

### Housing $\phi$ 12mm DC Brush Motor xRF-N20/ xFF/FK-N30

OUTPUT : 0.2W~7W (APPROX)

BRUSH TYPE : 貴金属ブラシ / Precious Metal Brush Motor(RF-N20/ FF-N30)

: カーボンブラシ / Graphite Brush Motor(FK-N30)

WEIGHT(APPROX) : 8.0g(RF-N20)/7.8g(FF-N30)/8.1g(FK-N30)

#### 代表的用途 / Typical Application

オーディオ関連機器 / 車載用 CD プレーヤー、DVD プレーヤー  
 光学機器 / デジタルカメラ、カムコーダ、  
 家電機器 / 精密測定器、小型模型、玩具 /

Audio&Visual Equipment / CarCD Player、DVD Player  
 Digital Camera、Camcorder、  
 Household App、Precision Instrument、Model&Toy

#### Motor Parameter

No.	Standard Model No.	Product No.	Outline Size			Rated Voltage (V)	No Load		at Max Efficiency				at Stall			
			Motor OD (mm)	Housing Length (mm)	Shart OD (mm)		No Load Speed (rpm)	No Load Current (A)	Rated Speed (rpm)	Rated Current (A)	Rated Torque (mN-m, g·cm)		Output (W)	Starting Torque (mN-m, g·cm)		Starting Current (A)
Typical Model RF-N20																
45	DC-QRF-N20PAV	15085	12.0	20.0	1.5	2.4	16000	0.14	12400	0.48	0.29	2.92	0.37	1.27	13.00	1.67
46	DC-QRF-N20PAV	11150			1.5	5.0	19900	0.08	15700	0.28	0.29	2.93	0.47	1.37	14.00	1.07
47	DC-QRF-N20PAV	13096			1.5	2.4	14000	0.12	10500	0.36	0.29	2.99	0.32	1.18	12.00	1.09
48	DC-QRF-N20PAV	07270			1.5	6.0	13000	0.05	9300	0.13	0.28	2.82	0.27	0.98	10.00	0.32
Typical Model FF-N30																
49	DC-TFF-N30PA	2538	12.0	20.0	1.0	3.7	34700	0.50	28175	2.13	1.48	15.10	4.39	7.84	80.00	9.10
50	DC-TFF-N30SA	1395			1.0	5.5	21020	0.07	17661	0.33	0.74	7.60	1.39	4.70	48.00	1.77
51	DC-TFF-N30WA	2328			1.0	3.7	36400	0.37	30003	1.73	1.27	13.00	4.00	7.25	74.00	8.14
52	DC-TFF-N30PA	08220			1.0	6.0	9260	0.03	7160	0.10	0.48	4.90	0.28	2.50	25.00	0.36
53	DC-QFF-N30NAV	23030			1.0	3.7	40300	0.39	32300	1.58	0.92	9.40	3.12	4.65	47.40	6.38
54	DC-QFF-N30NAV	10125			1.0	3.0	7800	0.03	6400	0.11	0.28	2.86	0.19	1.53	15.60	0.50
55	DC-QFF-N30NAV	19050			1.0	3.7	25000	0.10	21400	0.59	0.63	6.45	1.42	4.35	44.40	3.46
56	DC-QFK-N30QA	18047			1.0	7.0	40000	0.29	33900	1.60	2.06	21.02	7.31	13.45	137.20	8.86
57	DC-QFK-N30QA	23024			1.0	3.7	37000	0.54	30300	2.42	1.61	16.46	5.12	8.85	90.30	10.88

