

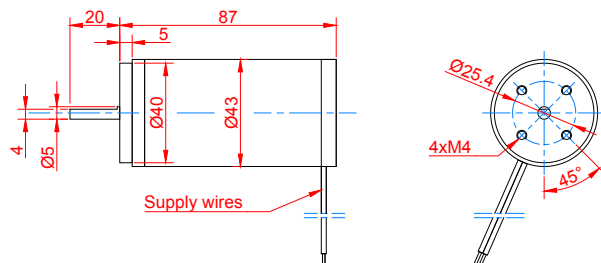
## DC MOTORS

Ø43 mm to Ø123 mm  
12 W to 421 W



D4387	12V-24V	Ø43 mm	carbon brushes	15 W	<a href="#">Page 3</a>
D54103	12V-24V	Ø54 mm	carbon brushes	29 W	<a href="#">Page 4</a>
D64108	12V-24V	Ø64 mm	carbon brushes	43 W	<a href="#">Page 5</a>
D8095	12V-24V	Ø80 mm	carbon brushes	49 W	<a href="#">Page 6</a>
D10079	12V-24V	Ø100 mm	carbon brushes	141 W	<a href="#">Page 7</a>
D109141	12V-24V	Ø109 mm	carbon brushes	248 W	<a href="#">Page 8</a>
D123182	12V-24V	Ø123 mm	carbon brushes	421 W	<a href="#">Page 9</a>
Magnetic encoder 48 counts per revolution 2 channels					<a href="#">Page 10</a>
Optical encoder 2000 counts per revolution 2 channels					<a href="#">Page 10</a>
Brake electro mechanic					<a href="#">Page 10</a>

## D4387 Ø43 mm carbon brushes 12 W



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE

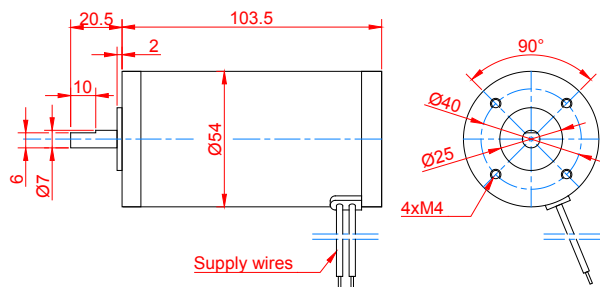
Example: D4387-12-ME

ME = Magnetic encoder  
OP = Optical encoder

### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3600	4000
No load current (A)	1.00	0.50
Nominal speed (rpm)	2700	3200
Nominal torque (mNm)	44	44
Nominal current (A)	2.0	1.1
Stall torque mNm)	167	176
Starting current (A)	7	4
Output (W)	13	15
Length (mm)	87	87

## D54103 Ø54 mm carbon brushes 29 W



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE

Example: D54103-12-ME

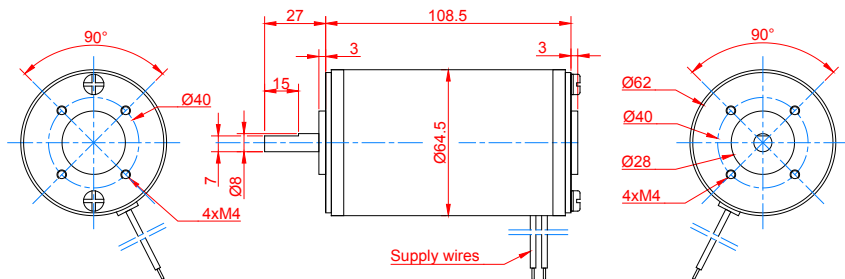
ME = Magnetic encoder  
 OP = Optical encoder  
 B = Brake



### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3600	3600
No load current (A)	0.60	0.40
Nominal speed (rpm)	3100	3100
Nominal torque (mNm)	88	88
Nominal current (A)	3.3	1.6
Stall torque mNm)	697	697
Starting current (A)	22	11
Output (W)	29	29
Length (mm)	103	103

## D64108 Ø64 mm carbon brushes 43 W



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE

Example: D64108-12-ME

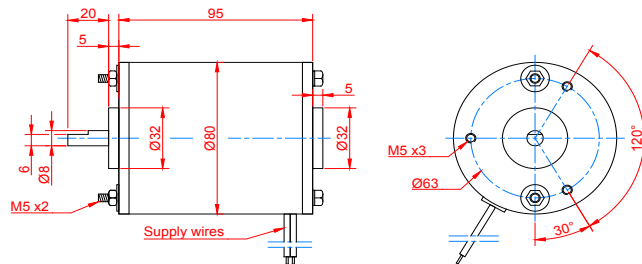
ME = Magnetic encoder  
 OP = Optical encoder  
 B = Brake



### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3300	3400
No load current (A)	1.30	0.60
Nominal speed (rpm)	2700	2800
Nominal torque (mNm)	147	147
Nominal current (A)	5.0	2.4
Stall torque mNm)	1373	1414
Starting current (A)	33	16
Output (W)	42	43
Length (mm)	108	108

## D8095 Ø80 mm carbon brushes 49 W



### MODEL NO. DESIGNATIONS

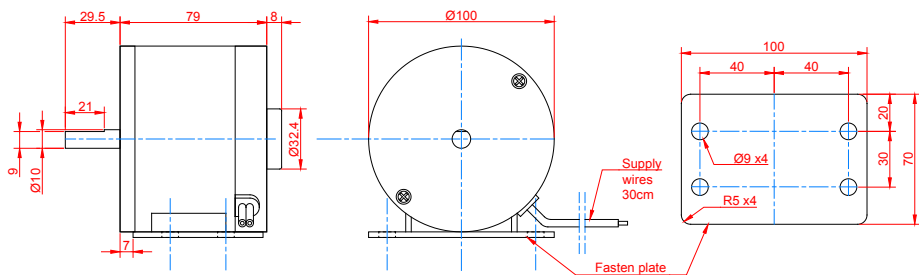
MODEL - VOLTAGE

Example: D8095-12

### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3500	3600
No load current (A)	1.50	0.70
Nominal speed (rpm)	3100	3200
Nominal torque (mNm)	145	145
Nominal current (A)	5.0	2.4
Stall torque mNm)	1422	1464
Starting current (A)	35	17
Output (W)	47	49
Length (mm)	95	95

## D10079 Ø80 mm carbon brushes 141 W



### MODEL NO. DESIGNATIONS

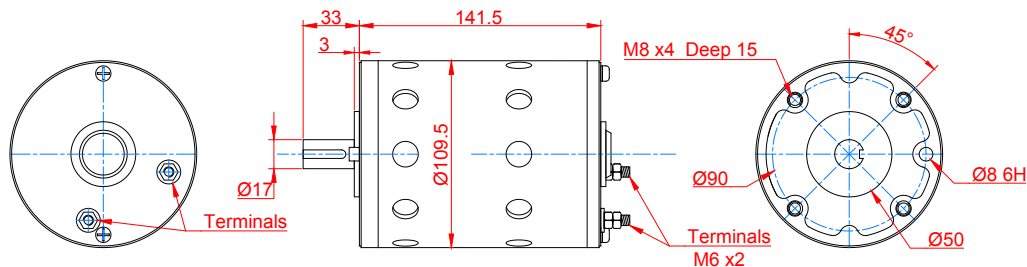
MODEL - VOLTAGE

Example: D10079-12

### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	3100	3200
No load current (A)	4.10	2.20
Nominal speed (rpm)	2600	2750
Nominal torque (mNm)	490	490
Nominal current (A)	15.5	7.4
Stall torque mNm)	5154	5244
Starting current (A)	164	80
Output (W)	134	141
Length (mm)	79	79

## D109141 Ø109 mm carbon brushes 248 W



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE

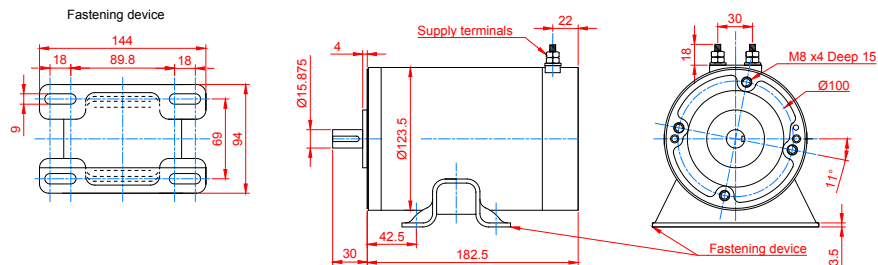
Example: D109141-12

### MOTOR DATA

Nominal voltage (V)	12	24
No load speed (rpm)	2700	2800
No load current (A)	14.00	6.80
Nominal speed (rpm)	2200	2300
Nominal torque (mNm)	1030	1030
Nominal current (A)	35.8	17.1
Stall torque mNm)	5658	5702
Starting current (A)	170	84
Output (W)	237	248
Length (mm)	141	141



