





5531A

- -4 digit 1/8 DIN (48 x 96 mm) loop-powered LCD display
- Easy push-button configuration
- Backlit LCD display is readable in low light conditions
- Display can be mounted in the safe area or in I.S. / Ex zone 2











Application

- The 5531 indicator is powered by the 4 to 20 mA current loop and is easily scaled to display the correct process value.
- · Because it does not require separate power wiring, the 5531 is perfect for remote display of process loops.
- The 5531A display can be panel mounted in the safe area or I.S. / Ex Zone 2 (gas).

Technical characteristics

- With a full measurement range of 3.6 to 23 mA, the 5531 is NAMUR NE43 compliant.
- The display can be push-button scaled to any range between -9999 to 9999, and reverse display action is possible.
- The LCD backlight can be set to half or full intensity for easy viewing in low light conditions.
- \bullet The display only requires 1.5 VDC, (75 Ω loop load), with the backlight turned off.
- · The input is HART transparent.
- The front push-buttons can be disabled to prevent unauthorized adjustment.

Mounting / installation

• Once panel mounted with the included gasket, the 5531 provides IP65 ingress protection.

Note

· Not suitable for new installations requiring certification to the latest ATEX standards - see ATEX certificate KEMA 05ATEX1044X and Declaration of conformity for details.

Applications Input signal: 4...20 mA 0 3 55.3 *l*

Order:

Туре	Input signal area classification	Field enclosure
5531A	420 mA from safe and zone 2	No

Environmental Conditions

Storage temperature	-20°C to +60°C
Calibration temperature	2028°C
Relative humidity	< 95% RH (non-cond.)
Protection degree	IP65, from front
Mechanical specifications	
Dimensions (HxWxD)	48 x 96 x 120 mm
Cut out dimensions	44.5 x 91.5 mm
Weight approx	200 g
Wire size, connector terminal 1 - 4	0.132.08 mm ² / AWG 2614 stranded wire
Screw terminal torque	0.5 Nm

Operating temperature.....-20°C to +60°C

Common specifications

Supply

Supply voltage...... Input loop-powered

Cable glands and cable diameter..... M16 x 1.5 / Ø 5...8 mm

Response time

 Response time (0...90%, 100...10%)
 < 1 s</td>

 Signal / noise ratio.
 > 60 dB

 Updating time.
 500 ms

 EMC immunity influence.
 < ±0.5% of span</td>

Input specifications

Current input

 Loop error detection, 4...20 mA: Low.
 ~ < 3 mA</td>

 Loop error detection, 4...20 mA: High.
 ~ > 24 mA

 Input range.
 4...20 mA

 Measurement range.
 3.6...23 mA

 Input voltage drop, without backlight.
 < 1.5 V @ 20 mA</td>

 Input voltage drop, with half backlight.
 < 6.5 V @ 20 mA</td>

 Input voltage drop, with full backlight.
 < 10.5 V @ 20 mA</td>

Observed authority requirements

LVD	2014/35/EU
EMC	2014/30/EU
RoHS	2011/65/EU
EAC	TR-CU 020/2011

Output specifications

Display

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Display readout	± 9999 (4 digits
Digit height	16 mm

Approvals

ATEX	KEMA 05ATEX1044 X
	(5531A/R1)