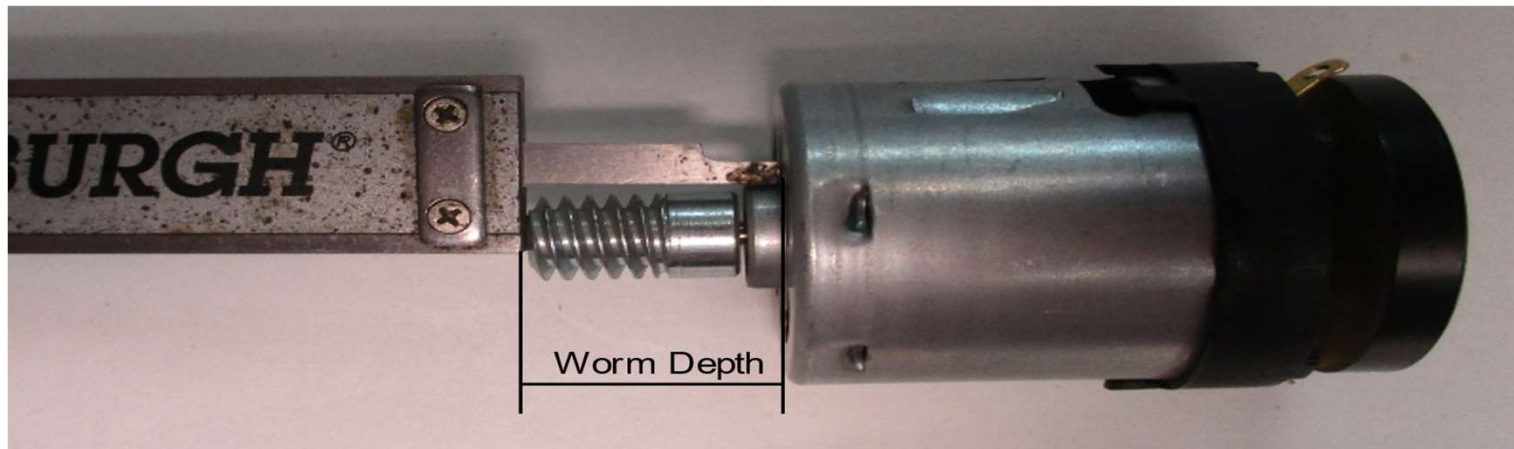


PREMIER DIESEL LOCOMOTIVE MOTOR & WORM GEAR CHART

The following list shows which motor and worm gear combinations are used in each specific model. Each motor description identifies the motor type, the worm gear, the overall flywheel diameter and thickness (if it is not denoted as tapered, then the flywheel is flat). It also lists the depth of the worm gear (from the face of the end of the worm gear to the bottom of the motor case (where it sits on the motor mount)). The diagram below shows how this dimension is taken. We recommend you measure the "worm depth" on the motor you are replacing BEFORE ordering a new replacement motor

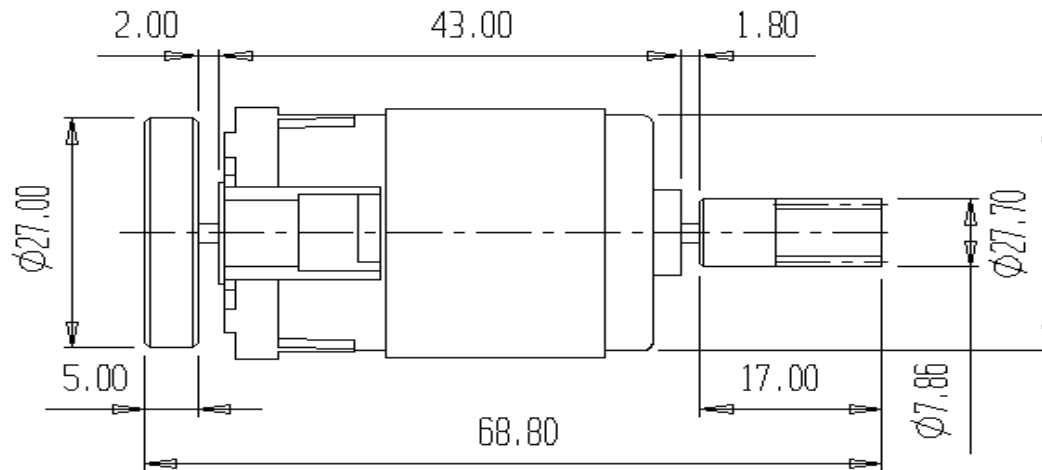
The part numbers shown below each category will all work on the Premier models shown on the left, they are segregated based on worm depth and flywheel/bracket combinations.



NOTE: The helical gear in the trucks have remained the same from Protosound 1 through Protosound 3.0. Hence the worm gears are the same from the earliest models to the most recently shipped models.

Motor:
RS385PH

Worm Gear:
MD001-M8



Fits the following Premier Diesels;

- | | |
|----------------|--------------------------------|
| GP-30 | F59PH |
| F-3 A UNIT | F-7 A unit |
| GP-38 | GP-9 |
| GP-40 | F40PH |
| C-Liner A UNIT | SHARK NOSE A UNIT |
| C-Liner A UNIT | GP-35 |
| FT A UNIT | EF-3 A UNIT |
| FA-2 A UNIT | EF-3 B UNIT |
| Genesis | SBB CE 6/8(CROCODILE ELECTRIC) |
| GP-60M | WEED SPRAY SET-WEED SPRAYER |

