

Stationary Measuring Systems

Introduction

Hydrotechnik offers four executions of stationary measuring systems that are perfectly adapted to the requirements of industrial measurement technology. Either in the direct use at machine or plant, or compactly integrated in panels.

Multi EPC 100 and Multi EPC 200 – a robust pressure switch for industrial use

Based on a measurement cell that has been proven itself millions of times, the modern electronics allow the reliable measurement and supervision of pressure conditions. The very robust design and vibration-resistant construction achieves a consistently reliable operation, problem-free even under difficult conditions. Also available as DESINA-Version.



- Pressure ranges:
25, 100, 250 and 400 bar (relative pressure)
- Robust construction:
vibration resistance acc. to IEC 60068-2-6,
shock resistance in acc. to IEC 60068-2-29
- Horizontal pivoted 280°
- Free selection of limit values, with choice of
one or two switchable contacts, hysteresis or
window function
- LED display: 4-digit, digit height 7 mm
- Optional with analogue output 0/4 to 20 mA
- DESINA conform specification (Multi-EPC 200)
- User-friendly operation programme
- Safe electrical operation due to reverse-polarity
protection, overvoltage protection and short-circuit
strength
- Excellent long-term stability and durability
- Measuring rate ≥ 10 ms

Order data measuring instruments

Multi-EPC



Measuring range	Standard execution	Order number
0 to 25 bar (0 to 2,5 MPa)	2 limit values 1 analogue output: 0 to 20 mA/4 to 20 mA	3160-10-40.01
0 to 100 bar (0 to 10 MPa)		3160-10-16.01
0 to 250 bar (0 to 25 MPa)		3160-10-17.01
0 to 400 bar (0 to 40 MPa)		3160-10-15.01






Measuring range	DESINA conform execution	Order number
0 to 25 bar (0 to 2,5 MPa)	1 limit value 1 analogue output: 4 to 20 mA	3160-11-40.02
0 to 100 bar (0 to 10 MPa)		3160-11-16.02
0 to 250 bar (0 to 25 MPa)		3160-11-17.02
0 to 400 bar (0 to 40 MPa)		3160-11-15.02

Panel mounted instrument SEG 1060



Power supply	Execution	Order number
24 VDC	Basic – only digital display	3192-04-10.00
	All-In – 1 analog output/1 limit value	3192-04-11.00
230 VAC	Basic – only digital display	3192-04-20.00
	All-In – 1 analog output/1 limit value	3192-04-21.00

Technische Daten

	Multi-EPC	SEG 1060	Compare	Multi-Panel 8050
Stationary Measuring Systems			 digital  analog	
Measuring inputs		Total 2 inputs: analogue: 0 to 20, 4 to 20 mA, 0 to 10 V and digital: 5 to 15 V rectangle 1 Hz to 10 kHz	1 to 2 inputs with 1 calculation channel optional analogue: 0/4 to 20 mA, 0 to 10 V digital: 1 Hz to 5 kHz	Total 16 input connection sockets 10x 6-pol, analogue signal inputs, 2x input jack for current +2 ADC and voltage +48 VDC, 0 to 20 mA, 4 to 20 mA, 0 to 10 VDC, ± 10 VDC, 4x 6-pol, digital signal inputs 0,25Hz to 5 kHz, 6x CAN input (optional 14)
Standard measurands	Pressure	Pressure, temperature, frequency, volume flow, rotational speed, direct current, power, torque, way and speed a.s.o.	Quantity (counter), pressure, tempe- rature, frequency, volume flow, rota- tional speed, direct current, power, torque, way and speed a.s.o.	Pressure, temperature, frequency, volume flow, rotational speed, direct current, power, torque, way and speed a.s.o.
Measuring rate	≥ 10 ms	≥ 40 ms	≥ 20 ms	Analogue inputs: 0,1 ms / 1 ms
Resolution A/D-converter		12 bit	10 bit (optional 12 bit)	Analogue inputs: 16 bit Current, voltage input: 12 bit
Error limit	$\pm 0,5$ % of final value	Analogue: $\pm 0,2$ % of final value Digital: ± 1 digit	Analogue: $\pm 0,5$ % of final value Digital: ± 1 digit	Analogue: $\pm 0,1$ % of final value Current, voltage input: $\pm 0,2$ % of measured value
Extreme value memory		Min. and max. value memory	Min. and max. value memory	Min. and max. value memory of all measuring channels, selectable with key
Measured value memory	No memory	No memory	No memory	128 MB in max. 200 series, optional expandable to 1 GB max. 6 mio. values/series (24 MB), scan rate: 0,1 ms to 99 min
Trigger	No trigger	No trigger	No trigger	Settable, external triggering, pre-trigger
Display	4-digit, 7-segment, red, digit height 7 mm, casing rotatable at bottom pressure connector for 280°	14 mm LED 7-segment display in red	14 mm LED 7-segment display in red	8/16 presentable channels with 14 mm LED 7-segment displays in red (30 channels via PC)
Interfaces	No interfaces	No interfaces	RS 232	RS 232, USB, CAN, Centronics, LVDS
Power supply	15 to 30 VDC, nominal 24 VDC	24 VDC ± 25 % 230 AC ± 10 %/50 Hz	24 VDC ± 25 % 230 VAC ± 10 %/50 Hz opt. with 110 VAC/60 Hz	With direct current 24 VDC, with protection against reverse-polarity and over-voltage, the device is equipped with self-reversing fuse resistors
CE labelling	EN 61000-6-4 and EN 61000-6-2	EN 50081-1 and EN 50082-1	EN 50081-1 and EN 50082-1	EN 50081-1 and EN 50082-1
Protection type	IP 67	Front IP 65, mounted	Front IP 65, mounted	Device front: IP 40; casing: IP 40; measuring inputs: IP 40
Ambient conditions	Operation temperature: -20 °C to +85 °C	Operation temperature: -20 °C to +50 °C	Operation temperature: 0 °C to +50 °C	Operation temp.: 0 °C to +60 °C relative humidity 0 % to 85 % (not condensing), storage: -20 °C to +60 °C
General	Material of parts with medium contact high-grade steel 1.4301, membrane 1.4542	ABS plastic	ABS plastic	Housing material: aluminium powder coated RAL 3004
	Dimensions: est. 120 x 65 x 33 mm	Dimensions: est. 48 x 96 x 101 mm	Dimensions: est. 48 x 96 x 110 mm	
	RoHs conformity	RoHs conformity	RoHs conformity	RoHs conformity
	Weight: 0,35 kg	Weight: est. 0,25 kg	Weight: est. 0,35 kg	
Outputs	Analogue outputs: 0-20 mA or 4-20 mA	Analogue outputs: 0-20 mA or 0-10 V 4-20 mA settable with software	Opt. potential-free relay changer and closer 230 VAC/1 A 24 VDC/3 A	2 analogue outputs for the emission of signals from signal generator or to transfer measured values of a measuring channel input, 4 digital outputs (1x trigger output) to solve control functions

Further products

MINIMESS®,
Measuring hoses a.s.o. ...



Further products

Sensors for pressure, temperature,
rotational speed, volume flow, a.s.o. ...



HYDROTECHNIK GmbH

Holzheimer Straße 94–96 | D-65549 Limburg
Tel. +49 (0) 64 31 40 04-0 | Fax +49 (0) 64 31 4 53 08
www.hydrotechnik.com | info@hydrotechnik.com



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