



## Gearboxes and Motors for 0 Gauge

Slater's range of gearboxes all feature precision CNC machined brass sideplates with high-efficiency crossed helical and spur gearing, mostly in steel. All manufacture is done in-house

**NOTE:** Although we describe different gearbox/motors within our range as being suitable for a particular Gauge or Scale, many of them can also be used, for example, in small locos in the next Scale up, or in large locos in the next Scale down.

For **0 Gauge** there are three gear ratios: **14:1**, intended for main line diesel locos, **30:1** intended for most steam locomotives, and **40:1** intended for shunting locomotives. We now use the **Canon EN22** flat can motor, but some of the range will be available with the **Mashima 1833** (with **L** suffix) or **1824** (with **S** suffix) Flat Can motors (which are no longer made), while stocks last.



(Left) **GB13/GB14**

14:1 gear ratio, designed to take our standard  $\frac{3}{16}$ in driving axle. The GB13 will replace the GB14 once stocks are exhausted; the only difference is with two of the gears which are now manufactured in-house rather than bought in.

(Below) **GB40L**

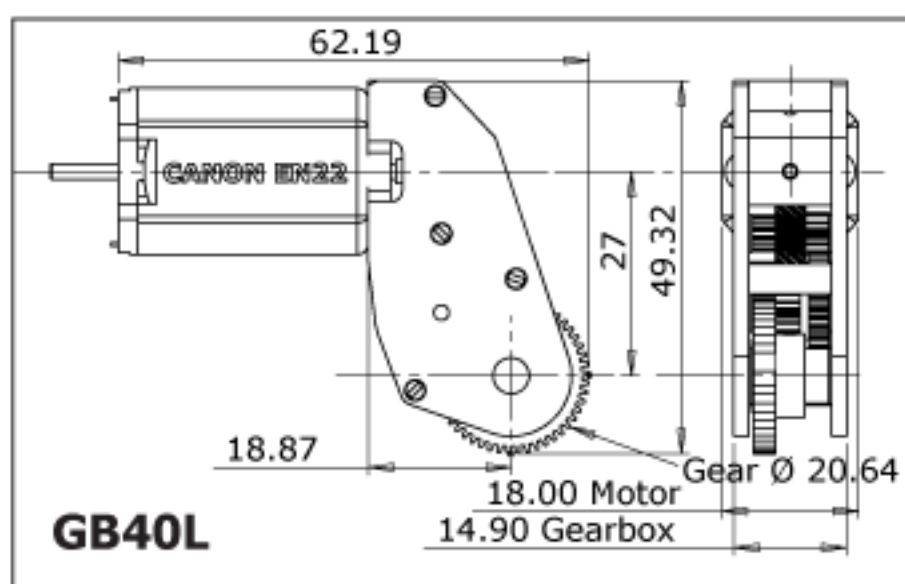
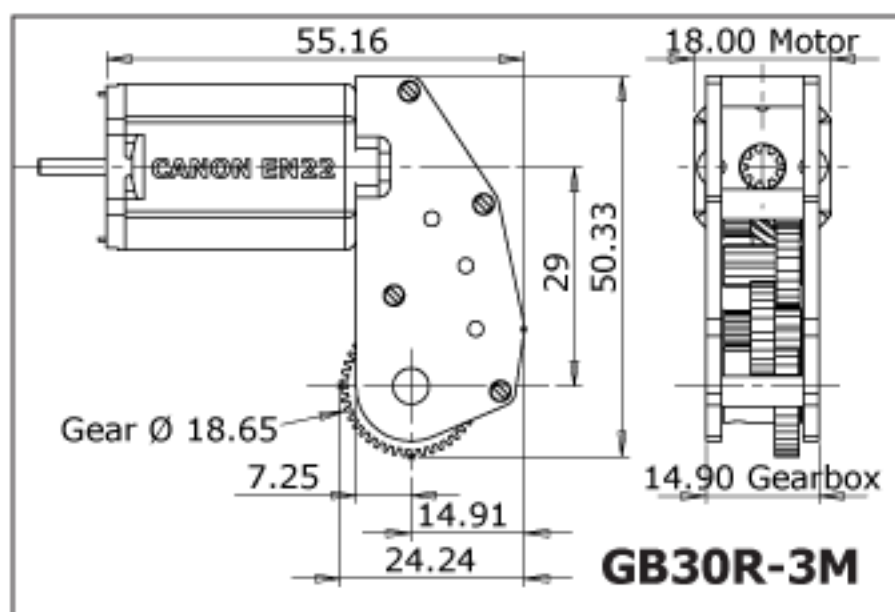
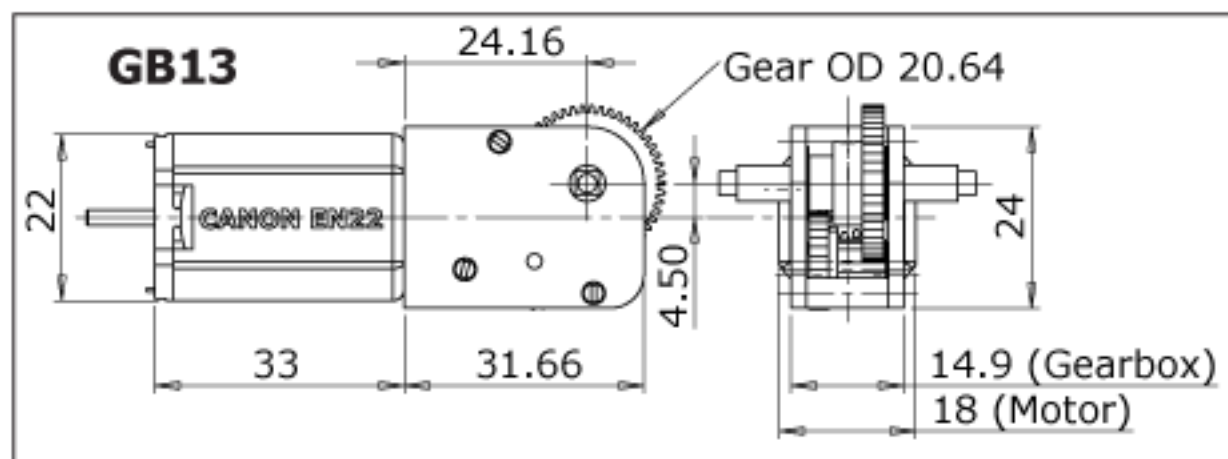
40:1 gear ratio, designed to take our standard  $\frac{3}{16}$ in driving axle.



