

This catalogue shows a selection of the more popular types of manual control friction and gear reduction drives and accessories.

These components are used throughout the world wherever fine adjustment is required and are in daily use in a variety of applications including signal generators, wave analysers, oscilloscopes, communication and medical diagnostic equipment.

Our tool room, machine shop and design staff are at all times ready and willing to adapt any of these standard products to meet individual requirements.

All items can be manufactured and supplied as proprietary items under DEF STAN 0521.

Please note we also manufacture and would welcome your enquiries for:

**Tuning Capacitors**  
**Trimmer Capacitors**  
**High Voltage Capacitors**  
**Terminal Strips**  
**Stand-Off Insulators**

Please ask for literature.

Ce catalogue présente une sélection de nos modèles les plus vendus de commandes manuelles, entraînements à friction et réducteurs engrenages, et accessoires.

Ces composants sont utilisés par les fabricants du monde entier pour les réglages fins, et en particulier dans de nombreuses applications type générateurs de signaux, analyseurs d'ondes, oscilloscope, et matériel de communications et de diagnostic médical.

Nos installations de fabrication et notre bureau d'étude sont à votre disposition pour adapter l'un de ces produits standard à vos besoins spécifiques.

Tous nos produits doivent être fabriqués et fournis conformément à la norme défense britannique DEF STAN 0521.

Veuillez également noter que nous fabriquons et distribuons les produits suivants:

— **condensateurs d'accord**  
— **trimmers**  
— **condensateurs HT**  
— **plaquettes de connection**  
— **isolateurs séparés**

Littérature sur demande.

In diesem Katalog finden Sie eine Auswahl gängiger Reibungs- und Zahnraduntersetzungsantriebe mit manueller Regelung.

Diese Antriebe, die sich überall dort eignen, wo es auf eine genaue Feineinstellung ankommt, befinden sich weltweit in den verschiedensten Bereichen im Einsatz, z.B. bei Meßsendern, Frequenzanalysatoren, Oszilloskopen, Kommunikationseinrichtungen und medizinischen Diagnosegeräten.

Unser Personal in Werkzeugraum, Maschinenwerkstatt und Konstruktion ist jederzeit gern bereit, diese Standardprodukte an den Bedarf einzelner Kunden anzupassen.

Sämtliche Artikel können exklusiv nach DEF STAN 0521 (brit. Verteidigungsnorm) hergestellt und geliefert werden.

Des weiteren produzieren wir folgende Artikel, für die wir gern Ihre Anfragen entgegennehmen:

**Abstimmkondensatoren**  
**Trimmerkondensatoren**  
**Hochspannungskondensatoren**  
**Klemmenleisten**  
**Abstandsisolatoren**

Bitte verlangen Sie Prospektmaterial.

In questo catalogo sono illustrati alcuni dei tipi più popolari di unità di comando ed accessori di frizione a comando manuale e di riduzione ad ingranaggi.

Questi componenti vengono ampiamente impiegati in tutto il mondo laddove sia richiesta una regolazione precisa e vengono usati quotidianamente in svariate applicazioni, tra cui generatori di segnali, analizzatori d'onda, oscilloscopi, attrezzature per comunicazioni e attrezzature diagnostiche mediche.

Il personale dei nostri reparti attrezzi, macchine e progettazione è sempre pronto ad adattare questi prodotti standard ai requisiti particolari dei singoli clienti.

Tutti gli articoli possono essere prodotti e forniti come articoli brevettati secondo i termini DEF STAN 0521.

Si prega di notare che produciamo anche le seguenti attrezzature, su cui possono essere richieste informazioni:

**Condensatori di sintonia**  
**Compensatori**  
**Condensatori d'alta tensione**  
**Morsettiere**  
**Isolatori portanti**

Chiedete il materiale illustrativo.

Este catálogo muestra una selección de los tipos más populares de transmisiones de reducción por engranajes y por fricción, de control manual, y accesorios.

Estos componentes se utilizan en todo el mundo dondequiera que se requiera un ajuste preciso, estando en uso continuo en una variedad de aplicaciones, incluyendo generadores omniondas, analizadores de la onda, osciloscopios, y equipo médico para diagnósticos y de comunicaciones.

Nuestro personal de diseño y en los talleres de herramientas y mecánico están dispuestos a colaborar en todo momento para adaptar cualesquier de estos productos estándar a las necesidades individuales de cada cliente.

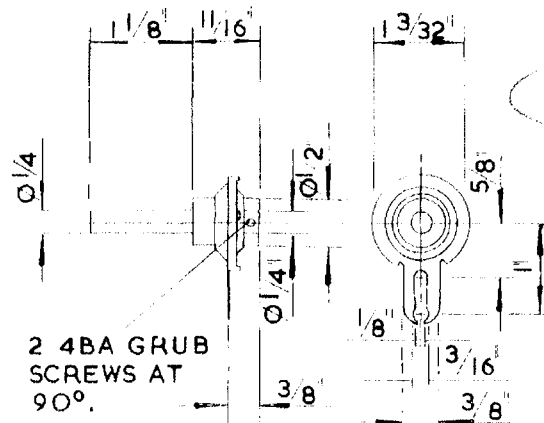
Se pueden fabricar y suministrar todos los artículos como artículos de marca bajo DEF STAN 0521.

También fabricamos y tendremos gusto en recibir sus consultas para los siguientes artículos:

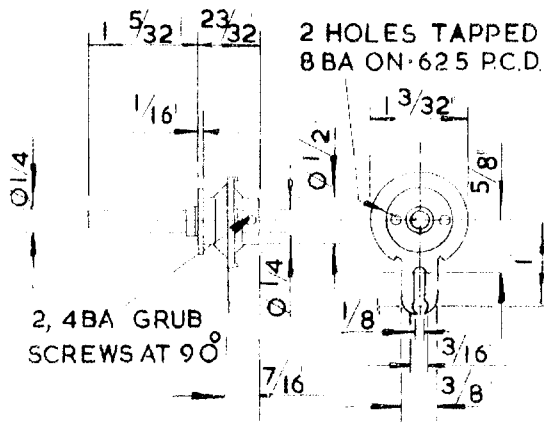
**Capacitores de sintonización**  
**Capacitores de corrección**  
**Capacitores de alto voltaje**  
**Cinta para terminales**  
**Aisladores distanciadores**

Gustosamente suministraremos literatura a solicitud.

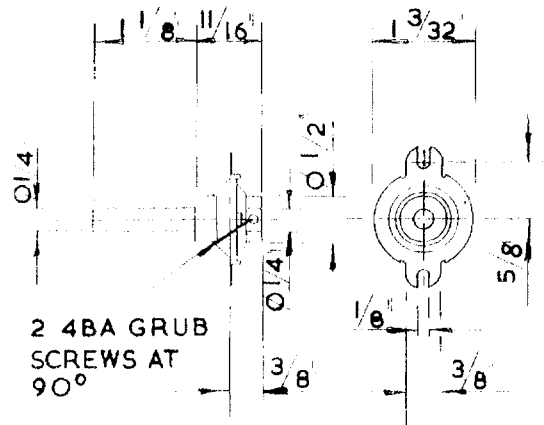
# Jackson Drives, Couplings, Accessories



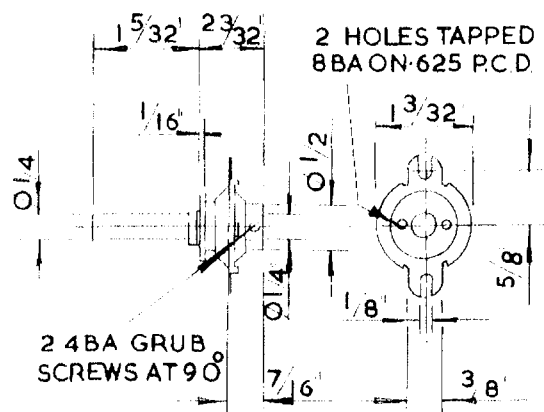
CAT. NO. 4511



CAT. NO. 4511/F



CAT. NO. 4511/DA



CAT. NO. 4511/DAF

101 601

Please note for all 4511 Series,  
Shaft length and diameter plus Fixing Bush  
bore and threads are available in  
metric sizes on request.

