

Endress+Hauser

New Cerabar S Pressure Transmitter

a new safe concept for gauge / absolute pressure measurement

The advantages of the latest version of Endress+Hauser's **Cerabar S** pressure transmitter make it the superior choice for measuring absolute or gauge pressure of gases, steams or liquids in all process industries.

Exceptionally user-friendly, **Cerabar S** now measures up to 700 bar, operates in direct contact with the process at temperatures up to 350°C and comes with an extensive range of process connections for various applications.



PMC 71 with Ceraphire® ceramic sensor
-40°C to 150°C, 100 mbar to 40 bar

Low-pressure applications

For low-pressure applications (vacuum to 40 bar), the **Cerabar S** incorporates the proven ceramic cell - with Ceraphire® cell now fitted as standard.

Thanks to its 99.9% A1203 purity, the Ceraphire® ceramic sensor is more resistant to mechanical abrasion and damage and more chemically inert than the original. The material is up to 30 times thicker than metal membranes, oil-free and can be used in applications up to 150°C.

Holiday arrangements

EMC take this opportunity to thank all our customers for their tremendous support throughout 2004 and to wish you all a very happy and safe holiday season.

EMC will be closed on statutory holidays only. At other times we will operate to ensure your needs are supported.

Should our phones be unanswered, please leave a message, send a fax or email and we will get back to you as quickly as possible.

Applications to 700 bar & 350°C

For high-pressure applications up to 700 bar, the new **Cerabar S** incorporates a mono-silicone cell with stainless steel diaphragm.

This version tolerates higher temperatures, up to 280°C, without the need for chemical seals. In the absence of fill fluid, the measured value is not affected by temperature changes. For applications up to 350°C, chemical seals are available. Accuracy is now 0.05% of the measured variable, and stability is 0.05% of the upper range limit/year.

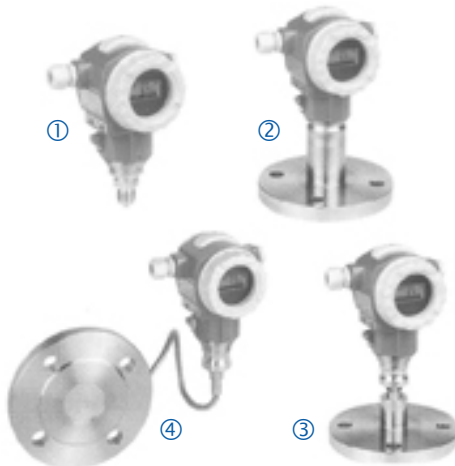
Unique data storage feature

New **Cerabar S** offers unique data storage and transfer capabilities. It incorporates a HistoROM®/M-DAT - a chip that stores a wide range of data including:

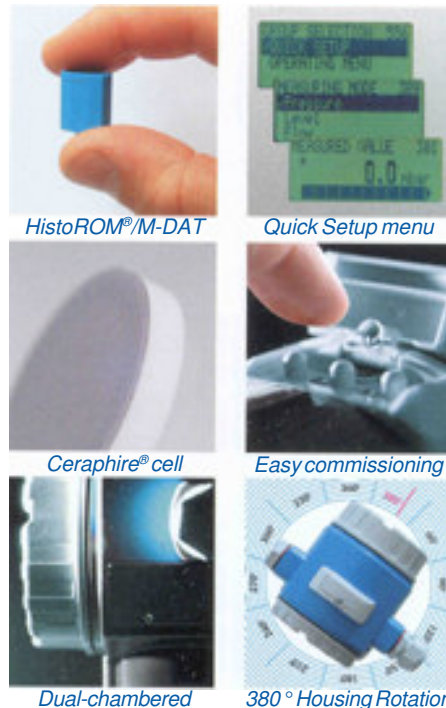
- last 25 hours of process variables, temperature and pressure
- configuration settings of the transmitter (uploaded and downloaded as required)
- event recording (with electronic signatures)

The HistoROM®/M-DAT enables speedy trouble-shooting and retrospective analysis in the event of a problem. It also allows the device to be moved to another process together with relevant calibration data.

Programming is easy using a well-proven E+H software tool or alternatively via the 3 buttons in the housing. The buttons provide contactless connections that are unaffected by traditional corrosion / jamming / weathering problems.