(Above) **GB30R-3M** 30:1 gear ratio, designed to take our standard  $\frac{3}{16}$ in driving axle.

For scale drawings of these gearbox/motors, see overleaf

For prices, see our current Price List or On-Line ordering pages

**Note**

These drawings should be to scale if this PDF document has been printed without any scale reduction onto A4 size paper. Always check against the quoted dimensions



## Small Gearboxes and Motors

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For smaller locomotives there is the **SG4** for models with a  $\frac{1}{16}$ in axle. It has been designed as a direct replacement for the Portescap® RG4. The **SG38** is very similar, but for models with  $\frac{3}{16}$ in axle. The **SG29** has been designed for locomotives with the driving axle under the cab floor, and the motor sitting vertically in the firebox (typically on G.W.R. 4-4-0s). In addition we also have the **FD01** and **FD03**, which are final drive, stand-alone, gearboxes for remotely connecting to a gearhead motor where a conventional gearbox/motor arrangement will not fit. Note that the last two require assembly.



(Left) **SG4**  
Designed as a direct replacement for the Portescap® RG4. For OO/HO/EM/P4 and small O gauge locos. For  $\frac{1}{16}$ in driving axle.

(Right) **SG38**  
A similar configuration to the SG4, but for  $\frac{3}{16}$ in driving axle. Intended for small O gauge locos.



(Left) **SG29**  
A compact 29:1 gearbox for use in, for example, G.W.R. 4-4-0s. For  $\frac{3}{16}$ in driving axle.