"DA" = Double Anchor Fixing Cage.

"F" = Dial or Pointer Flange directly  
coupled to Output Shaft.

With our fully equipped machine shop  
facilities we can quote for special Shaft and  
Bush Configurations to your Drawing to suit  
your own needs.

All the Ball Drives shown on this page have  
a Reduction Ratio of 6:1 (approx.).

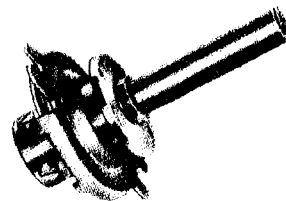
Working Temperature Range:—  
0°C to +55°C.

Storage Temperature Range:—  
-40°C to +70°C.

They all offer the following Torque Values:—

Output:— >26oz. ins. 1.8kgm cm.

Input:— <3oz. ins. 216gm cm.



## BALL DRIVES

These Reverse Vernier Ball Drives offer direct drive plus approx. 6:1 Reduction Ratio RV action.

*Working Temperature Range:*—  
0°C to +55°C.

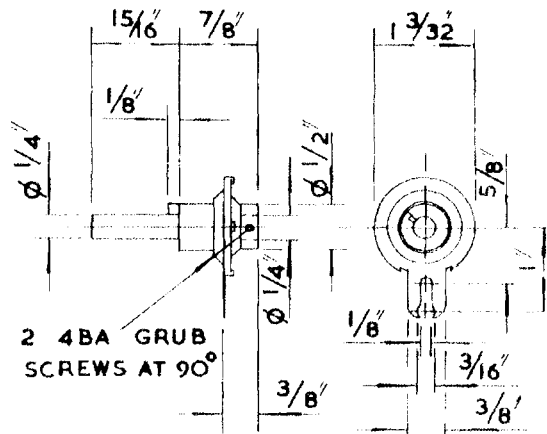
*Storage Temperature Range:*—  
-40°C to +70°C.

They both offer Torque Values as follows:—

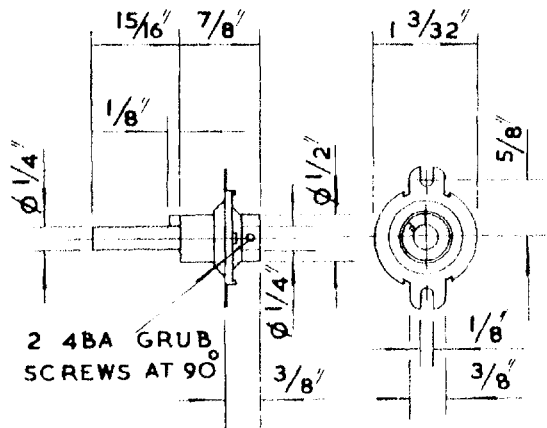
*Output (slow):*— >10oz. ins. 700gm cm.

*Input (fast):*— <20oz. ins. 1.45kgm cm.

*Input (slow):*— <3oz. ins. 216gm cm.



CAT. NO. 4511/RV



CAT. NO. 4511/DARV

One Coaxial Shaft provides Fast Drive approx. 6:1 Ratio with Reverse Vernier Action 30:1 (approx.).

*Working Temperature Range:*—  
0°C to +55°C.

*Storage Temperature Range:*—  
-40°C to +70°C.

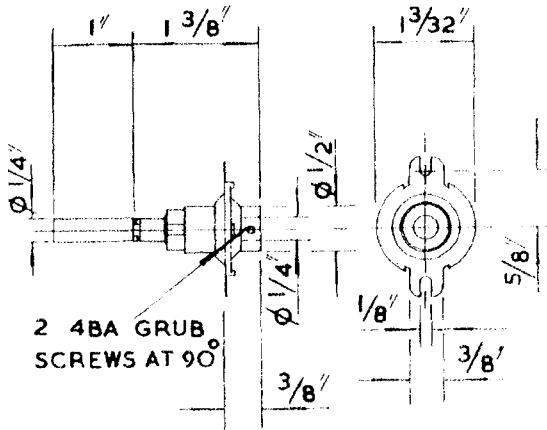
*Torque Values:*—

*Output (slow):*— >15oz. ins. 1.08kgm cm.

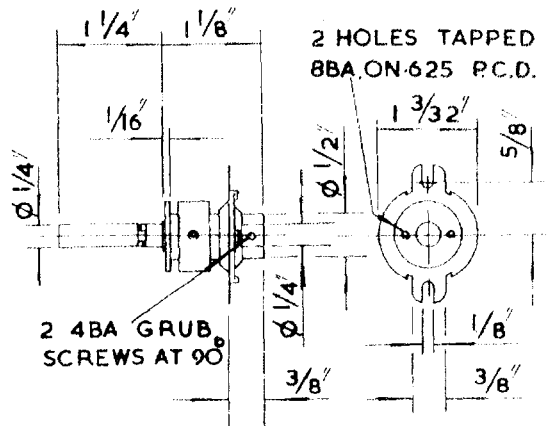
*Output (fast):*— >24oz. ins. 1.7kgm cm.

*Input (slow):*— <3oz. ins. 216gm cm.

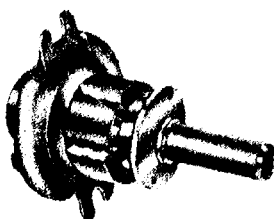
*Input (fast):*— >7oz. ins. 500gm cm.



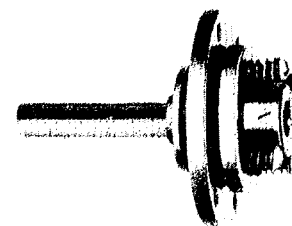
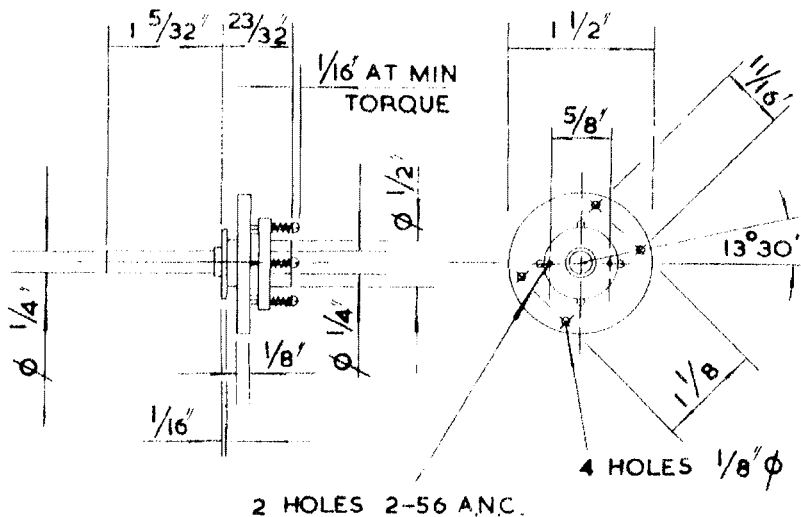
CAT. NO. 4511/DR



CAT. NO. 4511/DRF



# Jackson Drives, Couplings, Accessories



## ADJUSTABLE TORQUE BALL DRIVE CAT. NO. 5620

*Reduction Ratio:*— 6:1 (approx.).

