

DTD

Very low pressure calibration system



- accuracy 0.05%
- resolution 1/4000 (2.5×10^{-4})
- DTD2: range 0 to 2 mbar, resolution 0.0005mbar (0.05Pa)
- DTD20: range 0 to 20 mbar, resolution 0.005mbar (0.5Pa)
- front panel reset
- variable display intensity
- bi-directional range option
- option: display in Pa, mmWG, inH2O (on request)
- rugged, stable, cost effective

Applications

- Calibration
- Maintenance
- Laboratory

NICHESENSOR

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Represented by

DTD

Very low pressure calibration system

DESCRIPTION: the DTD series calibration system

Accurate measurement of very low differential or gauge pressures can be a difficult operation generally involving the use of complex, expensive and fragile equipment. The DTD system offers a straightforward solution. The DTD system comprises of two high quality elements:

- a PAXP® display
- a DT series differential sensor

These two elements are accurately paired to offer high performances at minimal cost. The extreme ruggedness (see the over-pressure capability) of this system makes it an ideal calibration tool for use in the laboratory or maintenance department.

®PAXP is a Red Lion product.



RANGES AND PERFORMANCES

model	range	resolution	accuracy*	sensor	over-pressure rating**
DTD20	0 to 20 mbar	0.005 mbar	0.05% (1Pa)	DT_LP	3 bar
DTD10bi	-10 to +10 mbar	0.005 mbar	0.05% (1Pa)	DT_LP	3 bar
DTD2	0 to 2 mbar	0.0005 mbar	0.05% (0.1Pa)	DT_ULP	500 mbar
DTD1bi	-1 to +1 mbar	0.0005 mbar	0.05% (0.1Pa)	DT_ULP	500 mbar

*= non-linearity, repeatability, hysteresis at reference temperature calculated by comparison to the best straight line (BSL)
 **= the over pressure that is admissible in either direction requiring eventually a minimal setting if a significant zero shift has occurred.
 note: in order to obtain the best results allow a 20 minutes warm-up time; cancel out the possible zero offset by pressing the RESET key

stability	PAXP® display	DT sensor accuracy	DTD system accuracy	
18 to 28°C	0.03%rdg*+2mV	0.1%rdg	0.15%rdg	rdg= reading (stability after reset)
0 to 50°C	0.12%rdg+2mV	0.5%rdg	0.65%rdg	

SENSOR

Please refer to DT_ULP and DT_LP datasheets

OPTIONAL PRESSURE FITTINGS

A	quick connect for semi-rigid 4 mm OD plastic tubing
B	quick connect for semi-rigid 6 mm OD plastic tubing
C	barbed fitting for 4 mm OD plastic tubing
D	barbed fitting for 6 mm OD plastic tubing
E	1/8 BSPP female brass
F	1/8 NPT female brass
G	Scanivalve TUBN-040 (dia 1.02mm)
H	Scanivalve TUBN-063 (dia 1.59mm)

SUPPLY LIST

The chain comprises of the sensor, the display and the connecting cable, but does not include the mains cable to the display.

DISPLAY

DESCRIPTION	1/8DIN analog input panel meter
DISPLAY	5-digit 14mm red sunlight readable LEDs variable intensity display
FUNCTIONS	zeroing by Reset key display and program lock-out*
CONNECTIONS	screw terminal AWG30 (0.25mm) to AWG14 (2.55mm)
POWER SUPPLY	85 to 250Vac
* = please refer to user instructions	

RELATED PRODUCTS

VV = dual action mechanical ultra low pressure generator
 DTD+ very low differential pressure calibrator