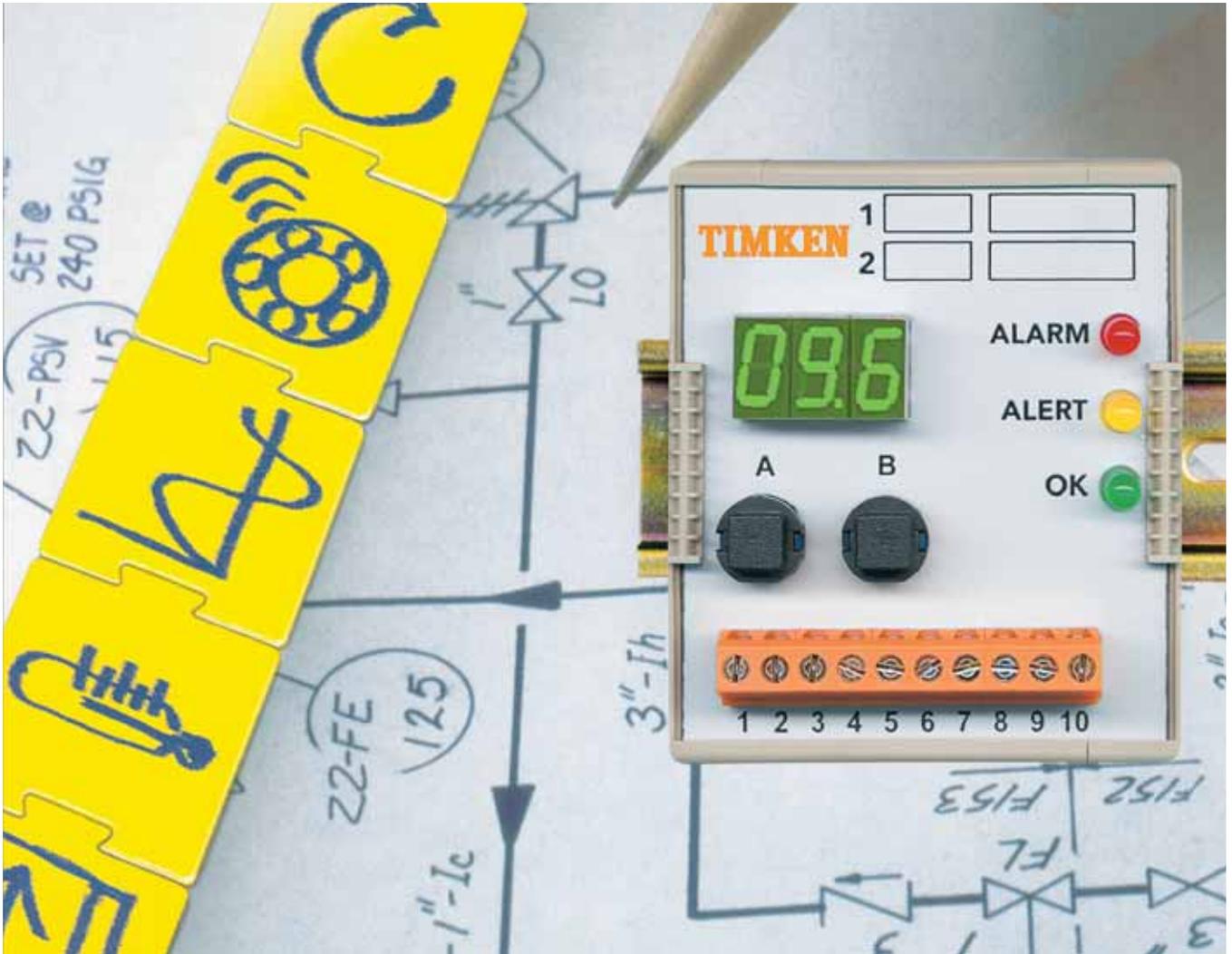


The CMM Series

Online Condition Monitoring Modules



The CMM Series

Online Condition Monitoring Modules



Timken offers a wide range of condition monitoring solutions, including the CMM series, which will help you:

- Monitor your critical equipment
- Avoid unplanned downtime
- Increase profits through early detection and
- Improve workplace safety.



Small cost-efficient modules offer many options

Condition monitoring directly impacts the bottom line and in some cases provides a necessary safety precaution. The goal is to detect developing faults before they become a severe problem. This becomes especially important as production levels and unmanned operations increase.



Timken offers a series of small, economical condition monitoring modules, which provides maintenance personnel with a variety of ways to track machine performance.



These modules offer the flexibility to monitor critical parameters, display information locally and supply a universally accepted output signal. The condition monitoring modules provide:

- A local readout of evaluated machine condition (green-yellow-red status and measured value)
- Condition-controlled relay connections
- 4-20 mA analog signals out to PLC or other computerized monitoring and control systems.



Evaluated bearing condition

The shock-pulse method is unique in providing immediate, evaluated measurements of bearing condition. This method, refined by years of practical experience, is part of the CMM series, as well as vibration monitoring according to ISO 2372.

