

**Characteristics:**

Industry first to address Detent Torque EC Motor

**Specifications:**

Shaft Diameter	: Ø 3.175 mm
Input Voltage	: 12.0 V DC
Detent Torque	: 1.60 mNm
Output Power at Maximum Efficiency	: 2.80 W
Maximum Efficiency	: 64%
Torque at Maximum Efficiency	: 14.60 mNm
Speed at Maximum Efficiency	: 1820 rpm
Life (Typical)	: 20000 hr
Weight	: 80 g
Electrcial Connection	: 2.00mm pitch receptacle, 8 Circuits

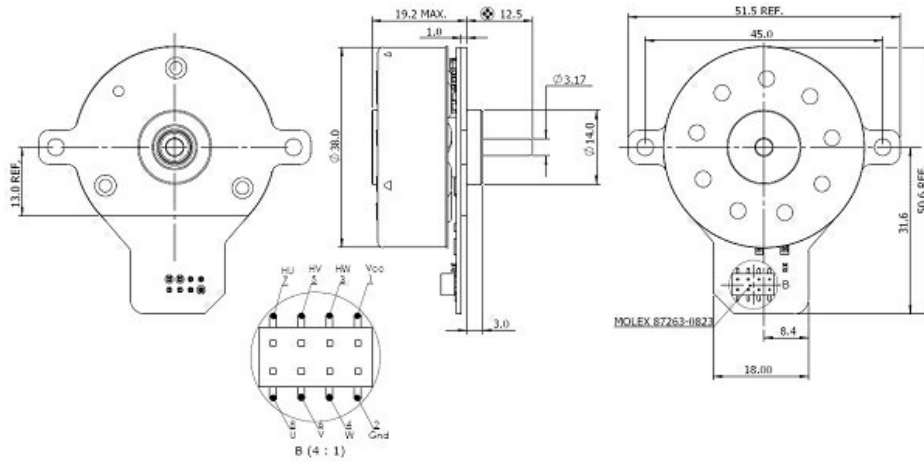
**Performance Data:**

	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	0.10	1.70	0.36	0.90
Efficiency (%)	-	-	64	47
Output Power (W)	-	-	2.80	5.00
Speed (rpm)	2180	-	1820	1090
Torque (mNm)	-	87.90	14.60	43.90

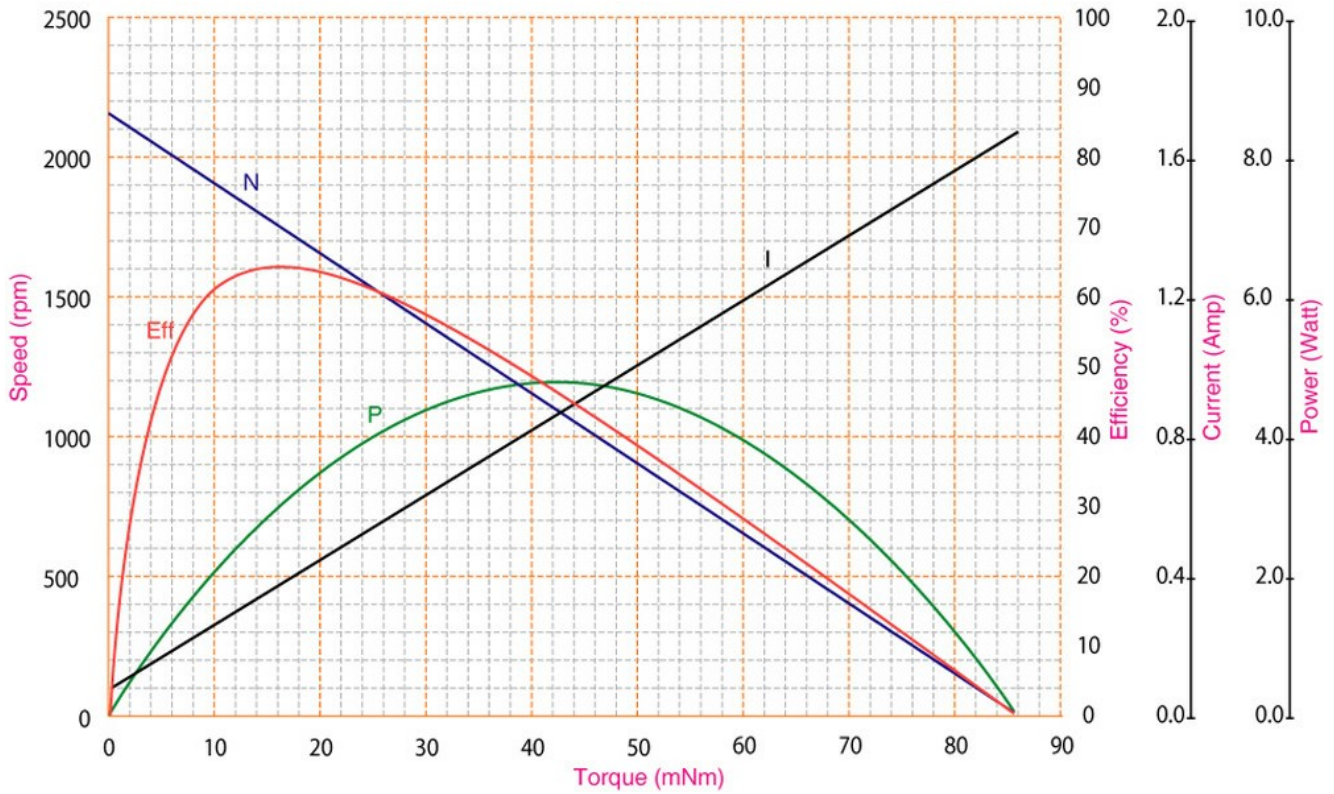
**Application Examples:**

Blowers, Air Flap Actuators, Water Valve Actuators, HVAC, Ventilation, Safety Dampers

