

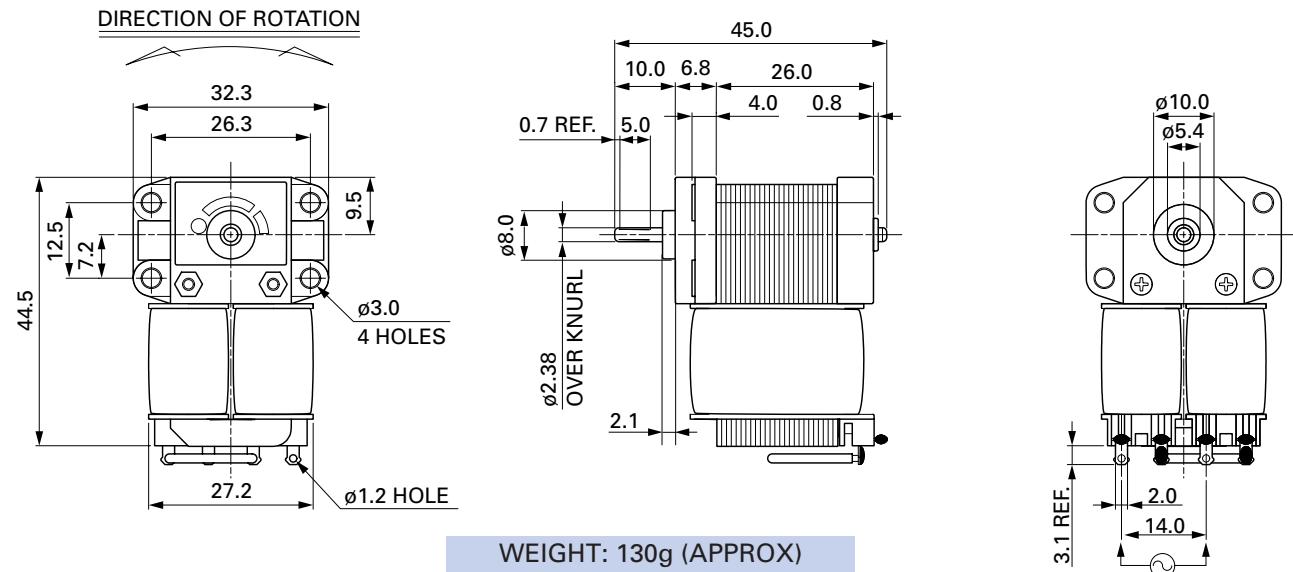
Typical Applications Household Appliances : Citrus Juicer



MODEL	VOLTAGE		FREQUENCY	SPEED	CURRENT	INPUT	PULL OUT TORQUE	
	OPERATING RANGE	NOMINAL					Hz	r/min
	AC. V	AC. V						
CO-241PA-112700	220 ~ 240	230	50	3000	0.10	10.2	32.3	330
CO-241PA-161300	100 ~ 120	120	60	3600	0.17	8.5	27.4	280

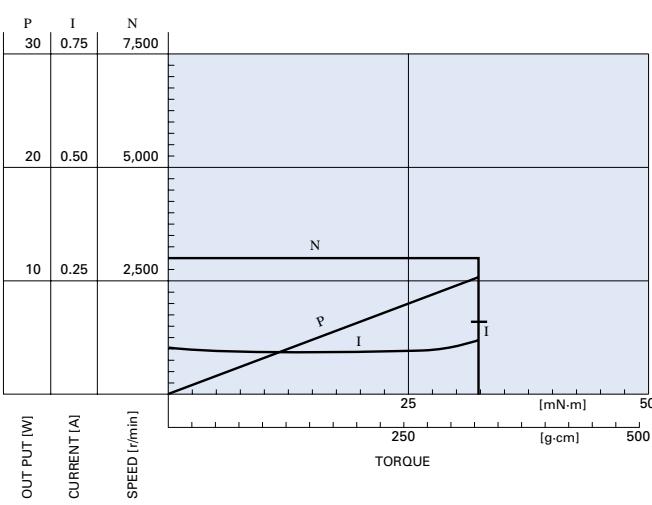
Direction of rotation is controlled mechanically.

UNIT: MILLIMETERS



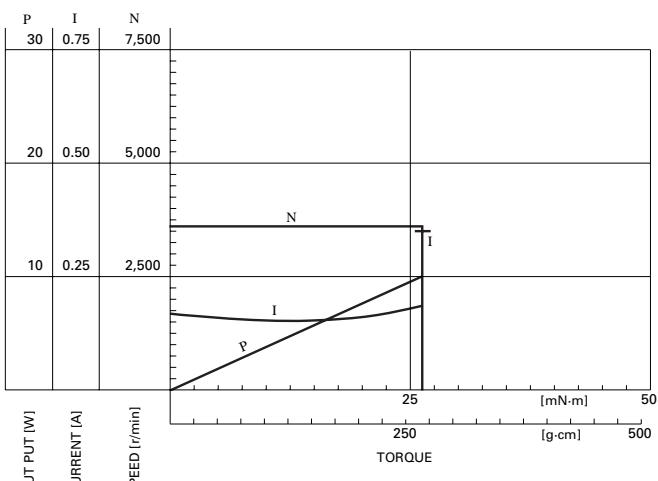
CO-241PA-112700

AC 230V, 50Hz

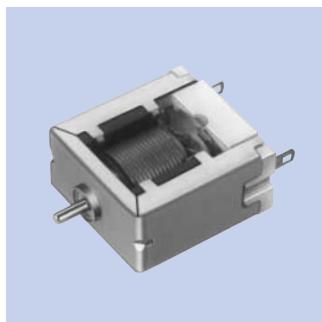


CO-241PA-161300

AC 120V, 60Hz

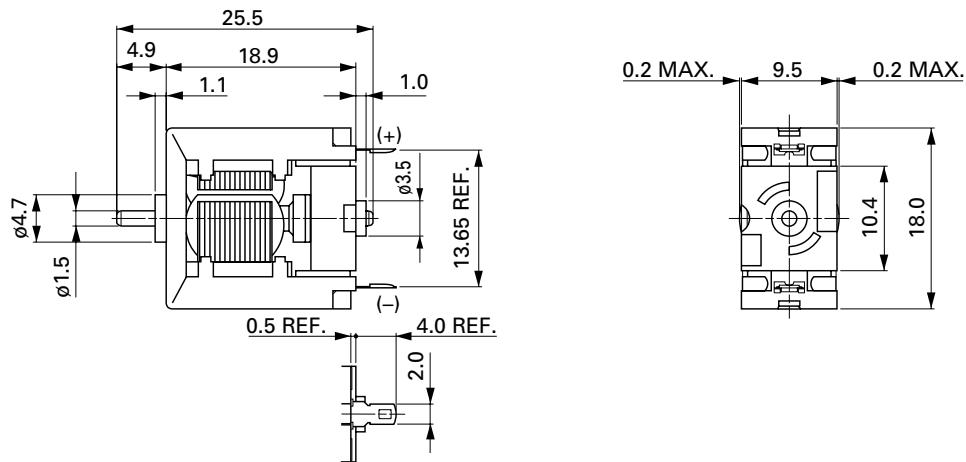
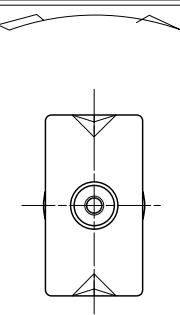


Typical Applications Toys and Models : Motorized Toy



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE	OUTPUT	mN·m	g·cm	A	
			r/min	A								
SU-020RA-1665	1.5	1.5V CONSTANT	15300	0.21	11080	0.55	0.22	2.2	0.25	0.79	8.1	1.45
SU-020RA-09170	3.0	3V CONSTANT	11800	0.080	8150	0.18	0.15	1.6	0.13	0.50	5.1	0.40
SU-020SA-1665	1.5	1.5V CONSTANT	12100	0.18	9000	0.52	0.31	3.2	0.30	1.23	13	1.52
SU-020SA-09170	1.5 ~ 3.0	3V CONSTANT	9300	0.070	6530	0.17	0.23	2.3	0.15	0.76	7.8	0.39

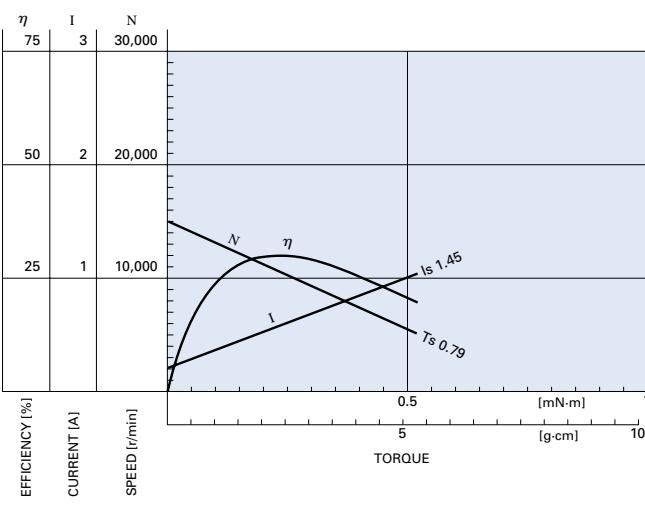
DIRECTION OF ROTATION



WEIGHT: 9.5g (APPROX)

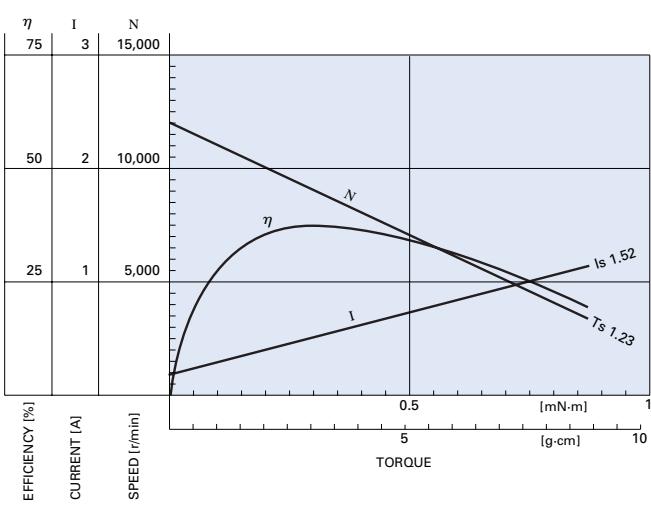
SU-020RA-1665

1.5V



SU-020SA-1665

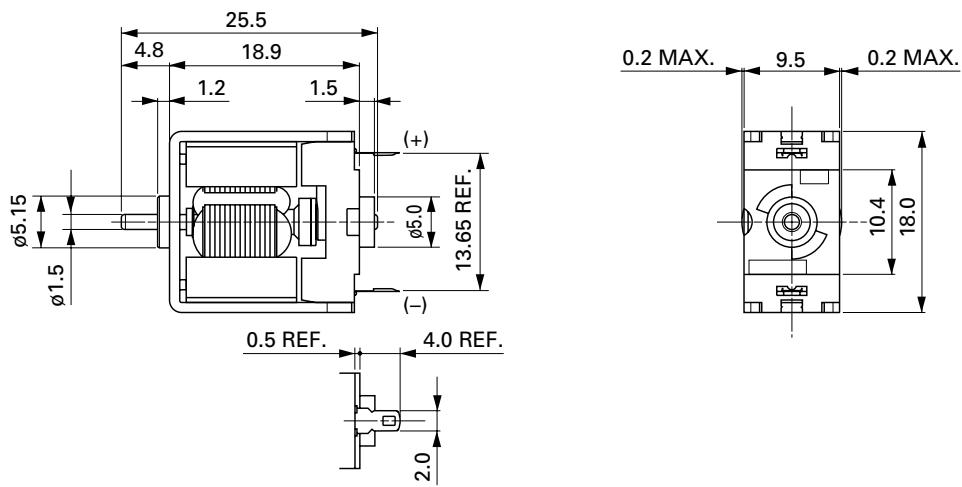
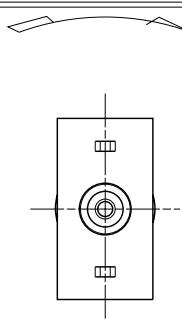
1.5V



Typical Applications Toys and Models : Motorized Toy



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE	
			r/min	A			mN·m	g·cm			
SH-030SA-08240	6 ~ 12	12V CONSTANT	22300	0.080	16730	0.24	0.71	7.2	1.24	2.84	29
		4.8V CONSTANT	11700	0.085	8440	0.22	0.44	4.5	0.39	1.57	16
	4.5 ~ 9.0	6V CONSTANT	15000	0.090	11080	0.25	0.53	5.4	0.61	2.01	21
SH-030SA-09170											0.72

DIRECTION OF ROTATION

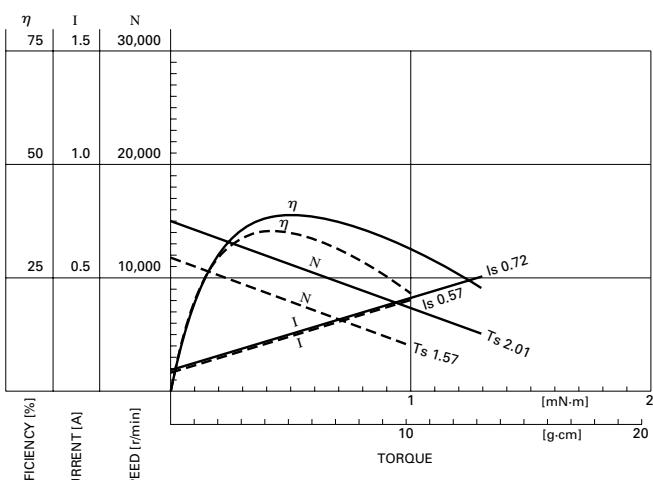
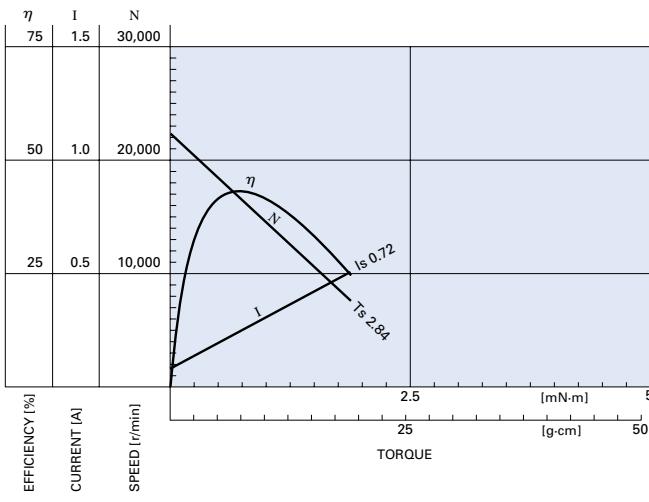
WEIGHT: 11g (APPROX)

SH-030SA-08240

12.0V

SH-030SA-09170

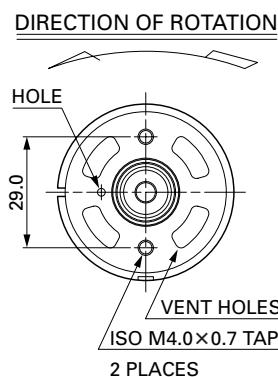
---- 4.8V —— 6.0V



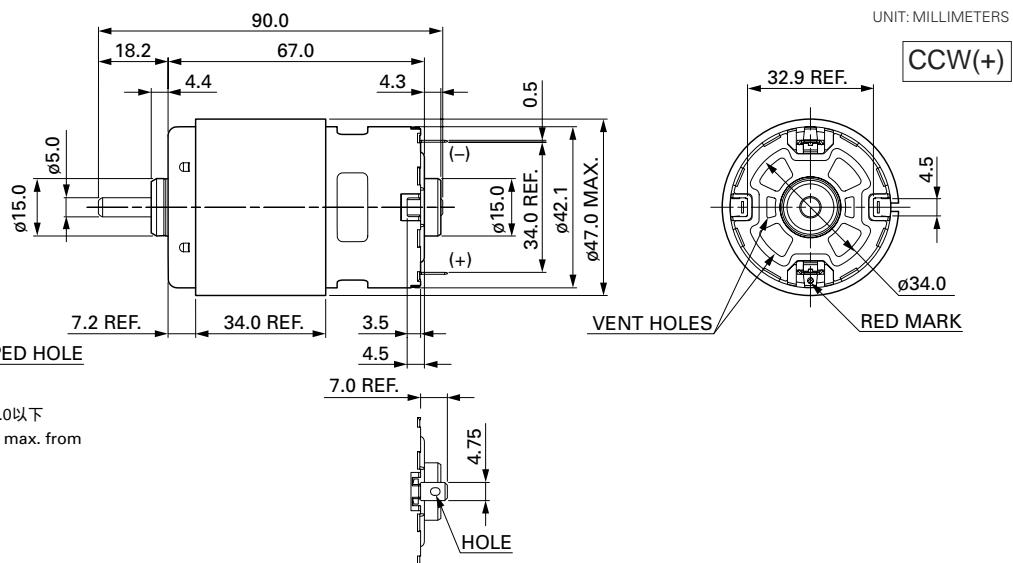
Typical Applications Cordless Power Tools : Drill & Screwdriver / Cordless Garden Tool
 Toys and Models : Ride-on Toy



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-775VC-8015	6 ~ 20	16.8V CONSTANT	18000	2.60	15630	17.1	135	1375	220	1024	10450	113
RS-775WC-8514	6 ~ 20	18V CONSTANT	19500	2.70	17040	18.7	153	1560	273	1215	12400	130



取付けネジはモーターケース面より5.0以下
 Usable machine screw length 5.0 max. from
 motor mounting surface.



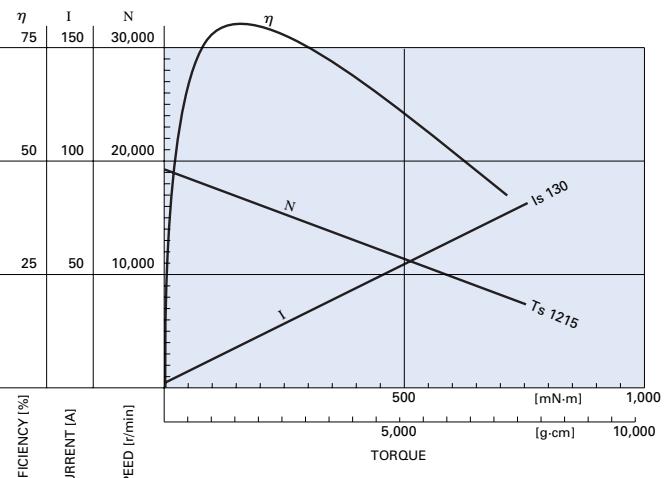
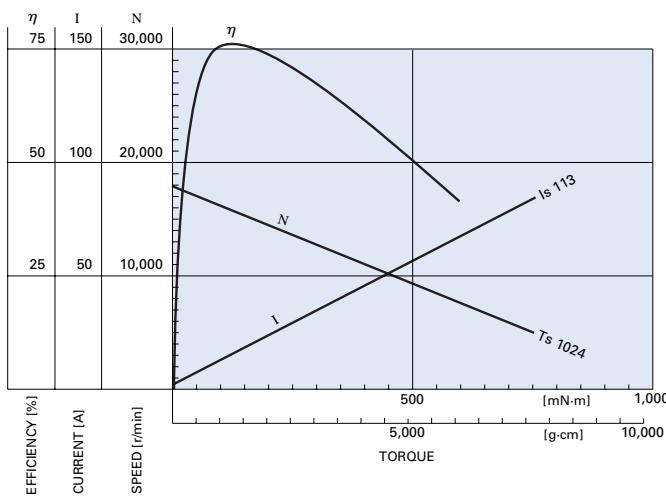
WEIGHT: 340g (APPROX)

RS-775VC-8015

16.8V

RS-775WC-8514

18.0V

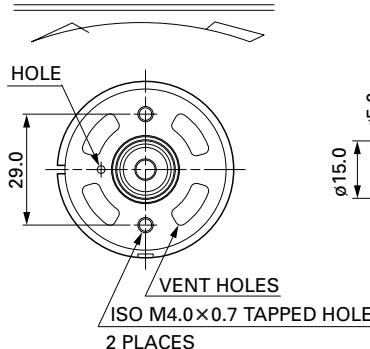


Typical Applications Cordless Power Tools : Drill & Screwdriver

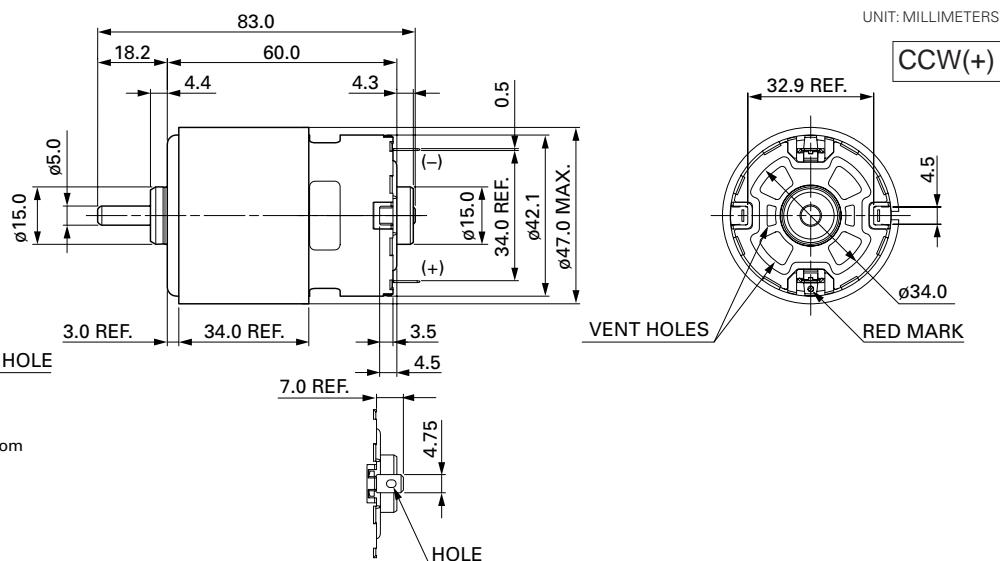


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
		r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm
RS-755WC-8017	6~20	18V CONSTANT	19800	2.30	17320	16.0	126	1289	229	1009

DIRECTION OF ROTATION



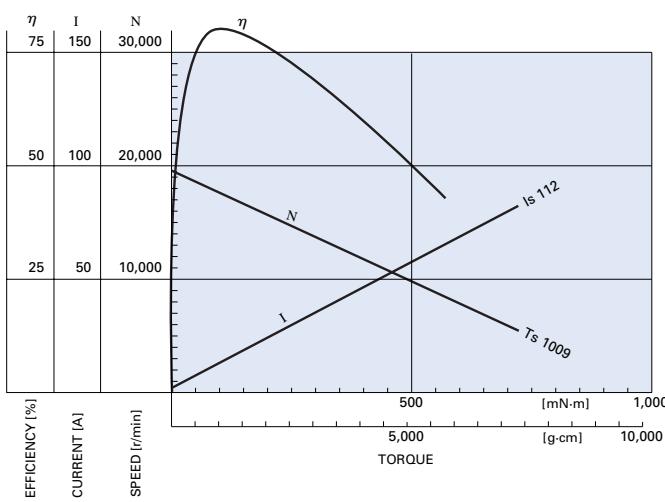
取付けネジはモータケース面より5.0以下
Usable machine screw length 5.0 max. from
motor mounting surface.



WEIGHT: 286g (APPROX)

RS-755WC-8017

18.0V





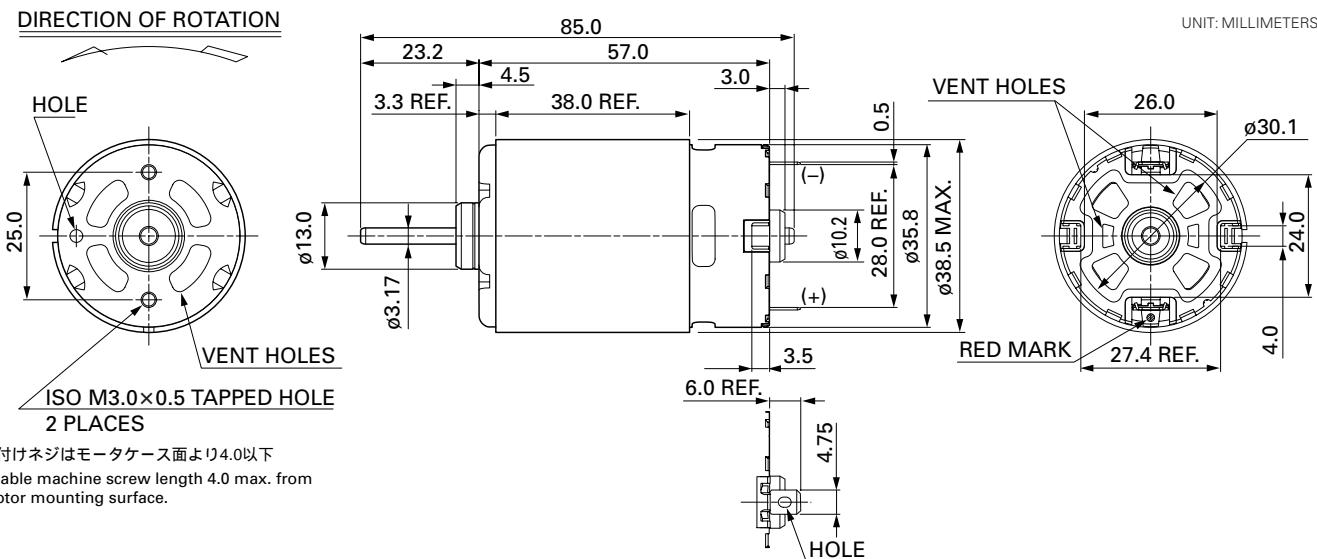
RS-555VC

OUTPUT: APPROX 3.0W~65W

Carbon-brush motors

Typical Applications	Household Appliances : Massager / Vibrator Automotive Products : Door Closer Toys and Models : Ride-on Toy
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Model	Voltage		No Load		At Maximum Efficiency				Stall			
	Operating Range	Nominal	Speed	Current	Speed	Current	Torque		Output	Torque		Current
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-555VC-3267	6 ~ 30	12V CONSTANT	3300	0.16	2870	1.06	30.9	315	9.26	235	2400	7.00

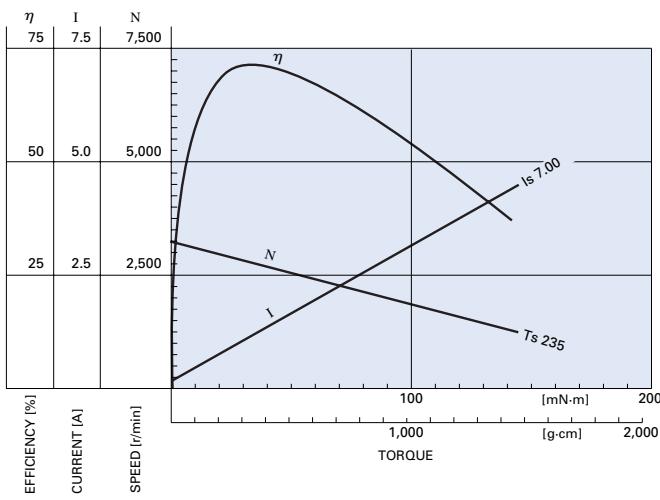


取付けネジはモータケース面より4.0以下
Usable machine screw length 4.0 max. from
motor mounting surface.

WEIGHT: 221g (APPROX)

RS-555VC-3267

12.0V

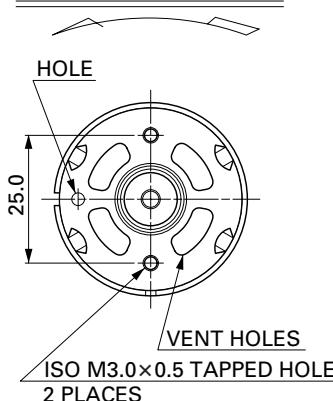


Typical Applications Cordless Power Tools : Drill & Screwdriver / Air Compressor / Cordless Garden Tool
 Toys and Models : Ride-on Toy

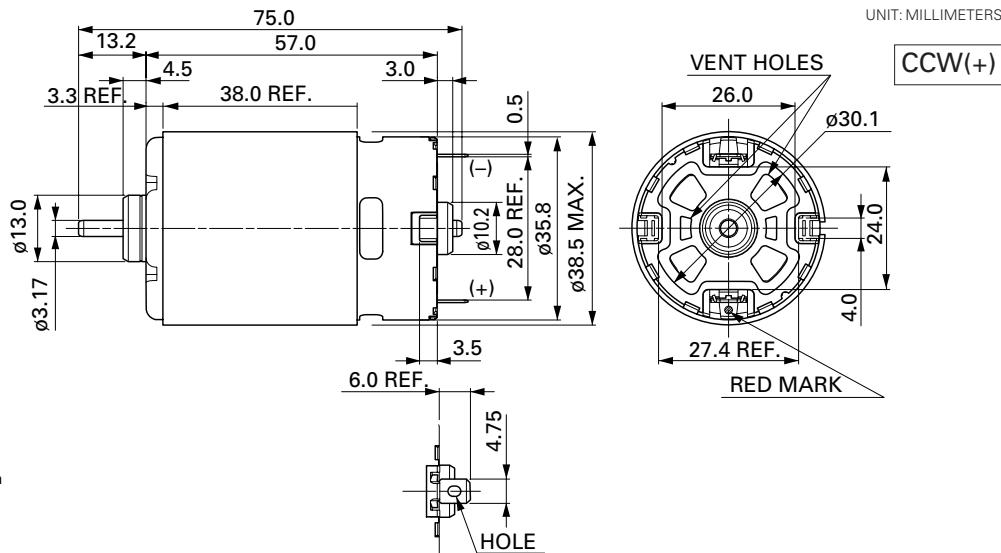


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-550PC-7524	6 ~ 12	12V CONSTANT	20600	1.35	18180	10.2	49.4	503	93.8	421	4300	76.5
RS-550VC-7527	6.0 ~ 14.4	14.4V CONSTANT	19800	1.30	17620	10.5	64.7	660	119	588	6000	85.0

DIRECTION OF ROTATION



取り付けネジはモーターケース面より4.0以下
 Usable machine screw length 4.0 max. from
 motor mounting surface.



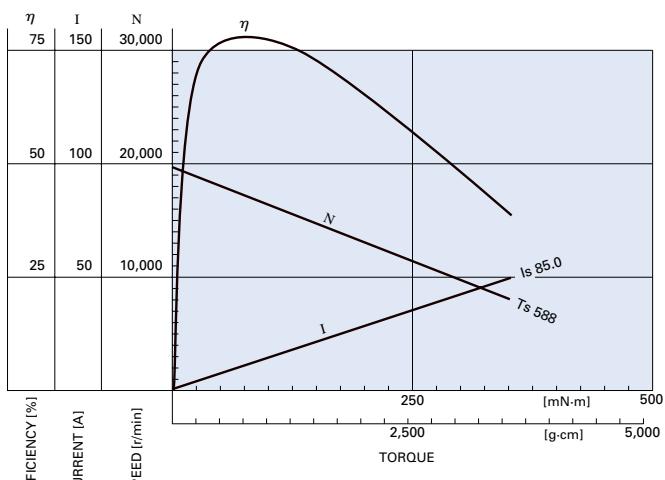
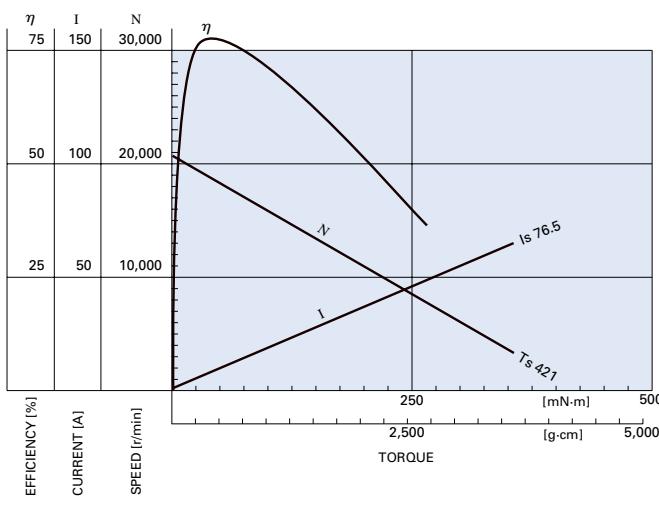
WEIGHT: 255g (APPROX)

RS-550PC-7524

12.0V

RS-550VC-7527

14.4V



Typical Applications Household Appliances : Hair Dryer / Massager / Vibrator / Vacuum Cleaner / Bilge Pump
Automotive Products : Automatic Cruise Control

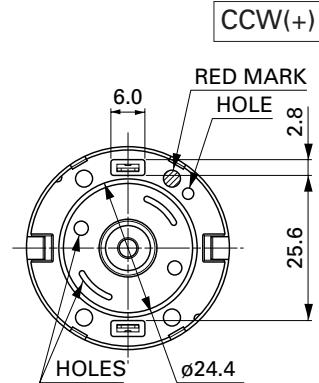
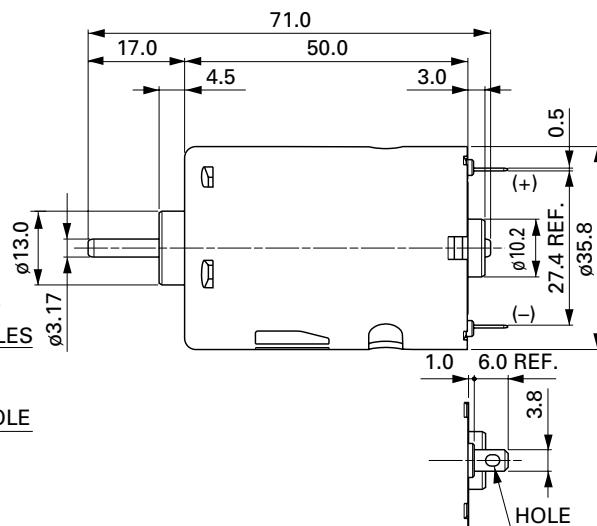
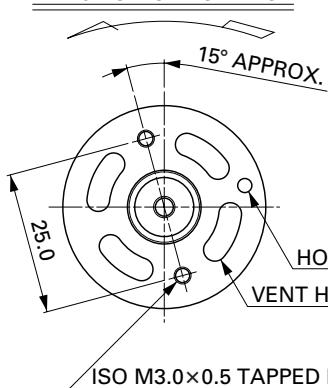


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RS-545RH-4522	3.6 ~ 12.0	12V CONST. (CCW+)	27800	1.30	22940	6.14	19.4	198	46.5	111
RS-545SH-5018	4.5 ~ 12.0	12V CONST. (CCW+)	24000	1.30	20510	7.65	31.1	317	66.7	214
RS-545SH-18150	12 ~ 32	24V CONST. (CCW+)	5600	0.12	4560	0.53	16.4	167	7.82	88.2
RS-545SH-22100	12 ~ 24	12V CONST. (CW+)	4200	0.16	3350	0.63	12.5	127	4.36	61.7

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

DIRECTION OF ROTATION



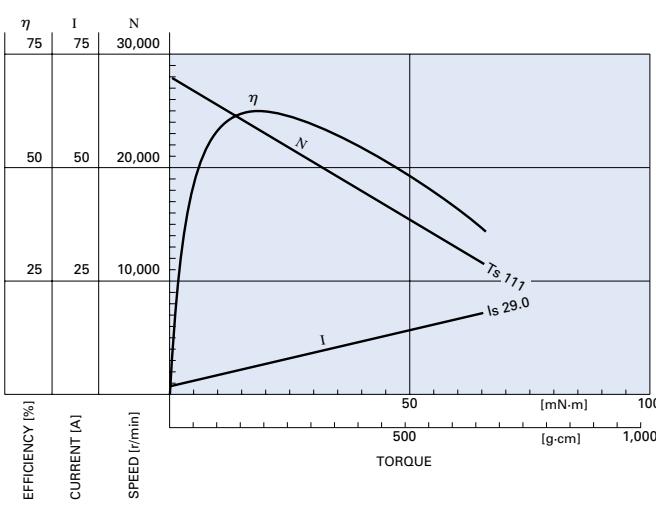
取り付けネジはモーターケース面より5.0以下

Usable machine screw length 5.0 max. from motor mounting surface.

WEIGHT: 156g (APPROX)

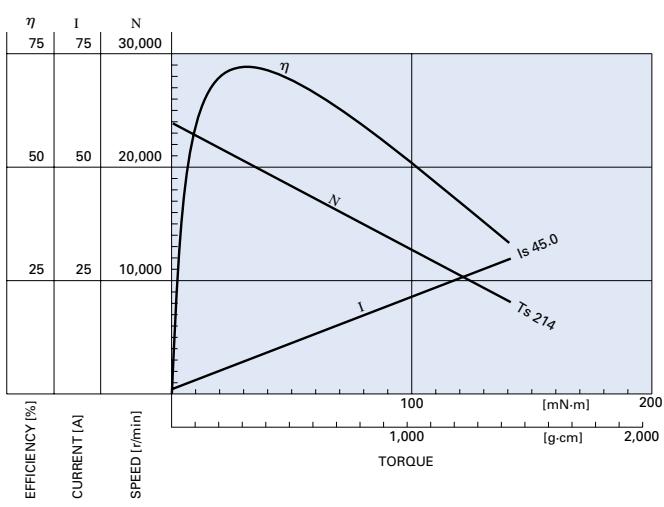
RS-545RH-4522

12.0V



RS-545SH-5018

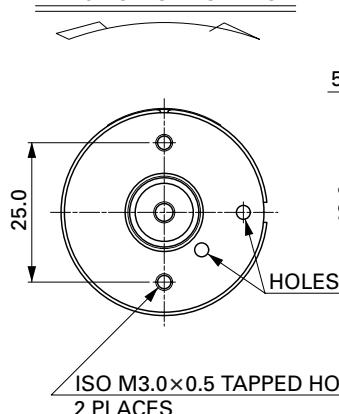
12.0V



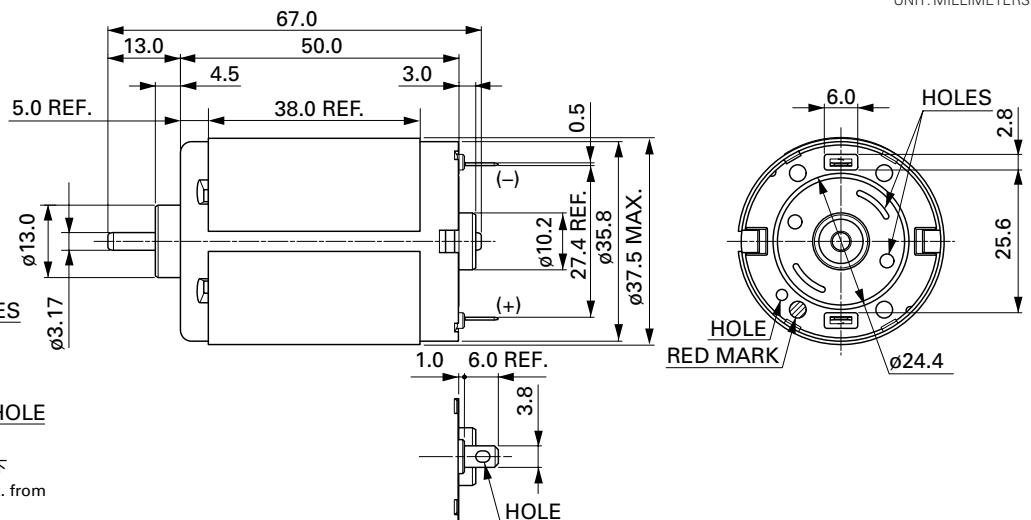
Typical Applications Office Automation Equipments : Printer



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
RS-545PH-22140	12~27	24V CONSTANT	4800	0.070	4200	0.49	18.9	193	8.30	150
RS-545PH-16250	16~32	32V CONSTANT	3900	0.045	3310	0.25	15.4	157	5.33	101
RS-545PH-20165	16~32	32V CONSTANT	5550	0.065	4850	0.45	20.3	206	10.3	161
										1640
										3.14

DIRECTION OF ROTATION

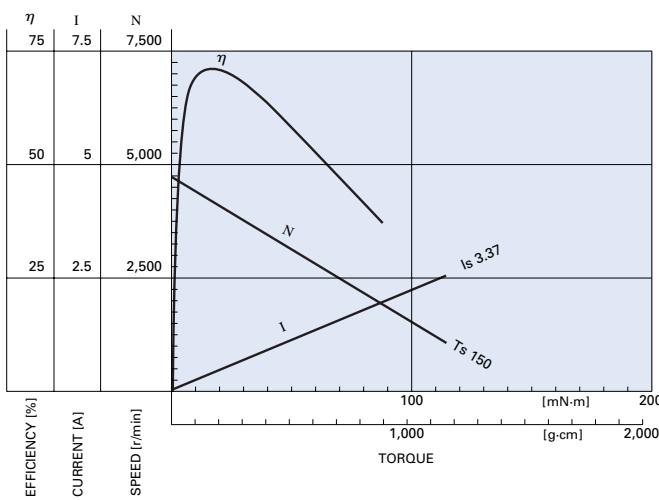
取付けネジはモーターケース面より5.0以下
Usable machine screw length 5.0 max. from
motor mounting surface.