# D123182 Ø80 mm carbon brushes 421 W



## MODEL NO. DESIGNATIONS

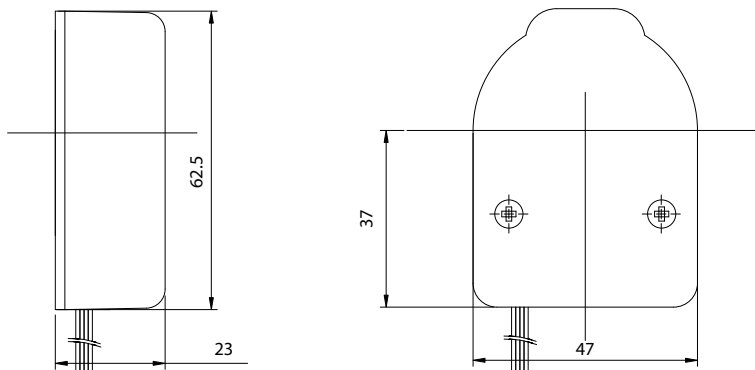
MODEL - VOLTAGE

Example: D123182-12

## MOTOR DATA

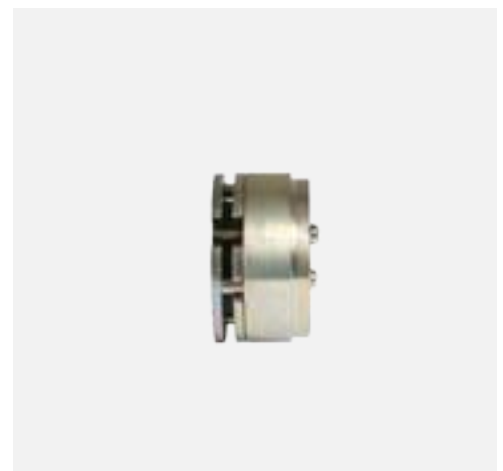
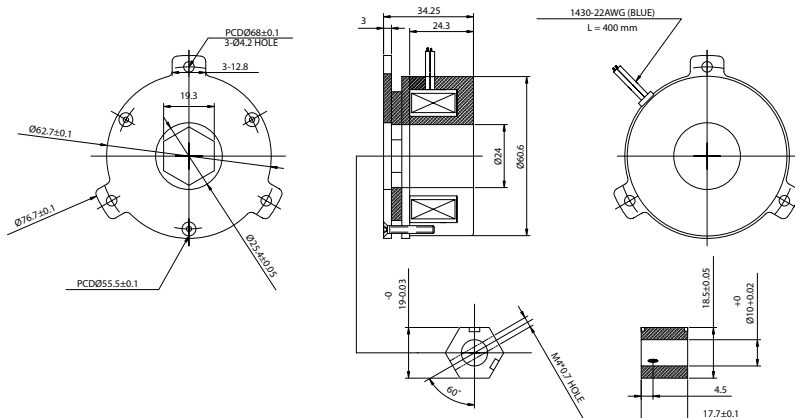
Nominal voltage (V)	12	24
No load speed (rpm)	2400	2400
No load current (A)	5.50	2.50
Nominal speed (rpm)	2020	2020
Nominal torque (mNm)	1991	1991
Nominal current (A)	43.3	21.6
Stall torque mNm)	8247	8242
Starting current (A)	262	131
Output (W)	421	421
Length (mm)	182	182

## Magnetic encoder 48 counts per revolution 2 channels Optical encoder 2000 counts per revolution 2 channels



ENCODER DATA				
	MAGNETIC		OPTICAL	
Pulses per revolution PPR two channels together	24		1000	
Counts per revolution CPR two channels together	48		2000	
Phase shift	90 degrees		90 degrees	
VCC	+5 VDC	Orange lead	+5 VDC	Pin 1
GND	0 VDC	Green lead	0 VDC	Pin 5 Pin 8
Signal A		Blue lead		A- Pin 6
Signal B		Yellow lead		B- Pin 7
Current			< 80 mA	
Index		-	Z+ Pin 4	
Output wave			Line driver	
Frequency response			25 KHz max.	
Connection	Flying wire		DB9 female	
Weight		< 100 g		
Wire length	400 mm		110 mm	

## Brake electro mechanic



BRAKE DATA	
Voltage	24VDC
Power	16W
Resistance	35Ω ±5%
Insulation class	F
Dynamic friction	35 Kgcm
Static friction	40 Kgcm
Insulation resistance	500 VDC / 50 MΩ
Insulation capacity	1500 VAC / 1mA / 1SEC
Release time	40 msec
Activation time	140 msec
Operating voltage	12V
Release voltage	5V
Clearance	0.12~0.15 mm
Weight	0.7 kg
Wire length	400 mm