Outline Drawing:



Performance Curves:



Units in Metric

**Characteristics:**

High Detent Torque EC Motor

**Specifications:**

Shaft Diameter	: Ø 3.175 mm
Input Voltage	: 12.0 V DC
Detent Torque	: 5.00 mNm
Output Power at Maximum Efficiency	: 2.54 W
Maximum Efficiency	: 56%
Torque at Maximum Efficiency	: 13.49 mNm
Speed at Maximum Efficiency	: 1795 rpm
Life (Typical)	: 20000 hr
Weight	: 80 g
Electrcial Connection	: 2.00mm pitch receptacle, 8 Circuits

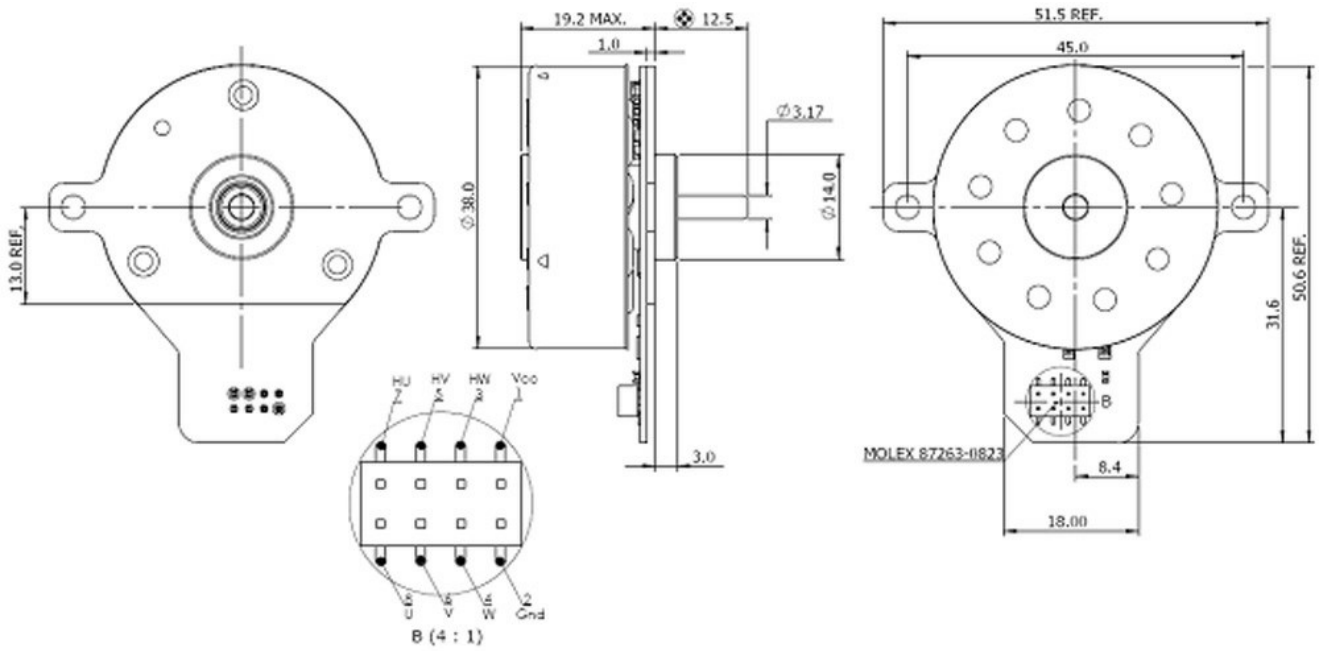
**Performance Data:**

	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	0.10	1.50	0.37	0.80
Efficiency (%)	-	-	56	42
Output Power (W)	-	-	2.54	4.00
Speed (rpm)	2300	-	1795	1120
Torque (mNm)	-	68.15	13.49	34.07

**Application Examples:**

Blowers, Air Flap Actuators, Water Valve Actuators, HVAC, Ventilation, Safety Dampers

Outline Drawing:



Performance Curves:



Units in Metric

**Characteristics:**


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Sensorless high efficiency EC blower motor

**Specifications:**


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Input Voltage	: 24.0 V DC
Output Power at Maximum Efficiency	: 49.50 W
Maximum Efficiency	: 57%
Torque at Maximum Efficiency	: 37.40 mNm
Speed at Maximum Efficiency	: 11700 rpm
Weight	: 210 g
Electrical Connection	: Connector

