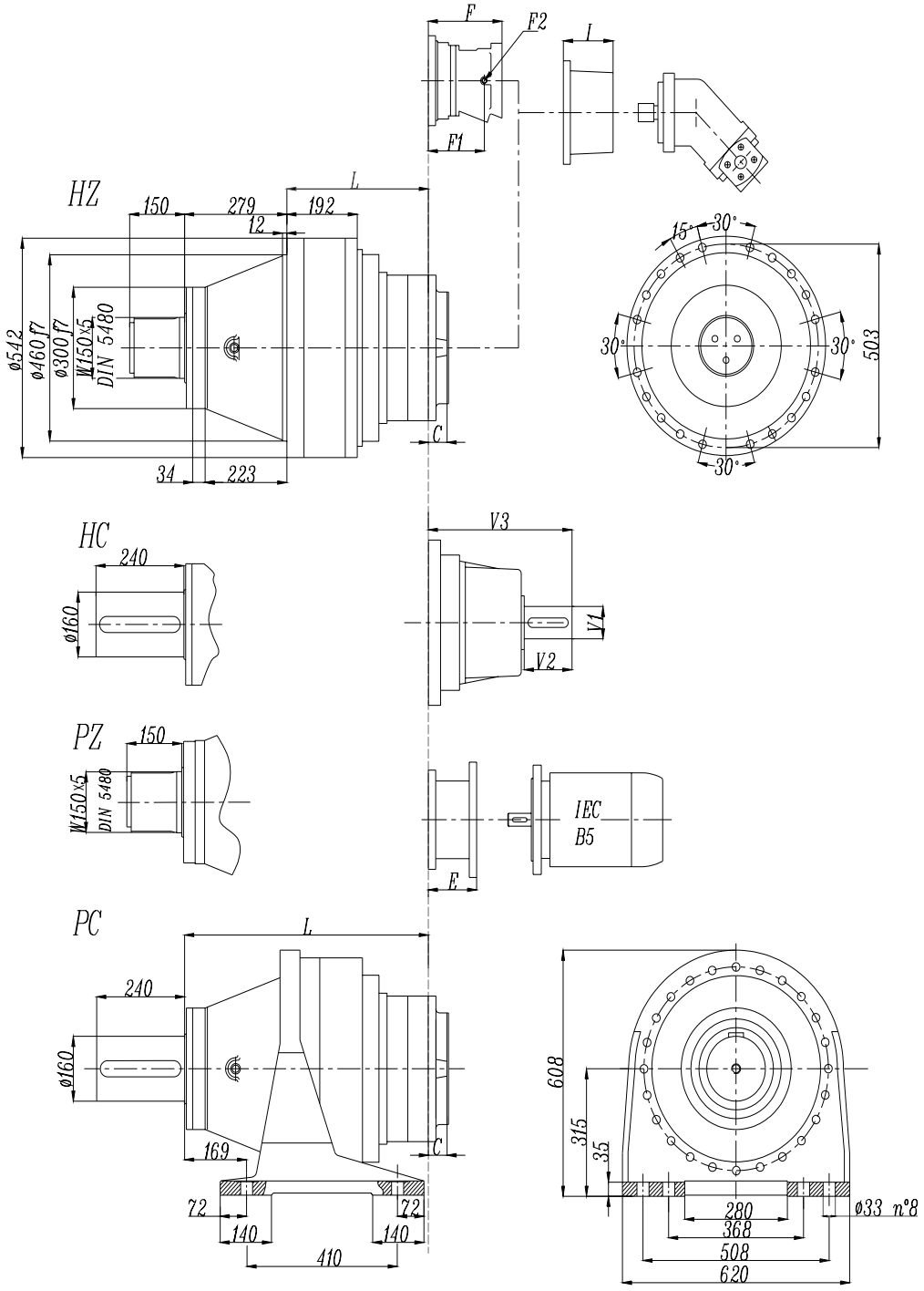


## EP315R M2'=80000N.m

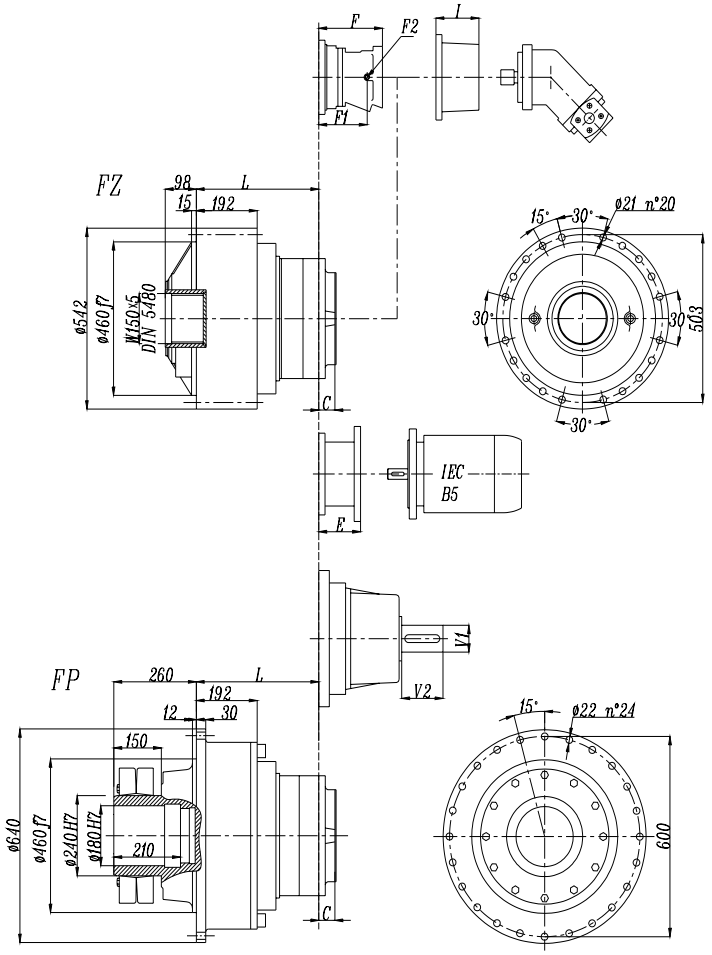
| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) (ta=20℃) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| R3 | 47.2 | 73000 | 73000 | 60000 | 48300 | 29800 | 24200 | 150 | 75 | 1500 | 2 500 | 3200 | 6L |
| | 54.1 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 150 | 75 | 1500 | 2 500 | 2600 | 6K |
| | 64.4 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 150 | 75 | 1500 | 2 500 | 2100 | 6G |
| | 76.9 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 125 | 75 | 1500 | 2 500 | 2100 | 6G |
| | 91.2 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 100 | 75 | 1500 | 2 500 | 1500 | 6E |
| | 105 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 90 | 75 | 1500 | 2 500 | 1500 | 6E |
| | 124 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 75 | 75 | 1500 | 2 500 | 850 | 6B |
| R4 | 152 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 80 | 40 | 1750 | 3 500 | 800 | 5G |
| | 173 | 105000 | 10000 | 97000 | 85000 | 53000 | 42800 | 80 | 40 | 1750 | 3 500 | 800 | 5G |
| | 198 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 70 | 40 | 1750 | 3 500 | 800 | 5G |
| | 236 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 60 | 40 | 1750 | 3 500 | 630 | 5E |
| | 279 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 50 | 40 | 1750 | 3 500 | 630 | 5E |
| | 326 | 99000 | 87000 | 79000 | 78000 | 49000 | 39700 | 43 | 40 | 1750 | 3 500 | 500 | 5C |
| | 389 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 32 | 40 | 1750 | 3 500 | 400 | 5B |
| | 462 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 26 | 40 | 1750 | 3 500 | 400 | 5B |
| | 531 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 23 | 40 | 1750 | 3 500 | 400 | 5B |
| | 650 | 90000 | 80000 | 70000 | 68000 | 42000 | 34000 | 21 | 40 | 1750 | 3 500 | 400 | 5B |
| | 772 | 80000 | 70000 | 65000 | 65000 | 41000 | 33000 | 16 | 40 | 1750 | 3 500 | 400 | 5B |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

## EP315 L


F
F2
I
F1
HZ
L
150
279
192
12
ø542
ø460 f7
ø300 f7
W150x5
DIN 5480
C
34
223
15°
30°
30°
30°
30°
503
HC
240
ø160
V3
V1
V2
PZ
150
W150x5
DIN 5480
IEC
B5
E
PC
L
240
ø160
169
C
72
72
140
140
410
608
315
35
280
368
508
620
ø33 n°8

