MAXCESS®

MAGPOWR
MAXTRAC
Tension Readout and Control

MAGPOWR

A Modular Tension Readout and Control Solution

Introducing the MAXTRAC, the next generation of tension control from MAGPOWR.

The MAXTRAC is a flexible all-in-one tension readout and control system that combines five selectable tension control methods into one powerful controller.

Enhanced features inspired by previous MAGPOWR controllers and exciting new features are included with the controller regardless of the mounting style chosen from DIN Rail, Panel mount and Wall mount versions.

The MAXTRAC supports direct control of AC/DC and servo drives, air brakes/clutches, differential shafts, and magnetic particle brakes/clutches using standard control outputs with optional external transducers or amplifiers.

The Panel and Wall Mount units operate as stand-alone controllers with a 5" high-resolution touchscreen, while optional communication cards enable integration with PLCs, HMIs, industrial networks, or remote operator interfaces and other controllers.

The DIN Rail Mount version supports simple analog I/O control or optional add-on digital communication and can be expanded into stacked, multi-zone systems with shared operator interfaces (handheld, panel, or wall mounted) and machine network access through common communication modules.

Overall, the MAXTRAC delivers scalable architecture, flexible mounting, and powerful tension control in a unified system designed to reduce total system cost while supporting everything from simple single-zone setups to complex multi-zone, PLC-integrated applications while staying true to an ease-of-use design.



Key Features

- Tension control of unwinds, rewinds and point-to-point
- Available in Wall Mount, Panel Mount and Din Rail Mount
- Five selectable control modes: Follower Arm and Diameter Sensor-based Open Loop Control, Load Cell, Dancer, and Free Loop Closed Loop Control
- High resolution 5 Inch color touch screen (Remote OI available for DIN rail mount)
- Selectable Language and Units
- Weightless load cell calibrations
- Three programmable alarms that can be set for diameter limits, tensions levels and other alarm conditions
- Advanced algorithms for Out-of-Round Roll Compensation, Gain Scheduling and Inertia Compensation
- Intuitive Tuning options including Auto Tune and direct access to PID parameters
- Advanced turret and splicing functions
- Available field bus module with selectable Modbus TCP, Ethernet/IP, PROFINET, EtherCAT and CC-Link for seamless integration into machine networks
- HTML browser-based graphical interface
- Automatic backup of setup and calibrations
- Modular, plug-in design to easily expand with add-on tension modules for multiple tension zones, communications and operator interface

SPECIFICATIONS

POWER SUPPLY

100 to 240 VAC
24 VDC
Listed by model on each page

ANALOG INPUTS

Diameter Input:
0 to 10 VDC
4 to 20 mADC

Analog Input 1 (Multiple Functions):
0 to 10 VDC
4 to 20 mADC

Analog Input 2 (Multiple Functions):
0 to 10 VDC

Analog Input 3 (Multiple Functions):
0 to 10 VDC

RPM Input:
0 to 10 VDC
0.01 to 50,000 pulses per second 5 to 24 VDC

Line Speed Input:
0 to 10 VDC
0.01 to 50,000 pulses per second 5 to 24 VDC

LOAD CELL INPUTS

Load Cell Sensitivity:
MAGPOWR (0 to 21mV)
0 to 500 mVDC
Scalable 1.5 to 100mV/V (500 mV Max)
0 to 10VDC
4 to 20mADC

DIGITAL INPUTS

E-Stop
Run/Stop
Auto/Manual
Tension On/Off
Digital Input 1 (Multiple Functions)
Digital Input 2 (Multiple Functions)
Digital Input 3 (Multiple Functions)
Switch closure, 5 to 24 VDC logic

