



PRESSURE

AIR DIFFERENTIAL PRESSURE VELOCITY TRANSDUCERS KDP2M SERIES

DESCRIPTION

The Kele KDP2M Series differential pressure / air velocity transducers can measure either air pressure or velocity with the flip of a switch. The KDP2M is available in three installation configurations: duct with static pressure tube, panel or universal. Duct and panel models have two pressure and velocity options: 0-1" WC / 0-3,000 ft/min or 1-10" WC / 3,000-6,000 ft/min with four field-selectable sub-ranges. The universal model comes in one pressure/velocity range: 0-10" WC / 0-7,000 ft/min with seven field-selectable sub-ranges for pressure and eight for velocity. All variants are available with and without display. The KDP2M has an IP65/NEMA 4 environmental rating and a 5-year limited warranty.

FEATURES

- Comes in one pressure/velocity range
- Available with and without display
- 5-year limited warranty
- NEMA 4 (IP65) enclosure

APPLICATION

Duct static pressure
Building or room pressure
Filter status / maintenance
Air flow measurement
Lobbies or Isolation rooms

Kele

CE



KDP2M-U

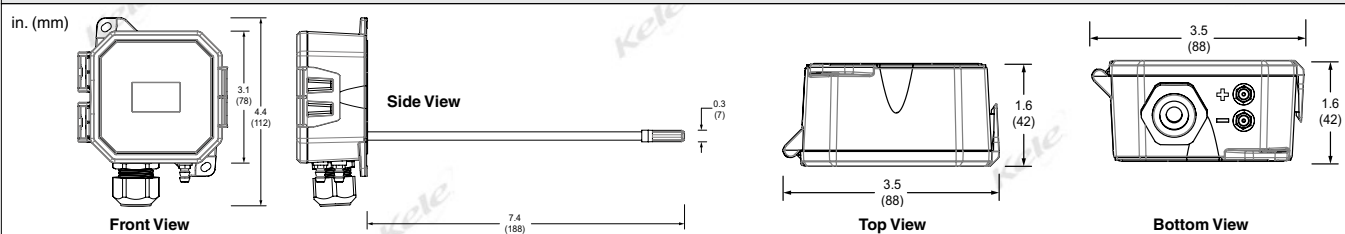


KDP2M-D

SPECIFICATIONS

Supply Voltage Three-wire Volt Mode 24 VAC or 12-30 VDC Two-wire mA Mode 12-30 VDC Accuracy Pressure $\pm 1\%$ FS (combined linearity and hysteresis), Velocity ± 90 ft/min (± 0.45 m/s) plus 5% of measured value Signal Output Field-selectable 2-wire, 4-20 mA 750 Ω @ 24 VDC max., 24 Vac/dc or 3-wire 0-5V/0-10V @ 5K Ω min. Adjustment Unidirectional or bidirectional, DIP switch selectable Normal Measurement Range 4 Field-Selectable Sub-Ranges Low Range 0-1" (0-3,000 ft/min) WC HI Range 1-10" (3,000-6,000 ft/min) WC Universal 0-10" (0-7000 ft/min) Overpressure Burst 5 psid (34.5 kPa) Proof 3 psid (20.6 kPa)		Display Pressure Mode 3-1/2 digit LCD, indicates \pm pressure, overrange indicator Velocity Mode 4-1/2 digit LCD, indicates velocity, overrange indicator Velocity Formula STD PITOT $4005 \times \sqrt{\Delta P(WC)}$ Operating Temperature 32 to 140°F (0 to 60°C) Operating Humidity 100% RH non-condensing Media Compatibility Dry air or inert gas Process Connection Brass Barb Wiring Terminals 2-(4-20 mA), 3-(0-5V/0-10V) Enclosure Rating IP65, NEMA 4 Dimensions 3.5"W x 4.4"H x 1.6"D (88 x 112 x 42 cm) Pressure Probe 7.4" (18.8 cm), 0.3" (0.7 cm) Weight 0.6 lb (0.28 Kg) Approvals CE Warranty 5 years	
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DIMENSIONS