WEIGHT: 180g (APPROX)

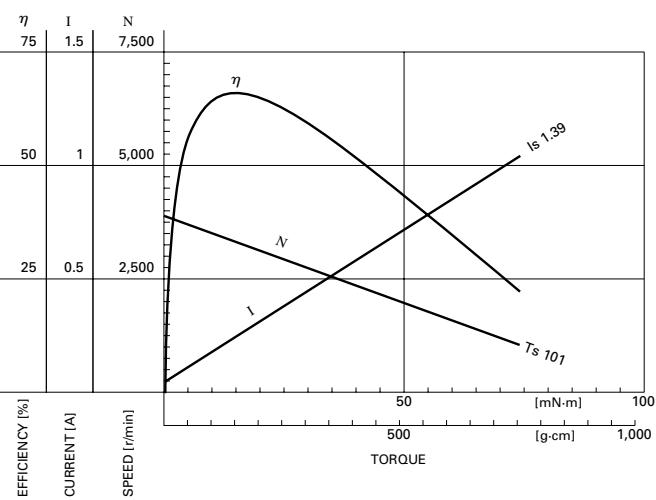
RS-545PH-22140

24.0V



RS-545PH-16250

32.0V



Typical Applications

Household Appliances : Vacuum Cleaner

Cordless Power Tools : Air Compressor / Drill & Screwdriver / Cordless Garden Tool

Toys and Models : Radio Control Model

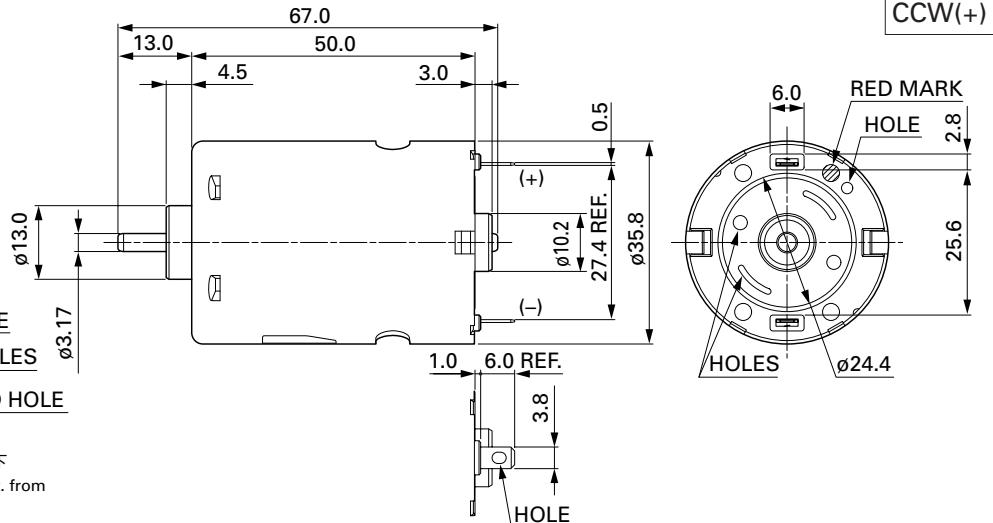
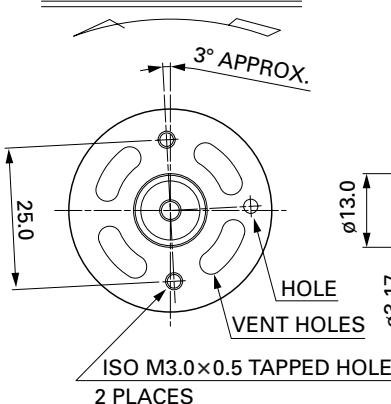


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RS-540RH-7516	2.4 ~ 4.5	3.6V CONST. (CCW+)	20200	2.90	16310	12.2	15.1	154	25.8	78.5
RS-540RH-5045	4.5 ~ 9.6	6V CONST. (CCW)	11600	0.82	9660	4.09	14.4	147	14.6	86.3
RS-540RH-6035	3.6 ~ 7.2	3.6V CONST. (CCW+)	9500	1.15	7700	4.91	12.3	125	9.88	64.7
RS-540SH-5045	4.5 ~ 12.0	12V CONST. (CCW+)	17500	0.95	15080	5.93	31.8	324	50.1	230
RS-540SH-7520	3.6 ~ 7.2	4.8V CONST. (CCW+)	15400	2.00	13010	10.9	26.0	265	35.3	167

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

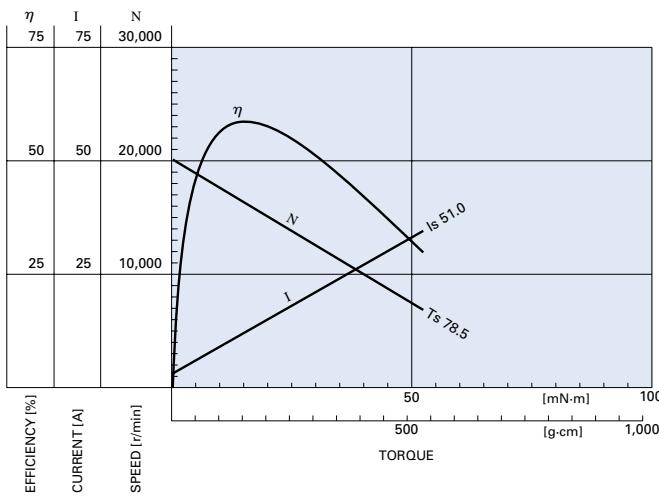
DIRECTION OF ROTATION



WEIGHT: 160g (APPROX)

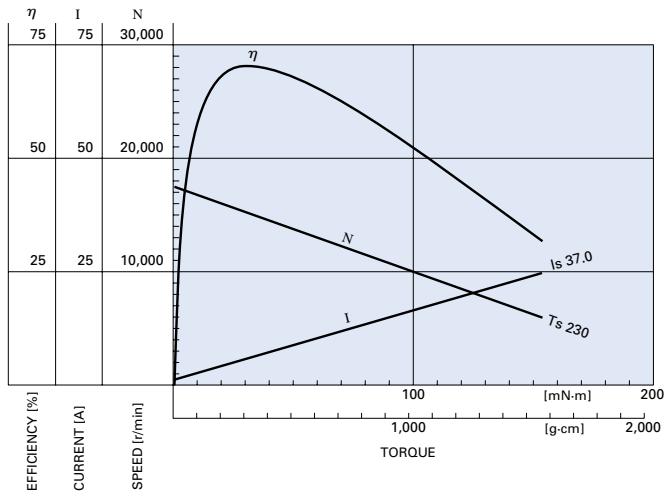
RS-540RH-7516

3.6V



RS-540SH-5045

12.0V

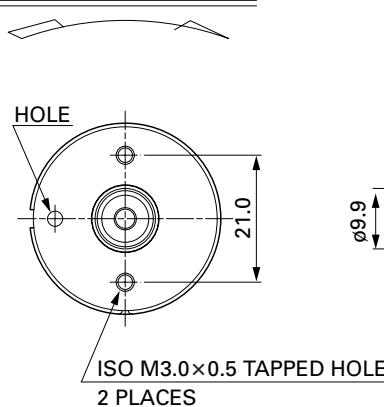


Typical Applications Office Automation Equipments : Printer

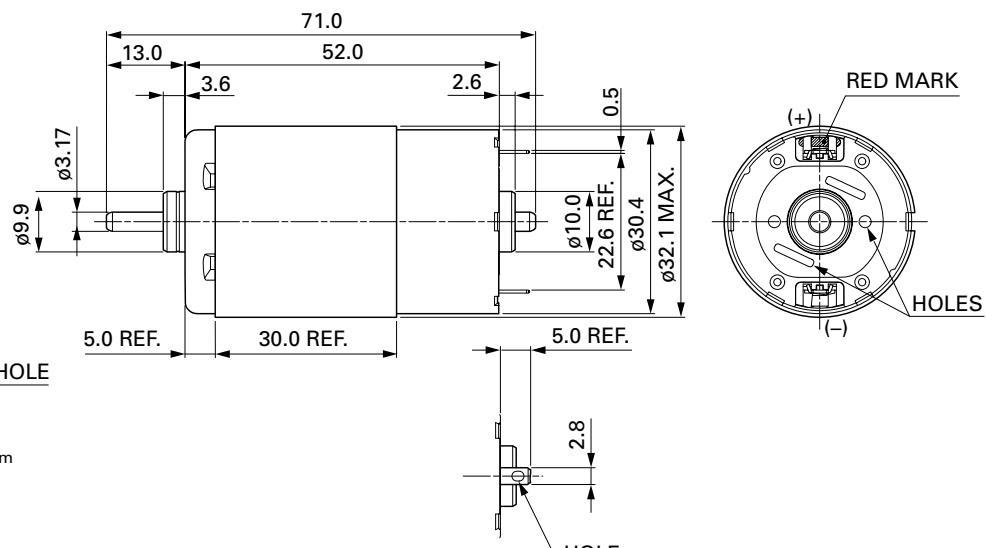


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-455PA-15200	12 ~ 42	42V CONSTANT	6300	0.058	5350	0.33	15.8	161	8.83	105	1068	1.85
RS-455PA-14230	12 ~ 42	42V CONSTANT	5500	0.047	4640	0.25	14.3	146	6.95	91.9	938	1.38

DIRECTION OF ROTATION



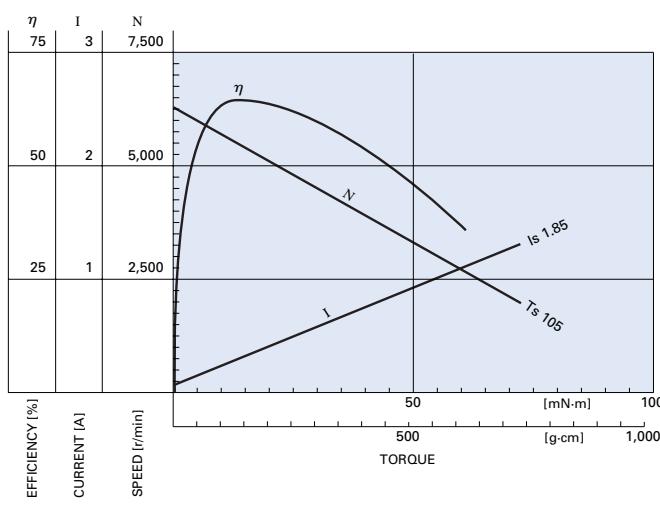
取付けネジはモーターケース面より4.0以下

Usable machine screw length 4.0 max. from
motor mounting surface.

WEIGHT: 145g (APPROX)

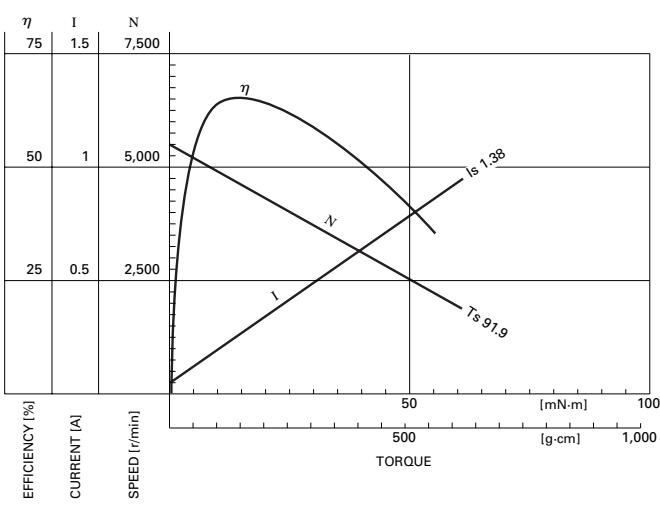
RS-455PA-15200

42.0V



RS-455PA-14230

42.0V

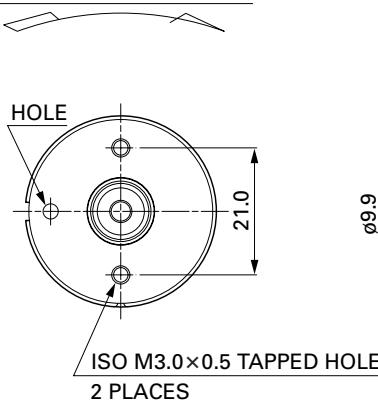


Typical Applications Office Automation Equipments : Printer

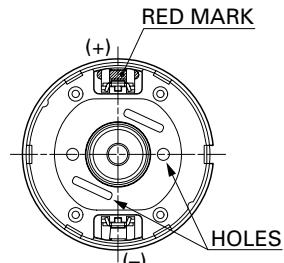
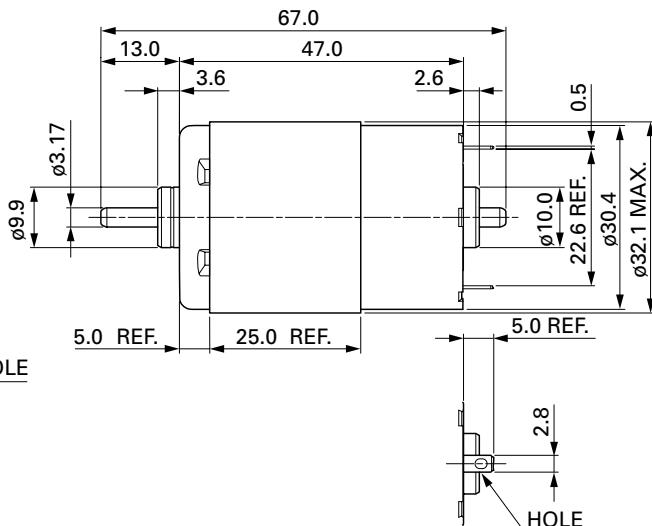


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-445PA-14230	12 ~ 42	42V CONSTANT	6600	0.060	5500	0.30	13.6	139	7.82	81.6	832	1.50

DIRECTION OF ROTATION



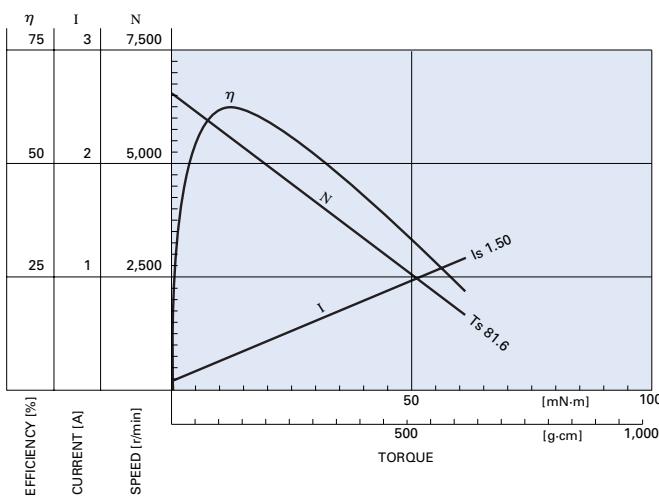
取付けネジはモーターケース面より4.0以下
Usable machine screw length 4.0 max. from
motor mounting surface.



WEIGHT: 127g (APPROX)

RS-445PA-14230

42.0V



Typical Applications Household Appliances : Hair Dryer
Office Automation Equipments : Printer / Copy Machine

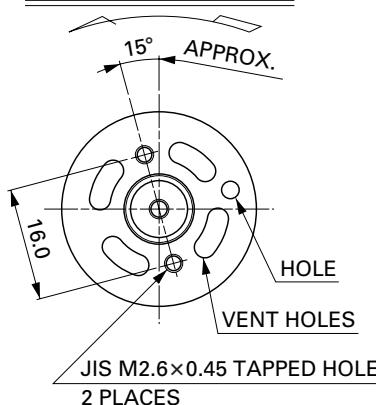


MODEL	VOLTAGE		NO LOAD				AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	W	TORQUE	
			r/min	A			mN·m	g·cm			mN·m	g·cm
RS-385SH-2270	6 ~ 24	12V CONSTANT	9800	0.15	8190	0.76	7.15	72.9	6.12	43.6	445	3.90
		20V CONSTANT	16400	0.18	14010	1.06	9.56	97.5	14.0	65.7	670	6.20

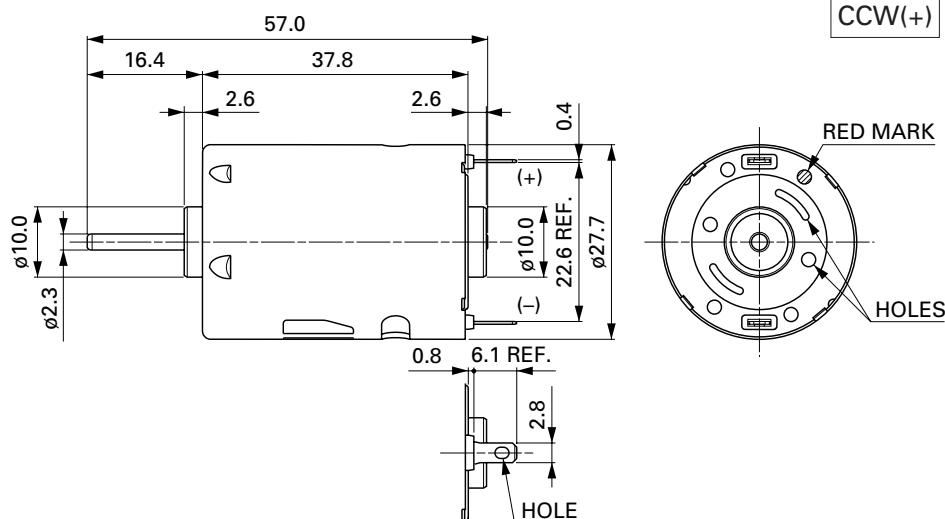
The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

DIRECTION OF ROTATION



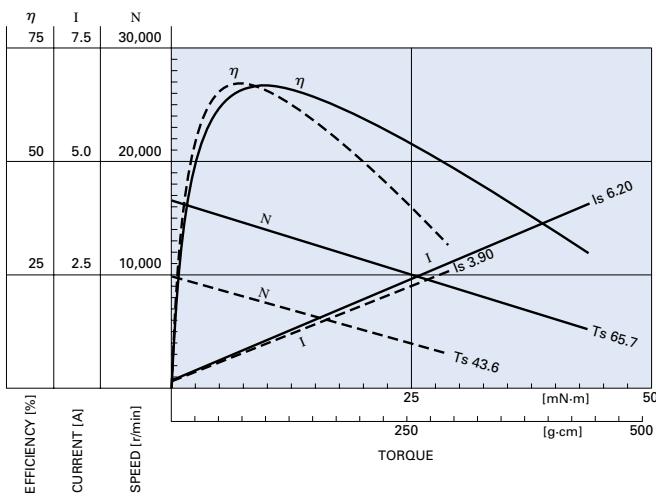
取付けネジはモータケース面より3.0以下
 Usable machine screw length 3.0 max. from
 motor mounting surface.



WEIGHT: 70g (APPROX)

RS-385SH-2270

----- 12.0V —— 20.0V



Typical Applications Household Appliances : Hair Dryer
Automotive Products : Automatic Cruise Control
Office Automation Equipments : Printer / Copy Machine

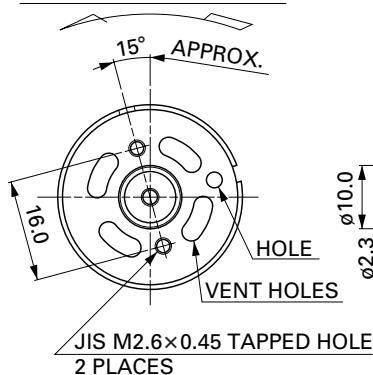


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-385PH-16140	12 ~ 30	24V CONSTANT	9100	0.090	7570	0.44	9.07	92.4	7.18	53.9	550	2.20
RS-385PH-2465	6 ~ 24	12V CONSTANT	9800	0.20	8170	1.00	9.32	95.0	7.96	55.9	570	5.00

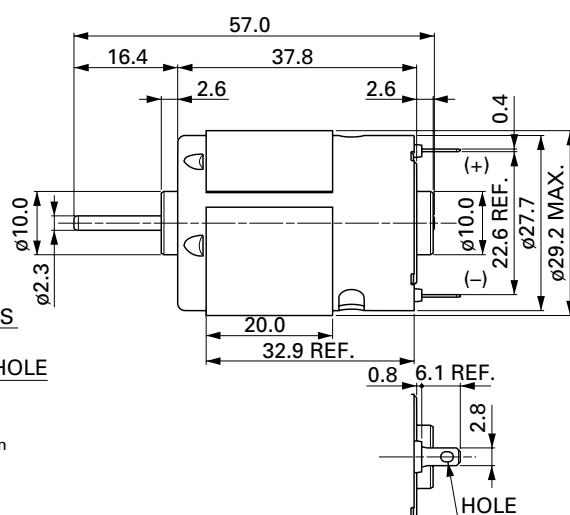
The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

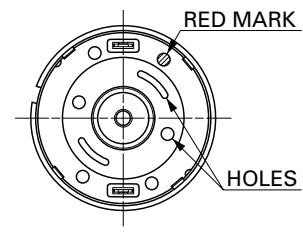
DIRECTION OF ROTATION



取付けネジはモーターケース面より3.0以下
 Usable machine screw length 3.0 max. from
 motor mounting surface.



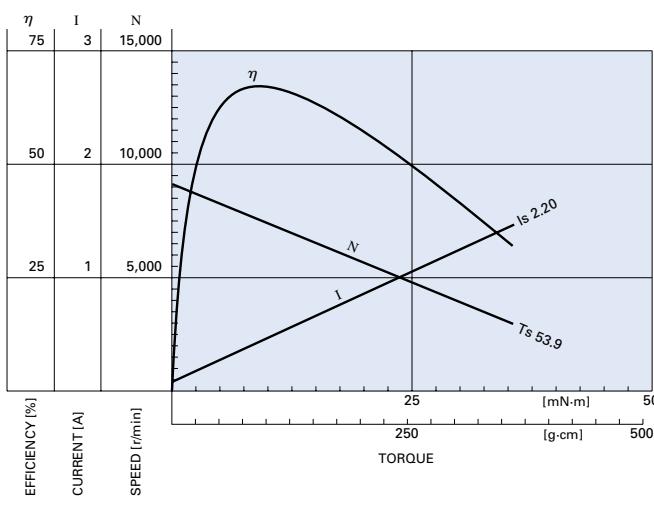
CCW(+)



WEIGHT: 80g (APPROX)

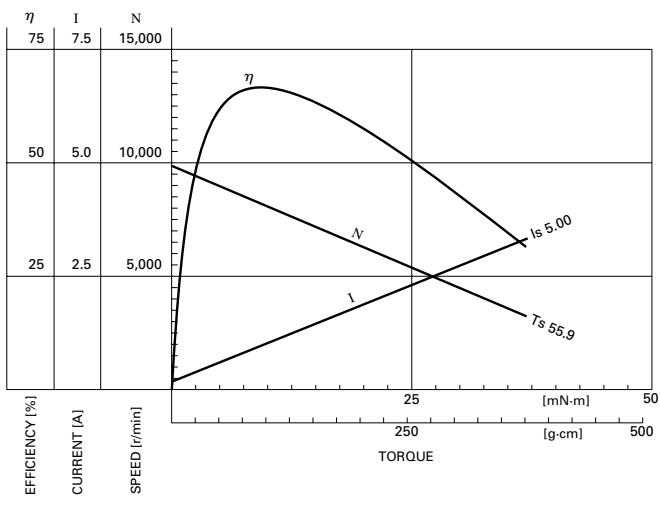
RS-385PH-16140

24.0V



RS-385PH-2465

12.0V

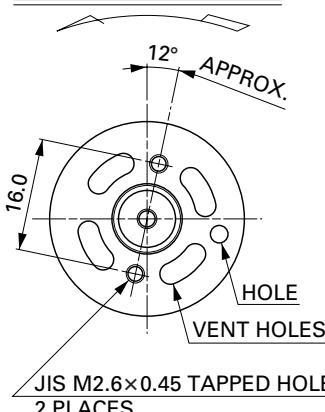


Typical Applications Household Appliances : Vacuum Cleaner / Kitchen Appliance
Cordless Power Tools : Drill & Screwdriver

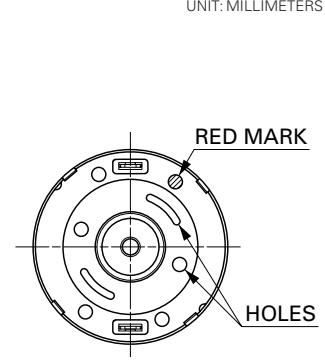
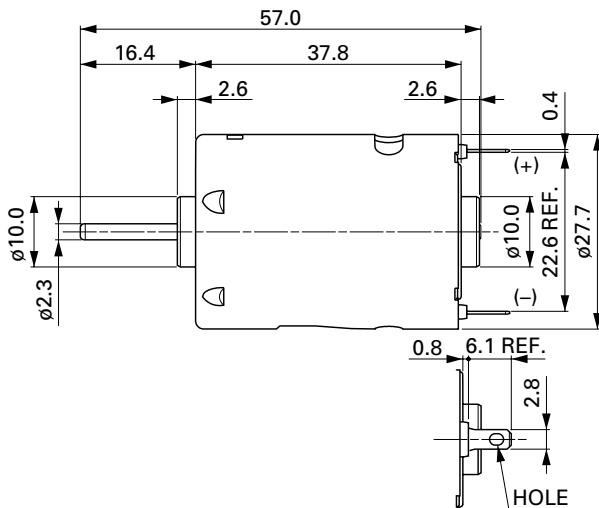


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
RS-380SH-4045	3 ~ 9	7.2V CONSTANT	16200	0.50	14060	3.29	10.9	111	16.0	82.3	840	21.6
RS-380SH-12300	12 ~ 30	24V CONSTANT	8000	0.070	6540	0.31	6.27	63.9	4.29	34.3	350	1.40

DIRECTION OF ROTATION



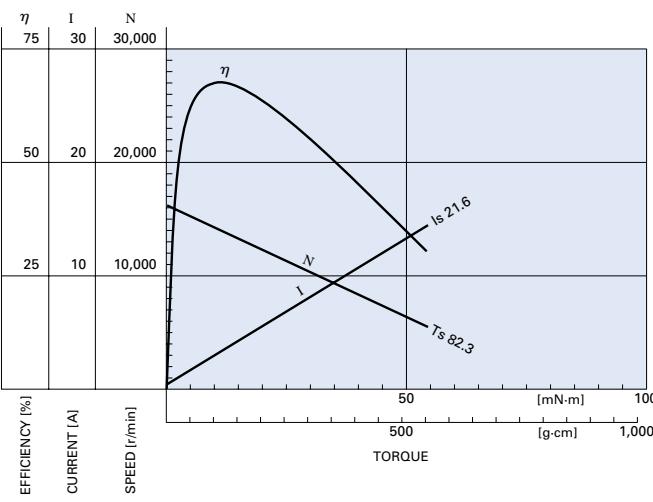
取付けネジはモータケース面より4.0以下
Usable machine screw length 4.0 max. from
motor mounting surface.



WEIGHT: 71g (APPROX)

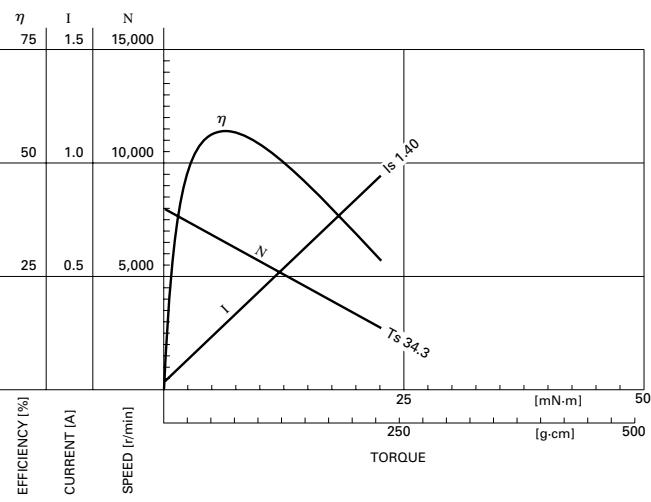
RS-380SH-4045

7.2V



RS-380SH-12300

24.0V



Typical Applications Household Appliances : Vacuum Cleaner
 Automotive Products : Car Antenna
 Cordless Power Tools : Drill & Screwdriver

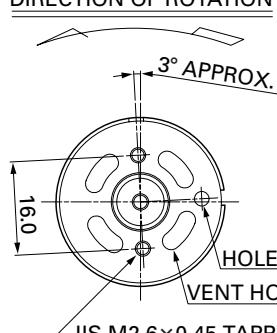


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RS-380PH-4045	2.4 ~ 12.0	10.5V CONST. (CCW+)	21900	0.70	18570	3.90	14.3	146	27.8	94.1
RS-380PH-3270	4.5 ~ 15.0	12V CONST. (CCW)	15200	0.34	13150	2.18	12.6	128	17.3	93.1

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

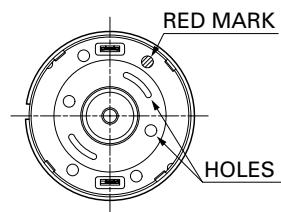
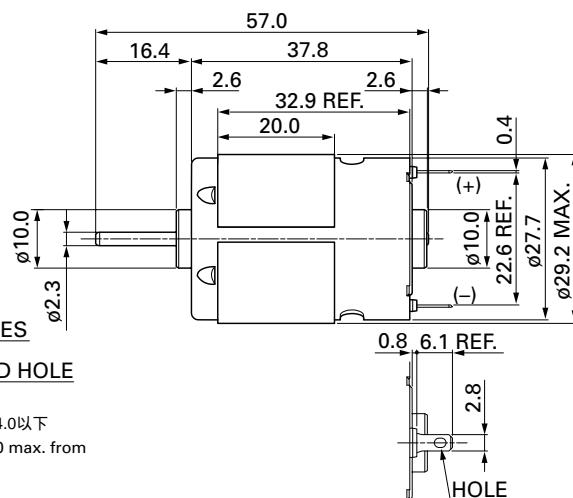
UNIT: MILLIMETERS

DIRECTION OF ROTATION



JIS M2.6×0.45 TAPPED HOLE
2 PLACES

取付けネジはモーターケース面より4.0以下
Usable machine screw length 4.0 max. from
motor mounting surface.



CCW(+)

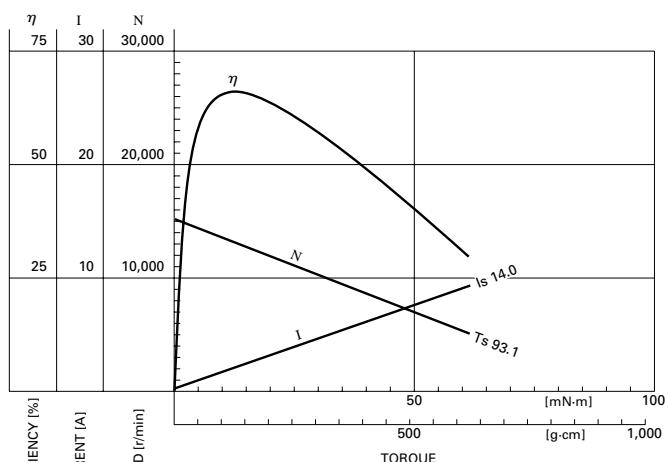
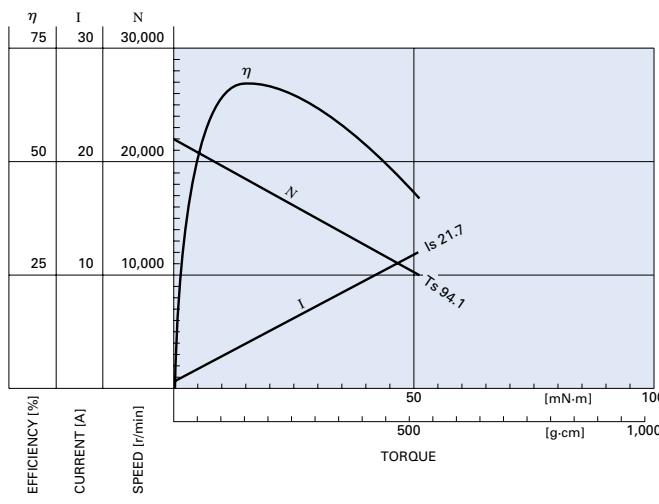
WEIGHT: 80g (APPROX)

RS-380PH-4045

10.5V

RS-380PH-3270

12.0V



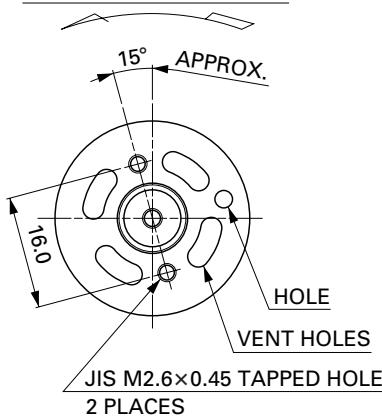
Typical Applications Household Appliances : Hair Dryer / Corn Popper / Massager / Vibrator



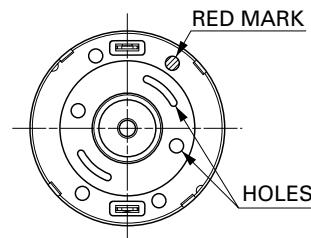
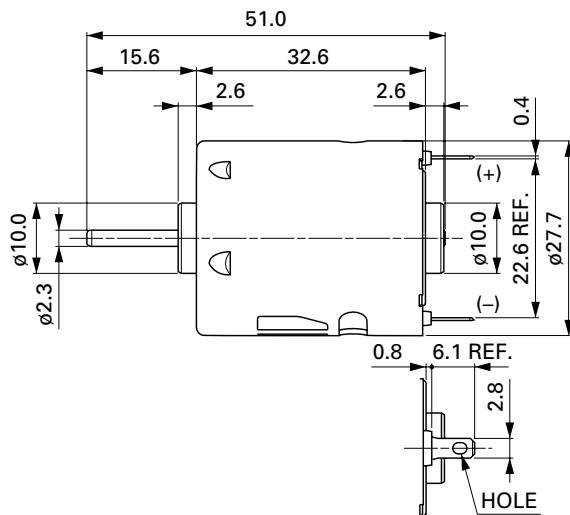
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-365SH-2080	6 ~ 20	12V CONSTANT	12800	0.19	10410	0.83	5.59	56.9	6.08	29.9	305	3.60
		18V CONSTANT	19400	0.22	16060	1.06	7.09	72.2	11.9	41.2	420	5.10

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

DIRECTION OF ROTATION

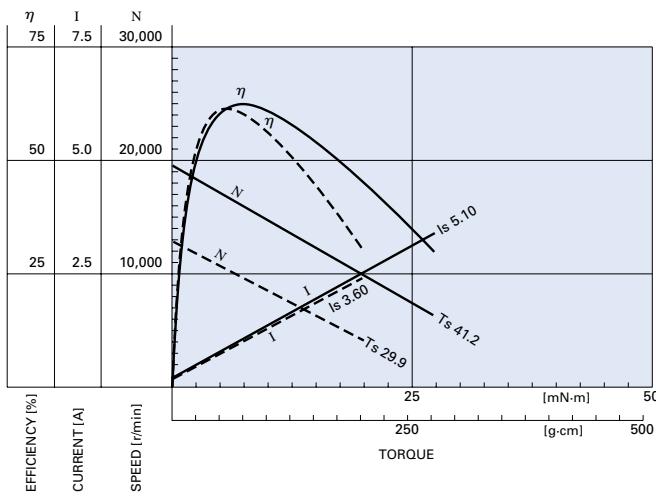
取付けネジはモーターケース面より3.0以下
Usable machine screw length 3.0 max. from
motor mounting surface.



WEIGHT: 54g (APPROX)

RS-365SH-2080

---- 12.0V —— 18.0V



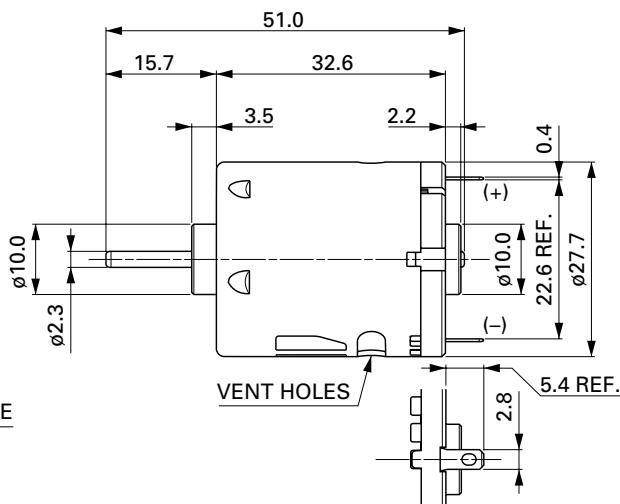
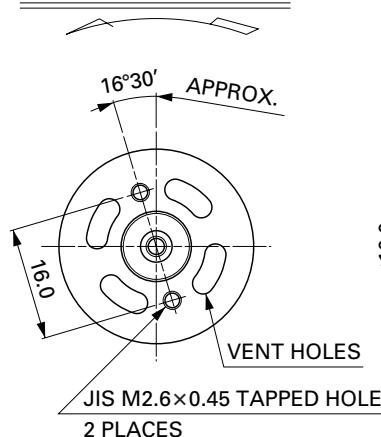
Typical Applications Household Appliances : Hair Dryer



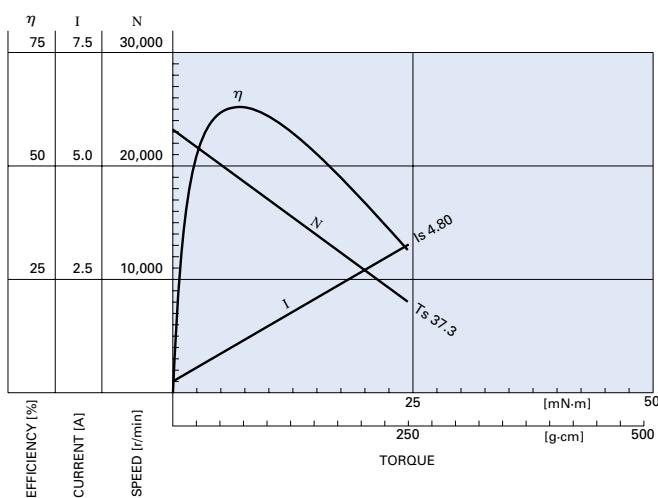
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-365SA-1885	6 ~ 20	20V CONSTANT	23200	0.24	18960	1.07	6.82	69.5	13.5	37.3	380	4.80

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

DIRECTION OF ROTATION**RS-365SA-1885**

20.0V

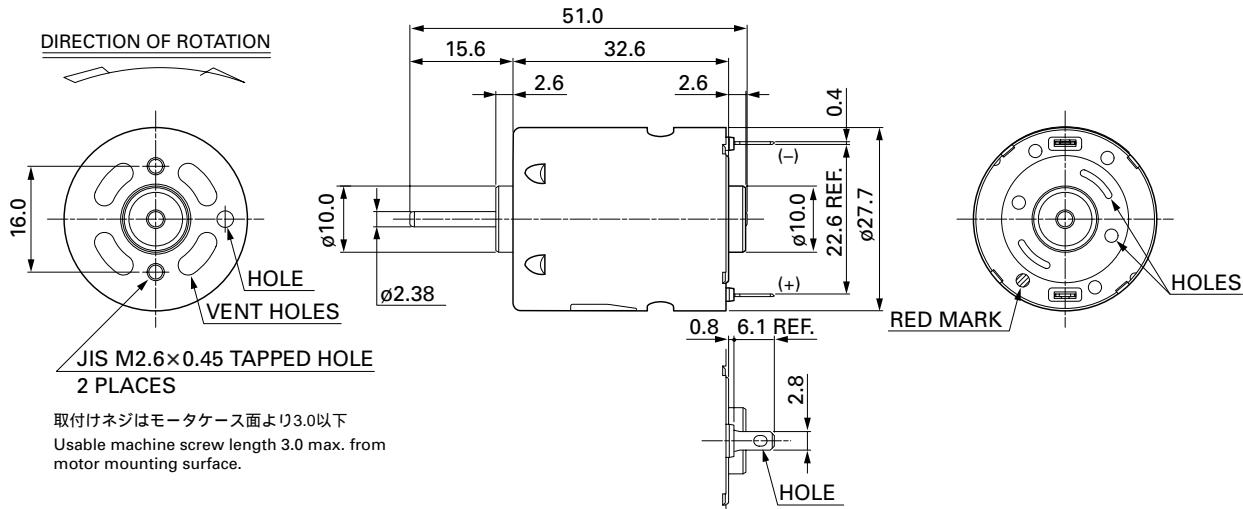


Typical Applications Household Appliances : Air Compressor / Massager / Vibrator



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RS-365RH-2650	3 ~ 12	12V CONSTANT	25500	0.40	20930	1.83	5.36	54.6	11.7	29.9	305	8.40

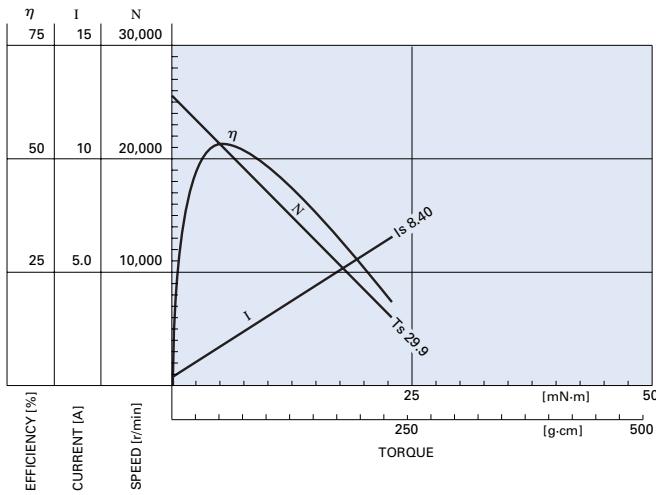
UNIT: MILLIMETERS



WEIGHT: 54g (APPROX)

RS-365RH-2650

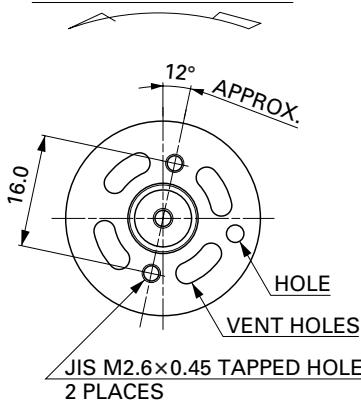
12.0V



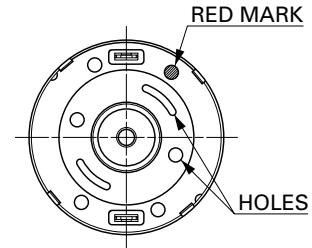
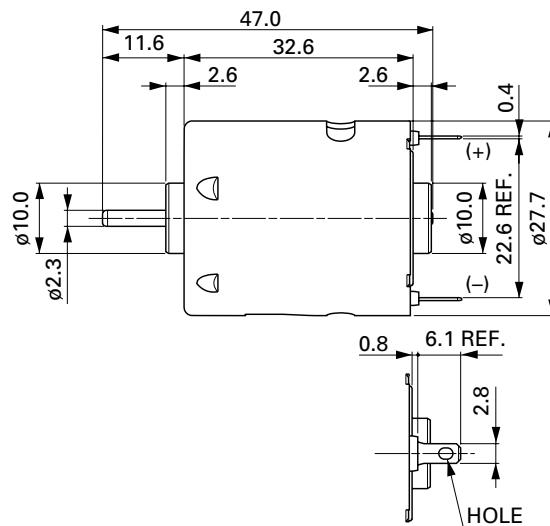
Typical Applications **Precision Instruments** : Vending Machine
Household Appliances : Massager / Vibrator
Office Automation Equipments : Copy Machine



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	mN·m	g·cm	A	
RS-360RH-2885	3 ~ 8	6V CONSTANT	13700	0.38	11210	1.71	4.64	47.2	5.43	25.5	260	7.70
RS-360RH-10500	12 ~ 25	12V CONSTANT	4500	0.050	3320	0.14	2.15	21.9	0.75	8.24	84	0.40
RS-360SH-2885	3 ~ 9	7.2V CONSTANT	12500	0.36	10380	1.76	7.00	71.3	7.59	41.2	420	8.60
RS-360SH-10500	12 ~ 25	24V CONSTANT	7000	0.050	5600	0.20	4.50	45.9	2.63	22.5	230	0.80
RS-360SH-14280	8 ~ 30	12V CONSTANT	6300	0.085	5040	0.34	4.20	42.8	2.21	21.0	214	1.36

DIRECTION OF ROTATION

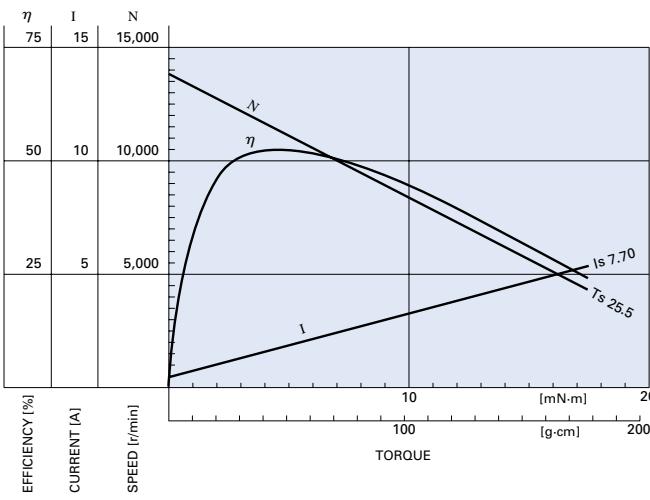
取付けネジはモータケース面より4.0以下
Usable machine screw length 4.0 max. from
motor mounting surface.



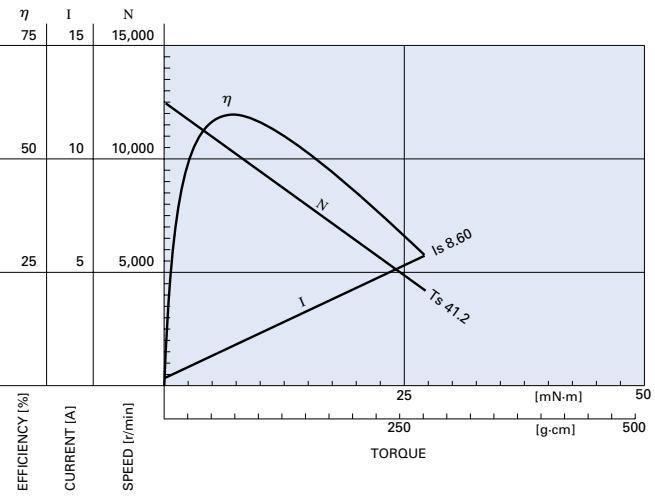
WEIGHT: 55g (APPROX)

RS-360RH-2885

6.0V

**RS-360SH-2885**

7.2V



Typical Applications Household Appliances : Styling Brush

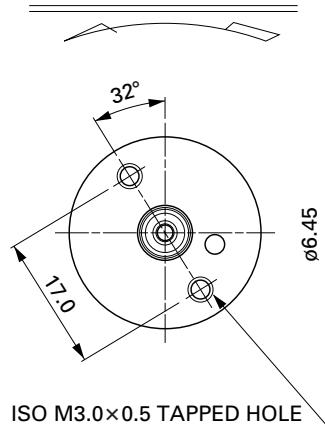


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RK-384CA-16170	24 ~ 30	30V CONSTANT	21000	0.15	16710	0.58	5.80	59.1	10.1	28.4	290	2.28

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

DIRECTION OF ROTATION



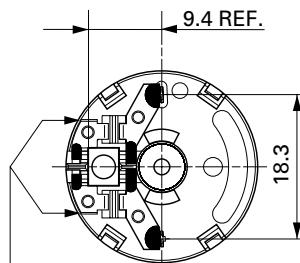
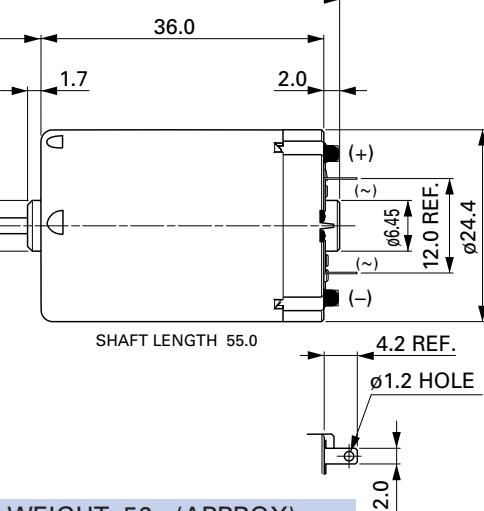
ISO M3.0×0.5 TAPPED HOLE

2 PLACES

取付けネジはモーターケース面より2.0以下
Usable machine screw length 2.0 max. from
motor mounting surface.