#### Japan Magnets.,Inc

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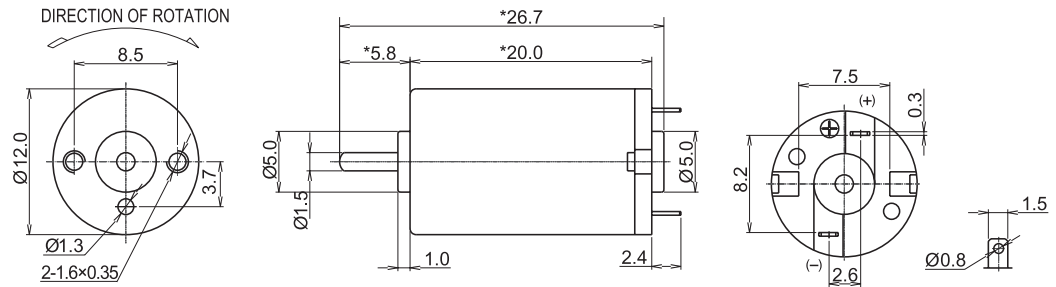
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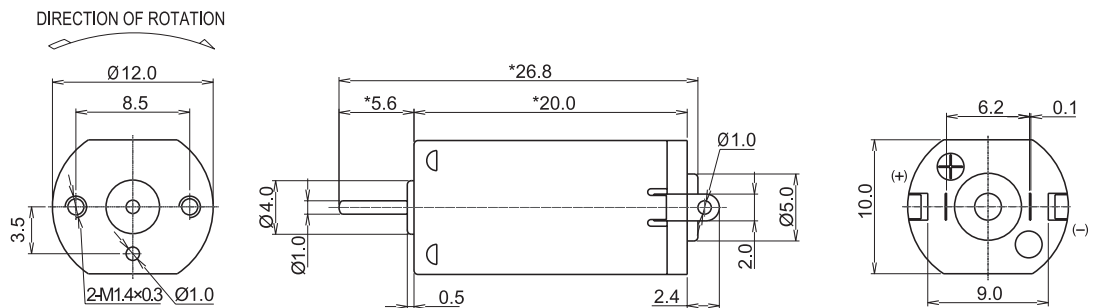
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### OUTLINE

#### DC-QRF-N20PAV

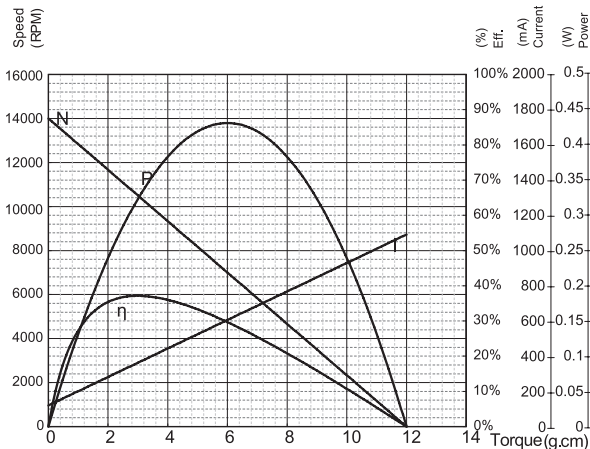


#### DC-QFF-N30NAV/ DC-QFK-N30QA

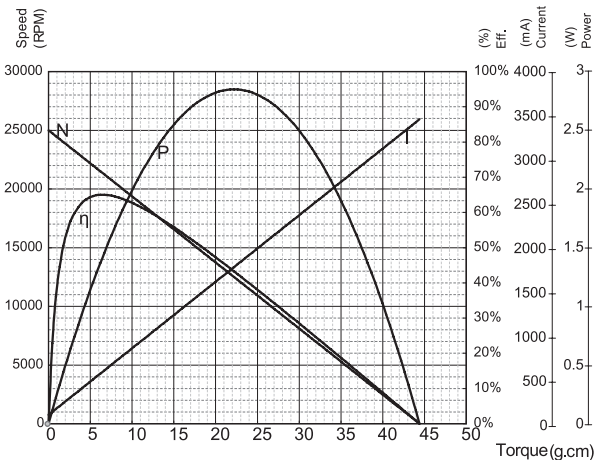


### Typical Performance

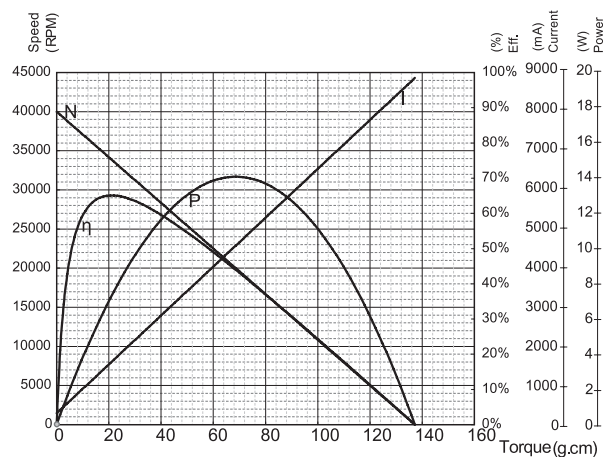
#### DC-QRF-N20PAV-13096(2.4V)



#### DC-QFF-N30NAV-19050(3.7V)



#### DC-QFK-N30QA-18047(7.0V)



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