

# Mellor

ELECTRICS LIMITED



THE MOTOR GEAR PEOPLE

**Mellor**  
ELECTRICS LIMITED



*“With over 30 years experience in motor gear systems our knowledge and expertise in this field is second to none.”*

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*“dealing with companies as far afield as America, Australia and Japan”*



### About us

As one of the world’s leading motor/gearbox manufacturers, Mellor Electrics deals with companies as far afield as America, Australia and Japan. Our products form an integral part of vending machines, pumps, medical equipment and other applications too numerous to mention. As such it is vital our product remains reliable, consistent and accurate throughout its working life.

To achieve this goal we keep the majority of our processes “in-house”, thereby maintaining total control of all aspects of production. Our CNC turning centres and precision hobbing machines offer levels of accuracy which, when combined with our CAD facilities and computerised testing equipment, allow us to offer unrivalled quality and service.

Originally founded in 1964, Mellor Electrics has constantly grown and evolved to meet the needs of the customer. Extensive investment in human resources and modern machinery has enabled us to offer flexibility in all areas of our business.

We now operate from a custom built, 2600 square metre factory which affords us the space we need to offer stock holding and kanban facilities to our customers.

With approval to ISO9002 and as a UL recognised manufacturer, we pride ourselves on our ability to meet customer requirements and exceed expectations.



### The products

The Mellor Electrics range comprises five AC shaded pole motor/gearbox types and five DC permanent magnet versions, complemented by the SC9 AC and RS DC motors.

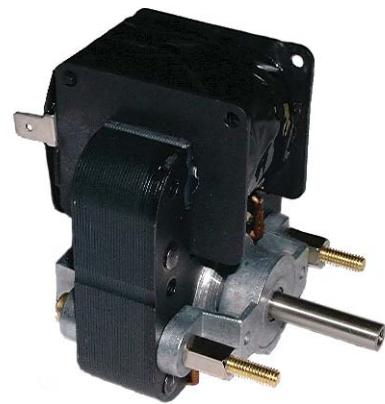
Our products are suitable for a vast array of applications and have so far been used in vending machines, pellet burning stoves, pumps, catering equipment, animated displays and scientific equipment to name just a few.

All our motor gearbox units are lubricated for life and many features such as shaft length and diameter can be modified to suit each application. Our on-site design and engineering facilities allow us to tailor our product to your needs and we are happy to discuss any special requirements with the customer.



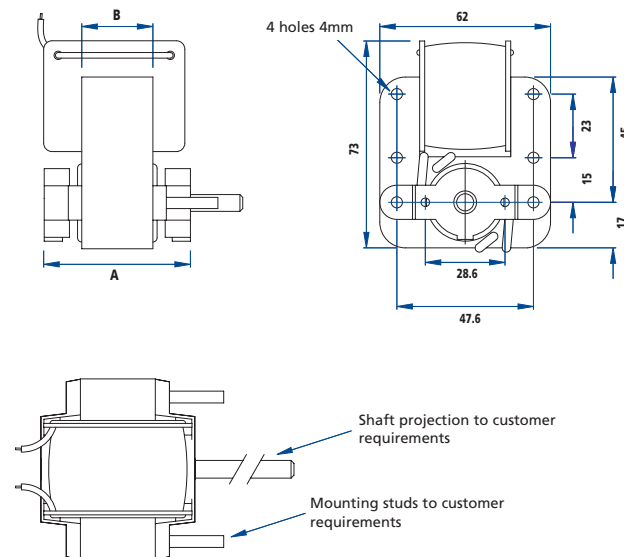
*“our on-site design and engineering facilities allow us to tailor our products to your needs”*

- Available in five stack heights 13mm - 38mm
- Lubricated for life
- Sintered or ball-race bearings
- 4.76mm or 6mm diameter precision ground steel shaft - stainless steel and custom diameters available to special order
- Voltage range 24v to 415v AC - Insulation to class B as standard, Class F available
- Re-setting or non re-setting thermal protection
- 6.3mm male tab or flying lead terminations

