

## DC MOTORS

Ø 15.5 mm to 52 mm  
0.1 W to 198 W



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Series	Part name	Diameter mm	Length mm	Nominal voltage (V)	Nominal speed (rpm)	Nominal torque (mNm)	Output (W)	Page
FF050S	FF-050S-13130-MV	15.5	26.9	2	3000	0.3	0.1	5
FF050S	FF-050S-11170-MV	15.5	26.9	7	8500	0.7	0.6	5
FF050S	FF-050S-09250-MV	15.5	26.9	8	6300	0.7	0.5	5
FF050S	FF-050S-06350-MV	15.5	26.9	12	5544	0.7	0.4	5
FF-180SH	FF-180SH-22100T-MV	20.4	32.1	3	4100	1.8	0.8	5
FF-180SH	FF-180SH-12250T-MV	20.4	32.1	12	7000	1.8	1.3	5
270	270-14200-CV	24.4	30.8	12	8800	2.8	2.6	6
RF-310	RF-310CA-11420-MV	24.4	20.1	3	2000	0.5	0.1	6
RF-310	RF-310TA-11400-MV	24.4	20.1	6	5800	0.8	0.5	6
370C	370C-3055-N-CV	24.4	30.8	3	6600	2.3	1.6	7
370C	370C-22170-N-CV	24.4	30.8	6	5200	2.5	1.3	7
370C	370C-14350-N-CV	24.4	30.8	12	5100	2.7	1.4	7
370C	370C-08700-N-CV	24.4	30.8	24	4800	2.5	1.2	7
370S	370S-5028P-C	24.4	30.8	3.6	16200	8.0	14	7
370S	370S-4530P-C	24.4	30.8	6	24000	7.7	19	7
370S	370S-33 70P-CV	24.4	30.8	7.2	13700	5.9	8.4	7
370S	370S-16235P-CV	24.4	30.8	15	7500	6.1	4.9	7
RF-370	RF-370CH-14320-MV	24.4	30.8	6	2400	1.8	0.5	8
RF-370	RF-370CH-12560-MV	24.4	30.8	12	3000	2.0	0.6	8
RF-370	RF-370CH-15370-MV	24.4	30.8	12	4800	2.5	1.3	8
RF-370	RF-370CH-10500-MV	24.4	30.8	24	6100	2.8	1.9	8
M_3N	MD3N-3745-CVC	27.5	32.5	3.6	9900	5.4	5.7	9
M_3N	MP3N-2495-CVC	27.5	32.5	6	8000	4.9	4.2	9
M_3N	MS3N-2880-CVC	27.5	32.5	6	9900	5.6	5.9	9
M_3N	MP3N-3260-CVC	27.5	32.5	6	12200	9.6	12	9
M_5N	MS5N-2365-CVC	27.5	32.5	12	12400	9.1	12	9
M_5N	MP5N-08360-CVC	27.5	32.5	24	3500	3.2	1.2	9
M_5N	MP5N-12190-CVC	27.5	32.5	24	7800	6.0	4.9	9
M_3FN	MS3FN-18180-CVC	27.5	32.8	6	3700	3.5	1.4	10
M_3FN	MS3FN-19145-CVC	27.5	32.8	6	4300	3.9	1.8	10
M_3FN	MD3FN-3270-CVC	27.5	32.8	7.2	12200	7.4	9.3	10
M_3FN	MP3FN-2885-CVC	27.5	32.5	9.6	12900	10.4	14	10
M_5FN	MP5FN-2080-CVC	27.5	32.6	6	4000	4.0	1.7	10
M_5FN	MP5FN-12185-CVC	27.5	32.6	12	3600	3.1	1.2	10
M_5FN	MS5FN-16120-CVC	27.5	32.6	12	5800	4.7	2.9	10
M_5FN	MS5FN-07420-CVC	27.5	32.6	24	3100	2.6	0.9	10
M_5-AA	MD5-2554AS-AA-C	27.5	32.5	12	17000	7.2	13	11
M_5-AA	MD5-2450AS-AA-C	27.5	32.5	12	17200	7.6	14	11
M_5-AA	MD5-15120AS-AA-CV	27.5	32.5	24	15100	6.5	10	11
M_5-AA	MD5-1980AS-AA-CV	27.5	32.5	24	22600	8.7	21	11
M_5-BB	MD5-2445AS-BB-C	27.5	32.5	6	9300	4.4	4.2	11
M_5-BB	MD5-2554AS-BB-C	27.5	32.5	12	17000	7.2	13	11
L_5-DD	LD5-3033AS-DD-C	27.5	37.8	12	19800	9.1	19	12
L_3N	LP3N-18200-CVC	29	37.8	6	2400	2.8	0.7	13
L_3N	LS3N-3558-CVC	29	37.8	6	8800	9.6	8.9	13
L_3N	LS3N-2870-CVC	29	37.8	7.2	8400	9.2	8.3	13
L_3N	LP3N-14350-CVC	29	37.8	12	2600	5.2	1.4	13
L_5N	LP5N-2268-CVC	29	37.8	12	7100	9.1	6.9	13
L_5N	LS5N-2073-CVC	29	37.8	12	7200	7.8	5.9	13
L_5N	LS5N-2445-CC	29	37.8	12	12600	8.8	12	13
L_5N	LS5N-14145-CVC	29	37.8	24	7500	6.4	5.1	13
L_3FN	LD3FN-5015-CC	29	37.8	4	19900	13.2	28	14
L_3FN	LS3FN-12300-CVC	29	37.8	9.6	2300	3.0	0.7	14
L_3FN	LS3FN-14280-CVC	29	37.8	12	3400	4.1	1.5	14
L_3FN	LD3FN-26110-CVC	29	37.8	18	12800	14.6	20	14
L_5FN	LS5FN-3019-CVC	29	37.8	2.4	4900	4.4	2.3	14
L_5FN	LS5FN-15145-CVC	29	37.8	12	3400	4.8	1.7	14

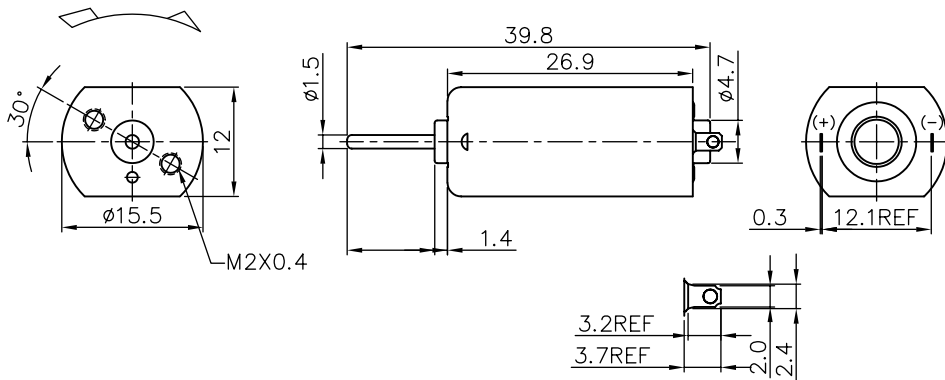
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Series	Part name	Diameter mm	Length mm	Nominal voltage (V)	Nominal speed (rpm)	Nominal torque (mNm)	Output (W)	Page
L_5FN	LS5FN-3035-CC	29	37.8	12	14600	15.6	24	14
L_5FN	LS5FN-16120-CVC	29	37.8	24	8200	8.0	7.0	14
J_3	JD3-5520-CC	30	46.6	7.2	19500	18.7	38	15
J_3	JD3-4532-CC	30	46.6	9.6	16800	23.9	39	15
J_3	JD3-14260-CVC	30	46.6	12	2300	6.3	1.5	15
J_3	JD3-24135-CVC	30	46.6	12	10661	15.7	18	15
J_5	JD5-3723-CVC	30	46.6	6	7500	13.3	11	15
J_5	JD5-2655-CVC	30	46.6	12	5900	12.1	7.5	15
J_5	JD5-18115-CVC	30	46.6	24	6262	11.0	7.2	15
J_3FN	JD5-14200-CVC	30	46.5	3.6	16340	11.1	19	16
J_3FN	JD3FN-5518-CC	30	46.5	6	17600	20.5	38	16
J_3FN	JD3FN-5025-CC	30	46.5	9.6	21800	22.6	52	16
J_5FN	JD5FN-3230-CVC	30	46.5	6	5600	10.3	6.1	16
J_5FN	JC5FN-2655-CVC	30	46.5	12	5700	14.8	8.9	16
J_5FN	JD5FN-14180-CVC	30	46.5	24	3900	6.2	2.6	16
J_5FN	JD5FN-2466-CVC	30	46.5	30	13900	17.0	25	16
RF-500	RF-500TB-14415-MV	32	19.5	6	3000	1.5	0.5	17
RF-500	RF-500TB-18280-MV	32	19.5	6	4400	2.2	1.0	17
RF-500	RF-500TB-12560-MV	32	19.5	12	4600	1.8	0.9	17
GR	GR-3548-CVC	32	29	2.4	5000	5.4	2.8	17
GR	GR-24130-CVC	32	29	6	5100	5.3	2.9	17
GR	GR-18260-CVC	32	29	12	5100	5.9	3.1	17
GR	GR-12530-CVC	32	29	24	5000	6.1	3.2	17
H_3SFN	HS3SFN-7523-CC	36	49.1	4.8	11600	23.9	29	18
H_3SFN	HD3SFN-6040-CC	36	49.1	6	7300	32.0	25	18
H_3SFN	HS3SFN-22240-CVC	36	49.1	12	2600	12.3	3.3	18
H_3SFN	HD3SFN-6035-CC	36	49.1	12	17200	37.3	67	18
H_5FN	HS5FN-19130-CVC	36	49.1	12	2100	12.4	2.8	19
H_5FN	HP5FN-3250-CVC	36	49.1	12	6200	21.5	14	19
H_5FN	HD5FN-2485-CVC	36	49.1	24	7900	22.2	18	19
H_5FN	HP5FN-2670-CVC	36	49.1	24	8600	30.5	28	19
H_3SN	HS3SN-22240-CVC	36	50.1	12	2300	15.9	3.8	19
H_3SN	HP3SN-26135-CVC	36	50.1	12	4400	16.0	7.5	19
H_3SN	HS3SN-4070-CVC	36	50.1	12	9300	23.0	23	19
H_3SN	HP3SN-5048-CVC	36	50.1	12	13800	30.6	44	19
H_5N	HS5N-4525-CVC	36	50.1	6	6800	18.6	13	20
H_5N	HP5N-20120-CVC	36	50.1	12	2300	12.7	3.2	20
H_5N	HS5N-16200-CVC	36	50.1	24	3500	9.4	3.5	20
H_5N	HP5N-20130-CVC	36	50.1	24	4600	15.8	7.7	20
K_3N	KP3N-7521-CC	38	57.1	7.2	12700	38.2	51	20
K_3N	KP3N-35110-CVC	38	57.1	12	3800	23.7	9.6	20
K_3N	KS3N-30100-CVC	38	57.1	12	4300	23.0	11	20
K_3N	KS3N-4553-CVC	38	57.1	12	8400	34.6	31	20
K_5A	KD5A-3058-CVC	41	56	12	4800	17.5	8.9	21
K_3SFN	KD3SFN-8518-CC	39	57	6	12000	36.1	46	22
K_3SFN	KS3SFN-7520F-CC	39	57	7.2	12300	41.5	54	22
K_3SFN	KP3SFN-8020F-CC	39	57	7.2	12400	40.1	52	22
K_3SFN	KV3SFN-7525F-CC	39	57	12	15800	57.3	95	22
K_5N	KD5N-4525-CVC	38	57.1	6	4300	24.5	11	22
K_5N	KP5N-3732-CVC	38	57.1	12	7200	20.3	15	22
K_5N	KP5N-18150-CVC	38	57.1	24	3000	20.7	6.6	22
K_5N	KS5N-18130-CVC	38	57.1	24	3300	15.3	5.4	22
N_3SFN	ND3SFN-4570-CVC	38	65	12	5400	33.5	19	23
N_3SFN	ND3SFN-4565-CVC	38	65	12	5800	36.0	22	23
N_3SFN	NC3SFN-6035-CVC	38	65	12	10700	45.6	52	23
N_3SFN	NC3SFN-7522-CC	38	65	12	17500	45.7	84	23
N_5FN	NC5FN-3550-CVC	38	65	12	3700	30.7	12	23
N_5FN	ND5FN-16190-CVC	38	65	24	2300	11.7	2.9	23
N_5FN	ND5FN-3738-CVC	38	65	24	10900	44.3	51	23

