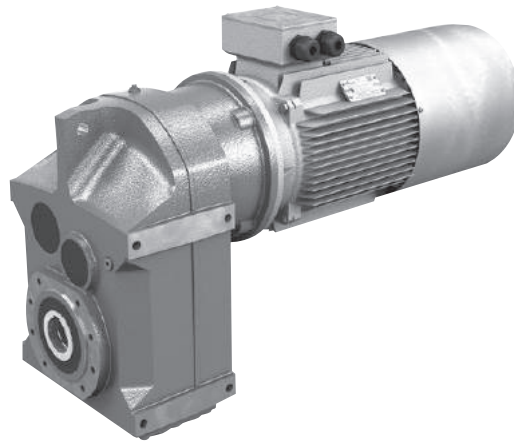


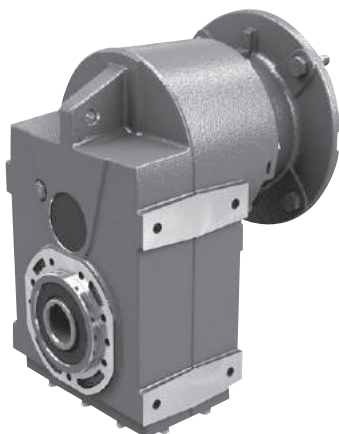
**S**  
SERIES

**CS**

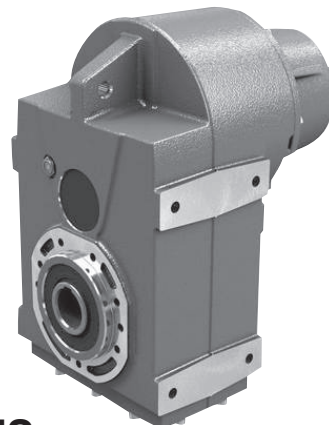


**샤프트 마운트 기어드 모터와 기어 유니트**  
**Shaft mounted geared motors and gear units**

**S**



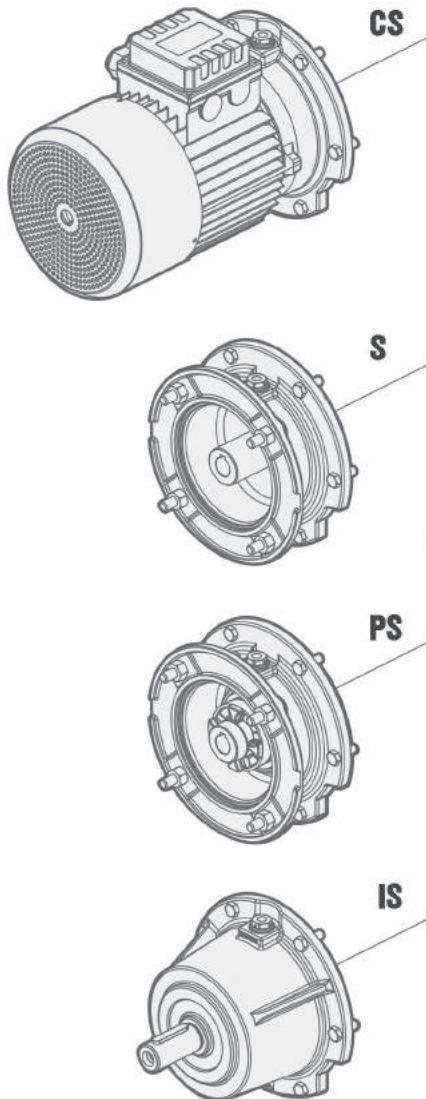
**IS**



## 모듈방식 / Modularity

## S

주철시리즈 / Grey cast iron series.



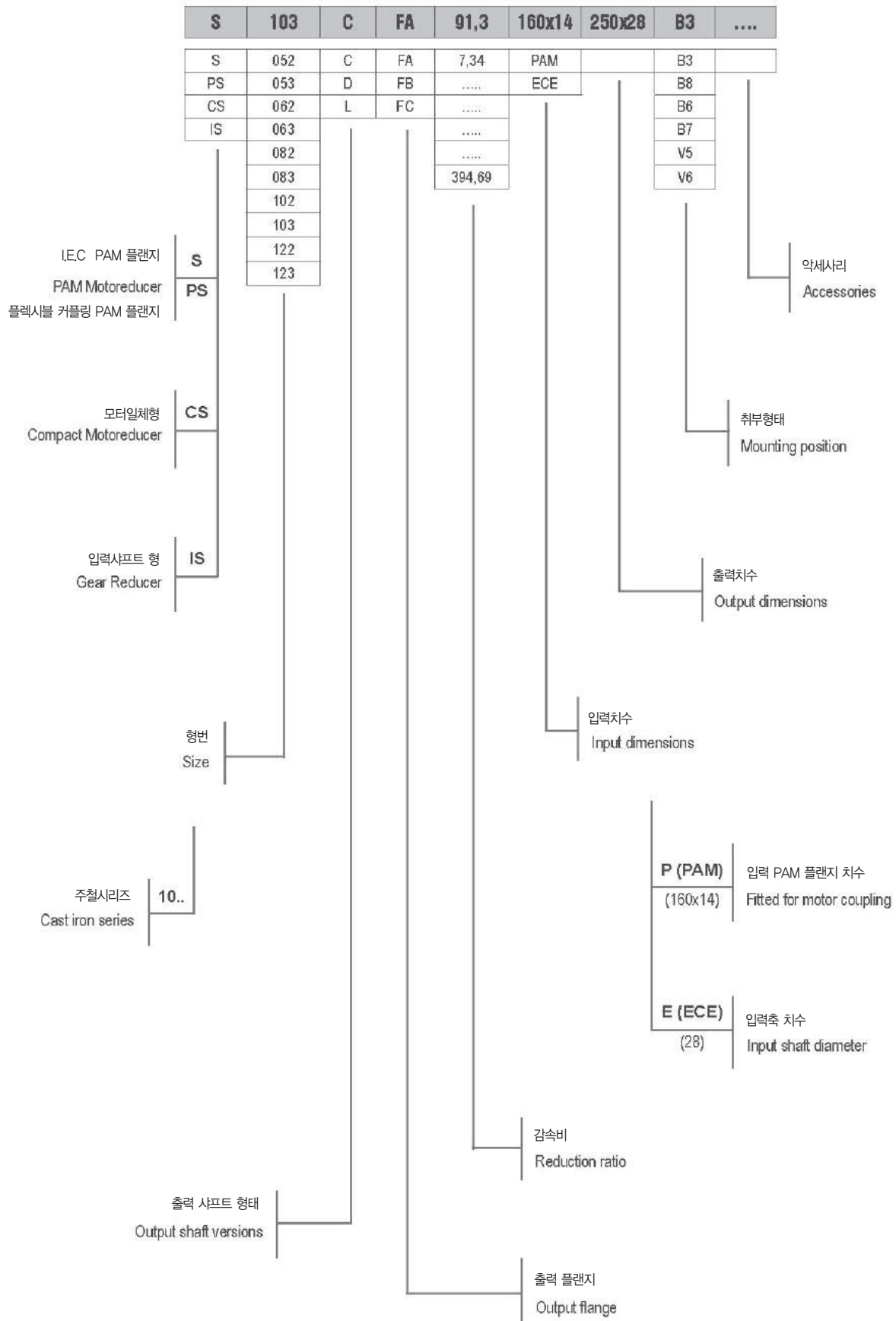
**CS** - 기어드 모터  
 - Compact electric motor versions.

**S** - I.E.C 플랜지 PAM모터 취부형태  
 - Fitted for motor coupling version (PAM).

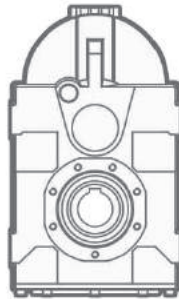
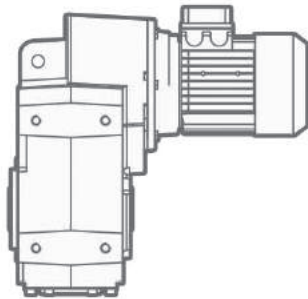
**PS** - 플렉시블 커플링형  
 - Fitted for motor mounting with flexible coupling.

**IS** - 입력 샤프트형  
 - Input shaft versions.

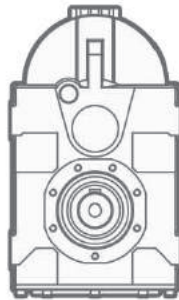
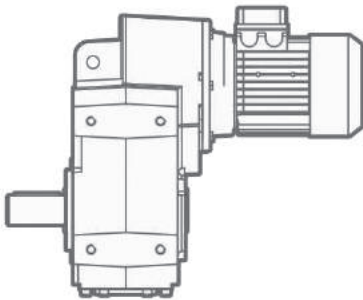
모델형식 / Designation



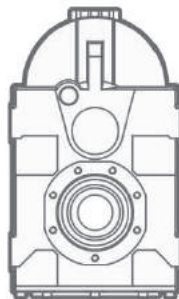
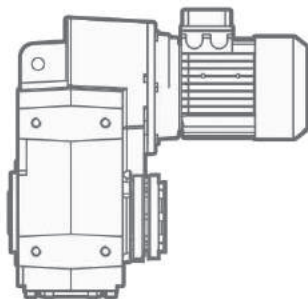
## 버전 / Versions

**S ... C**

- 풋-플랜지 마운트/중공축
- Foot-flange mounting / hollow shaft.

**S ... D**

- 풋-플랜지 마운트/중실축(D)
- Foot-flange mounting / D solid shaft.

**S ... L**

- 풋-플랜지 마운트/샤링크 디스크
- Foot-flange mounting / shrink disc shaft.

감속비에 따른 모터 취부 분류 / Predisposition

**CS - S - PS ...052**

| i     | 071    | 080    | 090    | 100    | 112    |
|-------|--------|--------|--------|--------|--------|
| 8.63  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 11.14 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 13.66 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 15.27 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 16.29 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 18.63 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 21.04 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 24.07 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 25.79 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 27.81 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 30.00 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 32.55 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 36.55 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 39.00 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 42.63 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 47.20 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 52.25 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 57.86 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 72.83 | B5-B11 | B5-B11 | B5-B11 |        |        |

**CS - S - PS ...053**

| i      | 063    | 071    | 080    | 090    |
|--------|--------|--------|--------|--------|
| 74.20  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 95.84  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 117.48 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 137.45 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 177.55 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 198.45 | B5-B11 | B5-B11 |        |        |
| 217.64 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 256.33 | B5-B11 | B5-B11 |        |        |
| 314.21 | B5-B11 | B5-B11 |        |        |

**CS - S - PS ...062**

| i     | 071    | 080    | 090    | 100    | 112    |
|-------|--------|--------|--------|--------|--------|
| 8.00  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 9.55  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 11.71 |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 13.36 |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 15.94 |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 19.55 |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 23.18 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 25.14 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 27.66 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 30.00 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 33.93 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 36.57 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 39.38 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 43.64 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 46.10 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 53.53 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 55.00 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 67.47 | B5-B11 | B5-B11 | B5-B11 |        |        |

**CS - S - PS ...063**

| i      | 071    | 080    | 090    |
|--------|--------|--------|--------|
| 81.43  | B5-B11 | B5-B11 | B5-B11 |
| 99.89  | B5-B11 | B5-B11 | B5-B11 |
| 126.43 | B5-B11 | B5-B11 | B5-B11 |
| 150.85 | B5-B11 | B5-B11 | B5-B11 |
| 185.05 | B5-B11 | B5-B11 | B5-B11 |
| 217.79 | B5-B11 |        |        |
| 267.16 | B5-B11 |        |        |

- B = 11 특수 모터(감속기 모터 일체형)
- Motor with special execution
- 테이블 표에 표시된것은 모두 가능함. 단, 안전계수를 필히 확인하시기 바람.
- Tables report all possible dimensions, Please verify service factor.

## 감속비에 따른 모터 취부 분류 / Predisposition

## CS - S - PS ...082

| i     | 080    | 090    | 100    | 112    | 132    |
|-------|--------|--------|--------|--------|--------|
| 7.34  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 8.06  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 9.94  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 11.61 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 12.75 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 15.73 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 17.29 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 20.14 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 22.13 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 24.00 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 27.29 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 28.67 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 31.78 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 34.91 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 40.05 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |
| 43.05 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 50.25 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |
| 54.27 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |
| 61.98 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |

## CS - S - PS ...102

| i     | 080    | 090    | 100    | 112    | 132    | 160 |
|-------|--------|--------|--------|--------|--------|-----|
| 8.06  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 8.85  | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 10.88 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 12.75 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 13.99 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 17.21 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5  |
| 19.00 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 22.13 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 24.28 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 26.33 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 29.87 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 32.40 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 34.91 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 38.30 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 44.00 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |     |
| 47.13 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |
| 55.14 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |     |
| 59.40 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |     |
| 67.84 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |        |     |

## CS - S - PS ...083

| i      | 080    | 090    | 100    | 112    | 132    |
|--------|--------|--------|--------|--------|--------|
| 67.52  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 74.18  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 91.49  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 117.17 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 128.73 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 158.76 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 184.86 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 203.11 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 250.50 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 292.36 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 315.73 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 360.58 | B5-B11 | B5-B11 | B5-B11 |        |        |

## CS - S - PS ...103

| i      | 080    | 090    | 100    | 112    | 132    |
|--------|--------|--------|--------|--------|--------|
| 74.10  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 81.39  |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 100.15 |        | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 110.55 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 128.73 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 141.24 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 173.78 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 203.11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 222.85 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 274.20 | B5-B11 | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 320.79 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 345.60 | B5-B11 | B5-B11 | B5-B11 |        |        |
| 394.69 | B5-B11 | B5-B11 | B5-B11 |        |        |

- B = 11 특수 모터(감속기 모터 일체형)
- Motor with special execution
- 테이블 표에 표시된것은 모두 가능함. 단, 안전계수를 필히 확인하시기 바람.
- Tables report all possible dimensions, Please verify service factor.

## 감속비에 따른 모터 취부 분류 / Predisposition

### CS - S - PS ...122

| i     | 080 | 090    | 100    | 112    | 132    | 160 | 180 | 200 |
|-------|-----|--------|--------|--------|--------|-----|-----|-----|
| 8.48  |     |        |        |        |        | B5  | B5  | B5  |
| 9.30  |     |        |        |        |        | B5  | B5  | B5  |
| 11.42 |     |        |        |        |        | B5  | B5  | B5  |
| 12.63 |     |        |        |        |        | B5  | B5  | B5  |
| 13.84 |     |        |        |        |        | B5  | B5  | B5  |
| 16.99 |     |        |        |        |        | B5  | B5  | B5  |
| 21.25 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 23.29 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 26.15 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 28.60 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 30.51 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 33.44 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 35.20 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 41.07 |     |        | B5-B11 | B5-B11 | B5-B11 | B5  | B5  |     |
| 43.60 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |     |     |
| 49.04 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |     |     |
| 53.75 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |     |     |
| 66.00 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |     |     |     |

### CS - S - PS ...123

| i      | 080 | 090    | 100    | 112    | 132    |
|--------|-----|--------|--------|--------|--------|
| 71.07  |     |        | B5-B11 | B5-B11 | B5-B11 |
| 87.27  |     |        | B5-B11 | B5-B11 | B5-B11 |
| 112.52 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 123.33 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 133.78 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 151.43 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 177.53 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 194.59 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 238.93 | B5  | B5-B11 | B5-B11 | B5-B11 | B5-B11 |
| 280.10 | B5  | B5-B11 | B5-B11 | B5-B11 |        |
| 301.16 | B5  | B5-B11 | B5-B11 | B5-B11 |        |
| 343.93 | B5  | B5-B11 | B5-B11 | B5-B11 |        |

- B = 11 특수 모터(감속기 모터 일체형)
- Motor with special execution
- 테이블 표에 표시된것은 모두 가능함. 단, 안전계수를 필히 확인하시기 바람.
- Tables report all possible dimensions, Please verify service factor.

## 감속비에 따른 모터 취부 분류 / Predisposition

## S - PS ...142

| i     | 132B5 | 160B5 | 180B5 | 200B5 |
|-------|-------|-------|-------|-------|
| 4.11  | B5    | B5    | B5    | B5    |
| 4.58  | B5    | B5    | B5    | B5    |
| 5.14  | B5    | B5    | B5    | B5    |
| 5.81  | B5    | B5    | B5    | B5    |
| 6.21  | B5    | B5    | B5    | B5    |
| 7.31  | B5    | B5    | B5    | B5    |
| 8.20  | B5    | B5    | B5    | B5    |
| 9.28  | B5    | B5    | B5    | B5    |
| 9.91  | B5    | B5    | B5    | B5    |
| 11.40 | B5    | B5    | B5    | B5    |
| 12.81 | B5    | B5    | B5    | B5    |
| 14.27 | B5    | B5    | B5    | B5    |
| 16.00 | B5    | B5    | B5    | B5    |
| 18.10 | B5    | B5    | B5    | B5    |
| 19.33 | B5    | B5    | B5    | B5    |
| 22.24 | B5    | B5    | B5    | B5    |
| 25.26 | B5    | B5    | B5    |       |
| 28.33 | B5    | B5    | B5    |       |
| 32.05 | B5    | B5    | B5    |       |
| 34.22 | B5    | B5    | B5    |       |
| 39.27 | B5    | B5    | B5    |       |

## S - PS ...152

| i     | 160B5 | 180B5 | 200B5 | 225B5 |
|-------|-------|-------|-------|-------|
| 4.06  | B5    | B5    | B5    | B5    |
| 4.53  | B5    | B5    | B5    | B5    |
| 5.20  | B5    | B5    | B5    | B5    |
| 5.71  | B5    | B5    | B5    | B5    |
| 6.52  | B5    | B5    | B5    | B5    |
| 7.28  | B5    | B5    | B5    | B5    |
| 8.35  | B5    | B5    | B5    | B5    |
| 9.17  | B5    | B5    | B5    | B5    |
| 10.41 | B5    | B5    | B5    | B5    |
| 12.46 | B5    | B5    | B5    | B5    |
| 13.90 | B5    | B5    | B5    | B5    |
| 15.96 | B5    | B5    | B5    | B5    |
| 17.52 | B5    | B5    | B5    | B5    |
| 19.90 | B5    | B5    | B5    | B5    |
| 22.88 | B5    | B5    | B5    | B5    |
| 27.10 | B5    | B5    | B5    | B5    |
| 29.75 | B5    | B5    | B5    | B5    |
| 33.79 | B5    | B5    | B5    | B5    |
| 38.84 | B5    | B5    | B5    | B5    |

## S - PS ...143

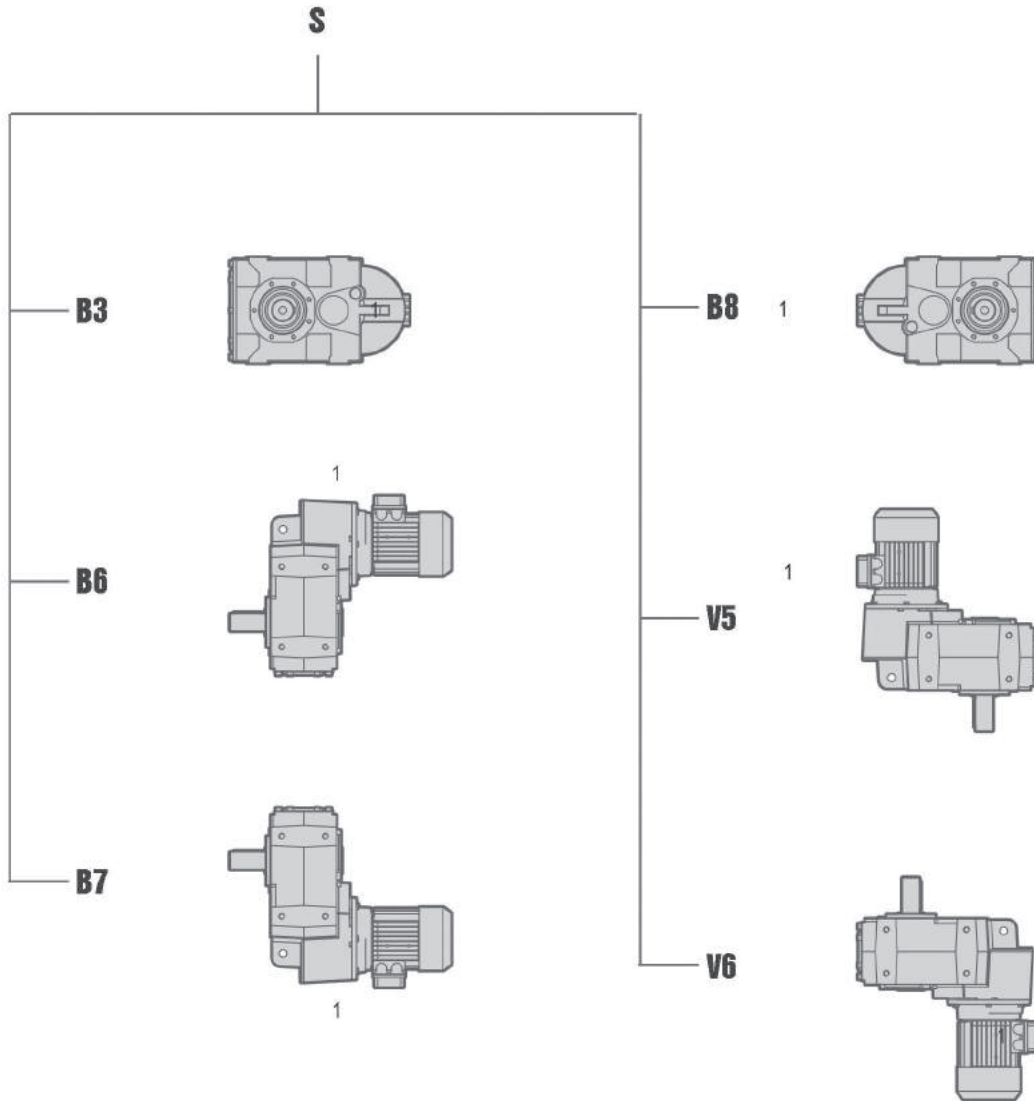
| i      | 100-112B5 | 132B5 | 160B5 |
|--------|-----------|-------|-------|
| 45.76  | B5        | B5    | B5    |
| 50.97  | B5        | B5    | B5    |
| 57.17  | B5        | B5    | B5    |
| 64.67  | B5        | B5    | B5    |
| 69.05  | B5        | B5    | B5    |
| 79.45  | B5        | B5    | B5    |
| 98.80  | B5        | B5    |       |
| 110.05 | B5        | B5    |       |

## S - PS ...153

| i     | 132B5 | 160B5 | 180B5 |
|-------|-------|-------|-------|
| 40.10 | B5    | B5    | B5    |
| 44.75 | B5    | B5    | B5    |
| 51.37 | B5    | B5    | B5    |
| 56.39 | B5    | B5    | B5    |
| 64.05 | B5    | B5    | B5    |
| 73.62 | B5    | B5    | B5    |
| 87.15 | B5    | B5    |       |
| 97.27 | B5    | B5    |       |

- B = 11 특수 모터(감속기 모터 일체형)
- Motor with special execution
- 테이블 표에 표시된것은 모두 가능한. 단, 안전계수를 필히 확인하시기 바람.
- Tables report all possible dimensions, Please verify service factor.

## 취부방식 / Mounting positions



- 수직형으로 사용할 경우에는 카다로그 6페이지를 참조할 것.
- For vertical positions, check with pages 6.

- 취부형태가 정해지지 않으면 B3 형태로 출하됨.
- Unless specified otherwise, the standard positions are B3.

- 원하는 취부형태가 카다로그에 없다면 본사로 연락해서 협의해야함.
- For positions not envisaged, it is necessary to call our Technical Service.