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

- | | |
|-----------|--|
| BE2100120 | DC MOTOR / RS385PH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 21mm TO 21.35mm / STRIPED / PS 2 BKT |
| BE2200003 | DC MOTOR / RS385PH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 20.93mm TO 21.46mm / STRIPED / PS 3 BKT |
| BE2240001 | DC MOTOR / RS385PH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 21.43mm TO 22mm / STRIPED / PS 2 BKT |
| BE0000122 | DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 7mm THICK / WORM LENGTH 21.5mm / STRIPED / PS 2 BKT |
| BE0000125 | DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 21.38mm / STRIPED / PS 2 BKT |
| BE0000110 | DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 20.75mm TO 21.29mm / STRIPED / PS 2 BKT |
| BE0000184 | DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 21.26mm TO 21.28mm / STRIPED / PS 2 BKT |

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE2230009 DC MOTOR / RS385PH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 20.7mm TO 21.32mm / BLACK / PS 2 & PS 3

BE0000166 DC MOTOR / RS385PH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 21.45mm TO 21.96mm / BLACK / PS 2 & PS 3

BE3100016 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 7mm THICK / WORM LENGTH 23.17mm / BLACK / PS 2

BE2100004 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 7mm THICK / WORM LENGTH 20.38mm / BLACK / PS 2

BE0000239 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 21.32mm / BLACK / PS 2

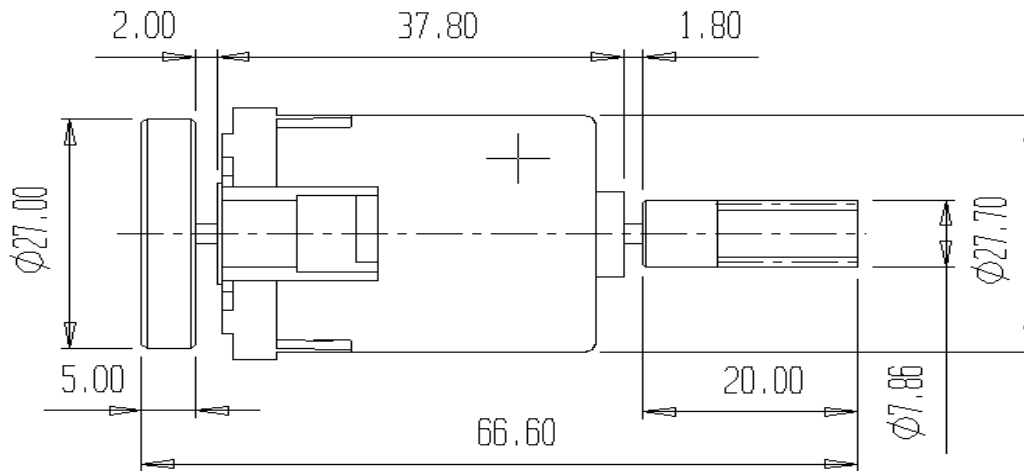
BE0000124 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 20.95mm / BLACK / PS 2

BE0000205 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 21.07mm / BLACK / PS 2

BE0000183 DC MOTOR / RS385PH / MD001-M8 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 21.17mm / BLACK / PS 2

Motor:
RS365SH

Worm Gear:
MD008-M15



Fits the following Premier Locomotives;

R-32 Graffiti Powered
R 1/9 Subway Powered
Zephy Powered
Zephy Slave
BMT Subway Powered

R11/34 Subway Powered
R40 Subway Powered
Turbo Train Master
Turbo Train Slave

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

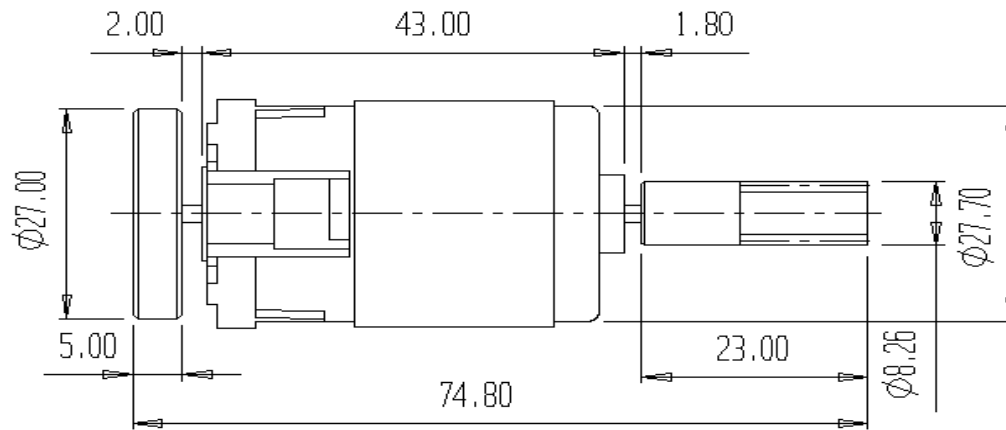
- BE0000152 DC MOTOR / RS365SH / MD008-M15 / F/W 27mm D x 5mm THICK / WORM LENGTH 24.4mm TO 24.82mm / STRIPED / PS 2 BKT
- BE2240009 DC MOTOR / RS365SH / MD008-M15 / F/W 27mm D x 5mm THICK / WORM LENGTH 27mm / STRIPED / PS 2 BKT
- BE0000225 DC MOTOR / RS365SH / MD008-M15 / F/W 27mm D x 5mm THICK / WORM LENGTH 23.11mm TO 23.74mm / STRIPED / PS 3 BKT
- BE3100002 DC MOTOR / RS365SH / MD008-M15 / F/W 30mm D x 9mm THICK / WORM LENGTH 23.97mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE0000043 DC MOTOR / RS365SH / MD008-M15 / F/W 30mm D x 8.25mm (TAPERED) THICK / WORM LENGTH 24.16mm / BLACK / PS 2
- BE0000201 DC MOTOR / RS365SH / MD008-M15 / F/W 30mm D x 10mm (TAPERED) THICK / WORM LENGTH 24.22mm / BLACK / PS 2
- BE2140008 DC MOTOR / RS365SH / MD008-M15 / F/W 27mm D x 5mm THICK / WORM LENGTH 24.7mm TO 24.85mm / BLACK / PS 2 & PS 3

