



### Description:

Electronic measuring sensor Series 3311 serves for transformation of air pressure value to electric signal. It is designed for operation in meteorology and environmental observation, e.g. automatic weather stations, at airports, on research vessels, at industrial sites, for mobile measuring systems etc.

### Construction and Mode of Operation

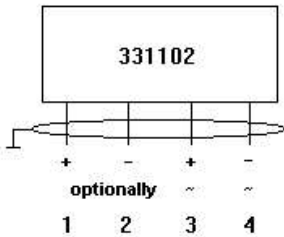
With a piezoresistive pressure sensor and signal conditioning electronic the actual air pressure will be transformed into a proportional standardised electrical output. The dust and water resistant synthetic housing (ABS) of the sensor will protect the electronic against the influence of the weather. A sinter filter on the bottom of the housing ensures the necessary pressure balance.

### Technical Data

linearity	: $\pm 0,5$ hPa
temperature error	: max. $\pm 0.006$ % FS /K -20 ... 40°C
temperature hysteresis	: $\pm 0.5$ hPa (remaining offset shift after exposure at -25 ... 40°C)
Vcc offseterror	: max $\pm 0.01$ % FS / V (offset shift with supply voltage different from test certificate)
position error	: $\pm 0.1$ hPa for 90° (0° with perpendicular wall mounting)
settling time	: ca. 10 min
measuring range	: 900 ... 1050 hPa
working range	: 200 ... 1060 hPa
over pressure	: 0 ... 4000 hPa
operating voltage	
331102	: 10...28 V DC/24VAC
331103/331104	: 13...28 V DC/24VAC
operating current	
331102	: typical 40 mA, max. 80 mA
331103	: typical 40 mA, max. 80 mA
331104	: typical 40 mA, max. 80 mA
electronic output	
331102	: 0 ... 5 V (for measuring range), load resistance > 10 kOhm
331103	: 4 ... 20 mA (for measuring range), load resistance 0 ... 500 Ohm
331104	: 0 ... 20 mA (for measuring range), load resistance 0 ... 500 Ohm
mounting	: on perpendicular walls with two screws through two holes with an diameter of 4.5mm outside of the protected area of the housing
operating temperature	: -25 ... 40 °C
protecting	: IP 54
cable	
331102	: LiYCY 4 x 0,2 mm <sup>2</sup> ;
331103, 331104	: LiYCY 6 x 0,2 mm <sup>2</sup> .
dimension:	: 115 x 65 x 40 mm, weight approx. 100 g

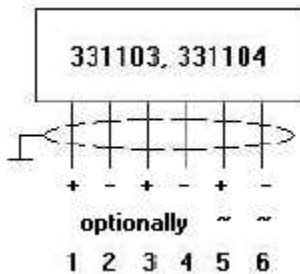
**Connection chart**

**331102**



position	colour	connection
1	yellow	output 0...5VDC
2	green	output ground
3	red	supply: +10...28 VDC, optionally 24 VAC
4	blue	supply ground, optionally 24 VAC
	green/yellow	cable screen

**331103, 331104**



position	colour	connection
1	yellow	5V output signal
2	green	5V output ground
3	red	20 mA output signal
4	black	20 mA output ground
5	white	supply 13...28 VDC, optionally 13...24 VAC
6	brown	ground supply, optionally 13...24 VAC
	green/yellow	cable screen

The Fischer company reserves the right to make changes/improvements to their products and to their specifications at any time without prior notice to anyone.



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