## S – 모터 용량에 따른 분류 / Performance

**0,18 kW**

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 20,4          | 77         | 3,4  | 137,45 | S053                                                                              | 63A2                                                                                | 6000         | 6000           |
| 15,8          | 99         | 2,7  | 177,55 | S053                                                                              | 63A2                                                                                | 6000         | 6000           |
| 14,6          | 111        | 3,2  | 95,84  | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 11,9          | 136        | 2,6  | 117,48 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 10,2          | 159        | 2,2  | 137,45 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 7,9           | 205        | 1,7  | 177,55 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 7,1           | 229        | 1,5  | 198,45 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 6,4           | 251        | 1,4  | 217,64 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 5,5           | 296        | 1,2  | 256,33 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |
| 4,5           | 363        | 1,0  | 314,21 | S053                                                                              | 63B4                                                                                | 6000         | 6000           |

**0,37 kW**

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 46,7          | 73         | 4,0  | 30     | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 43,0          | 79         | 3,8  | 32,55  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 38,3          | 89         | 3,7  | 36,55  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 35,1          | 97         | 3,6  | 39,9   | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 32,8          | 103        | 3,4  | 42,63  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 29,7          | 114        | 3,1  | 47,2   | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 26,8          | 127        | 2,8  | 52,25  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 24,2          | 140        | 2,5  | 57,86  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 19,2          | 176        | 2,0  | 72,83  | S052                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 18,9          | 176        | 2,0  | 74,2   | S053                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 14,6          | 227        | 1,5  | 95,84  | S053                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 11,9          | 279        | 1,3  | 117,48 | S053                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 10,2          | 326        | 1,1  | 137,45 | S053                                                                               | 71B4                                                                                 | 6000         | 6000           |
| 20,8          | 163        | 3,7  | 67,47  | S062                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 17,2          | 193        | 3,1  | 81,43  | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 14,0          | 237        | 2,5  | 99,89  | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 11,1          | 300        | 2,0  | 126,43 | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 9,3           | 358        | 1,7  | 150,85 | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 7,6           | 439        | 1,4  | 185,05 | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 6,4           | 517        | 1,2  | 217,79 | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 5,2           | 634        | 0,9  | 267,16 | S063                                                                               | 71B4                                                                                 | 10000        | 4000           |
| 11,9          | 278        | 3,6  | 117,17 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 10,9          | 305        | 3,3  | 128,73 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 8,8           | 377        | 2,7  | 158,76 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 7,6           | 439        | 2,3  | 184,88 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 6,9           | 482        | 2,1  | 203,11 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 5,6           | 594        | 1,7  | 250,5  | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 4,8           | 694        | 1,4  | 292,36 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 4,4           | 749        | 1,3  | 315,73 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 3,9           | 855        | 1,2  | 360,58 | S083                                                                               | 71B4                                                                                 | 18000        | 7200           |
| 8,1           | 412        | 3,9  | 173,78 | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 6,9           | 482        | 3,3  | 203,11 | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 6,3           | 529        | 3,0  | 222,85 | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 5,1           | 651        | 2,5  | 274,2  | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 4,4           | 761        | 2,1  | 320,79 | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 4,1           | 820        | 2,0  | 345,6  | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |
| 3,5           | 936        | 1,7  | 394,69 | S103                                                                               | 71B4                                                                                 | 22000        | 9000           |

## 0,55 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 75,1          | 67         | 3,6  | 18,63  | S052                                                                              | 71C4/80A4                                                                          | 5236         | 5236           |
| 66,6          | 76         | 3,4  | 21,04  | S052                                                                              | 71C4/80A4                                                                          | 5415         | 5415           |
| 58,2          | 87         | 3,0  | 24,07  | S052                                                                              | 71C4/80A4                                                                          | 5618         | 5618           |
| 54,3          | 93         | 3,1  | 25,79  | S052                                                                              | 71C4/80A4                                                                          | 5723         | 5723           |
| 50,3          | 100        | 2,9  | 27,81  | S052                                                                              | 71C4/80A4                                                                          | 5838         | 5838           |
| 46,7          | 108        | 2,7  | 30     | S052                                                                              | 71C4/80A4                                                                          | 5955         | 5955           |
| 43,0          | 117        | 2,6  | 32,55  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 38,3          | 132        | 2,5  | 36,55  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 35,1          | 144        | 2,4  | 39,9   | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 32,8          | 154        | 2,3  | 42,63  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 29,7          | 170        | 2,1  | 47,2   | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 26,8          | 188        | 1,9  | 52,25  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 24,2          | 208        | 1,7  | 57,86  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 19,2          | 262        | 1,3  | 72,83  | S052                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 18,9          | 262        | 1,3  | 74,2   | S053                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 14,6          | 338        | 1,0  | 95,84  | S053                                                                              | 71C4/80A4                                                                          | 6000         | 6000           |
| 32,1          | 157        | 3,8  | 43,64  | S062                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 30,4          | 166        | 3,6  | 46,1   | S062                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 26,2          | 193        | 3,1  | 53,53  | S062                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 25,5          | 198        | 3,0  | 55     | S062                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 20,8          | 243        | 2,5  | 67,47  | S062                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 17,2          | 287        | 2,1  | 81,43  | S063                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 14,0          | 352        | 1,7  | 99,89  | S063                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 11,1          | 446        | 1,3  | 126,43 | S063                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 9,3           | 532        | 1,1  | 150,85 | S063                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 7,6           | 653        | 0,9  | 185,05 | S063                                                                              | 71C4/80A4                                                                          | 10000        | 4000           |
| 11,9          | 413        | 2,4  | 117,17 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 10,9          | 454        | 2,2  | 128,73 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 8,8           | 560        | 1,8  | 158,76 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 7,6           | 652        | 1,5  | 184,88 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 6,9           | 716        | 1,4  | 203,11 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 5,6           | 883        | 1,1  | 250,5  | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 4,8           | 1031       | 1,0  | 292,36 | S083                                                                              | 71C4/80A4                                                                          | 18000        | 7200           |
| 18,9          | 262        | 3,8  | 74,18  | S083                                                                              | 80A4                                                                               | 18000        | 7200           |
| 15,3          | 323        | 3,1  | 91,49  | S083                                                                              | 80A4                                                                               | 18000        | 7200           |
| 10,9          | 454        | 3,5  | 128,73 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 9,9           | 498        | 3,2  | 141,24 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 8,1           | 613        | 2,6  | 173,78 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 6,9           | 716        | 2,2  | 203,11 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 6,3           | 786        | 2,0  | 222,85 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 5,1           | 967        | 1,7  | 274,2  | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 4,4           | 1131       | 1,4  | 320,79 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 4,1           | 1219       | 1,3  | 345,6  | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 3,5           | 1392       | 1,1  | 394,69 | S103                                                                              | 71C4/80A4                                                                          | 22000        | 9000           |
| 5,9           | 843        | 3,6  | 238,93 | S123                                                                              | 80A4                                                                               | 30000        | 11200          |
| 5,0           | 988        | 3,0  | 280,1  | S123                                                                              | 80A4                                                                               | 30000        | 11200          |
| 4,6           | 1062       | 2,8  | 301,16 | S123                                                                              | 80A4                                                                               | 30000        | 11200          |
| 4,1           | 1213       | 2,5  | 343,93 | S123                                                                              | 80A4                                                                               | 30000        | 11200          |

## 0,75 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 125,7         | 55         | 3,5  | 11,14 | S052                                                                                | 80B4                                                                                 | 4430         | 4430           |
| 102,5         | 67         | 3,1  | 13,66 | S052                                                                                | 80B4                                                                                 | 4688         | 4688           |

## 0,75 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 91,7          | 75         | 3,2  | 15,27  | S052                                                                              | 80B4                                                                                | 4833         | 4833           |
| 86,0          | 80         | 3,0  | 16,29  | S052                                                                              | 80B4                                                                                | 4916         | 4916           |
| 75,1          | 92         | 2,6  | 18,63  | S052                                                                              | 80B4                                                                                | 5094         | 5094           |
| 66,6          | 103        | 2,5  | 21,04  | S052                                                                              | 80B4                                                                                | 5255         | 5255           |
| 58,2          | 118        | 2,2  | 24,07  | S052                                                                              | 80B4                                                                                | 5435         | 5435           |
| 54,3          | 127        | 2,3  | 25,79  | S052                                                                              | 80B4                                                                                | 5527         | 5527           |
| 50,3          | 137        | 2,1  | 27,81  | S052                                                                              | 80B4                                                                                | 5627         | 5627           |
| 46,7          | 147        | 2,0  | 30     | S052                                                                              | 80B4                                                                                | 5727         | 5727           |
| 43,0          | 160        | 1,9  | 32,55  | S052                                                                              | 80B4                                                                                | 5834         | 5834           |
| 38,3          | 179        | 1,8  | 36,55  | S052                                                                              | 80B4                                                                                | 5983         | 5983           |
| 35,1          | 196        | 1,8  | 39,9   | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 32,8          | 209        | 1,7  | 42,63  | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 29,7          | 232        | 1,5  | 47,2   | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 26,8          | 257        | 1,4  | 52,25  | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 24,2          | 284        | 1,2  | 57,86  | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 19,2          | 358        | 1,0  | 72,83  | S052                                                                              | 80B4                                                                                | 6000         | 6000           |
| 18,9          | 357        | 1,0  | 74,2   | S053                                                                              | 80B4                                                                                | 6000         | 6000           |
| 55,7          | 123        | 3,9  | 25,14  | S062                                                                              | 80B4                                                                                | 9895         | 3958           |
| 50,6          | 136        | 3,5  | 27,66  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 46,7          | 147        | 3,4  | 30     | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 41,3          | 167        | 3,2  | 33,93  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 38,3          | 180        | 3,3  | 36,57  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 35,6          | 193        | 3,1  | 39,38  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 32,1          | 214        | 2,8  | 43,64  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 30,4          | 226        | 2,7  | 46,1   | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 26,2          | 263        | 2,3  | 53,53  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 25,5          | 270        | 2,2  | 55     | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 20,8          | 331        | 1,8  | 67,47  | S062                                                                              | 80B4                                                                                | 10000        | 4000           |
| 17,2          | 392        | 1,5  | 81,43  | S063                                                                              | 80B4                                                                                | 10000        | 4000           |
| 14,0          | 480        | 1,2  | 99,89  | S063                                                                              | 80B4                                                                                | 10000        | 4000           |
| 11,1          | 608        | 1,0  | 126,43 | S063                                                                              | 80B4                                                                                | 10000        | 4000           |
| 25,8          | 267        | 3,8  | 54,27  | S082                                                                              | 80B4                                                                                | 18000        | 7200           |
| 22,6          | 304        | 3,3  | 61,98  | S082                                                                              | 80B4                                                                                | 18000        | 7200           |
| 20,7          | 325        | 3,1  | 67,52  | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 18,9          | 357        | 2,8  | 74,18  | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 15,3          | 440        | 2,3  | 91,49  | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 11,9          | 564        | 1,8  | 117,17 | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 10,9          | 619        | 1,6  | 128,73 | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 8,8           | 764        | 1,3  | 158,76 | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 7,6           | 889        | 1,1  | 184,88 | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 6,9           | 977        | 1,0  | 203,11 | S083                                                                              | 80B4                                                                                | 18000        | 7200           |
| 14,0          | 482        | 3,3  | 100,15 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 12,7          | 532        | 3,0  | 110,55 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 10,9          | 619        | 2,6  | 128,73 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 9,9           | 679        | 2,4  | 141,24 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 8,1           | 836        | 1,9  | 173,78 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 6,9           | 977        | 1,6  | 203,11 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 6,3           | 1072       | 1,5  | 222,85 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 5,1           | 1319       | 1,2  | 274,2  | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 4,4           | 1543       | 1,0  | 320,79 | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 4,1           | 1662       | 1,0  | 345,6  | S103                                                                              | 80B4                                                                                | 22000        | 9000           |
| 7,9           | 854        | 3,5  | 177,53 | S123                                                                              | 80B4                                                                                | 30000        | 11200          |
| 7,2           | 936        | 3,2  | 194,59 | S123                                                                              | 80B4                                                                                | 30000        | 11200          |
| 5,9           | 1149       | 2,6  | 238,93 | S123                                                                              | 80B4                                                                                | 30000        | 11200          |
| 5,0           | 1347       | 2,2  | 280,1  | S123                                                                              | 80B4                                                                                | 30000        | 11200          |
| 4,6           | 1448       | 2,1  | 301,16 | S123                                                                              | 80B4                                                                                | 30000        | 11200          |
| 4,1           | 1654       | 1,8  | 343,93 | S123                                                                              | 80B4                                                                                | 30000        | 11200          |

## 1,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 162,3         | 85         | 2,0  | 8,63   | S052                                                                              | 90LA4                                                                              | 3871         | 3871           |
| 125,7         | 109        | 1,7  | 11,14  | S052                                                                              | 90LA4                                                                              | 4112         | 4112           |
| 102,5         | 134        | 1,6  | 13,66  | S052                                                                              | 90LA4                                                                              | 4298         | 4298           |
| 91,7          | 150        | 1,6  | 15,27  | S052                                                                              | 90LA4                                                                              | 4397         | 4397           |
| 86,0          | 160        | 1,5  | 16,29  | S052                                                                              | 90LA4                                                                              | 4452         | 4452           |
| 75,1          | 183        | 1,3  | 18,63  | S052                                                                              | 90LA4                                                                              | 4562         | 4562           |
| 66,6          | 207        | 1,3  | 21,04  | S052                                                                              | 90LA4                                                                              | 4655         | 4655           |
| 58,2          | 236        | 1,1  | 24,07  | S052                                                                              | 90LA4                                                                              | 4748         | 4748           |
| 54,3          | 253        | 1,1  | 25,79  | S052                                                                              | 90LA4                                                                              | 4791         | 4791           |
| 50,3          | 273        | 1,1  | 27,81  | S052                                                                              | 90LA4                                                                              | 4834         | 4834           |
| 46,7          | 295        | 1,0  | 30     | S052                                                                              | 90LA4                                                                              | 4871         | 4871           |
| 43,0          | 320        | 0,9  | 32,55  | S052                                                                              | 90LA4                                                                              | 4905         | 4905           |
| 38,3          | 359        | 0,9  | 36,55  | S052                                                                              | 90LA4                                                                              | 4941         | 4941           |
| 146,7         | 94         | 3,8  | 9,55   | S062                                                                              | 90LA4                                                                              | 7162         | 2865           |
| 119,6         | 115        | 3,4  | 11,71  | S062                                                                              | 90LA4                                                                              | 7568         | 3027           |
| 104,8         | 131        | 3,2  | 13,36  | S062                                                                              | 90LA4                                                                              | 7834         | 3134           |
| 87,8          | 157        | 2,9  | 15,94  | S062                                                                              | 90LA4                                                                              | 8194         | 3277           |
| 71,6          | 192        | 2,4  | 19,55  | S062                                                                              | 90LA4                                                                              | 8609         | 3444           |
| 60,4          | 228        | 2,1  | 23,18  | S062                                                                              | 90LA4                                                                              | 8951         | 3581           |
| 55,7          | 247        | 1,9  | 25,14  | S062                                                                              | 90LA4                                                                              | 9112         | 3645           |
| 50,6          | 272        | 1,8  | 27,66  | S062                                                                              | 90LA4                                                                              | 9296         | 3719           |
| 46,7          | 295        | 1,7  | 30     | S062                                                                              | 90LA4                                                                              | 9450         | 3780           |
| 41,3          | 333        | 1,6  | 33,93  | S062                                                                              | 90LA4                                                                              | 9675         | 3870           |
| 38,3          | 359        | 1,7  | 36,57  | S062                                                                              | 90LA4                                                                              | 9806         | 3922           |
| 35,6          | 387        | 1,6  | 39,38  | S062                                                                              | 90LA4                                                                              | 9929         | 3972           |
| 32,1          | 429        | 1,4  | 43,64  | S062                                                                              | 90LA4                                                                              | 10000        | 4000           |
| 30,4          | 453        | 1,3  | 46,1   | S062                                                                              | 90LA4                                                                              | 10000        | 4000           |
| 26,2          | 526        | 1,1  | 53,53  | S062                                                                              | 90LA4                                                                              | 10000        | 4000           |
| 25,5          | 540        | 1,1  | 55     | S062                                                                              | 90LA4                                                                              | 10000        | 4000           |
| 20,8          | 663        | 0,9  | 67,47  | S062                                                                              | 90LA4                                                                              | 10000        | 4000           |
| 69,5          | 198        | 3,9  | 20,14  | S082                                                                              | 90LA4                                                                              | 18000        | 5331           |
| 63,3          | 217        | 3,7  | 22,13  | S082                                                                              | 90LA4                                                                              | 18000        | 5486           |
| 58,3          | 236        | 3,4  | 24     | S082                                                                              | 90LA4                                                                              | 18000        | 5624           |
| 51,3          | 268        | 3,4  | 27,29  | S082                                                                              | 90LA4                                                                              | 18000        | 5846           |
| 48,8          | 282        | 3,2  | 28,67  | S082                                                                              | 90LA4                                                                              | 18000        | 5934           |
| 44,1          | 312        | 3,2  | 31,78  | S082                                                                              | 90LA4                                                                              | 18000        | 6119           |
| 40,1          | 343        | 2,9  | 34,91  | S082                                                                              | 90LA4                                                                              | 18000        | 6293           |
| 35,0          | 393        | 2,5  | 40,05  | S082                                                                              | 90LA4                                                                              | 18000        | 6552           |
| 32,5          | 423        | 2,4  | 43,05  | S082                                                                              | 90LA4                                                                              | 18000        | 6691           |
| 27,9          | 494        | 2,0  | 50,25  | S082                                                                              | 90LA4                                                                              | 18000        | 6996           |
| 25,8          | 533        | 1,9  | 54,27  | S082                                                                              | 90LA4                                                                              | 18000        | 7151           |
| 22,6          | 609        | 1,6  | 61,98  | S082                                                                              | 90LA4                                                                              | 18000        | 7200           |
| 20,7          | 649        | 1,5  | 67,52  | S083                                                                              | 90LA4                                                                              | 18000        | 7200           |
| 18,9          | 713        | 1,4  | 74,18  | S083                                                                              | 90LA4                                                                              | 18000        | 7200           |
| 15,3          | 880        | 1,1  | 91,49  | S083                                                                              | 90LA4                                                                              | 18000        | 7200           |
| 36,6          | 376        | 4,0  | 38,3   | S102                                                                              | 90LA4                                                                              | 22000        | 8020           |
| 31,8          | 432        | 3,0  | 44     | S102                                                                              | 90LA4                                                                              | 22000        | 8368           |
| 29,7          | 463        | 3,5  | 47,13  | S102                                                                              | 90LA4                                                                              | 22000        | 8544           |
| 25,4          | 542        | 2,4  | 55,14  | S102                                                                              | 90LA4                                                                              | 22000        | 8958           |
| 23,6          | 583        | 2,7  | 59,4   | S102                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 20,6          | 666        | 2,4  | 67,84  | S102                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 18,9          | 713        | 2,2  | 74,18  | S103                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 17,2          | 783        | 2,0  | 81,39  | S103                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 14,0          | 963        | 1,7  | 100,15 | S103                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 12,7          | 1063       | 1,5  | 110,55 | S103                                                                              | 90LA4                                                                              | 22000        | 9000           |
| 10,9          | 1238       | 1,3  | 128,73 | S103                                                                              | 90LA4                                                                              | 22000        | 9000           |

## 1,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 9,9           | 1358       | 1,2  | 141,24 | S103                                                                              | 90LA4                                                                               | 22000        | 9000           |
| 8,1           | 1671       | 1,0  | 173,78 | S103                                                                              | 90LA4                                                                               | 22000        | 9000           |
| 12,4          | 1082       | 2,8  | 112,52 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 11,4          | 1186       | 2,5  | 123,33 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 10,5          | 1287       | 2,3  | 133,78 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 9,2           | 1457       | 2,1  | 151,43 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 7,9           | 1708       | 1,8  | 177,53 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 7,2           | 1872       | 1,6  | 194,59 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 5,9           | 2298       | 1,3  | 238,93 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 5,0           | 2694       | 1,1  | 280,1  | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 4,6           | 2897       | 1,0  | 301,16 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |
| 4,1           | 3308       | 0,9  | 343,93 | S123                                                                              | 90LA4                                                                               | 30000        | 11200          |

## 2,2 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 162,3         | 124        | 1,4  | 8,63  | S052                                                                              | 100LA4                                                                              | 3641         | 3641           |
| 125,7         | 161        | 1,2  | 11,14 | S052                                                                              | 100LA4                                                                              | 3815         | 3815           |
| 102,5         | 197        | 1,1  | 13,66 | S052                                                                              | 100LA4                                                                              | 3934         | 3934           |
| 91,7          | 220        | 1,1  | 15,27 | S052                                                                              | 100LA4                                                                              | 3990         | 3990           |
| 86,0          | 235        | 1,0  | 16,29 | S052                                                                              | 100LA4                                                                              | 4018         | 4018           |
| 175,0         | 115        | 2,9  | 8     | S062                                                                              | 100LA4                                                                              | 6587         | 2635           |
| 146,7         | 138        | 2,6  | 9,55  | S062                                                                              | 100LA4                                                                              | 6885         | 2754           |
| 119,6         | 169        | 2,3  | 11,71 | S062                                                                              | 100LA4                                                                              | 7228         | 2891           |
| 104,8         | 192        | 2,2  | 13,36 | S062                                                                              | 100LA4                                                                              | 7446         | 2978           |
| 87,8          | 230        | 2,0  | 15,94 | S062                                                                              | 100LA4                                                                              | 7731         | 3092           |
| 71,6          | 282        | 1,6  | 19,55 | S062                                                                              | 100LA4                                                                              | 8041         | 3217           |
| 60,4          | 334        | 1,4  | 23,18 | S062                                                                              | 100LA4                                                                              | 8278         | 3311           |
| 55,7          | 362        | 1,3  | 25,14 | S062                                                                              | 100LA4                                                                              | 8381         | 3353           |
| 50,6          | 398        | 1,2  | 27,66 | S062                                                                              | 100LA4                                                                              | 8493         | 3397           |
| 46,7          | 432        | 1,2  | 30    | S062                                                                              | 100LA4                                                                              | 8579         | 3431           |
| 41,3          | 489        | 1,1  | 33,93 | S062                                                                              | 100LA4                                                                              | 8689         | 3476           |
| 38,3          | 527        | 1,1  | 36,57 | S062                                                                              | 100LA4                                                                              | 8743         | 3497           |
| 35,6          | 567        | 1,1  | 39,38 | S062                                                                              | 100LA4                                                                              | 8785         | 3514           |
| 32,1          | 629        | 1,0  | 43,64 | S062                                                                              | 100LA4                                                                              | 8823         | 3529           |
| 89,0          | 227        | 3,4  | 15,73 | S082                                                                              | 100LA4                                                                              | 17049        | 4871           |
| 80,9          | 249        | 3,1  | 17,29 | S082                                                                              | 100LA4                                                                              | 17543        | 5012           |
| 69,5          | 290        | 2,7  | 20,14 | S082                                                                              | 100LA4                                                                              | 18000        | 5244           |
| 63,3          | 319        | 2,5  | 22,13 | S082                                                                              | 100LA4                                                                              | 18000        | 5391           |
| 58,3          | 346        | 2,3  | 24    | S082                                                                              | 100LA4                                                                              | 18000        | 5521           |
| 51,3          | 393        | 2,3  | 27,29 | S082                                                                              | 100LA4                                                                              | 18000        | 5729           |
| 48,8          | 413        | 2,2  | 28,67 | S082                                                                              | 100LA4                                                                              | 18000        | 5811           |
| 44,1          | 458        | 2,2  | 31,78 | S082                                                                              | 100LA4                                                                              | 18000        | 5983           |
| 40,1          | 503        | 2,0  | 34,91 | S082                                                                              | 100LA4                                                                              | 18000        | 6142           |
| 35,0          | 577        | 1,7  | 40,05 | S082                                                                              | 100LA4                                                                              | 18000        | 6380           |
| 32,5          | 620        | 1,6  | 43,05 | S082                                                                              | 100LA4                                                                              | 18000        | 6506           |
| 27,9          | 724        | 1,4  | 50,25 | S082                                                                              | 100LA4                                                                              | 18000        | 6780           |
| 25,8          | 782        | 1,3  | 54,27 | S082                                                                              | 100LA4                                                                              | 18000        | 6917           |
| 22,6          | 893        | 1,1  | 61,98 | S082                                                                              | 100LA4                                                                              | 18000        | 7156           |
| 20,7          | 953        | 1,0  | 67,52 | S083                                                                              | 100LA4                                                                              | 18000        | 7200           |
| 18,9          | 1046       | 1,0  | 74,18 | S083                                                                              | 100LA4                                                                              | 18000        | 7200           |
| 53,2          | 379        | 4,0  | 26,33 | S102                                                                              | 100LA4                                                                              | 22000        | 7053           |
| 46,9          | 430        | 3,5  | 29,87 | S102                                                                              | 100LA4                                                                              | 22000        | 7326           |
| 43,2          | 467        | 3,2  | 32,4  | S102                                                                              | 100LA4                                                                              | 22000        | 7507           |

## 2,2 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 40,1          | 503        | 2,8  | 34,91  | S102                                                                              | 100LA4                                                                             | 22000        | 7676           |
| 36,6          | 552        | 2,7  | 38,3   | S102                                                                              | 100LA4                                                                             | 22000        | 7890           |
| 31,8          | 634        | 2,1  | 44     | S102                                                                              | 100LA4                                                                             | 22000        | 8218           |
| 29,7          | 679        | 2,4  | 47,13  | S102                                                                              | 100LA4                                                                             | 22000        | 8384           |
| 25,4          | 794        | 1,6  | 55,14  | S102                                                                              | 100LA4                                                                             | 22000        | 8771           |
| 23,6          | 856        | 1,9  | 59,4   | S102                                                                              | 100LA4                                                                             | 22000        | 8958           |
| 20,6          | 977        | 1,6  | 67,84  | S102                                                                              | 100LA4                                                                             | 22000        | 9000           |
| 18,9          | 1046       | 1,5  | 74,18  | S103                                                                              | 100LA4                                                                             | 22000        | 9000           |
| 17,2          | 1148       | 1,4  | 81,39  | S103                                                                              | 100LA4                                                                             | 22000        | 9000           |
| 14,0          | 1413       | 1,1  | 100,15 | S103                                                                              | 100LA4                                                                             | 22000        | 9000           |
| 12,7          | 1559       | 1,0  | 110,55 | S103                                                                              | 100LA4                                                                             | 22000        | 9000           |
| 28,5          | 706        | 3,4  | 49,04  | S122                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 26,0          | 774        | 3,4  | 53,75  | S122                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 21,2          | 951        | 3,2  | 66     | S122                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 19,7          | 1003       | 2,7  | 71,07  | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 16,0          | 1231       | 2,4  | 87,27  | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 12,4          | 1587       | 1,9  | 112,52 | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 11,4          | 1740       | 1,7  | 123,33 | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 10,5          | 1887       | 1,6  | 133,78 | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 9,2           | 2136       | 1,4  | 151,43 | S123                                                                              | 100LA4                                                                             | 30000        | 11200          |
| 7,9           | 2504       | 1,2  | 177,63 | S123                                                                              | 100LA4                                                                             | -            | 11200          |
| 7,2           | 2745       | 1,1  | 194,59 | S123                                                                              | 100LA4                                                                             | -            | 11200          |
| 17,6          | 1121       | 3,7  | 79,45  | S143                                                                              | 100LA4                                                                             | -            | 24700          |
| 14,2          | 1394       | 3,2  | 98,80  | S143                                                                              | 100LA4                                                                             | -            | 25800          |
| 12,7          | 1553       | 3,0  | 110,05 | S143                                                                              | 100LA4                                                                             | -            | 25800          |
| 11,36         | 1741       | 2,7  | 123,43 | S143                                                                              | 100LA4                                                                             | -            | 26300          |
| 10,0          | 1970       | 2,5  | 139,64 | S143                                                                              | 100LA4                                                                             | -            | 26700          |
| 9,4           | 2103       | 2,3  | 149,09 | S143                                                                              | 100LA4                                                                             | -            | 26700          |
| 8,9           | 2222       | 1,7  | 157,48 | S143                                                                              | 100LA4                                                                             | -            | 26700          |
| 8,2           | 2420       | 1,9  | 171,54 | S143                                                                              | 100LA4                                                                             | -            | 27000          |
| 8,0           | 2474       | 1,7  | 175,40 | S143                                                                              | 100LA4                                                                             | -            | 27000          |
| 7,1           | 2775       | 1,7  | 196,73 | S143                                                                              | 100LA4                                                                             | -            | 26700          |
| 6,3           | 3140       | 1,7  | 222,56 | S143                                                                              | 100LA4                                                                             | -            | 25700          |
| 5,9           | 3352       | 1,5  | 237,62 | S143                                                                              | 100LA4                                                                             | -            | 25100          |
| 5,1           | 3857       | 1,2  | 273,41 | S143                                                                              | 100LA4                                                                             | -            | 23900          |

## 3,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 162,3         | 169        | 1,0  | 8,63  | S052                                                                                | 100LB4                                                                               | 3379         | 3379           |
| 175,0         | 157        | 2,1  | 8     | S062                                                                                | 100LB4                                                                               | 6321         | 2528           |
| 146,7         | 188        | 1,9  | 9,55  | S062                                                                                | 100LB4                                                                               | 6568         | 2627           |
| 119,6         | 230        | 1,7  | 11,71 | S062                                                                                | 100LB4                                                                               | 6839         | 2736           |
| 104,8         | 262        | 1,6  | 13,36 | S062                                                                                | 100LB4                                                                               | 7003         | 2801           |
| 87,8          | 313        | 1,4  | 15,94 | S062                                                                                | 100LB4                                                                               | 7201         | 2881           |
| 71,6          | 384        | 1,2  | 19,55 | S062                                                                                | 100LB4                                                                               | 7392         | 2957           |
| 60,4          | 455        | 1,0  | 23,18 | S062                                                                                | 100LB4                                                                               | 7508         | 3003           |
| 55,7          | 494        | 1,0  | 25,14 | S062                                                                                | 100LB4                                                                               | 7546         | 3019           |
| 190,8         | 144        | 3,8  | 7,34  | S082                                                                                | 100LB4                                                                               | 13364        | 3818           |
| 173,6         | 158        | 3,8  | 8,06  | S082                                                                                | 100LB4                                                                               | 13753        | 3929           |
| 140,8         | 195        | 3,3  | 9,94  | S082                                                                                | 100LB4                                                                               | 14654        | 4187           |
| 120,6         | 228        | 3,1  | 11,61 | S082                                                                                | 100LB4                                                                               | 15348        | 4385           |
| 109,8         | 250        | 3,0  | 12,75 | S082                                                                                | 100LB4                                                                               | 15781        | 4509           |

