

Loop powered
Gas + Dust Ex- protection
TÜV 99 ATEX 1488



Properties

Ex-i Indicator in 4 ... 20 mA measure circuit

- Loop powered - trouble-free use in hazardous areas, without a separate power supply
- Connected like passive analogue indicators, voltage drop ca. 1V

Gas and Dust Explosion proof

- II 2 (1) G, Ex ia IIC T6 Gb
- II 2 D, IP65 T 70°C Db

Display

- 5- digits 7-Segment display 99999 Digits
- LC-Display, up to 30 mm digit height
- Fast bargraph for trend observation, (41 segments, refresh 4 times per second)

Housings

- Short control panel housing, protection class IP 65
 - (HxWxD) 48x96x62
 - (HxWxD) 72x144x80
- Field housing, protection class IP 65
 - (HxWxD) 133,5x138x64
- Field housing, dust Ex- proofed
 - (HxWxD) 140x140x72

Ergonomics

- µ-Processor technology for extensive configuration
- Separately scaleable bargraph (Zoom)
- Actual value control button
- Keeps the configuration by turn off
- Ability to change configuration during operation
- Exchangeable dimension signs

Options

- Alarm monitoring: 2 intrinsically safe alarm outputs
- Potential free contacts
- Ex i- Input for RESET
- Additional limit bargraph
- Limit function with hysteresis and time delay
- Normal open or normal closed circuit principle
- Curve fitting, e.G. cubic tank level metering

Service

- Customized calibration



Description

The 5-digit totalizer D122.Z operates in hazardous area and indicates the sum of measured values of a 4 up to 20 mA current circuit. The device gets its energy from the measure circuit, therefore an extra power supply or batteries are unnecessary. The totalizer measures the current, scales it, adds it to the previous values, and displays the sum finally on the LCD.

The present measured signal is also be displayed on a 41 segment bargraph. It's possible to scale the bar-graph separately. The totalizer D122 is available in several housings.

Furthermore with alarm monitoring option the totalizer its two intrinsically safe alarm outputs. These outputs change their state, when the measured value exceeds his alarm limits. It is possible to configure the outputs as normally open or normally closed circuits.

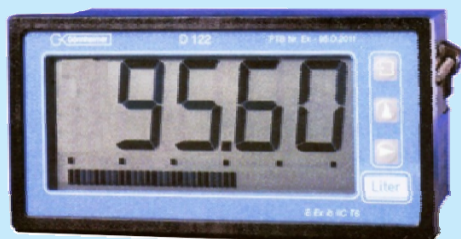
The alarm monitoring can refer to the sum or to the present measured value. In the last case the limits are displayed on a second bargraph. On one look you're sure that the measured value is in its limits.