56.1 REF.

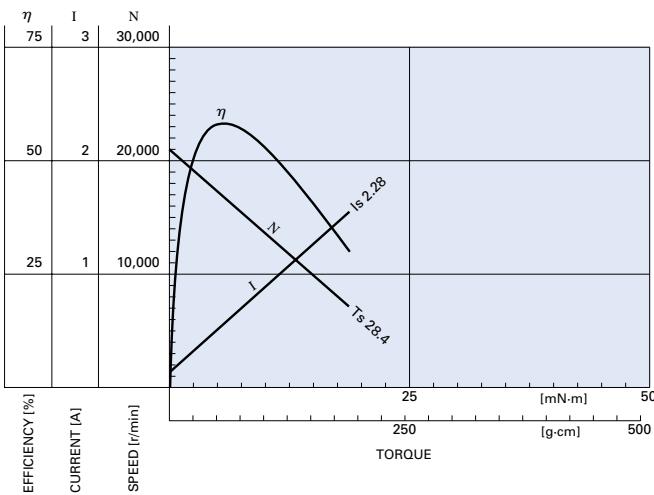
CCW(+)

AC INPUT TERMINALS
交流入力端子

WEIGHT: 56g (APPROX)

RK-384CA-16170

30.0V



Typical Applications Toys and Models : Radio Control Model



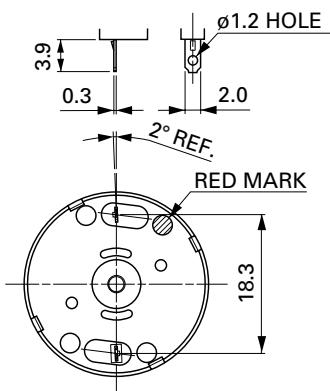
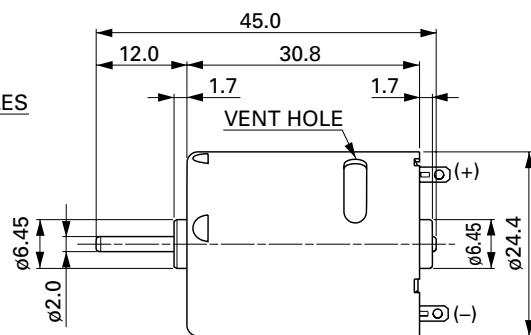
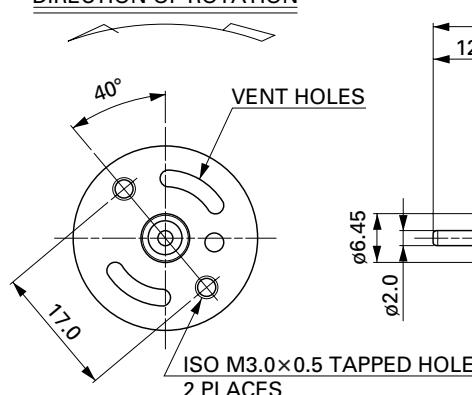
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RK-370SD-2870	4.5 ~ 9.6	7.2V CONSTANT	16500	0.34	13790	1.73	5.97	60.9	8.61	36.3	370	8.77

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

CCW(+)

DIRECTION OF ROTATION



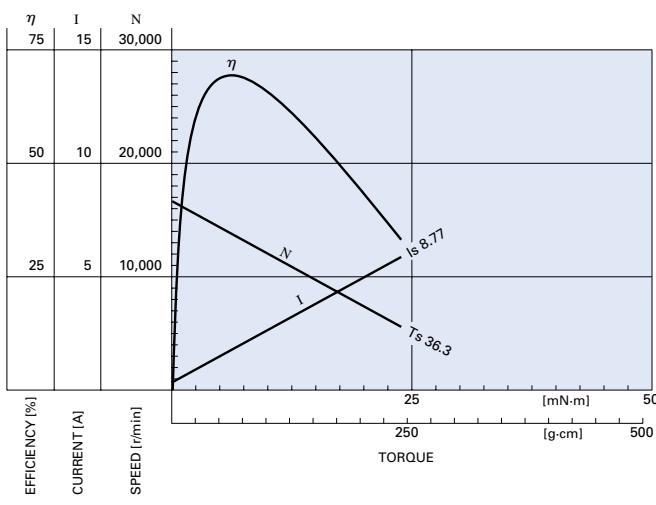
取付けネジはモーターケース面より2.0以下

Usable machine screw length 2.0 max. from
motor mounting surface.

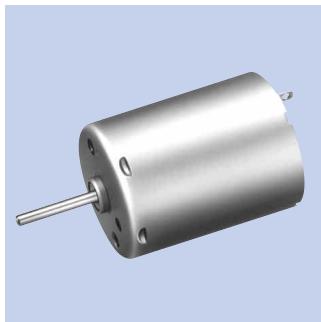
WEIGHT: 51g (APPROX)

RK-370SD-2870

7.2V



Typical Applications Household Appliances : Styling Brush

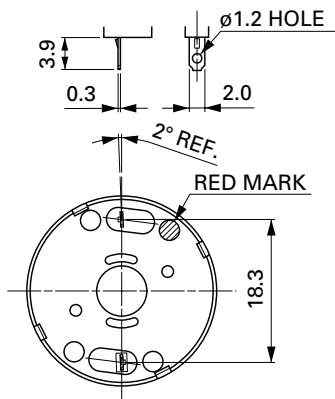
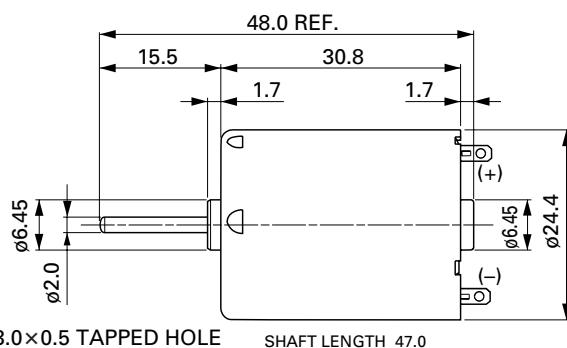
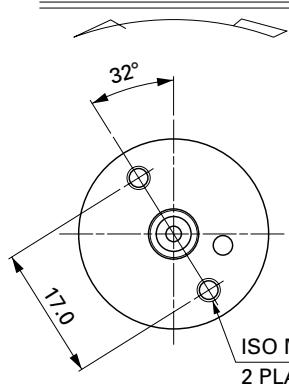


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RK-370CC-14280	12 ~ 30	30V CONSTANT	17000	0.090	14330	0.48	6.15	62.7	9.21	39.2	400	2.60

The terminal position against the tapped holes varies depending on CW+/NEUTRAL.

UNIT: MILLIMETERS

CCW(+)

DIRECTION OF ROTATION

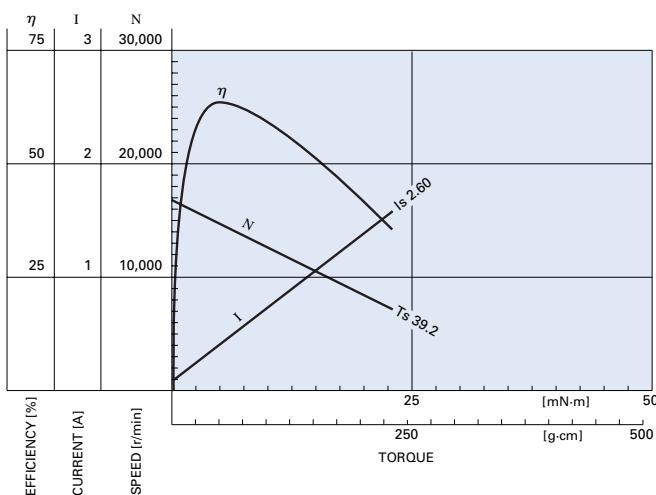
取付けネジはモータケース面より2.0以下

Usable machine screw length 2.0 max. from
motor mounting surface.

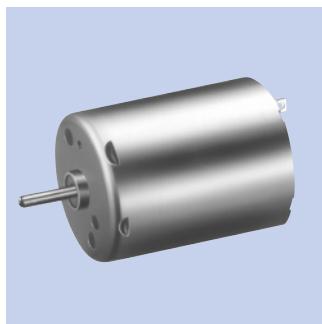
WEIGHT: 51g (APPROX)

RK-370CC-14280

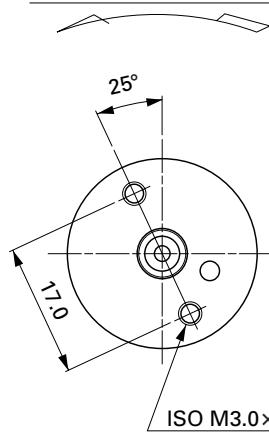
30.0V



Typical Applications Office Automation Equipments : Printer / Copy Machine
Precision Instruments : Vending Machine



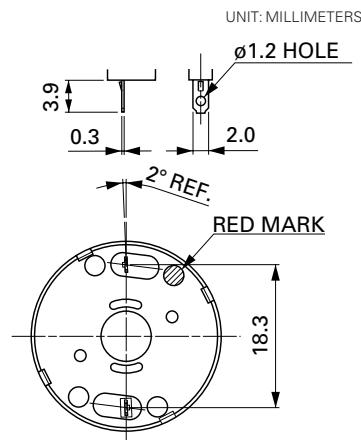
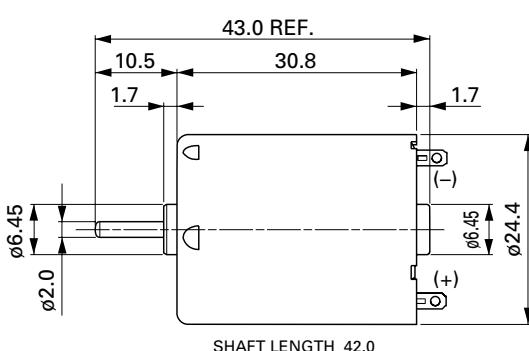
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
RK-370CA-10800	12 ~ 30	24V CONSTANT	5100	0.015	4310	0.082	2.58	26.3	1.16	16.7
RK-370CA-18260	6 ~ 18	12V CONSTANT	7900	0.050	6820	0.32	3.21	32.7	2.29	23.5
RK-370CA-081050	12 ~ 30	24V CONSTANT	3900	0.010	3210	0.047	1.90	19.3	0.64	10.8

DIRECTION OF ROTATION

**ISO M3.0×0.5 TAPPED HOLE
2 PLACES**

取付けネジはモータケース面より2.0以下

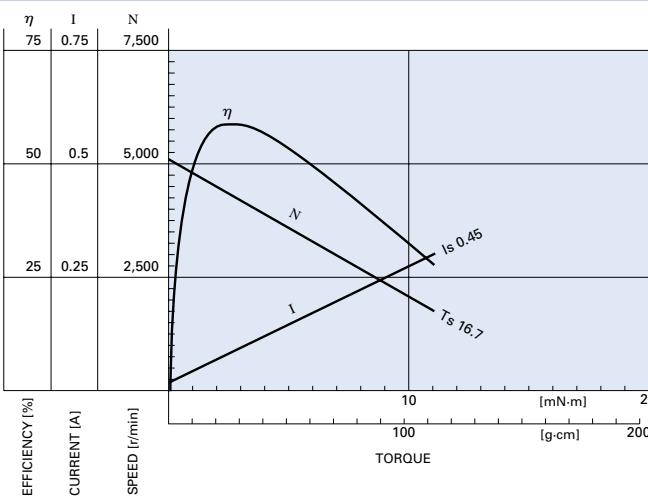
Usable machine screw length 2.0 max. from
motor mounting surface.



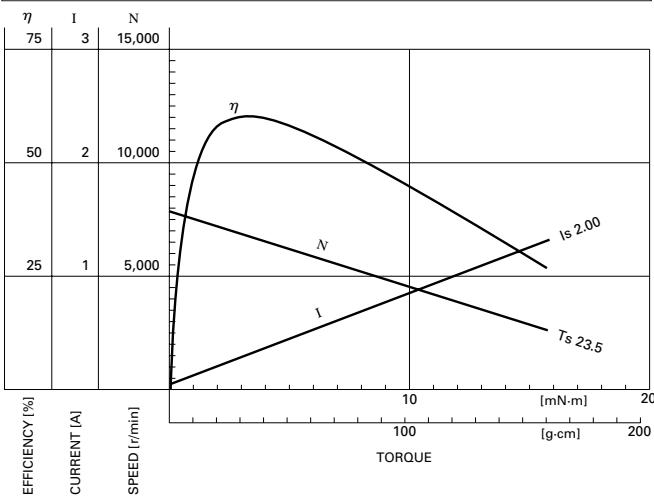
WEIGHT: 51g (APPROX)

RK-370CA-10800

24.0V

**RK-370CA-18260**

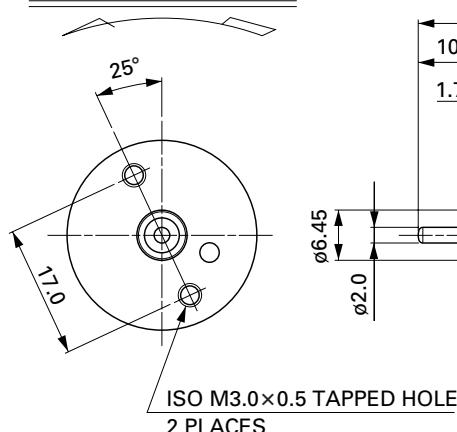
12.0V



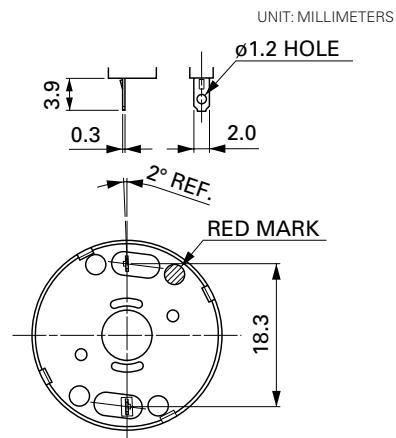
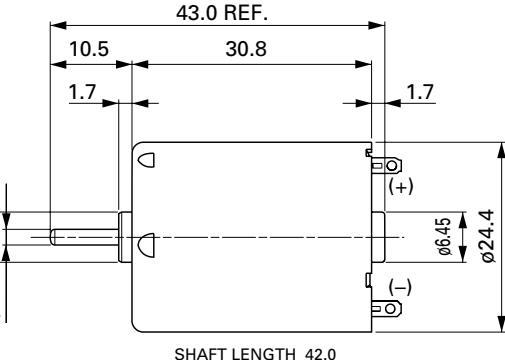
Typical Applications Precision Instruments : Vending Machine
Office Automation Equipments



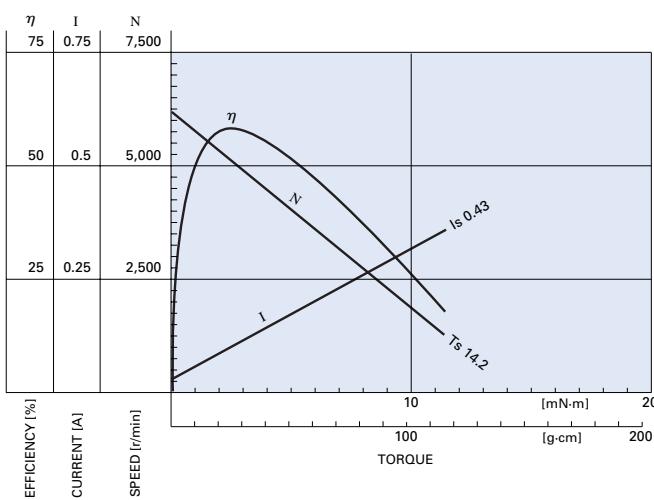
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
RK-270SH-08550	12 ~ 26	24V CONSTANT	6300	0.026	5060	0.11	2.80	28.6	1.48	14.2	145	0.43
RK-270SH-16175	4.5 ~ 18.0	9V CONSTANT	7500	0.070	6320	0.37	3.18	32.5	2.10	20.2	206	2.00

DIRECTION OF ROTATION

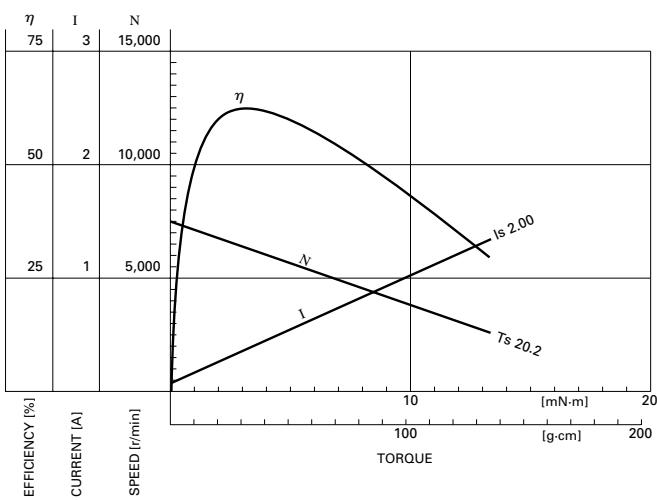
取付けネジはモータケース面より2.0以下
Usable machine screw length 2.0 max. from
motor mounting surface.

**WEIGHT: 51g (APPROX)****RK-270SH-08550**

24.0V

**RK-270SH-16175**

9.0V



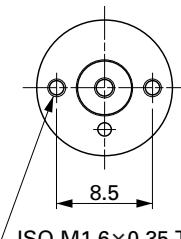
Typical Applications Precision Instruments : Camera
Household Appliances



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
RF-N60CA-1955	1 ~ 3	2.4V CONSTANT	12700	0.13	10140	0.51	0.63	6.5	0.67	3.14	32	2.04

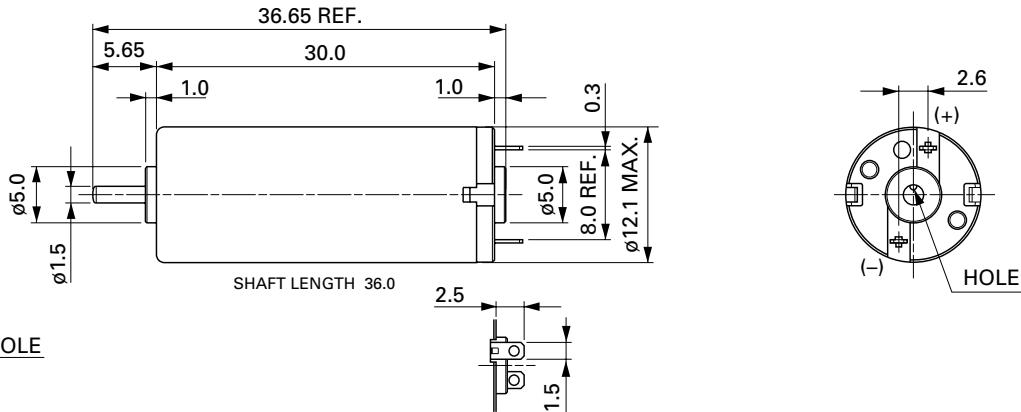
UNIT: MILLIMETERS

DIRECTION OF ROTATION



ISO M1.6×0.35 TAPPED HOLE
2 PLACES

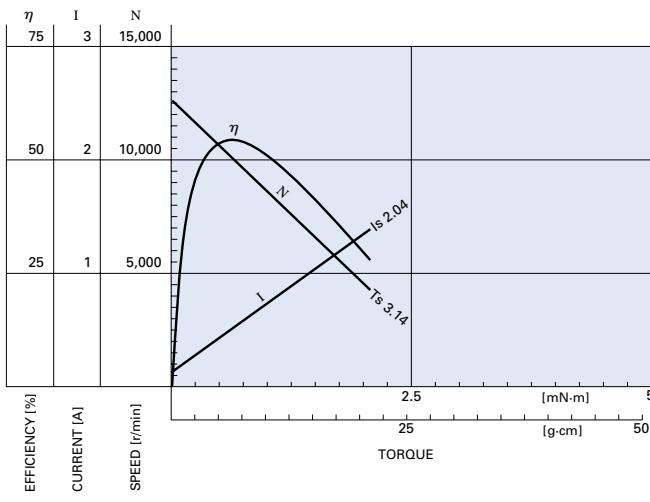
取付けネジはモータケース面より1.0以下
Usable machine screw length 1.0 max. from
motor mounting surface.



WEIGHT: 13g (APPROX)

RF-N60CA-1955

2.4V



Typical Applications Precision Instruments : Camera

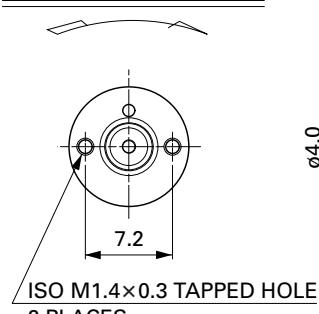


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-M50SC-1750	1.2 ~ 2.4	2.4V CONSTANT	21200	0.068	17790	0.35	0.27	2.8	0.51	1.70	17	1.85
RF-M50WB/WC-1747	1.2 ~ 2.4	2.4V CONSTANT	15400	0.070	13070	0.39	0.41	4.2	0.56	2.70	28	2.20

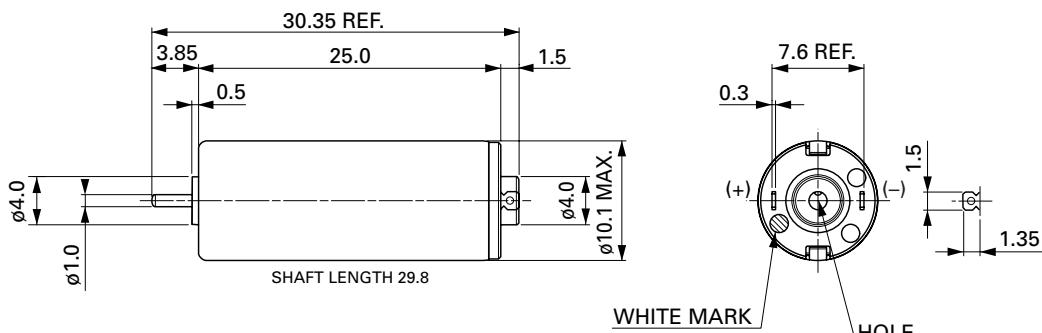
*RF-M50WB : Magnetic-leak-proof specifications

UNIT: MILLIMETERS

DIRECTION OF ROTATION



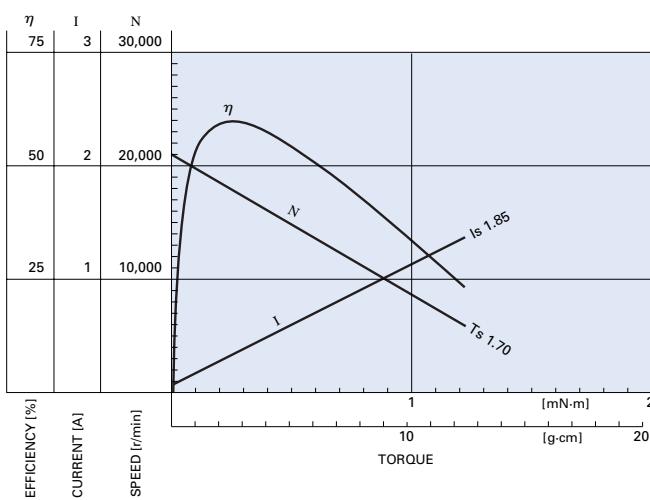
取付けネジはモーターケース面より1.0以下
Usable machine screw length 1.0 max. from
motor mounting surface.



WEIGHT: 8.6g (APPROX)

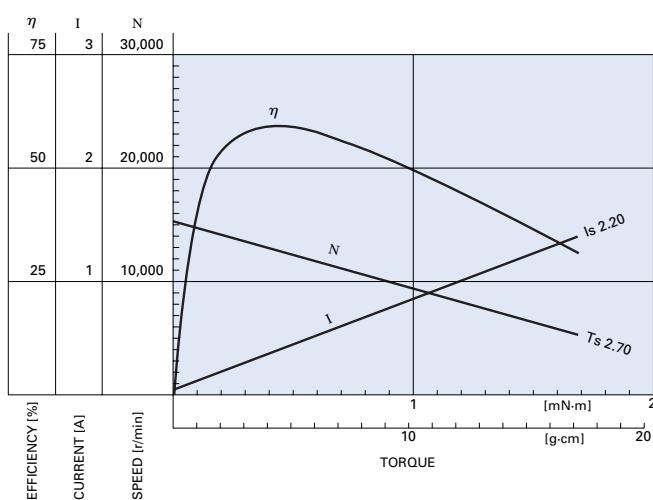
RF-M50SC-1750

2.4V

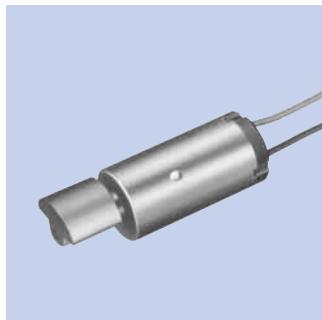


RF-M50WB/WC-1747

2.4V



Typical Applications Precision Instruments : Pager / Mobile Phone



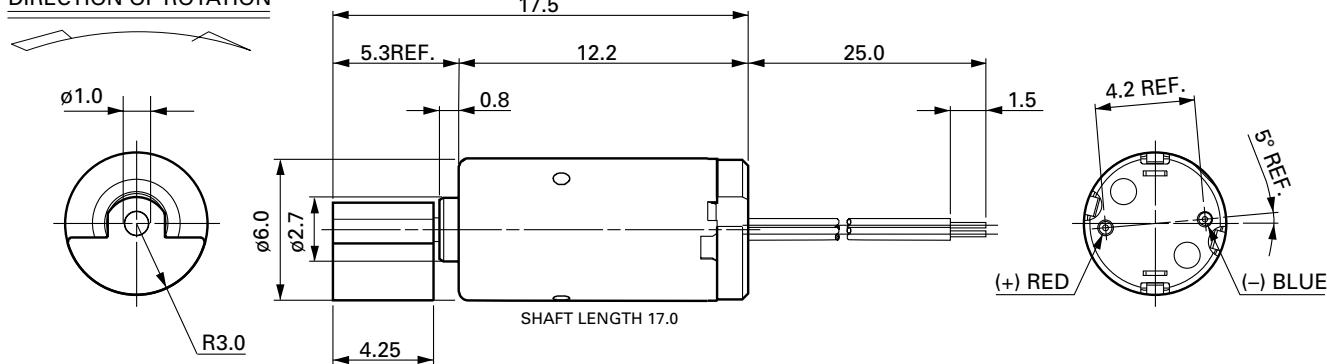
MODEL	RATED VOLTAGE	RATED SPEED	RATED CURRENT	STARTING VOLTAGE	STARTING CURRENT
	V	r/min	mA	V	mA
RF-J20WA-5Z145	1.3V CONSTANT	7400	68	0.48	130

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-J20WA-5Z145	1.1~2.0	1.3V CONSTANT	12900	0.028	8810	0.060	0.019	0.19	0.018	0.06	0.6	0.13

*Without counter weight.

UNIT: MILLIMETERS

DIRECTION OF ROTATION



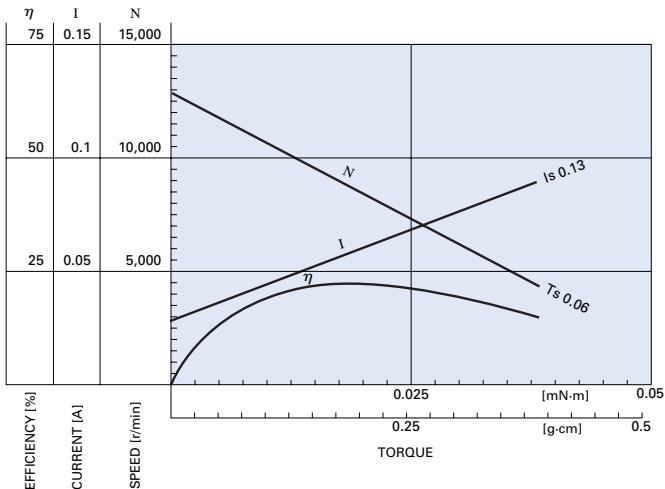
WEIGHT: 2.2g (APPROX)

Distinctive Features

In comparison with conventional cored motors in the market, this motor has been developed with low starting voltage, while securing sufficient vibration value, and at the competitive price.

RF-J20WA-5Z145

1.3V

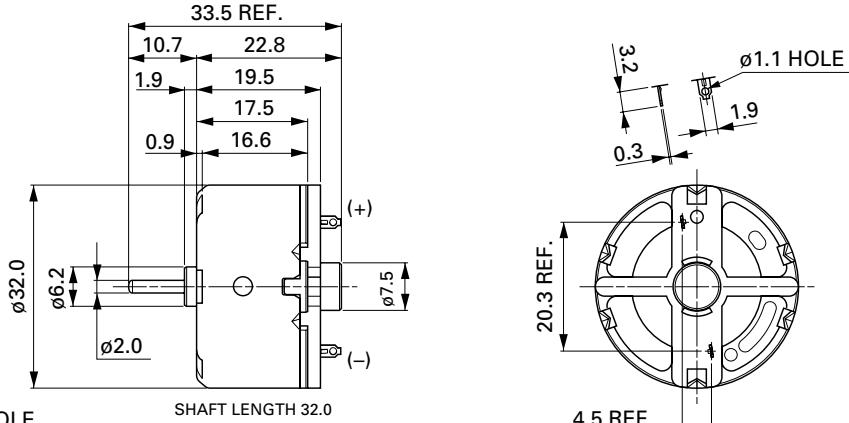
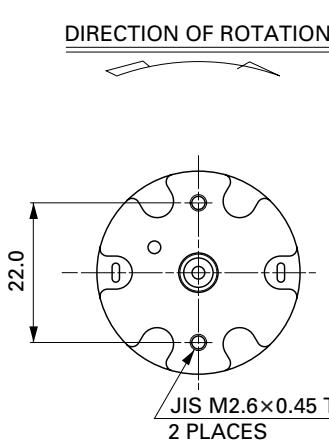


Typical Applications Audio and Visual Equipments : CD Player / DVD Player / Cassette Tape Recorder / VCR



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT	
		r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-500TB-12560	1.5 ~ 12.0	6V CONSTANT	2700	0.020	2180	0.084	1.13	11.6	0.26	5.88	60
		9V CONSTANT	4000	0.023	3300	0.11	1.55	15.8	0.53	8.92	91
RF-500TB-14415	1.5 ~ 9.0	3V CONSTANT	1800	0.022	1430	0.085	0.82	8.4	0.12	4.02	41
		6V CONSTANT	3700	0.028	3060	0.13	1.42	14.4	0.45	8.24	84

UNIT: MILLIMETERS

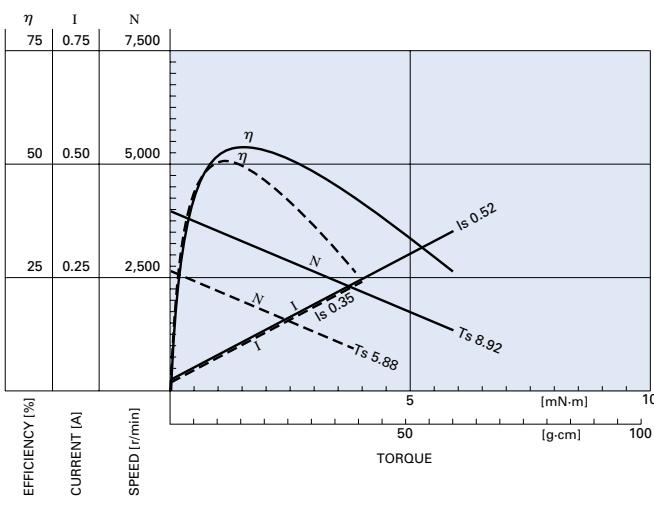


取付けネジはモーターケース面より1.5以下
Usable machine screw length 1.5 max. from
motor mounting surface.

WEIGHT: 45g (APPROX)

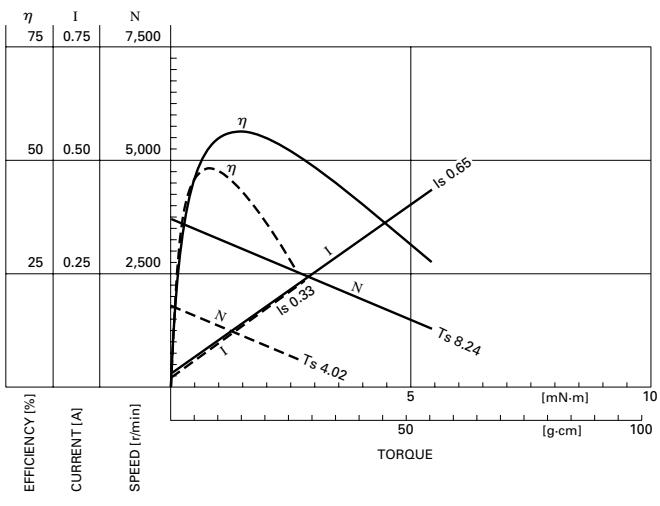
RF-500TB-12560

---- 6.0V —— 9.0V



RF-500TB-14415

---- 3.0V —— 6.0V



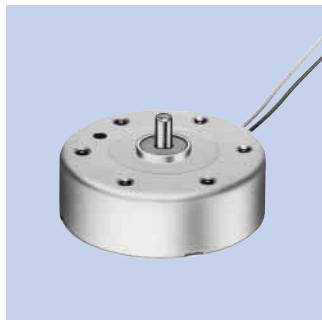


RF-4LOWA

OUTPUT: APPROX 0.05W~0.25W

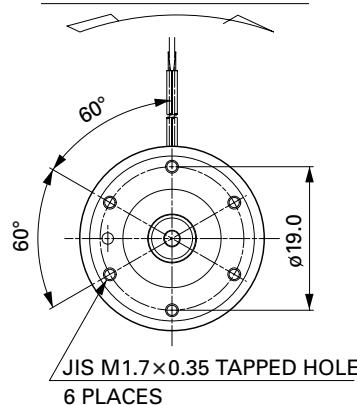
Precious metal-brush motors

Typical Applications Audio and Visual Equipments : Portable CD Player / Car CD Player

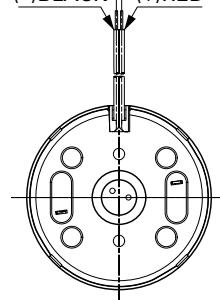
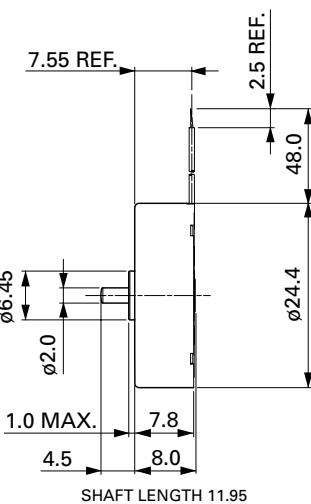


Model	Voltage		No Load		At Maximum Efficiency				Stall			
	Operating Range	Nominal	Speed	Current	Speed	Current	Torque		Output	Torque		Current
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-4L0WA-13185	2~6	2V CONSTANT	4800	0.060	3510	0.16	0.33	3.4	0.12	1.23	13	0.44

DIRECTION OF ROTATION



取付けネジはモータケース面より1.1以下
Usable machine screw length 1.1 max. from
motor mounting surface

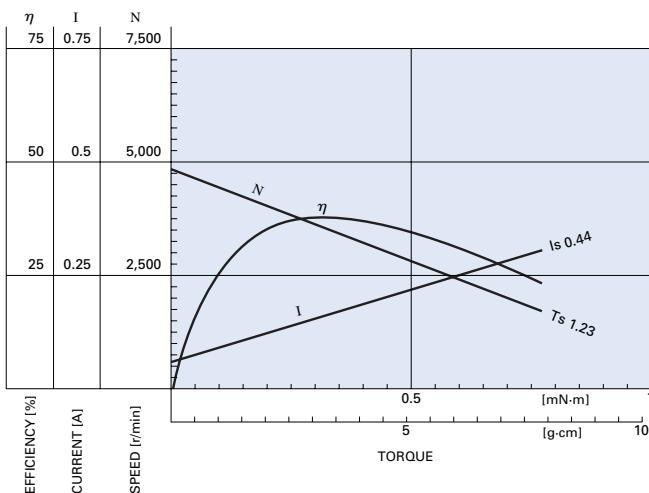


UNIT: MILLIMETERS

WEIGHT: 13.5g (APPROX)

RF-4L0WA-13185

20V

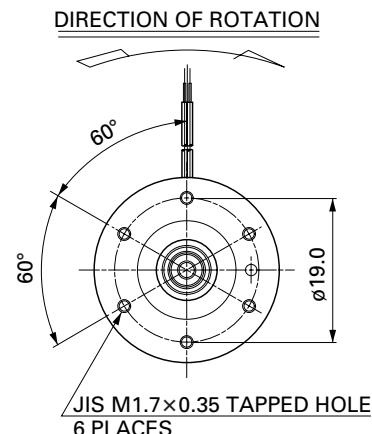


Typical Applications Audio and Visual Equipments : Portable CD Player / Car CD Player
Office Automation Equipments : CD/DVD-ROM Drive

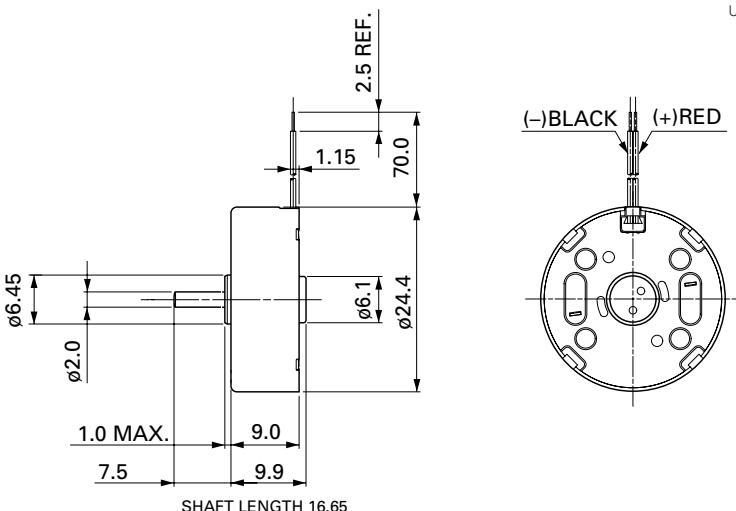


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-400CA-12265	1 ~ 6	2V CONSTANT	4000	0.030	3070	0.099	0.25	2.6	0.080	1.08	11	0.33
RF-400CA-13225	1.5~6.0	2V CONSTANT	4800	0.035	3730	0.12	0.30	3.0	0.12	1.33	14	0.43

*Also available with terminals (without leadwires).



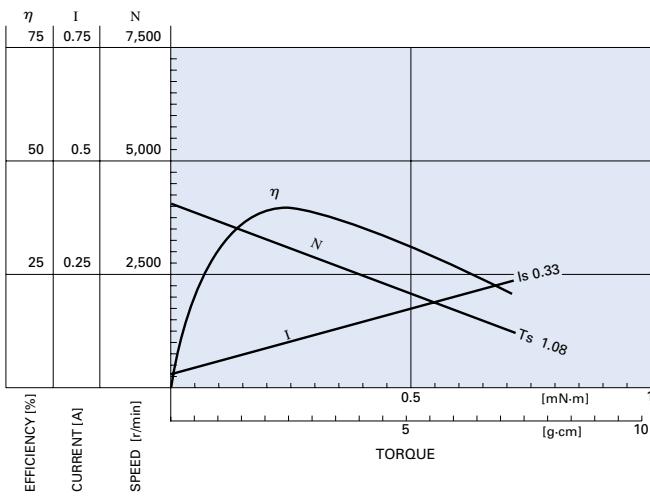
取付けネジはモータケース面より1.1以下
Usable machine screw length 1.1max.from
motor mounting surface.



WEIGHT: 16.5g (APPROX)

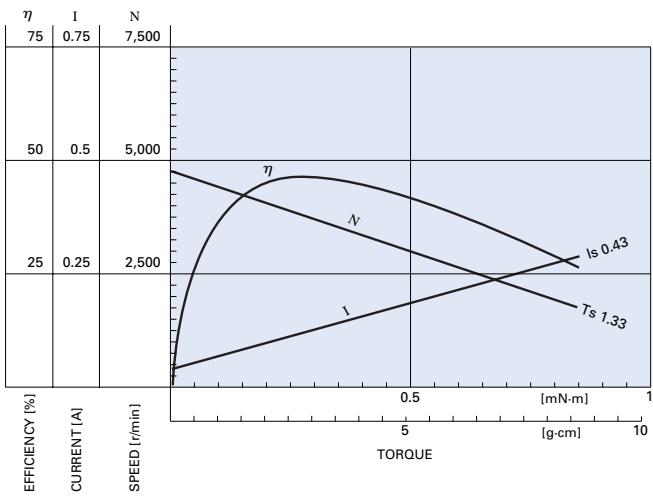
RF-400CA-12265

2.0V



RF-400CA-13225

2.0V

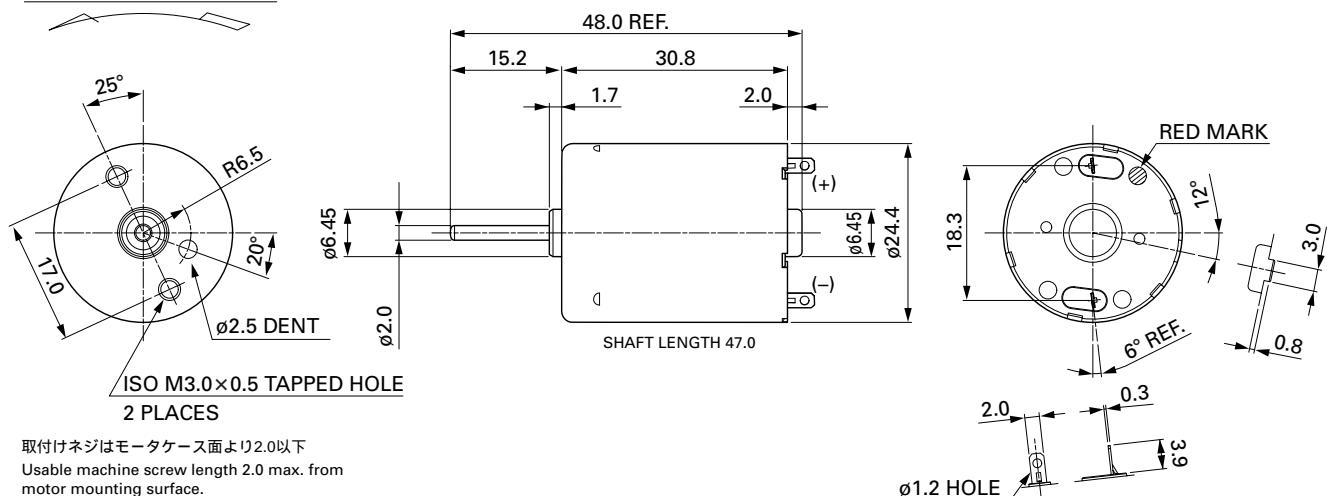


Typical Applications Automotive Products : Air Conditioning Damper Actuator



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	
RF-370CB-11670	7 ~ 16	12V CONSTANT	3100	0.011	2620	0.059	1.63	16.6	0.45	10.4	106	0.32

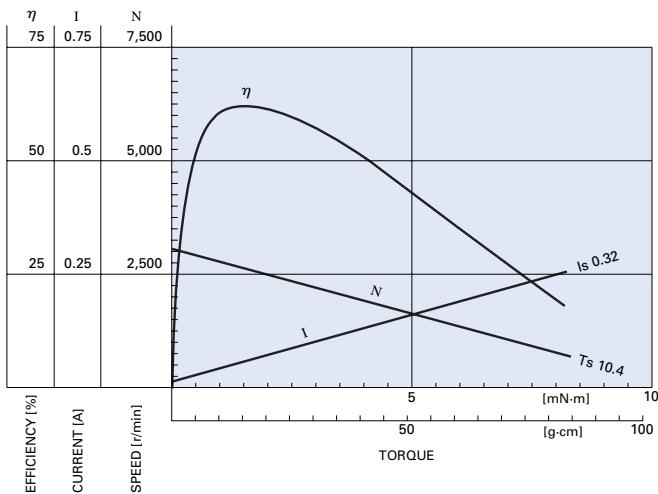
DIRECTION OF ROTATION



WEIGHT: 51g (APPROX)

RF-370CB-11670

12.0V

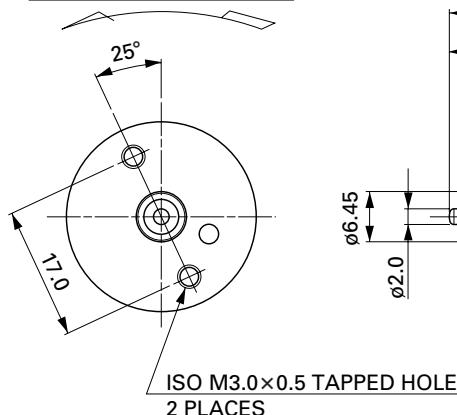


Typical Applications Audio and Visual Equipments : CD Player / VCR
Household Appliances : Kitchen Appliance / Blood Pressure Meter

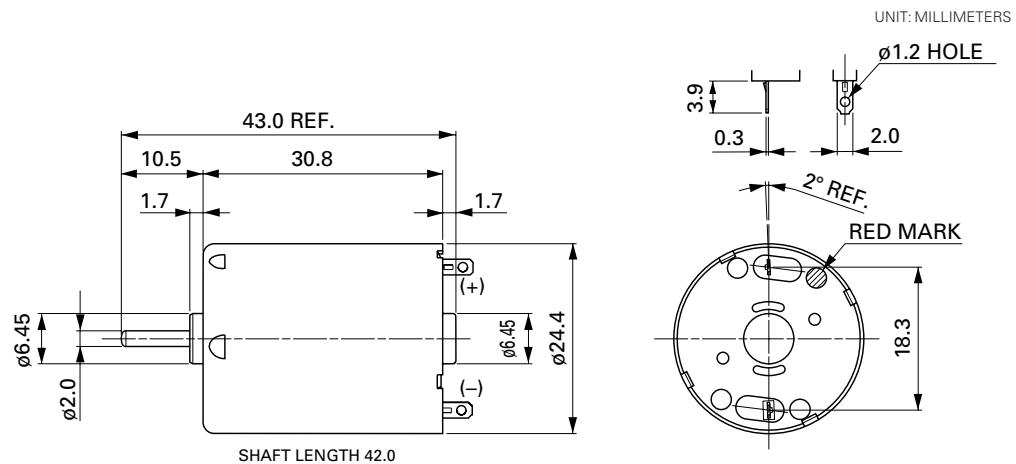


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-370CA-15370	3 ~ 12	12V CONSTANT	5600	0.026	4840	0.17	2.48	25.3	1.25	18.3	187	1.06
RF-370CA-12560	4 ~ 12	12V CONSTANT	3700	0.018	3090	0.091	2.03	20.7	0.66	12.3	125	0.46

DIRECTION OF ROTATION



取付けネジはモータケース面より2.0以下

Usable machine screw length 2.0 max. from
motor mounting surface.