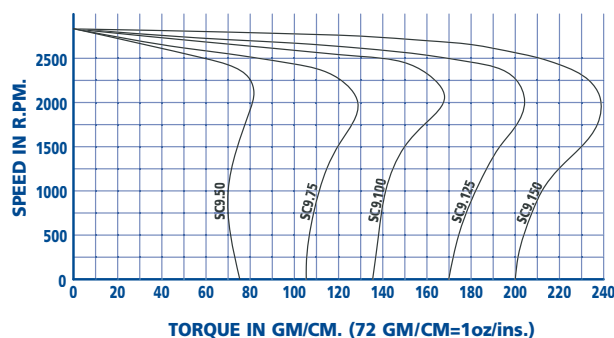


SC9 Series

At the heart of the Mellor Electrics AC range is the SC9 single phase shaded pole motor, the motive power for all our AC motor/gearboxes. Also available as a motor- only unit, this dependable and consistent performer offers long life, low cost and quiet running.



**Torque/Speed Characteristics – Continuous rating:**



Cat no.	Dim A	Dim B	Wgt kg	Rating	Starting Torque	Torque at 2000RPM	Input watts
SC9 50	38	13	0.45	CONT.	74	83	15
				INT.	90	140	30
SC9 75	44	19	0.624	CONT.	106	125	19
				INT.	140	245	38
SC9 100	50	25	0.794	CONT.	136	168	24
				INT.	260	340	48
SC9 125	57	32	0.964	CONT.	170	208	30
				INT.	323	400	60
SC9 150	63	38	1.14	CONT.	205	240	35
				INT.	390	475	70

- Carbon brushes
- Hardened steel shaft
- Lubricated for life sintered bearings
- Life up to 3000 hrs - depending on usage
- Terminated to solder tabs, connection PCB or flying leads
- Fitted with internal suppression to meet EMC directives



RSDC Series



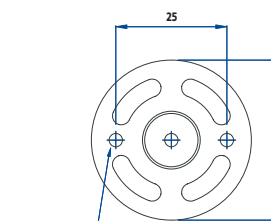
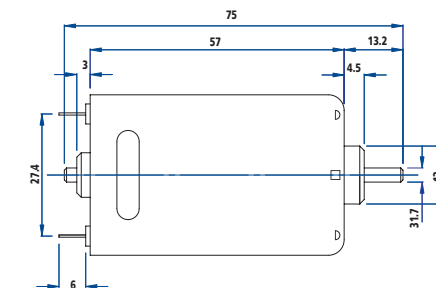
RSW450 Series

**RSDC**

The RS series of DC permanent magnet field motors are available in two can sizes, 12 or 24 volts and a variety of speeds. These efficient, high quality motors are suitable for continuous operation and can be supplied on their own or fitted with a wide range of gear reducers.

**RSW 450**

Designed as a cost-effective replacement for bulky AC vending whipper motors, the RSW series is available with a wide range of stainless steel shafts. Speeds of 10,000, 12,500 and 14,000rpm are standard, as are connector PCBs or flying leads and an adaptor that allows direct connection to currently available whipper chambers.



Cat no.	Nominal Voltage	No Load Speed	Amps	Stall Torque Ncm
RS-550	12	7000	0.300	19.00
RS-555	24	3500	0.150	10.00
RS-560	24	4200	0.200	12.00
RS-360	24	5600	0.150	2.30
RS-380	24	6500	0.150	3.50