# EP315 L




**FP version**

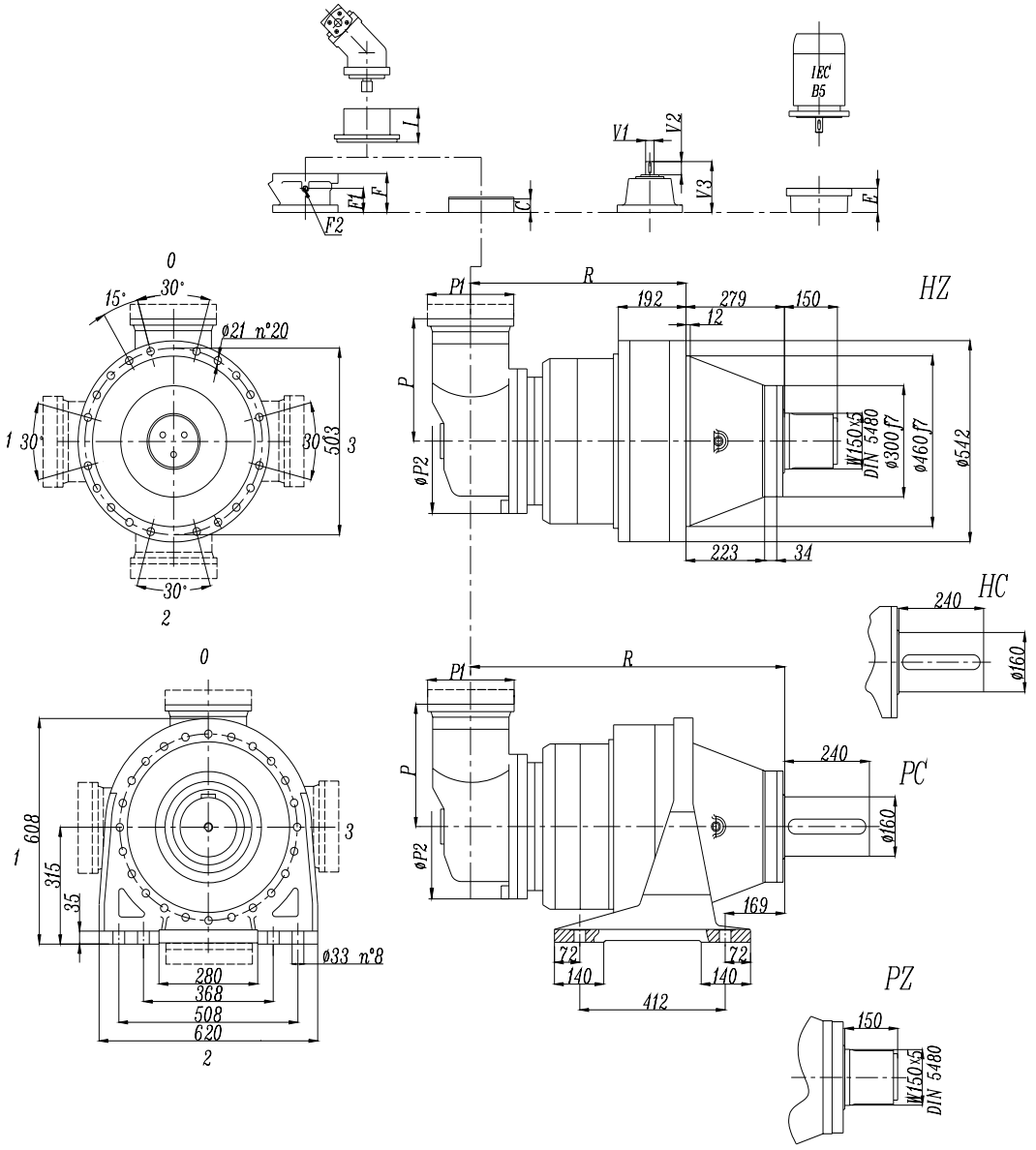
**Max. transmissible**

**126000 N.m**

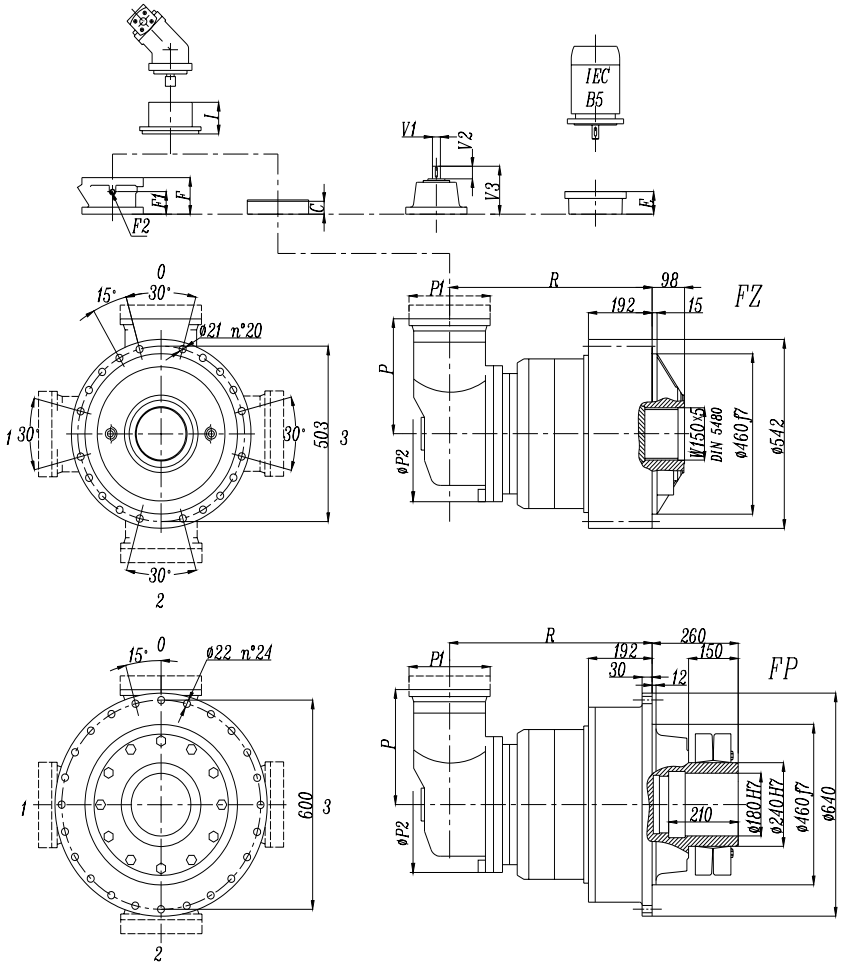
| | L | | | | Ref. weight (without input) (Kg) | | | | C | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | F | F1 | F2 | Type | Ref. Weight |
| **315 L1** | 174 | 453 | 174 | 174 | 370 | 500 | 280 | 330 | 116 | According to hydraulic motor | | | | | |
| **315 L2** | 386 | 665 | 386 | 386 | 455 | 585 | 365 | 415 | 81 | | 232 | 185 | 1/4 G | 6 | 46 Kg |
| **315 L3** | 519 | 798 | 519 | 519 | 500 | 630 | 410 | 460 | 51 | | 201 | 153 | 1/4 G | 6 | 38 Kg |
| **315 L4** | 612 | 891 | 612 | 612 | 512 | 642 | 422 | 472 | 37 | | 145 | 95 | 1/4 G | 5 | 22 Kg |

| | E (IEC motor input) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 | | | |
| **315 L1** | | | | | | | | | | | | | | |
| **315 L2** | | | | | | | | | | | | | | |
| **315 L3** | | | | | | | | 195 | 186 | 216 | 215 | | | |
| **315 L4** | | | | | | 114 | 144 | 114 | 174 | | | | | |

## EP315 R


IEC
B5
I
V1
V2
V3
F1
F
F2
C
E
0
15°
30°
ø21 n°20
1
30°
30
503
3
2
P1
R
192
279
150
12
HZ
P
øP2
W150x5
DIN 5480
ø300 f7
ø460 f7
ø542
223
34
240
HC
ø160
608
315
35
ø33 n°8
280
368
508
620
240
PC
169
72
140
412
PZ

## EP315 R

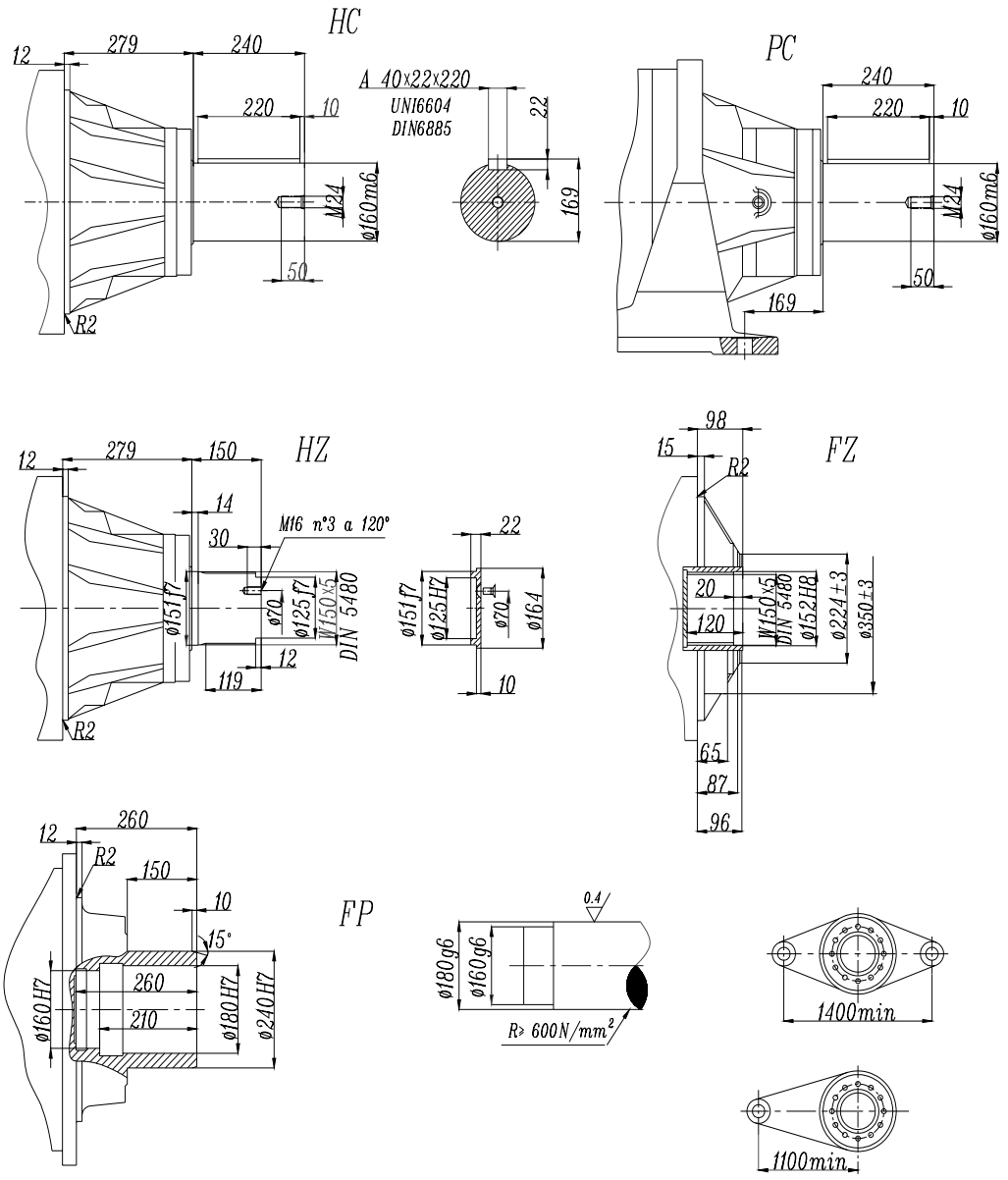



**FP version**
**Max. transmissible**
**126000 N.m**

| | R | | | | Ref. weight (without input) (Kg) | | | | C | P | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | | F | F1 | F2 | Type | Ref. Weight 15 Kg |
| | | | | | | | | | | | According | | | | | |
| **315 R3** | 611 | 890 | 611 | 611 | 600 | 730 | 510 | 560 | 45 | 390 | to hydraulic | 195 | 147 | 1/4 G | 6 | 38 |
| **315 R4** | 642 | 921 | 642 | 642 | 550 | 680 | 460 | 510 | 37 | 225 | motor | 145 | 95 | 1/4 G | 4 | 22 |

| | P1 | E (IEC motor input) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HZ | HC | FZ | FP | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 |
| | | | | | | | | | | | | | | | | |
| **315 R3** | 245 | 130 | 130 | 110 | 110 | | | | | | | | 152 | 182 | 212 | 193 |
| **315 R4** | 186 | 130 | 130 | 110 | 110 | | | | | | 114 | 144 | 144 | 174 | 174 | |