Product photos

Short control panel housing



Digital Indicator D122.A.0.x.x

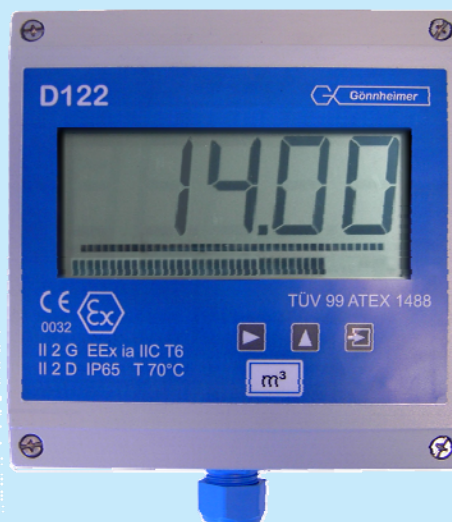


Digital Indicator D122.A.3.x.x

Field housing

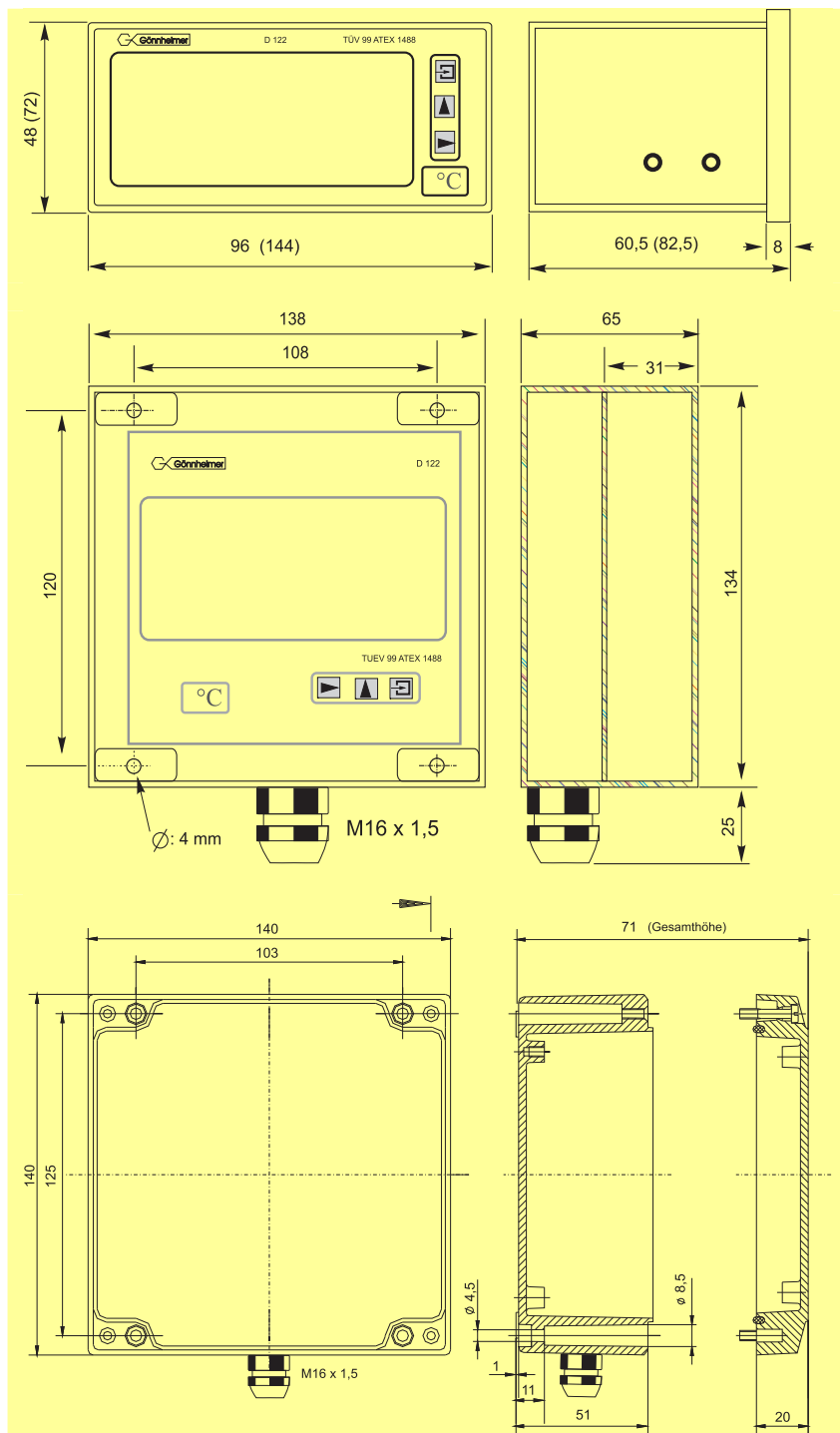


Digital Indicator D122.A.5.x.x



Digital Indicator D122.A.7.x.x

Dimensions



**Digital totalizer
D122.Z.0.x.x / (D122.Z.3.x.x)**

Digital totalizer D122.Z.5.x.x

Digital totalizer D122.Z.7.x.x

Technical Details

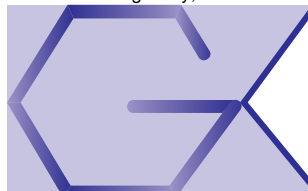
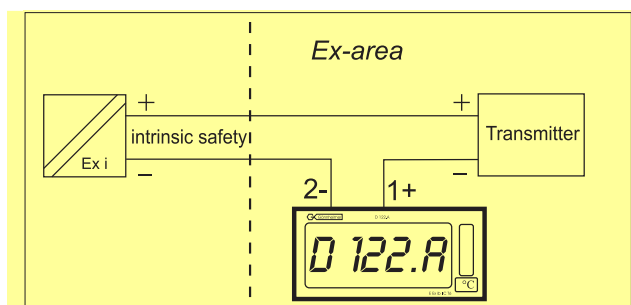
	D122.Z.			
	D122.Z.0	D122.Z.3	D122.Z.5	D122.Z.7
Ex- Protection	II 2 (1) G, Ex ia IIC T6 Gb			I.left+ II2D, Ex tb IIIC IP65 T70°C Db
EC- type certificate	TÜV 99 ATEX 1488			
Display	5- digits seven-segment LCD			
Digit height	15mm	30mm	30mm	30mm
Display range	00000 ... +99999			
Dimensions symbols	Selectable with defined symbols			
Decimal points	Selectable by keyboard			
Bargraph	41 segments			
Sample rate	0,25 s			
Alarm limits display Versions D122.Z.x.2.x	- Via bargraph - Flashing 'max.' or 'min' display			
Limit monitoring	(D122.Z.x.2.x only) By means of intrinsically safe control circuits (e.g. NAMUR or DIN 19234)			
Actual value control button	Direct display of the current in measurement circuit			
Measurement circuit	Intrinsically safe measurement circuit 4 ...20 mA, Voltage drop ca. 1V			
Measurement circuit limits	No-load voltage $U_i = 65$ V, short-circuit current $I_i = 160$ mA Internal inductance: 40 μ H, internal capacitance: 10 nF			