# EB T2 Series Motor Gear Unit

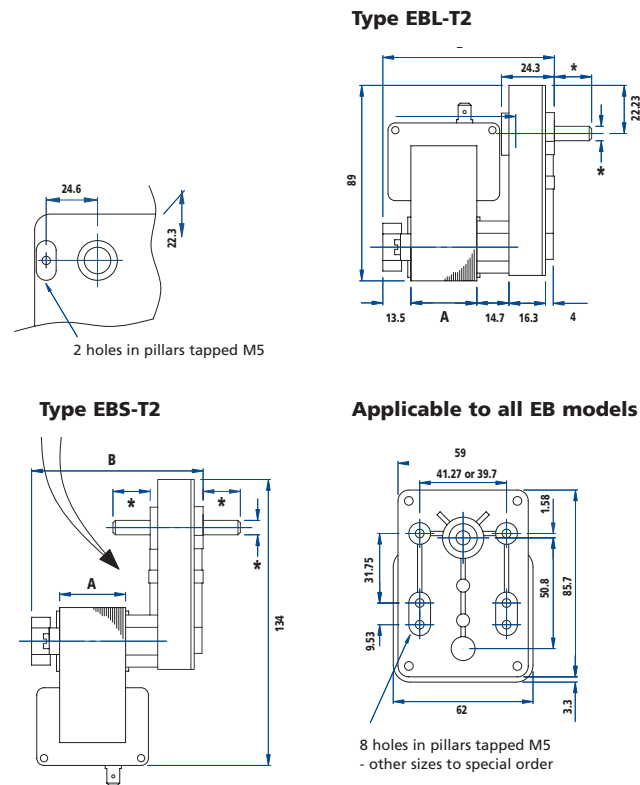
- Available with an AC SC9 motor
- Output Torque: Up to 4Nm depending on speed and motor size
- Speed Range: 30 to 325rpm



EB T2 Series

A compact and versatile unit, the EBT2 is available in a variety of configurations and can be supplied with sintered bronze or ball race output bearings.

As a lower cost option we also offer this unit with a moulded plastic gear-train and a plastic output shaft design to mate with a variety of vending canister systems.



\* Output shaft diameter & length to suit customer requirements

Cat no.	Dim A	Dim B
EBS/EBL16 T2	13	62
EBS/EBL17 T2	19	68
EBS/EBL18 T2	25	74
EBS/EBL19 T2	32	81
EBS/EBL20 T2	38	87

# FB/DFB T3 Series Motor Gear Units

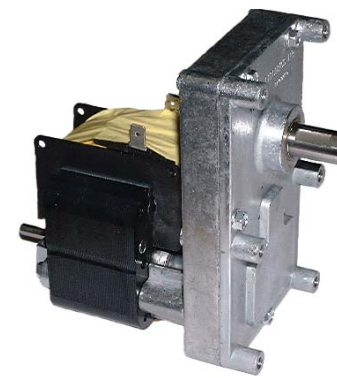
- Available in AC and DC versions

- Output Torque: Up to 130Nm AC or 33Nm DC, depending on speed and motor size

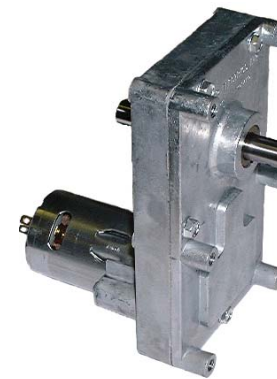
- Speed Range: 1 - 50rpm

The heavyweight of our range, the FBT3 is a low speed, high torque unit designed with pellet burners and fresh brew vending systems in mind, although it is equally suited for many other applications.

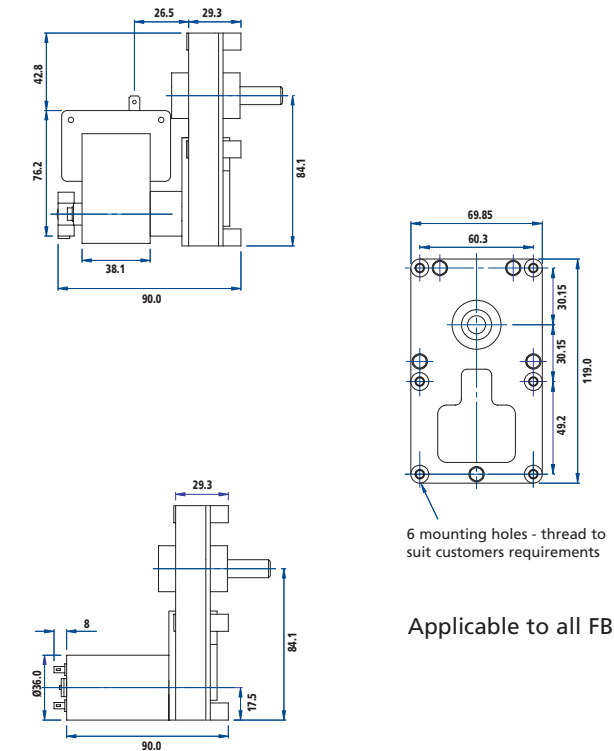
High quality engineering ensures quiet running and a long life.



