



M1025 Series Brakewear Monitor for a system cost of just \$895!

OSHA Compliant Resolver based Brakewear Monitor

The M1025 Series Brakewear Monitor from Autotech is the most cost effective OSHA compliant stand alone Brakewear monitor system costing just \$895 including a rugged 3/8" shaft resolver. M1025 measures the **press stopping time after it receives brake activation signal**. The resolver is used to detect press stoppage. The M1025 system is also expandable to include up to 6 PLS outputs.

Plug-in Program Panel

Normally blank, it is a hot plug-in programming panel to program various motion detector and **brake monitor settings**. It can be removed after the brake monitor has been programmed

Display Window

Displays Position, RPM, Production Rate ON setpoint and OFF setpoint stopping time, **brake danger limit, motion limit**

* Includes Resolver **except cable and Plug-in operator interface**

3/8" Shaft Double Bearing Rugged Resolver

M1025 Brake Monitor system comes with a heavy duty, double bearing, 3/8" shaft, NEMA 13, E7R Resolver specifically designed for press applications.



M1025 Brakewear Monitor

Brake Danger limit Programming

With M1025 Brake Monitor, the user can view the stopping time of the press, as well as control an output, called Brake Monitor Output. The Brake Monitor Output is a fail **safe relay output (normally energized)**. **The user programs the danger limit. The brake monitor output is de-energized if the stopping time is more than programmed danger limit. The output can be reset by contact closure on brake reset input.**

Tach/Production rate Display

Pressing the MODE key to switch to the Tach **Display Mode, the number in the display window will indicate Production Rate**. If production rate factor is 1 the display is in RPM. If previous default mode was Position, pressing Recall key in the Tach Mode will make tach a new default. If a tachometer reading exceeds 1000, the left window **display is used to show the most significant tach digit**

Low-Cost OSHA Compliant Motion and Brakewear Monitor System with PLS Option

View Brake Stopping Time

Pressing the MODE key in the Motion Limit Mode will take the user into Stopping Time Viewing Mode. This mode is related to the **brake monitor feature of the M1025. The user will be able to see the time in seconds it takes for the shaft to stop from the moment the brake input is applied**

Offset Programming for PLS

Function

From the Production Rate Factor Mode or Tach Mode press the MODE Key to switch to Offset Mode. The offset is the value added to the current shaft angle to align the machine zero with the resolver zero. The display shows a **current offset value for about 2.5 seconds and then returns to show current position**

Motion Limit Programming

From the Brake Danger Limit Mode, press **the MODE key to reach Motion Limit Setting Mode**. Pressing the INC or DEC Keys will alter the motion limit. The motion output will turn on, if the shaft RPM exceeds the programmed motion limit. If motion limit is programmed **as zero, the motion output can be used as a normal PLS output**

PLS Set Point Programming

The “On/Off” set-points for each output can be programmed simply by the touch of a key from the front panel. The Autotech patented **key sequence in the M1025 is incredibly simple and easy to use.**

Detailed Specifications

Power Requirements:

AC Power: 105-135 VAC, 60 Hz, 10 W

Operating Temperature:

-10 to +130°F (-23 to +55°C)

System Resolution: 10 Bits

Scale Factor: Fixed, 359

Offset: Programmable, 0 to 359

Position Signal: Autotech's Series E7R or RL100 resolvers

Cable Length Between Resolver and M1025: 2500 Ft. shielded

Resolver-to-Digital Tracking Speed: 380 RPM for 1° resolution, up to 2000 rpm max

Control Inputs:

Programmable:

Needs to be tied to common .5mA Sink Current to enable programming. Programming is disabled if this input is left open.

Brake Reset:

When connected to common .5mA Sink Current, it clears the stopping time display and resets the danger output.

Brake Input:

Electromechanical Relay, 120VAC coil, Pickup Voltage 84VAC min. Dropout Voltage 15VAC max. When 120 VAC is removed from this input the brake signal is supplied to the system activating brake monitoring. The Brake output is deactivated when the shaft stopping time exceeds the programmed danger limit.

Brake Output:

The Brake output, “ON” under normal conditions, is deactivated when the shaft stopping time exceeds the programmed danger limit.

Output Rating:

Electromechanical SPST Relay

10 Amp resistive continuous @ 120 VAC

M1025 Motion Detector and Brakewear Monitor

Brakewear Monitor - M1025

Standard Brake wear unit with E7R Resolver (Plug-in Programming Panel extra)

M025 Features

- Brake danger limit programming
- View Brake stopping time
- Output relays mounted on the unit
- Tach and Production Rate display
- Motion Limit programming
- Removable programming module to insure security
- Ratio-metric decoding for noise immunity
- OSHA Compliant

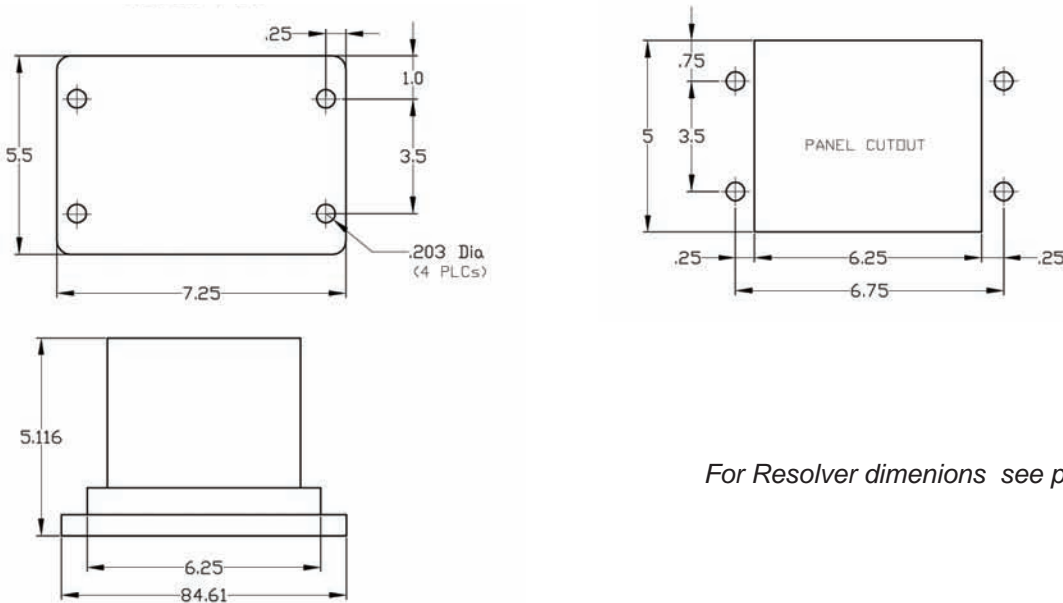


Part Number	Description	Price
SBM-M1025-E7R	Standard Brake wear Unit with 3/8" shaft E7R Resolver, cable not included	\$895
SBM-M1025-RL100	Standard Brake wear Unit with 5/8" shaft RL100 Resolver, cable not included	\$1195
ASY-M1025-POI	Plug-in Programming Interface Panel	\$395
Cables		
CBL-10T22-Mxxx	22 Autotech, 10 conductor (5 twisted pairs) overall foil shielded cable, with 10-pin MS connector. xxx = to be filled in with length in feet	\$65+\$2.50/ft.

Note: For Part Numbers and Price of individual components, cables & accessories, and other product variations such as PLS outputs or different resolver housings **CALL THE FACTORY**

The M1025 Brakewear monitor System is expandable to have 6 PLS outputs

M1025 unit with cut-out, side and front dimensions



For Resolver dimensions see page 5