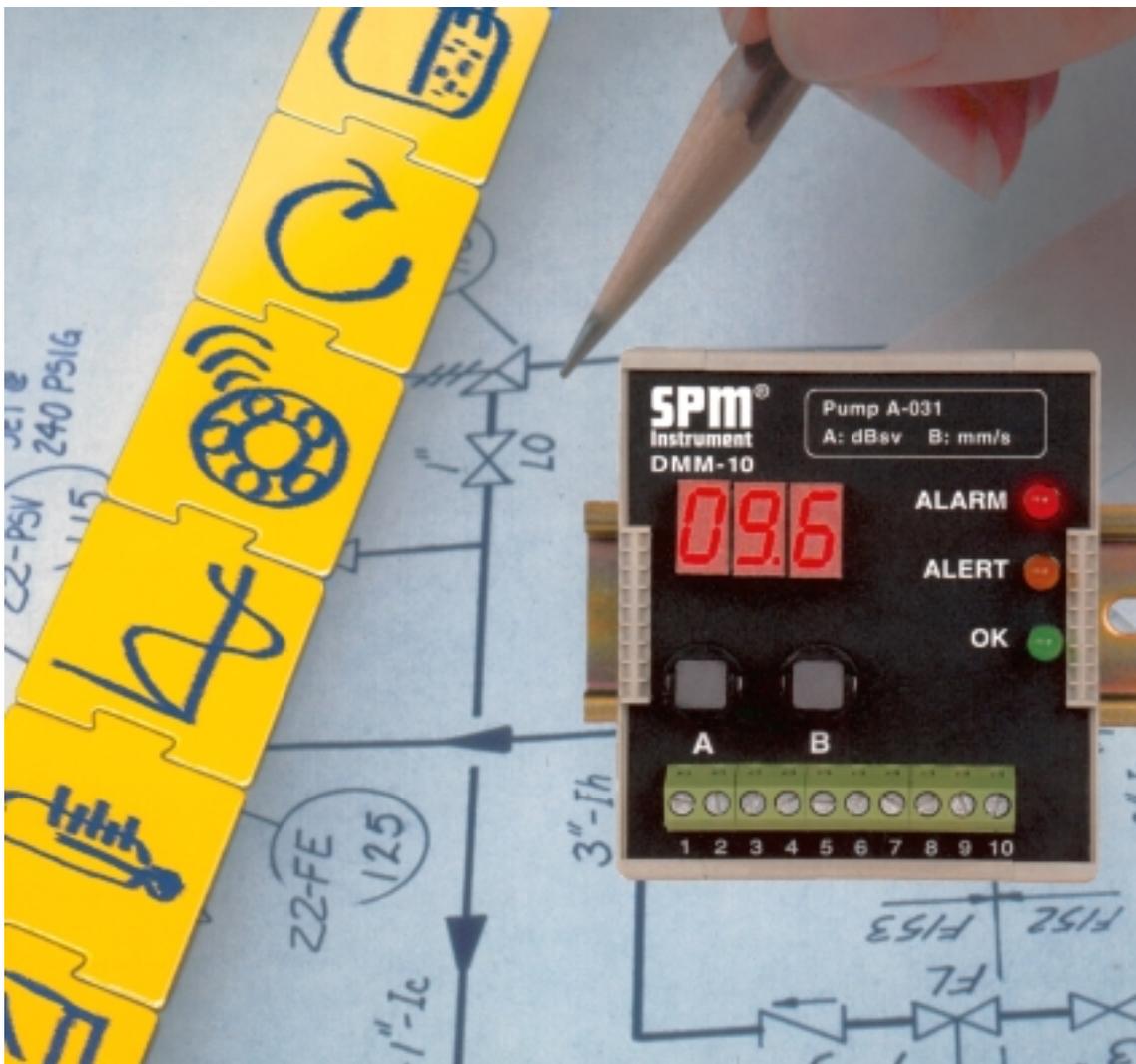