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Series	Part name	Diameter mm	Length mm	Nominal voltage (V)	Nominal speed (rpm)	Nominal torque (mNm)	Output (W)	Page
N_5FN	NC5FN-3545-CVC	38	65	36	14300	40.7	22	23
K_5FN	KS5FN-2462-CVC	39	57	12	3100	13.9	4.6	24
K_5FN	KC5FN-5021F-CC	39	57	24	20800	53.4	117	24
K_5FN	KP5FN-22105-CVC	39	57	28	5200	23.5	13	24
750	750-9013-C	42.4	59	6	16800	46.7	83	25
750	750-32160-C	42.4	59	12	2600	37.9	11	25
750	750-4570-C	42.4	59	12	6300	51.9	35	25
750	750-8028-C	42.4	59	12	15500	66.0	107	25
755	755-8512F-C	42.4	59	9.6	14000	98.2	144	25
755	755-5027F-C	42.4	59	12	8400	45.7	41	25
755	755-3262-C	42.4	59	24	7400	43.3	34	25
755	755-19175-C	42.4	59	36	3900	33.6	14	25
770	770-4087-CC	45	66	12	3500	56.1	21	26
770	770-7040-CC	45	66	12	8400	59.3	53	26
770	770-8525F-CC	45	66	12	13500	80.3	114	26
770	770-32165-CC	45	66	24	3900	52.9	22	26
775	775-9008F-CC	45	66	7.2	12300	80.0	103	26
775	775-9009F-C-CC	45	66	12	18000	102.6	194	26
775	775-8013F-C-CC	45	66	18	18700	100.8	198	26
775	775-5520F-CC	45	66	24	18400	94.3	182	26
987	987-5025F-C	52	69	12	4000	83.5	35	27
987	987-8012F-C	52	69	12	9000	113.2	107	27
987	987-8010F-C	52	69	12	11100	87.5	102	27
987	987-5524F-C	52	69	24	9700	1101.9	112	27

## FF050S series Ø15.5 mm 0.1-0.6 W

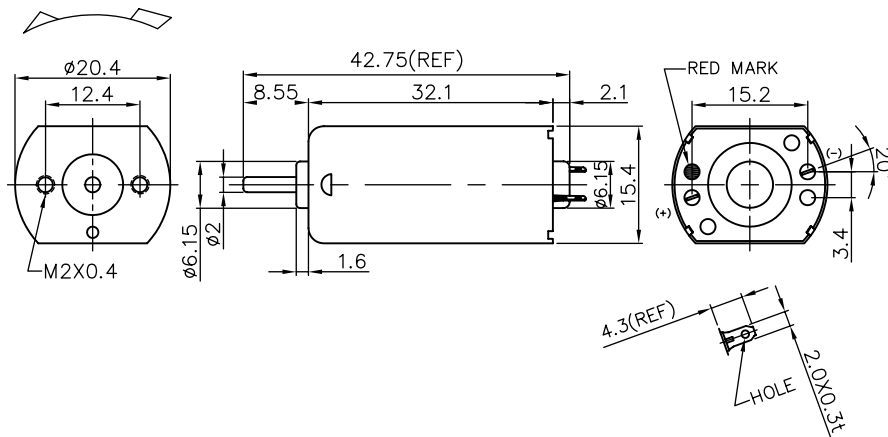


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	FF-050S-13130-MV	FF-050S-11170-MV	FF-050S-09250-MV	FF-050S-06350-MV
Diameter (mm)	15.5	15.5	15.5	15.5
Length (mm)	26.9	26.9	26.9	26.9
Nominal voltage (V)	2	7	8	12
Nominal speed (rpm)	3000	8500	6300	5544
Nominal torque (mNm)	0.3	0.7	0.7	0.7
Nominal current A	0.1	0.2	0.1	0.1
No load speed (rpm)	3700	10300	7900	8000
No load current A	0.04	0.05	0.03	0.03
Stall torque (mNm)	1.7	4.5	3.4	2.6
Starting current (A)	0.5	0.8	0.4	0.4
Output (W)	0.1	0.6	0.4	0.4
Efficiency (%)	42	51	51	42
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## FF-180SH series Ø20.4 mm 0.8-1.3 W

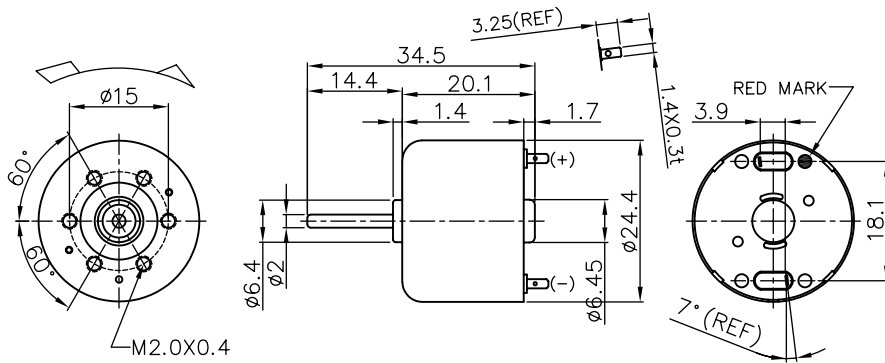


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	FF-180SH-22100T-MV	FF-180SH-12250T-MV		
Diameter (mm)	20.4	20.4		
Length (mm)	32.1	32.1		
Nominal voltage (V)	3	12		
Nominal speed (rpm)	4100	7000		
Nominal torque (mNm)	1.8	1.8		
Nominal current A	0.4	0.2		
No load speed (rpm)	5200	8000		
No load current A	0.10	0.05		
Stall torque (mNm)	9.7	12.1		
Starting current (A)	1.9	1.0		
Output (W)	0.8	1.3		
Efficiency (%)	58	64		
Operating temperature deg. C	-10..+60	-10..+60		

## RF-310 series Ø24 mm 0.1-0.5 W



WEIGHT :29g(APPROX)

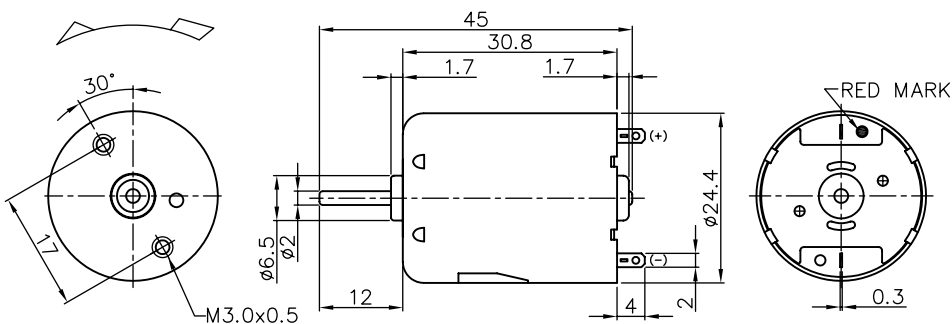


Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	RF-310CA-11420-MV	RF-310TA-11400-MV
Diameter (mm)	24.4	24.4
Lenth (mm)	20.1	20.1
Nominal voltage (V)	3	6
Nominal speed (rpm)	2000	5800
Nominal torque (mNm)	0.5	0.8
Nominal current A	0.1	0.1
No load speed (rpm)	2700	7680
No load current A	0.03	0.04
Stall torque (mNm)	2.1	2.8
Starting current (A)	0.2	0.2
Output (W)	0.1	0.5
Efficiency (%)	52	57
Operating temperature deg. C	-10..+60	-10..+60

## 270 series Ø24 mm 2.6-4.2 W



WEIGHT :51g(APPROX)

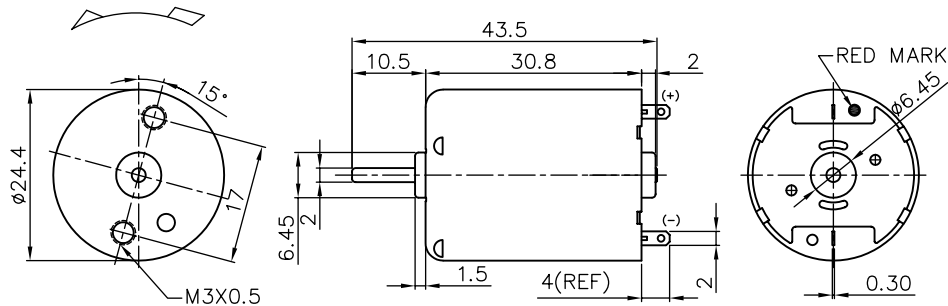


Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	270-14200-CV	270-09450-CV
Diameter (mm)	24.4	24.4
Lenth (mm)	30.8	30.8
Nominal voltage (V)	12	33
Nominal speed (rpm)	8800	9500
Nominal torque (mNm)	2.8	4.1
Nominal current A	0.4	0.2
No load speed (rpm)	11600	11700
No load current A	0.12	0.06
Stall torque (mNm)	12.1	19.6
Starting current (A)	1.4	0.8
Output (W)	2.6	4.2
Efficiency (%)	51	59
Operating temperature deg. C	-10..+60	-10..+60

## 370C series Ø24.4 mm 1.2-1.6 W

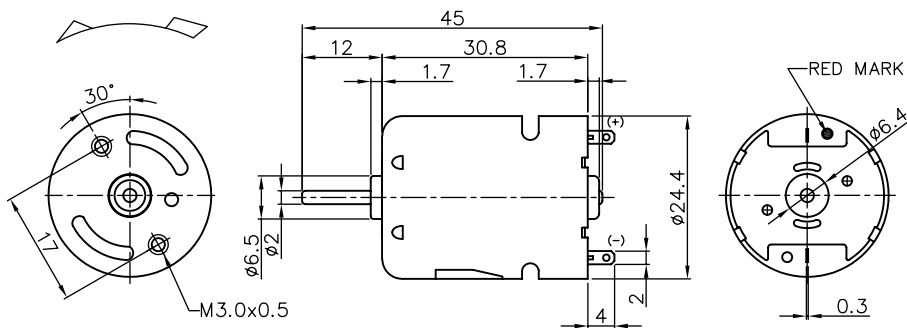


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	370C-3055-N-CV	370C-22170-N-CV	370C-14350-N-CV	370C-08700-N-CV
Diameter (mm)	24.4	24.4	24.4	24.4
Length (mm)	30.8	30.8	30.8	30.8
Nominal voltage (V)	3	6	12	24
Nominal speed (rpm)	6600	5200	5100	4800
Nominal torque (mNm)	2.3	2.5	2.7	2.5
Nominal current A	1.2	0.4	0.2	0.1
No load speed (rpm)	8000	6200	6200	6000
No load current A	0.30	0.10	0.06	0.05
Stall torque (mNm)	12.8	14.7	15.2	12.3
Starting current (A)	5.4	1.8	0.9	0.4
Output (W)	1.6	1.3	1.4	1.2
Efficiency (%)	46	62	62	57
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## 370S series Ø24.4 mm 4.9-19W

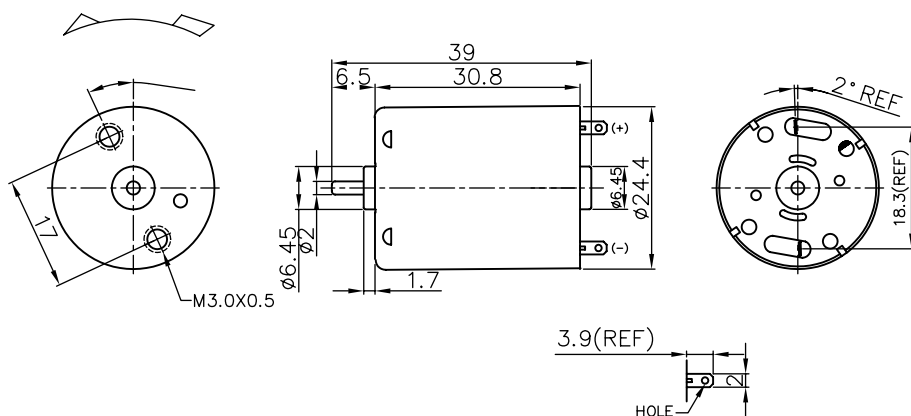


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	370S-5028P-C	370S-4530P-C	370S-3370P-CV	370S-16235P-CV
Diameter (mm)	24.4	24.4	24.4	24.4
Length (mm)	30.8	30.8	30.8	30.8
Nominal voltage (V)	3.6	6	7.2	15
Nominal speed (rpm)	16200	24000	14265	7500
Nominal torque (mNm)	8.0	7.7	7.2	6.1
Nominal current A	5.8	5.5	2.0	0.5
No load speed (rpm)	19000	29000	16500	9700
No load current A	1.00	0.80	0.48	0.10
Stall torque (mNm)	46.7	52.8	48.5	32.9
Starting current (A)	28.0	29.2	12.2	2.6
Output (W)	14	19	8.4	4.9
Efficiency (%)	66	59	81	62
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

