

Cygnus[®] Digital Tension Readout and Control



Never has so much power and so many features been designed into such a small package. At less than 101 mm (4 inches) deep, the Cygnus leaves plenty of space to mount other components. Now you can dramatically reduce setup time and improve consistency with powerful features like Auto Tuning, Out-of-Round Roll Compensation, Weightless Load Cell Calibration and Web Break Detection.

Web tension is easily maintained or adjusted using multi-function SmartKeys. Operators simply navigate the control using full text and on-screen prompts on the large backlit display. To ensure global operation, Cygnus can display multiple languages including German, French, Italian, Spanish and Chinese.

Cygnus provides the flexibility of remote tension readout and control over your standard industrial bus communication network, allowing you to harness all of the power, features and performance from a central control point.

The PS-90 or PS-24 power amplifier may be used to operate 90 VDC or 24 VDC magnetic particle clutches and brakes. The amplifier mounts inside of the Cygnus-E enclosure.

Cygnus-E

Cygnus-DIN

Features

Large backlit display for viewing in any light condition

Tactile feedback SmartKeys for confirmed data entry

Web Break Detection and Out-of-Round Roll Compensation features to reduce waste and the need for expensive dancer systems

Automatic tuning for quick setup

“Weightless” calibration and on-screen diagnostics simplify load cell setup and operation

Multiple memory setup for quick material/machine changeover

IP65 protection against dirt and liquids

Selectable language and metric or inch units for global installations

Choice of mounting options for flexibility

Bus Communication for remote operation over an existing DeviceNet, Profibus-DP, or Ethernet/IP network

UL and CE Compliant

Cygnus[®] Keypad and Display

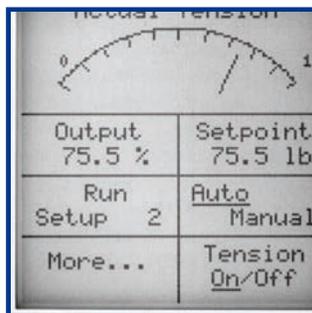


Home Screen with Digital Tension Display

- Large Backlit Display
- Tactile Feedback Keys
- Backspace
- Enter

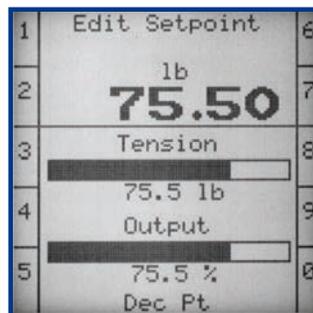
Home Digital

(Environmentally sealed, electrostatically protected touch keypad for setting tension and inputting data)