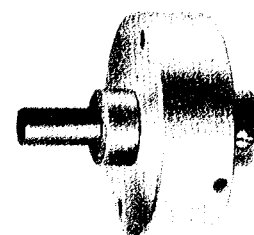
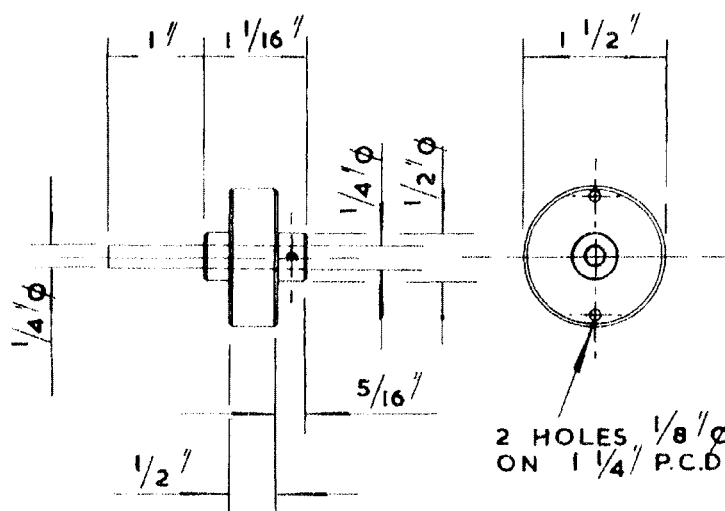
*Working Temperature Range:*—  
0°C to +55°C.

*Storage Temperature Range:*—  
-40°C to +70°C.

*Output Torque* can be adjusted by  
users to suit their own application.

*Minimum Recommended Setting:*—  
20oz. ins. 1.45Kg cm.

*Maximum Recommended Setting:*—  
60oz. ins. 4.3Kg cm.



## HEAVY DUTY EPICYCLIC DRIVE CAT. NO. 5670

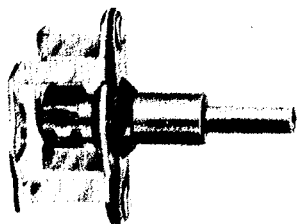
*Reduction Ratio:*— 6:1 (approx.).

*Working Temperature Range:*—  
0°C to +55°C.

*Storage Temperature Range:*—  
-40°C to +70°C.

The shaft and ball races are specially  
machined, ground and hardened  
to provide an *Output Torque* in excess  
of 100oz. ins. (7.2Kg cm).

**ADJUSTABLE TORQUE BALL • HEAVY DUTY EPICYCLIC • MINI BALL • 10:1 BALL DRIVES**

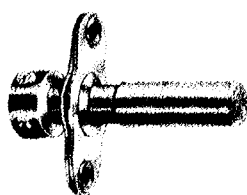
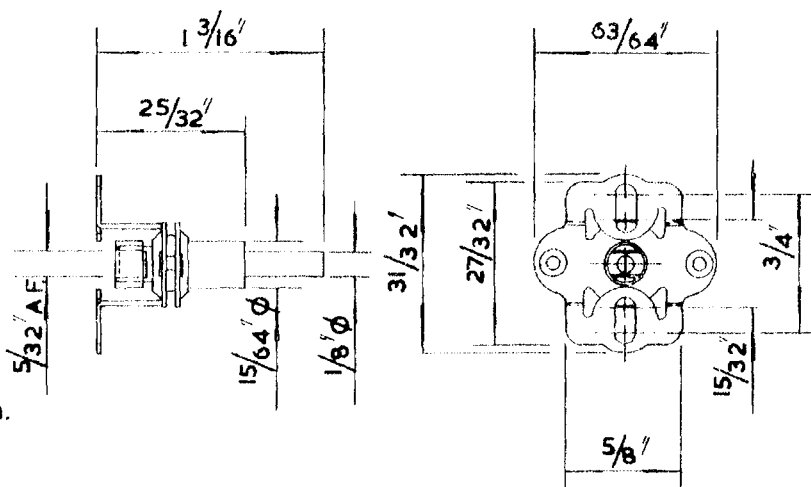


**MINI BALL DRIVE  
CAT. NO. 5690**

*Reduction Ratio:*— 5:1 (approx.).

*Output Torque:*— >10oz. ins. 720gm cm.

The Mounting Bracket is designed to fit directly to many of the solid dielectric variable Capacitors currently in use throughout the world.



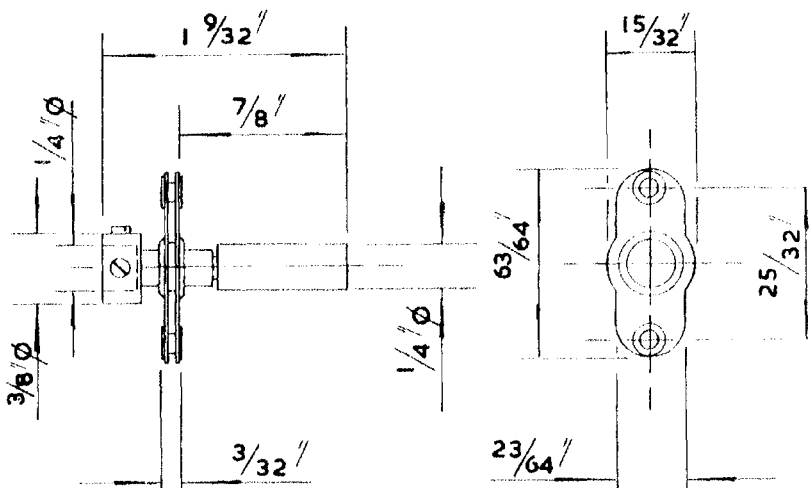
**10:1 BALL DRIVE  
CAT. NO. 6020**

*Reduction Ratio:*— 10:1 (approx.).

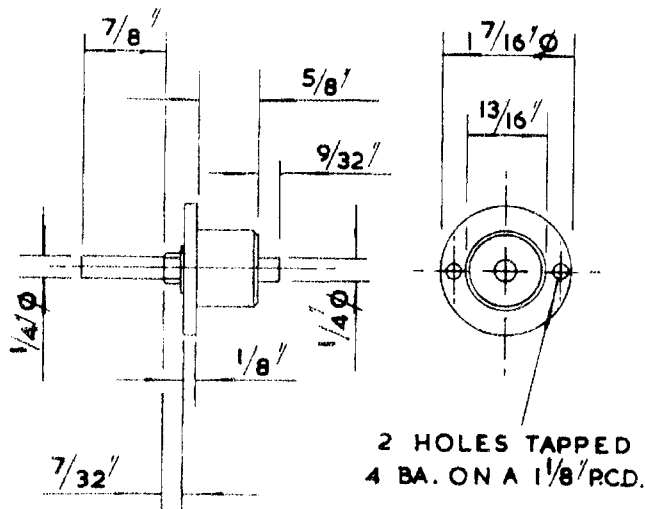
*Output Torque:*— >8oz. ins. 570gm cm.