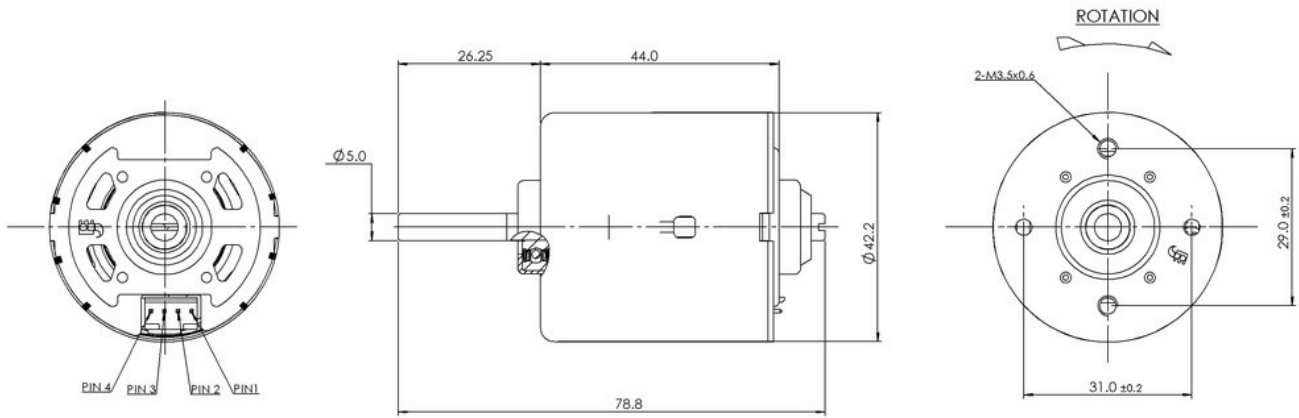
**Performance Data:**


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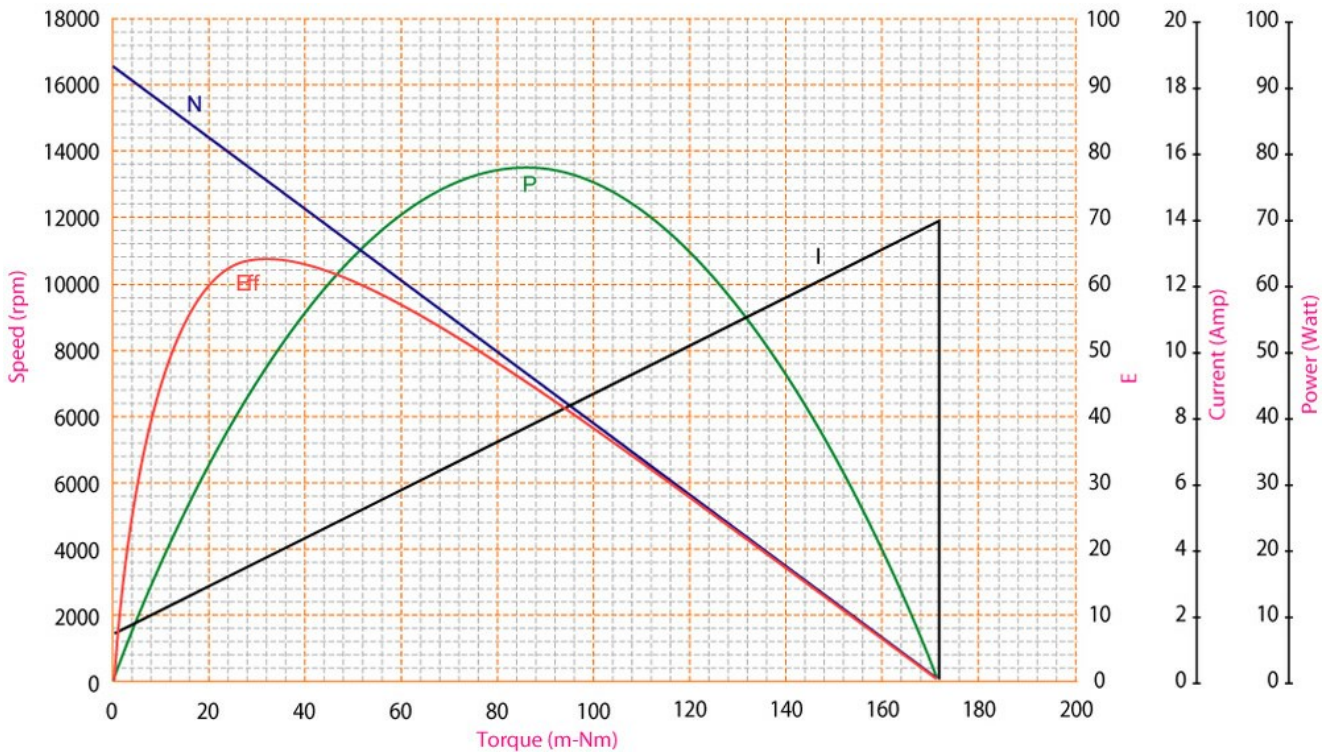
	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	0.91	13.95	3.57	7.43
Efficiency (%)	-	-	57	43
Output Power (W)	-	-	49.50	76.30
Speed (rpm)	15870	-	11700	7930
Torque (mNm)	-	183.54	37.40	91.80



Outline Drawing:



Performance Curves:



Units in Metric

**Characteristics:**

Compact EC Motor, High Power Density, High Efficiency

**Specifications:**

Shaft Diameter	: Ø 5.000 mm
Input Voltage	: 14.4 V DC
Output Power at Maximum Efficiency	: 250.00 W
Maximum Efficiency	: 83%
Torque at Maximum Efficiency	: 160.00 mNm
Speed at Maximum Efficiency	: 14920 rpm
Weight	: 250 g
Operating Temperature Range	: -10 to 55 °C
Storage Temperature Range	: -20 to 80 °C
Electrcial Connection	: Connection on PCBA