# RF-370 series Ø24.4 mm 0.5-1.8 W

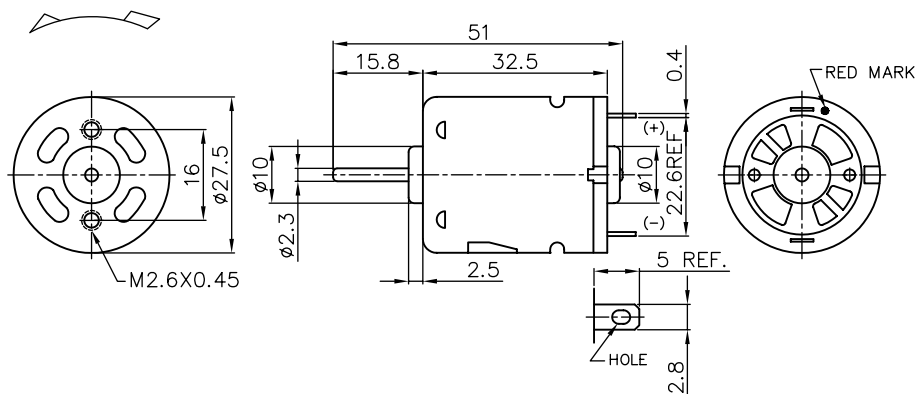


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

MOTOR DATA				
Part name	RF-370CH-14320-MV	RF-370CH-12560-MV	RF-370CH-15370-MV	RF-370CH-10500-MV
Diameter (mm)	24.4	24.4	24.4	24.4
Length (mm)	30.8	30.8	30.8	30.8
Nominal voltage (V)	6	12	12	24
Nominal speed (rpm)	2400	3000	4800	6100
Nominal torque (mNm)	1.8	2.0	2.5	2.8
Nominal current A	0.1	0.1	0.2	0.1
No load speed (rpm)	3200	3700	5600	8000
No load current A	0.03	0.01	0.02	0.02
Stall torque (mNm)	8.8	12.3	18.2	16.9
Starting current (A)	0.5	0.7	0.9	0.6
Output (W)	0.5	0.6	1.3	1.8
Efficiency (%)	58	62	70	60
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60



## M\_3N series Ø27.5 mm 4.2-12 W

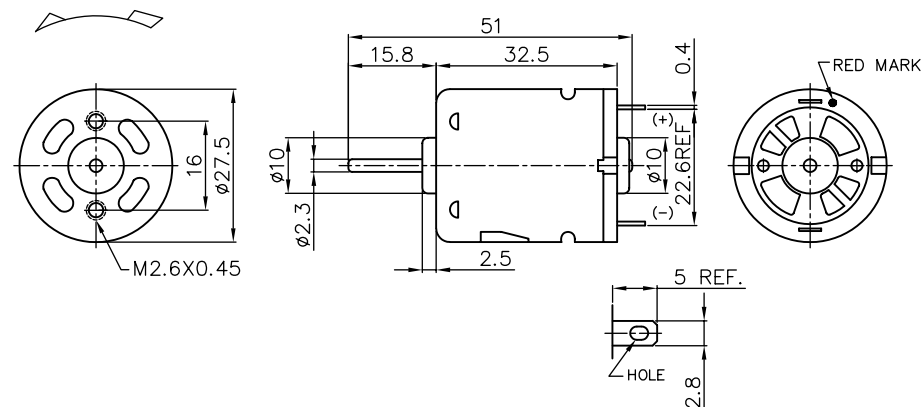


Model - □ - □  
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MD3N-3745-CVC	MP3N-2495-CVC	MS3N-2880-CVC	MP3N-3260-CVC
Diameter (mm)	27.5	27.5	27.5	27.5
Length (mm)	32.5	32.5	32.5	32.5
Nominal voltage (V)	3.6	6	6	6
Nominal speed (rpm)	9900	8000	9900	12200
Nominal torque (mNm)	5.4	4.9	5.6	9.6
Nominal current A	2.6	1.2	1.6	3.4
No load speed (rpm)	12500	9800	12000	15000
No load current A	0.80	0.30	0.35	0.55
Stall torque (mNm)	25.9	30.3	35.6	51.4
Starting current (A)	9.5	5.8	8.2	14.9
Output (W)	5.7	4.2	5.9	12
Efficiency (%)	61	60	64	62
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## M\_5N series Ø27.5 mm 1.2-11 W

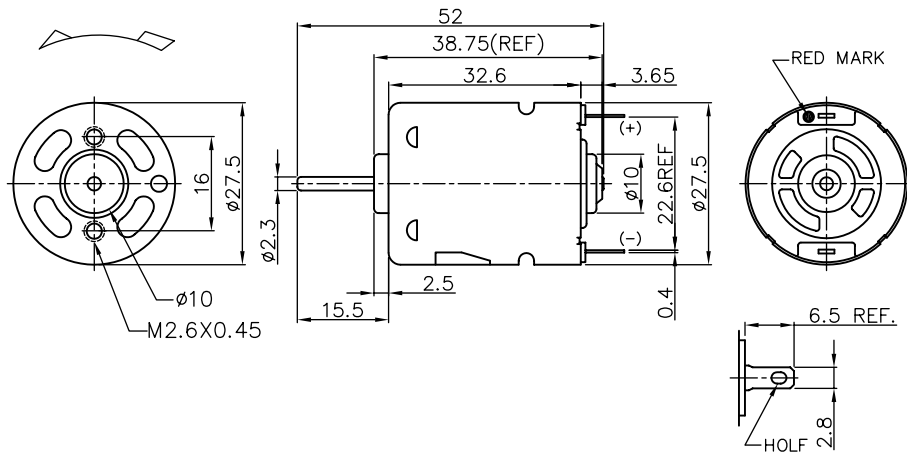


Model - □ - □  
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MS5N-2365-CVC	MP5N-08360-CVC	MP5N-12190-CVC
Diameter (mm)	27.5	27.5	27.5
Length (mm)	32.5	32.5	32.5
Nominal voltage (V)	12	24	24
Nominal speed (rpm)	12400	3500	7800
Nominal torque (mNm)	9.1	3.2	6.0
Nominal current A	1.7	0.1	0.4
No load speed (rpm)	16600	4800	10200
No load current A	0.40	0.05	0.10
Stall torque (mNm)	41.8	12.7	25.9
Starting current (A)	6.3	0.3	1.2
Output (W)	11	1.2	4.91
Efficiency (%)	58	42	59
Operating temperature deg. C	-10..+60	-10..+60	-10..+60

## M\_3FN series Ø27.5 mm 1.3-14 W

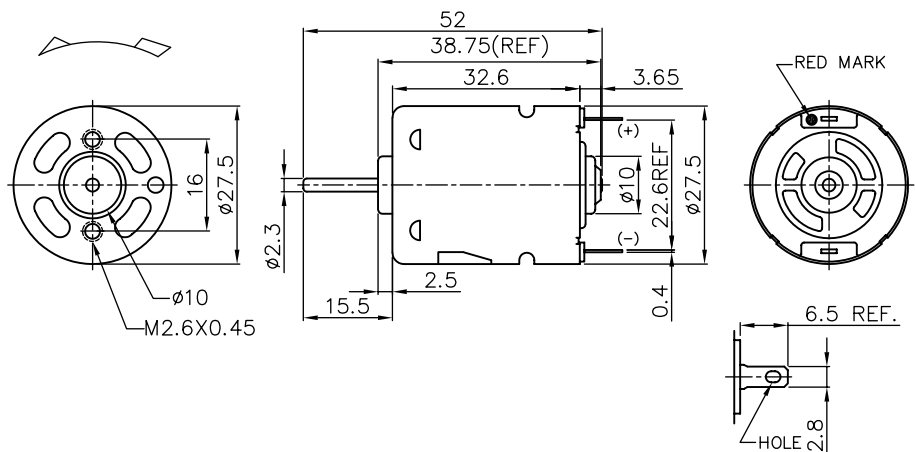


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MS3FN-18180-CVC	MS3FN-19145-CVC	MD3FN-3270-CVC	MP3FN-2885-CVC
Diameter (mm)	27.5	27.5	27.5	27.5
Length (mm)	32.6	32.6	32.6	32.6
Nominal voltage (V)	6	6	7.2	9.6
Nominal speed (rpm)	3700	4300	12200	12900
Nominal torque (mNm)	3.5	3.9	7.4	10.4
Nominal current A	0.4	0.6	2.1	2.4
No load speed (rpm)	4750	5900	14800	15700
No load current A	0.13	0.17	0.55	0.45
Stall torque (mNm)	17.0	16.9	43.1	58.8
Starting current (A)	1.6	2.0	10.4	11.1
Output (W)	1.3	1.8	9.3	14
Efficiency (%)	59	53	61	62
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## M\_5FN series Ø27.5 mm 0.9-2.9 W

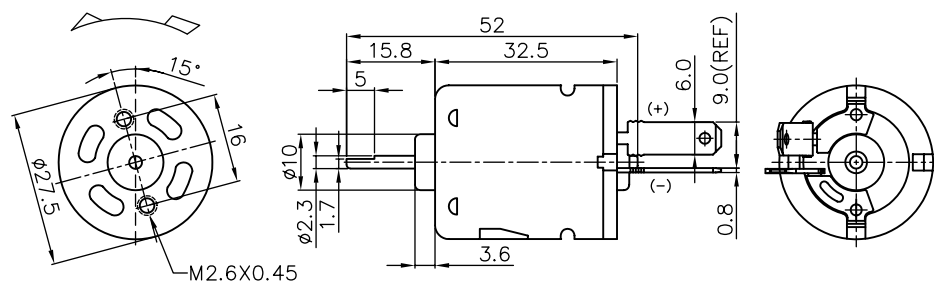


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MP5FN-2080-CVC	MP5FN-12185-CVC	MS5FN-16120-CVC	MS5FN-07420-CVC
Diameter (mm)	27.5	27.5	27.5	27.5
Length (mm)	32.6	32.6	32.6	32.6
Nominal voltage (V)	6	12	12	24
Nominal speed (rpm)	4000	3600	5800	3100
Nominal torque (mNm)	4.0	3.1	4.7	2.6
Nominal current A	0.5	0.2	0.5	0.1
No load speed (rpm)	5200	4800	7600	4300
No load current A	0.16	0.08	0.10	0.04
Stall torque (mNm)	19.8	14.3	23.0	10.1
Starting current (A)	2.1	0.7	1.7	0.2
Output (W)	1.7	1.2	2.9	0.9
Efficiency (%)	53	53	54	45
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## M\_5-AA series Ø27.5 mm 10-21 W

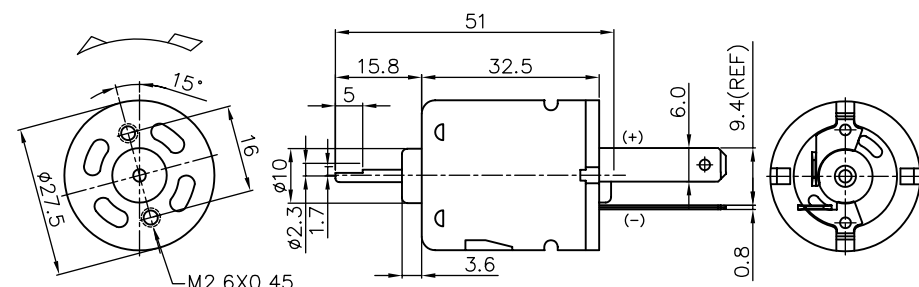


Model - □ - □  
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MD5-2554AS-AA-C	MD5-2450AS-AA-C	MD5-15120AS-AA-CV	MD5-1980AS-AA-CV
Diameter (mm)	27.5	27.5	27.5	27.5
Lenth (mm)	32.5	32.5	32.5	32.5
Nominal voltage (V)	12	12	24	24
Nominal speed (rpm)	17000	17200	15100	22600
Nominal torque (mNm)	7.2	7.6	6.5	8.7
Nominal current A	1.7	2.0	0.7	1.4
No load speed (rpm)	20800	22000	18800	27000
No load current A	0.55	0.60	0.24	0.40
Stall torque (mNm)	39.2	35.3	33.3	46.1
Starting current (A)	7.7	7.4	2.9	5.9
Output (W)	13	14	10	21
Efficiency (%)	62	56	62	61
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## M\_5-BB series Ø27.5 mm 4.2-12 W

