

Model 136S Pressure Transmitter with Display for Field Applications



Based on BCM silicon piezoresistive technology, 136S pressure transmitters are in mass production for pressure measurements in general industrial applications. Equipped with an integrated 4-digits display, 136S pressure transmitters provide an easy solution for field testing applications, such as leakage testing for tanks.

Model 136S 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.

The measuring ranges of model 136S span from 0~0.35bar to 0~600bar. The output signal is 4~20mA. The measuring accuracy is 0.5%fs (fs = full scale). Negative gauge pressure measurement is also possible on request. The integrated LCD display has its parameters adjustable, such as displayed value of both lower-limit and upper-limit measuring pressure, displayed decimal position, unit of displayed unit, and damping.

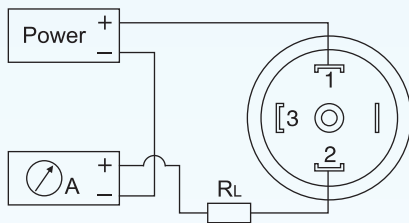
Features:

- pressure ranges: 0~0.35bar, ..., ~600bar
- pressure types: absolute (A), gauge (G) and sealed gauge (S)
- output signal: 4~20mA with integrated 4-digits display
- accuracy: 0.5%fs
- compensated temperature range: -10 ~ +70°C
- materials: 316L SS (pressure membrane)
316 SS (wetted parts), 304 SS (housing)
- housing protection: IP65 (connector);
IP66 (direct cable)
- display: 4-digits LCD



Electrical connection:

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



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



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

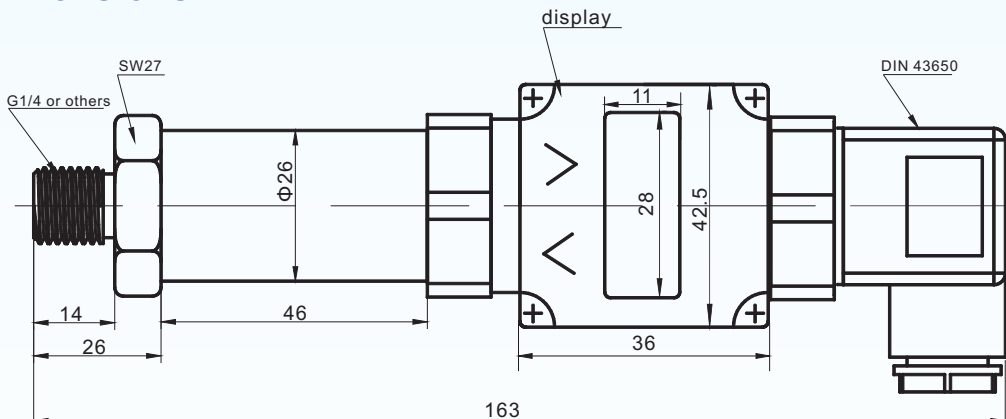


136S (type Ic):
inner cavity
with internal thread



136S (type IIa):
flush diaphragm

Dimensions:



dimensions of the display:

display	LxWxH* (mm)
LCD	36x42.5x40.5

*: H is the thickness of the display.

BCM SENSOR TECHNOLOGIES BVBA

Model 136S

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Technical Data:

Parameter	Units	Specifications
pressure media		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)	0~0.35, ~0.6, ~1, ~1.6, ~2.5, ~4, ~6, ~10, ~25, ~40
	bar, absolute (A)	0~1, 0~1.6, 0~2.5, 0~4, 0~6, 0~10, 0~16, 0~25, 0~40
	bar, sealed G (SG)	0~10, ~16, ~25, ~40, ~60, ~100, ~160, ~250, ~400, ~600
proof pressure	%fs	150
burst pressure	%fs	200
output signal		4~20 mA with integrated 4-digits display
accuracy	%fs	≤ ±0.5 (standard), ≤ ±1
long-term stability of zero	%fs/year	≤ ±0.3
power supply	Vdc	12, ..., 30 V
load resistance	Ω	250~1100
compensated temperature range	°C	-10~+70
operating temperature range	°C	-30~+70
storage temperature range	°C	-40~+85
temperature coefficient of span	%fso/°C	≤ ±0.03
temperature coefficient of zero	%fso/°C	≤ ±0.03
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	316L SS
	wetted part	316 SS
	housing	304 SS
environment protection	IP rating	IP65 (DIN 43650 or plug-in connector) , IP66 (cable)
integrated display		4-digits LCD with zero & span adjustment function.
weight	g	~180

The listed specifications are subject to change without prior notice.

*: On request, 136S is available for negative pressure measurement in gauge pressure. The negative pressure range is half of the positive pressure range, but not beyond -1 bar. For example, if the pressure range of the concerned 136S pressure transmitter is 0~1 barG and this 136S is to be specifically used for negative pressure measurement, then the 136S pressure range would be -0.5~+1 barG.

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Ordering Information

position (pos.) 1: model								
136S(Ia)	136S(Ib)	136S(Ic)	136S(IIa)					
pos. 2: pressure ranges and references								
0.35bar G	4bar G, A, S	40bar G, A, S	400bar S	G: gauge pressure				
0.6bar G	6bar G, A, S	60bar S	600bar S	A: absolute pressure				
1bar G, A	10bar G, A, S	100bar S		S: sealed gauge				
1.6bar G, A	16bar G, A, S	160bar S						
2.5bar G, A	25bar G, A, S	250bar S						
pos. 3: output signal								
4/20 mA								
pos. 4: accuracy								
0.5%fs (standard)			0.1%fs					
pos. 5: mechanical interface								
G1/4 (standard) (for type I only)								
1/4NPT (for type I only)								
M14x1.5 (for type I only)								
G1/2								
pos. 6: electrical interface								
DIN43650 (standard)								
4-pin circular plug-in connection, plus mating connector								
Φ5,2-core,shieldedPVC,2m = Φ5mm, 2 cores, shielded PVC cable, L = 2m (this length should be specified)								
pos. 7: display								
4 digits LCD								
pos. 8: environment protection								
IP65			IP66					
pos. 9: customized specifications								
“(*)” is necessary only if any customized parameter is required, otherwise it is neglectable.								
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9

Examples of Ordering Code

- standard transmitter:

136S(Ia)-16barG-4/20mA-0.5%fs-G1/4-DIN43650-4 digits LCD-IP65

- customized transmitter:

136S(IIa)-50barG-4/20mA-0.5%fs-G1/2-(Φ5,2-core,shieldedPVC,2m)-4 digits LCD-IP66-(*)

(*): Customized pressure range = 0~50barG.



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