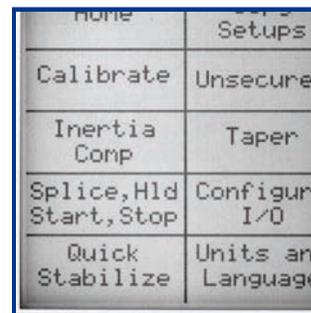
Home Analog Tension Display

For customers who prefer an analog readout



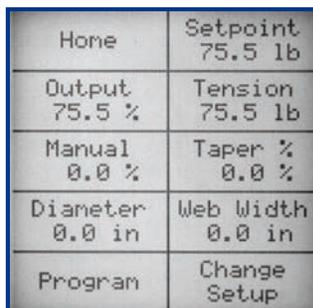
Edit Tension Setpoint Screen

Edit screens allow for easy numeric input using SmartKeys



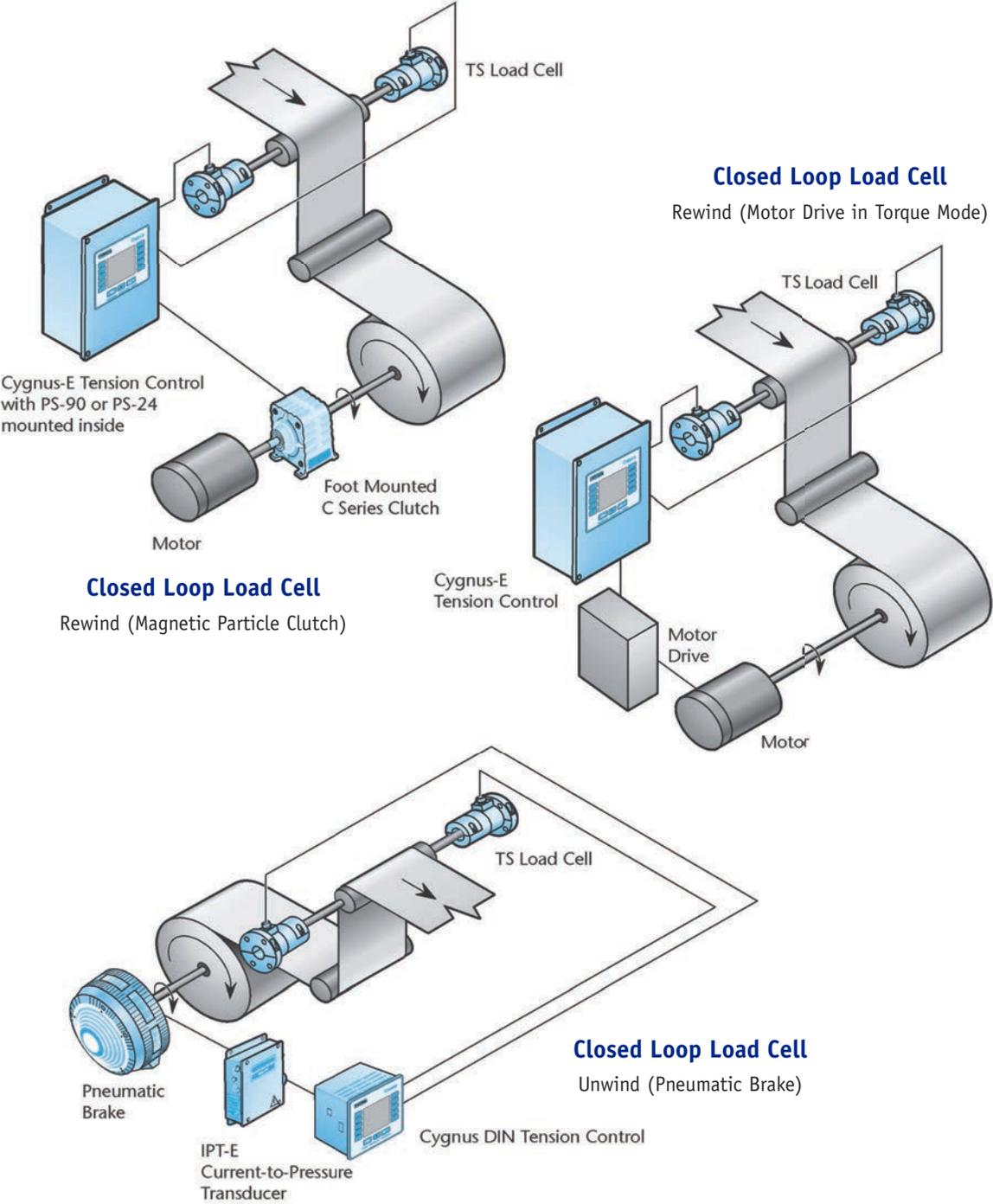
Program Options Screen

Multiple displayed options make navigation more intuitive



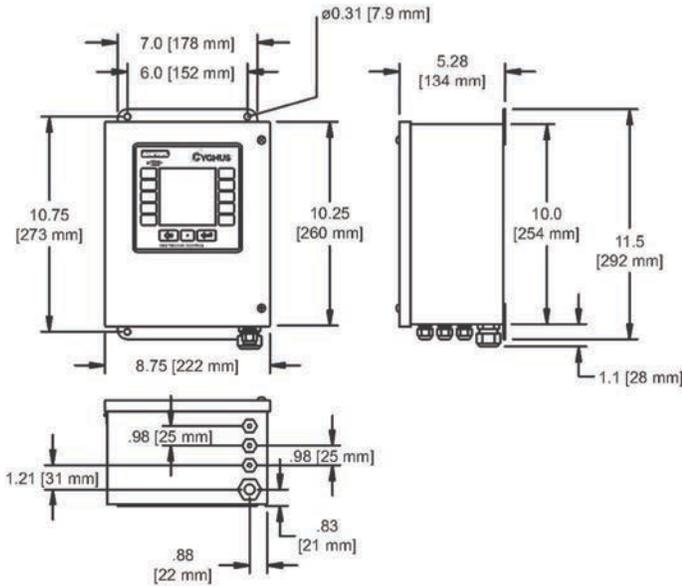
More . . . Options Screen

Cygnus[®] Typical Applications

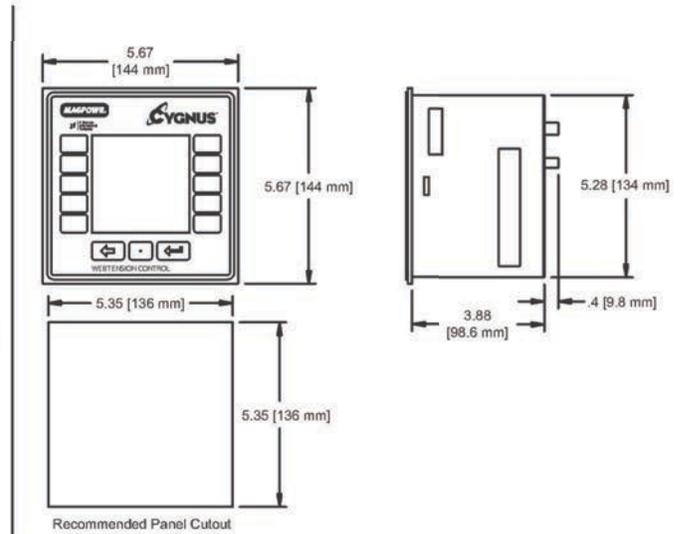


Cygnus[®] Dimensions and Specifications

Cygnus-E



Cygnus-DIN



Inputs

Supply Voltage	115/230 VAC +/- 10%, 50/60 Hz, switch selectable
Tension Input	0 to 21 mVDC (1 or 2, 350 Ω full bridges), 0 to 500 mVDC (1 or 2, 120 Ω bridge), 0 to 5 VDC, 1 mADC max
Diameter Input	0 to 10 VDC analog or calculated using velocity/rpm
RPM/Web Speed	0 to 10 VDC analog, or 0.01 to 50,000 pulses per second, 5 VDC or 24 VDC logic