- 1 PMP 71. Completely welded design
-40°C to 125°C, 100 mbar to 700 bar
- 2 PMP 72. High temperatures without seal
Up to 280°C, 100 mbar to 40 bar
- 3 PMP 75. High temperatures with seal
Up to 350°C, 100 mbar to 700 bar
- 4 PMP 75. With capillary and seal
Up to 350°C, 100 mbar to 700 bar



High safety standards

The robust housing of **Cerabar S** has been designed to satisfy the recent safety demands for process measuring devices, including SIL2 and PED requirements and all initially accepted Ex ratings, including IEC Ex.

Two housing versions are available:

- die-cast, powder-coated aluminium for chemically aggressive environments such as mining and power generation
- stainless steel for food applications and highly aggressive environments (eg sea air/chlorine atmospheres).

Both versions feature secondary containment, in which the sensor is mechanically separated from the electronics compartment in order to eliminate the possibility of harm to the operators in the event of a process accident.

The new features of **Cerabar S** make it the safest and highest performing pressure measurement transmitter on the market. With its SIL, PED and Ex approvals, data storage capabilities and extended operating and measurement parameters, it's the complete solution for all situations.

For more information on Cerabar S, please circle Enquiry No:

1201

To discuss your applications please contact Howard Berry or Chris Gailer

Leuze electronic GS06 Series

high performance Photoelectric Fork Sensors at an economical cost

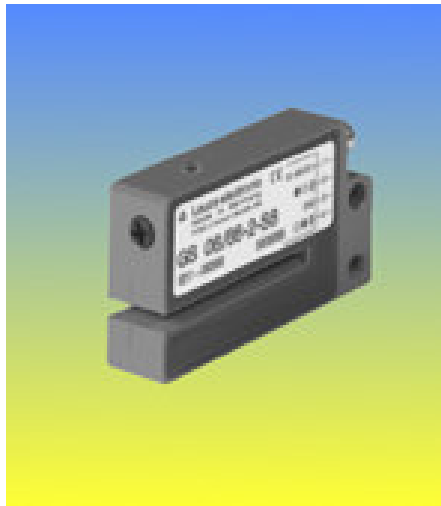


The new Leuze GS06 Series of Fork Type Photoelectric Sensors is primarily designed for the detection of gaps between labels, in labelling applications, and incorporates several innovations that improve performance and customer benefits.

Available with fork gaps of 2 and 5mm the GS06 series replaces the GS05 Series and offers:

- increased switching frequency to 8 kHz for more precise positioning and faster labelling speeds.
- the modulated light source increases immunity to ambient light sources and also immunity to false switching from glossy labels.
- Teach-in versions allow quick set-up to a variety of labels and also setting of options not available on standard units.

The GS06 has a robust metal housing rated to IP65 and a multiturn potentiometer for easy and exact sensitivity adjustment. It requires a 10-30Vdc supply and provides 2 push-pull switching outputs: PNP / NPN, light / dark switching.



The GS06 Series is available with a variety of electrical connection options:

- M8 plug connector
- 2 metre cable
- 150mm cable with M12 plug connector

Economical GS06/66-2-S8

We have negotiated special pricing for the GS06/66-2-S8 (picture left) which enables us to offer this particular model at a very economical price.

The GS06/66-2-S8 has a 2mm gap and comes with a M8 electrical connector socket.

This model is available ex stock and is priced at only:

\$260.00 + GST

Suitable M8 plugs, with an integrated 5 metres of cable, are also available at \$28.00 each. Select from either right angle or straight plug versions.

For more information on the GS06 Series, please circle Enquiry No:

1202

Alternatively, contact Steve Watkins or Russell Mason for assistance

Endress+Hauser Wetzler

winners of the Ludwig Erhard Quality Award 2004

Temperature Measurement, Recorders and System Components

Endress+Hauser Wetzler, a company of the Endress+Hauser Group, has received the Ludwig Erhard Quality Award 2004 - the most important German award for top performance in total quality management.

Within the Endress+Hauser Group the company is responsible for the business units Temperature Measurement, Recorders and System Components.

The festive award ceremony took place in Berlin on 16th November. The coveted Ludwig Erhard Prize trophy represents the first place in the category medium-sized businesses. It acknowledges the company's top performance in all important areas of quality management and the implementation of the company strategy.