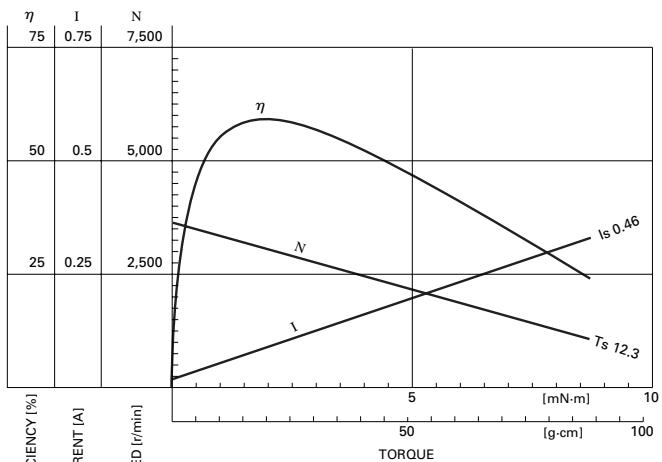
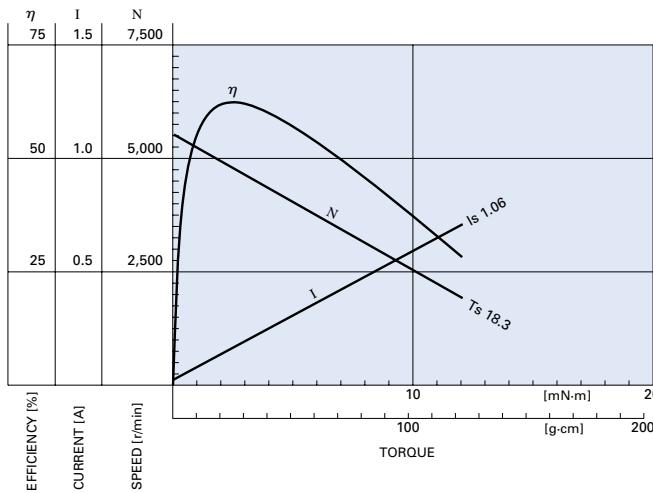
WEIGHT: 51g (APPROX)

RF-370CA-15370

12.0V

RF-370CA-12560

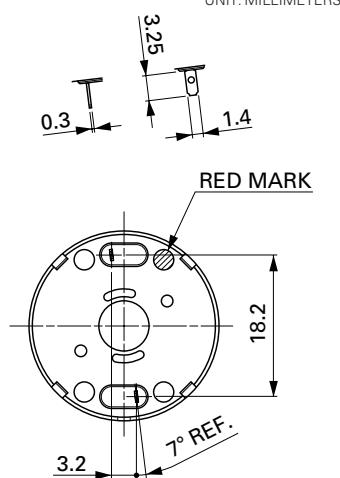
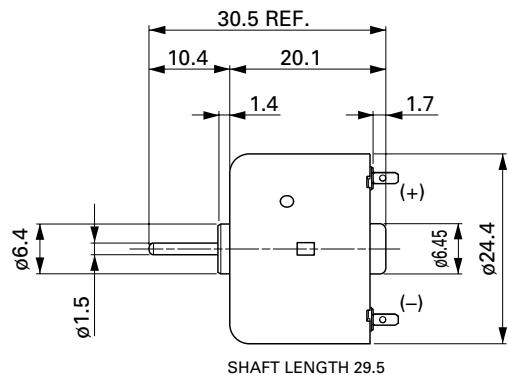
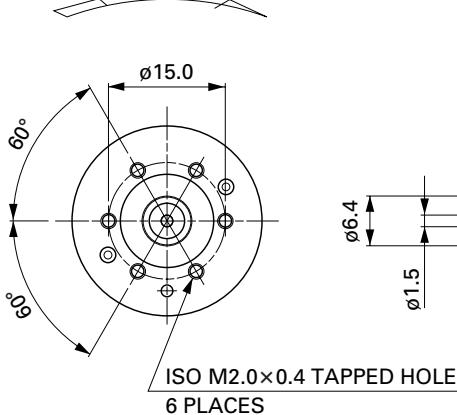
12.0V



Typical Applications Household Appliances : Air Freshener



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE
			r/min	A			mN·m	g·cm		
RF-330TK-07800	1 ~ 3	1.5V CONSTANT	800	0.004	570	0.010	0.083	0.84	0.005	0.29
		3V CONSTANT	1700	0.006	1260	0.017	0.16	1.6	0.021	0.61

DIRECTION OF ROTATION

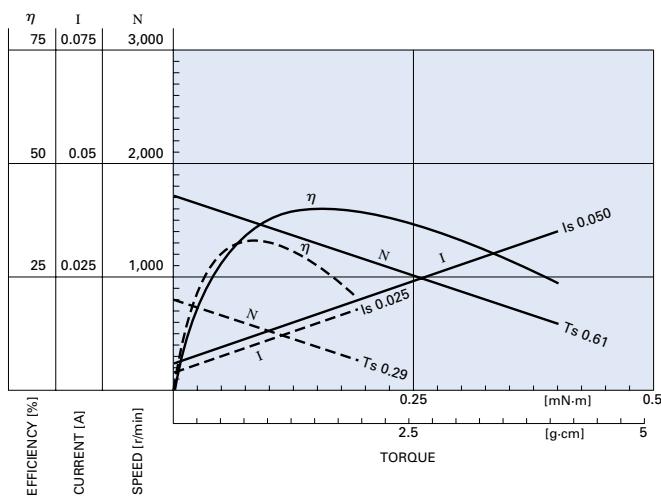
取付けネジはモータケース面より1.5以下

Usable machine screw length 1.5 max. from
motor mounting surface.

WEIGHT: 32g (APPROX)

RF-330TK-07800

---- 1.5V —— 3.0V

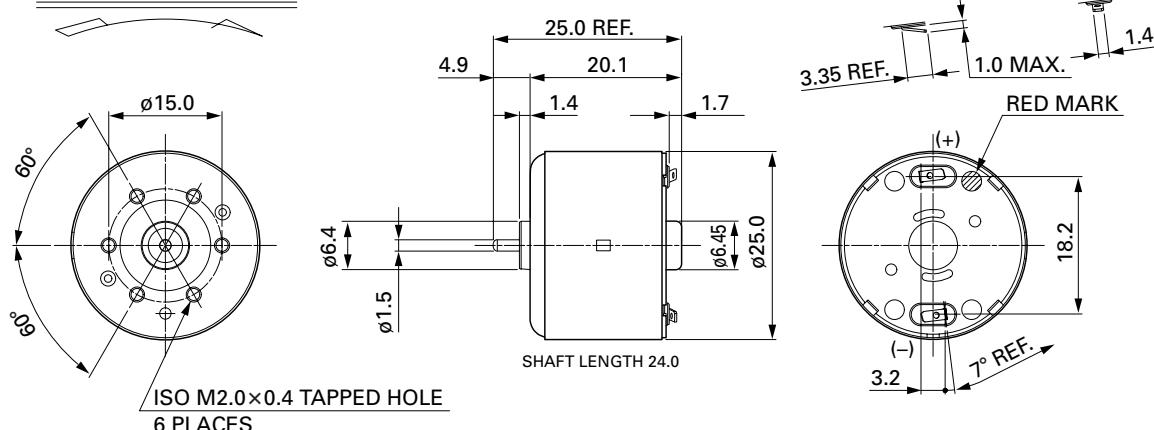


Typical Applications Audio and Visual Equipments : Volume Drive



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-330TA-09500	2 ~ 8	4.5V CONSTANT	3300	0.010	2700	0.045	0.40	4.1	0.11	2.21	23	0.20

UNIT: MILLIMETERS

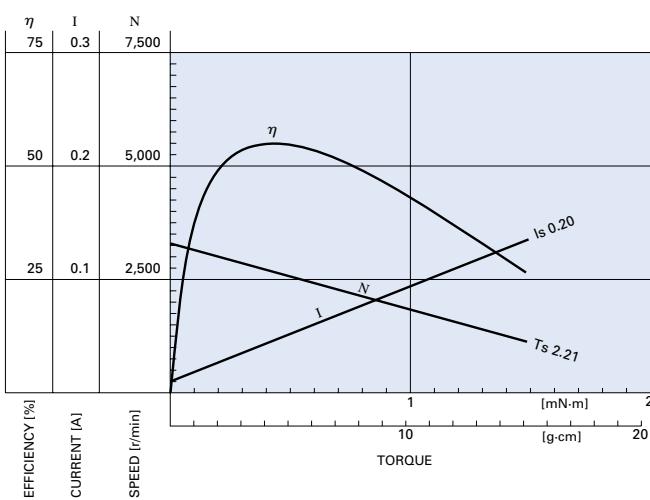
DIRECTION OF ROTATION

取付けネジはモーターケース面より1.5以下
Usable machine screw length 1.5 max. from
motor mounting surface.

WEIGHT: 32g (APPROX)

RF-330TA-09500

4.5V

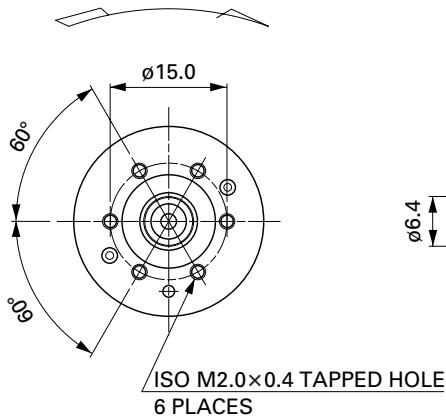


Typical Applications Audio and Visual Equipments : CD Player / DVD Player

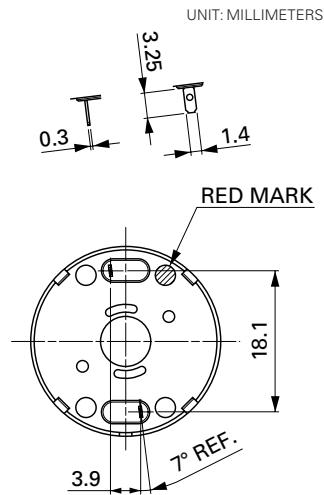
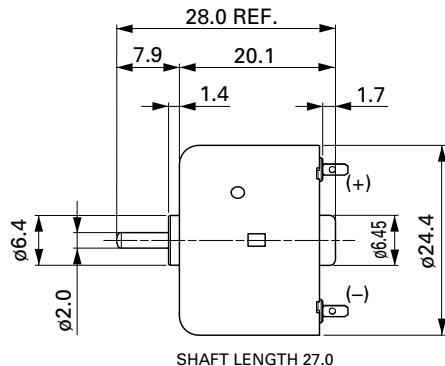


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-320CH-12400	1 ~ 5	3V CONSTANT	2700	0.019	2160	0.075	0.51	5.2	0.12	2.55	26	0.30

DIRECTION OF ROTATION



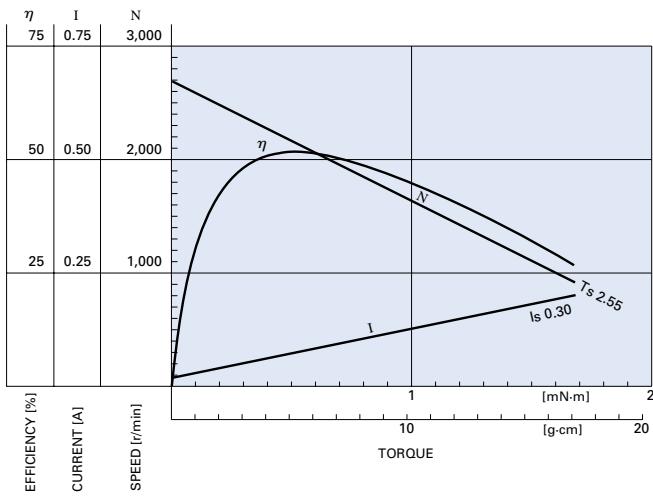
取付けネジはモーターケース面より1.5以下

Usable machine screw length 1.5 max. from
motor mounting surface.

WEIGHT: 28g (APPROX)

RF-320CH-12400

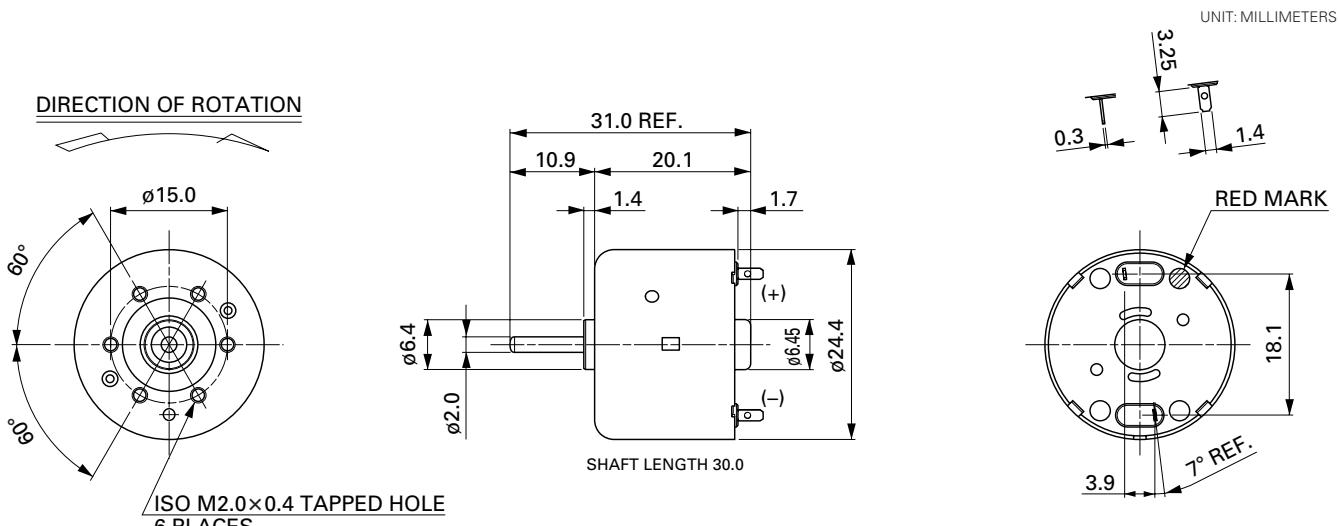
3.0V



Typical Applications Audio and Visual Equipments : CD Player / DVD Player



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-310TA-11400	1 ~ 6	2.5V CONSTANT	2800	0.017	2190	0.061	0.32	3.3	0.073	1.47	15	0.22



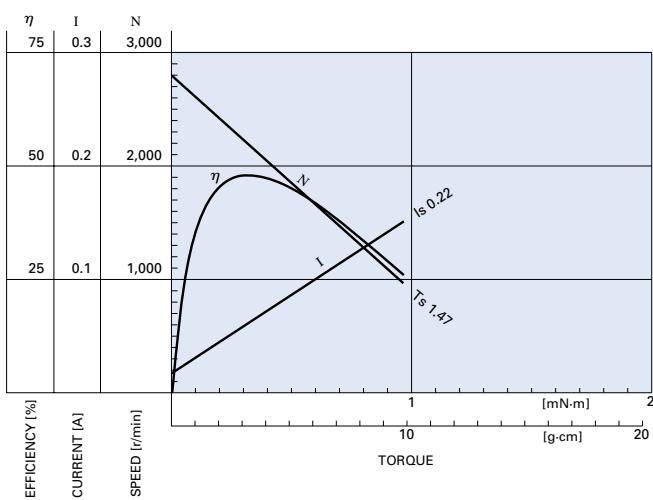
取付けネジはモーターケース面より1.5以下

Usable machine screw length 1.5 max. from motor mounting surface.

WEIGHT: 29g (APPROX)

RF-310TA-11400

2.5V



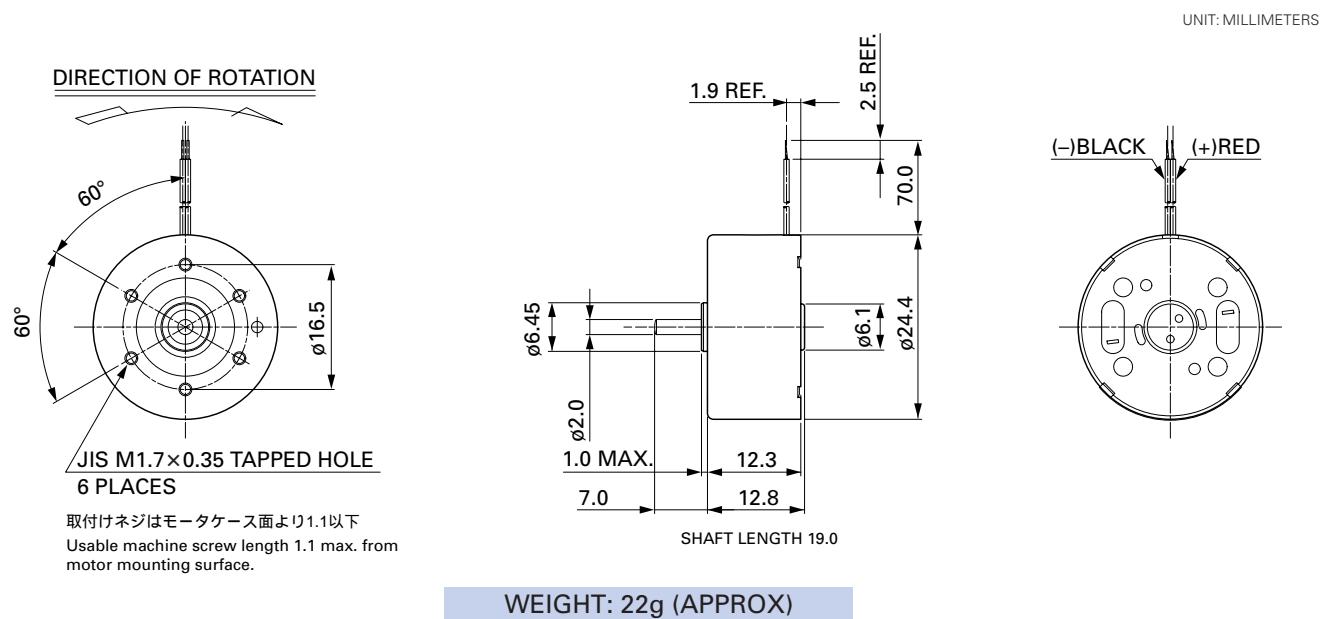
Typical Applications Audio and Visual Equipments : DVD Player



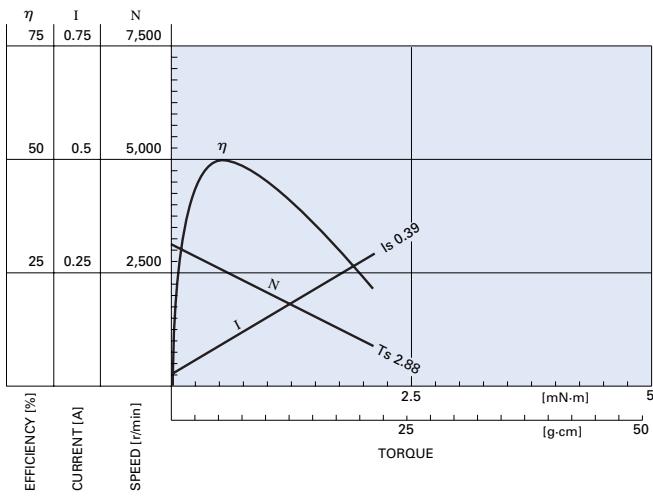
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RF-300SA-12350	2 ~ 6	3V CONSTANT	3100	0.027	2450	0.10	0.60	6.1	0.15	2.88

*High temperature specification motor is also available.

*Also available with terminals (without leadwires).

**RF-300SA-12350**

3.0V



Typical Applications Audio and Visual Equipments : CD Player / Car CD Player / DVD Player
 Office Automation Equipments : CD/DVD-ROM Drive



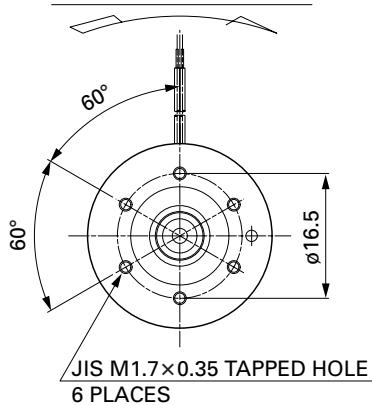
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RF-300FA-11420	0.7 ~ 5.0	3V CONSTANT	2900	0.017	2320	0.068	0.42	4.3	0.10	2.11
RF-300FA-12350	1.5 ~ 6.0	3V CONSTANT	3500	0.022	2830	0.093	0.48	4.9	0.14	2.51

*High temperature specification motor is also available.

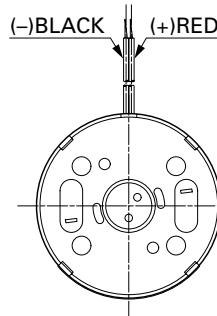
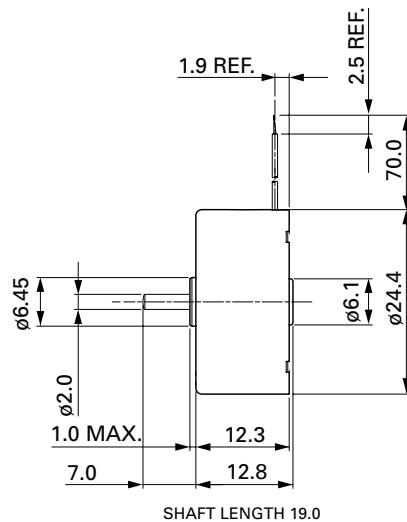
*Also available with terminals (without leadwires).

UNIT: MILLIMETERS

DIRECTION OF ROTATION



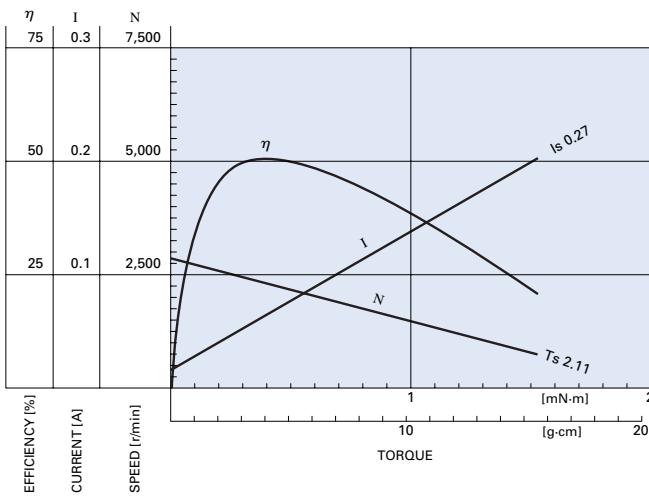
取付けネジはモータケース面より1.1以下
Usable machine screw length 1.1 max. from
motor mounting surface.



WEIGHT: 22g (APPROX)

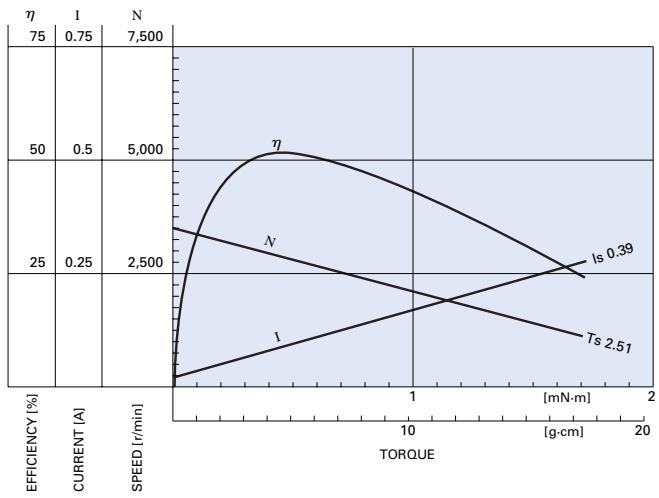
RF-300FA-11420

3.0V



RF-300FA-12350

3.0V



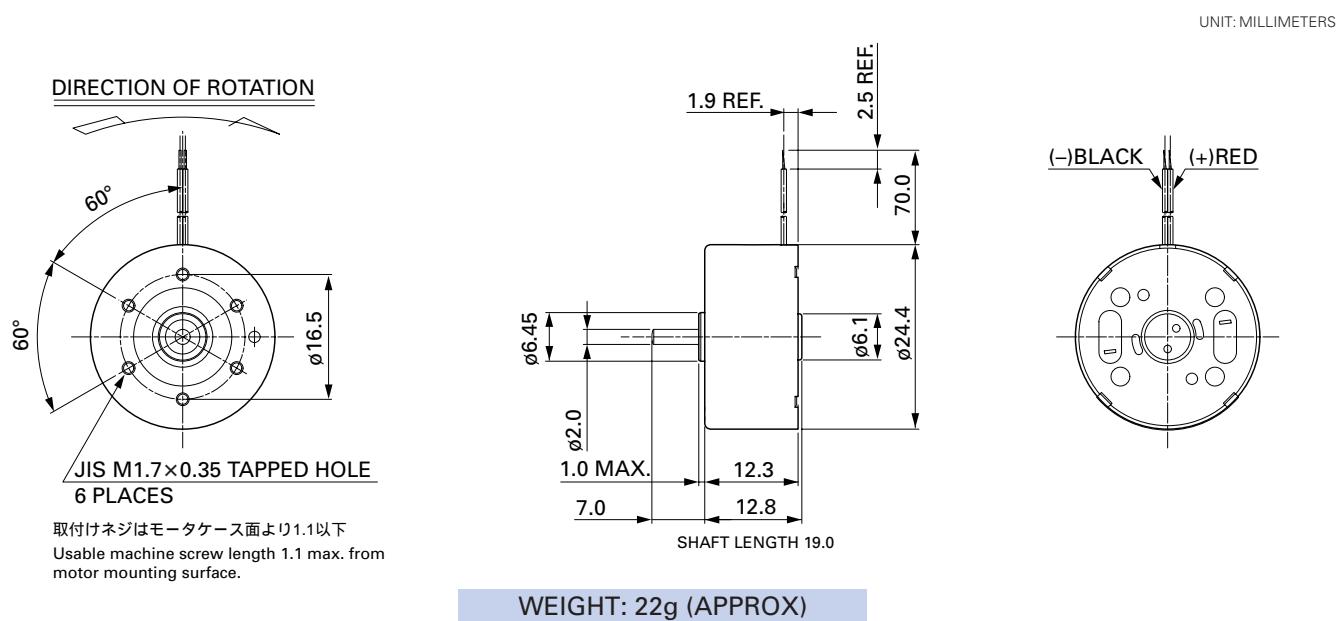
Typical Applications **Audio and Visual Equipments** : CD Player / DVD Player
Office Automation Equipments : CD/DVD-ROM Drive



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT g·cm	A	
RF-300EA-1D390	2.8 ~ 7.0	3.9V CONSTANT	4400	0.021	3520	0.084	0.47	4.8	0.17	2.35	24	0.34

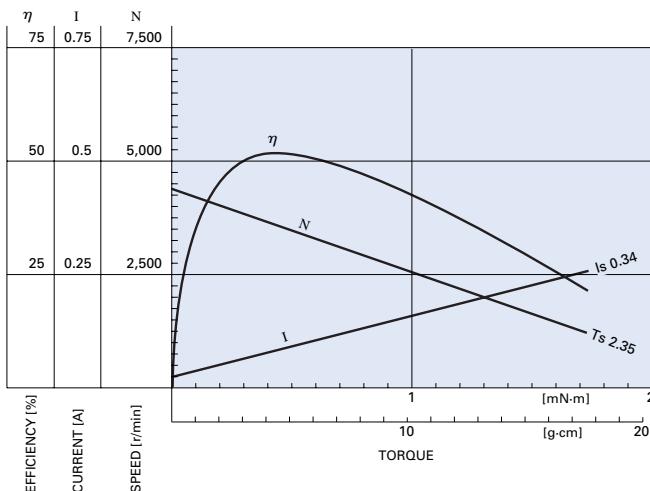
*High temperature specification motor is also available.

*Also available with terminals (without leadwires).



RF-300EA-1D390

3.9V



Typical Applications Audio and Visual Equipments : CD Player / Headphone Stereo / Car CD Player / DVD Player
Office Automation Equipments : CD/DVD-ROM Drive

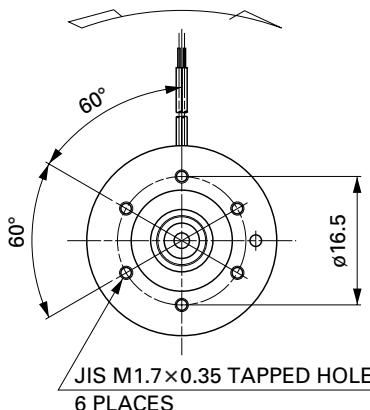


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RF-300CA-11440	0.7 ~ 5.0	2V CONSTANT	2200	0.018	1660	0.055	0.28	2.9	0.049	1.14
RF-300CA-11400	1.2 ~ 6.0	3V CONSTANT	3700	0.018	2970	0.073	0.38	3.8	0.12	1.91
RF-300CA-09550	1 ~ 6	3V CONSTANT	2700	0.012	2100	0.042	0.27	2.8	0.060	1.24
RF-300CA-14270	0.5 ~ 4.0	1.9V CONSTANT	3500	0.032	2740	0.12	0.38	3.9	0.11	1.76

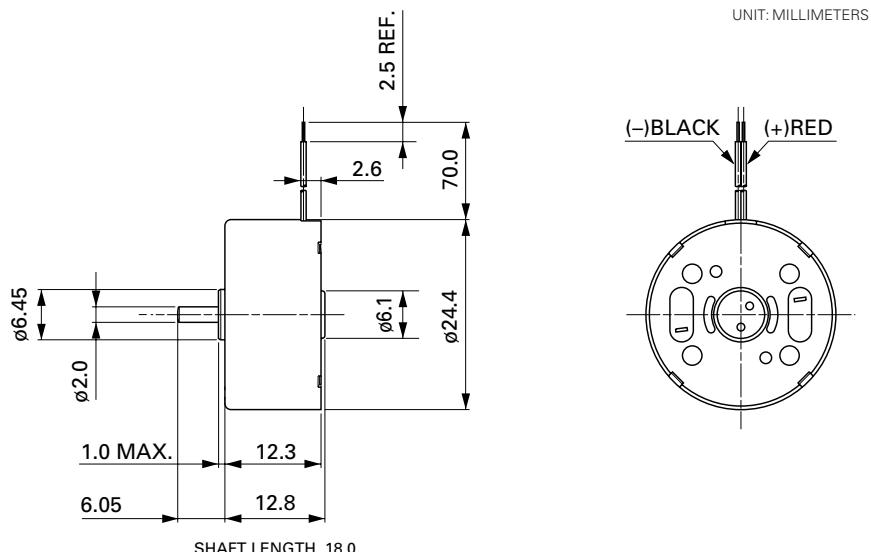
*High temperature specification motor is also available.

*Also available with terminals (without leadwires).

DIRECTION OF ROTATION



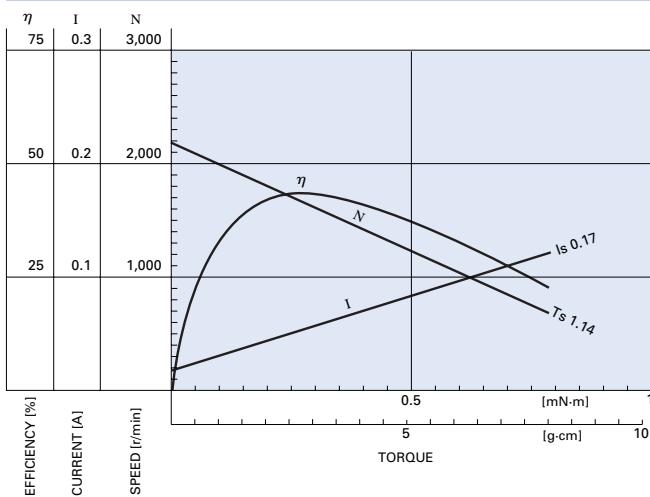
取付けネジはモータケース面より1.1以下
Usable machine screw length 1.1 max. from
motor mounting surface.



WEIGHT: 22g (APPROX)

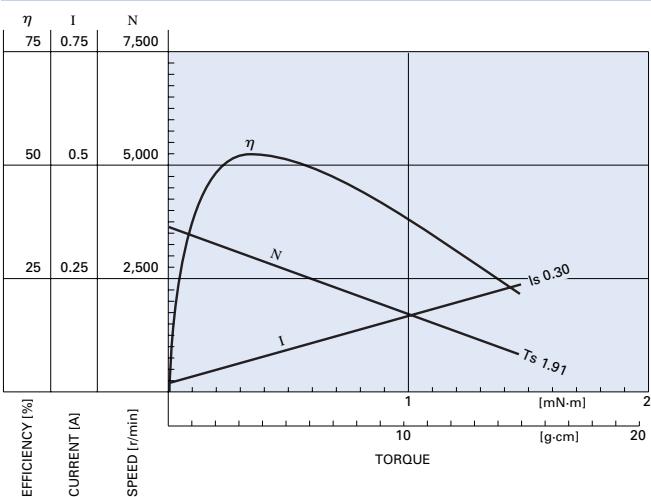
RF-300CA-11440

2.0V



RF-300CA-11400

3.0V

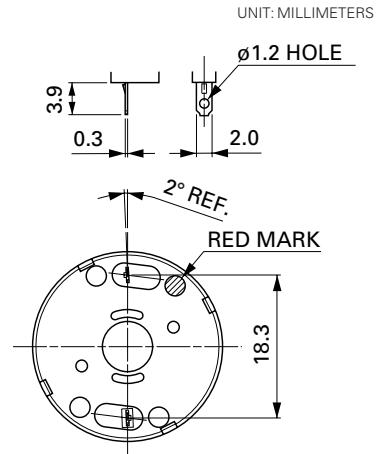
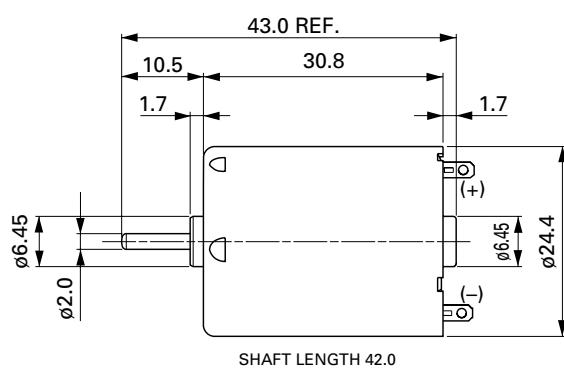
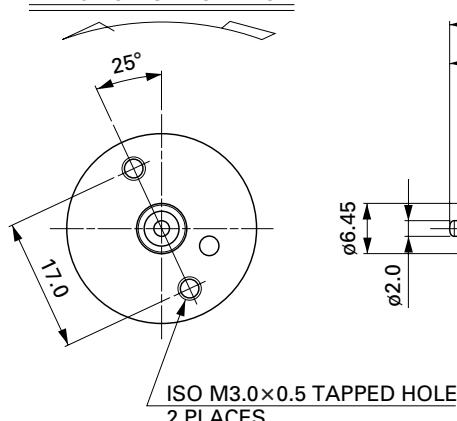


Typical Applications Audio and Visual Equipments : VCR



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-270RH-12370	6 ~ 15	12V CONSTANT	6200	0.028	5170	0.14	1.88	19.2	1.02	11.3	115	0.70

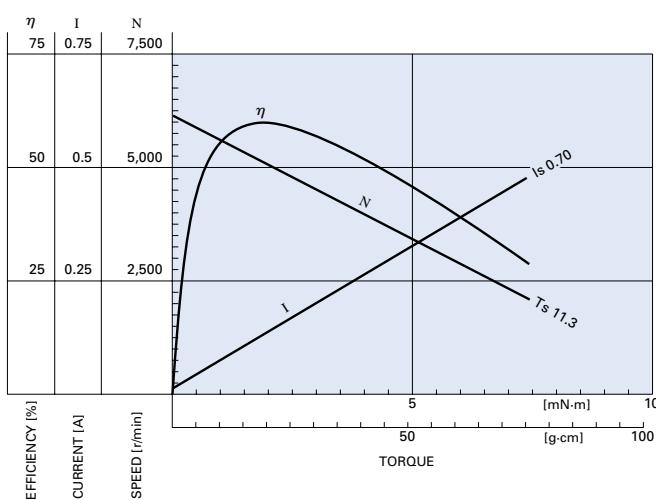
DIRECTION OF ROTATION



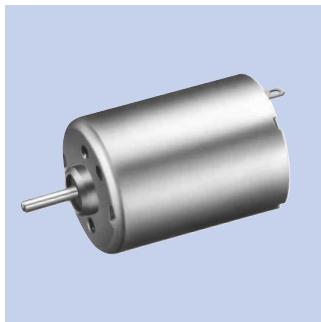
WEIGHT: 51g (APPROX)

RF-270RH-12370

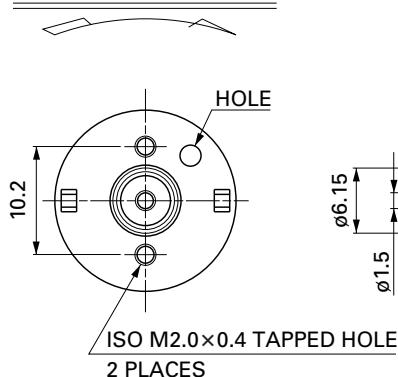
12.0V



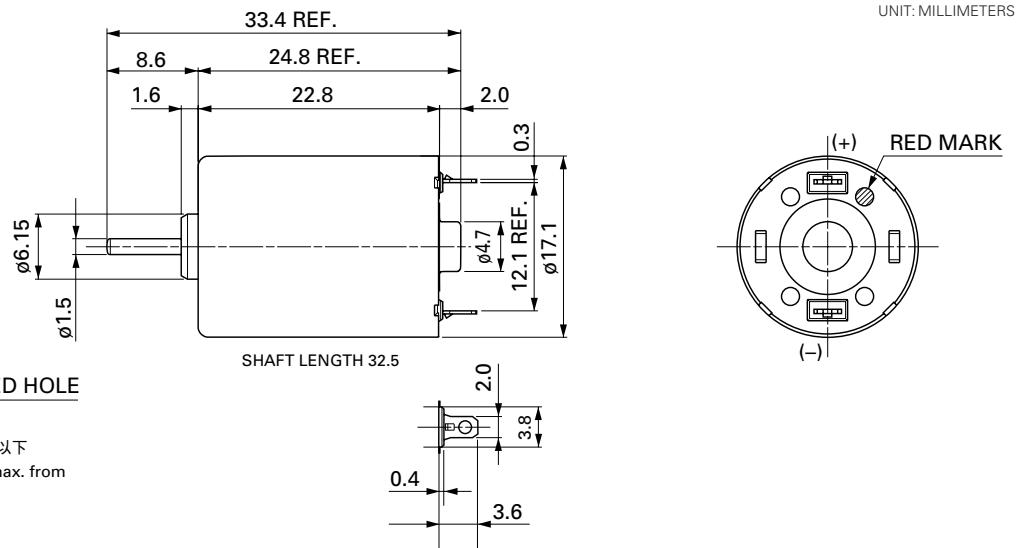
Typical Applications Audio and Visual Equipments : CD Player / DVD Player
Household Appliances : Electric Shaver



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
RF-130CH-12250	2.0 ~ 7.5	3.5V CONST. (CW)	4700	0.028	3730	0.11	0.49	5.0	0.19	2.36
		6V CONST. (CW)	8100	0.036	6600	0.16	0.76	7.8	0.53	4.12
RF-130CH-2860	1.0 ~ 1.5	1.5V CONST. (CW+)	9200	0.14	7600	0.67	0.74	7.5	0.58	4.24

DIRECTION OF ROTATION

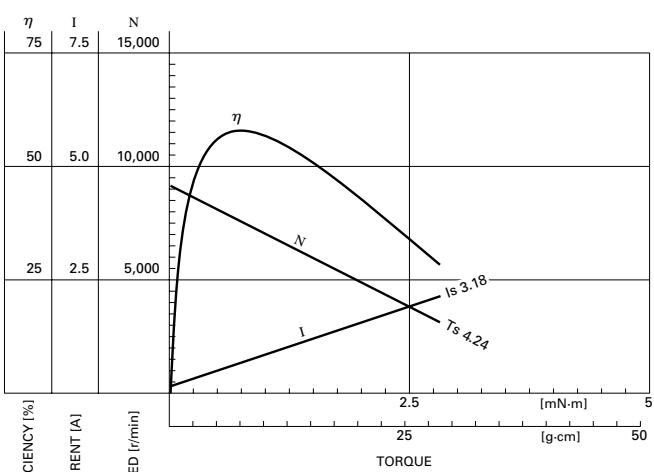
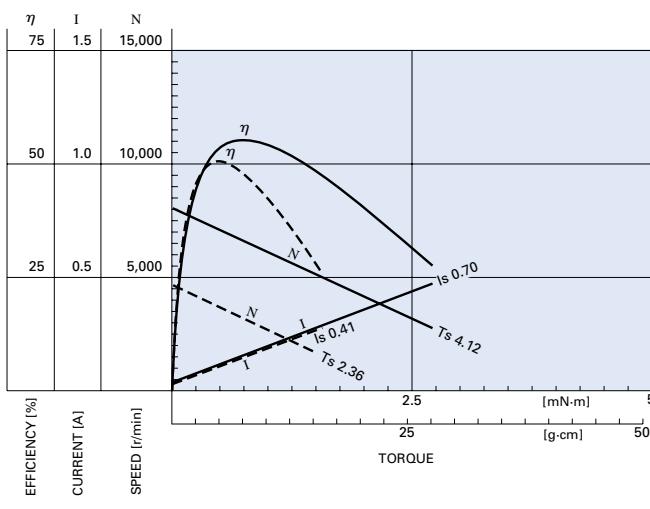
取付けネジはモーターケース面より1.2以下
 Usable machine screw length 1.2 max. from
 motor mounting surface.

**RF-130CH-12250**

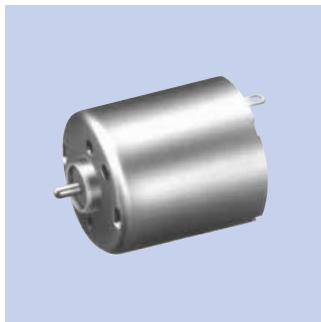
---- 3.5V —— 6.0V

RF-130CH-2860

1.5V

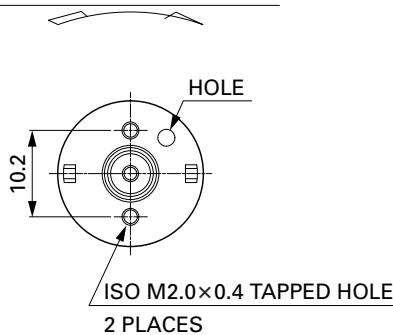


Typical Applications Toys and Models : Radio Control Model / Servo Mechanism

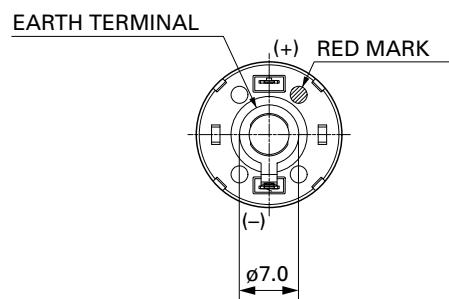
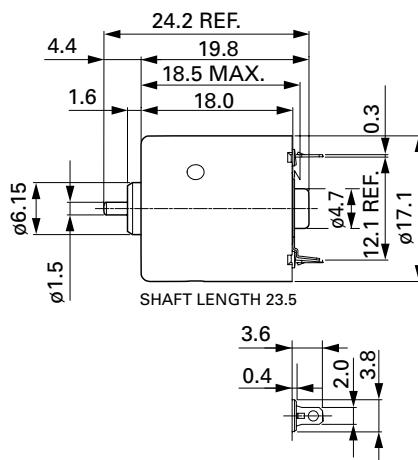


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RF-020TH-10210	2 ~ 5	4.5V CONSTANT	12600	0.058	9590	0.18	0.38	3.9	0.39	1.61	16	0.59

DIRECTION OF ROTATION



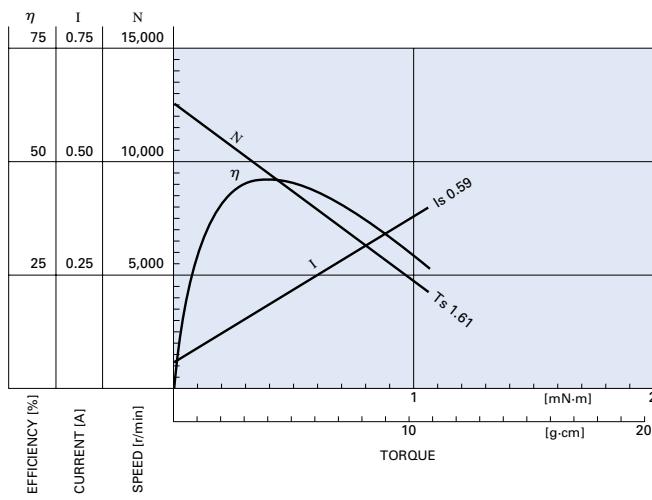
取付けネジはモータケース面より1.2以下
Usable machine screw length 1.2 max. from
motor mounting surface.