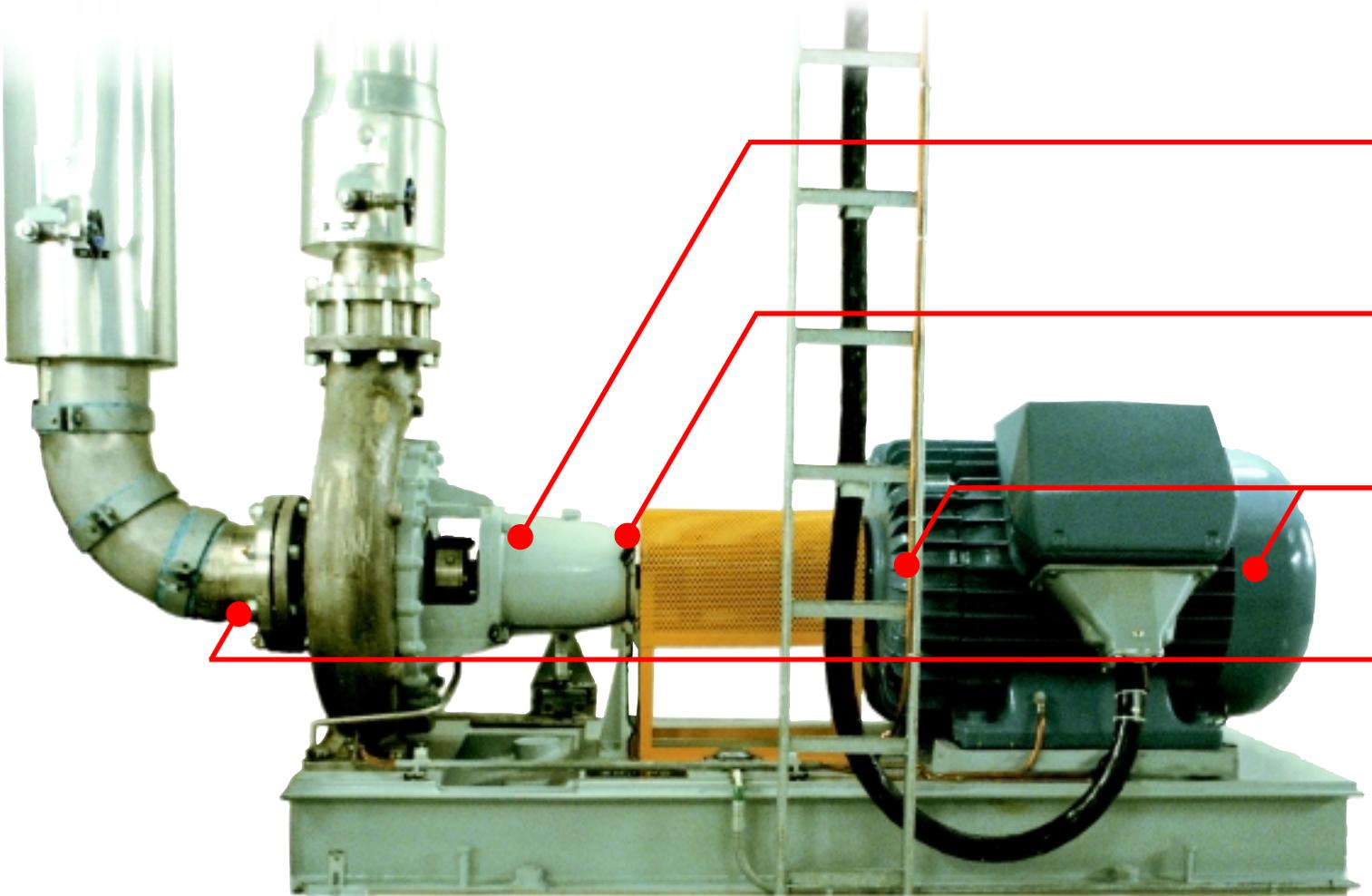