POWER OUTPUTS

Diameter Sensor Supply:
24 VDC

Load Cell Excitation:
5 VDC or 10 VDC

Power Supply for OI:
24 VDC

Power Supply for Tension and Manual Setpoints:
5 VDC

DIGITAL OUTPUT

Teach Output:
24 VDC

ANALOG OUTPUTS

Analog Output 1 (Multiple Functions):
0 to 10 VDC
4 to 20 mADC
0 to 1 mADC

Analog Output 2 (Multiple Functions):
0 to 10 VDC
4 to 20 mADC
0 to 1 mADC

Turret Output:
0 to 10 VDC

ISOLATED ANALOG OUTPUTS

Two Isolated Control Outputs:
0 to 10 VDC
-10 to +10 VDC
4 to 20 mADC

ALARM OUTPUTS

3 Programmable Alarms:
24 VDC Internal Voltage
5 to 24 VDC External Voltage (100mA Max)

CERTIFICATIONS

RoHS, CE

TUV Rheinland of North America to:
UL61010
CAN/CSA-C22.2 No. 61010-1
CB Certificate to IEC61010-1

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MAXTRAC WALL MOUNT

Tension Readout and Control

ADDITIONAL SPECIFICATIONS

Product Name:
MAXTRAC-WM, Wall Mount Control
MAXTRAC-PM, Panel Mount Control

Supply Power:
24 VDC, +/- 10%, 1.5 ADC max
or
100 to 240 VAC +/- 10%, 50 to 60 Hz, 1.5 Amps Max

Enclosure:
Wall Mount: IP-65
Panel Mount: IP-65 (Front Panel), IP-20 (Sides and Back)

Weight:
Wall Mount: 4.5kg [12 lbs]
Panel Mount: 1.2kg [3 lbs]