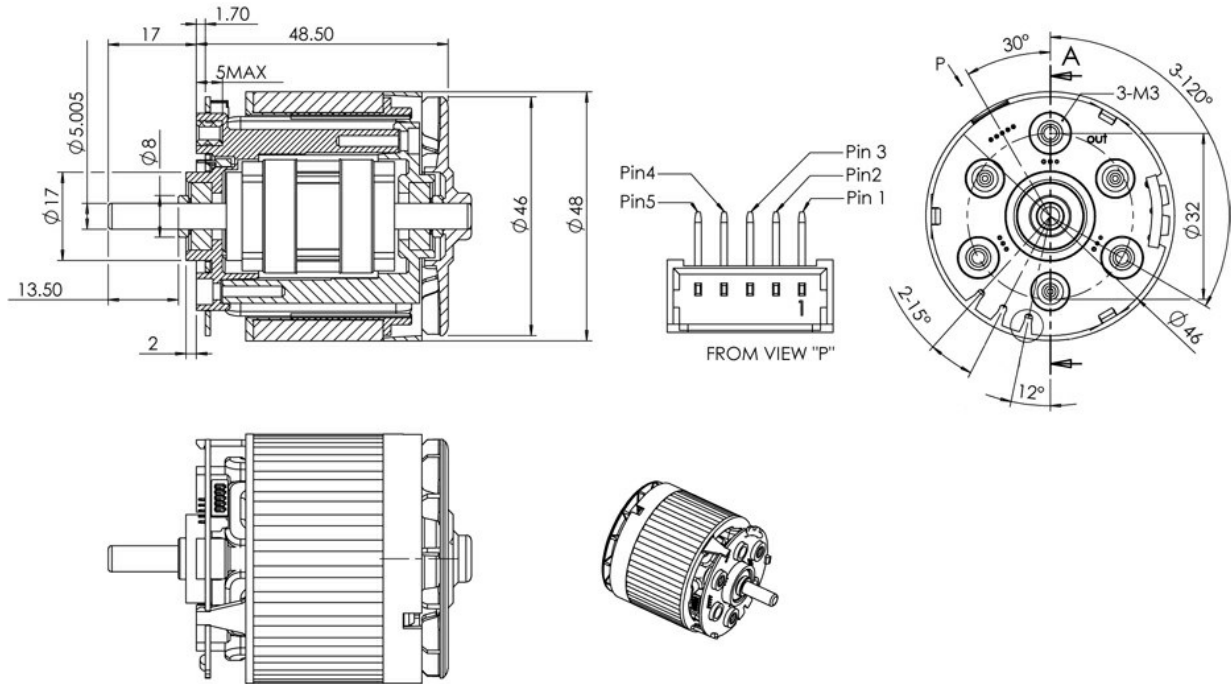
**Performance Data:**

	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	2.30	151.00	20.90	75.00
Efficiency (%)	-	-	83	46
Output Power (W)	-	-	250.00	500.00
Speed (rpm)	18500	-	14920	8681
Torque (mNm)	-	1153.00	160.00	550.00

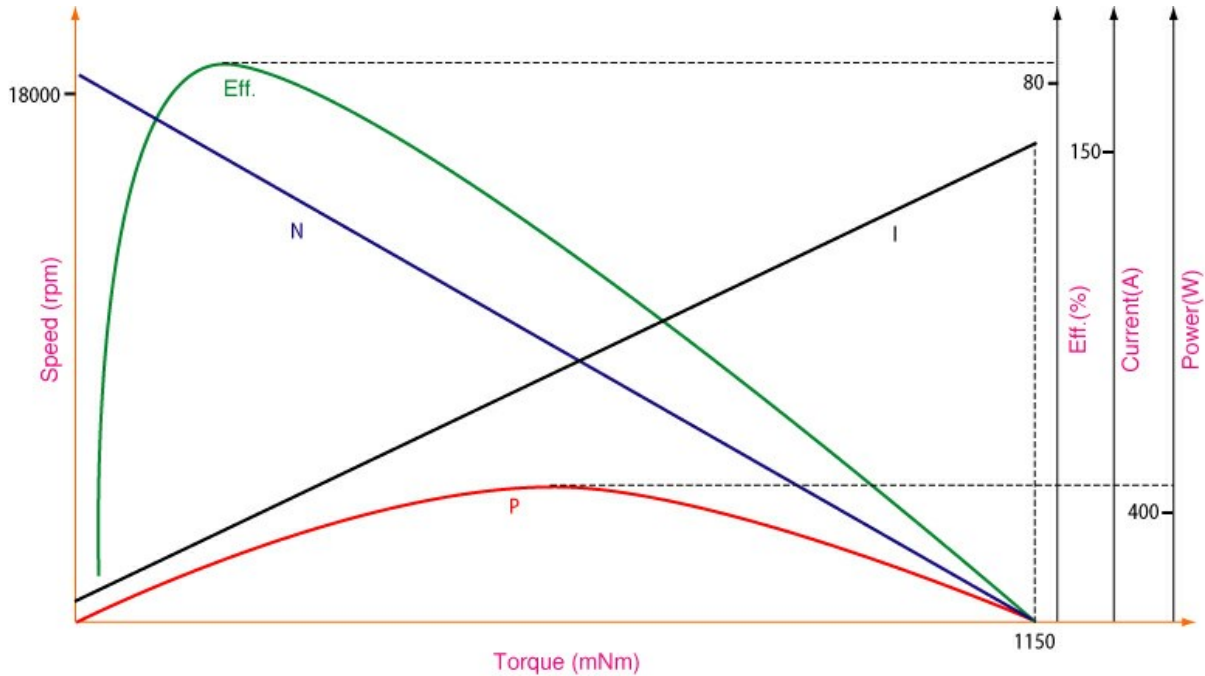
**Application Examples:**

Drills and Hammer Drills

Outline Drawing:



Performance Curves:



Units in Metric



**Characteristics:**

Compact EC Motor, High Power Density, High Efficiency

**Specifications:**

Shaft Diameter	: Ø 5.000 mm
Input Voltage	: 18.0 V DC
Output Power at Maximum Efficiency	: 330.00 W
Maximum Efficiency	: 85%
Torque at Maximum Efficiency	: 180.00 mNm
Speed at Maximum Efficiency	: 17500 rpm
Weight	: 370 g
Electrcial Connection	: Connection on PCBA

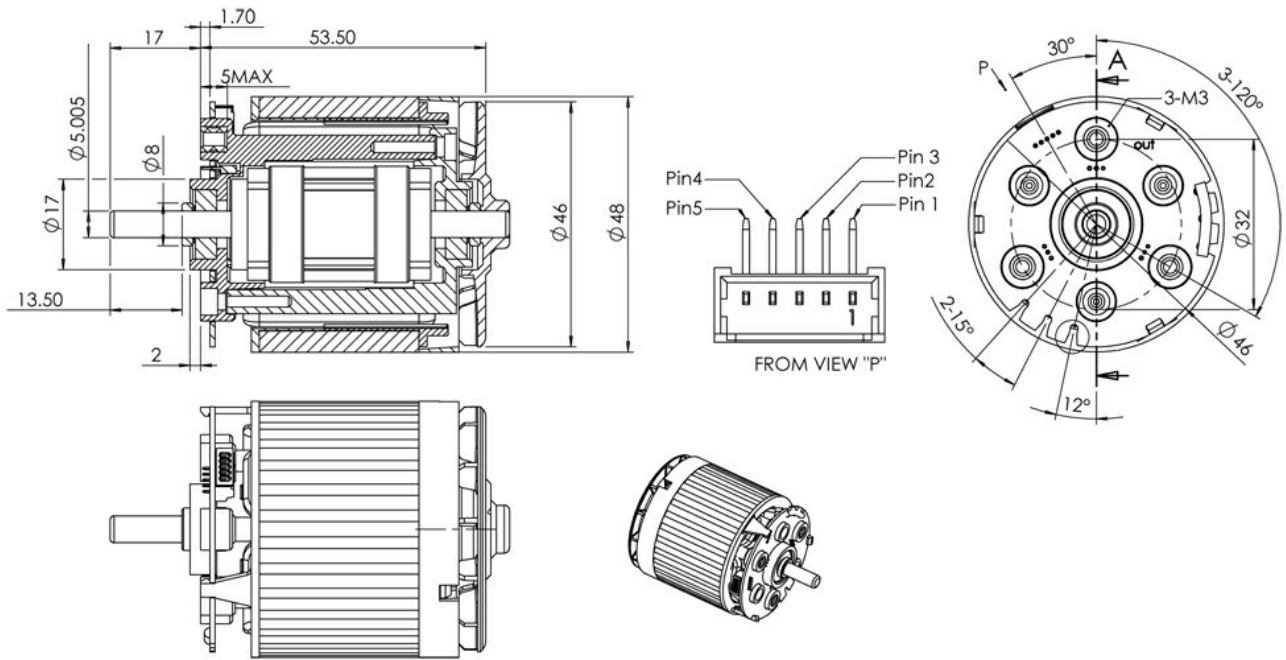
**Performance Data:**

	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	2.80	161.00	21.60	80.00
Efficiency (%)	-	-	85	49
Output Power (W)	-	-	330.00	706.00
Speed (rpm)	20000	-	17500	9490
Torque (mNm)	-	1437.00	180.00	710.00