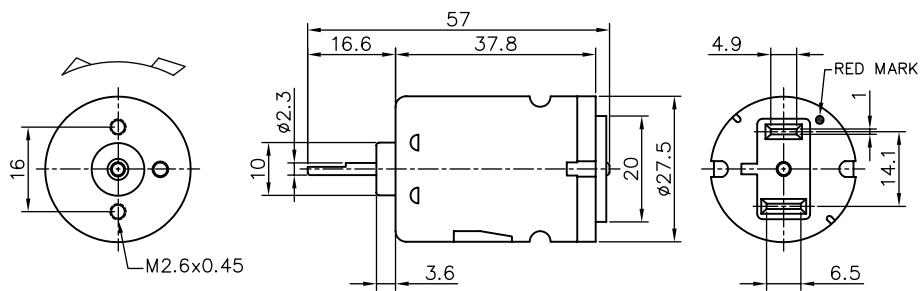


Model - □ - □  
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	MD5-2445AS-BB-C	MD5-2554AS-BB-C		
Diameter (mm)	27.5	27.5		
Lenth (mm)	32.5	32.5		
Nominal voltage (V)	6	12		
Nominal speed (rpm)	9300	17000		
Nominal torque (mNm)	4.4	7.2		
Nominal current A	1.4	1.7		
No load speed (rpm)	12000	20800		
No load current A	0.55	0.55		
Stall torque (mNm)	19.6	39.2		
Starting current (A)	4.6	7.7		
Output (W)	4.2	12		
Efficiency (%)	50	62		
Operating temperature deg. C	-10..+60	-10..+60		

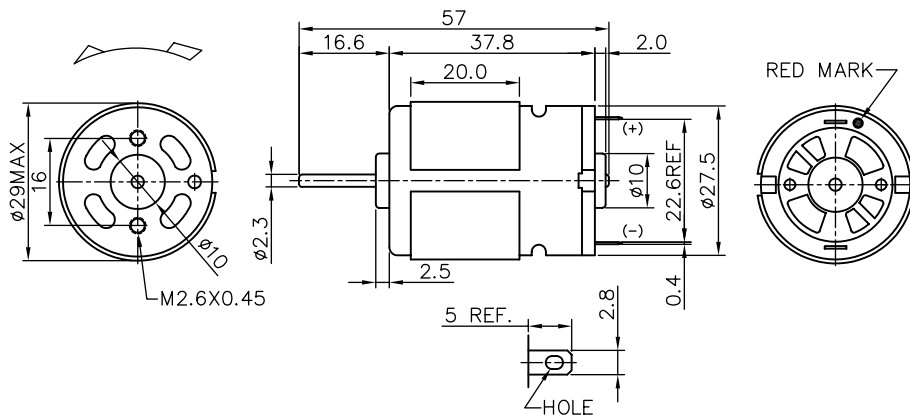
# L\_5-DD series Ø27.5 mm 19 W



Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

MOTOR DATA	
Part name	LD5-3033AS-DD-C
Diameter (mm)	27.5
Length (mm)	37.8
Nominal voltage (V)	12
Nominal speed (rpm)	19800
Nominal torque (mNm)	9.1
Nominal current A	2.6
No load speed (rpm)	25800
No load current A	0.70
Stall torque (mNm)	43.1
Starting current (A)	10.4
Output (W)	19
Efficiency (%)	62
Operating temperature deg. C	-10..+60

## L\_3N series Ø29 mm 0.7-8.9 W

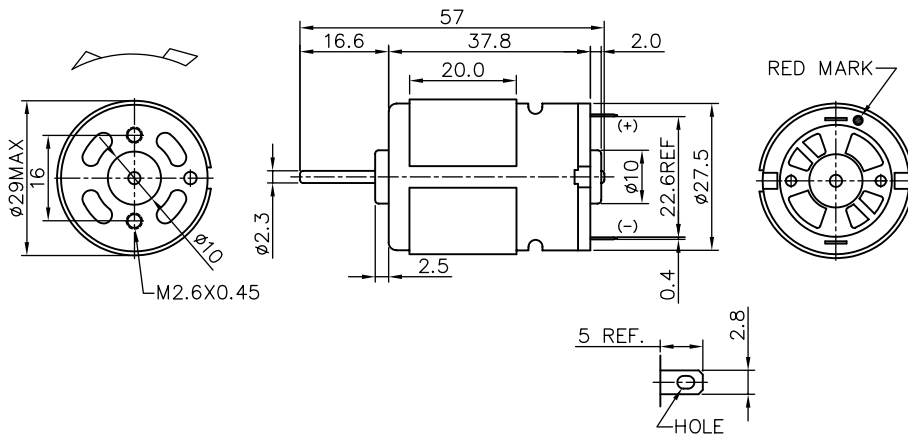


Model - □ - □  
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	LP3N-18200-CVC	LS3N-3558-CVC	LS3N-2870-CVC	LP3N-14350-CVC
Diameter (mm)	29	29	29	29
Lenth (mm)	37.8	37.8	37.8	37.8
Nominal voltage (V)	6	6	7.2	12
Nominal speed (rpm)	2400	8800	8400	2600
Nominal torque (mNm)	2.8	9.6	9.2	5.2
Nominal current A	0.2	2.2	1.7	0.2
No load speed (rpm)	3000	10500	10400	3200
No load current A	0.08	0.40	0.32	0.06
Stall torque (mNm)	19.1	65.5	51.0	25.8
Starting current (A)	1.1	12.6	7.9	0.8
Output (W)	0.7	8.9	8.3	1.4
Efficiency (%)	61	68	66	57
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## L\_5N series Ø29 mm 1.4-8.9 W

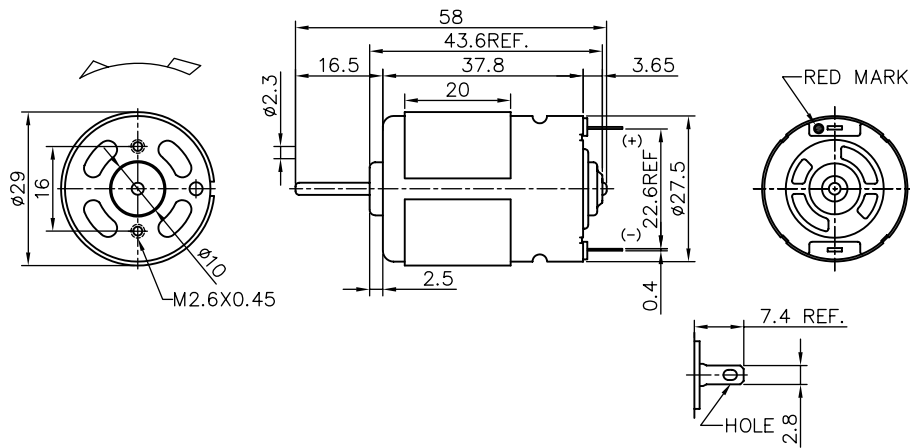


Model - □ - □  
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	LS3N-3558-CVC	LS3N-2870-CVC	LP3N-14350-CVC	LP5N-2268-CVC
Diameter (mm)	29	29	29	29
Lenth (mm)	37.8	37.8	37.8	37.8
Nominal voltage (V)	6	7.2	12	12
Nominal speed (rpm)	8800	8400	2600	7100
Nominal torque (mNm)	9.6	9.2	5.2	9.1
Nominal current A	2.2	1.7	0.2	0.9
No load speed (rpm)	10500	10400	3200	8600
No load current A	0.40	0.32	0.06	0.14
Stall torque (mNm)	65.5	51.0	25.8	54.9
Starting current (A)	12.6	7.9	0.8	4.4
Output (W)	8.9	8.3	1.4	6.9
Efficiency (%)	68	66	57	65
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## L\_3FN series Ø29 mm 0.7-28 W

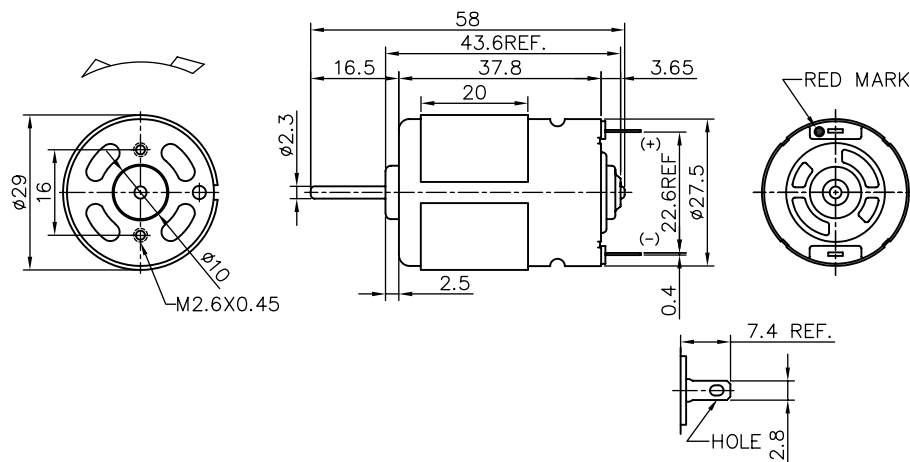


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	LD3FN-5015-CC	LS3FN-12300-CVC	LS3FN-14280-CVC	LD3FN-26110-CVC
Diameter (mm)	29	29	29	29
Length (mm)	37.8	37.8	37.8	37.8
Nominal voltage (V)	4	9.6	12	18
Nominal speed (rpm)	19900	2300	3400	12800
Nominal torque (mNm)	13.2	3.0	4.1	14.6
Nominal current A	10.8	0.2	0.2	1.6
No load speed (rpm)	25000	3100	4300	15000
No load current A	2.10	0.06	0.07	0.22
Stall torque (mNm)	61.5	13.3	23.8	102.9
Starting current (A)	41.9	0.5	1.0	9.9
Output (W)	28	0.7	1.5	20
Efficiency (%)	65	49	57	69
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## L\_5FN series Ø29 mm 1.7-24 W

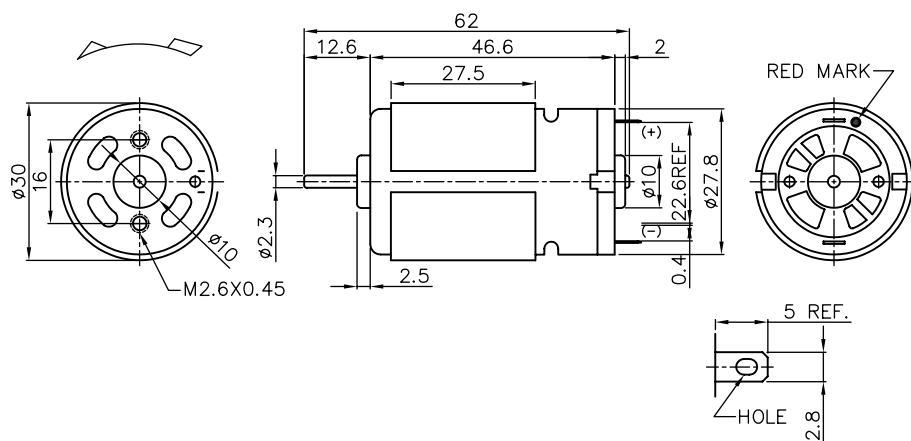


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	LS5FN-3019-CVC	LS5FN-15145-CVC	LS5FN-3035-CC	LS5FN-16120-CVC
Diameter (mm)	29	29	29	29
Length (mm)	37.8	37.8	37.8	37.8
Nominal voltage (V)	2.4	12	12	24
Nominal speed (rpm)	4900	3407	14600	8200
Nominal torque (mNm)	4.4	4.8	15.6	8.0
Nominal current A	1.8	0.3	2.9	0.5
No load speed (rpm)	6500	4300	17500	9700
No load current A	0.50	0.06	0.50	0.08
Stall torque (mNm)	20.8	25.0	84.7	55.9
Starting current (A)	6.7	1.0	13.5	2.6
Output (W)	2.3	1.7	24	7
Efficiency (%)	53	66	68	66
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## J\_3 series Ø30 mm 1.5-39 W