WEIGHT: 16g (APPROX)

RF-020TH-10210

4.5V

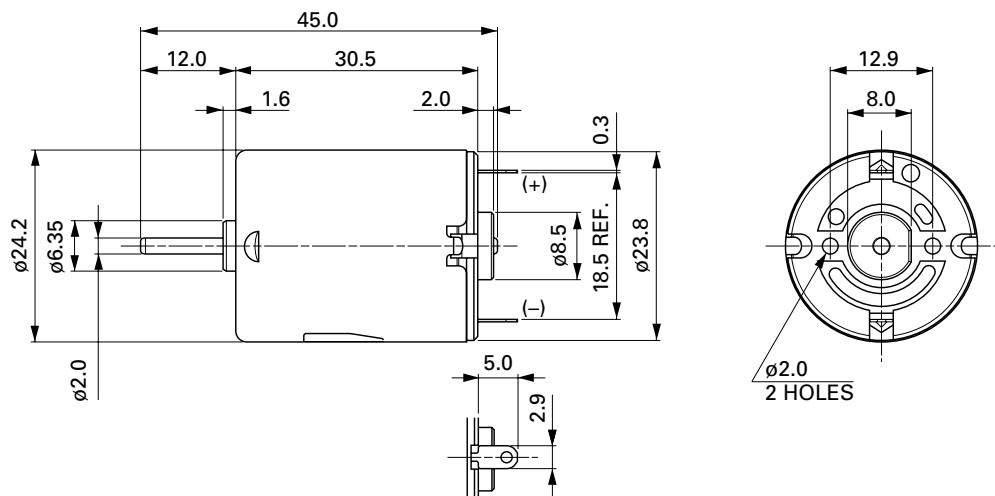
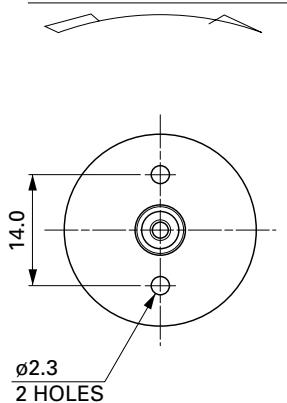


Typical Applications Toys and Models : Motorized Toy / Motorized Plastic Model
Household Appliances : Massager / Vibrator



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL		
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT g·cm	A
RE-280RA-2865	1.5 ~ 3.0	1.5V CONSTANT	4600	0.12	3740	0.53	1.13	11.5	0.44	6.08	62
		3V CONSTANT	9200	0.16	7770	0.87	1.98	20.2	1.61	12.7	130
RE-280RA-20120	3 ~ 6	3V CONSTANT	5000	0.070	4120	0.33	1.30	13.3	0.56	7.36	75
		4.5V CONSTANT	7500	0.080	6300	0.42	1.77	18.1	1.17	11.1	113
RE-280RA-2485	1.5 ~ 4.5	3V CONSTANT	7000	0.12	5800	0.58	1.68	17.1	1.02	9.80	100
RE-280SA-2865	1.5 ~ 4.5	3V CONSTANT	7100	0.16	6000	0.88	2.58	26.3	1.62	16.7	170
		4.5V CONSTANT	10400	0.19	8920	1.14	3.34	34.1	3.12	23.5	240
RE-280SA-20120	3 ~ 6	4.5V CONSTANT	5800	0.080	4890	0.43	2.26	23.1	1.16	14.5	148
		6V CONSTANT	7800	0.085	6680	0.50	2.71	27.6	1.89	18.8	192
RE-280SA-2485	3 ~ 6	4.5V CONSTANT	8100	0.13	6880	0.73	2.74	27.9	1.97	18.1	185
											4.10

DIRECTION OF ROTATION



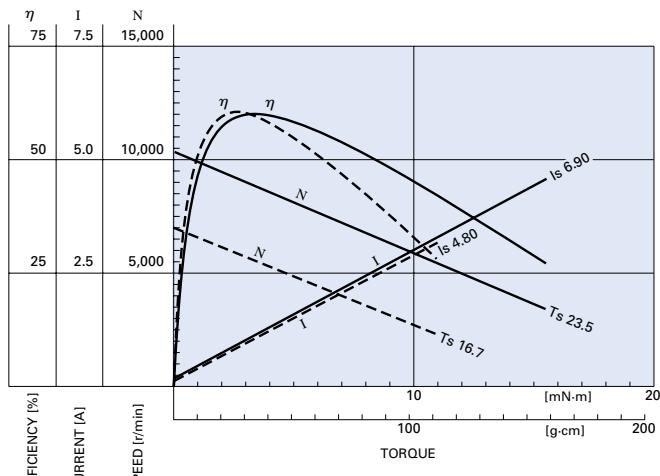
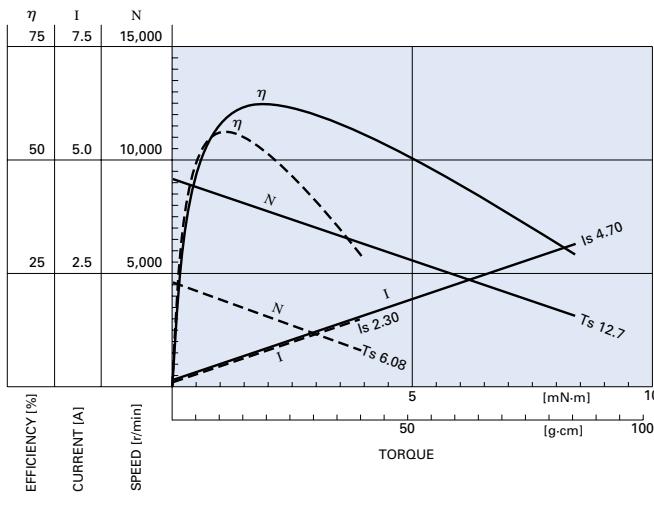
WEIGHT: 42g (APPROX)

RE-280RA-2865

---- 1.5V — 3.0V

RE-280SA-2865

---- 3.0V — 4.5V

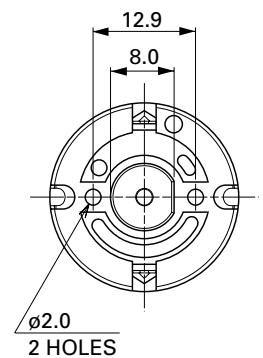
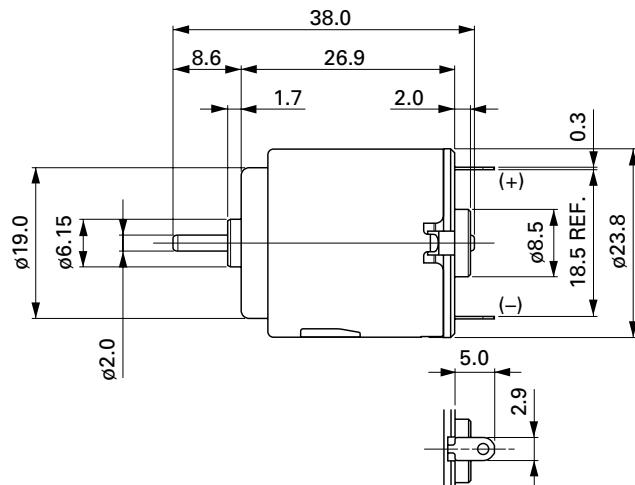
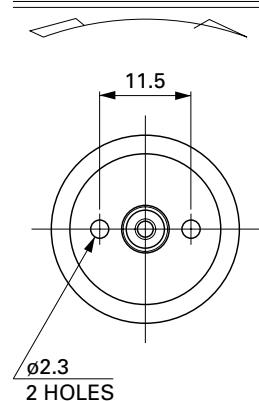


Typical Applications Toys and Models : Motorized Toy / Motorized Plastic Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
RE-260RA-2670	1.5 ~ 3.0	1.5V CONSTANT	6300	0.16	5040	0.64	0.98	10.0	0.52	4.90
		3V CONSTANT	12300	0.20	10200	0.97	1.50	15.2	1.60	8.77
RE-260RA-18130	1.5 ~ 4.5	1.5V CONSTANT	3300	0.075	2490	0.23	0.60	6.1	0.16	2.45
		3V CONSTANT	6900	0.095	5470	0.36	0.97	9.9	0.56	4.70
RE-260RA-2295	1.5 ~ 4.5	3V CONSTANT	9400	0.15	7610	0.64	1.31	13.3	1.04	6.86

DIRECTION OF ROTATION



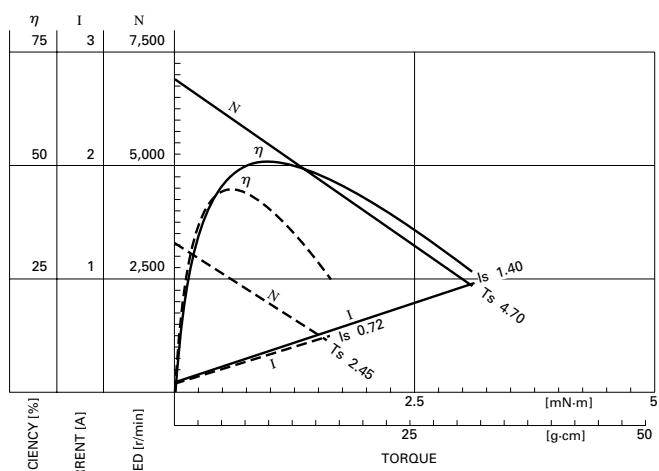
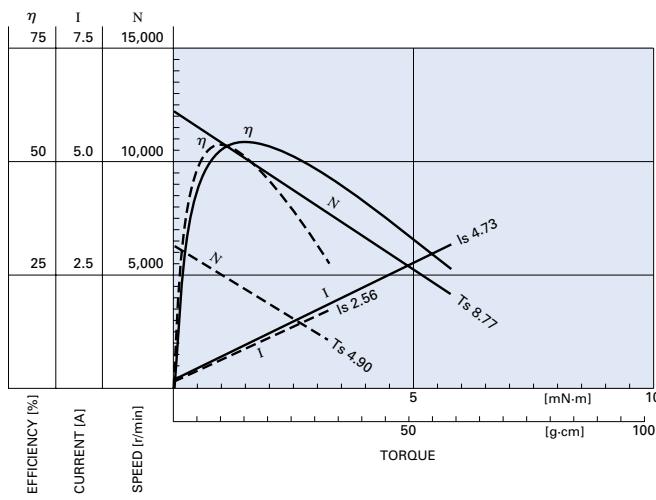
WEIGHT: 28g (APPROX)

RE-260RA-2670

---- 1.5V —— 3.0V

RE-260RA-18130

---- 1.5V —— 3.0V

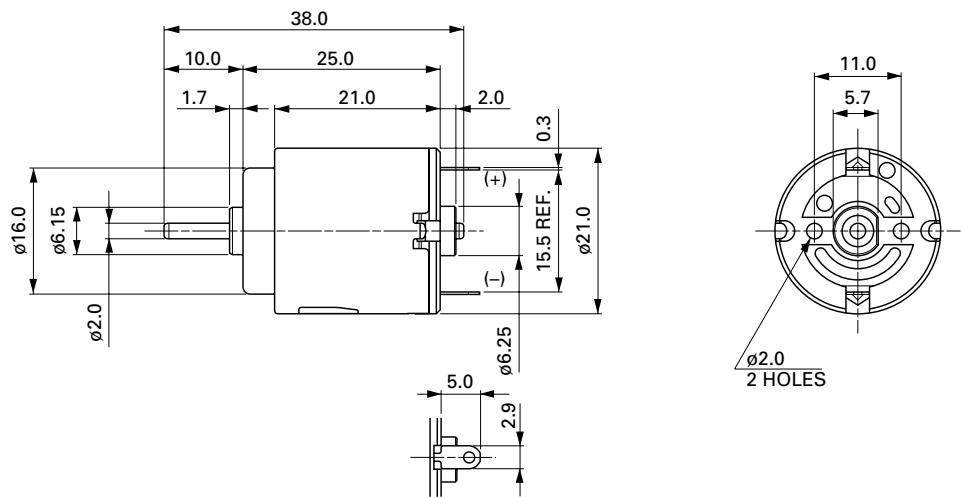
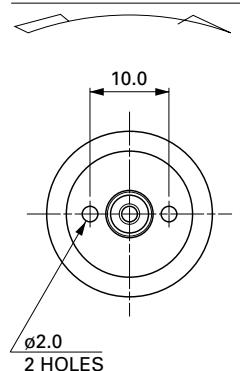


Typical Applications Toys and Models : Motorized Toy / Motorized Plastic Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
RE-140RA-2270	1.5 ~ 3.0	1.5V CONSTANT	8100	0.21	6150	0.66	0.66	6.7	0.42	2.74
		3V CONSTANT	14200	0.25	11320	0.98	1.04	10.6	1.24	5.15
RE-140RA-18100	1.5 ~ 3.0	1.5V CONSTANT	5700	0.13	4230	0.37	0.48	4.9	0.21	1.86
		3V CONSTANT	10900	0.16	8520	0.57	0.79	8.1	0.71	3.63
RE-140RA-12240	3 ~ 6	3V CONSTANT	4800	0.050	3530	0.14	0.44	4.5	0.16	1.67

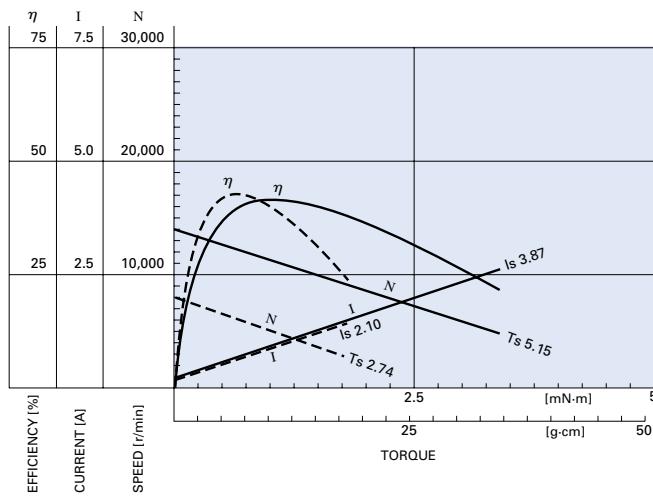
DIRECTION OF ROTATION



WEIGHT: 19g (APPROX)

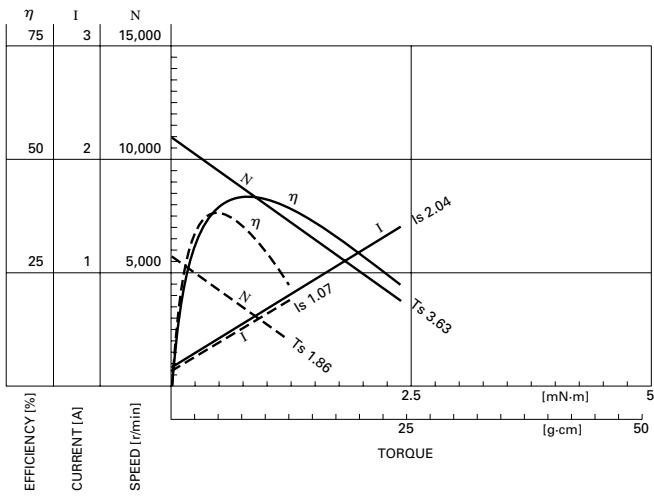
RE-140RA-2270

---- 1.5V —— 3.0V



RE-140RA-18100

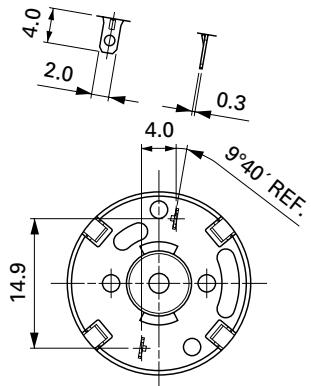
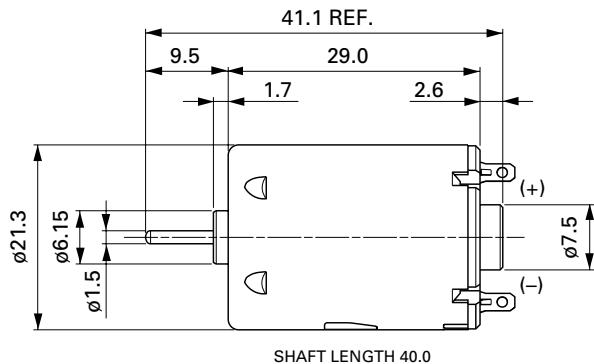
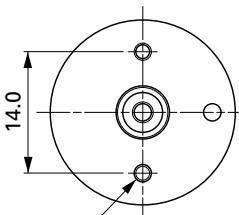
---- 1.5V —— 3.0V



Typical Applications Household Appliances : Electric Shaver
Toys and Models : Motorized Toy



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE
			r/min	A			mN·m	g·cm		
RD-180SA-2085	1.2 ~ 4.5	1.5V CONSTANT	3300	0.048	2730	0.23	0.73	7.4	0.21	4.22
		2.4V CONSTANT	5300	0.045	4570	0.28	0.96	9.7	0.46	6.97

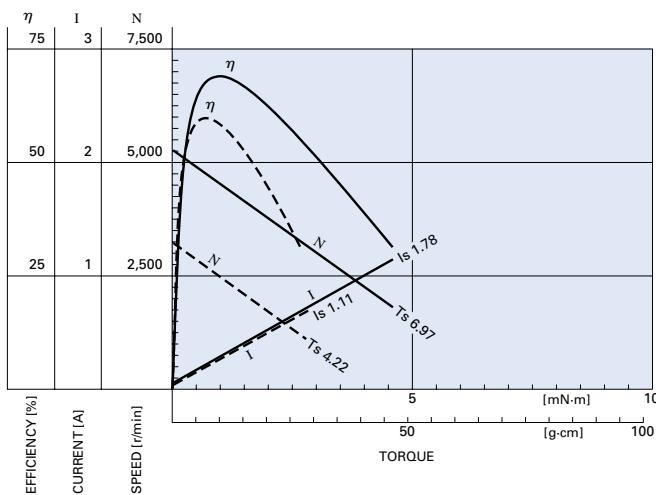
DIRECTION OF ROTATIONISO M2.0×0.4 TAPPED HOLE
2 PLACES

取付けネジはモータケース面より2.5以下
 Usable machine screw length 2.5 max. from
 motor mounting surface.

WEIGHT: 31g (APPROX)

RD-180SA-2085

---- 1.5V —— 2.4V

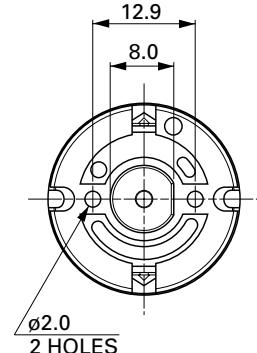
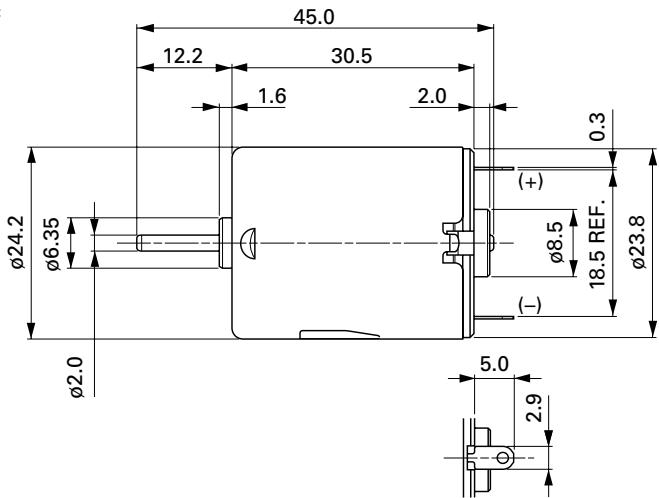
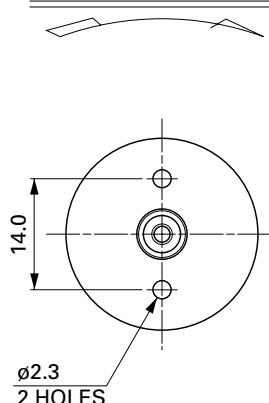


Typical Applications Household Appliances : Hair Clipper / Massager / Vibrator
 Toys and Models : Motorized Toy / Radio Control Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
RC-280RA-2865	4.5 ~ 6.0	4.5V CONSTANT	13600	0.27	11350	1.36	2.92	29.8	3.47	17.7
RC-280RA-20120	4.5 ~ 9.0	4.5V CONSTANT	7500	0.11	6110	0.48	1.91	19.4	1.22	10.3
		6V CONSTANT	9900	0.12	8210	0.58	2.26	23.0	1.94	13.2
		7.2V CONSTANT	16800	0.21	14260	1.18	3.27	33.3	4.87	21.6
RC-280SA-2865	4.5 ~ 9.0	6V CONSTANT	14000	0.28	11910	1.60	4.46	45.5	5.56	29.9
RC-280SA-20120	4.5 ~ 12.0	6V CONSTANT	7700	0.12	6390	0.58	2.93	29.9	1.96	17.2
		12V CONSTANT	15500	0.15	13320	0.92	4.68	47.7	6.52	33.3
RC-280SA-2485	4.5 ~ 9.6	7.5V CONSTANT	13300	0.19	11350	1.10	4.25	43.3	5.04	28.9

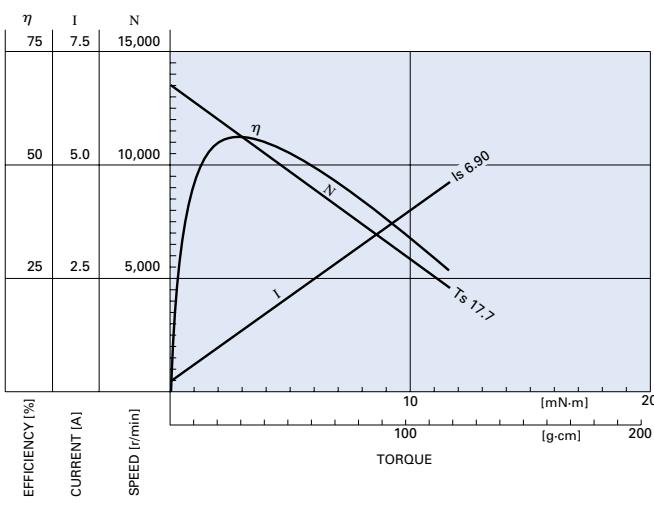
UNIT: MILLIMETERS

DIRECTION OF ROTATION

WEIGHT: 42g (APPROX)

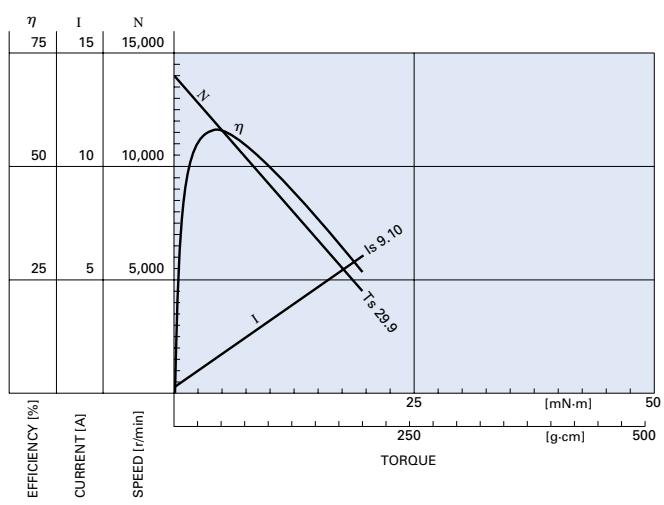
RC-280RA-2865

4.5V



RC-280SA-2865

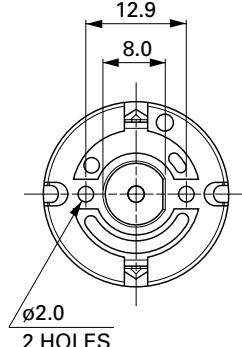
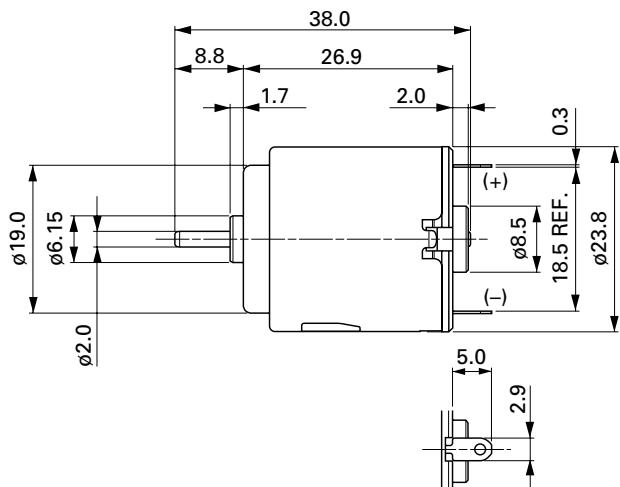
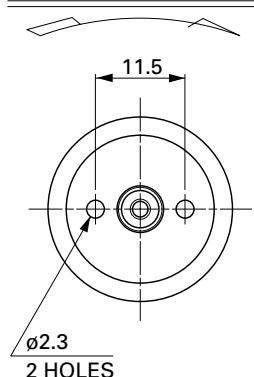
6.0V





Model	Voltage		No Load		At Maximum Efficiency				Stall			
	Operating Range	Nominal	Speed	Current	Speed	Current	Torque		Output	Torque		Current
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
RC-260RA-18130	4.5 ~ 6.0	4.5V CONSTANT	9800	0.14	7750	0.53	1.48	15.1	1.20	7.06	72	2.00
		6V CONSTANT	13600	0.17	10840	0.67	1.71	17.5	1.94	8.44	86	2.62
RC-260RA-2670	3.0 ~ 4.5	4.5V CONSTANT	18500	0.30	15290	1.43	2.14	21.8	3.41	12.3	125	6.80
RC-260SA-2670	3.0 ~ 4.5	4.5V CONSTANT	13700	0.24	11520	1.27	2.66	27.1	3.20	16.7	170	6.70
RC-260SA-2295	3 ~ 6	4.5V CONSTANT	10200	0.20	8300	0.87	2.43	24.7	2.11	13.0	133	3.80

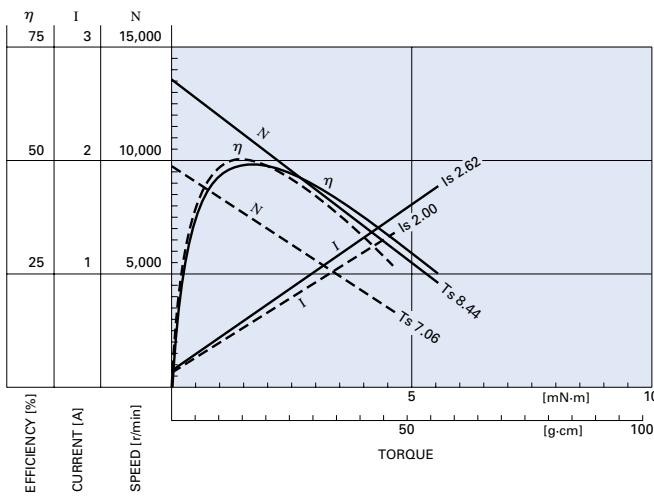
UNIT: MILLIMETERS



WEIGHT: 28g (APPROX)

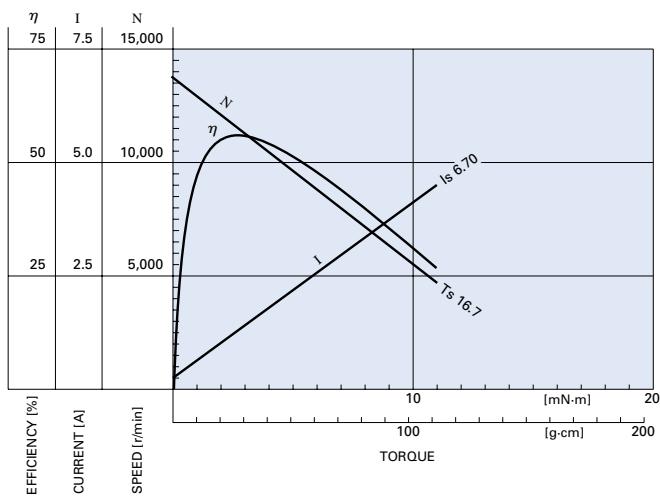
RC-260RA-18130

-----4.5V —— 6.0V



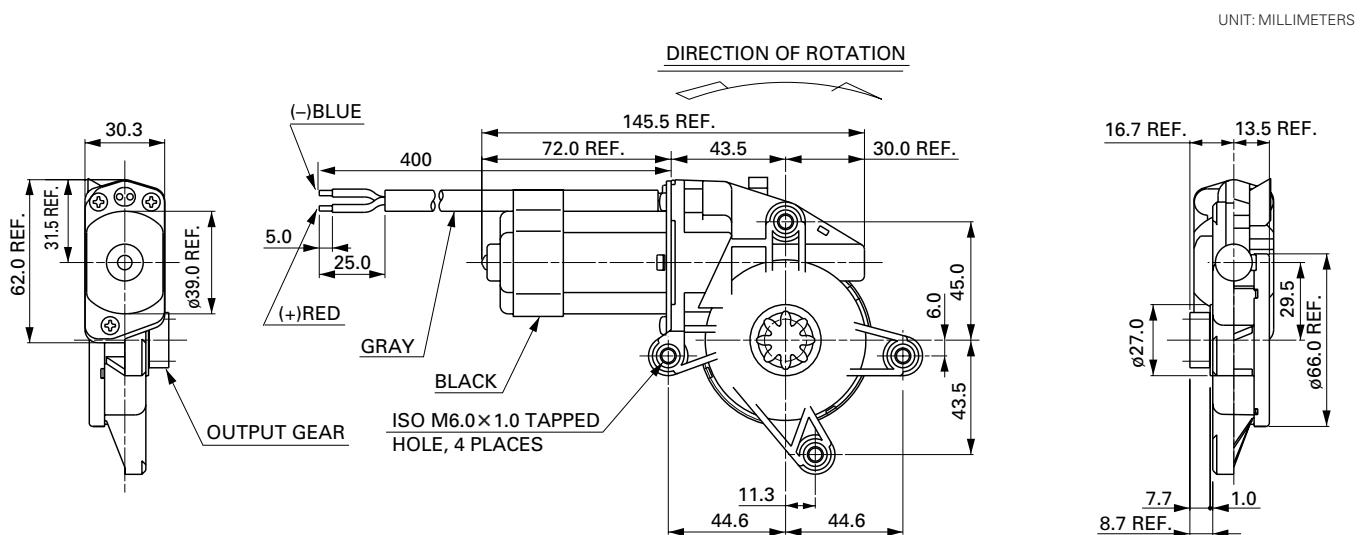
RC-260SA-2670

4.5V



**Distinctive Features**

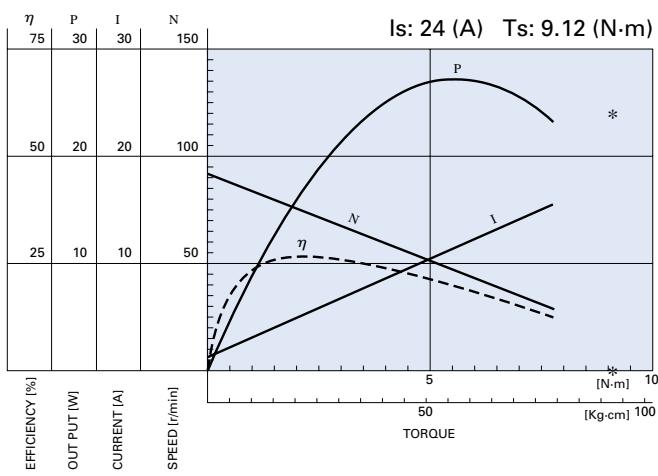
- The drive motor is designed to be the compact sized motor offered for power window applications, measuring 29mm thick and 39mm across the diameter.
- This motor is designed with water proof construction.



WEIGHT: 520g (APPROX)

JC/LC-578VA-4720

12.0V



Typical Applications Household Appliances : Electric Shaver / Hair Clipper

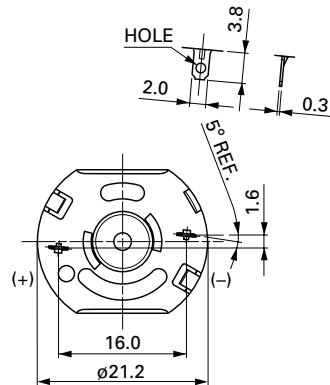
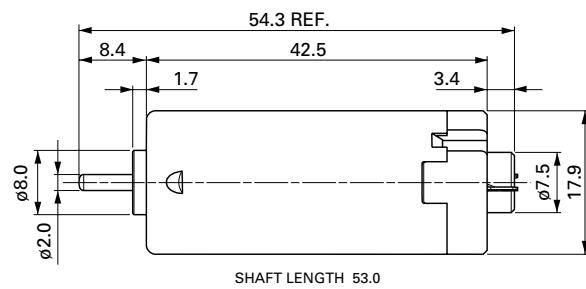
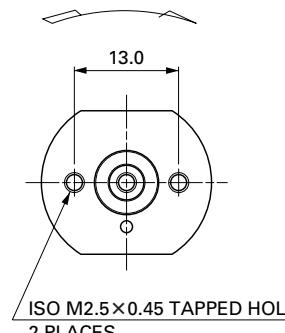


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FK-290PY-051000	100 ~ 120	100V CONSTANT	6800	0.005	5470	0.021	2.01	20.5	1.15	10.3	105	0.085

UNIT: MILLIMETERS

CW(+)

DIRECTION OF ROTATION

ISO M2.5×0.45 TAPPED HOLE
2 PLACES

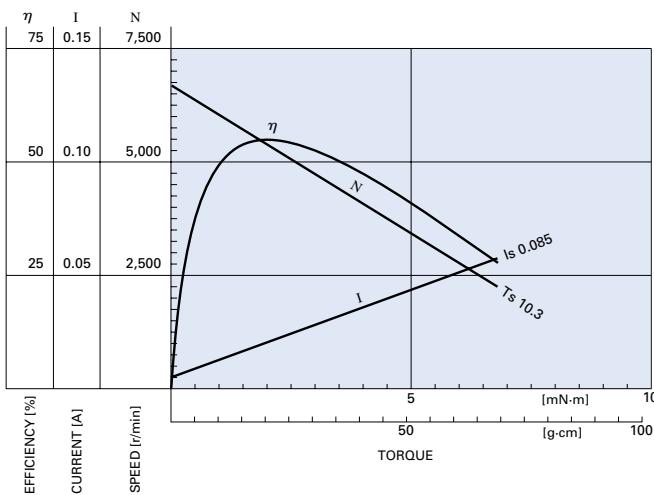
取付けネジはモータケース面より2.0以下

Usable machine screw length 2.0 max. from
motor mounting surface.

WEIGHT: 50g (APPROX)

FK-290PY-051000

100.0V



Typical Applications

Automotive Products : Door Lock Actuator / Retractable Rearview Mirror

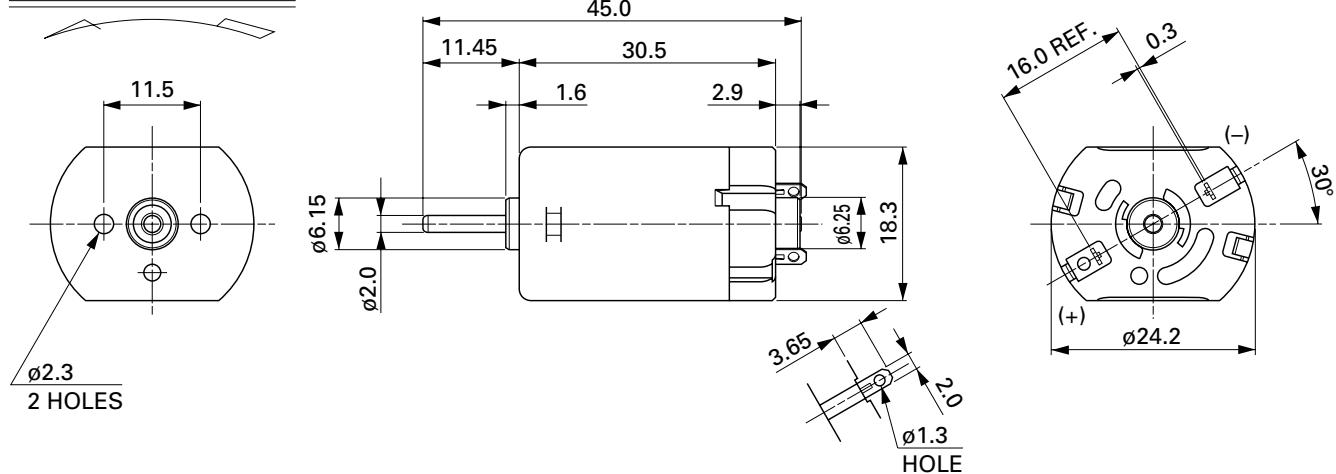
Household Appliances : Hair Remover

Precision Instruments : Vending Machine



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	CURRENT
			r/min	A			mN·m	g·cm		
FK-280PA-20150	10 ~ 15	12V CONSTANT	12000	0.10	10330	0.62	4.45	45.4	4.81	31.9
FK-280PA-18165	10 ~ 15	12V CONSTANT	10500	0.090	9000	0.54	4.12	42.0	3.88	28.9
FK-280SA-18165	10 ~ 15	12V CONSTANT	12300	0.075	10710	0.50	3.40	34.7	3.81	26.3
FK-280SA-20150	10 ~ 15	12V CONSTANT	13500	0.10	11700	0.65	3.80	38.7	4.64	28.4

DIRECTION OF ROTATION



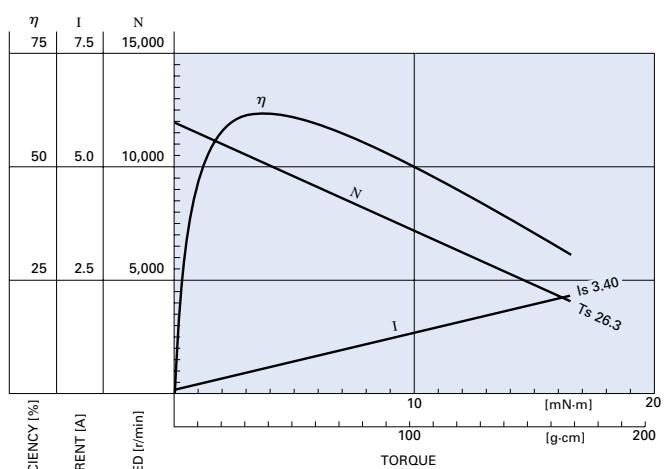
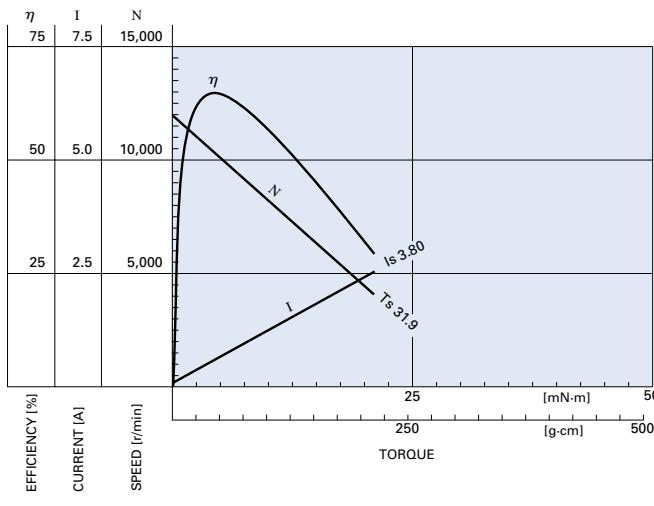
WEIGHT: 36g (APPROX)

FK-280PA-20150

12.0V

FK-280SA-18165

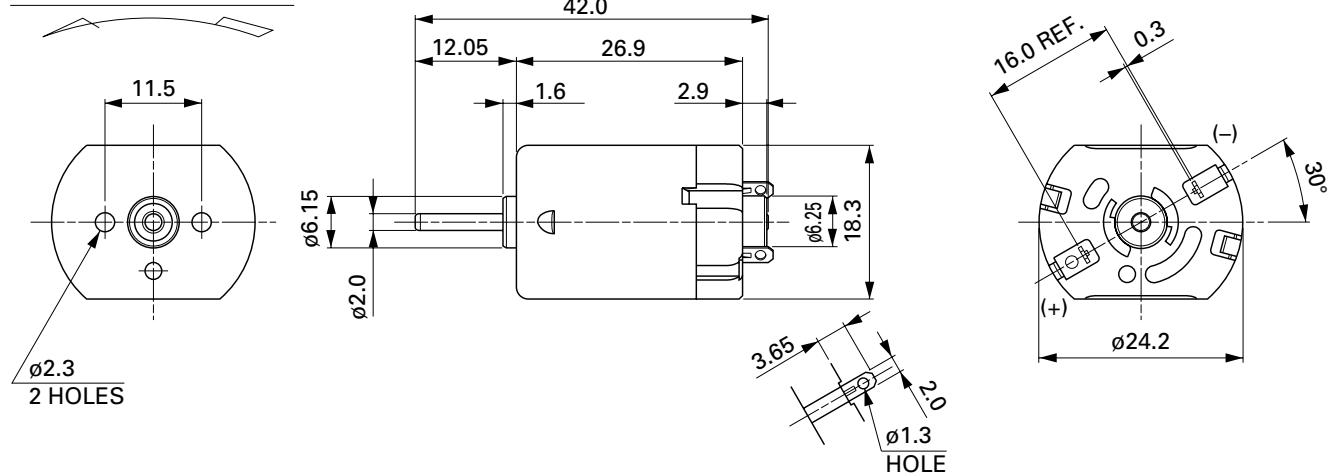
12.0V



Typical Applications : Automotive Products : Door Lock Actuator / Rearview Mirror



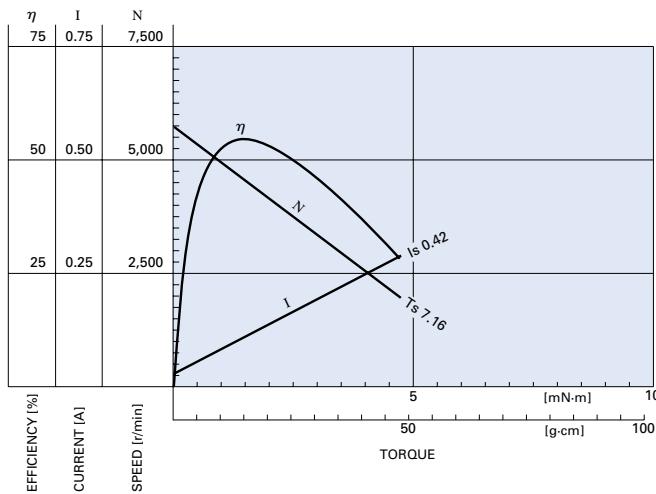
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	mN·m	g·cm
FK-260SA-09450	12 ~ 24	12V CONSTANT	5800	0.027	4630	0.11	1.45	14.8	0.70	7.16
FK-260SA-12300	10 ~ 15	12V CONSTANT	8700	0.042	7220	0.20	1.96	19.9	1.48	11.5

DIRECTION OF ROTATION

WEIGHT: 29g (APPROX)

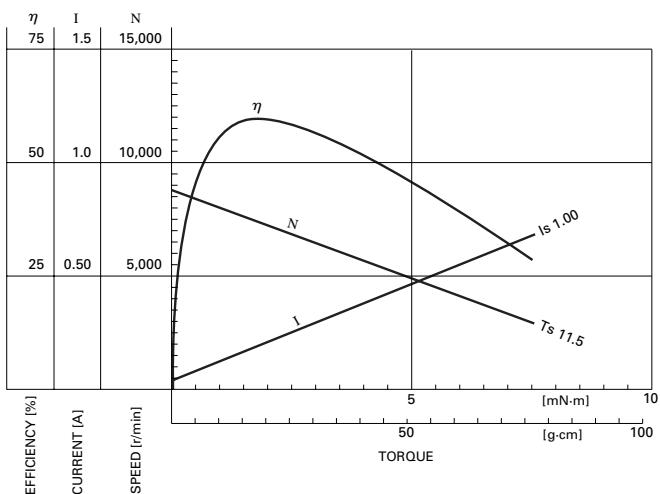
FK-260SA-09450

12.0V



FK-260SA-12300

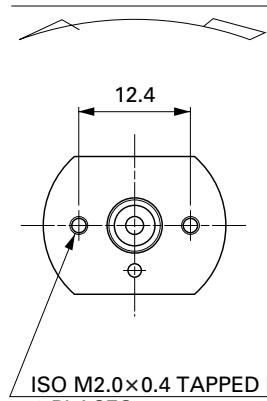
12.0V



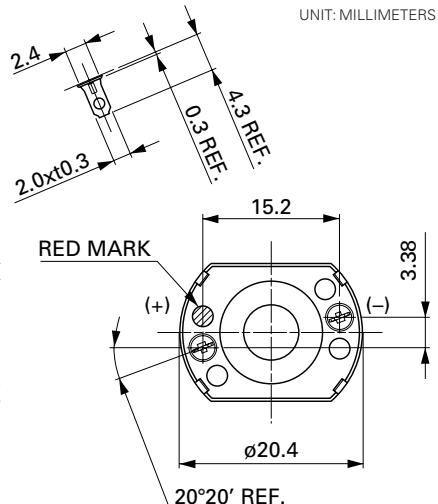
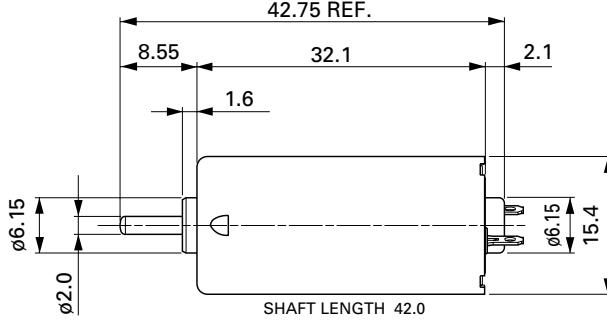
Typical Applications Household Appliances : Electric Shaver
Office Automation Equipments : Printer



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FK-180SH-09450	12 ~ 24	12V CONST. (CCW)	4400	0.021	3500	0.082	1.33	13.6	0.49	6.54	67	0.32
		24V CONST. (CCW)	9200	0.025	7660	0.12	2.12	21.6	1.70	12.7	130	0.62
FK-180SH-17140	6 ~ 12	6V CONST. (CCW+)	7800	0.085	6390	0.39	2.04	20.8	1.36	11.3	115	1.75

DIRECTION OF ROTATIONISO M2.0×0.4 TAPPED HOLE
2 PLACES

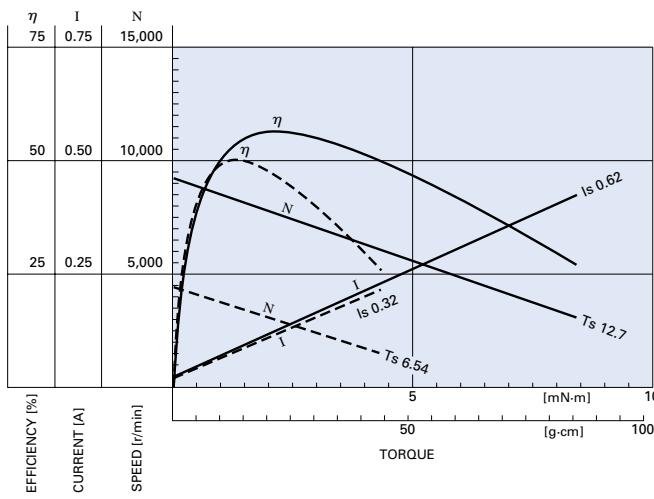
取付けネジはモーターケース面より2.0以下
 Usable machine screw length 2.0 max. from
 motor mounting surface.