## EP315 L - EP315 R

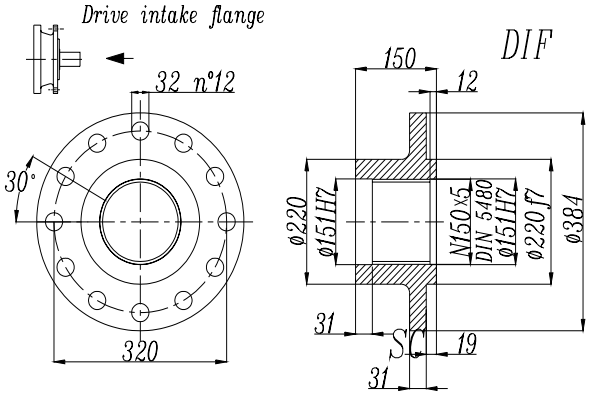


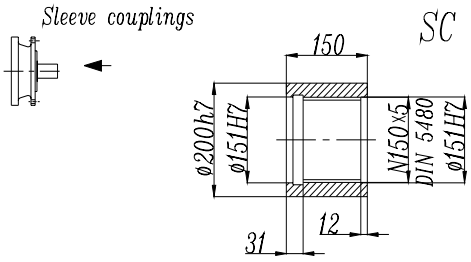

**FP version**

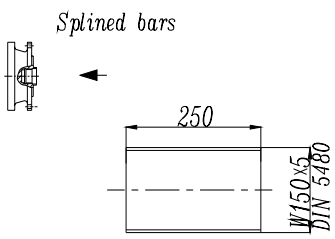
**Max. transmissible**

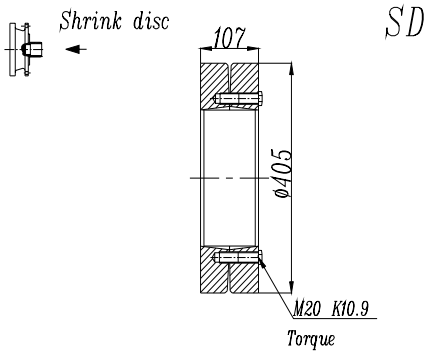
**126000 N.m**

## EP315 L - EP315 R

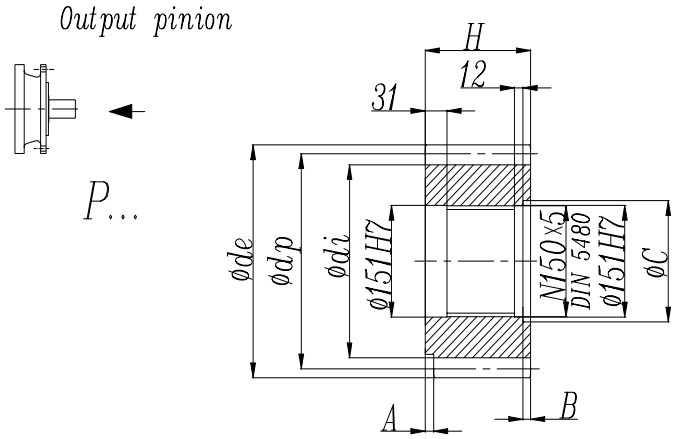


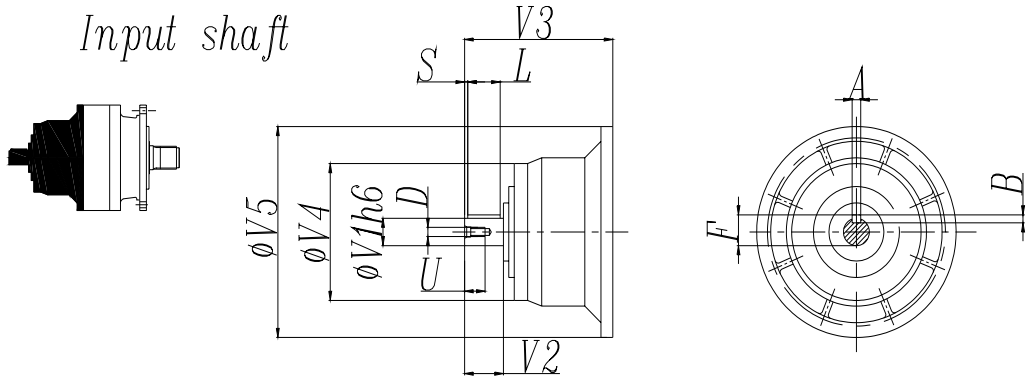



## EP315 L - EP315 R



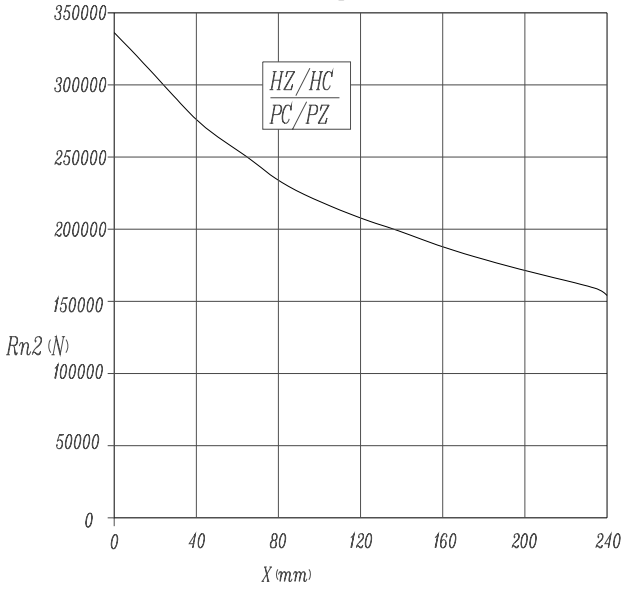

| | m | z | x | dp | di | de | H | A | B | C |
|---|---|---|---|---|---|---|---|---|---|---|
| **PRG1** | 18 | 16 | 0.500 | 288 | 261 | 342 | 160 | 0 | 10 | 166 |
| **PRG2** | 18 | 16 | 0.617 | 288 | 271 | 339 | 150 | 30 | 0 | 0 |

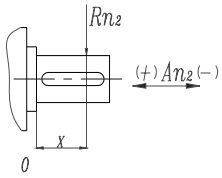



| | CODE | V1 | V2 | V3 | V4 | V5 | A | B | F | L | S | D | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **315 L2** | V11B | 80 | 130 | 348 | 200 | 428 | 22 | 14 | 85 | 110 | 10 | M16 | 36 |
| **315 L3** | V07B | 80 | 130 | 315 | 200 | 345 | 22 | 14 | 85 | 110 | 105 | M16 | 36 |
| | V07A | 60 | 105 | 315 | 155 | 345 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **315 L4** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |
| **315 R3** | V06B | 60 | 105 | 307 | 155 | 292 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **315 R4** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |

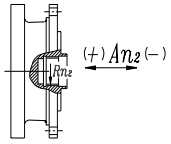
## EP315 L - EP315 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)



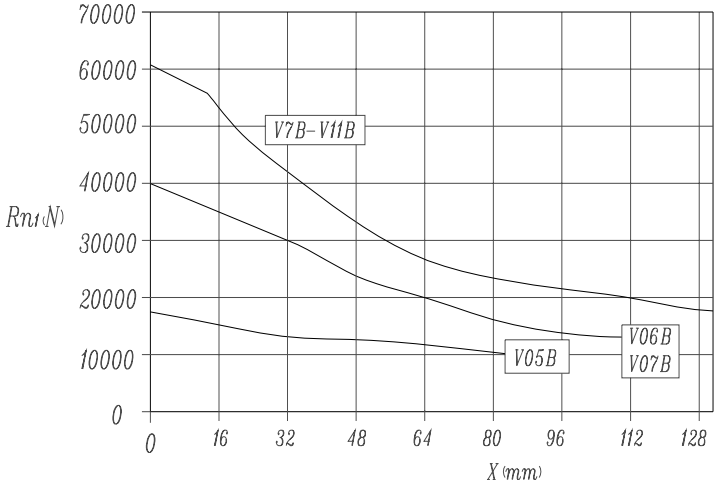

| | An2 (+) | An2 (−) |
|---|---|---|
| HZ-HC-PC-PZ | 280 000 | 210 000 |

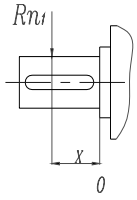



| | Rn2 | An2 (+/−) |
|---|---|---|
| FZ | 90 000 | 90 000 |

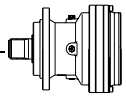
| Load corrective factor fh2 on shafts | fh2= n2 • h | | 10 000 | 25 000 | 50 000 | 100 000 | 500 000 | 1 000 000 |
|---|---|---|---|---|---|---|---|---|
| | fh2 | MZ-MC-PC-PZ-FZ | 1 | 0.74 | 0.58 | 0.46 | 0.27 | 0.21 |
| | | HZ-HC | 1 | 0.76 | 0.61 | 0.50 | 0.31 | 0.25 |

Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)



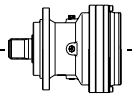

| Load corrective factor fh1 on shafts | Fh1= n1 • h | 250 000 | 500 000 | 1 000 000 | 2 00 000 | 5 000 000 | 10 000 000 |
|---|---|---|---|---|---|---|---|
| | fh1 | 1 | 0.79 | 0.63 | 0.50 | 0.37 | 0.29 |



## EP316L M2'=110000N.m

| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) (ta=20℃) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| L1 | 4.4 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 280 | 68 | 350 | 500 | | |
| | 5.3 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 280 | 68 | 350 | 500 | | |
| L2 | 18.0 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 180 | 50 | 750 | 1000 | | |
| | 23.1 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 180 | 50 | 750 | 1000 | | |
| | 27.6 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 180 | 50 | 750 | 1000 | | |
| | 32.7 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 180 | 50 | 750 | 1000 | | |
| L3 | 61.7 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 100 | 30 | 1500 | 2500 | 3200 | 6L |
| | 79.2 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 100 | 30 | 1500 | 2500 | 2600 | 6K |
| | 102 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 100 | 30 | 1500 | 2500 | 2100 | 6G |
| | 121 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 100 | 30 | 1500 | 2500 | 2100 | 6G |
| | 144 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 90 | 30 | 1500 | 2500 | 1500 | 6E |
| | 172 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 55 | 30 | 1500 | 2500 | 1100 | 6C |
| | 204 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 50 | 30 | 1500 | 2500 | 1100 | 6C |
| L4 | 226 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 60 | 18 | 1750 | 3 500 | 800 | 5G |
| | 290 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 60 | 18 | 1750 | 3 500 | 800 | 5G |
| | 333 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 60 | 18 | 1750 | 3 500 | 630 | 5E |
| | 396 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 51 | 18 | 1750 | 3 500 | 500 | 5C |
| | 427 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 47 | 18 | 1750 | 3 500 | 500 | 5C |
| | 508 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 40 | 18 | 1750 | 3 500 | 400 | 5B |
| | 606 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 34 | 18 | 1750 | 3 500 | 400 | 5B |
| | 676 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 30 | 18 | 1750 | 3 500 | 400 | 5B |
| | 827 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 25 | 18 | 1750 | 3 500 | 400 | 5B |
| | 981 | 135000 | 126000 | 113000 | 100000 | 66000 | 54000 | 22 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1171 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 18 | 18 | 1750 | 3 500 | 400 | 5B |
| | 1390 | 130000 | 120000 | 110000 | 95000 | 60000 | 50000 | 15.5 | 18 | 1750 | 3 500 | 400 | 5B |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

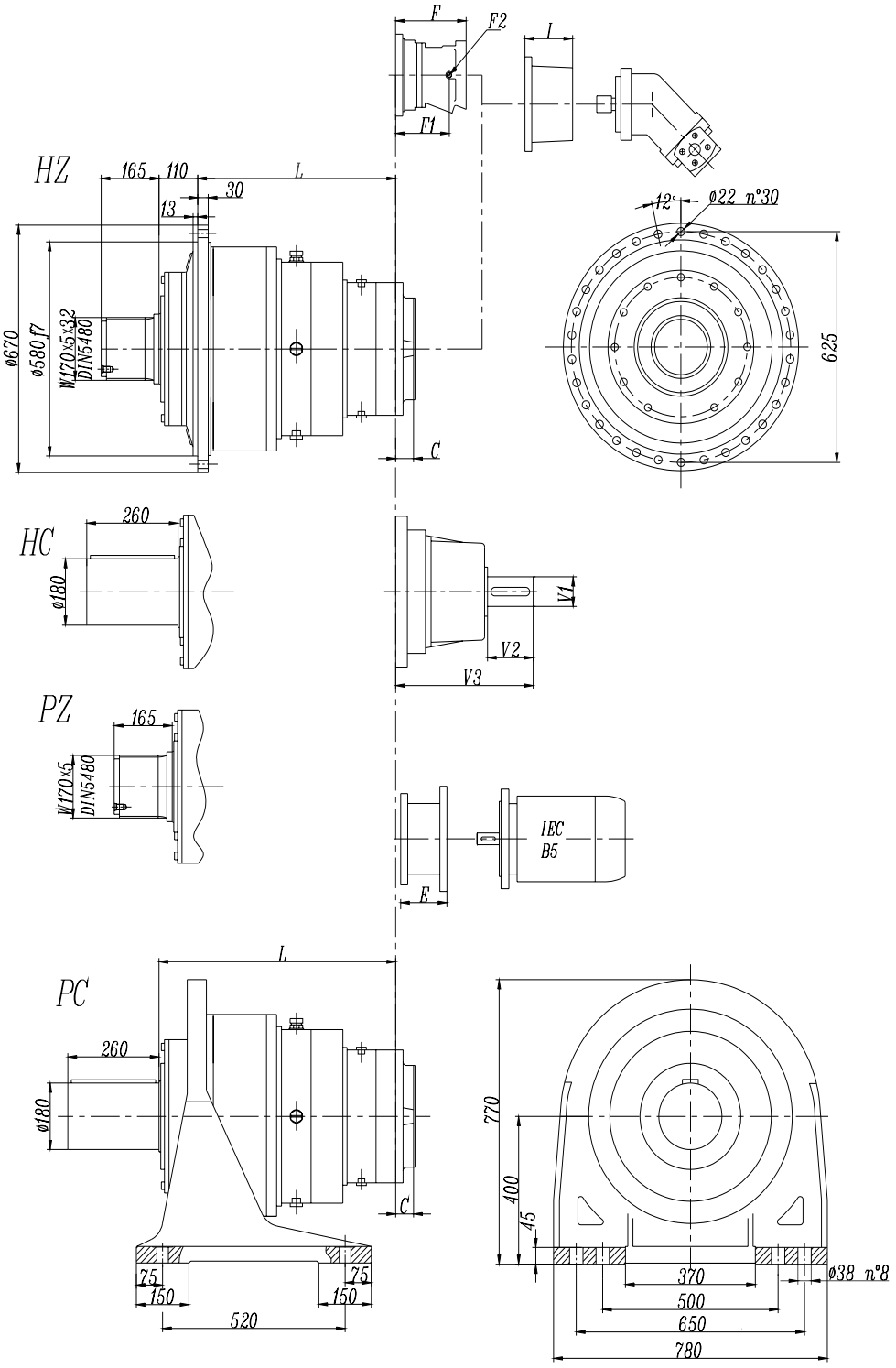


## EP316R M2'=110000N.m

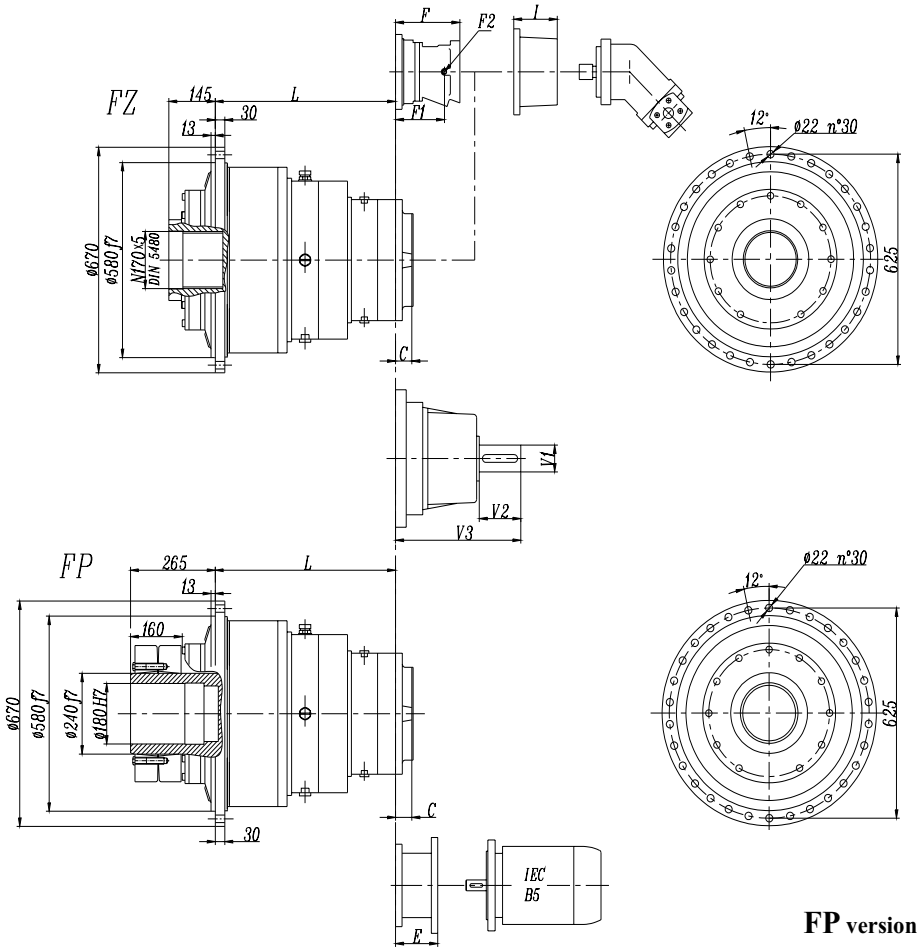
| | I | $Mn_2$ (N.m) | | | | | | $P_1$ | $P_t$(KW) (ta=20℃) | $n_1$ | $n_{1max}$ | $M_b$ | Brake type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1: | $n_2$.h 10000 | $n_2$.h 25000 | $n_2$.h 50000 | $n_2$.h 100000 | $n_2$.h 500000 | $n_2$.h 1000000 | (KW) | ($n_1$=1500) | ($min^{-1}$) | ($min^{-1}$) | (N.m) | |
| R3 | 52.7 | 105000 | 79000 | 64000 | 52000 | 32200 | 26200 | 100 | 90 | 1500 | 2 500 | 3200 | 6L |
| | 67.7 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 150 | 90 | 1500 | 2 500 | 2600 | 6K |
| | 80.7 | 130000 | 12000 | 110000 | 95000 | 60000 | 50000 | 150 | 90 | 1500 | 2 500 | 2100 | 6G |
| | 95.8 | 130000 | 12000 | 110000 | 95000 | 60000 | 50000 | 130 | 90 | 1500 | 2 500 | 2100 | 6G |
| R4 | 234 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 75 | 45 | 1750 | 3 500 | 800 | 5G |
| | 300 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 60 | 45 | 1750 | 3 500 | 630 | 5E |
| | 385 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 52 | 45 | 1750 | 3 500 | 500 | 5C |
| | 459 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 45 | 45 | 1750 | 3 500 | 400 | 5B |
| | 545 | 135000 | 12600 | 113000 | 100000 | 66000 | 54000 | 40 | 45 | 1750 | 3 500 | 400 | 5B |
| | 650 | 130000 | 12000 | 110000 | 95000 | 60000 | 50000 | 33 | 45 | 1750 | 3 500 | 400 | 5B |
| | 772 | 130000 | 12000 | 110000 | 95000 | 60000 | 50000 | 28 | 45 | 1750 | 3 500 | 400 | 5B |

