# Accu-Set Series Smart Speed Potentiometer

For Improved AC or DC Drive System Performance



The Accu-Set is a compact, economical control that can be used with conventional AC, DC, or Brushless DC adjustable speed drive systems to provide an LED display of set speeds and precise, digital closed loop motor speed control. An on-board microprocessor with non-volatile memory coupled with sophisticated internal software makes Dart's Accu-Set the ultimate in accuracy and control.

Target speeds are displayed directly in RPM, FPM, GPM, process time, or any other engineering unit of measure. Friendly front-panel field programming permits customizing the Accu-Set to the exact specifications for each application; maximum and minimum set speed, decimal points or colon, operating mode (master or follower), and the constant which takes into account motor gear ratios.

The Accu-Set is simple to operate... just set the desired RPM, rate, or time in the large 1/2" LED display by depressing the "up-down" pushbuttons, one digit at a time or fast sweep. The Accu-Set settings are exact and repeatable. It will precisely control speed to a remarkable  $\pm 1/2$  RPM of set speed, long term.

The panel mount unit is easy to install in the industry standard cutout dimensions of 1/8 DIN. All wiring connects directly to a European style terminal strip through the easy access rear panel.

# TYPICAL APPLICATIONS

Dart's Accu-Set design is ideal for providing the same precise closed loop control and digital readout as the MD Series Micro-Drive in new or retro-fit applications that use an AC, DC, or Brushless DC motor drive system.

# **OPERATING SPECIFICATIONS**

Temperature	10° to +45° C
AC input voltage	
Input frequency	
Transducer signal input	0-5 to 0-24 VDC
On-board power supply	5 VDC, 50mA
(for external sensors)	



18 www.dartcontrols.com

## **ACCU-SET SERIES STANDARD FEATURES**

- · Adjustable min/max
- Adjustable accel/decel
- Adjustable equivalent to Proportional & Integral gain setting
- Pulse input capacity of 50,000 PPM, 833Hz
- · Programmable power-on initial settings
- Inhibit mode is selectable from many input options
- Jog function selectable from many input options
- User-friendly programming from the front panel with parameter lockout capability
- Configurable display rate of change when in Program Mode (linear or accelerating)
- Display is programmable for any engineering unit of measure
- Adjustable display options include decimal point positions and intensity
- Custom front panel artwork available
- Easy panel mounting with 2 bolts (supplied)
- NEMA 4X Rating (faceplate with supplied gasket)
- Universal power supply supports any AC voltage input from 85–250 VAC
- Compatible with Dart's line of low-cost digital pick-ups or other suitable pick-ups
- Programmable user output supporting up to 230 VAC @5A
- Multiple operational modes: Rate, Time, Follower
- Non-volatile memory allows all custom settings to be stored for future use
- Factory default function-reset drive to factory setting
- User-default storage capability allows user to store/recall a known good set of parameters while experimenting with settings

# **ASP SELECTION GUIDE**

MODEL	INPUT	DISPLAY UNITS	STD. SPEED RANGE
ASP10	120/240 VAC	Rate or Time	Field Programmable*

Requires Dart PU-E or other pick-up.

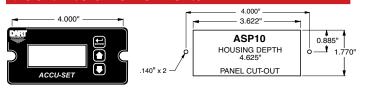
# **OPTION DESCRIPTION**

OPTION	SUFFIX
Provisions for remote pushbutton switches	1
Pluggable terminal strip	P
Magnetic pick-up input board	

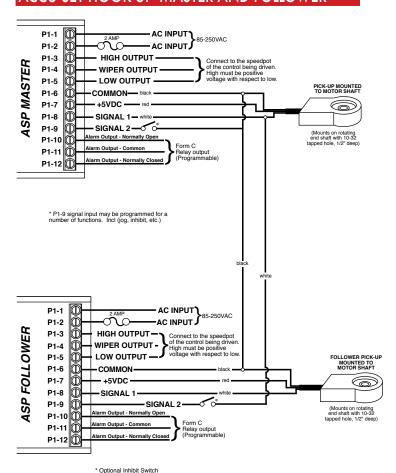
# DIMENSIONAL SPECIFICATIONS

MODEL	WIDTH	HEIGHT	DEPTH			
ASP 10 inches (millimeters)						
Housing	3.620 <i>(91.95)</i>	1.656 <i>(42.06)</i>	4.625 <i>(117.47)</i>			
Lens	4.539 <i>(115.29)</i>	2.289 (58.13)	0.375 <i>(9.52)</i>			

# **MOUNTING SPECIFICATIONS**

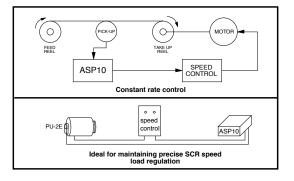


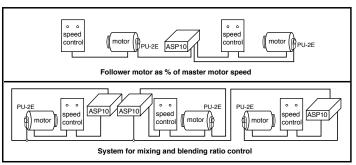
## ACCU-SET HOOK-UP- MASTER AND FOLLOWER



Optional limbit owith

#### ASP CONFIGURATIONS





www.dartcontrols.com 19

<sup>\*</sup> Shipped set for 0-2400 RPM with one pulse per revolution