## 3,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 89,0          | 309        | 2,5  | 15,73  | S082                                                                              | 100LB4                                                                              | 16779        | 4794           |
| 80,9          | 340        | 2,3  | 17,29  | S082                                                                              | 100LB4                                                                              | 17245        | 4927           |
| 69,5          | 396        | 1,9  | 20,14  | S082                                                                              | 100LB4                                                                              | 18000        | 5145           |
| 63,3          | 435        | 1,8  | 22,13  | S082                                                                              | 100LB4                                                                              | 18000        | 5282           |
| 58,3          | 471        | 1,7  | 24     | S082                                                                              | 100LB4                                                                              | 18000        | 5403           |
| 51,3          | 536        | 1,7  | 27,29  | S082                                                                              | 100LB4                                                                              | 18000        | 5595           |
| 48,8          | 563        | 1,6  | 28,67  | S082                                                                              | 100LB4                                                                              | 18000        | 5670           |
| 44,1          | 624        | 1,6  | 31,78  | S082                                                                              | 100LB4                                                                              | 18000        | 5826           |
| 40,1          | 686        | 1,5  | 34,91  | S082                                                                              | 100LB4                                                                              | 18000        | 5971           |
| 35,0          | 787        | 1,3  | 40,05  | S082                                                                              | 100LB4                                                                              | 18000        | 6183           |
| 32,5          | 846        | 1,2  | 43,05  | S082                                                                              | 100LB4                                                                              | 18000        | 6294           |
| 27,9          | 987        | 1,0  | 50,25  | S082                                                                              | 100LB4                                                                              | 18000        | 6533           |
| 25,8          | 1066       | 0,9  | 54,27  | S082                                                                              | 100LB4                                                                              | 18000        | 6650           |
| 109,8         | 250        | 4,0  | 12,75  | S102                                                                              | 100LB4                                                                              | 19555        | 5587           |
| 81,3          | 338        | 3,8  | 17,21  | S102                                                                              | 100LB4                                                                              | 21431        | 6123           |
| 73,7          | 373        | 3,8  | 19     | S102                                                                              | 100LB4                                                                              | 22000        | 6308           |
| 63,3          | 435        | 3,2  | 22,13  | S102                                                                              | 100LB4                                                                              | 22000        | 6602           |
| 57,7          | 477        | 3,1  | 24,28  | S102                                                                              | 100LB4                                                                              | 22000        | 6786           |
| 53,2          | 517        | 2,9  | 26,33  | S102                                                                              | 100LB4                                                                              | 22000        | 6951           |
| 46,9          | 587        | 2,6  | 29,87  | S102                                                                              | 100LB4                                                                              | 22000        | 7210           |
| 43,2          | 637        | 2,4  | 32,4   | S102                                                                              | 100LB4                                                                              | 22000        | 7382           |
| 40,1          | 686        | 2,0  | 34,91  | S102                                                                              | 100LB4                                                                              | 22000        | 7541           |
| 36,6          | 752        | 2,0  | 38,3   | S102                                                                              | 100LB4                                                                              | 22000        | 7742           |
| 31,8          | 864        | 1,5  | 44     | S102                                                                              | 100LB4                                                                              | 22000        | 8047           |
| 29,7          | 926        | 1,7  | 47,13  | S102                                                                              | 100LB4                                                                              | 22000        | 8201           |
| 25,4          | 1083       | 1,2  | 55,14  | S102                                                                              | 100LB4                                                                              | 22000        | 8556           |
| 23,6          | 1167       | 1,4  | 59,4   | S102                                                                              | 100LB4                                                                              | 22000        | 8727           |
| 20,6          | 1333       | 1,2  | 67,84  | S102                                                                              | 100LB4                                                                              | 22000        | 9000           |
| 18,9          | 1427       | 1,1  | 74,18  | S103                                                                              | 100LB4                                                                              | 22000        | 9000           |
| 17,2          | 1566       | 1,0  | 81,39  | S103                                                                              | 100LB4                                                                              | 22000        | 9000           |
| 34,1          | 807        | 3,7  | 41,07  | S122                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 32,1          | 856        | 3,5  | 43,6   | S122                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 28,5          | 963        | 2,5  | 49,04  | S122                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 26,0          | 1056       | 2,5  | 53,75  | S122                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 21,2          | 1297       | 2,3  | 66     | S122                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 19,7          | 1367       | 2,0  | 71,07  | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 16,0          | 1679       | 1,8  | 87,27  | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 12,4          | 2164       | 1,4  | 112,52 | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 11,4          | 2372       | 1,3  | 123,33 | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 10,5          | 2573       | 1,2  | 133,78 | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 9,2           | 2913       | 1,0  | 151,43 | S123                                                                              | 100LB4                                                                              | 30000        | 11200          |
| 21,6          | 1244       | 3,8  | 64,67  | S143                                                                              | 100LA4                                                                              | -            | 22700          |
| 20,3          | 1328       | 3,7  | 69,05  | S143                                                                              | 100LA4                                                                              | -            | 23200          |
| 17,6          | 1528       | 2,7  | 79,45  | S143                                                                              | 100LA4                                                                              | -            | 23100          |
| 14,2          | 1901       | 2,3  | 98,80  | S143                                                                              | 100LA4                                                                              | -            | 24000          |
| 12,7          | 2117       | 2,2  | 110,05 | S143                                                                              | 100LA4                                                                              | -            | 23500          |
| 11,3          | 2375       | 2,0  | 123,43 | S143                                                                              | 100LA4                                                                              | -            | 24000          |
| 10,0          | 2686       | 1,8  | 139,64 | S143                                                                              | 100LA4                                                                              | -            | 24100          |
| 9,4           | 2868       | 1,7  | 149,09 | S143                                                                              | 100LA4                                                                              | -            | 23800          |
| 8,9           | 3029       | 1,3  | 157,48 | S143                                                                              | 100LA4                                                                              | -            | 23800          |
| 8,2           | 3300       | 1,4  | 171,54 | S143                                                                              | 100LA4                                                                              | -            | 23800          |
| 8,0           | 3374       | 1,3  | 175,40 | S143                                                                              | 100LA4                                                                              | -            | 23800          |
| 7,1           | 3785       | 1,3  | 196,73 | S143                                                                              | 100LA4                                                                              | -            | 23200          |
| 6,3           | 4281       | 1,1  | 222,56 | S143                                                                              | 100LA4                                                                              | -            | 21600          |
| 5,9           | 4571       | 1,1  | 237,62 | S143                                                                              | 100LA4                                                                              | -            | 23000          |
| 5,1           | 5259       | 0,9  | 273,41 | S143                                                                              | 100LA4                                                                              | -            | 23200          |

**4,0 kW**

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 175,0         | 210        | 1,6  | 8      | S062                                                                              | 112MA4                                                                             | 5989         | 2396           |
| 146,7         | 250        | 1,4  | 9,55   | S062                                                                              | 112MA4                                                                             | 6171         | 2469           |
| 119,6         | 307        | 1,3  | 11,71  | S062                                                                              | 112MA4                                                                             | 6353         | 2541           |
| 104,8         | 350        | 1,2  | 13,36  | S062                                                                              | 112MA4                                                                             | 6448         | 2579           |
| 87,8          | 417        | 1,1  | 15,94  | S062                                                                              | 112MA4                                                                             | 6540         | 2616           |
| 71,6          | 512        | 0,9  | 19,55  | S062                                                                              | 112MA4                                                                             | 6581         | 2632           |
| 190,8         | 192        | 2,9  | 7,34   | S082                                                                              | 112MA4                                                                             | 13206        | 3773           |
| 173,6         | 211        | 2,8  | 8,06   | S082                                                                              | 112MA4                                                                             | 13580        | 3880           |
| 140,8         | 260        | 2,5  | 9,94   | S082                                                                              | 112MA4                                                                             | 14440        | 4126           |
| 120,6         | 304        | 2,3  | 11,61  | S082                                                                              | 112MA4                                                                             | 15098        | 4314           |
| 109,8         | 334        | 2,2  | 12,75  | S082                                                                              | 112MA4                                                                             | 15507        | 4430           |
| 89,0          | 412        | 1,9  | 15,73  | S082                                                                              | 112MA4                                                                             | 16441        | 4697           |
| 80,9          | 453        | 1,7  | 17,29  | S082                                                                              | 112MA4                                                                             | 16873        | 4821           |
| 69,5          | 528        | 1,5  | 20,14  | S082                                                                              | 112MA4                                                                             | 17574        | 5021           |
| 63,3          | 580        | 1,4  | 22,13  | S082                                                                              | 112MA4                                                                             | 18000        | 5146           |
| 58,3          | 629        | 1,3  | 24     | S082                                                                              | 112MA4                                                                             | 18000        | 5255           |
| 51,3          | 715        | 1,3  | 27,29  | S082                                                                              | 112MA4                                                                             | 18000        | 5427           |
| 48,8          | 751        | 1,2  | 28,67  | S082                                                                              | 112MA4                                                                             | 18000        | 5494           |
| 44,1          | 832        | 1,2  | 31,78  | S082                                                                              | 112MA4                                                                             | 18000        | 5631           |
| 40,1          | 914        | 1,1  | 34,91  | S082                                                                              | 112MA4                                                                             | 18000        | 5756           |
| 35,0          | 1049       | 1,0  | 40,05  | S082                                                                              | 112MA4                                                                             | 18000        | 5937           |
| 32,5          | 1128       | 0,9  | 43,05  | S082                                                                              | 112MA4                                                                             | 18000        | 6030           |
| 158,3         | 232        | 3,9  | 8,85   | S102                                                                              | 112MA4                                                                             | 17308        | 4945           |
| 128,6         | 285        | 3,3  | 10,88  | S102                                                                              | 112MA4                                                                             | 18438        | 5268           |
| 109,8         | 334        | 3,0  | 12,75  | S102                                                                              | 112MA4                                                                             | 19339        | 5525           |
| 100,1         | 366        | 3,3  | 13,99  | S102                                                                              | 112MA4                                                                             | 19883        | 5681           |
| 81,3          | 451        | 2,9  | 17,21  | S102                                                                              | 112MA4                                                                             | 21139        | 6040           |
| 73,7          | 498        | 2,8  | 19     | S102                                                                              | 112MA4                                                                             | 21757        | 6216           |
| 63,3          | 580        | 2,4  | 22,13  | S102                                                                              | 112MA4                                                                             | 22000        | 6495           |
| 57,7          | 636        | 2,4  | 24,28  | S102                                                                              | 112MA4                                                                             | 22000        | 6668           |
| 53,2          | 690        | 2,2  | 26,33  | S102                                                                              | 112MA4                                                                             | 22000        | 6823           |
| 46,9          | 782        | 1,9  | 29,87  | S102                                                                              | 112MA4                                                                             | 22000        | 7065           |
| 43,2          | 849        | 1,8  | 32,4   | S102                                                                              | 112MA4                                                                             | 22000        | 7224           |
| 40,1          | 914        | 1,5  | 34,91  | S102                                                                              | 112MA4                                                                             | 22000        | 7371           |
| 36,6          | 1003       | 1,5  | 38,3   | S102                                                                              | 112MA4                                                                             | 22000        | 7556           |
| 31,8          | 1153       | 1,1  | 44     | S102                                                                              | 112MA4                                                                             | 22000        | 7833           |
| 29,7          | 1234       | 1,3  | 47,13  | S102                                                                              | 112MA4                                                                             | 22000        | 7972           |
| 25,4          | 1444       | 0,9  | 55,14  | S102                                                                              | 112MA4                                                                             | 22000        | 8289           |
| 23,6          | 1556       | 1,0  | 59,4   | S102                                                                              | 112MA4                                                                             | 22000        | 8439           |
| 20,6          | 1777       | 0,9  | 67,84  | S102                                                                              | 112MA4                                                                             | 22000        | 8705           |
| 45,9          | 799        | 3,8  | 30,51  | S122                                                                              | 112MA4                                                                             | 30000        | 10150          |
| 41,9          | 876        | 3,4  | 33,44  | S122                                                                              | 112MA4                                                                             | 30000        | 10406          |
| 39,8          | 922        | 3,3  | 35,2   | S122                                                                              | 112MA4                                                                             | 30000        | 10549          |
| 34,1          | 1076       | 2,8  | 41,07  | S122                                                                              | 112MA4                                                                             | 30000        | 10985          |
| 32,1          | 1142       | 2,6  | 43,6   | S122                                                                              | 112MA4                                                                             | 30000        | 11156          |
| 28,5          | 1285       | 1,9  | 49,04  | S122                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 26,0          | 1408       | 1,8  | 53,75  | S122                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 21,2          | 1729       | 1,7  | 66     | S122                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 19,7          | 1823       | 1,5  | 71,07  | S123                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 16,0          | 2238       | 1,3  | 87,27  | S123                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 12,4          | 2886       | 1,0  | 112,52 | S123                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 11,4          | 3163       | 0,9  | 123,33 | S123                                                                              | 112MA4                                                                             | 30000        | 11200          |
| 30,6          | 1174       | 3,4  | 45,76  | S143                                                                              | 112MA4                                                                             | -            | 20500          |
| 27,5          | 1307       | 3,4  | 50,97  | S143                                                                              | 112MA4                                                                             | -            | 21100          |
| 24,5          | 1466       | 3,2  | 57,17  | S143                                                                              | 112MA4                                                                             | -            | 20900          |
| 21,6          | 1659       | 2,9  | 64,67  | S143                                                                              | 112MA4                                                                             | -            | 21100          |
| 20,3          | 1771       | 2,8  | 69,05  | S143                                                                              | 112MA4                                                                             | -            | 21600          |
| 17,6          | 2038       | 2,0  | 79,45  | S143                                                                              | 112MA4                                                                             | -            | 21000          |

## 4,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 14.2          | 2534       | 1.8  | 98.81  | S143                                                                              | 112MA4                                                                              | -            | 21700          |
| 12.7          | 2823       | 1.7  | 110.05 | S143                                                                              | 112MA4                                                                              | -            | 20800          |
| 11.3          | 3166       | 1.5  | 123.43 | S143                                                                              | 112MA4                                                                              | -            | 21200          |
| 10.0          | 3582       | 1.4  | 139.64 | S143                                                                              | 112MA4                                                                              | -            | 21000          |
| 9.4           | 3824       | 1.3  | 149.09 | S143                                                                              | 112MA4                                                                              | -            | 20300          |
| 8.9           | 4039       | 0.9  | 157.48 | S143                                                                              | 112MA4                                                                              | -            | 20300          |
| 8.2           | 4400       | 1.1  | 171.54 | S143                                                                              | 112MA4                                                                              | -            | 19800          |
| 8.0           | 4499       | 0.9  | 175.40 | S143                                                                              | 112MA4                                                                              | -            | 19800          |
| 7.1           | 5046       | 0.9  | 196.73 | S143                                                                              | 112MA4                                                                              | -            | 20000          |

## 5,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 190,8         | 264        | 2,1  | 7,34  | S082                                                                              | 132S4                                                                               | 12969        | 3705           |
| 173,6         | 290        | 2,1  | 8,06  | S082                                                                              | 132S4                                                                               | 13319        | 3806           |
| 140,8         | 358        | 1,8  | 9,94  | S082                                                                              | 132S4                                                                               | 14120        | 4034           |
| 120,6         | 418        | 1,7  | 11,61 | S082                                                                              | 132S4                                                                               | 14723        | 4207           |
| 109,8         | 459        | 1,6  | 12,75 | S082                                                                              | 132S4                                                                               | 15095        | 4313           |
| 89,0          | 566        | 1,4  | 15,73 | S082                                                                              | 132S4                                                                               | 15933        | 4552           |
| 80,9          | 623        | 1,2  | 17,29 | S082                                                                              | 132S4                                                                               | 16315        | 4661           |
| 69,5          | 725        | 1,1  | 20,14 | S082                                                                              | 132S4                                                                               | 16925        | 4836           |
| 63,3          | 797        | 1,0  | 22,13 | S082                                                                              | 132S4                                                                               | 17298        | 4942           |
| 58,3          | 864        | 0,9  | 24    | S082                                                                              | 132S4                                                                               | 17618        | 5034           |
| 51,3          | 983        | 0,9  | 27,29 | S082                                                                              | 132S4                                                                               | 18000        | 5176           |
| 173,6         | 290        | 2,9  | 8,06  | S102                                                                              | 132S4                                                                               | 16616        | 4747           |
| 158,3         | 319        | 2,8  | 8,85  | S102                                                                              | 132S4                                                                               | 17083        | 4881           |
| 128,6         | 392        | 2,4  | 10,88 | S102                                                                              | 132S4                                                                               | 18160        | 5189           |
| 109,8         | 459        | 2,2  | 12,75 | S102                                                                              | 132S4                                                                               | 19014        | 5432           |
| 100,1         | 504        | 2,4  | 13,99 | S102                                                                              | 132S4                                                                               | 19526        | 5579           |
| 81,3          | 620        | 2,1  | 17,21 | S102                                                                              | 132S4                                                                               | 20700        | 5914           |
| 73,7          | 684        | 2,0  | 19    | S102                                                                              | 132S4                                                                               | 21272        | 6078           |
| 63,3          | 797        | 1,8  | 22,13 | S102                                                                              | 132S4                                                                               | 22000        | 6334           |
| 57,7          | 874        | 1,7  | 24,28 | S102                                                                              | 132S4                                                                               | 22000        | 6492           |
| 53,2          | 948        | 1,6  | 26,33 | S102                                                                              | 132S4                                                                               | 22000        | 6631           |
| 46,9          | 1076       | 1,4  | 29,87 | S102                                                                              | 132S4                                                                               | 22000        | 6848           |
| 43,2          | 1167       | 1,3  | 32,4  | S102                                                                              | 132S4                                                                               | 22000        | 6988           |
| 40,1          | 1257       | 1,1  | 34,91 | S102                                                                              | 132S4                                                                               | 22000        | 7117           |
| 36,6          | 1380       | 1,1  | 38,3  | S102                                                                              | 132S4                                                                               | 22000        | 7277           |
| 29,7          | 1697       | 0,9  | 47,13 | S102                                                                              | 132S4                                                                               | 22000        | 7629           |
| 65,9          | 765        | 3,7  | 21,25 | S122                                                                              | 132S4                                                                               | 30000        | 8947           |
| 60,1          | 839        | 3,5  | 23,29 | S122                                                                              | 132S4                                                                               | 30000        | 9168           |
| 53,5          | 942        | 3,2  | 26,15 | S122                                                                              | 132S4                                                                               | 30000        | 9449           |
| 49,0          | 1030       | 2,9  | 28,6  | S122                                                                              | 132S4                                                                               | 30000        | 9667           |
| 45,9          | 1099       | 2,7  | 30,51 | S122                                                                              | 132S4                                                                               | 30000        | 9826           |
| 41,9          | 1205       | 2,5  | 33,44 | S122                                                                              | 132S4                                                                               | 30000        | 10050          |
| 39,8          | 1268       | 2,4  | 35,2  | S122                                                                              | 132S4                                                                               | 30000        | 10175          |
| 34,1          | 1479       | 2,0  | 41,07 | S122                                                                              | 132S4                                                                               | 30000        | 10549          |
| 32,1          | 1570       | 1,9  | 43,6  | S122                                                                              | 132S4                                                                               | 30000        | 10692          |
| 28,5          | 1766       | 1,4  | 49,04 | S122                                                                              | 132S4                                                                               | 30000        | 10971          |
| 26,0          | 1936       | 1,3  | 53,75 | S122                                                                              | 132S4                                                                               | 30000        | 11183          |
| 21,2          | 2377       | 1,3  | 66    | S122                                                                              | 132S4                                                                               | 30000        | 11200          |
| 19,7          | 2506       | 1,1  | 71,07 | S123                                                                              | 132S4                                                                               | 30000        | 11200          |
| 16,0          | 3078       | 1,0  | 87,27 | S123                                                                              | 132S4                                                                               | 30000        | 11200          |

## 5,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 40.9          | 1233       | 3.9  | 34.22  | S142                                                                              | 132S4                                                                              | -            | 18700          |
| 35.5          | 1418       | 3.1  | 39.47  | S142                                                                              | 132S4                                                                              | -            | 18600          |
| 30.6          | 1614       | 2.5  | 45.76  | S143                                                                              | 132S4                                                                              | -            | 18800          |
| 27.5          | 1798       | 2.5  | 50.97  | S143                                                                              | 132S4                                                                              | -            | 19400          |
| 24.5          | 2016       | 2.3  | 57.17  | S143                                                                              | 132S4                                                                              | -            | 18700          |
| 21.6          | 2281       | 1.9  | 64.67  | S143                                                                              | 132S4                                                                              | -            | 18700          |
| 20.3          | 2435       | 1.9  | 69.05  | S143                                                                              | 132S4                                                                              | -            | 19300          |
| 17.6          | 2802       | 1.6  | 79.45  | S143                                                                              | 132S4                                                                              | -            | 18000          |
| 14.2          | 3485       | 1.3  | 98.80  | S143                                                                              | 132S4                                                                              | -            | 18200          |
| 12.7          | 3881       | 1.2  | 110.05 | S143                                                                              | 132S4                                                                              | -            | 16600          |
| 11.3          | 4353       | 1.1  | 123.43 | S143                                                                              | 132S4                                                                              | -            | 16900          |
| 10.0          | 4925       | 1.0  | 139.64 | S143                                                                              | 132S4                                                                              | -            | 16100          |
| 9.4           | 5258       | 0.9  | 149.09 | S143                                                                              | 132S4                                                                              | -            | 14900          |
| 21.9          | 2259       | 3.9  | 64.05  | S153                                                                              | 132S4                                                                              | -            | 30200          |
| 19.0          | 2297       | 3.0  | 73.62  | S153                                                                              | 132S4                                                                              | -            | 30800          |
| 16.1          | 3074       | 2.3  | 87.15  | S153                                                                              | 132S4                                                                              | -            | 31000          |
| 14.4          | 3431       | 2.3  | 97.27  | S153                                                                              | 132S4                                                                              | -            | 31400          |
| 12.5          | 3938       | 2.3  | 111.66 | S153                                                                              | 132S4                                                                              | -            | 31700          |
| 11.4          | 4323       | 2.2  | 122.56 | S153                                                                              | 132S4                                                                              | -            | 31900          |
| 10.1          | 4910       | 1.9  | 139.20 | S153                                                                              | 132S4                                                                              | -            | 32000          |
| 9.1           | 5432       | 1.3  | 154.01 | S153                                                                              | 132S4                                                                              | -            | 30000          |
| 8.7           | 5643       | 1.4  | 160.01 | S153                                                                              | 132S4                                                                              | -            | 28000          |
| 7.9           | 6236       | 1.3  | 176.81 | S153                                                                              | 132S4                                                                              | -            | 27300          |
| 7.2           | 6844       | 1.3  | 194.05 | S153                                                                              | 132S4                                                                              | -            | 26500          |
| 6.4           | 7773       | 1.2  | 220.41 | S153                                                                              | 132S4                                                                              | -            | 25000          |
| 5.5           | 8935       | 0.9  | 253.35 | S153                                                                              | 132S4                                                                              | -            | 25000          |

## 7,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 190.8         | 360        | 1.5  | 7.34  | S082                                                                                | 132MA4                                                                               | 12653        | 3615           |
| 173.6         | 396        | 1.5  | 8.06  | S082                                                                                | 132MA4                                                                               | 12972        | 3706           |
| 140.8         | 488        | 1.3  | 9.94  | S082                                                                                | 132MA4                                                                               | 13692        | 3912           |
| 120.6         | 570        | 1.2  | 11.61 | S082                                                                                | 132MA4                                                                               | 14224        | 4064           |
| 109.8         | 626        | 1.2  | 12.75 | S082                                                                                | 132MA4                                                                               | 14547        | 4156           |
| 89.0          | 772        | 1.0  | 15.73 | S082                                                                                | 132MA4                                                                               | 15256        | 4359           |
| 80.9          | 849        | 0.9  | 17.29 | S082                                                                                | 132MA4                                                                               | 15571        | 4449           |
| 173.6         | 396        | 2.1  | 8.06  | S102                                                                                | 132MA4                                                                               | 16342        | 4669           |
| 158.3         | 434        | 2.1  | 8.85  | S102                                                                                | 132MA4                                                                               | 16782        | 4795           |
| 128.6         | 535        | 1.8  | 10.88 | S102                                                                                | 132MA4                                                                               | 17790        | 5083           |
| 109.8         | 626        | 1.6  | 12.75 | S102                                                                                | 132MA4                                                                               | 18580        | 5309           |
| 100.1         | 687        | 1.7  | 13.99 | S102                                                                                | 132MA4                                                                               | 19051        | 5443           |
| 81.3          | 845        | 1.5  | 17.21 | S102                                                                                | 132MA4                                                                               | 20115        | 5747           |
| 73.7          | 933        | 1.5  | 19    | S102                                                                                | 132MA4                                                                               | 20627        | 5893           |
| 63.3          | 1087       | 1.3  | 22.13 | S102                                                                                | 132MA4                                                                               | 21416        | 6119           |
| 57.7          | 1192       | 1.3  | 24.28 | S102                                                                                | 132MA4                                                                               | 21895        | 6256           |
| 53.2          | 1293       | 1.2  | 26.33 | S102                                                                                | 132MA4                                                                               | 22000        | 6375           |
| 46.9          | 1467       | 1.0  | 29.87 | S102                                                                                | 132MA4                                                                               | 22000        | 6558           |
| 43.2          | 1591       | 0.9  | 32.4  | S102                                                                                | 132MA4                                                                               | 22000        | 6674           |
| 65.9          | 1044       | 2.7  | 21.25 | S122                                                                                | 132MA4                                                                               | 30000        | 8646           |
| 60.1          | 1144       | 2.5  | 23.29 | S122                                                                                | 132MA4                                                                               | 30000        | 8838           |
| 53.5          | 1285       | 2.3  | 26.15 | S122                                                                                | 132MA4                                                                               | 30000        | 9079           |
| 49.0          | 1405       | 2.1  | 28.6  | S122                                                                                | 132MA4                                                                               | 30000        | 9262           |
| 45.9          | 1499       | 2.0  | 30.51 | S122                                                                                | 132MA4                                                                               | 30000        | 9393           |