FB T3 Series



DFB T3 Series



Applicable to all FB models

# CB/CBD T4 Series Motor Gear Units

- Available in AC and DC versions
- Output Torque: Up to 4Nm depending on speed and motor size
- Speed Range: 30 - 325rpm

Used extensively in chemical pumping and dosing applications, the CBT4 has a compact design which makes it ideal for mounting inside small enclosures.

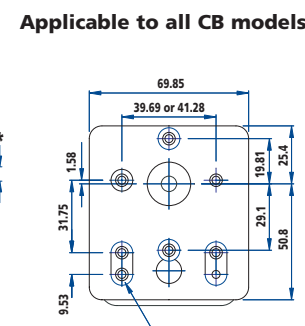
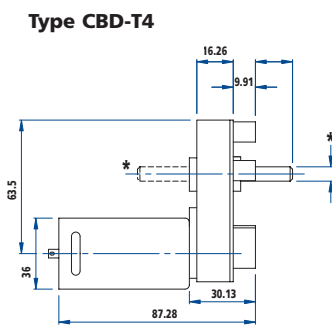
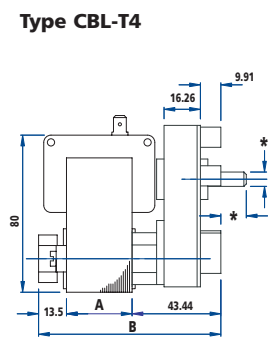
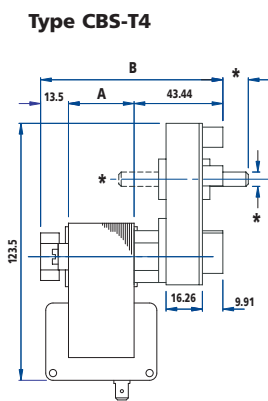
# GB T5 Series Motor Gear Unit

- Available with a DC motor in two can sizes (see RSDC section for details)
- Output Torque: Up to 2Nm depending on speed and motor size
- Speed Range: 50 - 325rpm

This versatile plastic bodied motor gearbox is slim-line and lightweight. Designed with the product engineer in mind, this unit is ideal for applications where space is at a premium but quality cannot be compromised.



CB T4 Series



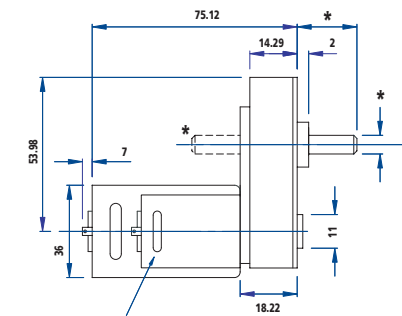
8 holes in pillars tapped M5 - other sizes to special order

\* Output shaft diameter & length to suit customer requirements

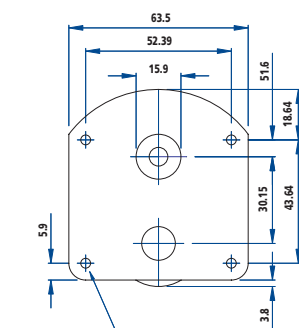
Cat no.	Dim A	Dim B
CBS/CBL21 T4	13	70
CBS/CBL22 T4	19	76
CBS/CBL23 T4	25	82
CBS/CBL24 T4	32	89
CBS/CBL25 T4	38	95