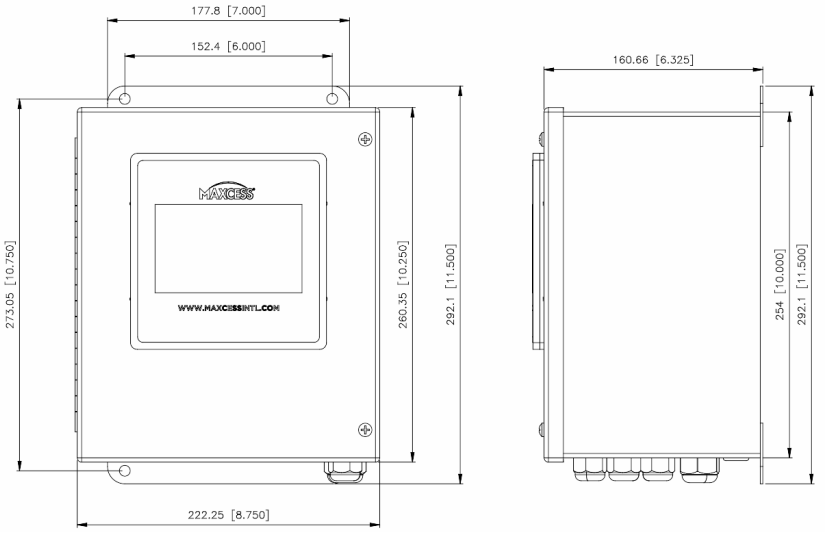
MAXTRAC-PM

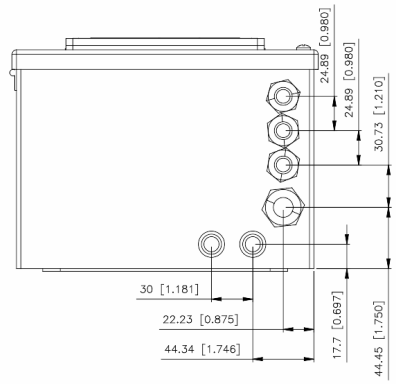


MAXTRAC-WM

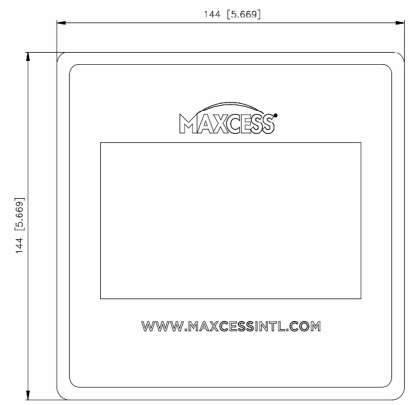
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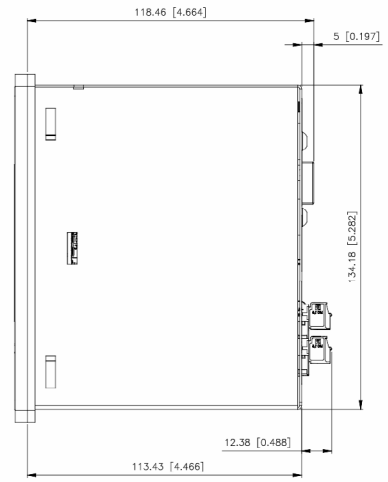
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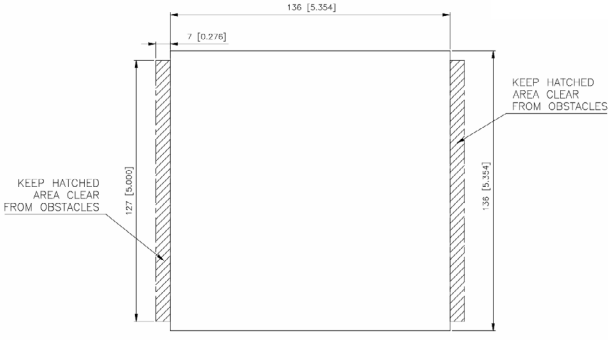




MAXTRAC-PM







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MAXTRAC DIN RAIL MOUNT

Tension Readout and Control

MAXTRAC-DRM

ADDITIONAL SPECIFICATIONS



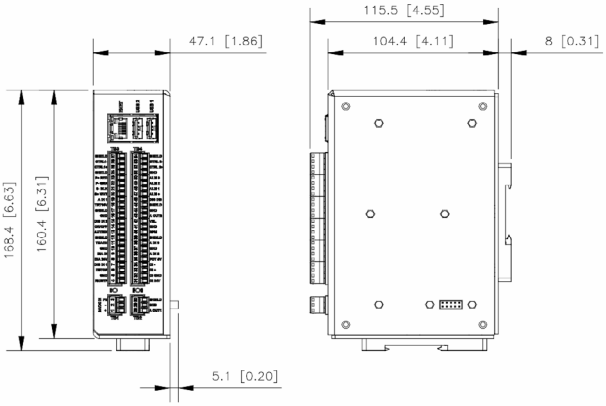
Product Name:
MAXTRAC-DRM
DIN Rail Mount Tension Control

Supply Power:
24 VDC, +/- 10%, 1.5 ADC maximum
Enclosure: IP20

Weight: 373g [1 lbs]

Features:

- Slim design of DIN Rail Mount limits space used in panel
- Add on communications module allows for seamless integration into machine networks



DRM-COMM

ADDITIONAL SPECIFICATIONS



Product Name:
DRM-COMM
DIN Rail Mount Communication Module

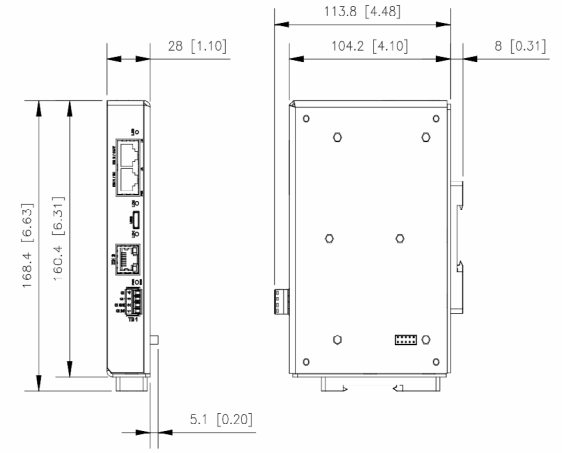
Supply Power:
Power through connection
to DIN Rail Mounted Controller