## 7,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 41,9          | 1643       | 1,8  | 33,44  | S122                                                                              | 132MA4                                                                              | 30000        | 9576           |
| 39,8          | 1729       | 1,7  | 35,2   | S122                                                                              | 132MA4                                                                              | 30000        | 9676           |
| 34,1          | 2017       | 1,5  | 41,07  | S122                                                                              | 132MA4                                                                              | 30000        | 9967           |
| 32,1          | 2141       | 1,4  | 43,6   | S122                                                                              | 132MA4                                                                              | 30000        | 10074          |
| 28,5          | 2408       | 1,0  | 49,04  | S122                                                                              | 132MA4                                                                              | 30000        | 10275          |
| 26,0          | 2640       | 1,0  | 53,75  | S122                                                                              | 132MA4                                                                              | 30000        | 10421          |
| 21,2          | 3242       | 0,9  | 66     | S122                                                                              | 132MA4                                                                              | 30000        | 10701          |
| 191,3         | 359        | 3,9  | 7,31   | S142                                                                              | 132MA4                                                                              | -            | 15800          |
| 170,5         | 403        | 3,9  | 8,20   | S142                                                                              | 132MA4                                                                              | -            | 16000          |
| 150,7         | 456        | 3,9  | 9,28   | S142                                                                              | 132MA4                                                                              | -            | 16200          |
| 141,3         | 487        | 3,9  | 9,91   | S142                                                                              | 132MA4                                                                              | -            | 16300          |
| 122,7         | 560        | 3,9  | 11,40  | S142                                                                              | 132MA4                                                                              | -            | 16500          |
| 62,9          | 1093       | 3,9  | 22,24  | S142                                                                              | 132MA4                                                                              | -            | 17000          |
| 55,4          | 1241       | 3,1  | 25,26  | S142                                                                              | 132MA4                                                                              | -            | 17300          |
| 49,4          | 1392       | 3,1  | 28,33  | S142                                                                              | 132MA4                                                                              | -            | 17000          |
| 43,7          | 1574       | 3,0  | 32,05  | S142                                                                              | 132MA4                                                                              | -            | 17000          |
| 40,9          | 1681       | 2,9  | 34,22  | S142                                                                              | 132MA4                                                                              | -            | 17300          |
| 35,6          | 1934       | 2,3  | 39,37  | S142                                                                              | 132MA4                                                                              | -            | 16600          |
| 30,6          | 2201       | 1,8  | 45,76  | S143                                                                              | 132MA4                                                                              | -            | 17100          |
| 27,5          | 2451       | 1,8  | 50,97  | S143                                                                              | 132MA4                                                                              | -            | 17100          |
| 24,5          | 2749       | 1,7  | 57,17  | S143                                                                              | 132MA4                                                                              | -            | 15700          |
| 21,6          | 3110       | 1,4  | 64,67  | S143                                                                              | 132MA4                                                                              | -            | 15500          |
| 20,3          | 3321       | 1,4  | 69,05  | S143                                                                              | 132MA4                                                                              | -            | 16100          |
| 17,6          | 3821       | 1,2  | 79,45  | S143                                                                              | 132MA4                                                                              | -            | 13900          |
| 14,2          | 4752       | 0,9  | 98,80  | S143                                                                              | 132MA4                                                                              | -            | 13600          |
| 34,9          | 1929       | 3,3  | 40,10  | S153                                                                              | 132MA4                                                                              | -            | 27200          |
| 119,0         | 2152       | 3,3  | 44,75  | S153                                                                              | 132MA4                                                                              | -            | 27700          |
| 27,2          | 2471       | 3,2  | 51,37  | S153                                                                              | 132MA4                                                                              | -            | 28200          |
| 24,8          | 2712       | 3,0  | 56,39  | S153                                                                              | 132MA4                                                                              | -            | 27400          |
| 21,9          | 3080       | 2,9  | 64,05  | S153                                                                              | 132MA4                                                                              | -            | 27700          |
| 19,0          | 3541       | 2,2  | 73,62  | S153                                                                              | 132MA4                                                                              | -            | 28100          |
| 16,1          | 4192       | 1,7  | 87,15  | S153                                                                              | 132MA4                                                                              | -            | 27500          |
| 14,4          | 5678       | 1,7  | 97,27  | S153                                                                              | 132MA4                                                                              | -            | 27600          |
| 12,5          | 5370       | 1,7  | 111,66 | S153                                                                              | 132MA4                                                                              | -            | 27600          |
| 11,4          | 5894       | 1,6  | 122,56 | S153                                                                              | 132MA4                                                                              | -            | 27300          |
| 10,1          | 6695       | 1,4  | 139,20 | S153                                                                              | 132MA4                                                                              | -            | 26800          |
| 9,1           | 7407       | 1,0  | 154,01 | S153                                                                              | 132MA4                                                                              | -            | 25800          |
| 8,7           | 7695       | 1,1  | 160,01 | S153                                                                              | 132MA4                                                                              | -            | 24900          |
| 7,9           | 8503       | 1,0  | 176,81 | S153                                                                              | 132MA4                                                                              | -            | 23700          |
| 7,2           | 9333       | 1,0  | 194,05 | S153                                                                              | 132MA4                                                                              | -            | 23500          |

## 11,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|----------------|
| 190,8         | 529        | 1,0  | 7,34  | S082                                                                                | 132MC4                                                                                | 12101        | 3457           |
| 173,6         | 581        | 1,0  | 8,06  | S082                                                                                | 132MC4                                                                                | 12365        | 3533           |
| 140,8         | 716        | 0,9  | 9,94  | S082                                                                                | 132MC4                                                                                | 12943        | 3698           |
| 73,7          | 1369       | 1,0  | 19    | S102                                                                                | 132MC4                                                                                | 19496        | 5570           |
| 173,6         | 581        | 1,5  | 8,06  | S102                                                                                | 132MC4/160S4                                                                          | 15862        | 4532           |
| 158,3         | 637        | 1,4  | 8,85  | S102                                                                                | 132MC4/160S4                                                                          | 16256        | 4644           |
| 128,6         | 784        | 1,2  | 10,88 | S102                                                                                | 132MC4/160S4                                                                          | 17143        | 4898           |
| 109,8         | 918        | 1,1  | 12,75 | S102                                                                                | 132MC4/160S4                                                                          | 17822        | 5092           |
| 100,1         | 1008       | 1,2  | 13,99 | S102                                                                                | 132MC4/160S4                                                                          | 18218        | 5205           |
| 81,3          | 1240       | 1,0  | 17,21 | S102                                                                                | 132MC4/160S4                                                                          | 19091        | 5455           |

## 11,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i      |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|--------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 32,1          | 3140       | 1,0  | 43,6   | S122                                                                              | 132MC4                                                                             | 30000        | 8993           |
| 65,9          | 1531       | 1,8  | 21,25  | S122                                                                              | 132MC4/160S4                                                                       | 28416        | 8119           |
| 60,1          | 1678       | 1,7  | 23,29  | S122                                                                              | 132MC4/160S4                                                                       | 28910        | 8260           |
| 53,5          | 1884       | 1,6  | 26,15  | S122                                                                              | 132MC4/160S4                                                                       | 29504        | 8430           |
| 49,0          | 2060       | 1,5  | 28,6   | S122                                                                              | 132MC4/160S4                                                                       | 29934        | 8553           |
| 45,9          | 2198       | 1,4  | 30,51  | S122                                                                              | 132MC4/160S4                                                                       | 30000        | 8636           |
| 41,9          | 2409       | 1,2  | 33,44  | S122                                                                              | 132MC4/160S4                                                                       | 30000        | 8746           |
| 39,8          | 2536       | 1,2  | 35,2   | S122                                                                              | 132MC4/160S4                                                                       | 30000        | 8803           |
| 34,1          | 2958       | 1,0  | 41,07  | S122                                                                              | 132MC4/160S4                                                                       | 30000        | 8948           |
| 165,0         | 611        | 2,5  | 8,48   | S122                                                                              | 160S4                                                                              | 22955        | 6558           |
| 150,6         | 670        | 2,5  | 9,3    | S122                                                                              | 160S4                                                                              | 23509        | 6717           |
| 122,6         | 822        | 2,3  | 11,42  | S122                                                                              | 160S4                                                                              | 24757        | 7073           |
| 110,9         | 910        | 2,4  | 12,63  | S122                                                                              | 160S4                                                                              | 25368        | 7248           |
| 101,2         | 997        | 2,4  | 13,84  | S122                                                                              | 160S4                                                                              | 25923        | 7407           |
| 82,4          | 1224       | 2,1  | 16,99  | S122                                                                              | 160S4                                                                              | 27144        | 7756           |
| 87,4          | 1153       | 3,0  | 16,00  | S142                                                                              | 160S4                                                                              | -            | 15600          |
| 77,3          | 1304       | 3,0  | 18,10  | S142                                                                              | 160S4                                                                              | -            | 15700          |
| 72,4          | 1393       | 3,0  | 19,33  | S142                                                                              | 160S4                                                                              | -            | 15700          |
| 62,9          | 1602       | 2,7  | 22,24  | S142                                                                              | 160S4                                                                              | -            | 15100          |
| 55,4          | 1820       | 2,1  | 25,26  | S142                                                                              | 160S4                                                                              | -            | 15300          |
| 49,4          | 2041       | 2,1  | 28,33  | S142                                                                              | 160S4                                                                              | -            | 14400          |
| 43,7          | 2309       | 2,1  | 32,05  | S142                                                                              | 160S4                                                                              | -            | 14300          |
| 40,9          | 2465       | 2,0  | 34,22  | S142                                                                              | 160S4                                                                              | -            | 14500          |
| 35,6          | 2836       | 1,3  | 39,37  | S142                                                                              | 160S4                                                                              | -            | 13100          |
| 30,6          | 3228       | 1,2  | 45,76  | S143                                                                              | 160S4                                                                              | -            | 12800          |
| 27,5          | 3595       | 1,2  | 50,97  | S143                                                                              | 160S4                                                                              | -            | 13000          |
| 24,5          | 4033       | 1,2  | 57,17  | S143                                                                              | 160S4                                                                              | -            | 10600          |
| 21,6          | 4562       | 1,0  | 64,67  | S143                                                                              | 160S4                                                                              | -            | 9900           |
| 20,3          | 4871       | 1,0  | 69,05  | S143                                                                              | 160S4                                                                              | -            | 10600          |
| 34,9          | 2829       | 2,2  | 40,10  | S153                                                                              | 160S4                                                                              | -            | 24600          |
| 119,0         | 3157       | 2,2  | 44,75  | S153                                                                              | 160S4                                                                              | -            | 24800          |
| 27,2          | 3624       | 2,2  | 51,37  | S153                                                                              | 160S4                                                                              | -            | 24900          |
| 24,8          | 3978       | 2,1  | 56,39  | S153                                                                              | 160S4                                                                              | -            | 23300          |
| 21,9          | 4518       | 1,9  | 64,05  | S153                                                                              | 160S4                                                                              | -            | 23400          |
| 19,0          | 5193       | 1,5  | 73,62  | S153                                                                              | 160S4                                                                              | -            | 23300          |
| 16,1          | 6148       | 1,2  | 87,15  | S153                                                                              | 160S4                                                                              | -            | 21500          |
| 14,4          | 6861       | 1,2  | 97,27  | S153                                                                              | 160S4                                                                              | -            | 20900          |
| 12,5          | 7877       | 1,2  | 111,66 | S153                                                                              | 160S4                                                                              | -            | 20400          |
| 11,4          | 8645       | 1,1  | 122,56 | S153                                                                              | 160S4                                                                              | -            | 19300          |
| 10,1          | 9819       | 0,9  | 139,20 | S153                                                                              | 160S4                                                                              | -            | 17800          |

## 15,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 173,6         | 792        | 1,1  | 8,06  | S102                                                                                | 160L4                                                                                | 15314        | 4375           |
| 158,3         | 869        | 1,0  | 8,85  | S102                                                                                | 160L4                                                                                | 15654        | 4473           |
| 165,0         | 833        | 1,8  | 8,48  | S122                                                                                | 160L4                                                                                | 22113        | 6318           |
| 150,6         | 913        | 1,9  | 9,3   | S122                                                                                | 160L4                                                                                | 22586        | 6453           |
| 122,6         | 1121       | 1,7  | 11,42 | S122                                                                                | 160L4                                                                                | 23624        | 6750           |
| 110,9         | 1240       | 1,8  | 12,63 | S122                                                                                | 160L4                                                                                | 24116        | 6890           |
| 101,2         | 1359       | 1,8  | 13,84 | S122                                                                                | 160L4                                                                                | 24550        | 7014           |
| 82,4          | 1669       | 1,6  | 16,99 | S122                                                                                | 160L4                                                                                | 25458        | 7274           |
| 65,9          | 2087       | 1,3  | 21,25 | S122                                                                                | 160L4                                                                                | 26307        | 7516           |
| 60,1          | 2288       | 1,3  | 23,29 | S122                                                                                | 160L4                                                                                | 26599        | 7600           |

## 15,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 53,5          | 2569       | 1,2  | 26,15 | S122                                                                              | 160L4                                                                               | 26909        | 7688           |
| 49,0          | 2809       | 1,1  | 28,6  | S122                                                                              | 160L4                                                                               | 27096        | 7742           |
| 45,9          | 2997       | 1,0  | 30,51 | S122                                                                              | 160L4                                                                               | 27199        | 7771           |
| 41,9          | 3285       | 0,9  | 33,44 | S122                                                                              | 160L4                                                                               | 27293        | 7798           |
| 170.5         | 806        | 4.0  | 8.20  | S142                                                                              | 160L4                                                                               | -            | 14600          |
| 150.7         | 912        | 4.0  | 9.28  | S142                                                                              | 160L4                                                                               | -            | 14600          |
| 141.3         | 974        | 4.0  | 9.91  | S142                                                                              | 160L4                                                                               | -            | 14700          |
| 122.7         | 1120       | 3.7  | 11.40 | S142                                                                              | 160L4                                                                               | -            | 14700          |
| 109.3         | 1259       | 2.9  | 12.81 | S142                                                                              | 160L4                                                                               | -            | 14100          |
| 98.1          | 1402       | 2.9  | 14.27 | S142                                                                              | 160L4                                                                               | -            | 14000          |
| 87.4          | 1572       | 2.9  | 16.00 | S142                                                                              | 160L4                                                                               | -            | 14000          |
| 77.3          | 1779       | 2.7  | 18.10 | S142                                                                              | 160L4                                                                               | -            | 14000          |
| 72.4          | 1899       | 2.5  | 19.33 | S142                                                                              | 160L4                                                                               | -            | 13400          |
| 62.9          | 2185       | 2.0  | 22.24 | S142                                                                              | 160L4                                                                               | -            | 12800          |
| 55.4          | 2481       | 1.6  | 25.26 | S142                                                                              | 160L4                                                                               | -            | 12900          |
| 49.4          | 2783       | 1.6  | 28.33 | S142                                                                              | 160L4                                                                               | -            | 11600          |
| 43.7          | 3148       | 1.5  | 32.05 | S142                                                                              | 160L4                                                                               | -            | 11100          |
| 40.9          | 3362       | 1.4  | 34.22 | S142                                                                              | 160L4                                                                               | -            | 11400          |
| 35.6          | 3868       | 1.1  | 39.37 | S142                                                                              | 160L4                                                                               | -            | 9100           |
| 30.6          | 4402       | 0.9  | 45.76 | S143                                                                              | 160L4                                                                               | -            | 8500           |
| 27.5          | 4903       | 0.9  | 50.97 | S143                                                                              | 160L4                                                                               | -            | 8400           |
| 112.4         | 1224       | 3.7  | 12.46 | S152                                                                              | 160L4                                                                               | -            | 22100          |
| 100.6         | 1366       | 3.7  | 13.90 | S152                                                                              | 160L4                                                                               | -            | 22300          |
| 87.7          | 1569       | 3.7  | 15.96 | S152                                                                              | 160L4                                                                               | -            | 22600          |
| 79.9          | 1722       | 3.7  | 17.52 | S152                                                                              | 160L4                                                                               | -            | 22300          |
| 70.3          | 1955       | 3.3  | 19.90 | S152                                                                              | 160L4                                                                               | -            | 22900          |
| 61.2          | 2248       | 3.7  | 22.88 | S152                                                                              | 160L4                                                                               | -            | 22700          |
| 51.6          | 2663       | 2.8  | 27.10 | S152                                                                              | 160L4                                                                               | -            | 22000          |
| 47.1          | 2922       | 2.7  | 29.75 | S152                                                                              | 160L4                                                                               | -            | 22000          |
| 41.4          | 3319       | 2.5  | 33.79 | S152                                                                              | 160L4                                                                               | -            | 21900          |
| 36.0          | 3815       | 2.0  | 38.84 | S152                                                                              | 160L4                                                                               | -            | 21600          |
| 34.9          | 3857       | 1.6  | 40.10 | S153                                                                              | 160L4                                                                               | -            | 21600          |
| 119.0         | 4305       | 1.6  | 44.75 | S153                                                                              | 160L4                                                                               | -            | 21500          |
| 27.2          | 4942       | 1.6  | 51.37 | S153                                                                              | 160L4                                                                               | -            | 21200          |
| 24.8          | 5424       | 1.5  | 56.39 | S153                                                                              | 160L4                                                                               | -            | 18800          |
| 21.9          | 6161       | 1.4  | 64.05 | S153                                                                              | 160L4                                                                               | -            | 18500          |
| 19.0          | 7081       | 1.1  | 73.62 | S153                                                                              | 160L4                                                                               | -            | 17800          |

## 18,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|----------------|
| 165,0         | 1028       | 1,5  | 8,48  | S122                                                                                | 180M4                                                                                 | 21376        | 6108           |
| 150,6         | 1126       | 1,5  | 9,3   | S122                                                                                | 180M4                                                                                 | 21779        | 6223           |
| 122,6         | 1383       | 1,4  | 11,42 | S122                                                                                | 180M4                                                                                 | 22633        | 6466           |
| 110,9         | 1530       | 1,4  | 12,63 | S122                                                                                | 180M4                                                                                 | 23019        | 6577           |
| 101,2         | 1677       | 1,4  | 13,84 | S122                                                                                | 180M4                                                                                 | 23348        | 6671           |
| 82,4          | 2059       | 1,3  | 16,99 | S122                                                                                | 180M4                                                                                 | 23983        | 6852           |
| 65,9          | 2574       | 1,1  | 21,25 | S122                                                                                | 180M4                                                                                 | 24462        | 6989           |
| 60,1          | 2822       | 1,0  | 23,29 | S122                                                                                | 180M4                                                                                 | 24577        | 7022           |
| 53,5          | 3169       | 0,9  | 26,15 | S122                                                                                | 180M4                                                                                 | 24638        | 7040           |
| 340.6         | 498        | 3.8  | 4.11  | S142                                                                                | 180M4                                                                                 | -            | 13000          |
| 305.0         | 556        | 3.8  | 4.58  | S142                                                                                | 180M4                                                                                 | -            | 13200          |
| 272.4         | 623        | 3.8  | 5.14  | S142                                                                                | 180M4                                                                                 | -            | 13500          |

## 18,5 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 240.5         | 705        | 3.8  | 5.81  | S142                                                                              | 180M4                                                                              | -            | 13800          |
| 225.4         | 753        | 3.8  | 6.21  | S142                                                                              | 180M4                                                                              | -            | 13900          |
| 191.3         | 887        | 3.2  | 7.31  | S142                                                                              | 180M4                                                                              | -            | 13900          |
| 170.5         | 994        | 3.2  | 8.20  | S142                                                                              | 180M4                                                                              | -            | 13900          |
| 150.7         | 1125       | 3.2  | 9.28  | S142                                                                              | 180M4                                                                              | -            | 13900          |
| 141.3         | 1201       | 3.2  | 9.91  | S142                                                                              | 180M4                                                                              | -            | 13900          |
| 122.7         | 1382       | 3.0  | 11.41 | S142                                                                              | 180M4                                                                              | -            | 13800          |
| 109.3         | 1552       | 2.4  | 12.81 | S142                                                                              | 180M4                                                                              | -            | 13000          |
| 98.1          | 1729       | 2.4  | 14.27 | S142                                                                              | 180M4                                                                              | -            | 12700          |
| 87.4          | 1939       | 2.4  | 16.00 | S142                                                                              | 180M4                                                                              | -            | 12700          |
| 77.3          | 2194       | 2.2  | 18.10 | S142                                                                              | 180M4                                                                              | -            | 12500          |
| 72.4          | 2342       | 2.1  | 19.33 | S142                                                                              | 180M4                                                                              | -            | 11700          |
| 62.9          | 2695       | 1.6  | 22.24 | S142                                                                              | 180M4                                                                              | -            | 10900          |
| 55.4          | 3060       | 1.3  | 25.26 | S142                                                                              | 180M4                                                                              | -            | 10800          |
| 49.4          | 3433       | 1.3  | 28.33 | S142                                                                              | 180M4                                                                              | -            | 9000           |
| 43.7          | 3883       | 1.2  | 32.05 | S142                                                                              | 180M4                                                                              | -            | 8200           |
| 40.9          | 4146       | 1.2  | 34.22 | S142                                                                              | 180M4                                                                              | -            | 7500           |
| 35.6          | 4770       | 0.9  | 39.37 | S142                                                                              | 180M4                                                                              | -            | 5600           |
| 112.4         | 1510       | 3.0  | 12.46 | S152                                                                              | 180M4                                                                              | -            | 21200          |
| 100.6         | 1685       | 3.0  | 13.90 | S152                                                                              | 180M4                                                                              | -            | 21300          |
| 87.7          | 1935       | 3.0  | 15.96 | S152                                                                              | 180M4                                                                              | -            | 21500          |
| 79.9          | 2123       | 3.0  | 17.52 | S152                                                                              | 180M4                                                                              | -            | 21000          |
| 70.3          | 2412       | 3.0  | 19.90 | S152                                                                              | 180M4                                                                              | -            | 21100          |
| 61.2          | 2772       | 3.7  | 22.88 | S152                                                                              | 180M4                                                                              | -            | 21100          |
| 51.6          | 3284       | 2.3  | 27.10 | S152                                                                              | 180M4                                                                              | -            | 1900           |
| 47.1          | 3604       | 2.2  | 29.75 | S152                                                                              | 180M4                                                                              | -            | 20000          |
| 41.4          | 4094       | 2.0  | 33.79 | S152                                                                              | 180M4                                                                              | -            | 19700          |
| 36.0          | 4705       | 1.6  | 38.84 | S152                                                                              | 180M4                                                                              | -            | 19000          |
| 34.9          | 4757       | 1.3  | 40.10 | S153                                                                              | 180M4                                                                              | -            | 19000          |
| 119.0         | 5309       | 1.3  | 44.75 | S153                                                                              | 180M4                                                                              | -            | 18600          |
| 27.2          | 6095       | 1.3  | 51.37 | S153                                                                              | 180M4                                                                              | -            | 18000          |
| 24.8          | 6690       | 1.2  | 56.39 | S153                                                                              | 180M4                                                                              | -            | 14800          |
| 21.9          | 7598       | 1.2  | 64.05 | S153                                                                              | 180M4                                                                              | -            | 14200          |

## 22,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 165.0         | 1222       | 1.2  | 8.48  | S122                                                                                | 180L4                                                                                | 20640        | 5897           |
| 150.6         | 1339       | 1.3  | 9.3   | S122                                                                                | 180L4                                                                                | 20972        | 5992           |
| 122.6         | 1645       | 1.2  | 11.42 | S122                                                                                | 180L4                                                                                | 21641        | 6183           |
| 110.9         | 1819       | 1.2  | 12.63 | S122                                                                                | 180L4                                                                                | 21923        | 6264           |
| 101.2         | 1994       | 1.2  | 13.84 | S122                                                                                | 180L4                                                                                | 22147        | 6328           |
| 82.4          | 2448       | 1.1  | 16.99 | S122                                                                                | 180L4                                                                                | 22507        | 6431           |
| 65.9          | 3061       | 0.9  | 21.25 | S122                                                                                | 180L4                                                                                | 22617        | 6462           |
| 340.6         | 592        | 3.2  | 4.11  | S142                                                                                | 180L4                                                                                | -            | 12300          |
| 305.0         | 661        | 3.2  | 4.58  | S142                                                                                | 180L4                                                                                | -            | 12500          |
| 272.4         | 741        | 3.2  | 5.14  | S142                                                                                | 180L4                                                                                | -            | 12800          |
| 240.5         | 838        | 3.2  | 5.81  | S142                                                                                | 180L4                                                                                | -            | 13100          |
| 225.4         | 895        | 3.2  | 6.21  | S142                                                                                | 180L4                                                                                | -            | 13300          |
| 191.3         | 1054       | 2.7  | 7.31  | S142                                                                                | 180L4                                                                                | -            | 13300          |
| 170.5         | 1182       | 2.7  | 8.20  | S142                                                                                | 180L4                                                                                | -            | 13200          |
| 150.7         | 1338       | 2.7  | 9.28  | S142                                                                                | 180L4                                                                                | -            | 13100          |
| 141.3         | 1428       | 2.7  | 9.91  | S142                                                                                | 180L4                                                                                | -            | 13100          |
| 122.7         | 1643       | 2.5  | 11.40 | S142                                                                                | 180L4                                                                                | -            | 12900          |

## 22,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------|----------------|
| 109.3         | 1846       | 2.0  | 12.81 | S142                                                                              | 180L4                                                                               | -            | 11800          |
| 98.1          | 2056       | 2.0  | 14.27 | S142                                                                              | 180L4                                                                               | -            | 11500          |
| 87.4          | 2306       | 2.0  | 16.00 | S142                                                                              | 180L4                                                                               | -            | 11400          |
| 77.3          | 2609       | 1.9  | 18.10 | S142                                                                              | 180L4                                                                               | -            | 11000          |
| 72.4          | 2785       | 1.7  | 19.33 | S142                                                                              | 180L4                                                                               | -            | 10000          |
| 62.9          | 3205       | 1.3  | 22.24 | S142                                                                              | 180L4                                                                               | -            | 8900           |
| 55.4          | 3639       | 1.1  | 25.26 | S142                                                                              | 180L4                                                                               | -            | 8800           |
| 49.4          | 4082       | 1.1  | 28.33 | S142                                                                              | 180L4                                                                               | -            | 6500           |
| 43.7          | 4618       | 1.0  | 32.05 | S142                                                                              | 180L4                                                                               | -            | 4000           |
| 40.9          | 4930       | 1.0  | 34.22 | S142                                                                              | 180L4                                                                               | -            | 5900           |
| 112.4         | 1796       | 2.5  | 12.46 | S152                                                                              | 180L4                                                                               | -            | 20200          |
| 100.6         | 2004       | 2.5  | 13.90 | S152                                                                              | 180L4                                                                               | -            | 20300          |
| 87.7          | 2301       | 2.5  | 15.96 | S152                                                                              | 180L4                                                                               | -            | 20400          |
| 79.9          | 2525       | 2.5  | 17.52 | S152                                                                              | 180L4                                                                               | -            | 19800          |
| 70.3          | 2868       | 2.5  | 19.90 | S152                                                                              | 180L4                                                                               | -            | 20300          |
| 61.2          | 3297       | 2.3  | 22.88 | S152                                                                              | 180L4                                                                               | -            | 19600          |
| 51.6          | 3905       | 1.9  | 27.10 | S152                                                                              | 180L4                                                                               | -            | 17900          |
| 47.1          | 4286       | 1.8  | 29.75 | S152                                                                              | 180L4                                                                               | -            | 17900          |
| 41.4          | 4868       | 1.7  | 33.79 | S152                                                                              | 180L4                                                                               | -            | 17400          |
| 36.0          | 5596       | 1.4  | 38.84 | S152                                                                              | 180L4                                                                               | -            | 16400          |
| 34.9          | 5567       | 1.1  | 40.10 | S153                                                                              | 180L4                                                                               | -            | 16400          |
| 31.3          | 6314       | 1.1  | 44.75 | S153                                                                              | 180L4                                                                               | -            | 15700          |
| 27.2          | 7248       | 1.1  | 51.37 | S153                                                                              | 180L4                                                                               | -            | 14700          |
| 24.8          | 7955       | 1.1  | 56.39 | S153                                                                              | 180L4                                                                               | -            | 10700          |
| 21.9          | 9036       | 1.0  | 64.05 | S153                                                                              | 180L4                                                                               | -            | 9800           |