The CMM System

[On-line condition monitoring modules offering reliable and low cost solutions]



Small cost-efficient modules, many options:



Safety and control

Avoiding mechanical problems and downtime is profitable, more so when using low-cost, on-line machine surveillance. Condition monitoring gives you

- greater machine availability
- increased safety
- improved planning and control.

SPM presents a family of small, inexpensive **Condition Monitoring Modules**, including transducers, converters, and combined display and control units.

The idea is to monitor anything that needs measuring and watching, to display information locally, and to supply a universally accepted output signal. The Condition Monitoring Modules provide

- a local read-out 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 computerised monitoring and control systems.

Evaluated bearing condition

SPM's patented Shock Pulse Method is unique in providing direct, evaluated measurements of bearing condition. This method, refined by 30 years of practical experience, is part of the system, as well as vibration monitoring according to ISO 2372.

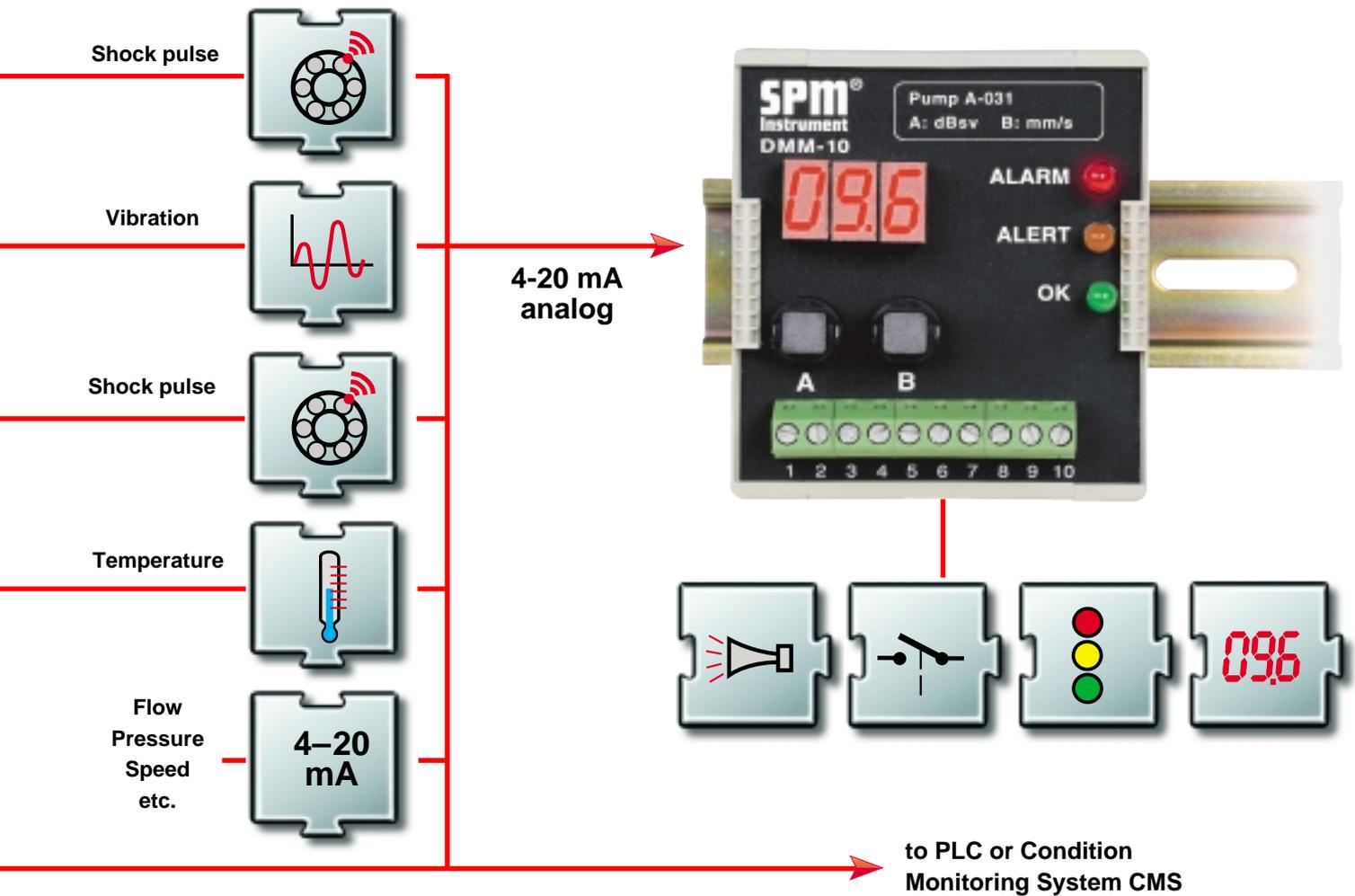
The output of SPM transducers is here converted to 4-20 mA analog. Thus, you can monitor bearing condition and vibration severity also via your PLC.

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 get a read-out, an alarm display, or a relay connection wherever you require them.

You define both measuring range and limit values for alarm and relay activation. Thus, you can monitor whatever you need according to your own specifications.

Build your best surveillance system!



What you need is what you get

A monitoring system based on small, one and two channel modules provides maximum flexibility. For a minimal investment, you keep important production machines under continuous surveillance.

Production and maintenance receive an early warning of developing machine faults. Necessary maintenance can be planned in advance, avoiding emergency repairs, stress, overtime, and secondary damage.

Full system security

Transducer lines are automatically monitored for system faults, with indication for short and open circuit.

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

Using low voltage installations and signals which are not sensitive to electric disturbance gives you a safe and reliable monitoring system.

A direct line to the computer

Condition Monitoring Modules are primarily designed to be stand-alone, frontline monitoring units, using DIP-switch settings for measuring range and limit values. But simple messages may not be enough to operate and maintain complicated machinery. At any time, you have the option to link with the computer.

