TQM 700

PRESS FORCE MONITOR

Tonnage Monitor

air-hydraulics INCORPORATED

AFFORDABLE PRESS FORCE MONITORING FOR QUALTY CONTROL

OVERVIEW

The TQM is important for press force assembly, insertion, staking, verification, and in-die applications. It is used with “in-line” load cells and strain gages. Die setup, SPC work and quality assurance are made easier when using a TQM Tonnage Monitor. Not only will it monitor force, but also it will assist in protecting your investments by reducing downtime, improving productivity and improving product quality.

ADVANTAGES

- Verify Press Force On Each Cycle
- Improve Product Quality
- Easily Configure Low/High Alarm Points
- Fault Notification Alarm with Manual Reset
- Affordable Solution For Quality Assurance
- Simply Installation On Existing Presses
- Ability To Interface Into Existing Quality Systems

OPERATION

When used with an in-line load cell, the TQM 700 monitor will display a four or six digit peak force value on each press cycle. If the press force monitor displays a value below or above the pre-set limits, then the monitor flashes and an alarm indicator turns on, notifying that a suspect non-conforming part/assembly has taken place. The alarm will need to be acknowledged and manually pushed to reset the display. Additional interfacing into the press control system will prevent the next press cycle until the fault/alarm is acknowledged, giving added assurance that the non-conforming part/assembly has been properly isolated. The TQM 700 also has the ability to be interfaced into your existing quality control system allowing complete press force monitoring throughout your factory floor.

STANDARD FEATURES

- Manual alarm setpoints
- Automatic setpoints
- Displays total force
- Low alarm can be disabled
- High & low set point display switch
- Excellent electrical noise rejection
- Capacity alarm
- Four or six digit display
- One or two sensor inputs
- Analog output jack
- Bi-directional RS-485/232 interface
- Automatic Zero Balance
- Use with load cell or T400 sensors

AVAILABLE OPTIONS

- Autolearn
- Part counter
- Reverse load display
- High Immediate
- Time based signatures
- Pressroom networking

Contact Us Today! Phone: 1-800-837-4355 or Email: info@airhydraulics.com

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SPECIFICATIONS	
No. Of Channels	**One**
Sensor Inputs	Full bridge strain gauge sensors 120 to 1000 ohms Up to (2) 350 ohm sensors
Sensor Excitation	Built-in 5VDC @ 70mA max (Short circuit protected)
Balance Range	+/- 1mV/V of offset
Gain Range	Low Gain = 0.568mV/V to 5.000mV/V High Gain = 0.057mV/V to 0.625mV/V
Analog Output	35mm stereo phono jack 2.5VDC @ Press Capacity
Accuracy	+/- 1% of full scale max
Non-linearity	+/- .1% of full scale max
Frequency Response	Flat DC to 1KHz
Display	4 or 6 digit display
Display Update	Every Stroke (up to 2 updates per second max)
Resolution	1024 or 2048 count
SPM	400 SPM (threshold trigger) 2000 SPM (probe trigger)
Calibration Shunts	1 Meg Ohm .1% precision resistor
Computer Interface	RS-485
Trigger	Probe or Threshold
Thershold Probe	Built-in voltage source (12VDC @ 50mA max) provides power for NPN or PNP proximity probes. Also supports limit switch, solid state or mechanical relays
Resolver Interface	No
Shutdown Relay	7.5A @ 120VAC N.O. and N.C. Contact Bypass switch available
Power Req.	18 Watts max, 85-140VAC @ 50-60Hz OR 170-280VAC @ 50-60Hz
Operating Temp.	0-70 degrees Celsius
Weight	Approximately 7.5lbs

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