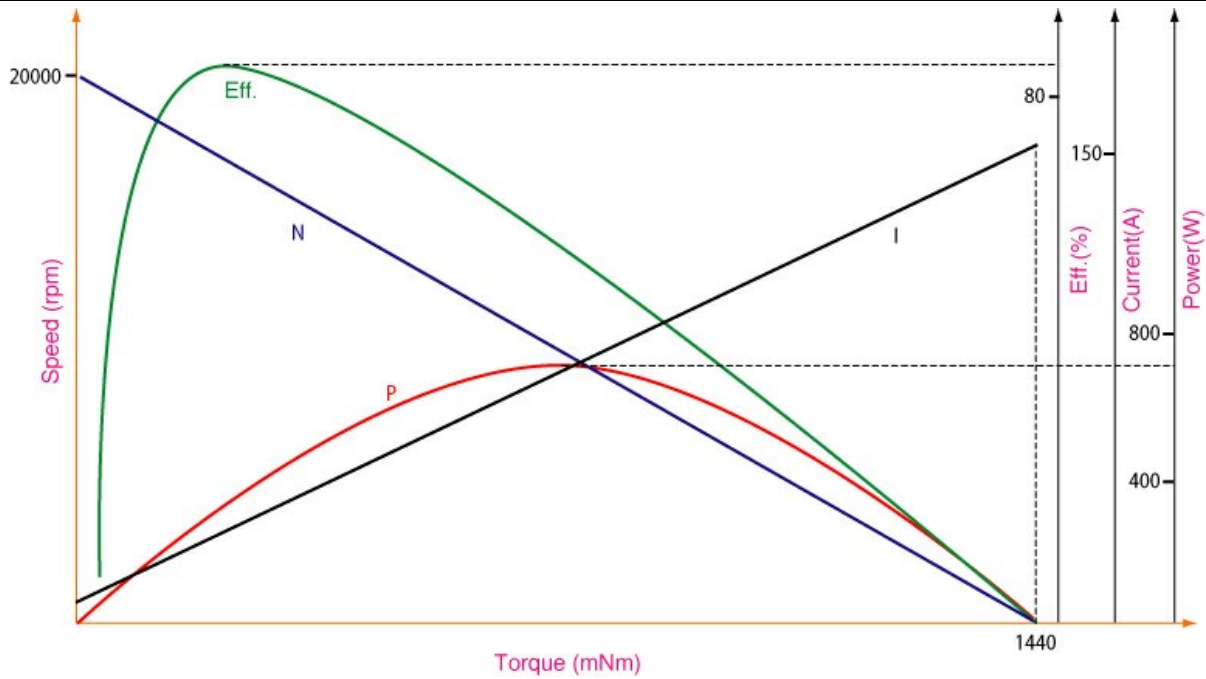
**Application Examples:**

Drills and Hammer Drills

Outline Drawing:



Performance Curves:



Units in Metric

**Characteristics:**

Compact EC Motor, High Power Density, High Efficiency

**Specifications:**

Shaft Diameter	: Ø 5.000 mm
Input Voltage	: 21.6 V DC
Output Power at Maximum Efficiency	: 488.00 W
Maximum Efficiency	: 82%
Torque at Maximum Efficiency	: 234.00 mNm
Speed at Maximum Efficiency	: 19880 rpm
Weight	: 435 g
Electrcial Connection	: Connection on PCBA

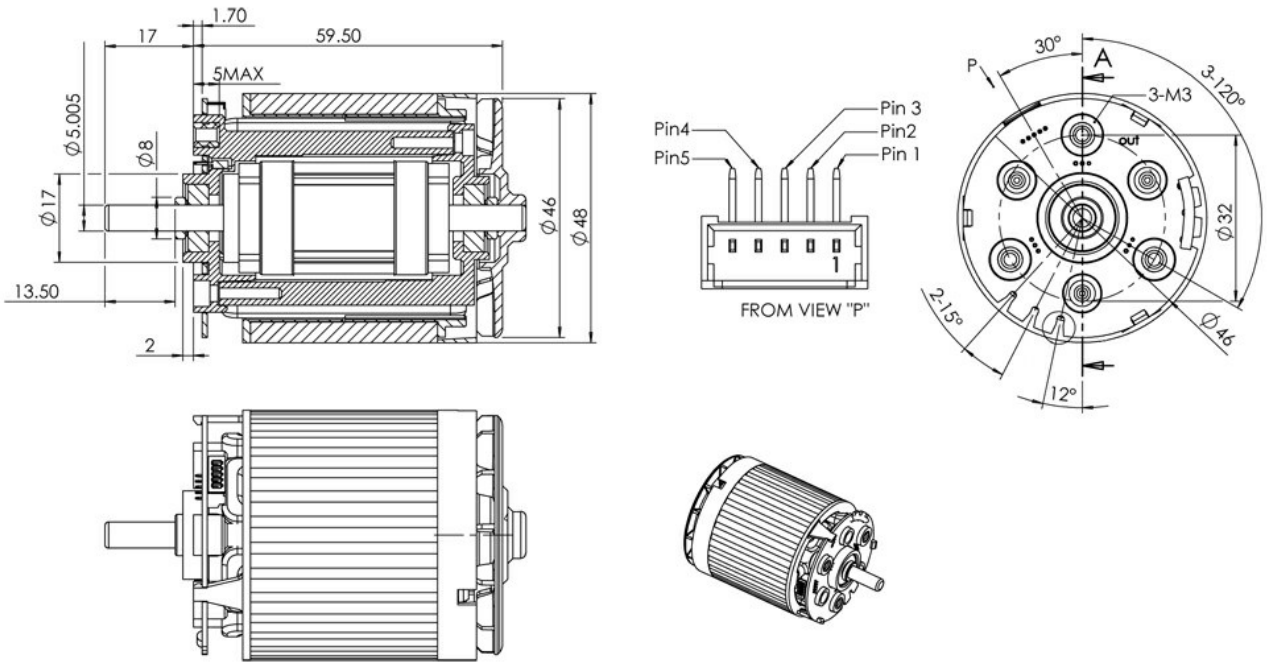
**Performance Data:**

	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	5.00	156.60	27.80	81.00
Efficiency (%)	-	-	82	55
Output Power (W)	-	-	488.00	952.00
Speed (rpm)	23410	-	19880	11707
Torque (mNm)	-	1553.00	234.00	777.00