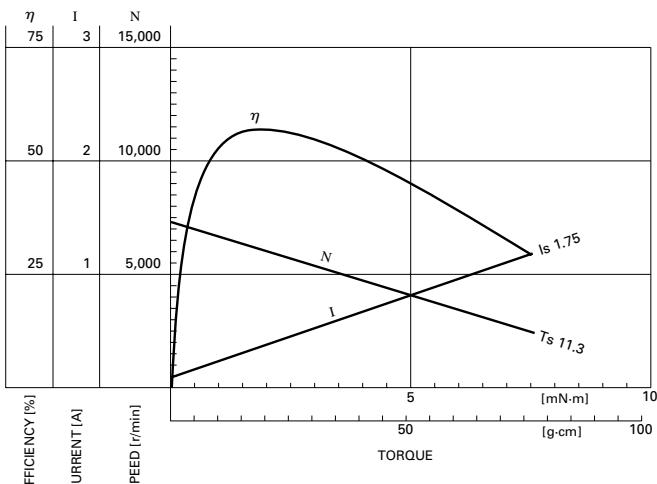
WEIGHT: 32g (APPROX)

FK-180SH-09450

---- 12.0V —— 24.0V

**FK-180SH-17140**

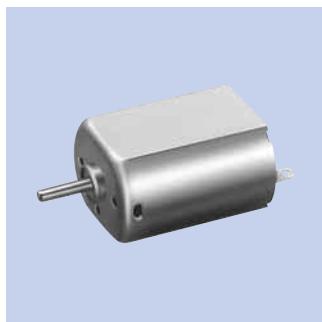
6.0V



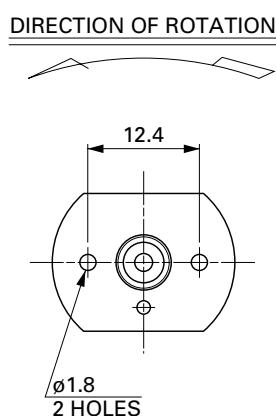
Typical Applications

Office Automation Equipments : Printer

Automotive Products : Rearview Mirror / Head Light Beam Level Adjuster



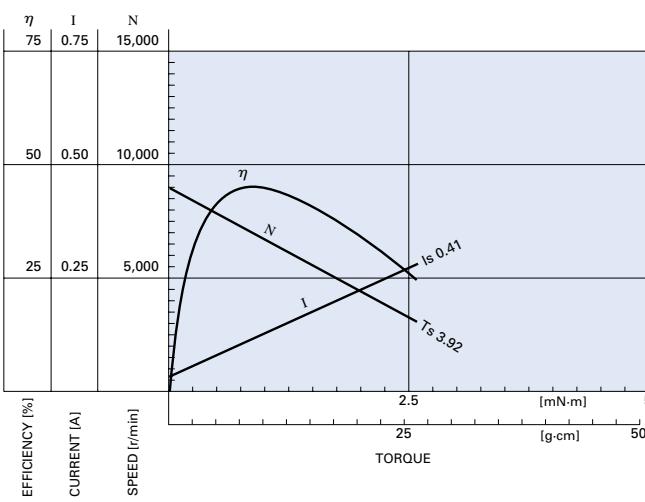
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A	r/min	A	mN·m	g·cm	W	A
FK-130RH-09490	6 ~ 18	12V CONSTANT	9000	0.034	6990	0.12	0.88	8.9	0.64	3.92
FK-130RH-15210	4.5 ~ 6.0	4.8V CONSTANT	8300	0.075	6540	0.28	0.89	9.0	0.61	4.17
FK-130SH-09450	6 ~ 24	12V CONSTANT	7200	0.030	5680	0.11	1.12	11.4	0.66	5.30
FK-130SH-16180	4 ~ 10	4.8V CONSTANT	7100	0.080	5690	0.32	1.31	13.4	0.78	6.59



WEIGHT: 24g (APPROX)

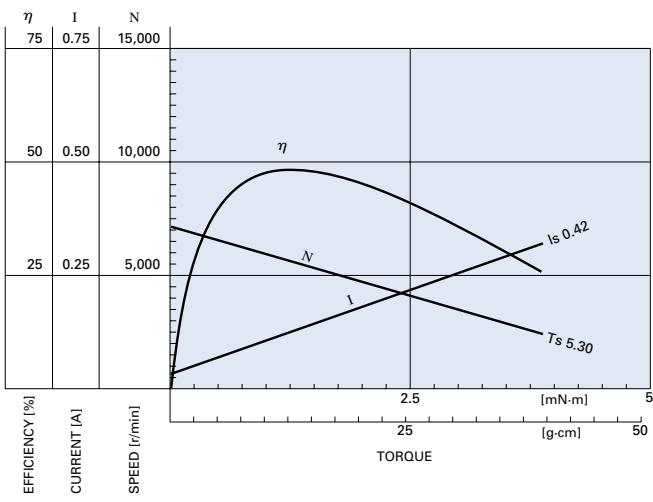
FK-130RH-09490

12.0V



FK-130SH-09450

12.0V

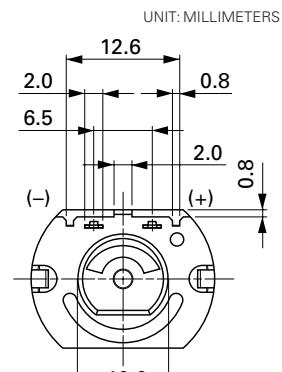
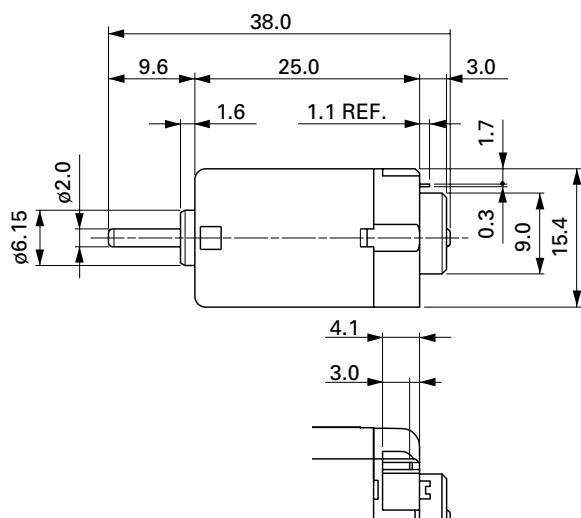
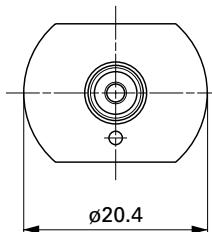
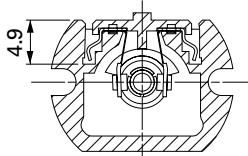


Typical Applications Automotive Products : Rearview Mirror



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
FK-130RD-09490	9 ~ 15	12V CONSTANT	8800	0.030	6870	0.11	0.82	8.3	0.59	3.72	38	0.38
FK-130SD-09390	9 ~ 15	12V CONSTANT	8400	0.045	6450	0.15	1.23	12.5	0.83	5.29	54	0.49

DIRECTION OF ROTATION

端子構造部断面図
Section of Terminal Structure Part.

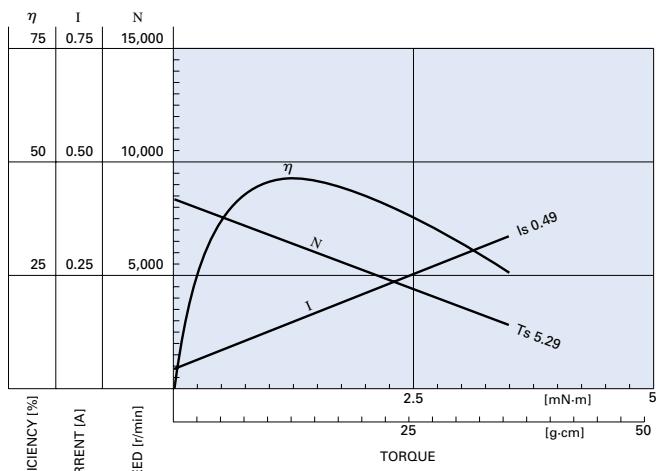
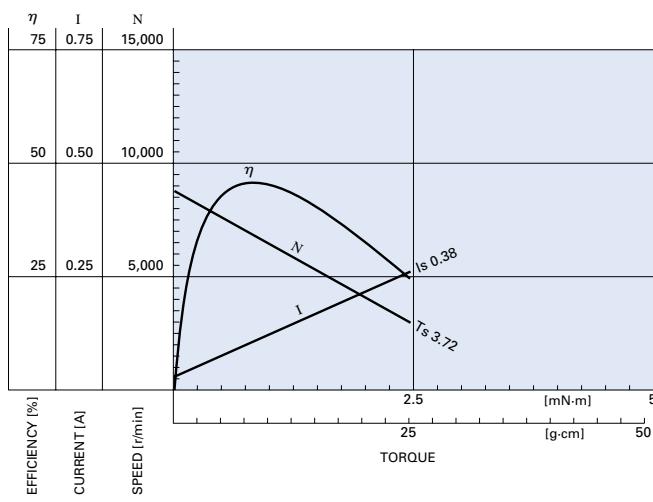
WEIGHT: 24g (APPROX)

FK-130RD-09490

12.0V

FK-130SD-09390

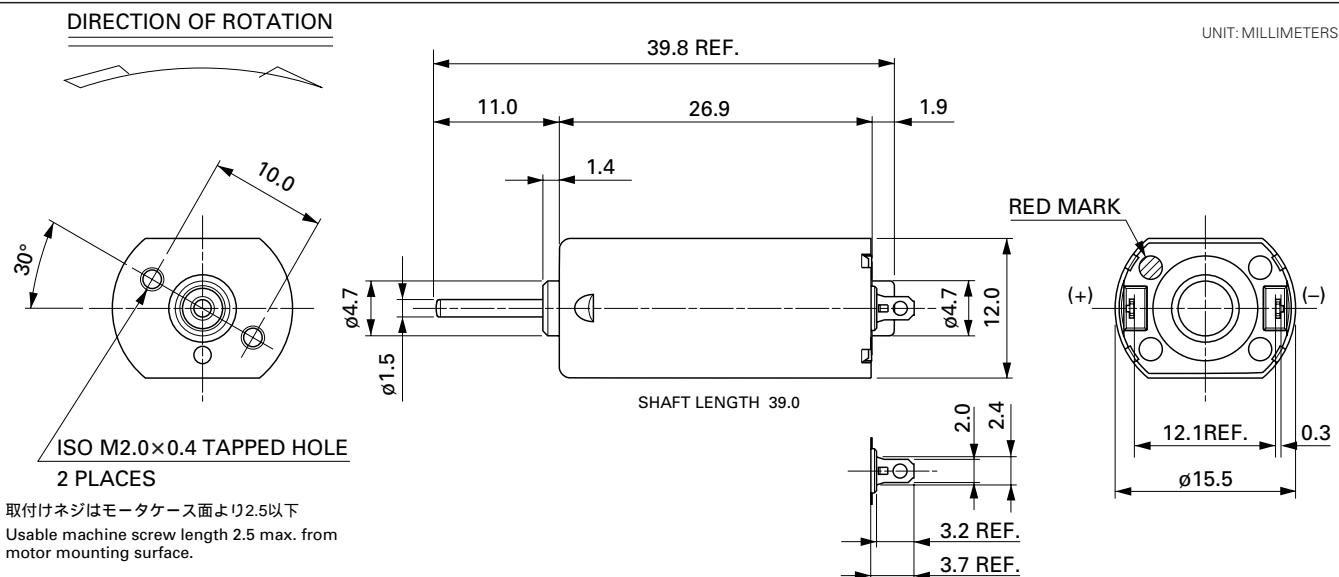
12.0V



Typical Applications Household Appliances
Office Automation Equipments : Printer



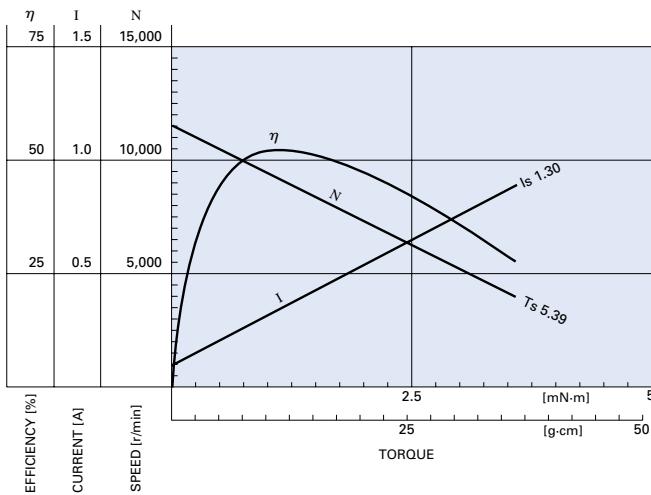
MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	mN·m	g·cm	A	
FK-050SH-13125	3 ~ 10	6V CONSTANT	11500	0.090	9100	0.34	1.12	11.4	1.07	5.39	55	1.30



WEIGHT: 18g (APPROX)

FK-050SH-13125

6.0V

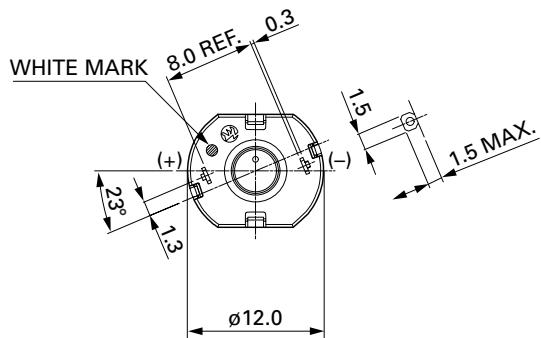
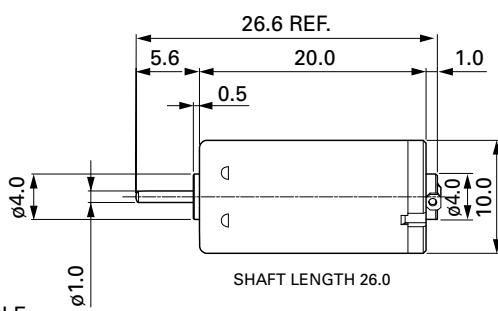
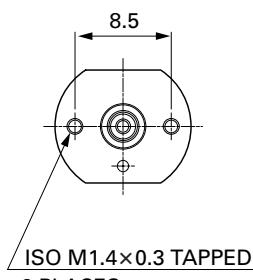


Typical Applications Audio and Visual Equipments : Portable CD Player / MD Player / Car MD Player
Household Appliances : Blood Pressure Meter



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-N30VA-09210	2 ~ 5	2.5V CONSTANT	5200	0.019	4040	0.066	0.18	1.8	0.075	0.80	8.2	0.23

UNIT: MILLIMETERS

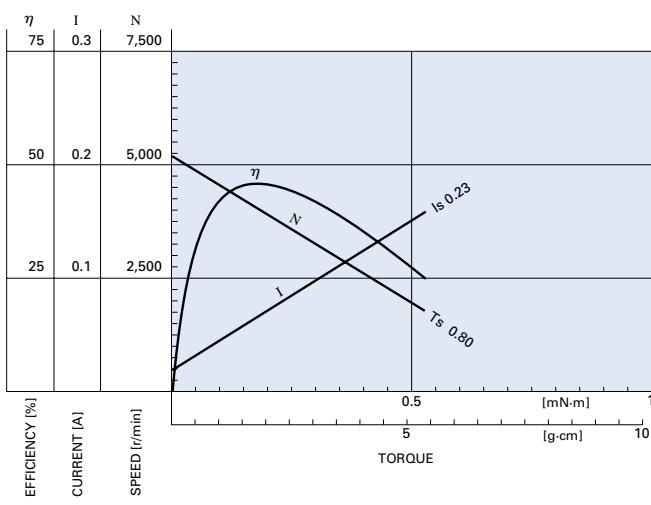
DIRECTION OF ROTATION

取付けネジはモーターケース面より1.3以下
 Usable machine screw length 1.3 max. from
 motor mounting surface.

WEIGHT: 7.5g (APPROX)

FF-N30VA-09210

2.5V



Typical Applications

Audio and Visual Equipments : Car CD/MD Player

Precision Instruments : Camera

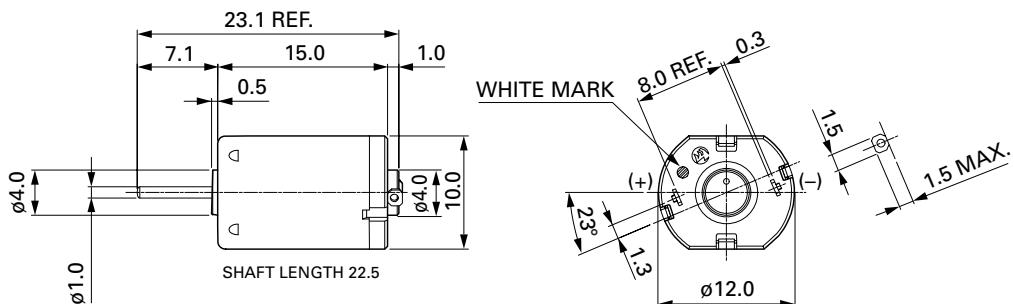
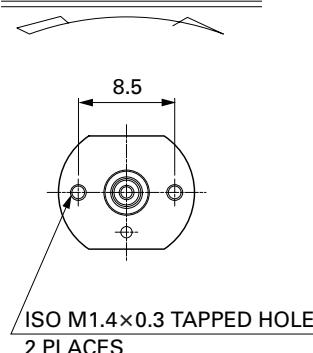
Toys and Models : Motorized Toy / Motorized Plastic Model / Radio Control Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE	CURRENT
			r/min	A			mN·m	g·cm		mN·m	g·cm
FF-N20PA-10190	2 ~ 5	3V CONSTANT	12100	0.045	9390	0.16	0.21	2.1	0.20	0.92	9.4
FF-N20PN-08260	1.5 ~ 6.0	3V CONSTANT	8200	0.040	5920	0.10	0.17	1.8	0.11	0.62	6.3
											0.54
											0.27

UNIT: MILLIMETERS

DIRECTION OF ROTATION



取付けネジはモータケース面より1.3以下
Usable machine screw length 1.3 max. from
motor mounting surface.

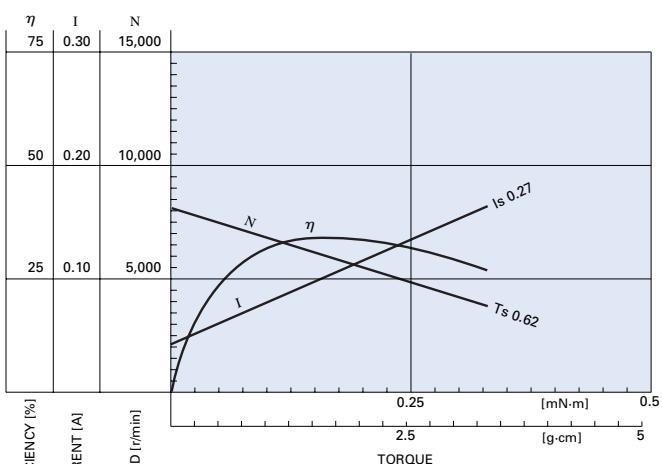
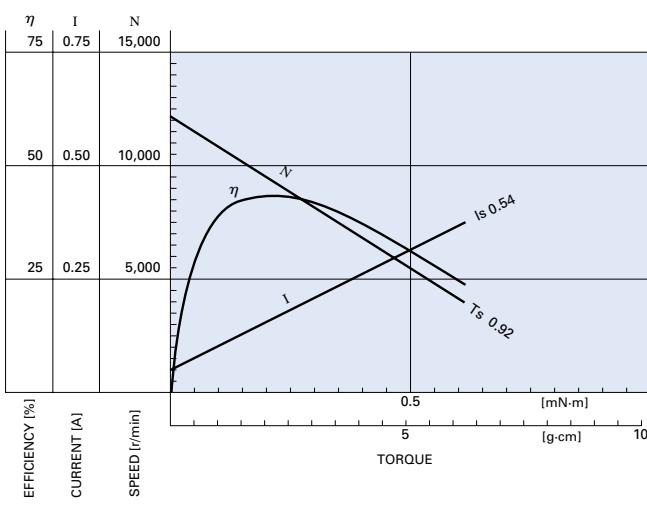
WEIGHT: 5g (APPROX)

FF-N20PA-10190

3.0V

FF-N20PN-08260

3.0V



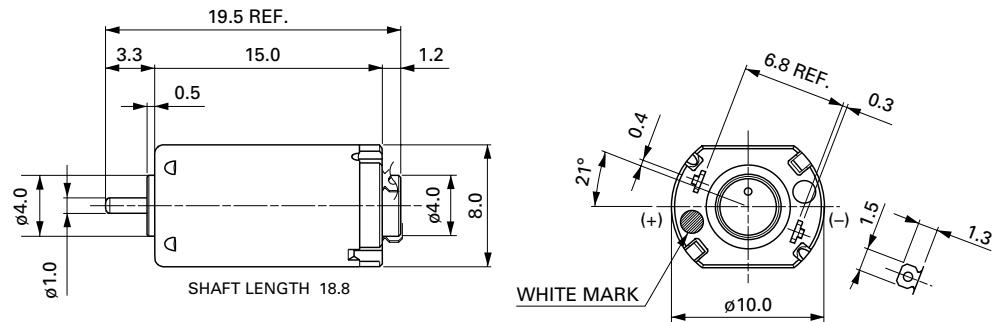
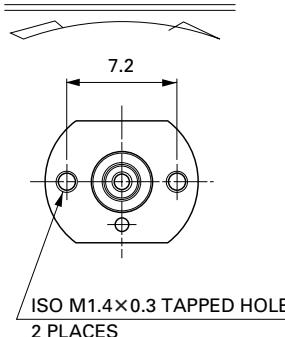
Typical Applications **Audio and Visual Equipments** : MD Player / Car CD Player / Camcorder
Precision Instruments : Camera
Household Appliances : Electric Shaver



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
FF-M20VA-8Z130	2 ~ 3	3V CONSTANT	15200	0.045	11820	0.16	0.16	1.7	0.20	0.74	7.6	0.55
FF-M20VA-10100	1.2 ~ 3.5	2.4V CONSTANT	15800	0.056	12410	0.20	0.18	1.8	0.23	0.84	8.6	0.75
FF-M20VK-7Z170	2 ~ 4	2V CONSTANT	8000	0.025	6020	0.076	0.094	0.96	0.059	0.38	3.9	0.23

UNIT: MILLIMETERS

DIRECTION OF ROTATION



取付けネジはモーターケース面より1.2以下
Usable machine screw length 1.2 max. from
motor mounting surface.

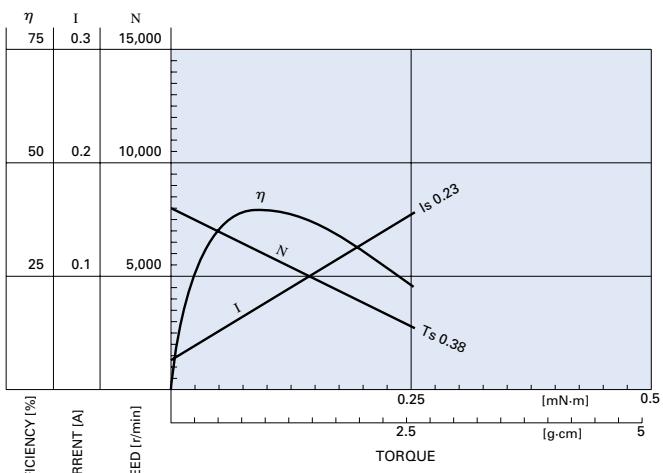
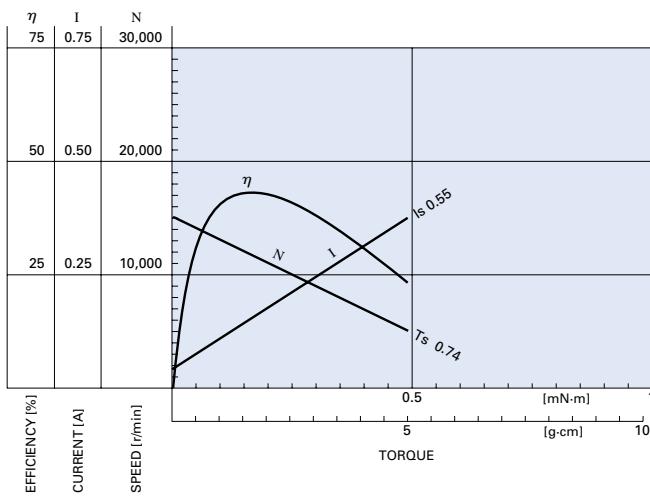
WEIGHT: 4g (APPROX)

FF-M20VA-8Z130

3.0V

FF-M20VK-7Z170

2.0V



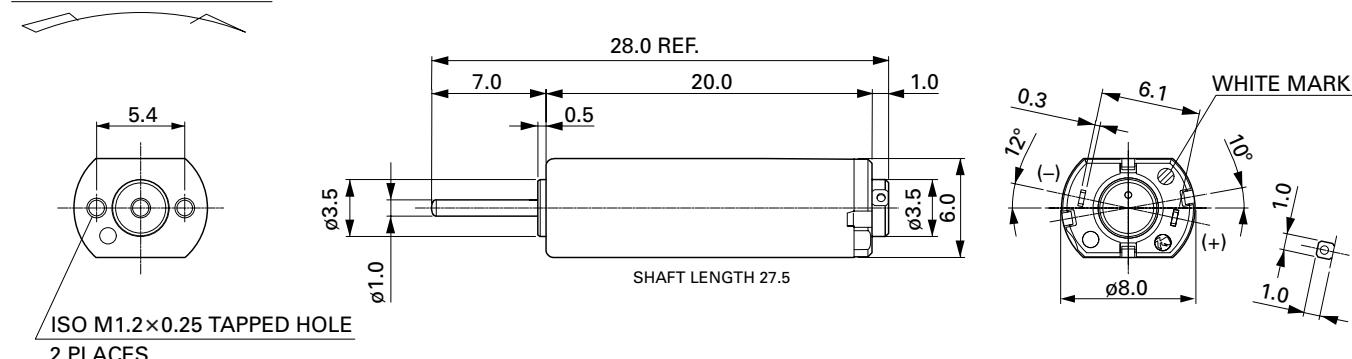
Typical Applications Office Automation Equipments : Note Book PC / CD/DVD-ROM Drive



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED r/min	CURRENT A	r/min	A	mN·m	g·cm	OUTPUT W	mN·m	g·cm	A
FF-K30WC-1077	1.2 ~ 4.5	1.5V CONSTANT	10000	0.043	7510	0.13	0.097	0.99	0.076	0.39	4.0	0.39
FF-K30WC-8Z107	1.5 ~ 4.3	3V CONSTANT	14500	0.036	11150	0.12	0.13	1.3	0.15	0.57	5.8	0.40

UNIT: MILLIMETERS

DIRECTION OF ROTATION

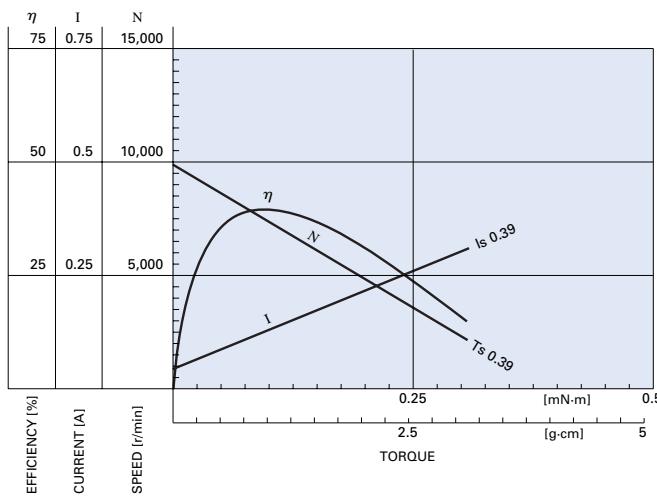


取付けネジはモーターケース面より0.8~1.1
Usable machine screw length 0.8~1.1 from
motor mounting surface.

WEIGHT: 3.6g (APPROX)

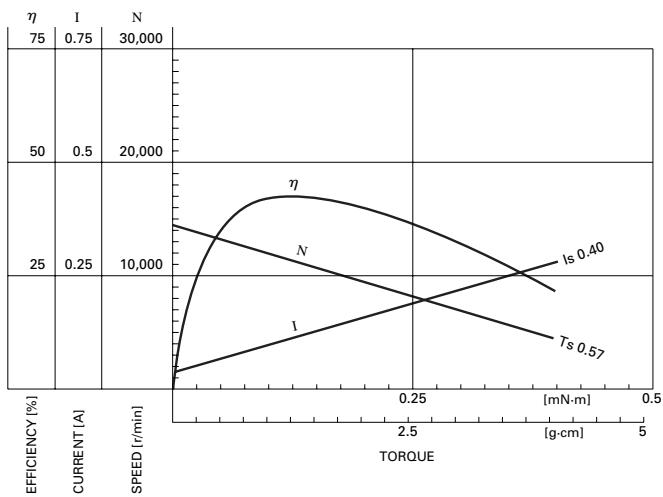
FF-K30WC-1077

1.5V



FF-K30WC-8Z107

3.0V

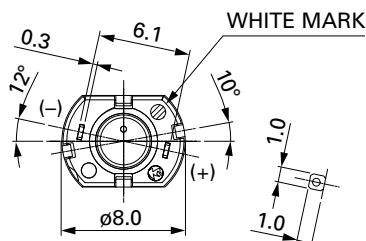
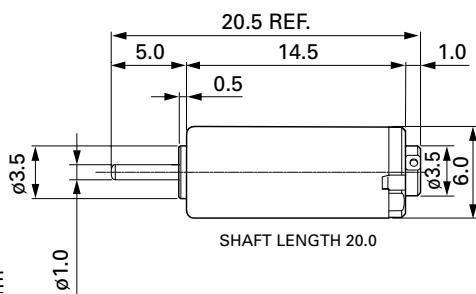
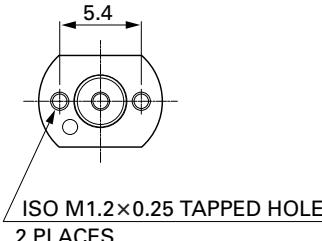


Typical Applications Office Automation Equipments : Note Book PC / CD/DVD-ROM Drive



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	TORQUE		
			r/min	A			mN·m	g·cm				
FF-K20WC-08127	1.5 ~ 3.5	1.5V CONSTANT	8800	0.038	6260	0.093	0.072	0.74	0.047	0.25	2.5	0.23

UNIT: MILLIMETERS

DIRECTION OF ROTATION

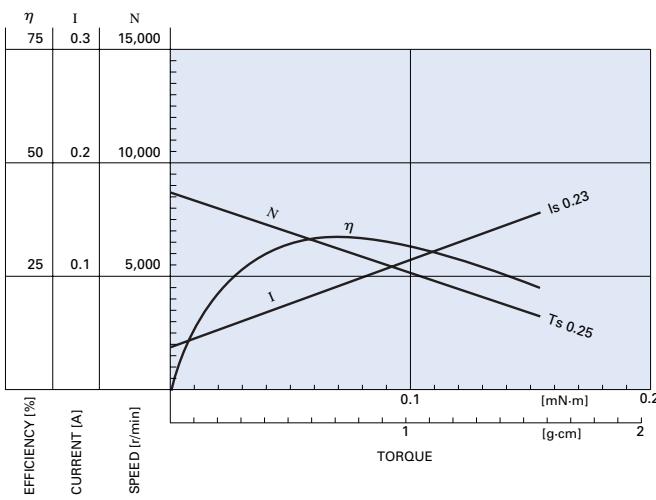
取付けネジはモーターケース面より1.0以下

Usable machine screw length 1.0 max. from
motor mounting surface.

WEIGHT: 2.4g (APPROX)

FF-K20WC-08127

1.5V

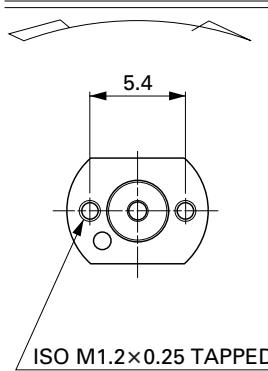


Typical Applications Office Automation Equipments : Note Book PC
Precision Instruments : Camera

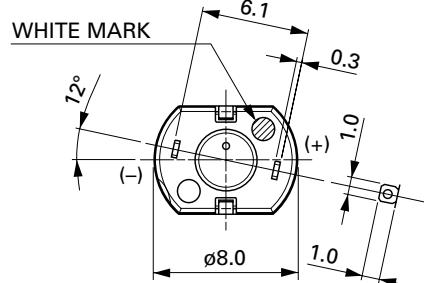
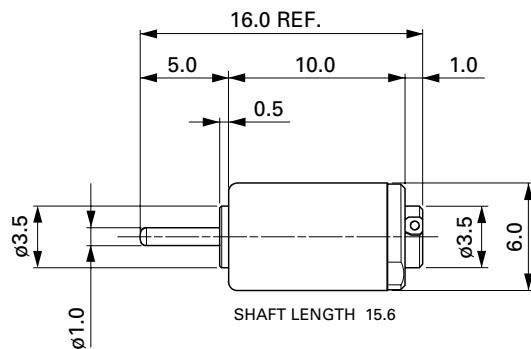


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-K10WA-5Z215	2.5 ~ 3.5	3V CONSTANT	20500	0.057	13870	0.12	0.061	0.63	0.089	0.19	1.9	0.25

UNIT: MILLIMETERS

DIRECTION OF ROTATIONISO M1.2×0.25 TAPPED HOLE
2 PLACES

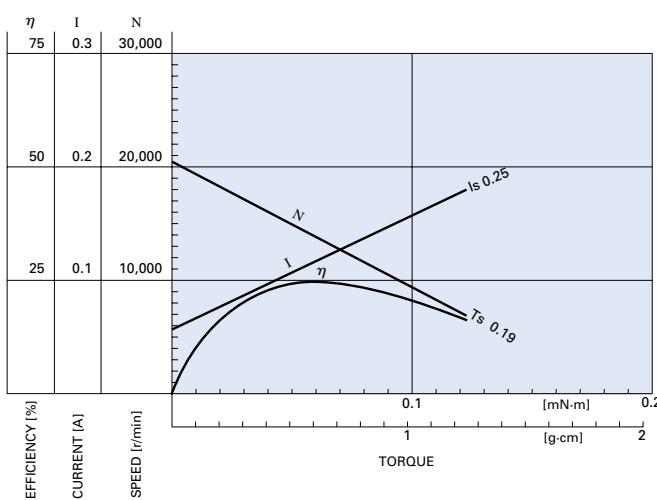
取付けネジはモータケース面より1.0以下
 Usable machine screw length 1.0 max. from
 motor mounting surface.



WEIGHT: 1.6g (APPROX)

FF-K10WA-5Z215

3.0V



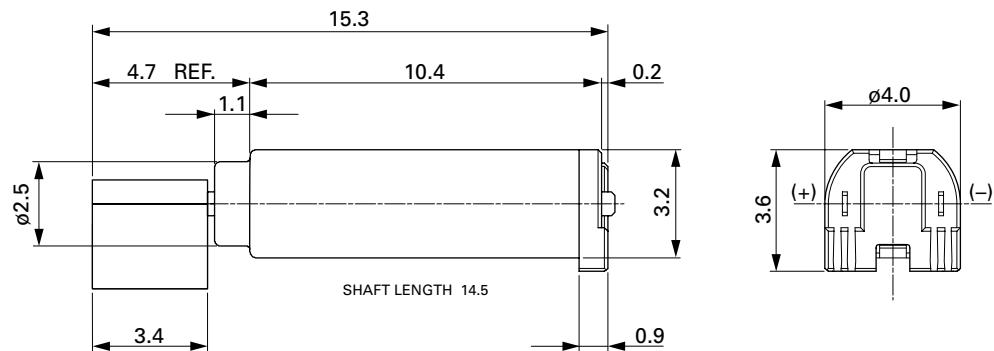
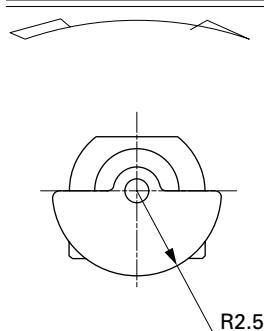
Typical Applications Precision Instruments : Mobile Phone



MODEL	COUNTER WEIGHT SIZE	RATED VOLTAGE	RATED SPEED	RATED CURRENT	STARTING VOLTAGE	STARTING CURRENT	VIBRATION FORCE	WEIGHT
	mm	V	r/min	mA	V	mA	N	g
FF-H30WA	R2.5×L3.5	3V CONSTANT	9000	49	1.7	60	0.5	1.1
	R2.5×L4.5	3V CONSTANT	8500	50	1.8	60	0.6	1.3

UNIT: MILLIMETERS

DIRECTION OF ROTATION



WEIGHT: 1.3g (APPROX)

Motor bracket and input terminals may be designed to customer's request. Mabuchi's own input terminals are also available.

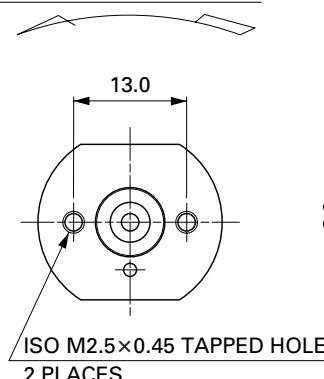


Typical Applications Household Appliances : Electric Shaver

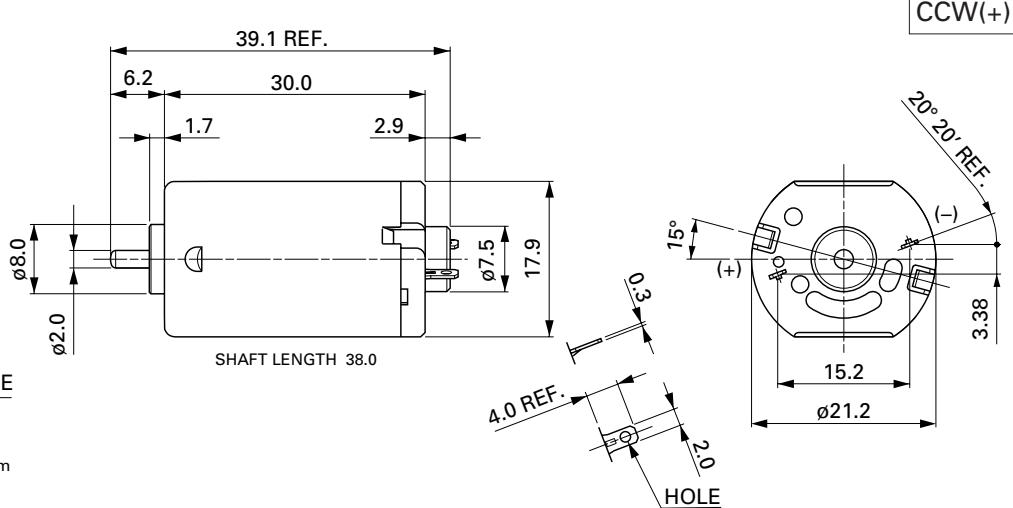


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TOQUE	OUTPUT	TOQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	
FF-270PA-3065	2.4 ~ 4.0	2.4V CONSTANT	6700	0.21	5530	0.99	2.42	24.7	1.40	13.9	142	4.71
FF-270PA-4031	1.2 ~ 2.0	1.2V CONSTANT	7000	0.34	5800	1.65	1.93	19.7	1.17	11.3	115	8.00

DIRECTION OF ROTATION



取付けネジはモーターケース面より2.0以下
Usable machine screw length 2.0 max. from
motor mounting surface.



