

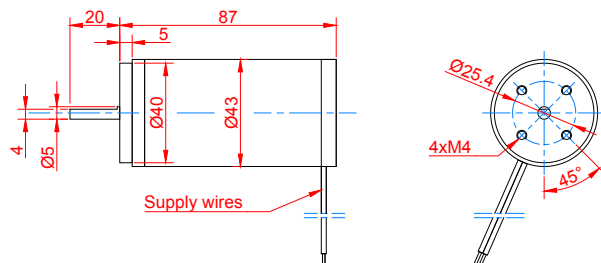
DC MOTORS

Ø43 mm to Ø123 mm
12 W to 421 W



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

D4387 Ø43 mm carbon brushes 12 W



MODEL NO. DESIGNATIONS

MODEL - VOLTAGE - ME / OE

Example: D4387-12-ME

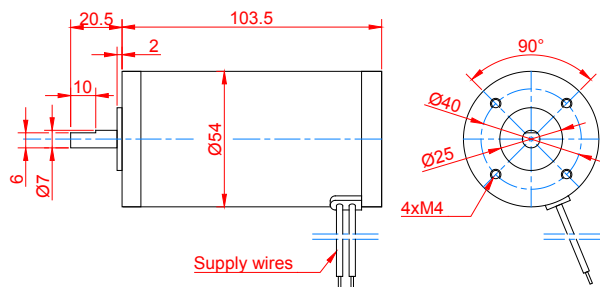
ME = Magnetic encoder
OP = Optical encoder



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



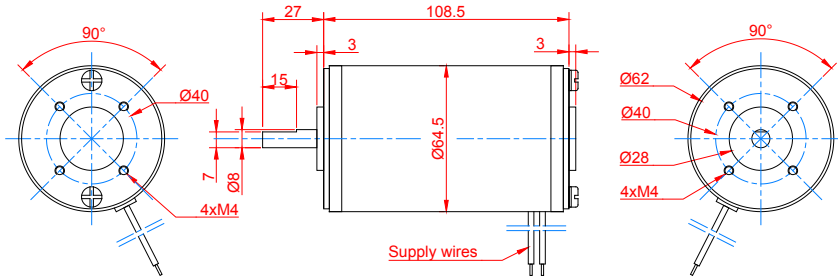
Encoder option

Brake option

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

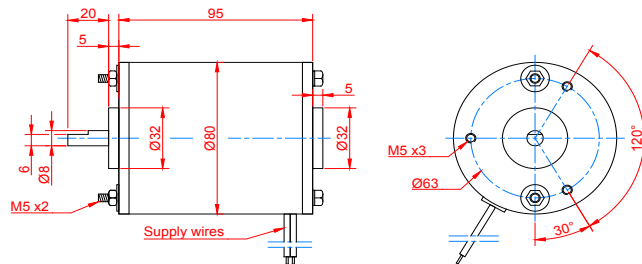
ME = Magnetic encoder
 OP = Optical encoder
 B = Brake