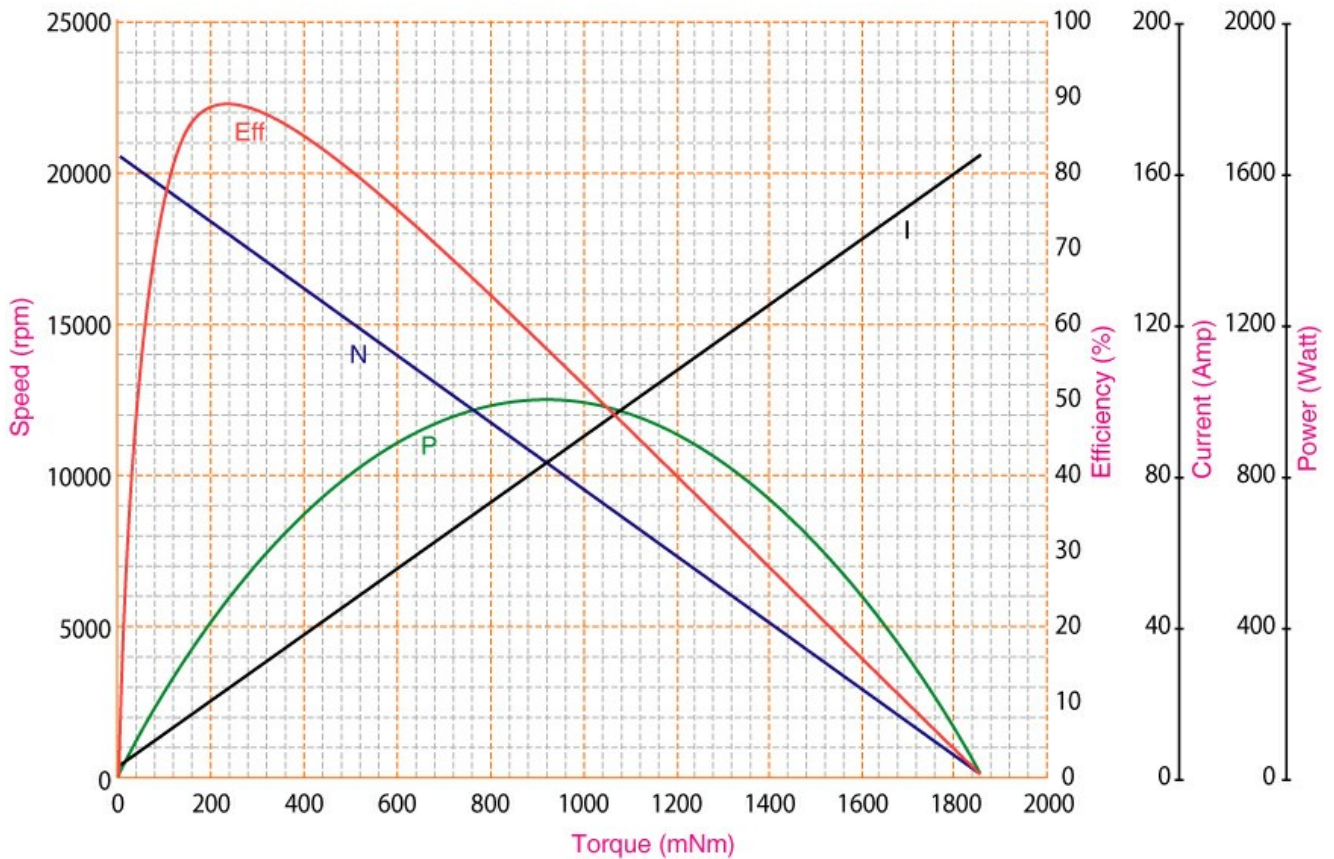
**Application Examples:**

Drills and Hammer Drills, Cordless Sprayers

Outline Drawing:



Performance Curves:



Units in Metric

**Characteristics:**


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 Sensorless high efficiency EC blower motor
**Specifications:**


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Shaft Diameter	: Ø 6.350 mm
Input Voltage	: 28.0 V DC
Output Power at Maximum Efficiency	: 78.90 W
Maximum Efficiency	: 75%
Torque at Maximum Efficiency	: 42.60 mNm
Speed at Maximum Efficiency	: 17700 rpm
Weight	: 240 g
Electrcial Connection	: Connector