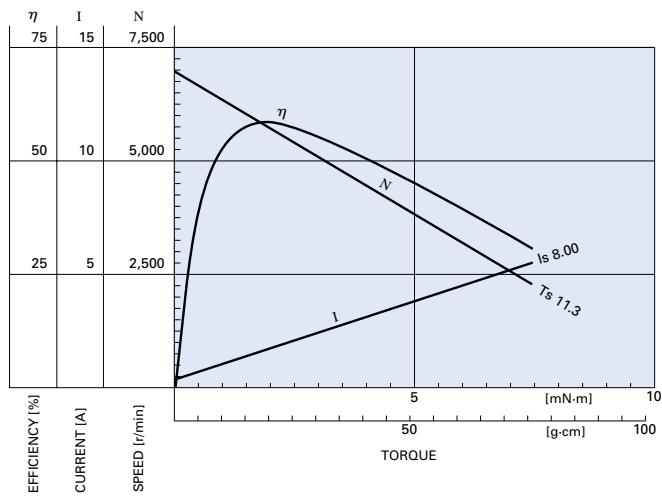
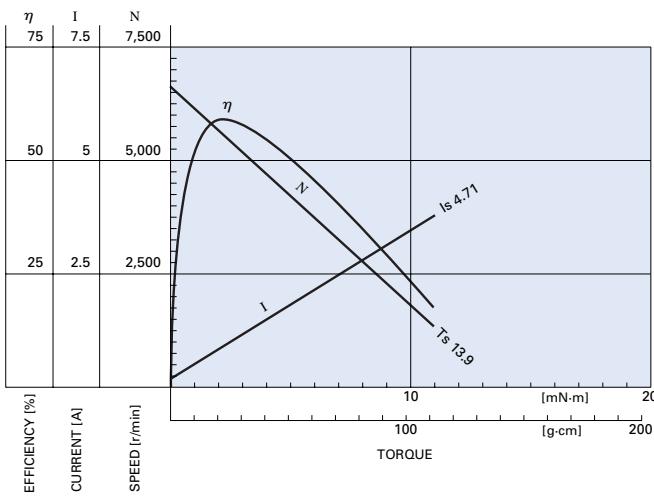
WEIGHT: 34g (APPROX)

FF-270PA-3065

2.4V

FF-270PA-4031

1.2V

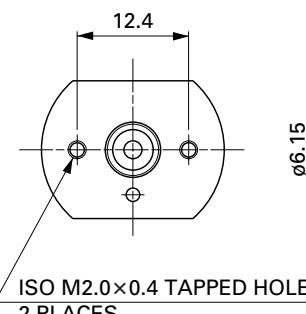
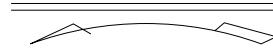


Typical Applications Audio and Visual Equipments : VCR
Household Appliances : Electric Shaver / Tooth Brush

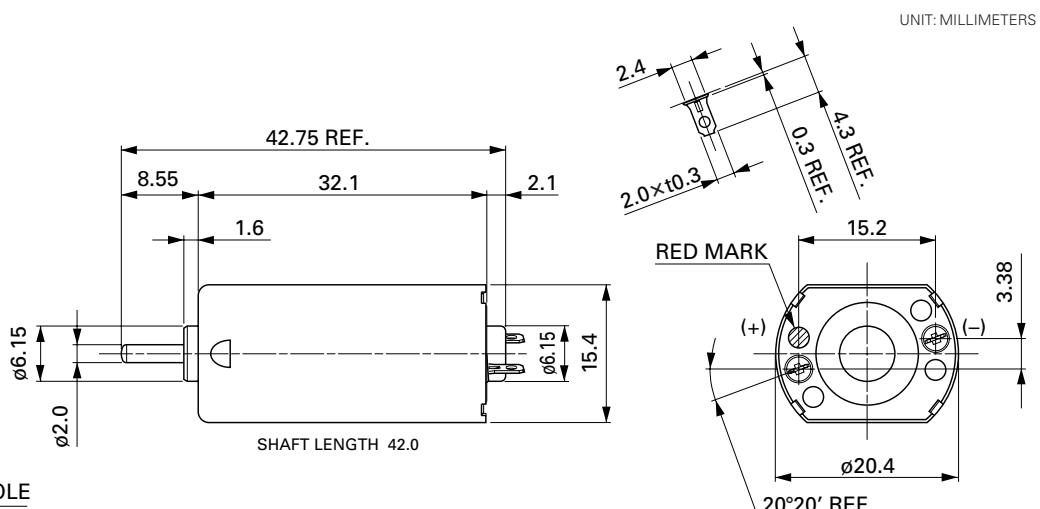


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL (COMMUTATOR POSITION)	SPEED r/min	CURRENT A	SPEED r/min	CURRENT A	TORQUE mN·m	OUTPUT W	TORQUE mN·m	CURRENT A
FF-180PH-2852	1 ~ 3	2.4V CONST. (CCW+)	8100	0.15	6850	0.82	1.82	18.6	1.30	11.8
FF-180PH-4022	1.0 ~ 1.5	1.2V CONST. (CCW+)	9400	0.40	7830	1.99	1.76	17.9	1.44	10.5
FF-180SH-10320	6 ~ 12	12V CONST. (CCW)	6500	0.028	5280	0.12	1.51	15.4	0.84	8.04
FF-180SH-2657	1 ~ 3	2.4V CONST. (CCW+)	7700	0.13	6500	0.70	1.56	15.9	1.06	10.0
FF-180SH-14210	3.0 ~ 7.2	4.5V CONST. (CCW)	3700	0.025	3090	0.13	1.02	10.4	0.33	6.17
FF-180SH-4026	1.0 ~ 1.5	1.2V CONST. (CCW+)	8300	0.30	6990	1.60	1.64	16.7	1.20	10.4
										8.55

DIRECTION OF ROTATION

ISO M2.0×0.4 TAPPED HOLE
2 PLACES

取付けネジはモーターケース面より2.0以下
 Usable machine screw length 2.0 max. from
 motor mounting surface.



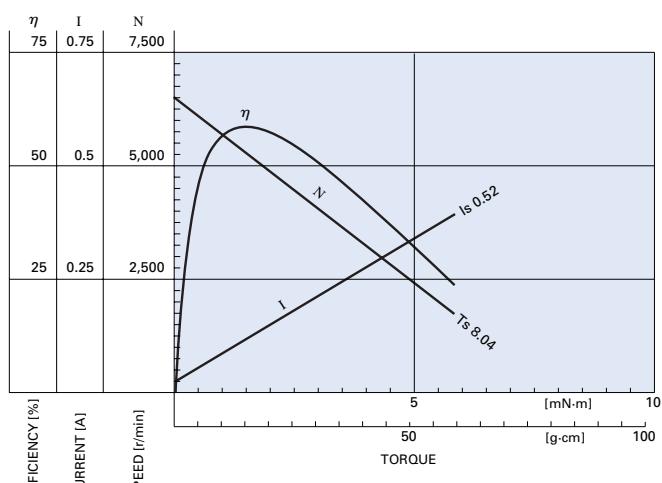
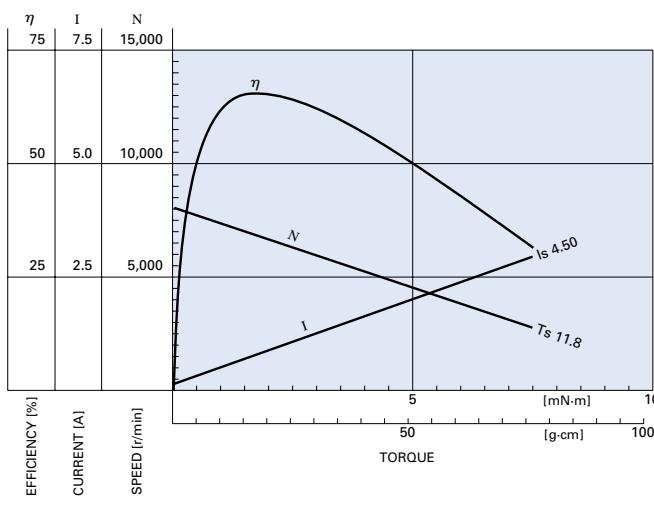
WEIGHT: 32g (APPROX)

FF-180PH-2852

2.4V

FF-180SH-10320

12.0V

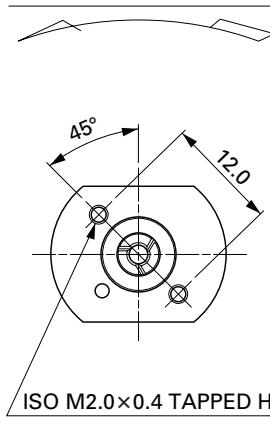
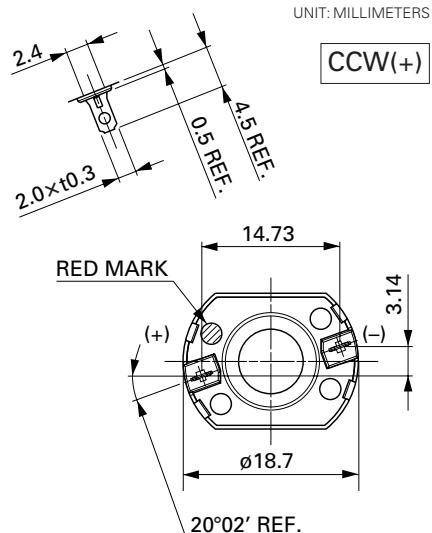
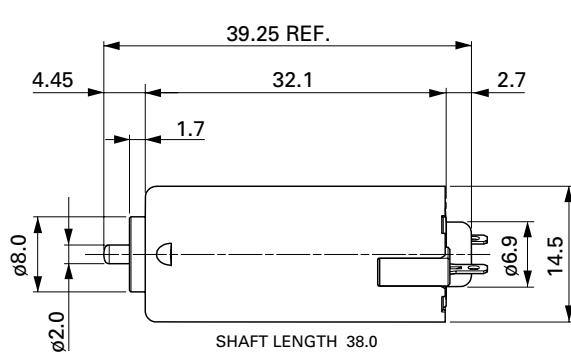


Typical Applications Household Appliances : Electric Shaver



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-170PA-2838	1 ~ 3	2.4V CONSTANT	9900	0.21	8340	1.12	1.97	20.1	1.72	12.5	128	6.00
FF-170PA-3724	1.0 ~ 1.5	1.2V CONSTANT	7800	0.33	6480	1.62	1.82	18.6	1.24	10.8	110	8.00

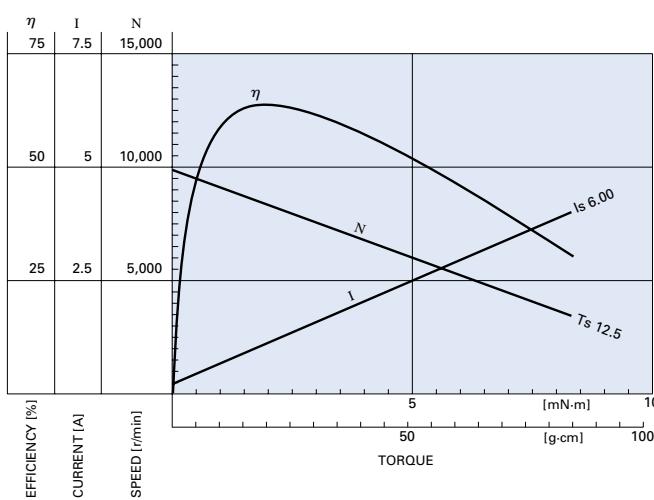
DIRECTION OF ROTATION

ISO M2.0×0.4 TAPPED HOLE
2 PLACES取付けネジはモータケース面より2.0以下
Usable machine screw length 2.0 max. from
motor mounting surface.

WEIGHT: 33g (APPROX)

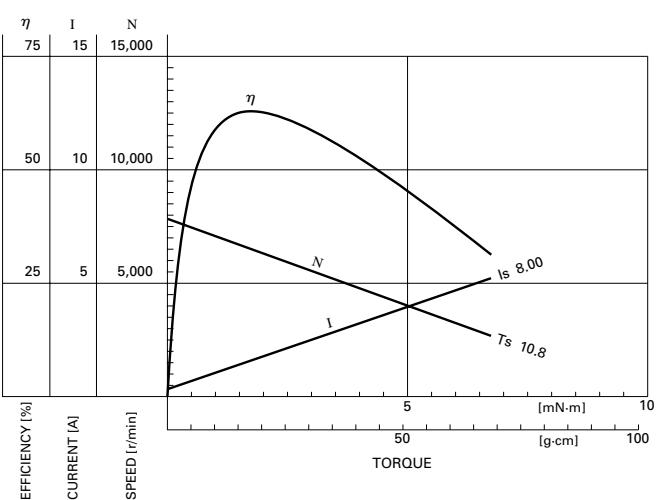
FF-170PA-2838

2.4V



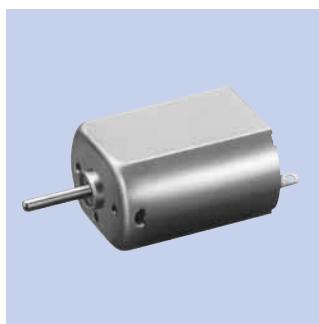
FF-170PA-3724

1.2V



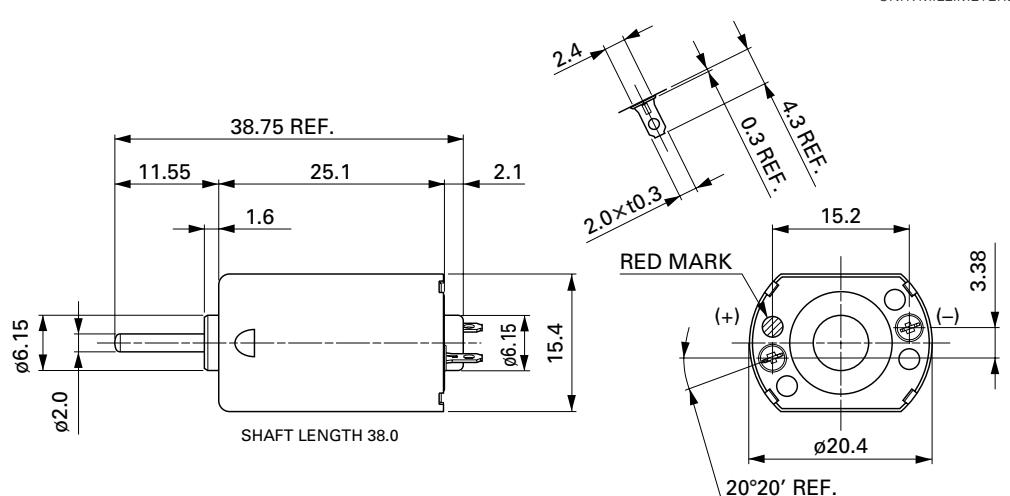
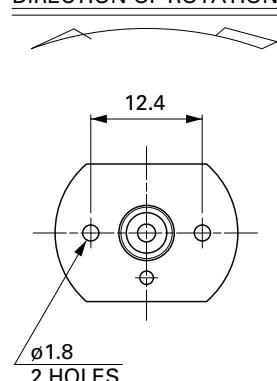
Typical Applications

Audio and Visual Equipments : CD Player / Tape Cassette Adapter
Household Appliances : Electric Shaver
Office Automation Equipments : CD/DVD-ROM Drive
Automotive Products : Air Conditioning Damper Actuator



MODEL	VOLTAGE		NO LOAD			AT MAXIMUM EFFICIENCY				STALL		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TOQUE	OUTPUT	TOQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	
FF-130RH-15210	1 ~ 4	3V CONSTANT	5400	0.045	4280	0.17	0.57	5.8	0.26	2.74	28	0.65
FF-130RH-2860	1.0 ~ 1.5	1.2V CONSTANT	7400	0.21	5870	0.81	0.77	7.8	0.47	3.72	38	3.10
FF-130SH-11340	3 ~ 12	6V CONSTANT	4800	0.030	3820	0.12	0.88	8.9	0.35	4.31	44	0.46
		9V CONSTANT	7400	0.035	6030	0.15	1.18	12.0	0.74	6.37	65	0.68

DIRECTION OF ROTATION



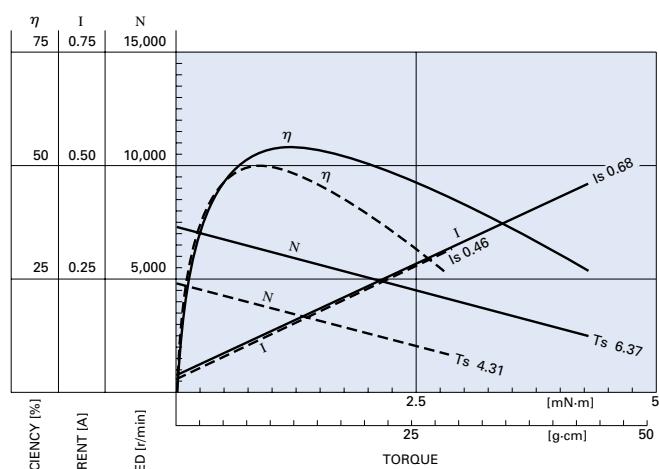
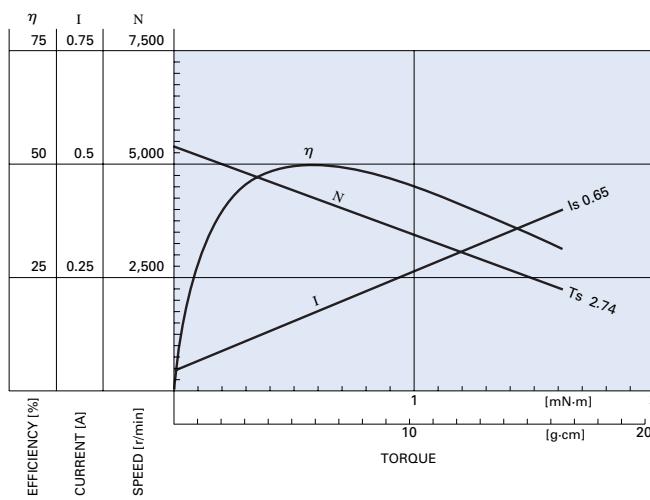
WEIGHT: 24g (APPROX)

FF-130RH-15210

3.0V

FF-130SH-11340

--- 6.0V —— 9.0V

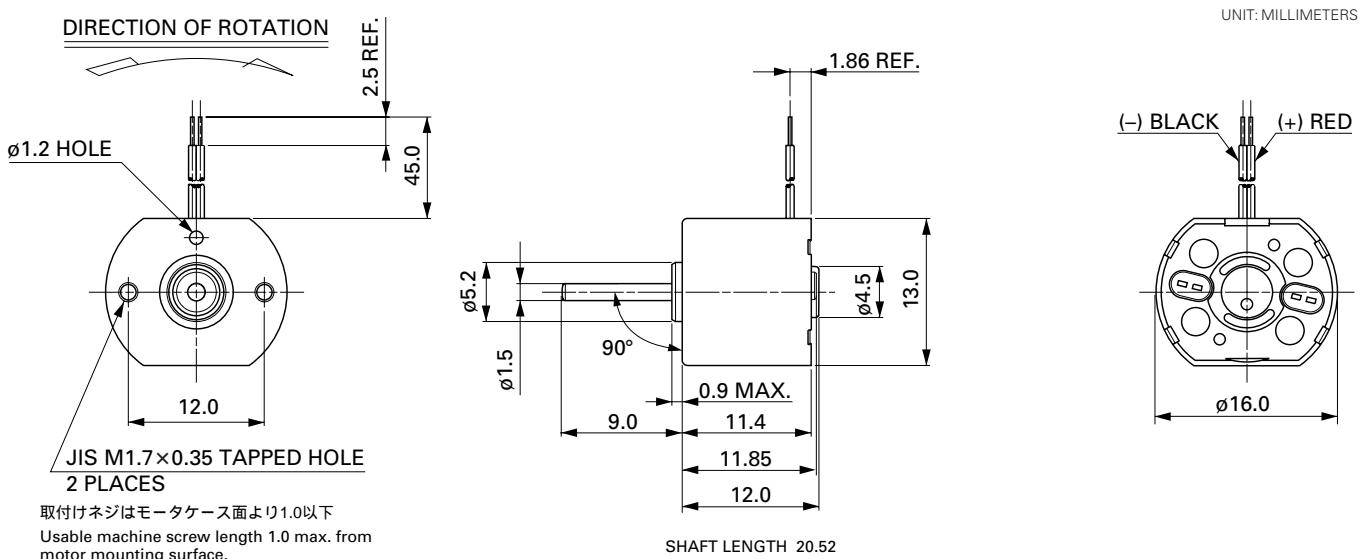


Typical Applications Audio and Visual Equipments : MD Player



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-110PH-08280	1 ~ 3	3V CONSTANT	8000	0.031	5850	0.084	0.16	1.6	0.095	0.58	5.9	0.23

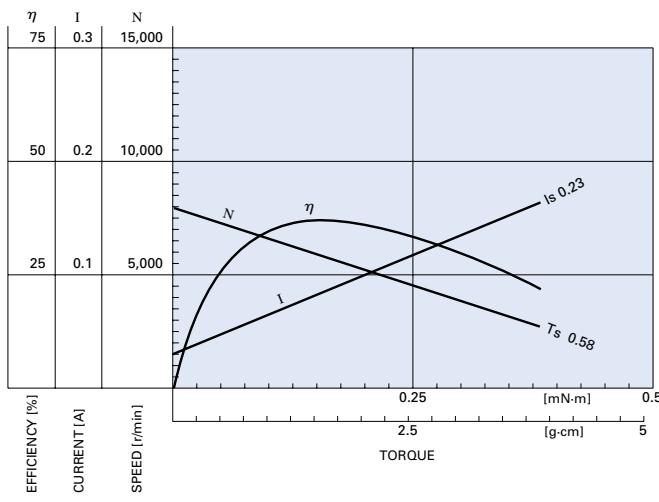
*Also available with terminals (without leadwires).



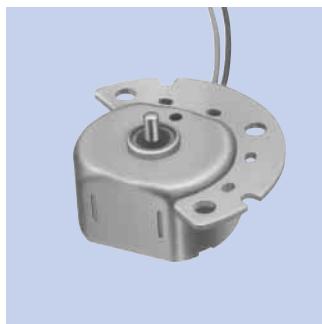
WEIGHT: 7.5g (APPROX)

FF-110PH-08280

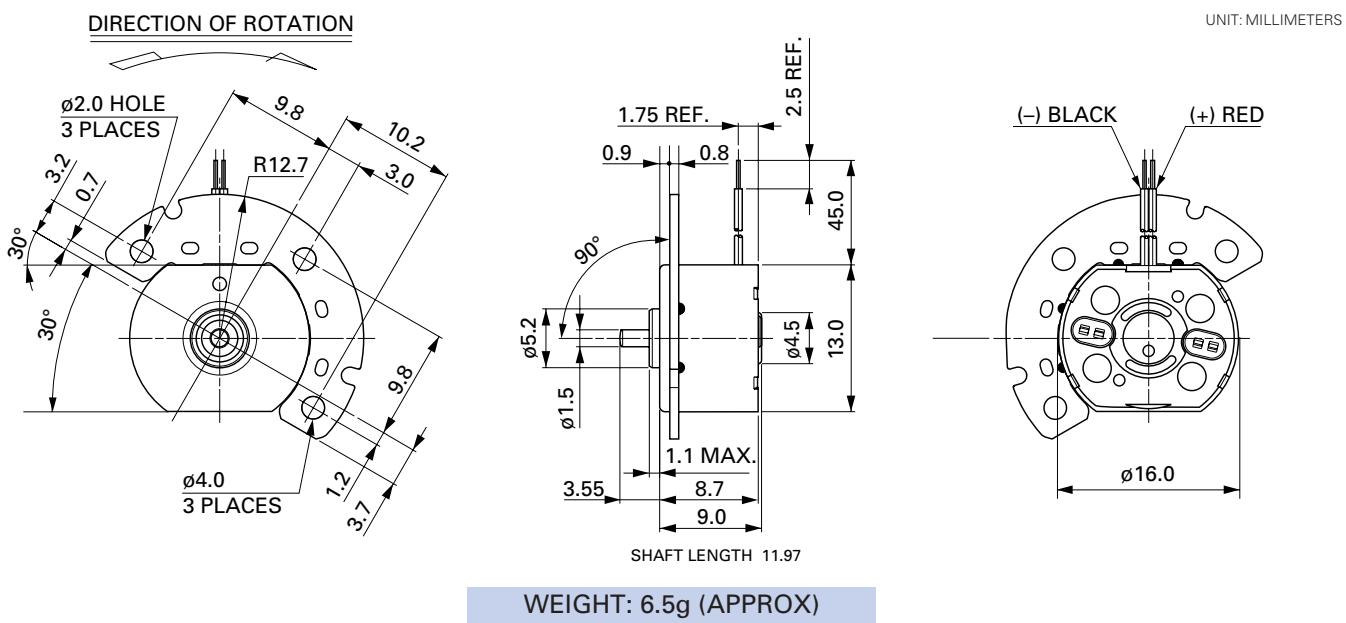
3.0V



Typical Applications Audio and Visual Equipments : MD Player / Car MD Player / Portable MD Player

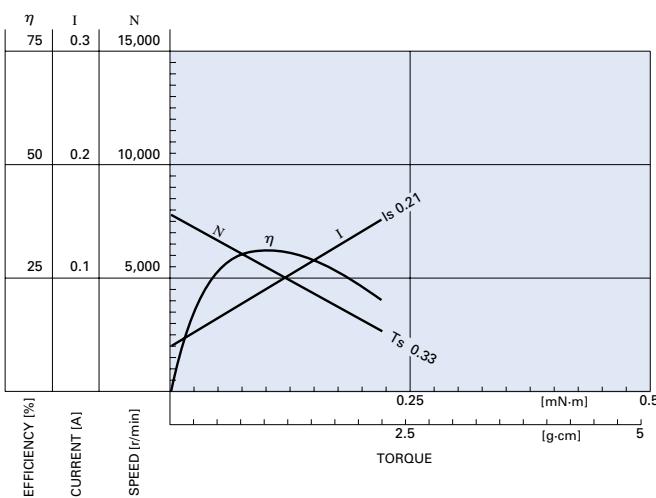


MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-100VA-08280	1 ~ 6	2V CONSTANT	7800	0.040	5430	0.092	0.10	1.0	0.057	0.33	3.4	0.21



FF-100VA-08280

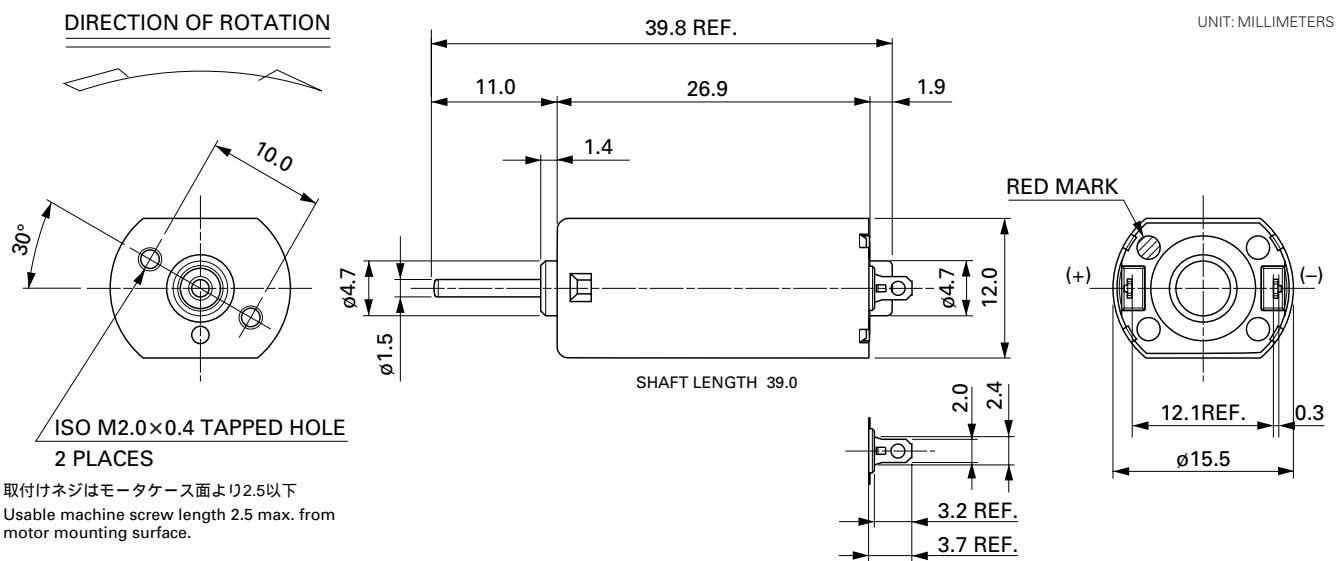
2.0V



Typical Applications **Audio and Visual Equipments** : CD Player / Car CD Player / DVD Player
Office Automation Equipments : CD/DVD-ROM Drive
Household Appliances : Electric Shaver



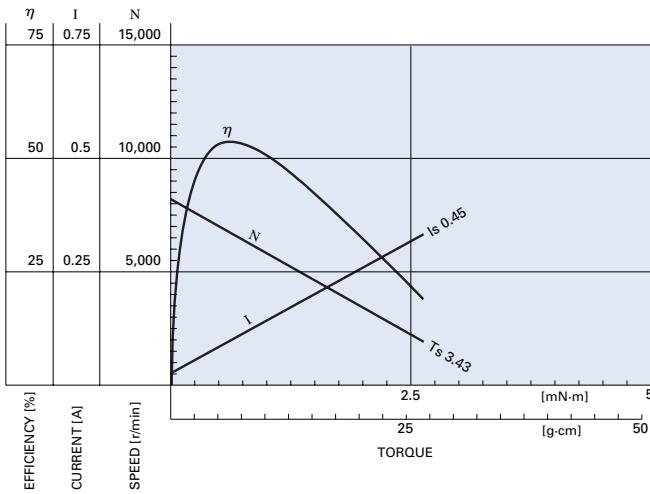
MODEL	VOLTAGE		NO LOAD			AT MAXIMUM EFFICIENCY			STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	
FF-050SB-09250	5.0 ~11.5	8V CONSTANT	8100	0.023	6610	0.10	0.63	6.4	0.44	3.43	35	0.45



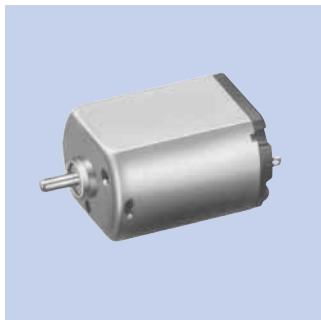
WEIGHT: 18g (APPROX)

FF-050SB-09250

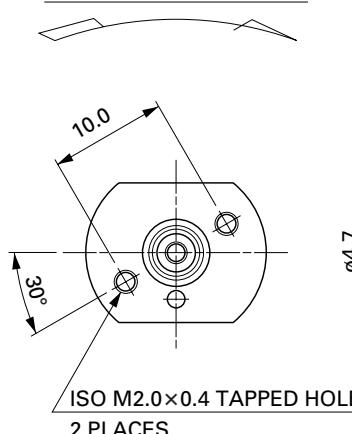
8.0V



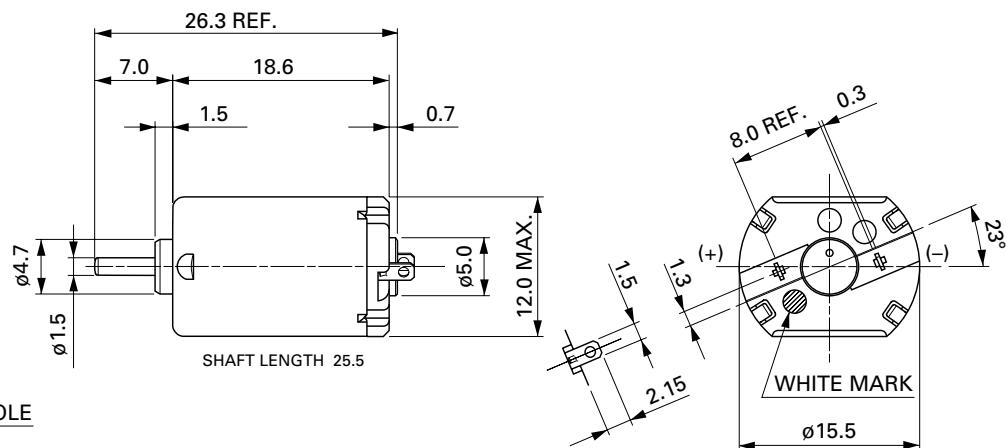
Typical Applications **Audio and Visual Equipments** : CD/MD Player / Car CD Player / Camcorder
Household Appliances : Blood Pressure Meter
Office Automation Equipments : CD/DVD-ROM Drive



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FF-030PA-10180	3.5 ~ 6.0	5V CONSTANT	11700	0.050	9230	0.19	0.50	5.1	0.48	2.35	24	0.70
FF-030PK-09210	1 ~ 5	5V CONSTANT	10500	0.046	8140	0.16	0.44	4.5	0.37	1.96	20	0.55
FF-030PK-08250	1 ~ 6	2.5V CONSTANT	4100	0.028	2940	0.071	0.21	2.1	0.064	0.74	7.6	0.18
		6V CONSTANT	10500	0.041	8020	0.13	0.43	4.4	0.36	1.81	19	0.43
FF-030PN-09210	4.5 ~ 6.0	5V CONSTANT	10400	0.045	8000	0.15	0.42	4.3	0.35	1.81	19	0.50

DIRECTION OF ROTATION

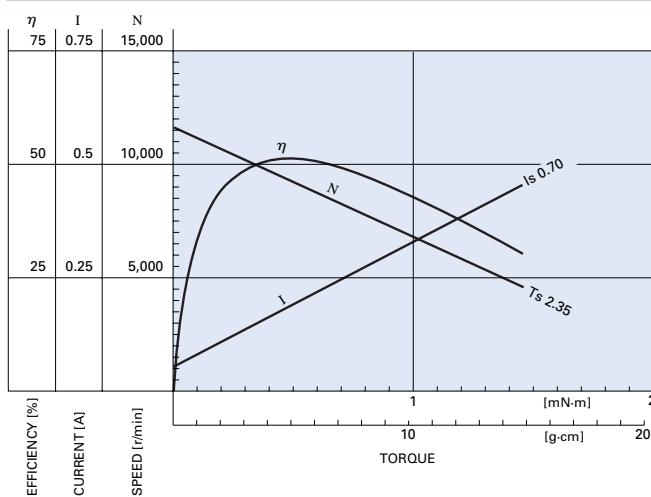
取付けネジはモータケース面より1.5以下
Usable machine screw length 1.5 max. from
motor mounting surface.



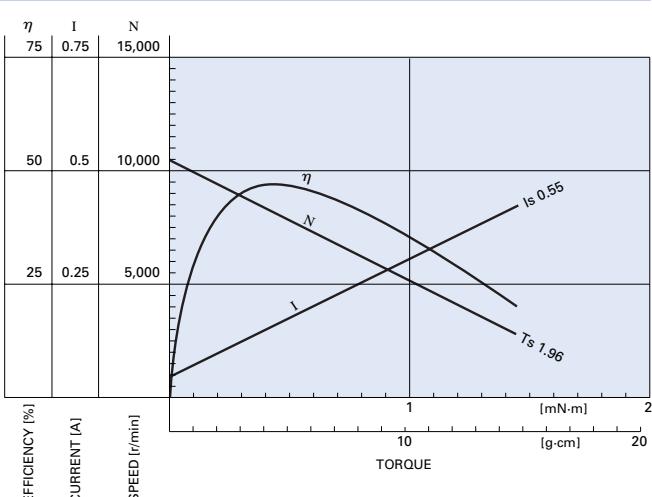
WEIGHT: 11g (APPROX)

FF-030PA-10180

5.0V

**FF-030PK-09210**

5.0V

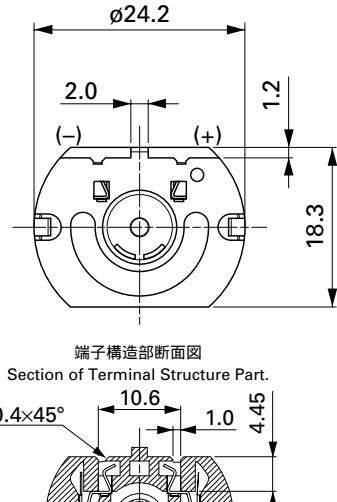
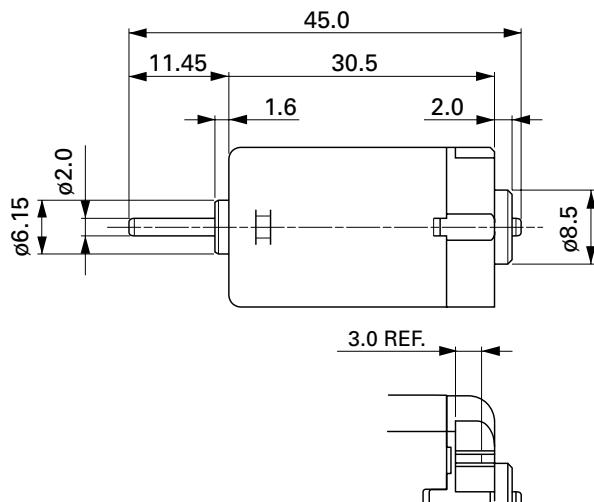
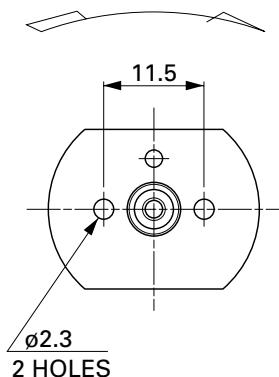


Typical Applications Automotive Products : Door Lock Actuator / Retractable Rearview Mirror



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FC-280SD-18165	10 ~ 15	12V CONSTANT	12200	0.095	10420	0.56	3.43	35.0	3.74	23.5	240	3.25

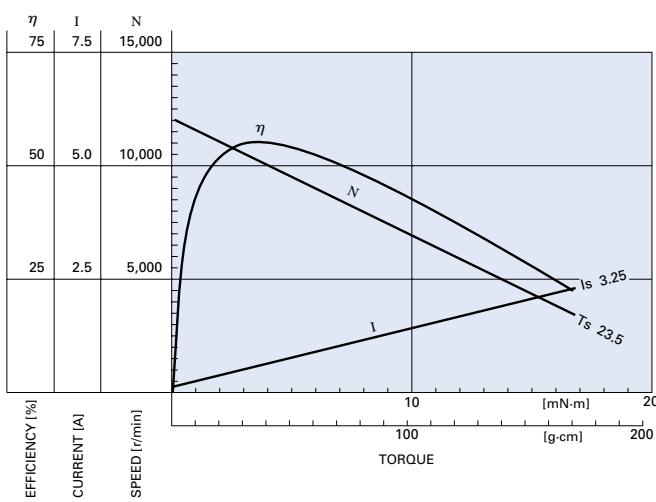
DIRECTION OF ROTATION



WEIGHT: 38g (APPROX)

FC-280SD-18165

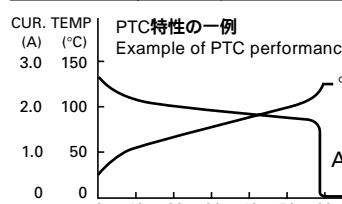
12.0V



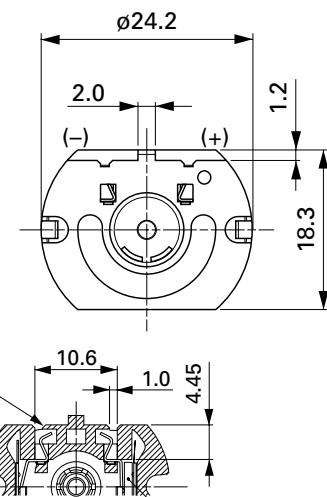
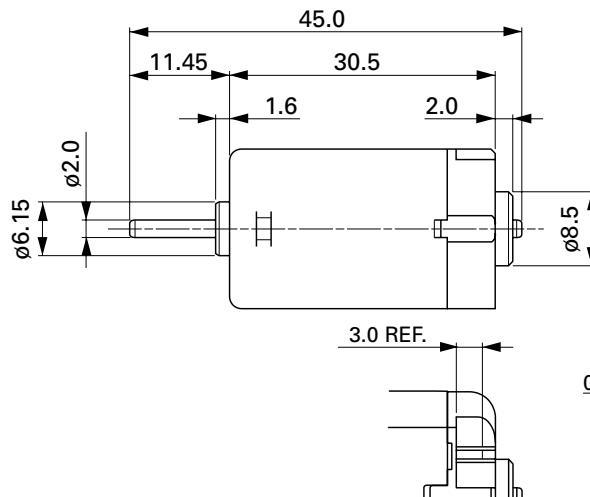
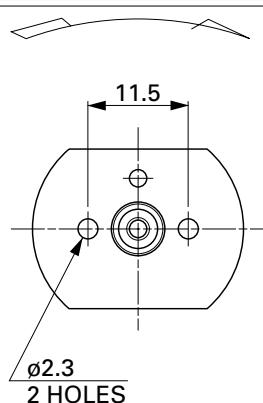
Typical Applications Automotive Products : Door Lock Actuator / Trunk Opener



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE	OUTPUT	TORQUE	CURRENT
			r/min	A					mN·m	g·cm
FC-280PT-20150	9 ~ 15	12V CONSTANT	12000	0.11	10260	0.65	4.20	42.8	4.51	28.9
FC-280ST-18180	9 ~ 15	12V CONSTANT	11400	0.075	9840	0.47	3.28	33.4	3.37	24.0
										3.80
										295
										3.00



*This performance changes by motor winding and PTC.