**$M_{2max}$=1.2×Mn2(n2×h=10 000)**

## EP316 L


F
F2
I
F1
HZ
165
110
L
30
13
ø670
ø580 f7
W170x5x32
DIN5480
C
12°
ø22 n°30
625
HC
260
ø180
V1
V2
V3
PZ
165
W170x5
DIN5480
IEC
B5
E
PC
L
260
ø180
C
75
150
520
75
150
770
400
45
370
500
650
780
ø38 n°8

## EP316 L




**FP version**

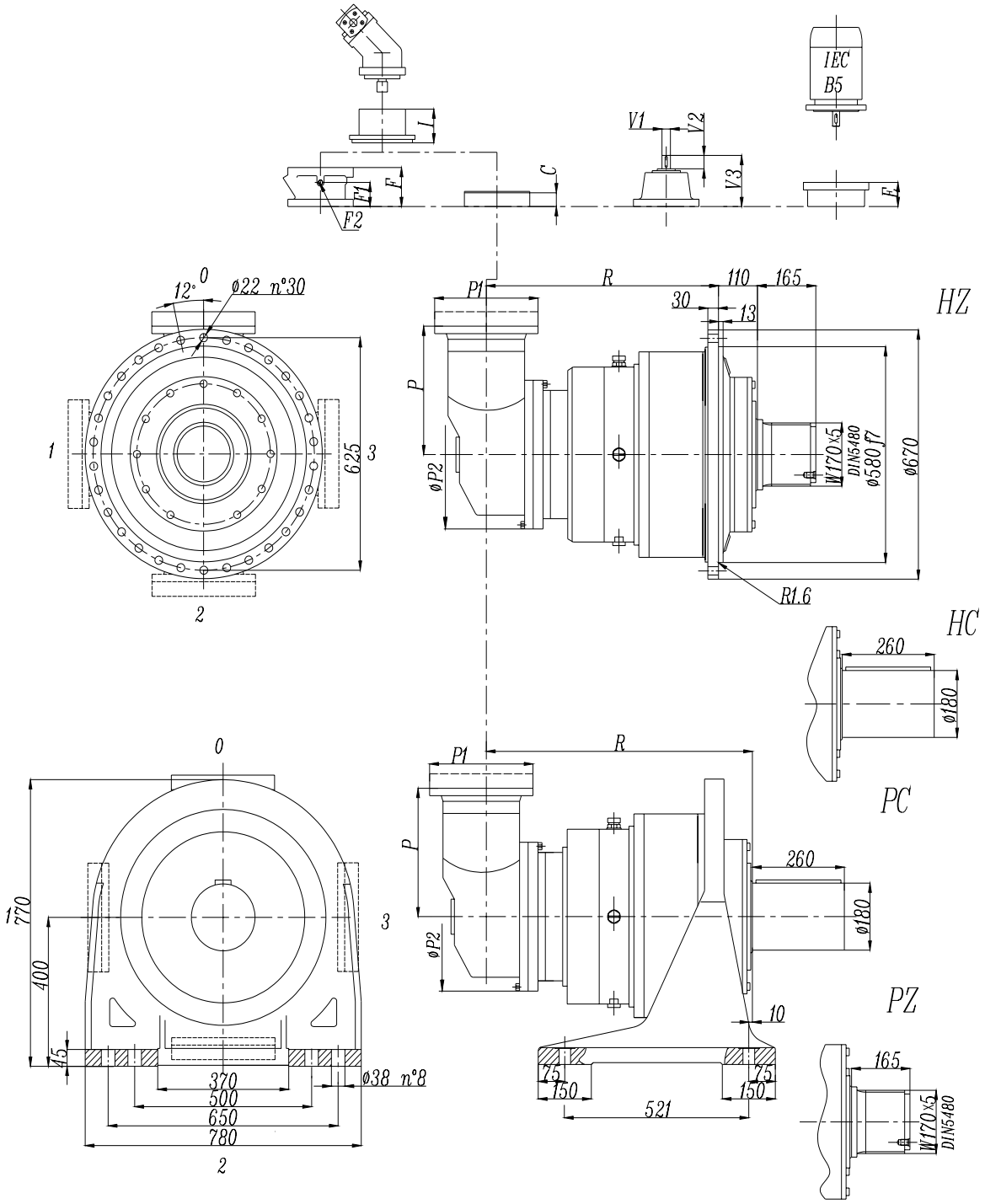
**Max. transmissible**

**162000 N.m**

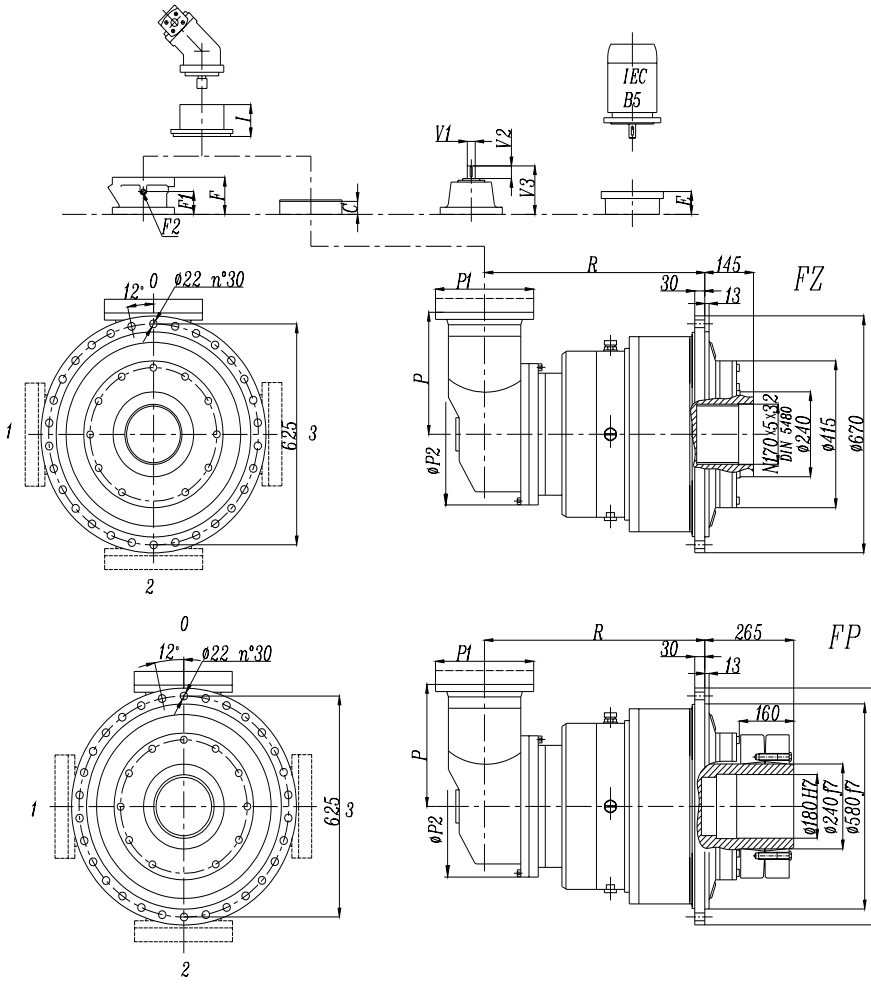
| | L | | | | Ref. weight (without input) (Kg) | | | | C | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | F | F1 | F2 | Type | Ref. Weight |
| **316 L1** | 179 | 289 | 179 | 179 | 500 | 700 | 430 | 450 | 156 | According to hydraulic motor | | | | | |
| **316 L2** | 431 | 541 | 431 | 431 | 590 | 790 | 520 | 540 | 81 | | | | | | |
| **316 L3** | 564 | 674 | 564 | 564 | 640 | 840 | 590 | 460 | 51 | | 201 | 153 | 1/4 G | 6 | 38 Kg |
| **316 L4** | 657 | 767 | 657 | 657 | 660 | 860 | 610 | 472 | 37 | | 145 | 95 | 1/4 G | 5 | 22 Kg |

| | E (IEC motor input) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 | | | |
| **316 L1** | | | | | | | | | | | | | | |
| **316 L2** | | | | | | | | | | | | | | |
| **316 L3** | | | | | | | | 195 | 186 | 216 | 215 | | | |
| **316 L4** | | | | | | 114 | 144 | 114 | 174 | | | | | |

## EP316 R


IEC
B5
V1
V2
V3
I
C
F
F1
F2
0
12°
Ø22 n°30
1
2
3
6.25
P1
R
110
165
30
13
HZ
P
ØP2
W170X5
DIN5480
Ø580 f7
Ø670
R1.6
HC
260
Ø180
PC
PZ
770
400
45
370
500
650
780
Ø38 n°8
10
75
150
521
165