The output of the transducers is converted to 4-20 mA analog, allowing you to monitor bearing condition and vibration severity via your PLC.

Build a customized surveillance series

4-20 mA analog signals

Analog signals can represent any measured quantity. The signal form 4-20 mA analog is universally used in PLC systems. You simply tap existing signal cables to receive a readout, an alarm display or a relay connection.

You define both measuring range and limit values for alarm and relay activation and you can monitor a variety of characteristics according to your own specifications.

A monitoring system based on small, single- and two-channel modules provides maximum flexibility. You can cost effectively keep important production machines under continuous surveillance.

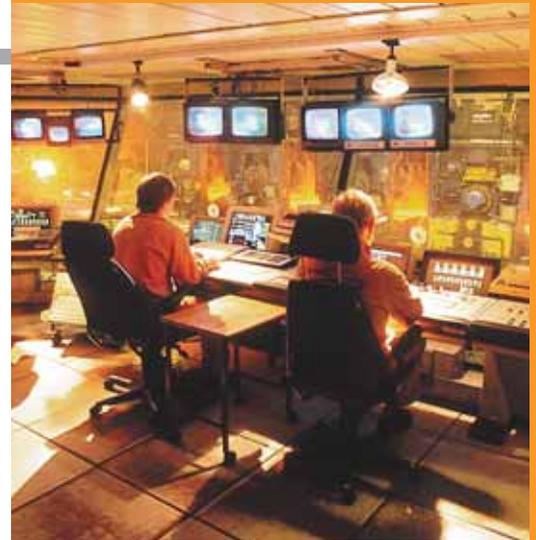
Production and maintenance departments receive early warnings of developing machine faults. Necessary maintenance can be planned in advance to avoid emergency repairs, overtime charges, lost production and secondary damage.

Full system security

Transducer lines are automatically monitored for system faults, with indications for a short or open circuit.

Parts exposed to harsh environments are robust, non-corrosive, sealed or waterproof. Ex-proof components also are available.

Using low-voltage installations and signals that are not sensitive to electric disturbance offers a safe and reliable monitoring system.



Available options:

- BMM 40/42T: Two-channel bearing monitoring modules
- BMR 40/42T: Two-channel bearing monitoring modules, rack mounted
- BDM 40/42T: Two-channel bearing display monitoring modules
- BDR 40/42T: Two-channel bearing display monitoring modules, rack mounted
- VMM 21T: Two-channel vibration monitoring module, 3 - 1000 HZ
- VMR 21T: Two-channel vibration monitoring module, rack mounted, 3 - 1000 HZ
- VDM 21T: Two-channel vibration display monitoring module, 3 - 1000 HZ
- VDR 21T: Two-channel vibration display monitoring module, rack mounted, 3 - 1000 HZ
- VMM 15T: Single-channel vibration monitoring module, 3 - 1000 HZ
- VMR 15T: Single-channel vibration monitoring module, rack mounted, 3 - 1000 HZ
- VDM 15T: Single-channel vibration display module, 3 - 1000 HZ
- VDR 15T: Single-channel vibration display module, rack mounted, 3 - 1000 HZ
- TMM 11T: Temperature transducer with a measuring range from 0° F to 250° F and an analog output of 4-20 mA

Create a smart monitoring solution

What is condition monitoring? You receive a signal from a machine and convert it into a message for whomever needs to know and act. Simple? Not quite, but Timken can provide a reliable and economical solution for your most challenging needs.

