



PRESSURE

DIFFERENTIAL LOW PRESSURE TRANSMITTER

DPA3 SERIES

DESCRIPTION

The **Kele DPA3 Series Differential Low Pressure** is based on a piezoresistive, silicon sensing element which senses Differential Pressure and provides an analog output. The hinged cover on the **DPA3** can be easily opened using the integrated locking tab on the side of the enclosure. This allows for easy access to the zero function and field selectable ranges and outputs. The **DPA3 Series** also includes an optional, five digit LCD for installation and monitoring support.

The standard accuracy of this series is $\pm 0.5\%$ FSO. Field selectable analog outputs include 0-5 and 0-10 VDC, or 4-20mA which correlate to a uni or bidirectional pressure range from 0-0.1" up to 0-40" of water column, depending on your model selection. Each unit has up to 8 field selectable, uni or bidirectional ranges.

FEATURES

- $\pm 0.5\%$ FSO (NIST available)
- Field selectable output 0-5V, 0-10V, 4-20 mA
- 0.1 to 40" WC (model dependent)
- 8 Files selectable ranges

NEW!

Kele



DPA3



APPLICATIONS

- Building and duct static pressure
- Filter monitoring
- Air flow measurement
- Process control

SPECIFICATIONS

Supply Voltage	4-20 mA output; 16-36 VDC (250 Ω load max.) / 22-36 VDC (500 Ω load max.)	Operating Temperature	-4 to 185°F (-20 to 85°C)
Supply Current	0-5 VDC / 0-10 VDC output; 16-36 VDC / 24 VAC (+/-10%)	Compensated Temperature Range	32 to 122°F (0 to 50°C)
Output Signals	4-20 mA output; 24 mA minimum / 0-5 VDC / 0-10 VDC output; 6 mA max.)	Storage Temperature	-22 to 185°F (-30 to 85°C)
Response Time	Current output; 4-20 mA, 2-wire loop powered (standard); (Current limited to 21.4 mA max)	Operating Humidity	10 to 95% RH, non-condensing
Output Data Rate	Voltage signals; 0-5 VDC/ 0-10 VDC Field selectable, 3-wire; output limited @ 5.25 & 10.5 VDC)	Media Types	Dry air or inert non-conductive gases
Pressure Ranges	(0-100% FSO) 8 seconds	Enclosure Material	Flame Retardant Polycarbonate; UL94-5VA
Accuracy	Multi range units (see ordering guide)	Wiring Connections	Finger pushbutton (spring) terminal blocks; accepts 16-24 AWG wires
Zero Function	$\pm 0.5\%$ FSO	Conduit Knockouts	Watertight cordgrip installed (1/2" NPT conduit fittings accepted when Cordgrip removed)
Thermal Effects	Pushbutton Zero Function	Pressure Fitting Material	Nickel Plated Brass or Stainless Steel
Proof Pressure or Burst Pressure	$\pm 0.067\%$ FSO /°F (0.12% FSO/°C)	Tubing Size Accepted	1/4" O.D. x 0.170" I.D. Poly Tubing
	DPA3-1, Proof: 270 inWC (67.2 kPa) / Burst: 415 inWC (103.3 kPa) for 1 inWC (249.8 Pa)	Dimensions	4.25"L x 2.25"W x 6.125"H
	DPA3-10, Proof: 350 inWC (87.12 kPa) / Burst: 550 inWC (139.9 kPa) for 10 inWC (2490.8 Pa)	Weight	
	DPA3-40, Proof: 562 inWC (140 kPa) / Burst: 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa)	No Pitot Tube or Din Rail	Non-LCD Display Version: 0.53 lbs (0.240 Kg) LCD Display Version: 0.58 lbs (0.263 Kg)
		With Pitot Tube & Din Rail	Non-LCD Display Version: 0.80 lbs (0.363 Kg) LCD Display Version: 0.85 lbs (0.385 Kg)
		Approvals	CE, RoHS, REACH, WEEE
		Warranty	5 years



DIMENSIONS



Front View



Right View



Top View

WIRING

Shielded is recommended cable with 16 to 24AWG conductors. The hinged cover must be opened to connect wires to the unit's finger push-button terminal blocks. Each unit can be configured to three output signals: 4-20mA, 0-5V or 0-10V. Use the table below to determine the proper wiring for your application.

Output Signal	Output Mode (SW1)	Output Signal (SW3 Position 4)	Supply Voltage	Wire Connections			
				Red	Black	White	Yellow
0-5 VDC	Vout	5V	VAC/VDC	V+	COM	VOUT	n/c
0-10 VDC	Vout	10V	VAC/VDC	V+	COM	VOUT	n/c
4-20 mA	mA	n/a	VDC	V+	n/c	n/c	IOUT

n/a=Not Applicable

n/c=No Connection

ORDERING INFORMATION

MODEL	DESCRIPTION
DPA3-1	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-0.1", 0-0.2", 0-0.5", 0-1" WC Bidirectional +/-0.1", +/-0.2", +/-0.5", +/-1" WC, No LCD
DPA3-1-LCD	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-0.1", 0-0.2", 0-0.5", 0-1" WC Bidirectional +/-0.1", +/-0.2", +/-0.5", +/-1" WC, With LCD
DPA3-10	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-1", 0-2", 0-5", 0-10" WC Bidirectional +/-1", +/-2", +/-5", +/-10" WC, No LCD
DPA3-10-LCD	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-1", 0-2", 0-5", 0-10" WC Bidirectional +/-1", +/-2", +/-5", +/-10" WC, With LCD
DPA3-40	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-10", 0-20", 0-30", 0-40" WC Bidirectional +/-10", +/-20", +/-30", +/-40" WC, No LCD
DPA3-40-LCD	Differential Low Pressure, 4 to 20 mA, Unidirectional 0-10", 0-20", 0-30", 0-40" WC Bidirectional +/-10", +/-20", +/-30", +/-40" WC, with LCD
PT-DPA3	Static Pressure Tube, 6.75" long installed into the back of Enclosure
DRC-DPA3	DIN-Rail Clip

NOTE: 3 Point and 5 Point NIST Certificates are available by adding a -3P or -5P at the end of the part number.