Wilfried Meissner (right), managing director of Endress+Hauser Wetzler, being presented with the Ludwig Erhard Quality Award 2004 by Michael Rogowski, President of BDI (confederation of German industry)



Typical Endress+Hauser Wetzler products: Temperature Probes, Recorders, Temperature Transmitters, Data Loggers, Sampling Systems

"The news that we are this year's winners of the Ludwig Erhard Quality Award made us very proud indeed", commented Wilfried Meissner, managing director of Endress+Hauser Wetzler. "This is a great honour for all our staff members and a highlight on our road to excellence."

The award can be attributed to the quality campaign, which was started in the year 2000 by introducing the motto "Wetzler for excellence". The aim of this campaign is to fill staff members with enthusiasm for quality and to transfer this enthusiasm to customers.

"Only enthusiastic customers are loyal and loyal customers are the basis for continued success", is the conviction of Klaus Endress, CEO of the Endress+Hauser Group.

"Meanwhile", Wilfried Meissner reports, "a quality culture has been cultivated within the company which is reflected not only in the growth rates which are clearly above the branch average. The staff members too have given our company good marks as shown by an excellent

third place in the competition 'Germany's best employers 2004'".

The company, which was founded in 1872, was in 1976 acquired by the Endress+Hauser Group. Today Endress+Hauser Wetzler with about 250 employees are one of the internationally leading suppliers in the area of process automation and measurement. More than one fifth of the staff members are dealing exclusively with the development and marketing of new products and applications.

A high degree of innovation thus ensures that Endress+Hauser Wetzler provide their customers with high-quality products in state-of-the-art technology.

For more information on the Wetzler product range, please circle Enquiry:

1203

Alternatively, Howard Berry will be pleased to discuss your applications

Thermophant T Temperature Switch

safe measurement, monitoring and control of process temperatures

The **Thermophant T** Temperature Switch series from Endress+Hauser is designed for the safe measurement, monitoring, display and control of process temperatures in a range from -50°C to 150°C.

Two models are available:

TTR 31

with thread connections or coupling

TTR 35

with Tri-clamp for hygienic applications

Thermophant T offers high accuracy across the entire ambient temperature range, short response time, high reproducibility and long-term stability.

The compact design, with integrated electronics, provides economic process monitoring and control together with on-site information and function check via the LEDs and digital display. The upper part of the housing can also be rotated by 350° for optimum installation.



The long-term stable temperature sensor is made of platinum (Pt100 class A as per IEC 751). Electrical connection is via M12 plug.

Operation and visualisation are with PC and E+H ReadWin 2000 configuration software.

Optional Electronics

Thermophant T also provides an optional choice of electronic version:

- 1 x PNP switch output (standard stock model)
- 2 x PNP switch outputs
- 1 x PNP switch output and 4-20mA output (to SIL2)

For literature on Thermophant T, please circle Enquiry No:

1204

Contact Howard Berry or Chris Gailer to discuss your applications



flow-captor CoolGuard

the safe sensing solution for industrial cooling systems.
all-in-one monitoring of flow and temperature of coolant

flow-captor CoolGuard from Weber extends the range of Flow Switches and Flow Meters that EMC have successfully supplied to NZ industry for many years.

The CoolGuard operates according to a new calorimetric principle especially adapted to the CoolGuard's tasks.

It safeguards cooling efficiency by monitoring flow rate as well as temperature - protecting against malfunctions such as:

- decrease of flow rate below set point
- flow breakdown
- coolant temperature increase due to loss of cooling efficiency - may result in an overload of whole cooling installation

This way a secure protection against machine damage or unwanted shutdown is guaranteed.

flow-captor CoolGuard is especially designed for all types of cooling systems as a reliable alternative to failure prone mechanical flow switches, which lack the temperature-monitoring feature.

Cooling system

Every cooling system relies on a consistent flow of coolant with the purpose of limiting a defined temperature range of the cooled application.

The cooling performance depends on the coolant's flow rate and temperature.



Weber flow-captor CoolGuard

Specifications

- Low flow setpoint: 0.3m/s fixed
- Hi temp setpoint: 70°C fixed
- Medium temp: -4°C to +80°C
- Response time: 2 to 10 seconds
- Repeatability: <0.5%
- Hysteresis: approx 20% of setpoint value
- Pressure: up to 150 psi
- Housing: 316 stainless steel, 1/2" - 14MNPT thread, IP65
- Supply voltage: 18 to 30Vdc
- Output: PNP n.o. (closes with flow)

Monitoring of cooling systems

Currently, traditional monitoring is limited to merely detecting the occurrence of a minimum flow by means of a mechanical flow switch, with an additional, separately installed temperature switch to monitor over temperature situations.