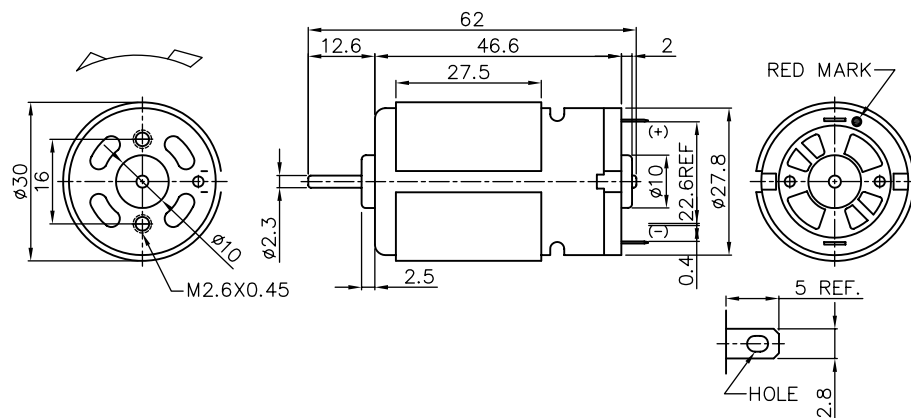


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	JD3-5520-CC	JD3-4532-CC	JD3-14260-CVC	JD3-24135-CVC
Diameter (mm)	30	30	30	30
Length (mm)	46.6	46.6	46.6	46.6
Nominal voltage (V)	7.2	9.6	12	12
Nominal speed (rpm)	19500	16800	2300	10661
Nominal torque (mNm)	18.7	23.9	6.3	15.7
Nominal current A	8.2	5.6	0.2	2.0
No load speed (rpm)	23500	20000	3000	12500
No load current A	1.50	0.80	0.06	0.35
Stall torque (mNm)	119.0	162.9	32.8	121.6
Starting current (A)	42.5	36.4	0.9	13.3
Output (W)	38	39	1.5	18
Efficiency (%)	66	72	60	77
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## J\_5 series Ø30 mm 7.2-19 W

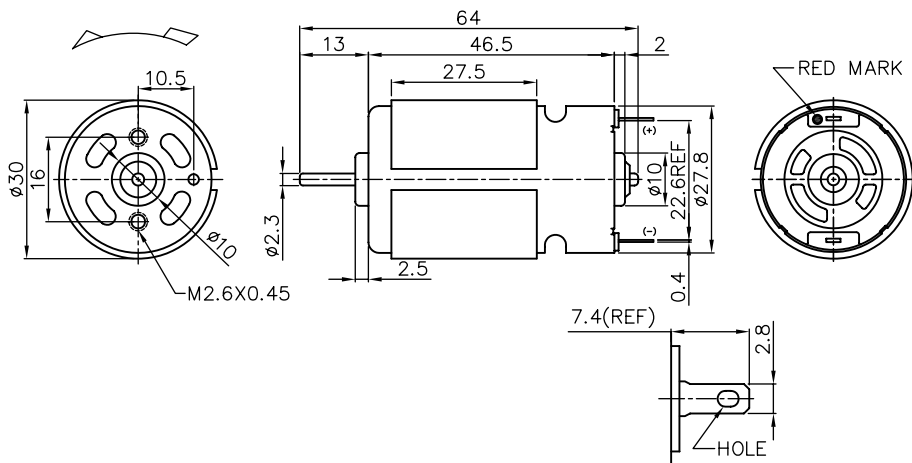


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	JD5-14200-CVC	JD5-3723-CVC	JD5-2655-CVC	JD5-18115-CVC
Diameter (mm)	30	30	30	30
Length (mm)	46.5	46.6	46.6	46.6
Nominal voltage (V)	3.6	6	12	24
Nominal speed (rpm)	16340	7500	5900	6262
Nominal torque (mNm)	11.1	13.3	12.1	11.0
Nominal current A	8.9	2.5	0.9	0.4
No load speed (rpm)	20000	9000	7200	7200
No load current A	2.00	0.45	0.15	0.09
Stall torque (mNm)	61.4	93.5	78.3	88.0
Starting current (A)	40.1	15.0	4.8	2.8
Output (W)	19	11	7.5	7.2
Efficiency (%)	59	72	73	74
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## J\_3FN series Ø30 mm 38-52 W

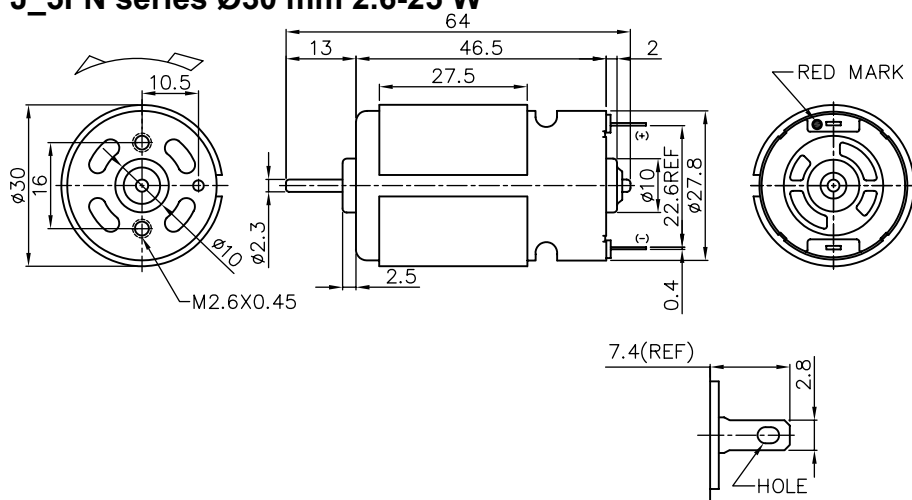


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	JD3FN-5518-CC	JD3FN-5025-CC		
Diameter (mm)	30	30		
Length (mm)	46.5	46.5		
Nominal voltage (V)	6	9.6		
Nominal speed (rpm)	17600	21800		
Nominal torque (mNm)	20.5	22.6		
Nominal current A	8.8	7.8		
No load speed (rpm)	20800	25500		
No load current A	1.20	1.40		
Stall torque (mNm)	134.4	164.0		
Starting current (A)	50.8	47.8		
Output (W)	38	52		
Efficiency (%)	72	70		
Operating temperature deg. C	-10..+60	-10..+60		

## J\_5FN series Ø30 mm 2.6-25 W



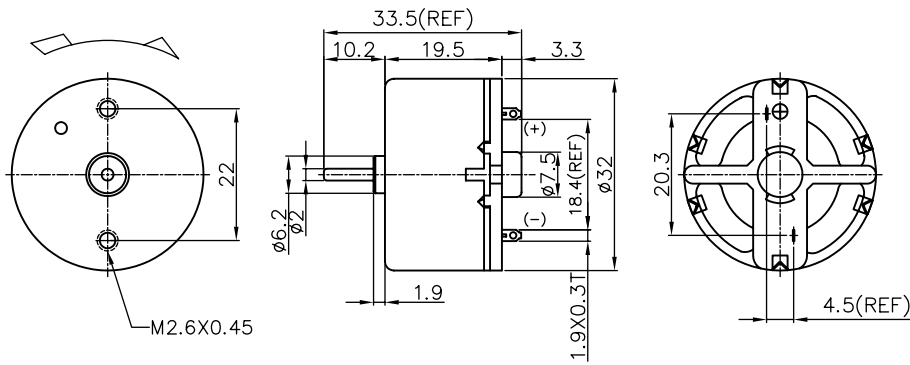
Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	JD5FN-3230-CVC	JC5FN-2655-CVC	JD5FN-14180-CVC	JD5FN-2466-CVC
Diameter (mm)	30	30	30	30
Length (mm)	46.5	46.5	46.5	46.5
Nominal voltage (V)	6	12	24	30
Nominal speed (rpm)	5600	5700	3900	13900
Nominal torque (mNm)	10.3	14.8	6.2	17.0
Nominal current A	1.46	1.0	0.1	1.1
No load speed (rpm)	6400	6700	4200	15700
No load current A	0.25	0.16	0.06	0.18
Stall torque (mNm)	68.6	106.3	60.6	162.3
Starting current (A)	8.4	6.3	1.2	9.1
Output (W)	6.1	8.9	2.6	25
Efficiency (%)	70	71	77	77
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60



## RF-500 series Ø32 mm 0.5-1.0 W

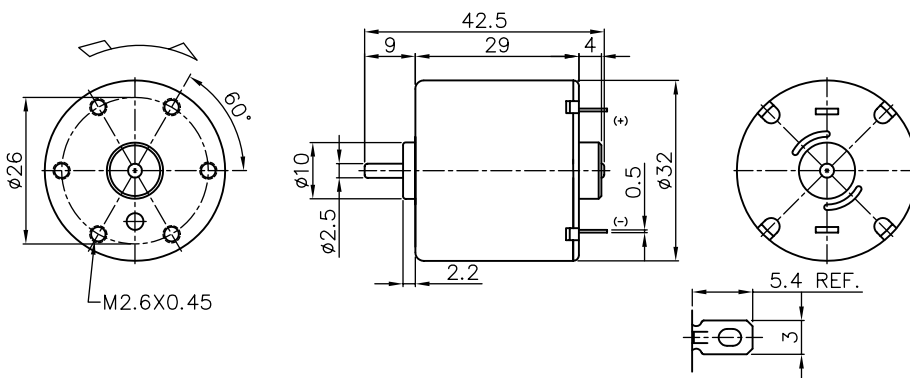


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	RF-500TB-14415-MV	RF-500TB-18280-MV	RF-500TB-12560-MV
Diameter (mm)	32	32	32
Length (mm)	19.5	19.5	19.5
Nominal voltage (V)	6	6	12
Nominal speed (rpm)	3000	4400	4600
Nominal torque (mNm)	1.5	2.2	1.8
Nominal current A	0.1	0.3	0.1
No load speed (rpm)	3700	5600	5600
No load current A	0.04	0.07	0.03
Stall torque (mNm)	8.4	12.3	11.8
Starting current (A)	0.6	1.3	0.6
Output (W)	0.5	1.0	0.9
Efficiency (%)	62	61	67
Operating temperature deg. C	-10..+60	-10..+60	-10..+60

## GR series Ø32 mm 2.8-3.2 W

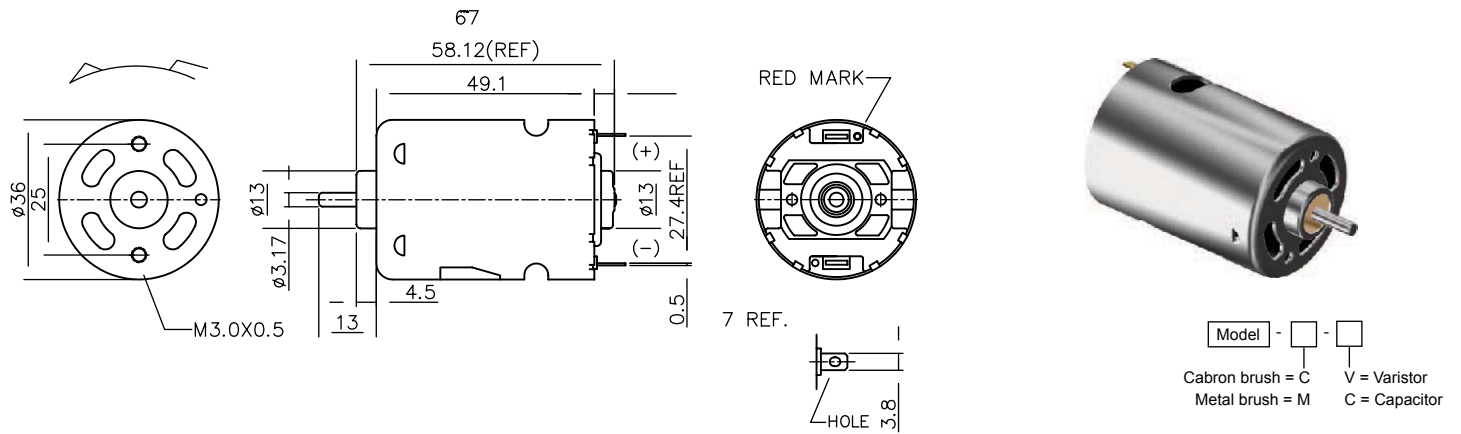


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

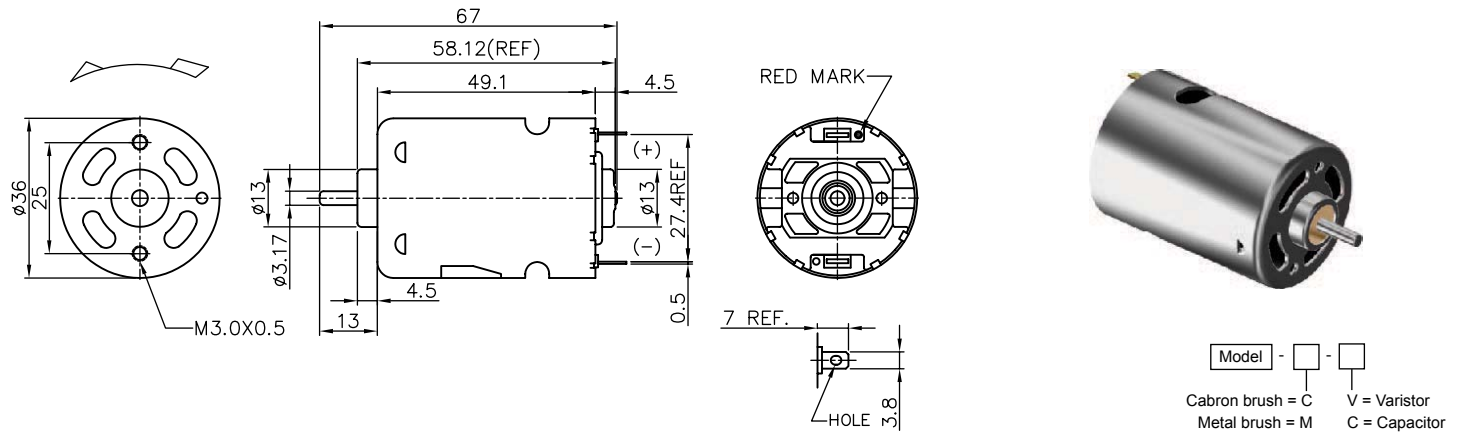
Part name	GR-3548-CVC	GR-24130-CVC	GR-18260-CVC	GR-12530-CVC
Diameter (mm)	26	26	26	26
Length (mm)	29	29	29	29
Nominal voltage (V)	2.4	6	12	24
Nominal speed (rpm)	5000	5100	5100	5000
Nominal torque (mNm)	5.4	5.3	5.9	6.1
Nominal current A	2.2	0.8	0.5	0.2
No load speed (rpm)	6400	6200	6200	6200
No load current A	0.60	0.20	0.12	0.06
Stall torque (mNm)	24.5	31.4	33.3	31.4
Starting current (A)	7.7	3.5	2.2	0.9
Output (W)	2.8	2.9	3.1	3.2
Efficiency (%)	54	61	56	62
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