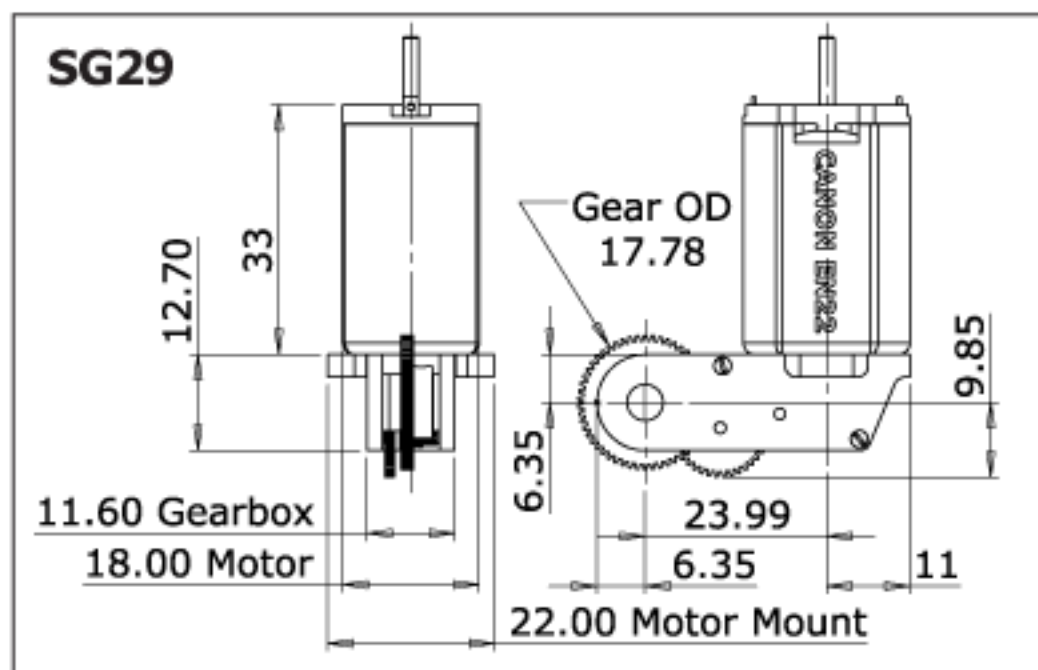
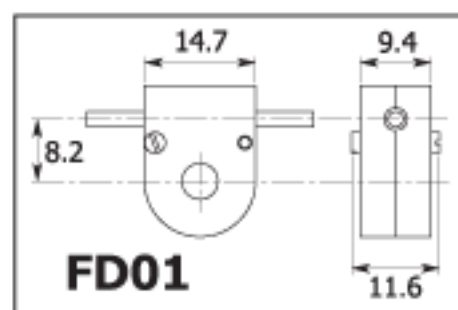
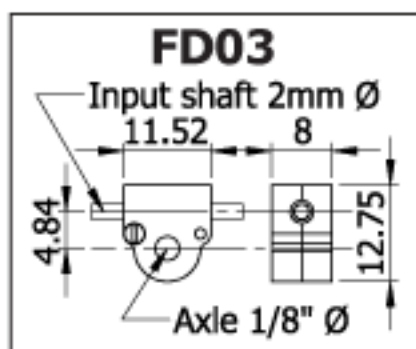
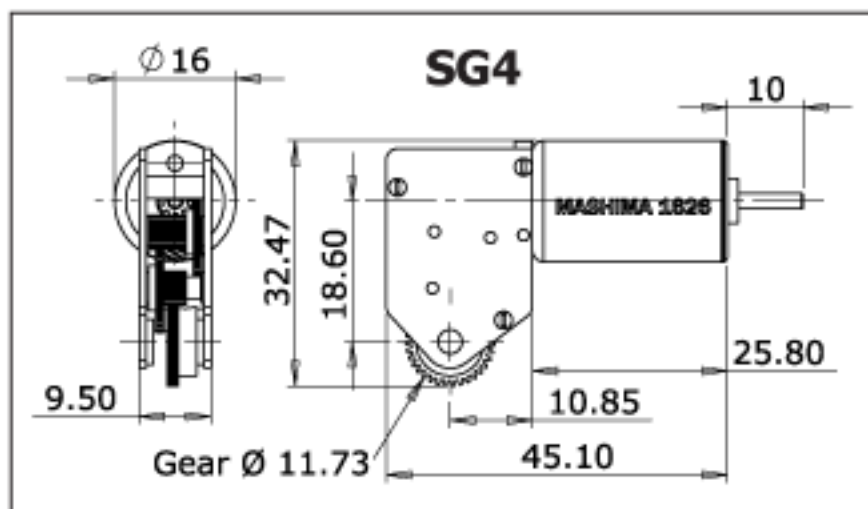
(Left) **FD01**  
3:1 final drive gearbox. Shown un-assembled (as supplied). Fits  $\frac{3}{16}$ in or  $\frac{1}{8}$ in axle.

