## MORE AC GEARHEAD MOTORS



#### 26 VAC, 20 RPM **CCW ROTATION**

Molon ZJM-3020-1....Intermittent duty 26 VAC, 4 amps, 50 lb/in torque at 20 RPM. STOP LOCK feature when power is removed, shaft is locked to hold load. 1/4" tabs provide electrical quick connection. Shaft end mounting with four

holes. Gearbox size is 2-1/2"W x 3-1/2"L. Shaft size 3/4"L x 1/4" dia. Open frame motor size is 2-1/2"W x 2-3/4"L. Overall depth 3". New. Wt, 3 Lbs. TM97MTR3074 -- \$14.95



#### 78 RPM, CW ROTATION HIGH TORQUE

Brevel 722 Series. . . Thermally protected open frame motor, 1.8 Amps, shaded pole. Shaft 3/8 dia. x 13/16" long with flat; 1/4 diameter shaft at rear of motor for fan (not

supplied). Gearbox end mounting. Size 2-1/2 x 4 x 3-3/8" deep. Quick connection terminals for connection. New. Shpg, 3.5 lbs.

TM93MTR2409 --



#### 1100-1300 RPM SERIES WOUND **RIGHT ANGLE GEARBOX**

Output shaft 1/4 dia. x 3-1/4" long. Features electrical governor circuitry. Can be electronically speed controlled. Size 7 x 5 x 5". Removed from hi-quality motion picture projector; good condition. Shpg Wt, 6 lbs.

TM91MTR1652

#### 90 RPM CCW ROTATION Torque 3.0 lb-in

Brevel 708 Series . . . Shaded pole motor, 1.0 Amps, thermally protected. Wire leads for connection. Shaft end mounting with 4 tapped holes. Output shaft size 1/4" Square x 1-1/2" long. Motor equipped with high speed rear shaft 1/4" dia x 5/8 long. O/A size 2-1/2" x 3-

7/16" x 3-1/2" long. New. Wt, 3.5 Lbs.

TM95MTR2818 --

\$8.95

#### 250 RPM, CCW Rotation 40 lb-in Torque

Merkle Korff RF . . . Shaded pole, 1.1 Amps, thermally protected, intermittent duty. Wire leads for connections. Shaft size 3/8" dia x 1" long. Rear shaft 3/16" dia x 11/16" long for fan (if required). Shaft end mounting. O/A size 2-1/2" x 3-1/2" x 3-1/2" deep. New. Shpg Wt, 3 Lbs.

TM93MTR2471 ---

\$7.95

#### **Synchronous Motor** 1800 RPM REVERSIBLE

Continuous duty, capacitor start (attached), 115 VAC 60 Hz. Torque 5.6 oz-in approx. Rated 0.35 Amps. Shaft 5/16" dia. x 1 long with flat. Motor 2-3/4 W x 2-3/4 H x 2-3/4" L, shaft end mounting. Wire leads for connection. Removed from equipment, good condition. Shpg, 4 lbs.

TM91MTR1751 ---

- \$9 95

## REVERSIBLE DC GEARHEAD MOTORS

## 24 VDC MOTORS WILL OPERATE AT 12 VDC AT APPROX. HALF SPEED AND TORQUE

#### Reversible DC Gearhead Motor



12 VDC, 200mA, 20 RPM, 6 in/lbs Torque

Great for Robotics use, Wheel and All

PM Field Motor, Reversible. Die cast gear case and bronze sleeve bearing. Gear case has four mounting holes, 1-32 threads. Wheel is 4-13/16"dia. and is easily removed. Motor size is 3 x 2-3/4 x 2-1/4". Shaft 3/4" long, flatted/ knurled, 5/16" dia. Red and black leads are 9"L and terminated in a connector. New. Shpg. wt.

TM99MTR3278 ·

#### Mighty-Might Gearhead Motor 2 - 24 VDC Reversible



50 mA, 40 in/oz Maximum Torque 10 to 1400 RPM

Motor comes with external gear train 1-3/4"L x 1-1/16"W x 5/8"H (easily removed). Motor size including built-in gearhead is 13/16"L imes 11/16" dia, shaft size 5/64" dia. x 7/16"L. Actual weight is 1 oz. Unit has two shaft end mounting holes, the external gear train has 3 holes for mounting. New. Shpg wt 1 lb.

