

Solutions to fulfill PL "c" with ASENTEC products

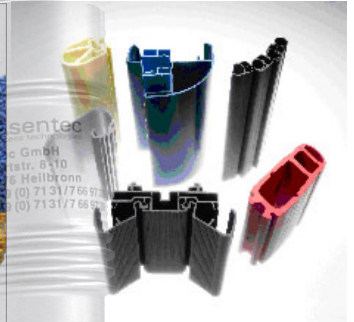
High Temperature Pressure Measurement
High Pressure Temperature Measurement



Chemistry



Compounding



Extrusion

EXTRUDER SAFETY WITH ASENTEC PRODUCTS

EN1114-1

The Extruder Standard EN1114-1 ist valid since end of 2011.

The EN1114-1 requests that every pressure generator has to be protected against over pressure in an extrusion line. Pressure generators in an extrusion line can be the extruder and/or the gear pump.

„The extruder and the over-pressurized parts must be protected against exceeding the maximum by the machine manufacturer specified internal pressure by one or more of the following measures:, burst plugs,, Pressure Measuring System acc. to EN ISO 13849-1:2008, PLr =c, which turns off all pressure generating elements through the control system upon reaching a limit value“. quote EN1114-1

ASENTEC MELT PRESSURE TRANSMITTERS

ASENTEC melt pressure transmitter series PTcan, ST2200 and PTEEXi in mA version achieve performance level „c“ (PLC) by its sophisticated design and through the use of top components and materials.

Versions with switching contact PLc reach PL „c“ in the application already in use according to category 1 and reach PL „d“ in the application according to category 3. PTcan with PLC switching contact is currently the only one bus solution on the market.

Using a logic solver the PTEEXi mA-versions reach PL“c“ (category 3). The transducers are then used redundantly, the logic solver compares the two signals and reports any deviation. The system can then be driven down well-directed.



FEATURES (mA-VERSION)

- real 2-wire mA transmitter system
- identical connector as for standard 2-wire mA, no need for changes on the connector / connecting cable in case of a retrofit
- integrated 80% calibration
- compatibel to other brands
- connector compatibility to other brands possible
- Switching contact (opening contact) 60..100% factory set for Performance Level „c“ (PLc)

FEATURES (CANOPEN-VERSION)

- safe CANopen bus signal
- up to 126 nodes per bus possible
- safe, because of encoded AutoZero function
- encoded data communication
- Linearization function
- integrated software alarms
- Switching contact (opening contact) 60..100% factory set for Performance Level „c“ (PLc)

ASENTEC BURST PLUGS



ASENTEC burst plugs or rupture discs are designed specifically for use in plastic extrusion systems, for reliable, emergency relief of excess pressure. ASENTEC burst plugs meet the standard EN 1114-1 and are classified as an approved overpressure protection according to performance level C. Even if other pressure control systems will fail, the burst plugs will instantaneously rupture at a specific, predetermined pressure. Therefore the function meets the requirements according to Performance Level „c“.

FEATURES

- several pressure ranges from 100bar to 1000Bar
- suitable for melt temperatures up to 400°C
- accuracy better than +/- 5%.
- standard mounting thread 1/2" 20 UNF identical to the thread of the melt pressure sensors
- optional with signaling function
- Inconell rupture disk for high operational safety
- with flush diaphragm

ASENTEC PRESSURE- AND -TEMPERATURE DISPLAYS ADM-SERIES

The ADM3 series is designed specifically for use in combination with melt pressure sensors. Equipped with functions adjusted to the sensor this series is easy to use.

The device is able to perform both: a 80% Shunt calibration and a real value calibration.

The „one-button-calibration“ via keyboard or contact makes the adjustment of the system particularly comfortable.

Single wire monitoring, 2 alarms, analog output and the 5-digit display are included in the ADM3 standard configuration.

The ADM3 series can be integrated in a complete system through an RS232 / RS485 interface.

FEATURES

- "one-button" pressure sensor calibration
- 80% Shunt calibration
- single wire monitoring
- 10 Vdc strain gauge- or 24Vdc transmitter power supply
- RS232/RS485 interface
- 2 alarms
- isolated analog output (mA or Volt)



OPTIONS

- green LED
- 4 Photomos outputs

DIMENSIONS

48mm x 96mm x 139mm
(HxWxD) including plug-in terminal
Panel cut out 45x92mm
Wall thickness up to 15mm
Weight 300g

ASENTEC PRESSURE- / SPEED CONTROLLER ASR 304c



FEATURES

- Up to 2 strain gauge inputs
- Optional external setpoint via analog signal
- 3 free configurable alarms
- Optional simultaneous differential pressure monitoring
- Internal supply voltage for strain gauge sensor (10Vdc) or transmitter (24Vdc)
- Easy pressure sensor calibration through keyboard or digital input
- Self-tuning and adaptive self-tuning
- Optional RS 485 interface
- PC configuration also without RS485 interface
- Ideal for retrofitting a pressure speed control and / or differential pressure monitoring

DIMENSIONS

96 x 96 x 128mm (HxWxD)
Panel cut out 92x92mm
Wall thickness 15,8mm

The controller ASR304c was designed specifically for the pressure- / speed control in the extrusion systems.

Up to two inputs of strain gauges are fed through internal 10 VDC converter.

Therefore a differential pressure measurement and -monitoring is also possible.



It is possible, for example, to monitor simultaneously to the control function the degree of filter contamination or differential pressure between input and output of the gear pump.

3 free configurable alarms provide maximum span. An automatic calibration routine compensates offsets for zero (0) or area (80%). Optionally the ASR304c is able to take over setpoint guided control functions from a master controller through an external setpoint.

The ASR304c can be configured through an internal interface.

Annoying working through the many parameter settings is not required. The controller can be connected to a SPS or a master control system through RS485 RTU MODBUS communication.

ASENTEC PRODUCTS:

Melt pressure sensors
Melt pressure transmitters
CANopen melt pressure transmitters
Pressure sensors for the  hazardous area
Temperature sensors for the  hazardous area
Melt temperature sensors
Displays for melt pressure sensors
Temperature displays
Pressure- Speed controller
20bit (peak to peak) signal amplifier
Burst plugs
Pressure calibrators
Strain gauge simulators
Machining tool kits 1/2" 20UNF
Cleaning tools 1/2" 20UNF
Testing- and locking bolts
Connecting cables
Connectors

ARE YOU INTERESTED?

**WOULD YOU LIKE TO HAVE MORE INFORMATION OR A
QUOTATION ABOUT OUR PRODUCTS?**

WE ARE HAPPY TO SUPPORT YOU:

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