(Right) **FD03**  
1.3:1 Small final drive gearbox. Shown un-assembled (as supplied). Fits  $\frac{1}{8}$ in axle.

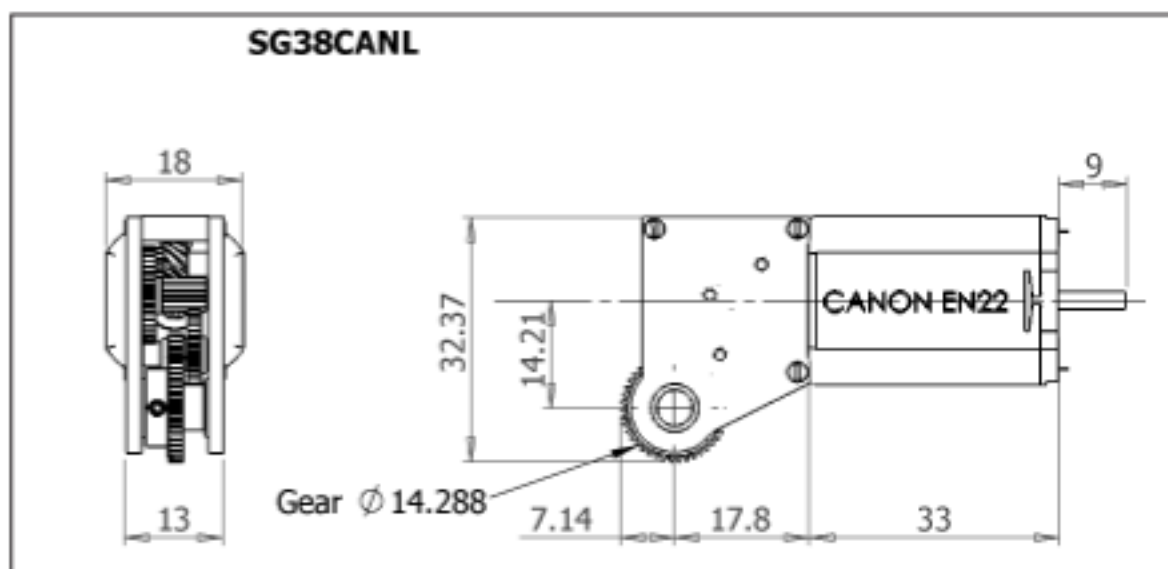
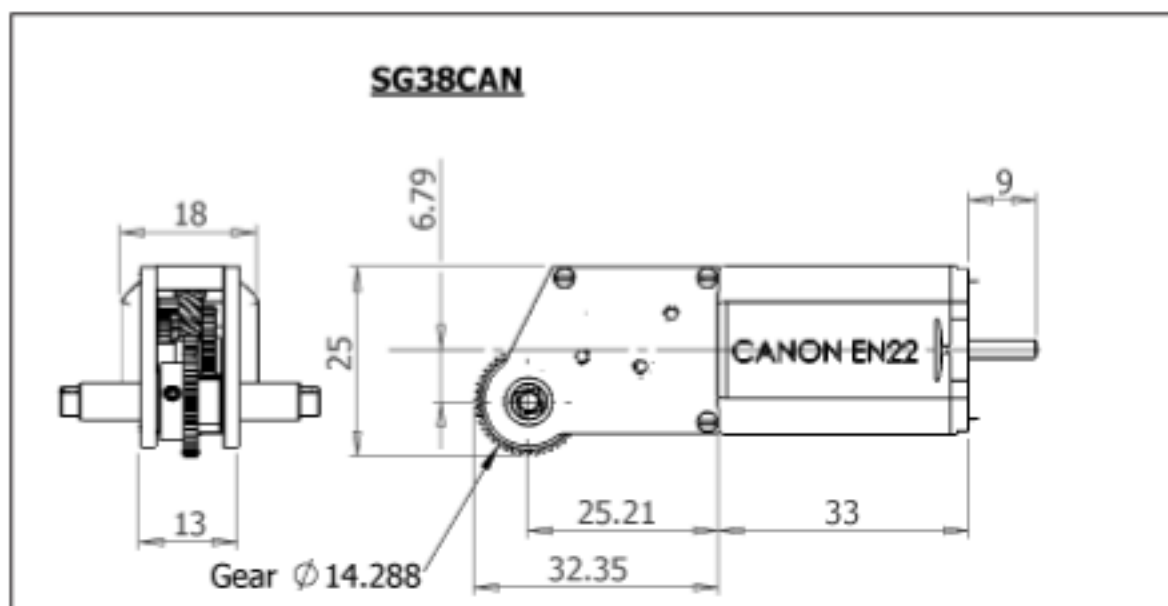
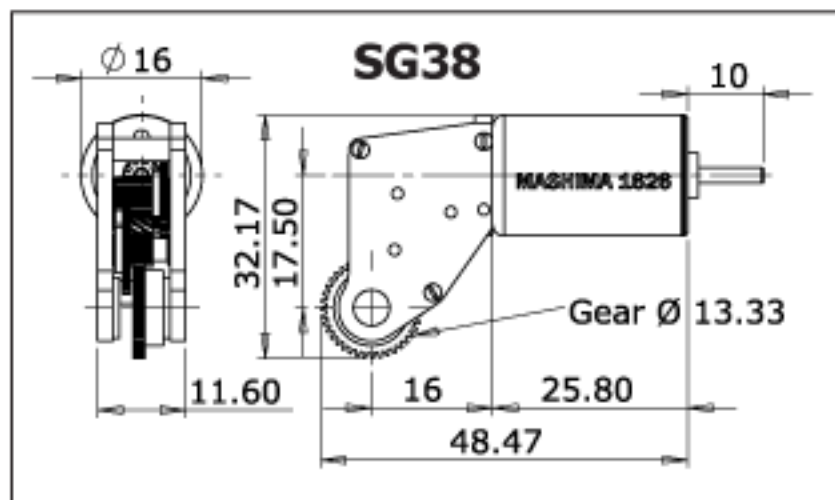


