

Model 136C Pressure Transmitters with Integrated 4-digit Display

Based on ceramic thick film technology, 136C pressure transmitters are designed for pressure measurements in general industrial applications. Equipped with an integrated 4-digit display, 136C pressure transmitters provide an easy solution for field testing applications, such as leakage testing for tanks.

Model 136C pressure transmitter is available with a variety of options for process connections: inner cavity type with protrude port (type Ia), inner cavity type with flat port (type Ib), internal thread type (type Ic) and flush diaphragm type (type IIa). Type I(a,b,c) process connections are used to measure gases or dilute liquids, while type IIa is specially used to measure paste or fluids with grains. Model 136C is specially suitable to measure corrosive pressure media with its ceramic diaphragm and 316L stainless steel pressure port.

The measuring ranges of model 136C span from 0~350 mbar to 0~300 bar. The output signal is 4~20 mA. The measuring accuracy is 0.5%fs (fs = full scale). Negative gauge pressure measurement is also possible on request. The integrated display provided can be either LCD for display purpose only, or smart LED which allows the user to set parameters such as zero, span, damping time and alarms.

Features:

- pressure ranges: 0~350 mbar, ..., 0~300 bar
- pressure types: absolute (A) and gauge (G)
- output signal: 4~20 mA with integrated 4-digit display
- accuracy: 0.5 %fs
- compensated temperature range: -10 ~ +60 °C
- materials: ceramic (pressure diaphragm); 316L SS (wetted part)
- environment protection:
IP 65 (connector), IP 66 (direct cable)
- display: 4-digit LCD (standard), 4-digit smart LED



136C (type Ia):
inner cavity
with protrude port



136C (type Ib):
inner cavity
with flat port



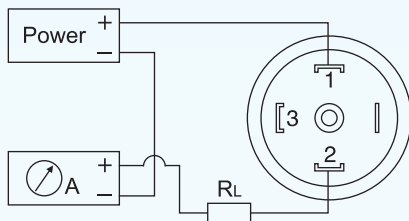
136C (type Ic):
inner cavity
with internal thread



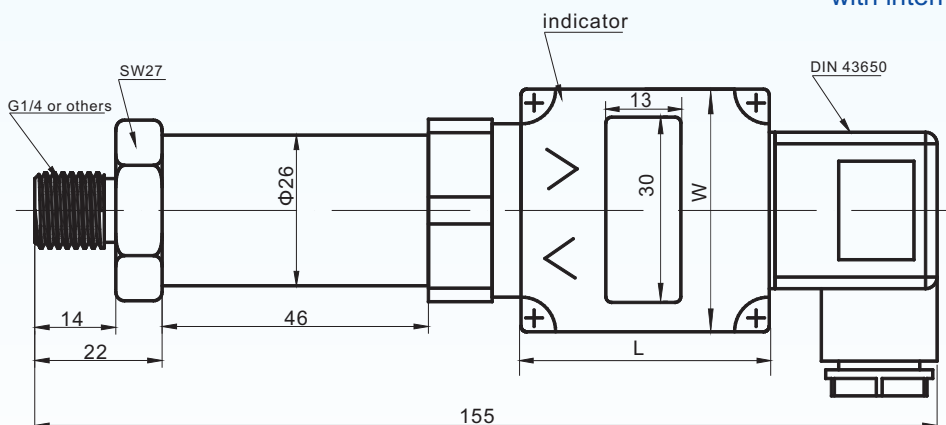
136C (type IIa):
flush diaphragm

Electrical connection:

(sketch of an example of 4~20 mA output signal configured to a DIN 43650 connector)



Dimensions:



dimensions of the display:

display	LxWxH* (mm)
smart LED	42.5x42.5x46
LCD	45x45x46

*: H is the thickness of the display.