Holes in Mounting Bracket suitable for clearance of 2 8BA or 2 M2.5 Screws.

Bore and shaft available  $\frac{1}{4}"$  or 6mm diameter.



# Jackson Drives, Couplings, Accessories



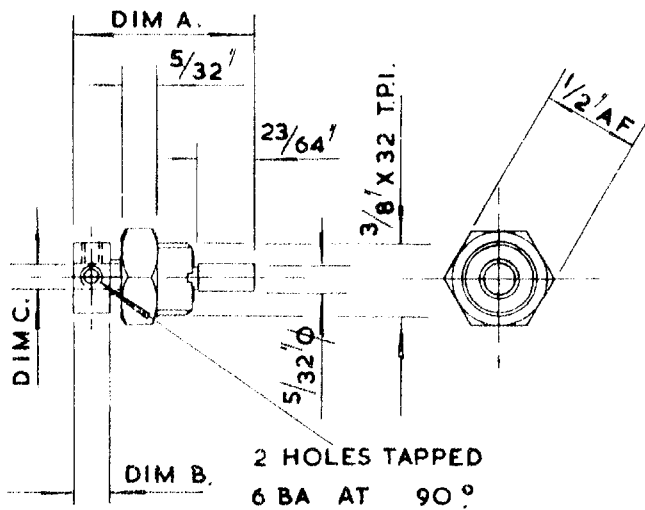
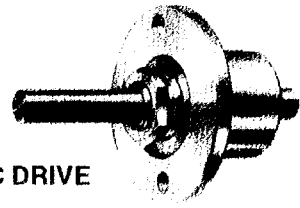
**10:1 EPICYCLIC DRIVE  
CAT. NO. 5857**

*Reduction Ratio:*— 10:1 (approx.).

*Working Temperature Range:*—  
0°C to +55°C.

*Storage Temperature Range:*—  
-40°C to +70°C.

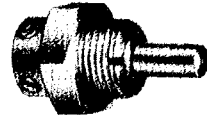
*Output Torque:*— >30oz. ins. 2Kg cm.



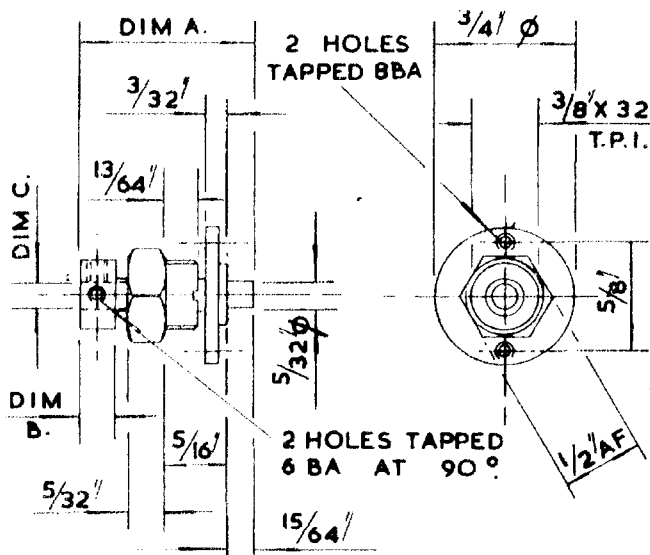
**MINIATURE 10:1 DRIVE UNIT  
CAT. NO. 5870**

*Reduction Ratio:*— 10:1 (approx.)

*Output Torque:*— >8oz. ins. 570gm cm.



|         |              |            |          |
|---------|--------------|------------|----------|
| 5870/3  | .945 / 24MM  | .196 / 5MM | 1/4 /    |
| 5870/2  | .945 / 24MM  | .196 / 5MM | 6MM      |
| 5870/1  | 29/32 / 23MM | .157 / 4MM | 4MM      |
| PART N° | DIM . A.     | DIM . B.   | DIM . C. |



**MINIATURE 10:1 FLANGED DRIVE UNIT  
CAT. NO. 5870/F**

*Reduction Ratio:*— 10:1 (approx.).

*Output Torque:*— >8oz. ins. 570gm cm.

|          |              |            |          |
|----------|--------------|------------|----------|
| 5870/F/3 | .945 / 24MM  | .196 / 5MM | 1/4 /    |
| 5870/F/2 | .945 / 24MM  | .196 / 5MM | 6MM      |
| 5870/F/1 | 29/32 / 23MM | .157 / 4MM | 4MM      |
| PART N°  | DIM . A.     | DIM . B.   | DIM . C. |

**EPICYCLIC REDUCTION DRIVE  
CAT. NO. 4111/RV**

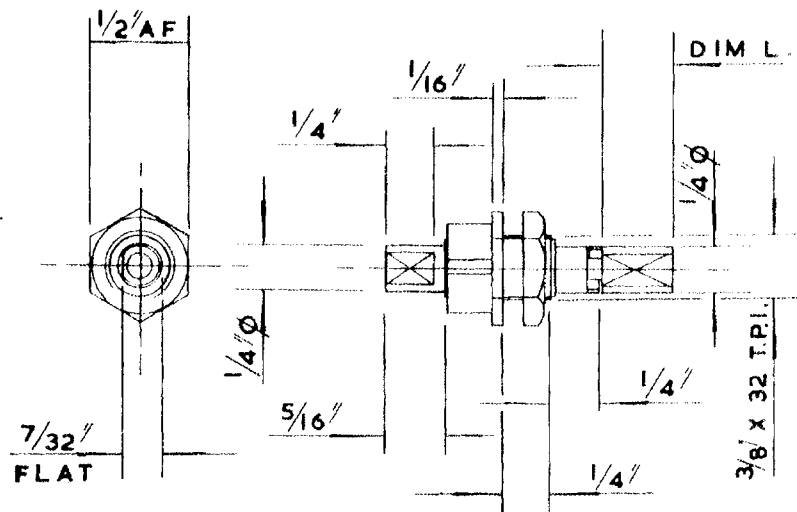
Reverse Vernier action provides  
5:1 *Reduction Ratio* plus direct drive.

*Input Torque (Slow):*— <3oz. ins. 216gm cm.

*Input Torque (Fast):*— <10-20oz. ins.  
700-1400gm cm.

*Output Torque:*— >8oz. ins. 570gm cm.

*DIM. L.* Standard 1" but can be varied in  
 $\frac{1}{8}$ " increments from  $\frac{3}{4}$ " to 1".  
Please state clearly when ordering.



