

Barometric pressure

Technical features - MODELS



Barometers

Sensors designed for accurate measurement of barometric pressure. DQA240.1#C is more suitable for LSI-LASTEM data acquisition systems (0-1Vdc output). DQA250 is suitable in applications where very high accuracy (0,3 hPa) is required.

Order numb.	DQA240.1#C (1)	DQA250.1 (2)
Output	0÷1 V	0÷1 V
Power supply	10÷14 Vdc	10÷30 Vdc
Power consumption	0,25 W	4 mA
Accuracy	0,5 hPa	0,3 hPa (15÷25°C)
Thermal drift	Compensated into the range: 10÷60°C. Drift in the range-20÷10°C: -0,025 hPa/°C	< 0,2 hPa
Calibration certificate	Includes	
Principle	Piezometric	
Range	800÷1100 hPa	
Maximum pressure limit	2000 hPa	
Protection	IP43	IP32



Sensors designed for accurate measurement of barometric pressure and integration with third party acquisition systems requiring standard analogue output. Calibration is made using trimmers. DQA223 model uses a thermocompensation system to reduce the thermal effect on the pressure measurement. On DQA801 the pressure range is selectable by dip-switches.

Order numb.	DQA801	
	Output	0/4÷20 mA
	Power supply	10÷30 Vdc/ac
	Power consumption	0,5 W
	Accuracy	0,5 hPa
	Thermal drift	Compensated into the range: 10÷60°C Drift in the range-20÷10°C: -0,025 hPa/°C
	Principle	Piezometric
	Range	Default: 800÷1100 hPa (selectable 600÷1100 hPa, 700÷1100 hPa)
	Maximum pressure limit	2000 hPa
	Protection	IP65
	Operative temperature	-40 85°C

Accessories	Order numb.	
	DWA505	Cable L = 5 m for DQA801
	DWA510	Cable L = 10 m for DQA801
	DWA525	Cable L = 25 m for DQA801
	DWA526	Cable L = 50 m for DQA801
	DWA527	Cable L = 100 m for DQA801
	MG2251	7 pin free female connector
	DYA078	Support for DQA801 with radiant shield Connection to DYA049 collar
	DYA049	Mast-mounting device for ø 45÷65 mm pipe



Absolute Pressure

Models



High precision absolute pressure sensor
DQA251 is a high precision instrument for absolute pressure, QNH, QFE, QFF measurements. Long-term stability and a web interface make it the perfect instrument for professional acquisition systems and meteorology, aviation. Heavy duty enclosure IP67, allows an easy installation also in harsh environmental conditions. This sensor is design according to WMO and ICAO standards.

Order numb.	DQA251	
	Output	Modbus on RS485; Modbus on TCP-IP, Lan-Ethernet; autosending on RS232, socket, FTP (SDI12 Optional)
	Measurement	Absolute Pressure QNH, QFE, QFF according to CIMO/ET-Standard-1/Doc.10 (20.XI.2012) WMO -2012
	Memory	128 Mb (about 3 years measurements)
	Data display	-by built-in LCD 2x24 chr display - by web-browser on a connected PC (charts and numeric values)
	Data download	Last 30 days measurements in Excel and ASCII files by Ethernet port
	Power supply	10÷30Vdc
	Power consumption	<0,6 W (~ 45mA @ 12Vdc)
	Accuracy	±0.1 hPa (@20°C) ±0.20 hPa (-40÷60 °C);
	Thermal drift	Compensated into the range: -40÷60°C.
	Range	500÷1.200 hPa
	Linearity	±0.1hPa / <0.05hPa
	Resolution	0.01 hPa
	Time constant	2 s
	Long term stability	<±0.1hPa/year
	Installation altitude	-700÷7200 m sl
	Calibration certificate	Included (ISO17025)
	Maximum pressure limit	3000 hPa
	Principle	Piezometric
	Protection	IP-67
	Weigh	1 Kg
	Installation	On DIN bar