GB T5 Series



Both motors shown

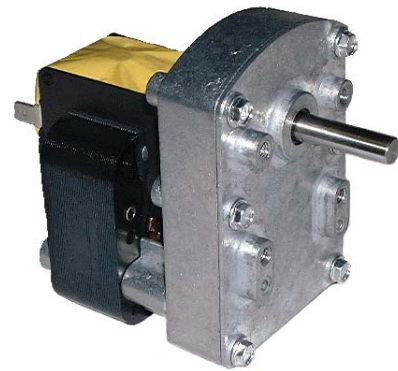


4 holes 3.5mm IN BODY

\* Output shaft diameter & length to suit customer requirements

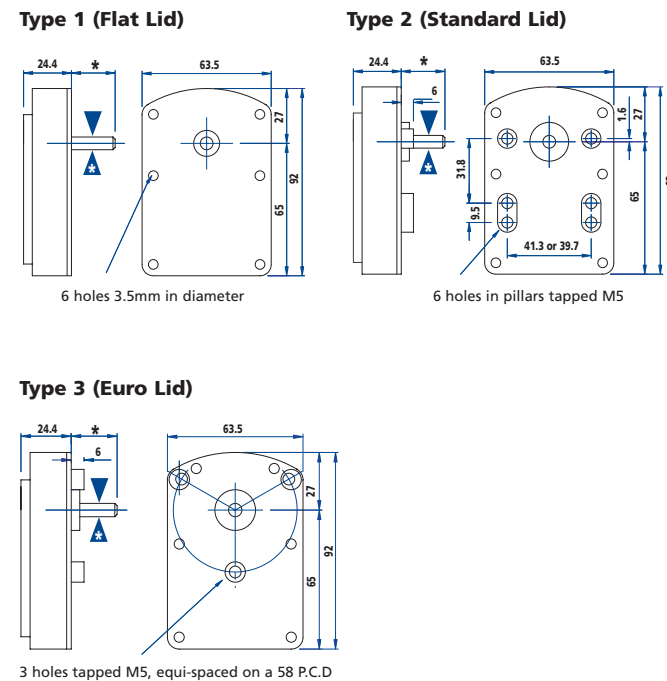
# UB T6 Series Gear Reducer

- Available in AC and DC versions
- Output Torque: Up to 8Nm depending on speed and motor size
- Speed Range: 2.4 - 425rpm



UB T6 Series

Our most versatile offering, the UBT6 series is available with five different lid options to suit a wide range of mountings. Used extensively in pumps, vending machines and animated displays, this unit is the perfect solution for any application that requires a quiet, robust and reliable gearbox.



\*Output shaft diameter & length to suit customer requirements

Refer to relevant pages for full motor specifications

SC9	Cat No.	Motor	A	B	C
AC Single phase shaded pole motors	UBSS60	SC9-50	13	65	140
	UBSS61	SC9-75	19	71	140
	UBSS62	SC9-100	25	77	140
	UBSS63	SC9-125	32	84	140
	UBSS64	SC9-150	38	90	140

SC9	Cat No.	Motor	A	B	C
AC Single phase shaded pole motors (see pg 5)	UBLS65	SC9-50	13	65	92
	UBLS66	SC9-75	19	71	92
	UBLS67	SC9-100	25	77	92
	UBLS68	SC9-125	32	84	92
	UBLS69	SC9-150	38	90	92

RS	Cat No.	Motor	A	B	C
DC Permanent magnet field motors (see pg 6)	UBD80	RS-550	36	57	92
	UBD81	RS-555	36	57	96