Measure

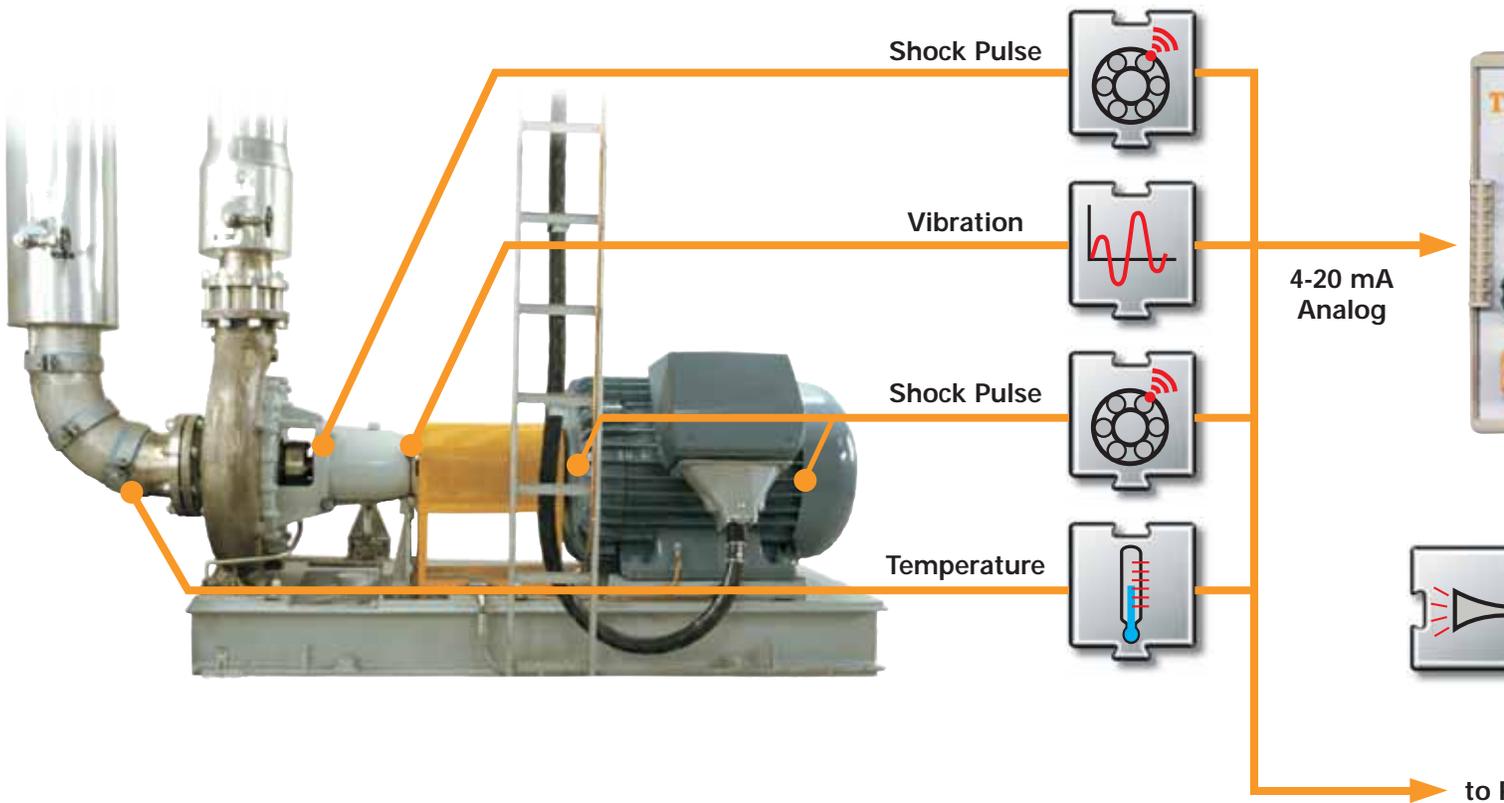
Use existing signals. Select special transducers for special tasks.

Convert

When needed, convert the transducer output to 4-20 mA analog.

Set range

Define quantity, range and limit values for alarm.



Display

Select on-site display: warning lamp, three-color code, measured value.

Control

Program alert and alarm and conditions. Rig a relay circuit.

Link with the computer

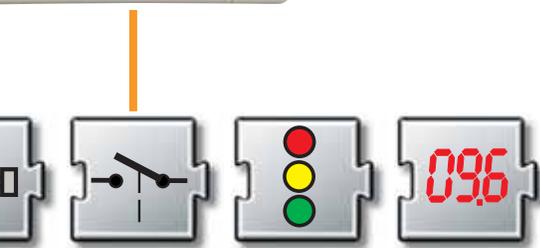
Condition monitoring modules equip you with options. You can monitor on site and also link with your control system. With our condition monitoring products, you have options that can be tailored to your operations.



BMM-40T



VMM-21T



PLC or Condition Monitoring System

Fully committed

In every industry, the goal is the same – maximize uptime, safety and profitability.

Any unscheduled downtime must be avoided. Any unsafe condition must be identified.

Any repair must be made immediately.

The Timken Corporation has a broad offering of condition monitoring products and services that includes portable instruments, continuous monitoring devices and online systems. We can help you maximize uptime with the development of cost-effective solutions to achieve maximum output and reliable service. Increasing the useful life and productivity of your machinery directly impacts the bottom line.

When you choose Timken, you gain access to an industry leader with more than 100 years of experience in industrial applications. Every design, production phase and service call is driven by one thing – exceeding the expectations of our customers. You can rely on Timken for products, services, analysis and ongoing technical support to help maximize uptime, reduce maintenance costs and improve productivity. Timken is committed to being your friction management solutions provider.

Friction management solutions

Industrial customers turn to Timken to provide comprehensive friction management solutions. Extending beyond bearings, these solutions include related parts and accessories, expert sales and service support, integrated logistics and a host of other programs to help keep your systems running efficiently. We help customers analyze performance and recommend solutions that make sense for their unique operating systems and conditions.

First, the bearing. Then:

How do you monitor the health of your bearing?
You can use StatusCheck, handheld devices or Timken Reliability Services.

How do you plan to lubricate the bearing?
There are many advantages to using Timken lubricants.



Do you need a simplified method of lubricating bearings?
Use Timken G-Power and M-Power single-point lubricators.

Do you plan to protect machinery from contamination?
There are many advantages to using Timken's line of industrial seals.

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