Auxiliary Input	0 to 10 VDC
E-Stop, Run/Stop, Tension Off, Format, Splice	switch closure, 5 or 24 VDC logic, active high or low

Enclosure

Cygnus-DIN	Front Panel IP65 (IEC529) Enclosure IP20 (IEC529)
Cygnus-E	IP65 (IEC529)

Certifications

CE	
UL 508C Listed	

Outputs

Torque	0 to 10 VDC, 4 to 20 mADC (500 Ω max), -10 to +10 VDC
Inverse Diameter	0 to 10 VDC, 1 mADC max
Tension Reference	0 to 10 VDC, 1 mADC max
Load Cell Excitation	5 or 10 VDC, +5 and -5 VDC (10 VDC)
Low Tension (Web Break) Tension Status	DC solid state relay, 100 mADC with a 1.6 VDC drop, 30 VDC max, or 5 mADC with a 0.6 VDC drop 30 VDC max

Weight

Cygnus-DIN	4 lb (1.8 kg)
Cygnus-E	11 lb (5 kg)

Temperature

E-Operating	0 to 40° C
DIN Operating	0 to 50° C
Storage	-30 to 80° C

Bus Communication Gateways

COMMKIT-DN	DeviceNet
COMMKIT-EN	Ethernet/IP
COMMKIT-PB	Profibus-DP