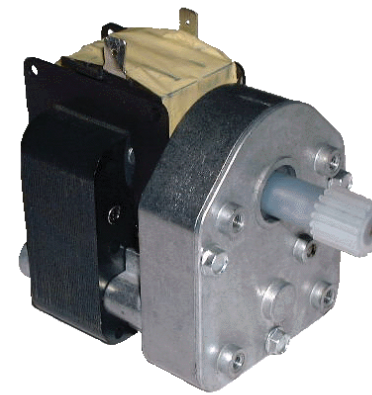
Front or rear mount

# JB T7 Series Motor Gear Unit

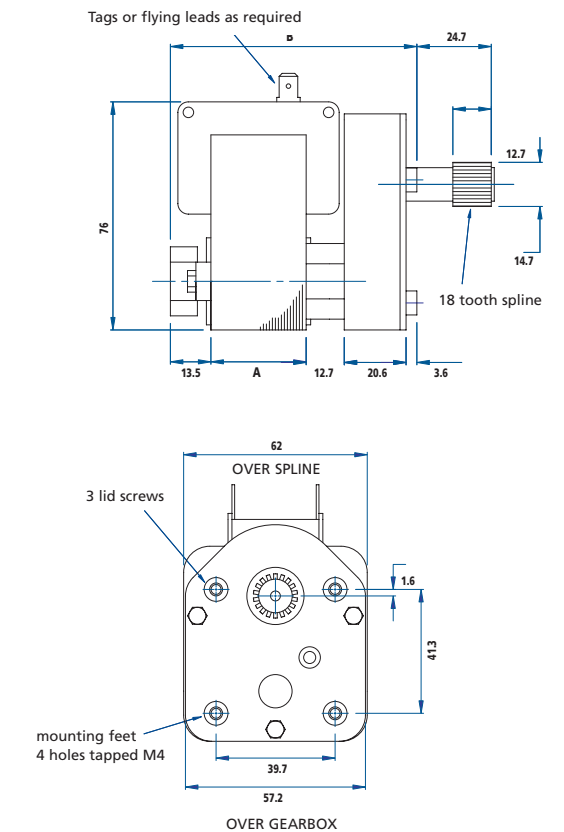
- Available with an AC SC9 motor
- Output Torque: Up to 1Nm depending on speed and motor size

This motor gear unit was specifically designed for use with canister dispensing systems. The output is a 14.7mm diameter 18 tooth spline which will mesh with all the popular makes of ingredient canisters.

The final drive gear is an integral moulding with the output spline which rotates on a ground steel shaft thus negating the need for bearings and providing long life and quiet, reliable operation. The speeds offered are limited to 80 and 140rpm, this enables us to produce the unit at a very competitive price.



JB T7 Series



Cat no.	Dim	Dim A	Speed B	Torque/ Ncm
JB40 T7	32	83	80	100
JB50 T7	38	89	140	62

# MBT10 Series Motor Gear Unit

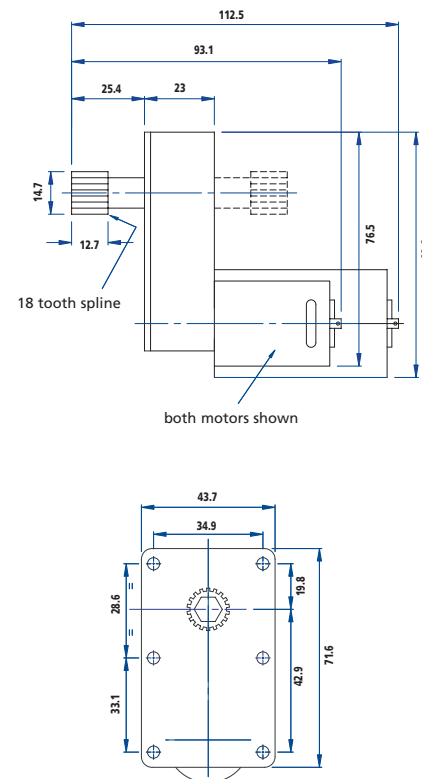
- Available with a DC motor in two can sizes (see RSDC section for details)
- Output Torque: Up to 1Nm depending on speed and motor size
- Speed Range: 80, 140 or 160rpm



MBT10 Series

Featuring moulded plastic gears and housing, the MBT10 series unit provides a low cost alternative to standard metal motor gearboxes.

The system has been designed on a modular basis to provide maximum versatility - two motors for different torques, choice of gears for three ratios and three different hex plug-in output shafts which can be front or rear mounted.



# Precision Moulded Plastic Gears

- Precision moulding
- CAD design system
- Tooling service
- Rapid delivery
- Spur, bevel, helical or rack
- Prototype cut gears

In addition to our range of motors and gearboxes, we also offer a complete service in moulded plastic gears.

From initial design, through tooling to final production, our 30 years of experience enable us to advise on every aspect of the project to achieve first class results.

Our CAD systems allow us to optimise gear designs for strength, long life or quiet running and our on site toolmaking facilities can turn these designs into working tools at short notice.

Expert design, accurate tooling, precision moulding and rapid delivery are what we offer as the most cost effective solution to any moulded gear requirement.