## 30,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|----------------|
| 165.0         | 1666       | 0.9  | 8.48  | S122                                                                                | 200L4                                                                                 | 18957        | 5416           |
| 150.6         | 1827       | 0.9  | 9.3   | S122                                                                                | 200L4                                                                                 | 19127        | 5465           |
| 340.6         | 807        | 1.0  | 4.11  | S142                                                                                | 200L4                                                                                 | -            | 11000          |
| 305.0         | 901        | 2.3  | 4.58  | S142                                                                                | 200L4                                                                                 | -            | 11300          |
| 272.4         | 1011       | 2.3  | 5.14  | S142                                                                                | 200L4                                                                                 | -            | 11500          |
| 240.5         | 1143       | 2.3  | 5.81  | S142                                                                                | 200L4                                                                                 | -            | 11800          |
| 225.4         | 1221       | 2.3  | 6.21  | S142                                                                                | 200L4                                                                                 | -            | 12000          |
| 191.3         | 1438       | 2.0  | 7.31  | S142                                                                                | 200L4                                                                                 | -            | 11900          |
| 170.5         | 1612       | 2.0  | 8.20  | S142                                                                                | 200L4                                                                                 | -            | 11700          |
| 150.7         | 1824       | 2.0  | 9.28  | S142                                                                                | 200L4                                                                                 | -            | 11400          |
| 141.3         | 1948       | 2.0  | 9.91  | S142                                                                                | 200L4                                                                                 | -            | 11300          |
| 122.7         | 2241       | 1.9  | 11.40 | S142                                                                                | 200L4                                                                                 | -            | 10900          |
| 109.3         | 2517       | 1.5  | 12.81 | S142                                                                                | 200L4                                                                                 | -            | 9300           |
| 98.1          | 2804       | 1.5  | 14.27 | S142                                                                                | 200L4                                                                                 | -            | 8600           |
| 87.4          | 3145       | 1.5  | 16.00 | S142                                                                                | 200L4                                                                                 | -            | 8300           |
| 77.3          | 3557       | 1.4  | 18.10 | S142                                                                                | 200L4                                                                                 | -            | 7500           |
| 72.4          | 3798       | 1.3  | 19.33 | S142                                                                                | 200L4                                                                                 | -            | 6100           |
| 62.9          | 4370       | 1.0  | 22.24 | S142                                                                                | 200L4                                                                                 | -            | 4400           |
| 214.7         | 1282       | 3.7  | 6.52  | S152                                                                                | 200L4                                                                                 | -            | 19200          |
| 192.3         | 1430       | 3.6  | 7.28  | S152                                                                                | 200L4                                                                                 | -            | 19300          |
| 167.5         | 1642       | 3.4  | 8.35  | S152                                                                                | 200L4                                                                                 | -            | 19400          |
| 152.7         | 1802       | 3.2  | 9.17  | S152                                                                                | 200L4                                                                                 | -            | 19400          |
| 134.4         | 2047       | 3.0  | 10.41 | S152                                                                                | 200L4                                                                                 | -            | 19300          |
| 112.4         | 2448       | 2.2  | 12.46 | S152                                                                                | 200L4                                                                                 | -            | 17900          |

## 30,0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 100.6         | 2733       | 2.2  | 13.90 | S152                                                                              | 200L4                                                                              | -            | 17800          |
| 87.7          | 3137       | 2.1  | 15.96 | S152                                                                              | 200L4                                                                              | -            | 17600          |
| 79.9          | 3443       | 2.0  | 17.52 | S152                                                                              | 200L4                                                                              | -            | 16500          |
| 70.3          | 3911       | 1.9  | 19.90 | S152                                                                              | 200L4                                                                              | -            | 17000          |
| 61.2          | 4495       | 1.7  | 22.88 | S152                                                                              | 200L4                                                                              | -            | 15600          |
| 51.6          | 5325       | 1.4  | 27.10 | S152                                                                              | 200L4                                                                              | -            | 13100          |
| 47.1          | 5845       | 1.3  | 29.75 | S152                                                                              | 200L4                                                                              | -            | 12400          |
| 41.4          | 6638       | 1.2  | 33.79 | S152                                                                              | 200L4                                                                              | -            | 11200          |
| 36.0          | 7630       | 1.0  | 38.84 | S152                                                                              | 200L4                                                                              | -            | 9500           |

## 37.0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|----------------|
| 344.8         | 984        | 3.8  | 4.06  | S152                                                                              | 225S4                                                                              | -            | 17000          |
| 309.1         | 1098       | 3.7  | 4.53  | S152                                                                              | 225S4                                                                              | -            | 17400          |
| 269.2         | 1261       | 3.5  | 5.20  | S152                                                                              | 225S4                                                                              | -            | 17700          |
| 245.2         | 1384       | 3.4  | 5.71  | S152                                                                              | 225S4                                                                              | -            | 18000          |
| 214.7         | 1581       | 3.0  | 6.52  | S152                                                                              | 225S4                                                                              | -            | 18300          |
| 192.3         | 1765       | 2.9  | 7.28  | S152                                                                              | 225S4                                                                              | -            | 18300          |
| 167.5         | 2025       | 2.7  | 8.35  | S152                                                                              | 225S4                                                                              | -            | 18200          |
| 152.7         | 2223       | 2.6  | 9.17  | S152                                                                              | 225S4                                                                              | -            | 18100          |
| 134.4         | 2524       | 2.5  | 10.41 | S152                                                                              | 225S4                                                                              | -            | 17900          |
| 112.4         | 3020       | 1.8  | 12.46 | S152                                                                              | 225S4                                                                              | -            | 16000          |
| 100.6         | 3370       | 1.7  | 13.90 | S152                                                                              | 225S4                                                                              | -            | 15700          |
| 87.7          | 3869       | 1.7  | 15.96 | S152                                                                              | 225S4                                                                              | -            | 15300          |
| 79.9          | 4247       | 1.6  | 17.52 | S152                                                                              | 225S4                                                                              | -            | 13800          |
| 70.3          | 4823       | 1.5  | 19.90 | S152                                                                              | 225S4                                                                              | -            | 14200          |
| 61.2          | 5544       | 1.4  | 22.88 | S152                                                                              | 225S4                                                                              | -            | 12400          |
| 51.6          | 6568       | 1.1  | 27.10 | S152                                                                              | 225S4                                                                              | -            | 9000           |
| 47.1          | 7208       | 1.1  | 29.75 | S152                                                                              | 225S4                                                                              | -            | 8000           |
| 41.4          | 8187       | 1.0  | 33.79 | S152                                                                              | 225S4                                                                              | -            | 6200           |

## 45.0 kW

| n2<br>[1/min] | M2<br>[Nm] | f.s. | i     |  |  | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|---------------|------------|------|-------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------|----------------|
| 344.8         | 1197       | 3.2  | 4.06  | S152                                                                                | 225M4                                                                                | -            | 16000          |
| 309.1         | 1336       | 3.0  | 4.53  | S152                                                                                | 225M4                                                                                | -            | 16400          |
| 269.2         | 1533       | 2.9  | 5.20  | S152                                                                                | 225M4                                                                                | -            | 16700          |
| 245.2         | 1683       | 2.8  | 5.71  | S152                                                                                | 225M4                                                                                | -            | 17000          |
| 214.7         | 1922       | 2.5  | 6.52  | S152                                                                                | 225M4                                                                                | -            | 17300          |
| 192.3         | 2145       | 2.4  | 7.28  | S152                                                                                | 225M4                                                                                | -            | 17300          |
| 167.5         | 2463       | 2.2  | 8.35  | S152                                                                                | 225M4                                                                                | -            | 17100          |
| 152.7         | 2703       | 2.1  | 9.17  | S152                                                                                | 225M4                                                                                | -            | 16900          |
| 134.4         | 3070       | 2.0  | 10.41 | S152                                                                                | 225M4                                                                                | -            | 16600          |
| 112.4         | 3673       | 1.4  | 12.46 | S152                                                                                | 225M4                                                                                | -            | 14300          |
| 100.6         | 4099       | 1.4  | 13.90 | S152                                                                                | 225M4                                                                                | -            | 13800          |
| 87.7          | 4706       | 1.4  | 15.96 | S152                                                                                | 225M4                                                                                | -            | 13200          |
| 79.9          | 5165       | 1.3  | 17.52 | S152                                                                                | 225M4                                                                                | -            | 11400          |
| 70.3          | 5866       | 1.3  | 19.90 | S152                                                                                | 225M4                                                                                | -            | 10800          |
| 61.2          | 6743       | 1.1  | 22.88 | S152                                                                                | 225M4                                                                                | -            | 9600           |
| 51.6          | 7988       | 0.9  | 27.10 | S152                                                                                | 225M4                                                                                | -            | 6400           |

## IS – 모터 용량에 따른 분류(입력회전수=1400rpm Fs=1)/Performance(n1=1400 rpm Fs=1)

**IS052**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 170        | 8,63  | 3,01       | 162,3         | 718        | 3375         | 3375           |
| 190        | 11,14 | 2,6        | 125,7         | 810        | 3644         | 3644           |
| 210        | 13,66 | 2,35       | 102,5         | 869        | 3857         | 3857           |
| 240        | 15,27 | 2,4        | 91,7          | 857        | 3874         | 3874           |
| 240        | 16,29 | 2,25       | 86            | 891        | 3987         | 3987           |
| 240        | 18,63 | 1,97       | 75,1          | 956        | 4231         | 4231           |
| 260        | 21,04 | 1,89       | 66,6          | 974        | 4345         | 4345           |
| 260        | 24,07 | 1,65       | 58,2          | 1029       | 4611         | 4611           |
| 290        | 25,79 | 1,72       | 54,3          | 1013       | 4578         | 4578           |
| 290        | 27,81 | 1,59       | 50,3          | 1042       | 4736         | 4736           |
| 290        | 30    | 1,48       | 46,7          | 1069       | 4898         | 4898           |
| 300        | 32,55 | 1,41       | 43            | 1084       | 5020         | 5020           |
| 330        | 36,55 | 1,38       | 38,3          | 1091       | 5109         | 5109           |
| 350        | 39,9  | 1,34       | 35,1          | 1100       | 5200         | 5200           |
| 350        | 42,63 | 1,25       | 32,8          | 1119       | 5359         | 5359           |
| 350        | 47,2  | 1,13       | 29,7          | 1147       | 5612         | 5612           |
| 350        | 52,25 | 1,02       | 26,8          | 1172       | 5873         | 5873           |
| 350        | 57,86 | 0,92       | 24,2          | 1195       | 6000         | 6000           |
| 350        | 72,83 | 0,73       | 19,2          | 1238       | 6000         | 6000           |

**IS053**

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 350        | 74,2   | 0,74       | 18,9          | 1242       | 6000         | 6000           |
| 350        | 95,84  | 0,57       | 14,6          | 1279       | 6000         | 6000           |
| 350        | 117,48 | 0,46       | 11,9          | 1302       | 6000         | 6000           |
| 350        | 137,45 | 0,4        | 10,2          | 1317       | 6000         | 6000           |
| 350        | 177,55 | 0,31       | 7,9           | 1338       | 6000         | 6000           |
| 350        | 198,45 | 0,28       | 7,1           | 1345       | 6000         | 6000           |
| 350        | 217,64 | 0,25       | 6,4           | 1350       | 6000         | 6000           |
| 350        | 256,33 | 0,21       | 5,5           | 1359       | 6000         | 6000           |
| 350        | 314,21 | 0,17       | 4,5           | 1367       | 6000         | 6000           |

**IS062**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 330        | 8     | 6,3        | 175           | 350        | 5225         | 2090           |
| 360        | 9,55  | 5,76       | 146,7         | 441        | 5474         | 2190           |
| 390        | 11,71 | 5,09       | 119,6         | 554        | 5825         | 2330           |
| 420        | 13,36 | 4,8        | 104,8         | 602        | 6004         | 2401           |
| 450        | 15,94 | 4,31       | 87,8          | 684        | 6334         | 2533           |
| 460        | 19,55 | 3,59       | 71,6          | 805        | 6911         | 2764           |
| 470        | 23,18 | 3,1        | 60,4          | 888        | 7415         | 2966           |
| 480        | 25,14 | 2,92       | 55,7          | 919        | 7635         | 3054           |
| 480        | 27,66 | 2,65       | 50,6          | 963        | 7976         | 3190           |
| 500        | 30    | 2,55       | 46,7          | 981        | 8149         | 3260           |
| 540        | 33,93 | 2,43       | 41,3          | 1000       | 8364         | 3346           |
| 600        | 36,57 | 2,51       | 38,3          | 988        | 8280         | 3312           |
| 600        | 39,38 | 2,33       | 35,6          | 1018       | 8578         | 3431           |
| 600        | 43,64 | 2,1        | 32,1          | 1056       | 9005         | 3602           |

**IS062**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 600        | 46,1  | 1,99       | 30,4          | 1075       | 9239         | 3695           |
| 600        | 53,53 | 1,71       | 26,2          | 1121       | 9898         | 3959           |
| 600        | 55    | 1,67       | 25,5          | 1129       | 10000        | 4000           |
| 600        | 67,47 | 1,36       | 20,8          | 1181       | 10000        | 4000           |

**IS063**

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 600        | 81,43  | 1,15       | 17,2          | 1220       | 10000        | 4000           |
| 600        | 99,89  | 0,94       | 14            | 1255       | 10000        | 4000           |
| 600        | 126,43 | 0,74       | 11,1          | 1287       | 10000        | 4000           |
| 600        | 150,85 | 0,62       | 9,3           | 1307       | 10000        | 4000           |
| 600        | 185,05 | 0,51       | 7,6           | 1326       | 10000        | 4000           |
| 600        | 217,79 | 0,43       | 6,4           | 1338       | 10000        | 4000           |
| 600        | 267,16 | 0,35       | 5,2           | 1351       | 10000        | 4000           |

**IS082**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 550        | 7,34  | 11,44      | 190,8         | 1261       | 12030        | 3437           |
| 600        | 8,06  | 11,36      | 173,6         | 1273       | 12302        | 3515           |
| 650        | 9,94  | 9,98       | 140,8         | 1482       | 13161        | 3760           |
| 700        | 11,61 | 9,21       | 120,6         | 1598       | 13797        | 3942           |
| 750        | 12,75 | 8,98       | 109,8         | 1632       | 14140        | 4040           |
| 770        | 15,73 | 7,48       | 89            | 1859       | 15264        | 4361           |
| 770        | 17,29 | 6,8        | 80,9          | 1962       | 15832        | 4523           |
| 770        | 20,14 | 5,84       | 69,5          | 2107       | 16778        | 4794           |
| 800        | 22,13 | 5,52       | 63,3          | 2154       | 17288        | 4939           |
| 800        | 24    | 5,09       | 58,3          | 2219       | 17830        | 5094           |
| 900        | 27,29 | 5,04       | 51,3          | 2228       | 18000        | 5253           |
| 900        | 28,67 | 4,79       | 48,8          | 2264       | 18000        | 5354           |
| 1000       | 31,78 | 4,81       | 44,1          | 2262       | 18000        | 5474           |
| 1000       | 34,91 | 4,37       | 40,1          | 2327       | 18000        | 5676           |
| 1000       | 40,05 | 3,81       | 35            | 2412       | 18000        | 5983           |
| 1000       | 43,05 | 3,55       | 32,5          | 2452       | 18000        | 6150           |
| 1000       | 50,25 | 3,04       | 27,9          | 2529       | 18000        | 6521           |
| 1000       | 54,27 | 2,81       | 25,8          | 2563       | 18000        | 6712           |
| 1000       | 61,98 | 2,46       | 22,6          | 2616       | 18000        | 7055           |

**IS083**

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 1000       | 67,52  | 2,31       | 20,7          | 2646       | 18000        | 7200           |
| 1000       | 74,18  | 2,1        | 18,9          | 2677       | 18000        | 7200           |
| 1000       | 91,49  | 1,7        | 15,3          | 2735       | 18000        | 7200           |
| 1000       | 117,17 | 1,33       | 11,9          | 2791       | 18000        | 7200           |
| 1000       | 128,73 | 1,21       | 10,9          | 2808       | 18000        | 7200           |

## IS083

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 1000       | 158,76 | 0,98       | 8,8           | 2842       | 18000        | 7200           |
| 1000       | 184,88 | 0,84       | 7,6           | 2863       | 18000        | 7200           |
| 1000       | 203,11 | 0,77       | 6,9           | 2874       | 18000        | 7200           |
| 1000       | 250,5  | 0,62       | 5,6           | 2895       | 18000        | 7200           |
| 1000       | 292,36 | 0,53       | 4,8           | 2908       | 18000        | 7200           |
| 1000       | 315,73 | 0,49       | 4,4           | 2914       | 18000        | 7200           |
| 1000       | 360,58 | 0,43       | 3,9           | 2923       | 18000        | 7200           |

## IS102

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 850        | 8,06  | 16,1       | 173,6         | 647        | 15163        | 4332           |
| 900        | 8,85  | 15,54      | 158,3         | 729        | 15574        | 4450           |
| 950        | 10,88 | 13,33      | 128,6         | 1050       | 16712        | 4775           |
| 1000       | 12,75 | 11,98      | 109,8         | 1247       | 17610        | 5032           |
| 1200       | 13,99 | 13,1       | 100,1         | 1084       | 17719        | 5063           |
| 1300       | 17,21 | 11,53      | 81,3          | 1311       | 18935        | 5410           |
| 1400       | 19    | 11,25      | 73,7          | 1352       | 19415        | 5547           |
| 1400       | 22,13 | 9,66       | 63,3          | 1583       | 20603        | 5886           |
| 1500       | 24,28 | 9,44       | 57,7          | 1616       | 21097        | 6028           |
| 1500       | 26,33 | 8,7        | 53,2          | 1724       | 21777        | 6222           |
| 1500       | 29,87 | 7,67       | 46,9          | 1873       | 22000        | 6533           |
| 1500       | 32,4  | 7,07       | 43,2          | 1961       | 22000        | 6741           |
| 1400       | 34,91 | 6,12       | 40,1          | 2098       | 22000        | 7011           |
| 1500       | 38,3  | 5,98       | 36,6          | 2119       | 22000        | 7187           |
| 1300       | 44    | 4,51       | 31,8          | 2333       | 22000        | 7724           |
| 1600       | 47,13 | 5,18       | 29,7          | 2235       | 22000        | 7701           |
| 1300       | 55,14 | 3,6        | 25,4          | 2465       | 22000        | 8396           |
| 1600       | 59,4  | 4,11       | 23,6          | 2391       | 22000        | 8406           |
| 1600       | 67,84 | 3,6        | 20,6          | 2465       | 22000        | 8836           |

## IS103

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 1600       | 74,18  | 3,36       | 18,9          | 2510       | 22000        | 9000           |
| 1600       | 81,39  | 3,07       | 17,2          | 2552       | 22000        | 9000           |
| 1600       | 100,15 | 2,49       | 14            | 2634       | 22000        | 9000           |
| 1600       | 110,55 | 2,26       | 12,7          | 2667       | 22000        | 9000           |
| 1600       | 128,73 | 1,94       | 10,9          | 2713       | 22000        | 9000           |
| 1600       | 141,24 | 1,77       | 9,9           | 2737       | 22000        | 9000           |
| 1600       | 173,78 | 1,44       | 8,1           | 2784       | 22000        | 9000           |
| 1600       | 203,11 | 1,23       | 6,9           | 2814       | 22000        | 9000           |
| 1600       | 222,85 | 1,12       | 6,3           | 2829       | 22000        | 9000           |
| 1600       | 274,2  | 0,91       | 5,1           | 2859       | 22000        | 9000           |
| 1600       | 320,79 | 0,78       | 4,4           | 2878       | 22000        | 9000           |
| 1600       | 345,6  | 0,72       | 4,1           | 2886       | 22000        | 9000           |
| 1600       | 394,69 | 0,63       | 3,5           | 2899       | 22000        | 9000           |

## IS122

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 1500       | 8,48  | 27         | 165           | 2951       | 19587        | 5596           |
| 1700       | 9,3   | 27,92      | 150,6         | 2916       | 19606        | 5602           |
| 1900       | 11,42 | 25,41      | 122,6         | 3010       | 20674        | 5907           |
| 2200       | 12,63 | 26,61      | 110,9         | 2966       | 20480        | 5851           |
| 2400       | 13,84 | 26,48      | 101,2         | 2970       | 20608        | 5888           |
| 2600       | 16,99 | 23,36      | 82,4          | 3087       | 21932        | 6266           |
| 2800       | 21,25 | 20,12      | 65,9          | 3209       | 23608        | 6745           |
| 2900       | 23,29 | 19,01      | 60,1          | 3251       | 24280        | 6937           |
| 3000       | 26,15 | 17,52      | 53,5          | 3307       | 25277        | 7222           |
| 3000       | 28,6  | 16,02      | 49            | 3364       | 26374        | 7535           |
| 3000       | 30,51 | 15,01      | 45,9          | 3401       | 27189        | 7768           |
| 3000       | 33,44 | 13,7       | 41,9          | 3451       | 28374        | 8107           |
| 3000       | 35,2  | 13,01      | 39,8          | 3476       | 29050        | 8300           |
| 3000       | 41,07 | 11,16      | 34,1          | 3546       | 30000        | 8903           |
| 3000       | 43,6  | 10,51      | 32,1          | 3571       | 30000        | 9145           |
| 2400       | 49,04 | 7,47       | 28,5          | 3685       | 30000        | 10285          |
| 2600       | 53,75 | 7,39       | 26            | 3688       | 30000        | 10464          |
| 3000       | 66    | 6,94       | 21,2          | 3705       | 30000        | 10962          |

## IS123

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 2700       | 71,07  | 5,92       | 19,7          | 3748       | 30000        | 11200          |
| 3000       | 87,27  | 5,36       | 16            | 3768       | 30000        | 11200          |
| 3000       | 112,52 | 4,16       | 12,4          | 3813       | 30000        | 11200          |
| 3000       | 123,33 | 3,79       | 11,4          | 3826       | 30000        | 11200          |
| 3000       | 133,78 | 3,5        | 10,5          | 3837       | 30000        | 11200          |
| 3000       | 151,43 | 3,09       | 9,2           | 3852       | 30000        | 11200          |
| 3000       | 177,53 | 2,64       | 7,9           | 3869       | 30000        | 11200          |
| 3000       | 194,59 | 2,4        | 7,2           | 3877       | 30000        | 11200          |
| 3000       | 238,93 | 1,96       | 5,9           | 3894       | 30000        | 11200          |

**IS142**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 1389       | 4.11  | 51.61      | 340.6         | 5100       | -            | 7700           |
| 1547       | 4.59  | 51.55      | 305.0         | 5100       | -            | 7800           |
| 1737       | 5.14  | 51.58      | 272.4         | 5100       | -            | 7900           |
| 1964       | 5.82  | 51.54      | 240.5         | 5100       | -            | 8000           |
| 2099       | 6.21  | 51.59      | 225.4         | 5100       | -            | 8100           |
| 1915       | 7.32  | 39.97      | 191.3         | 5300       | -            | 9800           |
| 2149       | 8.21  | 39.97      | 170.5         | 5300       | -            | 9400           |
| 2432       | 9.29  | 39.99      | 150.7         | 5300       | -            | 8900           |
| 2597       | 9.91  | 40.00      | 141.3         | 5300       | -            | 8600           |
| 2987       | 11.41 | 39.99      | 122.7         | 5300       | -            | 7800           |
| 2123       | 12.81 | 25.30      | 109.3         | 5500       | -            | 10600          |
| 2365       | 14.27 | 25.31      | 98.1          | 5500       | -            | 10000          |
| 2652       | 16.01 | 25.30      | 87.4          | 5500       | -            | 9800           |
| 3000       | 18.11 | 25.30      | 77.3          | 5500       | -            | 9200           |
| 3204       | 19.33 | 25.30      | 72.4          | 5000       | -            | 8900           |
| 3686       | 22.24 | 25.30      | 62.9          | 5000       | -            | 6500           |
| 2896       | 25.26 | 17.51      | 55.4          | 5900       | -            | 10700          |
| 3248       | 28.33 | 17.50      | 49.4          | 5900       | -            | 8800           |
| 3674       | 32.05 | 17.50      | 43.7          | 5900       | -            | 7900           |
| 3923       | 34.22 | 17.50      | 40.9          | 5900       | -            | 8400           |
| 4431       | 39.38 | 17.18      | 35.6          | 6050       | -            | 6300           |

**IS143**

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 4013       | 45.77  | 13.67      | 30.6          | 2950       | -            | 9000           |
| 4470       | 50.97  | 13.68      | 27.5          | 2950       | -            | 8900           |
| 4735       | 57.17  | 12.91      | 24.5          | 3400       | -            | 6800           |
| 4774       | 64.68  | 11.51      | 21.6          | 3750       | -            | 7500           |
| 4876       | 69.06  | 11.01      | 20.3          | 3900       | -            | 9100           |
| 4233       | 79.45  | 8.31       | 17.6          | 4200       | -            | 11600          |
| 4440       | 98.81  | 7.01       | 14.2          | 4300       | -            | 14200          |
| 4734       | 110.05 | 6.71       | 12.7          | 4350       | -            | 12500          |
| 4754       | 123.44 | 6.01       | 11.3          | 4400       | -            | 14800          |
| 4841       | 139.64 | 5.41       | 10.0          | 4450       | -            | 15900          |
| 4786       | 149.1  | 5.01       | 9.4           | 4470       | -            | 16500          |
| 3801       | 157.49 | 3.76       | 8.9           | 4570       | -            | 20700          |
| 4669       | 171.55 | 4.24       | 8.2           | 4550       | -            | 18500          |
| 4234       | 175.41 | 3.76       | 8.0           | 4570       | -            | 18500          |
| 4749       | 196.74 | 3.76       | 7.1           | 4570       | -            | 18500          |
| 4715       | 222.57 | 3.30       | 6.3           | 4600       | -            | 18500          |
| 4882       | 237.63 | 3.20       | 5.9           | 4600       | -            | 18500          |
| 4792       | 273.41 | 2.73       | 5.1           | 4650       | -            | 18500          |

**IS152**

| M2<br>[Nm] | i     | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|-------|------------|---------------|------------|--------------|----------------|
| 2573       | 4.06  | 96.75      | 344.8         | 6250       | -            | 10500          |
| 2871       | 4.53  | 96.72      | 309.1         | 6250       | -            | 10500          |
| 3296       | 5.2   | 96.71      | 269.2         | 6250       | -            | 10600          |
| 3619       | 5.71  | 96.76      | 245.2         | 6250       | -            | 10700          |
| 3844       | 6.52  | 89.99      | 214.7         | 7250       | -            | 10900          |
| 4292       | 7.28  | 90.03      | 192.3         | 7250       | -            | 10300          |
| 4923       | 8.36  | 89.95      | 167.5         | 7250       | -            | 9300           |
| 5406       | 9.17  | 90.00      | 152.7         | 7250       | -            | 8600           |
| 6137       | 10.42 | 89.95      | 134.4         | 7250       | -            | 7300           |
| 3306       | 12.46 | 40.50      | 112.4         | 5900       | -            | 14800          |
| 3688       | 13.91 | 40.49      | 100.6         | 5900       | -            | 14500          |
| 4234       | 15.97 | 40.49      | 87.7          | 5900       | -            | 13900          |
| 4648       | 17.53 | 40.50      | 79.9          | 5900       | -            | 12200          |
| 5280       | 19.91 | 40.50      | 70.3          | 5900       | -            | 11600          |
| 6070       | 22.88 | 40.51      | 61.2          | 5900       | -            | 11300          |
| 6089       | 27.11 | 34.30      | 51.6          | 7250       | -            | 10700          |
| 6685       | 29.75 | 34.31      | 47.1          | 7250       | -            | 9900           |
| 7592       | 33.79 | 34.31      | 41.4          | 7250       | -            | 8400           |
| 7689       | 38.84 | 30.23      | 36.0          | 7700       | -            | 9500           |

**IS153**

| M2<br>[Nm] | i      | P1<br>[kW] | n2<br>[1/min] | Fr1<br>[N] | Fr2 D<br>[N] | Fr2 C-L<br>[N] |
|------------|--------|------------|---------------|------------|--------------|----------------|
| 6281       | 40.10  | 24.43      | 34.9          | 4650       | -            | 14300          |
| 7010       | 44.76  | 24.43      | 119.0         | 4650       | -            | 13300          |
| 7865       | 51.38  | 23.87      | 27.2          | 4650       | -            | 11900          |
| 8254       | 56.39  | 22.83      | 24.8          | 4900       | -            | 8000           |
| 8795       | 64.05  | 21.41      | 21.9          | 5400       | -            | 9900           |
| 7779       | 73.63  | 16.48      | 19.0          | 5770       | -            | 15600          |
| 7105       | 57.16  | 12.71      | 16.1          | 5925       | -            | 17100          |
| 7931       | 97.27  | 12.71      | 14.4          | 5925       | -            | 16000          |
| 9104       | 111.67 | 12.71      | 12.5          | 5925       | -            | 15100          |
| 9536       | 122.57 | 12.13      | 11.4          | 5925       | -            | 15900          |
| 9142       | 139.21 | 10.24      | 10.1          | 5925       | -            | 19400          |
| 7129       | 154.02 | 7.22       | 9.1           | 6175       | -            | 19400          |
| 8084       | 160.02 | 7.88       | 8.7           | 6150       | -            | 19400          |
| 8184       | 176.81 | 7.22       | 7.9           | 6175       | -            | 19400          |
| 8982       | 194.06 | 7.22       | 7.2           | 6175       | -            | 19400          |
| 9353       | 220.42 | 6.62       | 6.4           | 6200       | -            | 19400          |
| 8279       | 253.36 | 5.10       | 5.5           | 6250       | -            | 19400          |