## EP316 R




**FP version**

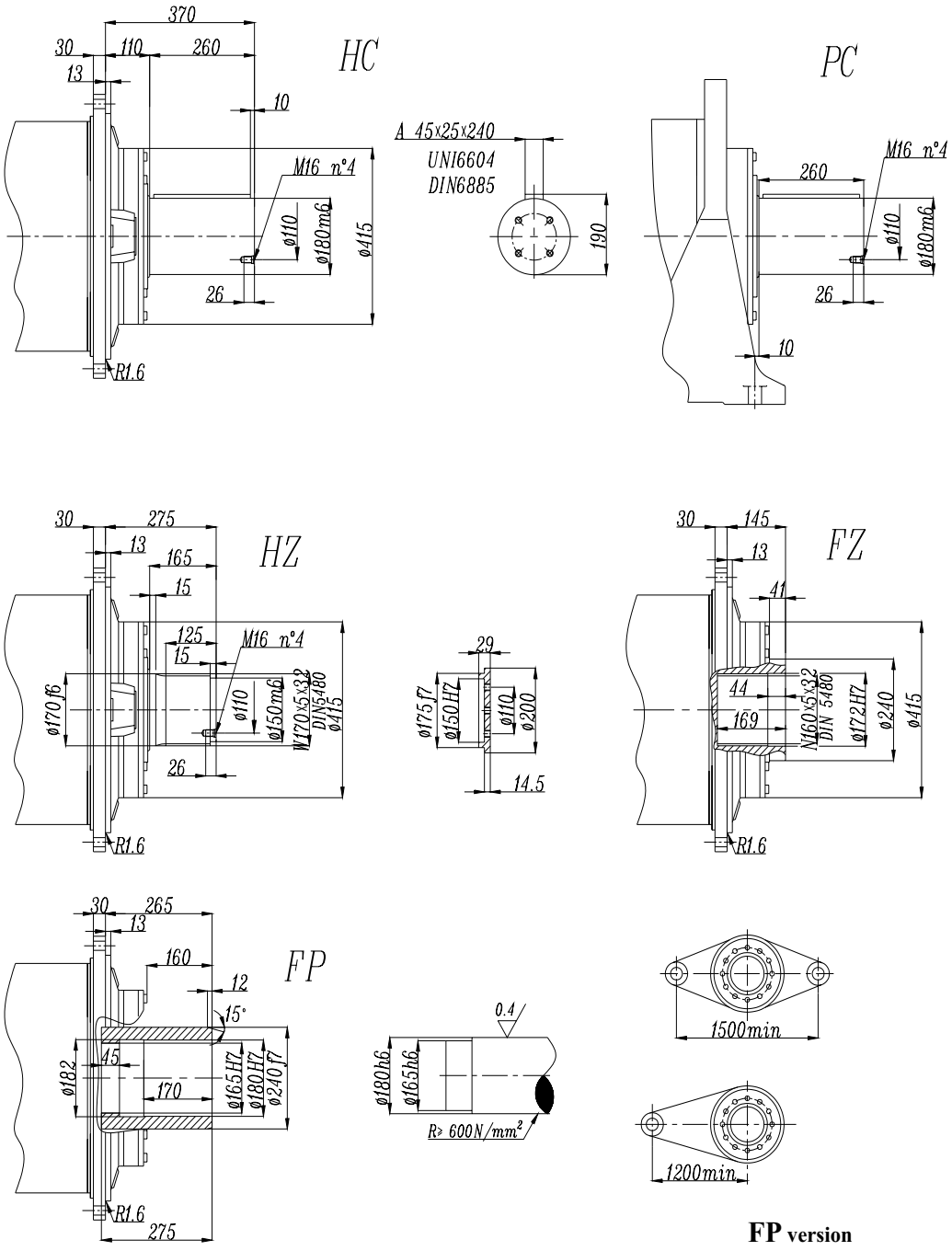
**Max. transmissible**

**162000 N.m**

| | R | | | | Ref. weight (without input) (Kg) | | | | C | P | I | Brake | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HZ HC | PC PZ | FZ | FP | HZ HC | PC PZ | FZ | FP | | | | F | F1 | F2 | Type | Ref. Weight 15 Kg |
| | | | | | | | | | | | According | | | | | |
| **316 R3** | 656 | 766 | 656 | 656 | 720 | 920 | 650 | 670 | 45 | 480 | to hydraulic | 195 | 147 | 1/4 G | 6 | 38 |
| **316 R4** | 687 | 797 | 687 | 687 | 690 | 890 | 620 | 640 | 37 | 345 | motor | 145 | 95 | 1/4 G | 4 | 22 |

| | P1 | E (IEC motor input) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | HZ | HC | FZ | FP | IEC 71 | IEC 80 | IEC 90 | IEC 100 | IEC 112 | IEC 132 | IEC 160 | IEC 180 | IEC 200 | IEC 225 | IEC 250 |
| **316 R3** | 245 | 130 | 130 | 110 | 110 | | | | | | | | 152 | 182 | 212 | 193 |
| **316 R4** | 186 | 130 | 130 | 110 | 110 | | | | | | 114 | 144 | 144 | 174 | 174 | |

## EP316 L - EP316 R

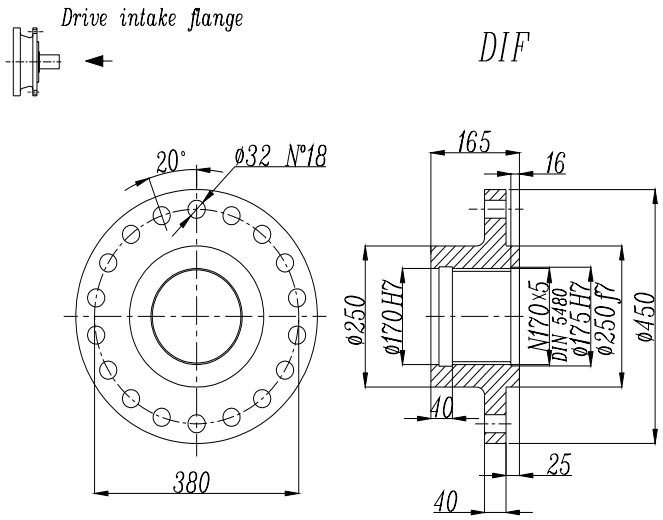


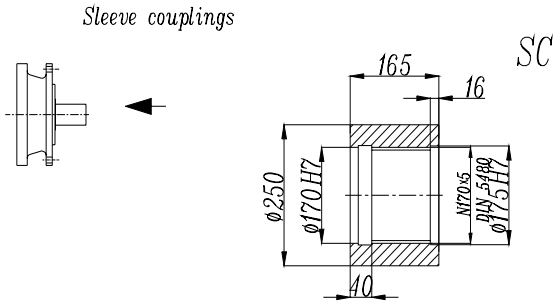

**FP version**

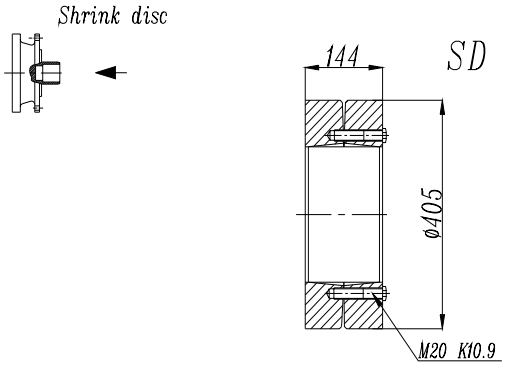
**Max. transmissible**

**162000 N.m**

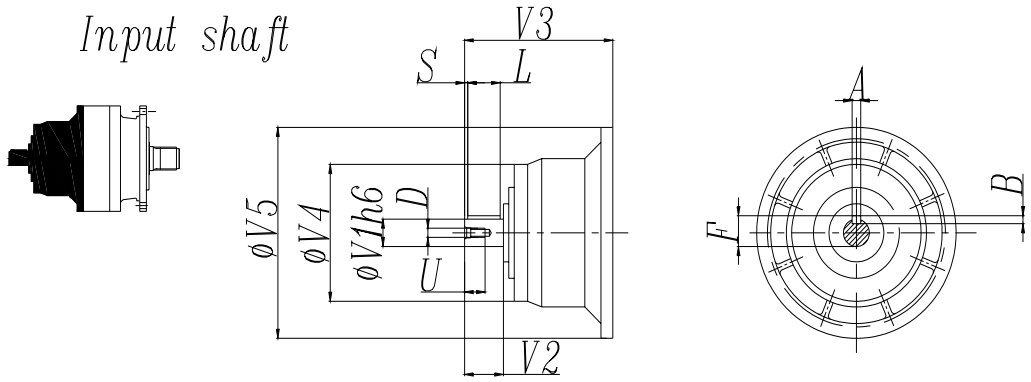
## EP316 L - EP316 R



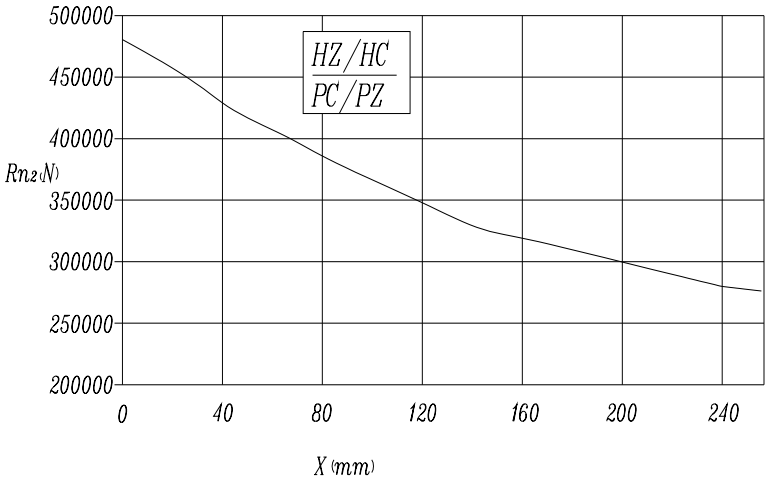
## EP316 L - EP316 R

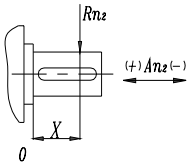



| | CODE | V1 | V2 | V3 | V4 | V5 | A | B | F | L | S | D | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **316 L2** | V11B | 80 | 130 | 348 | 200 | 428 | 22 | 14 | 85 | 110 | 10 | M16 | 36 |
| **316 L3** | V07B | 80 | 130 | 316 | 200 | 345 | 22 | 14 | 85 | 110 | 105 | M16 | 36 |
| | V07A | 60 | 105 | 316 | 155 | 345 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **316 L4** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |
| **316 R3** | V06B | 60 | 105 | 307 | 155 | 292 | 18 | 11 | 64 | 90 | 7.5 | M16 | 36 |
| **316 R4** | V05B | 48 | 82 | 239 | 155 | 245 | 14 | 9 | 51.5 | 70 | 6 | M16 | 36 |