Motor:
RS385PH

Worm Gear:
MD105-M38



Fits the following Premier Locomotives;

- | | |
|------------------------|---------------------------|
| Scale Dash-9 | SD-60E |
| SD60M | SD-45T-2 |
| SD70MAC | SD-24 |
| AC 6000 | SD-70 Ace |
| C-Liner A | AC4000 CW |
| 2500HP | SD 70 Mac |
| DD40AX | UP 80 COAL TURBINE A UNIT |
| DL-109 | UP 80 COAL TURBINE B UNIT |
| DL-110 B-Unit | U30C |
| SD40-2 | DASH8-40C |
| SD-90 MAC | ES44AC(DC) |
| Centipede A unit | SD-35 |
| Centipede A unit Trail | SD-45 |
| Alco PA A unit | SCALE DASH 8-40CW |
| FM Erie Built A unit | SCALE FM TRAINMASTER |
| SD-80 MAC | SCALE LITTLE JOE ELECTRIC |
| U50C | SD-50 |

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

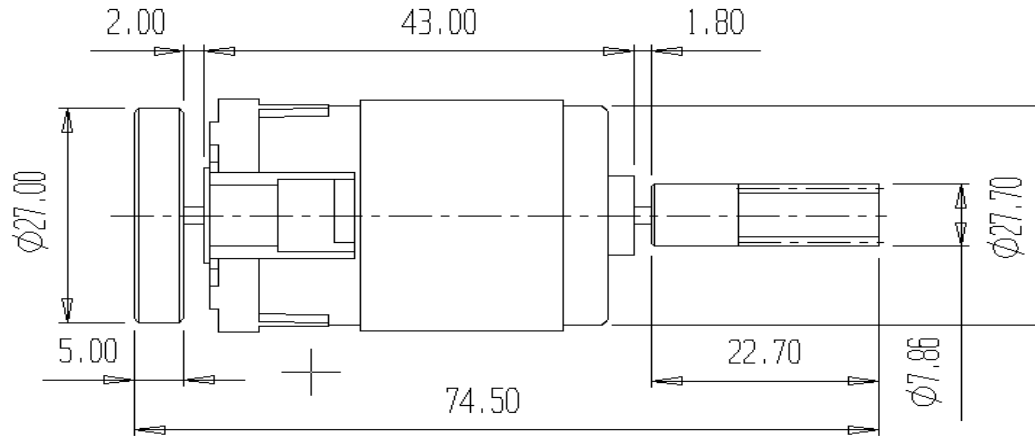
BE0000247 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.13mm TO 27.27mm / STRIPED / PS 3 TACH BKT
BE2200001 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.16 TO 27.61mm / STRIPED / PS 2 TACH BKT
BE0000190 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.6mm TO 27.75mm / STRIPED / PS 2 BKT
BE2100126 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.15mm TO 27.22mm / STRIPED / PS 3 BKT
BE0000118 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 9mm THICK / WORM LENGTH 27.08mm TO 27.45mm / STRIPED / PS 2 BKT
BE2140001 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.47mm TO 27.71mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE2230010 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 25.73mm / BLACK / PS 2 & PS 3
BE0000107 DC MOTOR / RS385PH / MD105-M38 / F/W 30mm D x 5mm THICK / WORM LENGTH 27.23mm TO 27.68mm / BLACK / PS 2 & PS 3
BE2200000 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 26.85mm TO 27.31mm / BLACK / PS 2 & PS 3
BE0000189 DC MOTOR / RS385PH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.25mm TO 27.47mm / BLACK / PS 2 & PS 3
BE0000059 DC MOTOR / RS385PH / MD105-M38 / F/W 30mm D x 9mm THICK / WORM LENGTH 27mm TO 27.44mm / BLACK / PS 2

Motor:
RS385PH

Worm Gear:
MD107-M36



Fits the following Premier Locomotives;