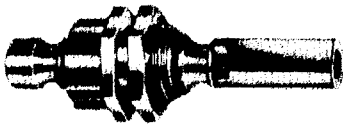
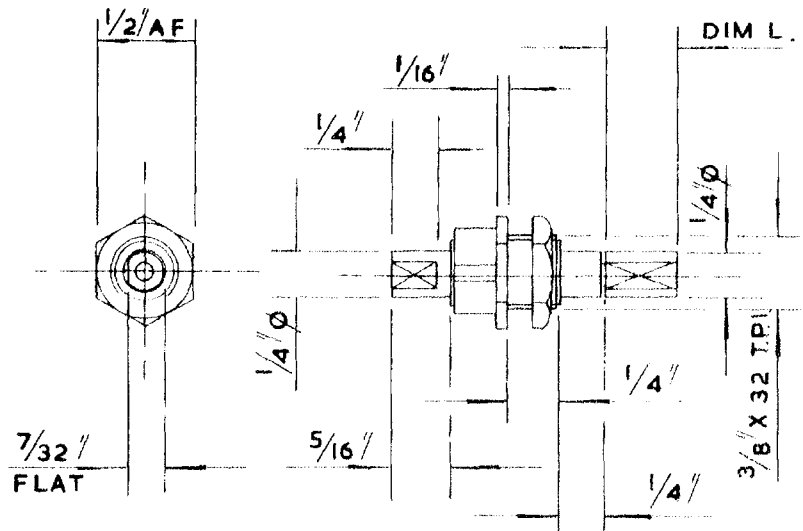
**EPICYCLIC REDUCTION DRIVE  
CAT. NO. 4112**

*Continuous Reduction Drive Ratio:*— 5:1.

*Input Torque:*— <3oz. ins. 216gm cm.

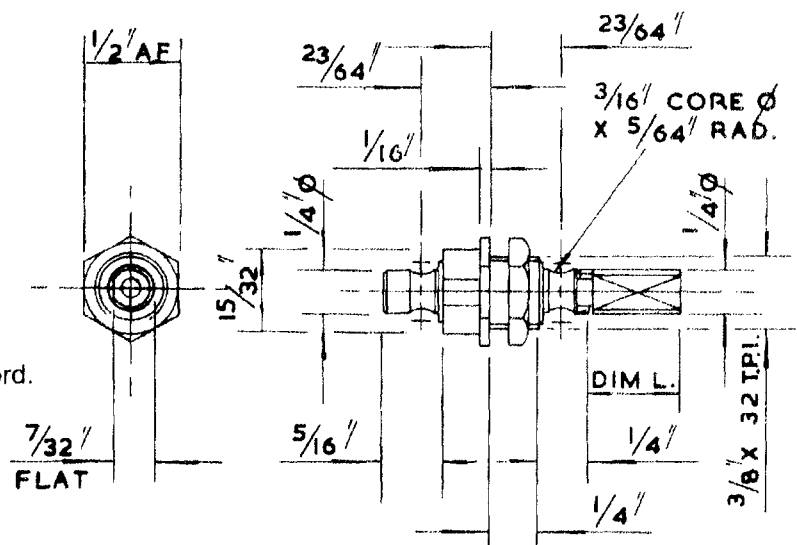
*Output Torque:*— >8oz. ins. 570gm cm.

*DIM. L.* Standard 1" but can be varied in  
 $\frac{1}{8}$ " increments from  $\frac{3}{4}$ " to 1".  
Please state clearly when ordering.

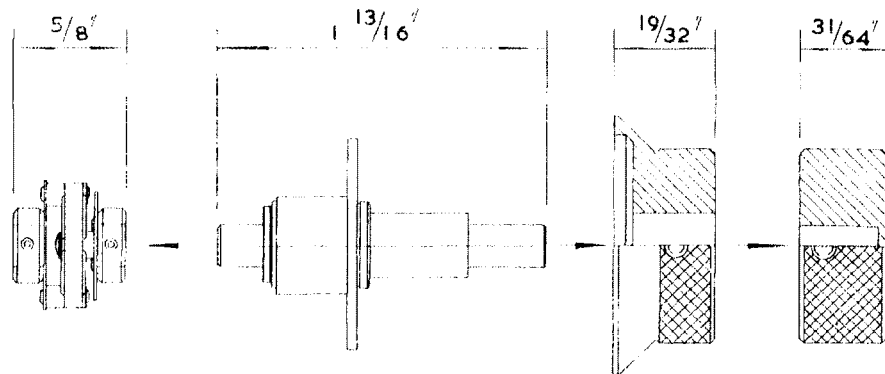
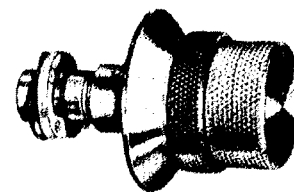


**EPICYCLIC CORD DRIVE  
CAT. NO. 4113**

This drive is the same in all respects as  
**No. 4111/RV** above except that suitably  
radiused grooves are provided for driving cord.



# Jackson Drives, Couplings, Accessories



UNIVERSAL  
COUPLING  
[ 5 610 ]

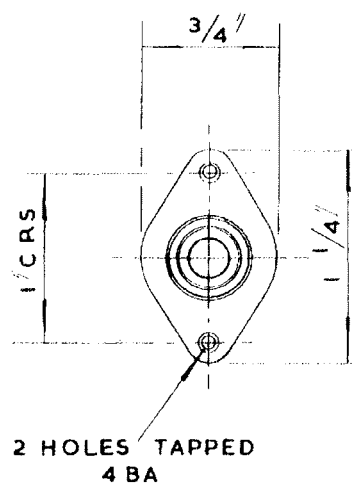
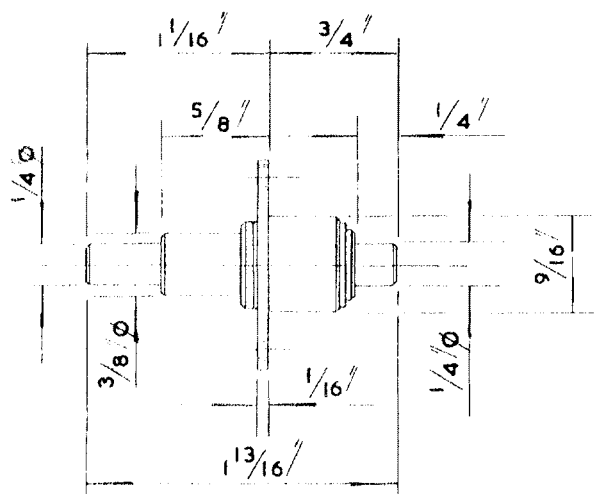
D. TYPE DRIVE  
[ 4 832 / 2K ]

DIAL  
[ 5 609 / A ]

KNOB  
[ 5 608 ]

## D TYPE 2 SPEED DRIVE UNIT CAT. NO. 4832/2K/UNIT

The complete Unit comprises 4 parts fully assembled to make a compact 2 speed Drive of professional equipment performance and appearance. The Dial and Knob are turned, anodised aluminium.



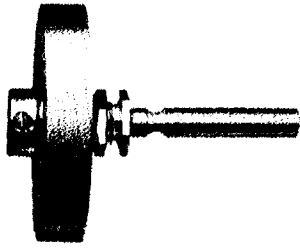
## D TYPE DRIVE CAT. NO. 4832/2K

Reduction Ratio:—  
5½:1 (approx.).

Output Torque:—  
>8oz. ins. 570gm cm.

Working Temperature  
Range:—  
0°C to +55°C.

Storage Temperature  
Range:—  
-40°C to +70°C.

