

2 STAGE GEARBOXES

1. **VML2** This is our standard 2 stage general purpose gearbox. It is available with 30:1, 26.7:1, 24:1, 22:1 and 20:1 although 18.5:1, 17.1:1, 16:1 and 13.3:1 are available to special order.
2. **VMS2** This is a shorter version of the VML2 to clear the next axle on short wheelbase locomotives. It is also available with ratios of 30:1, 26.7:1, 24:1, 22:1 and 20:1. Ratios of 18.5:1, 17.1:1, 16:1 and 13.3:1 are also available to special order.
3. **VML2C** This 2 stage gearbox was developed for motors with short shafts, the motor being mounted 3mm lower in the gearbox. The side frames have been widened but the width over the bearings is still 19mm. It is also available with ratios of 30:1, 26.7:1, 24:1, 22:1 and 20:1. Ratios of 18.5:1, 17.1:1, 16:1 and 13.3:1 are available to special order.
4. **VMS2C** This is the short version of the VML2C for short shaft motors. Again the gearbox is 16mm wide overall and is available with ratios of 30:1, 26.7:1, 24:1, 22:1 and 20:1. Ratios of 18.5:1, 17.1:1, 16:1 and 13.3:1 are available to special order.

3 STAGE GEARBOXES

1. **VML1** This gearbox is a 3 stage gearbox designed to give higher ratios for shunting and heavy freight locomotives. It also has a smaller final drive gear for locomotives with smaller wheels. It is available with ratios of 72.4:1, 64.4:1, 57.9:1, 52.7:1 and 48.3:1. Ratios of 44.6:1, 41.4:1, 38.6:1 and 32.2:1 are available to special order.
2. **VMS1** This is a shorter version of the VML1 to clear the next axle on short wheelbase locomotives. It is also available with ratios of 72.4:1, 64.4:1, 57.9:1, 52.7:1 and 48.3:1. Ratios of 44.6:1, 41.4:1, 38.6:1 and 32.2:1 are available to special order.
3. **MINI** This 3 stage gearbox was designed for smaller locomotives. The final drive gear is only 17.8mm diameter. It is available with ratios 30.2:1, 26.8:1, 24.2:1, 22:1 and 20.1:1.
4. **MINI-S** This is a shorter version of the MINI to clear the next axle on short wheelbase locomotives. It is also available with ratios of 30.2:1, 26.8:1, 24.2:1, 22:1 and 20.1:1.
5. **MINI-7** This is a variation of the MINI 3 stage gearbox designed to replace the RG7, available in 2 different types – end mounting (MINI-7E) or side mounting (MINI-7S). Gear ratios available are 30.2:1, 26.8:1, 24.2:1, 22:1 and 20.1:1.
6. **MINI GOOCH** This is another variation of the standard Mini which has had the sideplates reduced by 2.5mm and sits lower in the frames giving more head room in smaller locomotives. Gear ratios available are 30.2:1, 26.8:1, 24.2:1, 22:1 and 20.1:1.
7. **VML5** This 3 stage gearbox is between the VML1 and the MINI specifically for the Atlantic. Gear ratios available 38:1, 33.8:1, 30.4:1, 27.7:1 and 25.3:1.
8. **VMS5** This is a shorter version of the VML5 ideal for slower goods locomotives, available in ratios 38:1, 33.8:1, 30.4:1, 27.7:1 and 25.3:1.