TM97MTR3083 -

## **Worm Gear Drive Motor**

12 - 120 VDC and 120 VAC

CCL Motor #DE-25L . . . Motor can also operate as 120 VAC with attached bridge rectifier. 120 RPM no load @ 12 VDC. Worm drive is 1/2" long, turning 25-1 plastic

gear (approx. 0.750" dia.) There are two 0.420" cams at 180° concentric from the shaft on either side of the plastic gear. Motor is 2.800"L x 1.410" dia. Overall length of assembly is 3.700". New. Shpg wt 1 lb.

TM98MTR3220 -----\$3.50 ea. ----- 10 or more \$3.00 ea.

#### Reversible

12 VDC 200 mA 45 RPM

Merkle-Korff #26-64-27-GM. . . Hi-Torque motor is 18 in/lb @45 RPM. Motor/gearbox may be used at lower voltage with a corresponding reduction in torque and RPM. Shaft is 5/16" dia. x 1/4" long. Motor size : 1-1/2" dia x 3" long with solder tabs 5/32" on rear. 4-hole mounting on gearbox or 4-

hole platform mtg 4-1/8" with 3-3/4" centers. New. Shpg Wt, 3 lbs.

TM98MTR3203 -

--\$31.95

SPECIFICALLY SUITED FOR DRIVING ROBOTIC DEVICES 12 VDC 1.4 AMPS FULL LOAD • 22 RPM no load • High Starting Torque ● Max running torque 30 lb-in at 17 RPM



PM field motor. Reversible. Features life time lubrication. Die cast gear case and sintered bronze sleeve bearings. Gear case end mtg. with four 10/32 studs. Output shaft 5/16 dia x 1.0" long with flat. O/A size: Gear box 2-3/4 x 3 x 27/32 deep. O/A length including motor 2-21/32. Wire leads for connection. Shpg wt. 2 lbs.

Q5658 --

\$49.95

#### GEARHEAD DC PM MOTOR **REVERSIBLE** 6-14 VDC 23 RPM NO LOAD AT 12 VDC

Phillips Air-Pax# 9904-120-52607....Rated 22 RPM 90MA at 12 VDC with torque of 21 oz/in. Will operate at lower voltages with reduced speed and torque.

Shaft size 4MM dia (less than 3/16") x 5/16" Long. Bronze bearings. Plastic (Polyacetal Resin) housing. Shaft end mtg. with 4 equally spaced holes on 1-9/16" square x 1/8" thick mtg. plate. O/A size 1-1/2" max dia x 2-9/16" long. Solder lugs for conn. New. Wt, 8 oz.

TM95MTR2828 -----

-\$16.95

#### REVERSIBLE DC GEARHEAD MOTORS

## REVERSIBLE GEARHEAD 4 RPM, 24 VDC, 0.2 AMP 70 LB/IN TOROUE

70 LB/IN TORQUE

Globe Mfg #JCO-134.... Rated 24 VDC continuous duty. Life lubricated sleeve bearings. Gearhead flange is die-cast zinc, 1-1/2"sq, with four

Motor & Winch 12 - 24 VDC, 200 mA, 24 to 60 RPM 10 to 1 Ratio

Pittman # GM8712G595-R2... Winch will lift 2.5 to 12 lbs. at appropriate voltages. The overall assembly is 4-3/4" x 2-1/2" x 2-1/8" with a 1-3/4" pulley. Actual weight is 15 oz. Rlack and whi

4" pulley. Actual weight is 15 oz. Black and white leads are 4" long. There are 4 side mounting hooks. New. Shpg Wt. 2 lbs.
TM98MTR3181 -----\$38.95

19.1 VDC 500mA 1950 RPM 30 in/oz Torque

Pittman #GM8712-11... Motor/gearbox can be used at lower voltages with corresponding reduction in torque and RPM. Torque is 30 in/oz @1950 RPM. Motor size 1.175" dia. Gearhead size is 1.375"dia. Motor/gearhead length 3". Shaft size 0.185" dia. x 0.700" flatted. Mounting holes are on shaft end. New. Shpg Wt, 1 lb.

TM98MTR3117 ----- \$21.95

## WANTED

OVERRUNS - EXCESS UNUSED INVENTORY
Similar to products featured in 'This Month' Catalog.
Call or Send Data to Surplus Purchasing Department

#### Hi-Torque 24V DC Gearhead 1.1 Amps

Toshiba #DGM-208-2A... Reversible. 10 to 24
VDC; 165 to 450 RPM (no load); torque is 1.6 in/lbs @1.1 amps. Rubber padded front gearhead mounting plate has 3" threaded inserts. Motor size 1-9/16" x 3-3/8"L. Shaft size 13/16"L x 1/4" dia., one side flatted. Wire leads. New. Shpg Wt, 1 lb.

