

# TSL-PG12-KS1215 Series

Micro DC Planetary Gear Motor - Product Specification



## SERIES OVERVIEW

- Rated voltage: 12 V DC
- Available planetary ratios: 5:1, 25:1, 125:1 and 625:1
- 12 mm planetary steel gearbox with coreless brushed DC motor
- Compact construction with dual ball-bearing output support

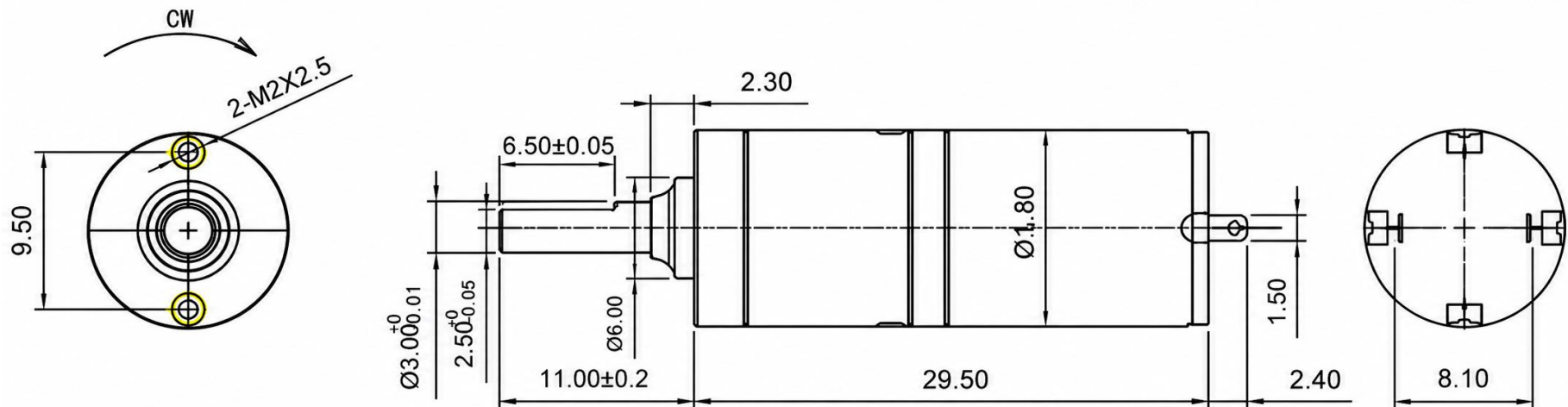
## ELECTRICAL OPTIONS

| Model           | Rated Voltage | Gear Ratios  |
|-----------------|---------------|--------------|
| TSL-PG12-KS1625 | 12 V DC       | 5:1 to 625:1 |