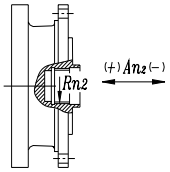
## EP316 L - EP316 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)




| | An2 (+) | An2 (−) |
|---|---|---|
| HZ-HC-PC-PZ | 360 000 | 300 000 |

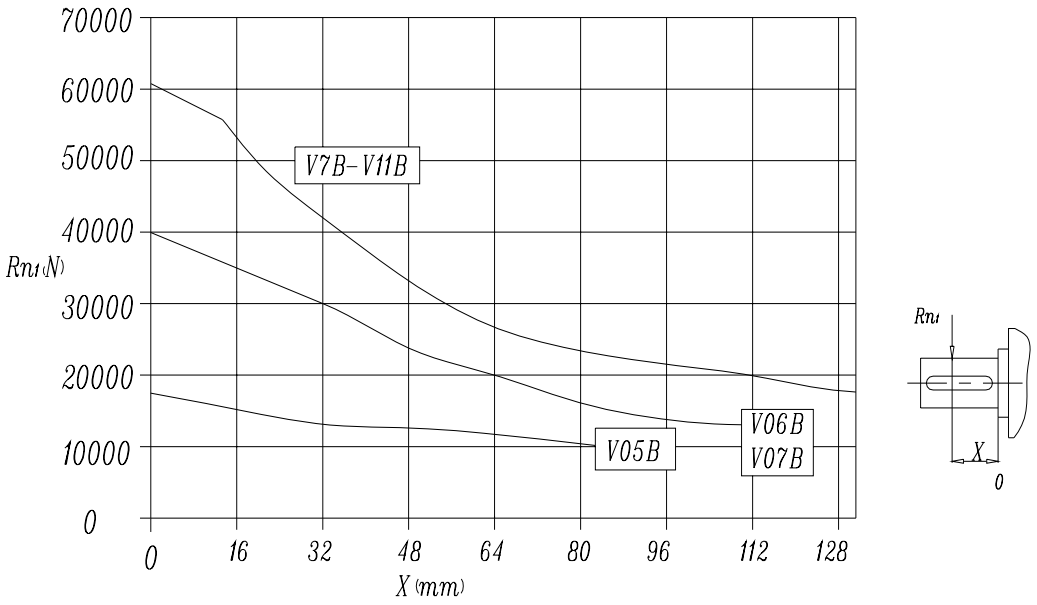



| | Rn2 | An2 (+/−) |
|---|---|---|
| FZ | 150 000 | 150 000 |

## EP316 L - EP316 R

| Load corrective factor fh2 on shafts | fh2= n2 • h | | 10 000 | 25 000 | 50 000 | 100 000 | 500 000 | 1 000 000 |
|---|---|---|---|---|---|---|---|---|
| | fh2 | MZ-MC-PC-PZ-FZ | 1 | 0.74 | 0.58 | 0.46 | 0.27 | 0.21 |
| | | HZ-HC | 1 | 0.76 | 0.61 | 0.50 | 0.31 | 0.25 |

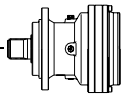
Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)




| Load corrective factor fh1 on shafts | Fh1= n1 • h | 250 000 | 500 000 | 1 000 000 | 2 00 000 | 5 000 000 | 10 000 000 |
|---|---|---|---|---|---|---|---|
| | fh1 | 1 | 0.79 | 0.63 | 0.50 | 0.37 | 0.29 |

# EP400 SERIES

# TRACK DRIVES

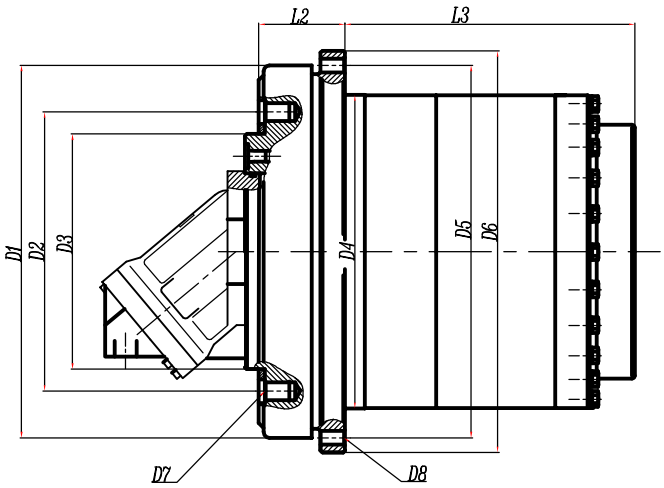


The EP400 series track drives by **HangZhou Ever-Power Transmission Co.,Ltd.** enjoy following features:

1. **Output torque Range:** 1000 ... 220000 N.m
2. **Gear Ratios:** i=5.3 ... 365
3. **Support:** rotating housing flange to fit tracks
4. **Applicable motors:** axial piston hydraulic motors, Hydraulic orbit motors
5. **Hydraulic motor options:** Pressure relief valve, Overcenter valve on request
6. **Brake:** hydraulic released parking brake on request

| Track drives Type | Max. torque N.m | Range of ratios ( i ) | Max. Input speed (rpm) | Braking torque (N.m) |
|---|---|---|---|---|
| EP400 L1 | 1300 | 6.09 | 1000 | 120-250 |
| EP401 L1 | 2800 | 6.09 | 1000 | 250-350 |
| EP402 L2 | 5000 | 12.4-25.8 | 3000 | ----- |
| EP403 L2 | 6000 | 15.4-40 | 3000 | 220-310 |
| EP405 L2 | 10000 | 20-53 | 3000 | 220-310 |
| EP406 L2,L3 | 17000 | 26-140 | 3000 | 220-450 |
| EP406A L3 | 24000 | 90-140 | 3000 | 300 |
| EP407 L3 | 36000 | 66-140 | 3000 | 550 |
| EP410 L3 | 50000 | 67-150 | 3000 | 800 |
| EP413 L3 | 60000 | 94-170 | 3000 | 750 |
| EP414 L3 | 80000 | 76-186 | 3000 | 1025 |
| EP415 L3 | 110000 | 95-215 | 3000 | 1100 |
| EP416 L3 | 160000 | 160-250 | 3000 | 1100 |
| EP417 L3 | 220000 | 95-365 | 3000 | 1400 |

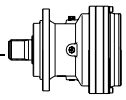
# TRACK DRIVES




| Track drives | Dimensions | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | L1 | L2 | L3 |
| EP400 L1 | 195 | 175 | 155 | 160 | 180 | 200 | M10×1.5 n=8 | M10×1.5 n=8 | 21 | 40 | 104 |
| EP401 L1 | 230 | 200 | 180 | 190 | 210 | 230 | M10×1.5 n=8 | M10×1.5 n=8 | 21 | 40 | 130 |
| EP402 L2 | 190.5 | 165.1 | 133.3 | 200 | 241.3 | 279.4 | 5/8”-11 UNC n=8 | 1/2”-13 UNC n=9 | 10.2 | 105.9 | 145 |
| EP403 L2 | 260 | 230 | 190 | 200 | 240 | 280 | M16 ×2 n=8 | M20×1.5 n=8 | 34 | 72 | 160 |
| EP405 L2 | 260 | 230 | 190 | 220 | 260 | 290 | M16×2 n=12 | M16×2 n=16 | 18 | 72 | 166 |
| EP406 L2,L3 | 320 | 290 | 250 | 280 | 305 | 330 | M20×2.5 n=16 | M16×2 n=16 | 30 | 82 | 230 |
| EP406A L3 | 320 | 290 | 250 | 280 | 305 | 330 | M20×2.5 n=16 | M16×2 n=16 | 30 | 82 | 240 |
| EP407 L3 | 350 | 310 | 270 | 320 | 350 | 380 | M20×2.5 n=16 | M16×1.5 n=16 | 30 | 90 | 269 |
| EP410 L3 | 350 | 310 | 270 | 350 | 400 | 430 | M20×1.5 n=20 | M20×1.5 n=16 | 40 | 82 | 313 |
| EP413 L3 | 410 | 370 | 330 | 370 | 410 | 450 | M20×1.5 n=20 | M20×2.5 n=20 | 25 | 114 | 318 |
| EP414 L3 | 480 | 430 | 380 | 430 | 480 | 520 | M24×3 n=20 | M24×3 n=20 | 22 | 148 | 338 |
| EP415 L3 | 500 | 460 | 420 | 460 | 500 | 540 | M24×3 n=24 | M18× 1.5 n=36 | 22 | 165 | 361 |
| EP416 L3 | 560 | 510 | 450 | 535 | 600 | 650 | M24 ×2 n=30 | M24×2 n=30 | 30 | 168 | 380 |
| EP417 L3 | 650 | 600 | 460 | 610 | 680 | 735 | M24×2 n=30 | M24 ×2 n=30 | 45 | 170 | 400 |

# EP600 SERIES

# WHEEL DRIVES

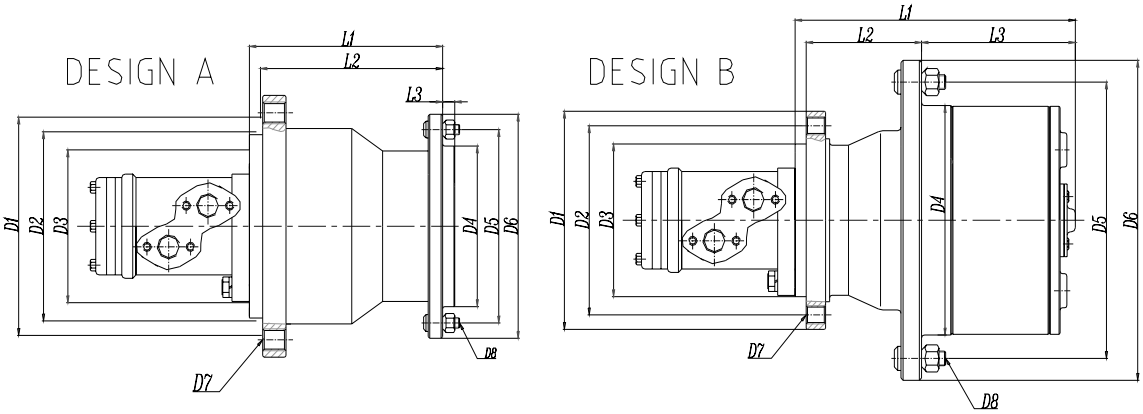


The EP600 series wheel drives by **HangZhou Ever-Power Transmission Co.,Ltd.** enjoy following features:

1. **Output torque Range:** 1750 ... 60000 N.m
2. **Gear Ratios:** i=5.8 ... 160
3. **Support:** rotating housing flange to fit wheels and drums
4. **Applicable motors:** axial piston hydraulic motors, Hydraulic orbit motors
5. **Hydraulic motor options:** Pressure relief valve, Overcenter valve on request
6. **Brake:** hydraulic released parking brake on request

| Track drives Type | Max. torque N.m | Range of ratios ( i ) | Max. Input speed (rpm) | Braking torque (N.m) | Design |
|---|---|---|---|---|---|
| EP601 L1A | 1750 | 5.77 | 1000 | 450-600 | A |
| EP603 L2A | 4000 | 19-23-32-40 | 3000 | 210 | A |
| EP603 L2B | 4000 | 19-23-32-40 | 3000 | 210 | B |
| EP602 L2 | 5000 | 12.4-25.8 | 3000 | ----- | B |
| EP605 L2 | 7000 | 22-27-30-42-53 | 3000 | 220-310 | B |
| EP606 L2, L3 | 12000 | 30-35-43-68-79 | 3000 | 300-800 | B |
| EP607 L2, L3 | 17000 | 33-75-108 | 3000 | 300-600 | B |
| EP609 L2, L3 | 23000 | 33-142 | 3000 | 300-600 | B |
| EP610 L2, L3 | 30000 | 20-111 | 3000 | 300-800 | B |
| EP611 L2, L3 | 36000 | 41-47 | 3000 | 300-800 | B |
| EP613 L3 | 45000 | 108 | 3000 | 300-800 | B |
| EP615 L3 | 60000 | 108 | 3000 | 300-1000 | B |

# WHEEL DRIVES




| Wheel drives | Dimensions | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | L1 | L2 | L3 | Design |
| EP601 L1A | 260 | 230 | 200 | 152.4 | 203.2 | 230 | 15n=8 | M14×1.5 n=8 | 245 | 195 | 10 | A |
| EP603 L2A | 270 | 230 | 190 | 160 | 205 | 280 | M6 ×2 n=8 | M18×1.5 n=6 | 230 | 175 | 25 | A |
| EP603 L2B | 270 | 230 | 190 | 200 | 245 | 280 | M6 ×2 n=8 | M18×1.5 n=6 | 230 | 72 | 128 | B |
| EP602 L2 | 190.5 | 165.1 | 133.35 | 200 | 241.3 | 279.4 | 5/8”-11 UNC n=8 | 1/2”-13 UNC n=9 | 261 | 105.9 | 145 | B |
| EP605 L2 | 270 | 230 | 190 | 220 | 275 | 310 | M16×2 n=8 | M20×1.5 n=6 | 260 | 72 | 176 | B |
| EP606 L2, L3 | 330 | 300 | 270 | 280 | 335 | 370 | M16×2 n=18 | M22×1.5n=10 | 330 | 115 | 190 | B |
| EP607 L2, L3 | 380 | 285 | 240 | 320 | 380 | 410 | M20×2.5 n=20 | M18×1.5 n=20 | 408 | 82 | 298 | B |
| EP609 L2, L3 | 380 | 285 | 240 | 350 | 400 | 435 | M20×2.5 n=20 | M20×1.5 n=16 | 413 | 91 | 303 | B |
| EP610 L2, L3 | 375 | 340 | 300 | 350 | 400 | 435 | M20×2.5 n=16 | M22×1.5 n=16 | 425 | 91 | 303 | B |
| EP611 L2, L3 | 425 | 325 | 290 | 410 | 455 | 490 | M20×2.5 n=24 | M20×1.5n=24 | 498 | 110 | 365 | B |
| EP613 L3 | 425 | 325 | 280 | 410 | 455 | 490 | M20×2.5 n=24 | M20×1.5n=24 | 510 | 110 | 380 | B |
| EP615 L3 | 500 | 460 | 420 | 460 | 510 | 550 | M20×2.5 n=24 | M20×1.5n=24 | 565 | 130 | 415 | B |

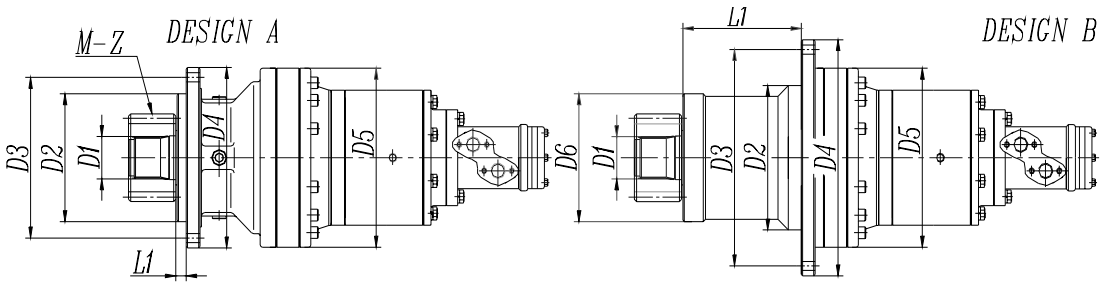
# EP700 SERIES

# SLEWING DRIVES

The EP700 series slew drives by **HangZhou Ever-Power Transmission Co.,Ltd.** enjoy following features:

1. **Output torque Range:** 1000 ... 80000 N.m
2. **Gear Ratios:** i=3,3 ... 3000
3. **Support:** slew support (with Flange mounted)
4. **Electric Brake:**DC and AC type
5. **Output shaft:** splined or with integral pinion. Output shafts supported by heavy duty capacity bearings
6. **Applicable motors:** ***axial piston hydraulic motors, Hydraulic orbit motors, IEC electric motors***
7. **Hydraulic motor options:** Pressure relief valve, Overcenter valve, parking brake on request

| Slewing drives Type | Max. torque (N.m) | | Range of ratios (i) | Max. Input speed (rpm) | Braking torque (N.m) | Design |
|---|---|---|---|---|---|---|
| | Excavator | Crane | | | | |
| EP700L1A | 1000 | 1200 | 3.38-7.2 | 2000 | 50-400 | A |
| EP701L1A | 1800 | 2400 | 3.38-7.2 | 2000 | 50-400 | A |
| EP703L2A | 2500 | 3500 | 12-44 | 3000 | 50-400 | A |
| EP705L2A | 5000 | 6500 | 12-44 | 3000 | 50-400 | A |
| EP705L2B | 5000 | 6500 | 12-44 | 3000 | 50-400 | B |
| EP706L2B | 7500 | 10000 | 13-44 | 3000 | 400-1000 | B |
| EP707L2B | 9000 | 15000 | 13-43 | 3000 | 400-1000 | B |
| EP709L2B | 12000 | 20000 | 14-47 | 3000 | 400-1000 | B |
| EP710L2B | 18000 | 30000 | 14-45 | 2500 | 400-1000 | B |
| EP711L2B | 20000 | 35000 | 14-45 | 2500 | 400-1000 | B |
| EP713L3B | 40000 | 55000 | 50-300 | 2500 | 400-1000 | B |
| EP715L3B | 70000 | 80000 | 52-320 | 2500 | 400-1000 | B |




| Slewing drives Type | Dimensions | | | | | | | | | | Design |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | D1 | | D2 | D3 | D4 | D5 | D6 | L1 | M | Z | |
| EP700L1A | 40×36 DIN 5482 | 19Z×2m×30P GB3478.1 | 150 | 195 | 220 | 185 | -- | 31 | Module and number of teeth of pinion please see PE300 series "Output pinion" | | A |
| EP701L1A | 40×36 DIN 5482 | 19Z×2m×30P GB3478.1 | 150 | 195 | 220 | 185 | -- | 31 | | | A |
| EP703L2A | 58×53 DIN 5482 | 28Z×2m×30P GB3478.1 | 175 | 245 | 272 | 245 | -- | 41 | | | A |
| EP705L2A | 58×53 DIN 5482 | 28Z×2m×30P GB3478.1 | 175 | 245 | 272 | 245 | -- | 41 | | | A |
| EP705L2B | 58×53 DIN 5482 | 28Z×2m×30P GB3478.1 | 195 | 245 | 290 | 245 | 180 | 171 | | | B |
| EP706L2B | 70×64 DIN 5482 | 34Z×2m×30P GB3478.1 | 250 | 325 | 360 | 292 | 200 | 225 | | | B |
| EP707L2B | 80×74 DIN 5482 | 39Z×2m×30P GB3478.1 | 280 | 314 | 348 | 348 | 230 | 295 | | | B |
| EP709L2B | 80×74 DIN 5482 | 39Z×2m×30P GB3478.1 | 280 | 380 | 420 | 348 | 250 | 295 | | | B |
| EP710L2B | 100×94 DIN 5482 | 32Z×3m×30P GB3478.1 | 425 | 460 | 500 | 400 | 300 | 360 | | | B |
| EP711L2B | 100×94 DIN 5482 | 32Z×3m×30P GB3478.1 | 425 | 460 | 500 | 428 | 300 | 345 | | | B |
| EP713L3B | 120×3 DIN 5480 | 39Z×3m×30P GB3478.1 | 400 | 510 | 560 | 445 | 340 | 420 | | | B |
| EP715L3B | 150×5 DIN 5480 | 29Z×5m×30P GB3478.1 | 470 | 600 | 640 | 542 | 370 | 465 | | | B |