E-6 A UNIT
E-8 A UNIT

Gas Turbine A unit Powered
Gas Turbine B unit Slave

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

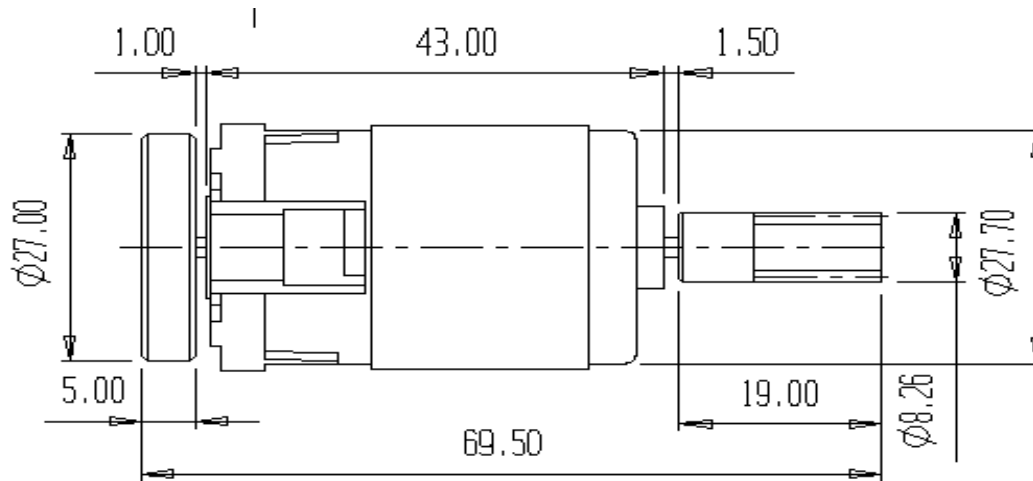
- BE2240007 DC MOTOR / RS385PH / MD107-M36 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.05mm TO 27.2mm / STRIPED / PS 2 BKT
- BE2200004 DC MOTOR / RS385PH / MD107-M36 / F/W 27mm D x 5mm THICK / WORM LENGTH 26.68mm TO 26.83mm / STRIPED / PS 3 BKT
- BE2100005 DC MOTOR / RS385PH / MD107-M36 / F/W 30mm D x 7mm THICK / WORM LENGTH 26.06mm / STRIPED / PS 2 BKT
- BE2240016 DC MOTOR / RS385PH / MD107-M36 / F/W 27mm D x 5mm THICK / WORM LENGTH 26.75mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE2230000 DC MOTOR / RS385PH / MD107-M36 / F/W 27mm D x 5mm THICK / WORM LENGTH 26.7mm TO 27.05mm / BLACK / PS 2 & PS 3
- BE0000119 DC MOTOR / RS385PH / MD107-M36 / F/W 30mm D x 9mm THICK / WORM LENGTH 27.3mm / BLACK / PS 2

Motor:
RS385PH

Worm Gear:
MD115-M29



Fits the following Premier Locomotives;

EP-5 Electric

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

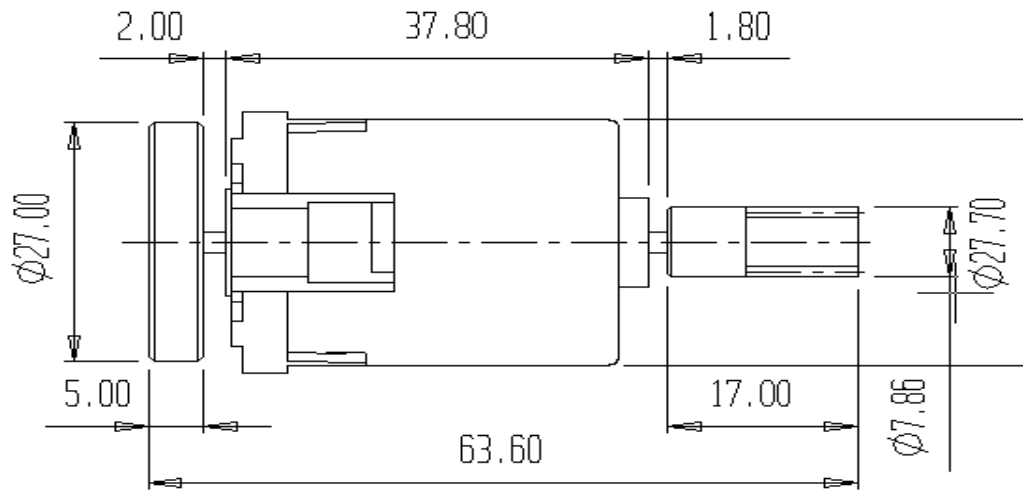
BE3100005 DC MOTOR / RS385PH / MD115-M29 / F/W 27mm D x 5mm THICK / WORM LENGTH 23.37mm / BLACK / PS 2 & PS 3

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE0000196 DC MOTOR / RS385PH / MD115-M29 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 22.6mm / BLACK / PS 2

Motor:
RS365SH

Worm Gear:
MD001-M8



Fits the following Premier Locomotives;

Alco S-2
BL-2
SCALE 3GS-21B
SCALE U25B

SCALE VERANDA TURBINE
SCALE PROPANE TURBINE
TRAXX
NJ TRANSIT ALP-46

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

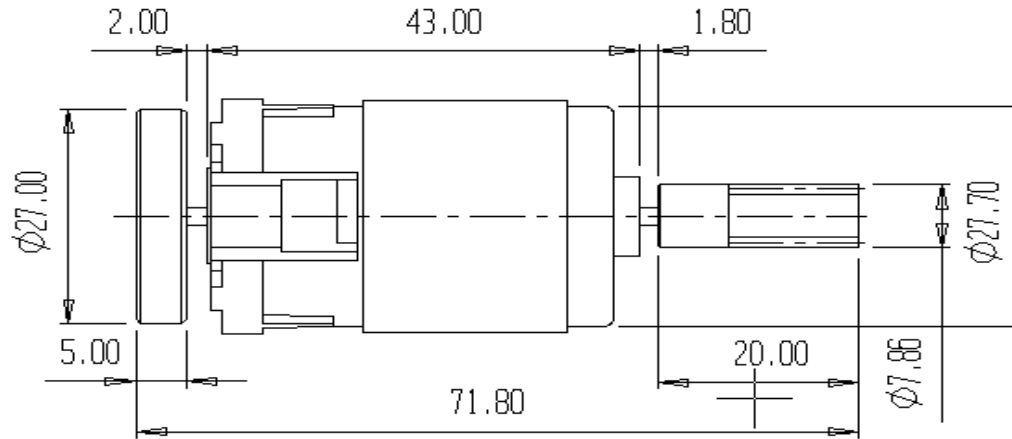
- BE2240006 DC MOTOR / RS365SH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 20.29mm TO 21.66mm / STRIPED / PS 2 BKT
- BE0000243 DC MOTOR / RS365SH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 20.76mm TO 21.72mm / STRIPED / PS 3 BKT
- BE0000060 DC MOTOR / RS365SH / MD001-M8 / F/W 30mm D x 9mm THICK / WORM LENGTH 21.45mm TO 21.79mm / STRIPED / PS 2 BKT
- BE0000142 DC MOTOR / RS365SH / MD001-M8 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 21.63 / STRIPED / PS 2 BKT
- BE0000093 DC MOTOR / RS365SH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 22mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE1240003 DC MOTOR / RS365SH / MD001-M8 / F/W 27mm D x 5mm THICK / WORM LENGTH 20.46mm TO 21.84mm / BLACK / PS 2 & PS 3
- BE0000120 DC MOTOR / RS365SH / MD001-M8 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 21.49mm TO 21.73mm / BLACK / PS 2