*All dimensions are in mm unless otherwise specified.*

## DIMENSIONAL DRAWING

### DIRECTION OF ROTATION



# TSL-PG12K5-KS1215 Series

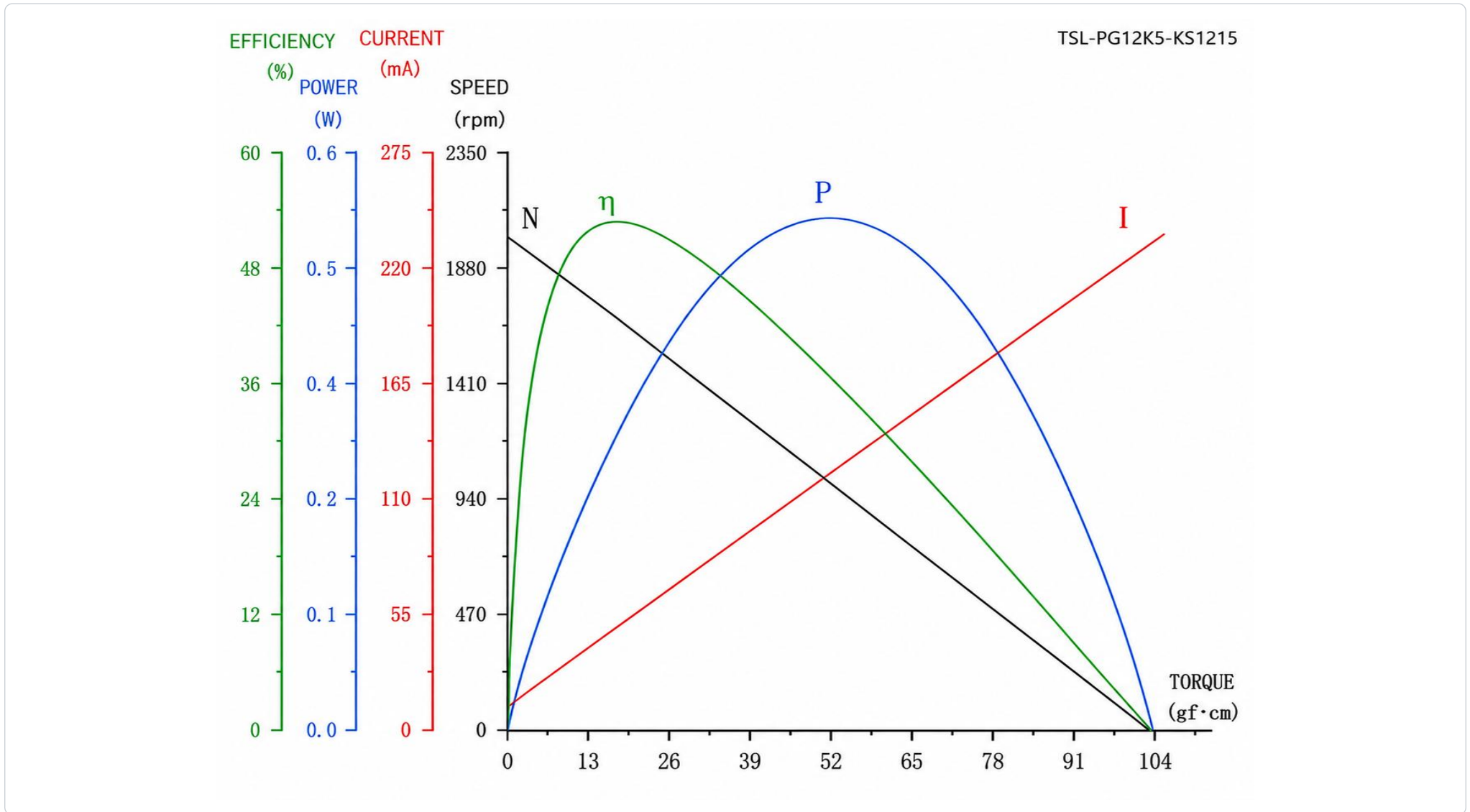
12 V DC - Performance Data by Gear Ratio

| Motor Model                            | TSL-PG12K5-KS1215 | TSL-PG12K25-KS1215 | TSL-PG12K125-KS1215 | TSL-PG12K625-KS1215 |
|--|-------------------|--------------------|---------------------|---------------------|
| Reduction Ratio                        | 5                 | 25                 | 125                 | 625                 |
| Rated Voltage (V)                      | 12                | 12                 | 12                  | 12                  |
| No-Load Speed (rpm)                    | 1992              | 403                | 79                  | 20                  |
| No-Load Current (mA)                   | 9.2               | 13.4               | 11.6                | 9.8                 |
| No-Load Efficiency (%)                 | 52.57             | 40.5               | 40.07               | 37.56               |
| Speed at Maximum Efficiency (RPM)      | 1661              | 326                | 65                  | 17                  |
| Current at Maximum Efficiency (mA)     | 46.3              | 56.5               | 52                  | 47.8                |
| Torque at Maximum Efficiency (gf-cm)   | 17                | 82                 | 375                 | 1242                |
| Output Power at Maximum Efficiency (W) | 0.29              | 0.27               | 0.25                | 0.22                |
| Stall Torque (gf-cm)                   | 103               | 428                | 2088                | 7295                |
| Stall Current (mA)                     | 233               | 238                | 233                 | 233                 |

*Specifications are for reference only. Products can be customized according to customer requirements.*