Problem

The problematic nature of mechanical flow switches is founded in their inherent moving parts, which have always been prone to different media-based malfunctions such as deposits, sticking and corrosion.

These circumstances result in frequently missed flow decrease detections or complete flow break down.

Solution... CoolGuard

flow-captor CoolGuard is the all-in-one solution for these problems.

As an electronic sensor it contains no moving parts at all, thus eliminating problems from the beginning.

flow-captor CoolGuard also combines monitoring of the coolant's flow and temperature in one device.

For literature on CoolGuard, please circle Enquiry No:

1205

Contact Howard Berry or Chris Gailer to discuss your applications

FoodTech / PackTech 2004

EMC's weighing technology on show

We were delighted with the response to our exhibit at the recent FoodTech / PackTech exhibition in Auckland - an event that attracted more than 4000 visitors.

In addition to a variety of process instrumentation from Endress +Hauser, (level, flow, pressure, temperature, analysis and recording devices), EMC's key focus items were an EMC stainless steel Weighfeeder and a TES Gross Bag Weigher.



EMC stainless steel Weighfeeder

EMC Weighfeeders

The EMC Weighfeeder on display at Foodtech was specifically designed for hygienic applications in the food industry and featured fully stainless steel construction.

EMC have manufactured Weighfeeders for more than 30 years and have experience in virtually all industries including food processing, wool, fertiliser, mining, tobacco, wood chips, etc.

Typical applications include:

- Control of bulk material flowrates
- Precise controlled mixing
- Continuous blending by %
- Constant accurate supply of ingredients

Controlling operation of the Weighfeeder was the EMC ModWeigh Continuous Weighing Processor - with the distinct advantage of fully digital operation. ModWeigh provides

high accuracy and much easier set-up procedures than analogue types - there are no troublesome potentiometers or DIP switches to contend with.



ModWeigh Series of Digital Weighing Transmitters, Instruments & Operator Displays

TES Gross Bag Weighers

Also featured on our Foodtech stand were TES Gross Weighers - precision electronic weighers, designed for fast and accurate bagging of 10 to 70kg open-mouth bags. They can be easily installed to existing Garner, Day Bins or other feed equipment.

The combination of correct feed gate and an EMC 2000 series Weigh Batch controller ensures TES Gross Weighers are capable of working fast and accurately.

A two-speed filling radial feed gate with infinite adjustability is used for free flowing granular products.



TES Gross Weigher with EMC 2064 Batch Controller

For more information please circle the following Enquiry No's:

EMC Weighfeeders: 1206

TES Bag Weighers: 1207

Alternatively please contact John Ball to discuss your applications

H₂O Waterproof Weighing Scales

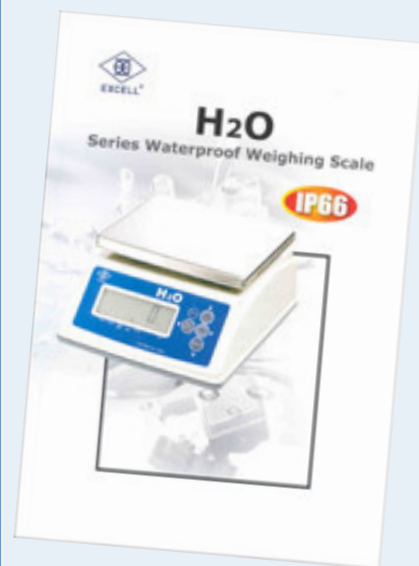
The new H₂O Series of Waterproof Weighing Scales from Excell provide many features for an excellent price of only:

\$550.00 + GST

Suitable for operation in wet areas and rated to IP66, the H₂O has a patented waterproof design, including a constant pressure structure, and a stainless steel platter size of 225 x 192mm.

Four models are available ex stock from EMC in the following capacities:

- 3kg x 1g resolution
- 6kg x 2g resolution
- 15kg x 5g resolution
- 30kg x 10g resolution



Features include

- Auto Zero tracking
- Auto calibration
- Kg/g/lb/ozgn/dwt/ct modes
- LCD display with backlight
- Low battery indication
- Functions include: counting, percentage, net/gross hold, check weighing
- Adjustable gravity value
- Rechargeable Battery
- Battery or mains (AC adaptor included)
- Auto power off
- IP66 standard

To receive a leaflet on the H₂O, please circle Enquiry No:

1208

To discuss your Scale applications please contact Steve Watkins



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