메모 / Notes

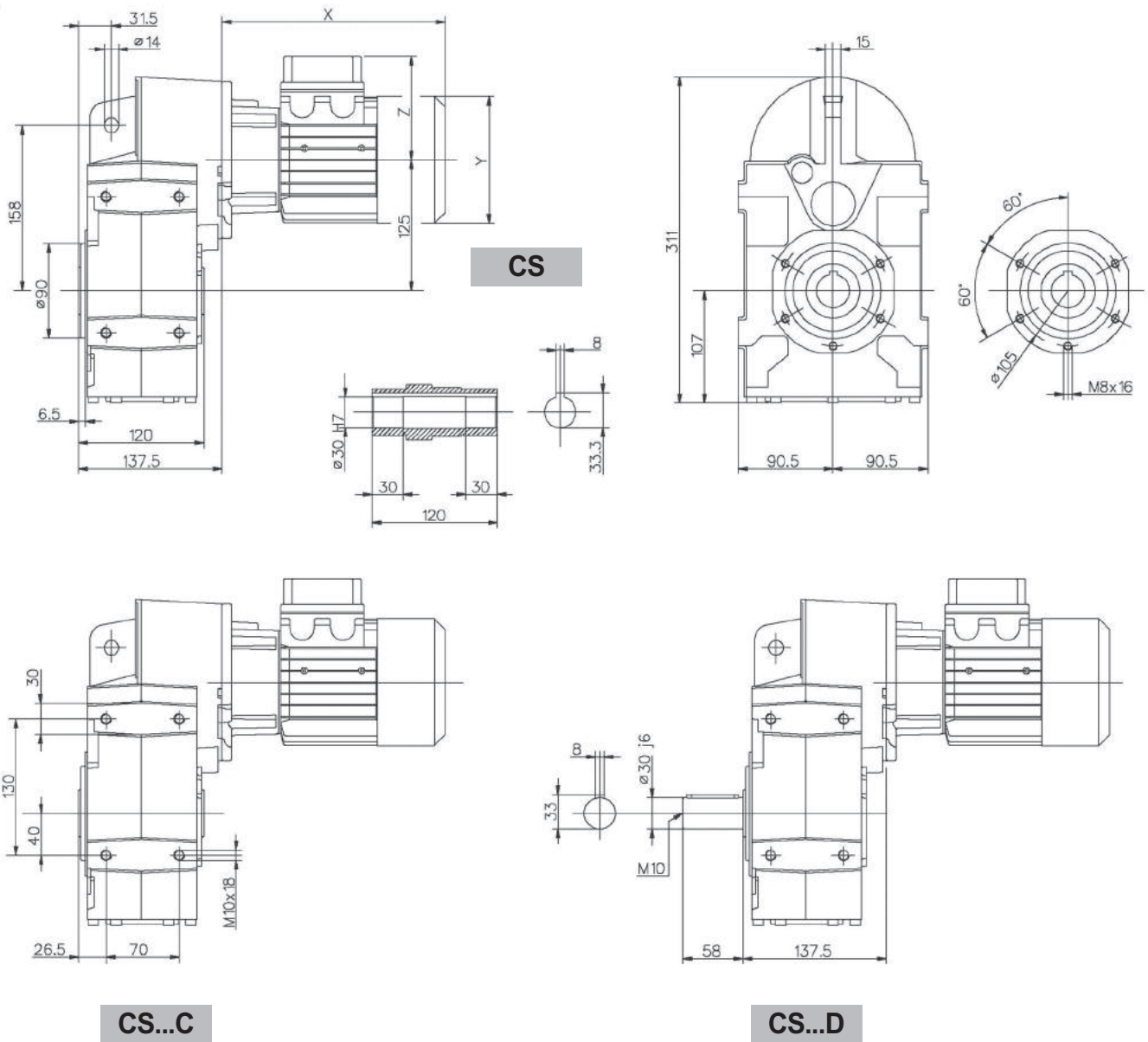
HA / H

BA / B

S

PBH series

Electric Motor

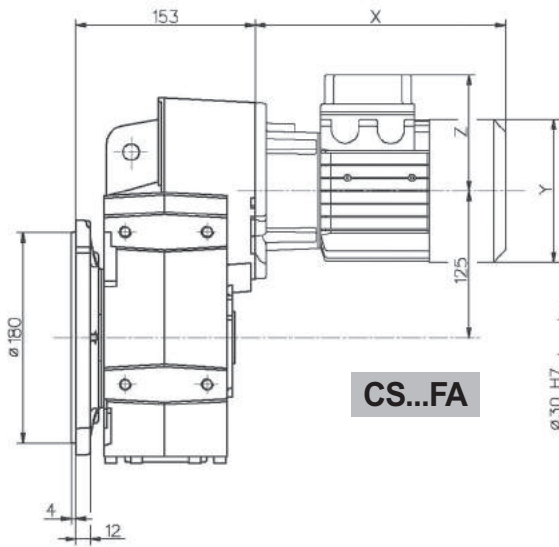
**052/.3 차수 / Dimensions**


| 050 | IS   | PAM |      | 표준모터 / Standard motor |     |     |      | 브레이크 모터 / Brake motor |     |     |      |
|-----|------|-----|------|-----------------------|-----|-----|------|-----------------------|-----|-----|------|
|     | ~ Kg | A   | ~ Kg | X                     | Y   | Z   | ~ Kg | X                     | Y   | Z   | ~ Kg |
| 63  | 21   | 57  | 17,8 | 215                   | 121 | 104 | 21,3 | 273                   | 121 | 119 | 22,8 |
| 71  |      | 69  | 18,2 | 241                   | 139 | 112 | 22,2 | 305                   | 139 | 128 | 24,4 |
| 80  |      | 90  | 18,8 | 268                   | 158 | 122 | 26,9 | 341                   | 158 | 137 | 30,4 |
| 90s |      | 90  | 18,8 | 296                   | 173 | 130 | 30,8 | 373                   | 173 | 130 | 36,3 |
| 90i |      | 90  | 18,8 | 321                   | 173 | 130 | 32,8 | 398                   | 173 | 130 | 38,3 |
| 100 |      | 105 | 23   | 333                   | 191 | 139 | 38,3 | 415                   | 191 | 139 | 43,8 |
| 112 |      | 105 | 23   | 351                   | 211 | 154 | 49,8 | 448                   | 211 | 154 | 59,5 |

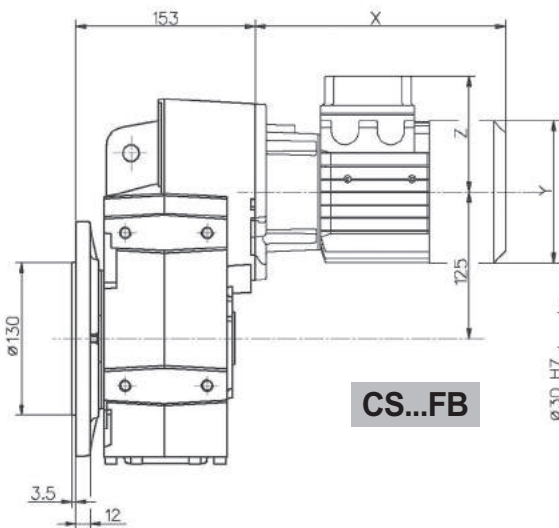
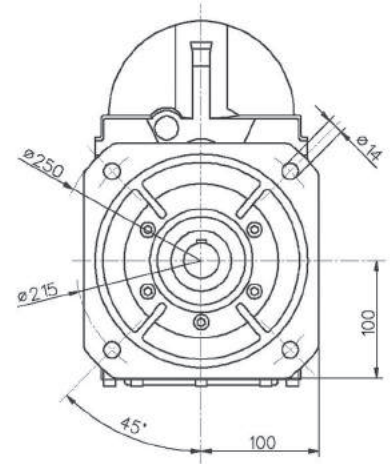
감속기에 취부할 모터의 dimensions (Pm,Dm,bm,tm)을 확인하려면 285페이지 참조

For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 285.

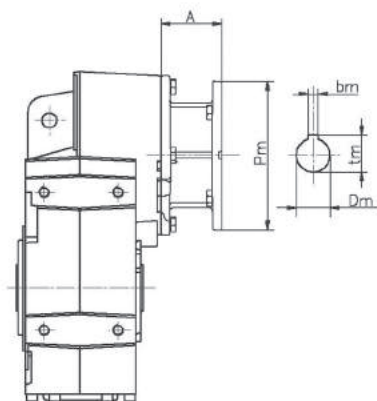
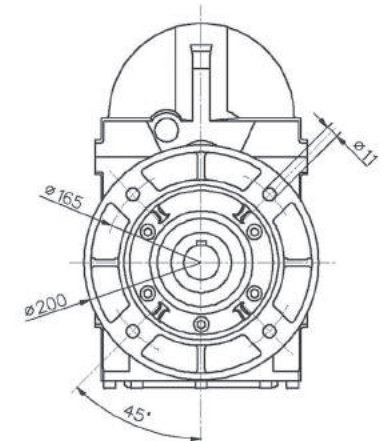
Dimensions / 치수 052/..3



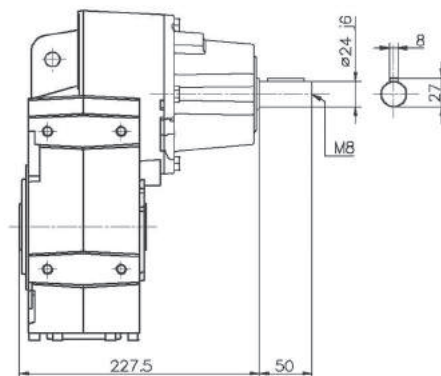
CS...FA



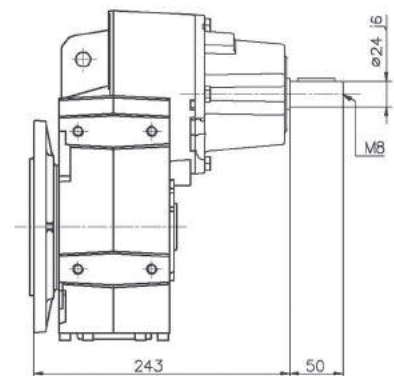
CS...FB



S...C

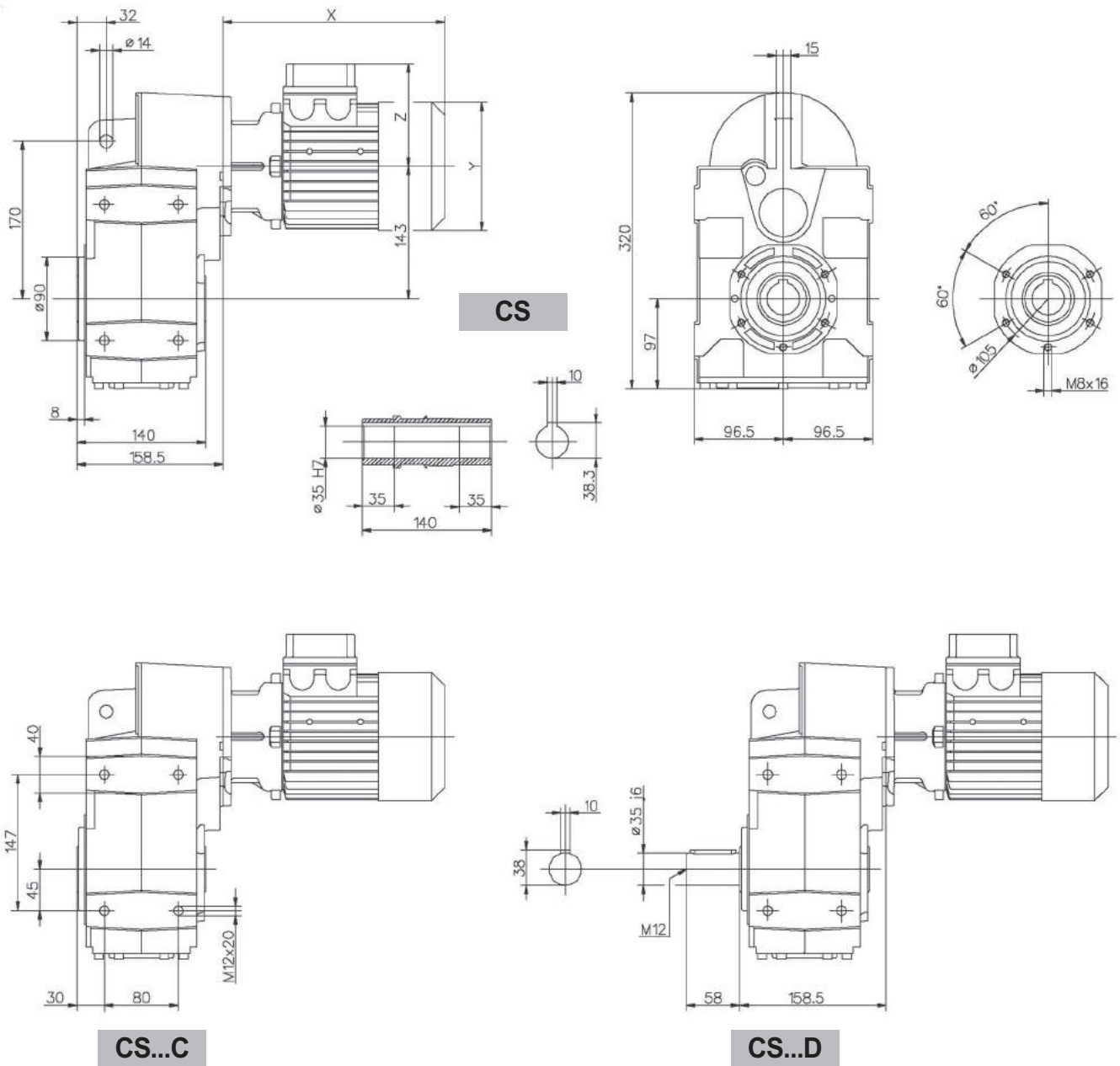


IS...C



IS...FA - FB

## 062/..3 차수 / Dimensions

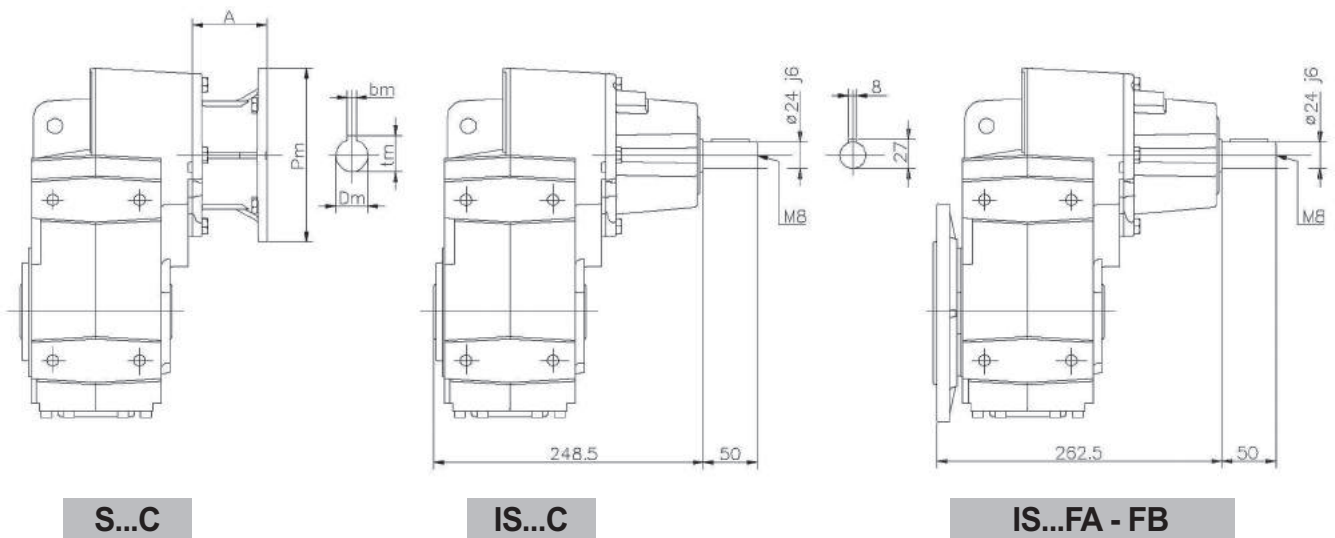
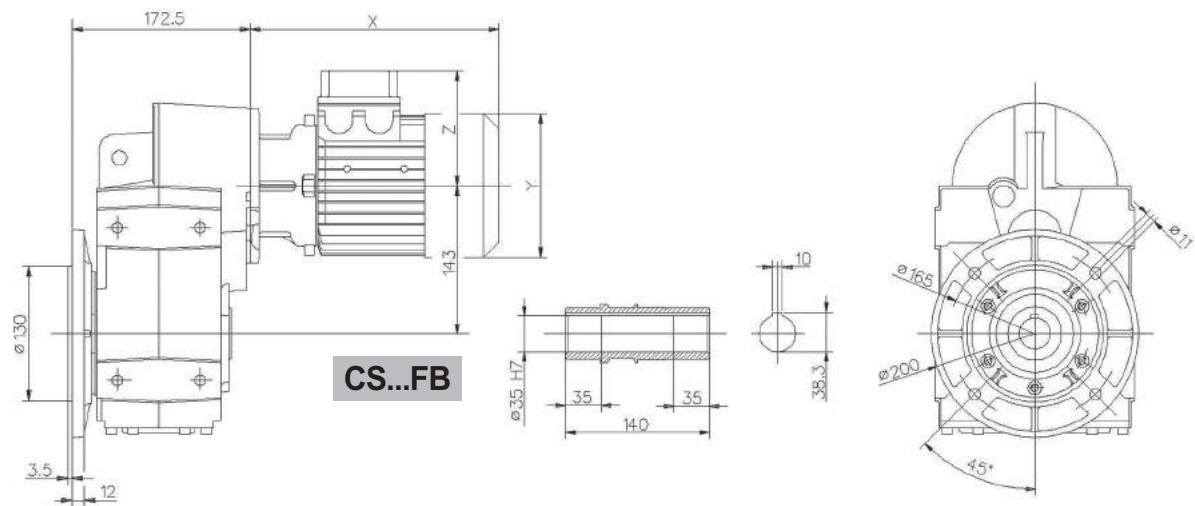
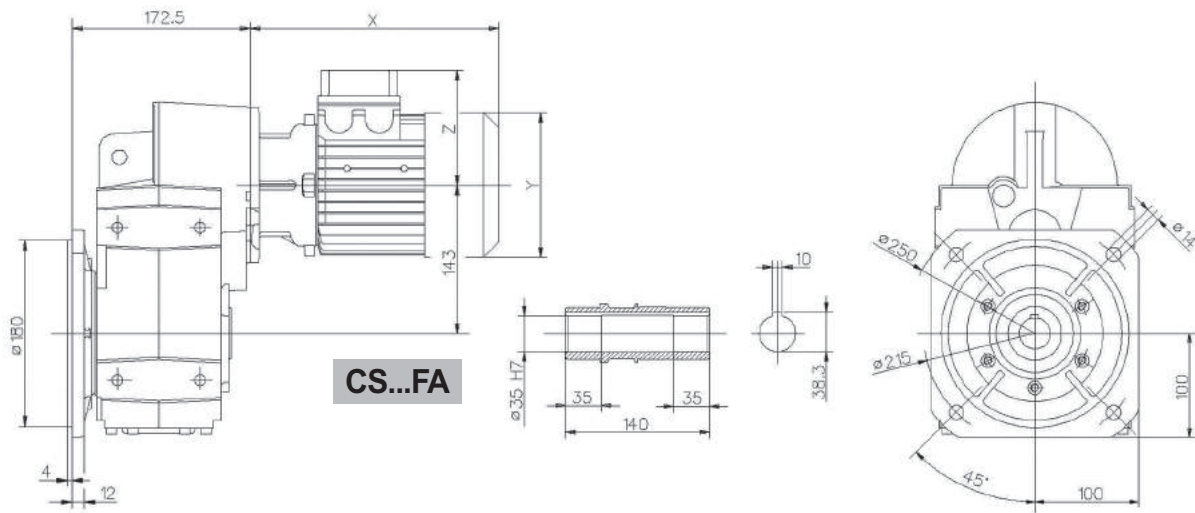


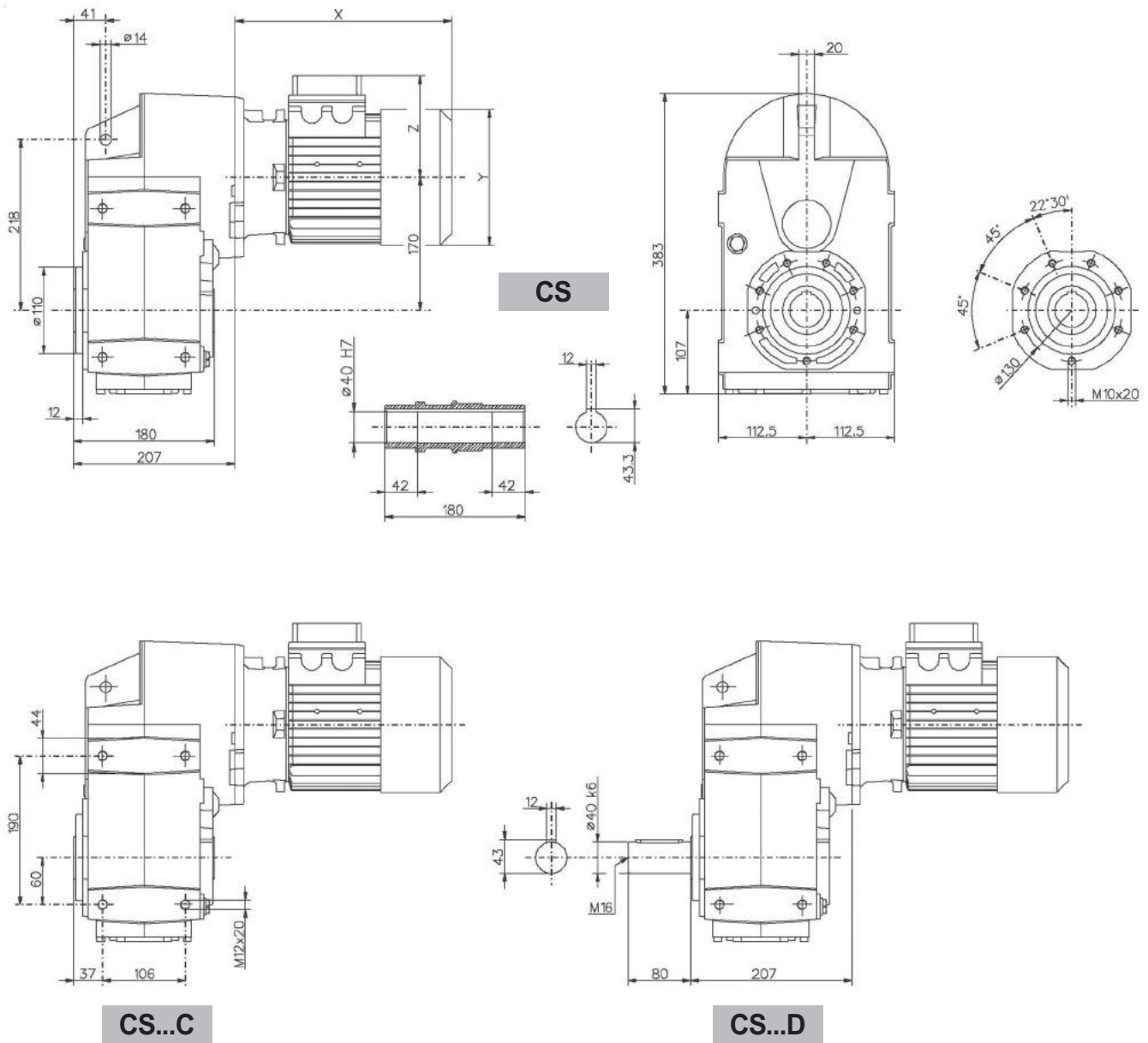
| 060 | IS   | PAM |      | 표준모터 / Standard motor |     |     |      | 브레이크 모터 / Brake motor |     |     |      |
|-----|------|-----|------|-----------------------|-----|-----|------|-----------------------|-----|-----|------|
|     | ~ Kg | A   | ~ Kg | X                     | Y   | Z   | ~ Kg | X                     | Y   | Z   | ~ Kg |
| 71  | 24,8 | 69  | 22   | 241                   | 139 | 112 | 26   | 305                   | 139 | 128 | 28,3 |
| 80  |      | 90  | 22,7 | 268                   | 158 | 122 | 30,8 | 341                   | 158 | 137 | 34,3 |
| 90s |      | 90  | 22,7 | 296                   | 173 | 130 | 34,7 | 373                   | 173 | 130 | 40,2 |
| 90l |      | 90  | 22,7 | 321                   | 173 | 130 | 36,7 | 398                   | 173 | 130 | 42,2 |
| 100 |      | 105 | 27   | 333                   | 191 | 139 | 42,2 | 415                   | 191 | 139 | 47,7 |
| 112 |      | 105 | 27   | 351                   | 211 | 154 | 53,7 | 448                   | 211 | 154 | 63,4 |

감속기에 취부할 모터의 dimensions (Pm,Dm,bm,tm)을 확인하려면 285페이지 참조

For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 285.