For scale drawings of these gearbox/motors, see overleaf

For prices, see our current Price List or On-Line ordering pages

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## Gearboxes and Motors for Gauge 1

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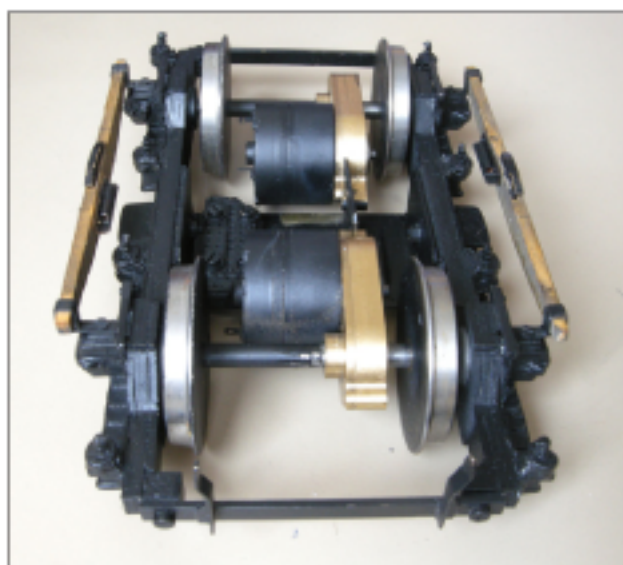
**NOTE:** Although we describe different gearbox/motors within our range as being suitable for a particular Gauge or Scale, many of them can also be used, for example, in small locos in the next Scale up, or in large locos in the next Scale down.

