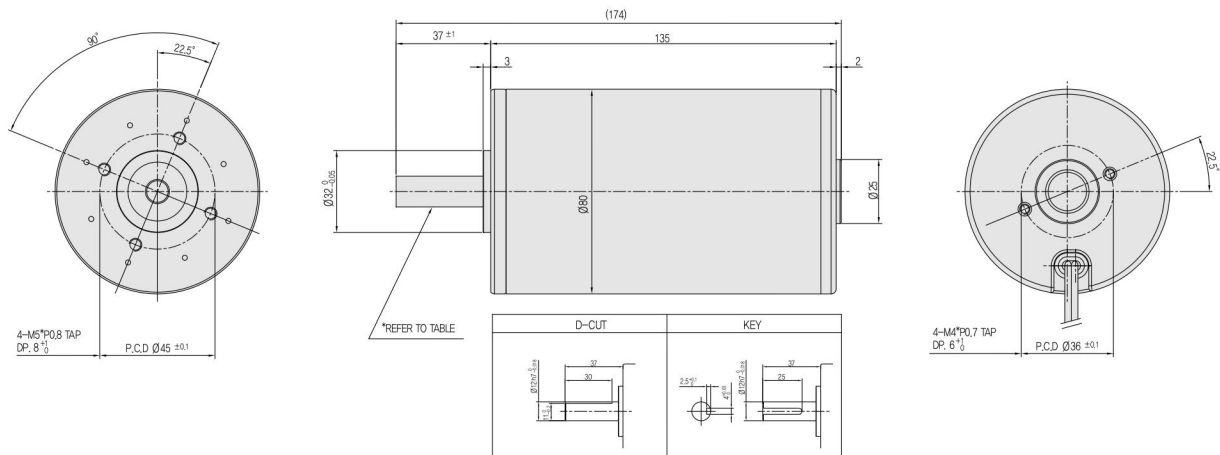


# XD & XA SERIES

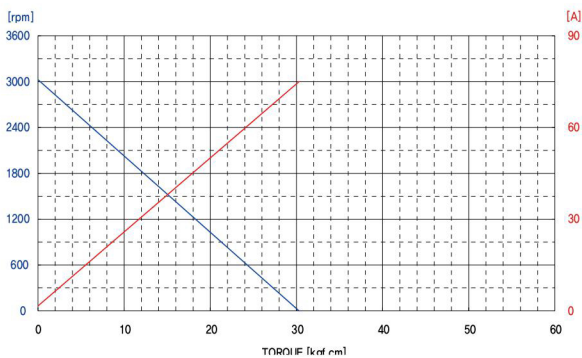
## XD80120 Series DC Motor Dimension



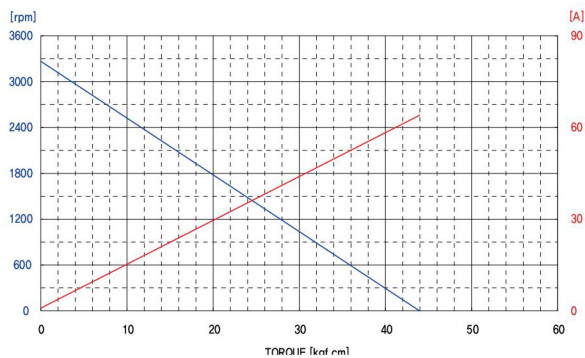
## XD80120 Series DC Motor Data Sheet

| Data                    | units    | XD80120 Series |       |       |       |
|-------------------------|----------|----------------|-------|-------|-------|
|                         |          | 12             | 24    | 40    | 60    |
| Rated voltage           | [Vd.c]   | 12             | 24    | 40    | 60    |
| No load speed           | [r/min]  | 3100           | 3200  | 3450  | 3400  |
| No load current         | [A]      | 2.5            | 1.8   | 1.2   | 0.6   |
| Rated torque            | [kgf.cm] | 3.97           | 3.64  | 3.40  | 3.50  |
|                         | [Ncm]    | 38.9           | 35.7  | 33.3  | 34.3  |
| Rated speed             | [r/min]  | 2945           | 3210  | 3440  | 3350  |
| Rated current           | [A]      | 12.6           | 5.8   | 4.0   | 2.6   |
| Rated Output power      | [W]      | 120            | 120   | 120   | 120   |
| Stall torque            | [kgf.cm] | 28.8           | 41.8  | 43.8  | 48.9  |
|                         | [Ncm]    | 282.2          | 409.5 | 429.3 | 479.5 |
| Stall current           | [A]      | 82.5           | 70.4  | 49.5  | 37.3  |
| Demagnetization current | [A]      | 96             | 48    | 32    | 20    |
| Weight                  | [kg]     | 2.7            | 2.7   | 2.7   | 2.7   |

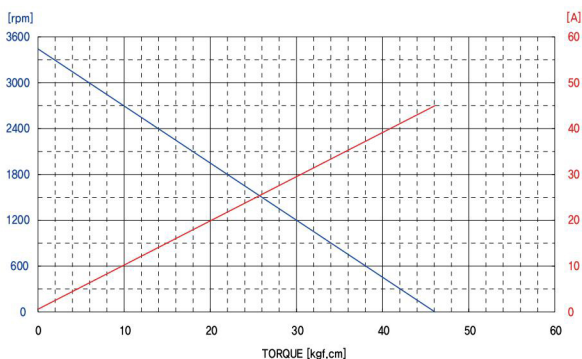
### XD80120-12 Characteristic diagram, 12Vd.c



