

# Accessories



IMC offers a variety of accessories to complete your automation package.

- ◆ AC Inverter Duty Motors and Drives
- ◆ DC Motors and Motor Controls
- ◆ Digi-Dog Electronic Limit Switch
- ◆ Camtronics Rotary Limit Switch
- ◆ Clutch-Brakes
- ◆ Spare Parts

## AC Drives



The IMC AC Inverter Drive System is a high performance, cost effective alternative to DC drives, clutch-brakes and brake motors. Positioning is achieved using a photoeye with a reaction time of less

than 1 ms. Once stopping position is set, the drive will automatically adjust for any speed differences with an extremely low margin of error. The special algorithms used in the drive make it the most accurate and dependable indexing drive for your applications. AC Drive features include:

- ◆ Up to 60 cycles per minute (1/3 and 1 hp)
- ◆ Sophisticated inverter designed for indexing applications
- ◆ Adjustable set speed with fixed stopping position
- ◆ Tight, repeatable accuracy
- ◆ Simple, easy to use programming
- ◆ Bi-directional
- ◆ PLC/PC communication
- ◆ CE, UL conformance
- ◆ Uses standard 3 phase AC motors or low profile, high power motors designed for indexing applications
- ◆ IP20 Enclosure
- ◆ 230V single phase or 460V 3 phase

## DC Drives



IMC DC Motors and Drives offer efficient, low-cost cycle-on-demand control for up to 30 cycles per minute. These motors and controls have variable speed capability for control of indexing rates and automated motor cycling for variable dwell periods. IMC's Varipak DC drive includes:

- ◆ **Current Limiting** protects the drive system from overloads and provides smooth acceleration of high inertia loads.
- ◆ **NEMA 12 Enclosure** is removable for chassis mounting
- ◆ **External Control Terminal Strip** allows for Cycle Start, Cycle Stop and Jog from Relay-PLC interface.
- ◆ **Line Regulation** – the control is unaffected by voltage fluctuations. Set speed will vary less than 1%, ensuring consistent drive system output.
- ◆ **Transient Protection** of power components against line voltage spikes with voltage clamping MOV's and RC networks.
- ◆ **Load Regulation** – 5% of base speed accuracy with armature feedback. Results in consistent machine output regardless of load conditions.

## Digi-Dog



The Digi-Dog is a digitally programmable rotary limit switch based upon resolver technology and EEPROM memory. The Digi-Dog is easily programmed using the operator display. Process times and sequences can be optimized in much less time when compared to other devices. The panel mount allows debugging to occur at a safe distance from the machine. The

Digi-Dog is ideal for applications where several positions require signaling such as Parts Handlers with multiple dwells.

- ◆ LCD Displays Position, Output Status, and Setup Menus
- ◆ Easy Digital Adjustments of Outputs
- ◆ EEPROM Memory to Save Setup and Position during Power Loss
- ◆ Available with 12-Bit Single or Multi-Turn “Absolute” Resolver or 16-Bit Multi-Turn “Absolute” Resolver
- ◆ 4 or 8 Outputs (24-240 VAC or 5-60 VDC)
- ◆ 24 VDC, 120 VAC or 240 VAC Input Power
- ◆ LED Indicator Lights for Power Supply and Outputs
- ◆ Program Enable Switch to Prevent Unauthorized Programming
- ◆ Sealed NEMA 12 Enclosure
- ◆ Brad-Harrison Connector Available
- ◆ UL Listed #E-23556
- ◆ Shaft input on left or right side

## Camtronics



Camtronics rotary cam limit switches have been designed for harsh industrial applications which require accurate and reliable shaft position sensing. They can be used as stand alone switching controls or as a shaft position sensor input to PLCs. The Camtronics uses a photo electric interrupter module

to sense the positions – the rotary cams pass through the module and interrupt the circuit without mechanical contact. The method provides long life, high-speed operation and eliminates contact bounce found in mechanical systems. Features include:

- ◆ Long Life
- ◆ High Speed capability
- ◆ NEMA-12 Enclosure
- ◆ 4, 8, 12 or 16 switches
- ◆ CT-4000 series
  - DC sinking outputs
  - 12-30 VDC input and 200 mA output per switch
- ◆ CT-6000 series
  - 115 VAC - does not require a power supply
  - Plug- in AC or DC modules
  - Replaceable plug-in fuses
  - LED “output on” indicator

## Reducers

IMC provides a variety of drive systems for indexers. IMC Sales Representative or Applications Engineers will recommend the best drive for your application.

- ◆ **Double-Enveloping Gear Reducers** provide high load capacity, smooth operation, long life and shock resistance. They are available in ratios of 5:1 to 60:1 with double-reduction models providing greater ratios. These reducers come with NEMA "C" face motor adapters and mount directly on the input shaft of the indexer ensuring constant camshaft speed.
- ◆ **Gear Motors** with integral reducer and AC motors are available in single or 2-speed models with optional brakes for cycle-on-demand applications and recovery from e-stops.



## Clutch-Brakes

IMC offers Electric and Air Clutch-Brakes for DC applications where cycle rates exceed 30 cycles per minute. A clutch-brake is mounted between the motor and reducer and allows the motor to maintain its full

RPM, eliminating the response time for motor to speed-up. With a compact, integrated design, the clutch-brake can be mounted directly between the motor and gear reducer with NEMA "C" face mounts.

## Repairs and Spares



With proper maintenance, IMC products are reliable and long lasting. Occasional replacement of worn parts will keep your system running smoothly and accurately. IMC offers Spare Parts Kits for most products. These kits contain common parts including oil seals, input bearings and shims and can be supplied with additional parts such as cam followers. IMC can also repair your unit on site or it can be returned to our factory for complete inspection and replacement of worn parts. Service manuals for IMC products and accessories are available on the IMC website, [www.camcoindex.com](http://www.camcoindex.com)

IMC can present seminars at your plant on the proper maintenance or repair of your Camco or Ferguson equipment. In addition, IMC offers a preventive maintenance program. An IMC technician will inspect your equipment on-site and perform routine maintenance from greasing bearings to changing worn cam followers. Contact IMC at 847-459-5200 for more information.