Motor:
RS385PH

Worm Gear:
MD012-M4



Fits the following Premier Locomotives;

Coors Light Silver Bullet

E-2 Bi-Polar

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

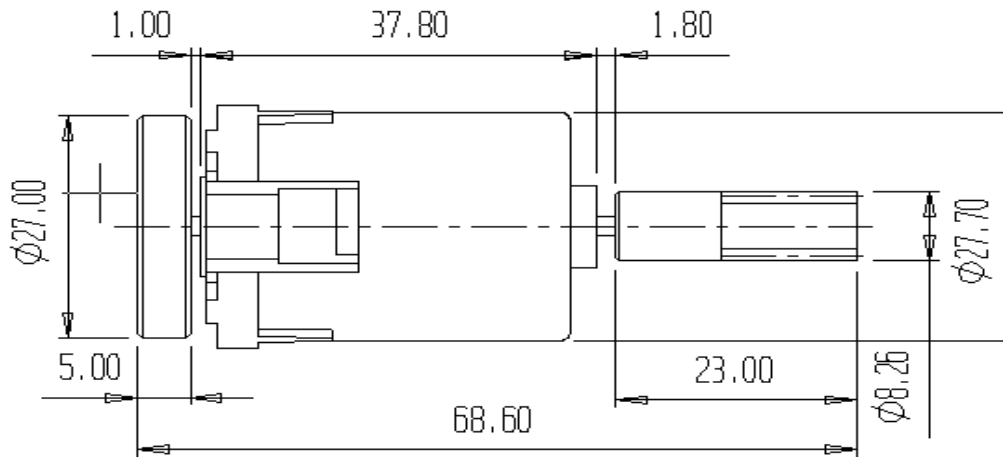
BE1200001 DC MOTOR / RS385PH / MD012-M4 / F/W 27mm D x 5mm THICK / WORM LENGTH 25.51mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE3100003 DC MOTOR / RS385PH / MD012-M4 / F/W 27mm D x 5mm THICK / WORM LENGTH 23.62mm / BLACK / PS 2 & PS 3

Motor:
RS365SH

Worm Gear:
MD105-M38



Fits the following Premier Locomotives;

E-33

E-44

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

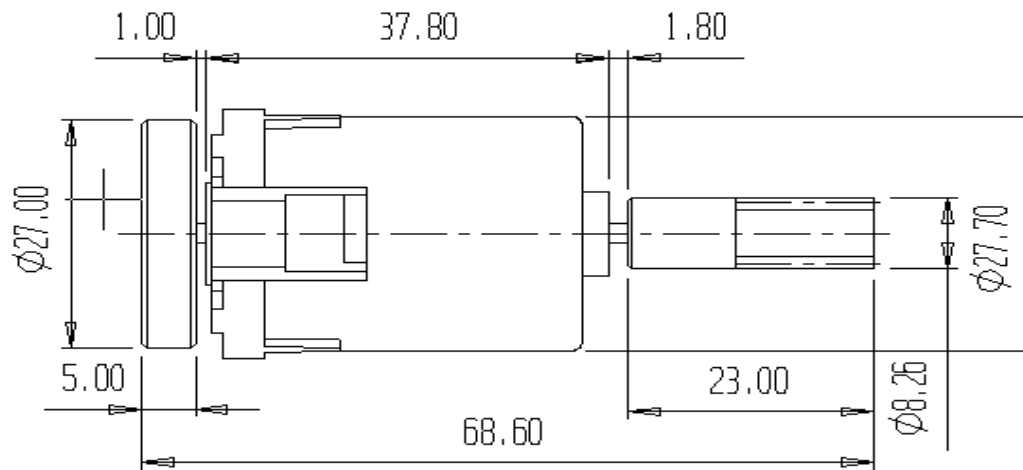
- BE2200002 DC MOTOR / RS365SH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 23.08mm / STRIPED / PS 2 BKT
- BE2100007 DC MOTOR / RS365SH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.84mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE2100008 DC MOTOR / RS365SH / MD105-M38 / F/W 27mm D x 5mm THICK / WORM LENGTH 27.45mm TO 27.63mm / BLACK / PS 2 & PS 3

Motor:
ORK-280DVAS-1716

Worm Gear:
MD204-M17



Fits the following Premier Locomotives;