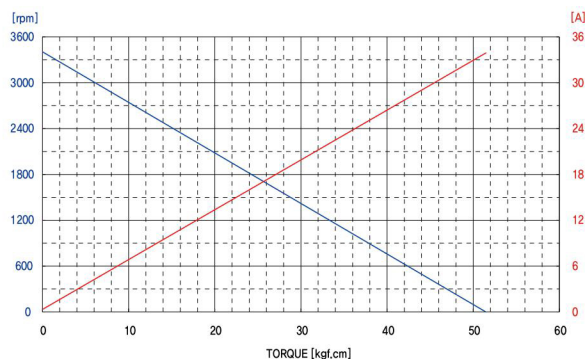
### XD80120-24 Characteristic diagram, 24Vd.c



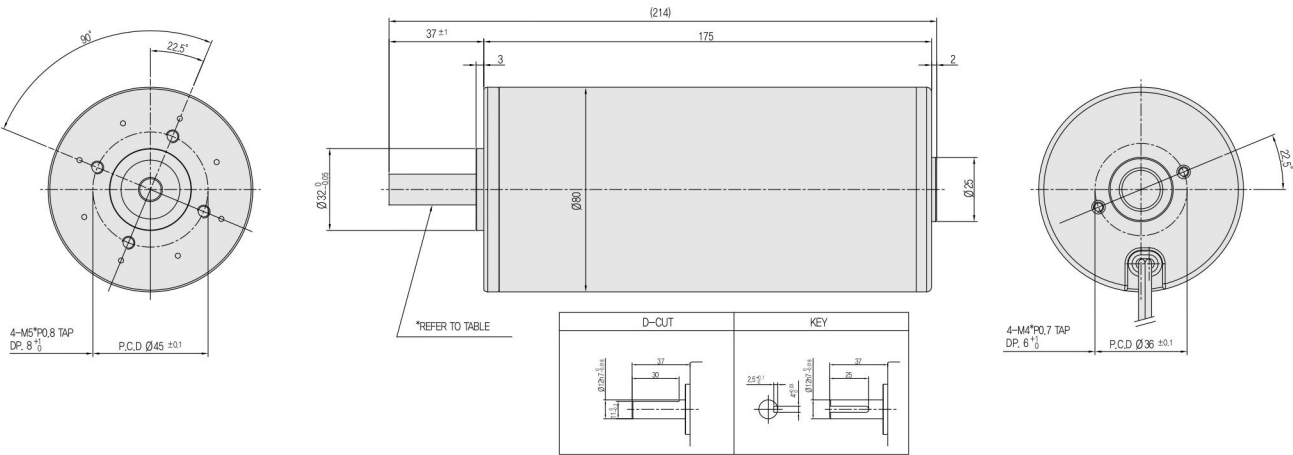
### XD80120-40 Characteristic diagram, 40Vd.c



### XD80120-60 Characteristic diagram, 60Vd.c



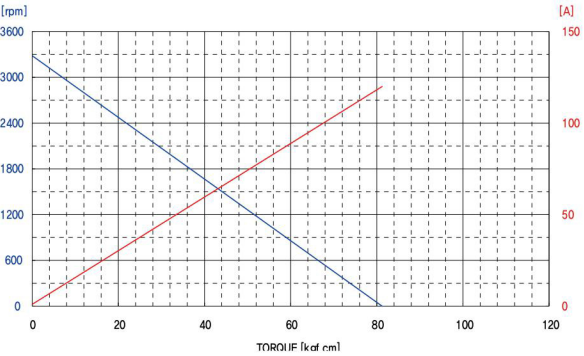
## XD80220 Series DC Motor Dimension



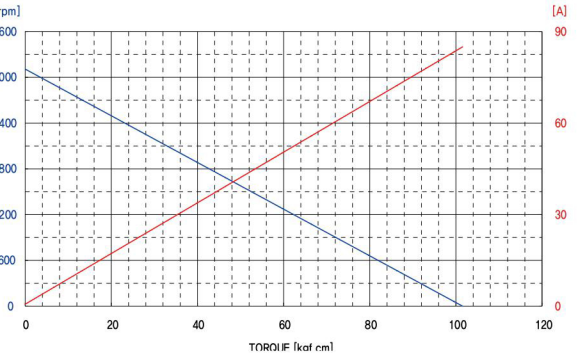
## XD80220 Series DC Motor Data Sheet

| Data                    | units    | XD80220 Series |       |       |
|-------------------------|----------|----------------|-------|-------|
| Rated voltage           | [Vd.c]   | 24             | 40    | 60    |
| No load speed           | [r/min]  | 3200           | 3000  | 3100  |
| No load current         | [A]      | 1.8            | 1.2   | 0.8   |
| Rated torque            | [kgf.cm] | 6.41           | 6.80  | 6.50  |
|                         | [Ncm]    | 62.9           | 66.7  | 63.7  |
| Rated speed             | [r/min]  | 3350           | 3150  | 3300  |
| Rated current           | [A]      | 11.1           | 6.2   | 4.2   |
| Rated Output power      | [W]      | 220            | 220   | 220   |
| Stall torque            | [kgf.cm] | 77.2           | 96.5  | 97.2  |
|                         | [Ncm]    | 756.7          | 945.9 | 953.2 |
| Stall current           | [A]      | 132.0          | 93.5  | 63.8  |
| Demagnetization current | [A]      | 91             | 51    | 36    |
| Weight                  | [kg]     | 3.75           | 3.75  | 3.75  |

### XD80220-24 Characteristic diagram, 24Vd.c



### XD80220-40 Characteristic diagram, 40Vd.c



### XD80220-60 Characteristic diagram, 60Vd.c