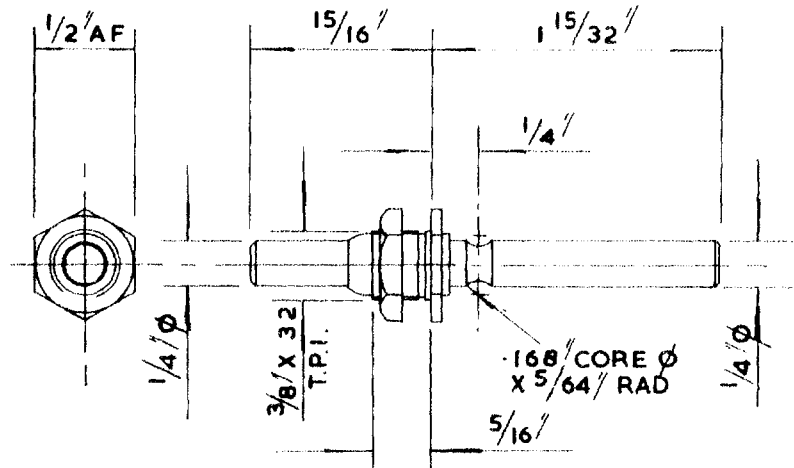


**BALL BEARING SPINWHEEL  
CORD DRIVE  
CAT. NO. 4589/BB**

The stainless steel shaft runs freely in ball bearings under the brass bush. In place of Ball Bearings we can offer this shaft with Nylon Rings between shaft and bush. The action is even smoother than with Ball Bearings but there is some loss of free running. The Cat. No. of this variation is **4589/NB**.

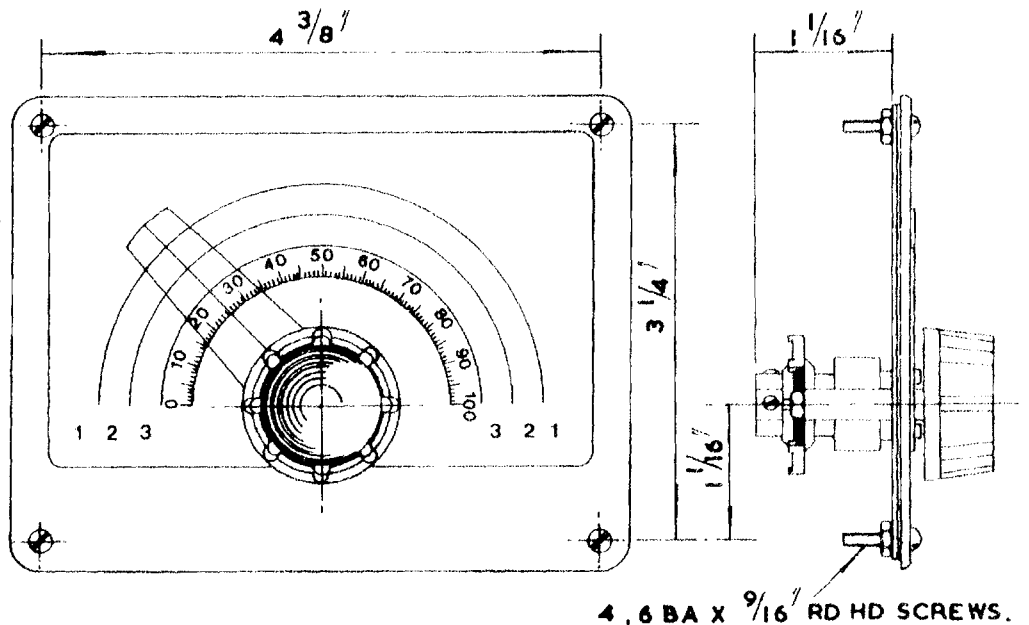
A cheaper alternative is a simple plain bearing, **Cat. No. 4589/PB**.

Used in conjunction with a flywheel, this supplies smooth and rapid traverse of a dial.

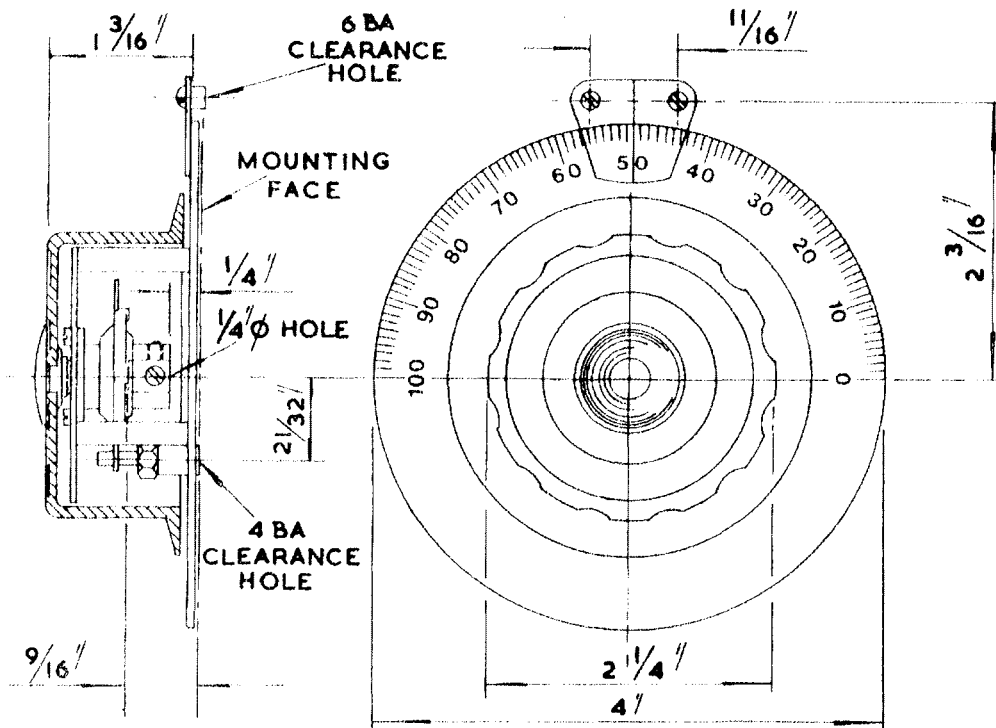


**NO. 6/36 DRIVE  
CAT. NO. 4103/A**

Incorporating the Dual Ratio Ball Drive providing 36:1 Slow drive and 6:1 Fast drive under one Knob with co-axial control. Scale is calibrated 0-100 and provides for individual calibration. The unit consists of aluminium back plate, drive unit, scale, spare scale, transparent cover, hair-line pointer, escutcheon and knob. Fits in front of panel which may be any thickness up to  $\frac{3}{8}$ " (or more by providing longer screws).



