FlexView Display

LC-display with zoom on range

Configurable engineering unit, decimal point position, damping, measuring range, number of digits and linearisation table

Powered from the 4...20 mA input

Voltage drop 2 Volt

ø80 mm stainless steel housing

Configurable error limits and indication

Ex ia IIC T4/T5, ATEX II 1G

Description

The configurable display is used for the read-out of a 4...20 mA signal.

FlexView shows the measuring data on a full 4-digit LC-display, having a high readability even in faint light.

The enclosure in polycarbonate plastic ensures high resistance to moisture even under hard environmental conditions.

The most commonly used engineering units are pre-loaded and easily accessed. Besides that, a unit according to user wishes can be designed.

A user specified linearisation table for e.g. tank level measuring can be saved in FlexView. The table is used to compensate for a possible non-linearity between measuring data and the actual data, for example at volumetric measuring in an asymmetric tank.

A large number of displays for indication of pressure, temperature, weight and flow can be replaced by FlexView. The flexible concept ensures that FlexView can be used also for future applications.

Technical Data

Input

Measuring range	4...20 mA
Connections	2 screw terminals
Accuracy	Max. 0.1% + 1 digit
Loop drop	2 Volt
Sample time	Max. 1 sec.

User-configurable data

Measuring range	4...20 mA
Error indication	Configurable limits 3.5/23 mA Configurable indication
Zoom on range	min. 2 mA (range 4...20 mA)
Damping	0...30 sec.
Linearization table	30 points
Measuring unit (standard)	°C, °F, bar, PSI, kPa, MPa, l, Hz, mmHg, mH_2O, l/h, Ton, mA, mbar, m^3, ATM, %, m^3/h, "Hg
Measuring unit	7 x 20 pixels matrix
Dec. point position	.xxxx ; x.xxx ; xx.xx ; xxx.x ; xxxx

Display

Type	4 digits, 7 segment LCD, and a DOT matrix area 7 x 20 pixels
Display	-9999...+9999
Digit height	11.5 mm

EMC data

Immunity	EN 61326
Emission	EN 61326

Communication

FlexProgrammer	2-way communication

Test conditions

Operating temperature	23°C ± 2°C

Approval — Ex ia IIC T4/T5, ATEX II 1G

Internal inductivity	$L_i \leq 10$ µH
Internal capacity	$C_i \leq 25$ nF
Barrier data	$U \leq 28\ V_{dc}$; $I \leq 0.1$ A ; $P \leq 0.7$ W
Temperature class	T1...T4: $-20 < T_{amb} < 70$°C
	T1...T5: $-20 < T_{amb} < 60$°C

Environmental conditions

Operating temperature	-20...70°C
Optimal readability	-10...70°C
Storage temperature	-40...85°C
Humidity	Max. 98% RH, condensing
Vibrations	LRS, Test 2 and GL, Test 9.2.B
Mechanical tolerances	ISO 2768-m

Mechanical data

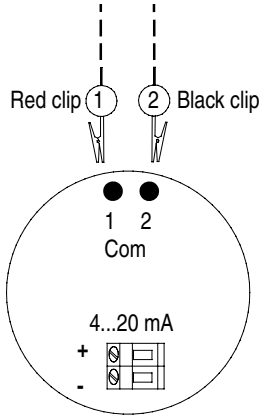
Dimensions	See dimensional drawing
Material	
Enclosure	Polycarbonate plastic.
ø80 mm housing and retaining ring	Stainless steel, AISI 304
Moulding compound	DP 460 (No silicone)
Protection class	IP 65 in ø80 mm housing
	IP 10 on terminals
Weight	170 g (incl. retaining ring)

Disposal of product and packing

According to national laws or by returning to Baumer

Configuration

Note:
Disconnect loop supply before connecting the FlexProgrammer to FlexView.



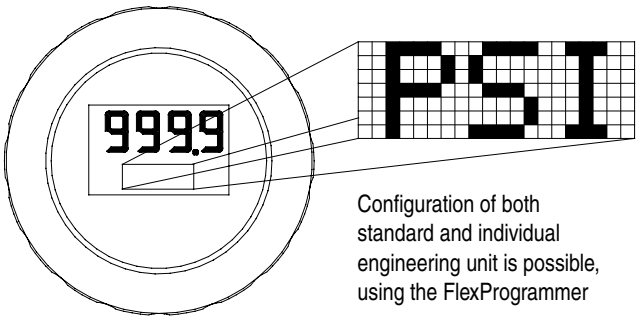
FlexView display, rear view

Accessories

The FlexProgrammer 9701 is a dedicated tool to configure all Baumer configurable products.

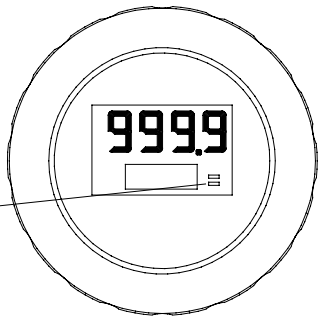
Type No. 9701-0001 complies:
FlexProgrammer interface unit
CD with the FlexProgram software and product drivers (DTM)
USB cable
Cable with 2 alligator clips