DIRECTION OF ROTATION

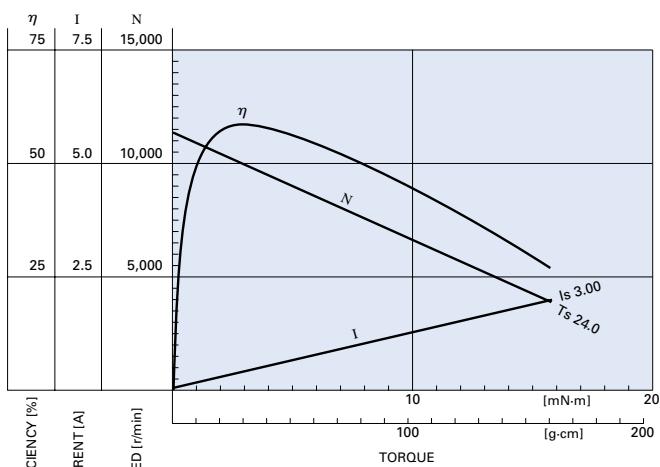
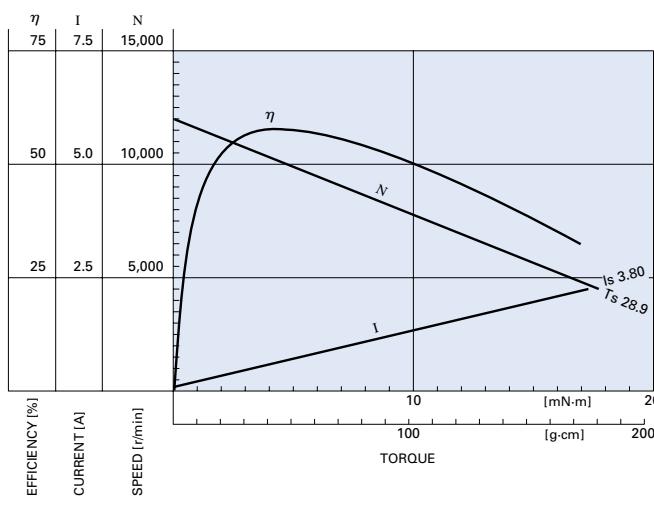
WEIGHT: 35g (APPROX)

FC-280PT-20150

12.0V

FC-280ST-18180

12.0V

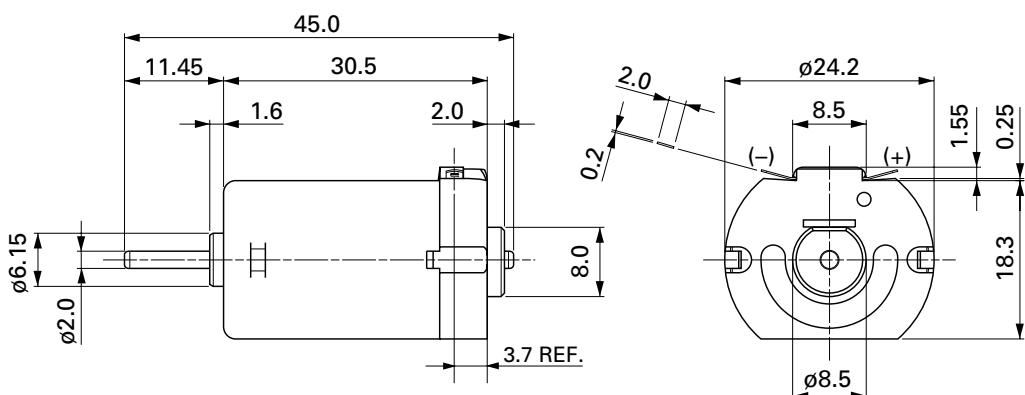
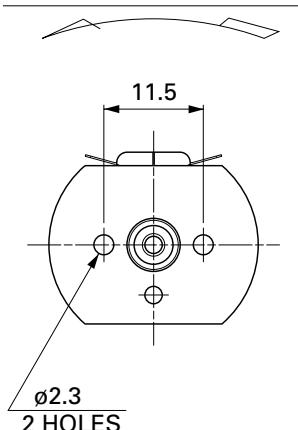


Typical Applications **Automotive Products** : Door Lock Actuator
Household Appliances



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	TORQUE	CURRENT	
			r/min	A			mN·m	g·cm	W			
FC-280PA-20150	9 ~ 15	12V CONSTANT	12000	0.10	10360	0.63	4.22	43.0	4.57	30.9	315	4.00
FC-280PA-18165	9 ~ 15	12V CONSTANT	11000	0.10	9330	0.56	4.24	43.2	4.13	27.9	285	3.12
FC-280SA-18165	10 ~ 15	12V CONSTANT	12400	0.090	10660	0.55	3.57	36.4	3.98	25.5	260	3.40
FC-280SA-16200	10 ~ 15	12V CONSTANT	10000	0.070	8470	0.39	3.30	33.7	2.92	21.6	220	2.15
FC-280SA-4523	1 ~ 2	1.2V CONSTANT	8700	0.58	7100	2.58	2.42	24.7	1.80	13.2	135	11.5

DIRECTION OF ROTATION

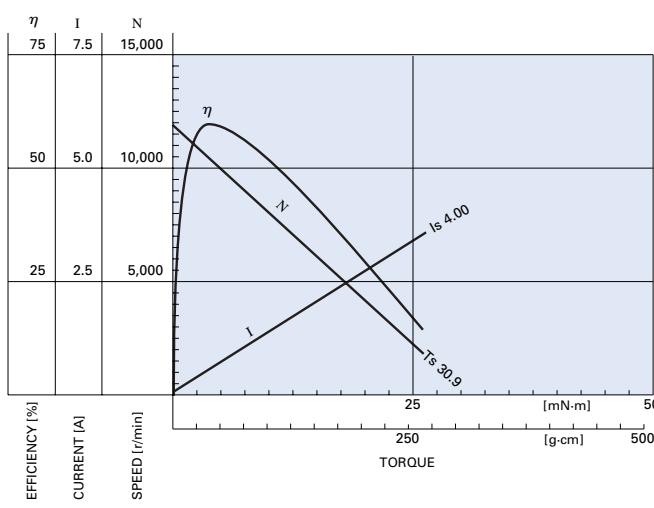


UNIT: MILLIMETERS

WEIGHT: 35g (APPROX)

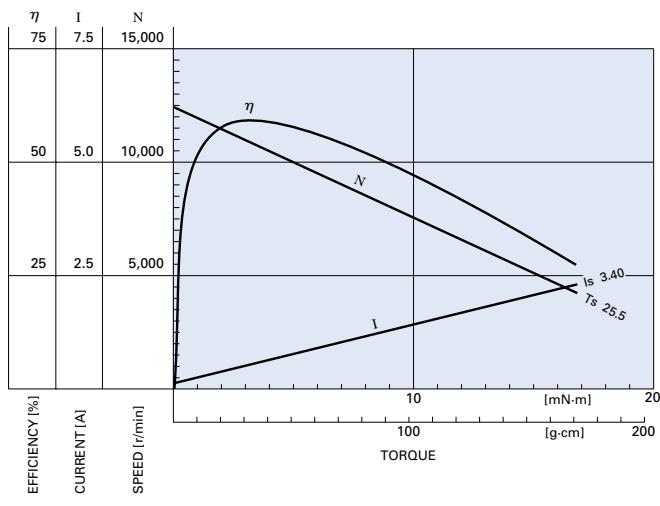
FC-280PA-20150

12.0V



FC-280SA-18165

12.0V



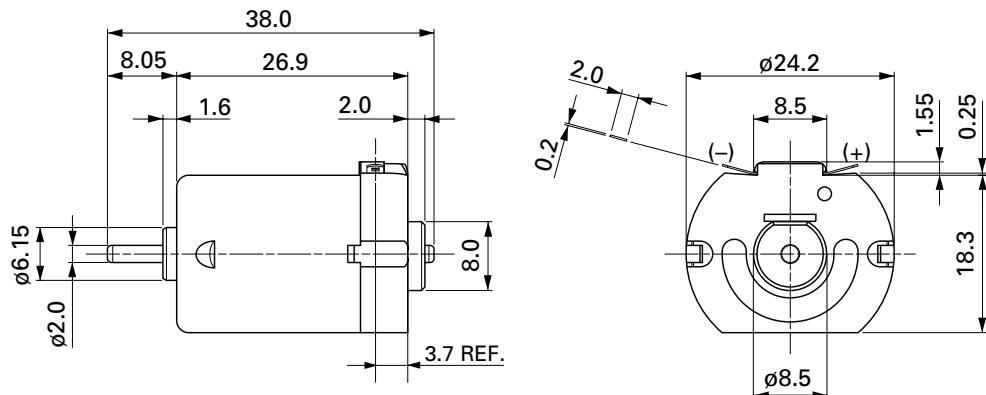
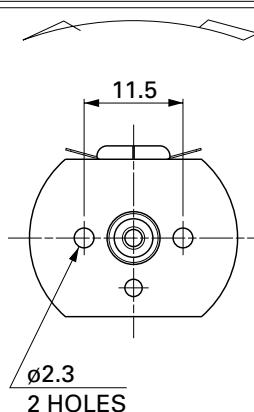
Typical Applications Household Appliances : Hair Dryer



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FC-260RA-10400	6 ~ 15	12V CONSTANT	8800	0.040	6990	0.15	1.41	14.4	1.03	6.87	70	0.60
FC-260SA-2670	3 ~ 6	4.5V CONSTANT	14000	0.27	11660	1.34	2.94	30.0	3.59	17.6	180	6.70
FC-260SA-10300	6 ~ 26	24V CONSTANT	17500	0.065	14400	0.30	2.78	28.4	4.19	15.7	160	1.40
FC-260SA-12250	6 ~ 28	24V CONSTANT	20000	0.090	16700	0.45	3.40	34.7	5.94	20.6	210	2.30

UNIT: MILLIMETERS

DIRECTION OF ROTATION



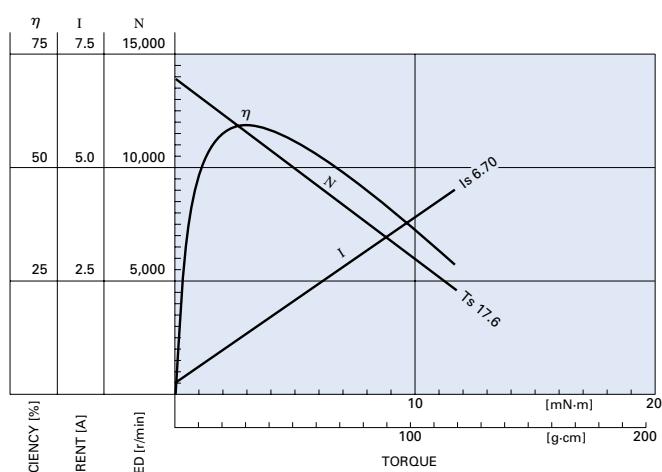
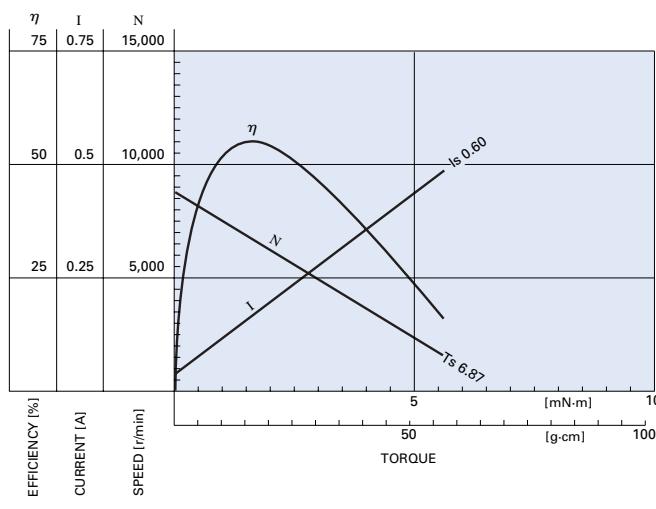
WEIGHT: 28g (APPROX)

FC-260RA-10400

12.0V

FC-260SA-2670

4.5V

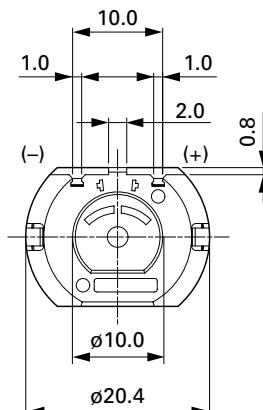
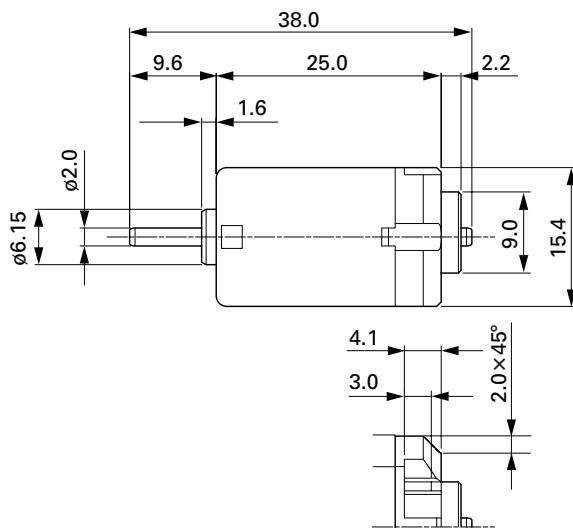
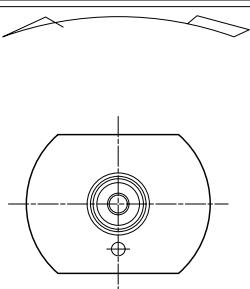


Typical Applications Automotive Products : Rearview Mirror



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	STALL TORQUE
			r/min	A			mN·m	g·cm	W	mN·m
FC-140RA-09490	9 ~ 15	12V CONSTANT	7900	0.042	5910	0.12	1.03	10.5	0.63	4.07
										42
										0.37

DIRECTION OF ROTATION

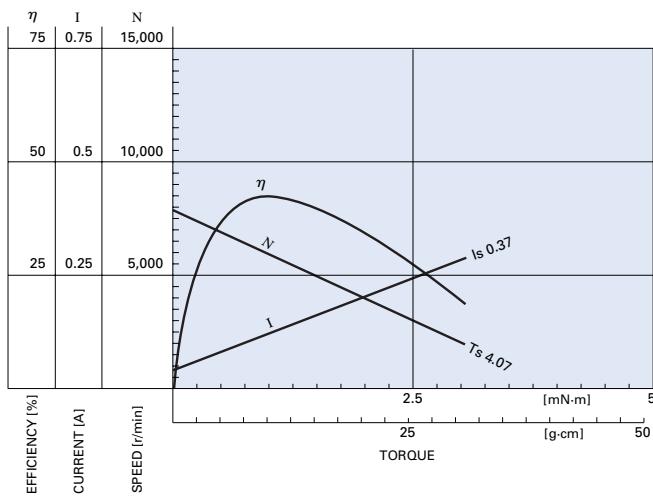


UNIT: MILLIMETERS

WEIGHT: 23g (APPROX)

FC-140RA-09490

12.0V



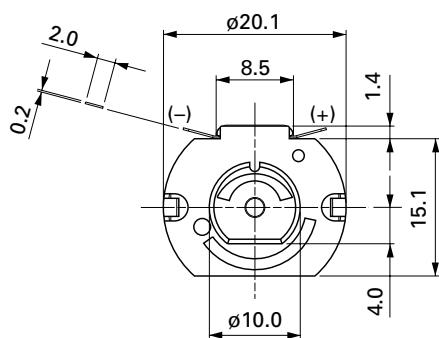
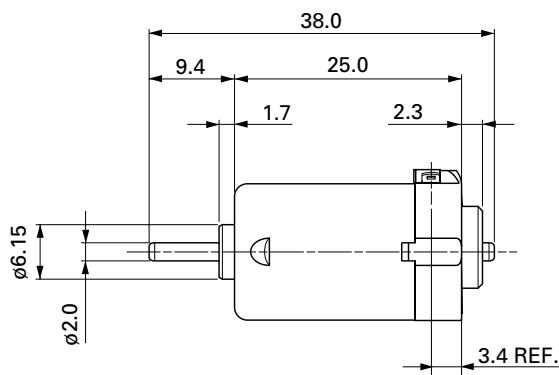
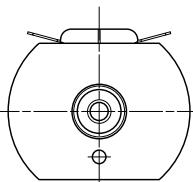
Typical Applications Household Appliances : Styling Brush
 Toys and Models : Motorized Toy / Radio Control Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	STALL TORQUE
			r/min	A			mN·m	g·cm	W	mN·m
FC-130RA-14150	4.5 ~ 6.0	4.5V CONSTANT	13200	0.14	9890	0.42	0.74	7.5	0.76	2.94
FC-130RA-10300	4.5 ~ 12.0	12V CONSTANT	18000	0.080	13770	0.26	0.90	9.1	1.29	3.82
FC-130SA-14150	4.5 ~ 6.0	6V CONSTANT	12400	0.14	9560	0.47	1.19	12.1	1.19	5.19
FC-130SA-2270	3.0 ~ 4.5	3V CONSTANT	13500	0.27	10740	1.05	1.37	14.0	1.54	6.71

UNIT: MILLIMETERS

DIRECTION OF ROTATION



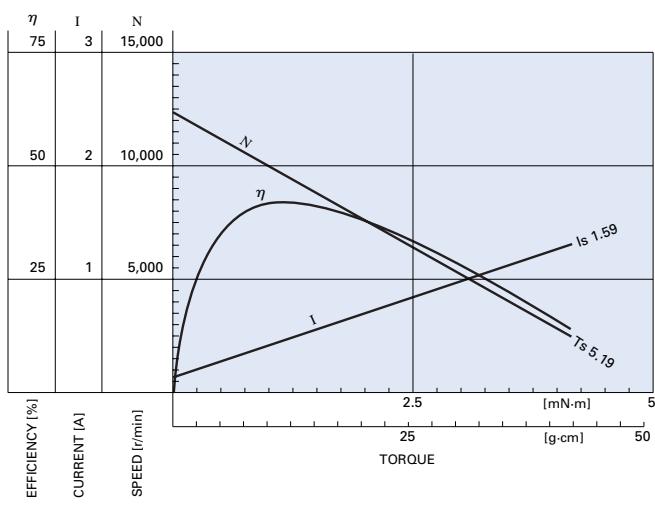
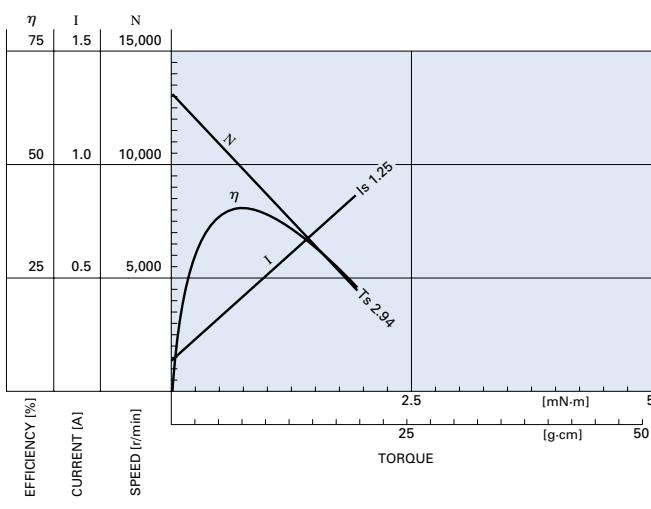
WEIGHT: 17g (APPROX)

FC-130RA-14150

4.5V

FC-130SA-14150

6.0V



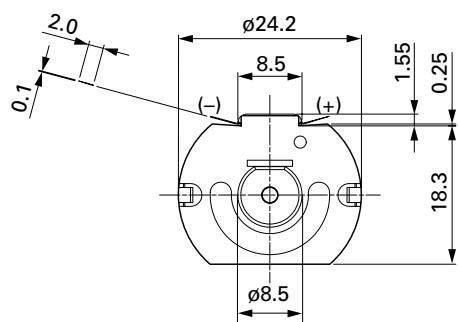
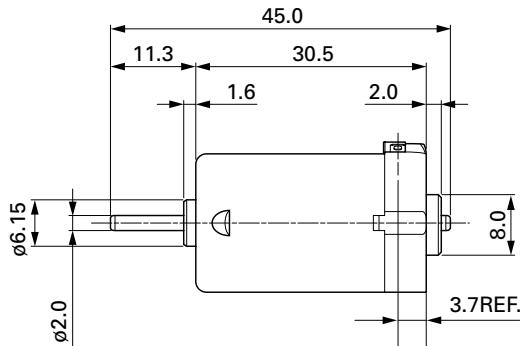
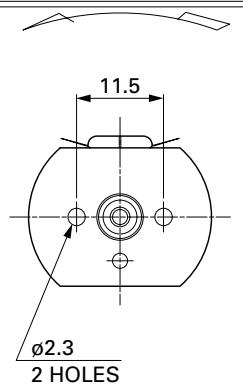
Typical Applications Toys and Models : Motorized Toy / Motorized Plastic Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	r/min	A	TORQUE		OUTPUT	TO TORQUE	CURRENT	
			r/min	A			mN·m	g·cm	W	mN·m	g·cm	A
FA-280RA-2865	1.5 ~ 3.0	3V CONSTANT	10500	0.17	8820	0.89	1.79	18.3	1.65	11.2	114	4.68
FA-280RA-20120	1.5 ~ 4.5	3V CONSTANT	5900	0.080	4790	0.35	1.18	12.0	0.59	6.27	64	1.50
FA-280RA-2485	1.5 ~ 3.0	3V CONSTANT	8000	0.13	6600	0.61	1.54	15.7	1.06	8.83	90	2.90
FA-280SA-4030	1.5 ~ 3.0	1.5V CONSTANT	7800	0.37	6540	1.92	2.29	23.4	1.57	14.2	145	10.0

UNIT: MILLIMETERS

DIRECTION OF ROTATION



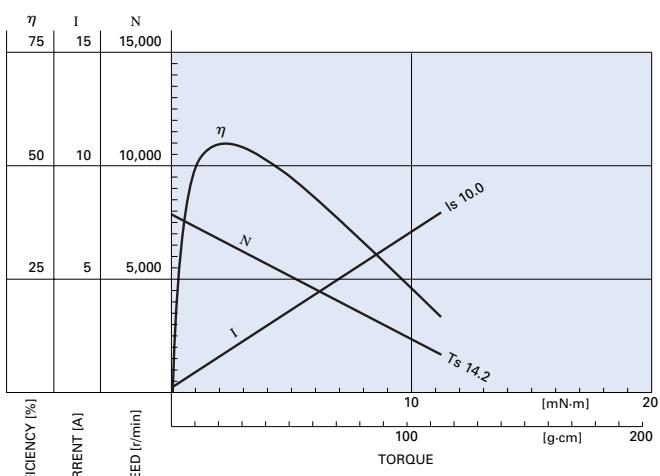
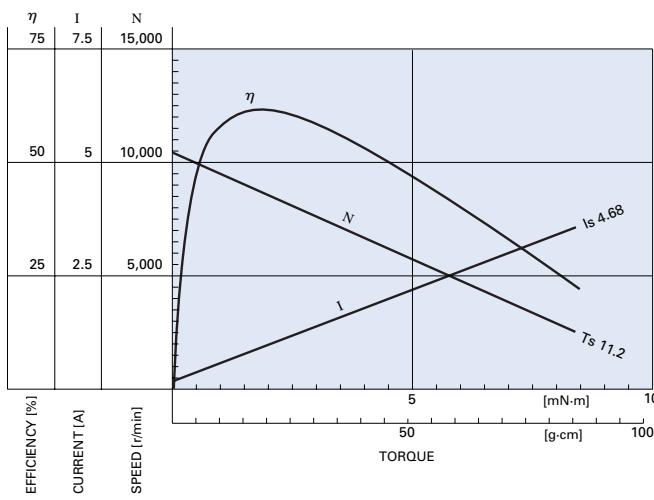
WEIGHT: 35g (APPROX)

FA-280RA-2865

3.0V

FA-280SA-4030

1.5V



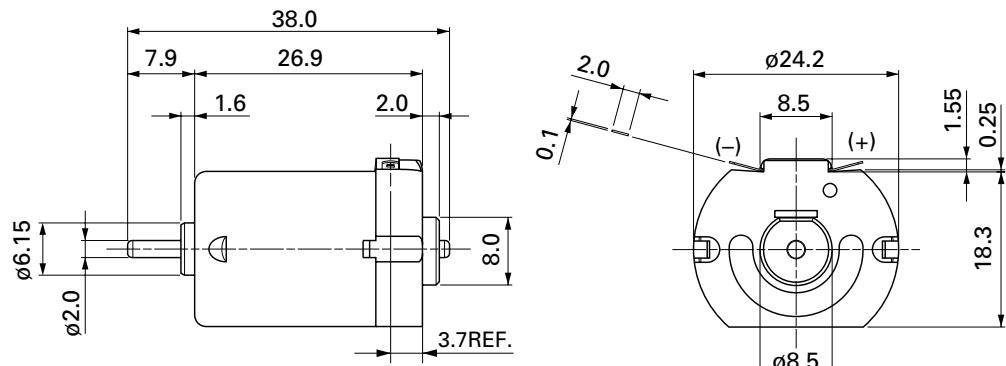
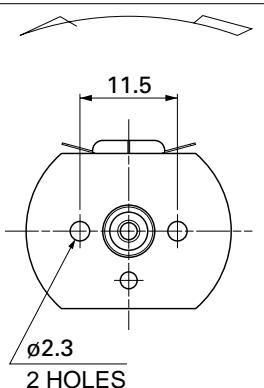
Typical Applications Toys and Models : Motorized Toy



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
		V	r/min	A	r/min	A	mN·m	g·cm	mN·m	g·cm	A	
FA-260RA-2670	1.5 ~ 3.0	1.5V CONSTANT	6300	0.15	5080	0.62	0.99	10.1	0.52	5.10	52	2.60
		3V CONSTANT	12100	0.21	10010	1.00	1.56	15.9	1.63	9.03	92	4.80
FA-260RA-2295	1.5 ~ 4.5	1.5V CONSTANT	4600	0.10	3640	0.38	0.78	8.0	0.30	3.73	38	1.43
		3V CONSTANT	9300	0.13	7640	0.60	1.26	12.9	1.01	7.06	72	2.74
FA-260RA-20120	1.5 ~ 4.5	3V CONSTANT	7300	0.090	5980	0.41	1.10	11.2	0.69	6.08	62	1.85
		4.5V CONSTANT	10800	0.12	8920	0.57	1.45	14.8	1.35	8.33	85	2.70

UNIT: MILLIMETERS

DIRECTION OF ROTATION

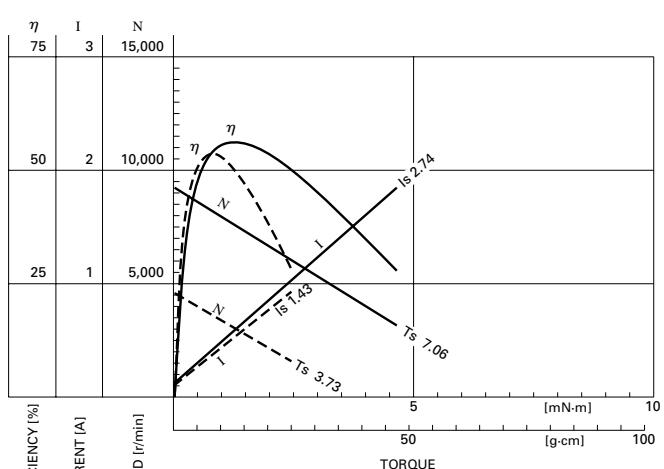
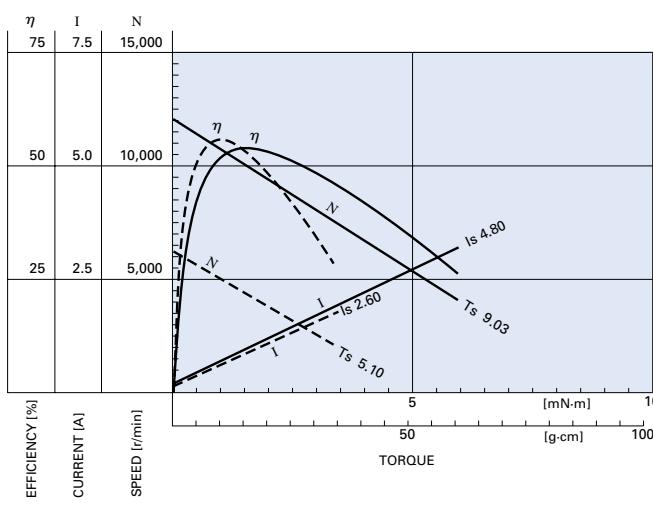


FA-260RA-2670

---- 1.5V —— 3.0V

FA-260RA-2295

---- 1.5V —— 3.0V



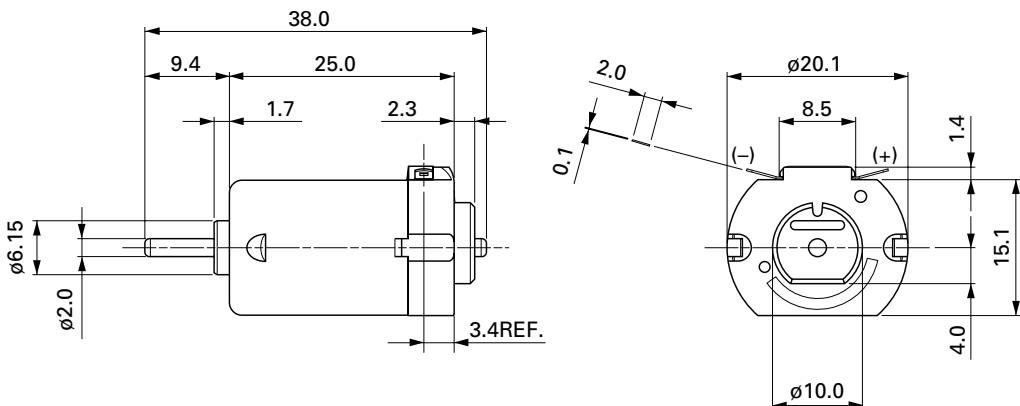
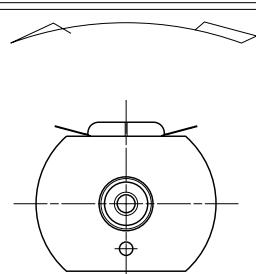
Typical Applications Toys and Models : Motorized Toy / Motorized Plastic Model



MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL			
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE	OUTPUT	TORQUE	CURRENT		
			r/min	A	r/min	A	mN·m	g·cm	W	mN·m	g·cm	A
FA-130RA-2270	1.5 ~ 3.0	1.5V CONSTANT	9100	0.20	6990	0.66	0.59	6.0	0.43	2.55	26	2.20
		3V CONSTANT	16400	0.23	13200	0.95	0.84	8.6	1.16	4.32	44	3.92
FA-130RA-18100	1.5 ~ 3.0	1.5V CONSTANT	6200	0.15	4540	0.41	0.47	4.8	0.22	1.76	18	1.12
		3V CONSTANT	12300	0.15	9710	0.56	0.74	7.6	0.76	3.53	36	2.10
FA-130RA-14150	1.5 ~ 4.5	3V CONSTANT	8300	0.11	6150	0.31	0.55	5.6	0.35	2.11	22	0.90
FA-130SA-2270	1.5 ~ 3.0	3V CONSTANT	13000	0.20	10650	0.91	1.24	12.7	1.38	6.86	70	4.10
FA-130SA-18100	1.5 ~ 4.5	3V CONSTANT	9300	0.14	7350	0.53	1.03	10.5	0.79	4.91	50	2.00
FA-130SA-14150	1.5 ~ 4.5	3V CONSTANT	6200	0.080	4780	0.27	0.74	7.6	0.37	3.23	33	0.90

UNIT: MILLIMETERS

DIRECTION OF ROTATION



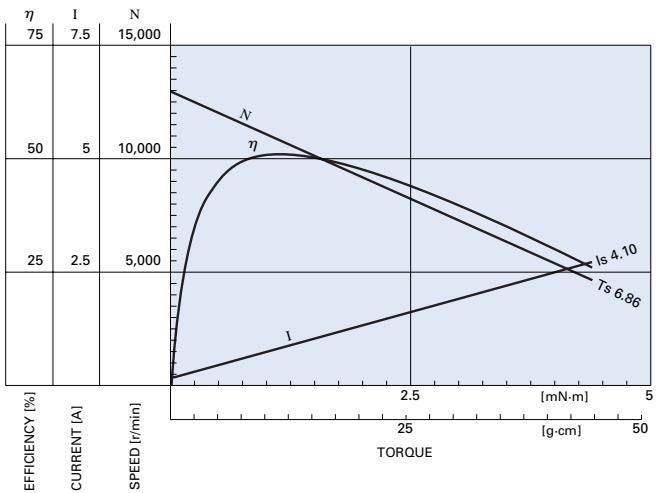
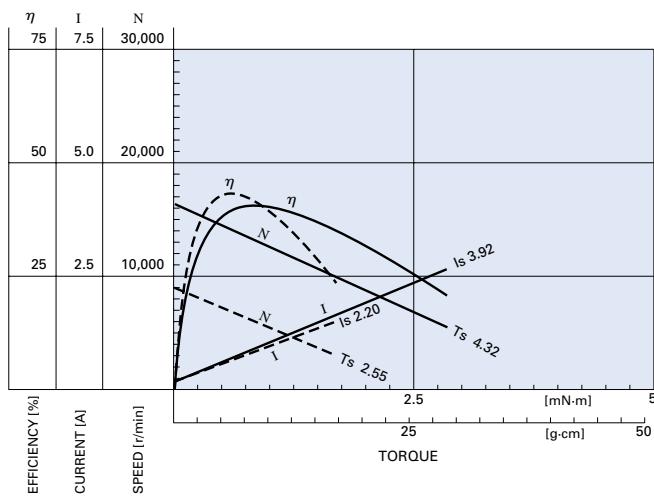
WEIGHT: 17g (APPROX)

FA-130RA-2270

---- 1.5V —— 3.0V

FA-130SA-2270

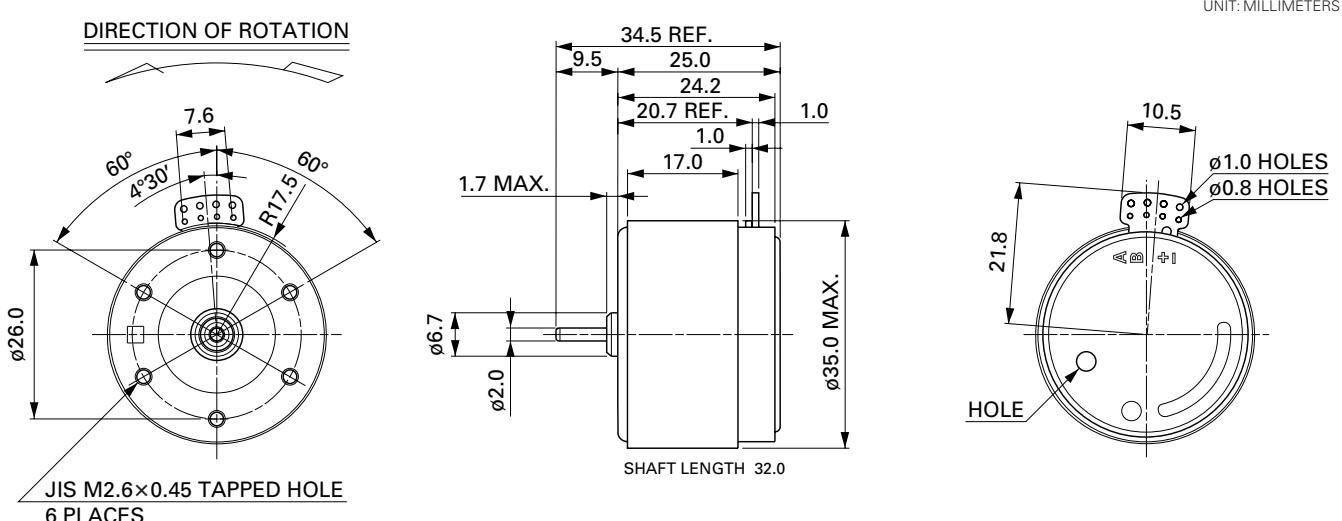
3.0V



Typical Applications Audio and Visual Equipments : Cassette Tape Recorder



MODEL	RATED VOLTAGE V	WORKING VOLTAGE V	RATED LOAD		RATED SPEED r/min	RATED LOAD CURRENT mA(TYP)	LOAD FLUCTUATION(TYP) r/min / g·cm		STARTING TORQUE(MIN) mN·m g·cm	
			mN·m	g·cm			mN·m	g·cm		
EG-530YD-9BH	9	6.3 ~ 11.7	0.98	10	2000	128	1.5		4.90	50
					4000	140	4.0			
EG-530YD-2BH	12	8.4 ~ 15.6	0.98	10	2000	99	1.5		5.39	55
					4000	108	4.0			



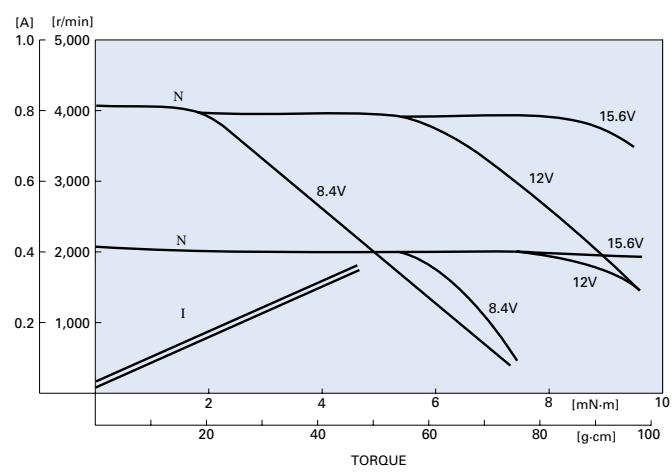
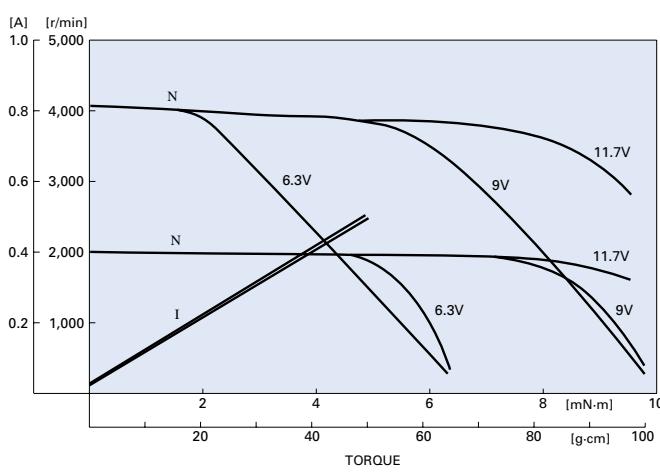
WEIGHT: 70g (APPROX)

EG-530YD-9BH

6.3V/9.0V/11.7V

EG-530YD-2BH

8.4V/12.0V/15.6V





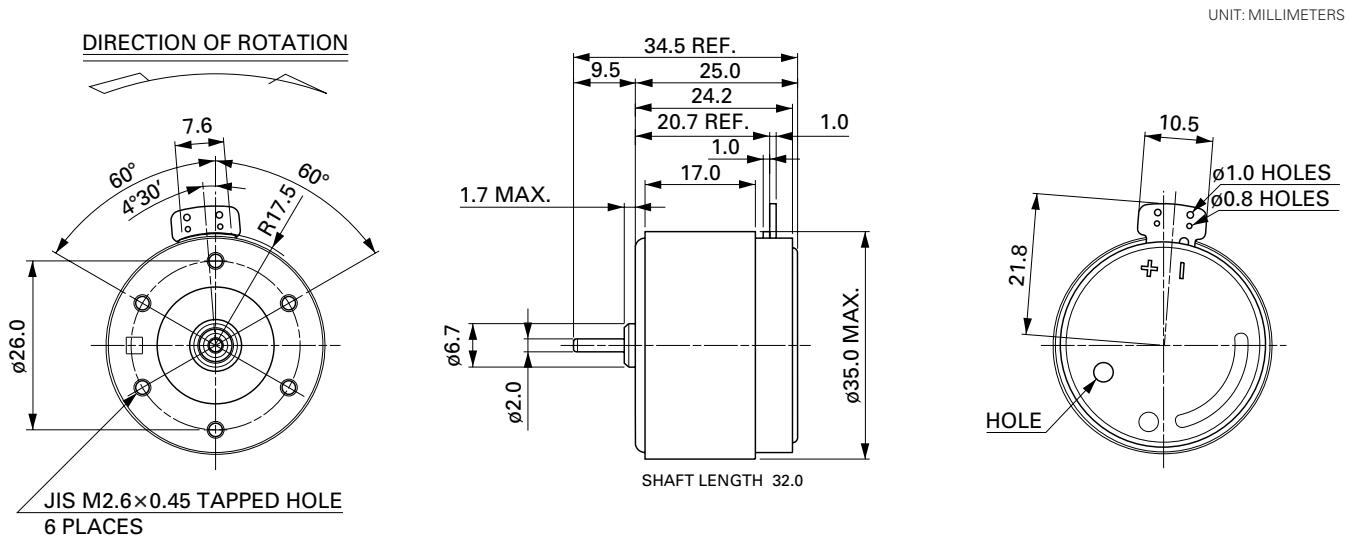
EG-530AD

(Electronic governor motors)

Typical Applications Audio and Visual Equipments : Cassette Tape Recorder



Model	Rated Voltage	Working Voltage	Rated Load		Rated Speed	Rated Load Current	Load Fluctuation(Typ)	Starting Torque(Min)	
	V	V	mN·m	g·cm	r/min	mA(TYP)	r/min / g·cm	mN·m	g·cm
EG-530AD-6F (6B)	6	4.2 ~ 7.5	0.78	8.0	2400±2%	132	9.0	3.72at4.2V	38at4.2V
EG-530AD-9F (9B)	9	6~11	0.78	8.0	2400±2%	92	9.0	4.90at6.0V	50at6.0V
EG-530AD-2F (2B)	12	8.4 ~ 15.0	0.78	8.0	2400±2%	73	9.0	5.88at8.4V	60at8.4V



取付けネジはモータケース面より1.8以下
Usable machine screw length 1.8 max. from
motor mounting surface.

取付けネジはモータケース面より1.8以下
Usable machine screw length 1.8 max. from
motor mounting surface.

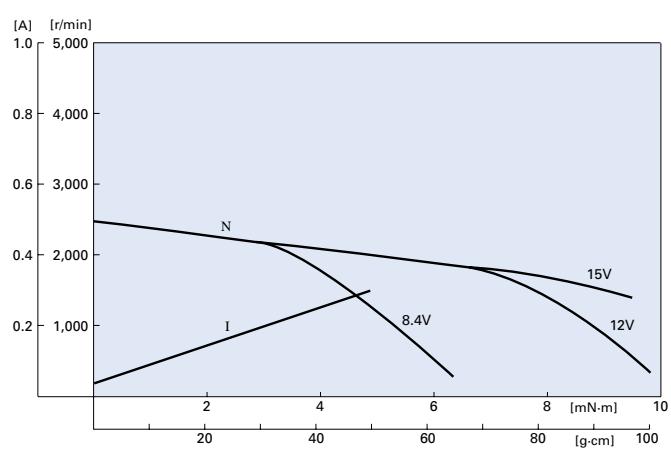
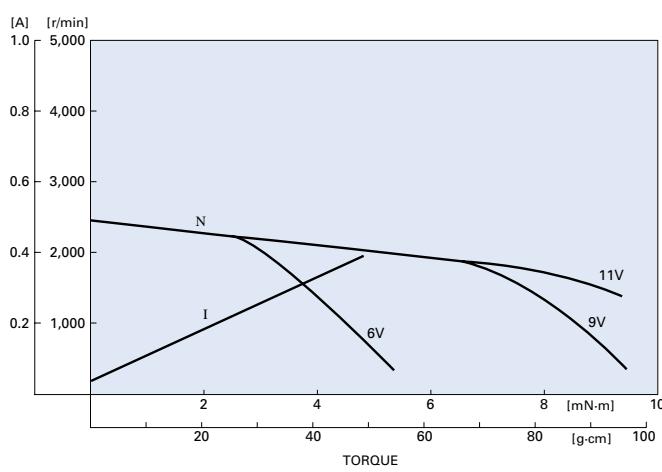
WEIGHT: 70g (APPROX)

EG-530AD-9F(9B)

6.0V/9.0V/11.0V

EG-530AD-2F(2B)

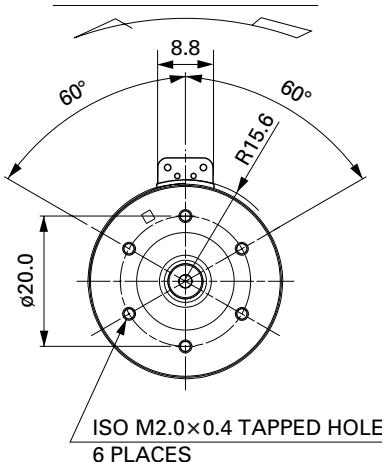
8.4V/12.0V/15.0V



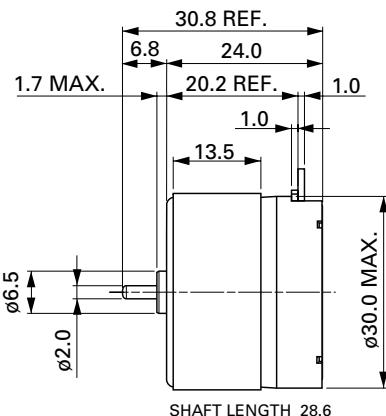
Typical Applications Audio and Visual Equipments : Car Cassette Tape Recorder



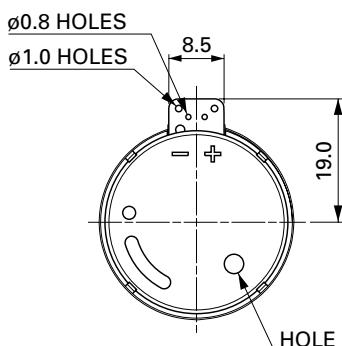
MODEL	RATED VOLTAGE		WORKING VOLTAGE		RATED LOAD		RATED SPEED	RATED LOAD CURRENT	LOAD FLUCTUATION(TYP)		STARTING TORQUE(MIN)	
	V	V	mN·m	g·cm	r/min	mA(TYP)	r/min / g·cm	mN·m	g·cm			
EG-520ED-3B	13.2	8.4 ~ 16.0	0.98	10	2400±2%	74	2.5	5.88at8.4V	60at8.4V			

DIRECTION OF ROTATION

取付けネジはモータケース面より1.5以下
Usable machine screw length 1.5 max. from
motor mounting surface.



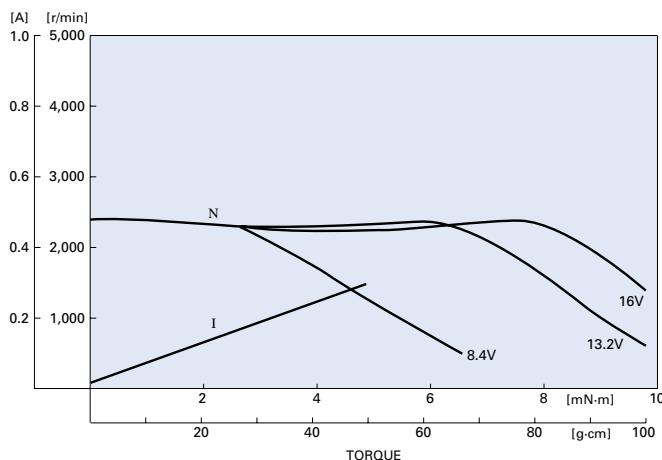
UNIT: MILLIMETERS



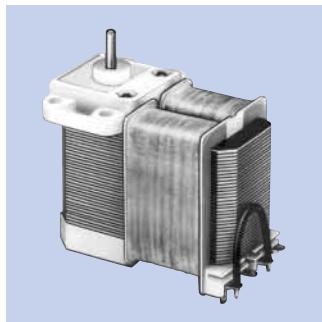
WEIGHT: 50g (APPROX)

EG-520ED-3B

8.4V/13.2V/16.0V



Typical Applications Household Appliances : Citrus Juicer

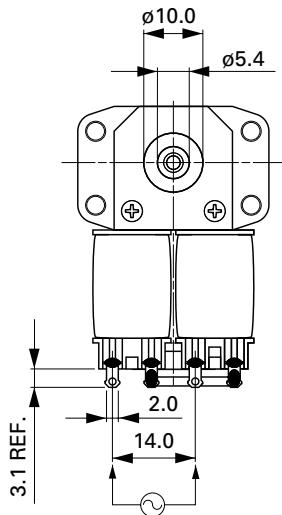
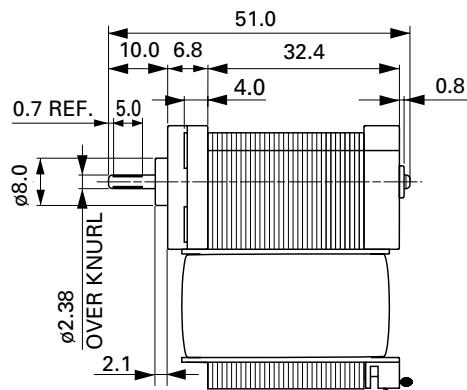
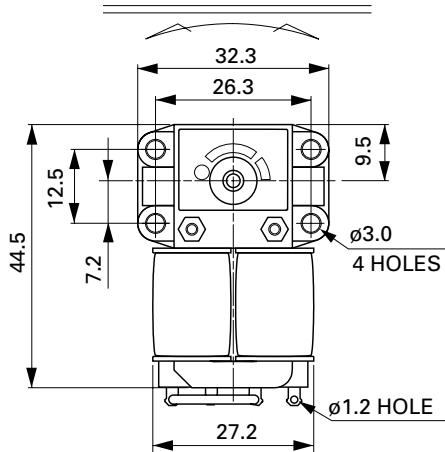


MODEL	VOLTAGE		FREQUENCY	SPEED	CURRENT	INPUT	PULL OUT TORQUE			
	OPERATING RANGE	NOMINAL					A.C. V	A.C. V	Hz	r/min
	AC. V	AC. V								g·cm
CO-261PA-122100	220 ~ 240	230	50	3000	0.14	11.5	37.2	380		
CO-261PA-181000	100 ~ 120	120	60	3600	0.27	13.0	35.3	360		

Direction of rotation is controlled mechanically.

UNIT: MILLIMETERS

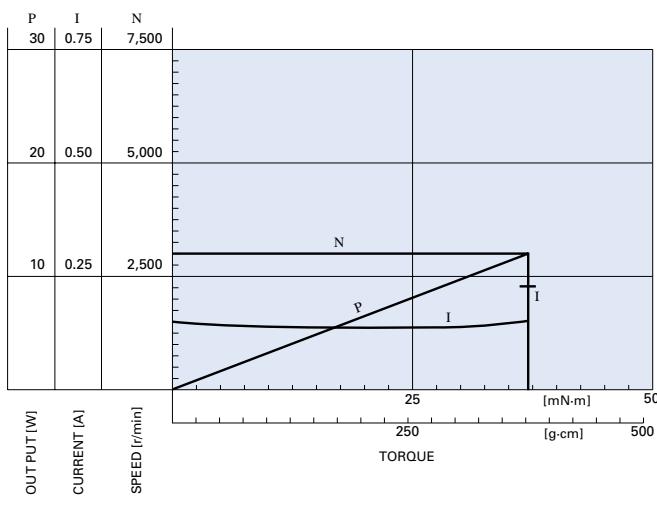
DIRECTION OF ROTATION



WEIGHT: 160g (APPROX)

CO-261PA-122100

AC 230V, 50Hz



CO-261PA-181000

AC 120V, 60Hz