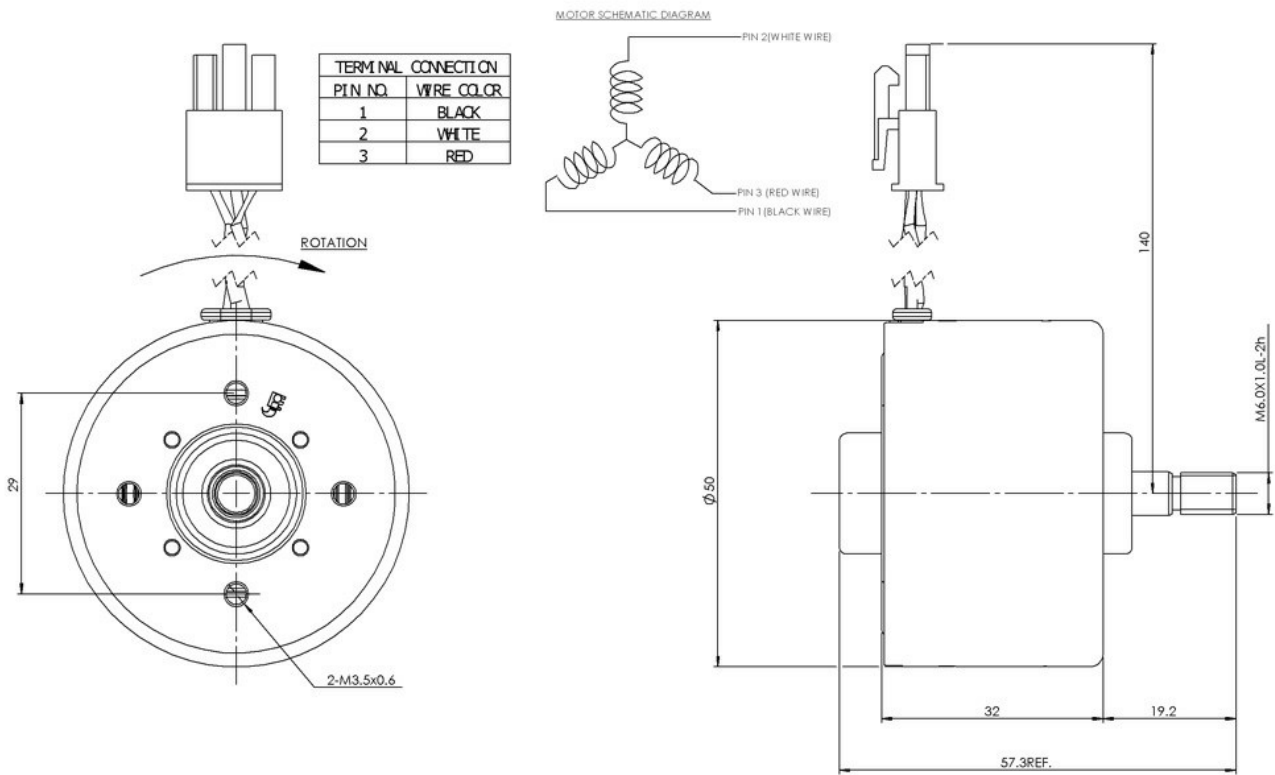
**Performance Data:**


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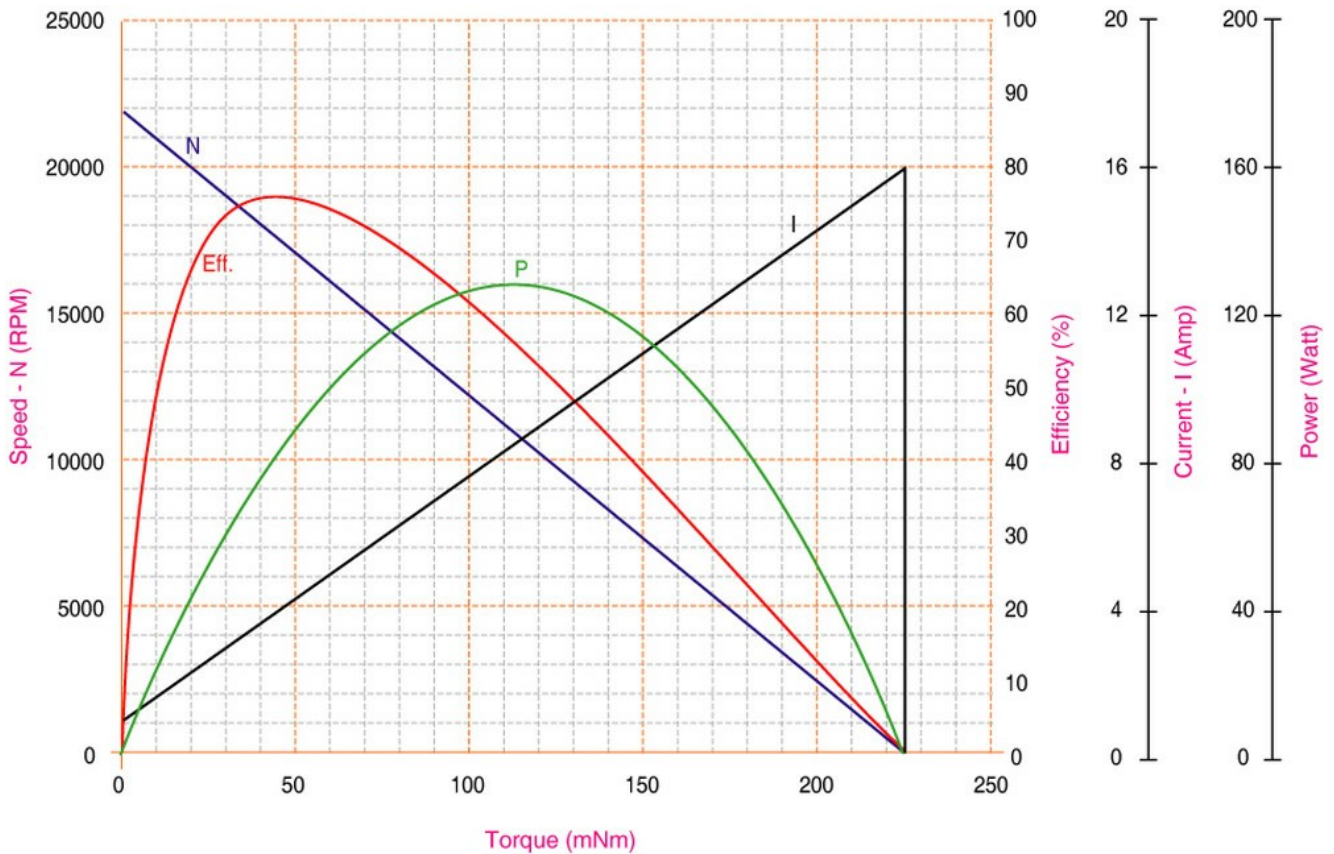
	No Load	Stall	Maximum Efficiency	Maximum Power
Current (A)	0.87	15.86	3.71	8.36
Efficiency (%)	-	-	75	55
Output Power (W)	-	-	78.90	128.20
Speed (rpm)	21850	-	17700	10920
Torque (mNm)	-	224.10	42.60	112.10



Outline Drawing:



Performance Curves:



Units in Metric