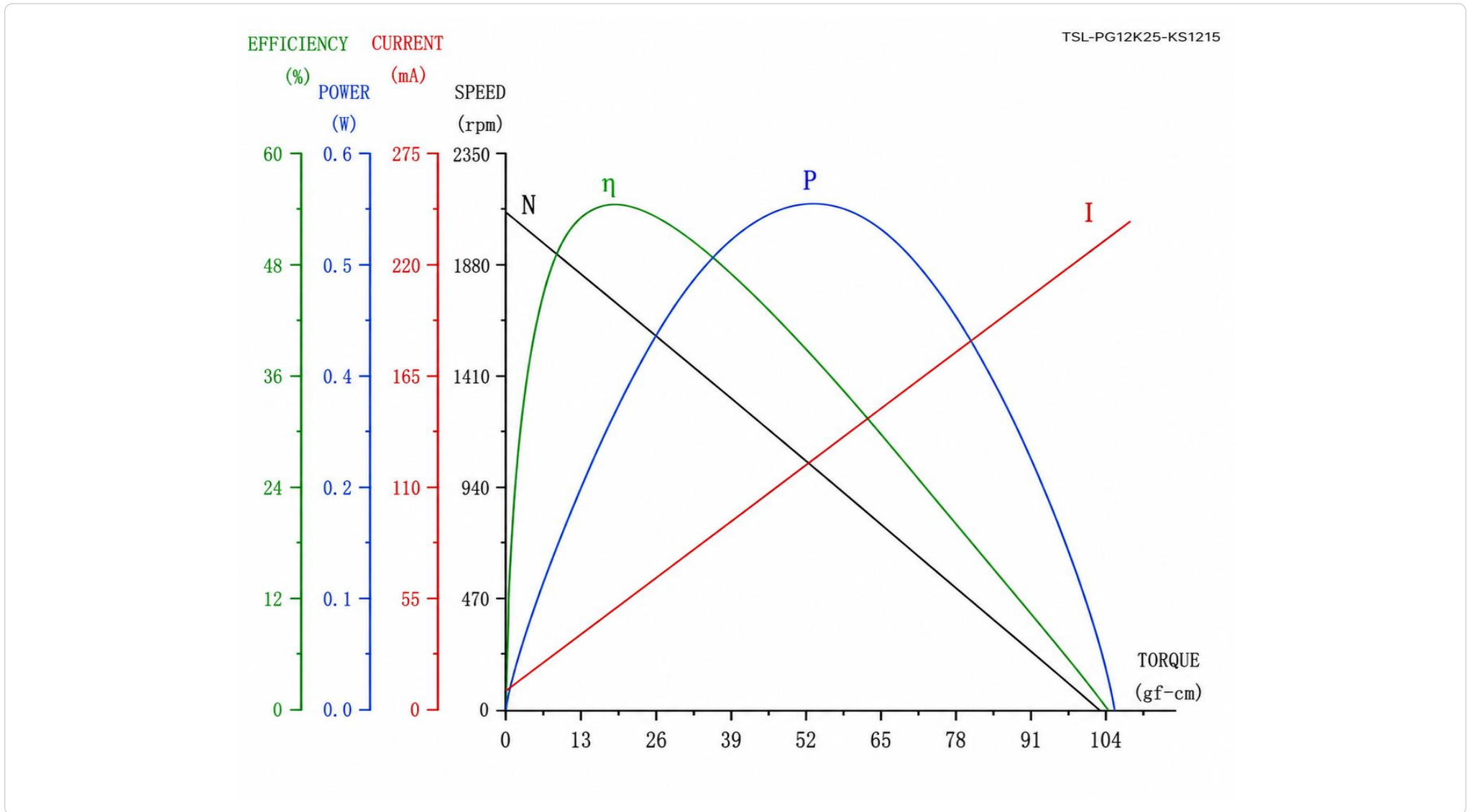
# TSL-PG12K5-KS1215

Speed, Current, Output Power and Efficiency vs. Torque



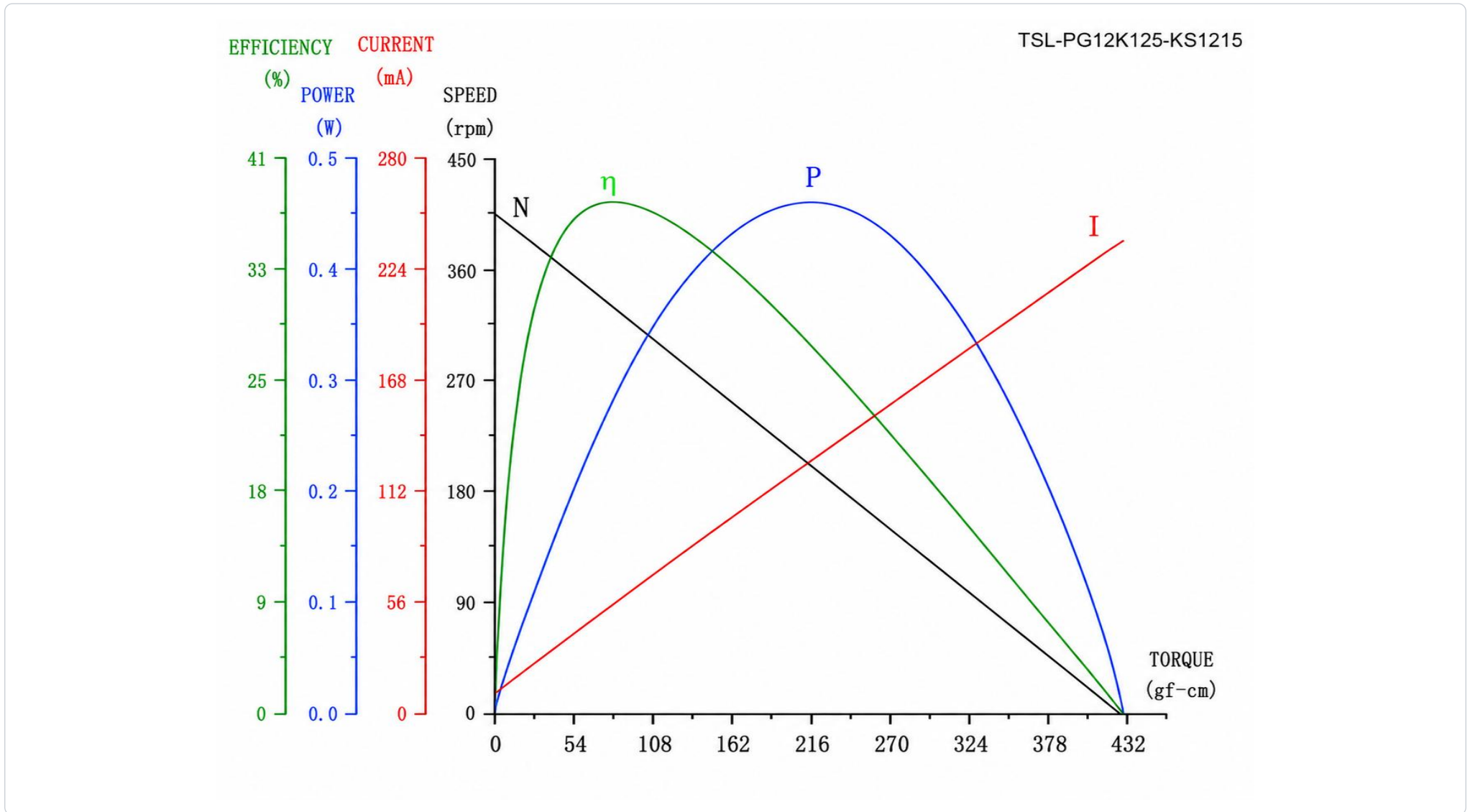
# TSL-PG12K25-KS1215

Speed, Current, Output Power and Efficiency vs. Torque



# TSL-PG12K125-KS1215

Speed, Current, Output Power and Efficiency vs. Torque



# TSL-PG12K625-KS1215

Speed, Current, Output Power and Efficiency vs. Torque