Enclosure: IP20

Weight: 312g [0.7 lbs]

Features:

- Power and connections through on-board side connectors
- Module allows for Modbus TCP, Ethernet/IP, PROFINET, EtherCAT, CC-Link





Example of stacked DIN Rail Mounted controllers with add on communication module.

Maximum number of stacked controllers will be 6, when fully loaded. Certain applications can stack up 10 units or more.

Supply Power Note:
If fully loaded when stacked:
24 VDC, +/- 10%, 7 ADC Maximum

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MAXTRAC WEB TENSION CONTROL

Tension Readout and Control

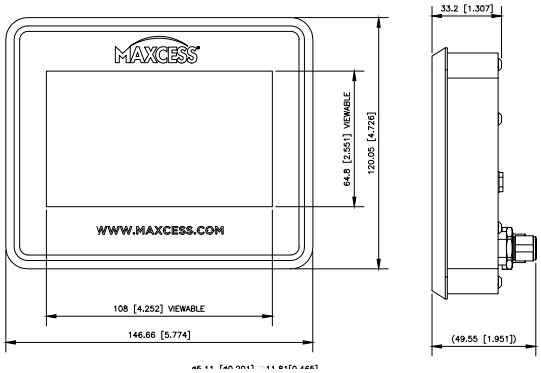
MAXTRAC-OI



Product Name:
MAXTRAC-OI
Remote Operator Interface

Supply Power:
24 VDC supplied
from controller

Enclosure:
IP-65



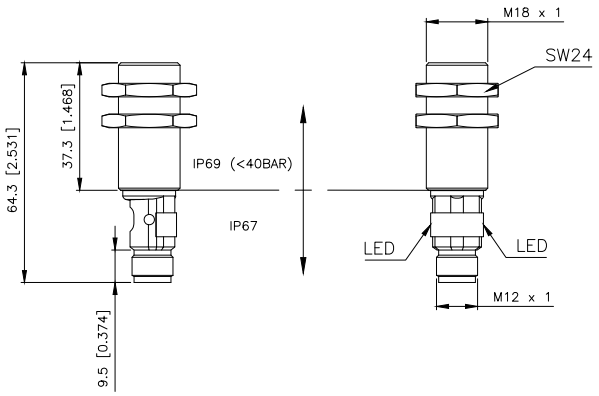
US-3



Product Name:
US-3
Ultrasonic Sensor

Supply Power:
24 VDC supplied
from controller

Enclosure:
IP-65



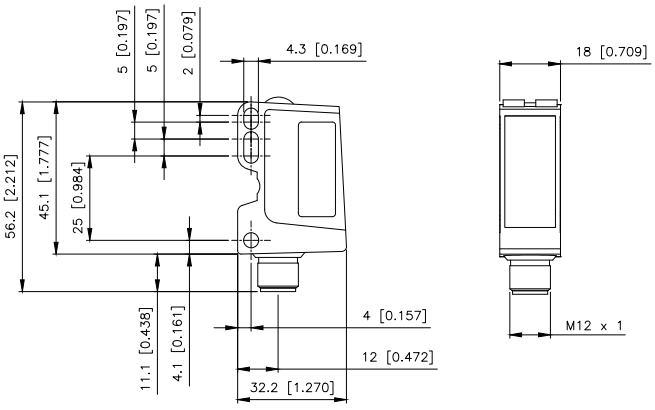
LS-1



Product Name:
LS-1
Laser Sensor

Supply Power:
24 VDC supplied
from controller

Enclosure:
IP-65



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