Dimensions / 치수 062/..3



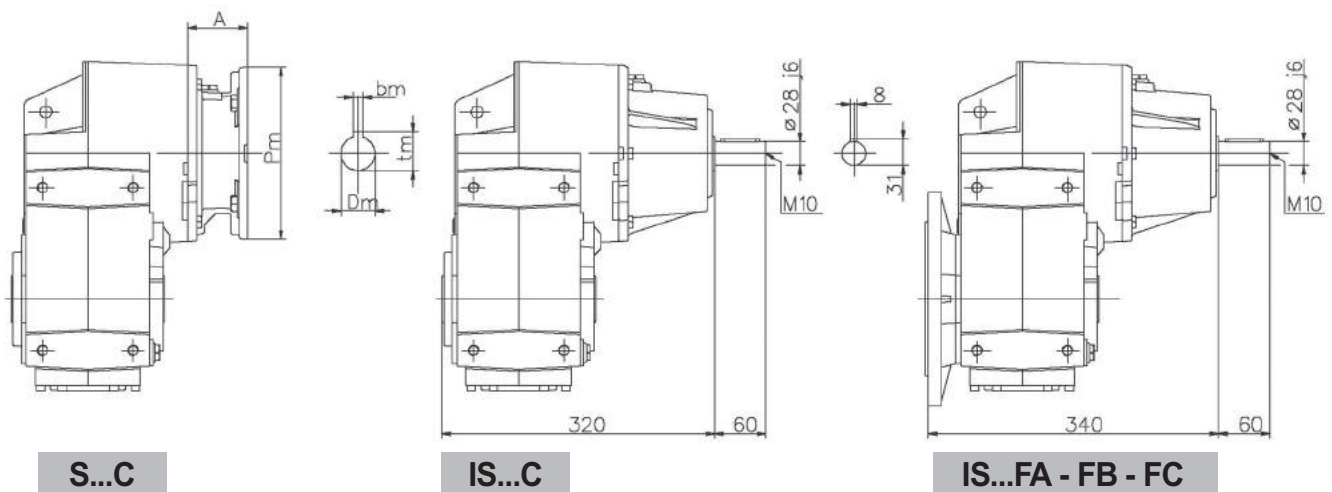
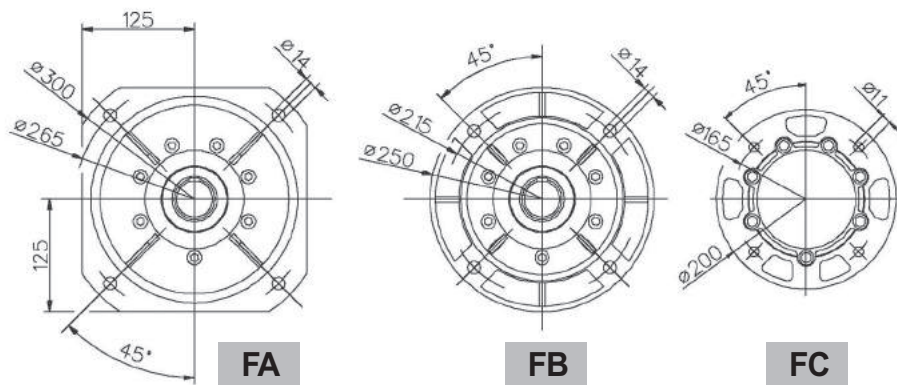
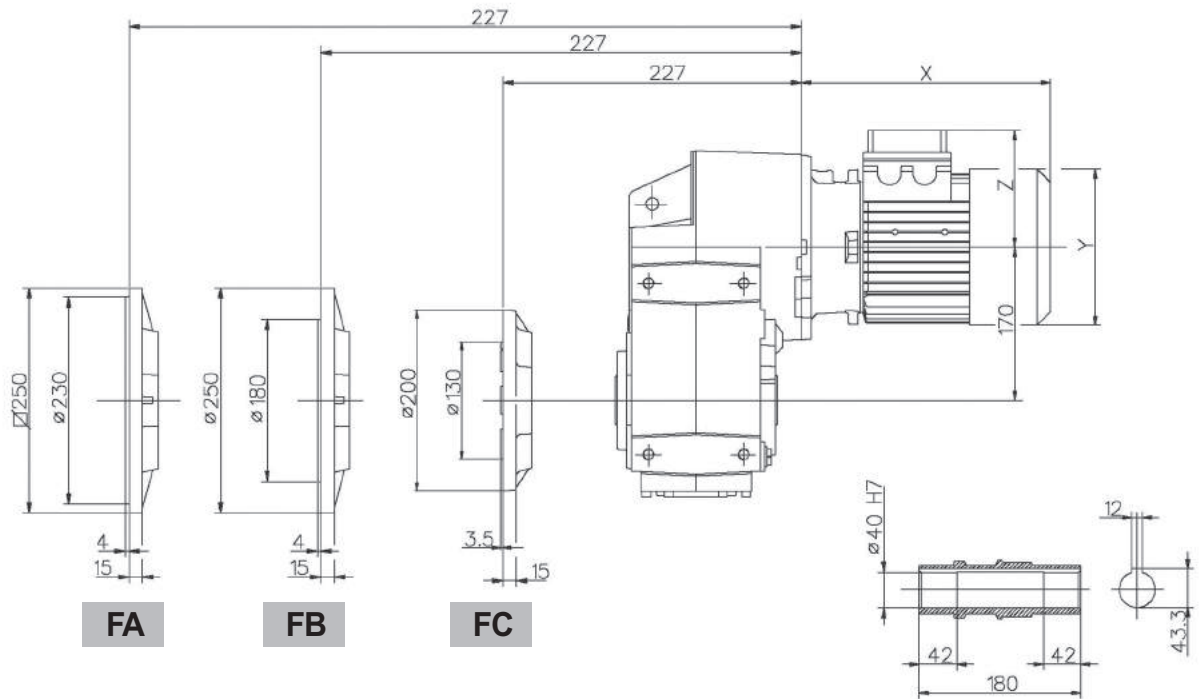
**082/.3 차수 / Dimensions**


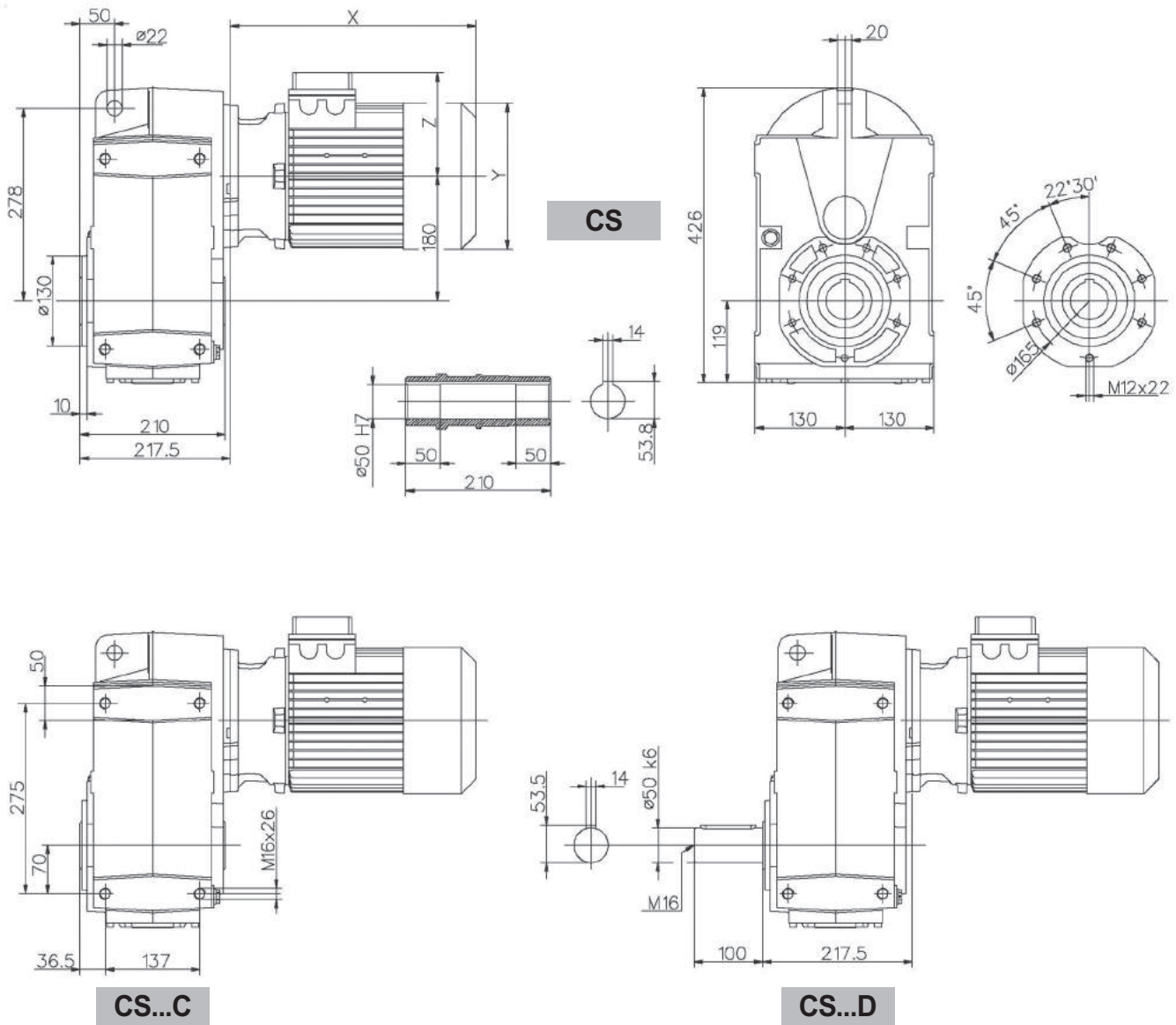
| 080  | IS   | PAM |      | 표준모터 / Standard motor |     |     |      | 브레이크 모터 / Brake motor |     |     |       |
|------|------|-----|------|-----------------------|-----|-----|------|-----------------------|-----|-----|-------|
|      | ~ Kg | A   | ~ Kg | X                     | Y   | Z   | ~ Kg | X                     | Y   | Z   | ~ Kg  |
| 71   | 39   | 49  | 32,9 | 221                   | 139 | 112 | 36,5 | 285                   | 139 | 128 | 38,7  |
| 80   |      | 70  | 35   | 248                   | 158 | 122 | 41,6 | 321                   | 158 | 137 | 45    |
| 90s  |      | 70  | 35   | 276                   | 173 | 130 | 44   | 353                   | 173 | 130 | 49,5  |
| 90l  |      | 70  | 35   | 301                   | 173 | 130 | 45,5 | 378                   | 173 | 130 | 51    |
| 100  |      | 85  | 37   | 335                   | 191 | 139 | 50,6 | 417                   | 191 | 139 | 56    |
| 112  |      | 85  | 37   | 356                   | 211 | 154 | 62   | 453                   | 211 | 154 | 71,7  |
| 132s |      | 110 | 39,7 | 396                   | 249 | 194 | 76   | 495                   | 249 | 194 | 86,3  |
| 132m |      | 110 | 39,7 | 443                   | 249 | 194 | 87,6 | 547                   | 249 | 194 | 102,3 |

감속기에 취부할 모터의 dimensions (Pm,Dm,bm,tm)을 확인하려면 285페이지 참조

For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 285.

**Dimensions / 치수** **082/..3**



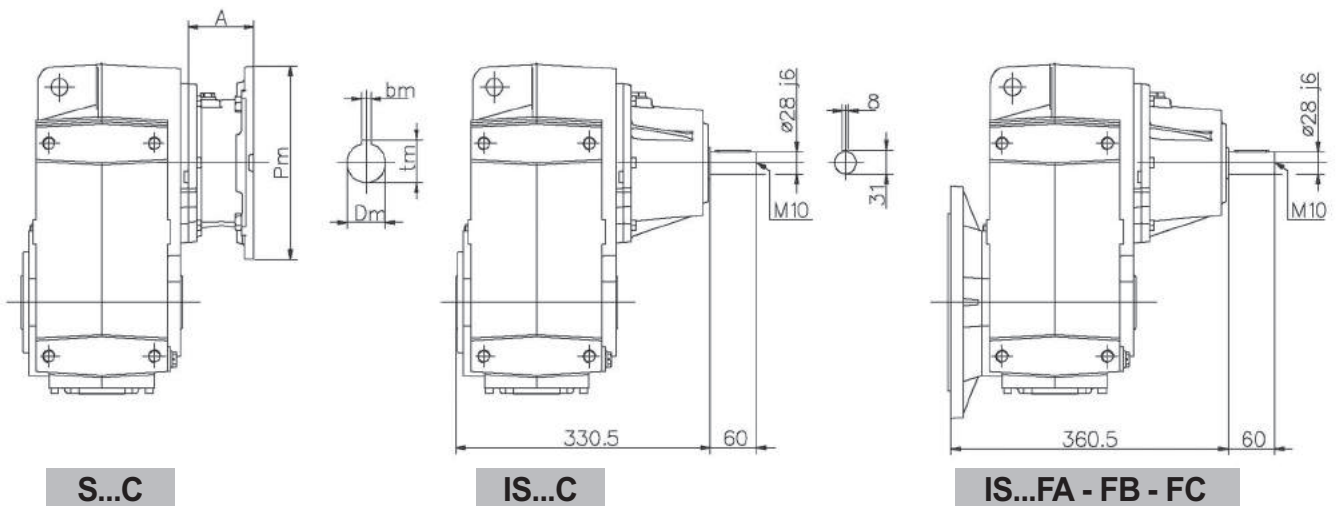
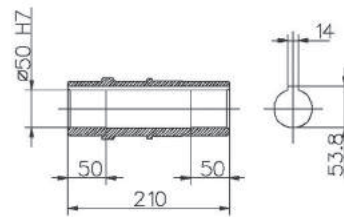
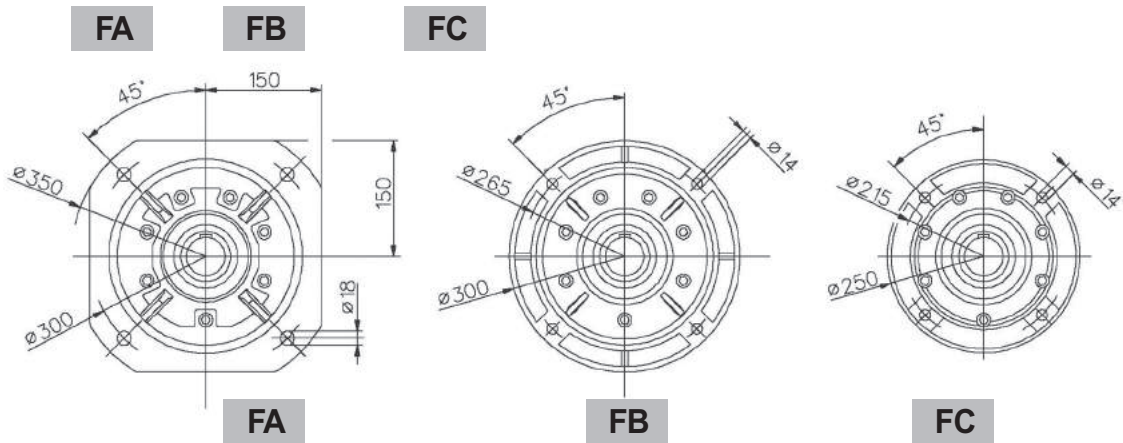
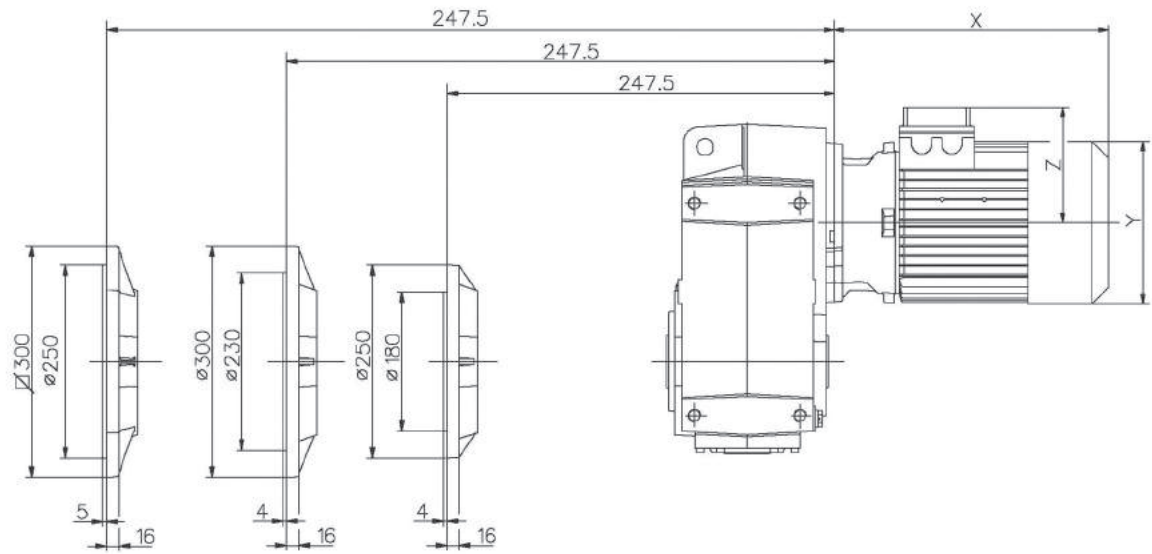
**102/..3 차수 / Dimensions**


| 100  | IS   | PAM |      | 표준모터 / Standard motor |     |     |      | 브레이크 모터 / Brake motor |     |     |       |
|------|------|-----|------|-----------------------|-----|-----|------|-----------------------|-----|-----|-------|
|      | ~ Kg | A   | ~ Kg | X                     | Y   | Z   | ~ Kg | X                     | Y   | Z   | ~ Kg  |
| 71   | 50   | 49  | 44   | 221                   | 139 | 112 | 47,5 | 285                   | 139 | 128 | 49,7  |
| 80   |      | 70  | 46   | 248                   | 158 | 122 | 52,6 | 321                   | 158 | 137 | 56    |
| 90s  |      | 70  | 46   | 276                   | 173 | 130 | 55   | 353                   | 173 | 130 | 60,5  |
| 90l  |      | 70  | 46   | 301                   | 173 | 130 | 56,5 | 378                   | 173 | 130 | 62    |
| 100  |      | 85  | 48   | 335                   | 191 | 139 | 61,6 | 417                   | 191 | 139 | 67    |
| 112  |      | 85  | 48   | 356                   | 211 | 154 | 73   | 453                   | 211 | 154 | 82,7  |
| 132s |      | 110 | 50,7 | 396                   | 249 | 194 | 87   | 495                   | 249 | 194 | 97,3  |
| 132m |      | 110 | 50,7 | 443                   | 249 | 194 | 98,6 | 547                   | 249 | 194 | 113,3 |
| 160s |      | 158 | 57,4 | 522                   | 310 | 244 | -    | -                     | -   | -   | -     |
| 160l |      | 158 | 57,4 | 566                   | 310 | 244 | -    | -                     | -   | -   | -     |

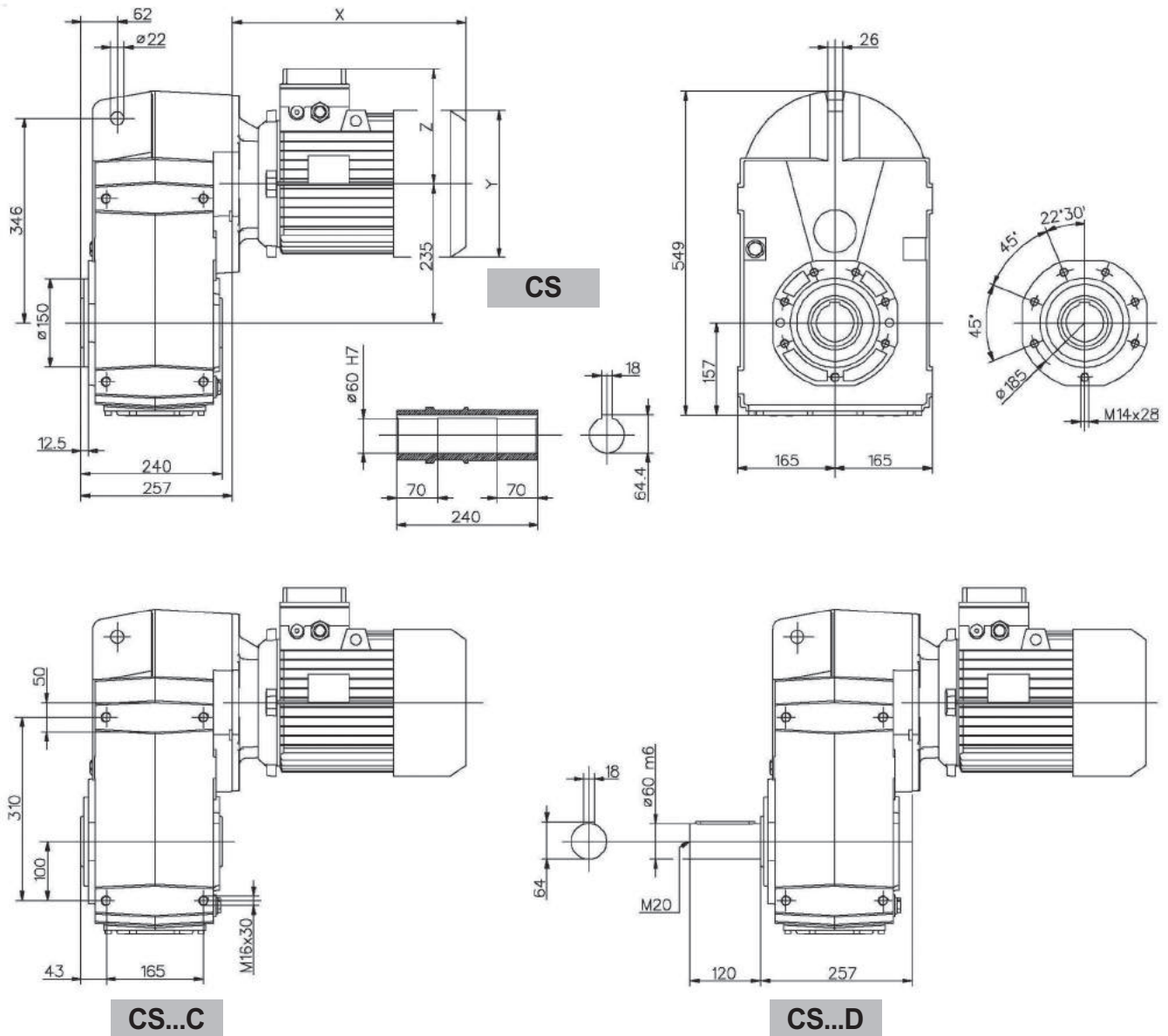
감속기에 취부할 모터의 dimensions (Pm,Dm,bm,tm)을 확인하려면 285페이지 참조

For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 285.

Dimensions / 치수 102/..3



## 122/.3 차수 / Dimensions



| 125  | IS   | PAM |      | 표준모터 / Standard motor |     |     |      | 브레이크 모터 / Brake motor |     |     |       |
|------|------|-----|------|-----------------------|-----|-----|------|-----------------------|-----|-----|-------|
|      | ~ Kg | A   | ~ Kg | X                     | Y   | Z   | ~ Kg | X                     | Y   | Z   | ~ Kg  |
| 80   | 91,8 | 61  | 82   | -                     | -   | -   | -    | -                     | -   | -   | -     |
| 90s  |      | 61  | 82   | 267                   | 173 | 130 | 91   | 343                   | 173 | 130 | 96,5  |
| 90l  |      | 61  | 82   | 292                   | 173 | 130 | 92   | 368                   | 173 | 130 | 97,5  |
| 100  |      | 76  | 84,2 | 326                   | 191 | 139 | 98   | 407                   | 191 | 139 | 103,5 |
| 112  |      | 76  | 84,2 | 347                   | 211 | 154 | 108  | 443                   | 211 | 154 | 117,7 |
| 132s |      | 101 | 87   | 386                   | 249 | 194 | 123  | 485                   | 249 | 194 | 133,3 |
| 132m |      | 101 | 87   | 434                   | 249 | 194 | 132  | 537                   | 249 | 194 | 146,7 |
| 160s |      | 148 | 93   | 540                   | 310 | 244 | -    | -                     | -   | -   | -     |
| 160l | 91,8 | 148 | 93   | 584                   | 310 | 244 | -    | -                     | -   | -   | -     |
| 180  |      | 148 | 93   | 641                   | 349 | 260 | -    | -                     | -   | -   | -     |
| 200  |      | 185 | 108  | -                     | -   | -   | -    | -                     | -   | -   | -     |

감속기에 취부할 모터의 dimensions (Pm,Dm,bm,tm)을 확인하려면 285페이지 참조

For the dimensions concerning the motor connection area (Pm, Dm, bm, tm) please refer to the table shown at page 285.

Dimensions / 치수 122/..3

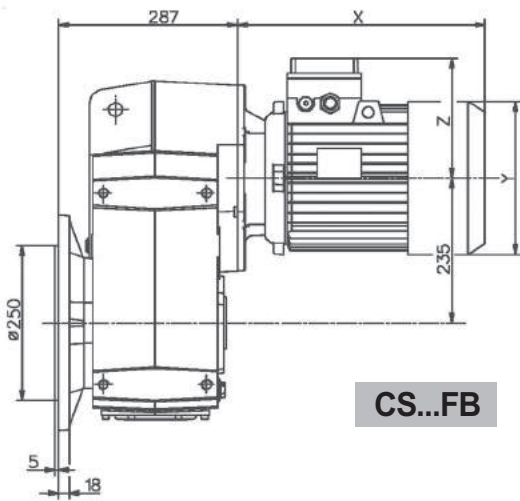
HA / H

BA / B

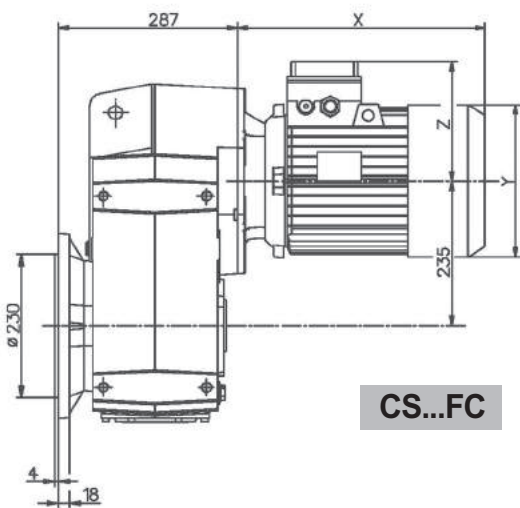
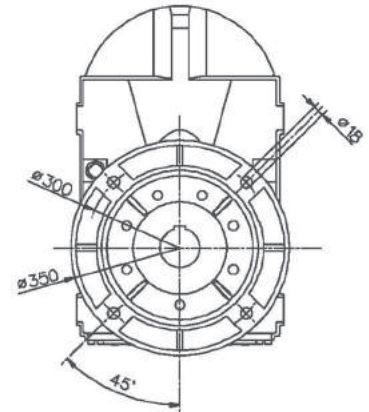
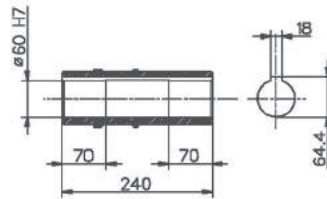
S

PBH series

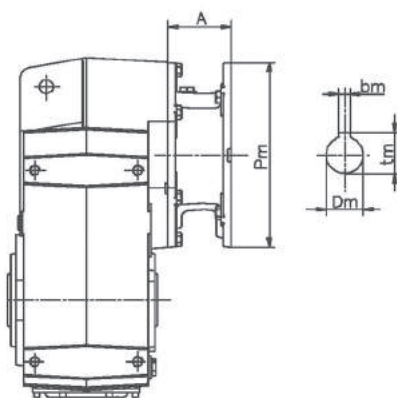
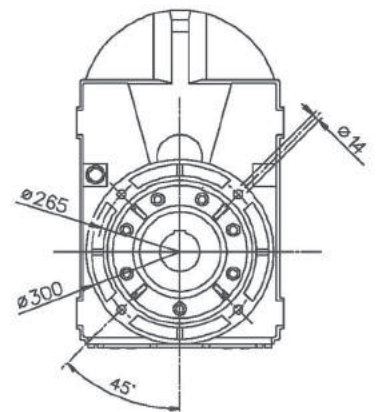
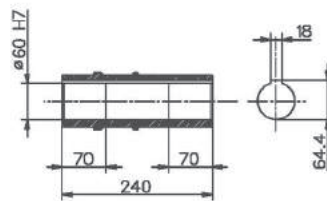
Electric Motor