Dot Matrix Display

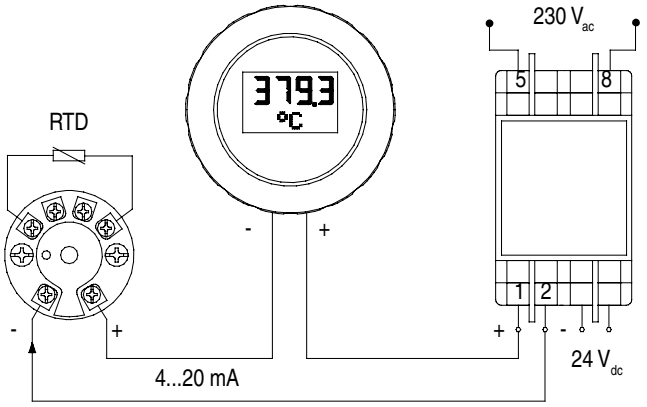


Configuration of both standard and individual engineering unit is possible, using the FlexProgrammer

REL or ABS display for pressure measurements



Example of Application



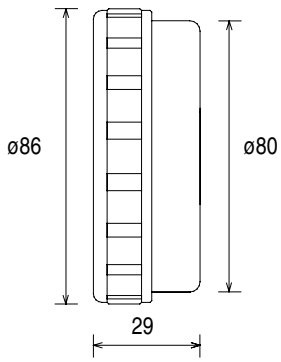
FlexTop 2211 FlexView Power Supply

Ordering Details - FlexView Display

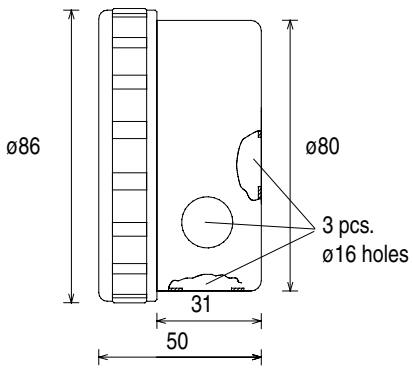
		81 46 - x2x
Type (Retaining ring is included, housing is not included)	**5´ digit**	
Standard version		5
Ex ia IIC T4/T5/ATEX II 1G		6
Configuration	**7´ digit**	
Not configured		4
Configured according to customer specifications		5

Accessories

[mm]



FlexView in ø80 mm stainless steel housing for panel mounting (No space for a transmitter).
Housing, type no. **81 46-910**



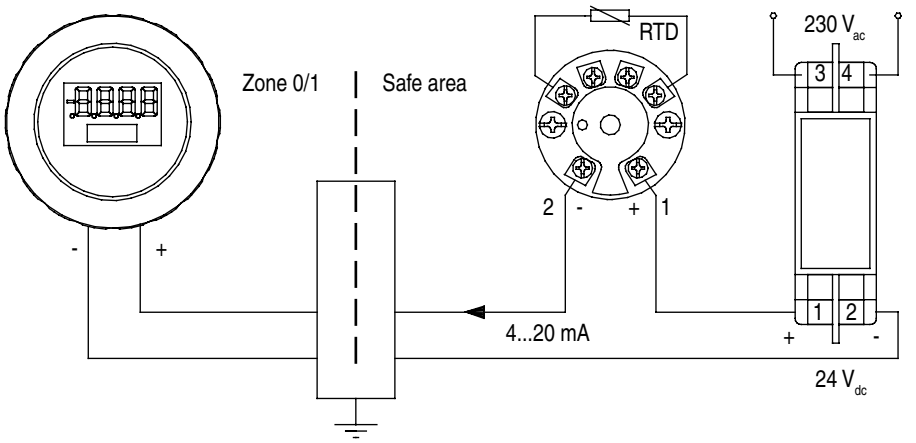
FlexView in ø80 mm stainless steel housing for temperature transmitter or sensor.
Housing incl. 1 blind plug, type no. **81 43-110**
For other accessories please refer to the data sheet „CombiTemp Accessories“

Ex Installation

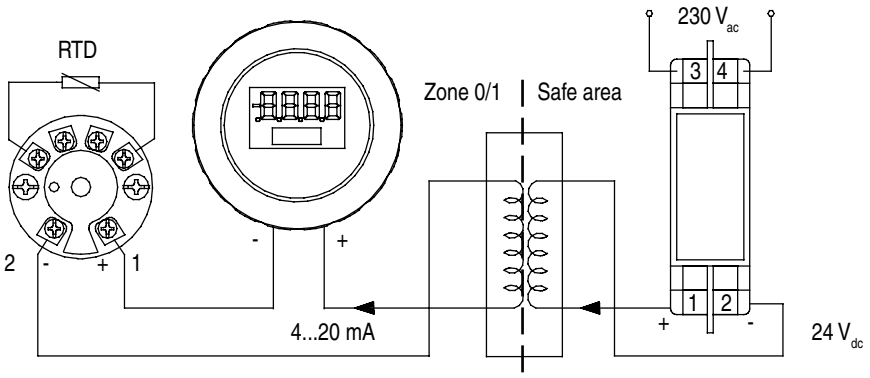
FlexView is approved for Ex ia IIC T4/T5 and ATEX II 1G in accordance with the current EU-directives.

The installation of FlexView must be done in accordance with prevailing guidelines for zone 0 or 1.

Ex-Applications



1) FlexView — Zener barrier — FlexTop 2211 — Power Supply



2) FlexTop 2211 — FlexView — Isolation Barrier — Power Supply

Cable parameters, Example 1)

	L_{max} [µH]	C_{max} [nF]
Barrier	4200	130
FlexView	10	25
Max. cable values	4190	105

Cable parameters, Example 2)

	L_{max} [µH]	C_{max} [nF]
Barrier	4200	130
FlexView	10	25
FlexTop 2211	1	10
Max. cable values	4189	95

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