44 Tonner

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

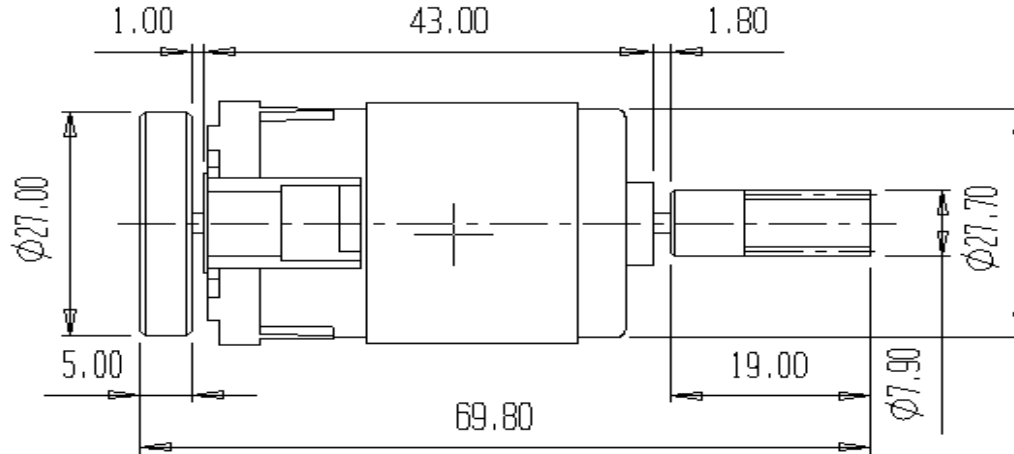
BE2100009 DC MOTOR / 17165 / MD204-M17 / F/W 23.1mm D x 4mm THICK / WORM LENGTH 22.05mm / STRIPED / PS 3 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE2100010 DC MOTOR / 17165 / MD204-M17 / F/W 23.1mm D x 4mm THICK / WORM LENGTH 22.2mm / BLACK / PS 3

Motor:
RS385PH

Worm Gear:
MD207-M37



Fits the following Premier Locomotives;
SCALE GG1 ELECTRIC

NYC P2 BOX CAR ELECTRIC

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

BE0000180 DC MOTOR / RS385PH / MD209-M37 / F/W 27mm D x 5mm THICK / WORM LENGTH 23/25mm / STRIPED / PS 2 BKT

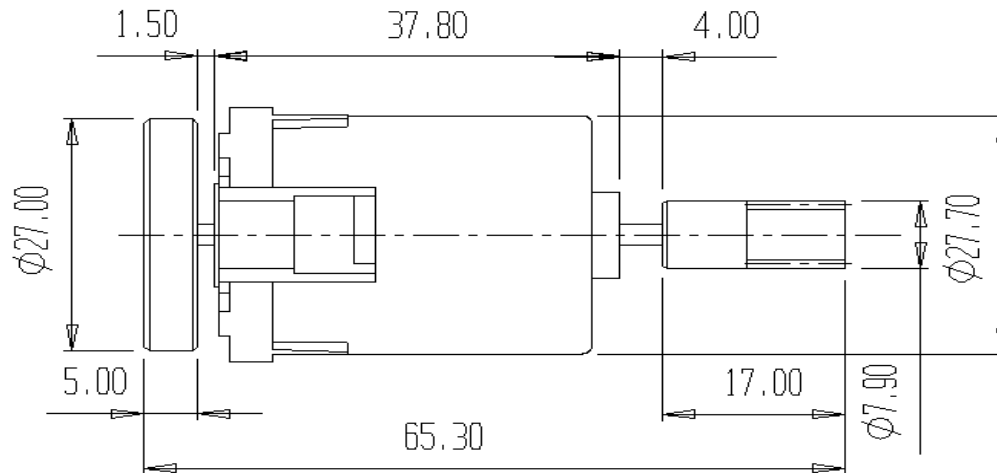
NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE0000179 DC MOTOR / RS385PH / MD207-M37 / F/W 27mm D x mm THICK / WORM LENGTH 23.25 / BLACK / PS 2 & PS 3

BE0000161 DC MOTOR / RS385PH / MD207-M37 / F/W 30mm D x 11mm THICK / WORM LENGTH 23.07mm / BLACK / PS 2

Motor:
RS365SH

Worm Gear:
MD209-M23



Fits the following Premier Locomotives;

BB-1 Electric Lead

BB-1 Electric Trailing

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE0000203 DC MOTOR / RS365SH / MD209-M23 / F/W 30mm D x 9mm THICK / WORM LENGTH 22.21mm / BLACK / PS 2

** Use Flywheel tach tape to add stripes to these motors, if needed

BE0000073 FLYWHEEL TACH TAPE / (STRIPES) / 1.77mm WIDE / FOR 27mm DIAM. FLYWHEELS

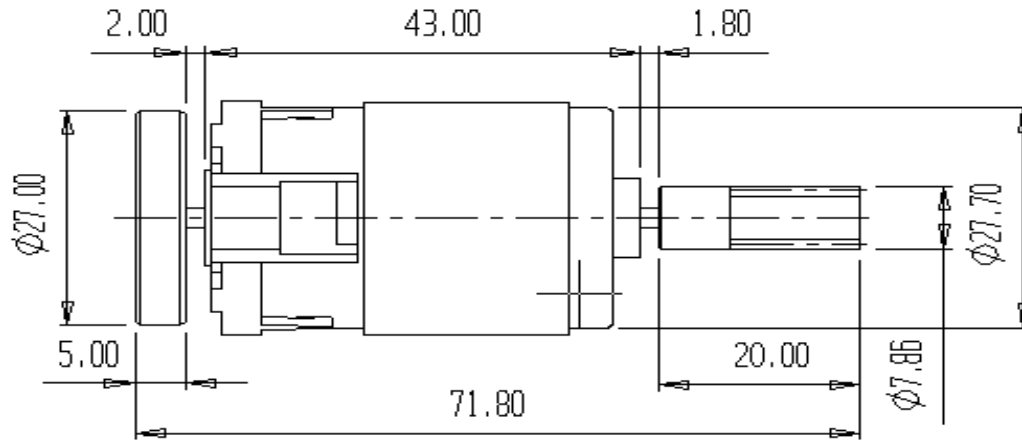
Tach Reader Brackets:

IH0000389 BRACKET / TACH READER / PS 2 / PLASTIC / MABUCHI MOTORS

IH0000475 BRACKET / TACH READER / PLASTIC / FOR 27mm FLYWHEELS / PS 3 ONLY / MABUCHI MOTORS / PS 3 UPGRADE KIT

Motor:
RS385PH

Worm Gear:
MD008-M15



Fits the following Premier Locomotives;
OC-3 RAIL INSPECTION

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

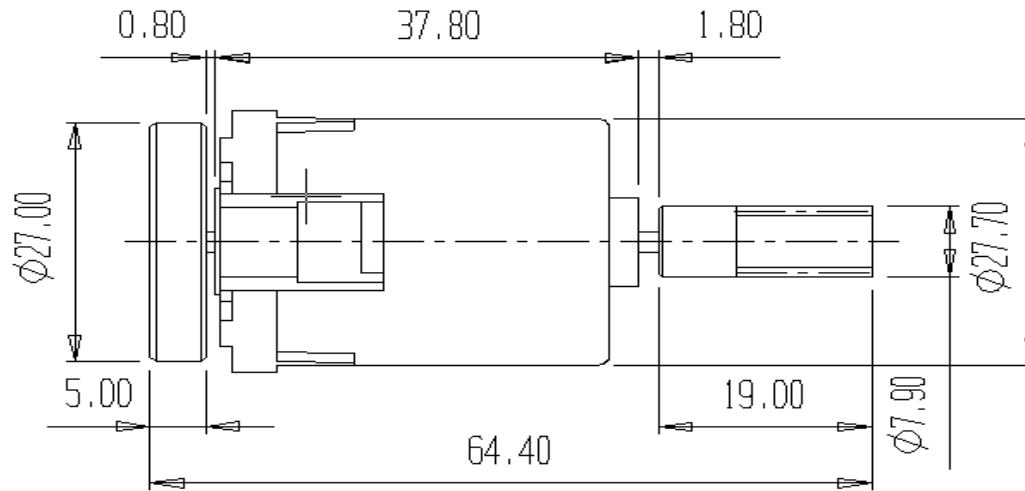
- BE0000232 DC MOTOR / RS385PH / MD008-M15 / F/W 27mm D x 5mm THICK / WORM LENGTH 24.11mm TO 24.36mm / STRIPED / PS 3 BKT
- BE2100003 DC MOTOR / RS385PH / MD008-M15 / F/W 30mm D x 9mm THICK / WORM LENGTH 25.48mm / STRIPED / PS 2 BKT
- BE0000186 DC MOTOR / RS385PH / MD008-M15 / F/W 30mm D x 9mm THICK / WORM LENGTH 24.23mm / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE0000185 DC MOTOR / RS385PH / MD008-M15 / F/W 30mm D x 9mm THICK / WORM LENGTH 24.09mm / BLACK / PS 2

Motor:
RS365SH

Worm Gear:
MD207-M37



Fits the following Premier Locomotives;
EF-3 Class Electric

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

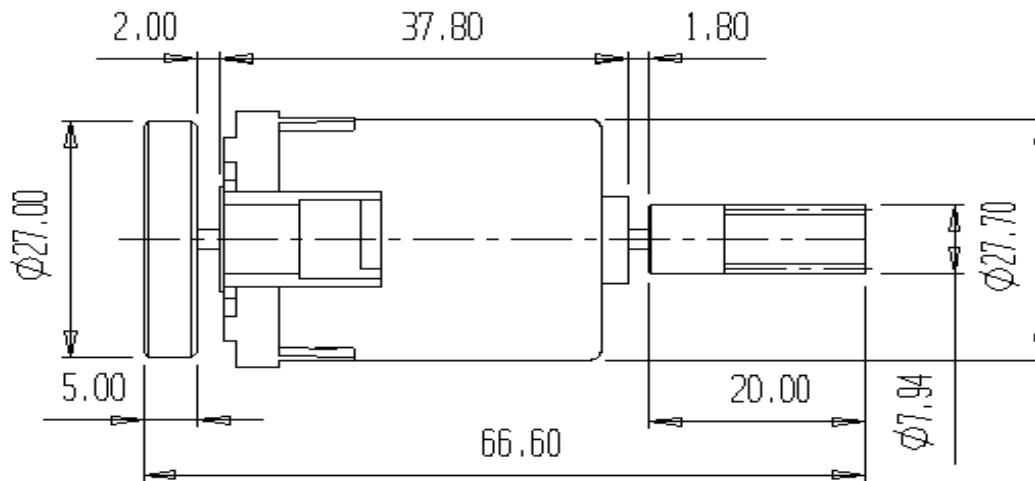
- BE3130000 DC MOTOR / RS365SH / MD207-M37 / F/W 27mm D x 5mm THICK / WORM LENGTH 23.32mm / STRIPED / PS 2 BKT
- BE7240000 DC MOTOR / RS365SH / MD207-M37 / F/W 30mm D x 9.4mm THICK / WORM LENGTH 23.23 / STRIPED / PS 2 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

- BE7230000 DC MOTOR / RS365SH / MD207-M37 / F/W 30mm D x 9mm (TAPERED) THICK / WORM LENGTH 23.32mm / BLACK / PS 2

Motor:
RS365SH

Worm Gear:
MD008-M15A



Fits the following Premier Locomotives;