For **Gauge 1**, we have a Gearbox/Motor intended for use in diesel and electric motor bogies. In use it resembles the "axle-hung" style used for many years on full size locomotives, multiple units and tramcars. There are three different gear ratios - **AGB17** (standard); **AGB6** (fast) and **AGB14** (medium). The motor is a very powerful and high quality Faulhaber coreless type. Each unit is supplied fitted with our  $\frac{3}{16}$ in diameter Gauge 1 diesel and bogie axle, but no wheels.

We also have our "standard" O Gauge gearboxes fitted with a larger (and higher voltage) motor, and also designed to be used with our  $\frac{1}{4}$ in axle.



(Left) **AGB6**  
As supplied,  
fitted with  
our Gauge 1  
 $\frac{3}{16}$ in driving  
axle. (AGB17  
and AGB14  
are identical  
externally).



(Above)  
Two AGB units fitted into an electric multiple unit  
motor bogie (shown upside down).

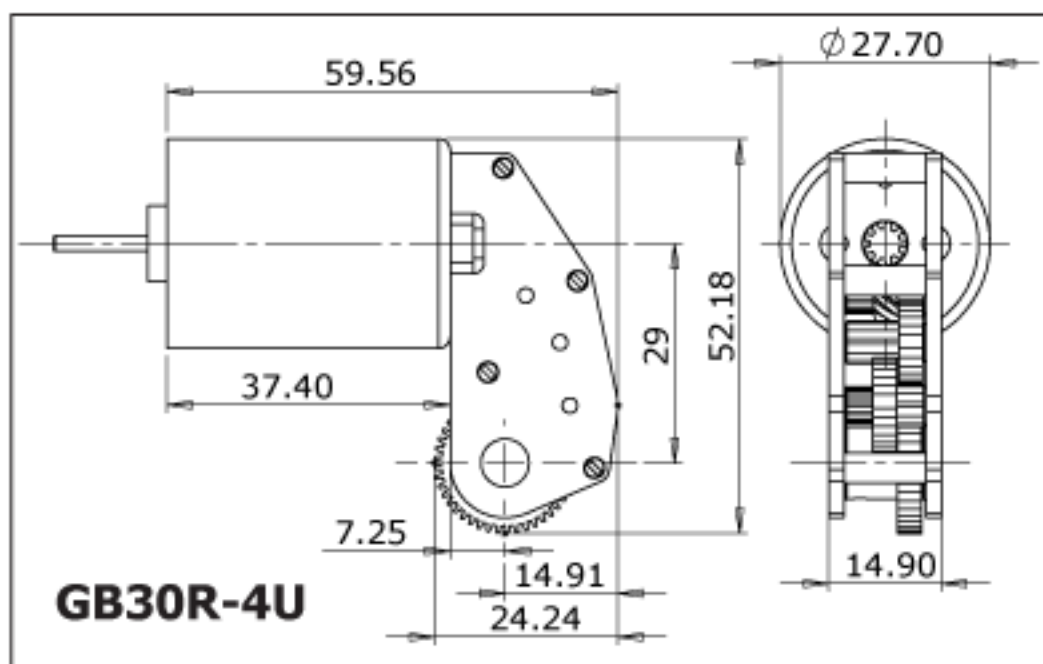
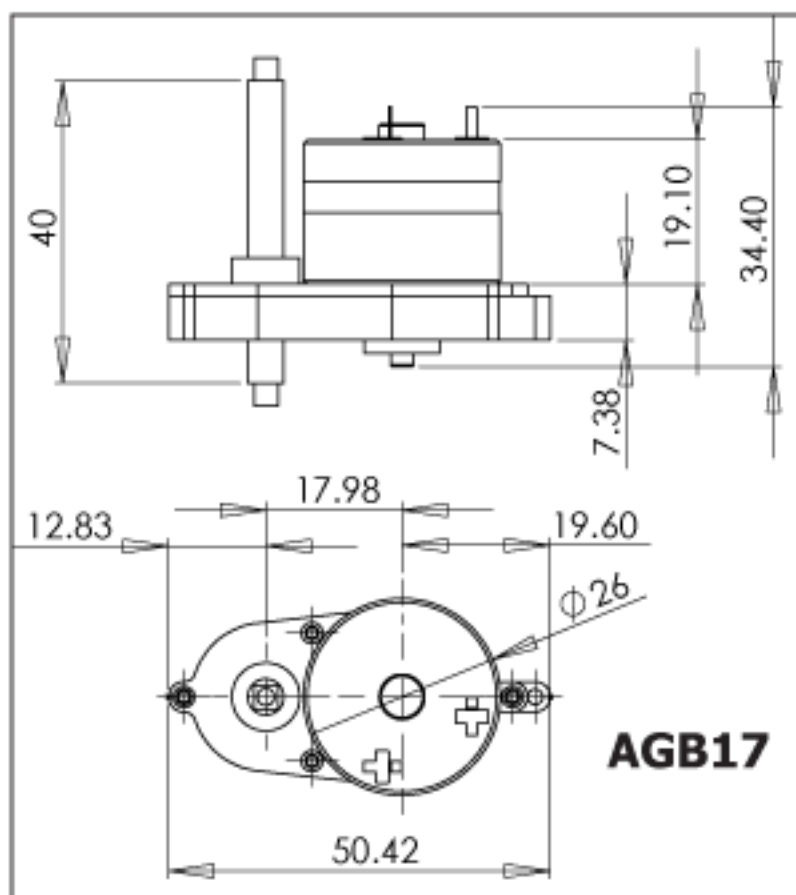
Photo: courtesy Peter Rogers Models