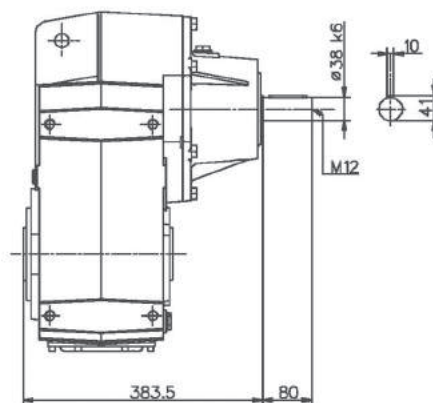
CS...FB



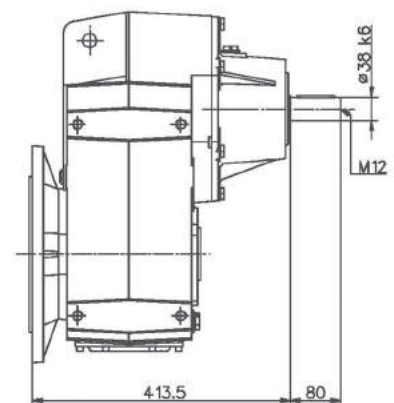
CS...FC



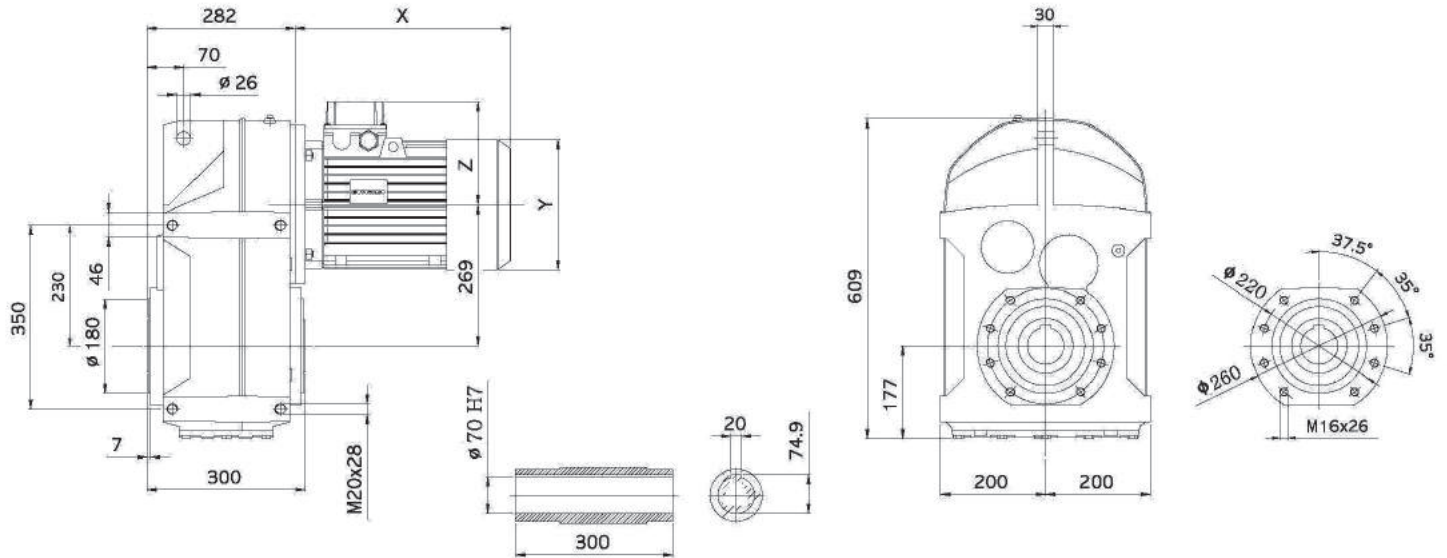
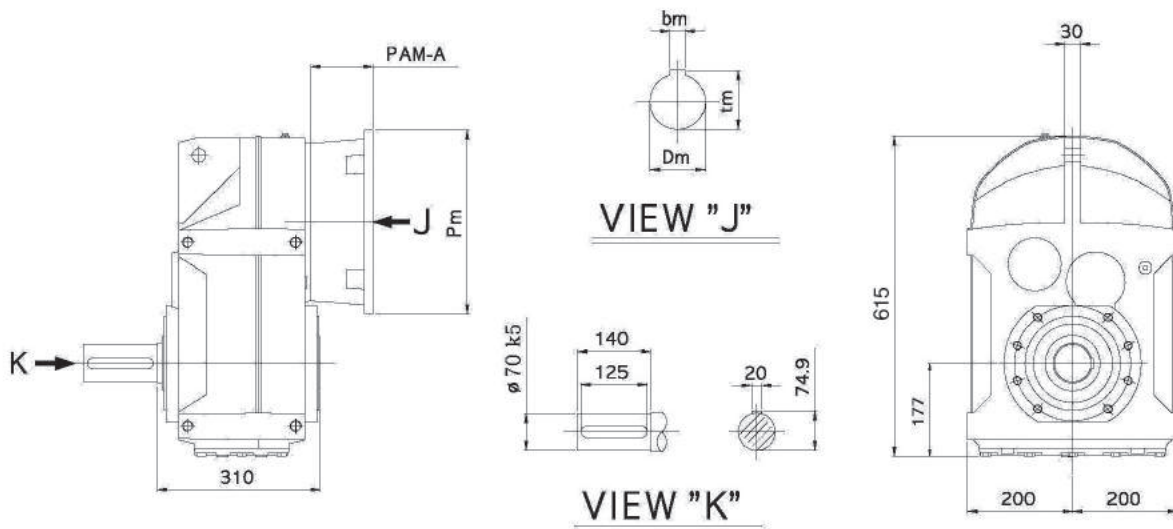
S...C



IS...C

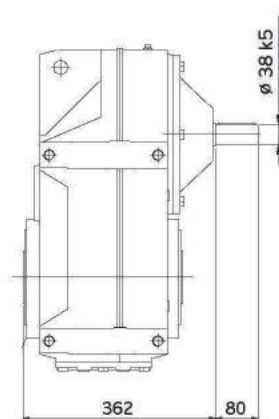
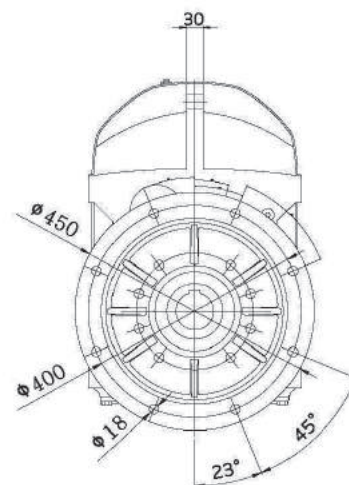
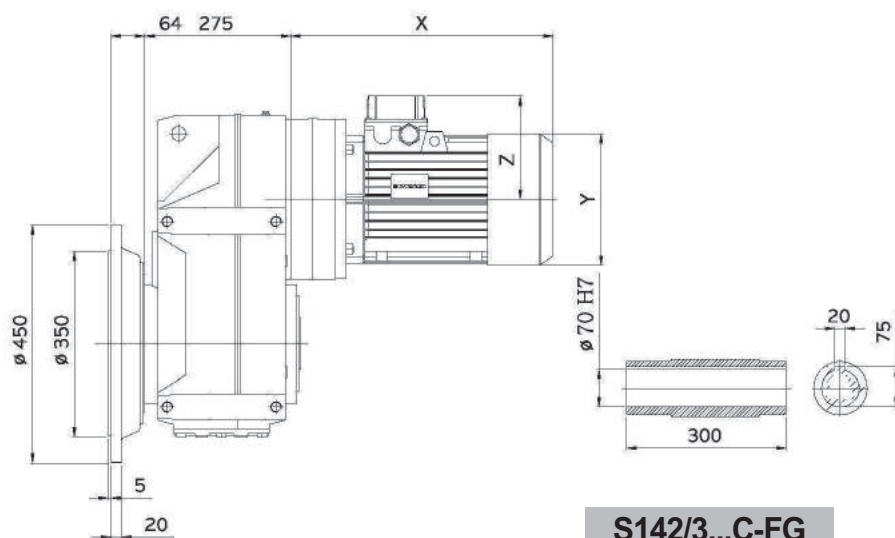


IS...FB - FC

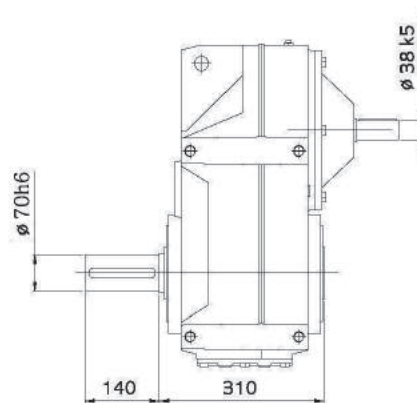
**142/..3 차수 / Dimensions**

**S142/3...C**

**S142/3...D**

| 140 | PAM   |     | VIEW "J" |    |      | 표준모터 / Standard motor |     |       |
|-----|-------|-----|----------|----|------|-----------------------|-----|-------|
|     | A     | Pm  | Dm       | bm | tm   | X                     | T   | Z     |
| 112 | 73.5  | 250 | 28       | 8  | 31.3 | 347                   | 211 | 154   |
| 132 | 84    | 300 | 38       | 10 | 41.3 | 410                   | 195 | 248.5 |
| 160 | 119.5 | 350 | 42       | 12 | 45.3 | 530                   |     | 316   |
| 180 | 119.5 | 350 | 48       | 14 | 51.8 | 610                   |     | 397   |
| 200 | 119.5 | 400 | 55       | 16 | 59.3 | 675                   |     | 300   |

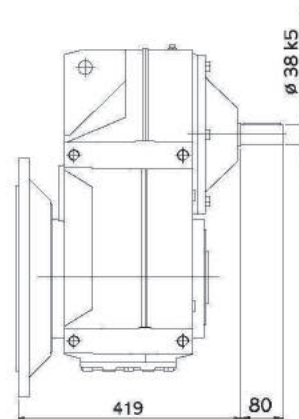
**Dimensions / 치수** **142/..3**



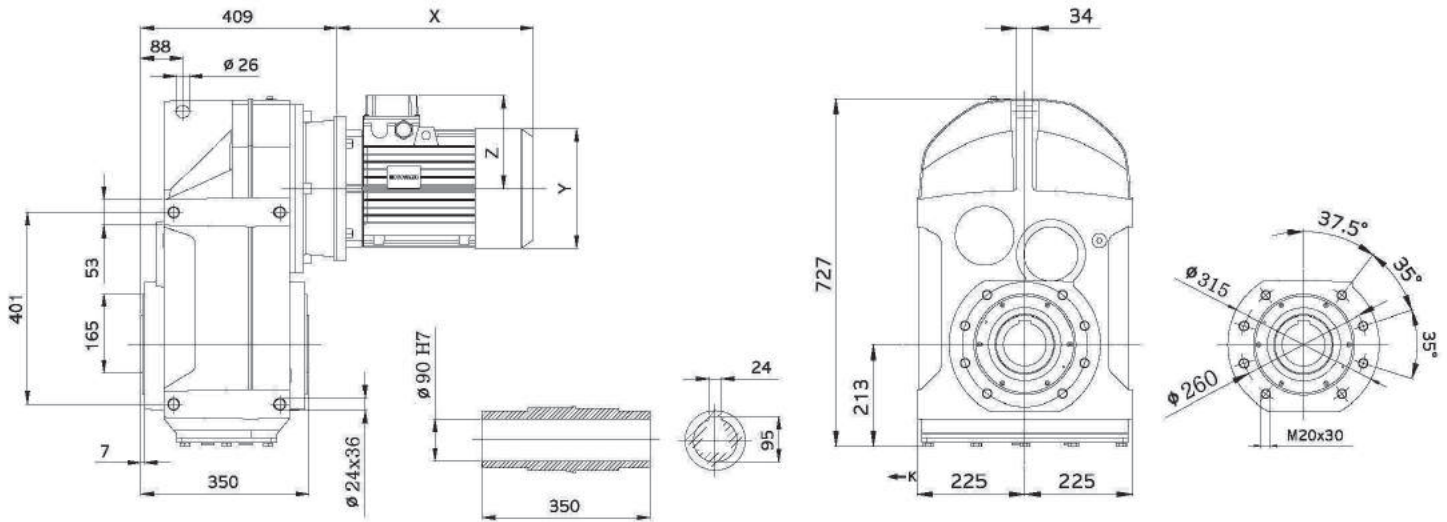
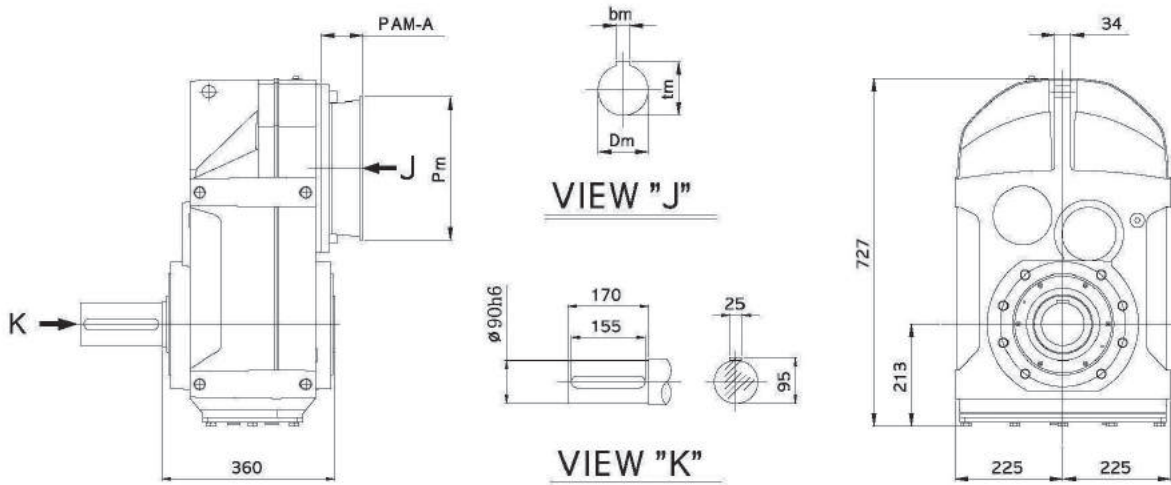
**IS142/3 C**



**IS142/3 D**

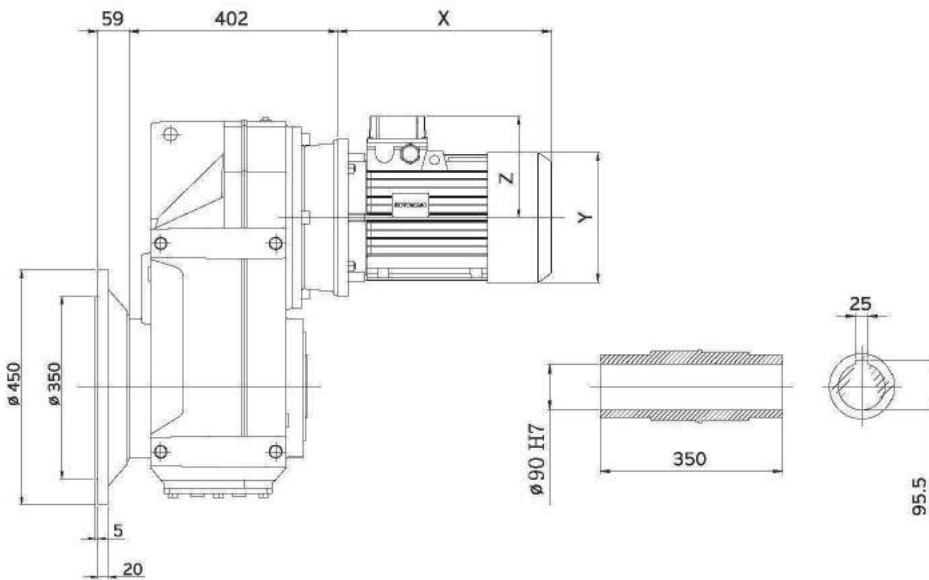


**IS142/3 C-FG**

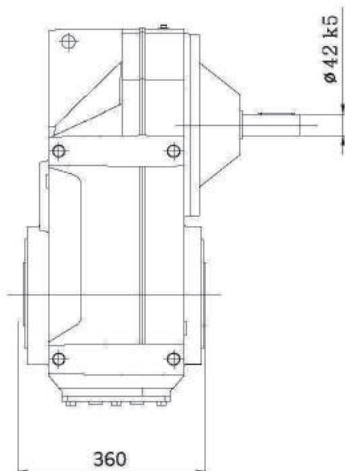
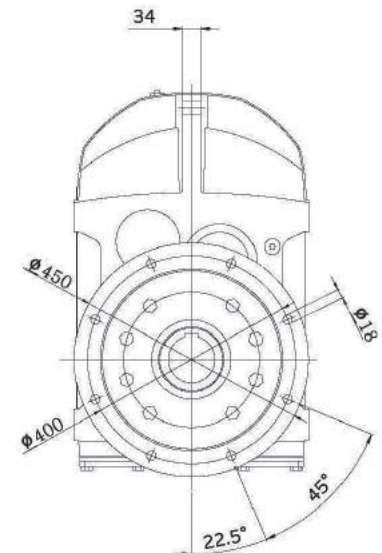
**152/..3 차수 / Dimensions**

**S152/3...C**

**S152/3...D**

| 150 | PAM   |     | VIEW "J" |    |      | 표준모터 / Standard motor |     |       |
|-----|-------|-----|----------|----|------|-----------------------|-----|-------|
|     | A     | Pm  | Dm       | bm | tm   | X                     | T   | Z     |
| 132 | 87.5  | 300 | 38       | 10 | 41.3 | 410                   | 195 | 248.5 |
| 160 | 112   | 350 | 42       | 12 | 45.3 | 530                   |     | 316   |
| 180 | 112   | 350 | 48       | 14 | 51.8 | 610                   |     | 397   |
| 200 | 122   | 400 | 55       | 16 | 59.3 | 675                   |     | 300   |
| 225 | 144.5 | 450 | 60       | 18 | 54.4 |                       |     |       |

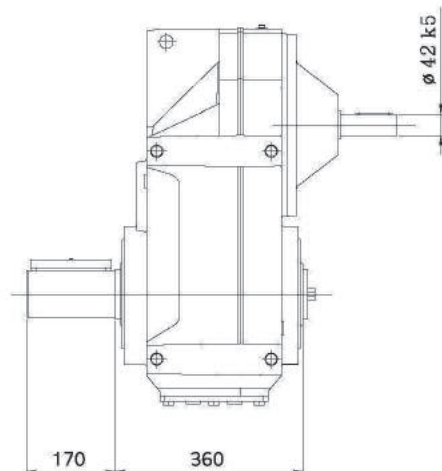
Dimensions / 치수 152/..3



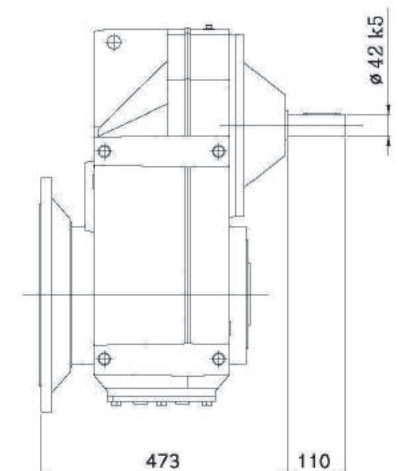
S152/3...C-FG



IS152/3 C

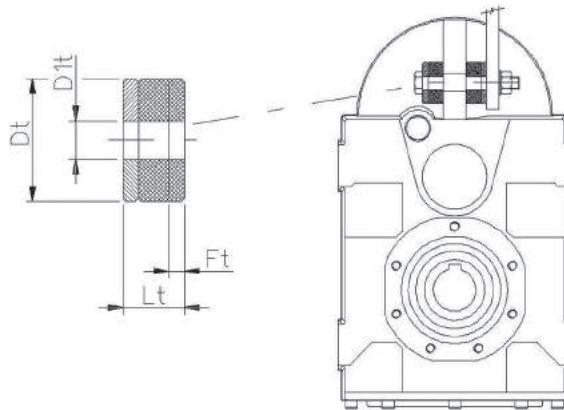


IS152/3 D



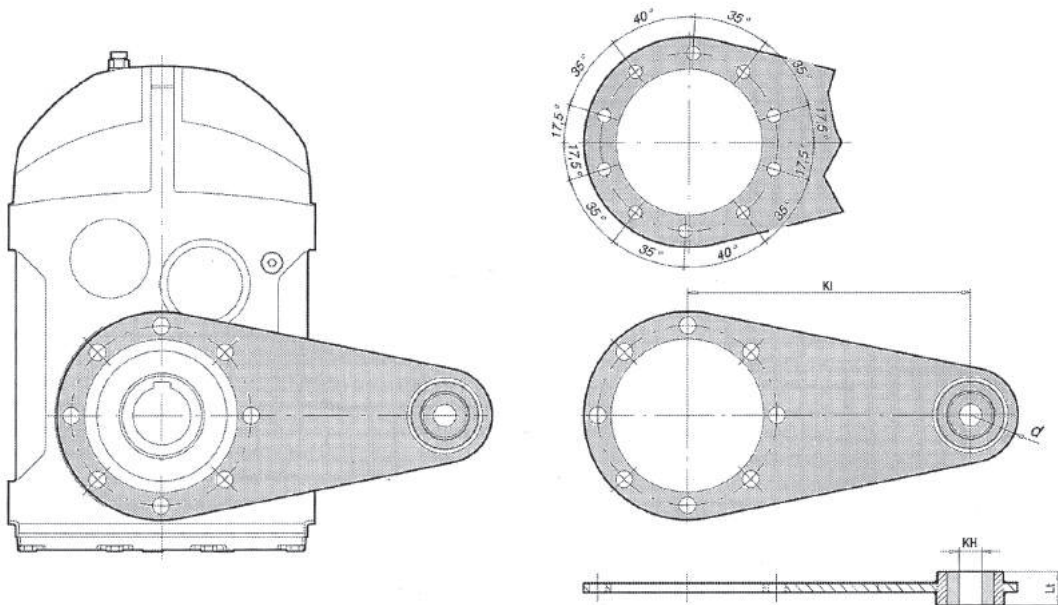
IS152/3 C-FG

## 토오크 암 / Torque arm



|     | Dt | D1t  | Lt | Ft  |
|-----|----|------|----|-----|
| 050 | 40 | 12.5 | 20 | ~ 3 |
| 060 | 40 | 12.5 | 20 | ~ 3 |
| 080 | 40 | 12.5 | 20 | ~ 3 |
| 100 | 60 | 21   | 30 | ~ 5 |
| 125 | 60 | 21   | 30 | ~ 5 |

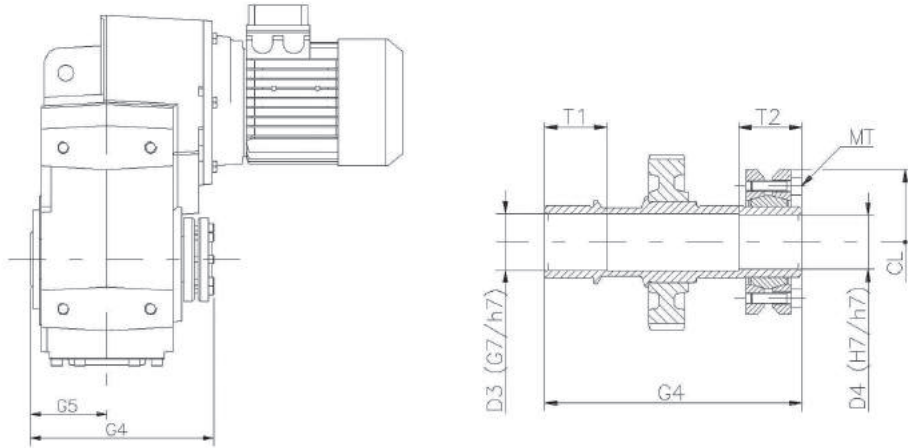
## 샤링크 디스크 / Shrink disc



|     | D3 | D4 | G4  | G5  | T1 | T2 | CL  | MT 12.9(Nm) |
|-----|----|----|-----|-----|----|----|-----|-------------|
| 050 | 31 | 30 | 152 | 60  | 35 | 35 | 74  | 15          |
| 060 | 36 | 35 | 173 | 70  | 40 | 35 | 80  | 15          |
| 080 | 41 | 40 | 217 | 90  | 50 | 40 | 100 | 15          |
| 100 | 51 | 50 | 248 | 105 | 55 | 40 | 115 | 15          |
| 125 | 61 | 60 | 282 | 120 | 60 | 50 | 145 | 40          |

사용할 샤프트에 그리스가 묻어 있지 않도록 깨끗이 해야한다.(M,T) 상기표에 나타난 토오크로 스크류를 조여야 한다.  
 Clean and degrease the surfaces of the shaft to be fitted to. Comply with the indicated tightening torque of screws(MT).

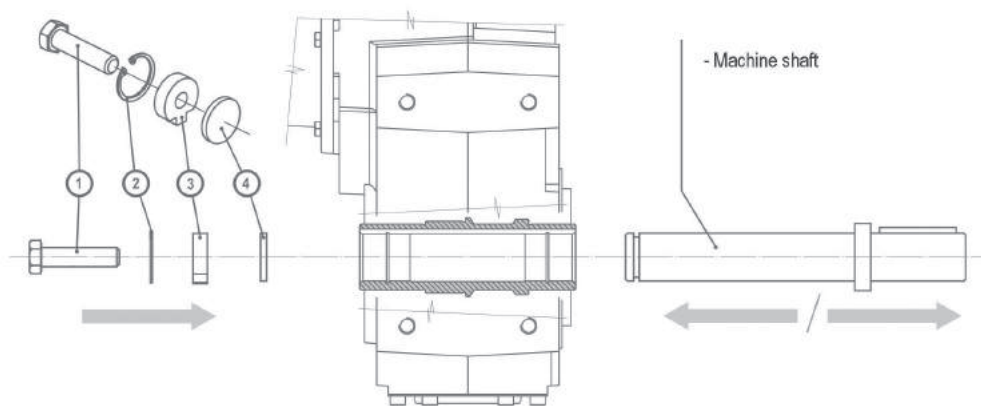
## 샤링크 디스크 / Shrink disc



|         | D3              | D4 | G4  | G5  | T1 | T2 | CL  | MT 12.9(Nm) |
|---------|-----------------|----|-----|-----|----|----|-----|-------------|
| 052/053 | 31              | 30 | 152 | 60  | 35 | 35 | 74  | 15          |
| 062/063 | 36              | 35 | 173 | 70  | 40 | 35 | 80  | 15          |
| 082/083 | 41              | 40 | 217 | 90  | 50 | 40 | 100 | 15          |
| 082/083 | 41              | 50 | 217 | 90  | 50 | 40 | 100 | 15          |
| 102/103 | 51              | 50 | 248 | 105 | 55 | 40 | 115 | 15          |
| 122/123 | 61              | 60 | 282 | 120 | 60 | 50 | 145 | 40          |
|         | D3 - D4 (H7/h6) |    | G4  |     |    |    |     |             |
| 142/143 | 75              |    | 345 | -   | -  | -  | -   | -           |
| 152/153 | 95              |    | 405 | -   | -  | -  | -   | -           |
| 152/153 | 80              |    | 405 | -   | -  | -  | -   | -           |

사용할 샤프트에 그리스가 묻어 있지 않도록 깨끗이 해야한다.(M,T) 상기표에 나타난 토크로 스크류를 조여야 한다.  
Clean and degrease the surfaces of the shaft to be fitted to. Comply with the indicated tightening torque of screws(MT).

## 조립부품 / Assembling/disassembling kit



### 조립부품 (Assembling/disassembling kit)

KO

마운트/Key way와 중공축 감속기의 분리를 위한 키트. 옵션 사항으로 별도 주문 요청을 하여야 함.

1. Retaining bolt
2. Circlip
3. Fixed nut
4. Forcing washer

### Assembling/disassembling kit

UK

Mounting/dismounting kit for hollow shaft gear reducers with keyway.

On request delivery includes :

1. Retaining bolt
2. Circlip
3. Fixed nut
4. Forcing washer