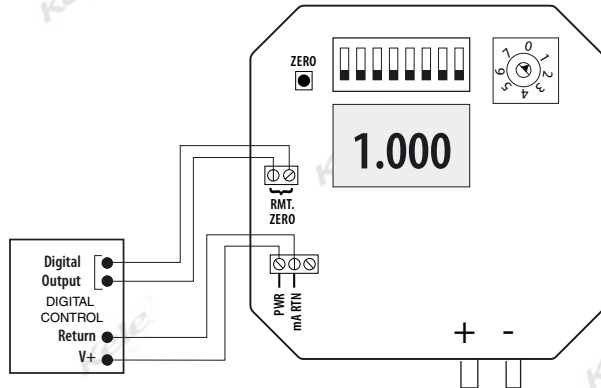




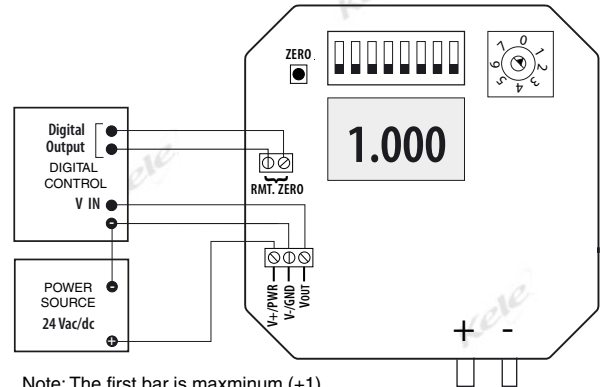
WIRING

Connect the transmitter to the control system and power supply as indicated below.
Optional: Connect the ZERO terminals to the digital output (contact closure) of the control system.

2-wire, 40-20 mA Current Loop Output



3-wire, 0-5 V/10-10 Voltage Output



Note: The first bar is maximum (+1)
Connect desired external tubing to the KDP2M.

Range 1

WC / ft/min	Pa / m/s
0 0 to 0.1 in. WC	0 0 to 25 Pa
1 0 to 0.25 in. WC	1 0 to 50 Pa
2 0 to 0.5 in. WC	2 0 to 100 Pa
3 0 to 1 in. WC	3 0 to 250 Pa
4 0 to 500 ft/min	4 0 to 2.5 m/s
5 0 to 1000 ft/min	5 0 to 5 m/s
6 0 to 2000 ft/min	6 0 to 10 m/s
7 0 to 3000 ft/min	7 0 to 15 m/s

Range 10

WC / ft/min	Pa / m/s
0 0 to 1 in. WC	0 0 to 250 Pa
1 0 to 2.5 in. WC	1 0 to 500 Pa
2 0 to 5 in. WC	2 0 to 1000 Pa
3 0 to 10 in. WC	3 0 to 2500 Pa
4 0 to 3000 ft/min	4 0 to 15 m/s
5 0 to 4000 ft/min	5 0 to 20 m/s
6 0 to 5000 ft/min	6 0 to 25 m/s
7 0 to 6000 ft/min	7 0 to 30 m/s

Range 010

(P) Pressure Mode	(V) Velocity Mode	(P) Pressure Mode	(V) Velocity Mode
0 0 to 0.1 in. WC	0 0 to 500 ft/min	0 0 to 25 Pa	0 0 to 2.5 m/s
1 0 to 0.25 in. WC	1 0 to 1000 ft/min	1 0 to 50 Pa	1 0 to 5 m/s
2 0 to 0.5 in. WC	2 0 to 2000 ft/min	2 0 to 100 Pa	2 0 to 10 m/s
3 0 to 1 in. WC	3 0 to 3000 ft/min	3 0 to 250 Pa	3 0 to 15 m/s
4 0 to 2.5 in. WC	4 0 to 4000 ft/min	4 0 to 500 Pa	4 0 to 20 m/s
5 0 to 5 in. WC	5 0 to 5000 ft/min	5 0 to 1000 Pa	5 0 to 25 m/s
6 0 to 10 in. WC	6 0 to 6000 ft/min	6 0 to 2500 Pa	6 0 to 30 m/s
7 0 to 10 in. WC	7 0 to 7000 ft/min	7 0 to 2500 Pa	7 0 to 35 m/s

ORDERING INFORMATION

MODEL	DESCRIPTION
KDP2M	Air Differential Pressure with Air Velocity
D	Duct (Includes 7.4" probe)
P	Panel
U	Universal (Panel and Duct) NOTE: MUST USE 010 PRESSURE RANGE OPTION
1	0-1" WC (0.10, 0.25, 0.50, 1.0 Selectable)
10	0-10" WC (1.0, 2.5, 5.0, 10.0 Selectable), 0 to 3000 Ft./Min (0 to 15 M/S), 0 to 6000 Ft./Min (0 to 30 M/S)
010	0.1-10" WC (0.10, 0.25, 0.50, 1.0, 2.5, 5.0, 10.0 Selectable), 0 to 7000 Ft./Min (0 to 35 M/S) NOTE: USED WITH "U" UNIVERSAL MODEL ONLY NOTE: "010" USED WITH "U" UNIVERSAL MODEL ONLY
X	No Display
LCD	LCD Display - 3.5 Digits for Pressure and 4.5 Digits for Velocity
X	NO NIST
N	NIST

RELATED PRODUCTS

A-3145K	Duct Static Pressure Kit that includes A-301-K compression tip 1/4" compression and A-345-K mounting flange
A-3245K	Duct Static Pressure Kit that includes A-302-K barb tip 1/4" and A-345-K mounting flange
A-306-K	Outdoor air static pressure tip
21122	4" Aluminum impact tube
21122-112	6" Pressure probe for 1/8" to 1/4" tube barb