# H\_3SFN series Ø36 mm 3.3-67 W



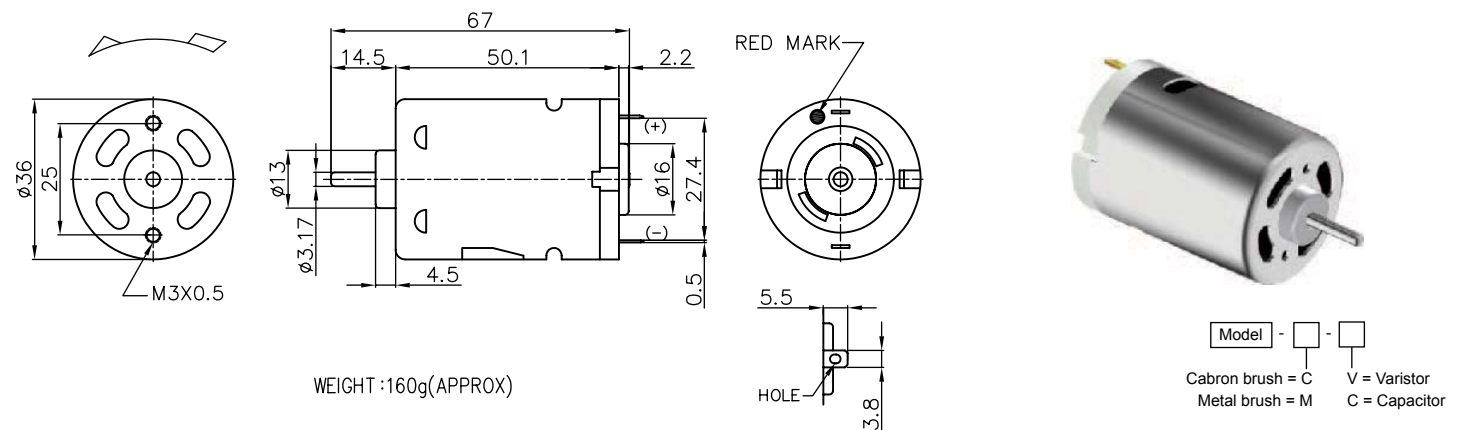
MOTOR DATA				
Part name	HS3SFN-7523-CC	HD3SFN-6040-CC	HS3SFN-22240-CVC	HD3SFN-6035-CC
Diameter (mm)	36	36	36	36
Length (mm)	49.1	49.1	49.1	49.1
Nominal voltage (V)	4.8	6	12	12
Nominal speed (rpm)	11600	7300	2600	17200
Nominal torque (mNm)	23.9	32.0	12.3	37.3
Nominal current A	9.1	5.9	0.4	8.3
No load speed (rpm)	14000	8600	3100	20500
No load current A	1.80	1.00	0.12	1.00
Stall torque (mNm)	165.2	232.8	77.5	286.3
Starting current (A)	53.8	38.7	2.3	56.3
Output (W)	29	25	3.3	67
Efficiency (%)	68	70	62	68
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## H\_5FN series Ø36 mm 2.8-28 W



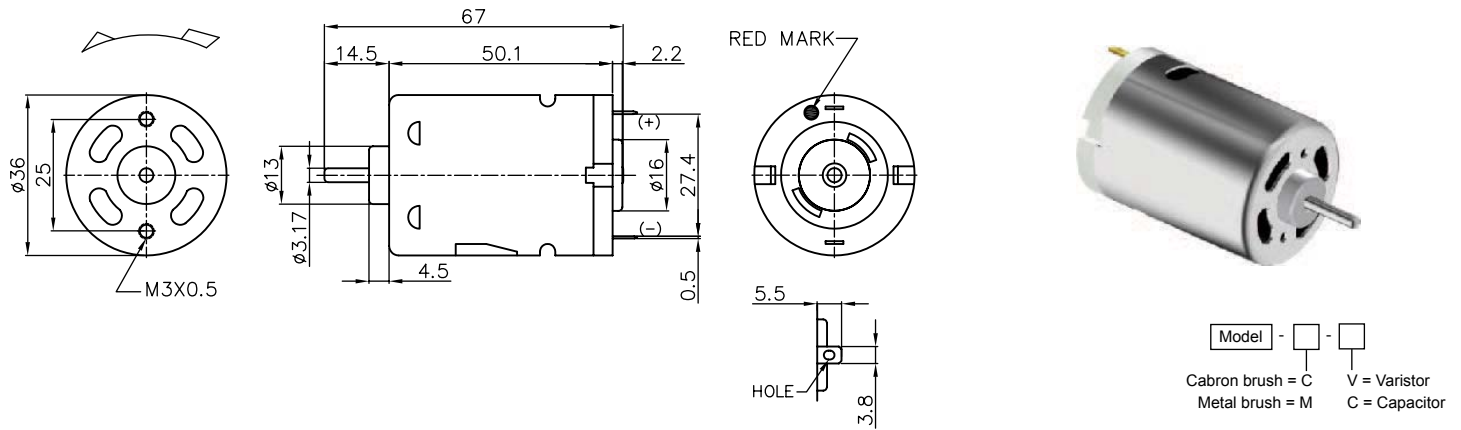
MOTOR DATA				
Part name	HS5FN-19130-CVC	HP5FN-3250-CVC	HD5FN-2485-CVC	HP5FN-2670-CVC
Diameter (mm)	36	36	36	36
Length (mm)	49.1	49.1	49.1	49.1
Nominal voltage (V)	12	12	24	24
Nominal speed (rpm)	2100	6200	7900	8600
Nominal torque (mNm)	12.4	21.5	22.2	30.5
Nominal current A	0.4	1.8	1.1	1.9
No load speed (rpm)	2800	7400	9700	10600
No load current A	0.10	0.32	0.26	0.70
Stall torque (mNm)	57.8	142.3	152.3	170.5
Starting current (A)	1.7	9.8	6.2	9.1
Output (W)	2.8	14	18	28
Efficiency (%)	54	66	71	60
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## H\_3SN series Ø36 mm 3.8-44 W



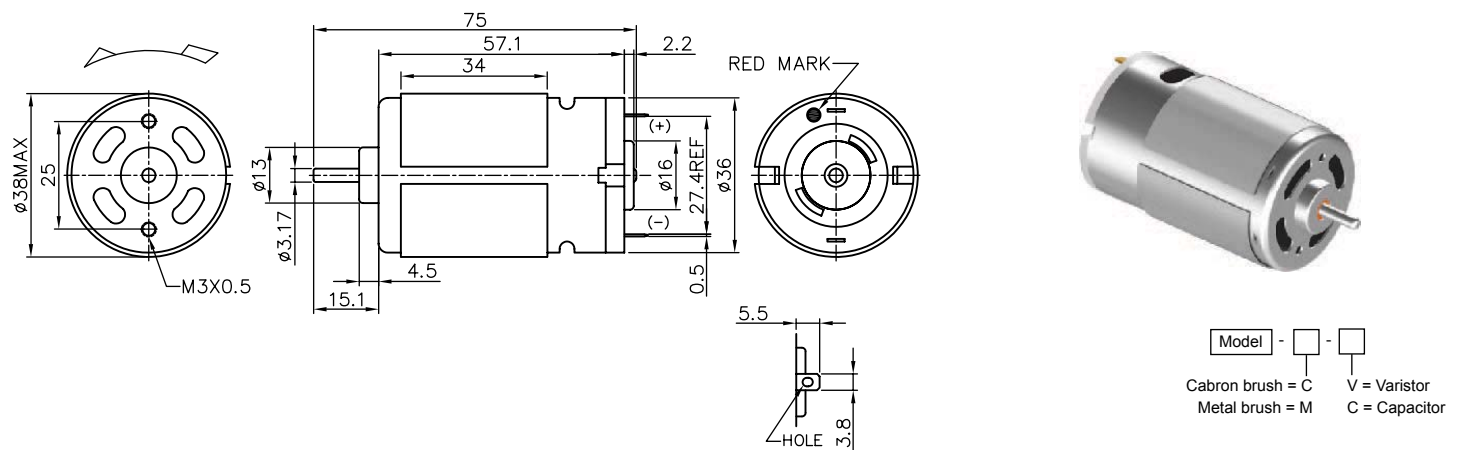
MOTOR DATA				
Part name	HS3SN-22240-CVC	HP3SN-26135-CVC	HS3SN-4070-CVC	HP3SN-5048-CVC
Diameter (mm)	36	36	36	36
Length (mm)	50.1	50.1	50.1	50.1
Nominal voltage (V)	12	12	12	12
Nominal speed (rpm)	2300	4400	9300	13800
Nominal torque (mNm)	15.9	16.0	23.0	30.6
Nominal current A	0.6	1.0	2.9	5.4
No load speed (rpm)	3000	5400	11000	16200
No load current A	0.11	0.20	0.50	0.86
Stall torque (mNm)	68.1	106.0	154.9	214.3
Starting current (A)	2.1	5.4	16.5	32.6
Output (W)	3.8	8	23	44
Efficiency (%)	58	65	65	69
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## H\_5N series Ø36 mm 3.2-13 W



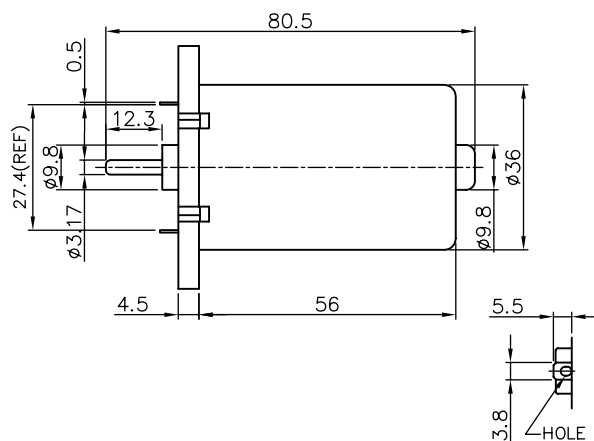
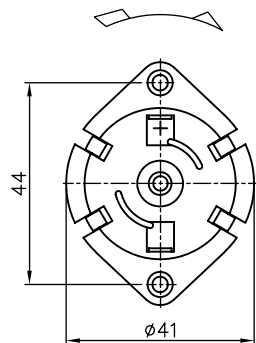
MOTOR DATA				
Part name	HS5N-4525-CVC	HP5N-20120-CVC	HS5N-16200-CVC	HP5N-20130-CVC
Diameter (mm)	36	36	36	36
Length (mm)	50.1	50.1	50.1	50.1
Nominal voltage (V)	6	12	24	24
Nominal speed (rpm)	6800	2300	3500	4600
Nominal torque (mNm)	18.6	12.7	9.4	15.8
Nominal current A	3.3	0.5	0.2	0.5
No load speed (rpm)	8700	3100	4100	5600
No load current A	1.00	0.12	0.60	0.12
Stall torque (mNm)	86.3	60.0	72.4	112.6
Starting current (A)	12.1	1.8	1.4	2.9
Output (W)	13	3.2	3.5	7.7
Efficiency (%)	66	56	66	66
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## K\_3N series Ø38 mm 9.6-51 W