# Jackson Drives, Couplings, Accessories

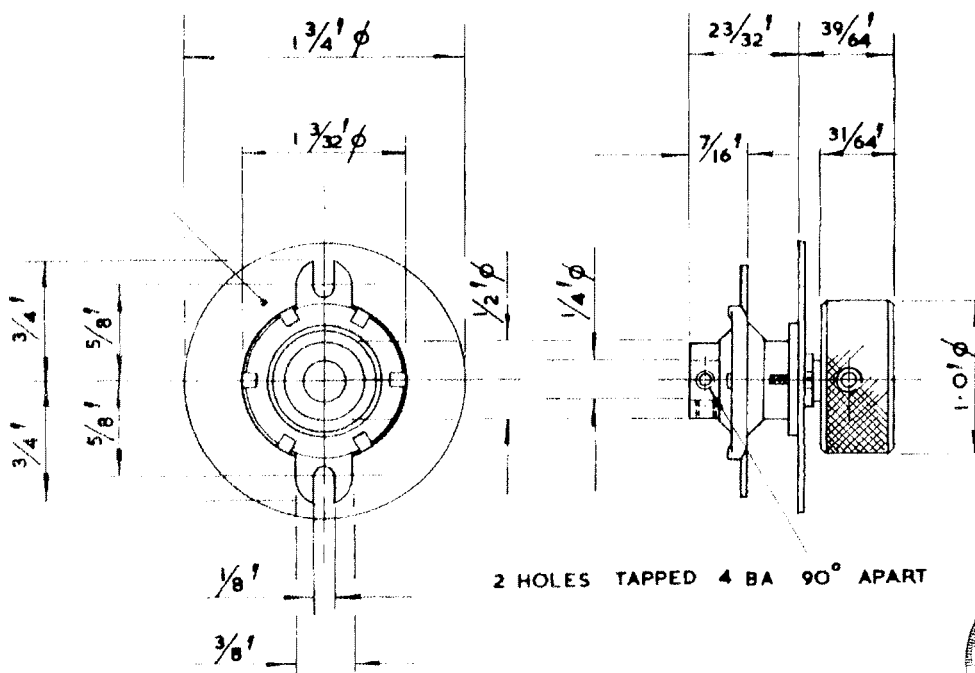


## BALL DRIVE DIAL CAT. NO. 4489/C

*Specification:—*  
Aluminium Scale.  
Black Plastic Knob.  
Jackson Ball Drive Unit  
incorporated within Knob.  
Other Parts Brass.

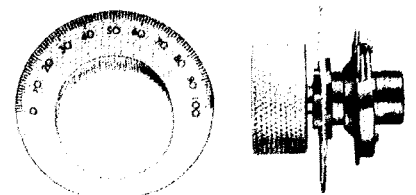
*Friction Drive Ratio:—*  
6:1 (approx.).

The Scale is reversible. One side printed as shown, the other left plain for customer to engrave.



## ALUMINIUM DIAL DRIVE CAT. NO. 4090

Consists of a dial knob, scale and a Jackson Ball Drive with a 6:1 reduction giving an output torque of 26oz. in. with an input torque of less than 3oz. in. The 1" diameter dial knob is diamond knurled. The 1 3/4" scale dial is anodised aluminium.



# BALL DRIVE DIAL • ALUMINIUM DIAL DRIVE • TYPE G1 • G10 GEAR DRIVES

## G1 GEAR DRIVE UNIT CAT. NO. 5160

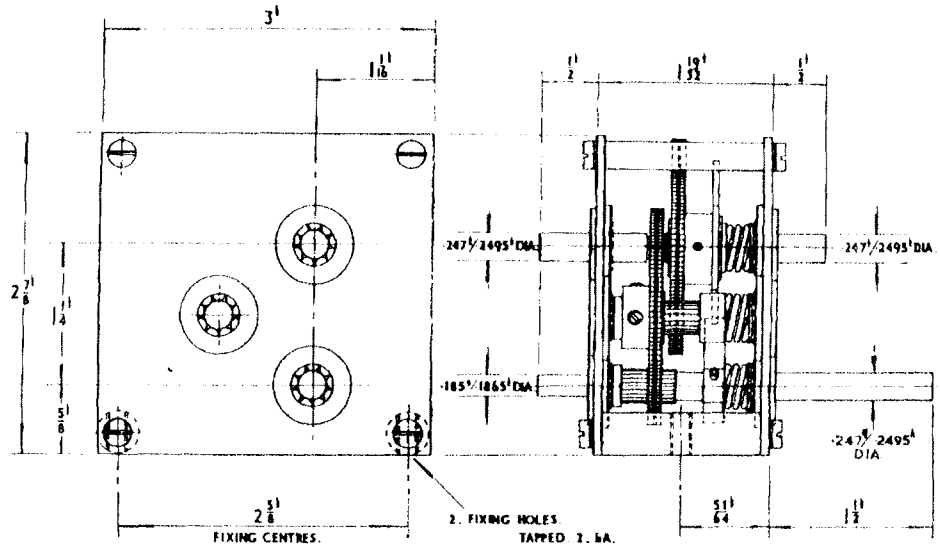
### Specification:—

Ratio precisely 56:25:1.  
Spring Loaded Gears and  
Ball Bearings ensure  
permanent freedom from  
Backlash.  
Positive End Stops for  
180 degrees Travel of Driven  
Spindle.

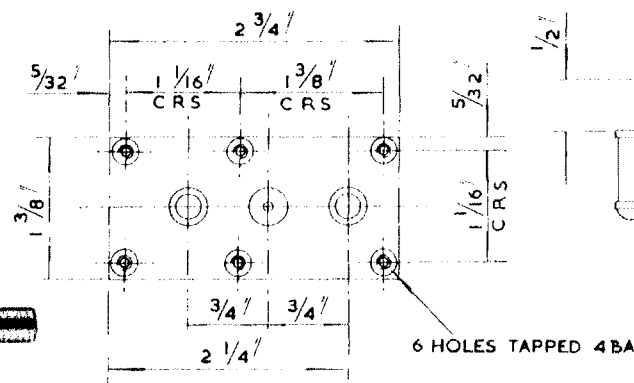
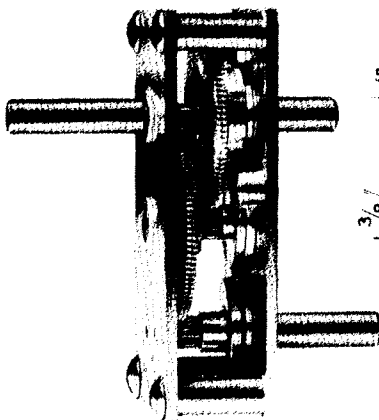
Maximum Torque  
transmitted 30oz. inches  
2.16kgm cm.

### Material:—

Stainless Steel — Spindles.  
Steel — Frame.  
Brass — Gears.  
Finish — To DEF. 5000.



Load of 14lbs./ins. may be  
applied to the Input Shaft  
when the End Stops are in  
engagement without  
causing damage.

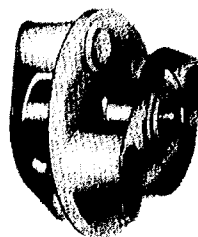


## TYPE G10 GEAR DRIVE CAT. NO. 12000

The aim of this Gear Box is  
to give 10 turns of the input  
shaft to one effective  
rotation of the output  
assuming the driven  
component to which it is  
joined is operating between  
stops as per the above table.  
The gears are fully spring-  
loaded for anti-backlash.  
The output torque is greater  
than 700gm. cm.

|         |               |                                                                 |
|---------|---------------|-----------------------------------------------------------------|
| 12000/3 | 25 · 1        | 144°                                                            |
| 12000/2 | 20 · 1        | 180°                                                            |
| 12000/1 | 12 · 1        | 300°                                                            |
| PART NO | OVERALL RATIO | ANGLE OF ROTATION OF OUTPUT SHAFT, FOR TEN TURNS OF INPUT SHAFT |