Alarm monitoring Output(s)	Intrinsically safe measurement circuit No-load voltage $U_0 \leq 30$ V; short-circuit current $I_k \leq 160$ mA; Power $P \leq 850$ mW;... Internal inductance: ≤ 40 μ H internal capacitance: is negligible			
Housing	Acc. to control-panel std. DIN 43700		-	
Protection class	Front panel up to IP 55		IP 65	
Dimensions HxWxD[mm]	48x96x62	72x144x80	133,5x138x64	140x140x72
Panel cut out	43,5 x 91,5	66 x 136,5	/	
Material	glass fibre strengthened Noryl	ABS	Aluminum	
Measuring error	0,1% \pm 2 digits referring to measure range			
Temperature coefficient	< 0,01% of measure range / K			
Ambient temperature limit	-10°C ...+45°C for temperature class 6 or -10°C ...+60°C for temperature class 5 Indicators for -20°C ambient temperature on inquiry			

Type code D122.Z series

Digital indicator D122	.X	.X	.X	.X
Type:				
Totalizer .....	.Z			
Totalizer + curve fitting .....	.ZS			
Housings:				
Control panel housing 48 x 96 mm (II 2 G) .....	.0			
Control panel housing 72 x 144 mm (II 2 G) ....	.3			
Field housing (30 mm digit height) (II 2 G) .....	.5			
Field housing 140 x 140 for (II 2 GD) .....	.7			
Digital output terminals:				
without .....	.0			
with 2 digital output terminals .....	.2			
with a reset input and a pulse output terminal .....	.3			
Additional Options:				
Internal zener barrier1 .....	.BM			
Internal Pt100- transmitter2 .....	.MU			

1: The zener barrier can not be placed into D122.x.0.x
2: Field housings only; zener barrier and Pt100 exclude themselves

Connection diagram



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