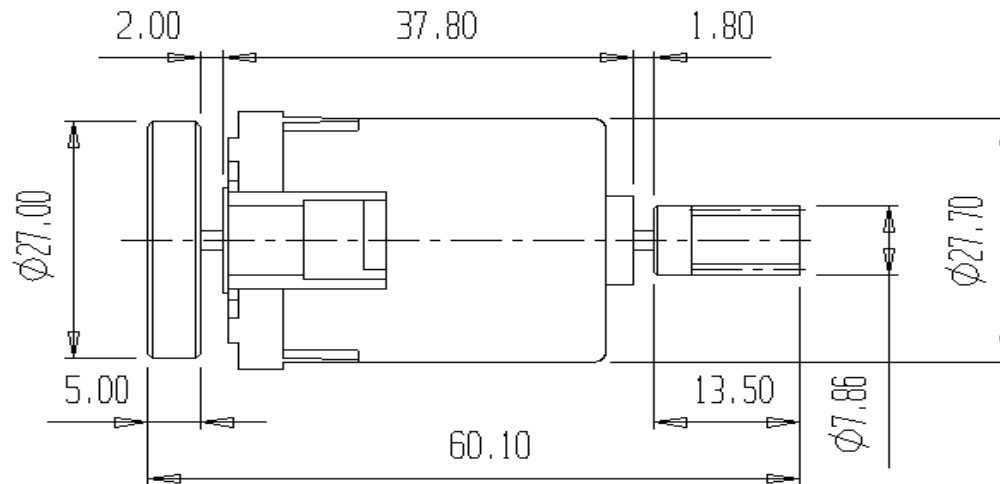
GE IR Boxcab Electric

Nothing identified at this time. You may need to pull flywheel & worm gear and press onto new motor.

BE0000244 DC MOTOR / RS365SH / DUAL SHAFT / NO FLYWHEEL / NO WORM GEAR

Motor:
RS365SH

Worm Gear:
MD305-M26



Fits the following Premier Locomotives;
Taurus

STRIPED FLYWHEEL MOTOR (PS2 & PS3)

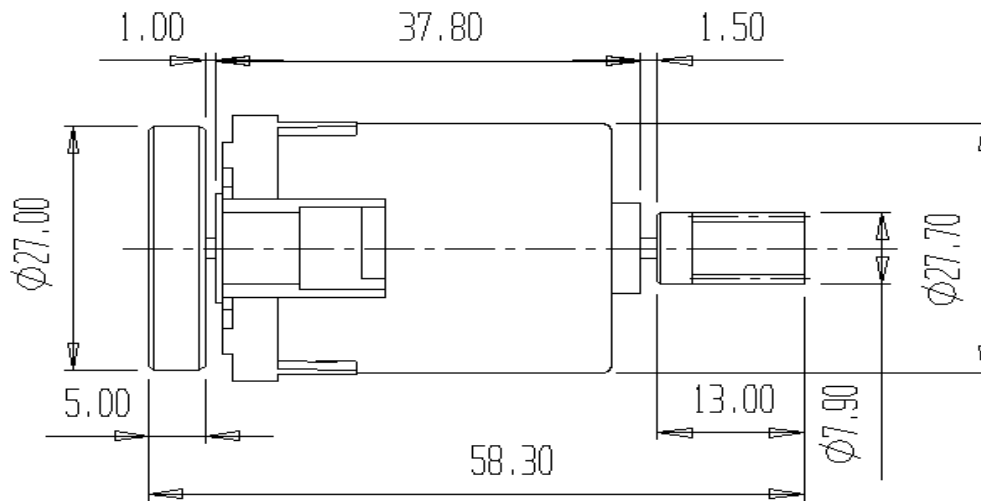
BE0000235 DC MOTOR / RS365SH / MD305-M26 / F/W 27mm D x 5mm THICK / WORM LENGTH 17.16mm / STRIPED / PS 3 BKT

NON-STRIPED FLYWHEEL MOTOR (PS1, PS2 & PS3)

BE0000234 DC MOTOR / RS365SH / MD305-M26 / F/W 27mm D x 5mm THICK / WORM LENGTH 17.14mm / BLACK / PS 3

Motor:
RS365SH

Worm Gear:
MD307-M41

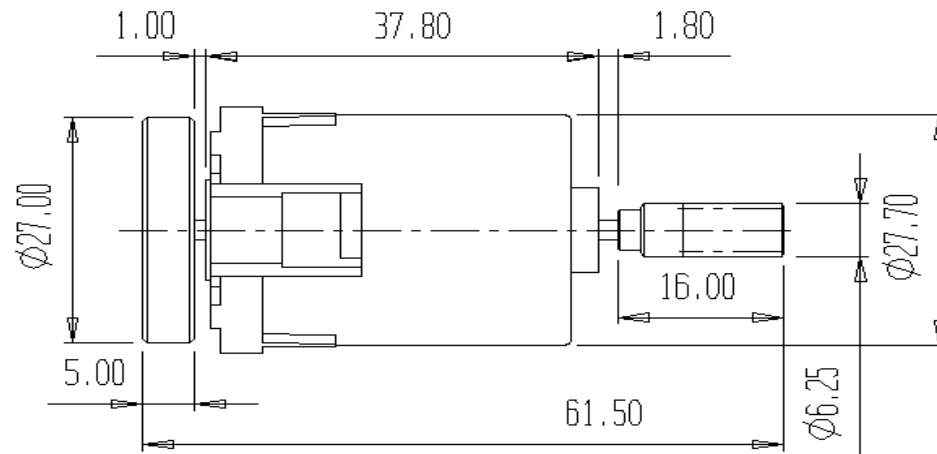


Fits the following Premier Locomotives;
E-94

Nothing identified at this time. You may need to pull flywheel & worm gear and press onto new motor.
BE0000244 DC MOTOR / RS365SH / DUAL SHAFT / NO FLYWHEEL / NO WORM GEAR

Motor:
RS365SH

Worm Gear:
MD194-M25



Fits the following Premier Locomotives;
PRR P-5a Modified Electric

Nothing identified at this time. You may need to pull flywheel & worm gear and press onto new motor.
BE0000244 DC MOTOR / RS365SH / DUAL SHAFT / NO FLYWHEEL / NO WORM GEAR