You can use the modules as parts of any data collecting, analysing, and control system that accepts a 4-20 mA analog input. Users of SPM's CMS System can connect to a measuring unit, and use our software CONDMASTER® for data processing.

Worldwide technical service

SPM is represented all over the world, with companies and distributors in over 50 countries. You get full support, including turn key installations. Our hard- and software are based on more than three decades of practical experience with industrial condition monitoring.

You know what you need. Pick a function. Add another . . .

Create a smart monitoring channel!

What is condition monitoring? You get a signal from the machine and convert it into a message for whoever has to know and act. Simple? Not quite, but SPM has a technical solution for your monitoring problem.

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 colour code, measured value.

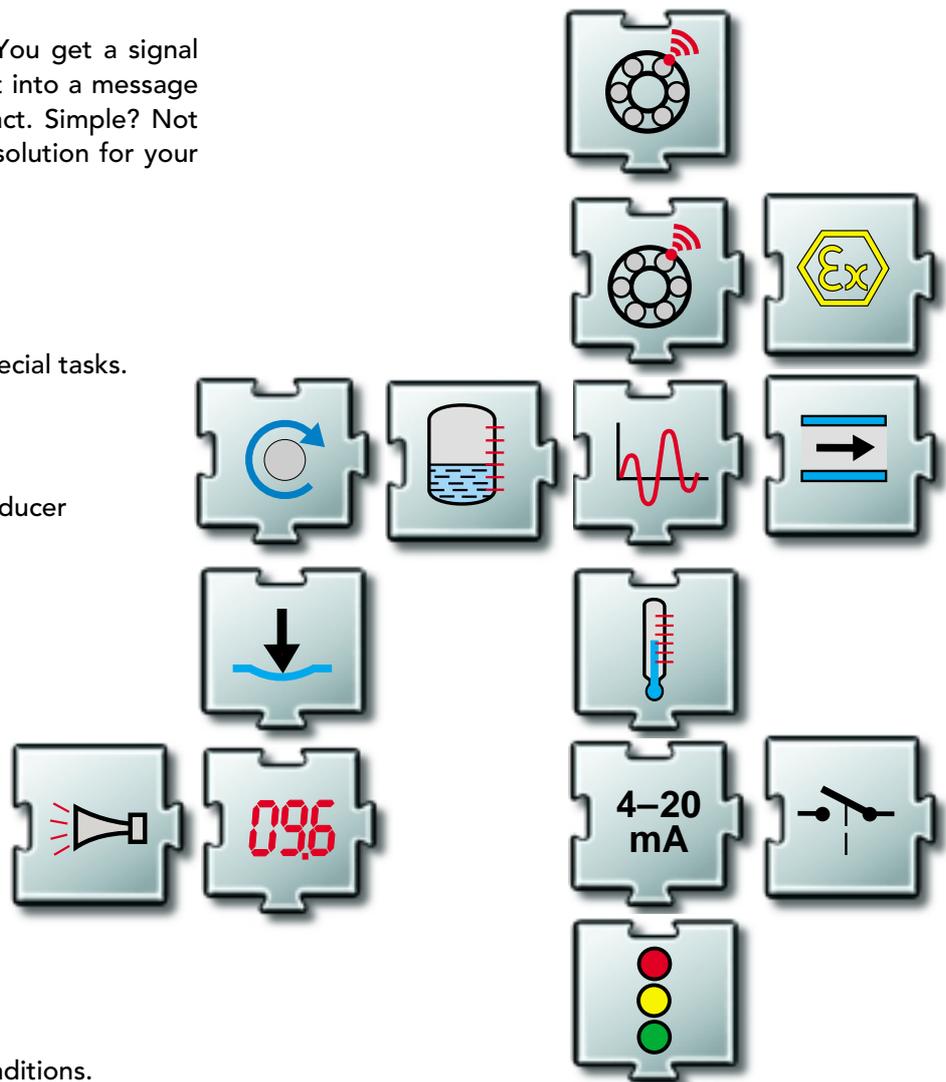
Control

Program alert and alarm and conditions.

Rig a relay circuit.

Link with the computer

Condition Monitoring Modules give you all the options. You can monitor on site and also link with the computer, now or in the future. Feed any signal to your PLC. Use SPM's condition monitoring software CONDMASTER® to process, analyse, and display the data. It is your choice . . .



SPM Instrument AB • Box 4 • SE-645 21 Strängnäs • Sweden
Tel. +46 152 22500 • Fax +46 152 15075
info@spminstrument.se • www.spminstrument.se