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

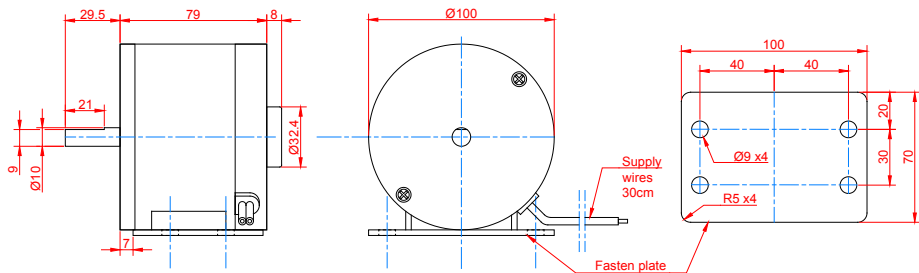
MODEL - VOLTAGE

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

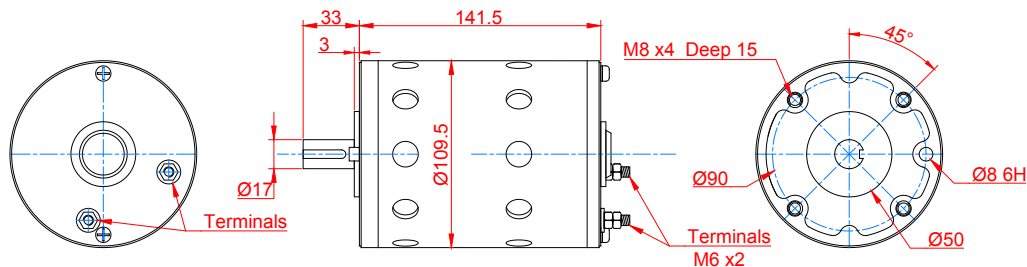
Example: D10079-12



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

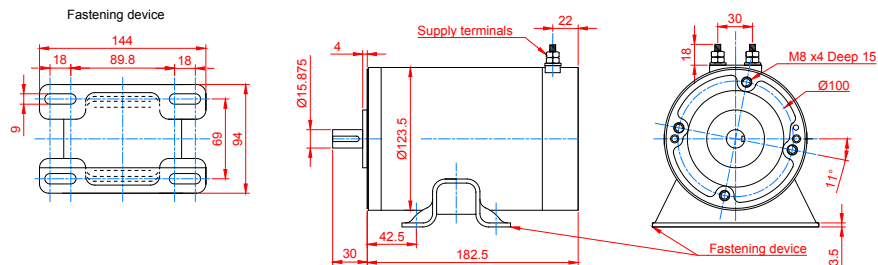
MODEL - VOLTAGE

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

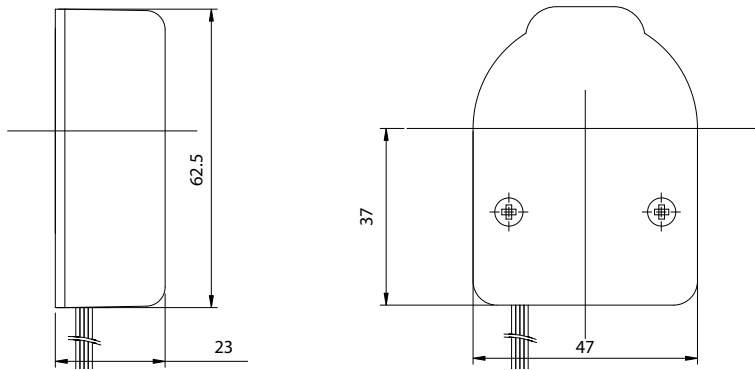
MODEL - VOLTAGE

Example: D123182-12

MOTOR DATA

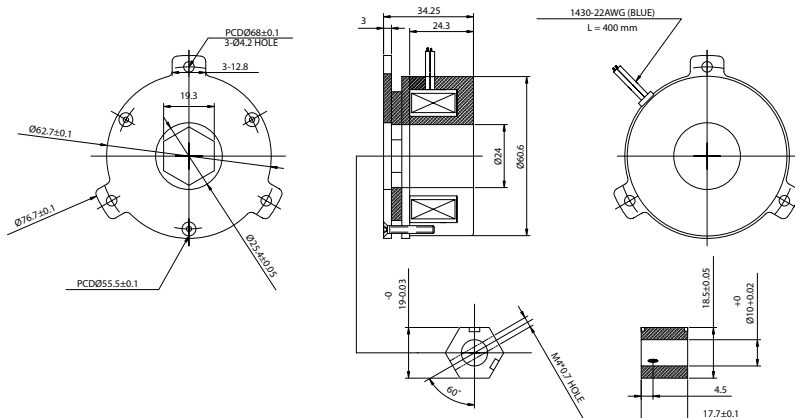
| | | |
|----------------------|------|------|
| Nominal voltage (V) | 12 | 24 |
| No load speed (rpm) | 2400 | 2400 |
| No load current (A) | 5.50 | 2.50 |
| Nominal speed (rpm) | 2020 | 2020 |
| Nominal torque (mNm) | 1991 | 1991 |
| Nominal current (A) | 43.3 | 21.6 |
| Stall torque mNm) | 8247 | 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 |