



# DC MOTORS | Ø 43 - 123mm 12 - 421W

Transmotec sell a broad range of high quality DC motors in standard and customized configurations. Our motors are also available with gear heads, encoders and wire harnesses. Transmotec is the ideal supplier source especially to instrument and apparatus builders. We keep a high number of motors in stock for immediate delivery.

## Customizations include:

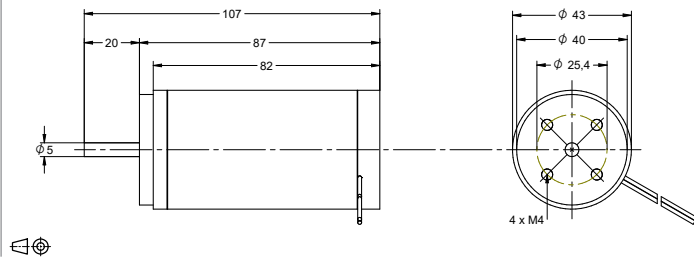
- ✓ Customized harness
- ✓ Shaft configuration
- ✓ Winding configuration
- ✓ And more...

# TABLE OF CONTENTS

Model	Voltage	Diameter	Power	Page
D4387	12V / 24V	43mm	15W	<a href="#">1</a>
D54103	12V / 24V	54mm	29W	<a href="#">1</a>
D64108	12V / 24V	64mm	43W	<a href="#">2</a>
D8095	12V / 24V	80mm	49W	<a href="#">2</a>
D10079	12V / 24V	100mm	141W	<a href="#">3</a>
D109141	12V / 24V	109mm	248W	<a href="#">3</a>
D123182	12V / 24V	123mm	421W	<a href="#">4</a>
Magnetic encoder (48 counts per revolution, 2 channels)				<a href="#">5</a>
Optical encoder (2000 counts per revolution, 2 channels)				<a href="#">5</a>
Brake (electro mechanic)				<a href="#">5</a>

## D4387 / Ø 43mm / 12W

### DRAWING (mm)



### PHOTO



### ADDITIONAL



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE

Example: D4387-12-ME

ME = Magnetic encoder  
OE = Optical encoder

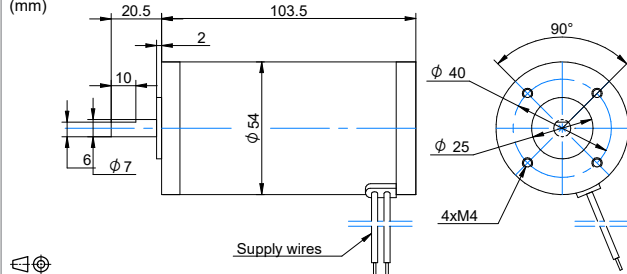
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

## D54103 / Ø 54mm / 29W

### DRAWING (mm)



### PHOTO



### ADDITIONAL



### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE / B

Example: D54103-12-ME

ME = Magnetic encoder  
OE = Optical encoder  
B = Brake

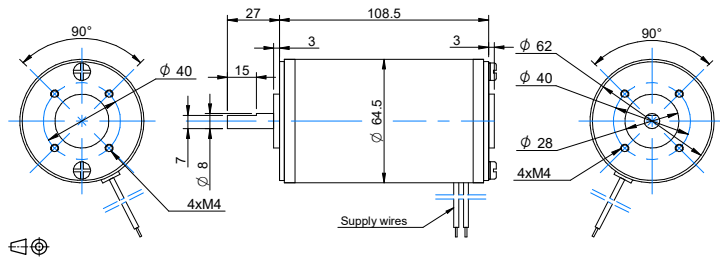
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

## D64108 / Ø 64mm / 43W

### DRAWING (mm)



### PHOTO



### ADDITIONAL



Brake



Encoder

### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE / B

Example: D64108-12-ME

ME = Magnetic encoder  
OE = Optical encoder  
B = Brake

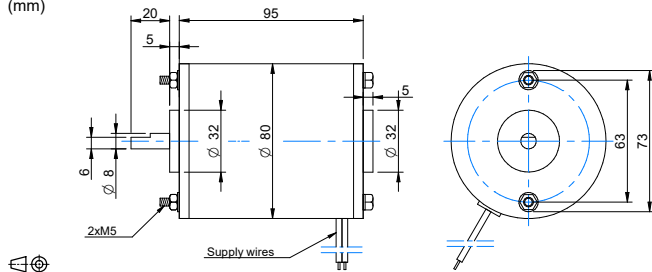
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

## D8095 / Ø 80mm / 49W

### DRAWING (mm)



### PHOTO



### ADDITIONAL

### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE

Example: D8095-12

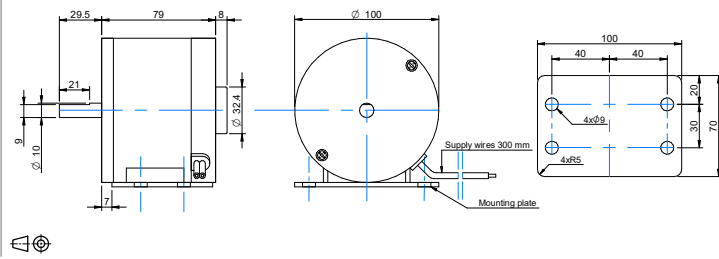
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