MOTOR DATA				
Part name	KP3N-7521-CC	KP3N-35110-CVC	KS3N-30100-CVC	KS3N-4553-CVC
Diameter (mm)	38	38	38	38
Length (mm)	57.1	57.1	57.1	57.1
Nominal voltage (V)	7.2	12	12	12
Nominal speed (rpm)	12700	3800	4300	8400
Nominal torque (mNm)	38.2	23.7	23.0	34.6
Nominal current A	9.9	1.1	1.3	3.6
No load speed (rpm)	14500	4500	5200	10200
No load current A	1.50	0.15	0.30	0.60
Stall torque (mNm)	353.7	198.0	147.1	246.4
Starting current (A)	79.8	8.3	7.2	22.7
Output (W)	51	9.6	11	31
Efficiency (%)	72	71	65	72
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

# K\_5A series Ø41 mm 8.9 W

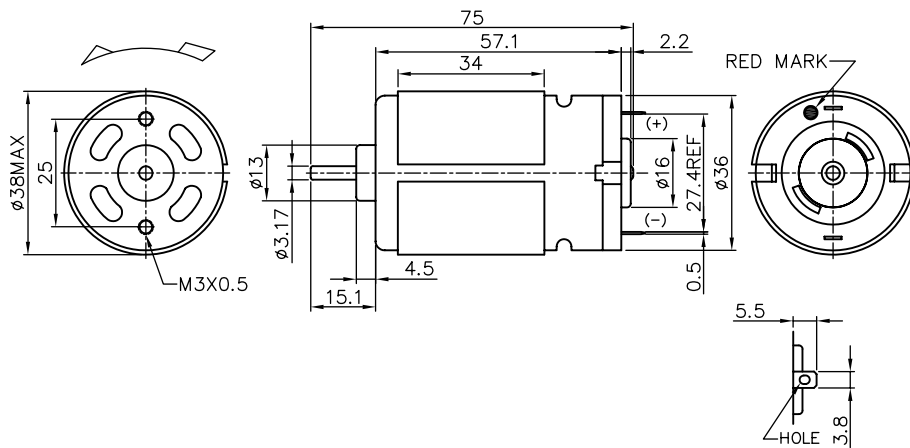


Model -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

## MOTOR DATA

Part name	KD5A-3058-CVC		
Diameter (mm)	41		
Length (mm)	56		
Nominal voltage (V)	12		
Nominal speed (rpm)	4800		
Nominal torque (mNm)	17.5		
Nominal current A	1.2		
No load speed (rpm)	5800		
No load current A	0.25		
Stall torque (mNm)	98.0		
Starting current (A)	5.3		
Output (W)	8.9		
Efficiency (%)	64		
Operating temperature deg. C	-10..+60		

## K\_5N series Ø38 mm 5.4-15 W

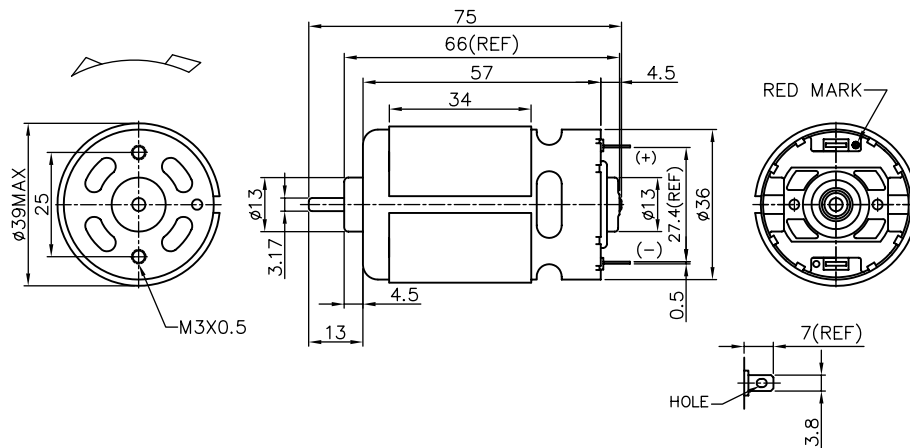


Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	KD5N-4525-CVC	KP5N-18150-CVC	KS5N-18130-CVC	KP5N-3732-CVC
Diameter (mm)	38	38	38	38
Lenth (mm)	57	57.1	57.1	57.1
Nominal voltage (V)	6	24	24	12
Nominal speed (rpm)	4300	3000	3300	7200
Nominal torque (mNm)	24.5	20.7	15.3	20.3
Nominal current A	2.7	0.4	0.4	1.8
No load speed (rpm)	5500	3700	4000	8400
No load current A	0.70	0.95	0.09	0.28
Stall torque (mNm)	133.3	119.0	110.0	180.1
Starting current (A)	12.5	2.0	2.1	13.8
Output (W)	11	6.6	5.4	15
Efficiency (%)	69	69	65	71
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## K\_3SFN series Ø39 mm 46-95 W

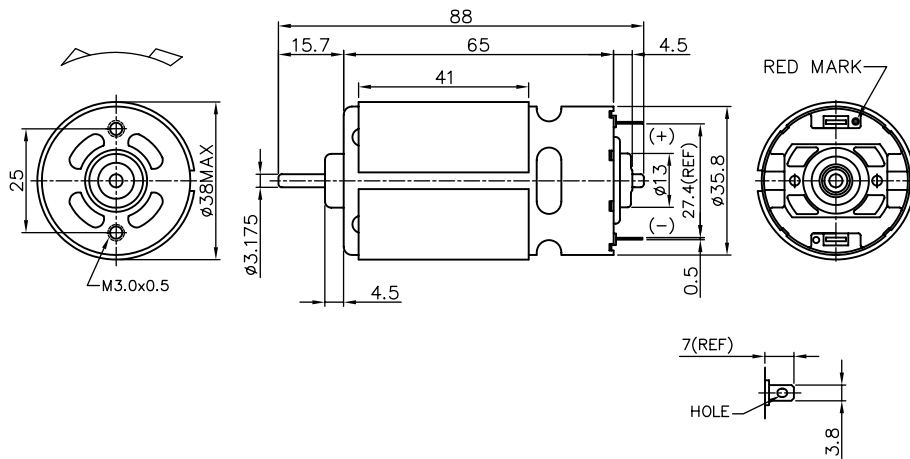


Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	KD3SFN-8518-CC	KS3SFN-7520F-CC	KP3SFN-8020F-CC	KV3SFN-7525F-CC
Diameter (mm)	39	39	39	39
Lenth (mm)	57	57	57	57
Nominal voltage (V)	6	7.2	7.2	12
Nominal speed (rpm)	12000	12300	12400	15800
Nominal torque (mNm)	36.1	41.5	40.1	57.3
Nominal current A	10.2	10.4	9.6	9.8
No load speed (rpm)	13000	15000	14400	17600
No load current A	6.00	1.30	1.50	1.20
Stall torque (mNm)	391.2	277.5	343.7	527.5
Starting current (A)	95.2	60.4	71.5	82.5
Output (W)	46	54	52	95
Efficiency (%)	75	72	76	81
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## N\_3SFN series Ø38 mm 19-95 W

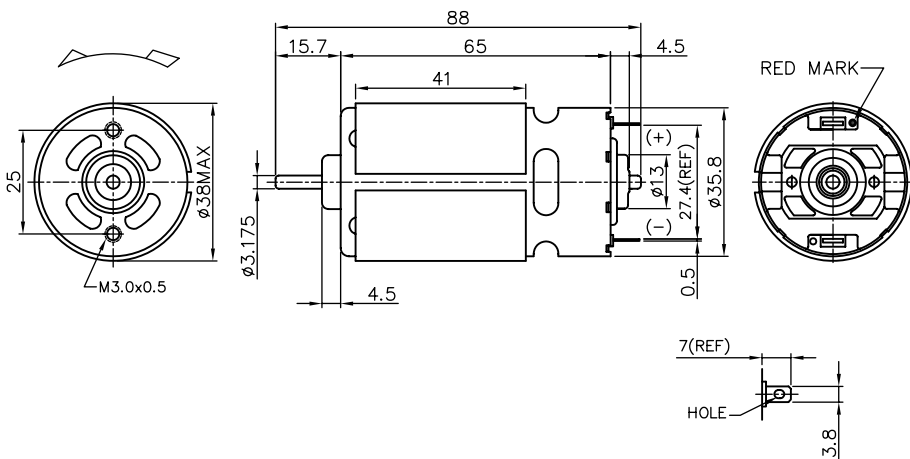


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	ND3SFN-4570-CVC	ND3SFN-4565-CVC	NC3SFN-6035-CVC	KV3SFN-7525F-CC
Diameter (mm)	38	38	38	39
Length (mm)	65	65	65	57
Nominal voltage (V)	12	12	12	12
Nominal speed (rpm)	5400	5800	10700	15800
Nominal torque (mNm)	33.5	36.0	45.6	57.3
Nominal current A	2.2	2.6	5.6	9.8
No load speed (rpm)	6200	6700	12000	17600
No load current A	0.30	0.50	1.00	1.20
Stall torque (mNm)	297.5	287.0	446.8	527.5
Starting current (A)	17.0	17.9	51.4	82.5
Output (W)	19	22	52	95
Efficiency (%)	74	71	76	81
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## N\_5FN series Ø38 mm 46-95 W

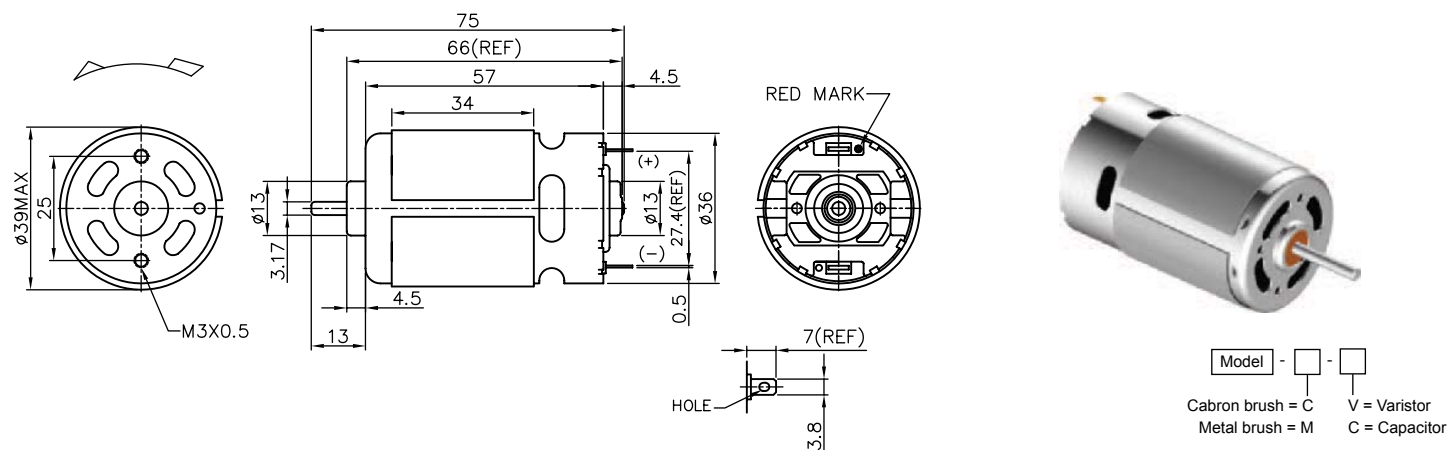


Model -  -  -   
 Carbon brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

### MOTOR DATA

Part name	NC5FN-3550-CVC	ND5FN-16190-CVC	ND5FN-3738-CVC	NC5FN-3545-CVC
Diameter (mm)	38	38	38	38
Length (mm)	65	65	65	65
Nominal voltage (V)	12	24	24	36
Nominal speed (rpm)	3700	2300	10900	14300
Nominal torque (mNm)	30,7	11,7	44,3	40,7
Nominal current A	1,4	2,2	2,6	2,1
No load speed (rpm)	4400	2750	12300	15600
No load current A	0,25	0,04	0,40	0,30
Stall torque (mNm)	217,1	86,2	413,7	448,8
Starting current (A)	8,5	1,1	22,7	21,9
Output (W)	12,03	2,87	50,89	21,85
Efficiency (%)	72	70	77	80
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