(Left) **GB30R-4U**  
30:1 gear ratio,  
fitted with the  
18volt 2838 round  
can motor and  
designed to take  
our standard  $\frac{1}{4}$ in  
driving axle.

For scale drawings of these gearbox/motors, see overleaf

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## Gearboxes and Motors for Gauge 3

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For **Gauge 3**, we have two different ratios, **30:1** (high speed) and **50:1** (more sedate speed), and three or four different motors. See our Web Site or Price List for current availability of motor and gearbox combinations. These gearbox/motors have ample power for Gauge 3, but their relatively compact size means that they are also suitable for larger Gauge 1 or 16mm Scale locomotives.



(Left) **GBG3P**  
30:1 gear ratio; fitted with a 28x55 Piko  
18volt motor.

(Below) **GBG3-50**  
50:1 gear ratio; fitted with a high power 30x40 Canon  
coreless 24volt motor.

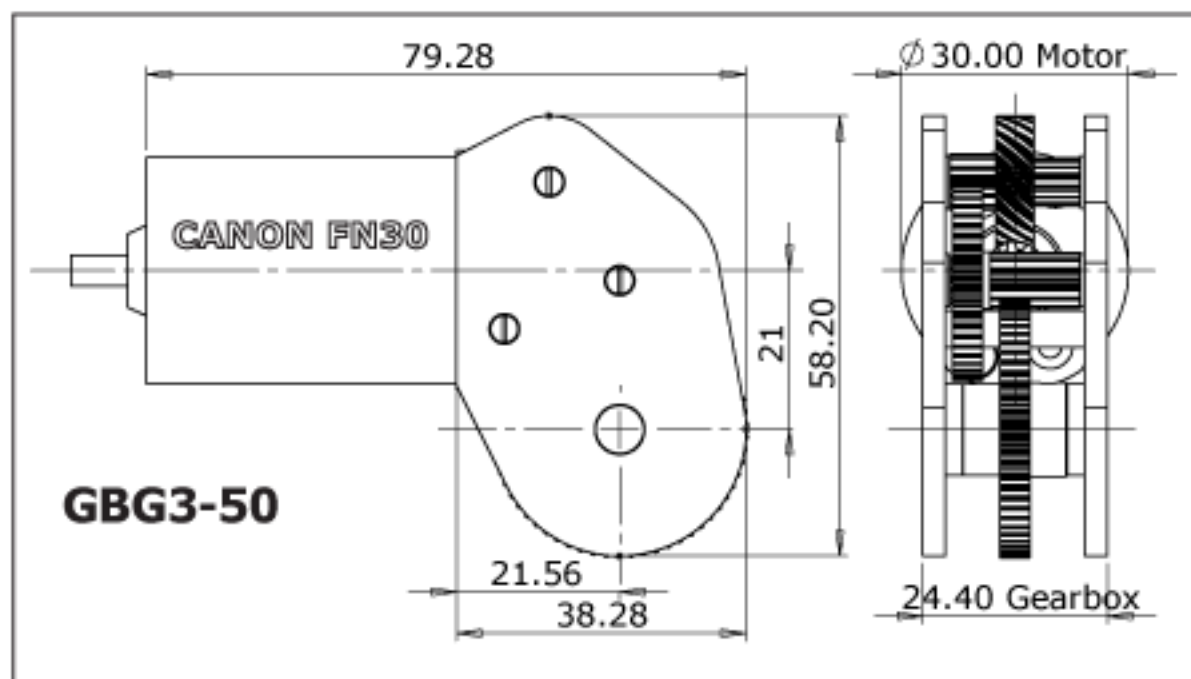
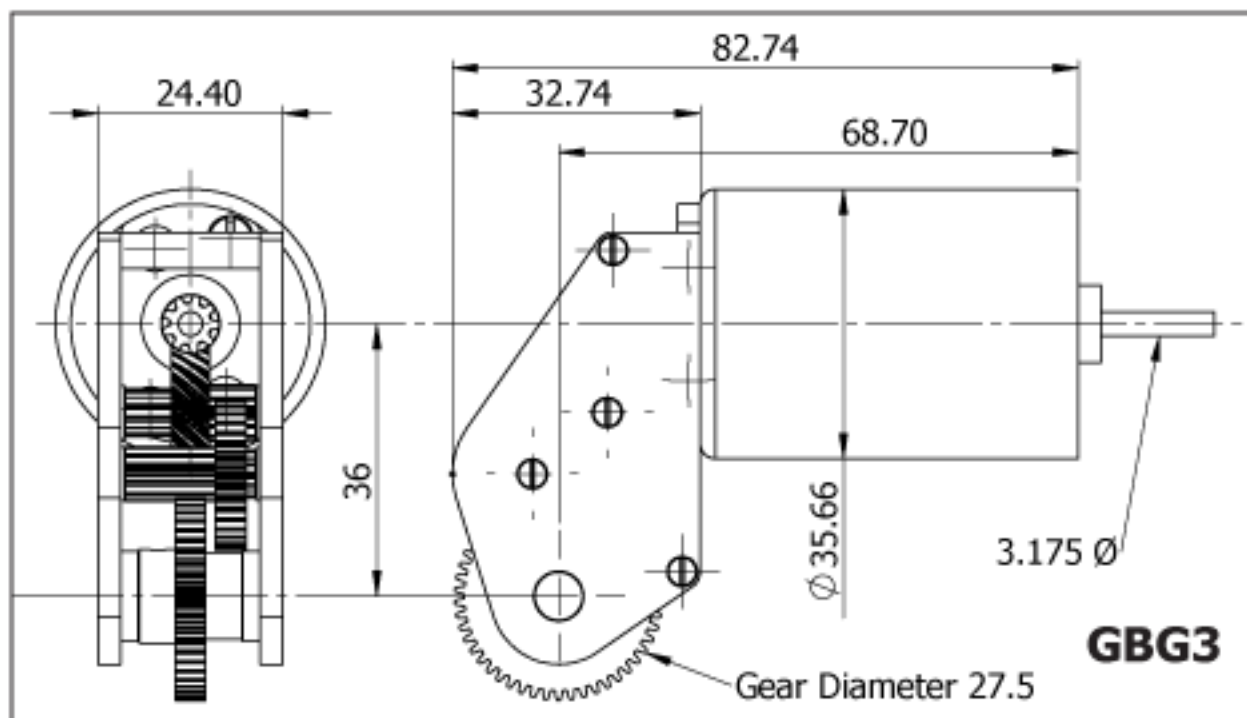


(Above) **GBG3**  
30:1 gear ratio; fitted with a 36x50  
Mabuchi 24volt motor.

For scale drawings of these gearbox/motors, see overleaf

For prices, see our current Price List or On-Line ordering pages



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