## Jackson Drives, Couplings, Accessories



**UNIVERSAL COUPLING**  
**CAT. NO. 4693**

**Constant Velocity:—**  
No lost motion.

**Misalignment Capacity:—**  
.040 linear and/or  
15° angular.

**Capacitance**  
(side to side, one earthed):—  
24 pF.

**Breakdown Voltage:—** 5KV.

**Shearing Torque:—**  
 >15in. lbs. 17Kg. cm.

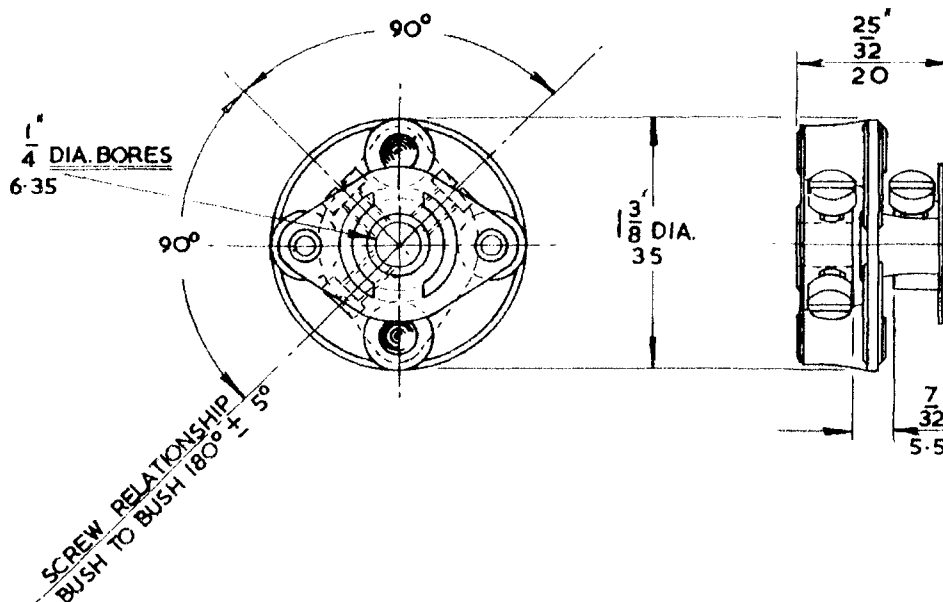
**Bore Diameters:—**  
Normally  $\frac{1}{4}$ " but any smaller metric or imperial size can be made to order.

*Insulation:*— Delrin.

**Metal Parts:—**Electroplated.

**Working Temperature Range:—**

-55° C to +100° C.



**UNIVERSAL COUPLING**  
**CAT. NO. 5610**

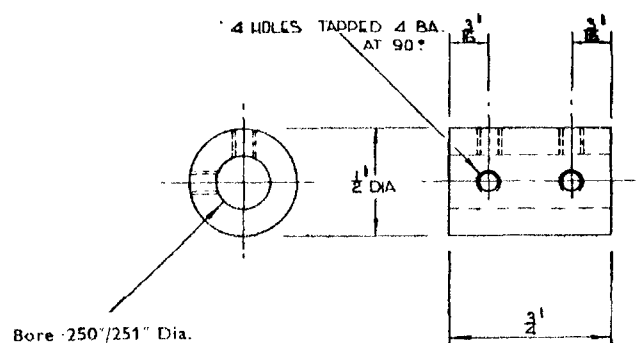
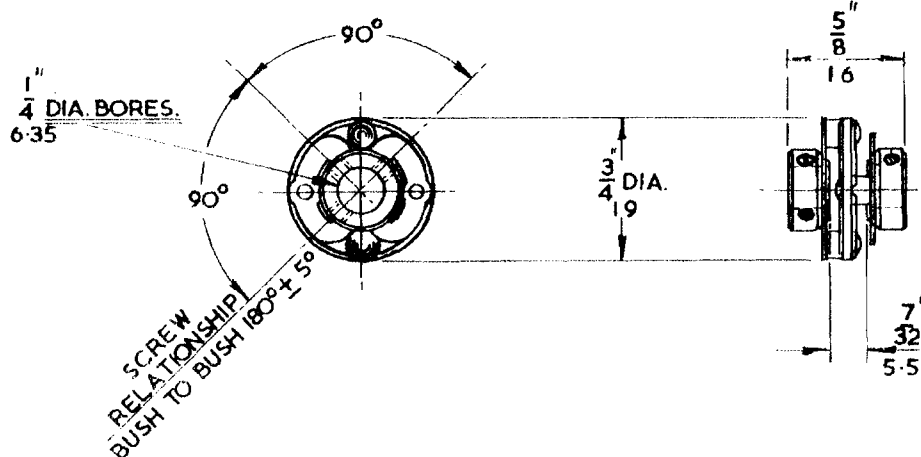
**Constant Velocity:—**  
No lost motion.

**Misalignment Capacity:**—  
 .005 linear and/or  
 10° angular.

Capacitance  
(side to side, one earthed):—  
1 pF.

**Breakdown Voltage:—** 3KV.

All other parameters exactly as **Cat. No. 4693** above.



**BRASS COUPLING**  
**CAT. NO. 4636**

A useful coupling unit  
for extension spindles, etc.  
Four screw fixing.

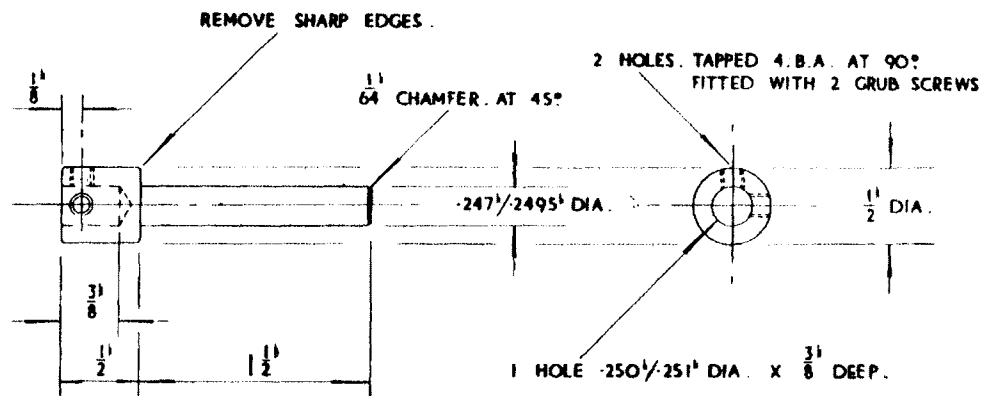
$\frac{1}{8}$ " or 6mm dia. bore to order.

**Material:** Brass.

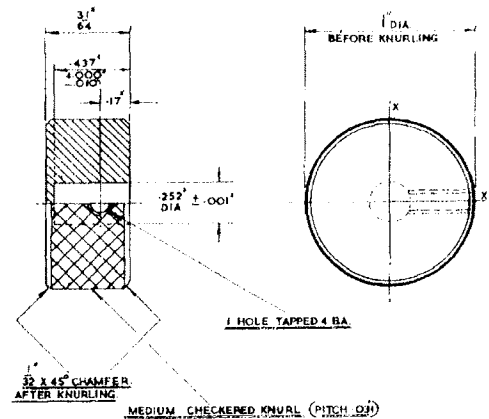
**Finish:** Clean.



$\frac{1}{4}$ " or 6mm diameter to order.  
**Material:** Brass.  
**Finish:** Clean.



**1" dia. CAT. NO. 5608**



**Note:—**  
**Type A.** .377  $\pm$  .001 dia. through hole.  
**Type B.** .252  $\pm$  .001 dia. blind hole.