## D10079 / Ø 80mm / 141W

### DRAWING (mm)



### PHOTO



### ADDITIONAL

### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE

Example: D10079-12

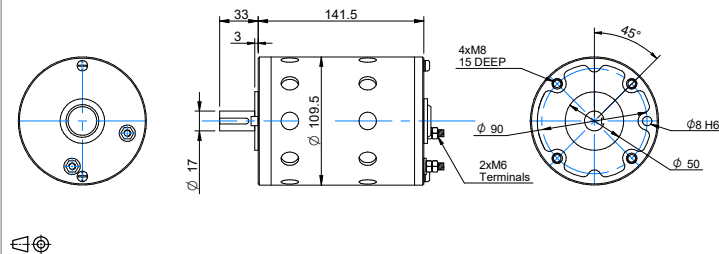
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

## D109141 / Ø 109mm / 248W

### DRAWING (mm)



### PHOTO



### ADDITIONAL

### MODEL NO. DESIGNATIONS

MODEL - VOLTAGE

Example: D109141-12

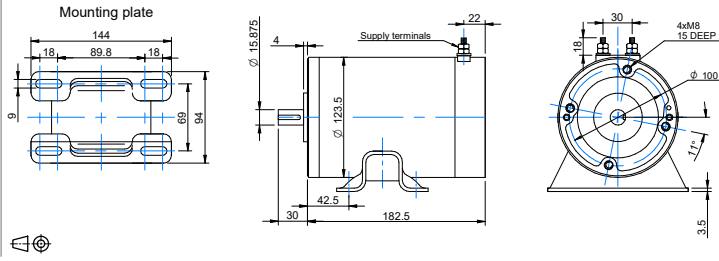
### MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

# D123182 / Ø 80mm / 421W

## DRAWING (mm)



## PHOTO



## ADDITIONAL

## MODEL NO. DESIGNATIONS

MODEL - VOLTAGE

Example: D123182-12

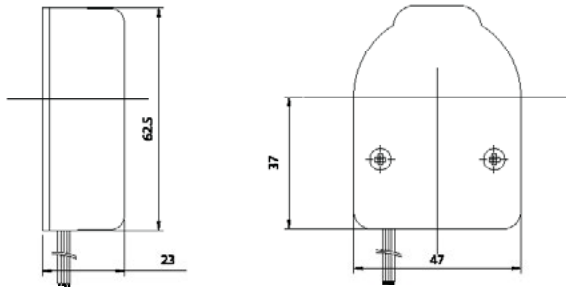
## MOTOR DATA

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

(\*) Nominal speed and nominal torque have a tolerance of  $\pm 15\%$

**Magnetic encoder** / 48 counts per revolution / 2 channels  
**Optical encoder** / 2000 counts per revolution / 2 channels

**DRAWING**  
(mm)



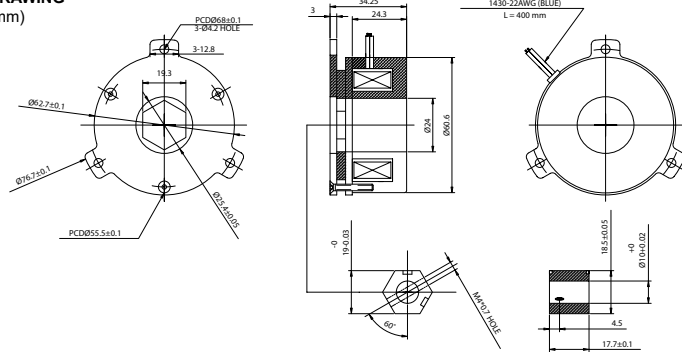
**PHOTO**



ENCODER DATA					
	MAGNETIC			OPTICAL	
Pulses per revolution PPR two channels	24			1000	
Counts per revolution CPR two channels	48			2000	
Phase shift	90°			90°	
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				DB9 female	
Weight				< 100g	
Wire length	400mm			110mm	

**Brake / Electro mechanic**

**DRAWING**  
(mm)



**PHOTO**



BRAKE DATA	
Voltage	24VDC
Power	16W
Resistance	35Ω ±5%
Insulation class	F
Dynamic friction	3.4 Nm
Static friction	3.9 Nm
Insulation resistance	500 VDC / 50 MΩ
Insulation capacity	1500 VAC / 1mA / 1s
Release time	40 ms
Activation time	140 ms
Operating voltage	12V
Release voltage	5V
Clearance	0.12~0.15 mm
Weight	0.7 kg
Wire length	400 mm