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Technical Data:

parameters	units	specifications
pressure media	type Ia, Ib, Ic	gases or dilute liquids (compatible with the wetted parts' materials)
	type IIa	paste or fluids with grains (compatible with the wetted parts' materials)
pressure ranges and types*	bar, gauge (G)	0~0.5, ~1, ~2, ~3, ~5, ~10, ~20, ~30, ~50, ~100, ~160, ~200, ~300
	bar, absolute (A)	0~0.35, 0~0.5, 0~1, 0~2, 0~5, 0~10, 0~20
	bar, sealed G (SG)	NA
overload pressure	%FS	150
output signal		4~20 mA with integrated 4-digit display
accuracy	%FS	± 0.5
long-term stability of zero	%FS/year	± 0.3
power supply	Vdc	12, ..., 30 V (depending on the load resistance)
load resistance	Ω	250, ..., 1100
storage temperature range	°C	-40 ~ +125
operating temperature range	°C	-40 ~ +125
compensated temperature range	°C	-10 ~ +60
temperature coefficient of SPAN	%FS/°C	± 0.05
temperature coefficient of ZERO	%FS/°C	± 0.05
response time	ms	<2
process interface	type Ia, Ib, Ic	G1/4 (standard), 1/4 NPT, M14x1.5, others are available on request
	type IIa	G1/2
electrical interface	connector/cable	DIN 43650 connector, plug-in connector (standard)
		shielded PVC cable (3m length, 2-wire, Φ4.7mm)
materials	diaphragm	ceramic (Al2O3)
	wetted part	316L SS
	housing	304 SS
environment protection	IP rating	IP 65 (DIN 43650 connector, or plug-in connector) , IP 66 (direct cable)
integrated display		4-digit LCD with zero & span adjustment function.
		4-digit smart LED with zero & span adjustment, alarm setting functions
weight	g	~180

The listed specifications are subject to change without prior notice.

How to order: model-range,type-output-accuracy-process interface-electrical interface-display-customized specification (if any)
ordering code example: 136C(type Ia)-0/10barG-4/20mA-0.5%fs-G1/4-DIN43650-4 digits LCD



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Model 136C

Pressure Transmitters with Integrated 4-digit Display



Ordering Codes System:

example: 136C(I) - L12 - G - O3 - A4 - M5- E2 - D1 - S4 - P5 - C*

code	model
136C(Ia)	136C (type Ia)
136C(Ib)	136C (type Ib)
136C(Ic)	136C (type Ic)
136C(IIa)	136C (type IIa)

code	pressure ranges & types
L1	0~350 mbar, G
L2	0~500 mbar, G, A
L3	0~1 bar, G, A
L4	0~2 bar, G, A
L5	0~3 bar, G, A
L6	0~5 bar, G, A
L7	0~10 bar, G
L8	0~20 bar, G
L9	0~30 bar, G
L10	0~50 bar, G
L11	0~100 bar, G
L12	0~160 bar, G
L13	0~200 bar, G
L14	0~300 bar, G
L15	other ranges on request

code	pressure type
G	gauge
A	absolute

code	output signal
O3	4~20 mA, + 4-digit display

code	accuracy
A4	0.5 %fs

code	customer especially requested item
C*	This is a customized code given by the customer, who wants to use this code to define his desired or wished specific item for the sensor to be ordered. This code starts with a "C" followed by a "*".
	Once the customer desired or wished item is confirmed by BCM sales people, the customer can write this code "C*" as part of his ordering code on his order sheet.
	If the customer does not have such special request, this "C*" code can be omitted.

code	environment protection
P5	IP 65 (connector for electrical connection)
P6	IP 66 (cable for electrical connection)

code	power supply
S4	12, ..., 30 V

code	display
D1	4-digit LCD (standard)
D2	4-digit smart LED

code	electrical interface
E2	DIN 43650 connector
E3	4-pin plug-in connector, plus mating connector
E4	2-conductor shielded PVC cable (Φ5 mm, length 2 m)
E5	other electrical interface available onrequest

code	process interface
M2	G1/4 (for type I only)
M3	1/4 NPT (for type I only)
M4	M14 x 1.5 (for type I only)
M5	G1/2
M6	other thread available on request

Explanation of the Ordering Code: 136C(Ia) - L12 - G - O3 - A4 - M5- E2 - D1 - S4 - P5 - C*

Model 136C (type Ia) pressure transmitter of inner cavity construction for 0~160 bar gauge pressure measurement application, the transmitter has 4~20 mA output signal with integrated 4-digit LCD display. The measuring accuracy of this transmitter is 0.5%fs, the process interface is G1/2, the electrical interface is DIN 43650 connector, the power supply is 12, ..., 30 V depending on load resistance, and the environment protection grade is IP 65. The customer has indicated the customized

specifications on the order sheet by using the code "C*" (for instance, C* = overload pressure has to be 200%FS), and this customized specification has to be confirmed by BCM sales people on the <<Order Confirmation>>.



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