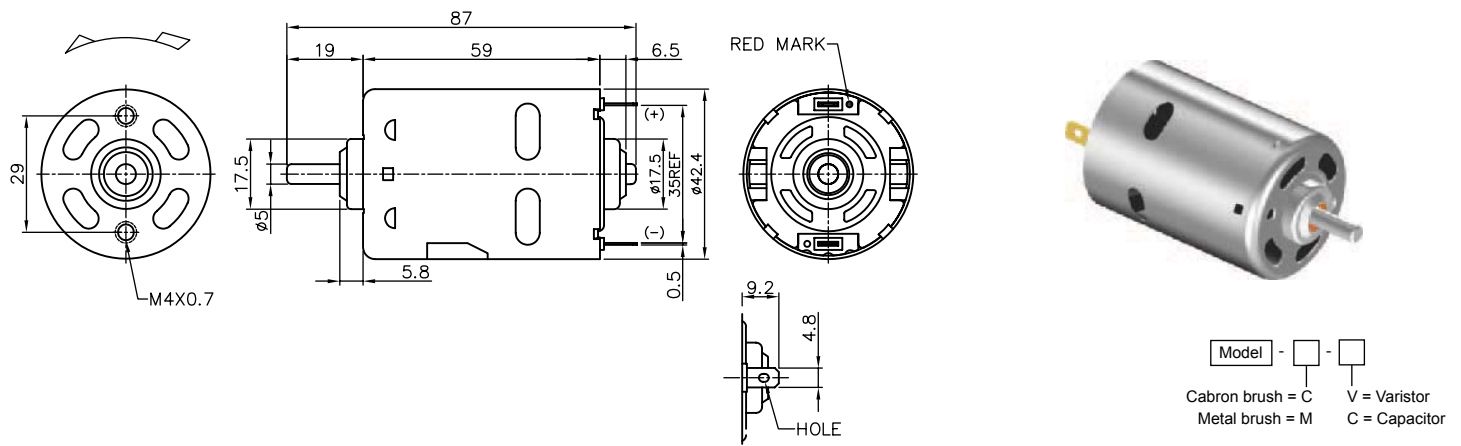
# K\_5FN series Ø39 mm 4.6-116 W



MOTOR DATA				
Part name	KS5FN-2462-CVC	KC5FN-5021F-CC	KP5FN-22105-CVC	
Diameter (mm)	39	39	39	
Lenth (mm)	57	57	57	
Nominal voltage (V)	12	24	28	
Nominal speed (rpm)	3100	20800	5200	
Nominal torque (mNm)	13.9	53.4	23.5	
Nominal current A	0.6	7.1	0.7	
No load speed (rpm)	4000	22800	6200	
No load current A	0.15	1.30	0.12	
Stall torque (mNm)	76.9	514.7	179.8	
Starting current (A)	2.8	57.3	4.1	
Output (W)	4.6	116	13	
Efficiency (%)	63	71	73	
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	

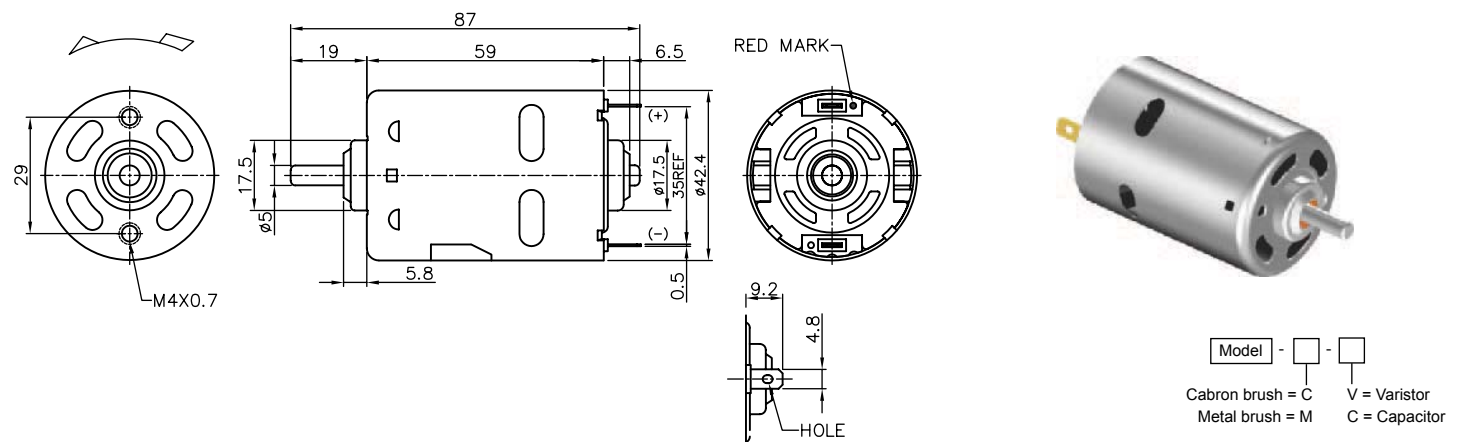


## 750 series Ø42.4 mm 11-107 W



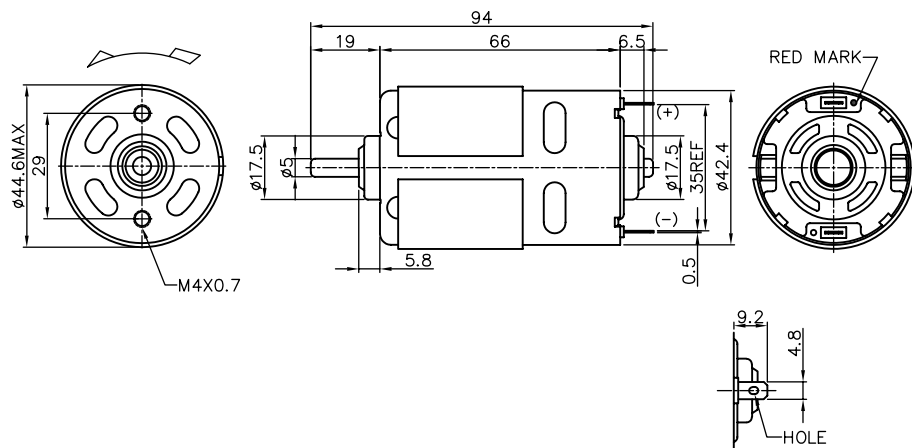
MOTOR DATA				
Part name	750-32160-C	750-4570-C	750-8028-C	750-9013-C
Diameter (mm)	42.4	42.4	42.4	42.4
Length (mm)	59	59	59	59
Nominal voltage (V)	12	12	12	6
Nominal speed (rpm)	2600	6300	15500	16800
Nominal torque (mNm)	37.9	51.9	66.0	46.7
Nominal current A	1.4	4.3	12.8	19.3
No load speed (rpm)	3200	7500	18800	19000
No load current A	0.36	0.75	2.60	4.00
Stall torque (mNm)	209.8	305.9	480.4	342.2
Starting current (A)	6.1	22.5	92.1	112.2
Output (W)	11	35	107	83
Efficiency (%)	65	69	70	72
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

## 755 series Ø42.4 mm 14-144 W



MOTOR DATA				
Part name	755-8512F-C	755-5027F-C	755-3262-C	755-19175-C
Diameter (mm)	42.4	42.4	42.4	42.4
Length (mm)	59	59	59	59
Nominal voltage (V)	9.6	12	24	36
Nominal speed (rpm)	14000	8400	7400	3900
Nominal torque (mNm)	98.2	45.7	43.3	33.6
Nominal current A	19.8	4.9	2.1	0.6
No load speed (rpm)	16700	10000	8900	4800
No load current A	2.80	1.40	0.45	0.18
Stall torque (mNm)	635.3	319.4	301.9	183.3
Starting current (A)	112.6	29.3	12.2	2.7
Output (W)	144	41	34	14
Efficiency (%)	76	71	70	64
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

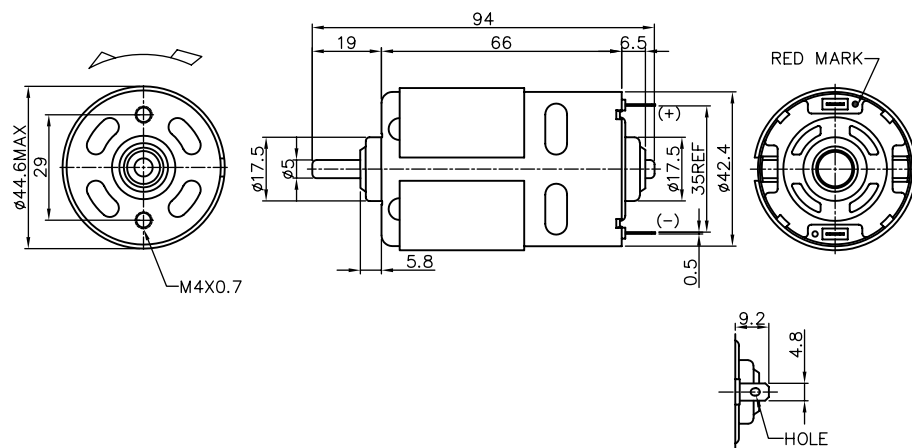
## 770 series Ø45 mm 21-114 W



Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

MOTOR DATA				
Part name	770-4087-CC	770-7040-CC	770-8525F-CC	770-32165-CC
Diameter (mm)	45	45	45	45
Lenth (mm)	66	66	66	66
Nominal voltage (V)	12	12	12	24
Nominal speed (rpm)	3500	8400	13500	3900
Nominal torque (mNm)	56.1	59.3	80.3	52.9
Nominal current A	2.8	6.0	12.1	1.3
No load speed (rpm)	4550	9700	16000	4650
No load current A	0.60	1.30	1.80	0.22
Stall torque (mNm)	334.1	595.7	587.9	397.1
Starting current (A)	14.1	56.9	83.0	8.6
Output (W)	21	53	114	22
Efficiency (%)	63	73	79	74
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

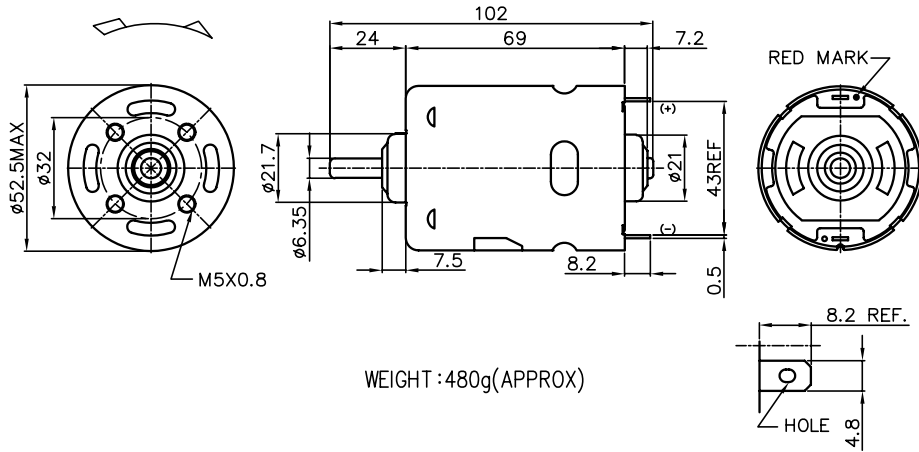
## 775 series Ø45 mm 103-198 W



Model -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

MOTOR DATA				
Part name	775-9008F-CC	775-9009F-C-CC	775-8013F-C-CC	775-5520F-CC
Diameter (mm)	45	45	45	45
Lenth (mm)	66	66	66	66
Nominal voltage (V)	7.2	12	18	24
Nominal speed (rpm)	12300	18000	18700	18400
Nominal torque (mNm)	80.0	102.6	100.8	94.3
Nominal current A	20.1	21.1	15.8	10.7
No load speed (rpm)	14600	21000	22000	21000
No load current A	3.20	2.80	3.00	1.70
Stall torque (mNm)	508.8	806.4	837.3	705.9
Starting current (A)	108.7	143.7	110.4	68.1
Output (W)	103	194	198	182
Efficiency (%)	72	77	70	71
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60

# 987 series Ø52 mm 35-112 W



WEIGHT : 480g(APPROX)



Model -  -  -   
 Cabron brush = C      V = Varistor  
 Metal brush = M      C = Capacitor

## MOTOR DATA

Part name	987-5025F-C	987-8012F-C	987-8010F-C	987-5524F-C
Diameter (mm)	52	52	52	52
Lenth (mm)	69	69	69	69
Nominal voltage (V)	12	12	12	24
Nominal speed (rpm)	4000	9000	11100	9700
Nominal torque (mNm)	83.5	113.2	87.5	1101.9
Nominal current A	4.8	13.1	11.9	6.3
No load speed (rpm)	5050	10800	13100	11000
No load current A	1.20	2.00	2.30	0.95
Stall torque (mNm)	417.6	787.3	676.4	857.5
Starting current (A)	20.3	79.6	82.5	44.6
Output (W)	35	107	102	112
Efficiency (%)	63	68	72	74
Operating temperature deg. C	-10..+60	-10..+60	-10..+60	-10..+60