

# Series C Gearboxes : Installation and Maintenance

Satisfactory performance depends on proper installation, lubrication and maintenance. All instructions given in the installation leaflet must be followed carefully.

## SHAFT MOUNTING

Ensure that the shaft on to which the gear unit is to be mounted and the gear unit bore are clean and free from burrs.

Liberal smear the shaft and bore with lubricants to aid assembly and prevent fretting corrosion. Slide the unit on to the driven shaft, fit side fitting key. **DO NOT USE TAPER OR TOP FITTING KEY.**

## LUBRICANT TYPE TEMPERATURE RANGE

ISO Viscosity	Ambient Temperature °C		
	-30° to 20°C	0°C to 35°C	20°C to 50°C
Synthetic Oil 1	220	320	460
Synthetic Oil 2	220	220	320

Synthetic Oil 1 = Polyglycol based  
 Synthetic Oil 2 = Polyalphaolefin based.  
 We recommend the use of a Polyglycol synthetic oil - see the note below regarding power ratings.

## FOOT MOUNTING

Mount the unit securely to a rigid structure. Fit the output extension shaft as required. Use flexible couplings such as Fenaflex for shaft to shaft connections and ensure that shaft misalignment is within the coupling's capacity. When a pulley or sprocket is fitted to either shaft, mount it as close as possible to the gearcase.

When fitting or removing drive components do not hammer on shaft as this will damage the bearings, Fenner Taper Lock bushes permit easy fixing and dismantling without undue force.

## LUBRICATION

**Sizes 870 to 873** are pre-filled for mounting position B3 with synthetic lubricant. Other mounting positions must be specified on order.

**Sizes 874 to 877** are supplied without oil. Before running they should be filled with an appropriate amount of the correct lubricant shown in the table, dependent on the mounting position, see below.

Oil capacities are only approximate and units should be filled until oil escapes from the level plug hole.

**WARNING:** Do not overfill as excess lubricant may cause overheating and leakage.

## OIL CHANGES

Sizes 870 and 871 are lubricated for life except when the units are required to work in an explosive atmosphere. (94/9/EC Atex 100a Group II category 2 zones 1 & 21 & category 3 zones 2 & 22). See separate leaflet for recommendations. All other sizes will require an oil change depending on the unit operating temperature. Initial fill of oil should be changed in a new gear unit after 1000 hours operation or one year or half the life in the table below whichever is the soonest.

Unit Op Temp °C	Renewal Period (Hours)	
	Mineral Oil	Synthetic Oil
65 or less	17000 or 3 Yrs	26000 or 3 Yrs
70	12000 or 3 Yrs	26000 or 3 Yrs
75	8500 or 3 Yrs	22000 or 3 Yrs
80	6000 or 2 Yrs	15000 or 3 Yrs
85	4200 or 17 Mths	10500 or 3 Yrs
90	3000 or 12 Mths	7500 or 2.5 Yrs
95	2100 or 8 Mths	6000 or 2 Yrs
100	1500 or 6 Mths	4500 or 18 Mths

## BREATHERS/MOUNTING POSITIONS

Sizes 870 to 873 are supplied for operation without breathers.

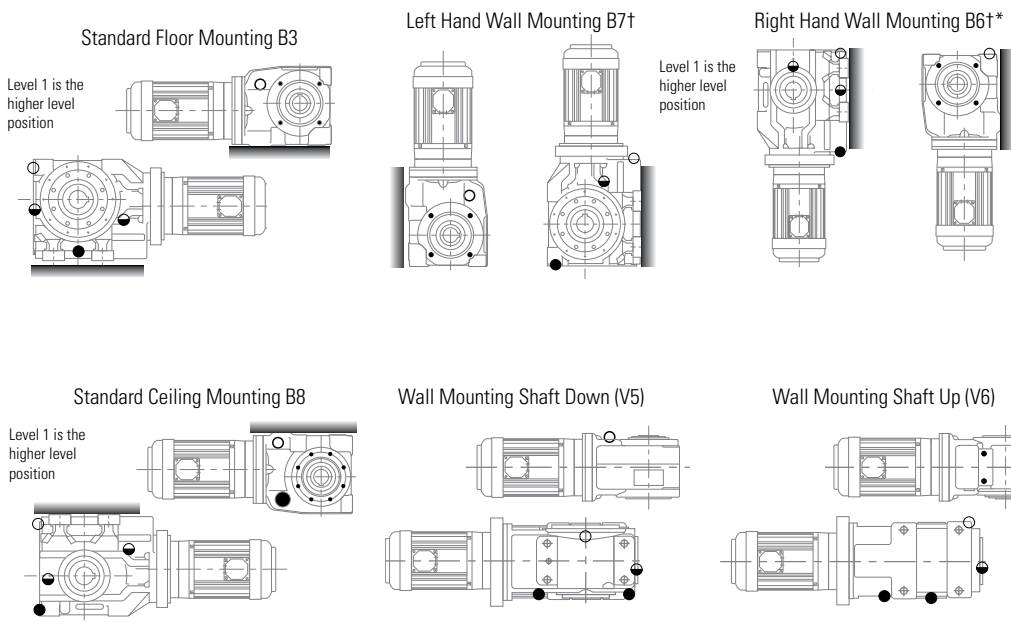
Sizes 874 to 877 are supplied for operation with breather but are despatched without oil. It is essential that when the unit is in its operating position the relevant blanking plug is removed and replaced by the breather plug (supplied) in the position indicated on the installation leaflet.

## LUBRICANT CAPACITY (LITRES)

Unit Size	Double Reduction								Triple Reduction							
	B3		B8		V5/V6	B7		B6	B3		B8		V5 V6	B7		B6
	Level 1	Level 2	Level 1	Level 2	All	All	Level 1	Level 2	Level 1	Level 2	Level 1	Level 2	All	All	Level 1	Level 2
870	0.3	-	0.7	-	0.5	0.6	0.7	-	0.4	-	1.2	-	0.8	1.0	1.2	-
871	0.4	-	1.0	-	0.7	0.9	1.0	-	0.5	-	1.5	-	0.9	1.3	1.5	-
872	0.7	-	1.4	-	1.0	1.4	1.4	-	0.9	-	2.1	-	1.4	2.0	1.9	-
873	1.5	-	3.1	-	2.2/2.3	3.0	3.2	-	2.1	-	4.0	-	2.5	4.6	4.0	-
874	4.5	3.0	5.1	3.0	3.7/3.5	5.6	7.4	5.1	4.8	3.8	5.9	3.6	3.7	6.6	9.2	6.9
875	7.1	5.9	9.5	4.8	3.7/6.2	9.6	12	9.5	-	-	-	-	-	-	-	-
876	17	11	17	8.3	12	18	25	17	-	-	-	-	-	-	-	-
877	28	17	26	14	21	31	42	28	-	-	-	-	-	-	-	-

\*Level 1 used for output speeds below 1000rpm, Level 2 used for output speeds above 1000rpm

## MOUNTING POSITIONS



† Gear units for use in mounting positions B6 & B7 should only be selected with overall ratios greater than or equal to those shown in the table below.

\* Mounting position B6 is not recommended for geared motors. Consult your local authorised distributor.

Unit Size	Input Speed (rpm)				Consult your local distributor
	1000	1500	1800	>1800	
870-875	All	All	All		
876	18:1	18:1	25:1		
877	18:1	40:1	63:1		

Plug positions apply for sizes 874 and larger.

- Ventilator/Filling Position
- Level Position
- Drain Position