TM98MTR3150 -----\$23.95



#### 12 to 24 VDC Hi-Torque 45 RPM @185 mA No Load

Barber Colman #EYQF-63604-750. . . Reversible DC Gearhead, rated load torque 80.5 in/oz; 225 mA; 7" wire leads. Mounting by three 4/40 tapped holes at shaft

end. Over all motor size, 2.915"L x 1.195"dia. Gearhead 1.300 x 1.375. Shaft 0.735" dia. flatted on one side, 1/2"L. New. Shpg wt 1 lb.

TM00MTR4404 -----\$24.95

#### REVERSIBLE DC GEARHEAD 24 VDC 700 mA 750 RPM



Pittman #GM8714F560-R1. . . Motor/gearbox may be used at lower voltage with a corresponding reduction in torque and RPM. Torque

sponding reduction in torque and RPM. Torque is approx. 60 oz/in @750 RPM. Gearhead is 1.375" dia. Shaft is 0.185" dia. x approx 0.430" long. Mounting holes on shaft end are #4-40 UNC-2B. Motor size : 1.175" dia. x 3.300" long. New. Shpg Wt, 1 lb.

TM98MTR3138 -----\$18.95

# Reversible DC Servo Gearhead Motors w/ Optical Encoders

Matsushita # GMX-8MC045A... Up to 100 in/lb TORQUE. Integrated encoder features ball bearings for smooth quiet operation with approx ratings as follows:

24 VDC 100 RPM 0.825A No Load 12 VDC 48 RPM 0.6A No Load 6 VDC 25 RPM 0.5A No Load



Gear box ratio 45.5 to 1. Stall current at 6 volts . 6 Amps. Optical encoder is +5 VDC, two channel output with 100 pulses and 4.550 pulses per rev. Shaft size 10mm dia x 10mm long w/flat. Shaft end mounting with 3 holes on gearbox. O/A size 3-3/16 x 6-1/4". Wire power and encoder leads. New. Shpg Wt. 5 lbs.

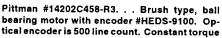
TM98MTR3114 ----- \$54.95

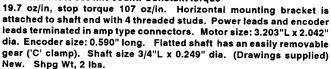
# ROBOTIC DRIVE KIT WITH COG BELT, MOTOR, & PULLEYS (Belt Meshes with All Pulleys)

Consists of: (1) Buehler Series 13.018 D.C. Reversible motor rated 25 VDC 2800 RPM 200MA No Load. Stall torque approx. 30 oz/in (will operate on voltages as low as 6 VDC with reduced speed & torque. Shaft end mtg. with 3 tapped holes and equipped with metal cog belt pulley 1/2" dia x 1/2" long. O/A Size 1-7/8" dia x 3" long. Wire leads for conn. (1) Cog belt 1/4" wide circumference 15". (1) Plastic op belt pulley 1" dia x 3/8" wide with bore for 6MM flatted shaft. (1) Plastic cog belt pulley idler style 1-7/8" dia x 3/" wide with bore 10 MM. (1) shaft 6MM dia x 2-1/2" long with 1 end flatted. Wt, 2 Lbs.

TM95MEC2787 ------\$17.95

#### Hi-Torque 24 VDC to 48 VDC 2100 to 4200 RPM





TM98MTR3118 ----- \$24.95

## Matsushita Gearhead Motor w/Encoder 24 VDC, 307 RPM, 32 in/lb Torque

Matsushita GMX-6MPO13A... Motor may be used between 18 - 28 volts with a corresponding reduction in torque and RPM. Gearhead mounting, four threaded 2-5/16" sq. holes and offset, 1" long shaft, 1/4" dia, flatted on one side. Wire leads terminated in molex type connector. Motor is 5" long, 2" dia. New. Shpg Wt, 2 lbs.



TM98MTR3113 ----- \$29.95

## Hi-Torque Gearhead w/ Integrated Optical Encoder

UP TO 30.3 VDC CW



Pittman #GM9236C534-R2...Can be used between 10 to 30.3 VDC. 3 in/lbs to 12 in/lbs measured at 110 RPM to 690 RPM. Rated at 49 oz/in continuous duty, 1.27 Amps. 5.9 to 1 gearhead with two channel 512 CPR encoder,